## BULLOCH COUNTY / CITY OF STATESBORO

2035 Long Range Transportation Plan

LONG RANGE TRANSPORTATION PLAN TECHNICAL MEMORANDUM

August 2009

#### PREPARED FOR

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**Technical Memorandum** 

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Georgia Department of Transportation

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# CHAPTER 1

## INTRODUCTION

#### A. General Description

Bulloch County has experienced considerable growth over the last several decades, increasing population by more than 50% between 1980 and 2000 and exceeding the statewide growth rate. This has resulted in increased travel demand in the County. The Georgia Department of Transportation (GDOT) Office of Planning, in conjunction with Bulloch County, the City of Statesboro, and the Towns of Brooklet, Register, and Portal, initiated the Bulloch County / City of Statesboro 2035 Long Range Transportation Plan to assess needs and identify multi-modal transportation improvement opportunities to help the County address transportation issues through the plan's horizon year of 2035. The transportation plan developed as part of this study builds upon previous plans and studies conducted in Bulloch County.

The purpose of this document is to identify existing and future (2035) transportation challenges for the multi-modal transportation system (roadways, bridges, bicycle and pedestrian facilities, freight, rail, and airports) within the County, and to utilize that information to identify improvements and prioritize projects for implementation. As part of this effort, a travel demand model was developed for the County to represent the transportation network of the study area and to assist with the analysis of future operating conditions. Additionally, a comprehensive and interactive public involvement program was conducted to establish plan goals and objectives, identify issues and opportunities, and to identify potential improvements to the Bulloch County transportation network. This process ensured that transportation improvements were not only coordinated with the leadership of Bulloch County, the City of Statesboro, and the Towns of Brooklet, Register, and Portal but afforded individual citizens and interested groups the opportunity to provide their input. Goals and objectives were coordinated with local comprehensive planning efforts in the County and City, to ensure consistency between planning efforts and to best represent the long term vision for the community.

Ultimately, study efforts have produced a comprehensive transportation planning document that, if implemented, will help to guide the efficient movement of people and goods within and through the study area through the study horizon year (2035). Successful implementation depends upon local efforts to move forward with plan recommendations by pursuing projects, policies, and funding sources that will help to achieve the goals and objectives identified as a part of the plan development process. Implementation is discussed in further detail in Chapter

8 of this document. The plan is intended as a tool for guiding local transportation decisionmaking as development pressures increase throughout the County.

#### B. Purpose

The purpose of the Bulloch County / City of Statesboro 2035 Long Range Transportation Plan (LRTP) is to identify existing and future transportation needs, to provide a framework of recommendations that address identified transportation needs, and to determine what resources may be necessary and available to successfully implement those recommendations.

Though it is not currently part of a federally designated Urbanized Area, it is expected that a portion of Bulloch County may become designated as urbanized following the 2010 Census, based on current US Census population estimates. This anticipated designation would trigger the need for the formation of a Metropolitan Planning Organization, or MPO. A MPO would be responsible for transportation planning and the allocation of federal dollars for transportation projects within the urbanized area. To that end, this plan incorporates requirements and guidelines consistent with the expectations for an MPO transportation planning and decision-making within Bulloch County if and when it makes the transition to an urbanized transportation service area.

The format of the LRTP, and the process by which it was developed, is prescribed by federal legislation known as the Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users (SAFETEA-LU). LRTPs are required to have a planning horizon of 20 or more years. This time frame provides a basic structure and overall goal for meeting the long-term transportation needs for the community. Since many factors influencing the development of the LRTP, such as demographics, forecasted revenue, and project costs, change over time, it is recommended that LRTPs are updated at least every five years.

## C. Study Area

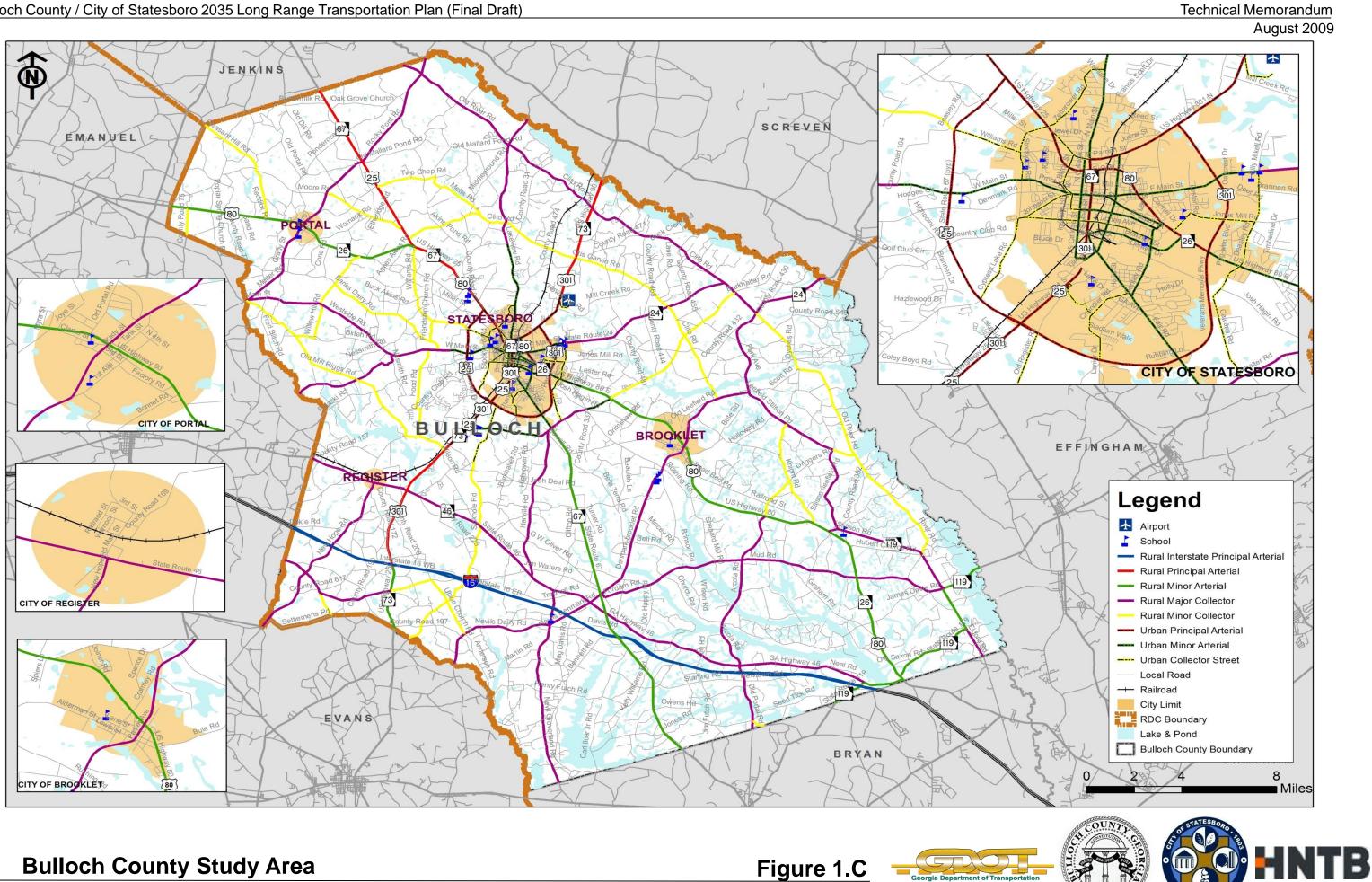
Bulloch County's boundaries comprise the study area for this plan. The County is located along the I-16 corridor in Southeastern Georgia, about 45 miles northwest of Savannah. Bulloch County is comprised of approximately 683 square miles.

The area features employment opportunities and points of interest that attract new residents and visitors each year. It is perhaps best known as the home to Georgia Southern University (GSU), the largest university in South Georgia with the 6<sup>th</sup> largest student enrollment in the Georgia University System, with approximately 17,748 students enrolled in the fall of 2008. These features create unique impacts on the transportation system.

Though many residents work within Bulloch County, there has been an increase in residents for whom Bulloch is a bedroom community for the City of Savannah and other surrounding counties. Population and economic growth in the County is also due to surging enrollment at Georgia Southern University in recent years. According to the U.S. Census, the population of Bulloch County increased 18.2 percent from the year 2000 to 2007, (55,983 residents in 2000 to 66,176 residents in 2007). Enrollment at GSU increased nearly 24 percent from the fall 2001 semester to the fall 2008 semester.

Bulloch County is part of the Coastal Georgia Regional Development Center (CGRDC). The CGRDC is the designated regional planning agency for 10 counties along the Coast of Georgia and the South Carolina border including Bryan, Bulloch, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Screven. The CGRDC provides comprehensive planning services for the area and partners with member counties on issues including transportation, water resources, historic preservation, and economic development. There are four major urban centers within the CGRDC region. The City of Statesboro is one of these urban centers. Previous studies completed in partnership with the CGRDC were considered in the development of the plan. In addition, the CGRDC is considered a potential resource for the County in future implementation efforts.

The study area is displayed on page 4 in Figure 1.C.



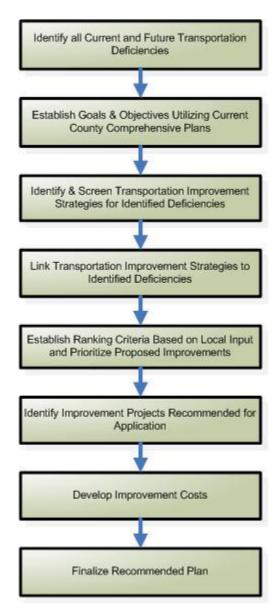
## **Bulloch County Study Area**



#### **D. Study Process**

Figure 1.D below outlines the process of developing a long-range transportation plan for Bulloch County and the City of Statesboro.





Detailed information for all analysis elements is provided in the following sections. It is within this framework that the existing and future conditions data was identified for collection, analyzed, and established as baseline conditions for the transportation system within the study area. Data collection sources are documented in Appendix A.



## DEMOGRAPHICS

#### A. Demographic Overview

The demographic overview of Bulloch County documents the historic population growth, future population projections, environmental justice population, and existing employment base.

A review of the 2000 U.S. Census, the most recent data available, shows that Bulloch County has experienced population growth comparable to state population growth during recent decades. Between 1990 and 2000, the Bulloch County population grew at an average annual rate of 2.6 percent, slightly higher than the average increase for Georgia (2.4 percent). Since 2000, the annual increase has been 2.0 percent, slightly less than Georgia's growth rate (2.3 percent). Table 2.A on page 7 presents 2000 and 2007 U.S. Census demographic data to illustrate the characteristics of the population, households and other socio-economic factors in Bulloch County. Note that the 2007 estimates are based on data collected over a 3-year time period (2005-2007), which represent the average characteristics of population and housing in Bulloch County.

Demographic	2000	2007 Estimate
Total Population	55,983	64,837
Median Age	26.1	26.4
Total Population in Occupied Housing Units	53,393	58,540
Average Household Size	2.53	2.52
Total Housing Units	22,742	26,166
Occupied Housing Units	20,743 (91.2% of total)	23,229 (88.8% of total)
Owner-Occupied Housing Units	12,052 (58.1% of total)	13,531 (58.3% of total)
Renter-Occupied Housing Units	8,691 (41.9% of total)	9,698 (41.7% of total)
School Enrollment (Age 3+)	23,132 (41.3% of total)	26,938 (40.7% of total)
Percent High School Graduate or Higher	77.9% of total	82.6% of total
Total Disabled Population (Age 5+)	9,112	7,422
Percent of Population in Same House in 1995	44.7%	N/A

Table 2.A	Bulloch County General D	Demographic Characteristics
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Source: 2000 US Census / 2007 US Census Estimates

According to the 2000 U.S. Census Occupied Housing Units and Employment figures, the most current data available, a jobs-to-housing ratio was calculated for the county. The employment figures are the sum of the 2000 Census industry numbers. The ratio of the number of jobs (26,367) to number of housing units (22,742) is greater than one (1.16), based on the 2000 U.S. Census information. This places increased demand on the transportation system linking Bulloch County residents to jobs in Chatham County, Effingham County, and other nearby employment centers.

The 2000 U.S. Census demographic data captures the number of disabled individuals in Bulloch County as 16 percent of the total population, which is slightly lower than the statewide average of 18 percent. The U.S. Census Bureau defines disability as:

"A long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business."

#### **B. Urban Versus Rural Population Totals**

Approximately 56 percent of Bulloch County residents (31,411) live outside of incorporated cities based on 2000 U.S. Census data. The data in Table 2.B below represents the rural and urban population breakdown for each City for the year 2000.

County	City	Population
	Statesboro	22,698
	Brooklet	1,113
Bulloch	Register	164
	Portal	597
	Unincorporated	31,411
	Total	55,983

Table 2.BArea Population

Source: 2000 US Census

## C. Historic Population Growth

Compared to State historic population growth, Bulloch County has received substantial growth over the past 20 years, with a 56 percent increase in total population from 1980 to 2000, which is higher than the State of Georgia, which had a significant increase of 50 percent in total population. Table 2.C below illustrates the growth trends from 1970 to 2000.

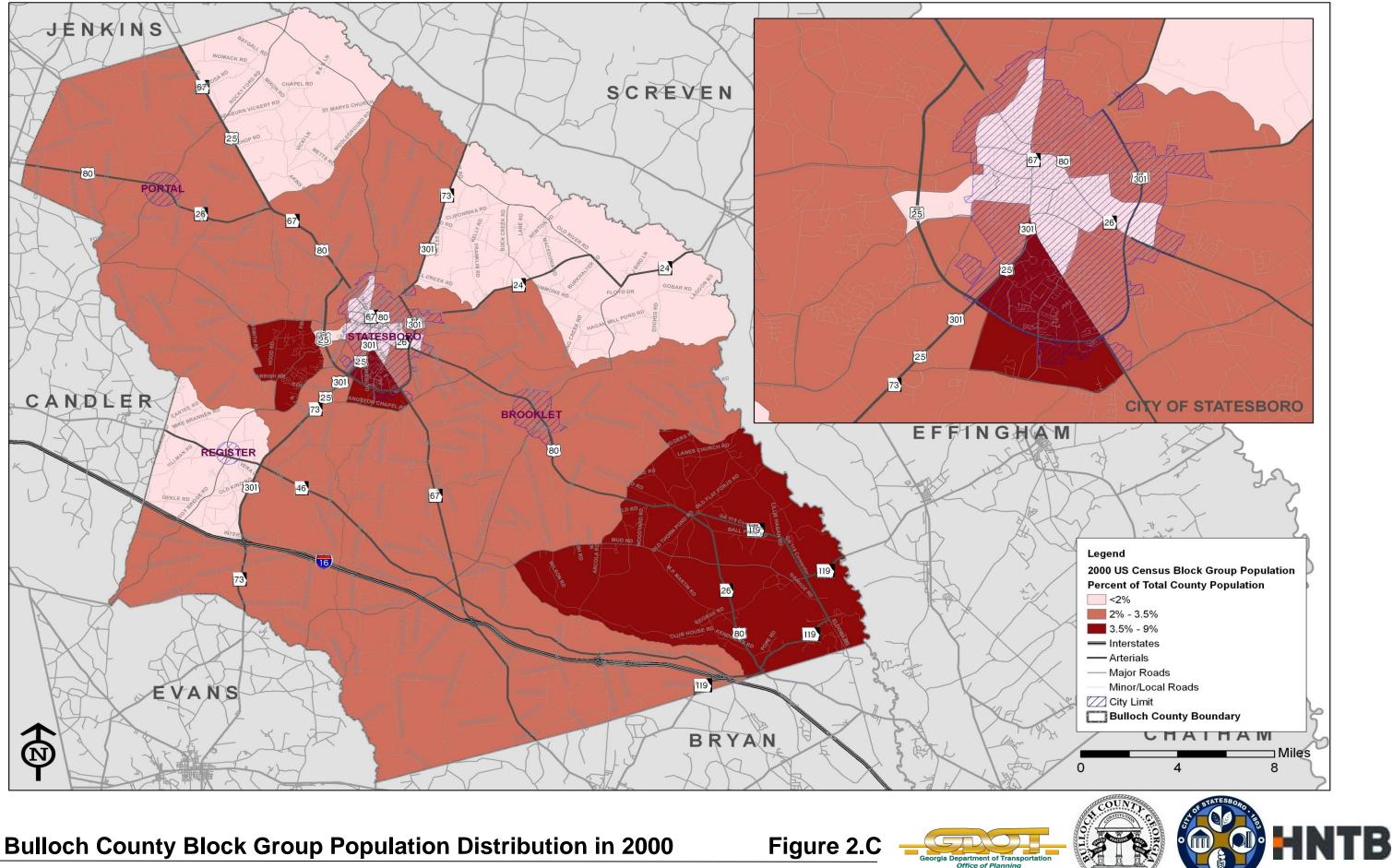
 Table 2.C
 Historical Population Profile

County	1970	1980	1990	2000	Percent Change 1980 - 2000
Bulloch	31,585	35,785	43,125	55,983	56%
Georgia	4,589,575	5,462,989	6,478,216	8,186,453	50%

Source: 2000 US Census

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Figure 2.C (on page 9) displays the block group population distribution in 2000, according to the 2000 U.S. Census, the most recent data available. While decennial census counts allow for block group level analysis, current year population estimates are limited to county-level statistics; therefore, changes in population at the block group level are not available to display. For illustrative purposes, the 2000 U.S. Census, population distribution at the block group level is provided.





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#### **D. Future Population**

Compared to Statewide future population projections, population growth in Bulloch County is expected to continue at a moderate rate through the study horizon year of 2035. Bulloch County experienced steady population growth between 1990 and 2000, with a 2.6 percent average annual increase in total population, which is slightly faster than the State of Georgia, which had a 2.4 percent average annual increase in total population over the same period. A study from Coastal Georgia Regional Development Center (CGRDC), titled: *Georgia Coast 2030: Population Projections for the 10-County Coastal Region*, estimated the annual population increase since 2000 to 2006 has been 2.0 percent, slightly lower than the rate of growth for the State of Georgia over the same period (2.3 percent).

Table 2.D.1 below displays the projected population growth as estimated in the CGRDC study using 2000 U.S. Census Data. Based on the study's growth estimates, Bulloch County's population is projected to increase by 29 percent, from 55,983 residents in 2000 to 72,338 by 2015. By 2030, the population is expected to reach 82,111 individuals according to the CGRDC, an increase of 47 percent over 2000 population. It is important to recognize the increased demand on the transportation system that accompanies the population increase.

#### Table 2.D.1 Projected Population Growth 2000 – 2030

County	2000	2005	2010	2015	2020	2025	2030
Bulloch	55,983	65,445	68,618	72,388	75,507	79,475	82,111

Sources: 2000 US Census and CGRDC Study entitled, "Georgia Coast 2030: Population Projections for the 10-County Coastal Region"

Table 2.D.2 below shows the 2000 U.S. Census, the 2007 U.S. Census population estimates, and the percentage change of the county population.

#### Table 2.D.2 Estimated County Population Change 2000 – 2007

County	2000	2007 Estimate	Percent Change
Bulloch	55,983	64,837	15.8%

Source: 2000 US Census and 2007 US Census Estimates

#### E. Environmental Justice

The Environmental Justice Executive Order 12898, signed February 11, 1994 defines Environmental Justice populations as persons belonging to any of the following groups:

- Black
- Hispanic
- Asian American
- American Indian or Alaskan Native
- Low-Income a person whose household income (or in the case of a community or group, whose median household income) is at or below the US Department of Health and Human Services poverty guidelines

-

President Bill Clinton signed the Environmental Justice (EJ) Executive Order to ensure that groups historically underrepresented in the transportation planning process are not disproportionately impacted as a result of transportation improvement recommendations. As a result of the executive order, transportation agencies have integrated special efforts into transportation planning efforts to identify the groups identified above and to appropriately engage them throughout the development of transportation improvement recommendations.

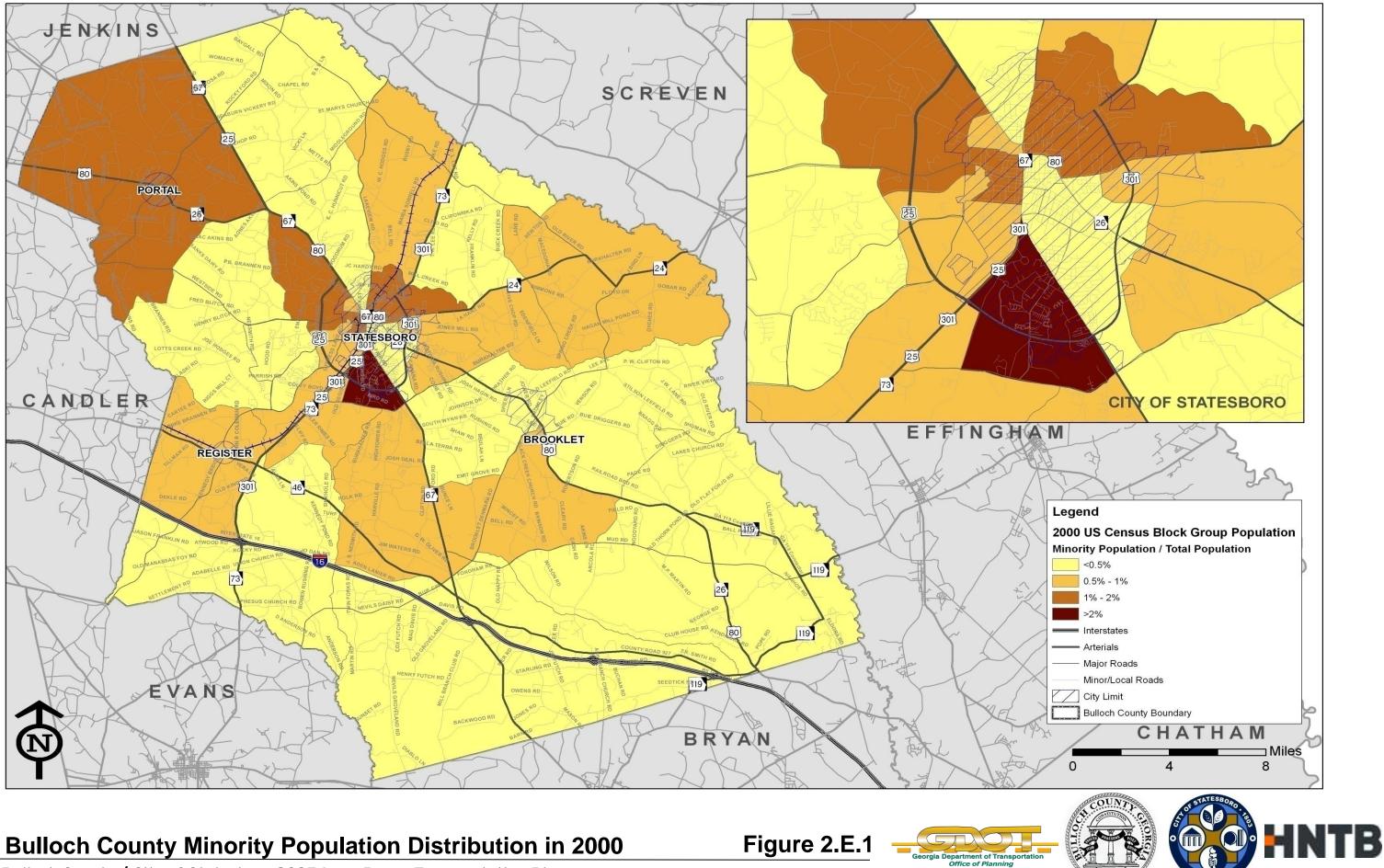
As part of the LRTP development process, an EJ analysis was conducted to locate EJ populations. The study's public involvement program incorporated activities to involve these populations early and continuously through the transportation decision making process (see Chapter 4, Public Involvement Activities, page 82 for details). Data was also used to analytically assess if there would be a disproportionate impact on these traditionally underrepresented communities. The following sections document the location of EJ populations in Bulloch County.

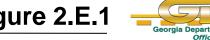
#### **Minority Population**

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The minority populations for Bulloch County were identified and analyzed using 2000 U.S. Census data, the most recent data available. This census data was reviewed by census block group and shows dense concentrations of minorities located in and near the City of Statesboro. The average minority population in Bulloch County is 35.2 percent, which is slightly higher than the statewide average of 34.9 percent.

The minority census block groups as a percentage of the county population are displayed in Figure 2.E.1 on page 12.





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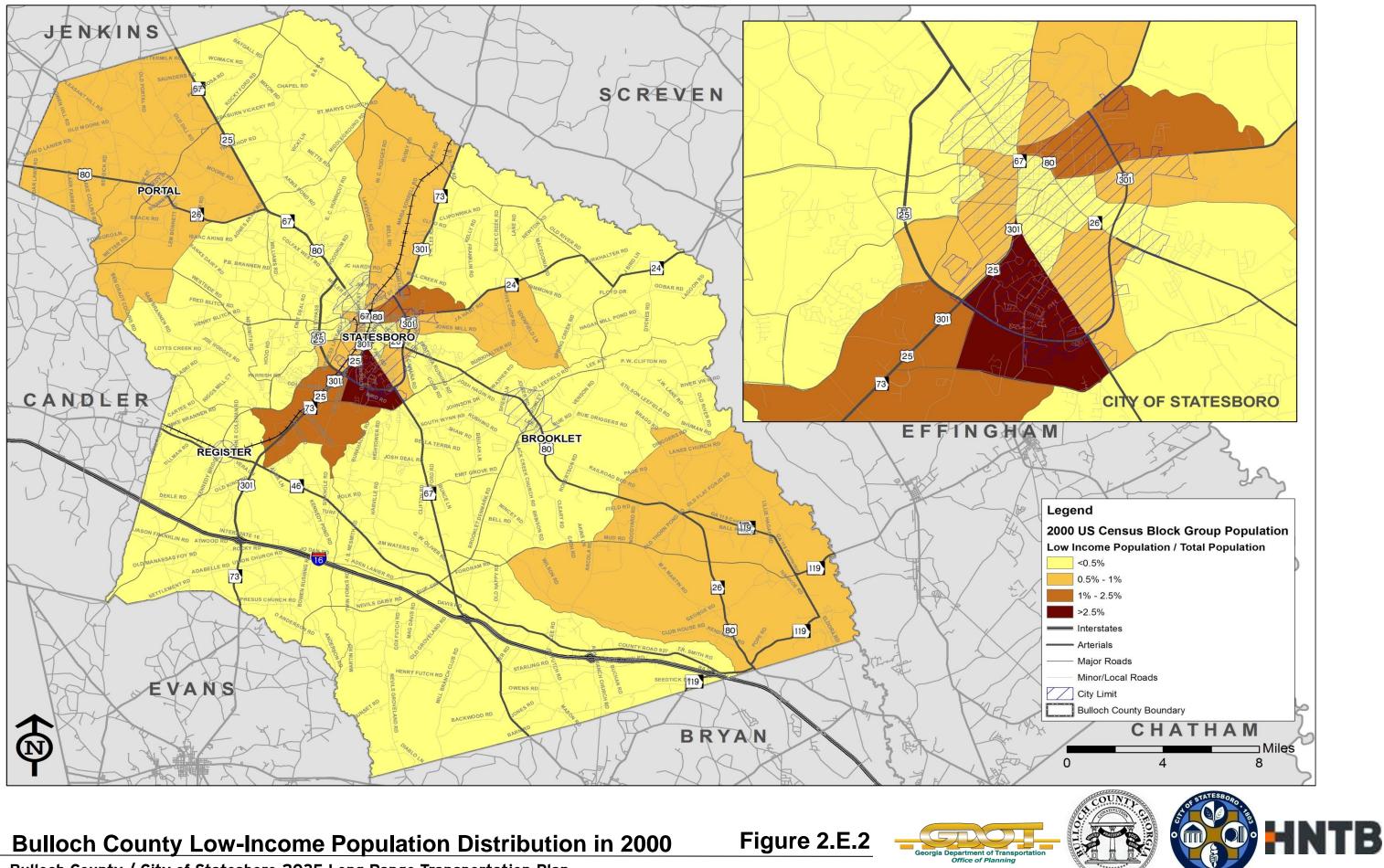
#### Low-Income Population

The second component of EJ, poverty level, was also analyzed using the 2000 Census data. This census data was reviewed by census block group. Similar to the minority population, there are concentrations of low-income residents located near the City of Statesboro. The average number of residents below the poverty line in Bulloch County is 24.5 percent, while the statewide average is 13 percent. The low-income census blocks are displayed in Figure 2.E.2 on page 14.

#### **Outreach and Analysis Efforts**

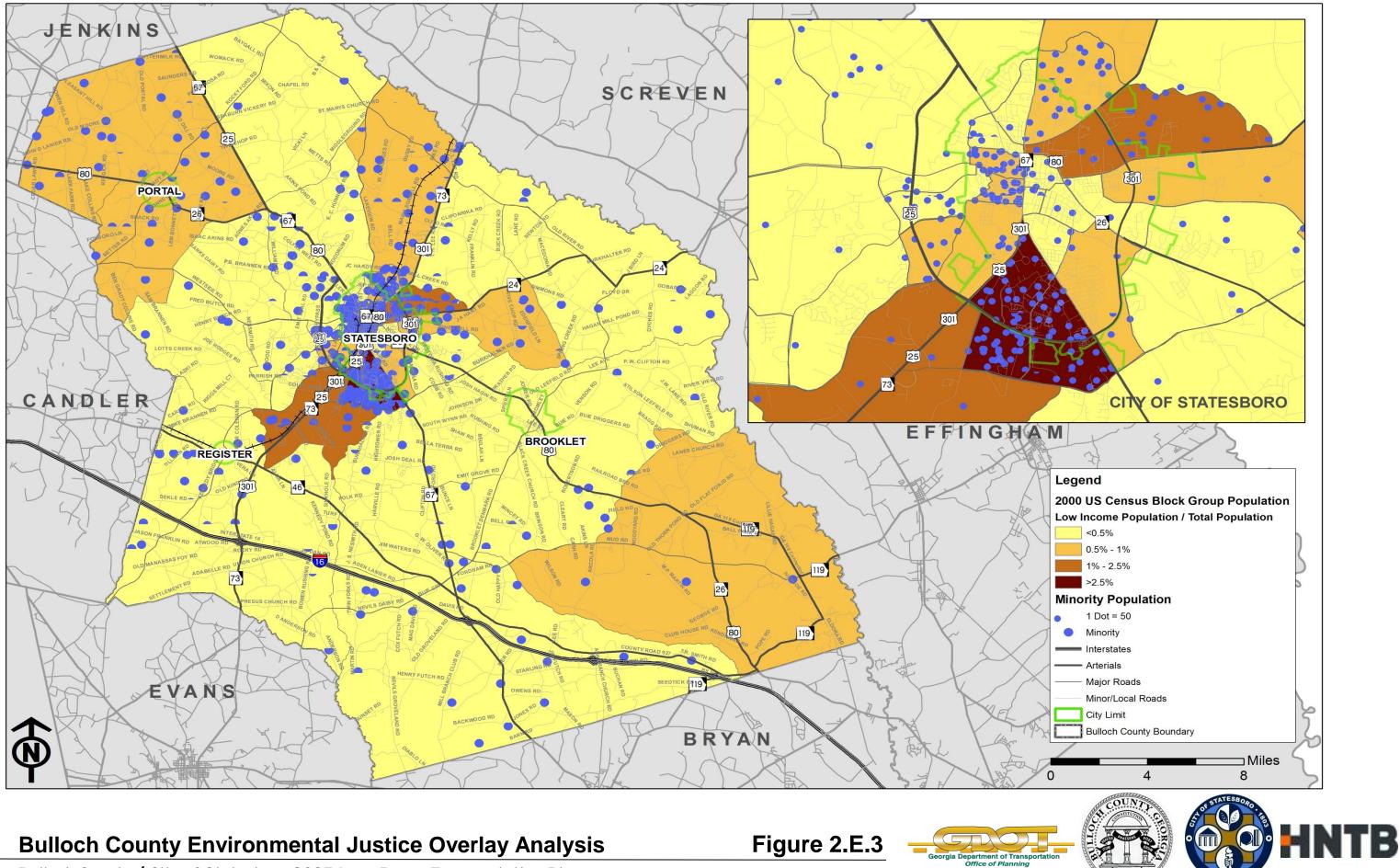
It is helpful to analyze the low-income population areas with respect to the location of minority population areas. Figure 2.E.3 on page 15 combines the minority and low-income population data and presents the EJ Overlay Analysis. Extra efforts were made to include the populations identified as part of this analysis in the planning process to ensure that transportation needs in these areas were identified and addressed and to avoid disproportionate impacts to these communities. Representation from these groups was actively sought out for inclusion in the study advisory group and public meetings were advertised in venues likely to reach these groups, including newspaper advertisements and flyer drop off at public locations. Areas in the Towns of Portal, Brooklet and Register and areas throughout Statesboro were included in the analysis in an effort to enhance the likelihood that transportation improvements would benefit and not disproportionately impact these areas in a negative manner. The following specific tasks were conducted in these areas:

- Coordinated through local staff and the Study Advisory Committee by asking them to identify leaders within EJ communities and invited their participation in the Committee;
- Posted notice for workshops in these communities;
- Considered potential impacts of recommended projects to ensure that disproportionate impacts did not accrue to these communities; and,
- Made special efforts to include projects that provided benefit and enhancement to these communities.
- For more information on outreach efforts, see Chapter 4, Public Involvement Activities, page 82.





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## F. Employment Data

In Bulloch County, public administration is the largest employment sector, accounting for approximately 26 percent of the total jobs. This is primarily due to the presence of Georgia Southern University (GSU). Other important sectors are retail trade, arts, entertainment, recreation, accommodation, food service, education, health and social services. Using the Georgia Department of Labor 2007 annual average employment data (latest available), the major employers for Bulloch County are listed in Table 2.F.1 below.

Category	Employer	Industry
	Georgia Southern University	Education
	Bulloch County Board of Education	Education
Public Employers	Bulloch County Board of Commissioners	General Government
	City of Statesboro	General Government
	Briggs & Stratton Corp.	Manufacturing
	Wal-Mart	Distribution
Private Employers	East Georgia Regional Medical Center	Medical
	Viracon	Manufacturing
	H.A. Sack Company	Construction

#### Table 2.F.1 Major Employers in Bulloch County

Source: Georgia Department of Labor, 2007

The number, industry type, and location of jobs have a direct implication on the types of transportation facilities needed by business operators and employees in an area. Table 2.F.2 located on page 17 shows the major categories of jobs and industries located within Bulloch County.

Industry Type	Bulloch County Employment
Public Administration	6,182
Retail Trade	3,314
Arts, Entertainment, Recreation, Accommodation and Food Services	2,894
Education, Health, and Social Services	2,435
Manufacturing	2,085
Construction	1,681
Finance, Insurance, Real Estate, and Rental and Leasing	1,091
Professional, Scientific, Management, Administrative, and Waste Management Services	1,049
Transportation, Warehousing, and Utilities	976
Wholesale Trade	577
Other Services	442
Agriculture, Forestry, Fishing, Hunting, and Mining	380
Information	315
TOTAL	23,505

#### Table 2.F.2 Existing Industry Jobs

The numbers of employees in Utilities and Management of Companies and Enterprises are confidential. Source: Georgia Department of Labor, 2007

#### Per Capita Income

According to the 2000 US Census, the most recent data available, Bulloch County's per capita income of \$16,080 in 1999 was lower than Georgia's statewide average of \$21,154 and the national average of \$21,587.

#### Journey to Work Data

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Transportation mobility for workers commuting to and from Bulloch County is an important component in the 2035 LRTP. According to the 2000 U.S. Census, the most recent data available, most workers (92.7 percent) rely on roadway-based transportation for commute trips, either by driving alone (78.3 percent) or carpooling (14.4 percent). About seven percent (7.3 percent) of workers in Bulloch County bike or walk, commute by other means, or work at home. Table 2.F.3 on page 18 illustrates the breakdown in commuting patterns by modes for Bulloch County residents.

		<b>D</b>	Statewide	
Work Commute	Bulloch County	Percentage	Total	Percentage
Total Workers (Age 16+)	24,248	100%	3,832,803	100%
Drove Alone	18,980	78.3%	2,968,910	78%
Carpooled	3,501	14.4%	557,062	15%
Transit/Taxi	95	0.4%	90,030	2%
Biked or Walked	835	3.4%	65,776	2%
Motorcycle or Other Means	304	1.3%	42,039	1%
Worked at Home	533	2.2%	108,986	3%
Mean Travel Time to Work (min.)	22.7	NA	27.7	NA

Table 2.F.3 Existing Work Commute Patterns

Source: 2000 US Census

The Bulloch County journey to work data, from the 2000 U.S. Census, the most recent data available, corresponds closely to the statewide averages for the various modes of travel (See Table 2.F.3 Above) The percentage of bike or walked commuters in Bulloch County (3.4 percent) is slightly higher than the statewide percentage (2 percent). The transit/taxi mode percentage in the County (0.2 percent) is lower than the statewide number (2 percent) due to the lack of a publicly accessible transit system in Bulloch County.

The mean travel time to work in Bulloch County (22.7 percent) is lower than the statewide average (27 percent). The shorter average commute time to work associated with Bulloch County commuters can be attributed to the proportion of workers commuting within or close to the County. According to 2007 US Census estimates, about 77.5 percent of employed Bulloch County residents traveled to work within Bulloch County and about 10.2 percent traveled to Chatham County for work. The remaining percentage traveled to other counties in the region.



## **EXISTING CONDITIONS ANALYSIS**

#### A. Land Use and Development

The existing land use patterns for Bulloch County illustrated in the 2006 land use plan demonstrate a substantial percentage of land devoted to residential and agricultural land uses. Additionally, growth in multi-family developments immediately south of Georgia Southern University is anticipated in the coming years to serve the ever –expanding student population. Growth is also anticipated through the study's horizon year of 2035 along the I-16 corridor in southern Bulloch County as growth from Chatham and Bryan Counties pushes westward. New commercial development is anticipated to occur mainly in the eastern and southern portions of the City of Statesboro. Industrial development is also anticipated to continue within Bulloch County's current industrial parks. Bulloch County and the City of Statesboro have identified targeted growth areas for new development as a part of their comprehensive plans, and efforts of the Chamber of Commerce and Development Authority focus on attracting new employers and businesses who may be interested in locating in these areas. Development in all of these areas depends upon transportation projects that adequately service increasing future travel demand on nearby facilities.

#### **Existing Land Use Characteristics**

To inventory the relationship between existing land use and the transportation system, the following area types were identified for Bulloch County: major residential areas, key activity centers, key employment centers, and primary travel corridors. The 2006 land use map for Bulloch County is presented in Figure 3.A on page 21.

#### **Major Residential Areas**

- Cities of Statesboro and Brooklet
- South of Georgia Southern University
- East of Statesboro City Limits
- Southeastern Bulloch along I-16

#### **Key Activity Centers**

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- City of Statesboro
- Along US 301 between SR 46 and the Statesboro City Limits
- Downtown business districts in Brooklet, Portal and Register

#### **Key Employment Centers**

- Georgia Southern University
- US 80 corridor between Downtown Statesboro and the Bypass
- SR 67 corridor near the Medical Center

- US 301 corridor between Statesboro and I-16
- Northeast of Statesboro near the Bulloch County airport
- Smaller centers located at Brooklet, Portal and Register

#### **Primary Travel Corridors**

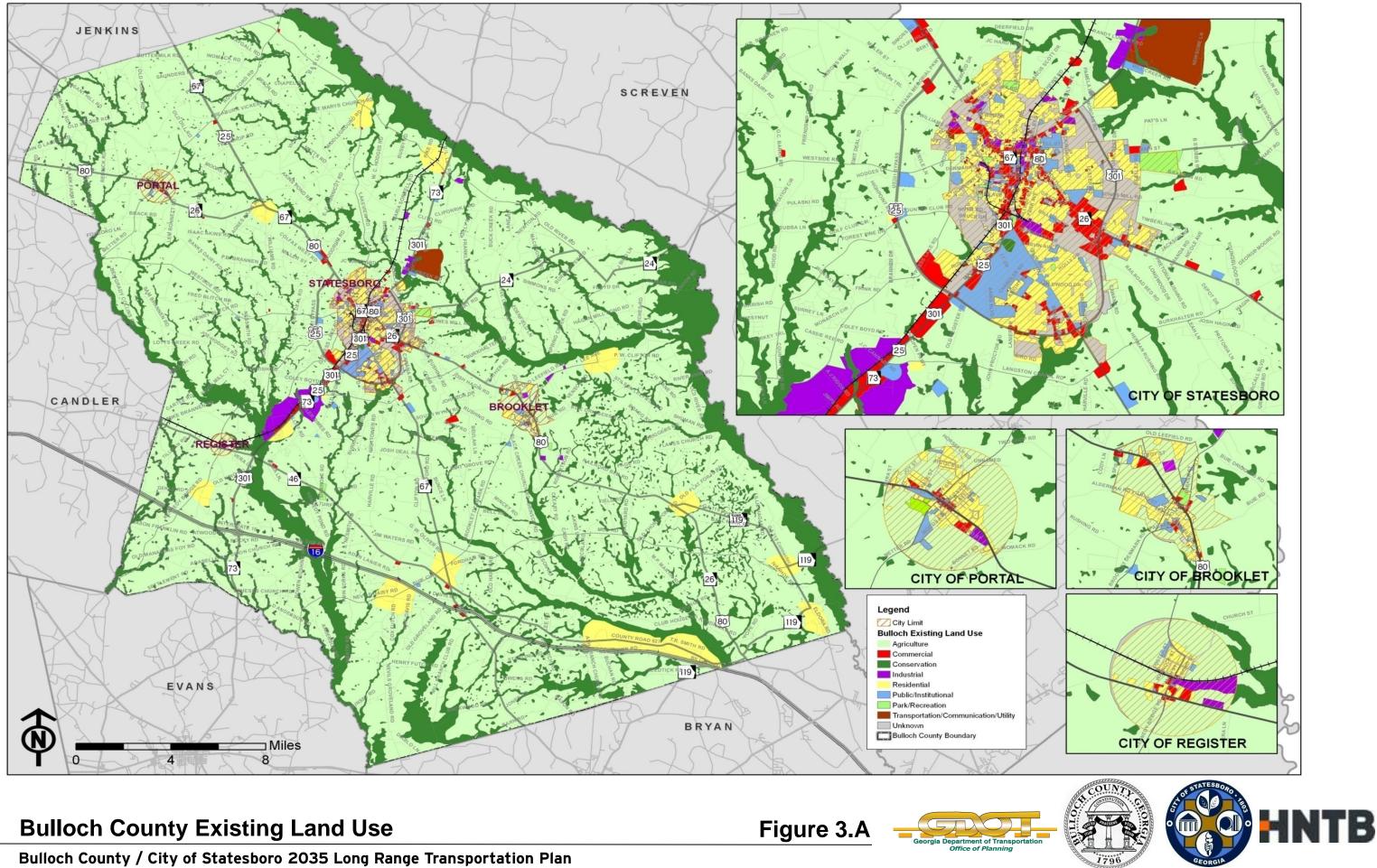
- I-16
- US 301/US 25
- US 80 / SR 26
- SR 73
- SR 67 (North from Statesboro City Limits to the County Line)
- US 25 / SR 67 / US 301 / SR 73 Bypass (Primary travel corridors are those roadway classified as urban/rural major arterials.)

#### **Developments of Regional Impact**

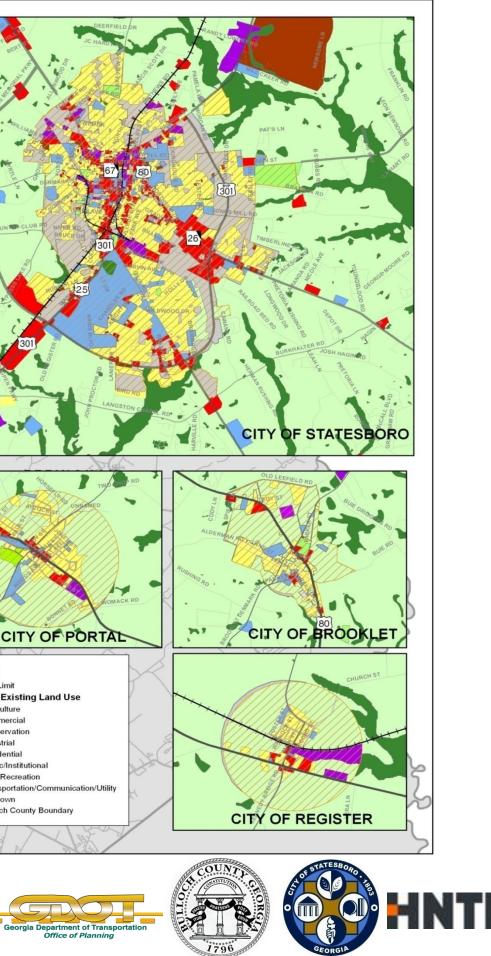
Five Development of Regional Impact (DRI) studies have been submitted or completed in Bulloch County since 2005 as shown below in Table 3.A. The Georgia Department of Community Affairs (DCA) concluded that two projects (No. 1404 and No. 1081) were "in the best interest of the region and therefore of the State". The CGRDC determined that one project (No.1969) warrants a regional review, and two projects (No.956 and No.927) did not warrant a regional review.

DRI ID #	Project Name	Development Type	County/ City	Initial Form Submitted	Current Status
<u>1969</u>	Deloach Family Annexation	Housing	Statesboro	10/27/2008	Under Review
<u>1404</u>	Flying J Truck Stop	Truck Stops	Bulloch (Unincorporated)	4/12/2007	Complete
<u>1081</u>	Transfer Station	Public Works	Bulloch (Unincorporated)	3/27/2006	Complete
<u>956</u>	Wastewater Pre- treatment Facility	Wastewater Treatment Facilities	Bulloch (Unincorporated)	11/14/2005	Complete
<u>927</u>	Southern Disposal Service	Disposal Services	Bulloch (Unincorporated)	10/4/2005	Complete

#### Table 3.A Development of Regional Impact Studies







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#### **B.** Previous Studies and Programs

An effective transportation plan accounts for previous planning efforts to ensure continuity between planning documents and to ensure that goals, objectives, and related projects recommended for the transportation system are consistent with the established community vision. Previous studies and planning documents have contributed to the established community vision and existing work program for Bulloch County and the City of Statesboro. To that end, the following planning studies and programs were considered as part of the LRTP development process:

- GDOT 2008-2011 State Transportation Improvement Program (STIP) & 2008-2013 Construction Work Program (CWP)
- GDOT Statewide Interstate System Plan (2004)
- Bulloch County Comprehensive Plan 2009-2029 (2009)
- City of Statesboro Comprehensive Master Plan 2009-2029 (2009)
- Bulloch County's Land Use Plan (2006)
- Coastal Georgia Population Study (2006)
- Bulloch County Transportation Plan (2000)
- Coastal Georgia Regional Bicycle and Pedestrian Plan (2005)
- Bulloch County Transit Development Plan (2008)

## GDOT's 2008 -2011 State Transportation Improvement Program (STIP) & 2008-2013 Construction Work Program (CWP)

Bulloch County has several planned and programmed improvements currently listed in the 2008-2011 State Transportation Improvement Program (STIP) & 2008-2013 Six-Year Construction Work Program (CWP). The following list highlights the general types of planned and programmed improvements for the County:

- Bridge rehabilitation / replacement
- Bicycle and pedestrian enhancements
- Roadway widening
- New roadways

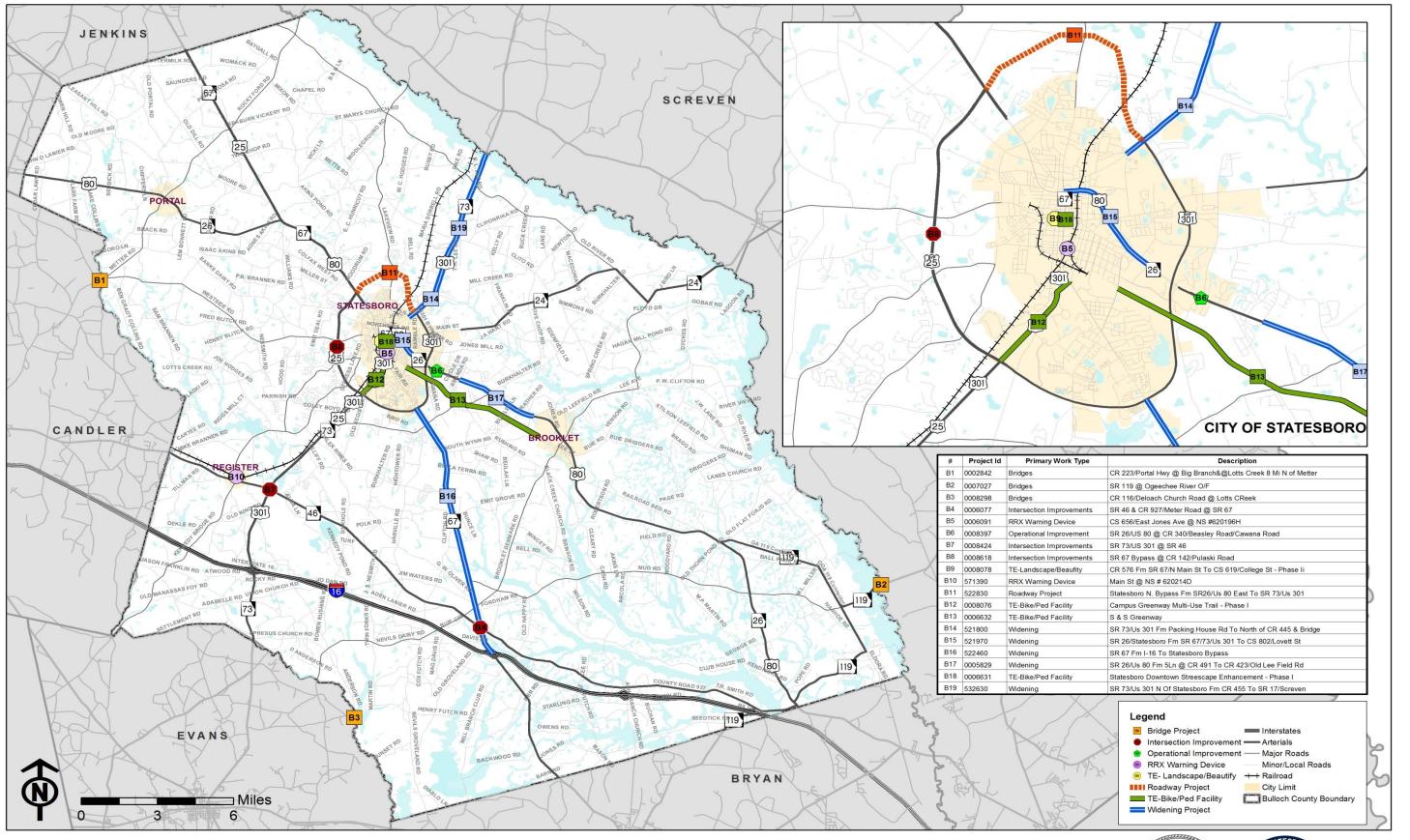
22

- Intersection improvements
- Railroad crossing warning improvements

The STIP was reviewed for specific projects impacting Bulloch County and its municipalities through 2035 and these projects are displayed in Table 3.B.1 on page 23. Additionally, these projects were given a study ID number and are mapped in Figure 3.B on page 24.

Project ID	Prime Work Type	Description	Program	Construction Date
0002842	BRIDGES	CR 223/PORTAL HWY @ BIG BRANCH @ LOTTS CREEK	STIP, CWP	2009
0005829	WIDENING	SR 26/US 80 FM 5LN @ CR 491 TO CR 423/OLD LEE FIELD RD	STIP	LR
0006077	INTERSECTION IMPROVEMENT	SR 46 @ SR 67/METTER ROAD @ SR 67	STIP, CWP	LUMP
0006091	RRX WARNING	CS 656/EAST JONES AVE @ NS #620196H	STIP, CWP	LUMP
0006631	TE- BIKE/PED FACILITY	STATESBORO DOWNTOWN STREESCAPE ENHANCEMENT - PHASE I	STIP, CWP	2008
0006632	TE- BIKE/PED FACILITY	S & S GREENWAY	STIP, CWP	LUMP
0007027	BRIDGES	SR 119 @ OGEECHEE RIVER O/F	STIP	LR
0008076	TE- BIKE/PED FACILITY	CAMPUS GREENWAY MULTI- USE TRAIL - PHASE I	STIP, CWP	LUMP
0008078	TE-LANDSCAPE/ BEAUTIFY	CR 576 FM SR 67/N MAIN ST TO CS 619/COLLEGE ST - PHASE II	STIP, CWP	LUMP
0008298	BRIDGES	CR 116/DELOACH CHURCH RD @ LOTTS CREEK	STIP, LR	LR
0008397	OPERATIONAL IMPROVEMENT	SR 26/US 80 @ CR 340/BEASLEY ROAD/CAWANA RD	STIP, CWP	LUMP
0008424	INTERSECTION IMPROVEMENT	SR 73/US 301 @ SR 46	STIP, CWP	LUMP
0008618	INTERSECTION IMPROVEMENT	SR 67 BYPASS @ CR 142/PULASKI RD	STIP, CWP	LUMP
521800	WIDENING	SR 73/US 301 FM PACKING HOUSE RD TO NORTH OF CR 445 &BRIDGE	LR	LR
521970	WIDENING	SR 26/STATESBORO FM SR 67/73/US 301 TO CS 802/LOVETT ST	LR	LR
522460	WIDENING	SR 67 FM 1-16 TO STATESBORO BYPASS	STIP, CWP	2012
522830	ROADWAY PROJECT	STATESBORO N. BYPASS FROM SR26/US 80 EAST TO SR 73/US 301	LR	LR

#### Table 3.B.1 Bulloch County 2008 – 2011 STIP / 2008 – 2013 CWP



## **Bulloch County Planned & Programmed Projects**



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#### GDOT Statewide Interstate System Plan (2004)

Sponsored by GDOT, the Statewide Interstate System Plan was designed to comprehensively evaluate Georgia's Interstate System, identifying necessary improvements and ultimately producing a prioritized program of projects to meet increasing traffic demands in order to ensure future statewide mobility. The study, completed in the summer of 2004, is organized into three phases and focuses primarily on the interstates outside of the metro Atlanta area. The study included analysis of I-16 in Bulloch County using the statewide travel demand model. The Interstate System Plan found that the performance of I-16 is adequate through the year 2035. Therefore no necessary improvements on I-16 have been identified at this time.

#### Bulloch County Comprehensive Plan 2009-2029 (2009)

The Bulloch County Comprehensive Plan provides a comprehensive review of the issues and opportunities that will affect the future growth of the community over the next 20 years. This analysis is based on a review and inventory of existing conditions, land use patterns, public policies, planned improvements, and an extensive community outreach process to establish and incorporate the desires of local citizens. This report is intended to meet the *Standards and Procedures for Local Comprehensive Planning* as established by the Georgia Department of Community Affairs (DCA) on May 1, 2005. Preparation of a Comprehensive Plan in accordance with these standards is an essential requirement in maintaining the County's status as a Qualified Local Government. Table 3.B.2 below presents a summary of the Comprehensive Plan.

Key Data/Trends	Description	
Population	US Bureau of Census 1980: 35,785 1990: 43,125 2000: 55,983 2005: 65,445 2010: 68,618 2015: 72,338	
Commute Patterns	Bulloch County is a regional job center for many surrounding counties, while Chatham County is a regional job center for some Bulloch County residents. Of the 24, 238 employed residents of Bulloch County, 77.4% work in Bulloch County, 10.2% work in Chatham County and the remaining 12.4% work in other counties. 78.7% of the jobs in Bulloch County are filled by Bulloch County residents, 3.9% by residents of Screven County, 2.7% by residents of Candler County. Bulloch County sends more workers to Effingham and Chatham counties than it receives from those counties and receives more workers from all other counties than it sends.	
Employment by Sector	1990         2006           Goods Producing         25%         17%           Services         46%         57%	

#### Table 3.B.2 Summary of Bulloch County Comprehensive Plan (2009-2029)

Bulloch County / City of Statesboro 2035 Long Range Transportation Plan Georgia Department of Transportation

Key Data/Trends	Description	
Bala Hondo	Government 29% 27%	
Growth Areas in the County	<ul> <li>Residential</li> <li>Single-family residences are located throughout Bulloch County, scattered along both major and minor roads.</li> <li>Outside of the immediate surroundings of Georgia Southern University, unincorporated Bulloch County contains very few multifamily residences. There are a significant number of manufactured homes.</li> <li>There has been growth in Bulloch County of small-scale residential developments. Smaller subdivision development is taking place in areas outside of the Statesboro bypass and in areas south of Brooklet, within reach of I-16.</li> <li>Commercial</li> <li>Commercial areas are concentrated in the Statesboro region. Outside of the City of Statesboro, significant commercial areas are located along U.S. 301, U.S. 80, SR 24 and SR 25.</li> <li>The most recent major commercial development in Bulloch County has occurred near the U.S. 301 Bypass and Northside Drive at the eastern edge of the Statesboro City Limits. The U.S. 301 corridor between SR 46 and the Statesboro City Limits is an intensely developed commercial strip.</li> <li>Industrial</li> <li>The largest amount of industrial land use in Bulloch County is located along U.S. 301, both north and south of Statesboro.</li> <li>Industries south of Statesboro, including a major Wal-Mart distribution facility, benefit from the proximity to I-16 while those on the north, such as Briggs and Stratton, are located near the airport.</li> </ul>	
Transportation- Related Issues and Opportunities	<ul> <li>High intensity uses are not concentrated along major corridors or activity centers that might facilitate public transportation.</li> <li>Transportation corridors are congested.</li> <li>People lack transportation choices for access to daily goods and services.</li> <li>Streets are designed in ways that discourage pedestrian and bike activity.</li> <li>Streets in new developments are not connected to those in neighboring parts of the community.</li> <li>On-street parking is inadequate.</li> </ul>	
Land Use Issues and Opportunities	<ul> <li>Existing commercial strip development along major corridors lack character and discourages walking.</li> <li>There are many undeveloped vacant sites in each town.</li> <li>There is no clear boundary where the town stops and the countryside begins</li> </ul>	

#### City of Statesboro Comprehensive Master Plan 2009-2029 (2009)

The City of Statesboro Comprehensive Master Plan provides a comprehensive review of the issues and opportunities that will affect the future growth of the City of Statesboro over the next 20 years. Like the County Comprehensive Plan, the analysis is based on a review and inventory of existing conditions, land use patterns, public policies, planned improvements, and an extensive community outreach process to establish and incorporate the desires of local citizens. This report is intended to meet the *Standards and Procedures for Local Comprehensive Planning* as established by the Georgia Department of Community Affairs (DCA) on May 1, 2005. Preparation of a Comprehensive Plan in accordance with these standards is an essential requirement in maintaining the City's status as a Qualified Local Government.

The following transportation related issues and opportunities relevant to the LRTP were identified by the City's Comprehensive Plan Steering Committee and members of the community during the plan's outreach process:

- Need for more bicycle and pedestrian enhancements including sidewalks, crosswalks, more pedestrian signage, landscaping along sidewalks.
- Desire for bicycle and pedestrian access to businesses and sidewalk improvements to accommodate bicycle, stroller, and wheelchair access.
- Need to alleviate congestion along Fair Road through cooperation between the City and Georgia Southern University (GSU).
- Planted medians in turn lanes will improve the aesthetics of the City and calm traffic.
- Neighborhoods need to be connected with safe bicycle and pedestrian routes along major roads and to all City schools.
- A direct route is needed from the shopping mall to the college without having to drive through residential neighborhoods.
- The transition from single family homes to student housing causes significant parking issues in these neighborhoods and needs to be addressed.
- Public transportation is desired. GSU operates a bus system for faculty, students and staff which could provide a foundation for a public system throughout the community. The city should conduct a feasibility study to determine how the existing system could serve the general public.
- New developments along arterial and collector streets require sidewalks and an expansion of that requirement would be beneficial throughout the transportation network.
- Extending the McTell trail throughout the City and to the proposed County greenway would provide greater connectivity throughout the community.

#### Bulloch County Land Use Plan (2006)

The Bulloch County Land Use Plan, updated in 2006, emphasizes preservation and enhancement of existing land uses along with growth. The plan builds upon the previous land use update for the County, completed in 1993. The land use plan stresses the importance of thinking about how development decisions impact the roadway transportation network, and references the recommendations established in the 2000 Bulloch County Transportation Plan. In addition to a functional classification system and recommendations for paving roadways throughout Bulloch County, it discusses opportunities that exist to improve the appearance and function of roadway corridors for motorists, bicyclists, and pedestrians. Designating scenic corridors is identified as a potential opportunity to exhibit aesthetic improvements of county-wide significance. Other transportation related suggestions include control of access points, and establishment of development permitting limits for non-residential uses along certain corridor types.

#### Coastal Georgia Population Study (2006)

As part of the 2006 Coastal Georgia Population Study, Coastal Georgia Regional Development Center (CGRDC), in cooperation with Georgia Tech's Center for Quality Growth and Regional Development (CQGRD), developed revised 2030 population projections for the 10-county coastal Georgia area that includes Bulloch County. The counties included in the study are: Bryan, Bulloch, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh and Screven. Motivation for this study came from a common perception between CGRDC and CQGRD that typical methods for population projections did not adjust for the unique context and recent growth trends of coastal Georgia.

According to the study, population growth in Bulloch County is projected to increase by 29% between 2000 (55,983) and 2015 (72,388). By 2030, the population is projected to reach 82,111 – a 47% increase from the year 2000 population. This significant increase in population is attributed to the County's high quality of life, location, quality school system, and continued business attraction and retention due to the student population of Georgia Southern University in Statesboro. The East Georgia Regional Medical Center is also spurring growth in business sectors and attracting a growing population of medical staff to the area. The addition of a proposed cultural and performing arts center in downtown Statesboro may continue to attract people to Bulloch County with additional entertainment offerings.

#### **Bulloch County Transportation Plan (2000)**

The previous transportation plan for Bulloch County was completed in 2000 with a study horizon year of 2025. The primary purpose of the study was to prepare a transportation plan for Bulloch County to ensure that the transportation infrastructure will be developed to sufficiently serve future mobility needs. Current and anticipated land use patterns were reviewed and used to determine future travel patterns. Public and intercity transportation, air service, rail service, over-the-road freight movement, and bicycle/pedestrian facilities were reviewed within Bulloch County.

The five following facilities were projected to experience an unacceptable degree of congestion by 2025:

- SR 67 between Statesboro and 1-16
- US 301 between Statesboro and SR 46
- Bulloch County / City of Statesboro 2035 Long Range Transportation Plan Georgia Department of Transportation

- SR 24 east of Statesboro
- US 80 between Statesboro and Brooklet
- I-16 east of Arcola Road

Recommendations were developed to ensure a consistent approach to addressing current and future deficiencies. Recommendations were also made for traffic impact analysis and for requirements in the development permitting process. Intersection and roadway upgrades were recommended to accommodate specific developments or to improve general deterioration. Traffic signage improvements were recommended along with rumble strip replacement. Specific projects recommended for Bulloch County included:

- Paving all arterial and collector facilities
- Installing a flashing beacon at the intersection of Sinkhole Rd and Union Church Rd
- Make safety improvements in the Southeast Bulloch High School and Portal High School areas
- Construct passing lanes on US 80 between Statesboro and Brooklet
- Upgrade the railroad crossing in Register
- Widen SR 67 from Burkhalter Rd to 1-16
- Upgrade the intersection of SR 119 and SR 119C

#### **Additional Studies**

Additional studies, including the Bulloch County Transit Development Plan, the Coastal Georgia Regional Bicycle and Pedestrian Plan, and the Bulloch County Greenways Plan, are reviewed in Section C – Public Transportation beginning on page 30, and Section I – Bicycle and Pedestrian Facilities beginning on page 50.

# C. Public Transportation

The Coastal Georgia RDC (CGRDC) conducted two studies, in recent years, which pertain to transit in Bulloch County and the 10-county coastal Georgia region; the *Regional Plan for Rural and Public Transportation* in 2005, and the *Bulloch County Transit Development Plan* in 2008. These studies examined current and future projected transit need in the region, in the City of Statesboro, and in Bulloch County and evaluated ways to possibly integrate and coordinate existing transportation services. The section below presents existing transportation services and conditions in Bulloch County. It also presents the CGRDC's new Regional Rural and Coordinated Public Transportation System (proposed by the 2005 Regional Plan, mentioned above) as well as findings from the CGRDC's 2008 *Bulloch County Transit Development Plan*. Transit issues and opportunities expressed by the Bulloch County Study Advisory Committee, the public, the CGRDC, the Department of Human Resources Transportation Services, and Georgia Southern University are also summarized in this section.

#### **Existing Transit Services**

Bulloch County does not currently participate in the 5311 Rural Transit Program – the Federal Transit Administration (FTA) Program which provides funding assistance for public transit in rural areas to enhance access to health care, shopping, education, employment, public services, and recreation. Independent transit services, however, are available in the county and include the GSU Southern Express Transit System and the Georgia Department of Human Resources (DHR) Coordinated Transportation System, which serves county residents who are clients of the Area Agency on Aging (AAA) and Division of Family and Children Services (DFCS. Each of these systems is described below.

#### Georgia Southern University – Southern Express

Georgia Southern University operates Southern Express, a fixed-route, fixed-schedule transit service which transports students between the GSU campus and designated parking facilities, with limited connectivity to apartment buildings near the campus. The system consists of eight buses which operate on one circulating route consisting of seven stops, as shown in Figure 3.C on page 32. The route originates at Paulson Stadium, where the parking lot serves as a "park and ride" lot for students commuting to campus. From there, the route continues left onto Lanier Drive, making two stops for Cambridge, College Park, University Pines, and Eagle Village Apartments. The route continues left onto Georgia Avenue stopping at the University Book Store/Russell Student Union, and then proceeds left onto Forest Drive with a stop near Plant Drive. The bus then heads to the circular driveway area in front of the College of Education and the Chemistry/Nursing Buildings. From there, the route continues down Akins Boulevard, stopping at the Recreation Activities Center (RAC) before returning to Paulson Stadium via Malecki Drive.

Southern Express buses depart from Paulson Stadium every three to four minutes between 7:00 a.m. and 4:00 p.m., and every 15 minutes between 4:00 p.m. until 9:00 p.m. Service ends on Friday at 5:00 p.m. and no weekend service is currently available. All Southern Express buses run on compressed natural gas (CNG), a clean alternative fuel. CNG buses cost more to operate, but they generate less exhaust and greenhouse gases than gasoline and diesel buses.

The GSU Southern Express transit system currently provides 1.3 to 1.5 million passenger trips per year. Specific figures for the number of students served are difficult to estimate as most students use the service several times per day. The transit system is funded by the \$90 annual student transportation fee charged to students taking more than 4 hours of coursework.

GSU has a shortage of parking facilities, particularly for students who live off-campus and must commute to school. Based on the 2009 parking data, the University estimates that there is a daily demand for 12,000 parking spaces, but there are only 8,000 spaces available in the campus core. The Southern Express system does help to ease this shortage. All students are allowed to park at Paulson Stadium free of charge (no permit required) and use the shuttle to get to the center of campus. The University allocates four to five-hundred parking spaces at Paulson Stadium for transit parking.

In July 2008, GSU completed a Campus Transit Master Plan which addresses vehicular circulation, parking, and transit needs to the year 2024. The Plan proposes expanding the current transit service to include SR67/Fair Road between Herty Drive and Tillman Road, Tillman Road to GSU's "Sweetheart Circle" on Southern Drive, Forest Drive to Old Register Road, and Old Register Road to Malecki Drive via the Recreation Activity Center. This expanded route will provide students with increased access to the GSU Administrative offices, the student recreation facilities and ball fields, and to apartments and commercial establishments on SR67 and Tillman Road.

#### Figure 3.C Georgia Southern University – Current Southern Express Transit Route



Source: Georgia Southern University - www.georgiasouthern.edu.

#### The Department of Human Resources Coordinated Transportation System

The Georgia Department of Human Resources (DHR) Coordinated Transportation System provides transit to eligible recipients or "clients" of DHR services. Individuals qualify for DHR transportation services if they meet specific eligibility criteria and if space is available in DHR programs provided by their county service centers (which vary across counties and service centers, depending on funding). The Coastal Georgia Regional Development Center (CGRDC) serves as the administrator for the regional system which serves Bulloch, Screven, Effingham, Bryan, Chatham, Liberty, Long, McIntosh, Glynn, and Camden Counties. In Bulloch County specifically, the system provides clients of the Area Agency on Aging and the Division of Family and Children's Services with trips to a variety of destinations within the 10-county service area. These transportation services are available only to eligible clients and are limited to specific trip purposes (i.e. trips to the senior center, medical appointments, job training, etc.).

The DHR Coordinated System operates as a demand-response service, that is, the particular DHR agency schedules trips in advance with a third party transportation provider. In FY' 08 (July 2007 to June 2008) two third-party providers operated in Bulloch County. Concerted Services, Inc. served as the Area Agency on Aging provider for trips primarily to and from the senior center for meals and socialization, and for a limited number of trips to medical appointments and shopping destinations. Concerted Services also provided Department of Family and Children Services (DFCS) clients with trips associated with job searches and with trips to child care. The second third-party provider, Pineland Community Services Board, also provided services for DFCS clients, primarily those who are clients in DHR residential treatment centers. The total number of trips provided to Bulloch County residents by the DHR Coordinated Transportation System in FY'08 is shown below in Table 3.C.1:

#### Table 3.C.1 FY'08 Bulloch County DHR Coordinated Transportation System Trips

DHR Agency	Number of Trips
Area Agency on Aging	9,385
DFCS	11,474
DFCS-Temporary Assistance for Needy Families (TANF)	16,500
Total Trips	37,359

Source: Coastal Georgia RDC, Coordinated Transportation Trip Usage by County, FY'08 (July 1, 2007 – June 30, 2008)

TF & S Transport is the new third-party provider for Bulloch County DHR Aging and DFCS clients for Fiscal Year '09 (July 2008 to June 2009). TF & S Transport also provides transportation for Bulloch County Medicaid clients as well as transportation to employment for a small number (approximately 200) of permanently disabled workers under the Georgia Department of Labor (DOL) Rehabilitative Service Program. This program provides limited transportation services to Georgia DOL clients who by definition have a permanent disability, an impediment to employment, and a desire to work.

#### **Existing Opportunities for Transit**

#### The New Regional Rural and Coordinated Public Transportation System

In FY'09, the CGRDC implemented the Regional Rural and Coordinated Public Transportation Program in its 10-county region. The program is the third pilot project of such initiated by the GDOT Office of Intermodal Programs and is designed to provide a demand-response, advance reservation service that coordinates human services transportation (DHR) and rural, public transportation (5311) into one seamless, coordinated system that offers rural, public transportation for all residents, for any purpose, to any destination within the coastal region. The rural public system is designed to be a "feeder" system into the urbanized areas of the region, connecting to urban systems in Hinesville, Savannah, and Brunswick. Thus, for example, residents living in one county can reserve a trip to Savannah for a medical appointment or a cultural event, and so forth. The State of Georgia's budget shortfall delayed the expected start of the rural transit service in early 2009, however, its amended budget mid-year 2009 has allowed GDOT funding to be released to the CGRDC, with rural transit service expected to begin in July 2010 (FY'10).

The Program is structured to consolidate multiple funding resources which will reduce its overall costs. Funding will come from state and federal grants (FTA Section 5311 funds and DHR Purchase of Service funds), city and county match dollars, and the public transit ridership fares. Each county's share of total cost is based on the respective county's percentage of non-urban population within the entire 10-county region. Since the program is a rural transportation program, only non-urban areas can participate.

The Regional Rural and Coordinated Public Transportation Program is a voluntary initiative. Each county and/or city decides, via commission or council vote, whether or not to participate, and there is an annual renewal process which allows localities to opt out of the program if needed. The Coastal Georgia RDC is providing a financial incentive for counties to participate during the program's 5-year phase-in by funding participating counties' capital costs (vans, lift equipment, computers, etc), thus providing a low-cost transit start-up opportunity for the local governments. GDOT funds a portion of these capital costs, with the CGRDC paying the match with funds allocated from its transportation budget.

Bulloch County elected not to participate in the Program for FY'09 due to funding constraints. Bulloch's share of local match, for FY'09, would have been \$58,700, comprised of \$48,000 local share plus \$10,700 local farebox (which the county is obligated to subsidize if ridership fares are insufficient) (Source: Coastal Georgia RDC, October 2008).

Bulloch County still has the option to operate the 5311 Rural Transit Program independent of the Regional Rural and Coordinated Public Transportation Program. The local match required by Bulloch County, under this scenario, is \$241,077 comprised of a \$197,245 local share plus \$43,832 local farebox, which the county is obligated to subsidize if ridership fares are insufficient. These figures do not include capital expenses for vans, lifts, equipment, computers, etc. (Source: Coastal Georgia RDC, October 2008)

#### **Bulloch County 2008 Transit Development Plan**

Statesboro and its surrounding area are expected to reach a population of greater than 50.000 in the 2010 U.S. Census. This means that the greater Statesboro area will be classified as an urbanized area and may be required to designate a Metropolitan Planning Organization (MPO) to be responsible for overall transportation planning. If this occurs, Statesboro will be eligible for transportation funding from the Federal Transit Administration (FTA) Section 5307 Program of assistance for small urban areas while any portion of Bulloch County outside of the MPO area will continue to qualify for FTA Section 5311 Rural Transit funding. In light of this, the Coastal Georgia Regional Development Center, working with KFH Group Inc., completed the Bulloch County Transit Development Plan in June 2008 to examine transit alternatives for Bulloch County, the City of Statesboro, and Georgia Southern University which would accommodate all transportation needs versus those that could be met by the typical rural transit system. This study focused on fixed-route options for the greater Statesboro area that could be interconnected with any rural transit services in the county and with the existing GSU transit system. The established goals for the study were thus to develop a service plan that would address:

- University needs;
- General public needs in Statesboro;
- General public needs in the rural county areas;
- Human services transportation needs (DHR); and
- Ways to integrate these services with the new 10-county Regional Rural and Coordinated Transportation System.

The Study examined the transit needs in the county from a variety of angles. First, it looked at population segments (from the 2000 US Census) most likely to require alternative mobility options. Second, the study identified major trip generators, origins and destinations, which both transit dependent persons and "by choice" riders might frequent. These included locations of high density housing, major employers, medical facilities, educational facilities, human services agencies, local and state services, daycares, shopping districts, restaurants, and the airport. Third, the study conducted a random telephone survey of 279 Bulloch County households (out of 20,743 households in the county) which probed travel patterns and needs, the availability of drivers' licenses and vehicles, pertinent demographic data, areas of traffic congestion, and desired public transit service characteristics. Based on the findings from these three components, the Transit Development Study established a number of key findings that indicate future opportunities for a transit system within the County.

#### **Transit-Related Issues and Opportunities**

A number of transit-related issues and opportunities were captured from the Bulloch County Study Advisory Committee, the public, and stakeholders including the CGRDC, DHR Transportation Services, and Georgia Southern University during the Study's existing conditions collection and data analysis process. These points are summarized below and will be further examined throughout the course of the Study.

• The City and County has expressed the desire for an additional demand assessment as funding becomes available to further ascertain that a rural transit system is justified and that ridership would support the local government farebox obligation.

- Any public transportation services offered in Bulloch County should be open to the general public, and be attractive, high-quality service that anyone in the county would see as a potential option if they needed a ride.
- The Coastal Georgia RDC and the DHR Region 12 Transportation Services Office and additional analysis conducted as part of the LRTP effort find that, despite the services provided by the DHR Coordinated System, there is still unmet transportation need in Bulloch County. The lack of 5311 Rural Transit further compounds this need. Specifically:
- Persons who need client transportation programs to reach training or employment under DHR programs lose these benefits when they leave the program for employment, and there is no public transportation to allow them to continue to work on their own.
- Clients who do have transportation under these programs likely also need transportation for daily life activities such as shopping, work, personal business, medical trips, etc.
- Funding for the Area Agency on Aging is limited and only able to provide trips to the senior center and, on a limited basis, to medical appointments and to shopping. Transportation to shopping and doctor's appointment was the need most citied by senior citizens throughout the coastal region at a series of public meetings conducted by the Area Agency on Aging in early 2006.
- There is need for transportation to medical trips (not just by the elderly and not just those eligible for Medicaid) including both local and out-of-county trips.
- There is a need for other employment trips to link low-income areas with new employment in outlying areas.
- According to the CGRDC, Bulloch County can realize significant cost savings by participating in the Regional Rural and Coordinated Public Transportation System during its five-year phase-in period as the RDC and GDOT will fund the capital costs of the program.
- If the County becomes classified as an urbanized area in the 2010 U.S. Census as expected, it will become eligible for transportation funding from the Federal Transit Administration (FTA) Section 5307 Program of assistance for small urban areas. This change will create new opportunities and challenges for transit solutions which address fixed-route needs in the urbanized area along with rural transit demand in the county.
- The growth of Georgia Southern University continues to exert pressure on its existing transit and parking facilities. Specifically:
- The GSU student population is expected to continue growing in future years. The University increased by 1,000 students this year to an enrollment of 17,600, with only 3,500 students living on campus. This growth will spawn new apartment developments in the Statesboro area and an increased need for parking and transit facilities.
- To accommodate growth, the University has had to close some parking facilities for new building development, increasing the need for expanded transit facilities. Currently, there is a daily need for 12,000 parking spaces but only 8,000 spaces are available in the campus core.
- Students without cars have trouble getting to off-campus activities, such as the shopping district, the mall, the Savannah or Atlanta Airports, or to the Atlanta area. The University is interested in expanding transit services off campus to circulate into the community and in identifying potential ridership for this type of service. GSU is also interested in possible City/County partnerships to better accommodate transit needs.

 GSU is currently hampered in expanding transit and parking facilities simultaneously. Expanding one makes funding for the other smaller. The University is looking for funding sources to finance new parking facilities and decks recommended in the recently completed Campus Master Plan.

# **D. Commuter Patterns and Transportation Options**

#### **Bulloch County Workflows and Commute Times**

According to the 2000 U.S. Census, seventy-seven percent (77%) of Bulloch County residents who worked did so in Bulloch County, exceeding the statewide average of 58% and the U.S. average of 73%. Table 3.D.1 below shows workplace flows for Bulloch County residents in 2000.

Workplace Location	Number of Workers	Percent
Bulloch County	18,778	77.4%
Chatham County	2,474	10.2%
Effingham County	328	1.4%
Evans County	286	1.2%
Screven County	273	1.1%
Emanuel County	218	0.9%
Bryan County	188	0.8%
Candler County	170	0.7%
Jenkins County	148	0.6%
57 remaining counties	1,385	5.7%
Total	24,248	100%

#### Table 3.D.1 Bulloch County Residents – Workplace Locations

Source: 2000 U.S. Census.

The majority of Bulloch County workers experience minimal commute times to work. In Statesboro, commute times are even more favorable, as shown on in Table 3.D.2 below:

#### Table 3.D.2 Commute Times for Bulloch County and Statesboro Workers

	Percentage of Workers			
Commute Times to Work	Bulloch County	Statesboro		
Traveled less than 15 minutes to work	43%	66%		
Traveled 15 to 29 minutes to work	31%	18%		
Traveled 30 minutes or more to work	26%	16%		
Total	100%	100%		

Source: 2000 U.S. Census.

The majority of Bulloch County residents traveled to work in their personal vehicles. According to the 2000 U.S. Census, 73% traveled alone in their cars, 15% carpooled, 6% walked, 3% worked at home, and the remaining 3% used alternative modes (bus, taxi, etc.).

The entire Bulloch County workforce is comprised of the 18,778 residents from Bulloch County as well as 5,069 workers from 94 other counties to total 23,847 workers in all. Table 3.D.3 below shows the county of residence for this group of 5,069 people who commute into Bulloch County to work each day.

County of Residence	Number of Workers	Percent
Screven County	923	18.2%
Candler County	653	12.9%
Jenkins County	401	8.0%
Evans County	352	6.9%
Tattnall County	336	6.6%
Emanuel County	304	6.0%
Chatham County	262	5.2%
Bryan County	236	4.6%
Effingham County	177	3.5%
91 remaining counties	1,425	28.1%
Total Bulloch County workers from other counties	5,069	100%

#### Table 3.D.3 Bulloch County Workforce – County of Residence

Source: 2000 U.S. Census.

#### **Commuter Transportation Options**

The Coastal Georgia Regional Development Center implemented a regional vanpool service in FY'09 for its 10-county region, using FTA Section 5316 – Job Access Reverse Commute funds which help to provide transportation to employment opportunities particularly for, but not limited to, low-income households and welfare recipients. The vanpool program will be available to every resident who lives or works in the 10-county coastal region whose employer participates in/contributes to the program. As of June 2009, the CGRDC has received funding from GDOT for the program and is in the process of contracting with VPSI Inc., a national vanpool company, to provide vans for the program, with the expectation that the program will be operational by July 2010. The CGRDC is also working with GDOT to establish "park and ride" rideshare locations to accommodate parking needs. Under the program, five to 15 employees of a participating employer who live near each other can organize into a vanpool. The employees decide the vanpool hours, where to meet, and designate two to three drivers who rotate driving duties. The cost of ridership is spread over the number of employees in a van, so a van with 15 riders will realize lower ridership cost than a van with 5 riders. The program also guarantees riders a trip home if a situation arises during the workday which necessitates needing to get home, such as a child getting sick.

The vanpool program will help to address workplace commute needs of county residents which cannot be satisfactorily met under the typical 5311-Rural Transportation Program. The vanpool program will provide convenient, reliable, low-cost transportation to and from work for those with participating employers that does not have to be scheduled a day in advance or within restricted hours as under the 5311 Program. The vanpool program will also allow commute to work transportation that crosses county lines, so that, for example, a group of people living in Bulloch County who work for a company in Chatham County can form a vanpool to share the cost of ridership.

The program will also provide economic development advantages. Employers who participate will benefit from having a consistent, reliable workforce and a larger labor pool from which to hire employees. They will also receive tax incentives for their financial contributions, on behalf of their employees, to the program. The region as a whole will benefit from the program as well. A larger, more accessible labor pool will likely attract new business and industry to the region. The program will also lower the number of vehicles on the roads, reducing wear and tear on the roads, and will help to reduce local traffic congestion in the region.

# E. Freight Movement

The identification of freight generators, freight corridors and preservation of freight mobility is a key component of the Bulloch County / City of Statesboro 2035 LRTP. In Bulloch County, the Gateway Regional Industrial Park, located three miles south of the City of Statesboro, is the major manufacturing and warehousing center, which contributes to high volumes of truck traffic on US 301 and I-16. According to the travel demand model analysis conducted as part of this study, about 20 percent of the traffic volume on US 301 is trucks. The US 301 corridor was designated as a route for oversized trucks by the Surface Transportation Assistance Act of 1982 (STAA), a federal highway program currently administrated by GDOT. This corridor is also part of the National Highway System (NHS). Other NHS corridors include I-16, US 25 Bypass, US 301 Bypass and SR 73. A map of the major roadway freight facilities in Bulloch County can be found in Figure 3.E.1 on page 41.

#### Freight Rail

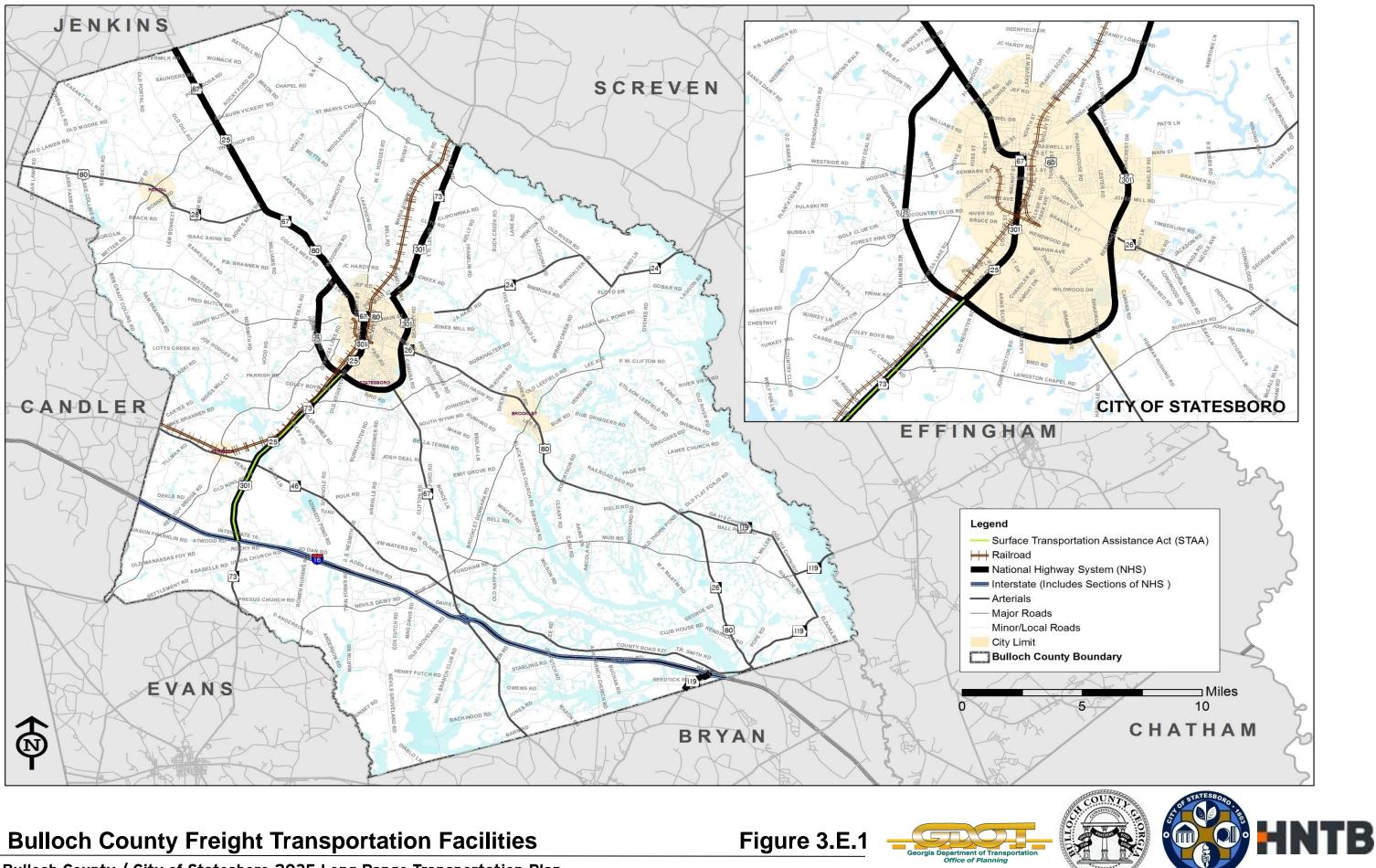
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The Georgia Midland Railroad was formed in 2004 with the acquisition of Ogeechee Railway Company by Atlantic Western Transportation (AWT) of Americus, Georgia. Georgia Midland operates two to four trains per day through Bulloch County on a 32-mile route which runs between Metter (in Candler County), Statesboro (Bulloch County), and Dover (in Screven County). In Dover, Georgia Midland connects to the Norfolk Southern Railroad network which serves the Eastern US and, specifically, the Port of Savannah, Macon, and Atlanta rail hubs. In addition to its Metter to Dover line, Georgia Midland operates lines between Roberta and Perry, and Sylvania and Ardmore. These lines, along with that of its AWT-owned sister railroad, Heart of Georgia Railroad (HOG), are shown in Figure 3.E.2 on page 42.

Georgia Midland Railroad is a shortline railroad that operates over a relatively short distance and exists to link industries together that require freight rail. The Georgia Midland Metter to Dover line through Bulloch County transports between 1,800 to 2,000 carloads and 190,000 to 220,000 tons of cargo per year. The freight consists primarily of rock and aggregate (70%), dimensional lumber (12%), grain (8%), fertilizers and farm products (8%), and other products (2%). Georgia Midland serves a number of customers in Bulloch County, including Reeves Construction, Claude Howard Lumber, Bulloch Fertilizer, Kennedy Concrete, Statesboro Grain, Stubbs Recycling, Southern States COOP, Southeast Aggregate, and Tillman and Deal.

Georgia Midland Railroad had anticipated significant increases in rail freight movement in Bulloch County in 2009 when A-1 Action, a new scrap metal business located in Metter, was expected to begin carrying an estimated 600 to 1,200 carloads through the County per year. A-1 Action's activity alone was expected to increase the number of trains through the County by two to four per week. The economic climate in 2009, however, has slowed scrap metal markets resulting in A-1 Action transporting approximately five carloads of material per month through Bulloch County versus the over 50 to 100 carloads the Railroad had anticipated.

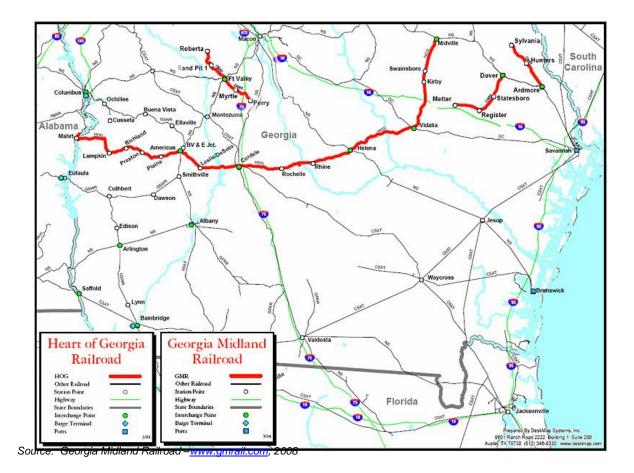
The Statesboro Bulloch County Chamber of Commerce actively works to attract rail customers to Bulloch County. Future growth in rail is expected to be modest over the next two to five years, with the hope that one or two good rail shippers will locate in Bulloch County.





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## Figure 3.E.2 Atlanta Western Transportation Railroads - Georgia Midland Railroad and Heart of Georgia Railroad



# F. Rail Crossings

Bulloch County has 73 railroad crossings, all of which are at-grade. There are 49 public railroad crossings, while 24 are private railroad crossings. The railroad has an east-west spur line off of its north-south main line in downtown Statesboro at US301 and SR67. The east-west spur extends from Williams Street southeast to Zetterower Avenue and currently serves Bulloch Fertilizer.

Multiple crossings along the Georgia Midland line experience heavy vehicle traffic volume. Table 3.F.1 below presents Bulloch County rail crossings with the highest Average Annual Daily Traffic (AADT).

Table 3.F.1	Bulloch County Rail Cro	ossings with Highest AADT
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Rail Crossing and Location	AADT
Crossing # 620179P on the rail spur at SR 67/Fair Road	20,250
Crossing # 620182A on the rail spur at SR 67/Fair Road	20,250
Crossing # 620181T on the rail spur at Zetterower Avenue	11,943
Crossing # 620176W on the rail spur at Zetterower Avenue	11,943
Crossing # 620198W on the main rail line at Main and Brannen Street	9,500
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Source: Federal Railroad Administration, 2008; GDOT State and Traffic Report System (STARS), 2008.

#### Rail Crash Data

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The Federal Railroad Administration (FRA), Office of Safety Analysis, reports 11 accidents which involved trains at rail crossings in Bulloch County, based on the latest data available for the 22 year period between 1975 and 2007. Since 2003, 3 crashes have occurred at the crossing locations highlighted in Table 3.F.2 on page 44.

#### Table 3.F.2 Bulloch County FRA Railroad Crossing Accident Data, 2000 to 2007, Latest Available Data (Crashes Involving Trains)

Crossing ID	Location	City or Community	Date of Incident	Highway User Involved	Position of Highway User	Injuries
620204X	Lakeside Drive	Statesboro	01/17/05	Auto	Moving over Crossing	None
620155D	Clito Road	Clito	06/07/04	Pick-up Truck	Moving over Crossing	None
620202J	US 301/US 25 Bypass	Statesboro	10/28/03	Auto	Moving over Crossing	None

Source: Federal Railroad Administration - Highway-Rail Grade Crossing Accident/Incident Report, 2008

The GDOT Office of Safety and Design maintains crash data as reported by local law enforcement. This data does not include the incidences involving trains as reported in Table 3.F.2 above. Based on the latest available data for the period from 2004 to 2007, 13 vehicular crashes have been reported at rail crossings in Bulloch County, none involving injuries or fatalities, which are shown in the Table 3.F.3 on page 45.

# Table 3.F.3Bulloch County Railroad Crossing Crash Data, 2004 to 2007 (Crashes<br/>Not Involving Trains)

Crossing ID	Location	City or Community	Date of Incident(s)	Manner of Collision	Injuries
620197P	SR 67/Fair Rd.	Statesboro	08/31/07	Motor Vehicle in Motion/Angle	None
620173B	East Grady St.	Statesboro	10/10/06 05/19/05 06/03/04 01/08/04	Motor Vehicle in Motion/Angle	None
			05/04/06	Collision with a deer	None
620182A	SR 67/Fair Rd	Statesboro	02/03/05	Collision with a utility pole	None
			02/05/04	Motor Vehicle in Motion/Angle	None
620176W	Zetterower Ave.	Statesboro	03/03/06	Motor Vehicle in Motion/Rear End	None
620165J	SR 26	Statesboro	10/31/05	Collision with a Fixed Object	None
620202J	US 301 Bypass	Statesboro	04/27/04	Motor Vehicle in Motion/Rear End	None
620181T	Zetterower Ave.	Statesboro	12/06/04	Motor Vehicle in Motion/Rear End	None
620155D	Clito Rd.	Clito	06/07/04	Motor Vehicle in Motion/Angle	None

Source: Georgia DOT Office of Traffic Safety and Design, October 2008

#### **Rail Accident Prediction**

The Federal Railroad Administration Web Accident Prediction System (WBAPS) is a computer model which provides an analytical tool, which when combined with other site-specific information, can assist state and local rail and highway officials in selecting particular public, atgrade crossings which may require physical safety improvements or enhancements. The WBAPS computes a rail crossing collision value, based upon two independent factors (obtained from the FRA's inventory and accident/incident files) which include: 1) basic data about a crossing's physical and operating characteristics; and 2) five years of accident history data at the crossing. This predicted collision value is the probability that a collision between a train and a highway vehicle will occur at the crossing in a year. The information produced by the WBAPS does not state that specific crossings are the most dangerous, but rather provides an indication that conditions are such that one crossing may possibly be more hazardous than another based on the specific data in the program. It should be noted that there are certain characteristics which are not included in the WBAPS database. These include sight-distance, highway congestion, bus or hazardous material traffic, local topography, and passenger exposure (train or vehicle). It should also be noted that, according to the FRA, the WBAPS is subject to data errors which might result in erroneous, inaccurate, and non-current data which can alter predicted collision values. The WBAPS is not the sole indicator of the condition of a specific public highway-rail intersection, but is designed to nominate crossings for further evaluation.

Bulloch County railroad crossings with the highest WBAPS computed predicted collision values are shown in Table 3.F.4 below. These crossings will be further examined for potential needed safety improvements.

#### Table 3.F.4 FRA Web Accident Prediction System – Bulloch County Crossings with the Highest Predicted Collision Values

Crossing ID	Location	City or Community	Rank	Predicted Collision Value	AADT
620155D	Clito Rd.	Clito	1	4.3%	150
620204X	Lakeside Dr.	Unincorporated Statesboro	2	4.3%	60
620202J	US 301 Bypass	Statesboro	3	4.1%	80
620181T	Zetterower Rd.	Statesboro	4	3.3%	11,943
620176W	Zetterower Rd.	Statesboro	5	2.7%	11,943

Source: Federal Railroad Administration, Office of Safety Analysis – Web Accident Prediction System, 2008

#### **Planned Rail Improvements**

Two railroad improvement projects are listed for Bulloch County in GDOT's 2008-2013 Construction Work Program. A description of these improvements and their current status is listed in Table 3.F.5 below:

#### Table 3.F.5 Bulloch County Construction Work Program

CWP Project ID	Work Type	Work Description	Location	Phase	Status
0006091	Railroad Crossing Warning Device	Upgrade crossbucks to gates, lights, and bell with a cantilevered light unit on one approach	Crossing #620196H at East Jones Avenue	Construction	On Hold – operating shortline railroad changed ownership from Ogeechee RR to Georgia Midland RR
571390	Railroad Crossing Warning Device	Upgrade crossbucks to gates, lights and bell	Crossing #620214D at Main Street	Construction	On Hold – operating shortline railroad changed ownership from Ogeechee RR to Georgia Midland RR

#### **Railroad Improvement Projects**

Source: Georgia Department of Transportation, Construction Work Program, 2008 - 2013

### Local Rail Concerns

The Study Advisory Committee noted the crossings in Bulloch County, as identified below:

- The rail crossings on the Georgia Midland Railroad main line and on the spur line which cross in downtown at the junction of US301 and SR67 (Crossing #620198W and #620197P) are dangerous from a geometry perspective. Vehicles maneuvering turns in the intersection can become stopped on the rail line. Additionally, the warning device hardware is currently placed so that the train has to slow down or stop and wait for the gates to drop down before entering the intersection. The hardware needs to be extended further away from the intersection to allow the warning gates to drop well before the train gets near the intersection.
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 The rail crossings on the spur line facing Rackley Street are in possible need of safety upgrades (lights, gates).

These railroad crossing issues along with rail crossings identified above with crash and safety incidence will be further examined for possible improvement recommendations.

# G. Intercity and Commuter Rail

The Georgia Rail Passenger Program (GRPP), a joint initiative between GDOT, Georgia Passenger Rail Authority (GRPA), and Georgia Regional Transportation Authority (GRTA) has proposed future intercity rail between Atlanta, Macon, and Savannah. Intercity rail service is defined as high-speed train service between major cities with two to three trains per day and few stops to minimize travel time. The 2006 Program calls for three daily express intercity trains to operate each way on an initial route between Atlanta and Macon, with a stop in Griffin, by the year 2015. Capital costs are estimated at \$58 million on this initial route which is expected to carry 275,000 passengers.

The Macon to Savannah route is projected to open two years after the Atlanta to Macon route becomes operational. This route would utilize either the existing Norfolk Southern line to Jesup and the CSX line from Jesup to Savannah, or the existing Georgia Central Railroad line between Macon and Savannah. Initial capital costs are estimated at \$302 million, with 551,000 passengers expected to use the service. The Atlanta to Macon to Savannah service, if implemented, would provide Bulloch County residents and GSU students with the option of traveling to Savannah to board a high-speed train to transport them to the Atlanta or Macon area. At this point in time, the GRPP does not propose active commuter rail directly to Bulloch County.

Passenger rail in the coastal region is currently limited to Amtrak's Silver Service/Palmetto route which serves the Savannah and Jesup areas with routes between New York, Washington DC, Columbia, Charleston, Jacksonville, Orlando, Tampa, and Miami.

# H. Airport Facilities

Statesboro-Bulloch County Airport is the primary airport within Bulloch County. The Statesboro-Bulloch County Airport is jointly owned by Bulloch County and the City of Statesboro and is operated by the county. The Airport is located on 935 acres approximately four miles northeast of Statesboro on US Highway 301 / Georgia Highway 73. Statesboro-Bulloch County Airport is classified as a Level III – Business Airport of Regional Impact by the State of Georgia Aviation System Plan, which classifies airports on the basis of runway length and width, lighting systems, visual aids, approach systems, and general aviation facilities and services. Other private airstrips in Bulloch County are located off Womack Road near Portal, between Harville Road and SR67 south of Statesboro, and off Rushing Road west of Brooklet.

Commercial airport needs in Bulloch County are met by the Savannah/Hilton Head International Airport, located approximately 50 miles southeast of Statesboro. Savannah/Hilton Head International offers commercial jet service, corporate/business jet use, and military aviation. Its facilities include a 275,000 square foot commercial terminal building, a 16,883 square foot general aviation terminal building with fuel concessions, and an international customs service.

The Statesboro-Bulloch County Airport accommodates a variety of aviation-related activities including general aviation/recreational flying (70%), corporate/business jet aviation (20%), and forestry, police/law enforcement, experimental aircraft, and aerial photography and surveying aviation (five to 10%). There were 19,120 takeoffs and landings in 2006. The Airport opened a corporate hangar in January 2008 with two hangar spaces, both immediately occupied. Citation and Lear jet aircraft utilize the facility along with King Air Turbo Prop planes. The Airport expects corporate and business travel to become a significant component of its aviation activity in coming years.

Statesboro-Bulloch has two runways. Runway 14/32 is 6,001 feet long and 100 feet wide with high intensity runway lighting, precision approach path indicator lights, and a full parallel taxiway with medium intensity lighting. The secondary runway, Runway 5/23 is 4,381 feet long by 100 feet wide. The Airport has a 4,200 square foot terminal/administrative building, a maintenance facility, and a 24-hour self-service AvGas and jet fuel facility. There are 49 hangar spaces, 30 apron parking spaces, and 30 auto parking spaces. Figure 3.H on page 50 shows a schematic layout of Statesboro-Bulloch County Airport.

Statesboro-Bulloch County Airport completed an update to its Airport Layout Plan (ALP) in December 2008. The ALP provides a "blueprint" for the airport for the next ten years. With input from the Airport, Bulloch County, as part of its 2008-2009 Comprehensive Land Use Planning initiatives, will be assessing appropriate zoning and land use controls for the airport vicinity that are consistent with the business and commercial development opportunities anticipated in light of the airport's expected future growth.

The Airport updated its Five-Year Capital Improvement Plan in late 2008. Focus is given to accommodating the growing corporate business aviation activity, improving existing facilities, and in further developing new charter jet services. Specific improvements planned for 2009 include installing security fencing and completing pavement rejuvenation of the airport's ramps (runway pavement rejuvenation was completed in 2008).

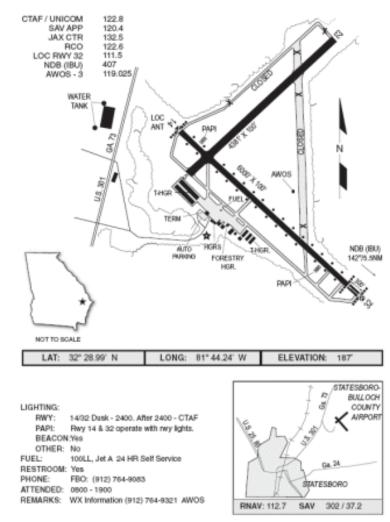


Figure 3.H Statesboro/Bulloch County Airport

Source: Georgia Department of Transportation-Aviation, 2008

# I. Bicycle and Pedestrian Facilities

Bicycle and pedestrian facilities are an important part of a multimodal transportation system designed to efficiently move people. It is important to consider that everyone is a pedestrian at one point in almost every trip, even if the primary mode of travel for a trip involves a personal vehicle or transit. Sidewalks are an important element along roadways near local activity centers such as schools, libraries, commercial centers, and public recreation areas which attract significant pedestrian and vehicular traffic. Crosswalks at roadway intersections in areas with pedestrian activity should be utilized to minimize conflicts between motor vehicles and pedestrians. This section provides a summary of previous bicycle and pedestrian planning efforts and an outline of issues to consider during the development of future transportation system alternatives.

To help reduce the overall costs of infrastructure development for a bicycle and pedestrian network, new local facilities should be implemented concurrent with subdivision development and local policy standards.. Recommendations for development of a county wide system for bicyclists and pedestrians will focus on connectivity with the existing designated bicycle routes, system of sidewalks, neighborhood streets, and pathway connections.

#### Existing Bicycle and Pedestrian Network

The City of Statesboro maintains a partially developed sidewalk network in the downtown and residential areas of the City as determined by field review of these areas. The three smaller communities of Brooklet, Portal, and Register also have core sidewalk networks. The networks in these four areas could be expanded to better connect residents to activity centers within these communities. There are very few sidewalks outside of these incorporated communities.

A greenway trail called the McTell Trail has been constructed in the City of Statesboro. The trail begins at Fair Road Park and runs north to North Main Street linking Georgia Southern University to downtown. The University also has a well-developed internal system of facilities for walking and biking.

The Georgia Department of Transportation has designated a State Bicycle Route network consisting of fourteen routes throughout the state. Figure 3.I.1 on page 52 displays the Georgia State Bicycle Route Network. Two of those identified routes, March to the Sea and TransGeorgia, traverse Bulloch County. The March to the Sea route begins in Rossville in Dade County in the far northwest corner of the state and terminates in Savannah. This route enters northwest Bulloch County following Rocky Ford Road, Old River Road, and Lakeview Road into downtown Statesboro. It then travels south to SR 67 and continues along SR 67 until it converges with the TransGeorgia Route at the intersection of SR 46 near Denmark. The Bulloch County portion of the March to the Sea Route is approximately 44 miles long. The second State Bicycle Route located in Bulloch County, the TransGeorgia Route, begins in Lee County just north of Columbus and terminates in Savannah. This route runs along SR 46 across southern Bulloch County for approximately 29 miles. The majority of the bicycle network in Bulloch County, with the exception of the section of March to the Sea through downtown Statesboro, has shoulders at least 4 feet wide which allow adequate space for bicycles. Neither of the routes currently have share the road or bicycle route designation signage.

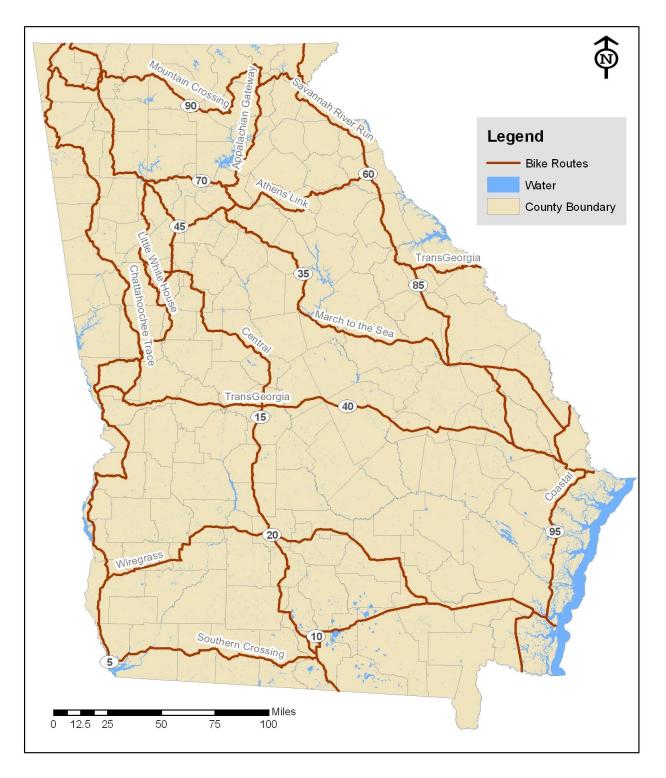
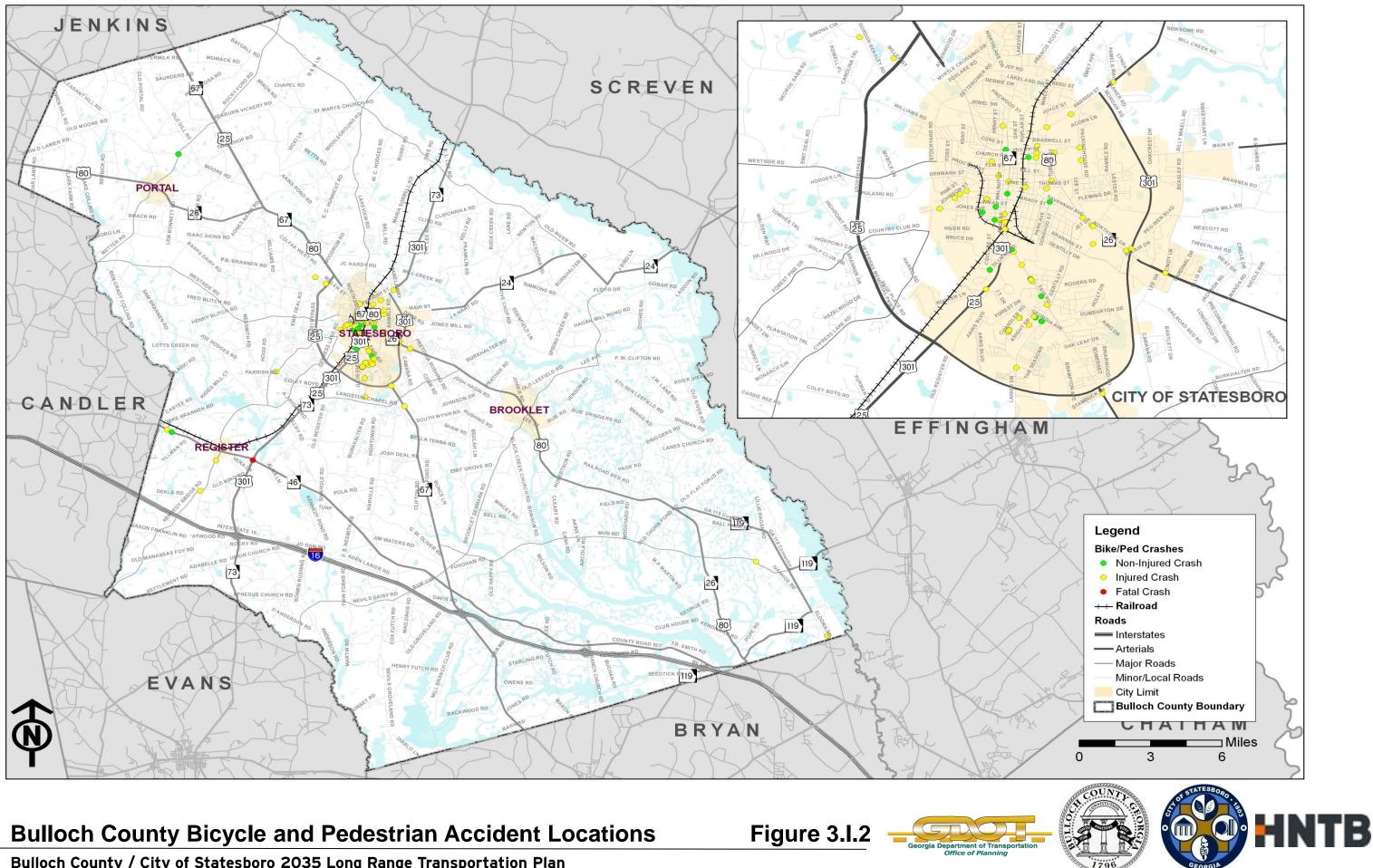


Figure 3.I.1 Georgia State Bicycle Route Network

#### **Bicycle and Pedestrian Crash Data**

The most recent statistics for bicycle and pedestrian crashes (2005-2008) were examined to offer insight into safety concerns for bicyclists and pedestrians traveling in Bulloch County. During this period, there were 16 bicycle or pedestrian crashes with no injuries, 56 crashes with injuries, and 2 crashes resulting in fatalities. The majority of the injuries (89 percent) were concentrated in the City of Statesboro and the two fatalities occurred at the intersections of US 301 and SR 46 and on I-16 respectively. The locations of bicycle and pedestrian crashes are shown in Figure 3.I.2 on page 54. These crash locations will be examined in the field to identify any changes that can be implemented to improve bicycle and pedestrian safety.







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#### **Programmed Bicycle and Pedestrian Improvements**

Planned improvements for roadway widening, resurfacing, and intersection improvements in Bulloch County included in GDOT's 2008-2011 Statewide Transportation Improvement Program (STIP) and 2008 – 2013 Construction Work Program (CWP) were evaluated to identify existing and potential opportunities for the inclusion of bicycle or pedestrian improvements in the concept design. Programmed projects that are specifically designated in the CWP as bicycle or pedestrian facilities are listed in Table 3.I below.

# Table 3.IGDOT Bicycle and Pedestrian Planned and Programmed Projects-<br/>2008-2011 STIP and 2008-2013 CWP

Project ID #	Primary Work Type	Description	PE	ROW	CST
0006631	TE-Bike/Ped Facility	<b>Statesboro Downtown Streetscape Enhancement</b> – <b>Phase I</b> This streetscape project extends along East and West Main Streets, between Oak Street on the east and College Street on the West. The streetscaping includes sidewalks with curbs, street trees, lighting, benches, trash receptacles, and improved crosswalks.	Local	Local	2008
0006632	TE-Bike/Ped Facility	<b>S&amp;S Greenway</b> Phase II of the S&S Greenway will include 1.75 miles of paved multi-use trail heads with restrooms at each end. Project will begin at Cawana Road and end at Pretoria Rushing/Burkhalter Intersection.	Local	Local	Lump
0008076	TE-Bike/Ped Facility	<b>Campus Greenway Multi-use Trail – Phase I</b> Campus Multi-Use Trail linking City to Campus. Trail will be 14 feet wide and include signage, lighting, picnic facilities, and bike racks. Begins Tillman & Fair Road and ends at Southwest end of campus academic corridor.	Local	Local	Lump
0008078	TE- Landscape/ Beautify	CR 576 from SR 67/North Main to CS 619/College Street – Phase II Along West Main from North/South Main to College Street to include sidewalks, curbs, crosswalks with ADA access, lighting, benches, and trash receptacles.	Local	Local	Lump

Source: Georgia Department of Transportation

#### **Potential Destinations for Bicycle and Pedestrian Facility Connections**

Bulloch County has many destinations that inspire the need for connectivity by non-motorized forms of transportation. Several key destinations will be considered when evaluating locations for new bicycle or pedestrian facilities. These include existing schools (elementary, middle, high schools and institutes of higher learning), city centers, medical facilities, parks and natural facilities, libraries, and community centers.

These destinations plus any others identified during the study process will be considered when developing recommendations for additional facilities to foster bicycle and pedestrian connectivity.

#### Existing Bicycle and Pedestrian Planning Studies

Several relevant studies and plans are underway or have been completed for Statesboro and Bulloch County. A summary of the bicycle and pedestrian elements of each of the plans is included below. Please note that these studies are considered an input to the development of the long range transportation plan recommendations, but this plan does not endorse all recommendations included in these studies. Bicycle and pedestrian policy and facility recommendations identified for the Bulloch County / City of Statesboro 2035 Long Range Transportation Plan will be based on transportation system data and field evaluation, in addition to relevant policy and facility recommendations outlined in the plans below.

#### **Bulloch County Transportation Plan (2000)**

The Bulloch County Transportation Plan, prepared in 2000, indicated that there were no facilities constructed exclusively for the use of bicycle and pedestrians in unincorporated Bulloch County. No recommendations for location-specific bicycle or pedestrian facilities were made. Sidewalks were indicated to be present in the incorporated communities of Brooklet and Register in a few isolated locations immediately outside of Statesboro. The presence of the two statewide bicycle routes was noted and a recommendation to consider them when planning any roadway improvements was made. A recommendation was made to require additional space along roadway shoulders for separation of automobiles and bicycles. The County was encouraged to adopt internal policies and coordinate with GDOT on state-financed projects to ensure that bicycle and pedestrian needs are accommodated as a routine matter in project development.

#### Bulloch County Comprehensive Plan – Land Use Plan (2006)

The Bulloch County Comprehensive Plan update is currently underway and was completed in June 2009. A review of the Land Use Plan created in March of 2006 was conducted to gain insight into the bicycle and pedestrian elements. The plan recommends development of a pedestrian and bicycle circulation system that links municipalities and communities in the county along key destination corridors specifically linking schools. The plan recommends consideration of adoption of a level of service measure for bicyclists and pedestrians.

A bicycle and pedestrian system separate from the major roads in the county is recommended with specific mention of the abandoned rail line between Statesboro and Brooklet. Several corridors considered as candidates for scenic corridor designation are recommended for potential bicycle and pedestrian facilities. The specific corridors mentioned include US 80; SR 24, 46, and 67; Old River Road; and Brooklet Denmark Road. Also, roadways classified as Arterials are recommended for inclusion of generous and protected walkways and bike paths, as well as signalized crosswalks. Finally, local roads are recommended to accommodate the greatest mix of users with an emphasis for bicycle and pedestrian facilities.

#### City of Statesboro 2009-2029 Comprehensive Master Plan – Draft Community Assessment (2009)

The City of Statesboro is currently updating their Comprehensive Master Plan and was completed in June 2009. The Draft Community Assessment, prepared in August 2008, was reviewed to identify elements related to bicycle and pedestrian needs in Statesboro. The study referenced year 2000 data from the US Census Bureau related to means of

transportation to work. According to the Census Bureau, 6.23% of Statesboro residents walk to work while 1.43% ride a bicycle to work. The Community Assessment indicates that sidewalks in new developments are only required along arterial and collector streets.

As a part of the Community Assessment, a list of issues and opportunities was developed using stakeholder feedback gathered at several public workshops held during the spring of 2008. Several issues and opportunities related to bicycling and walking were identified as follows:

- Link bicycle paths in the city and county with GSU campus
- Provide more sidewalks and pedestrian facilities throughout the city
- Provide more bicycle lanes and facilities throughout the city
- More bicycle lanes (wide roads = opportunity)
- Enhance pedestrian connectivity
- More sidewalks
- More crosswalks
- More pedestrian signage
- Install sidewalks on Gentilly Road
- Bicycle trail not felt to be safe
- Install more curb cuts to accommodate bicycle, stroller, and wheelchair access to sidewalks [NOTE: it is illegal to ride bicycles on sidewalks]
- Improve landscape maintenance along sidewalks (i.e. trim schrubs)
- Connect neighborhoods with bicycle paths along major roads.
- Ensure safe routes pedestrian and bicycle to all city schools
- Better enforcement of crosswalk laws and pedestrian rights-of-way
- More bicycle storage facilities
- More bicycle access to local business (e.g. GSU and residential neighborhoods)

In the analysis of existing development patterns, a strategy to enhance existing pedestrian connectivity by repairing/replacing sidewalks and adding new ones where necessary was recommended in the following development areas: traditional neighborhood, in-town neighborhood, and in-town corridors. A strategy to promote walking and bicycling as an alternative means of transportation was recommended in the existing and developing suburban areas. In the areas transitioning to multi-family rental areas, bicycle and pedestrian facilities were recommended for students commuting to and from GSU. In declining suburban areas where housing units are predominantly rental units, adequate bicycle and pedestrian facilities to link neighborhoods with adjacent areas was recommended.

Greenspace areas were recommended for use to connect new development with existing and proposed networks of bicycle paths and multiuse trails. Statesboro High School was specifically mentioned for enhancement of pedestrian and bicycle connectivity with surrounding streets and neighborhoods. Finally, designated gateways at the intersections of the bypass and SR 67 and US 301 South and at the city limits where US 301 North and US 80 North and South intersect are recommended for the addition of bicycle and pedestrian facilities.

#### Coastal Georgia Regional Bicycle and Pedestrian Plan (2005)

The Coastal Georgia Regional Development Center, with funding support from the Georgia Department of Transportation in conjunction with a Bicycle Pedestrian Advisory Committee completed the *Coastal Georgia Regional Bicycle and Pedestrian Plan* in 2005. Although the plan does not outline any specific recommendations for facilities in Bulloch County, the following goals were established for the 10-County region:

- Goal 1: Increase number and quality of bike lanes, bike paths, and dedicated trails
- Goal 2: Increase bicycle and pedestrian safety
- Goal 3: Provide bike routes for casual rider, moderate rider, and advanced cyclists
- Goal 4: Prepare bicycle and pedestrian plans for each county and city in the region
- Goal 5: Research and educate the public on Georgia laws pertaining to bicycle/pedestrian safety, rights and responsibilities.
- Goal 6: Establish bicycle and pedestrian retrofit strategy for existing roadways and intersections
- Goal 7: Establish ongoing public education on bicycle and pedestrian transportation and safety

#### **Comprehensive Recreation Master Plan (2000)**

A Comprehensive Recreation Master Plan was developed in 2000. The Master Plan outlines existing and proposed recreational facilities in Bulloch County and its incorporated municipalities. These facilities have been noted in the *Potential Destinations for Bicycle and Pedestrian Facility Connection* section above and will be examined for possible benefit for connection with a bicycle or pedestrian facility. The plan also recommended the development of a Greenway Master Plan to connect parks, schools, and neighborhoods. This plan has been completed as described below.

#### Bulloch Greenways System Plan (Ongoing)

The Bulloch Greenways Partnership was established to develop a plan for building a greenway system in Bulloch County. The Local Partnership, comprised of the Statesboro-Bulloch County Parks and Recreation Department, the Bulloch Greenways Steering Committee, Georgia Southern University, and local government agencies and businesses, was formed in 2002. The Partnership is dedicated to planning and developing a network of greenways and trails that provides non-motorized recreation opportunities such as walking, biking, and jogging convenient to all residents of Bulloch County. The goals and objectives of the study were considered in development of this plan.

## J. Bridges

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Another critical transportation area of emphasis in Bulloch County is bridge conditions. Bridges were evaluated to determine the need for potential improvement. Deficient bridges can pose a major obstacle to a fully functional road network due to load limits or other restrictions. The study area was reviewed to identify all bridges and assess the need for potential improvements.

To facilitate this analysis, GDOT provided bridge condition reports for each bridge within the study area. Sufficiency rating is the general measure of the condition of each bridge. The sufficiency rating is used to determine the structural and geometric condition of the bridge, and represents the structural safety, adequacy, serviceability, and necessity of public use. This

measure is used to identify need for maintenance, rehabilitation or reconstruction of a bridge structure. Bridges are rated on a point system from 1 to 100 (the maximum rating). Bridges with ratings below 50 are still able to safely accommodate traffic; however, upgrading these bridges to modern design and load standards will improve the operation and safety of the bridge as well as the capacity of the roadway. All bridges with a sufficiency rating of 50 or lower were identified as deficient for purposes of the study. These bridges are candidates for federal bridge replacement funds.

141 bridges within Bulloch County were identified and documented with a sufficiency rating. Table 3.J below displays the collected information. Italics font indicates that the bridge is on the state system.

Road	Feature	Sufficiency Rating
Brooklet-Denmark Road	Lower Black Creek	8.81*
Portal Hwy	Big Branch & Lotts Creek	16 &24*
Deloach Church Road	Lotts Creek	N/A*
Akins Pond Road	Mill Creek	25.66
Cypress Lake Road	Dry Branch	26.74
Cypress Lake Road	Wateringhole Branch	27.03
Old River Road	Ogeechee River Overflow	39.45
Stilson-Leefield Rd	Mill Creek	54.02
Nevils-Daisy Road	Lotts Creek	55.01
Pulaski Road	Crossway Branch	57.57
Pulaski Road	Lotts Creek	57.57
Pulaski Road	Lotts Creek Overflow	57.57
SR 24	Ogeechee River	59.91
SR 24	Ogeechee River Overflow	60.93
Rocky Ford Road	Bay Gall Creek	64.22
Mud Road	Lower Black Creek	64.30
Lakeview Road	Ogeechee River Overflow	65.38
US 301	Ogeechee River	65.58
US 25 (NB / SB Lane)	Lotts Creek Trib.	66.92
SR 119	Ogeechee River Overflow	67.00*
Old River Road	Ogeechee River	67.35
Spring Creek Road	Spring Creek	68.42
Adabelle Road	Scott Creek	69.27
Clito Road	Mill Creek	69.41
Arcola Road	Upper Black Creek	69.50
Mp Martin Road	Cross Branch	70.08
Burkhalter Road	Little Lotts Creek	70.59
US 25	Little Lotts Creek	71.21
Cypress Lake Road	Lotts Creek	71.30
US 80	Lotts Creek	71.45
Sinkhole Road	Lotts Creek	73.17
Lakeview Road	Ogeechee River	74.14
Mud Road	Upper Black Creek	74.29
Deloach Church Rd.	Lotts Creek Overflow	75.71

#### Table 3.J Bridge Inventory – Bulloch County

Bulloch County / City of Statesboro 2035 Long Range Transportation Plan Georgia Department of Transportation

Road	Feature	Sufficiency Rating	
FAS 577	Ash Branch	76.58	
US 301	Mill Creek	76.86	
Stilson-Leefield Rd	Spring Creek	77.78	
US 25	Lotts Creek Trib.	79.27	
Malard Pond Bridge	Nevils Creek	80.18	
Arcola Road	Lower Black Creek	80.27	
Gov-Treutlen Hwy	Sweeten Water Branch	80.36	
Bulkhalter Road	Mill Creek	80.57	
Sinkhole Road	I-16 EB Lane (SR 404)	81.54	
Sinkhole Road	I-16 WB Lane (SR 404)	81.54	
Kennedy Bridge Rd	I-16 (SR 404)	81.74	
Old River Road	Mill Creek	82.57	
SR 24	Floyd Branch	82.67	
Old River Road	Nevil's Creek	82.83	
Lakeview Road	Mill Creek	83.00	
Nevils-Groveland	I-16 (SR 404)	85.96	
SR 24	Spring Creek	88.00	
US 25	Banks Creek	88.22	
US 25	Banks Creek Trib.	88.22	
SR 67	College Canal	88.26	
SR 67	Lower Black Creek Trib.	88.58	
SR 67	Little Lotts Creek	88.61	
US 25	Bay Gall Creek Trib.	88.64	
US 25	Wyatts Branch	89.01	
Red Hill Church Rd	I-16 (SR 404)	89.35	
US 80	Panther Branch	89.87	
Zetterower Street	Little Lotts Creek	89.90	
US 80	Caney Branch	90.22	
Gentilly Road	Little Lotts Creek	90.39	
Nevil Denmark Rd	Mann Branch	90.54	
US 25	Lotts Creek	90.57	
Pulaski Road	Dry Branch	91.20	
Nevils-Daisy Road	Reedy Branch	91.47	
Nevils-Daisy Road	Reedy Branch Trib.	91.47	
US 80	Upper Black Creek Trib.	91.54	
US 80	Iric Creek	91.60	
Pulaski Road	Wateringhole Branch	91.72	
Rocky Ford Road	Wyatts Branch	91.86	
Pleasant Hill Road	Lotts Creek	91.87	
Lakeview Road	Coleman Creek Trib.	91.91	
FAS 577	Boggy Branch	91.94	
Langston Chapel Rd	Little Lotts Creek	91.95	
US 80	Cross Branch	91.99	
Clito Road	Mill Creek Overflow	92.00	
Arcola Road	Boggy Branch	92.01	
Kennedy Br Road	Tenmile Creek Trib.	92.08	
Westside Road	Dry Branch	92.11	
Stilson-Leefield	Sand Hill Branch	92.36	
Stilson-Leefield	Sand Hill Branch	92.36	

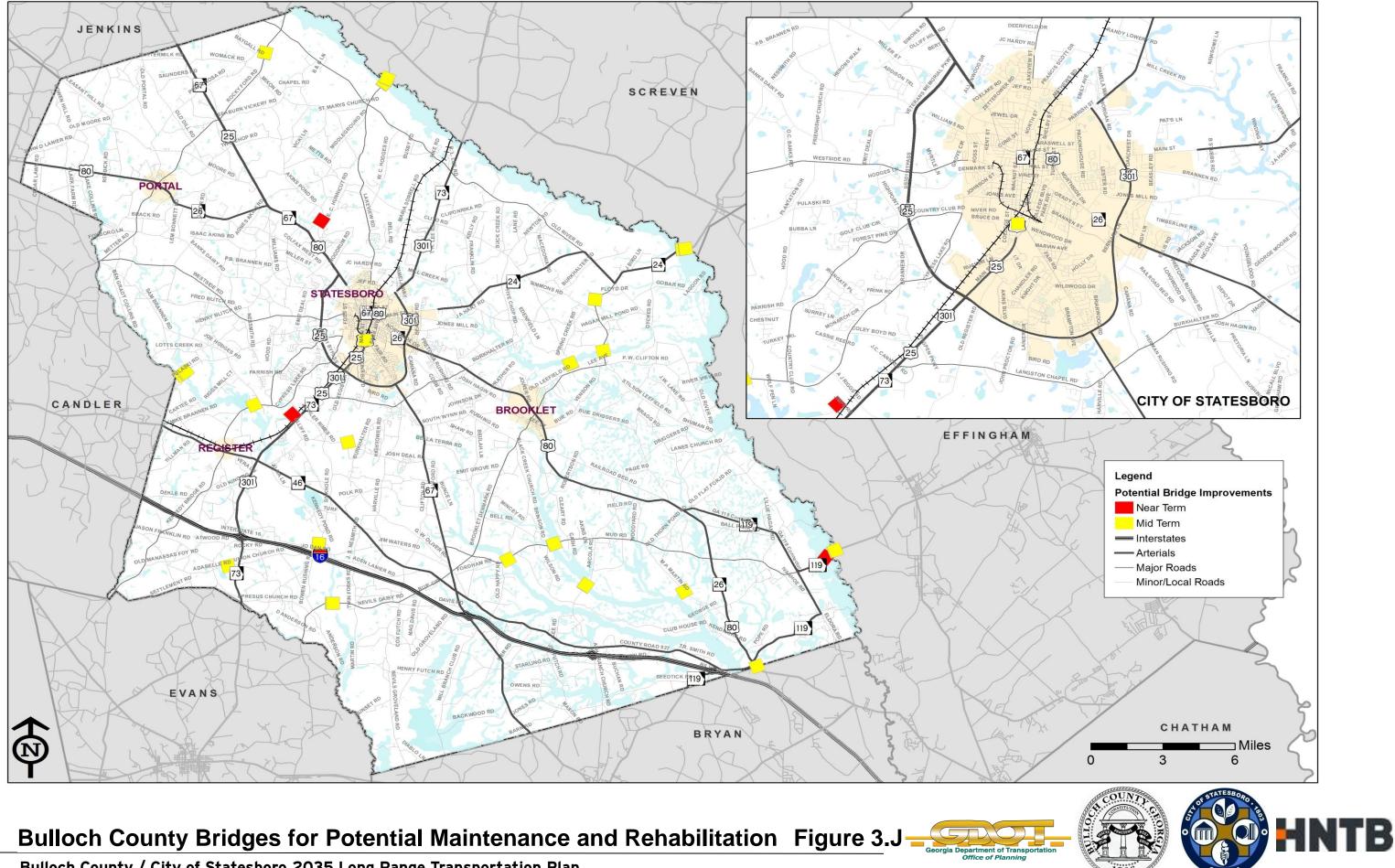
Road	Feature	Sufficiency Rating	
Westside Road	Big Branch	92.36	
Nevils-Groveland	Mill Branch	92.41	
Old River Road	Buck Creek	92.43	
G .W. Oliver Road	Little Lotts Cr	92.48	
Jim Water Road	Little Lotts Creek	92.49	
SR 46	Lotts Creek	93.28	
US 25	Scott Creek	93.35	
SR 67	I-16 (SR 404)	94.52	
SR 24	Mill Creek	94.63	
Gov-Treutlen Hwy	I-16 (SR 404)	96.00	
Ash Branch Ch Rd	I-16 (SR 404)	96.20	
SR 67	Little Lotts Creek	96.99	
SR 67	Woodcock Branch	96.99	
Rocky Ford Road	Ogeechee River	97.42	
US301 / US 25 (NB/SB)	I-16 (SR 404)	97.45	
FAS 2766	Lotts Creek Overflow	97.57	
US 25 (SB Lane)	Mill Creek	97.59	
US 25 (NB Lane)	Mill Creek	97.65	
SR 67	Zetterower Branch	98.02	
FAS 577	Mann Branch	98.10	
SR 67	Mann Branch	98.14	
Gov-Treutlen Hwy	Black Creek	98.39	
FAS 577	Luke Swamp Branch	98.48	
SR 67	Zilks Bay Branch	98.72	
SR 46	Little Lotts Creek	98.74	
US 301 Bypass	Lotts Creek Trib.	98.81	
SR 67	Luke Swamp Branch	99.36	
SR 67	Reed Branch	99.36	
Westside Road	Wateringhole Branch	99.53	
SR 119 Connector	Pole Branch	99.55	
Lakeview Road	Belcher Branch	99.65	
Old River Road	Sand Hill Branch	99.66	
Country Club Road	Wateringhole Branch	99.67	
Lawrence Ch Road	Ash Branch	99.72	
Old River Road	Coleman Creek	99.76	
Emit Grove Road	Lower Black Creek	99.77	
Mud Road	Cross Branch	99.84	
Mud Road	Iric Creek	99.92	
Hagan Mill Pond Rd	Spring Creek	99.98	
Aden Lanier Road	Little Lotts Creek	99.99	
Brooklet Road	Upper Black Creek Trib.	100.00	

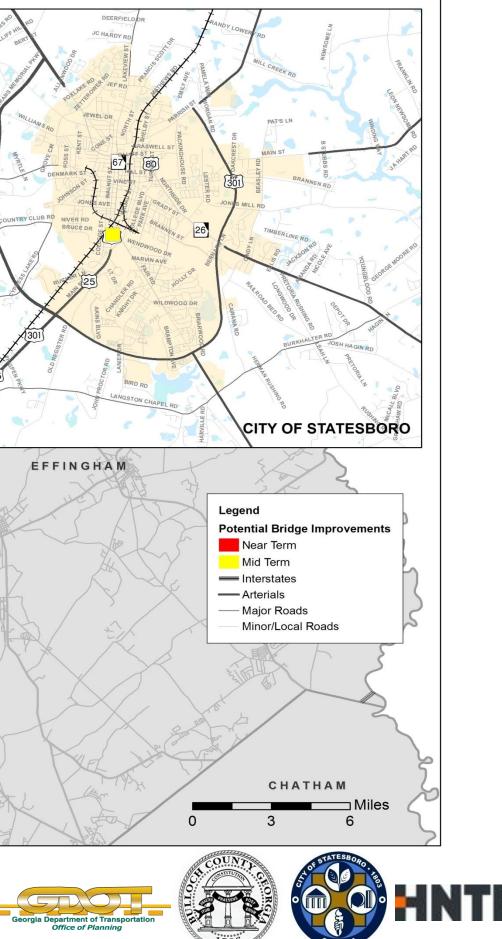
Source: GDOT. \* Included in GDOT's current work program. Italic font indicates that the bridge is on the state system

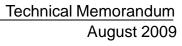
Based on the sufficiency rating, the majority of bridges are in good condition and not in need of any major maintenance or upgrade activities. There are seven bridges that have a sufficiency rating below 50 and are potentially in need of maintenance and rehabilitation in the next 10-15 years. The following bridges have a sufficiency rating below 50:

- Brooklet-Denmark Road at Lower Black Creek (currently under construction)
- Portal Hwy at Big Brach & Lotts Creek (currently in GDOT work program)
- Deloach Church Road at Lotts Creek (currently in GDOT work program)
- Akins Pond Road at Mill Creek
- Cypress Lake Road at Dry Branch
- Cypress Lake Road at Wateringhole Branch
- Old River Road at Ogeechee River Overflow

Additionally, there are twenty-seven bridges that have a sufficiency rating between 50 and 75 and should be considered candidates for maintenance and rehabilitation within the horizon year of the plan (2035). The candidate bridges in the Bulloch County Region for maintenance and rehabilitation are mapped in Figure 3.J on page 63.







# K. Safety

The most recent vehicular crash data from GDOT (2003 - 2007) was collected and analyzed for Bulloch County. The crash data was analyzed using the Critical Analysis Reporting Environment (CARE) software developed by the University of Alabama with supporting crash data from GDOT's Office of Traffic Safety and Design. Crash data was used to determine roadway locations with potential safety deficiencies throughout the study area. Bulloch County experienced a total of 9,336 crashes with 2,786 non-fatal injured crashes and 66 fatal crashes during the five-year analysis period. During same analysis period, the State of Georgia experienced a total of 1,702,654 crashes with 440,949 non-fatal injured crashes and 7,590 fatal-crashes.

Based on the statistical analysis of the crash data as well as engineering judgment, a threshold of 50 crashes over the five-year period (10 crashes per year on average) was determined to identify "active crash" intersection locations.

#### **Bulloch County Crash Data Summary**

Five years of crash data (2003 - 2007) were collected and analyzed for Bulloch County. Table 3.K below lists the active crash intersections between 2003 and 2007.

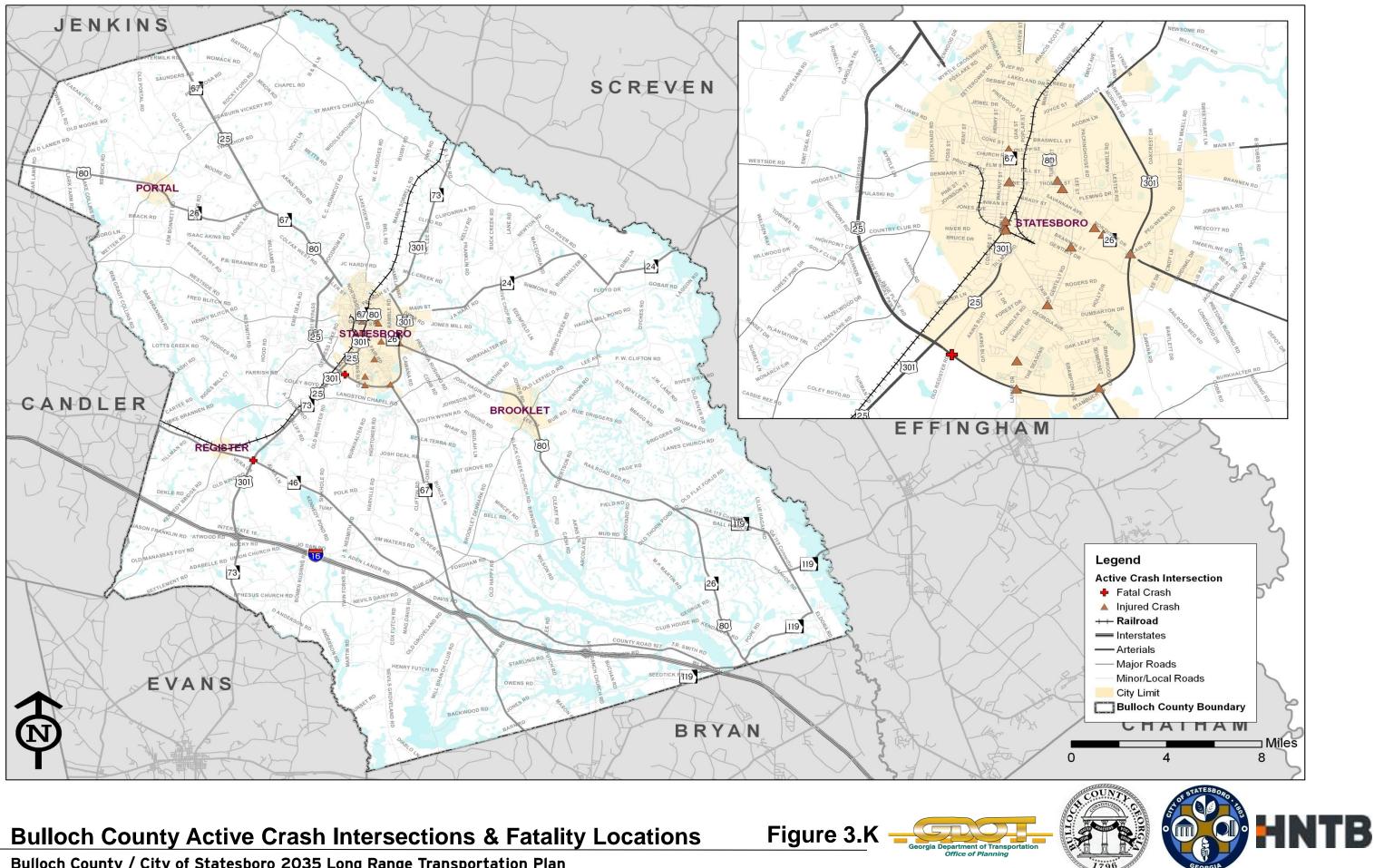
Intersection	Crashes	Fatalities	Injuries
Fair Rd at Veterans Memorial Pkwy	144	0	33
Northside Dr. at Lester Rd	107	0	26
Veterans Memorial Pkwy at Lanier Dr.	106	0	24
Northside Dr. W at N. Main St	98	0	27
Fair Rd at W Brannen St.	93	0	15
Northside Dr. E at Veterans Memorial Pkwy	87	0	16
S. Main St. at Fair Rd	87	0	8
Fair Rd at Chandler Rd	86	0	15
Chandler Rd at Lanier Dr.	71	0	6
Northside Dr. at Brannen St	62	0	14
S Main St. at Mikell St.	62	0	11
Northside Dr. at Cone Crescent	59	0	12
Veterans Memorial Pkwy at Old Register Rd	56	1	18
SR 46 at US 25/SR 73	55	2	34
Brannen St. at Gentilly Rd	53	0	9
E. Main St. at Northside Dr.	51	0	17
E. Main St at N. Main St.	50	0	7

#### Table 3.K Active Crash Intersections – Bulloch County

In addition to the active crash locations, an area of focus and concern was the location of fatal crashes. The locations listed below experienced at least two (2) fatality crashes during the five-year analysis period.

- SR 46 near Clifton Rd
- Brooklet Leefield Rd near Old Leefield Rd

Figure 3.K on page 66 represents intersections with more than 50 crashes over the five-year analysis period (2003 - 2007) as well as fatality and bicycle and pedestrian related crash locations.





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# L. Roadway Characteristics

This section presents the characteristics of the roadways in Bulloch County. The data is collected from the latest GDOT Roadway Characteristics (RC) Database and GDOT Highway System Status maps. The following data was reviewed as part of the study process:

- Functional Classification
- Road Lanes
- Roadway Shoulders
- Roadway Surface Type

### **Functional Classification**

Roadways are grouped into functional classes according to the character of traffic they are intended to serve. The Federal Highway Administration (FHWA) defines the hierarchy of the highway functional classification system including principal arterials, minor arterial roads, collector roads, and local roads for rural areas, urbanized areas and small urban areas. The functional system for rural areas, currently applicable to Bulloch County, is defined as:

- Principal Arterial 1) serve corridor movements having trip length and travel density characteristics indicative of substantial statewide or interstate travel; 2) serve all urban areas of 50,000 and over population and a large majority of those with population of 25,000 and over; and 3) provide an integrated network without stub connections except where unusual geographic or traffic flow conditions dictate otherwise. The principal arterial system is stratified into Interstate system and other principal arterials.
- Minor Arterial 1) link cities and larger towns and form an integrated network providing interstate and intercounty service; 2) be spaced at such intervals, consistent with population density, so that all developed areas of the State are within a reasonable distance of an arterial highway; and 3) provide service to corridors with trip lengths and travel density greater than those predominantly served by rural collector or local systems. Minor arterials therefore constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to through movement.
- Collector Road generally serve travel of primarily intracounty rather than statewide importance and constitute those routes on which predominant travel distances are shorter than on arterial routes. Consequently, more moderate speeds may be typical, on the average. Collectors are typically classified as **major** collector and **minor** collector.
- Local Road 1) serve primarily to provide access to adjacent land; and 2) provide service to travel over relatively short distances as compared to collectors or other higher systems. Local road constitute the rural mileage not classified as part of the principal arterial, minor arterials, or collector systems.

The Bulloch County study area has approximately 104 lane miles of interstate, comprised by I-16. There are also approximately 345 lane miles of arterial facilities in the study area, 651 lane miles of collectors and 1,989 lane miles of local streets. Figure 3.L.1 on page 69 displays the functional classification of roadways in Bulloch County and in City of Statesboro.

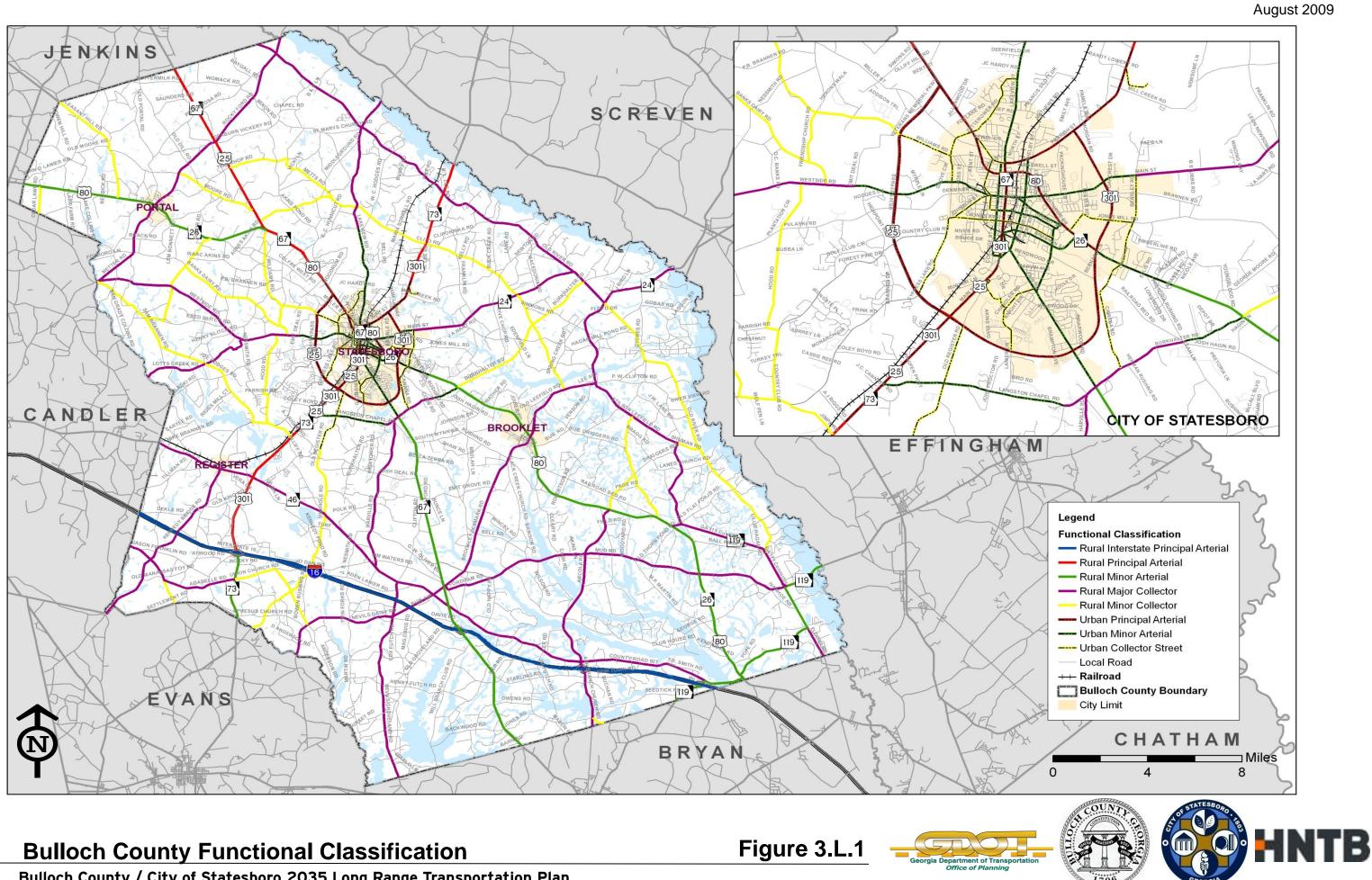
Table 3.L.1 below displays the mileage and vehicle miles traveled (VMT) for the different roadway classifications in Bulloch County. The Bulloch County study area is served by multiple

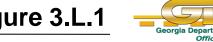
state roads (approximately 16 percent of the lane miles), which handle a majority of the traffic (63 percent). This is the same as the Georgia statewide averages. To ensure future mobility for Statesboro and Bulloch County, it is important to evaluate and identify needed improvements to the state road system through the development of this LRTP.

### Table 3.L.1 Existing Mileage and Vehicle Miles Traveled

Country	State Roads		County Roads		Local Roads		Total	
County	Miles	VMT	Miles	VMT	Miles	VMT	Miles	VMT
Bulloch	179	1,495,140	1,205	698,297	100	185,376	1,483	2,378,813
State	18,095	193,224,561	84,559	88,759,173	14,584	23,343,808	117,238	305,327,543

Source: GDOT Office of Transportation Data-Mileage by Route Type and Road System Date: 12/31/07





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#### **Roadway Lanes**

Another important attribute reviewed from GDOT's RC Database is the number of lanes provided on each roadway facility. The roads in Bulloch County predominately serve bidirectional traffic flows; however there are a few roads serving one-way traffic circulation in downtown Statesboro. Additionally, the majority of the roads in the study area are 2-lane facilities. The dependency on a largely 2-lane roadway network may become strained in the future as traffic levels increase.

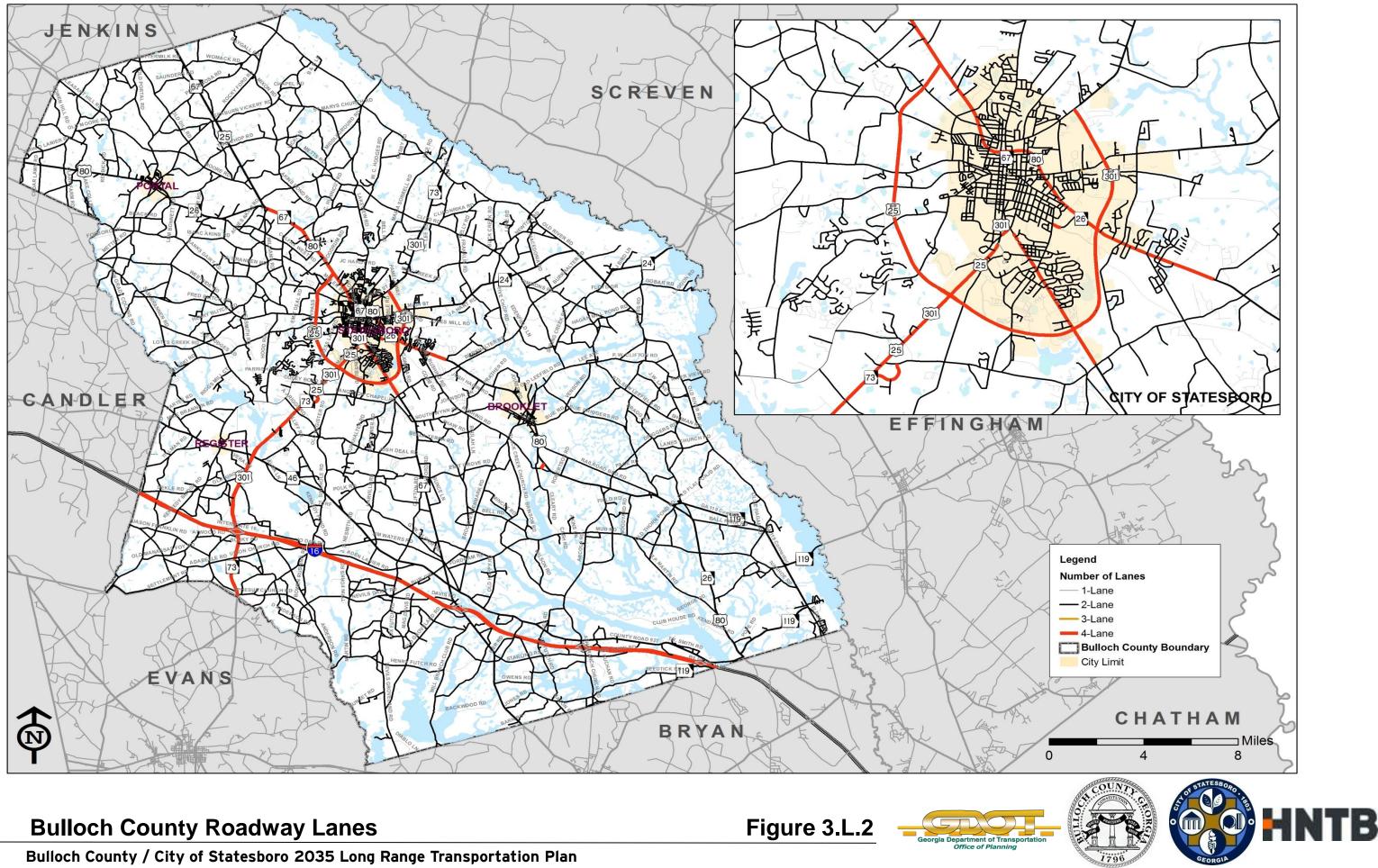
Figure 3.L.2 on page 71 displays the number of lanes on the roads in Bulloch County and in the City of Statesboro.

#### **Roadway Shoulders**

GDOT's RC Database also provides information on roadway shoulders. For this analysis, both the shoulder type and shoulder width were reviewed to determine segments of roadways in need of potential shoulder upgrades or operational widening. A wide variety of shoulder widths and types are present throughout Bulloch County. Insufficient shoulder width can contribute to travel speed reductions, potentially impact safety, and influence bicycle and pedestrian usage of facilities. The following guidelines are used to determine potential shoulder deficiencies:

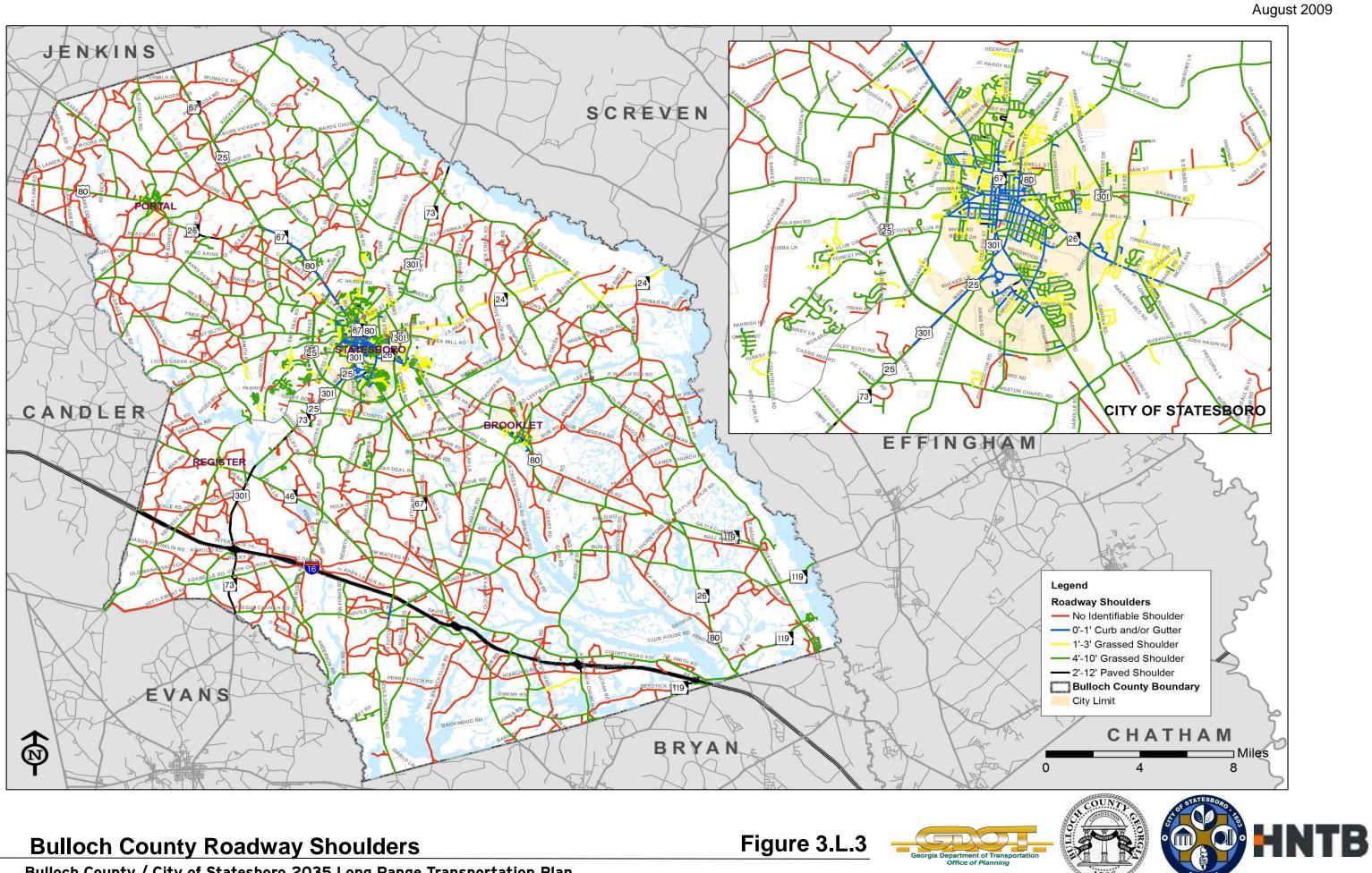
- No shoulder or an unidentifiable shoulder
- Grass shoulder less than 4 feet
- Paved shoulder less than 2 feet

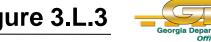
Figure 3.L.3 on page 72 displays the roadway shoulder types and widths according to GDOT's RC Database for Bulloch County. Roadway segments with potential deficient shoulders will become candidates for recommended upgrades.





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#### Roadway Surface Type

The final attribute reviewed from GDOT's RC Database is roadway surface type. Roadway surface dramatically affects the capacity, useful life, and safety of a particular facility. The list below details the surface types present in the study area.

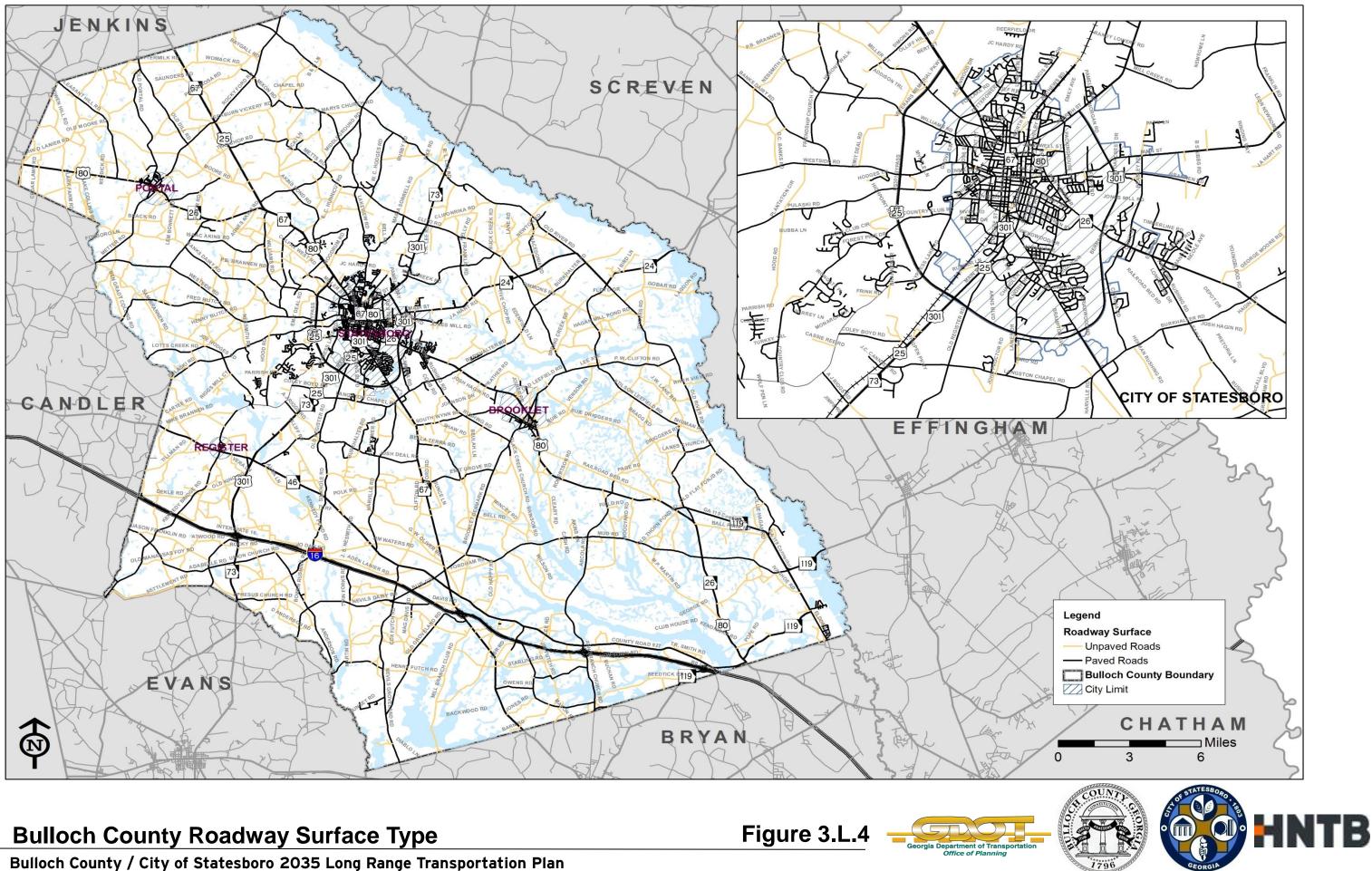
#### Paved Roads

- **High Rigid** Portland cement concrete pavements with or without bituminous surface if less than one inch.
- High Flexible Mixed bituminous penetration road on a rigid or flexible base with a combined (surface and base) thickness of seven inches or more. Includes any bituminous concrete, sheet asphalt, or rock asphalt.
- **Mixed Bituminous Penetration** Low type (less than seven inches combined thickness surface and base). Surface is one inch or more.
- Mixed Bituminous Pavement A road, the surface course of which is one inch or more in compacted thickness composed of gravel, stone, sand, or similar material, mixed with bituminous material under partial control as to grading and proportions.
- Bituminous Surfaced Treated An earth road, a soil-surfaced road, or a gravel or stone road to which has been added by any process a bituminous surface course with or without a seal coat, the total compacted thickness which is less than one inch. Seal coats include those known as chip seals, drag seals, plant mix seals, and rock asphalt seals.

#### Unpaved Roads

- Gravel or Stone Road A road, the surface of which consists of gravel or stone. Surfaces may be stabilized.
- Soil-Surfaced Road A road, the surface of which consists of mixed or stabilized soil.
- Graded and Drained A road of natural earth aligned and graded to permit reasonable convenient use by motor vehicles and drained by longitudinal and transverse drainage systems (natural and artificial) sufficient to prevent serious impairment of the road by normal surface water, with or without dust palliative treatment or a continuous course of special borrow material to protect the new roadbed temporarily and to facilitate immediate traffic service.

Approximately 685 miles of roadways in Bulloch County are dirt or gravel. This constitutes approximately 46% of the total roadway mileage of Bulloch County. Most of these unpaved roads are concentrated in rural areas outside the City of Statesboro and are minor collectors or local roads. It may be appropriate to upgrade and pave some of these facilities to provide better connectivity throughout the study area. Figure 3.L.4 on page 74 displays the roadway surface types according to GDOT's RC Database for Bulloch County.





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# M. Roadway Operating Conditions

A travel demand model was developed to assist in the evaluation of existing and future travel conditions throughout Bulloch County. More detailed information regarding the model and model development process is presented in the *Bulloch County Model Documentation Technical Memorandum, May 2009.* The key output from the travel demand model is the daily volume to capacity ratio for each roadway segment. Each volume to capacity ratio corresponds to a level of service (LOS) based on accepted methodologies from the 2000 Highway Capacity Manual. Existing (2007) and future (2020 & 2035) operating conditions for the study are summarized in the following sections.

Prior to documenting operating conditions it is useful to summarize level of service. Level of service (LOS) is a qualitative measure of traffic flow describing operating conditions. Six levels of service are defined by the Federal Highway Administration (FHWA) in the Highway Capacity Manual for use in evaluating roadway operating conditions. They are given letter designations from A to F, with LOS A representing the best operating conditions and F the worst. A facility may operate at a range of levels of service depending upon time of day, day of week or period of the year. A qualitative description of the different levels of service is provided below.

LOS A – Drivers perceive little or no delay and easily progress along a corridor.

**LOS B** – Drivers experience some delay but generally driving conditions are favorable.

**LOS C** – Travel speeds are slightly lower than the posted speed with noticeable delay in intersection areas.

**LOS D** – Travel speeds are well below the posted speed with few opportunities to pass and considerable intersection delay.

**LOS E** – The facility is operating at capacity and there are virtually no useable gaps in the traffic.

**LOS F** – More traffic desires to use a particular facility than it is designed to handle resulting in extreme delays. The recommended approach used to identify deficient segments in Bulloch County was to analyze the volume of traffic on the roadway segments compared to the capacity of those segments, also known as the volume to capacity (V/C) ratio. For daily operating conditions, any segment identified as LOS D or worse was considered deficient.

The following thresholds were used to assign a level of service to the V/C ratios for rural facilities based on GDOT standards:

V/C < 0.70 = LOS C or better;

0.70 > V/C < 0.85 = LOS D;

0.85 > V/C < 1.00 = LOS E; and,

V/C > 1.00 = LOS F.

#### **Existing Operating Conditions**

The existing conditions results derived from traffic counts and the calibrated travel demand model were used to determine deficient roadway segments in Bulloch County. Deficient segments were determined by analyzing the volume of traffic on the roadway segments compared to the capacity of those segments. The corresponding V/C ratios were related to LOS. For the planning purposes of this study, GDOT strives for a LOS C.

The existing (2007) daily operating conditions analysis shows that seven segments currently operate at or below LOS D. Table 3.M.1 below displays the deficient roadway segments with the corresponding V/C ratio and LOS for daily operating conditions. Figure 3.M.1 on page 77 illustrates these segments graphically.

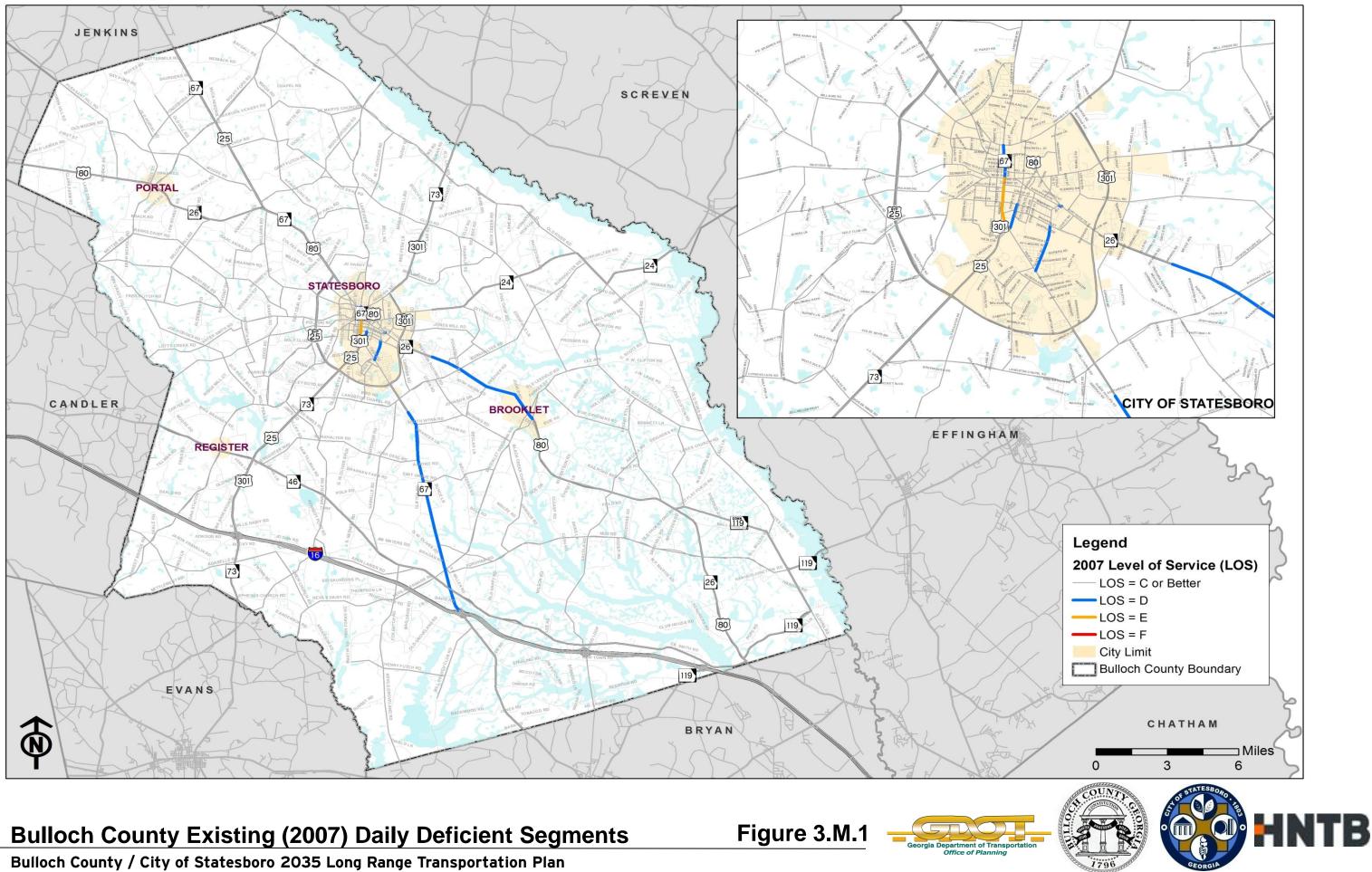
Roadway	From	То	Volume <sup>(1)</sup>	V/C	LOS
US 80	George Moore Rd	Brooklet Denmark Rd	9,576	0.79	D
SR 67	Josh Deal Rd	I-16	9,962	0.76	D
Gentilly Rd	Fair Rd	Brannen St	9,500	0.71	D
S Main St	Fair Rd	E Main St	14,163	0.94	E
N Main St	E Main St	E Parrish St	11,559	0.79	D
S Zetterower Ave	Fair Rd	E Jones Ave	9,266	0.83	D
Savannah Ave	Northside Dr	Gentilly Rd	8,329	0.72	D

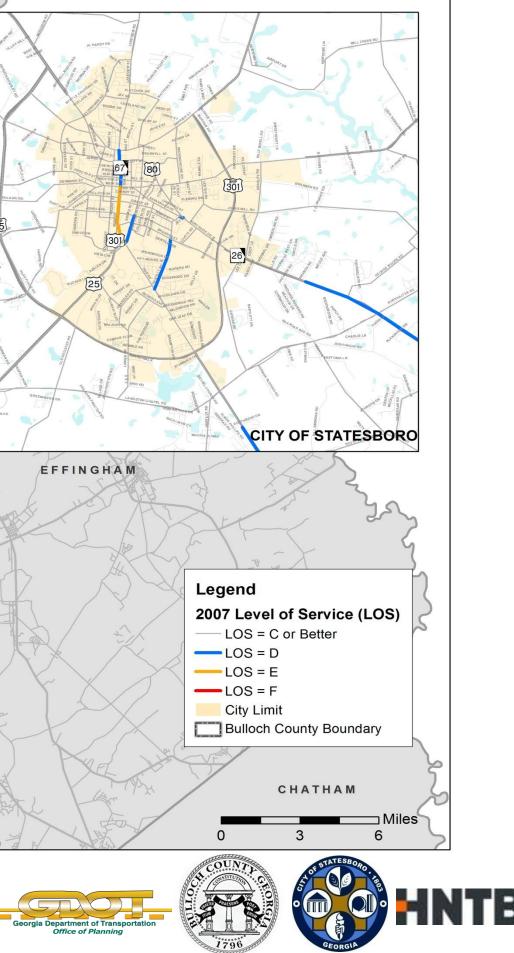
### Table 3.M.1 Existing (2007) Deficient Segments

(1) - Two-way volumes

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The majority of roadways in Bulloch County and the City of Statesboro currently operate at an acceptable LOS C during daily conditions. Analysis shows that as traffic volumes continue to increase, some of these roadways will degrade to an unacceptable LOS.





# **Technical Memorandum** August 2009

### **Future Operating Conditions**

Future operating conditions were evaluated for 2020 and 2035. The existing roadway network was used to determine how well the roadway network will serve the 2020 and 2035 population and employment projections in Bulloch County with no additional roadway improvements. The projects identified in GDOT's 2008-2013 Construction Work Program were considered long-range and thus were not added to the model network.

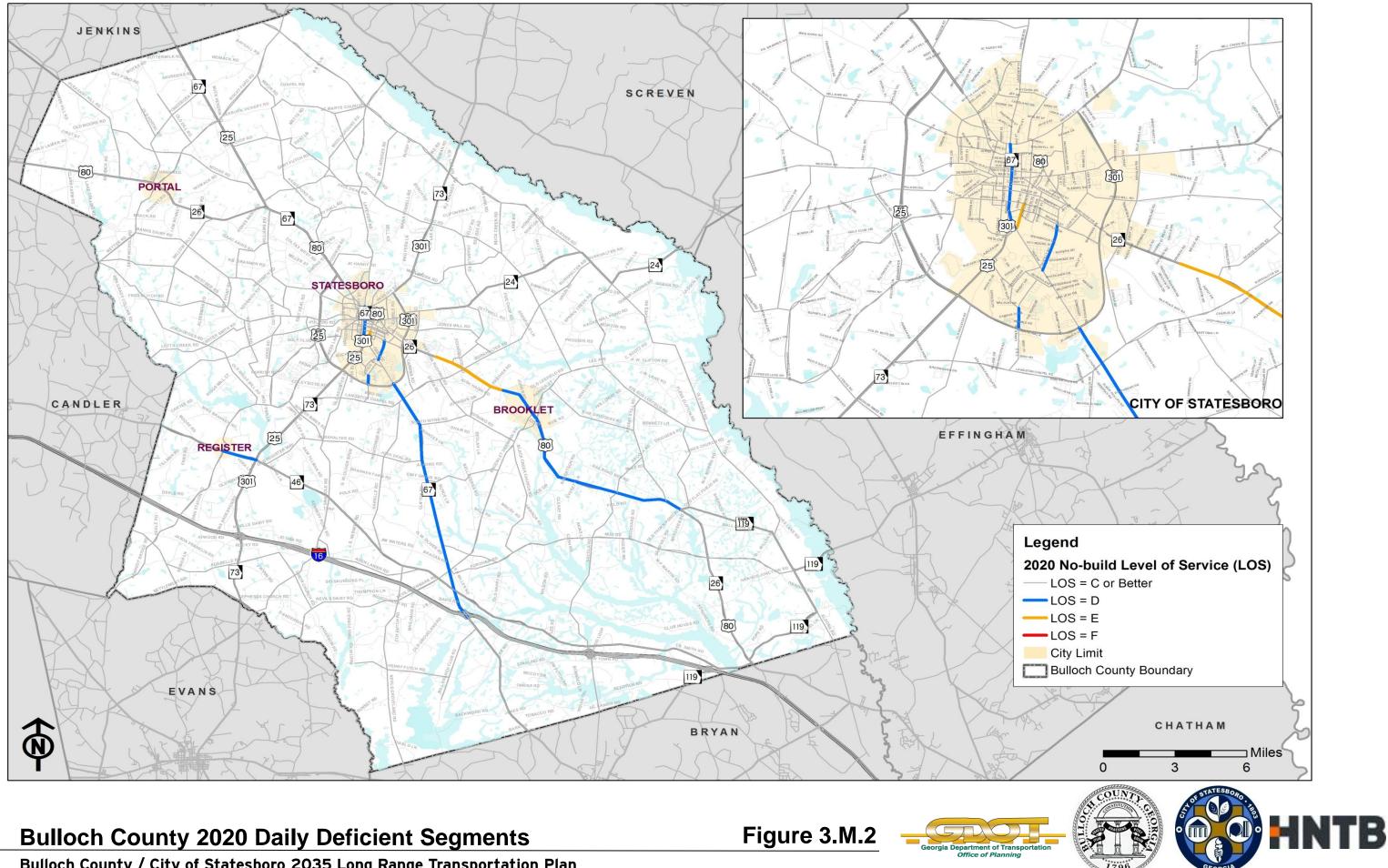
It is useful to point out that the long-term projections for population and employment can be unreliable. This is not due to specific inaccuracies or projection techniques but simply because it requires the judgment of stakeholders to assign population and employment throughout the study area based on recent trends and anticipated growth. This in turn impacts estimates of trip production and traffic demand. These long term results should be considered preliminary, and when the transportation plan is updated every 3 to 5 years, these projections should be updated, and recommended projects should be reexamined and amended as necessary.

The mid-range (2020) analysis shows that ten segments can be expected to operate at or below LOS D under daily conditions. Table 3.M.2 below and Figure 3.M.2 on page 79 display the 2020 roadway segments operating at an unacceptable LOS.

Roadway	From	То	Volume <sup>(1)</sup>	V/C	LOS
US 80	Amanda Rd	Old Leefield Rd	11,337	0.89	Е
US 80	Old Leefield Rd	SR 119 Conn	9,436	0.74	D
SR 67	Josh Deal Rd	I-16	10,268	0.80	D
SR 46	US 301	Kennedy Bridge Rd	7,988	0.77	D
SR 67	US 301 Bypass	Burkhalter Rd	21,303	0.71	D
Gentilly Rd	Fair Rd	Brannen St	8,966	0.72	D
S Main St	Fair Rd	E Main St	12,986	0.83	D
N Main St	E Main St	E Parrish St	10,881	0.72	D
S Zetterower Ave	Fair Rd	E Grady St	9,927	0.93	Е
Lanier Rd	US 301 Bypass	Chandler Rd	7,611	0.73	D

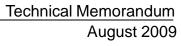
Table 3.M.2 Mid-Range (2020) Deficient Segments

(1) - Two-way volumes









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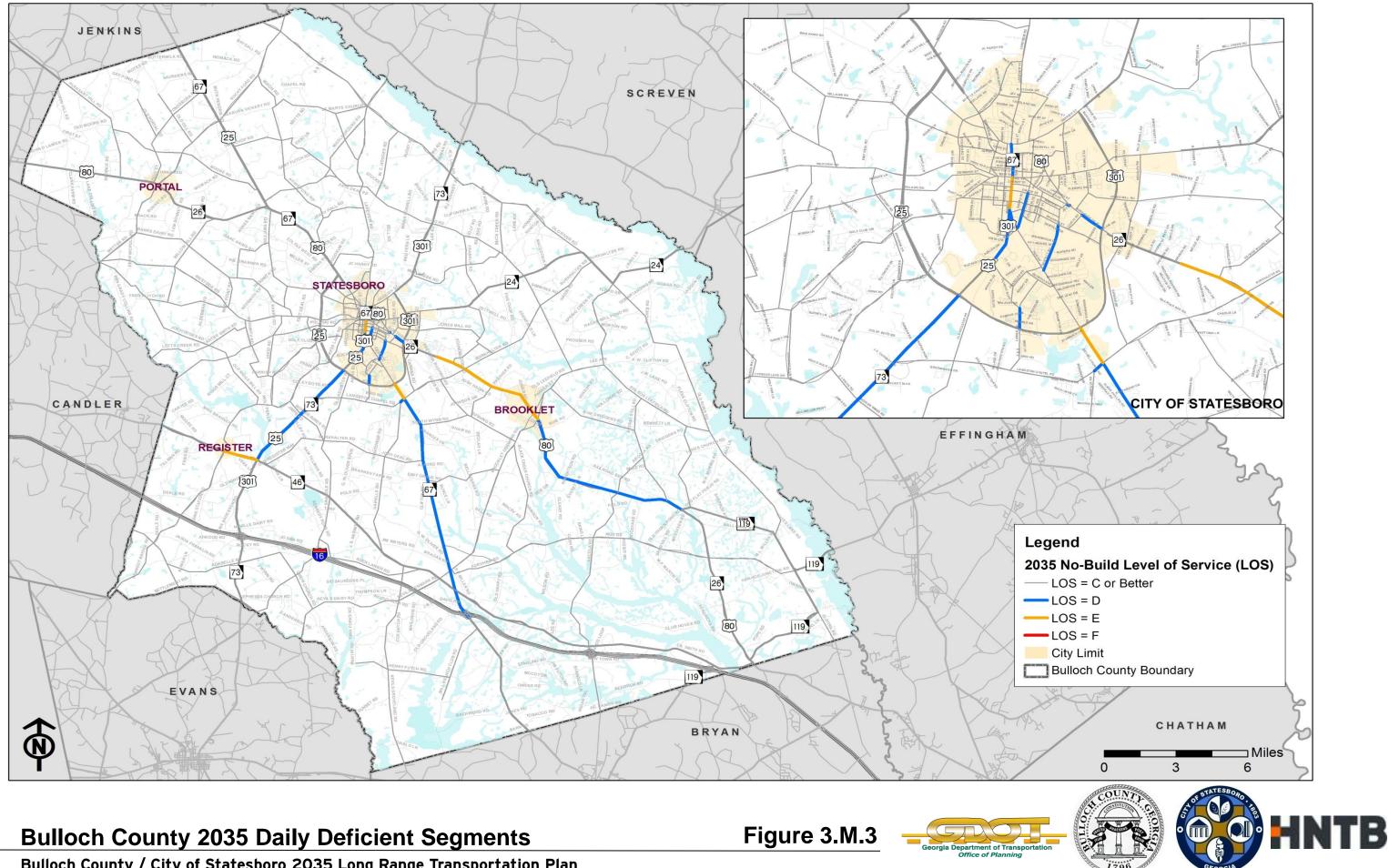
The future (2035) analysis shows that 15 segments can be expected to operate at or below LOS D. Table 3.M.3 below displays the 2035 roadway segments operating at an unacceptable LOS.

Roadway	From	То	Volume <sup>(1)</sup>	V/C	LOS
US 80	Amanda Rd	Old Leefield Rd	12,287	0.97	Е
US 80	Old Leefield Rd	SR 119 Conn	11,021	0.81	D
SR 67	Burkhalter Rd	I-16	12,113	0.80	D
US 301	US 25 Bypass	SR 46	26,873	0.77	D
SR 46	US 301	Kennedy Bridge Rd	9,111	0.86	Е
SR 67	US 301 Bypass	Burkhalter Rd	25,627	0.86	Е
Gentilly Rd	Fair Rd	Brannen St	9,445	0.77	D
S Main St	Rucker Ln	Fair Rd	19,910	0.76	D
S Main St	Fair Rd	E Main St	12,992	0.92	Е
N Main St	E Main St	E Parrish St	11,796	0.79	D
S Zetterower Ave	Fair Rd	E Grady St	9,277	0.82	D
Lanier Rd	US 301 Bypass	Chandler Rd	8,687	0.82	D
Northside Dr	US 301 Bypass	Lovett Rd	24,781	0.72	D
Burkhalter Rd	SR 67	Harville Rd	9,141	0.81	D
Savannah Ave	Northside Dr	Gentilly Rd	9,529	0.83	D

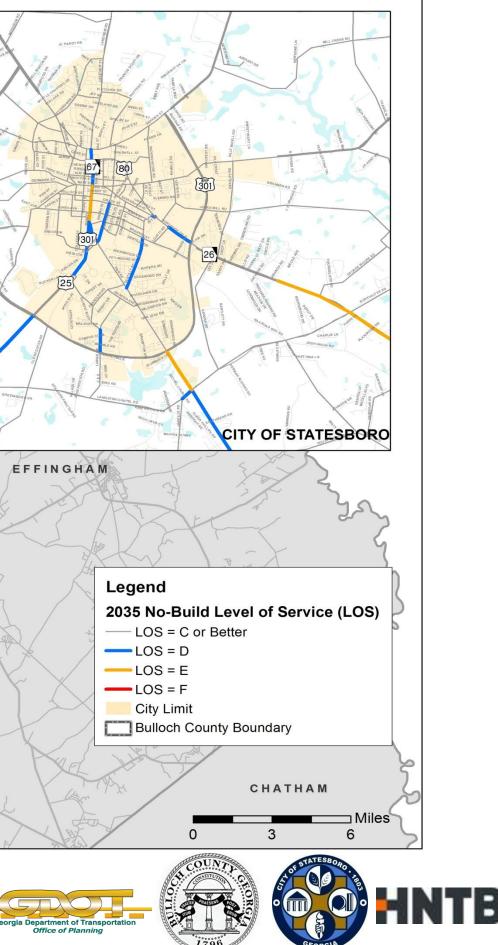
(1) - Two-way volumes

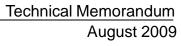
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Figure 3.M.3 on page 81 presents the 2035 daily deficient segments along the existing roadway network.











# **PUBLIC INVOLVEMENT ACTIVITIES**

# A. Citizen and Stakeholder Input

It is important to understand transportation issues, opportunities, and needs as perceived by citizens and key stakeholders in addition to those identified through technical analysis. As part of the Long Range Transportation Plan (LRTP) process, GDOT participated in ongoing coordination with Bulloch County and City of Statesboro staff representatives. An initial meeting was held in September of 2008 to kickoff the study process. Representatives from GDOT, CGRDC, Bulloch County, the City of Statesboro, and the Towns of Brooklet, Register, and Portal participated in the meeting and provided input to the overall public involvement approach for the study. Subsequently, the *Bulloch County / City of Statesboro 2035 LRTP Public Involvement Plan* was reviewed and approved by GDOT. The public involvement approach outlined in the plan included the formation of a Study Advisory Committee that convened at key milestones during the planning process. A series of two public meetings was also planned to solicit feedback from residents living and working in the County.

## B. Study Advisory Committee

A Study Advisory Committee was formed and convened at key milestones during the LRTP development process. Committee members were identified with assistance from County and City staff and represented different perspectives from state and regional agencies, Bulloch County, the City of Statesboro, and the Towns of Brooklet, Register, and Portal. Members of the Stakeholder Advisory Committee are listed in Table 4.B.1 below.

# Table 4.B.1 Bulloch County / City of Statesboro 2035 LRTP Study Advisory Committee Members

Name	Agency / Job Title
Tom Couch	Bulloch County- County Manager
Andy Welch	Bulloch County- County Planner
Kirk Tatum	Bulloch County- County Engineer
Shane Hayes	City of Statesboro- City Manager
Christian Lentz	City of Statesboro- Planning Director
Jason Boyles	City of Statesboro- Interim Director of Public Works
Rick Weatherford	City of Statesboro- Planner
Michelle Canon	Coastal Georgia RDC - Planner II
Tricia Reynolds-	Coastal Georgia RDC – Director of Planning & Government
Huffman	Services

Bulloch County / City of Statesboro 2035 Long Range Transportation Plan Georgia Department of Transportation

Name	Agency / Job Title
Larry Motes	Town of Portal - Mayor
Mandi Pilz	Town of Register – Town Administrator
Randy Newman	Town of Brooklet – Zoning Administrator
Paul Webb	Bulloch County Board of Education – Transportation Director
Rebecca Boston	Georgia DHR
Mike Rollins	Bulloch County - Parks and Recreation Director
Jamey Cartee	Statesboro – Bulloch County Chamber of Commerce
Paul Roesel	Bulloch County Development Authority
Robert Chambers	Georgia Southern University – Transportation
Chuck Taylor	Georgia Southern University – Campus Landscape Architect
Pearl Brown	Bulloch County NAACP - President
Jonathan LeFevers	Georgia Midland Railroad
Brad Saxon	GDOT- District 5 Assistant District Construction Engineer
Radney Simpson	GDOT- Office of Planning
C.R. Jackson	GDOT- District 5
Dave Cox	GDOT- Office of Planning
Teresa Scott	GDOT-District 5 Planning and Programming Engineer

The Study Advisory Committee met at three key milestones (dates and locations shown below in Table 4.B.2) during the plan development effort. The first meeting took place early in the study process to discuss issues and opportunities, establish priorities, and finalize study goals and objectives. The second meeting provided an opportunity to gather feedback on preliminary project recommendations. The third meeting focused discussion on the study's prioritized recommendations and project costs. The meetings also provided an opportunity to vet material that would be presented at the public workshops.

# Table 4.B.2 Bulloch County / City of Statesboro 2035 LRTP Study Advisory Committee Meetings

Purpose	Location	Date / Time
Meeting #1	Bulloch County Board of Commissioners North Annex – Community Room	10/23/2008 / 10:30AM
Meeting #2	Bulloch County Board of Commissioners North Annex – Community Room	3/19/2009 / 2:00PM
Meeting #3	Bulloch County Board of Commissioners North Annex – Community Room	5/28/2009 / 2:00PM

Documentation of each Study Advisory Committee meeting can be found in Appendix B.

# **C.** Public Notification

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Public meetings were held to obtain feedback from citizens in Bulloch County and to discuss their transportation issues and concerns. The Study Team utilized several methods to inform the public of study activities and to solicit public input for the identification of potential improvements. The following notification techniques were employed during this study:

### Press Releases, Advertisements and Flyers

A press release was issued by GDOT prior to each public meeting to promote and encourage public participation. The press releases were used to generate media interest in attending the meetings and writing related news articles.

A paid advertisement was placed in the Statesboro Herald approximately two Sundays before each public meeting.

Flyers promoting the public meetings were distributed at key public locations within the study area and circulated electronically to Study Advisory Committee members two - three weeks prior to each public meeting. The flyer was also made available for download from the study website.

Meeting notification materials and a list of specific distribution locations is included in Appendix B.

#### Study Website

A study webpage was developed as part of GDOT's website, located at:

#### http://www.dot.ga.gov/bullochstudy

The Study website provides study information, including a calendar of upcoming meetings and all public meeting materials were made available for download from the project website.

# D. Public Workshops

Public workshops were held to provide an open forum for citizens to voice their opinions, concerns, and ideas related to the Bulloch County / City of Statesboro 2035 LRTP. These workshops ensured that ample opportunity was provided for both public input and education on the planning process. Comments received at public workshops were considered in the plan's evaluation process and recommendations. In addition, transportation issues and concerns were related to other active studies for consideration through dialogue with County Staff. Each public workshop encouraged interaction between local citizens and GDOT, County, and City Officials in the identification of potential transportation improvements for the area.

Each workshop was conducted in an open house format that provided opportunity for the informal review of display materials with the public and included a brief presentation to educate attendees on the purpose of the study and on the LRTP process. A question and answer session was also held as part of the presentation. Materials presented at each meeting included maps and graphics designed to convey technical information to non-technical audiences. Representatives from the study team were available for one-on-one discussions at all of the workshops. In addition, public comment forms were provided for citizens to officially record their comments and submit them to the study team.

Two public workshops took place at key milestones in the study process. These milestones mirrored those identified for the Study Advisory Committee meetings. Public workshops dates and locations are provided in Table 4.D below.

## Table 4.D Public Workshops

Purpose	Location	Date / Time	
Workshop #1	Bulloch County Board of Commissioners North Annex – Community Room	3/19/2009 / 5:00PM – 7:00PM	
Workshop #2	Bulloch County Board of Commissioners North Annex – Community Room	5/28/2009 / 5:00PM – 7:00PM	

The first public workshop included an overview of the study process, a presentation of the existing and future conditions of the transportation network, and presented initial project recommendations to address transportation needs. This workshop included a presentation followed by an open house period to facilitate informal discussion of the materials on display.

The second workshop presented prioritized improvement recommendations and project costs. A presentation of these recommendations was followed by an open house period to solicit public input on the study recommendations.

# E. Bulloch County Citizen & Stakeholder Input

Table 4.E below summarizes general themes expressed by citizens and stakeholders relative to transportation issues, opportunities, and needs in Bulloch County and the City of Statesboro. These themes and suggestions were considered alongside technical analysis during the identification of potential transportation solutions to address future transportation needs in the County.

Table 4.E	Bulloch County Citizen and Stakeholder Input
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Transportation & Growth
<ul> <li>Address Georgia Southern University's (GSU) lack of enough parking for commuters.</li> <li>Consider the extents of the sewer system when identifying locations in Bulloch County that are equipped to accommodate future growth .</li> <li>Relieve congestion in vicinity of GSU and the mall.</li> <li>Explore coordination of services between City, County, schools, GSU, and hospital.</li> </ul>
Roadway and Operational Improvements
<ul> <li>Make State Route 67 a four-lane facility to I-16.</li> <li>There is a desire to complete the Statesboro Bypass.</li> <li>There is a desire for left turn arrows and turn lanes on East-West streets in Statesboro.</li> <li>Relieve traffic congestion on State Highway 67.</li> </ul>
<ul> <li>Add or coordinate traffic signals, turn lanes, and other features to improve traffic flow at the intersection of State Route 46 and US 301.</li> <li>Improve traffic flow on Fair Road.</li> <li>Add traffic calming devices in city center and surrounding neighborhoods.</li> <li>Improve congestion on Lanier Drive and on Georgia Avenue.</li> </ul>

Add turn lane on Hwy 80 between Zettertower Road to the end of Savannah

#### Avenue.

- Mitigate vehicle and pedestrian conflict issues on GSU's campus. Cars drive too fast through campus and pedestrians are crossing at inappropriate points.
- Mitigate "personal taxi service" issues on campus students are being dropped off at inappropriate locations – traffic then backs up.
- Possible need for a left-hand turn lane on Lanier Drive.
- Eliminate the raised median on US 80, from the high school to US 301.
- Widen US 80 to Brooklet.
- Improve collector roads.
- Address impacts on traffic due to reduction of vehicular access to GSU campus – impacting Savannah Avenue – much cut-through traffic.
- Address US 80 in Brooklet and around Southeast Bulloch High School on Brooklet-Denmark Road – has a lot of traffic volume – cut through traffic is an issue.
- Extend Lanier Drive to connect to the perimeter of GSU campus.
- Signal timing needs to be coordinated in the vicinity of the mall.
- Provide more direct routes around the city and / or more direct access to the interstate.

#### **Intersection Improvements**

- Addition of stop signs for cars crossing the McTell Trail in Statesboro.
- Re-align Burkhalter Road at intersection with Pretoria Rushing.
- Address the high traffic crossing US 80 at Burkhalter Road.
- Address issue of red light at US 80 and Parker Street it is a concern as there has been much development at that corner.
- Improve operational conditions / add a traffic signal at SR 46 and US 301 (currently has a caution light).
- Address operational / signage / sight distance issues with the intersection of Ivanhoe Drive / Mud Road and SR 119.

#### **Bicycle and Pedestrian**

- Improve bike / ped amenities and facilities around educational facilities, the hospital, downtown Statesboro and surrounding neighborhoods, and the mall area.
- Desire for GSU students, especially those without cars, to have pedestrian access to surrounding community and access to shopping areas – add sidewalks, pedestrian islands in wide streets, etc.
- Add golf cart trails.
- Addition of dedicated bike paths, as opposed to share the road facilities.
- Addition of dedicated bike lanes on Gentilly Road.
- Addition of dedicated bike lanes on S. College Street.
- Continue sidewalks north on N. Main St to Debbie Drive.
- Desire for pedestrian and bike improvements from city to Mill Creek Park; Addition of sidewalk and pedestrian facilities east of downtown Statesboro, around Mill Creek Park and towards Brooklet.
- Addition of sidewalk and pedestrian facilities around the Proctor Street area connect to Blitch State Park, existing school, housing project, new school and small athletic fields.
- Extend shared use path along East Main St between Lee Street and Savannah Avenue.
- Addition of biking, horseback riding trail along the river in portions of the

county.

- Address desire for pedestrian amenities on Gentilly Road between GSU and the mall.
- Connect park and school, and provide pedestrian improvements in general, in environmental justice community on the west side of town, along Martin Luther King Jr Drive
- Add new sidewalks in Register and update existing sidewalks (Main Street from Cypress Lake Road to State Road 46, Church Street and part of Railroad Street).
- Add new sidewalks in Register on State Road 46 connecting residential and commercial development.
- Add sidewalks to Foster Street in Register to connect the town hall, the public playground and the future library.
- Streetscaping and lighting are desired in Register to encourage walking.
- In Brooklet, add more sidewalks, a trail for golf carts, and explore the possibility of walking or biking to Southeast Bulloch High School.
- Desire for safer and nicer bike and pedestrian facilities in vicinity of schools in Bulloch County (lighting and crossing guards may be needed in some areas).
- Do something about safety issues with regards to existing bike lane near the hospital.
- Desire for a bikeway connection between Gentilly Road and Fair Park Road.
- Connect Phase I and Phase II greenway to Mill Creek Park via a multi-use path.
- Further the Greenway initiative needs to maximize the non-motorized connectors in the community.

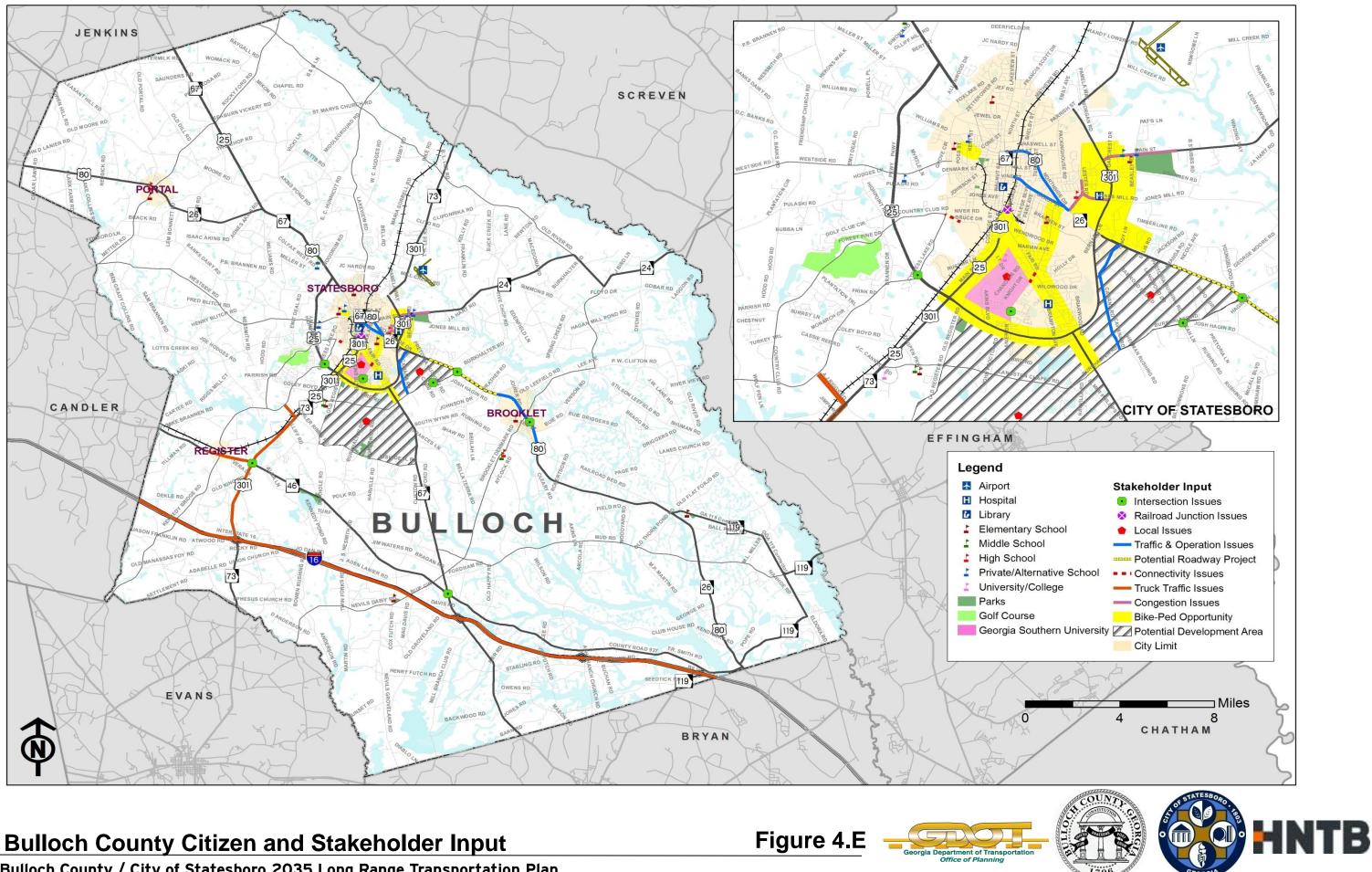
#### Public Transportation

- Desire for public transportation growing elderly population needs form of transportation.
- Desire for reliable, dedicated transportation service to Savannah.
- Desire to expand GSU transit service to points off campus as students without cars have trouble accessing off-campus services.
- Look to Athens-Clarke County for transit model model for transfer between campus buses and city buses.
- City of Statesboro and Bulloch County should work together in transit.

#### Freight & Rail

- Address truck traffic on SR 46, which is a concern in Register.
- Address issue of trucks cutting through on Old Highway 46.
- Address possibility of trucks using alternative routes to bypass scales on I-16.
- Address railroad crossing on US 301 just south of downtown dangerous from a geometry perspective (also, train warning hardware needs to be extended further away from the intersection so warning gates drop well before train arrives at intersection).
- Identify funding sources to implement warning lights and gates at RR crossing at Rackley St.

Figure 4.E on page 88 graphically displays the citizen and stakeholder input received throughout the course of the study.





Bulloch County / City of Statesboro 2035 Long Range Transportation Plan

# **Technical Memorandum** August 2009



# **GOALS AND OBJECTIVES**

# A. Background

Goals and objectives are the foundation of the long range planning process. They guide the development of the Long Range Transportation Plan (LRTP) by providing a basis for evaluating transportation plan improvements – reflecting the intentions that the Plan is meant to achieve. It is necessary to establish long range goals and objectives to guide the transportation plan development process for Bulloch County. The goals represent the general themes and overall direction that Bulloch County and its residents envision for the future of the County. The objectives provide additional specificity and focus for each associated goal. Combined, they provide the policy framework for development and implementation of the transportation plan.

Goals and objectives should be consistent with relevant federal, state, and local plans and legislation. The Safe, Affordable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users (SAFETEA – LU) includes eight factors that must be considered when a Metropolitan Planning Organization (MPO) develops an LRTP. It is understood that Bulloch County is not currently within an MPO service area; however, the guidelines for MPO's were followed to provide a strong framework for transportation decisions. Specifically, the LRTP must be designed to:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non-motorized users;
- Increase the accessibility and mobility of people and for freight;
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation; and,
- Emphasize the preservation of the existing transportation system.

# **B. Methodology**

#### **Consistency with Other Planning Documents**

The Bulloch County / City of Statesboro 2035 LRTP goals and objectives were developed to reflect the community's long-term vision based on input from the Study Advisory Committee and a review of relevant planning documents including the Bulloch County and City of Statesboro Comprehensive Plans, and the GDOT Statewide Transportation Plan, and other studies listed in Chapter 3, Section B: Previous Studies and Programs. In particular, emphasis was placed on the ongoing Comprehensive Plan Updates for Bulloch County and the City of Statesboro.

#### SAFETEA – LU Planning Considerations

Table 5.B below, excerpted from the "SAFETEA-LU Users Guide," shows how LRTP policies and evaluation criteria are related. Included are planning factors, long range considerations, sample program and project types, as well as evaluation criteria. These will vary based on the specific needs and characteristics of the community. Specific considerations, criteria, and projects were identified for the Bulloch County / City of Statesboro LRTP based on the goals and objectives of the study.

Factor	Long Range Considerations	Project Selection Criteria	Sample Projects
1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency	<ul> <li>Intermodal facilities</li> <li>Rail and port access</li> <li>Public/private partnerships</li> <li>Land use policies</li> <li>Economic development</li> <li>Energy consumption</li> </ul>	<ul> <li>Community integration</li> <li>Long-term, meaningful employment opportunities</li> <li>Accessibility</li> <li>Modal connectivity</li> <li>Infrastructure impacts</li> </ul>	<ul> <li>Demand management</li> <li>System preservation</li> <li>Planned community development</li> <li>Transit-oriented design</li> </ul>
2. Increase the safety of the transportation system for motorized and non-motorized users	<ul> <li>Community access</li> <li>Social equity</li> <li>System upgrades</li> </ul>	<ul> <li>Number of crashes</li> <li>Number of rail grade crashes</li> <li>Bicycle and pedestrian crashes</li> </ul>	<ul> <li>Sidewalks</li> <li>Rail crossing upgrades</li> <li>Traffic calming</li> <li>Dedicated right-of- way for different modes</li> </ul>
3. Increase the security of the transportation system for motorized and non-motorized users	<ul><li>Accessibility</li><li>Reliability</li></ul>	<ul> <li>Crashes</li> <li>Potential for security hazard</li> <li>Access to critical infrastructure</li> <li>Access to power sources</li> <li>Access to reservoirs</li> <li>Access to population centers</li> </ul>	<ul> <li>System access and security</li> </ul>

### Table 5.B Applying the SAFETEA-LU Planning Factors

Factor	Long Range Considerations	Project Selection Criteria	Sample Projects
4. Increase the accessibility and mobility of people and for freight	<ul> <li>Multi-modal considerations</li> <li>Transit accessibility and level of service</li> </ul>	<ul> <li>Prevention of bottlenecks</li> <li>Segmentation prevented</li> <li>Intermodal connectivity</li> <li>Community-based economic development</li> </ul>	<ul> <li>System maintenance</li> <li>Intermodal facilities</li> <li>Planned Communities</li> <li>Mixed use zoning</li> <li>Transit-oriented development</li> <li>Land use controls</li> </ul>
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns	<ul> <li>Air and water quality</li> <li>Energy consumption</li> <li>Livability of communitiessocial cohesion, physical connection, urban design, and potential for growth</li> </ul>	<ul> <li>Environmental impact</li> <li>Emissions reductions</li> <li>Waterway preservation</li> <li>Preservation and conservation of resources</li> </ul>	<ul> <li>Demand management</li> <li>Scenic and historic preservation</li> <li>Planned community development</li> <li>Transit services</li> <li>Transit-oriented development</li> </ul>
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight	<ul> <li>Intermodal transfer facilities</li> <li>Rail access roads</li> <li>Container policies</li> <li>Freight policies/needs</li> </ul>	<ul> <li>Intermodal connectivity</li> <li>Accessibility for people and freight</li> <li>Congestion relief</li> </ul>	<ul> <li>Intermodal facilities</li> <li>Modal coordination with social services</li> </ul>
<ol> <li>Promote efficient system management and operation</li> </ol>	<ul> <li>Life cycle costs</li> <li>Development of intermodal congestion strategies</li> <li>Deferral of capacity increases</li> </ul>	<ul> <li>Use of existing system</li> <li>Congestion impacts</li> <li>Community and natural impacts</li> <li>Maintenance of existing facilities</li> </ul>	<ul> <li>Traffic, incident and congestion management programs</li> </ul>
8. Emphasize the preservation of the existing transportation system	<ul> <li>Maintenance priorities</li> <li>Demand reduction strategies</li> <li>Reasonable growth assumptions</li> <li>Alternative modes</li> </ul>	<ul> <li>Maintenance vs. new capacity</li> <li>Reallocates use among modes</li> <li>Reflects planning strategies</li> </ul>	<ul> <li>Management System development</li> <li>Maintenance of roads, bridges, highways, rail</li> <li>Traffic calming</li> <li>Take-a-lane HOV</li> <li>Enhancement of alternative modes</li> </ul>

Source: SAFETEA-LU Users Guide

# C. Goals and Objectives

Based on input from County and City officials and local stakeholders, the following goals and objectives were established for the Bulloch County / City of Statesboro 2035 Long Range Transportation Plan to guide the transportation decision-making process:

#### Goal 1: Provide access to a safe, efficient, and well-maintained transportation system.

Objectives:

1.1 Improve the safety of the existing roadway network by identifying high-crash locations and identifying safety-related funding sources to implement improvements at these locations.

1.2 Identify potential projects that improve and enhance access to employment and activity centers.

- 1.3 Explore transportation solutions that accommodate growth in travel demand while enhancing quality of life.
- 1.4 Focus on system preservation by maintaining and enhancing the existing transportation network.

#### Goal 2: Improve mobility through enhanced connectivity and reduced congestion.

Objectives:

- 2.1 Identify potential projects that provide key linkages between existing roadway facilities and/or improve linkages by upgrading existing facilities on a grid-like system.
- 2.2 Address congested corridors with solutions that enhance and connect existing roadways.
- 2.3 Enhance north-south and east-west connectivity in the County by improving existing connections between I-16 and the City of Statesboro and creating new connections in potential development areas.
- 2.4 Connect residential and commercial activity centers, including Georgia Southern University, through roadway, bicycle, and pedestrian improvements along major transportation corridors.

# Goal 3: Improve access to jobs, homes, and services through a multi-modal transportation system.

Objectives:

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3.1 Enhance bicycle and pedestrian amenities so they provide a viable transportation alternative within the City and County.

- 3.2 Explore projects that improve access to and from neighboring Counties.
- 3.3 Work with Georgia Southern University and the Coastal Georgia Regional Development Center (CGRDC) to explore the potential for future local transit connections.
- 3.4 Coordinate with Planning Partners including the Georgia Department of Transportation, the Coastal Georgia RDC, the Department of Human Resources, Georgia Southern University and neighboring Counties regarding regional plans and opportunities for partnership.

# Goal 4: Create a sustainable environment through the coordination of land use and transportation plans.

Objectives:

- 4.1 Analyze the future land use element of the Bulloch County and City of Statesboro Comprehensive Plans to identify development areas and assess potential impacts to the transportation system.
- 4.2 Encourage potential transportation improvements compatible with area development types.
- 4.3 As development is permitted, review the impact to the transportation system to ensure mobility is protected as parcel- level development occurs.
- 4.4 Coordinate decision-making to encourage viability of alternative modes.

# Goal 5: Maintain a reliable transportation system which will sustain economic activity and promote economic development.

Objectives:

- 5.1 Identify potential projects that improve and enhance access to employment and activity centers serving Bulloch County residents.
- 5.2 Ensure mobility for freight within the County.
- 5.3 Explore transportation solutions that accommodate growth in travel demand while enhancing quality of life in order to attract more residents and businesses.
- 5.4 Coordinate with the Bulloch County City of Statesboro Chamber of Commerce and Development Authority regarding future initiatives and opportunities.

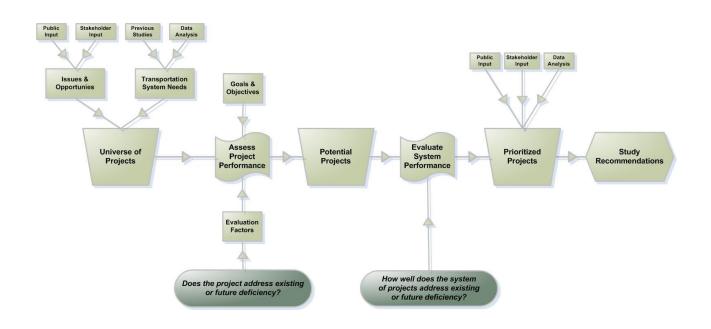


# **FUTURE IMPROVEMENT NEEDS**

## A. Future Conditions Evaluation

Based on the activities summarized in Chapters 1 – 5 of this document, the study team conducted an assessment of future conditions and identified a series of potential improvements to address Bulloch County's future transportation needs. Potential improvements were identified in various areas of transportation, including roadway, bridges, rail, bicycle, and pedestrian. Aviation and transit were also considered in the evaluation and several recommendations to enhance these modes are also included in the document. These potential improvements were developed in consultation with the Study Advisory Committee and Bulloch County citizens as outlined in Chapter 4: Public Involvement Activities. Figure 6.A below illustrates the overall approach to the future improvement development process:





# **B. Transit Future Conditions**

There are a number of factors which must be examined when considering a transit strategy for Bulloch County. These include:

- The future population of Bulloch County;
- The future population density of Bulloch County;
- The population growth projected for the greater Statesboro area;
- The County's projected number of transit dependent individuals;
- The future land use map for both the County and Statesboro; and
- The anticipated enrollment growth at Georgia Southern University.

While some of these factors have been quantified in the County and City comprehensive planning efforts for the 2009 to 2029 horizon, there are several for which concrete data is not currently available or will not become available until completion of the 2010 U.S. Census. Despite this, each of these factors has the potential to drive both the need and demand for future transit alternatives for the County's rural and urban populations.

#### **Population Projections for Bulloch County**

According to the Bulloch County Comprehensive Plan 2009 – 2029, completed in June 2009, Bulloch County experienced population growth of almost 17% from 2000 to 2005, increasing from 55,983 persons in the year 2000 to an estimated 65,435 in 2005. The majority of this growth has occurred in the unincorporated area (in the form of single family residences) and in Statesboro (multi-family residences and student housing). Population growth to the year 2030, however, is not projected to maintain this rate of increase but is still expected to exceed the overall rate of growth for the State of Georgia (2.3%). This projected population growth will likely translate into greater need for transportation services to meet a variety of needs. Population projections for Bulloch County from the year 2000 to 2030 are shown in Table 6.B.1 below.

Year	2000	2005	2010	2015	2020	2025	2030
Population	55,983	65,435	68,615	72,389	75,508	79,474	82,111
5-year % Increase	-	16.9%	4.9%	5.5%	4.3%	5.2%	3.3%

Table 6.B.1	Bulloch County Population Projections 2000 to 203	30
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Source: Bulloch County Comprehensive Plan 2009-2029, June 2009

### **Population Projections for Statesboro**

According to the City of Statesboro Comprehensive Plan 2009 – 2029, completed in June 2009, the City of Statesboro is projected to increase in population by nearly 50% from the year 2000 to 2030, from 22,698 persons in 2000 to 33,291 in 2030, as shown in Table 6.B.2 on page 96. According to the City of Statesboro Comprehensive Master Plan 2009 – 2029, this growth will be largely attributable to the growing GSU student population.

Year	2000	2005	2010	2015	2020	2025	2030
Population	22,698	26,534	27,821	29,349	30,614	32,223	33,291
5-year % Increase	-	16.9%	4.9%	5.5%	4.3%	5.2%	3.3%

Source: City of Statesboro Comprehensive Master Plan 2009 – 2029, June 2009

In addition to growth within the city limits, Bulloch County may become classified as an urbanized area after the 2010 Census and may become designated as all or part of an MPO that would become responsible for overall transportation planning in the County. The urbanized area will then be eligible for transportation funding from the FTA Section 5307 Program which provides Federal resources for transit capital and operating assistance in urbanized areas with a population of 50,000 or more (with a possible two-year window between the urban designation and the availability of 5307 funding). Any remaining, non-urbanized areas of Bulloch County will continue to qualify for FTA Section 5311 Rural Transit funding which provides Federal resources for public transportation systems to non-urbanized areas with a population of less than 50,000. The increased population in the County and in Statesboro will affect the need for transit solutions in the near future.

#### **Transit Dependent Population Projections**

The June 2008 Bulloch County Transit Development Plan (compiled by KFH Group, Inc. on behalf of the Coastal Georgia RDC) identified segments of the population most likely to require alternative mobility options, such as transit. Overall, the Plan estimated demand for general public transportation trips in Bulloch County to be 88,768 trips per year, exclusive of demand generated by GSU. While difficult to quantify given the elapsed time since the 2000 U.S. Census data, the most recent data available, future estimations/projections for these transit dependent populations must also be analyzed when considering a transit strategy.

**Young Adults (between 18 and 24):** Persons aged 18-24 account for a major percentage of the Bulloch County population due largely to the presence of students attending Georgia Southern University in Statesboro. In 2000, this group comprised approximately 20% of the County population and as much as 48% of the Statesboro population. This trend is expected to continue. According to the City of Statesboro Comprehensive Master Plan 2009 – 2029, completed in June 2009, the college age population will comprise 25% to 30% of the County population by 2030. The growing young adult population will continue to stress the GSU transit system and parking facilities as well as increase the need for transportation to multifamily housing off campus, to downtown Statesboro, and to the mall area.

**The Elderly:** The percentage of elderly (age 65+) in Bulloch County comprised 9.3% (5,207 persons) of the total Bulloch County population in the year 2000. While this percentage is expected to remain fairly constant through the year 2030, the actual number of elderly persons is expected to increase from the 5,207 in 2000 to 6,682 persons by 2015, and to 7,600 persons by 2030, an overall 46% increase. The Bulloch County Transit Development Plan found that the highest concentration of elderly (based on 2000 Census block group data) was located in the eastern and western sections of Statesboro with the percentage of seniors relative to the total population in the City of Statesboro projected to actually decrease in coming years.

Bulloch County / City of Statesboro 2035 Long Range Transportation Plan Georgia Department of Transportation

According to the Bulloch County Comprehensive Plan 2009 – 2029, Bulloch County has seen an increase in the number of requests and plans for subdivisions geared towards retirees. The Plan anticipates that this trend will continue in the future as baby boomers begin to retire.

According to the Georgia DHR Region 12 Transportation Service Office, there is currently unmet need for transportation for seniors to medical, shopping, and public services destinations. Currently, human services transportation services for seniors are geared primarily for trips to the senior center. The growing population of seniors will further generate public transportation needs both in Statesboro and in the outlying County areas.

**The Disabled:** According to the 2000 Census, there were 9,112 persons age five years and up with disabilities, representing 16.3% of the County's total population (slightly lower than the percentage in the rest of the region, 18% and up). This included 6,321 who were of working age (16 to 64) of whom 3,229 (51.1%) were employed. The Coastal Georgia RDC, Area Agency on Aging, reports in its FY2009 Area Plan that there are 1,570 persons age 65+ in Bulloch County, (included in the 9,122 persons identified above), with limited mobility who are unable to drive a vehicle and are reliant on family members, friends, or public transportation services.

According to the Bulloch County Transit Development Plan, the highest concentration of disabled persons (based on 2000 Census block group data) is located in the northeastern part of Statesboro. The 2010 U.S. Census will provide more definitive data and insight into the number and location of the disabled population, and their need for transit services.

**The Poor:** Census figures show that 11.9% or 1,486 of Bulloch County's 12,441 families had incomes which fell below the poverty level in 1999. The Bulloch County Comprehensive Plan, 2009-2029, states that 0% of these families were in Register, 6.9% in Brooklet, 8.2% in Portal, 9.0% in the unincorporated areas of Bulloch County, and 20.5% in Statesboro. Moreover, according to the Coastal Georgia RDC Area Agency on Aging FY2009 Area Plan, 18.6% of Bulloch County seniors age 65 and over were living below the poverty level in 2000. While updated figures for families living in poverty will not become available until the 2010 Census is completed and compiled, the 2009 – 2029 Bulloch County Comprehensive Plan reports that residents receiving certain kinds of public assistance is on the rise, providing a present-day indicator of the increased number cost-burdened households.

**Autoless Households:** According to the 2000 U.S. Census, 1,436 out of 20,743 (or seven percent) of Bulloch County households were without an automobile. Of renter-occupied households, 12% were autoless compared to just 3% of owner-occupied households. The Bulloch County Transit Development Plan showed that the highest concentration of autoless households was in Statesboro, likely attributed largely to the GSU student population. Once again, the percentage of autoless households is difficult to gauge at present pending the 2010 Census. The current economic downturn and surging fuel prices in late 2008 likely resulted in an increase in the number of households unable to afford a vehicle. Autoless households are a primary indicator of potential transit need within a community.

#### **Transit Dependent Population - A Summary:**

The future conditions for transit dependent populations, which includes young adults, the elderly, the disabled, the poor, and autoless households, described above, indicates that all groups will experience increased need for transit services in Bulloch County in future years. These conditions and needs are summarized in Table 6.B.3 below.

Table 6.B.3         Summary of Transit Dependent Population Future Needs	Table 6.B.3	Summary of	Transit Depe	endent Popu	lation Future	Needs
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Transit Dependent Population	2000 U.S. Census Population	Future Projections	Future Transit Services Planning Implications
Young Adults, age 18-24	<ul> <li>27% of County Population</li> <li>48% of Statesboro Population</li> </ul>	25% to 30% of the County Population by 2030	<ul> <li>Increased demand on GSU transit</li> <li>Increased need for transportation within the City of Statesboro</li> </ul>
Elderly, age 65+	<ul> <li>5,207 elderly population</li> </ul>	7,600 elderly population by 2030	<ul> <li>Increased need for transit services in downtown Statesboro</li> <li>Increased need for transit services in outlying areas where new retiree housing development is anticipated</li> </ul>
Disabled, age 5+	<ul> <li>9,112 persons of which 3,229 were employed</li> <li>16.3% of County Population</li> </ul>	Overall increase expected but specific projections not known	<ul> <li>Increased need for transit services in northeastern part of Statesboro and in downtown Statesboro</li> </ul>
Poor	<ul> <li>11.9% of families with incomes under the poverty level</li> <li>18.6% of elderly with incomes below poverty level</li> </ul>	Future projections not specifically known although County is seeing increased demand for public assistance during current economic downturn	<ul> <li>Need for transit services where poor are concentrated (in the unincorporated areas and in Statesboro)</li> </ul>
Autoless Households	<ul> <li>7% of total households autoless</li> <li>12% of total renter occupied households autoless</li> </ul>	Specifically unknown but dependent on duration of economic downturn and fuel prices	<ul> <li>Need for transit services in Statesboro</li> <li>Need for transit services in future multifamily housing development areas</li> </ul>

### Future Land Use Projections

The future land use of Bulloch County and Statesboro will drive the origins and destinations of residents who are potential transit riders. According to the Bulloch County Comprehensive Plan 2009 – 2029, the County has experienced significant residential and commercial growth in the past fifteen years, and will continue this trend in the future. In recent years, heavy growth has occurred between Statesboro and Brooklet along US 80 and south of Statesboro along SR 67. At present, there are a number of new, large multi-family housing developments being built along the bypass south of GSU which will primarily serve the growing GSU student population.

The Bulloch County Comprehensive Plan 2009 – 2029 recommends future character areas which will drive preferred development patterns in the County and that will be significant to any transit strategy. Recommended character areas which will affect the need and potential demand for transit alternative are:

- The location of existing and future employment centers, located primarily within the greater Statesboro area, along the I-16 corridor, and in the industrial parks (along US 301);
- The developing commercial corridors, located along SR 67 and SR 25 south of Statesboro; and
- The crossroad communities targeted primarily along the I-16 corridor in the southern part of the County.

The City of Statesboro Comprehensive Land Use Plan, 2009 - 2029 also pinpoints various character areas, the following of which would be significant to any transit strategy:

- The city's urban core or downtown;
- The activity center in the mall area along the U.S.80 corridor; and
- The activity center located along the SR64 corridor adjacent to the GSU campus.

These character areas warrant priority attention when analyzing various transportation alternatives.

#### Projected Enrollment Growth at Georgia Southern University

Georgia Southern University (GSU) is expected to continue to grow in student population in future years. The University increased by 1,000 students in the 2008-2009 school year to an enrollment of 17,700+ students, with only 3,500 living in on-campus housing. According to the GSU Enrollment Projections, Fall 2008 to Fall 2018, the student population is projected to be at or exceeding 20,000 by the year 2018 (GSU Office of Strategic Research and Analysis, January 2009). This growth has already and will continue to spur new multifamily developments in the Statesboro area and an increased need for transportation facilities which extend beyond campus boundaries.

GSU's existing transit system is primarily a park and ride service versus a true circulation service. The system is designed to provide stops on the campus core that provide access to various points on the campus within a five minute walk. With the growth of multifamily housing adjacent to the campus, the system has been able to incorporate a few additional stops to pick students up and deliver them to campus, precluding a drive to the park and

ride facility at Paulson Stadium. Although funding constraints and the emphasis on solving parking shortages on campus prevent expanding the transit system currently, a long-range vision for the transit system is to develop it into a full circulation system that could make numerous stops in the campus core, transport more students in from off-campus housing residential areas, and extend service into the downtown and mall areas.

GSU will be conducting a Transit Operations Analysis during 2009 to examine its operations and to identify capacity issues. Results from this analysis will be used to tailor the transit provider contract during its renewal process but will also recommend improvements to strengthen operational efficiencies and to address any capacity issues found.

As part of the LRTP and other transit planning activities undertaken by the Coastal Georgia RDC, a transit strategy that involves partnerships between GSU, Bulloch County, and Statesboro has been suggested. Major issues that would need to be specifically addressed are the public and student ridership demand, branding/marketing issues with GSU transit buses, and the financial commitment from each participating entity. GSU will be bringing in a new university president in 2009 that will be responsible for setting direction for any type of university partnership strategy in the future.

#### Transit Recommendations

Rural transit is a quality of life amenity that some local governments have the option to offer to their citizens as funding allows. It can provide needed transportation to work, to medical appointments, to education, to recreational facilities, and to commercial/shopping districts. It can serve workers and their employers, the elderly, the disabled, the underprivileged, or anyone who chooses to use an alternative mode of transportation to reach a desired destination. A decision to implement a transit system must compare the community benefits and the program revenues with the cost to the local government, with the upfront knowledge that such programs usually do have to emphasize the intangible community benefits to make them feasible.

Given the existing and future conditions and factors discussed above, a transit strategy for Bulloch County and Statesboro should consider relying on the following:

- Definitive proof of a local desire for transit; and
- County and City established initiatives to formally evaluate and plan a transit strategy; and
- Working partnerships between Bulloch County, the City of Statesboro, and GSU to develop viable options within timeframes conducive to funding opportunities.

Recommendations predicated on these requirements outlined directly above include:

1. The establishment of an action item to evaluate transit.

Current economic conditions and budgeting constraints necessitate that any transit strategy be carefully considered and planned in advance. Before this can happen, however, both Bulloch County and the City of Statesboro must establish intention to consider such a strategy. The recommendation is that Bulloch County and Statesboro each designate a transit evaluation and planning initiative that can be included as part of the Short Term Work Program, five-year financial plan, and budget process. 2. The completion of a Detailed Transit Demand Analysis.

Bulloch County, the City of Statesboro, and Georgia Southern University have all expressed that completion of a detailed transit demand analysis is a requirement for work on a transit strategy to proceed. While the existing and future conditions and factors discussed above confirm the need for transit, hard numbers which document location-specific demand have not yet been produced. The recommendation is that a detailed transit demand analysis be completed to examine/provide:

- a) Demand-response and fixed-route transit demand in both the rural and incorporated areas of Bulloch County;
- b) Ridership demand from all population groups, including the elderly, the disabled, low-income individuals, students, and the non-transit dependent populations;
- c) Testimonials from other Georgia counties which operate both demand-response and fixed-route systems; and
- d) Recommendations for further study of transit alternative that should be explored in more detail based on the demand findings.

Bulloch County, Statesboro, and GSU should co-sponsor the study to ensure that the findings accurately reflect demand relevant to each.

3. The establishment of a County, City, and GSU transit planning partnership/entity to develop financially and logistically viable transit solutions. A Bulloch County, City of Statesboro, and GSU transit planning partnership/entity would ensure that each party's interests, demands, and needs are met. The partnership/entity would be able to decide the scope of services, the financial obligations, the populations each wishes to best serve, and the implementation timeframe.

Several transit partnership opportunities and timing issues must be considered. The recommendation is that:

- a) Bulloch County gauge transit planning and decision-making activities in order to take advantage of the Coastal Georgia RDC's Regional Rural and Coordinated Public Transportation Program five-year phase-in period incentive. During the program's first five years, (January, 2009 to 2014), the Coastal Georgia RDC will fund participating counties' capital costs (ADA compliant vehicles with wheelchair lifts, dispatching equipment, software, computer hardware, and two-way radios). Thus, if Bulloch County elects to participate in the Regional Coordinated Program in 2012, for example, it will receive the remaining two years worth of capital costs provided by the incentive.
- b) The City of Statesboro gauge transit planning and decision-making activities to coincide with the outcome of the 2010 U.S. Census and its subsequent requirements. If the greater Statesboro area becomes designated as an urban area, it will be required to establish an MPO to be responsible for overall transportation planning. The urbanized areas would then be eligible for transportation funding from the FTA 5307 Program. Under this scenario, it is estimated that Section 5307 funding would be available to Statesboro in the 2012 to 2013 timeframe.

At present, there are a variety of future scenarios which have been discussed and may be worthy of further consideration. Some of these include:

- a) A City of Statesboro and GSU sponsored pilot fixed-route/shuttle service to downtown and/or mall area combined with Bulloch County-sponsored demandresponse rural transit outside the greater Statesboro area which could link to the shuttle service in addition to providing transportation within the entire Coastal region.
- b) A Bulloch County/City of Statesboro sponsored demand-response service serving the entire County and providing transportation services within the Coastal Georgia region.
- c) A Bulloch County/City of Statesboro/GSU sponsored demand-response service extending service both in the county and to the Coastal Georgia region combined with a fixed route component serving downtown Statesboro.
- d) A City of Statesboro/GSU sponsored fixed-route option serving the GSU campus and the greater Statesboro area.

The recommendation is that any strategy be evaluated with updated U.S. Census data, with definitive transit demand data, and with the full participation and cooperation by Bulloch County, the City of Statesboro, and Georgia Southern University.

# C. Commuter Transportation Options

Bulloch County has a GDOT Park and Ride facility with 30 parking spaces located on SR 26 north of Statesboro. This facility appears to be underutilized by Bulloch County commuters. Bulloch County has expressed that the I-16 corridor in the southeastern part of the County would be a more appropriate location for a park and ride facility to accommodate commuters to Fort Stewart and to metropolitan Savannah.

If employers in the Coastal region elect to sign-on to the new Coastal Georgia RDC vanpool program, described in Chapter 3, Section D, Commuter Transportation Options on page 39, the need for new formal park and ride facilities will become evident. The Coastal Georgia RDC did field a number of inquiries from employers about the vanpool program when fuel prices spiked during the summer of 2008. Current economic conditions which have resulted in cut-backs and lay-offs, however, have shifted employer focus to merely retaining their employees. Despite this, the Coastal Georgia RDC feels that the current economic conditions could actually increase worker interest in the vanpool program as unemployed workers seek employment outside their county of residence.

The Coastal Georgia RDC plans to work with GDOT and its counties to try to accommodate the park and ride needs as part of establishing and growing the vanpool program. The Coastal Georgia RDC will also have an on-site vanpool coordinator once the program starts in 2009. The coordinator will be working with local chambers of commerce and development authorities to publicize and market the program to existing and potential employers.

<sup>2</sup> Bulloch County / City of Statesboro 2035 Long Range Transportation Plan Georgia Department of Transportation

#### Recommendations

- The Statesboro-Bulloch Chamber of Commerce and the Development Authority of Bulloch County should actively work with the Coastal Georgia RDC – Vanpool Coordinator to examine ways to market and publicize the vanpool program to existing and potential employers. The vanpool program is a potential economic generator that can attract employers to Bulloch County as well as attract workers from outside Bulloch County to employment centers in Bulloch County. (Vans are provided to the participating employee and it is up to the participant to organize and find riders to desired destinations.)
- Bulloch County should work with GDOT and the Coastal Georgia RDC Vanpool Coordinator to identify possible locations for a park and ride facility along the southeastern I-16 corridor to serve commuters to Fort Stewart and Savannah, and for future park and ride facilities as need dictates.

# D. Intercity and Commuter Rail Future Conditions

The Georgia Rail Passenger Program (GRPP) proposes long-range intercity rail between Atlanta, Macon, and Savannah. Phase one will implement a route between Atlanta and Macon; phase two will extend the line from Macon to Savannah. If implemented, this service would allow Bulloch County residents to travel approximately 50 miles to Savannah or 125 miles to Macon to board an express train to Atlanta. The current proposal is to use either the Norfolk Southern freight line to Jesup and CSX line to Savannah, or the Georgia Central line with a stop in Vidalia (as discussed in Chapter 3, Section G, Intercity and Commuter Rail on Page 48) The intercity rail service would potentially create demand in Bulloch County for public transportation or shuttle services to the designated rail station facility in Savannah.

#### Recommendations

 Incorporate the intercity rail program between Atlanta to Macon to Savannah into County and City transit planning initiatives. Provide methods to facilitate transportation (via the Regional Coordinated Transportation System, buses, shuttles, etc.) between points of origin in Bulloch County with the designated rail station in Savannah, when/if the program is implemented.

# E. Rail Crossing Future Conditions

Georgia Midland Railroad currently transports 1,800 to 2,000 carloads of cargo per year through Bulloch County on a 32-mile route which runs between Metter and Dover, Georgia. Prior to the economic downturn in 2009, the Railroad projected that 3,000 carloads of cargo would be shipped through Bulloch County in 2009. A-1 Action, a scrap metal business located in Metter, was projected to increase rail movement by 50 to 100 carloads per month in 2009, with scrap metal then accounting for 30% of all products transported through the County. As of July 2009, however, a drop in scrap metal prices coupled with the economic downturn has resulted in A-1 Action carrying approximately five carloads per month. The Railroad anticipates that an increase in the scrap metal market will increase carloads in the late 2009 to 2010 timeframe. The Statesboro Bulloch County's Gateway Industrial Park. Future growth in rail is expected to be modest over the next two to five years, with hope that one or two good rail shippers will locate in Bulloch County.

Since Georgia Midland Railroad acquired the Ogeechee Railway Company in 2004, there have been some improvements and upgrades made to rail crossings on the line. The track, however, has not had any program work done for several years and is in need of new wooden railroad crossties and track/railroad bed resurfacing. Business activity on the line as it stands now does not support the expense outlay for any significant work. Georgia Midland maintains the safety of the railroad by monitoring train speeds as needed to allow for safe operations.

Georgia Midland seeks to build carload activity on the line in order to generate revenue which would allow for track upgrades to be made. The Railroad looks to Bulloch County,

Statesboro, and GDOT to support improvements to rail crossings so that the County and City can continue to benefit from the presence of the railroad as an industrial development tool to attract good business to the area and to enhance safety. The Statesboro Bulloch County Chamber of Commerce does aggressively work to draw industry to the area. The Railroad has expressed that a funding mechanism to be used for construction of rail facilities needed by new industry interested in locating in the area is warranted and would help to prevent new industry from deciding to locate elsewhere.

### **Rail Crossing Safety**

The GDOT Office of Traffic Safety and Design, maintains an inventory of the State's railroad crossings and a priority list for those requiring improvements. Local governments are encouraged to report crossings within their jurisdictions which appear to be unsafe, deficient in their currently traffic control devices, candidates for closure, or in need of an upgrade. GDOT will schedule a field review to conduct a Highway Rail Engineering Analysis of any crossings in question, evaluating a number of criteria, including:

- The maximum number of passenger trains per day;
- Maximum number of freight trains per day;
- Distance to alternate crossings;
- Accident history of the crossing for the immediately preceding five year period;
- Type of warning device present at the crossing;
- The horizontal and vertical alignment of the roadway;
- The average daily traffic volume in proportion to the population of the jurisdiction;
- The posted road and train speed limits at the crossing;
- The effect of closing/altering the crossing for persons utilizing it (hospitals and medical facilities; federal state and local government services such as court, postal, library, sanitation, and park facilities; commercial, industrial and other areas of public commerce);
- Any use of the crossing by trucks carrying hazardous material, vehicles carrying passengers for hire, school buses, emergency vehicles, public or private utility vehicles;
- Other relevant factors such as clearing sight distance, traversing the crossing, high profile or "hump" crossings, land locked property, at-grade crossing signalized with bells, lights, and proximity to other crossings.

Upon review, if traffic control devices are found to be deficient, GDOT will assign a priority and program an improvement project to correct the deficiency.

#### **Crossing Traffic Control Devices**

Bulloch County has 73 railroad crossings, all of which are "at-grade", that is, the railroad track directly intersects the road at roadway level and not over or under the roadway via a bridge or tunnel. "At-grade" highway-rail crossings pose risks because the train always has the right of way. These crossings require traffic control devices (passive and active) to permit reasonably safe and efficient operation of both the rail and traffic. Passive devices are signs and pavement markings that are not activated by trains. Types of passive devices include:

 Highway-Rail Grade Crossing Crossbuck Signs - the white crisscrossed sign with RAILROAD CROSSING in black lettering. These are required in each highway approach to every highway-rail grade crossing, either alone or in combination with other traffic control devices.



- Stop and Yield Signs formerly recommended with crossbucks only where two or more trains operate daily. GDOT and FHWA now recommend that stop signs be placed with crossbucks at all crossings, particularly those where an engineering study deems conditions necessary for a vehicle to make full stop. Factors to be considered include:
- The line of sight from an approaching highway vehicle to an approaching train;
- Characteristics of the highway, such as the functional classification, geometric conditions, and traffic volumes and speed;
- Characteristics of the railroad including frequency, type and speed of trains, and number of tracks;
- Crossing crash history, and
- Need for active control devices.
- Pavement markings used to supplement the regulatory and warning messages of crossing signs and signals. They consist of an "X" and the letters "RR" and stop bars painted on the roadway on each approach lane of all paved approaches to crossings where:
- Crossing signals or automatic gates are located;
- The prevailing speed of highway traffic is 40 mph or greater; and/or
- Engineering studies indicate there is a significant potential conflict between vehicles and trains.

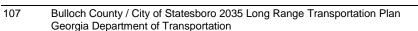
Pavement markings have limitations in that they may be obliterated by snow, may not be clearly visible at night or when wet, and may not be very durable when subjected to heavy traffic. Pavement markings are to be retroreflectorized by mixing glass beads in wet paint or using thermoplastic material. Thermoplastics are polymers that turn to a liquid when heated and freeze to a very glassy state when cooled. Thermoplastics do not contain solvents and provide extended service life, generally outperforming spray materials. Reapplication over existing markings may be accomplished with little surface preparation. Thermoplastics are preferred as they provide a long service life, good visibility, and good retroreflectivity.

Raised pavement markers can be used to supplement pavement markings in advance of crossings. The "X" lane lines and the stop bar line can be delineated by raised retroreflective markers to provide improved guidance at night and during periods of rain and fog.

Railroad Advance Warning Signs - intended for approach roadways that parallel the railroad to warn turning drivers that they will encounter a highway/rail crossing soon after making the turn.

Active traffic control devices are controlled by the train operator and give warning of the approach or presence of a train. Types of active traffic control devices include:

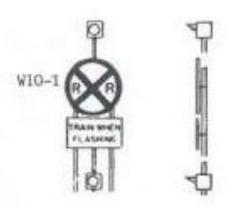
- Flashing-Light Signals two red lights in a horizontal line flashing alternately at approaching highway traffic.
- Cantilever Flashing Light Signals additional one or two sets of lights mounted over the roadway on a cantilever arm and directed at approaching highway traffic. Supplemental to the standard flashing light, used frequently on multi-lane approaches, high speed, two lane highways, roads with a high percentage of trucks or where obstacles obstruct visibility of standard flashing lights.
- Automatic Gates consisting of a drive unit and gate arm. Supplemental to flashing and cantilever lights.



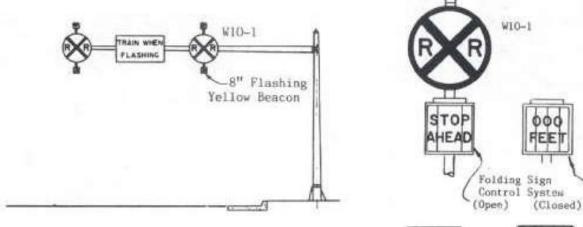




- Additional Flashing Light Signals used for additional approaches to active highway rail grade crossings. These lights can be mounted on existing flashing light masts, extension arms, additional traffic signal masts, cantilever supports, and in medians or other locations on the left side of the road.
- Active Advance Warning Signs with Flashers a train activated advance warning sign, considered at locations where sight distance is restricted on the approach to a crossing and the flashing light



signals can not be seen until an approaching driver has passed the decision point. Two amber lights can be placed on the sign to warn drivers in advance of a crossing where the control devices are activated. The continuously flashing amber caution lights can influence driver speed and provide warning for stopped vehicles ahead.



 Active Turn Restriction Signs - display 'No Right Turn' or 'No Left Turn' on a parallel street within 50 feet of the tracks, at a signalized highway intersection.



 Barrier devices - median separation devices to prohibit crossing gate violations.



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Forty-nine of Bulloch County's 73 railroad crossings are public crossings and 29 cross private roads. The Federal Railroad Administration - Office of Safety Analysis reports that, of the 49 public crossings:

- One has no type of highway warning;
- Forty-two are equipped with crossbucks; and
- Six are equipped with gates.

#### **Rail Recommendations**

Bulloch County rail crossings identified in Chapter 3, Section F, page 43 were further evaluated to determine deficiencies in safety control devices, described above. This analysis was combined with input provided by the Study Advisory Committee (Chapter 4, Section B, page 52) and from Georgia Midland Railroad to produce specific rail recommendations provided below.

#### Clito

 Clito Road (Crossing 620155D) – This crossing had an accident involving a train and a pick-up truck in 2004 (no injuries) and has the highest predicted collision value on the FRA Web Accident Prediction System, as described in Chapter 3, Section F, page 46. The crossing has crossbucks and yield signs, but poor sight distance in both directions and no advance warning signs.

Recommendation: Review crossing with the GDOT Railroad Crossing Manager to incorporate additional thermoplastic pavement markings and signage. Place advance warning signs on both approaches. Add pavement markings on both sides of crossing. Cutting trees back along the track near Clito Road could also improve sight distance.



Figure 6.E.1

Clito Road Rail Crossing

#### Statesboro

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2) Coley Boyd Road (Crossing 620204X) – The Coley Boyd Road crossing had an accident between an automobile and a train in 2005 (no injuries) and has the second

highest predicted collision value on the FRA Web Accident Prediction System. The crossing is equipped with crossbucks.

Recommendation: Review crossing with the GDOT Railroad Crossing Manager to add a stop sign, where none currently exists, on the westbound direction. Replace the eastbound stop sign as well.

3) The intersection of US 301, SR 67, Rackley Road, and Brannen Street – While none of the crossings in this intersection have identification plates, FRA GIS data indicates that it includes Crossing 620197P, 620182A, and 620198W. The intersection experiences high AADT, exceeding 20,000 vehicles per day. With the exception of Rackley Road, the intersection rail crossings are equipped with crossbucks, gates, and flashing lights. Several automobile crashes have occurred in the intersections between 2004 and 2007. The Study Advisory Committee (Chapter 4, Section B) and Georgia Midland Railroad have noted that these crossings are dangerous from a geometric perspective as vehicles maneuvering turns in the intersection can become stopped on the rail line. The warning device hardware is currently placed so that the train has to slow down or stop and wait for the gates to drop down before entering the intersection.

Recommendation: Review all legs of this 5-point intersection with the GDOT Railroad Program Crossing Manager and with Georgia Midland Railroad. Consider recommendations to:

- Equip the Rackley Road leg with gates and lights;
- Improve/relocate track circuitry to activate gates and lights sooner on the train approach; and
- Examine alternatives to re-route/realign the intersection to reduce the number of approaches and rail crossings and / or re-signalize to allow railroad signal preemption.

#### Figure 6.E.2 US 301 / SR 67 / Rackley Road / Brannen Street Rail Crossing



4) Zetterower Avenue, on the rail spur (Crossings 620176W, 620181T) – Crossings experience high AADT of 11,943 and are ranked fourth and fifth in predicted collision value on the Web Accident Prediction System. Crossings are equipped with crossbucks; some approaches have advance warning signs and pavement markings. Recommendation: Review crossings on Zetterower Avenue with GDOT Railroad Program Manager to incorporate stop signs, thermoplastic pavement markings, and advance warning signage.

5) E. Jones Avenue (Crossing 620196H) – This crossing was listed with the sixth highest predicted collision value on the FRA Web Accident Prediction System. The crossing is also listed on the GDOT Construction Work Program as a safety project to upgrade crossbucks to gates, and to add lights and a bell with a cantilevered light unit on one approach. The project is currently on hold. The crossing currently does not have stop signs or pavement markings but does have crossbucks.

Recommendation: Review crossing with GDOT Railroad Crossing Manager to update status of the safety improvement project on the Construction Work Program. Minimally, incorporate stop signs and thermoplastic pavement markings on both approaches.



Figure 6.E.3 E. Jones Avenue Rail Crossing

6) East Grady Street (labeled as Crossing 620172U and Crossing 620173B) – This crossing is labeled at the rail site as both Crossing 620172U and 620173B and experienced four GDOT reported crashes between 2004 and 2006, none with injuries. The crossings are both listed on the Web Accident Predication System and ranked number nine and seven in predicted collision value, respectively. The crossing is equipped with crossbucks and advance warning signs.

Recommendation: Review crossing with GDOT Railroad Crossing Manager and with Georgia Midland Railroad to determine/correct rail crossing number. Add stop signs and thermoplastic pavement markings on both approaches.

#### Figure 6.E.4 East Grady Street Rail Crossing

7) Johnson Street (Crossing 620189X) - This crossing is ranked number 10 on the FRA Web Accident Prediction System's predicted collision value. The northbound approach has pavement markings, advance warning sign, and crossbucks in advance of the crossing. The southbound approach has no crossbucks, no pavement markings, and no advance warning sign.

Recommendation: Review crossing with the GDOT Rail Crossing Manager to incorporate the following:

- Relocate northbound crossbucks to the crossing location;
- Add southbound crossbucks;
- Add southbound advance warning sign and thermoplastic pavement markings; and
- Add yield or stop signs on both approaches.
  - 8) SR26 (Crossing 620165J) This crossing experienced a vehicle crash with no injuries in 2005. The crossing is currently equipped with gates and lights.

Recommendation: Review crossing with GDOT Rail Crossing Manager to repaint faded eastbound pavement markings.

9) Georgia Midland Railroad seeks to build carload activity on the line in order to generate revenue which would allow for track upgrades to be made. The Railroad looks to the County, City, and GDOT to support improvements to rail crossings so that the local governments can continue to benefit from the presence of the railroad as an industrial development tool to attract good business to the area.

Recommendation: Address funding needs through a collaborative effort between Bulloch County, Statesboro, the Statesboro Bulloch County Chamber of GDOT. Georgia Commerce. and Midland Railroad to look for mechanisms/alternatives to provide timely funding incentives for rail improvements that are needed by potential rail customers who are evaluating locating their business in Bulloch County.

#### Other Rail Recommendations

• Report crossings described above to the GDOT Railroad Crossing Program Manager:

James Key Phillips Railroad Crossing Program Manager Georgia Department of Transportation Office of Utilities, 10th FL One Georgia Center 600 West Peachtree St. Atlanta, GA 30308 Office: 404-631-1376 FAX: 404-631-1934 Cell: 404-694-6622

The Crossing Program Manager will schedule a field review to conduct a Highway Rail Engineering Analysis of each crossing in question.

Report train standing problems to the Federal Railroad Administration at:

61 Forsyth Street, SW – Suite 16T20 Atlanta, Georgia 30303-3104 Phone – 404-562-3800 Hot Line – 1-800-724-5993 <u>www.fra.dot.gov</u>

- 1) Increased coordination between local officials, GDOT, and Railroad should occur to maximize safety and operational conditions on any new proposed at-grade railroad crossings within Bulloch County.
- 2) Install Stop or Yield Signs along with crossbucks at "at-grade" crossings. A Yield sign should be the default choice with a STOP sign required when a Highway Rail Engineering Analysis deems conditions necessary for vehicles to make a full stop.
- 3) When painting pavement markings, use thermoplastic versus paint. Thermoplastic will provide greater visibility at night and during inclement weather. Thermoplastic also provides a long service life, thus reducing maintenance costs.
- 4) GDOT offers local government incentive payments for at-grade rail-highway crossing closures, a provision of U.S. Code 23, section 130 (SAFETEA-LU section 1401(d)). The amount of the incentive grant may be up to \$7,500 to local governments for the permanent closure of public-at-grade crossings if matched by the railroad involved, for a total incentive of \$15,000. The local government receiving the incentive payment must use the portion received from the State for transportation safety improvements. Types of potential safety improvements include:
  - Grading, paving and drainage improvements associated with crossing removal;
  - Guardrail, barricades and barrier wall;
  - Traffic signals;

- Highway signs;
- Turn lanes;
- Pavement markings;
- Sidewalks;
- Emergency vehicles primarily responding to highway incidents;
- Emergency equipment (i.e. "Jaws of Life);
- Sirens and flashing lights for emergency response vehicles;
- Radar guns;
- Sponsorship of a community driver's education class.

Contact the Railroad Crossing Program Manager, above, for additional information.

- 5) Utilize available programs to address crossings with safety concerns and crossing violations.
- 6) The Georgia Operation Lifesaver Program is a national, non-profit education and awareness program dedicated to ending tragic collisions, fatalities and injuries at highway-rail grade crossing and on railroad rights of way. The organization promotes safety through:
- Education for drivers and pedestrians to make safe decisions at crossings and around railroad tracks;
- Active enforcement of traffic laws relating to crossing signs and signals; and
- Continued engineering research and innovation to improve the safety of railroad crossings.

Free programs are presented to schools, businesses, civic organizations, school bus drivers, professional drivers, law enforcement and emergency.

Georgia Operation Lifesaver, Inc. Jennie Glasgow, State Coordinator P.O. Box 76526 Atlanta, Ga 30358 (770) 393-2711 Fax (770) 393-3751 www.georgiaol.org

# **F.** Aviation Future Conditions

Statesboro-Bulloch County Airport (SBCA) completed an update to its Airport Layout Plan (ALP) in December 2008. The ALP provides a "blueprint" for the airport for the next ten years. In 2008, there were nearly 20,000 takeoffs and landings at Statesboro-Bulloch County Airport. According to the Airport Manager, future airport operations are projected to increase at a rate of 10% to 15% per year. Current economic conditions, however, have resulted in a drop in corporate/business jet activity despite stable general aviation business (specific figures were not available at the time this document was prepared). Given this, the Airport projects take-offs and landing operations to remain at the 20,000 figure until the recovery of corporate aviation activity occurs. The Airport currently has a pilot/aviator contact waitlist for 10 to 17 additional T-hangers for small aircraft. While four or so of the waitlisted aviators currently park their aircraft on site, the remaining do not, therefore, the addition of T-hangar space would generate additional revenues, aviation fuel sales, and increased operations for the Airport. The Airport is reliant on non-FAA funding sources, such as SPLOST funds, if allocated, to build this additional small aircraft storage space.

The SBCA Airport hopes to launch charter jet service in 2010. The service will be provided by a private third-party operator. The charter jet service will complement the existing corporate/business aviation activity as well as provide air transportation for individuals who do not have access to a private jet. The Airport expects corporate/business travel to become a significant component of its aviation activity in coming years.

Improvements planned for the Statesboro-Bulloch County Airport in 2009 include the installation of security fencing and pavement rejuvenation of the airport ramps. The Airport must now replace its AWOS weather information system which will require rescheduling the pavement rejuvenation project to 2010. The installation of the security fencing is expected to be completed as planned by the end of 2009. Other capital improvements planned for the 2010 to 2014 timeframe are shown in Table 6.F on page 116.

Fiscal Year	Description	Federal Cost	State Cost	Local Cost	Total Cost
2010	T-Hangar Taxi- lanes (excluding hangar) and Taxi-lane Reconstruction	\$237,500	\$6,250	\$6,250	\$250,000
2011	Construct Vehicle Access Road to East Hangars and Future Development	\$142,500	\$3,750	\$3,750	\$150,000
2012	Development of Additional Aircraft Apron	\$475,000	\$12,500	\$12,500	\$500,000
2013	Access Road Relocation	\$237,500	\$6,250	\$6,250	\$250,000
2014	Rehabilitate Runway 14/32	\$760,000	\$20,000	\$20,000	\$800,000
C	Grand Total:	\$1,852,500	\$48,750	\$48,750	\$1,950,000

# Table 6.FStatesboro-Bulloch County Airport Five-Year Capital ImprovementProgram

Source: Statesboro-Bulloch County Airport, Airport Layout Plan, December, 2008

Statesboro-Bulloch County Airport does not have future plans for land expansion as its existing land area provides a sufficient buffer from neighboring land uses and room for expansion. The Airport has been actively working with Bulloch County to develop a noise ordinance and zoning provisions to ensure compatible land uses around the airport property in the future.

Vehicular access in and out of Statesboro-Bulloch County Airport is hampered somewhat by traffic on US 301. Exiting the Airport requires making a left-hand turn into high-speed traffic on US 301 in order to drive into Statesboro.

Airport users sometimes experience difficulty finding the facility, usually as a result of missing the right hand turn onto the US 301 split north of Statesboro. Additional signage to complement existing airport symbol signage in this area may alleviate the problem.

#### Recommendations

- Bulloch County, working with GDOT District Office, should review access in and out of the Airport to determine if additional signage and/or a traffic signal are warranted. Any future plans to widen US 301 should include provisions for access safety improvements for the Airport.
- Bulloch County, working with GDOT District Office, should review airport signage and its placement to determine if additional signage is warranted. Consider locating signage at the US 301 split north of Statesboro.

# G. Bicycle and Pedestrian Future Conditions

The evaluation of existing bicycle and pedestrian systems in the study area revealed a fairly well developed sidewalk network within the City of Statesboro and a basic network in the smaller towns of Brooklet, Register and Portal. There are existing sidewalks adjacent to or in the vicinity of most of the schools and community facilities in Bulloch County. However, the examination found that often there are gaps in sidewalks, or that sidewalks are only present on one side of the road, requiring pedestrians to enter or cross the street in order to continue along the sidewalk.

Outside of Statesboro there are no bicycle facilities. There are two designated State Bicycle Routes that traverse Bulloch County, the TransGeorgia Route (SR46) and the March to the Sea Route (SR 67 to Lakeview Rd and Old River Rd), but neither have bikeable shoulders or signage. Throughout the county, shoulders are non-existent, very narrow, or are filled with rumble strips, rendering the shoulders unusable by bikes. However, the low traffic volumes, good sight distance and scenic surroundings make the county an attractive destination for bicycle tourists as well as residents riding for transportation or recreation.

The City of Statesboro does have the beginnings of a bicycle network, which includes some on-street bike lanes and shoulders, and the McTell Multi-use Trail that runs on a former railroad bed from Memorial Park to E. Main Street and Savannah Avenue. There are also various other multi-use path projects that are funded and programmed for construction.

The study recommendations were based on the following:

- Review of existing land use, transportation, and recreation plans
- Analysis of bicycle and pedestrian crash data
- Examination of existing facilities
- Review of current and proposed projects
- Site visits

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Input from Study Advisory Committee and the Public



#### Figure 6.G.1 Bike / Ped Shared Lane Markings

Shared lane markings or "sharrows" are used when there is not enough room for a bicycle lane, but there is a desire to indicate to motorists that bicycles are present, and to indicate to bicyclists where they should be positioned on the roadway. They have been used throughout the country. Currently they are approved by FHWA for experimental use and will be included in the next edition of the Manual of Uniform Traffic Control Devices (MUTCD).

It is important to note that the scope of this plan does not include an examination of every local street in the county for bike or pedestrian facilities. This plan is intended to evaluate safety problems and identify major bicycle and pedestrian needs and network deficiencies, and to propose potential projects to address those needs. Once the top priorities have been implemented, the plan should be updated to assess the current conditions, new challenges and opportunities and possible solutions. The development of a more detailed bicycle and pedestrian plan for the county or the City of Statesboro may be necessary once the network begins to take shape.

#### **Bicycle and Pedestrian Recommendations**

#### Town of Register:

- <u>Foster Street and Cross Street</u>: Construct sidewalks on one side of Foster Street from City Hall to Cross Street, along Cross Street to Main Street. This will connect Main Street to community facilities.
- <u>SR 46 @ Main Street</u>: Install crosswalks and pedestrian signage at intersection (connects gas station and sidewalks on both ends of Main Street).

#### Town of Portal:

- <u>US-80</u>: Pave shoulders from 1<sup>st</sup> Avenue to Bonnet Street (at least 4' in width).
- <u>Rocky Ford Rd</u>: Construct sidewalks on one side from US-80 to Johnson Street (connects residents to town and school).
- <u>US-80 @ Rocky Ford Road</u>: Add crosswalks and curb ramp (there is an existing flashing beacon).
- US-80 @ Woods Avenue / 1<sup>st</sup> Street: Re-paint crosswalk.

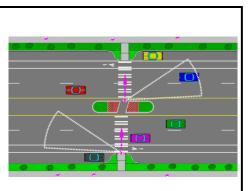
#### Town of Brooklet:

- <u>West Lane Street</u>: Construct sidewalk on one side of street from end of street to the elementary school (where it connects to existing sidewalks). The S&S Greenway is proposed to connect to West Lane Street. (The S&S Greenway is a planned shareduse path that will run along Railroad Bed Road and Josh Hagin Road between Statesboro and Brooklet.)
- <u>East Lane Street</u>: Construct sidewalk on one side of street from Parker Avenue to US-80.
- <u>Cromley Road</u>: Construct sidewalk on one side of street from Brooklet-Denmark Road to just south of Spence Road (approximately 519 N. Cromley Road) to connect neighborhoods to elementary school and Roebuck Park.
- <u>West Lee Street</u>: Construct sidewalk on one side of street from Cromley Road to western city limits.
- <u>US-80 at N. Cromley Road</u>: Install pedestrian crossing advance warning signs and flashing beacon. If warrants cannot be met on flashing beacon, install in-street pedestrian crosswalk sign. The intersection currently has faded crosswalk and school crossing signs.

#### **City of Statesboro:**

#### US-301/South Main Street/North Main Street:

- Paint shared lane markings, or "sharrows" (see Figure 6.G.1: Bike / Ped Shared Lane Markings, p. 117), construct pedestrian crossing islands (see Figure 6.G.2 to the Right) and implement access management from Tillman Road to E. Parrish Street. See inset below. Small pedestrian crossing islands should be placed in the existing center turn lane where driveway and intersection interference are minimized. Driveways should be consolidated where possible (see management access recommendations under System-wide Infrastructure and Policv *Recommendations*). This corridor has a history of bicycle and pedestrian crashes, and a high level of bicycle and pedestrian.
- Restripe South Main Street to narrow traffic lanes from Tillman Road to Veteran's Memorial Parkway and add bike lanes.
- Construct sidewalks on the east side (i.e. campus side) of South Main Street from Southern Drive to Old Register Road (across from Ruckner Lane). This connects apartments on Ruckner Lane to campus.
- Install a traffic signal at South Main Street and Old Register Road.
- Construct raised medians on S. Main Street from Old Register Road to just south of Tillman Road (in particular at the GSU driveway at Parrish Drive across from a development). There retail are few driveways or intersections that would interfere with the median: the median could also serve as a gateway to Statesboro with landscaping and signage, and will improve pedestrian safety and discourage speeding.





#### Figure 6.G.2 Pedestrian Crossing Island

Courtesy of GDOT Local Technical Assistance Program *Developing Pedestrian Safety Action Plans* Course Material.

A Pedestrian Crossing Island provides a safe refuge for pedestrians crossing streets or highways. Notice that the pedestrian cut in the median is angled so pedestrians are facing oncoming traffic. The cut is ADA compatible and the curb edge aligns with the crosswalk edge to aid the visually impaired. Intersection of US301/SR67/Brannen Rd & 2 RRs: Install pedestrian crossing improvements. The particular types of facilities will depend on planned intersection redesign. At a minimum, crosswalks and signage should be installed. Retrofit the existing skewed railroad tracks to create a safe crossing for bicycles. Apply rubber or flangeway fillers to gaps in tracks, and add warning sign for skewed tracks. A flangeway filler is a rubber or plastic composite material used to fill the gap between the rail and the pavement (See Figure 6.G.3 below).





- <u>Public Library (corner of S. Main Street & E. Grady Street)</u>: Construct sidewalks adjacent to library on E. Grady Street and S. Mulberry Street. Construct sidewalks on S. Mulberry Street from Savannah Avenue to E. Jones Avenue.
- <u>Fair Rd</u>: Restripe Fair Road narrowing traffic lanes to include bike lanes from S. Main Street/US-301 to Bermuda Run Road (where it connects to existing bike lanes). Add bicycle lane signage along these proposed and existing bicycle facilities. Construct landscaped raised medians in the center turn lane between intersections and major driveways, and allow for U-turns. There have been multiple bicycle crashes on Fair Road and there is a need for both bicycle facilities and traffic calming.
- <u>Savannah Avenue</u>: Stripe bike lanes on Savannah Avenue from E. Main St. to Northside Drive.
- <u>Zetterower Avenue</u>: Paint shared lane markings, or "sharrows" (see Figure 6.G.1: Bike / Ped Shared Lane Markings, p. 117) on Zetterower Avenue from Fair Road to E. Parrish Street.

Possible Alternative to consider in future LRTP updates: Restripe Zetterower Avenue from Fair Road to E. Parrish Street to reduce the number of traffic lanes from 3-lanes to 2-lanes, paint bike lanes, and preserve left turn lanes at intersections where necessary. The section of Zetterower Avenue from Savannah Avenue to Hill Street is an existing two-lane section with striped shoulders: tie these into the proposed bike lanes and add bicycle signage.

 <u>Jones Mill Road</u>: Construct sidewalks along Jones Mill Road from Lester Road to US 301 Bypass. There is evidence of walkers in this area (worn paths). Sidewalks are proposed for Lester Road as well (see Statesboro High School recommendations).

- <u>N. Main Street</u>: Construct sidewalks on both sides of N. Main Street from Jef Road to Pinewood Drive to connect to existing sidewalks, and from Miller Road to just north of E. Parrish Street which will complete sidewalks along South/North Main Street.
- <u>S. College Street</u>: Install bicycle signage along existing shoulder on S. College Street from W. Parrish Street to W. Brannen Street.

#### East and West Jones Avenue:

- Stripe bike lanes on East/West Jones Avenue from Johnson Street to S. Zetterower Avenue. Jones Avenue connects to the S. College Street and Johnson Street bike lanes, the McTell Trail and provides an important east-west connection.
- Construct sidewalks on W. Jones Avenue from Institute Street to existing sidewalk near Broad Street. The worn paths along the side of the road are evidence of high pedestrian activity along W. Jones Avenue.

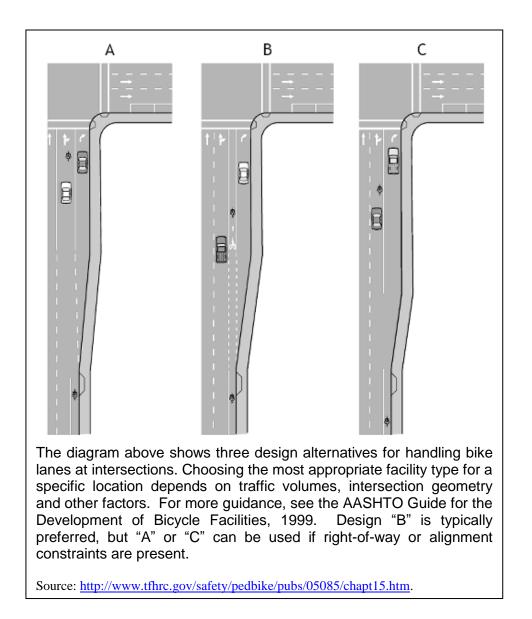
#### East and West Main Street:

- Paint sharrows on East/West Main Street from Savannah Avenue to S. College Street.
- Stripe bike lanes on West Main Street from S. College Street to Johnson Street to Denmark Street to city limits (just west of W. Altman Street). These bike lanes will connect to existing bike lanes/shoulders on Johnson Street from Denmark Street to West Jones Avenue. (See Figure 6.G.3: Potential Bike Lane Designs at Intersections, p. 122)
- Install "share the road" signage on Pulaski Road from end of Denmark Street bike lanes to the West Bypass.
- Stripe bike lanes on East Main Street from Savannah Ave to Mill Creek Park Entrance east of Beasley Road.
- Extend existing multi-use trail from Oakcrest Drive to US 301 Bypass.
- Construct sidewalks on both sides from Northside Parkway to US 301 Bypass.

#### Statesboro High School:

- Construct sidewalks on Lester Road from Northside Drive to E. Main Street.
- Enhance pedestrian crossing at the signalized intersection of Lester Rd. and Northside Drive/US-80 by adding a raised median, pedestrian countdown timers and signage ("right turn yield to pedestrians", and pedestrian crossing signs).

<u>Mattie Lively School</u>: While new school is being constructed, construct a short trail link from back of school property to Jef Road along the driveway at Well # 6 (25 Jef Road).



#### Figure 6.G.3 Potential Bike Lane Designs at Intersections

#### **GSU Campus Connections:**

GSU to Statesboro Mall Connection:

 <u>Gentilly Road</u>: Paint sharrows (see Figure 6.G.1: Bike / Ped Shared Lane Markings, p. 117), on Gentilly Road from Fair Road to Savannah Avenue. Construct sidewalks on both sides of the road from Fair Road to Brannen Street.

> Possible Alternative to consider in future LRTP updates: Restripe Gentilly Road from a 3lane road to a 2-lane road, while preserving left-turn pockets at intersections where warranted, and add bike lanes from Fair Road to Savannah Avenue.

- <u>Brannen Road</u>: Stripe bike lanes on Brannen Street from S. Zetterower Avenue to Veteran's Memorial Parkway, which will connect campus, via Gentilly Road to the back entrance of Mall.
- <u>Chandler Road</u>: Construct sidewalk segments to fill existing gaps in sidewalks. Add bicycle lanes from Fair Road to Lanier Drive.
- Construct raised medians and pedestrian crossing islands (see Figure 6.G.2 on page 119) at bus stop locations and where driveways permit.
- At every intersection and pedestrian crossing, add crosswalks, pedestrian warning signs, and in-street pedestrian crossing signs.



Figure 6.G.4 Hawk Signal

**HAWK Signal, Tucson, AZ.** Courtesy of The National Center for Safe Routes To School (www.saferoutesinfo.org).

A HAWK signal is a pedestrianactivated crossing device that has less delay time than a traditional signal because it allows traffic to flow when the pedestrian has completed the crossing. The AADT and pedestrian traffic volume warrants to install a HAWK are less than that of a traditional signal. HAWK signal will be in the upcoming edition of the Manual Uniform on Traffic Control Devices and are currently used in other parts of

This corridor is a city street within the Georgia Southern University campus. With extremely high pedestrian and bicycle activity largely due to the campus bus stops and student housing along the corridor, this corridor has the potential for even more bicycle and pedestrian traffic. There have also been eight recent pedestrian crashes while pedestrians were attempting to cross the street and one bicycle crash (GDOT Crash Database, 2004 – 2007).

Possible Alternative to consider in future LRTP updates: Re-stripe Chandler Road from a 3-lane road to a 2-lane road, while preserving left-turn pockets at intersections where warranted, and add bike lanes from Fair Road to Lanier Drive.

- <u>Terrell Drive</u>: Construct sidewalks on one side of Terrell Drive from Fair Road to Gentilly Road (this is a high pedestrian traffic areas with many student apartments).
- <u>Herty Drive</u>: Construct sidewalks on one side and install sharrows from Fair Road to Gentilly Road. Herty Drive provides a direct connection to campus.
- <u>Lanier Drive</u>: Restripe Lanier Drive from 3-lanes to 2-lanes and add bike lanes, preserving left turn lanes at intersections as warranted, from Veteran's Memorial Parkway to Georgia Avenue.

#### Parks and Paths:

Mill Creek Regional Park to McTell Trail Connection:

- Stripe bike lanes on E. Main Street from Northside Drive to Mill Creek Park (connecting to proposed bike lanes on E. Main Street east of Northside Parkway).
- Stripe bike lanes along Lee Street from E. Main Street to Savannah Avenue.
- Install HAWK signal (see Figure 6.G.4, HAWK signal, p. 123) or flashing beacon, signage, and crosswalks at intersection of Lee Street and Northside Drive.
- Bike lanes have been proposed along Savannah Avenue previously in this section, which will then complete the bicycle connection from Mill Creek Regional Park to the McTell Trail.
- Construct sidewalks on Savannah Ave. from E. Main St. to S. Zetterower Avenue (approximately 0.1 mile gap in existing sidewalk).

<u>Memorial Park</u>: Construct sidewalk along west side (park-side) of Zetterower Avenue from Fair Road to Brannen Street. A sidewalk is needed to connect to the McTell Trail, Memorial Park, and other destinations.

#### Northwest Statesboro / Blitch State Park Area:

- Construct shared-use path along abandoned railway between Williams Road (just west of Floyd Street) and Proctor Street. There is evidence of people accessing the property from the end of James Street (worn paths leading to former railroad).
- Construct sidewalks on both sides of W. Main Street from Proctor St. to Ivory St.
- Construct sidewalks on north side of W. Main Street/Proctor Street from N. Foss St. to Morris Street.
- Construct sidewalks on east side of Stockyard Road and bike lanes on both sides from Williams Road to West Main Street.
- Construct sidewalks on Williams Street from Bryant School entrance to Stockyard Road (gap closure).
- Install bike lanes on Blitch Street from W. Main Street to Northside Drive.
- Stripe bike lanes on Williams Road from Northside Drive to Stockyard Road.

#### S & S Greenway:

- Phase I: This project is programmed and funded by the Transportation Enhancement and Recreational Trails Programs. Construct shared use path along Railroad Bed Road from Gentilly Road to Veterans Memorial Parkway.
- Phase II: Construct shared use path from Veterans Memorial Parkway to Railroad Bed Road. This phase was also awarded TE and RTP funds. Tunnel under Veterans Memorial Parkway is already constructed.
- Phase III: Construct a shared use path along Railroad Bed Road and Josh Hagin Road to Brooklet, connecting to West Lane Street in Brooklet. Vehicular access to residential driveways along Railroad Bed Road and Josh Hagin Road needs to be maintained or alternate access provided. This segment is not yet funded.
- Connect S & S Greenway from its terminus at Gentilly Road to the McTell Trail. Alignment to be determined.

#### System-wide Infrastructure and Policy Recommendations

- Appropriate bicycle and pedestrian facilities should be included in all roadway improvement projects. The type of facility and level of accommodation will vary depending on need, land use and other factors.
- Where bike lanes are recommended or planned, and it is later determined during the project development process that bike lanes cannot be accommodated for any reason, then shared lane markings (sharrows) should be used in its place rather than just signage or no facility at all.
- For roads with a rural-typical section (i.e. open drainage, no curb and gutter), construct minimum 6.5' paved shoulders as part of GDOT widening, reconstruction or resurfacing projects, and minimum 4' shoulders on county roads (increase to 6.5' if rumble strips are used).
- Construct and maintain sidewalks on both sides of the road within a ½-mile radius of all schools, as recommended by GDOT's Pedestrian and Streetscape Guide and supported by GDOT's Safe Routes to School Program. These could be implemented as part of roadway construction projects, developments or subdivisions, in order to help with implementation.
- Construct 6.5' paved shoulders and install bike route signage along the two State Bicycle Routes (SBR) in Bulloch County - TransGeorgia (SBR 40) and March to the Sea (SBR 35).
- Install fluorescent green-yellow pedestrian crossing warning signs at all trail crossings to warn motorists of bicycle and pedestrian crossings. In addition, install advance warning signage where sight distance is poor.
- Develop and adopt access management policies in the City of Statesboro. Roads such as S. Main Street, with multiple commercial driveways per business and a lack of inter-parcel access, create many conflict points and potential safety hazards for bicycles and pedestrians. Additionally, fewer driveways allow for continuous sidewalks which create a more pedestrian-friendly and ADA compatible environment.

- Upgrade intersections for pedestrian and bicycle safety anytime a roadway is improved. Intersection treatments may include, but are not limited to: traffic signals, raised medians or crossing islands, crosswalks, advance crosswalk bars, curb ramps (as required by ADA in all roadway alteration projects), pedestrian countdown signal heads, pedestrian or trail crossing signage, "no turn on red" or other restrictive signage, and signal time adjustments. FHWA's PEDSAFE tool and FHWA's "How to Develop a Pedestrian Safety Action Plan" are helpful aides in choosing the right facility:
  - o FHWA PEDSAFE tool: <u>http://www.walkinginfo.org/pedsafe/</u>
  - FHWA's "How to Develop a Pedestrian Safety Action Plan": <u>http://www.walkinginfo.org/library/details.cfm?id=229</u>.
- Subdivision and Zoning Codes: Update subdivision and zoning regulations to require that developers do the following:
- Construct sidewalks on both sides of the road within subdivisions and along the main street frontage of a subdivision, commercial, office or retail development.
- Provide bicycle parking at large commercial, office, and retail developments
- Construct a path, bike lanes or suitable bicycle facility as part of any new development.

# H. Future Bridge Conditions

Based on the sufficiency ratings identified in Chapter 3, Section J, Bridges, on page 59, bridges were identified for mid-term and long-term improvement recommendations. Bridges with a sufficiency rating 50 or below are recommended for improvements by 2020. Bridges with a sufficiency rating between 50 and 75 are recommended for improvement by 2035. Several bridges with a sufficiency rating of 50 or below were determined to have improvements completed or underway during the course of this study, and were therefore not included in this list. The four bridges with sufficiency ratings below 50 recommended for improvement by 2020 include:

- Portal Highway at Big Branch & Lofts Creek
- Akins Pond Road at Mill Creek
- Cypress Lake Road at Dry Branch
- GA Highway 119 at Ogeechee River Overflow

Twenty-seven bridges were identified with sufficiency ratings between 50 and 75 and recommended for improvement by 2035. See Table 6.K.2 on page 138 for a complete list of bridges recommended for improvement.

# I. Future Roadway Conditions

The transportation network in Bulloch County was analyzed for three different types of potential roadway improvements: capacity improvements (including new roadways), operational improvements, and intersection improvements. Needs were evaluated through the analysis of safety data, discussed in Chapter 3, Section K on page 64, roadway characteristics, discussed in Chapter 3, Section L on page 67and current and future levels of service revealed by the Bulloch County Travel Demand Model, discussed in Chapter 3, Section M on page 74. Study Advisory input was also considered in the identification of improvements consistent with the goals and objectives of the study, discussed in Chapter 5, Goals and Objectives on page 89.

#### **Capacity Improvements**

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Based on the existing and future deficiencies identified in Chapter 3, Section M, the following capacity improvements are recommended:

- Widening of SR 26 / US 80 from 2-lanes to 4-lanes from Amanda Ct to Highway 119 Connector
- Widening of SR 67 from 2-lanes to 4-lanes from I-16 to just south of Burkhalter Road
- Statesboro North Bypass 2-lane connection from SR 26 / US 80 East to SR 73 / US 301 North
- Extension of Lanier Drive from Georgia Ave to Fair Rd / SR 67
- Extension of Country Club Drive from Cypress Lake Road to US 301

The first two capacity recommendations include capacity widening of existing facilities. The remaining three are new roadways that connect existing facilities. For a detailed description of each project, see Table 6.K.1 on page 137.

#### **Operational Improvements**

Operational improvements address geometric concerns and other issues that impact the flow of traffic on an existing roadway facility. Operational improvements may include the addition of turn lanes or passing lanes, signage improvements, signal timing improvements, shoulder widening or upgrades, introduction of traffic calming elements, improved curve or turning radii, and / or paving projects. Operational upgrades of facilities can provide relief to adjacent facilities experiencing capacity problems by providing for viable movement of increased traffic flows without the major investment associated with a capacity enhancement or new roadway facility.

Recommendations for operational improvements are developed based on safety data, roadway characteristics, and Study Advisory input received during the LRTP development process and should be regarded as planning-level. Detailed location-specific traffic analysis by a professional engineer, Bulloch County and the City of Statesboro, and / or further review by GDOT District 5 are necessary in order to make specific improvement recommendations. For a list of corridors recommended for operational improvements, see Table 6.K.1 on page 137.

#### Intersection Improvements

Intersection improvements are proposed to address needs identified based on safety analysis, existing and future traffic volumes, as well as safety concerns raised by the Study Advisory Committee (Chapter 4, Section B, page 82). Improvements may include an adjustment in intersection controls and /or geometric realignment of an intersection. Recommendations for intersection improvements as part of the LRTP process are based on planning-level data, and require detailed location-specific analysis by a professional engineer, Bulloch County and the City of Statesboro, and / or further review by GDOT District 5 to refine specific project improvement recommendations. Considerations include available right-of-way, traffic volumes, safety, driver expectancy, and the context of the area. Roundabouts are warranted for intersections with single lane approaches, ADT under 16,000 and circulating traffic under 1,800 vehicles per hour. Table 6.I on page 129 compares three common types of intersection controls frequently considered for intersection improvements: signalization, stop control, and roundabouts.

As part of the LRTP process, a sub-area analysis was conducted for a more in-depth look at a County-identified growth area. As part of this analysis, traffic counts and turning movement counts were collected at key intersections located along the Langston Chapel Road / Burkhalter Road corridor south of the Statesboro city limits between US 301 and US 80. HCS, a micro-simulation analysis tool, was applied to analyze levels of service at these intersections. Therefore, in the case of these intersections, more specific improvement recommendations have been identified. For more information on the sub-area analysis, see the *Bulloch County / City of Statesboro 2035 Long Range Transportation Plan Sub-Area Analysis Technical Memorandum*.

Details associated with near-term intersection improvements identified in the GDOT 2008-2013 CWP, are included based on the latest information available from the GDOT District 5 Preconstruction Engineer. For a complete list of corridors recommended for operational improvements, see Table 6.K.1 on page 137.

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		Signal	Stop Control	Roundabout
	Crash Frequency	High	Medium	Low
Safety	Crash Severity	Higher due to higher speeds and higher speed differential	Medium	Lower due to lower speeds and lower speed differential. Elimination of high-speed T-bone or rear end collisions.
Š	Traffic Calming	Not effective	Effective at All-Way Stop Controlled Intersections. Not effective for through traffic at Two-Way Stop Controlled intersections.	Entering and circulating geometry ensure lower speeds (18-30mph).
Traffic Operations	Capacity	Constrained by green time in cycle length	Higher capacity than signalized intersections due to the omission of lost time (red and yellow) at signalized intersections.	Higher capacity than stop control at lower proportions of major street traffic, same capacity as stop control when major and minor street volumes are equal. Higher capacity than signalized intersection due to omission of lost time (red and yellow) at signalized intersections.
Oper	Operational Benefits	Greater delays to all vehicles.	Delays at off-peak periods.	Less delays.
Traffic	Traffic Signing	Typical Intersection Signing.	Typical Intersection Signing	Typical Intersection Signing with YIELD signs for the traffic entering the roundabout.
	Traffic Speed	Not limited by geometrics.	Lower speed on side roads than signalized intersections.	Geometric features ensure slow entering and circulating speeds (18-30 mph).
	User Familiarity	Drivers are very familiar with using signalized intersections.	Drivers are very familiar with using stop-controlled intersections.	Drivers are less familiar with roundabouts.
ROW Impacts	Overall Right-of- Way Requirements	Requires less space on the approaches than roundabouts if no exclusive left turn lanes; more space if exclusive left turns constructed.	Requires less space than roundabouts.	Typically requires more space at the conjunctions but less space on the approaches than stop- controlled and signalized intersections.

Table 6.I	Comparison of Signal, St	op Control and Roundabout Improvements

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		Signal	Stop Control	Roundabout
Community Impacts	Community Enhancements	Community enhancement is available on the perimeter of the intersection.	Community enhancement is available on the perimeter of the intersection.	Community enhancements are available on the perimeter of the intersection. Allows additional landscaping, monuments, and other aesthetic uses within the central island.
Com	Environmental Benefits	More fuel consumption and emissions due to idling vehicles during red time phases.	More fuel consumption and emissions due to idling vehicles.	Overall less fuel consumption and vehicle emissions.
Cost	Maintenance	Routine signal maintenance required.	Less cost than signals and minimum maintenance costs.	Pavement markings and landscaping costs required. Minimum maintenance costs.

# J. Suggested Improvements

Over the course of the study, public input was collected regarding transportation issues and opportunities for consideration during the needs assessment and improvement development process (See Chapter 4, Public Involvement Activities for more information on the Public Involvement Process). Table 6.J on page 131 includes the improvement suggestions collected at these activities throughout the course of the study. Each suggested improvement was considered alongside technical data in order to determine if a need for the improvement in fact exists. If a need did exist, potential environmental impacts were identified and the project was recommended for inclusion in the plan recommendations. The associated project number is included in the table, and can be used to reference project details in Table 6.K.1, 6.K.2, and 6.K.3 on pages 137, 138, and 140 respectively. Policy recommendations that are not specific to a project are noted as such.

#	Suggested Improvement	Source	Need Identified?	Possible Environmental Impacts?	Status	Recommended for Inclusion in Plan?
1	There is a desire for a northern leg of the Statesboro by-pass	Study Advisory Committee	Yes	Yes- Wetland	2-lane connection is recommended from US 80 East to US 301 N.	Yes- B11
2	Provide public transportation – growing elderly population needs form of transportation	Study Advisory Committee / Public Comment	Yes	No	Recommendation included for locals to formalize transit action plan.	Yes-Policy Recommendation
3	There is a desire for left turn arrows and turn lanes on E-W streets in Statesboro	Public Comment	Location driven	Location Driven	Projects included to address east-west operational issues where needed.	Yes-Policy Recommendation
4	Relieve traffic congestion on Hwy 67	Public Comment	Yes	Yes - Wetland	Widening is recommended on SR 67 from S. of Burkhalter Rd to I-16.	Yes- B16
5	Add or coordinate traffic signals, turn lanes, and other features to improve traffic flow at the intersection of SR 46 and US 301	Public Comment	Yes	No	Yes- safety improvements recommended.	Yes-B7
6	Pedestrian access for GSU students	Public Comment	Yes	Location driven	Pedestrian	Yes-B12,B97
7	Desire for reliable, dedicated transportation service to Savannah	Public Comment	Yes	No	Recommended for further local study in the plan	Yes-Policy Recommendation
8	Improve traffic flow on Fair Rd	Public Comment	Yes	No	Recommended for further local study in the plan.	Yes- Policy Recommendation
9	Add traffic calming devices in city center and surrounding neighborhoods	Public Comment	Yes	No	Suggested traffic calming on Savannah Rd. Most bike/ped projects within the city also provide traffic calming opportunities.	Yes- B60, B96
10	Improve congestion on Lanier and Georgia Ave	Study Advisory Committee	Yes	No	Suggested roadway connections between Lanier Rd and Fair Rd.	Yes- Policy Recommendation
11	Add golf cart trails	Study Advisory Committee	No	No	No need identified.	No
12	Addition of stop signs for cars crossing the McTell Trail	Study Advisory Committee	No	No	Bike and ped volumes at this location do not warrant stop signs.	No

#	Suggested Improvement	Source	Need Identified?	Possible Environmental Impacts?	Status	Recommended for Inclusion in Plan?
13	Addition of dedicated bike paths	Study Advisory Committee	Yes	Location driven	Bicycle paths recommended in specific locations where need exists.	Yes-Policy Recommendation
14	Addition of dedicated bike lanes on Gentilly Rd	Study Advisory Committee	Yes	Location driven	Sharrows (bike route pavement markings on roadway . Picture on page 113 Figure 6.G.1) included in plan recommendations.	Yes- B106
15	Addition of dedicated bike lanes on S. College St	Study Advisory Committee	Yes	No	Bicycle signage included in plan recommendations	Yes- Signage Improvements
16	Continue sidewalks north on N. Main St to Debbie Dr	Study Advisory Committee	Yes	No	Recommendation included in the plan.	Yes- Policy Recommendation
17	Desire for pedestrian and bike improvements from city to Mill Creek Park; Addition of sidewalk and pedestrian facilities east of downtown Statesboro, around Mill Creek Park and towards Brooklet	Kickoff Meeting	Yes	Location driven	Recommendation included in the plan.	Yes- B176
18	Addition of sidewalk and pedestrian facilities around the Proctor St area – connect to Blitch State Park, existing school, housing project, new school and small athletic fields	Study Advisory Committee	Yes	No	Recommendation for multi-use path and sidewalk included in the plan.	Yes-B160,B171
19	Extend shared use path along E Main St between Lee St and Savannah Ave	Study Advisory Committee	Yes	No	Recommended.	Yes- B105
20	Add turn lane on Hwy 80 between Zettertower Rd to the end of Savannah Ave	Study Advisory Committee	No	No	No need identified in the plan.	No
21	Addition of biking, horseback riding trail along the river in portions of the county	Public Comment	No	Location driven	Recreational trail needs are addressed by the County's recreation master plan.	No
22	Use of different travel modes should be encouraged at GSU	Kickoff Meeting	Yes	No	Bike facilities and sidewalk are recommended within campus.	Yes- Policy Recommendation
23	Desire to expand GSU transit service to points off campus as students without cars have trouble accessing off-campus services	Kickoff Meeting	Yes	No	Recommended for further study in the plan.	Yes-Policy Recommendation
24	Mitigate vehicle and pedestrian conflict issues on GSU's campus. Cars drive too fast through campus and pedestrians are crossing at inappropriate points	Kickoff Meeting	Yes	No	Recommended bike/ped projects (bike facilities, sidewalk and crosswalks) include a traffic calming approach.	Yes- B104,B161,B177

#	Suggested Improvement	Source	Need Identified?	Possible Environmental Impacts?	Status	Recommended for Inclusion in Plan?
25	Possible need for a left-hand turn lane on Lanier Dr	Kickoff Meeting	Yes	No	Recommended intersection improvements on Lanier and Burkhalter.	Yes- B109
26	Address GSU's lack of enough parking for commuters	Kickoff Meeting	No	NA	Multi-modal recommendations in plan help to mitigate parking.	No
27	Eliminate raised median on US 80, from the high school to US 301	Kickoff Meeting	No	NA	Proposed widening of US 80 in the plan will address the current typical section.	No
28	Widen US 80 to Brooklet	Kickoff Meeting	Yes	No	Recommended widening from Old Leefield Rd to SR 119 Connector.	Yes-B17
29	Address issue of sewer line and its extension as it relates to the growth the of the county	Kickoff Meeting	No	NA	Sewer improvements are addressed by Bulloch County.	No
30	Improve collector roads	Kickoff Meeting	Yes	Location driven	Operational improvements recommended as appropriate.	Yes-Policy Recommendation
31	Address impacts on traffic due to reduction of vehicular access to GSU campus – impacting Savannah Ave – much cut-through traffic	Kickoff Meeting	Yes	No	Plan includes a recommendation for speed humps along Savannah Ave.	Yes- B60
32	Address desire for pedestrian amenities on Gentilly between GSU and the mall	Kickoff Meeting	Yes	No	Plan includes recommendations for both sharrows (bike route pavement markings on roadway . Picture on page 113 Figure 6.G.1) and sidewalks along Gentilly Rd from Fair Rd to Savannah Ave	Yes-B178
33	Re-align Burkhalter "Six Points" intersection	Kickoff Meeting	Yes	No	Plan includes a recommendation for future study and improvement.	Yes-B48
34	Address the high traffic crossing US 80 at Burkhalter Rd.	Kickoff Meeting	Yes	No	Plan includes a recommendation for a signal at this location.	Yes-B49
35	Address issues at Cawana Rd, an area of interest	Kickoff Meeting	Yes	No	Plan includes recommended intersection improvements in the vicinity of Cawana Rd	Yes-B6
36	Connect park and school, and provide pedestrian improvements in general, in environmental justice community on the west side of town, along MLK	Kickoff Meeting	Yes	No	Plan includes recommendations for bike facilities along MLK, connecting a proposed multi-use path and bike facilities on Donnie Simmons Rd .	Yes-B160,B171

#	Suggested Improvement	Source	Need Identified?	Possible Environmental Impacts?	Status	Recommended for Inclusion in Plan?
37	Address truck traffic on SR 46, which is a concern in Register	Kickoff Meeting	Yes	No	Plan includes recommendations for operational improvements on SR 46.	Yes-B99
38	Address US 80 in Brooklet and around SE Bulloch HS – has a lot of traffic volume and cut through traffic	Kickoff Meeting	Yes	No	Plan includes recommendation for capacity improvements on US 80 in Brooklet.	Yes-B17
39	Address issue of signalization at US 80 and Parker – it is a concern as there has been much development at that corner	Kickoff Meeting	Yes	No	Plan includes recommendation for intersection improvement at this location. Appropriate improvement will be determined in conjunction with GDOT District 5.	Yes-B50
40	Address issue of trucks cutting through on Old SR 46	Kickoff Meeting	Yes	No	Plan includes improvements to SR 46 that help to deter cut through traffic.	Yes-B4
41	Address possibility of trucks using alternative routes to bypass scales on I-16	Kickoff Meeting	No	No	Additional enforcement may help deter trucks.	No
42	Add new sidewalks in Register and update existing sidewalks (Main St from Cypress Lake Rd to SR 46, Church St and part of Railroad St)	Study Advisory Committee	Yes	Yes - Wetland	Plan includes recommendation for sidewalk.	Yes- B93,B132
43	Add new sidewalks in Register on SR 46 connecting residential and commercial development	Study Advisory Committee	Yes	No	Plan includes recommendations for crosswalks and pedestrian signage.	Yes- Signage Improvements
44	Add sidewalks to Foster St in Register to connect the town hall, the public playground and the future library.	Study Advisory Committee	Yes	Yes -Wetland	Plan includes recommendation for sidewalk.	Yes-B92
45	Streetscaping and lighting are desired in Register to encourage walking	Study Advisory Committee	No	Yes	Recommended in system-wide infrastructure and policy recommendations	Yes-Policy Recommendation
46	In Brooklet, add more sidewalks, a trail for golf carts, and explore the possibility of walking or biking to SE Bulloch HS	Study Advisory Committee	Partial	No	Plan includes recommendations for sidewalks in downtown Brooklet and near the high school.	Yes- B91,B93,B95,B157
47	Extend Lanier Rd to connect to the perimeter of GSU campus	Study Advisory Committee	Yes	No	Plan includes recommended extension of Lanier Rd from Georgia Ave to Fair Rd.	Yes-B59
48	Relieve congestion in vicinity of GSU and the mall	Study Advisory Committee	Yes	Location Driven	Multi-modal improvements and capacity enhancements to area facilities included in the plan.	Yes-Policy Recommendation

#	Suggested Improvement	Source	Need Identified?	Possible Environmental Impacts?	Status	Recommended for Inclusion in Plan?
49	Look to UGA -Athens-Clarke County for transit model	Study Advisory Committee	Yes	No	Plan includes recommendation for further local study.	Yes-Policy Recommendation
50	Safer and nicer bike and pedestrian facilities in vicinity of schools in Bulloch County	Study Advisory Committee	Yes	Location Driven	Plan includes recommendations in the vicinity of schools.	Yes-B56
51	Address railroad crossing on US 301 just south of downtown - dangerous from a geometry perspective	Study Advisory Committee	Yes	No	Plan includes recommended railroad and crossing improvements.	Yes-B122
52	Identify funding sources to implement warning lights and gates at RR crossing at Rackley St	Study Advisory Committee	Yes	No	Plan includes recommendation for improvement and GDOT contact for funding information.	Yes-Policy Recommendation
53	Do something about safety issues with regards to existing bike lane near the hospital	Study Advisory Committee	Yes	No	Recommended in system-wide infrastructure and policy recommendations.	Yes-Policy Recommendation
54	Improve safety / add a traffic signal at SR 46 and US 301 (currently has a caution light)	Study Advisory Committee	Yes	No	Recommended in plan and soon to be implemented by GDOT District 5.	Yes-B7
55	Desire for a bikeway connection between Gentilly and Fair Rd	Study Advisory Committee	Yes	No	Plan includes recommendation for bike lane at this location	Yes-B106,B168
56	Connect Phase I and Phase II greenway to Mill Creek Park via a multi-use path	Study Advisory Committee	Yes	No	Plan includes recommendations to connect to eventually connect to the park through bike lanes and sidewalks	Yes - Policy Recommendation
57	Further the Greenway initiative - need to maximize the non-motorized connectors in the community	Study Advisory Committee	Yes	Location driven	Non-motorized recommendations and enhancements are included in the plan.	Yes-Policy Recommendation
58	Signal timing needs to be coordinated in the vicinity of the mall	Study Advisory Committee	NA	NA	Congestion is noted in the vicinity of the mall. A local signal timing study is necessary to determine if this improvement is warranted.	No
59	Provide more direct routes around the city and / or more direct access to the interstate	Public Comment	No	NA	Analysis revealed that existing routes can be upgraded and enhanced.	No
60	Address operational / signage / sight distance issues with the intersection of Ivanhoe Dr / Mud Rd and SR 119	Public Comment	No	NA	Location did not emerge as an area of need based on technical analysis.	No

# K. Recommended Improvements

As part of the LRTP process, specific future improvement projects have been identified for roadways, bridges, rail, and the bicycle and pedestrian network. A complete listing of recommended roadway projects is provided in Table 6.K.1 on page 137. A complete listing of recommended bridge and rail crossing projects is provided in Table 6.K.2 on page 138. A corresponding map of roadway, bridge, and rail crossing project locations can be found in Figure 6.K.1 on page 139. A complete listing of recommended bicycle and pedestrian projects is provided in Table 6.K.3 on page 140. A corresponding map of project locations can be found in Figure 6.K.2 on page 141.

Project costs and prioritization are discussed in Chapter 7: Prioritized Recommendations, page 142.

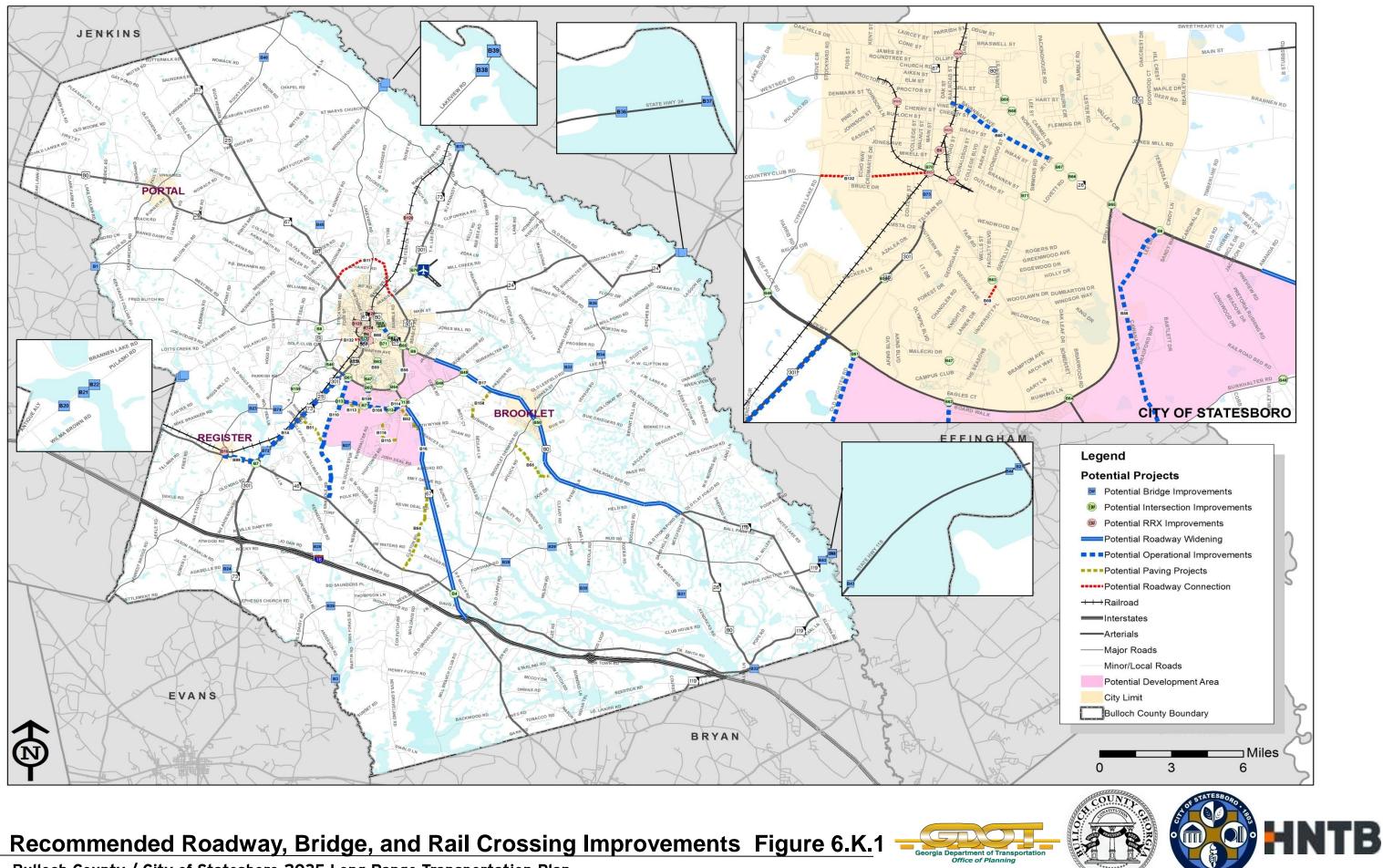
## Table 6.K.1Bulloch County / City of Statesboro 2035 Long Range Transportation PlanRecommended Roadway Improvements

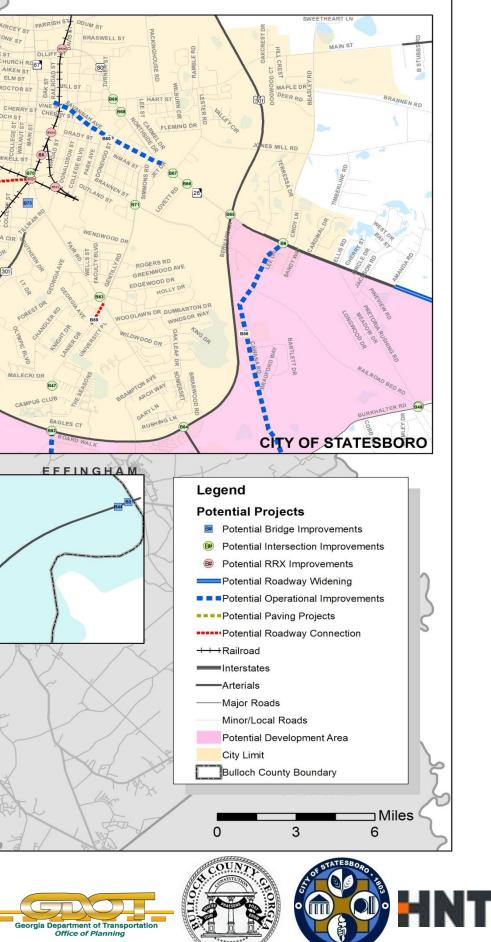
		Sean	nent Limits							
Project Ref. No.	Facility	From	То	Existing Configuration	Improved Configuration	Notes/Comments	Source	Improvement Type	Need	Anticipated Benefit
Capacity Improv	ements and New Roadways					•		•		·
B11	Statesboro North Bypass	SR 16/US 80 East	SR 73/US 301 N	N/A	2-Lanes	3.90 miles	Analysis	New Road	Connectivity	Increased Capacity & Improved Safety
B16	SR 67	I-16	S of US 301 Bypass	2-Lanes	4-Lanes	10.85 miles	Analysis	Minor Arterial Widening	Capacity Deficiency	Increased Capacity & Improved Safety
B17	SR 26/US 80	Amanda Ct	SR 119 Connector	2-Lanes	4-Lanes	13.10 miles	Analysis	Minor Arterial Widening	Capacity Deficiency	Increased Capacity & Improved Safety
B59	Extension of Lanier Rd	Georgia Ave	Fair Rd	N/A	2-Lanes	0.20 miles	Comments	New Road	Capacity Deficiency	Increased Capacity & Improved Safety
B132	Country Club Drive	Cypress Lake Rd	US 301	N/A	2-Lanes	0.78 miles	Comments	New Road	Capacity Deficiency	Increased Capacity & Improved Safety
Operational Imp	rovements									
B14	SR 73/US 301	SR 46	US 301 Bypass	4-lane divided highway . Grass shoulder.	upgrade shoulders / further study	5.50 miles	Analysis	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety
B51	Bohler Rimes Rd	US 301	Burkhalter Rd	unpaved	paved	1.50 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety
B52	Elmer Phillips Rd	SR 67	Harville Rd	unpaved	paved	1.33 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety
B54	Clifton Rd	SR 67 / Emit Grove Rd		unpaved	paved	4.00 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety
B55	Brannen Pond Rd	Brooklet Denmark Rd	US 80	unpaved	paved	2.36 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety
B56	Cawana Rd	Burkhalter Rd	US 80	2-lane. Grass shoulder.	add turn lanes	2.11 miles	Comments	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety
B60	Savannah Ave	E Main St	Northside Dr	2-lane. No shoulder.	traffic calming	1.00 miles	Comments	Operational Improvements	Operational & Safety Issues	Improved Safety
B99	SR 46	SR 73/US 301	Kennedy Bridge Rd	2-lane. Grass shoulder	add turn lanes	1.40 miles	Analysis	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety
B108	Langston Chapel Rd	Old Register Road	SR 67	2-lane. Grass shoulder.	add turn lanes	2.80 miles	Analysis	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety
B109	Lanier Rd	US 301 Bypass	Langston Chapel Rd	2-lane. Grass shoulder. A few turning lanes.	add one turn lane	0.85 miles	Analysis	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety
B110	Old Register Rd / Sinkhole Rd	US 301 Bypass	SR 46	2-lane. Grass shoulder.	upgrade shoulders / further study	6.00 miles	Analysis	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety
B113	Sea Born Proctor Rd	Langston Chapel Rd	Langston Chapel Rd	unpaved	paved	0.95 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety
B114	Bethel Church Rd	Langston Chapel Rd		unpaved	paved	0.34 miles	Analysis	Paving and Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety
B115	Josh Smith Rd	Harville Rd	Hightower Rd	unpaved	paved	0.62 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety
B116	Hightower Rd	Burkhalter Rd	South of Josh Smith Rd	unpaved	paved	0.84 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety
B158	Grimshaw Rd	US 80	Rushing Rd	unpaved	paved	1.70 miles	Comments	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety
			· · • • • · · · · · · · · · · · · · · ·					·		
Intersection Imp	provements									
B4	SR 46 @ SR 67			two-way stop control, caution signalization	signalization	27 crashes / 1 fatality	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B6	SR 26/US 80 @ Cawana Rd			one-way stop control	further study	N/A	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
					signalization, right turn lane, median					
B7	SR 73/US 301 @ SR 46			two-way stop control, caution signalization	upgrade.	55 crashes / 2 fatalities	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B8	US 25 Bypass @ Pulaski Road			two-way stop control	signalization	N/A	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B46	Cypress Lake Rd @ US 25 Bypass			two-way stop control, caution signalization	further study	N/A	Comments	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B47	Chandler Rd @ Lanier Dr			signalized	further study	71 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B48	Pretoria Rushing Rd @ Burkhalter Rd			four-way stop control	roundabout	N/A	Comments	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B49	Burkhalter Rd @ US 80			two-way stop control	signalization	N/A	Comments	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B50	US 80 @ Parker St			two-way stop control, caution signalization	further study	N/A	Comments	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B61	Old Register Rd @ US 301 Bypass			two-way stop control	further study	56 crashes / 1 fatality	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B62	Lanier Rd @ US 301 Bypass			signalized	further study	106 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B63	Chandler Rd @ Fair Rd			signalized	further study	86 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B64	SR 67 @ US 301 Bypass			signalized	further study	144 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B65	US 301 Bypass @ Northside Dr			signalized	further study	87 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B66	Northside Dr @ Lovett Rd			signalized	further study	62 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B67	Lester Rd @ Northside Dr			signalized	further study	107 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B68	Northside Dr @ Cone Rd			one-way stop control	further study	59 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B69	Northside Dr @ Main St			signalized	further study	51 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B70	Fair Rd @ Main St			one-way stop control	further study	87 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B71	Brannen St @ Gentilly Rd			signalized	further study	53 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B76	US 301 @ Newsome Rd			two-way stop control	further study	Airport access	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B77	Langston Chapel Rd @ Lanier Rd			one-way stop control	signalization	N/A	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B133	Old Register Rd @ Langston Chapel Rd			four way stop control	signalization	N/A	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B134	Burkhalter Rd @ Langston Chapel Rd			one-way stop control	roundabout	N/A	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
					signal timing modification, add left turn la	ane				
B135	Burkhalter Rd @ SR 67			signalized	and right turn lane on SR 67 WB	N/A	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B136	Rucker Ln @ US 301			two-way control	signalization	N/A	Comments	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
B159	Cypress Lake Rd @ Coley Boyd Rd			one-way control	roundabout	N/A	Comments	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity
	*Operational and intersection improvements	recommendations are play								

\*Operational and intersection improvements recommendations are planning level and require further study for specific solutions.

# Table 6.K.2 Bulloch County / City of Statesboro 2035 Long Range Transportation PlanRecommended Bridge and Rail Crossing Improvements

		Segme	nt Limits							
Project Ref. No.	Facility	From	То	Existing Configuration	Improved Configuration	Notes/Comments	Source	Improvement Type	Need	Anticipated Benefit
Bridge Improver			10		improved configuration	Hotes/ comments	oource	improvement Type	inccu	Anticipated Benefit
R1	Portal Hwy @ Big Branch & Lofts Creek, 8 mi n	orth of Metter		0.79 miles		24 & 16 sufficiency rating	Analysis	Replacement	Rehabilitation or Maintenance	Improved Safety & Operations
B2	SR 119 @ Ogeechee River Overflow			0.4 miles		67 sufficiency rating	Analysis	Replacement	Rehabilitation of Maintenance	Improved Safety & Operations
B3	Deloach Church Rd @ Lotts Creek			0.4 miles		75.71 sufficiency rating	Analysis	Replacement	Rehabilitation of Maintenance	Improved Safety & Operations
	Pulaski Rd @ Lotts Creek Overflow			2,160 sq ft		57.57 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	Pulaski Rd @ Lotts Creek			4,320 sq ft		57.57 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	Pulaski Rd @ Crossway Branch @ Lotts Creek	1		2,160 sq ft		57.57 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	Cypress Lake Rd @ Lotts Creek	•		5,152 sq ft		71.3 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	Adabelle Rd @ Scott Creek			1,440 sq ft		69.27 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	Sinkhole Rd @ Lotts Creek			5,520 sq ft		73.17 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B26	Nevils Daisy Rd @ Lotts Creek			9,600 sq ft		55.01 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B27	Burkhalter Rd @ Little Lotts Creek			1,440 sq ft		70.59 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	Mud Rd @ Lower Black Creek			3,712 sq ft		64.3 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	Mud Rd @ Upper Black Creek			4,640 sq ft		74.29 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B30	Arcola Rd @ Upper Black Creek			2,760 sq ft		69.50 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B31	M.P. Martin Rd @ Cross Branch			1,080 sq ft		70.08 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B32	US 80 @ Lotts Creek			5,040 sq ft		71.45 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	Clito Rd @ Mill Creek			5,130 sq ft		69.41 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B34	Stilson Leefiled Rd @ Mill Creek			5,544 sq ft		54.02 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	Spring Creek Rd @ Spring Creek			1,440 sq ft		68.42 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	SR 24 @ Ogeechee River Overflow			5,200 sq ft		60.93 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	SR 24 @ Ogeechee River			10,400 sq ft		59.91 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B38	Lakeview Rd @ Ogeechee River Overflow			6,696 sq ft		65.38 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B39	Lakeview Rd @ Ogeechee River			14,160 sq ft		74.14 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	Rocky Ford Rd @ Bay Gall Creek			3,885 sq ft		64.22 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B43	GA Hwy 119 @ Ogeechee River Overflow			10,395 sq ft		39.45 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B44	GA Hwy 119 @ Ogeechee River			17,758 sq ft		67.35 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B45	Akins Pond Rd @ Mill Creek			3,000 sq ft		25.66 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B72	US 25 @ Lotts Creek Trib.			1,428 sq ft		66.92 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B73	US 25 @ Little Lotts Creek			1,445 sq ft		71.21 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B74	Cypress Lake Rd @ Dry Branch			2,520 sq ft		27.03 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
B75	US 301 @ Ogeechee River			49,920 sq ft		65.58 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations
	-						-			· ·
Railroad Crossii	ng Improvements									
B5 Near Term	East Jones Avenue Crossing	NS # 620196H		Wa	arning Device	0.2 miles	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations
B5 Mid Term	East Jones Avenue Crossing	NS # 620196H			arning Device	0.2 miles	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations
B10		NS # 620214D		Sto	op Sign		Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations
B120		NS #620155D			arning Device		Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations
B122	US 301/SR67, Rackley Road and Brannen St				op Sign, Pavement Markings		Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations
B123	Zetterower Ave	NS # 620176W, 620181T	-	Sto	op Sign, Pavement Markings, Crossbuc	ks	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations
		NS # 620172U, 620173B			paint Pavement Markings		Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations
		NS # 620189X			arning Device, Pavement Markings		Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations
B126	SR 26	NS # 620165J		Wa	arning Device	0.2 miles	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations



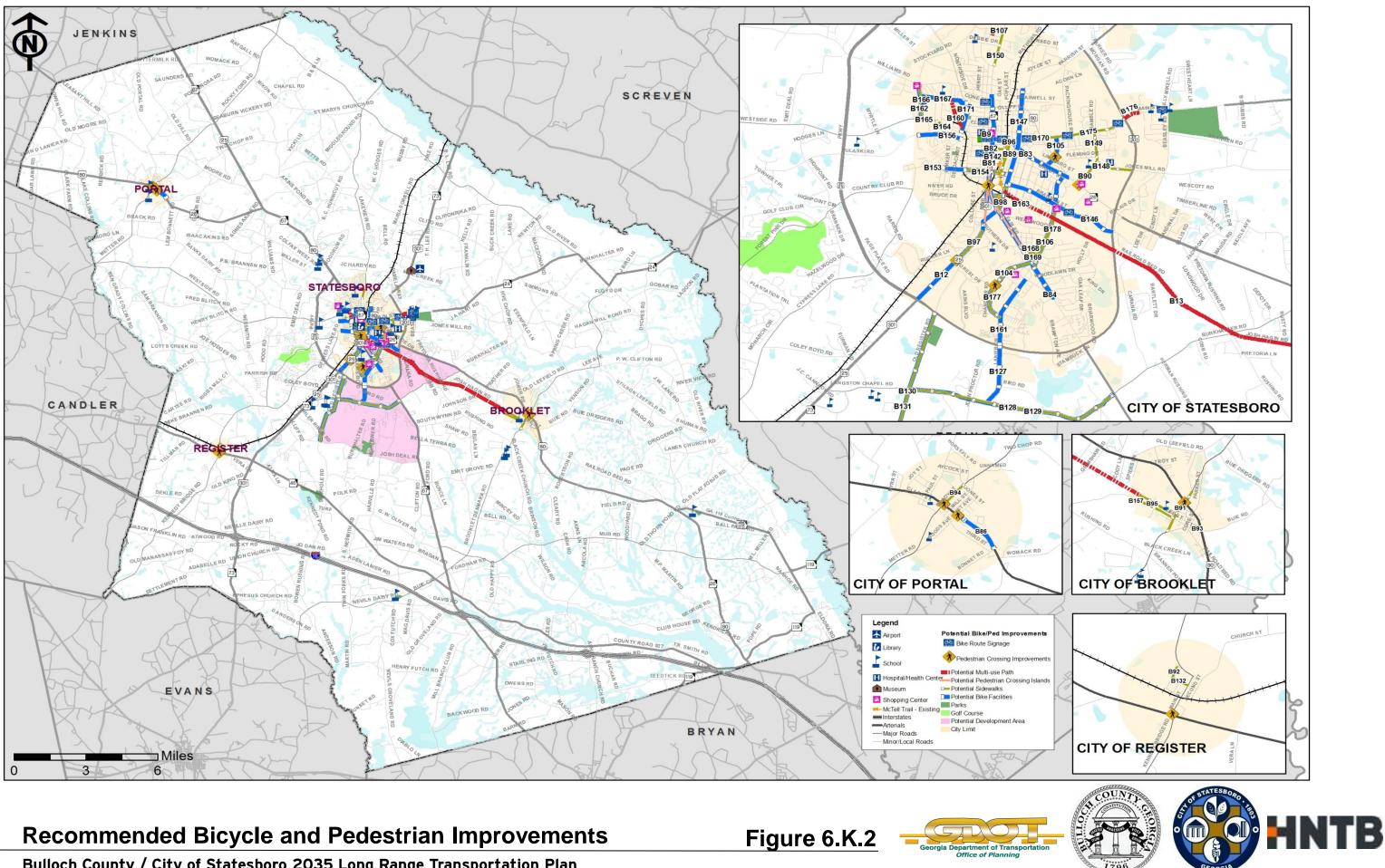


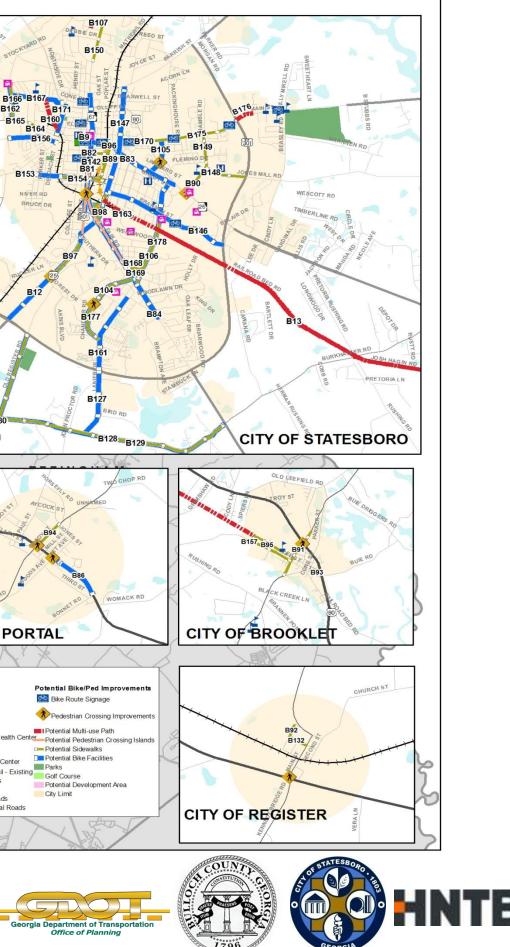
#### **Technical Memorandum** August 2009

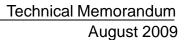
## Table 6.K.3 Bulloch County / City of Statesboro 2035 Long Range Transportation Plan Recommended Bicycle and Pedestrian Improvements

Project Ref. No.	Facility	Segment Limits		Existing Configuration	Improved Configuration	Notes/Comments	Source	Improvement Type
Facility Impro						I.a	T	
39	CR 576	SR 67/N Main St	College St	None	TE Landscape/Beautify	0.1 miles	Analysis	TE Landscape/Beautify
312 313	US 301 S & S Greenway	US 301 Bypass Gentilly Rd	Tillman Rd West Lane St in Brooklet	None None	Bike Lane restriping Multi-Use Trail	1.4 miles 6.1 miles	Analysis Analysis	Multi-Use Trail Multi-Use Trail
381	US 301	Tillman Rd	E Parrish St	None	Sharrows	1.8 miles	Analysis	Bike Shoulder
382	US 301	Tillman Rd	E Parrish St	None	Raised Pedestrian Crossing Island	1.8 miles	Analysis	Pedestrian Crossing Island
383	Savannah Ave	Northside Dr	E Main St	None	Bike Lanes	0.9 miles	Analysis	Bike Lane
					Bike lanes & signage, raised medians in			
					the center turn lane between intersections			
384	Fair Rd.	US 301 Bypass	Bermuda Run Rd.	None	and major driveways	1.7 miles	Analysis	Bike Shoulder
		21			, ,		,	
386	US 80 (in Portal)	1st Ave	Bonnet St	None	Paved shoulders (both sides of road)	0.6 miles	Analysis	Paved Shoulders
B89	Mulberry St	E Jones Ave	Savannah Ave	None	Sidewalks on one side	0.5 miles	Analysis	Sidewalk
391	Cromley Rd (in Brooklet)	Brooklet-Denmark Rd	Spence Rd	None	Sidewalks on one side	1.1 miles	Analysis	Sidewalks
392	Foster St (in Register)	City Hall	Cross St.	None	Sidewalks on one side	0.1 miles	Analysis	Sidewalks
							,	
B93	East Lane St (in Brooklet)	Parker Ave	US 80	None	Sidewalks on one side	0.3 miles	Analysis	Sidewalks
394	Rocky Ford Rd (in Portal)	HWY 80	Johnson St.	None	Sidewalks on one side	0.3 miles	Analysis	Sidewalks
395	West Lane St (in Brooklet)	Brooklet Elementary School	S&S Greenway	None	Sidewalks on one side	0.8 miles	Analysis	Sidewalks
396	Savannah Ave	E Main St	S Zetterower Ave	None	Construct sidewalk segment to fill gaps	0.1 miles	Analysis	Sidewalks
					0 01		, i i i i i i i i i i i i i i i i i i i	
B97	US 301	Southern Dr.	Old Register Rd.	None	Sidewalks on east side	0.5 miles	Analysis	Sidewalks
B98	Zetterower	Fair Rd	Brannen St	None	Sidewalk on west side	0.4 miles	Analysis	Sidewalks
B104	Chandler Rd	Fair Rd	Lanier Dr.	None	Road Diet (3 lanes to 2), bike lanes	1.1 miles	Analysis	Bike Lane
B105	Lee St	E Main St	Savannah Ave	None	Bike lanes	0.5 miles	Analysis	Bike Shoulder
B106	Gentilly Rd.	Fair Rd	Savannah Ave	None	Road Diet (3 to 2), bike lanes	1.3 miles	Analysis	Multi-Use Trail
B107	Jeff Rd	Jeff Rd	Mattie Lively School	None	Short Trail Link	0.1 miles	Analysis	Multi-Use Trail
B127	Lanier Dr	US 301 Bypass	Langston Chapel Rd	None	Bike Shoulder	0.9 miles	Analysis	Bike Shoulder
B129	Langston Chapel Rd	Old Register Rd	SR 67	None	Sidewalks on at least one side	2.8 miles	Analysis	Sidewalks
B130	Old Register Rd	US 301 Bypass	Burkhalter Rd	None	Bike Shoulder	3.3 miles	Analysis	Bike Shoulder
B131	Old Register Rd	US 301 Bypass	Burkhalter Rd	None	Sidewalks on at least one side	3.3 miles	Analysis	Sidewalks
B132	Cross St (Register)	Foster Street	Main St.	None	Sidwalks on one side	0.2 miles	Analysis	Sidewalks
B142	E Grady St (Statesboro Library)	S Main St	S Mulberry St	None	Sidewalks on one side	0.2 miles	Analysis	Sidewalks
B146	Brannen St	E Bypass	S Zetterower Ave	None	Bike lanes	1.5 miles	Analysis	Bike lanes
D140	brainleit St	L Dypass	3 Zetterower Ave	NULLE	Restripe 3 lanes to 2, add bike lanes	1.5 111165	Allalysis	Dike lailes
					(excludes section between Savannah Ave			
					and Hill Street already 2 lanes with			
D147	Zetterewer Ave	Fair Dd	E Derrich St	None		1.7 miles	Analysia	Bike lone strining
B147 B148	Zetterower Ave Jones Mill Rd	Fair Rd Lester Rd	E Parrish St	None	shoulders) Sidewalks on one side	1.7 miles 0.05 miles	Analysis	Bike lane striping Sidewalks
			Hospital	None			Analysis	
B149	Lester Rd	Entire length	E Dawish Ot	None	Sidwalks on one side	0.8 miles	Analysis	Sidewalks
B150	N Main St	Jef Rd	E.Parrish St	None	Sidewalks on both sides	0.7 miles	Analysis	Sidewalks
B153	E/W Jones St	Johnson St	S Zetterower Ave	None	Bike lanes	1.1 miles	Analysis	Bike lanes
B154	W Jones St W Main St/Denmark St	Institute St W Main S	SW near Broad St	None	Sidwalks on one side	0.5 miles	Analysis	Sidewalks
B156 B157	West Lee St (Brooklet)		Denmark St @ city limits	None None	Bike lanes Sidewalks on one side	0.9 miles 0.9 miles	Analysis	Bike lanes Sidewalks
D13/	West Lee St (Brookiet)	Cromley Rd	Western city limits	None	Sidewarks on one side	0.9 miles	Analysis	Sidewalks
DICO	Dittale Otata David Dath	Millione Del	Due stan Ot	News		0.5	A	Marthi I I an Tanii
B160	Blitch State Park Path	Williams Rd	Proctor St	None	Shared use path along abandoned railway		Analysis	Multi-Use Trail
B161	Lanier Dr	US 301 Bypass	Georgia Ave	None	Road Diet (3 to 2), bike lanes	1.0 miles	Analysis	Bike Shoulder
<b>B</b> 100					Bike lanes and construct sidewalks on one			87
B162	Stockyard Rd	Williams Rd	W. Main St	None	side	0.5 miles	Analysis	Bike lanes
B163	S & S Greenway Connection to McTell Trail	Gentilly Rd	McTell Trail	None	Shared use path	1.0 miles	Analysis	Multi-Use Trail
B164	W.Main St	Proctor St	Ivory St	None	Sidewalks on both sides	0.2 miles	Analysis	Sidewalks
B165	W.Main St/Proctor St	N. Foss St	Morris St	None	Sidewalks on one side (460feet)	0.08 miles	Analysis	Sidewalks
					Construct sidewalk segment to fill gap (250			
B166	Williams St	Bryant School entrance	Stockyard Rd	None	feet)	0.05 miles	Analysis	Sidewalks
B167	Williams Rd	Northside Dr	Stockyard Rd	None	Bike Lanes	0.5 miles	Analysis	Bike lanes
B168	Herty Dr	Fair Rd	Gentilly Rd	None	Sharrows and sidewalk on one side	0.3 miles	Analysis	Sharrows and Sidewalks
B169	Terrell Dr	Fair Rd	Gentilly Rd	None	Sidewalks on one side	0.2 miles	Analysis	Sidewalks
					Sharrows from S. College St. to Savannah			
D / 70					Ave (.3 mi), bike lanes from Savannah to			
B170	E/W Main St	Savannah Ave	S College St	None	Beasely Road (2.1 mi.)		Analysis	Sharrows
B171	Blitch St	W. Main st	Northside Dr	None	Bike lanes	0.5 miles	Analysis	Bike lanes
B175	E. Main Street	Northside Parkway	US 301 Bypass	None	Sidewalks on both sides	1.1 miles	Analysis	Sidewalks
					Multi-use trail extension on south side of			
B176	E. Main Street	US 301 Bypass	Near Oakcrest Drive (to ex	isNone	road	0.3 miles	Analysis	Multi-Use Trail
					Sidewalks (Construct approximately 0.25			
B177	Chandler Rd	Fair Rd	Lanier Drive	None	mile of sidewalk to fill gaps).	1.1 miles	Analysis	Sidewalks
B178	Gentilly Rd.	Fair Rd	Brannen St	None	Sidewalks on both sides	0.9 miles	Analysis	Sidewalks
Signage Impro	ovements							
Statesboro	South Main St	Old Register Rd	Tillman Rd	None	Raised Median		Analysis	Raised Median
		~~~~			Ped crossing improvements & flangeway			
Statesboro	US 301/SR 67/Brannen Rd & 2 RRs			None	filler to railroad tracks		Analysis	Crosswalks and Signage
	US 301 @ Old Register Rd/Rucker Ln			None	Traffic signal with ped countdown timeer		Analysis	Traffic Signal
2					Raised medians and Pedestrian crossing	1		
Stateshoro	Chandler Rd	Fair Rd	Lanier Dr	None	islands		Analysis	Raised medians and Ped Crossing islands
0.000000								
Statesboro	Lester Bd	Northside Dr/US 80		None	Raised Median, Ped timers and signage		Analysis	Raised Median, Ped timers and signage
	S College St	W Parrish St	W Brannen St	None	Bike signage		Analysis	Bike signage
	Lee St	Northside Dr.	W Diaillell St	None	HAWK signal, crosswalks, signage		Analysis	HAWK signal
	Pulaski Rd		Statesboro city limits	None	Share the Road Signage			Bike signage
	US 80	West Bypass Rocky Ford Rd	Statesburg City IIMIts	None	Crosswalks, curb ramps		Analysis	Crosswalks and Curb Ramp
Portal							Analysis	
Portal	US 80	Woods Ave/1st St		None	Repaint crosswalk		Analysis	Repaint crosswalk
Register	SR 46	Main St		None	Crosswalks and Ped Signage		Analysis	Crosswalks and Ped Signage
D 11	110.00	N. Oramiau Bal		News	Ped xing advance warning signs and		A	Redestries are size
Brooklet	US 80	N Cromley Rd		None	flashing beacon.		Analysis	Pedestrian crossing signs

	Need	Anticipated Benefit
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System
	Dike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bite/1 cd 1 dointies	
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
_		
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
ds	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities Bike/Ped Facilities	Enhanced Multi-Modal System Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System
	Bike/Ped Facilities	Enhanced Multi-Modal System









## **PRIORITIZED RECOMMENDATIONS**

#### A. Project Prioritization Overview

Potential improvement projects identified by the study team to address future transportation needs in Bulloch County were vetted with local stakeholders, elected officials, and members of the public and prioritized based on established criteria consistent with the study goals and objectives identified in Chapter 5, Goals and Objectives, page 89. This section will present the recommended improvements, the estimated costs and benefits associated with these improvements, and the final list of prioritized projects for each improvement category including roadway, bridge, rail crossing, bicycle and pedestrian improvements.

#### **B. Estimated Costs**

The GDOT Office of Planning recently developed a Right of Way and Utilities Cost Estimation Tool (RUCEST) and a Construction Cost Estimation Tool (CES) that was used in the development of planning-level cost estimates for the Bulloch County / City of Statesboro 2035 LRTP. These tools include area-specific values and the most up-to-date data available for construction lettings in the State of Georgia. Please note that all planning level costs are current-year dollars, based on the best assumptions and information available at the time this study was completed. All planning level project costs will be further refined as specific improvements and engineering concepts evolve. Actual project costs could be higher or lower depending on a number of factors including the results of more detailed environmental and engineering studies, fluctuations in the cost of land and materials, and the year of expenditure. All planning level cost estimates should be considered preliminary in nature and taken with appropriate care. More detailed engineering studies are required to identify highly accurate cost estimates based on specific project characteristics and concepts.

#### Roadway, Bridge, and Rail Cost Estimates

Roadway assumptions include the planning level cost averages of pavement based on GDOT's recommended typical section for the facility type. Bridge improvements are calculated based on the appropriate typical section and square footage of the improved bridge structure.

In the case of intersection and operational improvement recommendations, a micro-level analysis and review by GDOT District 5 and/or a professional engineer is required to make specific project recommendations. Specific recommendations may include improvements such as turn lanes at each approach of an intersection, or, two right turn lanes off of a major arterial. For purposes of the Bulloch County / City of Statesboro study, the planning-level cost estimate used for operational improvements is a placeholder of \$270,000. This planning level estimate

represents a reasonable average for intersection improvements, but it is important to note that actual costs could be higher or lower depending on the specifics of the improvement identified (for example, addition of a left-hand turn lane vs. geometric modifications). In cases where a specific improvement item is identified, such as a traffic signal or a roundabout, a unit cost for the item is used if available. Planning level construction cost estimates for these types of improvements should be revisited when a more detailed analysis is conducted. Rail crossing improvement costs were developed based on unit costs provided by the GDOT Office of Railroad Crossing Safety.

#### **Bicycle and Pedestrian Cost Estimates**

Bicycle and pedestrian improvement costs assume 5' sidewalks and 6.5' paved shoulders (each direction) in rural sections, both of which are desirable, typical rules of thumb for sidewalk and shoulder widths for these types of improvements nationwide. Bike lane costs assume only striping - they do not include widening or additional pavement. Bike lanes in urban sections are assumed 5' wide on each side of the road. These could potentially be reduced to 4', however, any narrower than that would not meet AASHTO standards. In cases of tight right-of way, sharrows are proposed as an alternative improvement. Cost estimates for the bike lanes were based on a 4" traffic grade paint stripe.

Right-of-way (ROW) costs were factored into sidewalk and paved shoulder projects, and applicable trail projects. Bike lanes, signage and crossing treatments were assumed to occur within existing ROW. In the case of some trail projects, ROW has already been acquired or the project is within the public ROW. Land values for ROW were based on \$200,000/acre for commercial, \$40,000/acre for residential, \$15,000/acre for agriculture and \$20,000/acre for industrial based on current Bulloch County land values. There are 26,400 square feet per mile (SF/Mi) of sidewalk (5' width), 34,320 SF/mi of paved shoulder (6.5') and 52,800 (SF/Mi) per path/trail. The square footage was doubled if sidewalks or shoulders were placed on both sides of the street.

Project costs are included in Table 7.E.1: Prioritized Roadway, Bridge, and Rail Recommendations on page 162 and 7.E.2: Prioritized Bicycle and Pedestrian Recommendations on page 163.

#### **C. Project Prioritization Criteria**

In order to aid GDOT and County staff, potential improvements were ranked by mode based on evaluation factors developed with input from the Study Advisory Committee discussed in Chapter 4 on page 82. In addition, a benefit–cost (B/C) ratio was calculated for each applicable project type for purposes of identifying projects providing the most benefit as compared to the level of investment in the project. The following sections document the prioritization of recommended improvements for Bulloch County.

Qualitative and quantitative evaluation factors were established and applied to potential improvements. The evaluation methodology produces a score for each potential projects, resulting in a prioritization of improvement options to meet the County's transportation needs. Prioritization criteria were developed for the following types of projects – roadway capacity, roadway operations, intersections, bridges, and bicycle and pedestrian improvements.

#### **Corridor Prioritization – Roadway Capacity Improvements**

#### **Qualitative Criteria**

Qualitative criteria were established to evaluate the deficient corridors based on various conditions or standards established through the study process. These criteria were vetted with the Study Advisory Committee discussed in Chapter 4, Public Involvement Activities. The following list documents the qualitative criteria established for the roadway network improvement evaluation. These correspond to the goals and objectives documented in Chapter 5, Goals and Objectives.

- Continuation of Existing Road Widening Project
- Governor's Road Improvement Program (GRIP) / National Highway System
- Right of Way Protection Corridor
- Connectivity
- Construction Designs in Progress
- Parallel Relief
- Protection of Downtown
- Ideal Typical Section
- Development Conditions
- Community Preservation
- Transportation Land Use Linkages

Potential projects were considered alongside the established criteria and associated scoring presented in Table 7.C.1 below. Based on the resulting scores, an initial prioritization list was established. The highest score based on qualitative criteria is 33 points. The qualitative score is combined with the quantitative score documented on the following pages for the ultimate prioritization score.

#### Table 7.C.1 Qualitative Criteria and Scoring

Corridor Prioritization Criteria		ossible oints
<b>Continuation of Existing Road Widening Project</b> Is the proposed project a continuation of any previously completed or current project providing added lanes to the specific transportation corridor?	No Yes	0 4
Governor's Road Improvement Program/National Highway System Is the project identified as a GRIP Corridor or part of the National Highway System?	No Yes	0 2
<b>Right of Way Protection Corridor</b> Is the proposed project located in a developing area where right of way protection or early acquisition is needed?	No Yes	0 3
<b>Connectivity</b> Does the proposed project improve access between activity centers or link existing or proposed projects or provide regional connectivity?	No Yes	0 3

Corridor Prioritization Criteria	-	ossible Points
<b>Construction Designs in Progress</b> Are the design plans for the proposed project already complete or in the process of being completed?	No Yes	0 3
Parallel Relief Does the proposed project provide relief to parallel congested/ deficient corridors?	No Yes	0 4
<b>Protection of Downtown</b> Does the proposed project enhance the quality of life in downtown areas?	No Yes	0 4
Ideal Typical Section Does the proposed project address upgrading sub standard roadway segments?	No Yes	0 4
<b>Development Conditions</b> Is the proposed project located within a development area, or, is the specific project part of an approved plan for the redevelopment of revitalization of a developed area, or does the specific project provide access infrastructure to a mixed-use project area?	No Yes	0 2
<b>Community Preservation</b> Does the proposed project preserve or enhance the character of existing communities in the County?	No Yes	0 2
<b>Transportation Land Use Linkage</b> Has the proposed project coordinated with, or support, land use decisions in the area?	No Yes	0 2
Sub-Total Possible Points		33

#### **Quantitative Criteria**

145

Quantitative criteria were identified to evaluate deficient corridors based on various measurable conditions. Each measure was vetted with the Study Advisory Committee identified in Chapter 4, Public Involvement Activities. The following list documents the quantitative criteria established for the roadway network improvement evaluation:

- Volume to Capacity Ratio
- Ratio of Corridor Crash Rate (Number of Crashes per 100 Million Vehicle Miles Traveled) to Statewide Crash Rate Average
- Number of Fatalities
- Benefit / Cost Ratio Calculation

Table 7.C.2 on page 146 displays the quantitative criteria and the associated scoring. The total points established by the Quantitative Criteria range from 0 to 30 points.

Corridor Prioritization Criteria	Possible Points
Volume to Capacity Ratio	
0.00 - 0.349	0.00
0.350 - 0.399	2.00
0.400 - 0.449	2.50
0.450 - 0.499	3.00
0.500 - 0.549	3.50
0.550 - 0.599	4.00
0.600 - 0.649	4.50
0.650 - 0.699	5.00
0.700 - 0.749	5.50
0.750 - 0.799	6.00
0.800 - 0.849	6.50
0.850 - 0.899	7.00
0.900 - 0.949	7.50
0.950 - 1.049	8.00
1.050 - 1.149	9.00
1.150 - 1.249	10.00
1.250 - 1.349	11.00
1.350 - 1.449	12.00
1.450 - 1.549	14.00
1.550 - 1.649	16.00
1.650 -	18.00
Ratio of Corridor Crash Rate to	
Statewide Crash Rate	
0.01-0.49	0.50
0.50-0.99	1.00
1.00 -1.99	1.50
2.00-2.49	2.00
2.50-2.99	2.50
3.00-3.99	3.00
4.00-5.99	3.50
6.00	4.00
Number of Fatalities	
1	1
2 or more	3
Benefit / Cost Ratio	
Ranking	1-5
Sub-Total Possible Points	30

#### Table 7.C.2 Quantitative Criteria and Scoring

The total points that a facility can receive for both the qualitative and quantitative criteria is 63 points. Based upon the identified improvements and the evaluations made during the quantitative and qualitative evaluation, a prioritized list of recommendations was established. The scoring for the deficient corridors is displayed in Table 7.C.3 on page 137.

#### **Benefit Cost Ratio Calculations**

GDOT recently implemented an approach to benefit cost ratio calculations as part of the Project Prioritization Process. As part of the Bulloch County / City of Statesboro 2035 LRTP development process, the benefit cost ratio methodology established in the GDOT Office of Planning's "Transportation Study Guidelines for PrPP Input" was applied to all roadway capacity adding projects. In the case of Bulloch County, five capacity projects were recommended and benefit cost ratios were developed for each of these projects. The projects then received a ranking of 1-5 based on the relative benefit cost score that was ultimately incorporated into the quantitative criteria scoring described in the previous section. Benefit / cost rankings are included in Table 7.C.3 on page 148. Details of the benefit cost ratio calculations are included in Appendix C.

		Segmer	nt Limits			/													age				
Project Ref. No.	Facility	From	То	Qualitative Criteria	<ul> <li>Continuation of Existing Road Widening</li> <li>Project</li> </ul>	o Governor's Road Improvement Program و المعنان المعنان	င္ထိ Right of Way Protection Corridor	운 Connectivity	Construction Designs in Progress	Parallel Relief	Protection of Downtown	کے الاحماد Section	C Development Conditions	Community Preservation	C Transportation Land Use Linkage	Sub-Total Qualitative Criteria	Quantitative Criteria	Volume/Capacity Ratio	Ratio of 100 Million VMT to Statewide Average	Number of Fatalities	Benefit Cost Ratio	Sub-Total Quantitative Criteria	Total Score for Project
B16	SR 67	I-16	South of Burkhalter Rd		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$	$\checkmark$	21.00		0.80	0.67	1	2.26	13.00	34.00
B17	SR 26/US 80	Amanda Ct	SR 119 Connector		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	23.00		0.68	0.56	1	0.69	10.00	33.00
B11	Statesboro North Bypass	SR 16/US 80 East	SR 73/US 301 N		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	25.00		0.00	0.00	0	0.02	1.50	26.50
B59	Extension of Lanier Rd	Georgia Ave	Fair Rd					$\checkmark$		$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	15.00		0.00	0.00	0	1.74	4.50	19.50
B132	Country Club Drive	Cypress Lane Rd	US 301					$\checkmark$		$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	15.00		0.00	0.00	0	0.03	2.50	17.50

Table 7.C.3Roadway Capacity Improvement Prioritization

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The prioritization resulted in the following ranking of top roadway capacity improvements:

- SR 67 Widening from I-16 to South of Burkhalter Road (current 4-Lane Section)
- US 80 Widening from Statesboro to Hwy 119 Connector
- Statesboro North Bypass
- Lanier Drive connection to Gentilly Road
- Country Club Drive connection from Cypress Lake Road to US 301

Priority rankings are based on the qualitative and quantitative criteria discussed previously in this chapter. The points are not meant to be the final decision on whether a project should be implemented or not. Instead these rankings should be employed in conjunction with input from key technical staff from the City, County and GDOT; input from political decision makers; and, public comment.

#### **Operational Improvement Prioritization**

Operational improvements were prioritized based on the quantitative and qualitative evaluation criteria described in the previous section. Benefit cost ratios were not calculated for operational improvements, as system benefits for operational projects are difficult to quantify at this level of analysis due to the need for further improvement definition and for the application of micro-simulation tools beyond the scope of an LRTP study. Therefore, the total possible score for an operational improvement is 58.

Table 7.C.4 on page 150 displays the qualitative and quantitative criteria and the associated scoring. The prioritization resulted in the following ranking of top tier operational improvements:

- Non-Capacity Widening Sinkhole Rd / Old Register Road from SR 46 to US 301 Bypass
- Operational Improvements along US 301 from SR 46 to US 301 Bypass
- Operational Improvements along SR 46 from Kennedy Bridge Road to US 301
- Operational Improvements along Lanier Drive from Langston Chapel Road to US 301 Bypass

The remaining operational improvements scored lower and, at this time, should be considered a lower priority.

		Segmer	nt Limits			/ •													age			
Project Ref. No.	Facility	From	То	Qualitative Criteria	<ul> <li>Continuation of Existing Road Widening</li> <li>Project</li> </ul>	Governor's Road Improvement Program Vational Highway System	Vay Prot	S Connectivity	ନ୍ତୁ ୧୨ ଅନ୍ୟୁର୍ମ Construction Designs in Progress	S Parallel Relief	Rrotection of Downtown	रे Ideal Typical Section	2-0 Development Conditions	Community Preservation	င့္ပ်ိဳ Transportation Land Use Linkage	Sub-Total Qualitative Criteria	Quantitative Criteria	Volume/Capacity Ratio	Ratio of 100 Million VMT to Statewide Average	Number of Fatalities	Sub-Total Quantitative Criteria	Total Score for Project
B110	Old Register Rd / Sinkhole Rd	US 301 Bypass	SR 46					$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	17.00		0.59	1.09	2	8.50	25.50
B14	SR 73/US 301	SR 46	US 301 Bypass			$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$		$\checkmark$		14.00		0.77	1.35	4	10.50	24.50
B99	SR 46	SR 73/US 301	Kennedy Bridge Rd				$\checkmark$	$\checkmark$				$\checkmark$		$\checkmark$		12.00		0.86	2.36	1	10.00	22.00
B109	Lanier Rd	US 301 Bypass	Langston Chapel Rd					$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	15.00		0.45	8.21	0	7.00	22.00
B108	Langston Chapel Rd	Old Register Road	SR 67					$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	13.00		0.40	0.94	0	3.50	16.50
B54	Clifton Rd	SR 67 / Elm Grove Rd	SR 46					$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	13.00		0.00	0.00	0	0.50	13.50
B55	Brannen Pond Rd	Brooklet Denmark Rd	US 80					$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	13.00		0.00	0.00	0	0.50	13.50
B56	Cawana Rd	Burkhalter Rd	US 80								$\checkmark$	$\checkmark$	$\checkmark$			10.00		0.30	1.07	0	1.50	11.50
B51	Bohler Rimes Rd	US 301	Burkhalter Rd					$\checkmark$					$\checkmark$	$\checkmark$	$\checkmark$	9.00		0.09	0.00	0	0.50	9.50
B52	Elmer Phillips Rd	SR 67	Harville Rd					$\checkmark$					$\checkmark$	$\checkmark$	$\checkmark$	9.00		0.00	0.00	0	0.50	9.50
B115	Josh Smith Rd	Harville Rd	Hightower Rd					$\checkmark$					$\checkmark$	$\checkmark$	$\checkmark$	9.00		0.00	0.00	0	0.50	9.50
B116	Hightower Rd	Burkhalter Rd	South of Josh Smith Rd					$\checkmark$					$\checkmark$	$\checkmark$	$\checkmark$	9.00		0.00	0.00	0	0.50	9.50
	Savannah Ave		Northside Dr								$\checkmark$		$\checkmark$			6.00		0.00		0	2.00	8.00
	Sea Born Proctor Rd	Langston Chapel Rd	Langston Chapel Rd										$\checkmark$	$\checkmark$	$\checkmark$	6.00		0.00	0.00	0	0.50	6.50
	Bethel Church Rd	Langston Chapel Rd											$\checkmark$	$\checkmark$	$\checkmark$	6.00		0.00	0.00	0	0.50	6.50
B158	Grimshaw Rd	US 80	Rushing Rd					$\checkmark$						$\checkmark$		5.00		0.06	0.00	0	0.50	5.50

Table 7.C.4Operational Improvement Prioritization

#### Intersection Prioritization

Criteria were established to evaluate the potential intersection improvements based on various standards established through the study process. The following list documents the criteria established for the intersection evaluation.

- What is the Average Annual Daily Traffic (AADT) on the facility?
- How many crashes occurred at the intersection between 2003 and 2007?
- Did a fatality occur at the intersection?
- Is the intersection currently identified by the County/City?
- Can operational issues be addressed without installing a traffic signal?

By comparing potential projects to these established criteria, it was possible to determine which projects scored highest against these critical measures. This information was used to prioritize projects. Table 7.C.5 below documents the scoring used for the intersection prioritization and Table 7.C.6 on page 152 displays the scoring applied to the proposed intersection improvements.

#### Table 7.C.5 Intersection Scoring Criteria

Corridor Prioritization Criteria	Possible Points
AADT What is the Average AADT at the intersection?	> 6,000 = 5 6,000 - 4,000 = 4 4,000 - 2,000 = 2 < 2,000 = 0
Crashes How many crashes occurred at the intersection between 2003 and 2007?	> 25 = 10 25 - 20 = 5 20 - 15 = 2 <15 = 0
<b>Fatality</b> Did a fatality occur at the intersection?	No = 0 Yes = 10
<b>Previously Identified Improvement</b> Is the intersection currently identified by the County/City?	No = 0 Yes = 5
Improvement Opportunities Can operational issues be addressed without installing a traffic signal?	No = 0 Yes = 5
Sub-Total Possible Points	35

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Project Ref. No.	Road	Intersection	AADT	Crashes	Fatalities	County/City List	Score
					Fataillies	County/City List	
-	SR26 / US 80	Cawana Rd	2,423	39	1	Х	29
	SR 46	SR 67	3,562	27	1	Х	27
	US 25 Bypass	Pulaski Rd	5,847	31	1	Х	27
	SR 73 / US 301	SR 46	1,711	55	2		25
	Old Register Rd	US 301 Bypass	2,810	56	1		22
B46	Cypress Lake Rd	US 25 Bypass	3,153	39	0	Х	19
B62	Lanier Rd	US 301 Bypass	757	106	0	Х	19
B63	Chadler Rd	Fair Rd	3,223	86	0		15
B64	SR 67	US 301 Bypass	2,754	144	0		15
B65	US 301 Bypass	Northside Dr	2,493	87	0		15
B66	Northside Dr	Lovett Rd	2,837	62	0		15
B67	Lester Rd	Northside Dr	5,236	107	0		15
B69	Northside Dr	Main St	5,026	51	0		15
B70	Fair Rd	Main St	5,132	87	0		15
B47	Chandler Rd	Lanier Dr	6,244	71	0		14
B68	Northside Dr	Cone Rd	5,518	59	0		14
B71	Brannen St	Gentilly Rd	3,320	53	0		14
B77	Langston Chapel Rd	Lanier Dr	4,318	17	0	Х	12
B135	Burkhalter Rd	SR 67	6,188	17	0		10
B136	Rucker Ln	US 301	3,867	3	0	Х	10
B49	Burkhalter Rd	US 80	2,607	2	0	Х	9
B50	US 80	Parker St	1,701	0	0	Х	9
B76	US 301	Newsome Rd	1,876	1	0	Х	9
B48	Pretoria Rushing Rd	Burkhalter Rd	1,300	5	0	Х	7
B133	Old Register Rd	Langston Chapel Rd	4,396	11	0		7
	Cypress Lake Rd	Coley Boyd Rd	6,224	0	0	Х	5
B134	Burkhalter Rd	Langston Chapel Rd	559	0	0		2

Table 7.C.6Intersection Improvement Prioritization

The prioritization scoring resulted in the following top tier intersection improvements:

- •
- US 80 at Cawana Road
- SR 46 at SR 67
- US 25 Bypass at Pulaski Road
- US 301 at SR 46
- Old Register Road at US 301 Bypass
- Lanier Road at US 301 Bypass

The remaining intersections scored lower, and at this time, should be considered a lower priority.

#### **Bridge Prioritization**

Bridges with a sufficiency rating of 50 or lower were recommended for improvements by 2020, and those with a rating of 75 to 50 were recommended for improvements by 2035. These ratings are discussed in detail (see Chapter 6, Section H: Future Bridge Conditions). The four bridges with sufficiency ratings below 50 recommended for improvement by 2020 include:

- Portal Highway at Big Branch & Lofts Creek
- Akins Pond Road at Mill Creek
- Cypress Lake Road at Dry Branch
- GA Highway 119 at Ogeechee River Overflow

Complete prioritization results for bridge improvements are also included in Table 7.E.1 on page 162.

#### **Bicycle and Pedestrian Project Prioritization**

The prioritization criteria used to evaluate potential bicycle and pedestrian improvements were based on GDOT's Guidebook for Pedestrian Planning project prioritization framework, as well as on the goals and objectives established in this study (see Chapter 5: Goals and Objectives, page 89). In addition to project recommendations, policy recommendations were also made which will have the effect of improving the bicycle and pedestrian network system-wide over the long term.

The evaluation criteria account for both system deficiencies (e.g. where there are no bicycle or pedestrian facilities) as well as pedestrian and bicycle potential factors (i.e. do the land uses and demographics create a need or demand for facilities?). The following table lists the criteria and the associated weights for each factor in the prioritization. Table 7.C.7 on page 154 documents the scoring used for the bicycle and pedestrian prioritization and Table 7.C.8 on page 156 displays the scoring applied to the proposed bicycle and pedestrian improvements.

Table 7.C.7	Bicycle & Pedestrian Scoring Criteria
-------------	---------------------------------------

Project Prioritization Criteria		Scoring					
Bicycle and Pedestrian Defic	ienc	ency Factors					
	1	No more than one crash along this corridor (but not the project location) in past 3 years No more than one crash at the					
<b>Bicycle/Pedestrian Crashes:</b> Have there been bicycle or pedestrian crashes at this location, along this corridor, how many, and what severity?	3	project location within last 3 years 2 or more crashes on the corridor, but not at the project location in the past 3 years 2 or more crashes at the project					
	4 5	location in the past 3 years 1 or more injuries or fatalities at the project location or along the corridor in the past 3 years					
	1	If purely a cosmetic upgrade of existing facility					
Evicting Escilition	2	Existing bike/ped facilities but in poor condition					
Existing Facilities: Is this project replacing an existing facility or do none	3	Existing bike/ped facilities but many gaps or discontinuous					
currently exist?	4	No facilities currently on one side of road No facilities currently exist on					
	5	either side of the road, or no street crossing facilities					
Traffic Factors:	1	Project location is on a quiet, 2- lane residential street with low speeds and low traffic volumes.					
Does the project location have high motor vehicle speeds, high traffic volumes, multiple lanes to cross, or complicated intersections? Some roads due to their traffic and design characteristics are more difficult to cross and less attractive,	3	Project location is on a street with moderate traffic volumes and speeds, no more than 3 lanes of traffic (not including on-street parking).					
and sometimes less safe, to walk or bike along. These roads often warrant improvements more so than quiet residential streets that are already bike and pedestrian friendly.	5	Project location is on a major street with high speeds, high traffic volumes, multiple traffic lanes, wide intersections, and few crossing locations.					
Bicycle and Pedestrian Pote	ntial F	Factors					
Need: Is there evidence of existing demand (bike/pedestrian counts worn paths along roadside), current or forecasted population densities that rely more heavily on walking and biking (i.e young, elderly, low-income populations), or existing or future land uses that support biking and walking.	n   1 .   5	facilities.					
<b>Bike/Ped Priority Area:</b> Is the project within a bicycle or pedestrian priority area, i.e for bicycles, within 1 mile radius of schools, parks, libraries o							

Project Prioritization Criteria		Scoring
community facilities (such as senior center, YMCA, community health clinic, etc); for pedestrians, within ½ mile radius of schools, parks, libraries or community facilities (such as senior center, YMCA, community health clinic, etc).	or 5	
<ul> <li>Connectivity</li> <li>Does the proposed project provide a direct connection to: <ul> <li>Major employment or activity centers</li> <li>Downtown Commercial Business Districts</li> </ul> </li> <li>Existing or proposed transportation projects or major real estate developments</li> <li>Other modes of transportation (such as public transit or a shared path access point)</li> <li>Does the project close a gap in a sidewalk or bike facility?</li> </ul>	0 - 5	0 = No connectivity On a scale of 1-to-5, with 1 providing very little connectivity and 5 providing the greatest connectivity to multiple destinations.
<b>Previously Identified Improvement</b> Was the proposed project previously identified in a community plan (STIP, RDC Bike/Ped Plan, Comprehensive Plan, Land Use Plan, Recreation Plan, etc)?	0 or 3	0 = No 3 = Yes
<b>Funding/implementation</b> : Does the project have funding dedicated already (such as Transportation Enhancement funds)? Does the project have political and community support to move forward? Does the project require purchase of Right-of-Way?	1 - 5	<ul> <li>Rank on a scale of 1-to-5:</li> <li>1 = No political or community support, requires ROW purchase and no funding identified</li> <li>5 = Funding secured, no ROW required (or already purchased), has support/approval from governmental entities and community.</li> </ul>
TOTAL POSSIBLE POINTS	38	

		Table 7.C.8 B	icycle and Pedestria	n Improvement Prioritization										
Project Ref. No.	Facility	From	То	Type of Improvement		<sup>2-1</sup> Crashes	2.0 Listing Facilities	<sup>1,3</sup> or <sup>2</sup> Traffic Factors	Need	Priority Area	<sup>6</sup> Connectivity	ه م م 2 Previously Identified	<ul> <li>Implementation</li> </ul>	Total Score for Project
B12 B81 B82 B97	US 301	E Parrish St	US 301 Bypass	Sharrows and raised ped crossing islands from E. Parrish St to Tillman Road; Bicycle lanes from Tillman to Veteran's Memorial Pkwy; Raised medians from Tillman to Old Register Rd., Sidewalks on one side from Southern Dr to Old Register; Traffic signal w/ped countdown timer @ Old Register; Ped crossing improvements & flangeway filler on RR tracks at intersection of US301/SR67/Brannen St.	3.2	5	5	5	5	5	5	3	3	36
B84	Fair Rd	US 301	Bermuda Run	Bicycle lanes & signage, raised medians in the center turn lane between intersections and major driveways	1.7		5			3	5	3	4	35
B104	Ohan dha Dal	Esis Dal		Construct sidewalk segments to fill gaps, Bicycle lanes, raised medians, ped crossing islands, crosswalks, ped warning signs, and in-street crosswalk signs at unsignalized		_	_		_	-	-			
B177	Chandler Rd	Fair Rd	Lanier Dr	intersections. Sidewalks on both sides (excludes one block between Pinewood Drive and Miller Road -	1.1	5	5			5	5	3	4	35
B150 B153 B154	N. Main St East/West Jones St	Jef Rd Johnson St	E. Parrish St S. Zetterower Ave	already has sidewalks) Bicycle lanes and sidewalks on both sides from Institute to existing sidewalks near Broad St.	0.7	5	5			5	4	3	2	31 31
B170	East/West Main St	Savannah Ave	S College St	Sharrows from S. College St. to Savannah Ave, Bicycle lanes from Savannah to Beasely Road		5	5			3	5	3	3	31
<b>D150</b>	W. Main St/Danmark St	W. Main St @ S. College	Donmark St @ aity limita	Pievela Janaa	0.0	1	-	0	4	-	F	0	4	20
B156 B83	W. Main St/Denmark St Savannah Ave	St E. Main St	Denmark St @ city limits Northside Drive	Bicycle lanes Bicycle lanes	0.9	3	5 5			5 5	5 3	3	4	30 29
B106	Gentilly Rd	Fair Rd	Savannah Ave	Sharrows	1.3	2	5			3	5	3	4	29
B96	Savannah Ave	E. Main St	S. Zetterower Ave	Construct sidewalk segment to fill gap	0.1	3	3		3	5	4	3	4	28
B98	S. Zetterower Ave	Fair Rd Veteran's Memorial	Brannen St	Sidewalks on one side	0.4	3	5	3	4	5	5	0	3	28
B161	Lanier Drive	Parkway	Georgia Ave	Road Diet (3 to 2), Bicycle lanes	1	3	5			5	3	3	3	28
B146	Brannen St	E. Bypass	S. Zetterower Ave	Bicycle lanes	1.5	1	5		-	5	4	3	2	28
B147	Zetterower Ave Stockyard Rd	Fair Rd Williams Rd	E. Parrish St W. Main St	Sharrows Bicycle lanes and sidewalks on one side	1.7 0.5	4	5 5	_		5 5	4	0	4	28 28
B162 B166	Williams St	Brvant School entrance	Stockyard Rd	feet)	0.05	2 1	3	-		5	3	3	3	20
B149	Lester Rd	E. Main St	Northside Drive	Sidewalks on one side	0.8	1	5	-	-	5	3	3	2	25
B164	W. Main St	Proctor St	Ivory St	Sidewalks on both sides	0.2	1	5		-	5	3	3	2	25
B178	Gentilly Rd	Fair Rd	Brannen St	Sidewalks on both sides	0.9	2	5		-	3	4	3	1	24
B13 B167	S & S Greenway Phase I Williams Rd	Gentilly Rd Northside Drive	West Lane St (Brooklet) Stockyard Rd	Multi-Use trail Bicycle lanes	6.1 0.5	1	5 5		3	3 5	3	3	5 3	24 24
B168	Herty Drive	Fair Rd	Gentilly Rd	Sharrows and sidewalk on one side	0.3	1	5		4	3	3	3	3	24
B89	Library)	Savannah Ave	E. Jones Ave	Sidewalks on one side	0.5	2	5		-	5	3	0	2	23
DIOF	Lee St	E. Main St	Savannah Ave	Bicycle lanes and HAWK signal & crosswalks at Lee @ Northside intersection	0.5	0	5	0	3	3	0	0	3	
B105 B160	Blitch State Park Path		Proctor St	Multi-Use trail along abandoned railway	0.5	1	5		2	5	3 5	3	1	23 23
B171	Blitch St	W. Main St	Northside Drive	Bicycle lanes	0.5	1	5		3	5	4	0	4	23
B165	W. Main St/Proctor St	N. Foss St	Morris St	Sidewalks on one side (460 feet)	0.08	1	3		-	5	3	3	2	23
B169 B148	Terrell Drive Jones Mill Rd (Willing Way Hospital)	Fair Rd Lester Rd	Gentilly Rd Hospital (311 Jones Mill Rd)	Sidewalks on one side Sidewalks on one side (285 feet)	0.2	1	5 5	-	3	3 5	3	3	2	23 22
B148 B94	Rocky Ford Rd (Portal)	US-80	Johnson St	Sidewalks on one side	0.03	1	5		2	5	3	3	- 2	21
B163	Trail	Gentilly Rd Brooklet Elementary	McTell Trail	Multi-Use Trail (specific alignment TBD)	1	1	5	1	3	5	3	3	0	21
B95	West Lane St (Brooklet)	School	S&S Greenway	Sidewalks on one side	0.8	1	5	1	1	5	3	3	1	20
B91	Cromley Rd (Brooklet)	Brooklet-Denmark Rd	Spence Rd	Sidewalks on one side	1.1	1	5		2	3	3	3	1	19
B107	Jef Rd/Mattie Lively School	Jef Rd	Mattie Lively School	Multi-Use Trail (i.e. a short trail link)	0.1	1	5		2	5	3	0	2	19
B175 B93	E Main St East Lane St (Brooklet)	Northside Parkway Parker Ave	US 301 Bypass US-80	Sidewalks on both sides Sidewalks on one side	1.1 0.3	0	5 5		3	3 3	2	0	2	18 18
B157	West Lee St (Brooklet)	Cromley Rd	Western city limits	Sidewalks on one side	0.9	1	5		2	3	2	3	1	18
B142 B176	E. Grady St (Statesboro Public Library) E Main St	S. Main St Oakcrest Drive	S. Mulberry St US 301 Bypass	Sidewalks on one side Multi-use trail extension on south side of	0.2	1	5 5		2	5 3	2	0	2	18 16
B86	US - 80 (Portal)	1st Ave	Bonnet St	Paved shoulders	0.6	1	3			3	3	0	1	15
B92 B132	Foster St (Register) Cross St (Register)	City Hall Foster St	Cross St Main St	Sidewalks on one side Sidewalks on one side	0.1	1	5 5		1	3	1	0	1	13 13
	Lester Rd @ Northside Dr./US-80 (@ Statesboro High School)			Raised median/crossing island, pedestrian countdown signal head, pedestrian signage	0.2	5	3		5	5	5	0	5	33
	S. College St	W. Parrish St	W. Brannen St	Bicycle signage	1.2	2	3			5	3	3	4	24
Signals &	Pulaski Rd	Statesboro city limits	West Bypass	Share the Road signage	1	1	5	3	_	3	2	3	2	21
Signage	US-80 @ Rocky Ford Rd (Portal)			Crosswalks, curb ramps		1	3			5	3	0	3	20
	US-80 @ Woods Ave./1st St (Portal) SR 46 @ Main St (Register)			Repaint crosswalk Crosswalk & ped signage		1	3			5 3	3	0	3	20 16
				Ped xing advance warning signs and	1		5			5	2	0		
	US-80 @ N. Cromley Rd (Brooklet)			flashing beacon.		1	3	3	2	0	2	0	2	13

#### Table 7.C.8 Bicycle and Pedestrian Improvement Prioritization

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#### **D. Logical Termini and Environmental Considerations**

For roadway capacity improvements, logical termini were determined to help link the long range planning process with National Environmental Policy 2003 and 2007 (NEPA) regulations. The Federal Highway Administration (FHWA) Code of Federal Regulations (CFR) includes three general principles at 23 CFR 771.111(f) that should be used to frame a highway project:

- In order to ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, the action evaluated in each environmental impact statement (EIS) or finding of no significant impact (FONSI) shall:
  - Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
  - Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and
  - Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Transportation projects that receive federal funds must follow NEPA requirements in order to receive approval from the Federal Highway Administration. Among other environmental studies conducted during the NEPA process, a survey is conducted to assess historic resources under Section 106 of the National Historic Preservation Act. Identified historic resources that are National Register eligible properties are given special consideration during the NEPA process and transportation projects must receive State Historic Preservation Officer (SHPO) concurrence before receiving approval. These requirements are in place to identify historic resources, assess impacts, and determine appropriate measures to avoid, minimize, or mitigate adverse effects to historic resources.

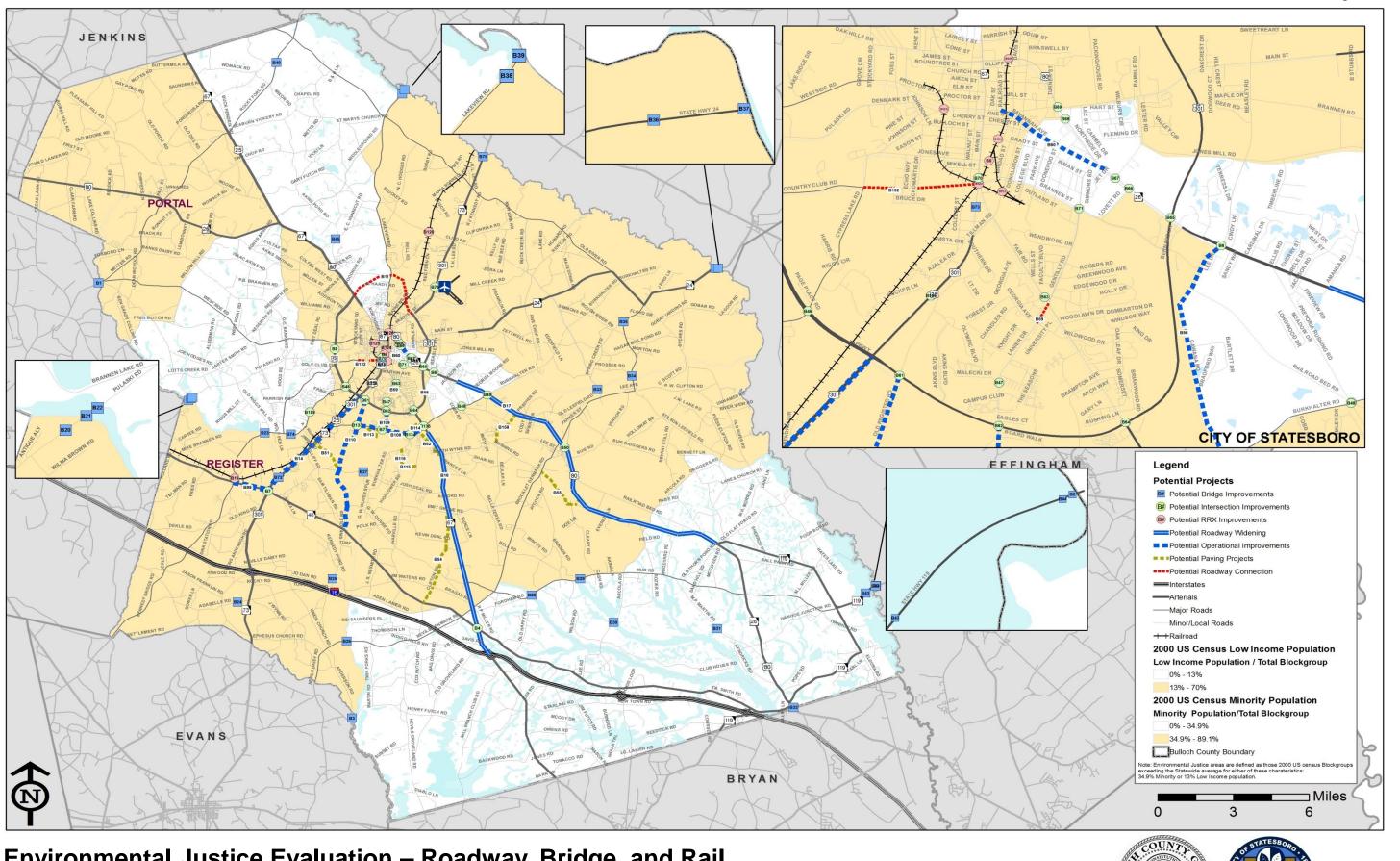
These principles were factored into the project development process in several capacities. First, all projects were considered alongside data including wetlands and historic resources for potential environmental impacts. Second, logical termini for each capacity improvement were examined and revised based on the analysis conducted to date. Logical termini for roadway improvements are included in Table 7.E.1 on page 162.

#### **Environmental Justice Considerations**

As a result of the executive order, transportation agencies have integrated special efforts into transportation planning efforts to identify the groups identified above and to appropriately engage them throughout the development of transportation improvement recommendations.

As discussed in Chapter 2, Section E: Environmental Justice on page 11, Executive Order 12898 signed into law by President Bill Clinton on February 11, 1994 requires that groups historically underrepresented in the transportation planning process are not disproportionately impacted as a result of transportation improvements. The environmental justice analysis conducted as part of this study and discussed in Chapter 2 identified areas with high concentrations of low-income and minority populations. As a result it was confirmed that improvements recommended as part of this study will improve safety, mobility, and access for all users on a county-wide basis. Positive benefits will accrue to EJ communities through

bicycle and pedestrian enhancements and roadway safety and capacity improvements. Figures 7.D.1 on page 159 and 7.D.2 on page 160 overlay recommended improvements and environmental justice areas to demonstrate projects and illustrate that there are no disproportionate negative impacts in these locations.



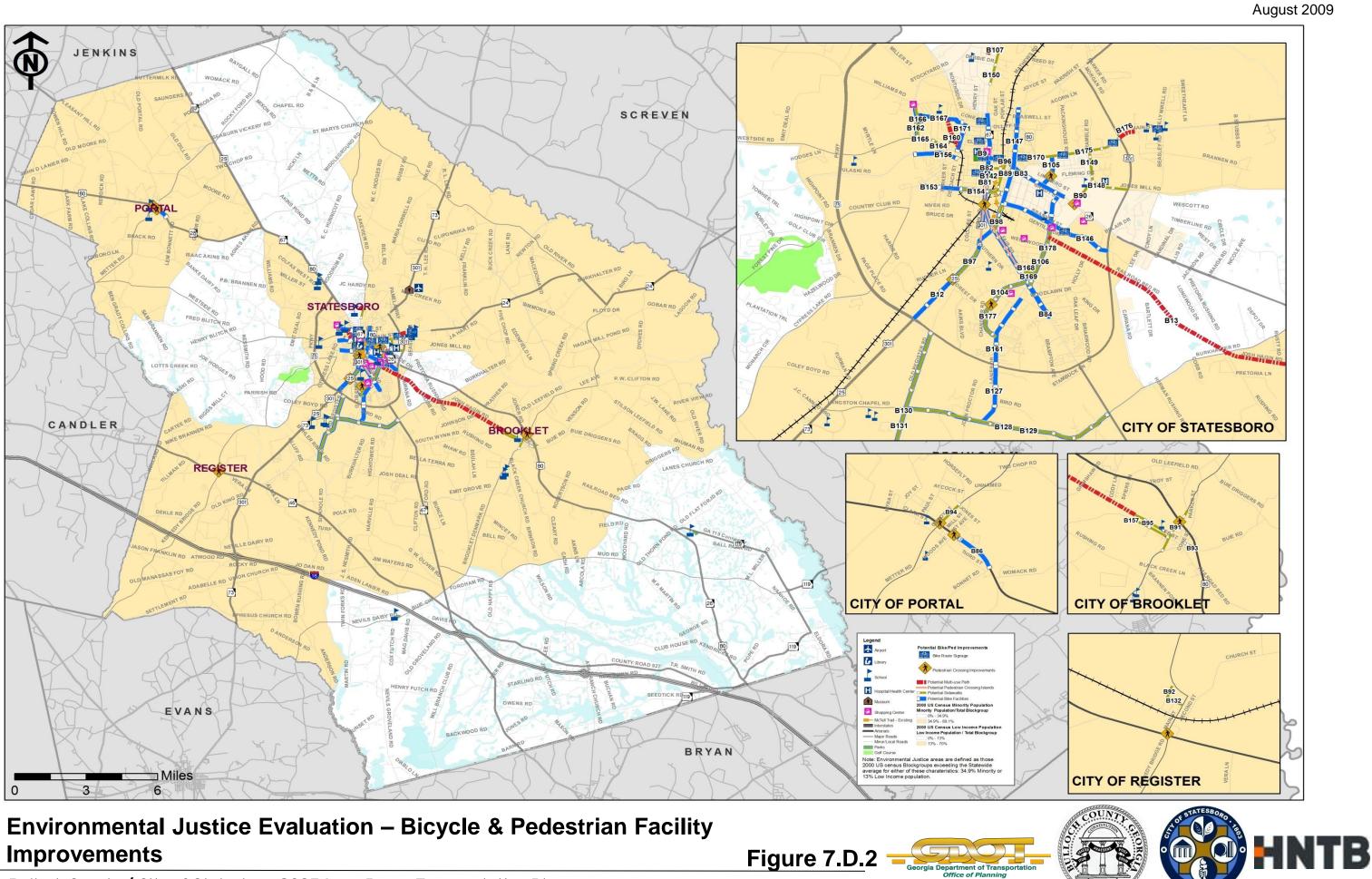
# Environmental Justice Evaluation – Roadway, Bridge, and Rail Crossing Improvements







#### Technical Memorandum August 2009





**Technical Memorandum** 

#### E. Summary of Recommended Improvements

Based on the analysis completed as part of this study, a prioritized listing of recommended projects was created for Bulloch County. This information is presented in Tables 7.E.1 and 7.E.2 on pages 162 and 163 respectively. Table 7.E.1 includes:

- Capacity Improvements and New Roadways
- Operational Improvements (increasing travel lane widths and/or shoulders)
- Intersection Improvements
- Bridge Improvements
- Rail Crossing Improvements

Bicycle and Pedestrian prioritized recommendations are included on page 163 in Table 7.E.2.

For each recommendation, several informational elements were produced including: facility; limits; existing and improved configuration; comments; source; improvement type; need; anticipated benefit; cost and prioritization score. For successful implementation of these projects, additional detailed engineering studies and environmental analysis are required to determine the most appropriate alignment, design, cost and prioritization score of each project. Additionally, successful project implementation will require identified funding mechanisms, political support, and public recognition of the project need and benefit. The LRTP provides a basis for each of these achievements, but more work is necessary in order to advance and ultimately build each project.

Project sheets were developed for all capacity improvement and new roadway projects, and intersection improvement projects. The project sheets include the project limits including logical termini, distance, priority, and jurisdiction. Project sheets are contained in Appendix D.

Table 7.E.1 Roadway, Bridge, and Rail Crossing Prioritized Improvments

Project Ref. N	o. Facility ovements and New Roadways	Seg From	ment Limits To	Existing Configuration	Improved Configuration	Notes/Comments	Source	Improvement Type	Need	Anticipated Benefit	Estimated Cost	Prioritization Scores	Potential Environmer Impacts
Sapacity impr 316	SR 67	I-16	US 301 Bypass	2-Lanes	4-Lanes	10.85 miles	Analysis	Minor Arterial Widening	Capacity Deficiency	Increased Capacity & Improved Safety	\$ 36,090,160.00	34.00	Wetland
B17	SR 26/US 80	Amanda Ct	SR 119 Connector	2-Lanes	4-Lanes	13.10 miles	Analysis	Minor Arterial Widening	Capacity Deficiency	Increased Capacity & Improved Safety	\$ 144,356,288.69	33.00	Wetland
311	Statesboro North Bypass	SR 16/US 80 East	SR 73/US 301 N	N/A	2-Lanes	3.90 miles	Analysis	New Road	Connectivity	Increased Capacity & Improved Safety	\$ 30,226,775.40		Wetland
122	Extension of Lanier Rd Country Club Drive	Georgia Ave Cypress Lake Rd	Fair Rd US 301	N/A N/A	2-Lanes 2-Lanes	0.20 miles 0.78 miles	Comments Comments	New Road New Road	Capacity Deficiency Capacity Deficiency	Increased Capacity & Improved Safety Increased Capacity & Improved Safety	\$ 5,423,745.61 \$ 17,823,255.02	19.50 17.50	
5132	· ·	Cypress Lake Rd	05 301	IVA	2-Lanes	0.78 miles	Comments	New Road	Capacity Denciency	increased Capacity & Improved Safety	\$ 17,823,255.02 \$ 233,920,224.71	17.50	
perational In 110	Old Register Rd / Sinkhole Rd	US 301 Bypass	SR 46	2-lane. Grass shoulder.	upgrade shoulders / further study	6.00 miles	Analysis	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety	\$ 1,075,640.55	25.50	Wetland
14	SR 73/US 301	SR 46	US 301 Bypass	4-lane divided highway . Grass shoulder.	upgrade shoulders / further study	5.50 miles	Analysis	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety	\$ 991,812.91		Wetland
99	SR 46	SR 73/US 301	Kennedy Bridge Rd	2-lane. Grass shoulder	add turn lanes	1.40 miles	Analysis	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety	\$ 629,405.14	22.00	
109	Lanier Rd	US 301 Bypass	Langston Chapel Rd	2-lane. Grass shoulder. A few turning lanes.	add one turn lane	0.85 miles	Analysis	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety	\$ 229,247.48		Wetland
108	Langston Chapel Rd	Old Register Road SR 67 / Emit Grove R	SR 67	2-lane. Grass shoulder.	add turn lanes	2.80 miles 4.00 miles	Analysis	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety	\$ 711,154.58 \$ 1,231,407.00		Wetland
55	Clifton Rd Brannen Pond Rd	Brooklet Denmark Ro		unpaved unpaved	paved paved	2.36 miles	Analysis Analysis	Paving Improvements Paving Improvements	Operational & Safety Issues Operational & Safety Issues	Improved Capacity & Safety Improved Capacity & Safety	\$ 1,231,407.00 \$ 752,876.00		Wetland Historic
56	Cawana Rd	Burkhalter Rd	US 80	2-lane. Grass shoulder.	add turn lanes	2.11 miles	Comments	Operational Improvements	Operational & Safety Issues	Improved Capacity & Safety	\$ 506,930,00		Wetland
51	Bohler Rimes Rd	US 301	Burkhalter Rd	unpaved	paved	1.50 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety	\$ 493.398.00		Wetland
352	Elmer Phillips Rd	SR 67	Harville Rd	unpaved	paved	1.33 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety	\$ 441,039.00	9.50	
115	Josh Smith Rd	Harville Rd	Hightower Rd	unpaved	paved	0.62 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety	\$ 225,428.00	9.50	Wetland, Historic
116	Hightower Rd	Burkhalter Rd	South of Josh Smith Ro		paved	0.84 miles	Analysis	Paving Improvements	Operational & Safety Issues	Improved Capacity & Safety	\$ 287,328.00	9.50	
60	Savannah Ave	E Main St	Northside Dr	2-lane. No shoulder.	traffic calming	1.00 miles	Comments	Operational Improvements	Operational & Safety Issues	Improved Safety	\$ -	8.00	Wetland
113	Sea Born Proctor Rd Bethel Church Rd	Langston Chapel Rd Langston Chapel Rd	Langston Chapel Rd	unpaved unpaved	paved paved	0.95 miles 0.34 miles	Analysis Analysis	Paving Improvements Paving and Operational Improvements	Operational & Safety Issues Operational & Safety Issues	Improved Capacity & Safety Improved Capacity & Safety	\$ 303,064.00 \$ 123,621.00	6.50	
158	Grimshaw Rd	US 80	Rushing Rd	unpaved	paved	1.70 miles	Comments	Paving Improvements	Operational & Safety Issues		\$ 569.662.00	5.50	
100		00.00	riddning rid	unpavea	paved	1.70 miles	Comments	i aving implovements	operational & ballety issues	improved Sapacity & Safety	\$ 8,572,013.66	0.00	
tersection Ir	nprovements SR 26/US 80 @ Cawana Rd			one-way stop control	further study	N/A	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00	29.00	
4	SR 46 @ SR 67			two-way stop control, caution signalization	signalization	27 crashes / 1 fatality	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 2,181,400.00	27.00	
8	US 25 Bypass @ Pulaski Road			two-way stop control	signalization	N/A	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 711,368.00		Wetland
					signalization, right turn lane, median		ĺ.	·					
7	SR 73/US 301 @ SR 46			two-way stop control, caution signalization	upgrade.	55 crashes / 2 fatalities	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 1,215,400.00	25.00	
61	Old Register Rd @ US 301 Bypass			two-way stop control	further study	56 crashes / 1 fatality	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00	22.00	
46	Cypress Lake Rd @ US 25 Bypass			two-way stop control, caution signalization	further study further study	N/A 106 crashes	Comments	Intersection Improvements	Operational & Safety Issues Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00 \$ 270,000.00	19.00 19.00	
62	Lanier Rd @ US 301 Bypass Chandler Rd @ Fair Rd			signalized	further study further study	86 crashes	Analysis	Intersection Improvements Intersection Improvements	Operational & Safety Issues Operational & Safety Issues	Improved Safety & Capacity Improved Safety & Capacity	\$ 270,000.00	19.00	
64	SR 67 @ US 301 Bypass			signalized signalized	further study	144 crashes	Analysis Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00	15.00	
65	US 301 Bypass @ Northside Dr			signalized	further study	87 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00		Wetland
66	Northside Dr @ Lovett Rd			signalized	further study	62 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00	15.00	
67	Lester Rd @ Northside Dr			signalized	further study	107 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00	15.00	
69	Northside Dr @ Main St			signalized	further study	51 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00		Wetland
70	Fair Rd @ Main St			one-way stop control	further study	87 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00	15.00	
47	Chandler Rd @ Lanier Dr			signalized	further study	71 crashes	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00	14.00	
08	Northside Dr @ Cone Rd Brannen St @ Gentilly Rd			one-way stop control	further study further study	59 crashes 53 crashes	Analysis Analysis	Intersection Improvements Intersection Improvements	Operational & Safety Issues Operational & Safety Issues	Improved Safety & Capacity Improved Safety & Capacity	\$ 270,000.00 \$ 270,000.00	14.00 14.00	
77	Langston Chapel Rd @ Lanier Rd			signalized one-way stop control	signalization	N/A	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 405,000.00	14.00	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					signal timing modification, add left turn		Finarysis		operational a ballety issues	imployed ballety & bapacity	\$ 405,000.00	12.00	
135	Burkhalter Rd @ SR 67			signalized	lane and right turn lane on SR 67 WB		Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 405,000.00	10.00	Historic
136	Rucker Ln @ US 301			two-way control	signalization	N/A	Comments	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 405,000.00	10.00	
49	Burkhalter Rd @ US 80			two-way stop control	signalization	N/A	Comments	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 405,000.00	9.00	
50	US 80 @ Parker St			two-way stop control, caution signalization	further study	N/A	Comments	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00	9.00	
376	US 301 @ Newsome Rd			two-way stop control	further study	Airport access	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 270,000.00	9.00	
348	Pretoria Rushing Rd @ Burkhalter Rd Old Register Rd @ Langston Chapel Rd			four-way stop control	roundabout	N/A N/A	Comments	Intersection Improvements Intersection Improvements	Operational & Safety Issues Operational & Safety Issues	Improved Safety & Capacity Improved Safety & Capacity	\$ 873,799.73 \$ 405.000.00	7.00	
159	Cypress Lake Rd @ Coley Boyd Rd			four way stop control one-way control	signalization roundabout	N/A	Analysis Comments	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 744.587.13	7.00	
134	Burkhalter Rd @ Langston Chapel Rd			one-way stop control	roundabout	N/A	Analysis	Intersection Improvements	Operational & Safety Issues	Improved Safety & Capacity	\$ 873,799.73	2.00	
ridge Improv	vements										\$ 12,945,354.59		
1	Portal Hwy @ Big Branch & Lotts Creek, 8	mi north of Metter		0.79 mi		24 & 16 sufficiency rating		Replacement	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 4,064,701.00	24 & 16 sufficiency rating	
74	Akins Pond Rd @ Mill Creek Cypress Lake Rd @ Dry Branch			3,000 s 2,520 s		25.66 sufficiency rating 27.03 sufficiency rating	Analysis Analysis	Upgrade Bridge Upgrade Bridge	Rehabilitation or Maintenance Rehabilitation or Maintenance	Improved Safety & Operations Improved Safety & Operations	\$ 830,250.00 \$ 697,410.00	25.66 sufficiency rating 27.03 sufficiency rating	
43	GA Hwy 119 @ Ogeechee River Overflow			2,520 S 10,395 s		39.45 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 2,292,097,50	39.45 sufficiency rating	
4	Stilson Leefiled Rd @ Mill Creek			5,544 s	a ft	54.02 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 1,534,302.00	54.02 sufficiency rating	
6	Nevils Daisy Rd @ Lotts Creek			9,600 s		55.01 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 2,656,800.00	55.01 sufficiency rating	
0	Pulaski Rd @ Lotts Creek Overflow			2,160 s	q ft	57.57 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 597,780.00	57.57 sufficiency rating	
1	Pulaski Rd @ Lotts Creek			4,320 s	q ft	57.57 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 1,195,560.00	57.57 sufficiency rating	
2	Pulaski Rd @ Crossway Branch @ Lotts Cr	reek		2,160 s		57.57 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 597,780.00	57.57 sufficiency rating	
/	SR 24 @ Ogeechee River SR 24 @ Ogeechee River Overflow			10,400 s		59.91 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance Rehabilitation or Maintenance	Improved Safety & Operations	\$ 2,293,200.00 \$ 1,146,600.00	59.91 sufficiency rating 60.93 sufficiency rating	
, )	Rocky Ford Rd @ Bay Gall Creek			5,200 s 3,885 s			Analysis Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations Improved Safety & Operations	\$ 1,146,600.00 \$ 1.075,173,75	64.22 sufficiency rating	
8	Mud Rd @ Lower Black Creek			3,885 S 3,712 s	a ft	64.3 sufficiency rating	Analysis	Upgrade Bridge Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 1,075,175.75	64.3 sufficiency rating	
	Lakeview Rd @ Ogeechee River Overflow			6,696 s	q ft	65.38 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 1,476,468.00	65.38 sufficiency rating	
5	US 301 @ Ogeechee River			49,920 s	a ft	65.58 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 11,007,360.00	65.58 sufficiency rating	
-	US 25 @ Lotts Creek Trib.			1,428 s	q ft	66.92 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 395,199.00	66.92 sufficiency rating	
	SR 119 @ Ogeechee River Overflow			0.4 mi		67 sufficiency rating	Analysis	Replacement	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 910,798.29	67 sufficiency rating	
1	GA Hwy 119 @ Ogeechee River Spring Creek Rd @ Spring Creek			17,758 s		67.35 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 3,915,639.00	67.35 sufficiency rating	
5 4	Adabelle Rd @ Scott Creek			1,440 s 1,440 s	d II	68.42 sufficiency rating 69.27 sufficiency rating	Analysis Analysis	Upgrade Bridge Upgrade Bridge	Rehabilitation or Maintenance Rehabilitation or Maintenance	Improved Safety & Operations Improved Safety & Operations	\$ 398,520.00 \$ 398,520.00	68.42 sufficiency rating 69.27 sufficiency rating	
	Clito Rd @ Mill Creek			5,130 s		69.41 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 398,520.00 \$ 1,419,727.50	69.27 sufficiency rating 69.41 sufficiency rating	
3	Arcola Rd @ Upper Black Creek			2,760 s		69.50 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 763,830.00	69.50 sufficiency rating	
3 0	M.P. Martin Rd @ Cross Branch			1,080 s			Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 298,890.00	70.08 sufficiency rating	
3 0 1				1,440 s	q ft	70.59 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 398,520.00	70.59 sufficiency rating	
3 0 1 7	Burkhalter Rd @ Little Lotts Creek			1,445 s	q ft	71.21 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 399,903.75	71.21 sufficiency rating	
3 0 1 7 3	Burkhalter Rd @ Little Lotts Creek US 25 @ Little Lotts Creek			5 450 -	n ft	71.3 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 1,425,816.00	71.3 sufficiency rating	
13 10 11 27 73 23	Burkhalter Rd @ Little Lotts Creek US 25 @ Little Lotts Creek Cypress Lake Rd @ Lotts Creek			5,152 s									
33 30 31 27 73 23 32	Burkhalter Rd @ Little Lotts Creek US 25 @ Little Lotts Creek Cypress Lake Rd @ Lotts Creek US 80 @ Lotts Creek			5,040 s	q ft	71.45 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 1,394,820.00	71.45 sufficiency rating	
3 0 1 7 3 3 2 5 5	Burkhalter Rd @ Little Lotts Creek US 25 @ Little Lotts Creek Cypress Lake Rd @ Lotts Creek US 80 @ Lotts Creek Sinkhole Rd @ Lotts Creek			5,040 s 5,520 s	q ft q ft	71.45 sufficiency rating 73.17 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 1,527,660.00	73.17 sufficiency rating	
13 10 11 17 13 13 13 12 15 19 19	Burkhalter Rd @ Little Lotts Creek US 25 @ Little Lotts Creek Cypress Lake Rd @ Lotts Creek US 80 @ Lotts Creek Sinkhole Rd @ Lotts Creek Lakeview Rd @ Ogeechee River			5,040 s 5,520 s 14,160 s	9 ft 9 ft 9 ft	71.45 sufficiency rating 73.17 sufficiency rating 74.14 sufficiency rating	Analysis Analysis	Upgrade Bridge Upgrade Bridge	Rehabilitation or Maintenance Rehabilitation or Maintenance	Improved Safety & Operations Improved Safety & Operations	\$ 1,527,660.00 \$ 3,122,280.00	73.17 sufficiency rating 74.14 sufficiency rating	
3 0 1 7 3 3 3 2 5 5 9 9 9	Burkhalter Rd @ Little Lotts Creek US 25 @ Little Lotts Creek Cypress Lake Rd @ Lotts Creek US 80 @ Lotts Creek Sinkhole Rd @ Lotts Creek			5,040 s 5,520 s	a ft a ft a ft a ft a ft	71.45 sufficiency rating 73.17 sufficiency rating 74.14 sufficiency rating 74.29 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	\$ 1,527,660.00	73.17 sufficiency rating	

Operational and intersection improvements recommendations are planning level and require further study for specific solutions and refined costs.
 Intersection costs assume a placeholder cost of \$270,000 where further study is required.
 Cost estimates are in current year dollars (uninitated dollars).
 Cost estimates are planning-level, based on best available data and assumptions

 Table 7.E.1

 Roadway, Bridge, and Rail Crossing Prioritized Improvments

Project Ref. No	Facility	Segment Limits From To	Existing Configuration	Improved Configuration	Notes/Comments	Source	Improvement Type	Need	Anticipated Benefit	Estimated Cost	Prioritization Scores	Potential Environmental Impacts
Railroad Crossi	ing Improvements						· · · · ·				·	
B5 Near Term	East Jones Avenue Crossing	NS # 620196H		Warning Device	0.2 miles	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	\$ 3,000.00	N/A	Historic
B5 Mid Term	East Jones Avenue Crossing	NS # 620196H		Warning Device	0.2 miles	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	\$ 265,500.00	N/A	Historic
B10	Main St, Register	NS # 620214D		Stop Sign		Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	\$ 187,500.00	N/A	
B120	Clito Rd	NS #620155D		Warning Device		Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	\$ 3,000.00		
B122	US 301/SR67, Rackley Road and Brannen St	NS # 620197P, 620182A, 6201998W		Stop Sign, Pavement Markings		Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	\$ 187,500.00	N/A	
B123		NS # 620176W, 620181T		Stop Sign, Pavement Markings, Crossb	ucks	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	\$ 4,500.00		
B124	East Grady Street	NS # 620172U, 620173B		Repaint Pavement Markings		Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	\$ 300.00		
B125	Johnson Street	NS # 620189X		Warning Device, Pavement Markings		Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	\$ 3,750.00		
B126	SR 26	NS # 620165J		Warning Device	0.2 miles	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	\$ 1,000.00	N/A	
										\$ 656,050.00	_	

Grand Total \$ 307,842,664.75

#### Table 7.E.2 **Bicycle and Pedestrian Prioritized Improvements**

UNIT         UNIT        UNIT        UNIT        UN	Project Ref. No.	Facility	Segment Limits		Existing Configuration	Improved Configuration	Notes/Comments	Source	Improvement Type	Need	Anticipated Benefit	Near	Implementation Mid	Long	Estimated Cost	Priority	Notes
Dist         Dist <t< td=""><td></td><td></td><td></td><td></td><td></td><td>3</td><td></td><td></td><td></td><td></td><td></td><td>Nour</td><td>inid</td><td>Long</td><td></td><td>,<b>.</b>,</td><td></td></t<>						3						Nour	inid	Long		, <b>.</b> ,	
Set     Set </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>Bike Lane restriping</td> <td></td> <td>36 *Assumed as one</td>						Bike Lane restriping											36 *Assumed as one
Dial         Dial <t< td=""><td>381</td><td>US 301</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>36 project in prioritization</td></t<>	381	US 301															36 project in prioritization
Name         Part of the second																	36 process.
And         And <td>597</td> <td>05 301</td> <td>Southern Dr.</td> <td>Old Register Rd.</td> <td>None</td> <td></td> <td>0.5 miles</td> <td>Analysis</td> <td>Sidewalks</td> <td>Dike/Ped Facilities</td> <td>Enhanced Multi-Modal System</td> <td>· ·</td> <td></td> <td></td> <td>φ210,942</td> <td></td> <td></td>	597	05 301	Southern Dr.	Old Register Rd.	None		0.5 miles	Analysis	Sidewalks	Dike/Ped Facilities	Enhanced Multi-Modal System	· ·			φ210,942		
M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M     M </td <td></td>																	
Proof and board         Proof and	B84	Fair Rd.	US 301 Bypass	Bermuda Run Rd.	None			Analysis	Bike Shoulder	Bike/Ped Facilities	Enhanced Multi-Modal System	~			\$1,008,184		35
Monton	B104	Chandler Rd	Fair Rd	Lanier Dr.	None	Road Diet (3 lanes to 2), bike lanes	1.1 miles	Analysis	Bike Lane	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$25,091		35
Diam         Diam <thdiam< th="">         Diam         Diam         <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<></thdiam<>																	
Dim         Dim <td>B177</td> <td></td> <td>35</td>	B177																35
Matrix     Matrix </td <td></td> <td>✓</td> <td></td> <td></td> <td></td> <td></td> <td>31</td>												✓					31
Name         Name </td <td></td> <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td> <td></td> <td></td> <td></td> <td>31</td>												· · · · · · · · · · · · · · · · · · ·					31
Martial	5104	W Jones St		Sw fiear bload St	INUTIE			Alidiysis	Sidewaiks	DIKE/FEU Facilities	Ennanced Multi-Modal System	· · · · ·		· · · · · · · · · · · · · · · · · · ·	\$340,732		
Model																	
M     M     M     M     M     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N     N </td <td>B170</td> <td>E/W Main St</td> <td>Savannah Ave</td> <td>S College St</td> <td>None</td> <td></td> <td></td> <td>Analysis</td> <td>Sharrows</td> <td>Bike/Ped Facilities</td> <td>Enhanced Multi-Modal System</td> <td>1</td> <td></td> <td></td> <td>\$49.941</td> <td></td> <td>31</td>	B170	E/W Main St	Savannah Ave	S College St	None			Analysis	Sharrows	Bike/Ped Facilities	Enhanced Multi-Modal System	1			\$49.941		31
main							0.9 miles					✓					30
Min     Min </td <td></td> <td>✓</td> <td></td> <td></td> <td></td> <td>29</td>													✓				29
Image     Norm	B106	Gentilly Rd.	Fair Rd	Savannah Ave	None	Road Diet (3 to 2), bike lanes	1.3 miles	Analysis	Multi-Use Trail	Bike/Ped Facilities	Enhanced Multi-Modal System		✓				29
Max     Max </td <td></td> <td></td> <td>E Main St</td> <td>S Zetterower Ave</td> <td>None</td> <td>Construct sidewalk segment to fill gaps</td> <td>0.1 miles</td> <td>Analysis</td> <td>Sidewalks</td> <td>Bike/Ped Facilities</td> <td>Enhanced Multi-Modal System</td> <td></td> <td>✓</td> <td></td> <td></td> <td></td> <td>28</td>			E Main St	S Zetterower Ave	None	Construct sidewalk segment to fill gaps	0.1 miles	Analysis	Sidewalks	Bike/Ped Facilities	Enhanced Multi-Modal System		✓				28
Name         Name <t< td=""><td>B98</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Bike/Ped Facilities</td><td>Enhanced Multi-Modal System</td><td></td><td>✓</td><td></td><td></td><td></td><td>28</td></t<>	B98									Bike/Ped Facilities	Enhanced Multi-Modal System		✓				28
Normal     Normal </td <td>B161</td> <td></td> <td>✓</td> <td></td> <td>\$14,656</td> <td></td> <td>28</td>	B161												✓		\$14,656		28
mark         mark <t< td=""><td>B146</td><td>Brannen St</td><td>E Bypass</td><td>S Zetterower Ave</td><td>None</td><td></td><td>1.5 miles</td><td>Analysis</td><td>Bike lanes</td><td>Bike/Ped Facilities</td><td>Enhanced Multi-Modal System</td><td></td><td>✓</td><td></td><td>\$17,107</td><td></td><td>28</td></t<>	B146	Brannen St	E Bypass	S Zetterower Ave	None		1.5 miles	Analysis	Bike lanes	Bike/Ped Facilities	Enhanced Multi-Modal System		✓		\$17,107		28
Bandar     Bandar </td <td></td> <td>1</td>																	1
10     10     10     10     10     10     10     10     1     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     10     <																	1
Image: Problem in the state of the stat		7	Esta Dat	E Dawlah Ci	News		4 7		Dilas las a staladas	D11 (D 1	Enhanced Marking 12.0		,		A =		
Set basks M     Filter State     Number State     Number State     Number State     State <th< td=""><td>B147</td><td>∠etterower Ave</td><td>Fair Ho</td><td>E Parrish St</td><td>None</td><td></td><td></td><td>Analysis</td><td>Bike lane striping</td><td>BIKE/Ped Facilities</td><td>Ennanced Multi-Modal System</td><td></td><td>~</td><td></td><td>\$11,567</td><td></td><td>28</td></th<>	B147	∠etterower Ave	Fair Ho	E Parrish St	None			Analysis	Bike lane striping	BIKE/Ped Facilities	Ennanced Multi-Modal System		~		\$11,567		28
Handian         Instance	100	Steeluserd Dd	Williama Dd	W. Main Ct	Name			Ameters	Dike lenge	Diles/Ded Endley	Enhanced Multi Madel Oriette		/		A00.1.100		
94       Maria B       Descind array of partial state array of partiarray of partial state array of partiarray of partial state array	B162	Stockyard Hd	vviiliams Rd	W. Main St	None		U.5 miles	Analysis	Bike lanes	BIKE/Ped Facilities	Ennanced Multi-Modal System		· ·		\$334,423		28
94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94     94    <	7100	Williama Ct	Druget Cabaal antrange	Charles and Del	Nama		0.05 miles	Analusia	Cidewalke	Dike/Ded Feeilities	Enhanced Multi Medal Custom		/		¢17.007		20
94         Mar B         Part B         Part B         Mar B         Mar B         Part B         Mar B         Part B        Part B        Part B				Stockyard Ho						BIKe/Ped Facilities	Ennanced Multi-Modal System		· · · · · · · · · · · · · · · · · · ·				26
Image       Marcial M				human Ch									×	· · · · · · · · · · · · · · · · · · ·			25
3)       3)       6 a Damay       Mail and Mail       Mail and Mail       6 a Lab Mail       Mail And Mail And Mail       Mail And Mail And Mail And Mail       Mail And Mail A																	25
97       Minus M       Monte M       Minus M       8 and M       Monte M       Bis Monte M													v				24
Member     Month	B167												· ·				24
Mark																	24
Mod     Mod     Mod     Mode     <																	23
1000     1000 mm													·				
11     1100 file     1100 file </td <td>5105</td> <td></td> <td></td> <td>Gavannan / WC</td> <td>None</td> <td>Diffe failes</td> <td>0.0 111103</td> <td>- Mildiyolo</td> <td>Dire Griodidei</td> <td>Diricon cu r acimico</td> <td>Ennanced Main Wodar Cystem</td> <td></td> <td></td> <td></td> <td>φ3,702</td> <td></td> <td></td>	5105			Gavannan / WC	None	Diffe failes	0.0 111103	- Mildiyolo	Dire Griodidei	Diricon cu r acimico	Ennanced Main Wodar Cystem				φ3,702		
11     1100 file     1100 file </td <td>B160</td> <td>Blitch State Park Path</td> <td>Williams Rd</td> <td>Proctor St</td> <td>None</td> <td>Shared use path along abandoned railway</td> <td>0.5 miles</td> <td>Analysis</td> <td>Multi-Use Trail</td> <td>Bike/Ped Facilities</td> <td>Enhanced Multi-Modal System</td> <td></td> <td>~</td> <td></td> <td>\$378.002</td> <td></td> <td>23</td>	B160	Blitch State Park Path	Williams Rd	Proctor St	None	Shared use path along abandoned railway	0.5 miles	Analysis	Multi-Use Trail	Bike/Ped Facilities	Enhanced Multi-Modal System		~		\$378.002		23
Main										Bike/Ped Facilities	Enhanced Multi-Modal System		~	E	ror		23
diff         disponent         locate fiel         book miss         Marke         Bites Add         Disponent         Control         Contro         Control	B165	W.Main St/Proctor St											~		\$27,258		
diff         disponent         locate fiel         book miss         Marke         Bites Add         Disponent         Control         Contro         Control	B169			Gentilly Rd			0.2 miles			Bike/Ped Facilities	Enhanced Multi-Modal System		√		\$68,147		23
13.8         3.8 A General Control MARTIN         Media	B148	Jones Mill Rd	Lester Rd		None		0.05 miles						✓		\$218,942		22
16.1       8.4.8.4.5.6.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5	B94	Rocky Ford Rd (in Portal)	HWY 80	Johnson St.	None	Sidewalks on one side	0.3 miles	Analysis	Sidewalks	Bike/Ped Facilities	Enhanced Multi-Modal System		✓		\$102,220		21
Image:	B163	S & S Greenway Connection to McTell Trail				Alignment TBD							✓				21
1011       Mart Days													✓				20
17.16       Man Stands       March and Mark Are       March and Mark Are       Mark Are       Stands Andread       Schwalter and Mark Med System       I       I       Mark Are       Stands Andread       Sta																	19
Bits       East Lane Stür Bitscheiden       Daries       Anages       Sterends       Bitsche Fallunge       Finanzed Mult Model System       Images       Images       Mill       Mill <td>B107</td> <td></td> <td>✓</td> <td></td> <td></td> <td>19</td>	B107													✓			19
127         Weat Les Situndes         Controls PM         Weat one Situndes         Mark         Statewalt         BisePMS facilitie         Entrance Multi-Model System         I         I         Statewalt         I           7.4         E Adde Situatione Linear Multi-Model Situatione         US 301 Byzas         Name Calcered Dive (1) mean         Statewalt         BisePMS facilitie         Entrance Multi-Model System         I         I         Statewalt         I         I         Statewalt         I         I         Statewalt         I         I         I         Statewalt         I         I         Statewalt         I         I         I         I         I         I         Statewalt         I         I         I	B175													✓			18
Product         State         Multer N         None         Statewales on me side         D.2 miles         Balance         Bible Profession         Control Multer Model System         C         State Multer Model System         C         C         State Multer Model System         C         C         State Multer Model System         C         C         State M																	18
main         Lum form         Lum form         Main during the lum form         Main during the lum form         Main during the lum form           Lum form <td></td> <td>18</td>																	18
7.6       E. Man Struet       05 301 Spans       Near Calcores Dirule (below)       name       Pared Studies       Studies       Studies       Enhances Mail Model System            States       Studies	B142	E Grady St (Statesboro Library)	S Main St	S Mulberry St	None		0.2 miles	Analysis	Sidewalks	Bike/Ped Facilities	Ennanced Multi-Modal System			×	\$68,147		18
64       0.89 (in Porta)       14 A <sup>n</sup> Bonnel Si,       Num       Paved shoulders look hades of noil       Analysis       Streams       Biker Port Polities       Enhanced Mult-Model System       ()        Streams       Stre	0170	E Main Chroat	LIC 201 Duran	Neer Only and Data (	Nama	Multi-use trail extension on south side of	0.0 miler	Americal	Mulli Llee Troil	Dilya/Dert Erretter	Enhanced Multi Madel Oriette				A070 0 · ·		
12         Caster St (in Flagster)         Opy Hall         Costes St.         None         Sidewals on one side         0.1 miles         Analysis         Sidewals on the standard         Biker/Ped Facilities         Enhanced Multi-Modal System         ()         ()         Side/R07         ()         Side/R07         ()         Sidewals         Biker/Ped Facilities         Enhanced Multi-Modal System         ()         ()         Side/R07         ()         Side/R07         ()         Sidewals         Biker/Ped Facilities         Enhanced Multi-Modal System         ()         ()         Side/R07         ()         Sidewals         Biker/Ped Facilities         Enhanced Multi-Modal System         ()         ()         Sidewals         Biker/Ped Facilities         Enhanced Multi-Modal System         ()         ()         Sidewals         Biker/Ped Facilities         Enhanced Multi-Modal System         ()         ()         ()         Sidewals         Biker/Ped Facilities         Enhanced Multi-Modal System         ()         ()         ()         Sidewals         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()         ()        ()        ()        ()<	D1/0					Pound abouildors (beth sides of res.")								v			10
32         Cross St (Regiser)         Four Stell         Man SL	386 392													•			10
1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1																	13
129         Langeton Chapel Pd         Old Register Pd         S167         None         Sidewalias on at eact one side         2 miles         Analysis         Bicker Pd Facilities         Enhanced Mult-Modal System         C         \$1000000000000000000000000000000000000																ong Term	
333       Old Register Rd       US 301 Pypass       Burkhaller Rd       None       Bike Shoulder       3.3 miles       Analysis       Bike Shoulder       Bike Pde Facilities       Enhanced Multi-Modal System       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I	B129														\$1 003 313	ong Term	
131       Old Register Pid       US 301 Bypass       Burkhafter Pid       None       Sidewalids on at least one side       3.3 miles       Analysis       Sidewalis       Bike/Ped Facilities       Enhanced Multi-Modal System														✓	\$2,760,173	ong Term	
○       CR 576       SR 67 N Main St       College St       None       TE Landscape/Beautify       Disk       Fe Landscape/Beautify       Bike/Ped Facilities       Enhanced Multi-Modal System       (m)       (m)       S37.00 NA       (m)         grade       Tellam N       None       Raised Median       None       Raised Median       Nanysis       Raised Median       Bike/Ped Facilities       Enhanced Multi-Modal System       (m)														√			
gage Important       Stateshop       South Main St.       Old Register Rd       Tillman Rd       None       Raised Median       Analysis       Raised Median       Bike/Ped Facilities       Enhanced Mult-Modal System       ✓       Stateshop       Stateshop       South Main St.       Old Register Rd       Tillman Rd       None       Raised Median       Bike/Ped Facilities       Enhanced Mult-Modal System       ✓       Image Important       Stateshop	B9	CR 576															
analysis       Baised Median       Baised Median       Baised Median       Bike/Ped Facilities       Enhanced Multi-Modal System       Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6">Colspan="6"Colspan="6">Colspan="6"Colspan="6">Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="6"Colspan="Colspan="Colspan="6"Colspan="6"Colspan="6"Colspan="6"Co				· · ·										Subtotal			
Statesbor       South Main S1       Old Register Rd       Tillman Rd       None       Raised Median       Analysis       Raised Median       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓        Statesbor	Signage Impro	vements											_				
Same       Part of costs in provements & langeway       Analysis       Crosswalks and Signage       Bike/Ped Facilities       Enhanced Multi-Modal System       C       C       C       Same	Statesboro	South Main St	Old Register Rd	Tillman Rd	None	Raised Median		Analysis	Raised Median	<b>Bike/Ped Facilities</b>	Enhanced Multi-Modal System	✓			\$513,216		36 *Assumed as one
Statesbor       US 301/S R7/Brannen R4 & 2 RRs       Mome       Itiller to railroad tracks       Analysis       Crasswalks and Signage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       Mome       Statesoon       State						Ped crossing improvements & flangeway											project in prioritization
Shatesbor       US 30 @ Old Register Rd/Rucker Ln       And       None       Traffic signal with ped countdown timeer       Analysis       Traffic Signal       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓        Statesbor       Statesbor       Chandler Rd       Lanier Dr       None       Raised medians and Pedestrian crossing       Analysis       Raised medians and Ped Crossing islands       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓        Statesbor       Statesbor       Northside Dr/US 80       None       Raised Median, Ped timers and signage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       ✓       Statesbor       Statesbor       Statesbor       Northside Dr/US 80       None       Raised Median, Ped timers and signage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       ✓       ✓       Statesbor       Statesbor       Statesbor       Northside Dr/US 80       None       Raised Median, Ped timers and signage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       ✓       ✓       Statesbor       Statesbor       Statesbor       Northside Dr/US 80       Statesbor       None       Raised Median, Ped timers and signage       Raised Median, Ped timers and signage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       ✓       ✓        ✓       St						filler to railroad tracks											
Statesbor       Chandler Rd       Fair Rd       Lanier Dr       None       islands       Analysis       Raised medians and Ped Crossing islands       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓        \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$       \$\$	Statesboro	US 301 @ Old Register Rd/Rucker Ln			None	Traffic signal with ped countdown timeer		Analysis	Traffic Signal	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$136,782		36
Statesbor       Scalesbor       Northside Dr/US 80       None       Raised Median, Ped timers and signage       Analysis       Raised Median, Ped timers and signage       Inanced Multi-Modal System       Inanced Multi-Mod						Raised medians and Pedestrian crossing											
Statesbor       S College St       W Parrish St       W Brannen St       None       Bike grage       Analysis       Bike grage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       Statesbor       Statesbor       Lee St       Nonthide Dr.       Statesbor       None       Share the Road Signage       Analysis       HAWK signal, crosswalks, grage       Analysis       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       Statesbor       Statesbor       Pulsak I Rd       West Model       Statesbor       Crosswalks, curb ramps       Analysis       Bike grage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       Statesbor       Statesbor       Statesbor       None       Statesbor       Crosswalks, curb ramps       Analysis       Bike grage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       Statesbor       Statesbor       Statesbor       None       Statesbor       Crosswalks, curb ramps       Analysis       Register       Statesbor       Statesbor <t< td=""><td>Statesboro</td><td>Chandler Rd</td><td>Fair Rd</td><td>Lanier Dr</td><td>None</td><td>islands</td><td></td><td>Analysis</td><td>Raised medians and Ped Crossing islands</td><td>Bike/Ped Facilities</td><td>Enhanced Multi-Modal System</td><td>~</td><td></td><td></td><td>\$766,584</td><td></td><td>35</td></t<>	Statesboro	Chandler Rd	Fair Rd	Lanier Dr	None	islands		Analysis	Raised medians and Ped Crossing islands	Bike/Ped Facilities	Enhanced Multi-Modal System	~			\$766,584		35
Statesbor       S College St       W Parrish St       W Brannen St       None       Bike grage       Analysis       Bike grage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       Statesbor       Statesbor       Lee St       Nonthide Dr.       Statesbor       None       Share the Road Signage       Analysis       HAWK signal, crosswalks, grage       Analysis       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       Statesbor       Statesbor       Pulsak I Rd       West Model       Statesbor       Crosswalks, curb ramps       Analysis       Bike grage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       Statesbor       Statesbor       Statesbor       None       Statesbor       Crosswalks, curb ramps       Analysis       Bike grage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       Statesbor       Statesbor       Statesbor       None       Statesbor       Crosswalks, curb ramps       Analysis       Register       Statesbor       Statesbor <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>T</td><td></td><td></td></t<>															T		
Statesbor       Lee St       Northige Dr.       None       HAWK signal, crosswalks, signage       Analysis       HAWK signal       Bike/Ped Facilities       Enhanced Multi-Modal System       ·       ·       ·       Statesbor       Statesbor       Statesbor       None       Share the Road Signage       Analysis       Bike/Ped Facilities       Enhanced Multi-Modal System       ·       ·       ·       Statesbor       Statesbor       Statesbor       Statesbor       None       Share the Road Signage       Analysis       Bike/Ped Facilities       Enhanced Multi-Modal System       ·       ·       ·       Statesbor       Statesbor       Statesbor       Statesbor       None       Share the Road Signage       Analysis       Bike/Ped Facilities       Enhanced Multi-Modal System       ·       ·       ·       Statesbor												<ul> <li>✓</li> </ul>					33
Statesbor       Pulask iRd       West Bypas       Statesbor oity limits       None       Share the Road Signage       Analysis       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       \$\$3,802       21         Portal       US 80       Rocky Ford Rd       None       Crosswalks, curb ramps       Analysis       Crosswalks and Curb Ramp       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       \$\$9,306       20         Portal       US 80       Woods Ave/Fits St       None       Repaint crosswalk       Analysis       Crosswalks and Curb Ramp       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       \$\$9,306       20         Register       SR 46       Main St.       Crosswalks and Ped Signage       Analysis       Crosswalks and Ped Signage       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460       \$\$460 <t< td=""><td></td><td></td><td></td><td>W Brannen St</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>				W Brannen St													
Portal       US 80       Rocky Ford Rd       None       Crosswalks, curb ramps       Analysis       Crosswalks and Curb Ramp       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       \$\$9,936       20         Portal       US 80       Woods Ave/1st St       None       Repaint crosswalk       Analysis       Repaint crosswalk       Bike/Ped Facilities       Enhanced Multi-Modal System       ✓       \$\$300       20         Register       R46       Main St       Crosswalk and Ped Signage       Analysis       Crosswalks and Ped Signage       Enhanced Multi-Modal System       ✓       \$\$00       20         Rook VE       Main St       None       Crosswalks and Ped Signage       Analysis       Crosswalks and Ped Signage       Enhanced Multi-Modal System       ✓       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00       \$\$00																	
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Register       SR 46       Main St       None       Crosswalks and Ped Signage       Bike/Ped Facilities       Enhanced Multi-Modal System       Image: Crosswalks and Ped Signage       State Croswalks and Ped Signag															\$9,936		20
Brooklet       US 80       N Cromley Rd       Ped xing advance warning signs and flashing beacon.       Analysis       Pedestrian crossing signs       Bike/Ped Facilities       Enhanced Multi-Modal System       Image: Comparison of the system													✓				20
Brooklet         US 80         N Cromley Rd         None         flashing beacon.         Analysis         Pedestrian crossing signs         Bike/Ped Facilities         Enhanced Multi-Modal System         ✓         \$15,120         13	Register	SR 46	Main St		None			Analysis	Crosswalks and Ped Signage	Bike/Ped Facilities	Enhanced Multi-Modal System			✓	\$460		16
		110.00												,			
1. Cost estimates are in current year dollars (uninflated dollars).					None	tlashing beacon.		Analysis	Pedestrian crossing signs	Bike/Ped Facilities	Ennanced Multi-Modal System			~			13
		1. Cost estimates are in current year dollars (uninflated dollar	ars).										_	Subtotal	\$1,556,191		

Cost estimates are in current year dollars (uninflated dollars).
 Cost estimates are planning-level, based on best available data and assumptions

Subtotal \$1,556,191 Grand Total \$ 19,355,006.30



## **FUNDING AND IMPLEMENTATION**

#### A. Funding Sources

Several funding sources will be utilized to implement recommended projects. Eligibility for funds is typically dictated by the agencies responsible for maintaining and operating the transportation facility in question. Most major facilities in Bulloch County are either operated by GDOT or the County. Should the County desire to accelerate projects on state owned and maintained facilities, it is highly likely that overmatching of local funds could accelerate the process.

Funding for most transportation projects in the County has historically come in part through GDOT. To understand the ability of GDOT to continue to provide funds to Bulloch County, it is useful to understand the components of GDOT funding. Key components include:

- Federal Title I Apportionments
- State Motor Fuels Taxes
- \_\_\_\_
- State License Tag Fees
- State Title Registrations
- State Motor Carrier Fuels Tax
- State Personal Property Tax
- Tax Allocation Districts

Accounts for approximately 98% of the State's transportation funding allotted for projects

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While detailed analysis of these funding sources is beyond the scope of this study, it is useful to point out that all of the revenue streams identified as key components of GDOT funding have positive growth rates historically, and it is anticipated that they will continue to grow in the future.

While GDOT funding components have positive growth rates, the Department is experiencing some funding challenges. There are currently more transportation needs in the state than there are dollars to fund projects. In addition, construction costs have fluctuated considerably over the past three years, forcing the Department to continually assess which projects it can reasonably fund. GDOT's Project Prioritization Study, completed in 2008, formulated a prioritization methodology for all projects in the state based upon GDOT's statewide goals and objectives for the performance of the transportation system. Every project eligible for Federal or State funding may be subject to this process, which helps to identify the projects that bring the state the most benefit for the investment. Local funding sources are becoming more significant

and will continue to be significant in the future for the successful implementation of projects. A review of project implementation shows that locations with a Special Purpose Local Option Sales Tax (SPLOST) have been in the best position to leverage funds and ultimately construct projects.

#### Federal Funding Sources for Transportation

A substantial portion of GDOT funding comes from the Federal Government through Federal Title I Apportionments. The primary funding source for Title I is the Federal gasoline tax collected at the state level. The US Congress authorizes federal transportation funding to the states and other public entities, generally every six years. The previous authorization was known as the "Transportation Efficiency Act for the 21st Century" or TEA 21. The reauthorization of TEA 21 in August 2005 was SAFETEA-LU which authorizes the Federal surface transportation programs for highways, highway safety, and transit for the 5-year period of 2005 through 2009. According to the U.S. DOT, funding levels for major highway transportation programs and apportionments allocated to Georgia over the five-year time frame FY 2005-2009 total approximately \$6,356,000,000 out of a total of \$183,466,000,000. These lump sum funds are apportioned throughout the state.

Federal funding for the majority of highway system improvements (excluding interstate highways) planned in Bulloch County is expected to come from the Surface Transportation Program (STP) and Minimum Guarantee Program. Locally-sponsored projects within the County will generally require a 20 percent local funding commitment to match federal funds. The local government is also generally responsible for completing the planning and design of the projects as well. Federal and state funds are programmed by GDOT for right of way and construction costs. State-sponsored projects generally require a 10-20 percent local funding match.

As part of the federal apportionment and allocation, there are opportunities for local governments to collaborate with GDOT on special transportation projects. These programs include:

*Scenic Byway Program* - GDOT has initiated a Scenic Byways Program to help communities preserve and promote the cultural and historic resources found along the roadways in Georgia. Once a road becomes designated as a Georgia Scenic Byway, it becomes eligible for federal Scenic Byway funds. Funds can be used to develop corridor management plans to protect the natural and cultural assets along the route.

*Transportation Enhancement Program (TE Funds)* - Currently, the TE Grant Program provides federal transportation funds through GDOT to local governments through a competitive process for non-highway projects. Eligible projects include bicycle and pedestrian facilities, multi-use trails, the preservation of historic sites related to transportation, etc.

#### Federal Funds for Public Transportation

The need for better mobility and access to transportation extends far beyond the city limits of Statesboro. In Bulloch County, public transportation services are not currently available for people who cannot or choose not to drive their private autos. As the population grows and demographic trends change with a larger percentage of the population being elderly, the needs for special public transit to serve seniors and disabled people will likely increase.

In addition, as the study area continues to urbanize and possibly become designated as an MPO post-2010 census, urbanized area 5307 funds would then become available to the County for public transportation. Commuter-oriented public transportation services, such as vanpooling programs and express bus services as well as transit facilities, such as park and ride lots can begin to be considered in the area. All of these programs are eligible for federal funding, with the local share ranging from 10 percent for transit vehicle purchases and the construction of park and ride lots up to 50 percent for rural transit operating assistance.

As Bulloch County continues to grow and develop, the County should continue to monitor its needs for local and regional public transportation services and identify potential opportunities to tap into the available federal sources for these programs and programs identified in Chapter 6 provided through the CGRDC. According to the U.S. DOT, an estimated \$22,598,000,000 in lump sum federal transit funds is included in SAFETEA-LU for the period from FY 2005- 2009. The state of Georgia received an estimated \$567,000,000 of these funds for the period of FY 2005-2009. These lump sum funds are apportioned throughout the state. Generally, for public transit projects proposed in Bulloch County, the federal funding programs will be the Non-Urbanized Area Program; the Rural Transit Assistance Program; Transit for Elderly and Disabled Persons, Job Access and Reverse Commute; and SAFETEA-LU's New Freedom Program.

#### **State Funding Sources for Transportation**

State funding for transportation projects in Georgia is derived from the following sources:

- State tax on motor fuels (7.5 cents per gallon)(provides majority of revenue);
- State license tag fees
- State title registrations
- State motor carrier fuels tax
- State personal property tax

It is also useful to note that Georgia currently has one of the nation's lowest state motor fuels taxes, excluding sales taxes. Even when including the additional 4 percent sales tax, Georgia's motor fuel taxes are the third lowest in the US.

#### Local Funding Sources for Transportation

Local governments (cities and counties) receive revenues from a number of sources to support the public facilities and services they provide to citizens. These sources include federal and state funds, "own source" funds, such as property tax revenues and other monies, and discretionary grant funds from federal and/or state agencies.

Increasingly, counties in Georgia, like Bulloch, have enacted a Special Purpose Local Option Sales Tax, or SPLOST, to fund specifically identified capital projects. SPLOST taxes require voter approval and are time-limited. SPLOST funds can be used for transportation projects, including matching federal and/or state transportation funds. A portion of Bulloch County's SPLOST funding goes to transportation improvements. Cities and counties may also use Local Option Sales Taxes (LOST) for transportation purposes, including providing local matching funds for GDOT projects. Other local sources of transportation funding include impact fees or other exactions paid by developers according to local ordinances and the creation of self-taxing entities, such as Community Improvement Districts. In addition, counties in Georgia may issue general obligation bonds to support transportation capital projects.

County governments typically may elect to use a portion of their own revenues for transportation-related purposes, including capital projects, and operations and maintenance of transportation facilities within their own jurisdiction. A key determinant of the ability to improve an area's transportation facilities is the availability of local funds to match state and/or federal transportation funds. Data on the County's expenditures for transportation were not available.

According to the Georgia Department of Community Affairs (DCA), the County's "own source" revenues, including revenues from property taxes, sales taxes, excise and special use taxes and service charges and fees were \$28.3 million in 2004. Own source revenues are relevant because a portion of these funds could be provided as local matching funds for federally and state-funded transportation improvements or for locally-funded projects, depending on the County's other funding priorities. Table 8.A.1 below illustrates this data. In 2004, Bulloch County had per capita own source amounts of \$480, which is slightly less than the statewide revenue per capita of \$631.

County	2000	2004	% Change	2004
	Own Source	Own Source	from 2000to	Per Capita
	Revenues	Revenues	2004	Amount*
Bulloch County	\$24.4 million	\$28.3 million	15.8%	\$480

 Table 8.A.1
 Own Source Revenues

\* Statewide per capita amount equals \$631.

Source: Georgia Department of Community Affairs

In addition, tax revenues jurisdictions in Georgia also have the ability to implement impact fees for transportation infrastructure. Impact fees are one time fees applied to new developments that are used to defray some of the costs of providing additional public facilities and infrastructure to these developments. Impact fees serve to generate additional revenue to reduce the gap between the resources needed to build new (or improve existing) public facilities that serve new development and the money available for those purposes through traditional revenue sources. Bulloch County does not currently have impact fee legislation, but is interested in the potential it may have to generate additional funds for transportation projects. For more information on the potential for impact fees in Bulloch County, see "Transportation Impact Fees – Exploratory Report", developed as part of the Bulloch County / City of Statesboro 2035 LRTP process.

#### GDOT State Transportation Improvement Program (STIP)

Each year, GDOT develops its State Transportation Improvement Program (STIP), a listing of all projects and project phases anticipated to be funded with federal and state funds within the current three-year period. The STIP also contains "lump sum" projects for transportation activities that benefit more than one county jurisdiction, for example, roadway beautification projects.

In its 2008-2011 STIP, GDOT estimated that nearly \$9.5 billion were allocated for various transportation functions throughout Georgia. Table 8.A.2 on page 168shows the allocation of these funds across major functional areas.

Transportation Function	Amount Allocated	Percent of Total
New Construction	\$1,273,880,000	13.47%
Reconstruction and Rehabilitation	\$3,239,680,000	34.25%
Bridges	\$969,770,000	10.25%
Safety	\$560,049,000	5.92%
Maintenance	\$911,204,000	9.63%
Transportation Enhancement	\$495,397,000	5.24%
Transit	\$957,176,000	10.12%
Other	\$1,052,411,000	11.13%
	\$9,459,567,000	100.00%

#### Table 8.A.2 STIP Fund Allocations (2008 – 2011)

Source: Georgia Department of Transportation

Additionally, GDOT develops a Construction Work Program, a listing of projects expected to be funded within a six-year period (current year plus five subsequent years). The fifth and sixth years of the CWP are viewed as an expression of GDOT's intention to proceed with the projects as funding becomes available to develop the projects (complete engineering design, acquire right-of-way, if needed, and construct the improvement). These projects are documented in this Plan.

According to GDOT's 2008-2011 STIP, no major capacity projects are currently programmed for Bulloch County. Several projects are currently included in long-range. These projects were reevaluated as part of the LRTP development process and were included amongst the plan recommendations if still warranted based on future needs.

#### **Future Transportation Funding Needs**

A combination of federal, state, local, and private funding sources should be pursued for individual projects to improve transportation facilities in the study area. These sources should be pursued based on GDOT (state), regional and local investment priorities that weigh the best investments for anticipated benefits of the projects through the planning horizon year of 2035. A combination of sources will increase the likelihood for project implementation.

#### B. Effective Use of the Plan

This LRTP Document identifies potential projects for implementation based on local transportation needs and verified by technical analysis. This is an important step towards implementation but additional steps are necessary in order to advance projects into the Georgia Department of Transportation's Project Development Process and / or to identify and solidify funding commitments from the state, if desired. The project implementation process for Georgia outside of an MPO area begins with support from local elected officials. Each County should begin with a thorough review of their LRTP priority projects. If funding is desired beyond what is available locally, the following steps are recommended:

Step 1: Gather letters of support from local elected officials highlighting the need for the project(s) and the merits of the project(s).

*Step 2:* Assess the level of funding support that may be provided by the County as a local match and / or for specific project phases (i.e. PE, ROW, etc.).

*Step 3:* Contact your GDOT District Office and coordinate with the GDOT District Engineer regarding the project. Depending on project type, the GDOT District may know of state aid resources that could be used for feasibility studies and potentially for additional match funding sources.

*Step 4:* The GDOT District Office typically serves as the project sponsor and submits a project information package to GDOT's Project Nominating Review Committee (PNRC) for consideration. The information included in the long-range plan and the project sheet, in addition to any supporting information resulting from additional study, is included in this package.

*Step 5:* Projects approved by the PNRC are programmed into GDOT's Long-Range Program. As funding is identified, the project will move into GDOT's six-year Construction Work Program (CWP).



## **CONCLUSIONS AND NEXT STEPS**

Bulloch County has experienced sustained growth over the last decade, resulting in increased travel demand in the County. The Georgia Department of Transportation (GDOT) Office of Planning, in conjunction with Bulloch County and the City of Statesboro, initiated the Bulloch County / City of Statesboro 2035 Long Range Transportation Plan to assess needs and identify multi-modal transportation improvement opportunities to help the County address transportation issues through the plan's horizon year of 2035. Recommended projects for Bulloch County were identified through analysis of existing and future transportation deficiencies, and selected and prioritized based on local goals and objectives with the intent of enhancing the quality of life for County residents and visitors. Efforts were taken to ensure that proposed projects negatively impacted the community as little as possible while providing maximum benefits. Analysis was conducted to ensure that the projects benefited and did not disproportionately impact low-income and minority communities. As part of this effort, existing and future operating conditions were documented for the following modes: highways and bridges, bicycle and pedestrian, freight, transit, rail, and airports. Ultimately, the study identified a prioritized list of projects for implementation.

GDOT coordinated with Bulloch County, the City of Statesboro, the Towns of Brooklet, Register, and Portal, Georgia Southern University, area residents and business leaders, and other partners in the planning, development, and review of potential improvements. Additionally, a comprehensive and interactive public involvement program was conducted. This ensured that alternative transportation improvements were not only coordinated with various governments, but afforded individual citizens and interested groups the opportunity to provide their input in developing and evaluating potential improvements to each County's transportation network.

The end product for this study is this LRTP document. If implemented, its solutions address future needs and provide for the efficient movement of people and goods within and through Bulloch County through the horizon year of this study, 2035. This document should be reviewed and updated periodically to ensure that the planning factors and other assumptions are still relevant and effectively address transportation needs. This document should serve as the foundation for Bulloch County's transportation planning efforts and a starting point for addressing future transportation needs.