

Macon County Long Range Transportation Plan

Southwest Georgia Multi-County
Transportation Study

October
2010

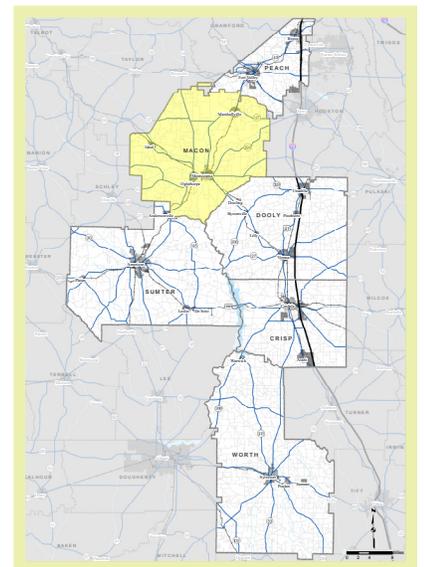
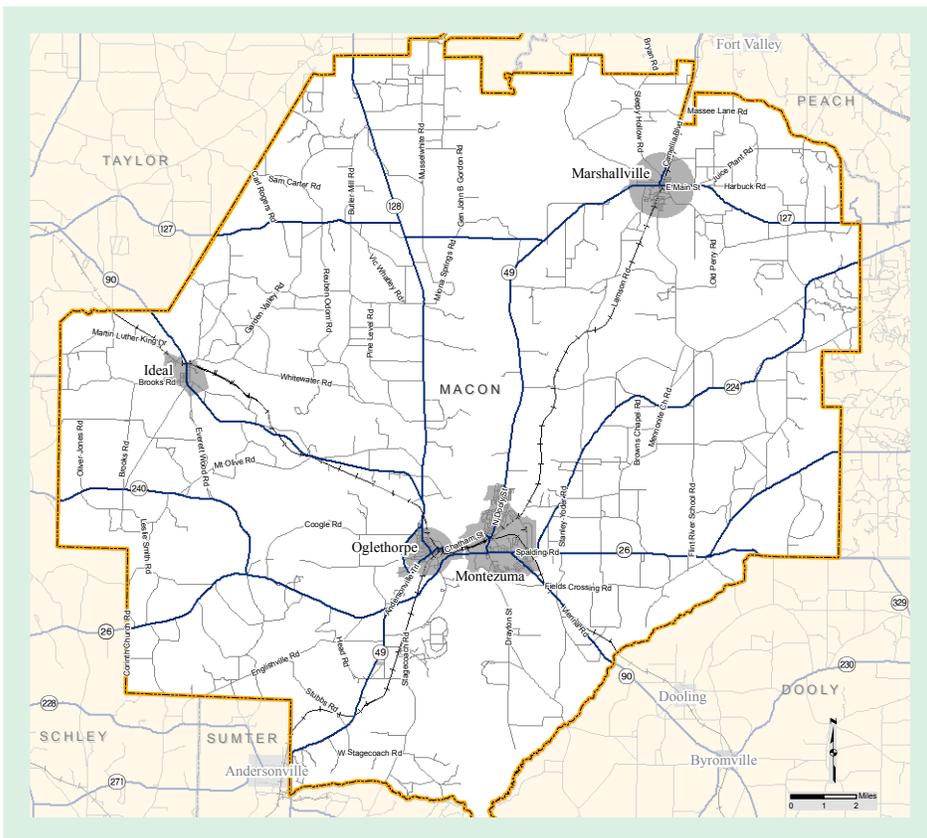


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1. INTRODUCTION

The Georgia Department of Transportation (GDOT) Office of Planning initiated the Southwest Georgia Multi-County Transportation Study in cooperation with the counties of Crisp, Dooly, Macon, Peach, Sumter and Worth; the River Valley, Southwest Georgia, and Middle Georgia Regional Commissions (RCs), and other planning partners. The objective of the study was to identify and recommend transportation improvements necessary within each county to meet existing and future transportation needs through the year 2035. Results and recommendations of this study will be important in identifying transportation deficiencies. The study began in October 2008 and was completed in October 2010.

1.1 STUDY PURPOSE

The ability of the transportation system to meet existing and future travel needs is essential to the economic viability of these six counties. This study will recommend transportation improvements that complement state, regional, and local objectives regarding economic development, quality of life, and the interconnection of people, goods, and services. The final result of this study process will be a 2035 Long Range Transportation Plan (LRTP) for each of the six counties in the study area. The focus of this report is Macon County. The Macon County LRTP will provide a prioritized outline of improvements necessary to address its existing, short term, and long term transportation needs of the county.

1.2 GENERAL DESCRIPTION OF THE SIX-COUNTY STUDY AREA

The study area is located in southwest Georgia from south of Macon to south and east of Albany. The six-county study area includes Crisp, Dooly, Macon, Peach, Sumter and Worth Counties. The study area includes a small portion of the Warner Robins Metropolitan Planning Organization area found in Peach County, which includes the city of Byron.

The six-county study area covers 2,300 square miles and a number of areas of interest that are significant to the state's natural, cultural, and social environments. A map of Macon County can be found in **Figure 1.1** on page 2 and a map of the six-county study area can be found in **Figure 1.2** on page 3. Key local assets include:

- Georgia Veterans Memorial State Park in Crisp County, which features a museum; Lake Blackshear, a privately operated conference center and golf club; and the Savannah, Americus, and Montgomery (SAM) Shortline Excursion Train, which runs from Cordele to Plains, GA.
- Flint River Wildlife Management Area (WMA) in Dooly County, located ten miles south of Montezuma. Activities in the WMA include hunting, fishing, hiking, bird watching and horseback riding.
- Andersonville National Historic Site in Macon County, located just east of the City of Andersonville. This site includes Camp Sumter, which served as the largest Confederate prison during the Civil War; the Andersonville National Cemetery, and the National Prisoner of War Museum.

SOUTHWEST GEORGIA MULTI-COUNTY TRANSPORTATION STUDY
 MACON COUNTY LONG RANGE TRANSPORTATION PLAN

FIGURE 1.1: MAP OF MACON COUNTY

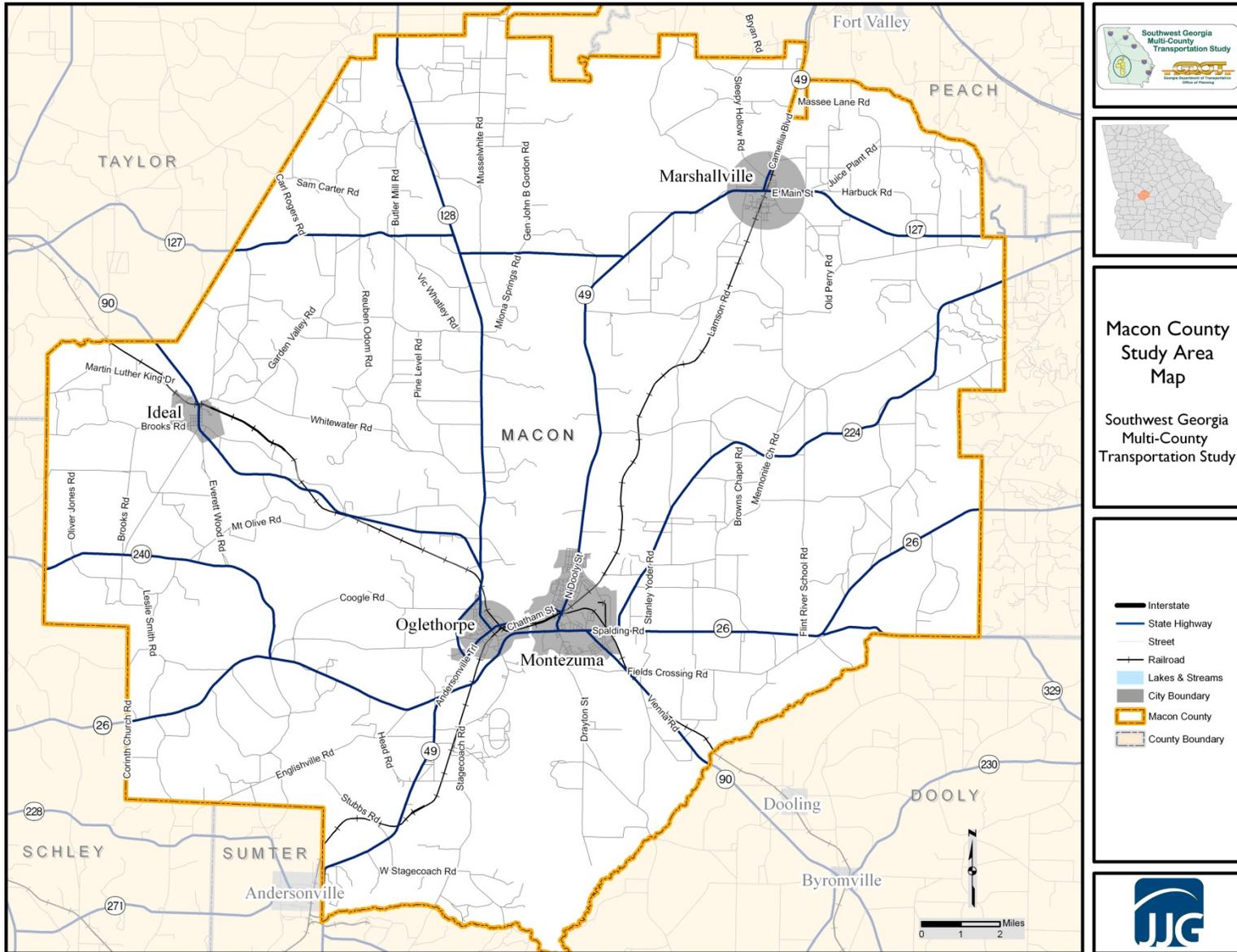
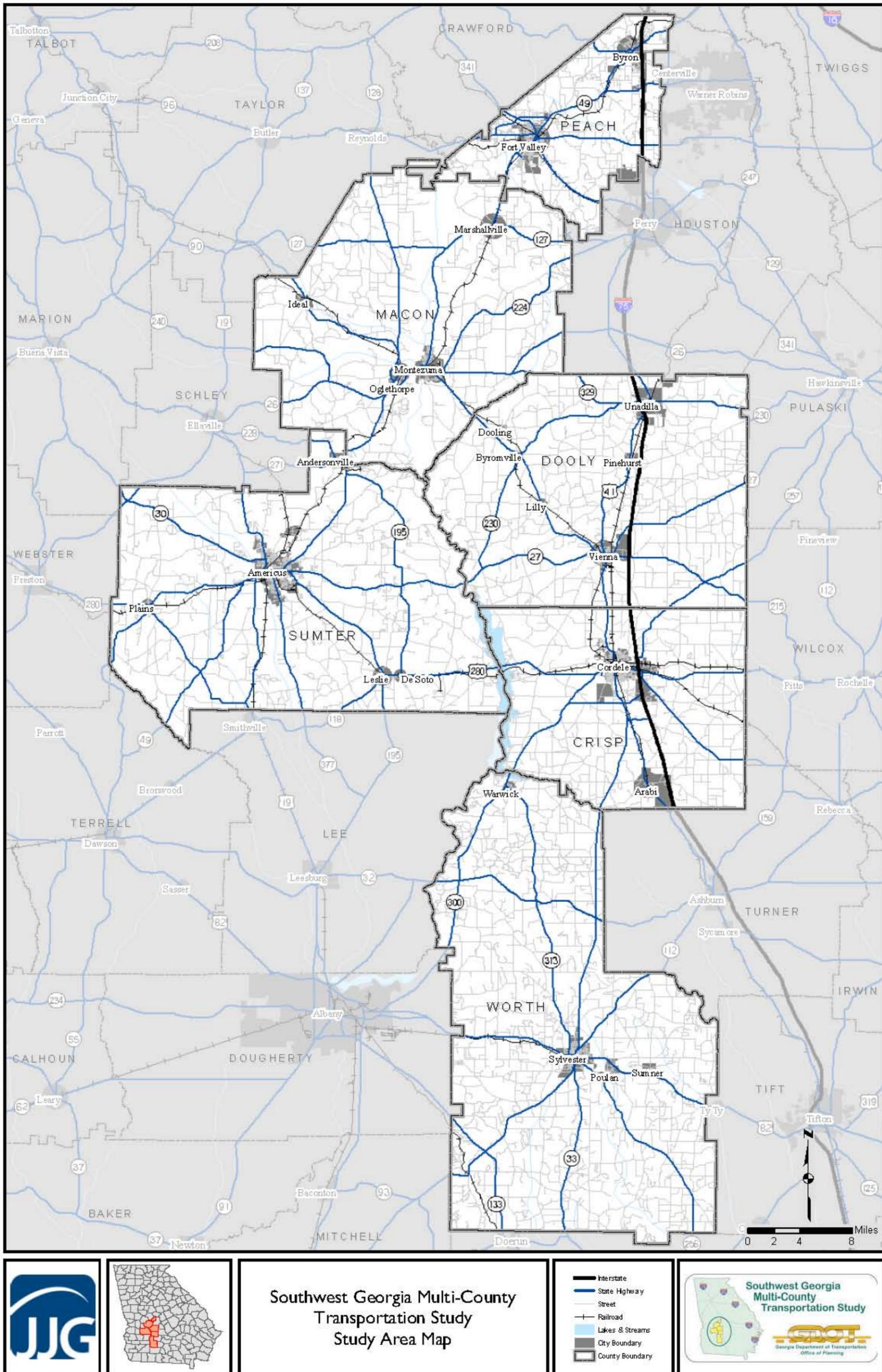


FIGURE 1.2: MAP OF THE SIX-COUNTY STUDY AREA



- Fort Valley State University in Peach County, a Historically Black Land Grant University located in the City of Fort Valley.
- Jimmy Carter National Historic Site in Sumter County. This historic area includes the thirty-ninth president's current residence, boyhood farm, school, and the town railroad depot, which served as his campaign headquarters during the 1976 Presidential Election.
- Worth County's annual Georgia Peanut Festival, held in Sylvester each October.

1.3 OVERVIEW OF DATA SOURCES

The data presented in the Southwest Georgia Multi-County Transportation Study include a variety of sources ranging from GDOT, counties within the six-county study area, Middle Georgia RC, River Valley RC, Southwest Georgia RC, U.S. Census Bureau, National Wetlands Inventory and key stakeholders in the region. See **Appendix A** for an inventory of all GIS data sources.

Demographic and socioeconomic data were collected primarily from the U.S. Census Bureau, local comprehensive plans and other various planning documents. In addition, this report includes other local studies and data sources from the Georgia Department of Labor (GDOL) and U.S Department of Commerce.

In order to analyze existing and future travel patterns and traffic conditions, a travel demand model was developed for the six-county study area. A travel demand model utilizes information such as roadway networks, population, and employment data to calculate the existing or future demand for transportation facilities. The travel demand model originally developed for the Southwest Georgia Interstate Study (2009) was modified and recalibrated for use in this study.

1.4 STUDY PROCESS

This study began with the collection of transportation data within the six-county study area, including a review of studies previously conducted in the region. Input from local agencies, stakeholders, and the general public regarding transportation issues and growth patterns was solicited and considered during the development of this study.

A travel demand model was prepared for the six county area based on much of the data presented in this report. This information includes demographic and land use data, existing transportation infrastructure and traffic conditions, as well as planned and programmed projects within each county.

Based on the information gathered, existing conditions and projected future conditions were evaluated. With the aid of stakeholders, the study goals and objectives were developed based on goals and objectives based on the counties' comprehensive plans. With these goals in mind, transportation recommendations were developed and prioritized for each county. This final transportation study is the result and documentation of these previous steps.

2. DEMOGRAPHICS

The demographic information discussed in this section includes general population, employment, and for environmental justice purposes, minority and low-income households. Demographics in this section are presented by Census Block Group, Census Tract, and Traffic Analysis Zone (TAZ). TAZs are relatively small units of geography used in travel demand modeling to relate different land-use patterns with trip purposes and trip end frequency.

2.1 EXISTING POPULATION

Macon County is one of three counties in the study area without direct access to I-75, as can be seen in **Table 2.1** below. Macon County experienced 7.3 percent growth between 1990 and 2000. During the same decade, the percentage of growth and annual rate of growth exhibited in the state of Georgia outpaced Macon County.

Between 2000 and 2006, Macon County experienced a population decline of 1.8 percent. The *Greater Macon Comprehensive Plan* (2008) examined the county's historic population trend over the last 60 years. Macon County exhibited its highest population during the 1940's with almost 16,000 residents, and has experienced a steady decline since then.

TABLE 2.1: HISTORIC POPULATION GROWTH FOR MACON COUNTY

	1990	2000	2006	1990 - 2000		2000 - 2006	
				Percent Change	Annual Growth Rate	Percent Change	Annual Growth Rate
Macon County	13,114	14,074	13,817	7.3%	0.71%	-1.8%	-0.31%
State of Georgia	6,478,216	8,186,453	9,363,941	26.4%	2.37%	14.4%	2.27%

Source: 2000 US Census

As depicted in **Figure 2.1** on page 6, over 92 percent of the county has less than more ten acres of land for every one person. The moderate to higher density areas are located within or surrounding Oglethorpe and Montezuma along SR 49, SR 128, and SR 26. Due to the overall rural nature of Macon County, the population density maps herein are expressed in persons per ten acres rather than persons per acre.

2.2 FUTURE POPULATION

Table 2.2 below presents the population forecast for Macon County. Based on historical trends, the county is expected to decline in population by nearly nine percent by 2035 and lose approximately 1,195 residents. Although it does not provide population estimates beyond 2007, Macon County's Partial Update (2006) of the comprehensive plan also shows a declining population trend for the county.

TABLE 2.2: POPULATION FORECAST FOR MACON COUNTY

	2006	2035	2006 - 2035	
			Percent Change	Annual Growth Rate
Macon County	13,817	12,622	-8.6%	-0.31%

FIGURE 2.1: MACON COUNTY EXISTING (2006) POPULATION DENSITY BY TAZ

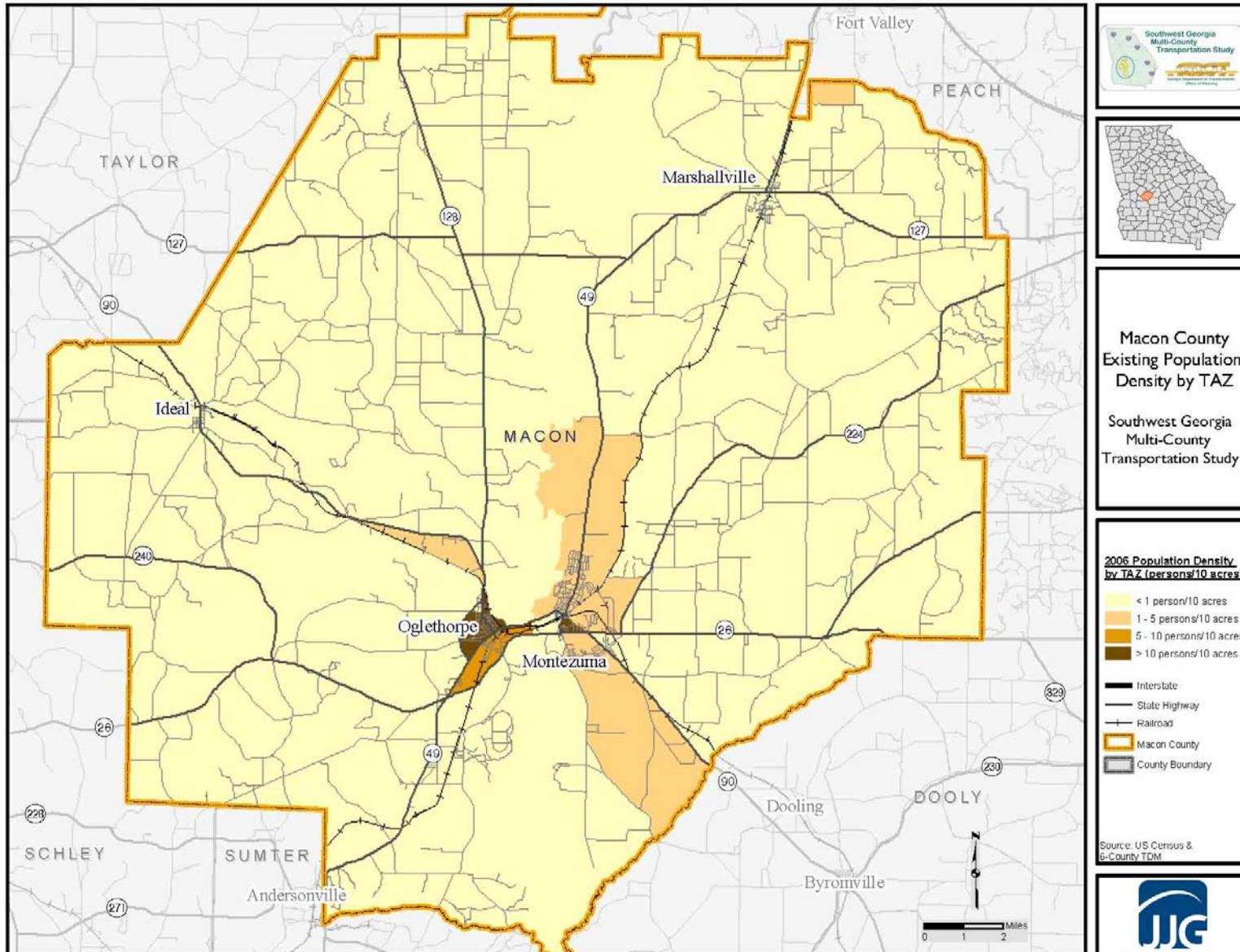


Figure 2.2 on page 8 illustrates the 2035 population density in Macon County. While the county is expected to lose population, it is expected to add increased density in the area along SR 49 south of Oglethorpe. This is due to a shift in the currently rural population in the county seeking proximity to city services.

Future population was determined by using growth rates based on continuation of past trends and growth assumptions outlined in the individual county comprehensive plans. The population estimates shown in the county comprehensive plans are very similar to the projections used in this study. For much of the study area, a uniform growth rate was applied. For counties with high growth areas or expected land use changes, population projections were modified to account for these changes. In addition, locations of possible growth areas were ascertained through interviews with representatives of Macon County. A detailed methodology used to develop the future population data is included in the separate Travel Demand Model Development technical report.

2.3 EXISTING EMPLOYMENT

As depicted in **Table 2.3** below, Macon County had approximately 3,950 jobs in 2006. In 2006, approximately 46 percent of Macon County employment was associated with the service-providing sector, and another 28 percent with manufacturing. According to Georgia Department of Community Affairs, Macon County employment has been slowly decreasing since 1990, when it was home to 5,187 jobs; by 2000, it had 4,802.

Appropriately, Macon County's largest employers are Allens Inc, Flint River Community Hospital, Fred's Stores of Tennessee, Macon County State Prison, and Weyerhaeuser Company. Macon County's partial update to its comprehensive plan states that historically, the county has had one of the most diversified, agriculturally-based economies in the state, covering production in conventional agriculture, horticulture and dairy. There is a strong medical component to the jobs base, comprised of one hospital and three nursing home facilities. Manufacturing, the second largest employment sector, includes wood, poultry and vegetable processing and a plastic extrusion manufacturer. The public school system is also a major employer.

TABLE 2.3: MACON COUNTY CURRENT EMPLOYMENT

County	AMC	MFG	WTW	RET	SER	Total
Macon County 2006	387	1,112	105	517	1,831	3,953
<i>Share of County Employment</i>	<i>10%</i>	<i>28%</i>	<i>3%</i>	<i>13%</i>	<i>46%</i>	<i>100%</i>

Note: AMC – Agricultural, Mining and Construction employment
 WTW – Wholesale, Trucking and Warehouse employment
 SER-Service employment

MFG – Manufacturing employment
 RET – Retail employment
 Source: GDOL; U.S. Bureau of Labor Statistics.

According to the population density data, approximately one-fourth of Macon County land has no employment. The majority of jobs are found along SR 26 in Montezuma and SR 128 in Oglethorpe. With approximately 60 persons per ten acres, the areas bounded by SR 26 and SR 49 are shown to have the highest concentrations of employment. A map of the existing employment density in Macon County can be found in **Figure 2.3** on page 9. Due to the rural nature of the Macon County, employment density is presented in terms of jobs per ten acres.

FIGURE 2.2: MACON COUNTY FUTURE (2035) POPULATION DENSITY BY TAZ

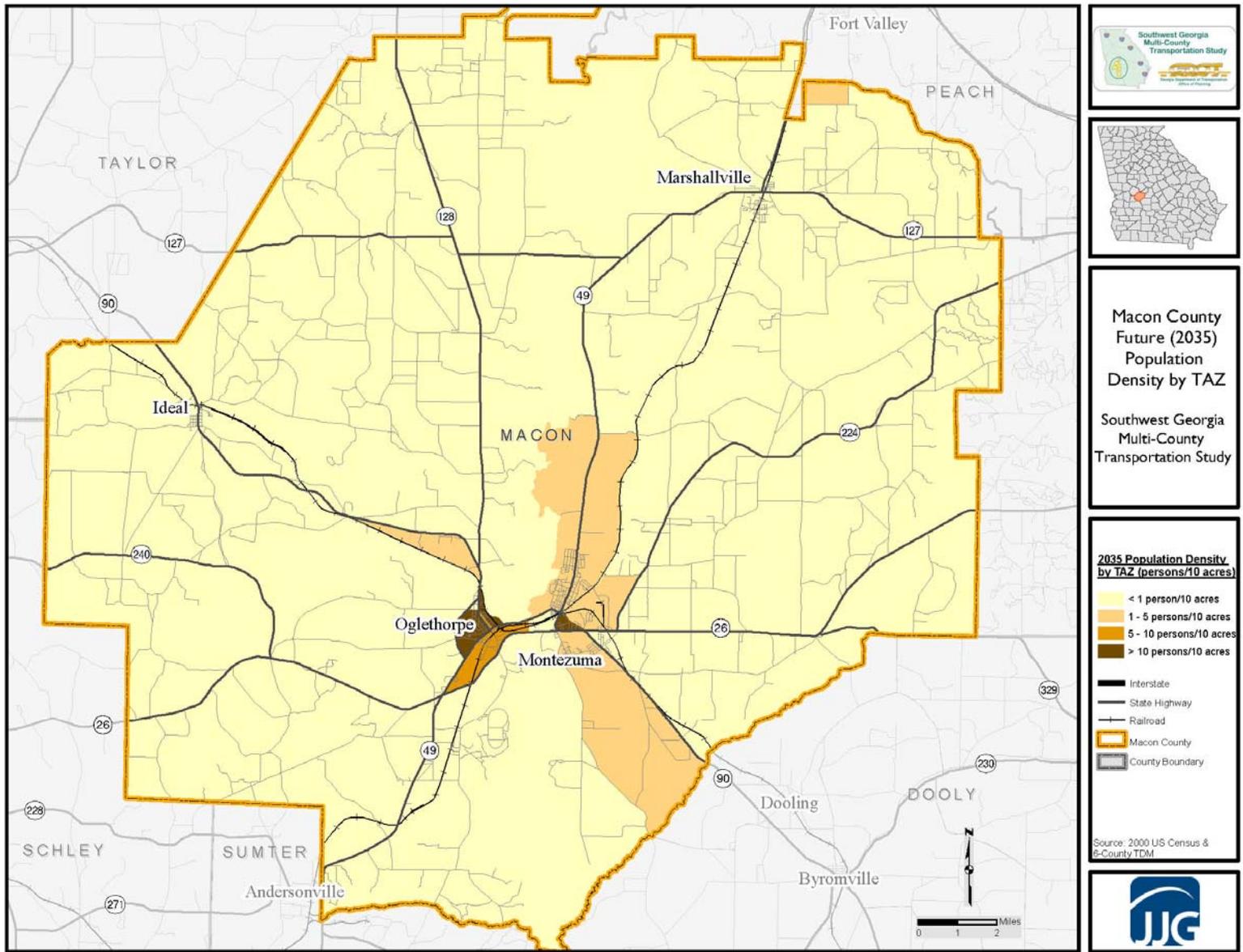
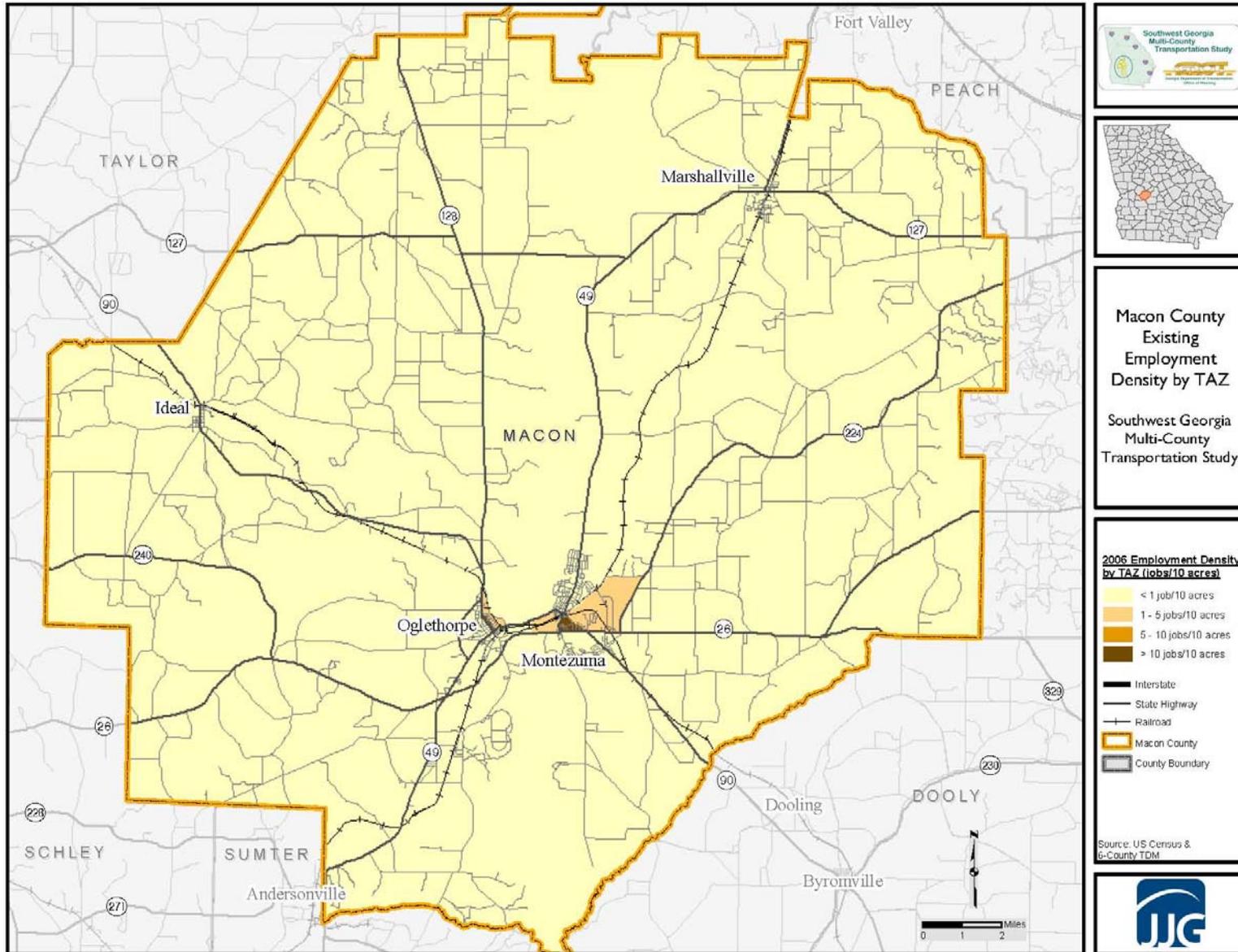


FIGURE 2.3: EXISTING (2006) MACON COUNTY EMPLOYMENT DENSITY BY TAZ



2.4 FUTURE EMPLOYMENT

By 2035, Macon County is expected to have a 12.7 percent increase in employment for a total of 4,450 jobs (**Table 2.4** below). This growth is solely dependent upon the planned Macon County Industrial Park identified in the River Valley RC's *Economic Development Strategy Report*. Employment in other sectors is forecast to follow the historical trend of decline and lose jobs by 2035.

TABLE 2.4: MACON COUNTY FUTURE EMPLOYMENT FORECAST

County	AMC	MFG	WTW	RET	SER	Total	Annual Growth Rate
Macon County 2006	387	1,112	105	517	1,831	3,953	
Macon County 2035	364	1,771	99	489	1,733	4,456	0.41%
Growth	-5.9%	59.3%	-5.7%	-5.4%	-5.4%	12.72%	

AMC – Agricultural, Mining and Construction employment
 WTW – Wholesale, Trucking and Warehouse employment
 SER-Service employment

MFG – Manufacturing employment
 RET – Retail employment

Source: GDOL; U.S. Bureau of Labor Statistics.

As can be seen in **Table 2.5** below, the planned Macon County Industrial Park is expected to boost manufacturing's share of county employment from 28 percent in 2006 to 40 percent by 2035. Consequently, the share of employment in other sectors is expected to decline. Most notably, the service sector is expected to account for 39 percent of employment in 2035, from 46 percent in 2006.

TABLE 2.5: MACON COUNTY FUTURE EMPLOYMENT CONSTITUTION

County	AMC	MFG	WTW	RET	SER	Total
Macon County 2035	364	1,771	99	489	1,733	4,456
Share of 2035 county employment	8%	40%	2%	11%	39%	100%

AMC – Agricultural, Mining and Construction employment
 WTW – Wholesale, Trucking and Warehouse employment
 SER-Service employment

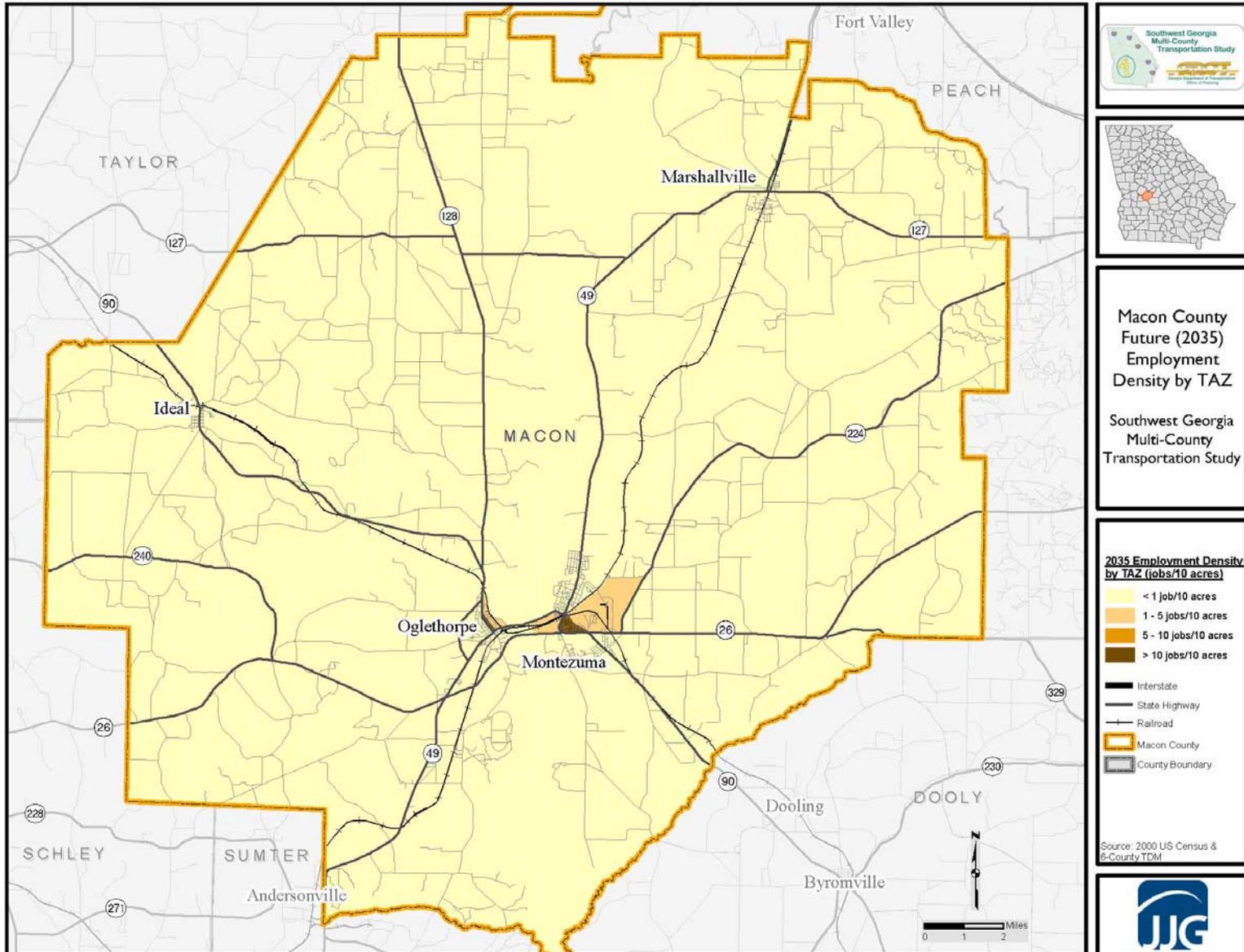
MFG – Manufacturing employment
 RET – Retail employment

Source: GDOL; U.S. Bureau of Labor Statistics.

Figure 2.4 on page 11 illustrates Macon County's future employment density. The shifts in employment sector emphasis projected in Macon County for the 2006, 2035 period, are not projected to be accompanied by significant shifts in employment density. Areas of employment density within Macon County are expected to remain in their 2006 locations and not intensify significantly in density.

In order to forecast employment for the six-county study area in the year 2035, linear growth estimates were developed at the county level based on GDOL 1990 to 2006 annual employment estimates by county. County level employment data for the 17-year period between 1990 and 2006 did not display a clear directional trend; individual county employment rose and fell during the time period, while for the study area as a whole there was a clear upward trend in employment. In addition to the linear growth rate, plans for future developments were also taken into account. Employment estimates are based on the assumption that all the currently planned developments will reach build out by 2035.

FIGURE 2.4: MACON COUNTY FUTURE (2035) EMPLOYMENT DENSITY BY TAZ



2.5 ENVIRONMENTAL JUSTICE

Title VI of the Civil Rights Act of 1964 and related statutes assure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, and disability. Executive Order 12898 Federal Actions to Address Environmental Justice to Minority Populations and Low Income Populations, signed by President Clinton requires federal agencies to consider impacts to minority and low income populations as part of environmental analyses to ensure that these populations do not receive a disproportionately high number of adverse human health impacts as a result of a federally funded project. In 1998, FHWA issued a guidance document that established policies and procedures for complying with EO 12898 in relation to federally-funded transportation projects. This guidance defines a “disproportionately high and adverse effect” as one that is predominantly borne by, suffered by, or that is appreciably more severe or greater in magnitude than the adverse effect that would be suffered by the non-minority population and/or non-low-income population.

Minority persons are defined as those people belonging to the following groups: Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and Hispanic or Latino. Census 2000 defines the first five groups as races, and Hispanic or Latino as an ethnicity. As such, people of this minority group can belong to any racial group but are still considered minorities with respect to Environmental Justice. Low-income persons are defined as those whose median household income is at or below the U.S. Department of Health and Human Services poverty threshold.

Census 2000 data from the P4 (Hispanic or Latino and Not Hispanic or Latino by Race) and P92 (Poverty Status is 1999 of Households by Household Type by Age of Householder) sample datasets were utilized to provide a quantitative analysis of counties in the study area with respect to minority and ethnic populations and low-income households. Census data are grouped together by geographic area, of which blocks are the smallest and most precise form. The sensitivity of some information requires the Census Bureau to release it in the more general form of block groups. The data for this study were gathered at the most accurate level for which they were available: for race and ethnicity, at the block level; for income, at the block-group level.

2.3.1 MINORITY POPULATION

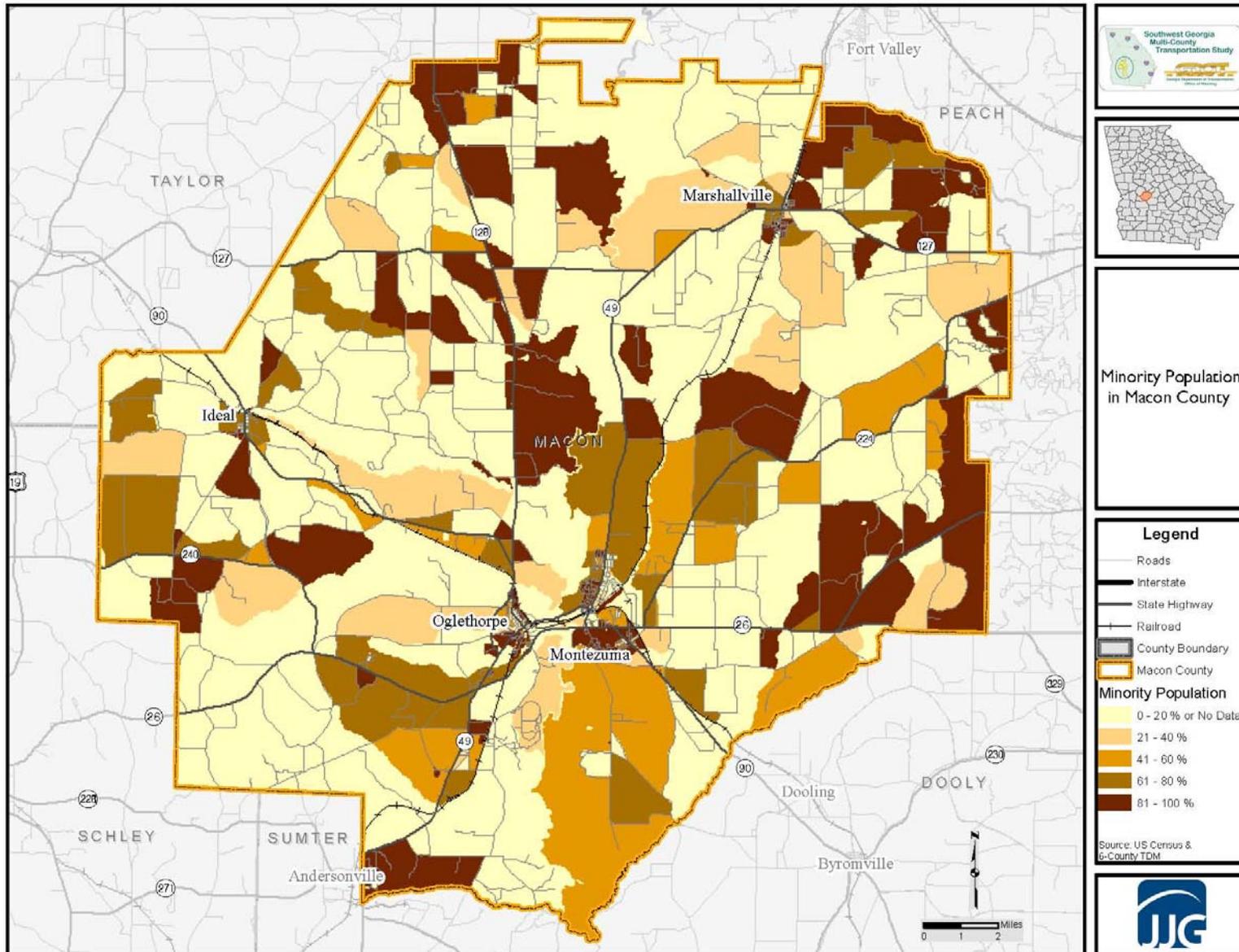
Table 2.6, below, presents the percentage of the total population of Macon County that is made up of racial and ethnic minorities. The population of Macon County is 63.2 percent minority, higher than the statewide average of 37.4 percent. Several census blocks in the county have populations that are 81 to 100 percent minority, particularly to the northeast of Marshallville and on the east county line. A map of the minority population in Macon County can be found in **Figure 2.5** on page 13.

TABLE 2.6: MINORITY POPULATION IN MACON COUNTY

	Macon County	State of Georgia
Total Population	14,074	8,186,453
Minority Population	8,890	3,057,792
Percent Minority	63.2%	37.4%

Source: 2000 US Census

FIGURE 2.5: MINORITY POPULATION IN MACON COUNTY BY TAZ (2000)



2.5.2 LOW INCOME POPULATION

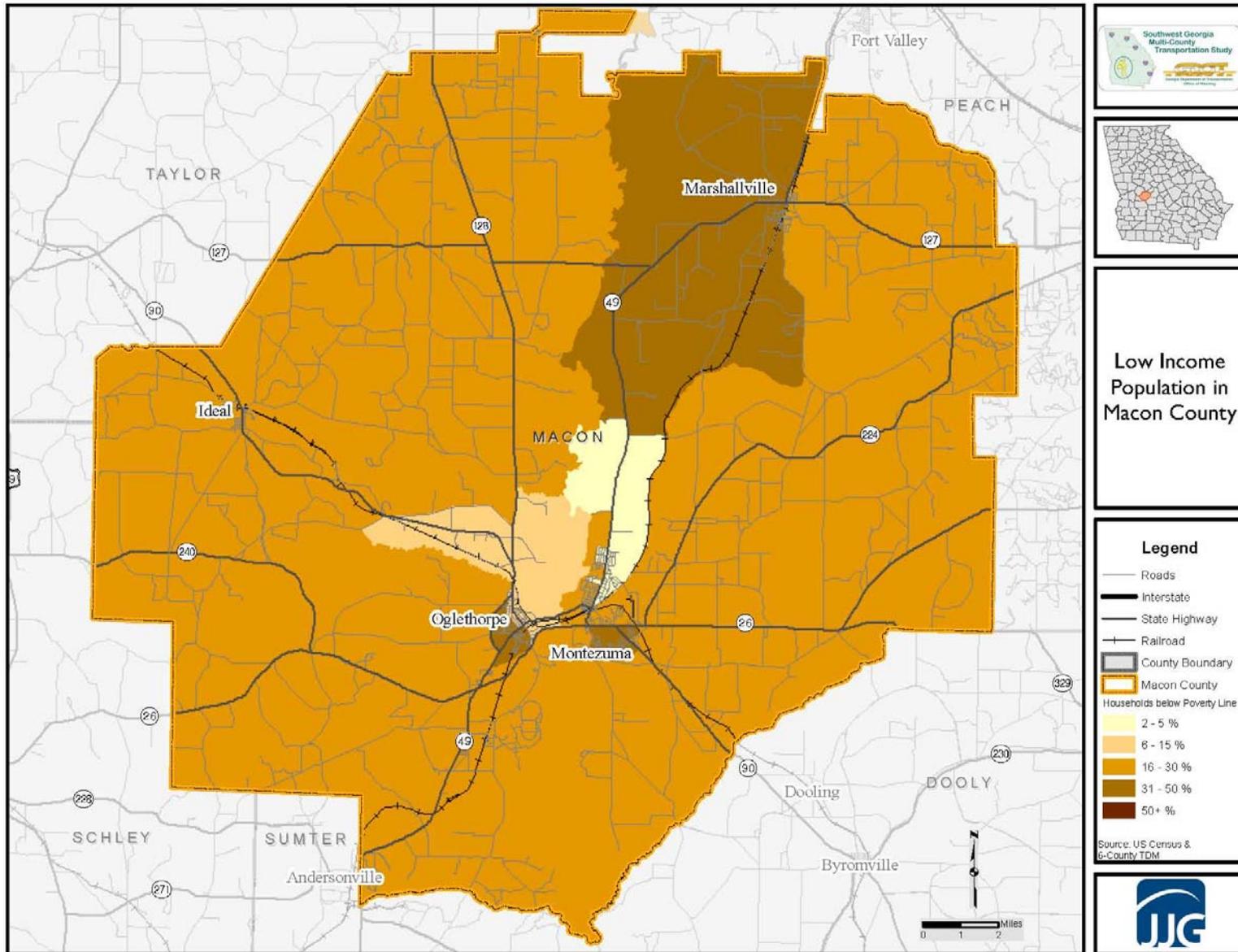
Table 2.7, below, presents the percentage of households in each county that have incomes under the poverty rate as determined by the federal government and reported by the US Census Bureau. Of Macon County households, 25.8 percent have incomes under the poverty level, more than double that of the statewide average of 12.6 percent. As can be seen in **Figure 2.6** on page 15, the highest percentage of low-income households is found in the cities of Oglethorpe, Montezuma, and around Marshallville.

TABLE 2.7: LOW INCOME POPULATION IN MACON COUNTY

	Macon County	State of Georgia
Total Households	4,813	3,006,369
Households with incomes below the poverty level, 1999	1,240	380,369
Percentage of low income households	25.8%	12.6%

Source: 2000 US Census

FIGURE 2.6: LOW INCOME HOUSEHOLDS IN MACON COUNTY BY TAZ (2000)



3. LAND USE

This section presents current and future land use in Macon County, including protected areas and anticipated development. Parks and wetlands are presented here, but further, detailed analysis of park and wetland resources will be necessary for any transportation project to proceed.

3.1 EXISTING LAND USE

Macon County is primarily agricultural in nature. The county's four incorporated cities—Ideal, Marshallville, Montezuma and Oglethorpe—are characterized by residential and commercial uses. Montezuma has a 226-acre industrial park, with access to SR 26 and a railroad line, located adjacent to the Montezuma Municipal Airport. Macon County has experienced little change over the past two decades, as witnessed by the county's slow population decline over that period. A map of existing land use in Macon County can be found in **Figure 3.1** on page 17.

3.2 FUTURE LAND USE

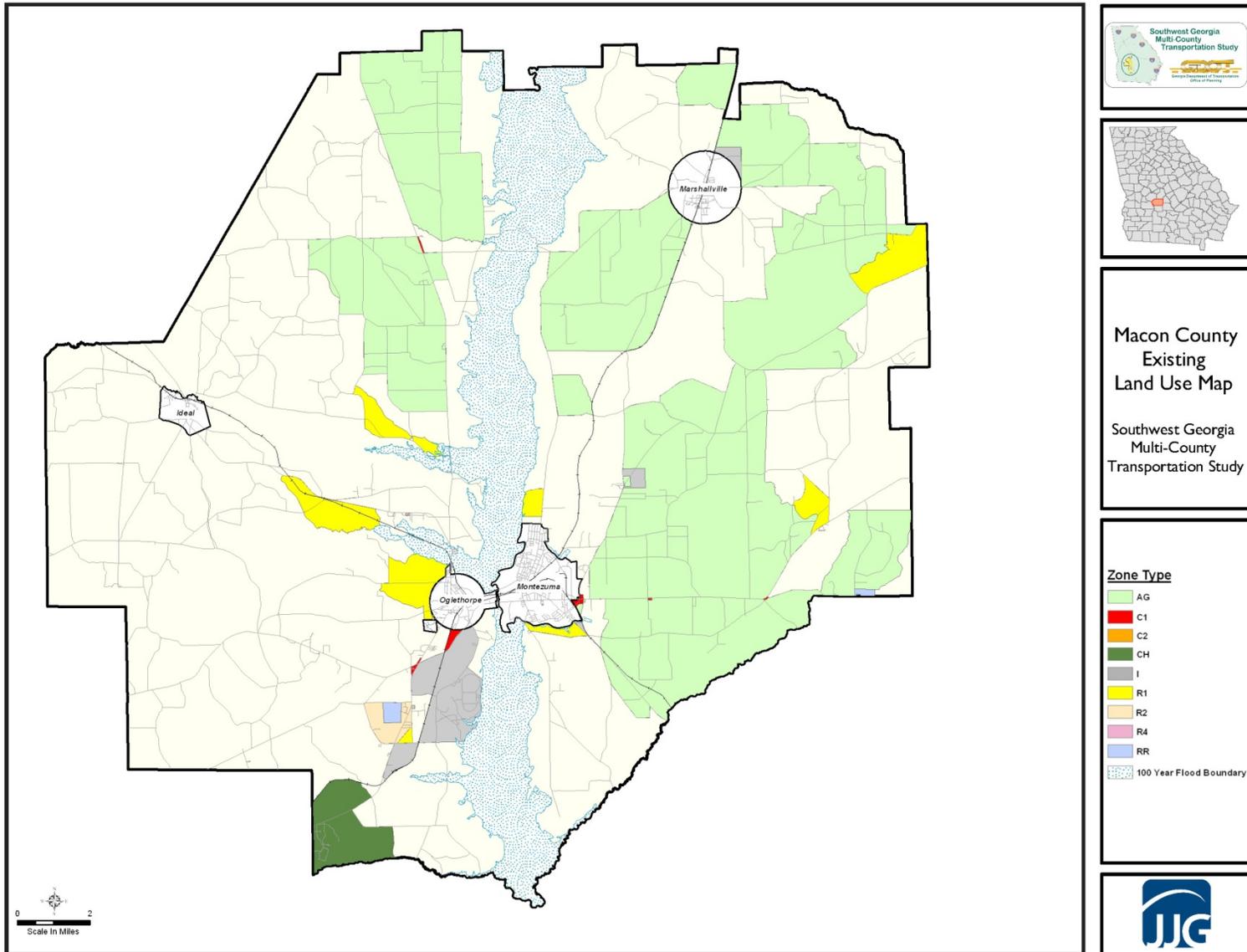
As none of the local jurisdictions are currently experiencing rapid development, and have lost population during the last two decades for which data were available, rapid growth or change in land uses is not anticipated in Macon County. Some residential spillover development could occur in the northeast quadrant of the county, where the area along SR 127 could capture growth to the east of Marshallville, and the area around SR 224 could capture that northeast of Montezuma. A significant level of development could appear in the unincorporated area south of SR 26 at SR 49.

According to the *2009-2011 Macon County Joint Partial Update of the Comprehensive Plan*, the entire county is in need of redevelopment and improvements, with particular need being evidenced at the gateways to commercial districts that may make such areas more inviting and encourage their development. Because the county has developed at low levels of density, Macon County is not planning for significant infill development in its unincorporated areas; within the cities of Macon County, sites have been identified for infill development that are near historic downtown areas and can receive services with little investment in infrastructure. No other changes in land use are expected. Macon County handles variances from the current land use on a case by case basis and has no future land use map.

3.3 PROTECTED AREAS

Protected areas are locations which receive protection because of their environmental, cultural or similar value. A large number of protected areas exist which vary by level of protection and by the enabling laws. Examples include parks, reserves, wetlands, wildlife management areas (WMAs), natural areas (NAs), and places and structures of a historic nature. The identification of environmental resources and parks is important in the preparation of a transportation study for two main reasons. First, the preservation of these resources is important to all local, state, and federal stakeholders. Second, the early identification of resources is important when developing transportation plans since their existence could serve to preclude potential transportation facilities or alignments. This discussion focuses on parks, wetlands, and historic locations.

FIGURE 3.1: MACON COUNTY EXISTING LAND USE (2009)



3.3.1 PARKS/PROTECTED NATURAL AREAS

The Andersonville National Historic Site, located in Macon and Sumter Counties, is classified as a park and an historic site. The Montezuma Bluffs Natural Area (NA) in Macon County is a protected area that can be used for hunting, fishing, and hiking. These locations are presented in **Figure 3.2** on page 19. There are no state parks in Macon County.

3.3.2 WETLANDS

Wetlands are defined as areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes and bogs. Federal law and the Georgia Planning Act require protection of wetlands and other natural resources from adverse impact. Because of this, the Georgia Department of Natural Resources maintains a database that defines, identifies, and maps the categories of freshwater wetlands and habitats. **Figure 3.2** depicts the location of wetlands, rivers, and open waters, and locations of key protected areas in Macon County.

3.3.3 NATIONAL REGISTER OF HISTORIC PLACES

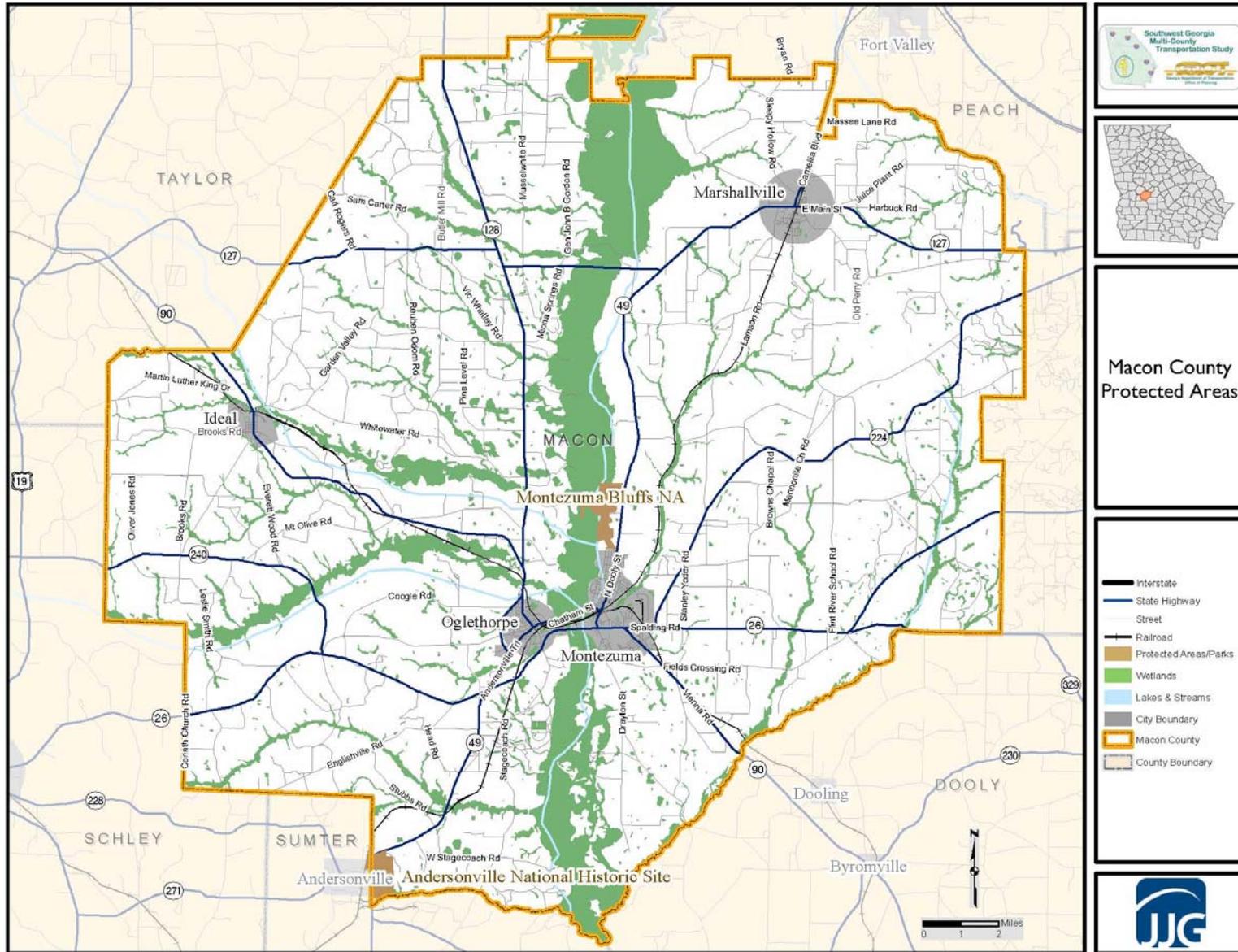
According to the National Register of Historic Places, there are ten historic sites which fall whole or in part in Macon County, including the Andersonville National Historic Site, residential and commercial districts in Marshallville, and the Macon County Courthouse. Properties within Macon County that are listed on the National Register of Historic Places are presented in **Table 3.1**, below.

TABLE 3.1: MACON COUNTY HISTORIC PLACES

City	County	Location	Address
Marshallville	Macon	Alma Fruit Farm	GA 49W
Marshallville	Macon	Billy Place	Rt. 1
Montezuma	Macon	DeVaughn-Lewis House	510 S. Dooly St.
Marshallville	Macon	East Main Street Residential District	E. Main St.
Marshallville	Macon	Felton, William Hamilton, House	McCaskill St.
Marshallville	Macon	Knob, Wilkes, Plantation	Rt. 1
Marshallville	Macon	Lamson-Richardson School	Railroad St.
Oglethorpe	Macon	Macon County Courthouse	Courthouse Sq.
Marshallville	Macon	Marshallville Commercial District	Main St.
Andersonville	Macon/ Sumter	Andersonville National Historic Site	1 mile E of Andersonville on GA 49

Source: National Register of Historic Places

FIGURE 3.2: MACON COUNTY WETLANDS, PROTECTED AREAS, AND PARKS (2009)



3.4 DEVELOPMENTS OF REGIONAL IMPACT

A review was performed for applications for Developments of Regional Impact (DRI) within Macon County filed since 2001 that have been approved or are still pending. DRIs are large-scale projects that are likely to have regional impacts, beyond the boundaries of the local governments of their locations. DRIs are included in this study because, due to their size and/or nature, they can have transportation implications for the regional roadway network.

DRI applications are reviewed by the Regional Commissions, which issue a finding of whether or not the proposed project is in “the best interest of the Region and therefore the State.” The local government uses this recommendation in deciding whether to allow the project to proceed. This process is overseen by the Georgia Department of Community Affairs. There have been no approved or pending applications for DRIs in Macon County since 2001.

4. TRANSPORTATION INVENTORY

This section presents an inventory of existing transportation facilities within Macon County. This inventory includes roadway functional classifications, surfaces, and lane configurations, bridges, pedestrian and bicycle facilities, railroads, public transportation services, and safety of roadway segments and intersections.

4.1 ROADWAY INVENTORY

4.1.1 FUNCTIONAL CLASSIFICATION

Functional classification is the process by which street and highway facilities are grouped into classes, or systems, according to the character of traffic service that they are intended to provide. The functional classification designation of a given road also determines whether it is eligible for federal funds. Federal-aid roads are:

- Principal arterials,
- Minor arterials,
- Urban collectors, and
- Rural major collectors.

In addition, rural minor collectors can be eligible for federal funds. Urban or rural local roads are not eligible for federal-aid.

The hierarchy of roadway networks is defined by the role each type of road serves meeting access and mobility requirements within the system. The role of a local road is to provide access to land, with little emphasis on system mobility. Conversely, arterials emphasize a high level of mobility, serving long trips between activity centers with little concern for land access. Collectors offer a balance between mobility and land access, and provide connections between local roads and streets and arterials.

Urban and rural areas have fundamentally different characteristics as to density and types of land use, density of street and highway networks, nature of travel patterns, and the way in which all these elements are related in the definitions of highway function. The following section describes the differences in roads for rural and urban areas.

Functional Systems for Rural Areas

Rural principal arterials typically serve substantial statewide or interstate travel. These continuous facilities emphasize regional mobility and connect larger urban areas. These roads are designed for a relatively high rate of speed and often have limited access to adjacent land uses and street networks. Rural principal arterials are comprised of Interstate facilities as well as major rural highways. Rural minor arterials, in conjunction with rural principal arterials, comprise a rural network that connects cities with towns. While generally not designed with limited or controlled access, these facilities allow for higher speeds and mobility than provided by collector roadways.

Rural major and minor collectors generally serve travel of primarily intra-county, rather than statewide or regional importance. These facilities provide a balance between mobility and land access. Trip length is therefore generally shorter than rural arterials and posted speeds generally more moderate than rural arterials.

Rural local roads typically provide access to adjacent land and provide service to travel over shorter distances than collector and higher order systems. Rural local roads represent the largest type of road network within Macon County.

Functional Systems for Urban Areas

Urban principal arterials serve the major centers of activity in a metropolitan area, are the highest traffic volume corridors, and serve the longest urban trips. These facilities carry a high proportion of the total urban area travel. Urban principal arterials should carry the major portion of trips entering and leaving the urban area, as well as the majority of through movements desiring to bypass the city centers. Characteristics of these roads include partially and fully controlled access and high speeds.

The urban minor arterial street system should connect to and support urban principal arterials and provide slightly lower mobility than the principal arterials. These usually serve a smaller geographic area and provide some local access. Urban minor arterials are usually lower speed facilities and generally do not have limited or controlled access.

Urban collectors provide land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. This classification of street is typically designed to distribute trips from the arterials to their ultimate destination. Speeds on these streets are relatively moderate.

Urban local streets comprise all facilities not on one of the higher systems. These streets serve primarily to provide direct access to abutting land and to the higher order systems. Speeds are typically low and through traffic movement is usually discouraged.

These classifications allow the safety of facilities across the state of Georgia to be evaluated relative to other facilities of similar design, traffic volumes and purpose. GDOT is responsible for collecting performance information from local and state reporting agencies for street and highway facilities. In most cases, GDOT also provides the functional classifications for state road facilities. Typical information collected includes Average Annual Daily Traffic (AADT), accident locations and equipment involved injuries and fatalities.

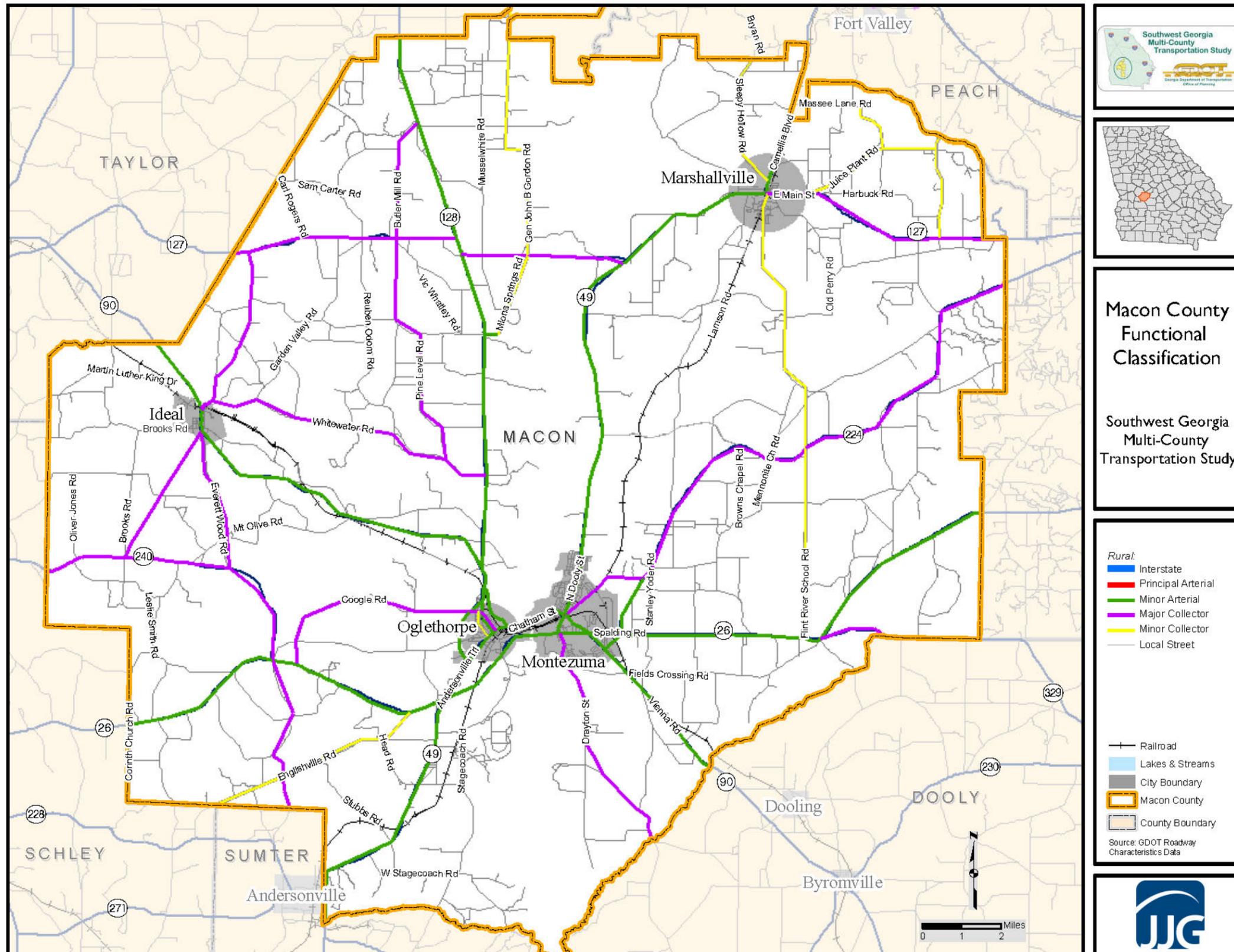
Figure 4.1 on page 23 presents the Macon County roadways by functional classification. The low VMT for the area can be attributed to lack of an interstate. **Table 4.1** below presents the mileage and VMT for each functional classification in Macon County.

TABLE 4.1: FUNCTIONAL CLASSIFICATIONS IN MACON COUNTY

	Rural Roadways		Urban Roadways	
	Mileage	VMT	Mileage	VMT
Interstate	0.00	0	0.00	0
Arterial	86.72	236,052	0.00	0
Collector	128.50	111,733	0.00	0
Local	379.30	133,141	0.00	0
Road Total	594.52	480,926	0.00	0

Source: GDOT Office of Transportation Data Mileage by Road Type and Road System

FIGURE 4.1: MACON COUNTY ROADWAY FUNCTIONAL CLASSIFICATIONS (2008)



4.1.2 ROAD SURFACE

The surface type of a road determines capacity of a facility, its maintenance requirements, and the uses of its surrounding land. Macon County has 220 miles of unpaved roads representing 27 percent of total road mileage in the county. The percent is significantly higher than the state average. **Table 4.2** below presents the road mileage by surface type for Macon County.

TABLE 4.2: MACON COUNTY ROAD MILEAGE BY SURFACE TYPE

Road Type	Macon County			State Totals		
	Total Mileage	Unpaved	Percent Unpaved	Total Mileage	Unpaved	Percent Unpaved
State Routes	129	0	0.0%	18,096	1	0.0%
County Roads	411	219	53.3%	84,558	27,986	33.1%
City Streets	54	1	1.9%	14,584	486	3.3%
Road Total	595	220	37.0%	117,238	28,473	24.3%

Source: GDOT Office of Transportation Data 2007

4.1.3 LANE CONFIGURATION

Another important attribute reviewed from GDOT's RC database is the number of lanes provided on each road in Macon County. Roads in the county primarily serve traffic in both directions. Additionally, all of the roads in the county are two-lane facilities. **Figure 4.2** on page 25 displays the number of lanes on roadways in Macon County as well as the locations of signals.

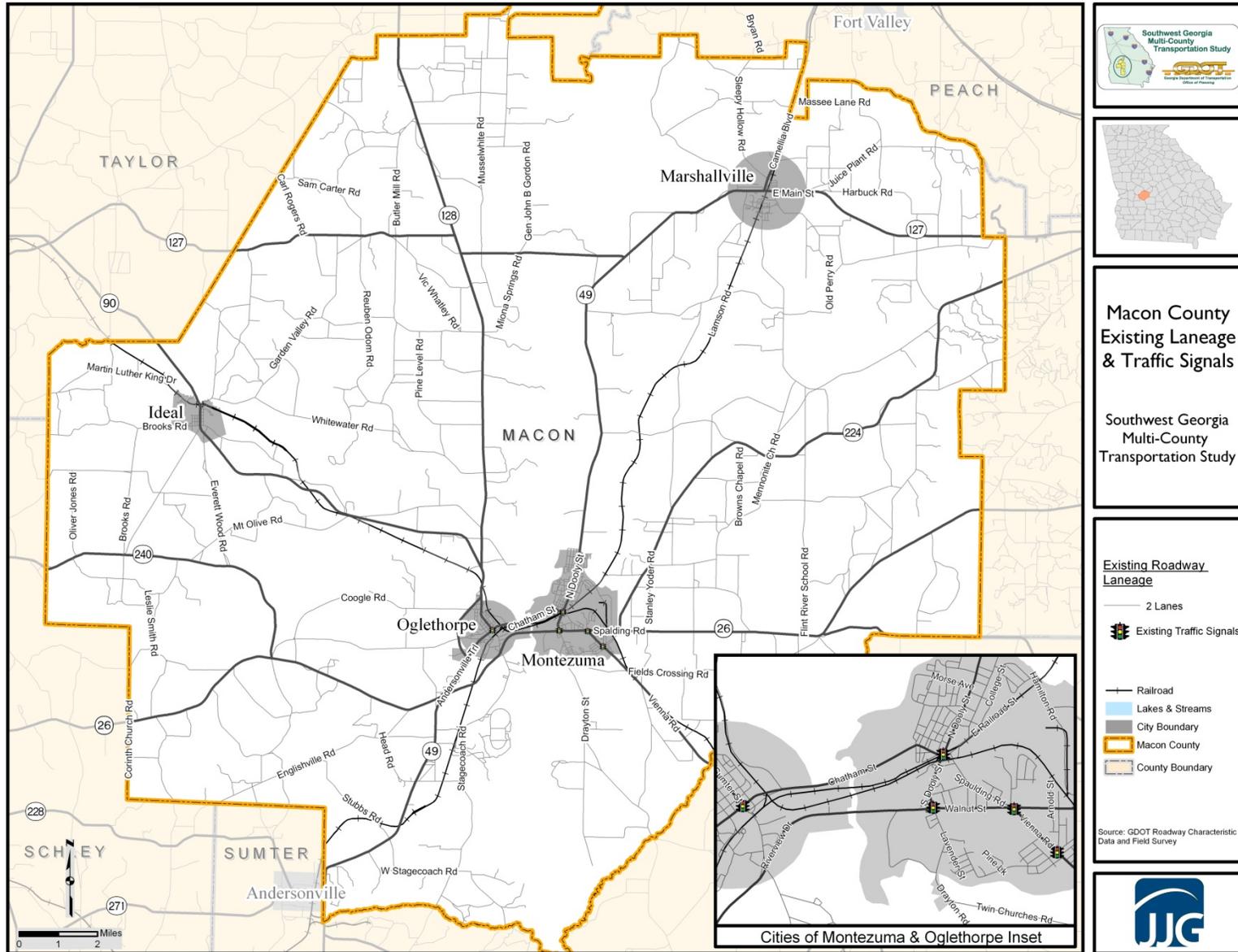
4.2 BRIDGE INVENTORY AND CONDITIONS ASSESSMENT

The following section will provide an analysis of current bridge conditions relative to sufficiency and importance to the overall roadway network in the study area. Maintaining bridges in good condition is important for safety and to avoid delays due to road closures and weight limits. The bridge sufficiency rating formula was created in part as a universally accepted method of collectively evaluating factors which indicate a bridge's condition and its ability to remain in service. The result of the standardized formula is a number between zero and 100, for which 100 represents an entirely sufficient bridge and zero represents an entirely insufficient or deficient bridge.

The collective factors which form a sufficiency rating are collected by GDOT and submitted to the Federal Highway Administration (FHWA) on an annual basis. Key factors which make up a sufficiency rating include the number of lanes relative to the roadway it carries, AADT, structural condition and deck condition.

It is important to note that sufficiency ratings do not necessarily indicate a bridge's ability to safely carry traffic loads. Measures used to determine a bridge's sufficiency also include metrics not related to the structural integrity. Factors that are used to calculate sufficiency that are not related to structural integrity include under-clearances, the bridge's location on the national highway system, conditions of the bridge approaches, and traffic safety features, like railing height, and the length of a detour should the bridge be closed. In total, there are 18 key factors used to calculate sufficiency ratings.

FIGURE 4.2: MACON COUNTY EXISTING LANEAGE AND TRAFFIC SIGNALS (2008)



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The Highway Bridge Program uses sufficiency ratings to help prioritize bridges in need of repair or replacement. The Highway Bridge Program is authorized and funded by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). To qualify for federal replacement funds, a bridge must have a rating of 50 or below. Bridges with a sufficiency of 50 to 80 meet the minimum qualifications for rehabilitation funding. Rehabilitation can include maintenance or repair of bridge decks, expansion joints, bridge railings, foundations, piers, etc. Bridge rehabilitation can be a cost efficient solution for bridges with sufficiency ratings below 50 if it can be demonstrated that the rehabilitation will improve the bridge to an acceptable sufficiency rating. It should be noted that bridges that qualify for federal funding by their sufficiency ratings are not guaranteed to receive such funds.

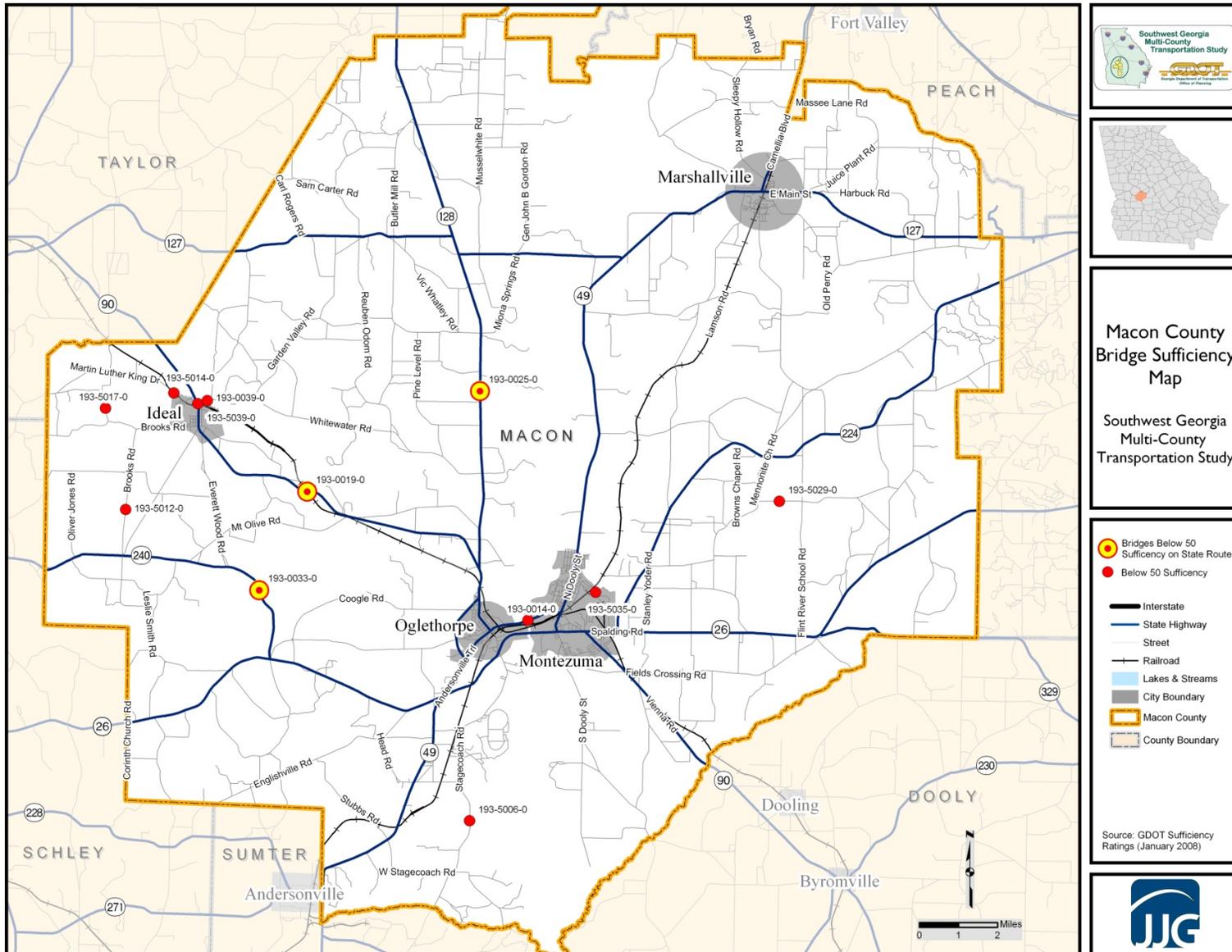
Macon County has 14 bridges, or approximately 34 percent of bridges in the county, with sufficiency ratings below 50, qualifying for FWHA bridge replacement funding. Two of these bridges are on the State Route system. Please see **Table 4.3** below and **Figure 4.3** on page 27 for descriptions and locations. It should be noted that replacements for the bridges on SR 90 over the CSX Railroad and on SR 128 over Whitewater Creek are included in GDOT's planned and programmed projects.

TABLE 4.3: MACON COUNTY BRIDGES WITH SUFFICIENCY RATINGS BELOW 50

Bridge Serial Number	Facility Carried	Feature Intersected	Sufficiency	Year Built	On State Route System?	PI Number?
193-0023-0	West Ferry Road	Flint River Overflow	16.87	1950	No	No
193-0024-0	West Ferry Road	Flint River Overflow	17.43	1950	No	No
193-0014-0	Oglethorpe Road	Flint River	24.27	1955	No	No
193-0033-0	SR 240	Buck Creek	25.60	1955	Yes	No
193-5014-0	M.L.K Drive & Haygood	Sand Creek	27.80	1945	No	No
193-0019-0	State Route 90	CSX Railroad	35.24	1937	Yes	322285
193-5017-0	Brooksmill Road	Sand Creek	40.93	1935	No	No
193-5012-0	Brooks Road	Camp Creek	41.71	1935	No	No
193-5029-0	South Melvin Road	Horsehead Creek Tributary	44.90	1935	No	No
193-0039-0	Marvis Chapman Road	Whitewater Creek	46.43	1918	No	No
193-5035-0	Hamilton Road	Beaver Creek	47.43	1960	No	No
193-0025-0	State Route 128	Whitewater Creek	47.69	1937	Yes	0007042
193-5039-0	County Route 281	Cedar Creek	48.61	1988	No	No
193-5006-0	Stage Coach Road	Camp Creek	49.96	1969	No	No

Source: GDOT January 2008

FIGURE 4.3: MACON COUNTY BRIDGE SUFFICIENCY (2008)



4.3 PEDESTRIAN AND BICYCLE FACILITIES

The information in this section regarding existing and planned bicycle and pedestrian facilities comes from the *Middle Flint Regional Bicycle and Pedestrian Plan (2005)*, which was prepared by the River Valley RC and submitted to GDOT in 2005 and GDOT planned and programmed projects. Planned near-term pedestrian and bicycle facility improvements are included in GDOT's State Transportation Improvement Program (GDOT STIP) 2008-2011 and Work Program. The nature of the GDOT STIP and Work Program are covered in the GDOT Planned and Programmed Improvements Section presented later in this document.

4.3.1 EXISTING BICYCLE AND PEDESTRIAN FACILITIES

Sidewalks are generally available in the cities and towns of Macon County, particularly in their historic centers and older neighborhoods. Pedestrian trails are also available in the Whitewater Creek Park in Macon County. Recreational walking and jogging tracks are in Montezuma and its vicinity at Blacks Recreation Complex and Whitewater Creek Park, and in Oglethorpe at Buck Creek Bypass Park.

Macon County currently does not have a state designated bicycle route within its borders. As the *Middle Flint Regional Bicycle and Pedestrian Plan (2005)* notes, however, state bicycle route designation does not imply access to bicycle facilities, nor signs that mark roadways as state bicycle routes. Existing bicycle routes in the six-county study area are mapped with the proposed bicycle routes in **Figure 4.4** on page 29.

4.3.2 FUTURE BICYCLE AND PEDESTRIAN FACILITIES

An inventory of recommendations from the RC bicycle and pedestrian plan and GDOT are listed in **Table 4.4** below. Proposed bicycle routes in the six-county study area are mapped with the existing bicycle routes in **Figure 4.4**.

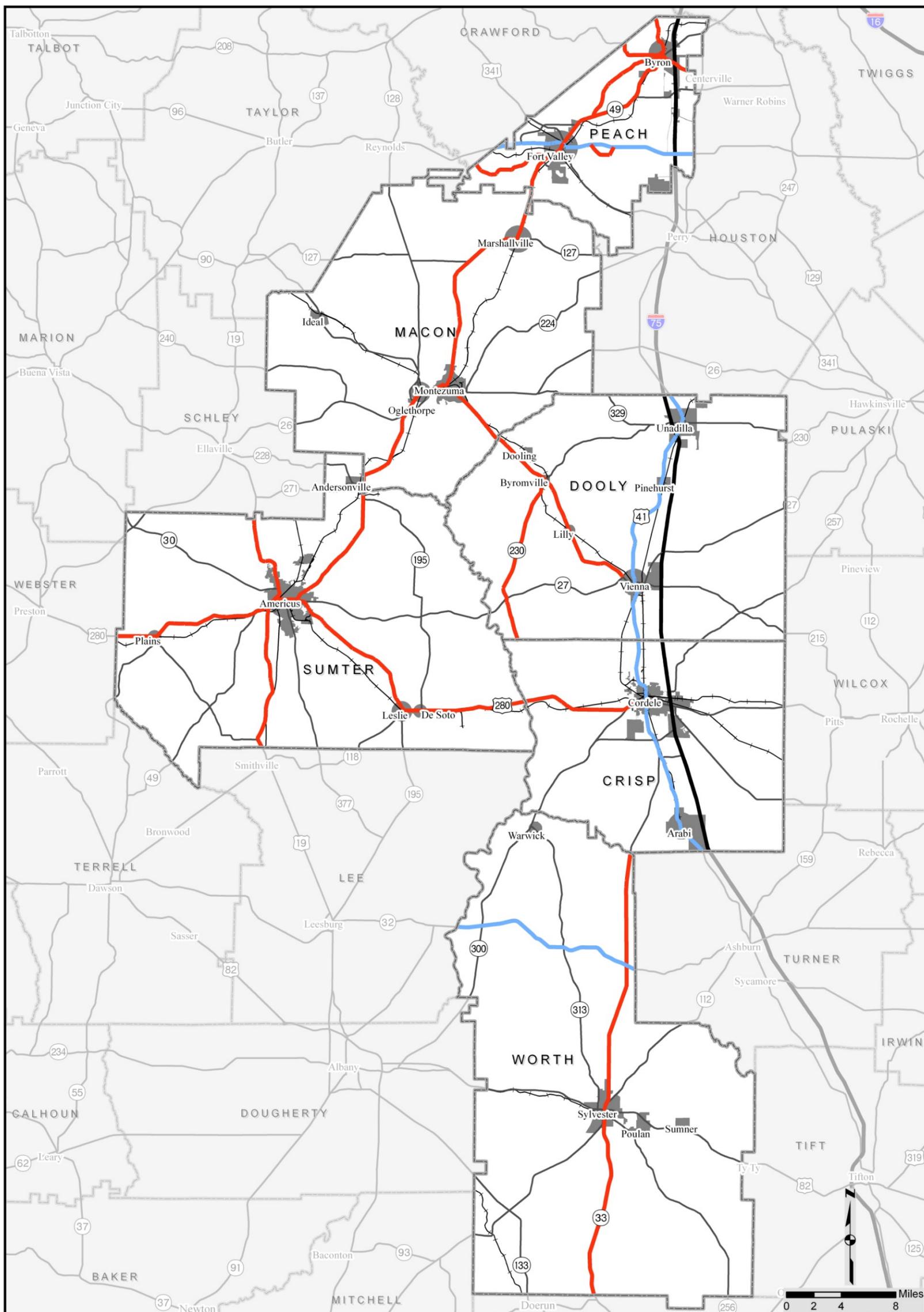
TABLE 4.4: BICYCLE AND PEDESTRIAN RECOMMENDATIONS IN MACON COUNTY

Source	County	Facility Type	Recommendation
River Valley RC	Macon and Sumter	Bike	New bicycle route along SR 49 from Montezuma, in Macon County, to Americus, in Sumter County, by way of Andersonville.
River Valley RC	Macon	Bike	New bicycle route along SR 49 from Montezuma to north Macon County Line, via Marshallville.
GDOT	Macon	Ped	Sidewalks in Montezuma
GDOT	Macon	Ped	Streetscape in Marshallville
GDOT	Macon	Bike & Ped	Streetscape in Oglethorpe

4.4 RAILROADS

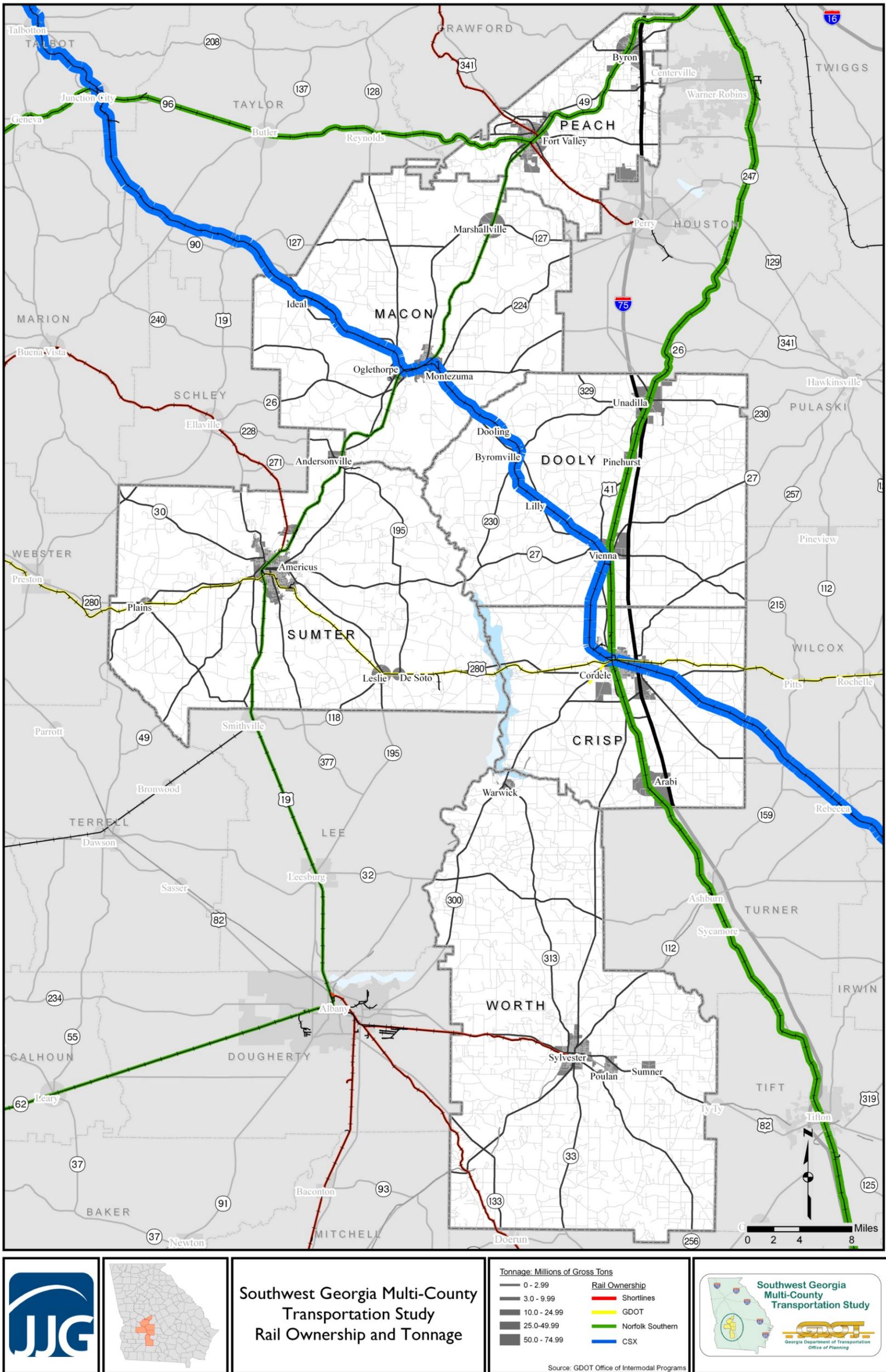
Historically, a number of thriving communities within the six-county study area were established along the railroad lines at key locations to serve commerce. Today, a number of these railroads continue serving the study area. Please see **Figure 4.5** on page 30 for a map of these railroads in the study area.

FIGURE 4.4: EXISTING AND PROPOSED BICYCLE ROUTES IN THE SIX-COUNTY STUDY AREA (2009)



		<p>Southwest Georgia Multi-County Transportation Study Existing and Planned Bike Routes</p>	<ul style="list-style-type: none"> — Existing Bike Route — Planned Bike Route Interstate State Highway Railroad City Boundary County Boundary <p><small>Sources: GDOT Bicycle and Pedestrian Program, Warner Robins Area Transportation Study, Middle Georgia, Middle Flint, and Southwest Georgia Regional Bicycle and Pedestrian Plans.</small></p>	
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FIGURE 4.5: RAIL OWNERSHIP AND TONNAGE (2005)



Two rail lines cross in Oglethorpe and Montezuma in Macon County. The first is a mainline operated by CSX and connects the Waycross Yard in Southeast Georgia to the Atlanta region via Cordele, Vienna and Montezuma. This line represents CSX main operation of moving freight north and west from the Ports of Savannah, Brunswick and Jacksonville. This rail line passes northwest-southeast through Macon County from Dooling, in Dooly County, through Montezuma, Oglethorpe, and Ideal and then into Taylor County.

The second line is operated by Norfolk Southern and connects Albany to Macon. This mainline has also been identified by GDOT's Intercity Rail program as a corridor for passenger service from Albany to Atlanta. This line passes through Macon County from Andersonville in Sumter County to the south, through Oglethorpe, Montezuma, and Marshallville, and then to Fort Valley in Peach County to the north.

4.5 PUBLIC TRANSPORTATION

Rural transit service can take the form of fixed-route, demand-responsive, or deviated fixed-route. Rural transit service can take the form of fixed-route, demand-responsive, or deviated fixed-route. A fixed-route system operates along a particular route according to a fixed schedule, such as a typical city bus service. A demand responsive system could include van services and shuttle bus systems that provide services only when or where they are required. Deviate fixed-route service combines aspect of both types of service by breaking from fixed-route service to make trips at other times or locations when requested.

The service is often infrequent and is designed to accommodate persons traveling for medical, shopping and other personal business needs rather than commuting. Service tends to be catered to the individual due to the clientele and number of requested trips. Service is usually open to the general public unless otherwise noted. Service hours tend to be limited to weekdays, with schedules designed to allow for same day return trips on days service is provided. In Oglethorpe, Macon County Transit provides transit services ((478) 472-9613).

4.6 SAFETY

Crashes occur most frequently at intersections, but can also occur along segments of a street or highway for many different reasons. Understanding where and why crashes occur is useful in measuring relative need and prioritizing projects. To pursue this end, crash data were analyzed using three distinct approaches.

First, a county analysis was conducted which compared crashes within each county to that of the state, per population, for the years 2000-2007. This analysis provides a generalized tool which compares each county relative to the likelihood of a crash occurring.

Second, an analysis was completed by road segment. Segment termini were established by using county lines, termini of a roadway facility, or location where a facility type changed. An example of a segment terminus would be the location where an urban arterial road facility type changed to a rural arterial, or from a local collector to an arterial, etc. Segments with crash rates higher than the state rate per 100 million vehicle miles (MVM) for their respective facility type were identified and noted. This analysis was conducted using the year 2007 data.

Facilities with high crash rates were compared to the statewide averages for their respective functional classifications. Functional classifications analyzed in this study were Urban Interstate, Rural Interstate, Urban Principal Arterial, Rural Principal Arterial, Rural Minor Arterial, Urban Collector, and Rural Major Collector.

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Rates were normalized for each segment by comparing crashes per 100 million vehicles miles (MVM). Crash, injury and fatality rates were compared against the average of similar facilities across the State of Georgia, as is industry standard.

The third process used to analyze crash information identified intersections throughout the six-county study area with consistently high numbers of reported crashes annually. GDOT funds the use of Critical Analysis Reporting Environment (CARE) software for crash data analysis in Georgia. CARE software was used in this study to examine reported crashes and their respective locations for the years 2000-2007. Intersections which averaged higher than five crashes per year between 2000 and 2007 were considered to experience relatively high crash rates.

High crash rates at intersections are generally the result of high traffic volumes and congestion, not poor intersection geometry. In almost all instances, high crash rate intersections are on the most heavily travelled roadways within a county. When intersections with safety concerns are identified by local input or field investigation, these intersection are compared with the list of high crash intersections in order to identify whether operational or geometric improvements are necessary.

From 2000 to 2007, three segments of Macon County experienced higher than state average crash rates when compared to roads of the same functional classification. All three segments were on the State Route system. Segments meeting these criteria included portions of Interstate 75, State Route 7/US 41 and State Route 215. **Table 4.5** below details segments and associated statistics.

TABLE 4.5: 2007 MACON COUNTY CRASH RATE BY ROADWAY SEGMENT

Highway			Crashes	Crash Rate (per 100 million vehicle-miles (MVM))		Injuries
GDOT Route Number	Functional Classification	Beg MP - End Mp	Number	Macon County Road Segment	Statewide Avg.	Number
SR 49	Rural Minor Arterial	8.3 - 12.8	11	194	154	7
SR 26	Rural Minor Arterial	11.0 - 14.2	11	161	154	6
SR 90	Rural Minor Arterial	3.5 - 8.3	9	161	154	6

Source: CARE Data 2000-2007

Five Macon County intersections were identified as having more crashes than other intersections in the county, all of which involved at least one roadway on the State Route System. Three locations were in unincorporated Macon County, one in Oglethorpe and one in Montezuma. **Table 4.6** on page 33 provides a list of crashes and other information for each of the hotspot intersections. Please see **Figure 4.6** on page 34 for a map identifying locations of each intersection. Intersections are difficult to compare to one another over time and space, due to the differences in roadway types, intersection geometries, and factors such as signalization and sight-distance. GDOT maintains statewide crash rates for intersections by type; however, for the purposes of this study, intersection crash rates were compared within the county.

High crash rates at intersections are generally the result of high traffic volumes and congestion, not poor intersection geometry. In almost all instances, high crash rate intersections are on the most heavily travelled roadways within a county. High rates of accidents on segments or intersections may not be indicative of skewed geometry and may not be open to remediation based on geometric redesign.

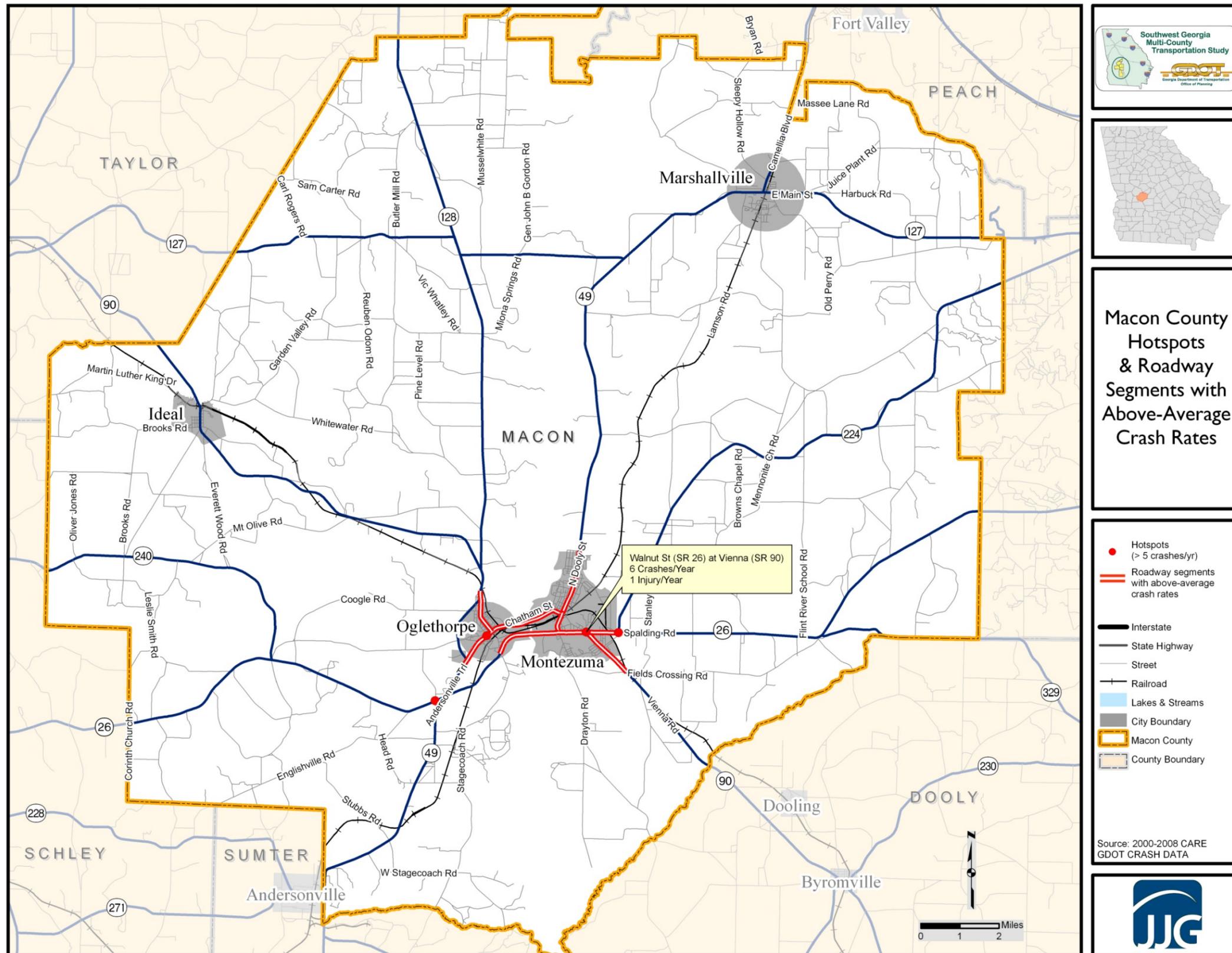
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TABLE 4.6: MACON COUNTY HOTSPOTS

Intersection Location			Total (2000-2007)			Annual Average		
Location	Milepost	City	Crash	Injury	Fatality	Crash	Injury	Fatality
Walnut Street(SR 26) at Vienna Road (SR 90)	12.39	Montezuma	46	17	0	6	2	0
Cheatham Street(SR 49) at Randolph Street	9.06	Oglethorpe	33	12	0	4	2	0
SR 26 at Cooks Mill Road	8.77	Macon Rural	26	20	0	3	3	0
SR 26 at SR 224	13.9	Macon Rural	18	9	0	2	1	0
SR 224 at Mennonite Ch Rd	2.7	Macon Rural	15	16	1	2	2	0

Source: CARE Data 2000-2007

FIGURE 4.6: HOTSPOTS AND ROADWAY SEGMENTS WITH ABOVE-AVERAGE CRASH RATES IN MACON COUNTY (2000-2007)



5. EXISTING AND FUTURE TRAFFIC CONDITIONS

In order to evaluate existing and future traffic conditions on roadways within each study county, a travel demand model was developed for the entire six-county study area. A travel demand model is a computer model used to estimate traffic volumes and travel patterns utilizing study area information such as roadway networks, land use information, and demographic data including population and employment. The travel demand model originally developed for the Southwest Georgia Interstate Study (2009) was modified and recalibrated for use in this study. The base, or existing, model year utilized was 2006 since this is the most recent year for accurate employment data from the Georgia Department of Labor. The future, or horizon, year utilized for this study was 2035.

The travel demand model was utilized to determine traffic conditions on all six-county study area roadways for base (2006) and horizon year (2035). Traffic conditions on study roadways are evaluated based on a Level-of-Service (LOS) analysis. LOS is a qualitative measure describing operational conditions and driver perceptions within a traffic stream. According to the 2000 Highway Capacity Manual (2000 HCM), six LOS are defined for each type of facility. Letters designate each level, from A to F, with LOS A representing free-flow conditions with minimal delay and LOS F representing severe congestion with long vehicle delays. **Figure 5.1** on page 36 presents a graphical representation of the six levels of service.

LOS for a roadway segment is based on the volume to capacity (V/C) ratio. V/C compares the traffic volumes on a roadway with the carrying capacity of that segment of road. V/C is the quantitative measure generated by the travel demand model that is utilized to determine the LOS of a roadway segment. The threshold for each LOS based on V/C is presented in **Table 5.1** below.

TABLE 5.1: LEVEL OF SERVICE THRESHOLDS

Level of Service (LOS)	Volume/Capacity Ratio
LOS A, B, C	$V/C < 0.75$
LOS D	$0.75 \leq V/C < 0.85$
LOS E	$0.85 \leq V/C < 1.00$
LOS F	$V/C \geq 1.00$

The travel demand model was utilized to identify existing and future roadway segments with deficient LOS. For planning level analysis, GDOT considers LOS C or better to be acceptable and considers LOS D, E, or F to be deficient. When developing long range transportation plans in rural counties, GDOT strives to provide LOS C or better for all study roadways. This section presents the existing (2006) and future (2035) traffic conditions for Macon County.

5.1 EXISTING (2006) TRAFFIC CONDITIONS

Under existing conditions, all roadways within Macon County operate at an acceptable LOS (C or better). There are currently no roadway segments that operate at an unacceptable LOS (D or worse). As presented in **Figure 5.2** on page 37, there are no deficient roadway segments in Macon County under existing conditions.

FIGURE 5.1: REPRESENTATION OF LOS

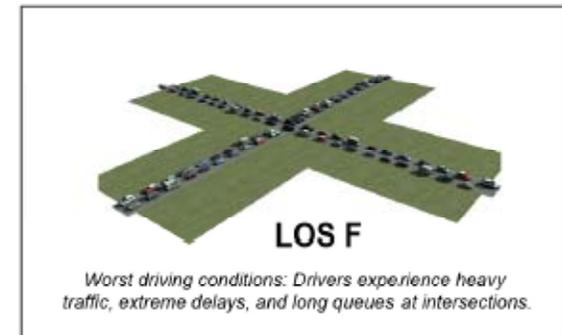
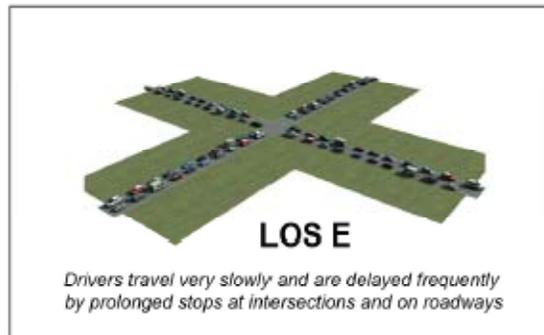
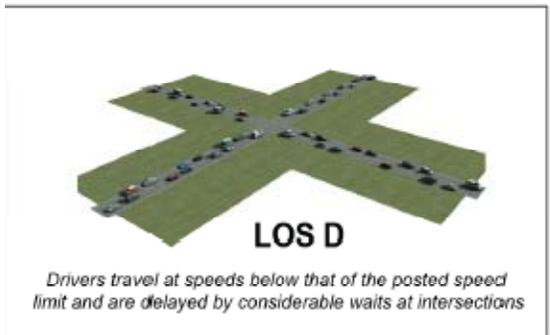
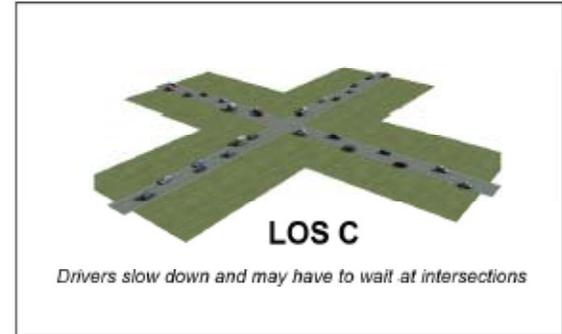
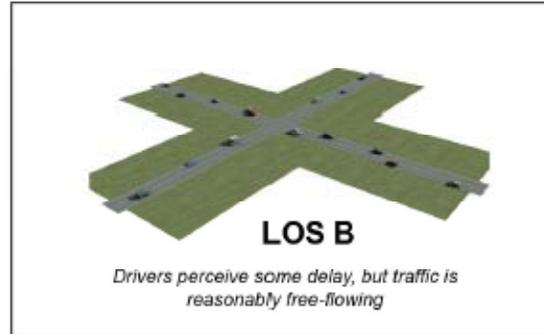
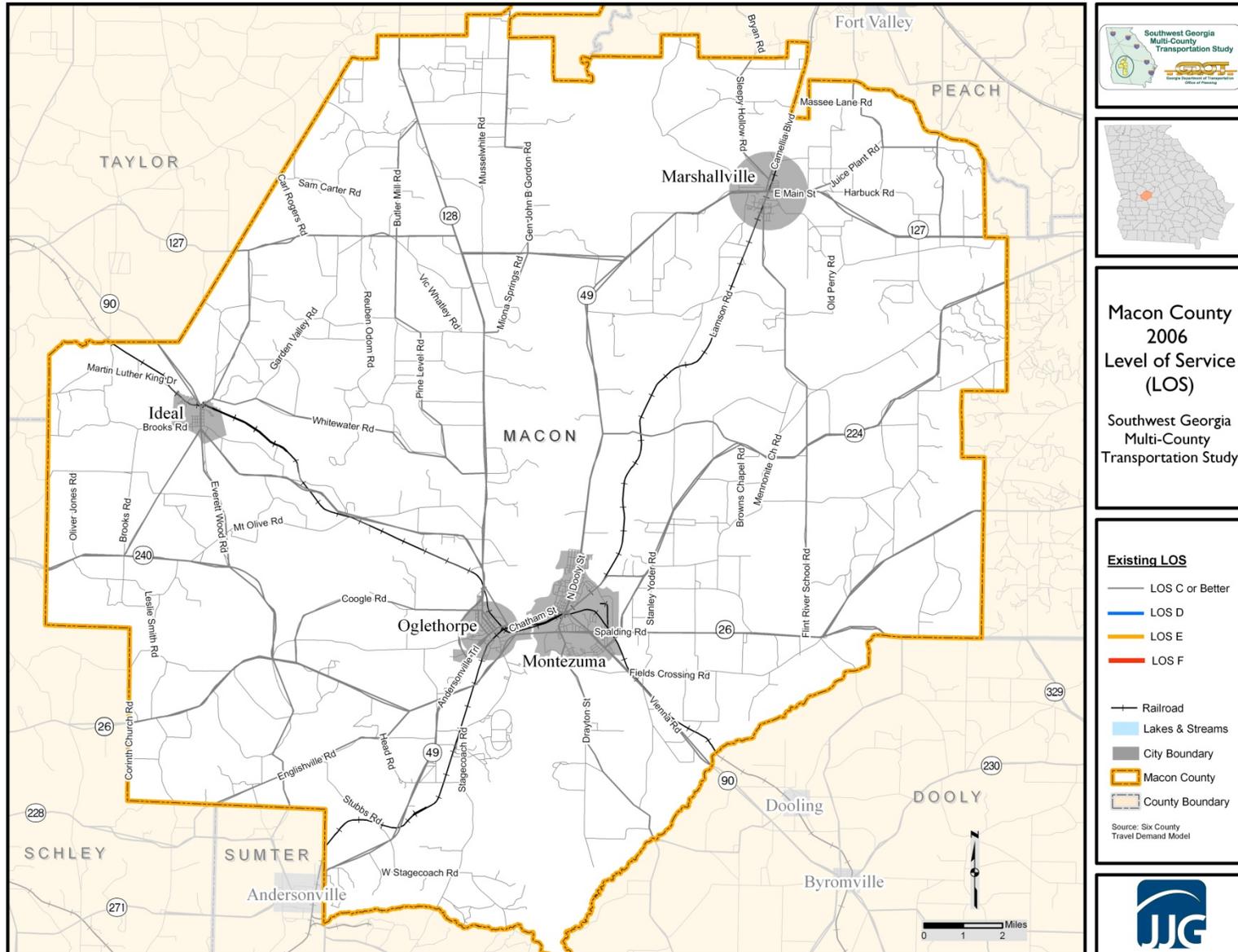


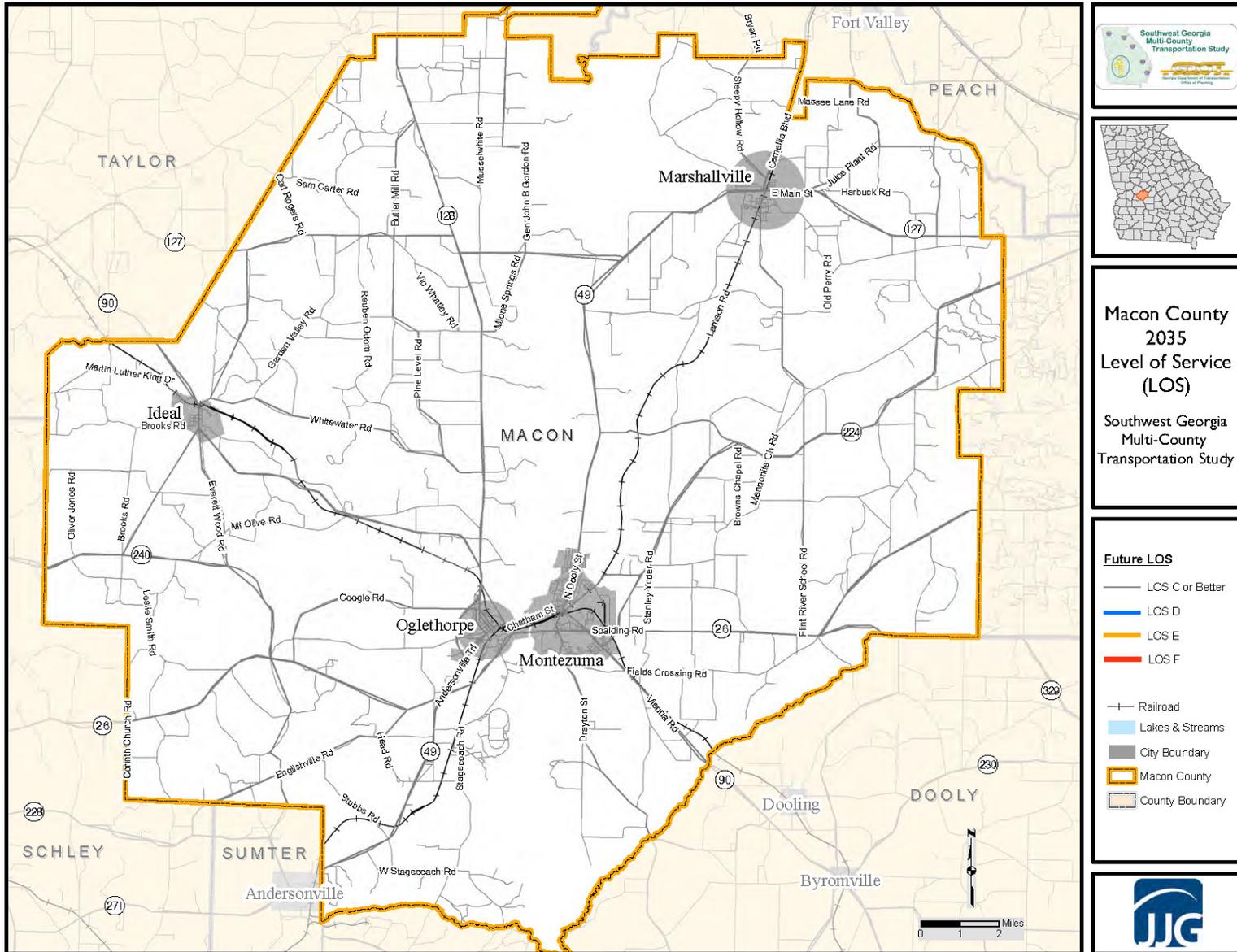
FIGURE 5.2: EXISTING (2006) DEFICIENT ROADWAY SEGMENTS IN MACON COUNTY



5.2 FUTURE (2035) TRAFFIC CONDITIONS

Under future (2035) conditions, all roadways within Macon County are expected to operate at an acceptable LOS (C or better). As presented in **Figure 5.3** on page 39, there are no deficient roadway segments in Macon County under future conditions. Since the population of Macon County is expected to decline slightly in the future, no roadway segments were expected to be deficient by 2035.

FIGURE 5.3: FUTURE (2035) DEFICIENT ROADWAY SEGMENTS IN MACON COUNTY



6. GDOT PLANNED AND PROGRAMMED PROJECTS

This section presents the projects planned and programmed for Macon County from the GDOT STIP (2008-2011) and Work Program.

6.1 GDOT STIP (2008-2011) AND WORK PROGRAM

GDOT maintains two lists of transportation improvement projects, the State Transportation Improvement Program (mandated by the federal government) and the Work Program. The following paragraphs explain the differences between the two programs.

- The GDOT STIP for the 2008-2011 period– includes a list of federally funded and state funded priority transportation project elements (Preliminary Engineering, Right-of-Way, or Construction) proposed to be carried out in the current and next three years (a four-year plan). It is financially constrained (dollar value of projects programmed is equal to the anticipated revenues per program year), and includes projects consistent with the Statewide Transportation Plan. The GDOT STIP is approved by the FHWA and Federal Transit Administration (FTA) and includes all TIP projects as adopted by the Metropolitan Planning Organizations (MPO) and approved by the Governor.
- The Work Program is a listing of identified transportation projects that are eligible for federal and state funding with all project phases scheduled beyond the current GDOT STIP outside the fiscal years of the GDOT STIP.

Improvements listed in the GDOT STIP (2008-2011) and Work Program include improvements to transit, pedestrian and bicycle facilities, airports, and roadways. Those improvements applicable to pedestrian and bicycle facilities are covered in that section of this document. Roadway improvements planned within the study are listed in this section.

6.2 GDOT PLANNED AND PROGRAMMED PROJECTS FOR MACON COUNTY

Table 6.1 on page 41 and **Figure 6.1** on page 42 present the projects and their descriptions as listed in the current GDOT STIP (2008-2011) and Work Program for Macon County, including the type of work, funding source, and programmed date for each.

Projects that utilize lump sum funding originate with exclusive federal and state funding and are administrated by the GDOT. A portion of the GDOT STIP funding is set aside for non-capacity projects in the following categories.

- Maintenance
- Safety
- Preliminary Engineering
- Roadway/Interchange Lightning
- Right of Way
- Transportation Enhancement
- Appalachia Local Access Road Program

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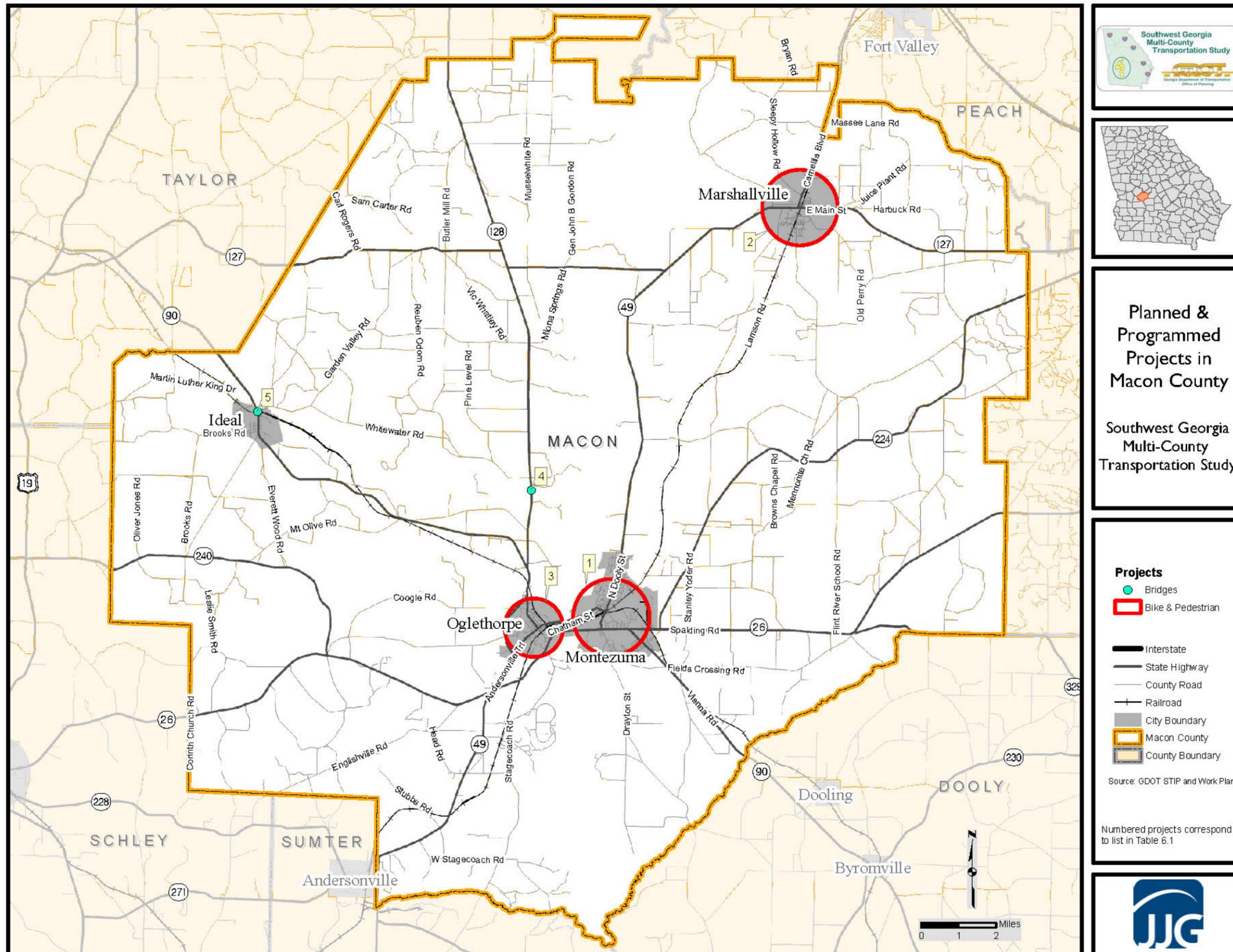
TABLE 6.1: GDOT PLANNED AND PROGRAMMED PROJECTS IN MACON COUNTY

Note: The most current project schedule can be found on Transportation Explorer under the Quick links sections of the Department's homepage (www.dot.ga.gov)..

Map No.	GDOT PI No.	Work Type	Description	Programmed Date	Primary Funding Source
1	0007594	Bike/Ped Facility	Sidewalks: Lighting and landscaping in Montezuma	2010	Federal
2	00009106	Bike/Ped Facility	Marshallville Downtown Streetscape	LUMP	Federal
3	00009107	Bike/Ped Facility	Oglethorpe Downtown Streetscape	LUMP	Federal
4	0007042	Bridge Replacement	SR 128@ Whitewater Creek 4 miles north of Oglethorpe	Beyond 2011	Federal
5	322285	Bridge Replacement	SR 90 @ CSX RR South of Ideal near CR 57	2010	Federal
Not on map	0009230	New Construction	Access Road in Montezuma	2010	Federal

Source: GDOT

FIGURE 6.1: GDOT PLANNED AND PROGRAMMED PROJECTS IN MACON COUNTY FROM WORK PROGRAM AND STIP 2008-2011



7. LOCAL INPUT

This section presents the public involvement activities conducted for the Southwest Georgia Multi-County Transportation Study and the resulting input. A complete record of Public Involvement activities can be found in **Appendix C**.

7.1 AGENCY INPUT

On December 3, 2008, GDOT held Agency Kickoff Meetings for the Southwest Georgia Multi-County Transportation Study. Due to the size of the study area, two meetings were held—one in the north of the study area, one in the south. The first meeting took place at 10 a.m. at the Fairfield Inn in Cordele, Georgia, and the second, at 2:30 pm at the Flint Area Housing Authority conference room in Montezuma, Georgia.

Including GDOT and study staff, those attending the meetings were:

Robert Hughes, GDOT	Jenny Lee, JJG
Radney Simpson, GDOT	Perry Ivie, City of Unadilla
Pat Smeeton, JJG	Shane Pridgen, GDOT 4 th District
Jimmy Watson, Macon County Board of Commissioners	Gene Crapse, Crisp County Board of Commissioners
Audra Rojek, JJG	Bryan Barnett, Southwest Georgia RC
Inga Kennedy, PEQ	Carl Gamble, Crisp County Public Works
Jean Burnnett, City of Cordele	Stephen Sanders, Dooly County
Bob Rychel, Middle Georgia RC	Gerald Mixon, River Valley RC
Deborah Bridges, City of Sylvester	Michael Sudduth, Sumter County Planning and Zoning
Charles West, City of Unadilla	

The meeting began with introductions. Pat Smeeton, a consultant on the study team, then made a presentation about the nature of the study and the purpose of the meeting, copies of which were given to attendees. Attendees broke into groups and provided information about the transportation needs of the counties and cities that they represent. The input for each county from meeting attendees was summarized and used to create maps of perceived needs areas within each county.

Agency members were then asked to fill out questionnaires and provide suggestions for membership on the study's Advisory Committee, potential stakeholder interviewees, and goals and objectives of the study. Lastly, in order to inform more people about the study and to collect public input, Fact Sheets were given to attendees for them to distribute in the areas they represent.

7.2 ADVISORY COMMITTEE

The Advisory Committee was assembled for this study from state and local agency staff from across the six-county study area. The committee provided guidance and strategic direction to the study, primarily through setting the project's goals and objectives. The committee met twice over the course of the study.

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Each meeting was held twice on the same day in separate locations to accommodate committee members from across the study area.

The first pair of Advisory Committee meetings were held on July 9, 2009, at 10:30 am at the Marriott Fairfield Inn and Suites in Cordele and at 1:30 pm at the Flint Area Consolidated Housing Authority in Montezuma. Including GDOT and study staff, those attending the meetings were:

Robert Hughes, GDOT	Pat Smeeton, JJG
Radney Simpson, GDOT	Erik Kruszewski, JJG
Rickey Blaylock, Peach County Zoning	Jimmy Watson, Macon County Public Works
John G. Turner, Macon County Planning & Zoning	Raymond Bridges, Sumter County Public Works
Marcia Johnson, Peach County Administrator	Willie Young, Sumter County Public Works.
Billie Segars, Peach County Public Works	Bryan Barnett, Southwest Georgia RC
Ralph Nix, Middle Georgia RC	Shane Pridgen, GDOT
Michael McDonald, GDOT	

Robert Hughes opened the meeting and began introductions. Then Pat Smeeton gave a presentation on the purpose of the study and progress made to date. The committee reviewed and commented upon the draft study goals that Mr. Smeeton presented. These goals are presented in the following section. After the presentation, the floor was opened to the questions and comments of meeting attendees. Areas that locals felt needed improvements were noted and added to the locally-identified needs areas for analysis.

The second Advisory Committee meetings were held March 25, 2010, at the same times and locations as the first round of meetings. Those attending the meetings were:

Kelly Gwin, GDOT	Pat Smeeton, JJG
Radney Simpson, GDOT	Audra Rojek, JJG
Cindy VanDyke, GDOT	Shane Pridgen, GDOT
Rickey Blaylock, Peach County Zoning	Robert McDaniel, Southwest Georgia RC
John G. Turner, Macon County Planning & Zoning	Bob Rychel, Middle Georgia RC
Brent Thomas, GDOT	Gerald Mixon, River Valley RC
Van Mason, GDOT	Carl Gamble, Crisp County Public Works
David Sparks, GDOT	Michael Sudduth, Sumter County Zoning Administration
Brink Stokes, GDOT	

Kelly Gwin opened the meeting by introducing herself as the new project manager and reviewing the purpose of the study. She then introduced Pat Smeeton, who gave a presentation on the means by which the study determined transportation needs in the study area, as well as the study findings. Maps of study recommendations were presented by county in posters for committee review and discussion. Committee feedback from this meeting called for the addition of study recommendations in Sumter County.

7.3 TRANSPORTATION GOALS AND OBJECTIVES

The goals and objectives of this study were prepared from a review of the goals and objectives of local studies and from guidance from stakeholders, primarily those on the Advisory Committee. The goals were determined to be as follows:

- Assure a safe and efficient street and highway network throughout the six-county study area.
- Develop transportation improvements to support desired development patterns for the community.
- Improve roadway network to accommodate vehicle circulation and provide pedestrian & bicycle connections to activity centers

7.4 STAKEHOLDER INTERVIEWS

Members of the study team met with stakeholders individually to obtain additional information about the needs of each county. Stakeholder input is summarized in **Appendix C**. Areas that were perceived by stakeholders to be in need of transportation improvements are included in the Locally-Identified Transportation Needs Areas map at the end of this section.

7.5 FACT SHEETS AND PUBLIC RESPONSE

Fact Sheets for the study were distributed at the Agency Kickoff Meeting, the Advisory Committee Meeting, and throughout the six-county study area at 45 locations where stakeholders and residents were likely to access them, such as libraries, colleges, chambers of commerce and city halls. A complete list of facilities at which newsletters were distributed is provided in **Appendix C**.

The Fact Sheet explained the purpose of the study and the process by which it would be undertaken, including the study schedule. It also reviewed the many ways the public would be involved in the study, including stakeholder interviews, the Advisory Committee, and the study webpage on the GDOT website.

In addition, inside each Fact Sheet was a stamped questionnaire that residents could fill out, seal, and return to the study team. The study collected ten questionnaires from stakeholders and residents. These responses were collected and added to the Locally Identified Transportation Needs Areas map found at the end of this section.

7.6 MACON COUNTY LOCALLY IDENTIFIED TRANSPORTATION ISSUES AND NEEDS

Stakeholder input from the Agency Kickoff Meeting, Advisory Committee Meeting, stakeholder interviews, and responses to Fact Sheet questionnaires was mapped to create a visual representation of each county's transportation conditions. During the assessment phase, these maps assisted the study team in locating those areas where improvements should be recommended. The issues and needs reported below are numbered in correspondence with the Locally Identified Transportation Issues and Needs map in **Figure 7.1** on page 47.

Roadway Issues and Needs [REDACTED]

1. Widening of Drayton Road, which provides access to recreational uses (GA Veterans State Park in Cordele), is needed.
2. Wear at the roads intersecting around the Macon County High School and Flint River Shipping Center in Montezuma is excessive. Huge ruts have been grooved into the asphalt at SR 26, SR 90, and Spaulding and Walnut Streets. Large trucks in the area wrinkle the pavement. Striping is worn out.
3. There is heavy traffic on SR 127 from Marshallville to I-75 in Perry.

Safety/Pedestrian and Bicycle Issues and Needs [REDACTED]

4. Operational improvements are needed at the intersection of SR 49 at Dooly St. Also, a crosswalk safety indicator is needed on the north side of the Norfolk Southern track for the crosswalk leading across Dooly Street from Railroad Street.
5. The intersection of SR 90 and SR 26 near the high school has a sharp angle for north- and southbound right turns. A channelized right turn lane for the northbound movement is also needed at this intersection.
6. Stage Coach Road at SR 26 is at a very sharp angle which makes it difficult to see at this intersection.
7. There is a popular doctor's office complex off SR 26 between Oglethorpe and Montezuma that has no deceleration lane for right turns. Since traffic moves quickly along this road, turning traffic at this location may cause accidents.
8. The pedestrian greenway along the Beaver Creek Levy adjacent to the CSX track is suffering erosion that is undermining the levy, the water treatment plan beside it, the walkway and the railroad track.

Not shown on map: Currently, there are no designated bicycle routes in Macon County.

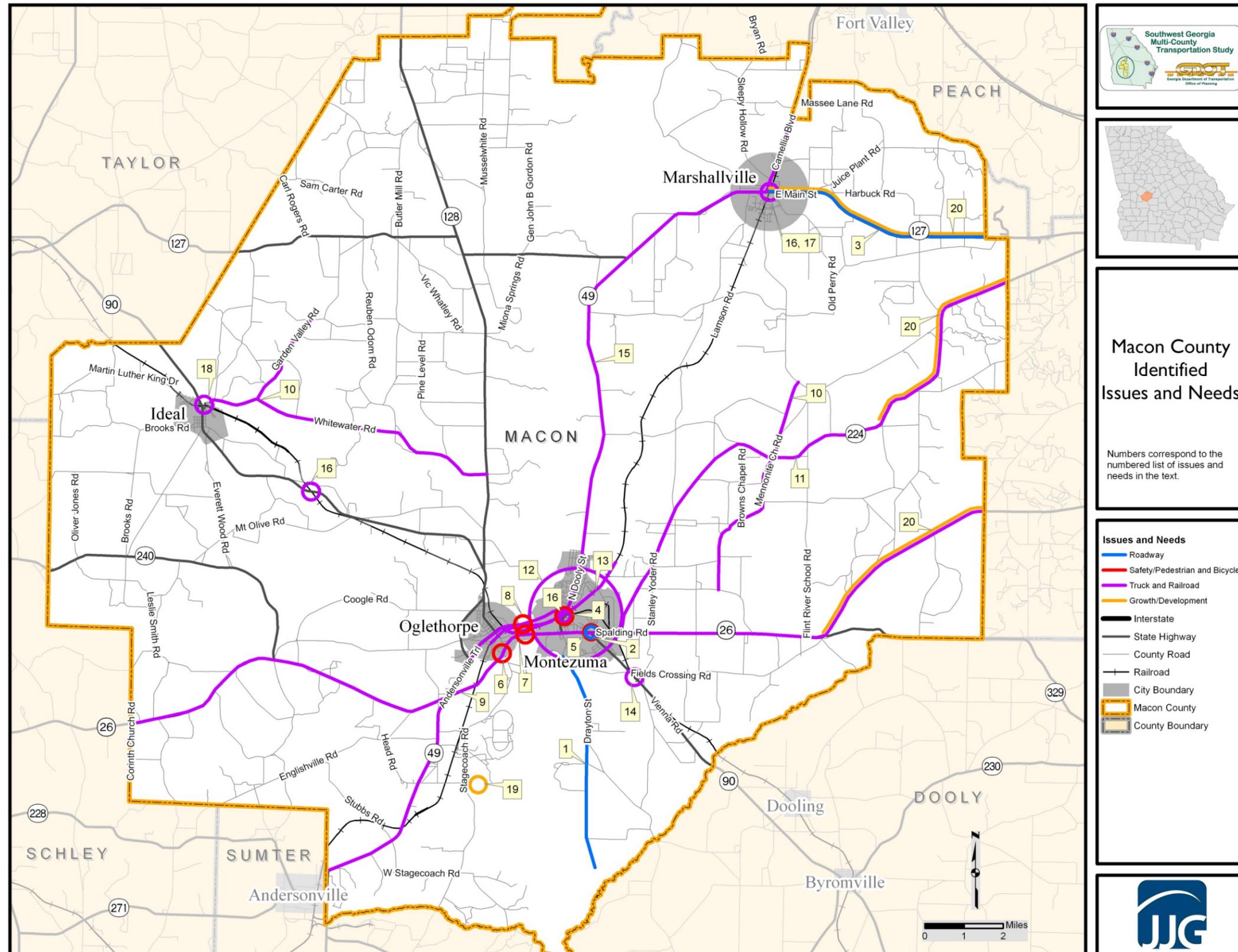
Truck and Railroad Issues and Needs

9. Heavy truck traffic on SR 26. SR 26 is a two lane road that provides a passing lane on a few sections of the roadway, and may need widening in the future.
10. Many local roads (only 19-20 ft wide) carry heavy truck volumes. These roads need improvement to accommodate large trucks. Roads include Whitewater Road, Garden Valley Road, and Mennonite Church Road.
11. SR 224 carries a large number of trucks, more truck traffic than it was designed for, and it has some sunken sections. SR 224 is also pretty crooked and could perhaps use a passing lane.
12. There are two active railroads in Montezuma, including a CSX line that has over 20 trains a day. A grade separated crossing of the railroad may be necessary in Montezuma.
13. Currently, a large number of trucks go through the City of Montezuma via SR 49 to SR 224. Keeping trucks out of the City is a major concern.
14. The at-grade crossing at Fields Crossing Road, and others in the county, need improved RR signage, signals, and gates. Some of the rail crossings have high vertical elevations with limited sight distances.
15. Trucks use SR 49 frequently.
16. At the railroad crossings at SR 49, SR 90, and Dooly Street, the railroad ties are gouged out and railroad spikes protrude above grade. These areas have been patched with asphalt few times, but the heavy truck traffic is too intense for these to remain in place for more than a few hours at a time.
17. There is heavy truck traffic from nearby sand mines at the SR 49 railroad crossing in Marshallville.
18. There is an at-grade railroad crossing in Ideal that was recently rebuilt by the railroad and raised above the roadway. Trucks can get hung up here, and if no one alerts the railroad, wrecks may ensue.

Growth/Development Issues and Needs

19. Weyerhaeuser Co., a wood products company located south of Oglethorpe, produces over 500 trucks daily. (Estimated at 250 trucks in per day, 250 out.)
20. Some development occurred on SR 127 and SR 224 east of Marshallville, due to Houston County spillover, as well as some from Fort Valley. SR 26 also had a little growth.

FIGURE 7.1: MACON COUNTY LOCALLY-IDENTIFIED ISSUES AND NEEDS



Macon County Identified Issues and Needs

Numbers correspond to the numbered list of issues and needs in the text.

Issues and Needs

- Roadway
- Safety/Pedestrian and Bicycle
- Truck and Railroad
- Growth/Development
- Interstate
- State Highway
- County Road
- Railroad
- City Boundary
- Macon County
- County Boundary



8. RECOMMENDATIONS FOR MACON COUNTY

This section presents the recommended transportation projects for Macon County based on the analysis completed as part of this study. The type of projects considered included:

- Capacity Improvements (roadway widenings or new roadways)
- Operational Improvements (interchange or intersection improvements, traffic signal)
- Safety Improvements (roadway or intersection realignments)
- Bridge Replacement or Rehabilitation
- Pedestrian or Bicycle Improvements
- Maintenance

This section describes how these projects were identified, analyzed, and how their cost was estimated. The final list of projects identified within Macon County is presented with project sheets providing additional information about each proposed improvement. An inventory of potential funding sources to support the list of proposed improvements is included at the end of this section.

8.1 METHODOLOGY

Findings from the existing and future conditions, travel demand model projections, field observations, and public and agency input were analyzed to determine the need for potential transportation projects. Due to the six-county size of the study area, bicycle and pedestrian needs identified over the course of this study have been forwarded to the appropriate Regional Commission for review and possible inclusion in their respective regional bicycle and pedestrian plan updates. Locations identified by local agencies and the public as potentially in need of traffic signals, maintenance, or safety measures have been forwarded to the appropriate GDOT District Engineers. Please note that this is a planning-level study, not an official engineering study, and comments or recommendations herein are not a verified reflection of any needed improvements.

The final project recommendations for Macon County can be classified as operational improvements. Operational improvements are projects that seek to address congestion or safety concerns at intersections or interstate interchanges. These are not roadway segments that need widening, rather, they are bottlenecks in the roadway network that reduce mobility and cause congestion. These projects were identified through local input and field observation. Operational improvements range from the reconstruction of a congested interstate interchange to the addition of turn lanes at a busy intersection.

8.1.1 COST ESTIMATION

Costs were estimated using GDOT Right-of-Way and Utility Relocation Cost Estimate Tool (RUCEST) and Trns-port Cost Estimation System Tool (CES) Software. In addition, Preliminary Engineering costs were set at eight percent of construction costs. Individual assumptions for each project can be found in **Appendix B: Cost Estimates**.

To determine right of way costs, a survey of the project area was conducted using aerial photography and field investigation for adjacent land use types, presence of utilities and potential impacts to homes, businesses and institutions. This information was entered into RUCEST, which determined costs for right of way acquisition based on land use type and county given the additional or new right of way requirements for the project. RUCEST estimated utility relocation costs by utility type and location, and

relocation and improvement costs based on market history. Contingency costs were added to right of way estimates, to cover damages (30 percent), scheduling (55 percent), and administration and court costs (60 percent, all costs cumulative). The resulting right of way and utility cost estimates were included when developing total project costs.

Construction costs were based on width, length and roadway functional classification, to which costs for additional or replacement traffic signals, turn lanes and bridges were added as needed. Turn lanes were included in cost estimates for major intersections or where intersection improvements were deemed necessary. Likewise, traffic signals were included at intersections where widening or other improvements would require their replacement or where they were deemed necessary as an intersection improvement.

In CES, costs for turn lanes were estimated using the same price per ton for asphalt and base/aggregate as the main project; these prices were estimated by CES given size and location of the project. Cost estimates for bridges were determined by CES based on materials costs and historic data. CES construction estimates were utilized in the development of total project costs, which included right of way, utility relocation, and preliminary engineering costs.

8.2 RESPONSE TO LOCALLY-IDENTIFIED NEEDS

During the public involvement process, study stakeholders and the general public were invited to identify transportation needs as they perceived them in the counties in which they live, play and work. These locally identified needs are presented and mapped in Section 8. Each of the perceived needs was then considered for transportation improvements by this study. **Table 8.1** below provides a response to each locally identified need, including projects proposed by this study.

TABLE 8.1: RESPONSES TO LOCALLY-IDENTIFIED NEEDS

Locally Identified Need	Recommended Activities
Widening of Drayton Road, which provides access to recreational uses (GA Veterans State Park in Cordele), is needed.	Projected 2035 traffic volumes do not exceed 2,000 ADT south of Montezuma. As these volumes correspond to LOS C or better for this roadway segment, widening is not justified and is not recommended.
Wear at the roads intersecting around the Macon County High School and Flint River Shipping Center in Montezuma is excessive. Huge ruts have been grooved into the asphalt at SR 26, SR 90, and Spaulding and Walnut Streets. Large trucks in the area wrinkle the pavement. Striping is worn out.	This concern has been forwarded to the GDOT District Area Engineer for further study and appropriate maintenance.
There is heavy traffic on SR 127 from Marshallville to I-75 in Perry.	Projected 2035 traffic volumes do not exceed 8,000 ADT west of Perry. As these volumes correspond to LOS C or better for this roadway segment, widening is not justified and is not recommended.
Operational improvements are needed at the intersection of SR 49 at Dooly St. Also, a crosswalk safety indicator is needed on the north side of the Norfolk Southern track for the crosswalk leading across Dooly Street from Railroad Street.	Roadway realignment or operational improvements at the intersection of SR 49 and Dooly street are recommended by this study.

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Locally Identified Need	Recommended Activities
<p>The intersection of SR 90 and SR 26 near the high school has a sharp angle for north- and southbound right turns. A channelized right turn lane for the northbound movement is also needed at this intersection.</p>	<p>Operational improvements at the intersection of SR 90 and SR 26 are recommended by this study.</p>
<p>Stage Coach Road at SR 26 is at a very sharp angle which makes it difficult to see at this intersection.</p>	<p>The intersection of Stage Coach Road and SR 26 does not have a high rate of accidents. No improvements are recommended at this location.</p>
<p>The pedestrian greenway along the Beaver Creek Levy adjacent to the CSX track is suffering erosion that is undermining the levy, the water treatment plan beside it, the walkway and the railroad track.</p>	<p>This concern regarding pedestrian facilities has been forwarded to the River Valley RC for study and possible inclusion in the regional bicycle and pedestrian plan update.</p>
<p>Heavy truck traffic on SR 26. SR 26 is a two lane road that provides a passing lane on a few sections of the roadway, and may need widening in the future.</p>	<p>Projected 2035 traffic volumes do not exceed 7,500 ADT. As these volumes correspond to LOS C or better for this roadway segment, widening is not justified and is not recommended.</p>
<p>Many local roads (only 19-20 ft wide) carry heavy truck volumes. These roads need improvement to accommodate large trucks. Roads include Whitewater Road, Garden Valley Road, and Mennonite Church Road.</p>	<p>This concern has been forwarded to the GDOT Area Engineer for further study and appropriate maintenance.</p>
<p>SR 224 carries a large number of trucks, more truck traffic than it was designed for, and it has some sunken sections. SR 224 is also pretty crooked and could perhaps use a passing lane.</p>	<p>Current and projected 2035 truck and traffic volumes on SR 224 are insufficient to necessitate widening. Grade concerns have been forwarded to the GDOT District Area Engineer.</p>
<p>There are two active railroads in Montezuma, including a CSX line that has over 20 trains a day. A grade separated crossing of the railroad may be necessary in Montezuma.</p>	<p>Safety concerns have been forwarded to GDOT District Area Engineer as well as the GDOT State Utilities office for study. However, the intersection at the CSX rail line does not have a high occurrence of accidents and no improvements are recommended.</p>
<p>Currently, a large number of trucks go through the City of Montezuma via SR 49 to SR 224. Keeping trucks out of the City is a major concern.</p>	<p>Current and projected 2035 truck and traffic volumes on SR 49 are insufficient to require the construction of a bypass and none is recommended.</p>
<p>The at-grade crossing at Fields Crossing Road, and others in the county, needs improved RR signage, signals, and gates. Some of the rail crossings have high vertical elevations with limited sight distances.</p>	<p>Safety concerns have been forwarded to GDOT District Area Engineer as well as the GDOT State Utilities office for study.</p>

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Locally Identified Need	Recommended Activities
At the railroad crossings at SR 49, SR 90, and Dooly Street, the railroad ties are gouged out and railroad spikes protrude above grade. These areas have been patched with asphalt few times, but the heavy truck traffic is too intense for these to remain in place for more than a few hours at a time.	This concern has been forwarded to the GDOT Area Engineer for further study and appropriate maintenance.
There is an at-grade railroad crossing in Ideal that was recently rebuilt by the railroad and raised above the roadway. Trucks can get hung up here, and if no one alerts the railroad, wrecks may ensue.	This concern has been forwarded to the GDOT Area Engineer for further study and appropriate maintenance.

8.3 CURRENTLY IDENTIFIED PROJECTS

One mission of the Southwest Georgia Multi-County Transportation Study was to assess currently identified projects, or those projects listed in the GDOT STIP (2008-2011) and Work Program, for their efficacy in remedying the transportation problems of their area. The assessment of currently identified projects in Macon County is presented in **Table 8.2** below.

TABLE 8.2: CURRENTLY IDENTIFIED PROJECTS IN MACON COUNTY

GDOT PI No.	Work Type	Description	Recommendation
0007594	Bike/Ped Facility	Sidewalks: Lighting and landscaping in Montezuma	Project addresses previously identified pedestrian and bicycle needs; recommend its continued inclusion in GDOT STIP/Work Program.
00009106	Bike/Ped Facility	Marshallville Downtown Streetscape	Project addresses previously identified pedestrian and bicycle needs; recommend its continued inclusion in GDOT STIP/Work Program.
00009107	Bike/Ped Facility	Oglethorpe Downtown Streetscape	Project addresses previously identified pedestrian and bicycle needs; recommend its continued inclusion in GDOT STIP/Work Program.
0007042	Bridge Replacement	SR 128@ Whitewater Creek 4 miles north of Oglethorpe	This bridge has a sufficiency rating of 47.2 and provides access and connectivity within the local roadway network. This project's continued inclusion in the GDOT STIP/Work Program is recommended.
322285-	Bridge Replacement	SR 90 @ CSX RR South of Ideal near CR 57	This bridge has a sufficiency rating of 36.5 and provides access and connectivity within the local roadway network. This project's continued inclusion in the GDOT STIP/Work Program is recommended.
M003929	Resurface & Maintenance	SR 26 From SR 49 TO E OF CR 15/Stagecoach Road	Project addresses previously identified maintenance issue; its continued inclusion in GDOT STIP/Work Program is recommended.
M003930	Resurface & Maintenance	SR 49 From W OF CS 600 TO E OF CS 602 in Montezuma	Project addresses previously identified maintenance issue; its continued inclusion in GDOT STIP/Work Program is recommended.

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GDOT PI No.	Work Type	Description	Recommendation
M003931	Resurface & Maintenance	SR 90 From SR 26 TO SR 49 in Montezuma	Project addresses previously identified maintenance issue; its continued inclusion in GDOT STIP/Work Program is recommended.
M003471	Maintenance	Macon County SR 23/Flint River Scour Repair	Project addresses previously identified maintenance issue; its continued inclusion in GDOT STIP/Work Program is recommended.
0009230	New Construcion	Access Raod in Montezuma	Project addresses previously identified access issue; its continued inclusion in GDOT STIP/Work Program is recommended.

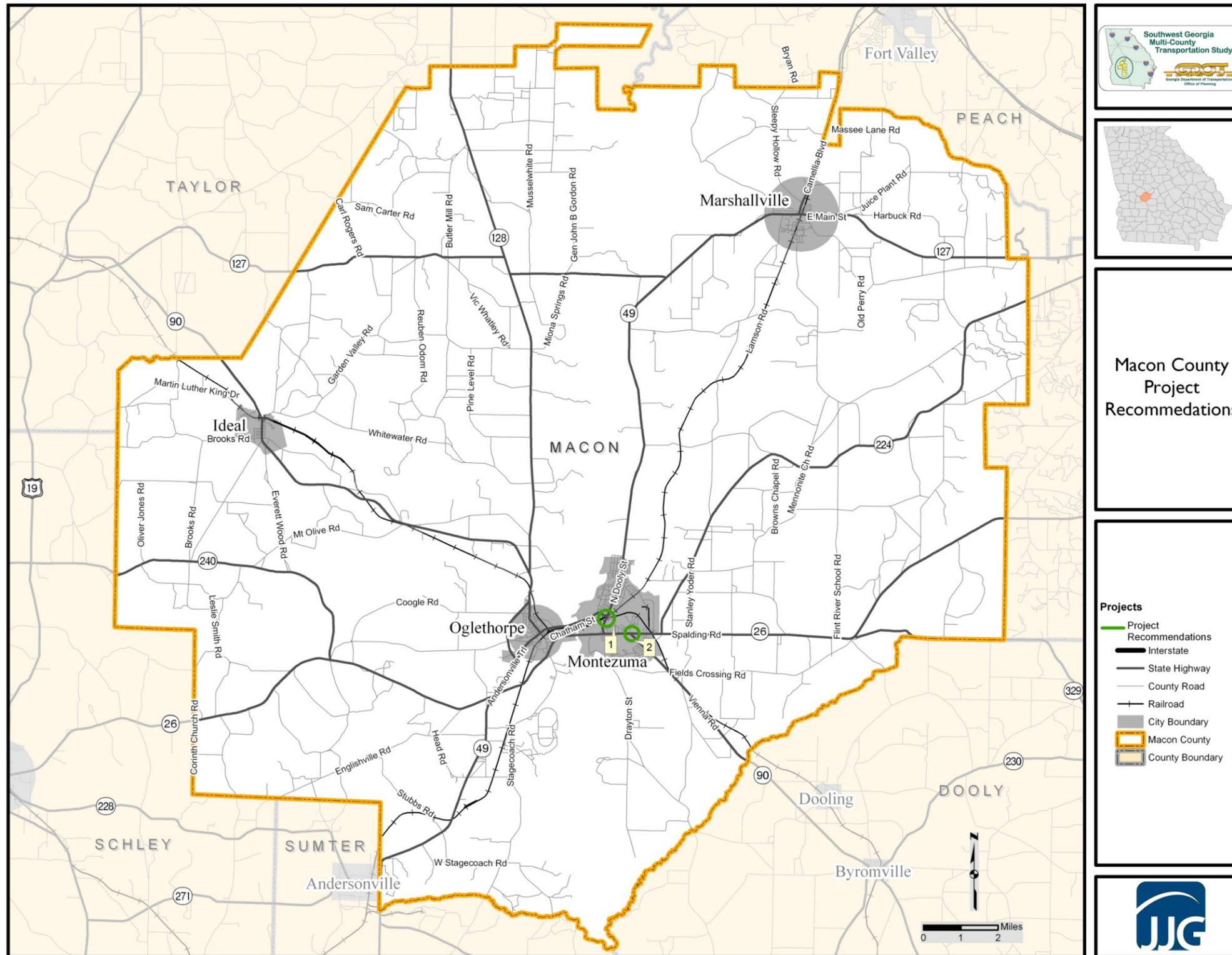
8.4 RECOMMENDED TRANSPORTATION IMPROVEMENTS

From the locally identified needs, field observations, as well as from the results of travel demand modeling projections, recommendations for transportation improvements were made. A list of transportation improvements recommended for Macon County is presented in **Table 8.3** below and a map of recommended projects can be found in **Figure 8.1** on page 53. Project sheets for each recommendation with further details and location maps are presented on pages 54 and 55.

TABLE 8.3: RECOMMENDATIONS FOR MACON COUNTY

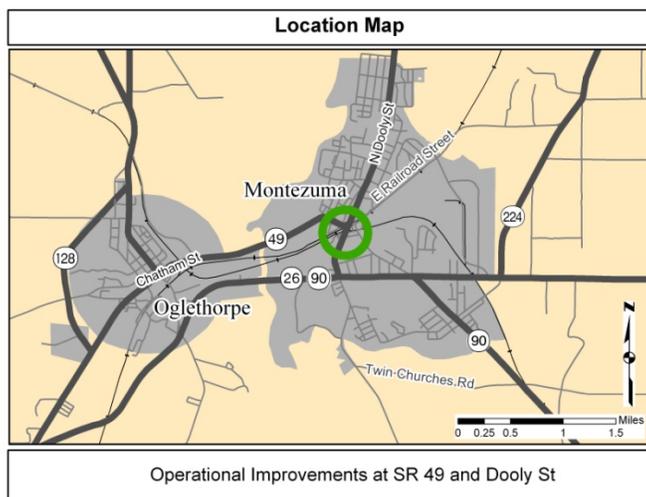
Map ID	Project Name	Project Description	Cost Estimate
1	Operational Improvements at SR 49 at Dooly Street/SR 90	Roadway realignment at intersection	\$595,478.37
2	Operational Improvements at SR 90 at SR 26	Add right turn lanes at intersection	\$891,351.18

FIGURE 8.1: RECOMMENDATIONS FOR MACON COUNTY



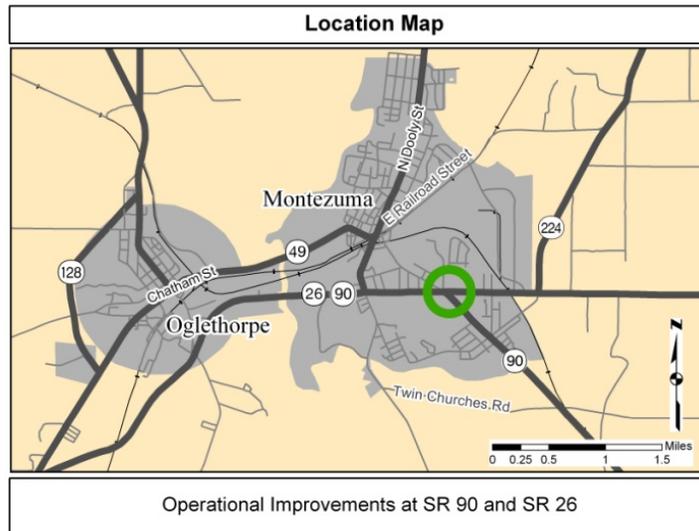
8.5 PROJECT SHEETS

Project Name: Intersection Improvements to SR 90 at SR 49 in Oglethorpe						
Description: Intersection realignment of SR 90 at SR 49/Oglethorpe Road/Dooly Street. Connect Railroad Street to SR 90 north of existing intersection.				County	Macon	
				GDOT District	3	
				Congressional District:	2	
Traffic Vol.:	2006:	2,410	2035:	5,870	RC/MPO:	River Valley RC
Truck %	2006:	31%	2035:	28%	Length (miles):	NA
No. of Lanes	Existing:		Recommended:		Route #:	SR 49
Functional Classification:			Rural Minor Arterial		Beginning and Ending Points:	NA
<p>Project Need and Purpose: Four roadways and one rail line all intersect in downtown Montezuma at this intersection. Congestion is a routine occurrence at this intersection due to its less than desirable alignment. Improvements are needed to reduce congestion and improve safety at this downtown intersection.</p> <p>Logical Termini: Since this is an operational improvement, the logical termini would be the points at which improvements would tie back into existing roadways.</p>						
Project Phase	Preliminary Engineering	Right-of-Way	Utility Relocation	Construction	Total	
Cost Estimate	\$22,257.20	\$205,163.64	\$89,842.50	\$278,215.03	\$595,478.37	
				Project Type (Local/GDOT):	GDOT	



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Project Name: SR 90 at SR 26						
Description: Operational Improvements at Oglethorpe-Montezuma Bypass/Walnut Street/SR 90/SR 26/SR 224 and Spaulding Road/Vienna Road/SR 26				County	Macon	
				GDOT District	3	
				Congressional District:	2	
Traffic Vol.:	2006:	6,700	2035:	7,140	RC/MPO:	River Valley RC
Truck %	2006:	46%	2035:	47%	Length (miles):	NA
No. of Lanes	Existing:	NA	Recommended:	NA	Route #:	SR 90
Functional Classification:			Rural Minor Arterial		Beginning and Ending Points:	NA
<p>Project Need and Purpose: This project would add turn lanes to the intersection of SR 90 and SR 26. The existing roadway alignment at the intersection has a less than desirable skew angle between the two intersecting roadways. The ideal alignment for an intersection is a perpendicular or 90 degree angle between the intersecting roadways. While the realignment of this intersection would be very costly and impact multiple businesses, right turn lanes can be added to improve overall intersection operation at minimal cost.</p> <p>Logical Termini: Since this is an operational improvement, the logical termini would be the points at which improvements would tie back into existing roadways.</p>						
Project Phase	Preliminary Engineering	Right-of-Way	Utility Relocation	Construction	Total	
Cost Estimate	\$40,361.00	\$156,315.15	\$190,162.50	\$504,512.53	\$891,351.18	
				Project Type (Local/GDOT):	GDOT	



8.6 MACON COUNTY RECOMMENDATIONS

Table 8.4 on page 58 displays a complete list of projects recommended by this study for Macon County, along with the project limits, configuration, source, type, implementation timeline and potential funding source of each. The source of the recommendation refers to whether the need for the project was first identified by a local representative or by data analysis. The implementation timeline for each project was determined by the general need for the project and the difficulty of financing its implementation. Therefore, projects with higher costs were generally determined to be longer-range in nature. For the purposes of the implementation timeline, short-term projects are expected to be implemented within one to five years; mid-term projects, within five to ten years; and long-range projects, more than ten years from the time of this study. The potential funding sources column notes those funding sources for which each project is eligible. No steps have been taken by this study towards securing such funding nor are any projects guaranteed access to funding.

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TABLE 8.4: COMPLETE RECOMMENDATIONS FOR MACON COUNTY

Project	Project Limits		Configuration		Source	Project Type	Implementation Timeline			Potential Funding Source		
	From	To	Existing	Proposed			Short-term	Mid-term	Long-term	Federal	State	Local
SR 49	SR 90/Dooly St.		Skewed Intersection	Realigned intersection	Locally Identified	Intersection Improvements		X		X	X	X
SR 90	SR 26		Skewed intersection	Realigned intersection	Locally Identified	Intersection Improvements		X		X	X	X

8.7 TRANSPORTATION FUNDING RESOURCES

Planning for and successfully implementing a transportation plan relies on the identification and effective utilization of available transportation funds. Generally, funding is provided at the federal, state and local levels. It is important to note that, while a wide array of funds may be available for transportation improvements, funds at each level are limited.

8.7.1 FEDERAL FUNDING SOURCES

The primary source for relatively costly roadway, transit, bicycle and pedestrian projects is federal funding authorization provided by Safe, Accountable, Flexible, and Efficient Transportation Equity Act: a Legacy for Users (SAFETEA-LU). Federal funding requires that project sponsors contribute a portion of the project's cost, typically 20 percent or more of the total cost. Project sponsors can be state or local, or both. Federal funding sources may be available to those rural roads classified as major collectors or above, or urban roads designated as collectors or above. Due to the large number of projects vying nationwide for federal funding, federal funds are limited and require stringent regulation.

8.7.2 STATE FUNDING SOURCES

State funds are also an important component of transportation funding, primarily for capital projects (those requiring construction or equipment costs). As with federal funds, rural roads classified as major collectors or above, or urban roads designated as collectors or above, are potentially eligible for state funding sources.

The State of Georgia collects two types of taxes on motor fuels to help fund transportation infrastructure projects. Along with the *Prepaid State Tax*, by which three percent of average retail price of fuel is dedicated to transportation, and a bond program, the state of Georgia has the *Fuel Excise Tax*, which places a 7.5 cents tax on each gallon of fuel purchased. Since this tax is based solely on the volume of gasoline sold, it is not indexed to inflation. Revenues increase only with an increase in roadway usage, and revenue increases from travel are offset due to improved engine technology and higher fuel efficiency of vehicles. Due to these factors, the funding ability generated by this tax has been in decline. At this time, State funding is limited, although efforts are underway to identify a potential new source of state funding to supplement the transportation gas tax.

8.7.3 LOCAL FUNDING SOURCES

HB 277 was signed by Governor Sonny Purdue June 2, 2010. The law allows each region to designate a list of selected transportation projects within its boundaries. These projects would be financed by a regional one percent sales tax over ten years, if approved by voters within the region. Project lists will undergo initial developments in the fall of 2010 and referendums will take place in 2012.

Projects along local roads and rural minor collectors are typically funded through local sources. Use of local funding provides local agencies with additional control and direction over the project, but requires expenditure of local resources. Localities within the State of Georgia are able to collect three types of taxes to generate funds for transportation infrastructure projects.

Local governments may, in some cases, also levy fees for this purpose. These may include a *Special Local Option Sales Tax (SPLOST)*, which can be levied by a county via voter referendum for the purpose of raising money to build and maintain transportation and other public facility improvements; *Tax Allocation Districts (TAD)* can fund infrastructure projects, including transportation projects, with bonds from a limited area targeted for accelerated growth; *Community Improvement Districts (CID)* can fund

infrastructure projects, including transportation projects, in a limited area at the discretion of existing commercial property owners; and *Impact Fees*, which are one-time fees charged in association with a new development and are designed to cover part of the cost of providing public facilities to support the development.