

**East Georgia Multi-County Transportation Study**  
Greene, Jasper, Morgan and Putnam Counties

**Jasper County Multi-Modal  
Transportation Plan**

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August 2007

**HNTB**



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## Preface

This document serves as a guide to the County's transportation needs, in the form of a Long Range Transportation Plan (LRTP), through the horizon year, 2030. LRTPs are required to have a planning horizon of 20 or more years. This time frame provides a basic structure and overall goal for meeting the long-term transportation needs for the County. Since many factors influencing the development of the LRTP, such as demographics, forecast revenue, and project costs, change over time, long range transportation plans should be updated at least every five years.

The Transportation Plan is a useful tool that empowers a County to act on its current and expected needs. GDOT programs projects for all 159 counties in the state of Georgia, and it is extremely helpful to them to know the true needs of each county. The Transportation Plan follows an accepted process that documents existing and future needs. These needs are then addressed by potential improvements which are prioritized.

The Transportation Plan is a living document, that should be revisited as the County changes and development occurs. Typically Transportation Plans are updated every three to five years. The current Transportation Plan was based on existing data and forecasts developed with the best information available. It is expected that the inputs into this original planning process, particularly public comment and opinion; population forecasts; development forecasts; and, the distribution of population and employment within the county will change over time in response to changing realities through the study area. A critical mass of new information should provide a stimulus to the update the plan and refine the planning process. The following key components of the Transportation Plan should be reviewed and updated as necessary:

- Transportation Plan Goals;
- Population Forecasts;
- Employment Forecasts;
- Distribution of Population and Employment;
- Needs;
- Projects;
- Costs; and,
- Funding.

Updating the Transportation Plan acknowledges changes to 20-year growth forecasts, ongoing refinements in travel demand forecasting, updated revenue forecasts, and other factors influencing the development and outcome of the Plan and its recommendations.

The outcome of the Transportation Plan is a prioritized list of improvements that meet the transportation goals and objectives of the County. This list is recognized by planning partners as the most important projects for the County – and correspondingly is the focus of funding and implementation efforts. It is important to recognize that these priorities are not static. As the inputs to the planning process change so will the priorities. Re-prioritizing all projects every year does not make sense – nothing would get constructed if priorities

changed on a year to year basis. Typically, even with updated information core priorities remain unchanged over a number of years.

The interested resident should utilize the Plan in several ways to actively contribute to the planning process and quality of life within the County:

1. Review the documented input from the public involvement process and provide additional comment when conditions change;
2. Review the list of prioritized projects to understand where the County will be investing its limited transportation resources;
3. Understand that the improvements recommended in the Plan relate to deficiencies identified through the planning process – the Plan has an established methodology for assessing need and determining improvements;
4. Use the Plan as a mechanism to provide input to the County to reflect changing realities within the County;
5. Understand the goals for the Transportation Plan and hold the County and other planning partners accountable for achieving the established outcomes.

The planning partners (County, Regional Development Center, GDOT and others) also make use the Plan for key activities including:

1. Clear documentation and technical analysis to support the need for transportation investment using proven analytical methods and analysis tools and approaches;
2. An understanding of County priorities for transportation investment;
3. A role to assist with development of a Special Purpose Local Option Sales Tax (SPLOST) Program;
4. A framework for continuous transportation planning activities; and,
5. A mechanism for ensuring active dialogue of transportation issues and opportunities.

A transportation plan is made more effective by an informed public that actively contributes to the planning process.

## 1.0 Introduction

Growth in Greene, Jasper, Morgan, and Putnam Counties has resulted in increased travel demand through the 4-County Region. The Georgia Department of Transportation (GDOT) Office of Planning, in conjunction with these four Counties, initiated the East Georgia Multi-County Transportation Study to develop a Long Range Transportation Plan (LRTP) to serve the 4-County Region through the planning horizon, 2030. Currently, the transportation planning function for the Counties is provided by GDOT through coordination with each County. The Multi-County Transportation Study is built upon existing work efforts to date, and provides a mechanism for guiding transportation decision-making as development pressures increase through the 4-County Region.

Although this Multi-County Transportation Study involved four counties, a transportation plan was developed for each County individually. Additionally, an Executive Summary was developed that included the entire 4-County study area. This allowed each of the Counties to understand what was recommended within the 4-County Region. This document focuses specifically on Jasper County.

The purpose of this technical memorandum was to identify existing and future operating conditions for the multi-modal transportation system and then identify multi-modal improvements and prioritize project implementation for Jasper County. As part of this effort, a travel demand model was developed for the 4-County Region to represent the transportation network of the study area and to assist with analysis of future operating conditions.

HNTB coordinated with GDOT, Greene, Jasper, Morgan, and Putnam Counties, local cities, and other partners in the planning, development, review, and approval of potential improvements. Additionally, a comprehensive and interactive public involvement program was conducted. This ensured that alternative transportation improvements were not only coordinated with various governments, but afforded individual citizens and interested groups the opportunity to provide their input in developing and evaluating potential improvements to each County's transportation network.

Ultimately, study efforts produced a LRTP that provides for the efficient movement of people and goods within and through the study area through the study horizon year (2030). Interim analysis was conducted for the year 2015. As part of this effort, existing and future operating conditions were documented for the following modes: roadways, bicycle and pedestrian facilities, freight, transit, railways, and airports.

### 1.1 Study Purpose

The purpose of the LRTP is to identify long-range transportation needs, determine resources to meet those needs, and outline a framework of projects that meet the transportation needs of a community to the extent allowed by existing and future resources. While the 4-County Region is not within a Metropolitan Planning Organization (MPO) service area, the transportation plan development process followed the guidelines

established for MPO's. This more rigorous process established a strong framework for transportation planning and decision-making. The format of the LRTP, and the process by which it was developed, is prescribed by federal legislation known as the Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users (SAFETEA-LU).

LRTPs are required to have a planning horizon of 20 or more years. This time frame provides a basic structure and overall goal for meeting the long-term transportation needs for the community. Since many factors influencing the development of the LRTP, such as demographics, forecast revenue, and project costs, change over time, long range transportation plans should be updated at least every five years.

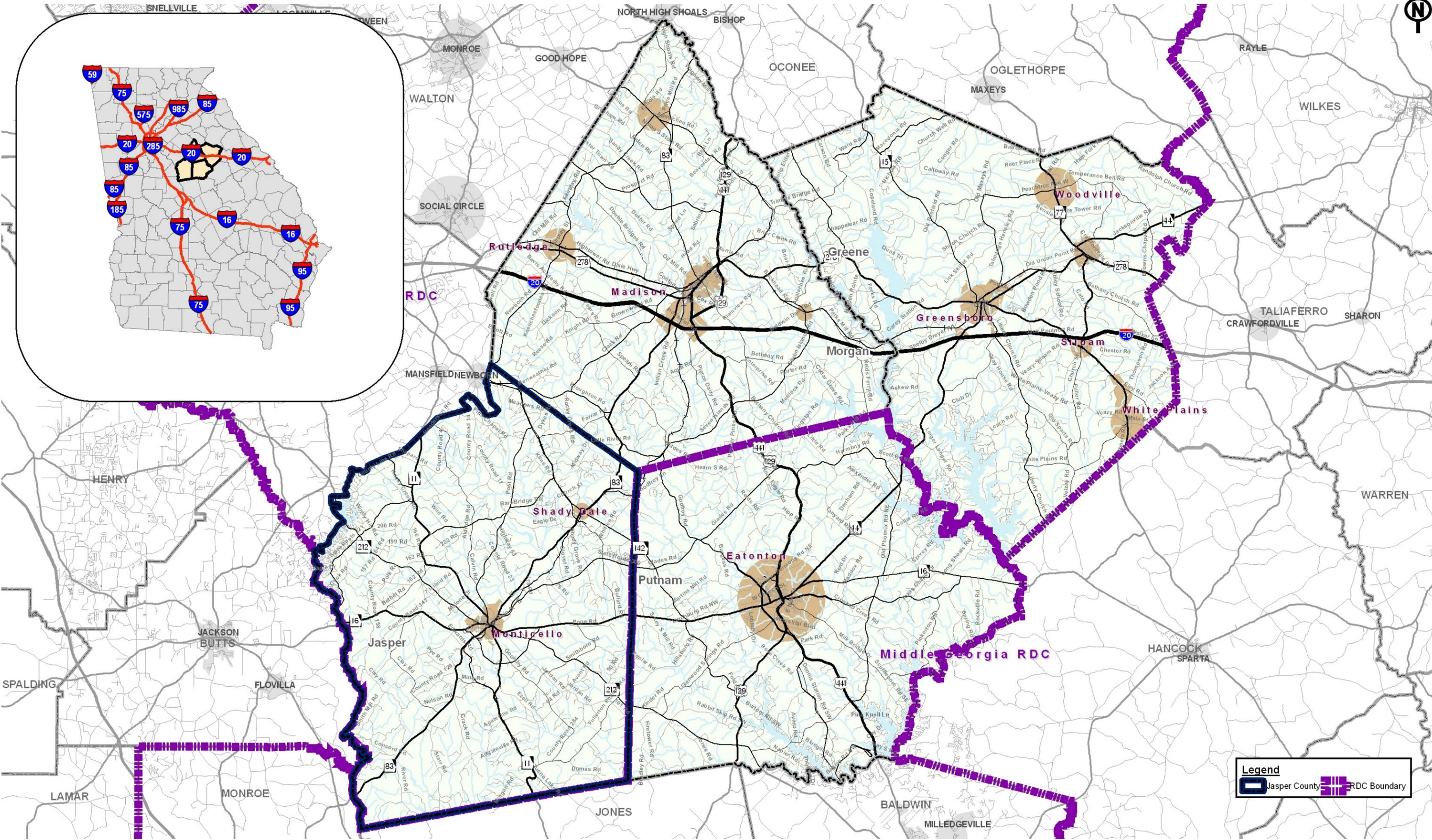
## 1.2 Study Area Description

The study area is located along the I-20 corridor in northeast Georgia, east of Atlanta. In recent years, communities located in the I-20 corridor from South Carolina to Alabama have recognized the economic importance of the corridor in attracting manufacturing, distribution, logistics, and warehousing operations and the associated residential, commercial, and office development that supports these valuable businesses.

Greene, Jasper, Morgan and Putnam Counties cover a land area of just over 1,453 square miles. Jasper County covers approximately 371 square miles. According to the University of Georgia, the area features many appealing points of interest and is significant to the State's natural and built environments as well as its cultural and historic assets, creating unique impacts on its transportation system.

- Jasper County was the 34<sup>th</sup> County formed in Georgia (1807), named after the Revolutionary War Hero Sergeant William Jasper.
- Jasper County has several homes on the National Register of Historic Places including the Hitchcock-Roberts Home (circa 1817), the Jordan-Bellew House (circa 1838), and Reese Hall (circa 1820).
- Jasper County is bordered on the west by Lake Jackson. Lake Jackson has contributed to the recent population and employment growth in the area.
- A significant portion of Jasper County is in the Oconee National Forest.

Jasper County is part of the Northeast Georgia RDC (NEGRDC). There are two municipalities in Jasper County – Monticello and Shady Dale. The study area is displayed in Figure 1.2.



**Legend**

- Jasper County
- RDC Boundary

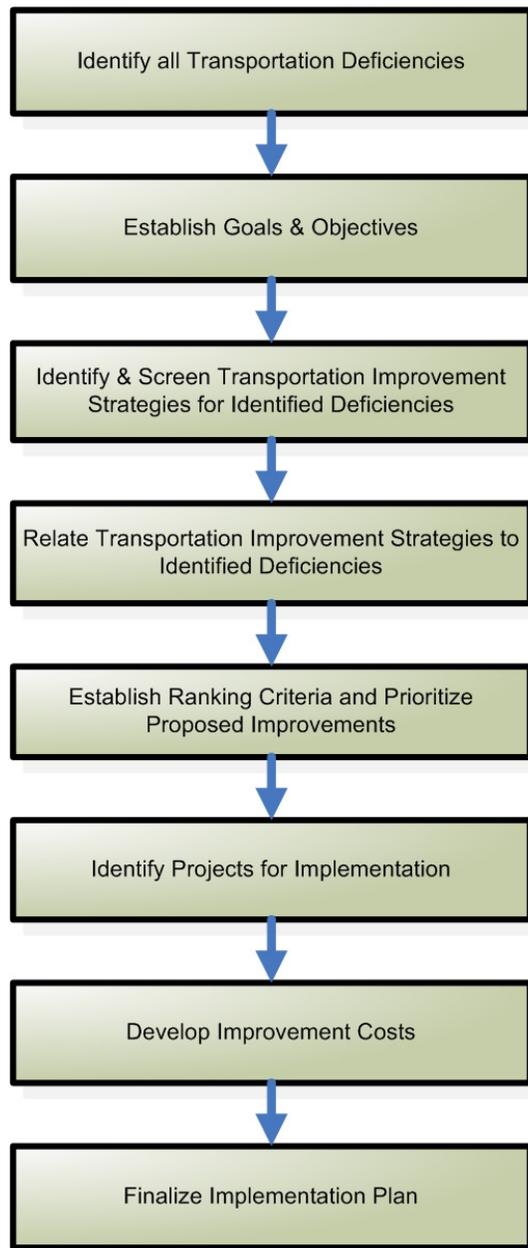
**Study Area**  
East Georgia Multi-County Transportation Study

### 1.3 Study Process

The following activities generally represent the transportation plan development process: data collection and development of analysis tools and methodologies; analysis of existing and future conditions; development of improvement strategies; and, ultimately, project cost development and prioritization.

Figure 1.3 displays a flow chart depicting the study process.

**Figure 1.3  
Study Process**



## 2.0 Public and Stakeholder Involvement

The purpose of the public involvement program is to inform the public and to include them in the decision-making process. Public concerns were brought to the forefront so that they could be discussed and resolved. This approach engaged the end users (i.e. the residents and business owners of the four Counties) in the identification, development, evaluation, and selection of transportation improvements. The ultimate goal of the Public Involvement effort was to build consensus for the recommended short-term and long-term improvements identified through the transportation planning process.

A public involvement program that results in active participation and interaction throughout the process has a good chance of attaining community consensus. An effective, well-planned, and organized public involvement program helps anticipate and lessen negative perceptions and can build towards acceptance of the study results. The Study Team implemented a public involvement program that utilized consensus-building techniques throughout the study process.

Area stakeholders, individual citizens, and interested groups were given multiple opportunities to become involved in the planning process. Citizens with an interest in the study were informed of the study's progress and provided various forums to contribute input into the decision-making process, including public workshops, study advisory groups, meeting notices, newspapers, newsletters, and web site updates. Through the public involvement process, the Study Team was able to identify improvements that met the needs of stakeholders and residents of Jasper County. A complete summary of public involvement activities for the East Georgia Multi-County Transportation Plan is provided in the Public Involvement Report.

### 2.1 Summary of Activities

Involving the public in the decision-making process was essential for developing consensus or acceptance among the community it is intended to serve. Throughout the process, the public was invited to provide information, offer alternatives, and present their interests and concerns. As stakeholders who live and travel through the study area, citizens were able to provide insightful input to technical and non-technical issues relevant to the plan development.

Several forums were available for citizens to voice their opinions, concerns, and ideas. Two open house workshops were conducted as part of the study. These workshops ensured that public input was reflected accurately for the evaluation and recommendation of the proposed transportation improvements. Each public workshop was used to encourage consensus among citizens, County staff, and area municipalities, as to the planned improvements for the County's multi-modal transportation network.

## 2.2 Public Information Workshops

A brief presentation was given at each of the public workshops to support facilitation activities and informal review of display materials with the public. The Study Team was available for one-on-one discussions at all of the workshops. In addition, public comment forms were available for citizens to officially record their comments. As appropriate, HNTB developed responses to all comments and coordinated these responses with GDOT.

Based on input from the project Steering Committee, it was determined that two public workshops were appropriate for this study. These workshops took place from 6:00 PM to 8:00 PM on a weekday night with an attempt to avoid any conflicts with any other significant community events or meetings. The Monticello City Hall Meeting Room was identified for hosting public workshops. This facility is centrally located in the County and provided adequate space for the workshops.

### ***Workshop #1 (Overview of Existing and Future Operating Conditions)***

This workshop provided an overview of the study process; documented data collection activities; reviewed existing and future operating conditions; and, identified deficiencies in the transportation system. This workshop also included a formal presentation, followed by an open house period to solicit public input, identify issues and concerns, and to aid the Study Team in evaluation of existing and future deficiencies.

### ***Workshop #2 (Present Preliminary Long Range Transportation Plan)***

This workshop presented preliminary improvement recommendations for major deficiencies and the findings to date, including a preliminary project prioritization methodology for public review and comment. A formal presentation of the study results was followed by an open house period to solicit public input on the draft study recommendations.

## 2.3 Study Advisory Group Meetings

In addition to the public workshops, Study Advisory Group (SAG) meetings were held to solicit stakeholder feedback at key junctures throughout the study. Jasper County selected its SAG participants including representatives from the business community, planning staff, elected officials and emergency management staff. Members of the SAG are listed below:

- Greg Williams - Jasper County, County Manager;
- Chris Anderson - Jasper County, Planning Manager;
- Hugh King - City of Monticello, City Manager;
- Anson Gock - Northeast Georgia RDC;
- Walter Smith – Citizen;
- Ken McMichael - Jasper County Water Authority;
- Robert Jordan – Citizen;
- Bill O’Keeffe – Citizen;
- David Dyer – Citizen;
- Jerry Lazar – Citizen;
- Larry Thurman - Jasper County Public Works Director; and,

- Preston Campbell - Jasper County Public Works.

This group met a total of three times throughout the study excluding the project kick-off meeting to discuss issues and opportunities and review study progress to date. Meeting dates and locations are documented below:

- Old Senior Center – October 24, 2006;
- Old Senior Center – February 15, 2007; and,
- Old Senior Center – July 9, 2007.

## 2.4 Program Evaluation

It was important to document and evaluate the effectiveness of the Multi-Modal Transportation Study Public Involvement Plan. The following data was documented:

- Number of newsletters distributed;
- Number of open house attendees; and,
- Number of public comments received.

Feedback from GDOT and SAG members was evaluated to determine the effectiveness of the Public Involvement Plan. Post workshop reviews yielded no changes to the public involvement program. Table 2.4 displays the public workshop participation information.

**Table 2.4**  
**Public Workshop Participation**

Meetings	Date	Location	# of Newsletters	# of Attendees	# of Comments
Workshop #1	13-Nov-06	Monticello City Hall	125	18	8
Workshop #2	8-Mar-07	Monticello City Hall	105	13	3

### 3.0 Demographic Information

A review of US Census data shows that Jasper County has experienced population growth at a modest level during the past 20 years. Table 3.0 presents select demographic data to illustrate the characteristics of the population living in Jasper County, its households, and other socio-economic factors. Dialogue with County Staff revealed that many new residents in the County relocated from the Atlanta metro area to live in a more rural area. However, historically employment has not shifted to Jasper County. The ratio of residents (11,426) to jobs (5,258) is approximately two to one based on the 2000 Census information. This places increased demand on the transportation system linking County residents to jobs in Atlanta, Macon, Athens, and other employment centers.

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

**Table 3.0**  
**Year 2000 General Demographic Characteristics**

Demographic	Jasper County
Total Population	11,426
Median Age	36.3
Households	4,175
Average Household Size	2.72
Total Housing Units	4,806
Occupied Housing Units	4,175 (86.9% of total)
Owner-Occupied Housing Units	3,300 (68.7% of total)
Renter-Occupied Housing Units	875 (18.2% of total)
School Enrollment (Age 3+)	2,876 (25.2% of total)
Percent High School Graduate or Higher	69.7%
Total Disabled Population (Age 5+)	2,355
Percent of Population in Same House in 1995	56.4%

Source: 2000 US Census

Over three-fourths of the residents (8,756) of Jasper County live outside of the cities. The following shows the population of each city for the year 2000:

- Monticello – 2,428; and,

- Shady Dale – 242.

Perhaps the most significant figure identified in the demographic data is the percent of disabled individuals in Jasper County, 20.6%. This figure exceeds the statewide average of 19%. The US Census Bureau defines disability as:

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

Dialogue with stakeholders revealed that the study area’s population is aging and is attracting an older population. As Jasper County continues to attract retirement residential land uses, the need will increase for a transportation system that accommodates the aging population.

### 3.1 Historic Population Growth

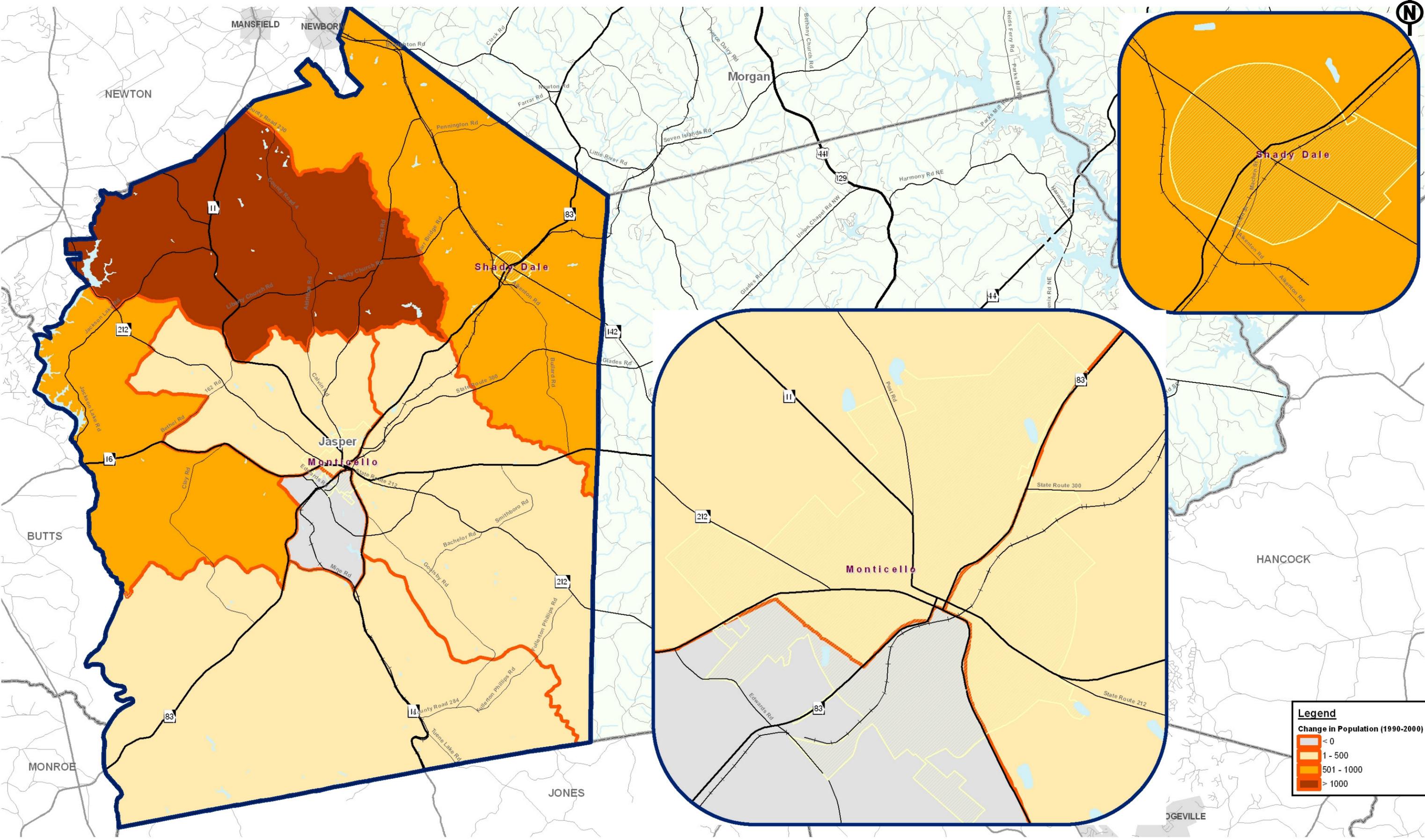
Table 3.1 illustrates the growth trends for Jasper County and Georgia from 1900 to 2000. Information in Table 3.1 shows that the area has had relatively the same historical growth compared to the growth trend for the State of Georgia between 1980 - 2000. The population for Jasper County is expected to increase throughout most of the County through the study horizon year of 2030.

**Table 3.1  
Historical Population Profile**

County	1900	1920	1940	1960	1980	2000	Percent Change 1980 - 2000
Jasper	15,033	16,362	8,772	6,135	7,553	11,426	51.3%
Georgia	2,216,331	2,895,832	3,123,723	3,943,116	5,462,982	8,186,453	50.0%

Source: 2000 US Census

Figure 3.1 shows the change in population from 1990 to 2000 in Jasper County for each Census Block Group. The greatest change has occurred in the northern portion of the County, which is closest to Metro Atlanta.



**Change in Population (1990-2000)**  
East Georgia Multi-County Transportation Study

Figure No: 3.1

### 3.2 Future Population

Jasper County has received a moderate amount of growth over the past 20 years (51.3%). This growth trend is expected to continue as the area continues to attract people and business owners who enjoy a rural lifestyle while having good access to nearby amenities in the Atlanta, Macon, and Athens urban areas. Table 3.2 displays the projected growth, provided by the Jasper County Comprehensive Plan, for Jasper County through the horizon year of 2030.

**Table 3.2**  
**Projected Population**

	2000	2005	2010	2015	2020	2025	2030
Projected Population	11,426	13,060	15,500	17,340	20,100	24,920	25,810

*Source: Jasper County Comprehensive Plan*

Reviewing Jasper County's Comprehensive Plan reveals that over the next 30 years the County is projected to more than double in population. It is important to recognize this growth and the substantial demand for a quality transportation system and transportation services that accompanies the population increase.

### 3.3 Environmental Justice

Environmental justice (EJ) is intended to acknowledge minority and low-income populations and ensure that these groups are not disproportionately impacted as a result of transportation improvement recommendations. The US DOT Order on Environmental Justice and Executive Order 12898 defines EJ populations as persons belonging to any of the following groups:

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

It is important to look at the distribution and concentration of minority and low-income populations to determine potential EJ impacts. The intent of EJ analysis is to locate these populations and to involve them early and continuously through the decision making process, as well as use data to analytically assess if there would be a disproportionate impact on traditionally underrepresented communities. The following sections document the location of minority and low-income populations.

### ***Minority Populations***

The minority populations for Jasper County were analyzed using the 2000 Census data. This census data was reviewed by Census Block Group, and shows concentrations of minority populations located south and east of Monticello. The average minority population figure for the County is 29% while the statewide average is 34.9%. The minority Census Block Groups are displayed in Figure 3.3.1.

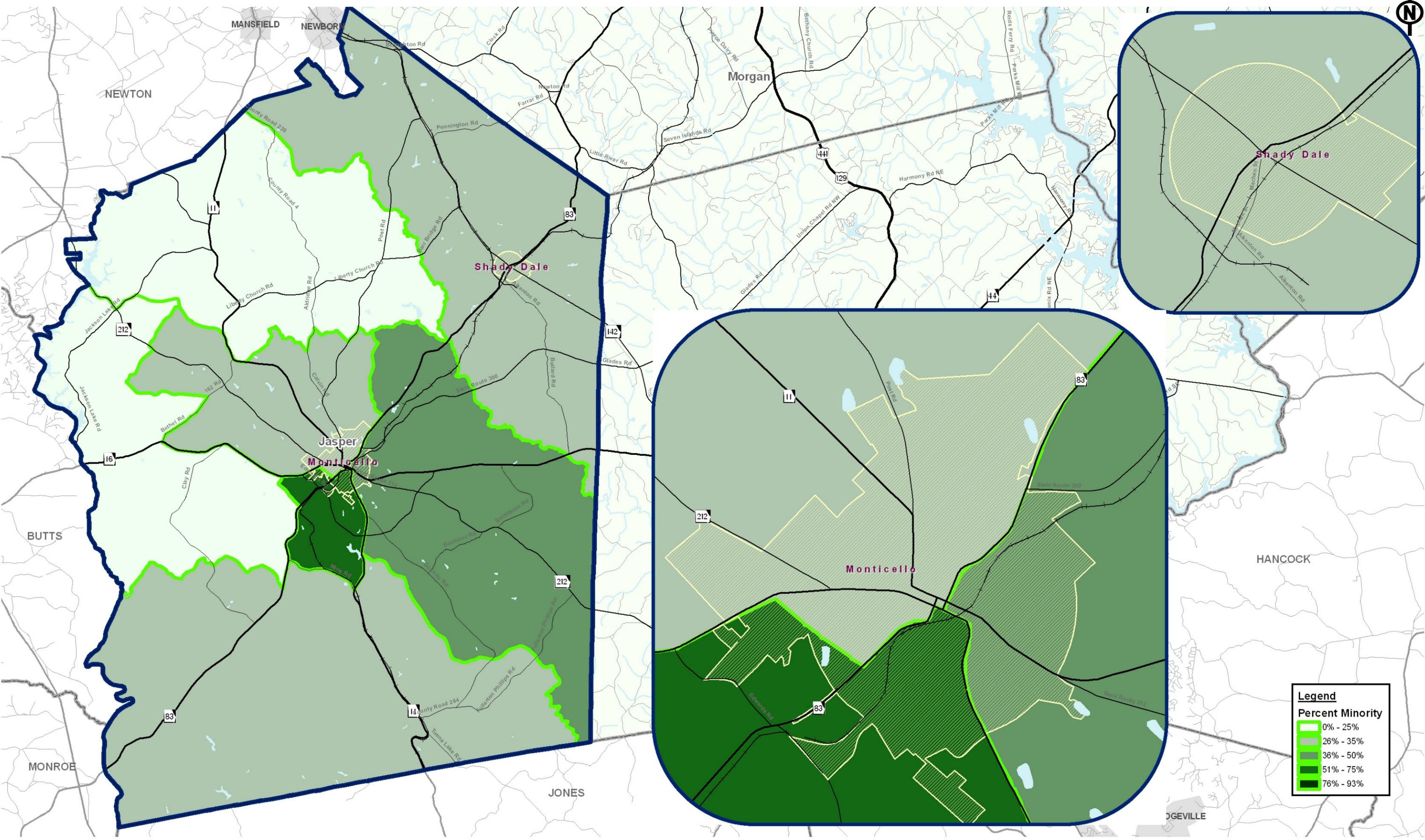
### ***Low-Income Populations***

The second component for EJ, poverty level, was also analyzed using the 2000 Census data. This census data was reviewed by Census Block Group, and shows concentrations of low-income populations located south of Monticello. The average number of residents below the poverty line in the County is 14% while the statewide average is 13.0%. The low-income census blocks are displayed in Figure 3.3.2.

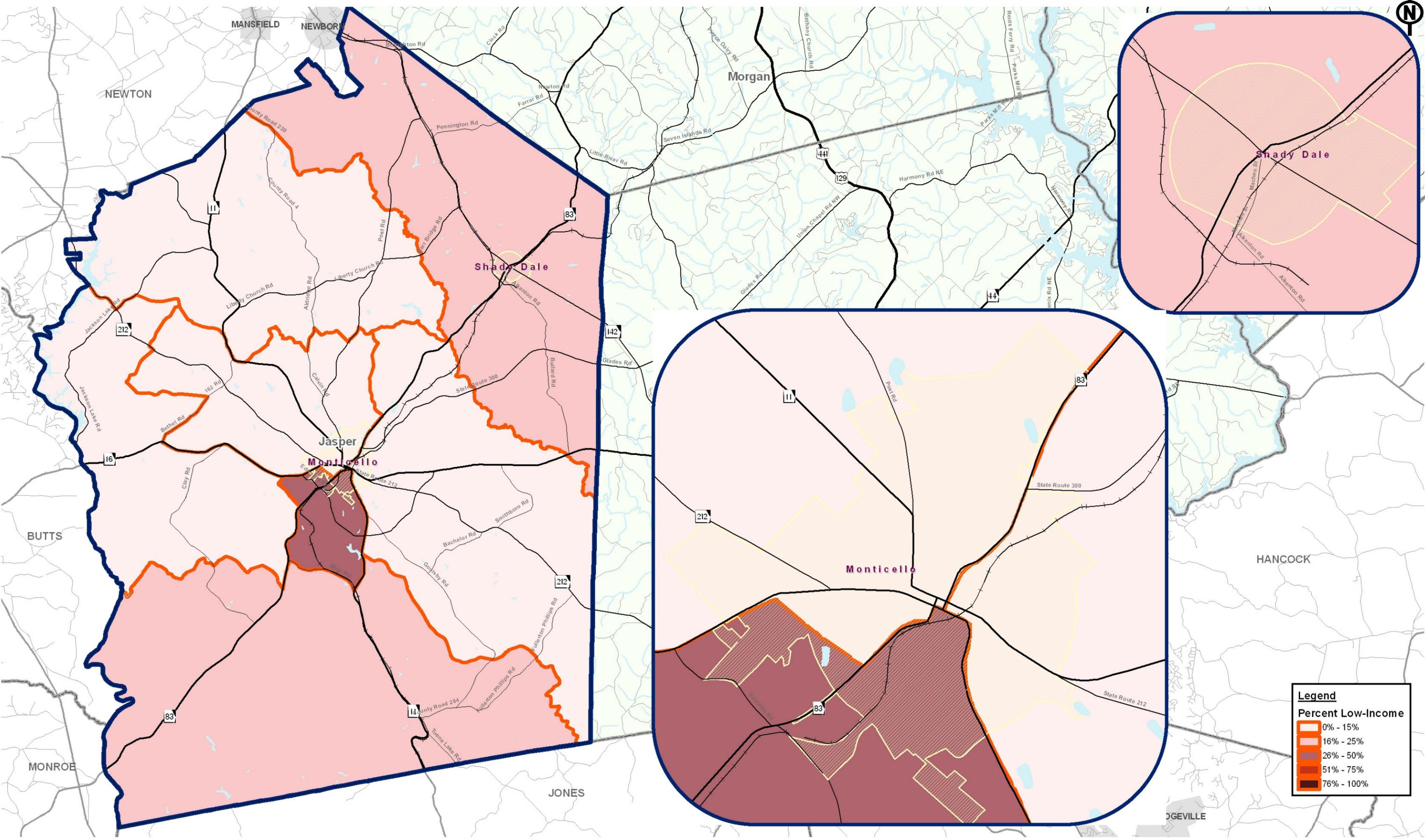
It is helpful to analyze the low-income population areas with respect to the location of minority population areas. Interest is drawn to areas with high populations for both of these categories. Figure 3.3.3 combines the minority and low-income population data and presents it in a single graphic.

Disadvantaged populations were identified as part of this analysis and extra efforts were made to include these groups in the planning process. These areas include south of Monticello. These areas were evaluated to ensure that transportation improvements would benefit and not disproportionately impact these areas in a negative manner. The following tasks were conducted for the identified low-income and minority populations:

- Coordinated with the SAG to identify leaders within these communities;
- Posted notice for workshops in these communities;
- Analyzed recommended projects to ensure that disproportionate impacts did not accrue to these communities; and,
- Analyzed recommended projects to ensure that mobility benefits accrued to these communities – including bicycle and pedestrian amenities.



**Minority Population Locations**  
East Georgia Multi-County Transportation Study



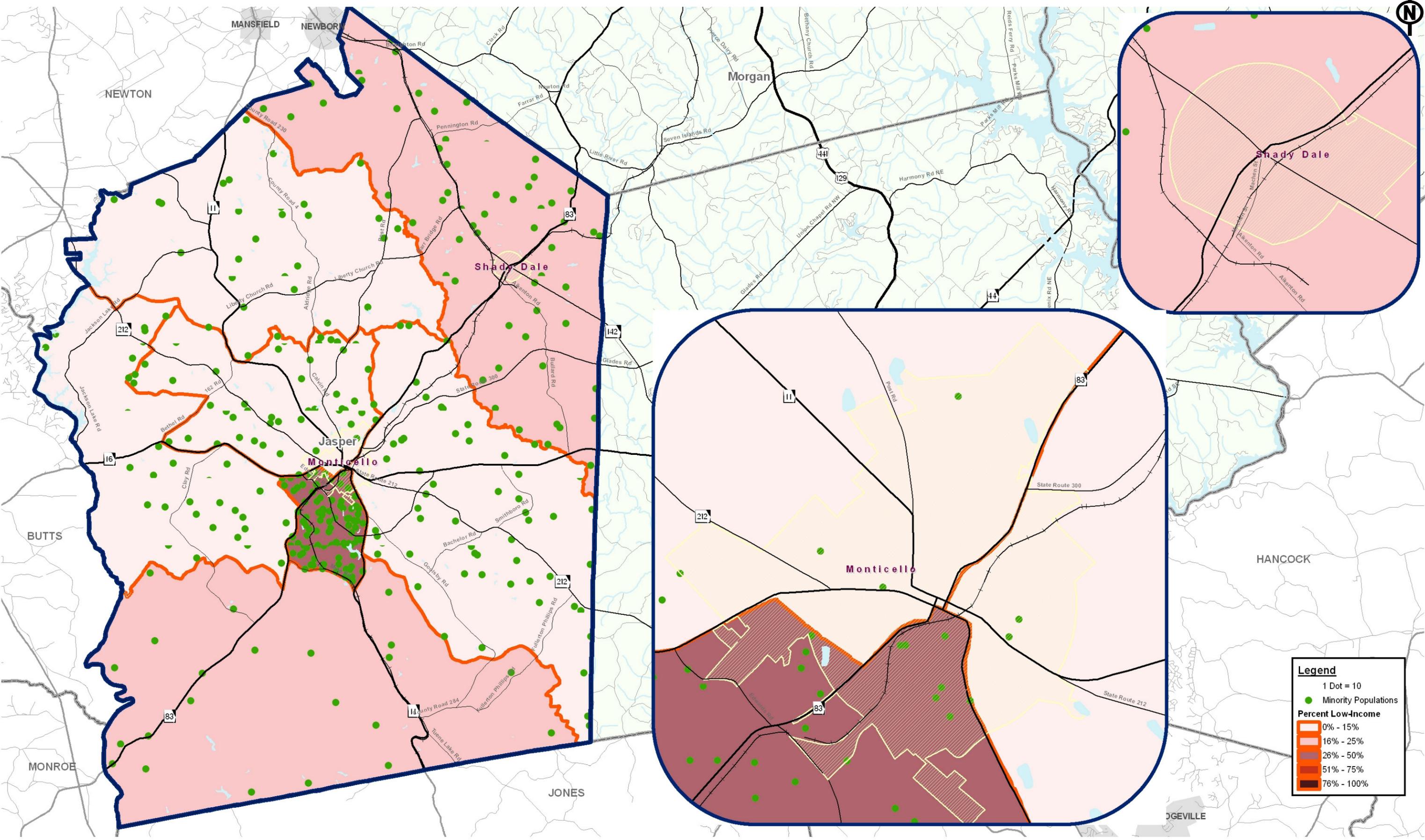
**Legend**

**Percent Low-Income**

- 0% - 15%
- 16% - 25%
- 26% - 50%
- 51% - 75%
- 76% - 100%

**Low-Income Population Locations**  
East Georgia Multi-County Transportation Study

Figure No: 3.3.2



**Legend**

- 1 Dot = 10
- Minority Populations
- Percent Low-Income**
- 0% - 15%
- 16% - 25%
- 26% - 50%
- 51% - 75%
- 76% - 100%

**Overlay of Minority & Low-Income Populations**  
East Georgia Multi-County Transportation Study

### 3.4 Employment Data

In Jasper County, manufacturing is the largest employment sector providing nearly one-fourth of the total jobs. Other important sectors are education, health and social services, and retail trade. Among the major employers in the County are Jasper County Superintendent (380 employees), Georgia Pacific Company (187 employees), Jasper Memorial Hospital (130 employees), Jasper County Primary School (98 employees), and Georgia Pacific Corp. (71 employees). The number, type, and location of jobs in the County have direct implications to the types of transportation facilities needed by business operators and employees in the area. Table 3.4.1 shows the major categories of jobs and industries located in Jasper County.

**Table 3.4.1  
Existing Industry Jobs**

Industry Type	Jasper County
Agriculture, Forestry, Fishing, Hunting, and Mining	190
Construction	670
Manufacturing	1,301
Wholesale Trade	151
Retail Trade	625
Transportation, Warehousing, and Utilities	252
Information	62
Finance, Insurance, Real Estate, and Rental and Leasing	182
Professional, Scientific, Management, Administrative, and Waste Management Services	228
Education, Health, and Social Services	826
Arts, Entertainment, Recreation, Accommodation and Food Services	245
Other Services	266
Public Administration	260
<b>TOTAL</b>	<b>5,258</b>

Source: 2000 US Census

The County's per capita income (\$19,249) in 1999 was lower than Georgia's statewide average of \$27,324 and the national average of \$28,546.

Transportation mobility for workers in Jasper County is an important consideration for the Plan. Not surprisingly, most workers (95.5%) in the County rely on highway-based transportation for commute trips, either by driving alone or carpooling. Less than two percent (1.9%) of workers in the County walk or commute to work by other means and three percent (2.7%) work at home. Table 3.4.2 illustrates the breakdowns in commuting modes for Jasper County.

**Table 3.4.2  
Existing Work Commute Patterns**

Work Commute	Jasper County		Georgia
	Population	Percentage	Percentage
Total Workers (Age 16+)	5,123	100%	100%
Drove Alone	3,816	74.5%	77.5%
Carpooled	941	18.4%	14.5%
Transit/Taxi	8	0.2%	2.3%
Biked or Walked	99	1.9%	1.9%
Motorcycle or Other Means	122	2.4%	1.0%
Worked at Home	137	2.7%	2.8%
Mean Travel Time to Work (mins.)	34.2		27.7

Source: 2000 US Census

The County’s journey to work data corresponds closely to the statewide averages for the various modes of travel. The mean travel time to work is higher than the statewide average (27.7 minutes). This is due to the large number of people who commute to areas outside of Jasper County.

## 4.0 Land Use and Development

Based on Jasper County's Comprehensive Plan the existing and future land use patterns for the County continue to show a substantial percentage of land devoted to residential and agricultural land uses. Development is projected to occur in Monticello and in the vicinity of Lake Jackson.

### 4.1 Existing Land Use Characteristics

To assess the impact of existing land use on the transportation system the following types of areas were identified for the County: major residential areas; key activity centers; key employment centers; and, primary travel corridors.

#### *Major Residential Areas*

- Cities of Monticello and Shady Dale
- Community of Hillsboro
- Lake Jackson

#### *Key Activity Centers*

- Cities of Monticello and Shady Dale
- Lake Jackson

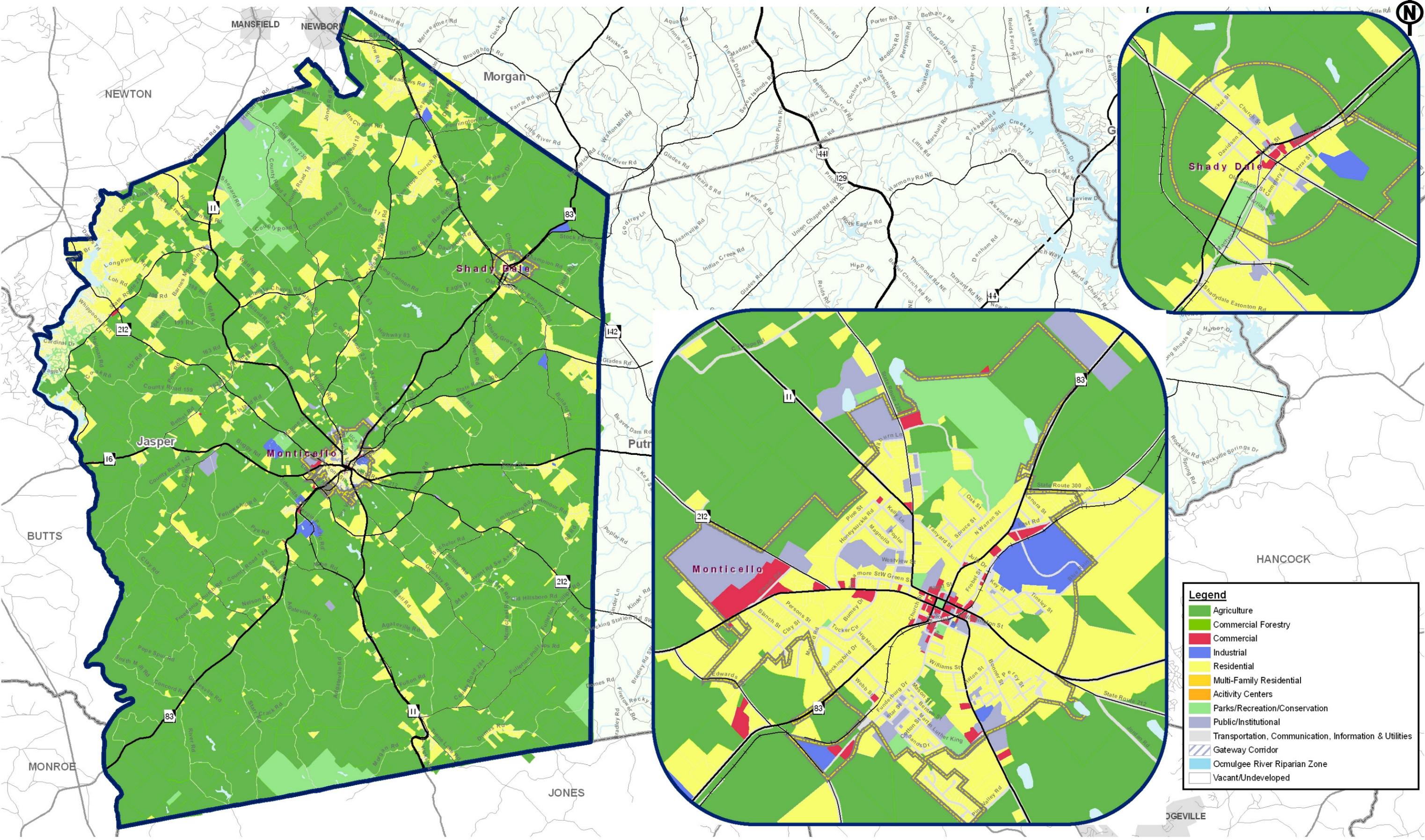
#### *Key Employment Centers*

- Cities of Monticello and Shady Dale

#### *Primary Travel Corridors*

- SR 11
- SR 16
- SR 83
- SR 142
- SR 212
- Norfolk Southern Rail line

The existing land use map is presented in Figure 4.1.



**Legend**

- Agriculture
- Commercial Forestry
- Commercial
- Industrial
- Residential
- Multi-Family Residential
- Activity Centers
- Parks/Recreation/Conservation
- Public/Institutional
- Transportation, Communication, Information & Utilities
- Gateway Corridor
- Ocmulgee River Riparian Zone
- Vacant/Undeveloped

**Existing Land Use**  
East Georgia Multi-County Transportation Study

Figure No: 4.1

## 4.2 Future Land Use Characteristics

It is important to document future land use characteristics because this information is essential in the evaluation of future operating conditions on the County's transportation network. The future land use plan identifies the desired location of population and employment through the horizon year of the study. These two variables are the key inputs into the travel model to forecast future travel volumes and related deficiencies.

For the purposes of this study, it was important to work with the Future Land Use Map contained in the County's Comprehensive Plan. This map identifies where growth is likely to occur in the County through the horizon year of the study. By clearly identifying where growth is allowed to occur in the County, it is possible to more accurately represent travel demand on the roadway network and future year travel conditions.

The Future Land Use Map designates most of the County for rural land uses. The County has plans for growth but much of the County is zoned as agricultural. The remaining areas are zoned for residential, commercial and industrial use. The following growth areas were identified:

### *Residential*

- Cities of Monticello and Shady Dale
- Community of Hillsboro
- Lake Jackson
- Stanton Springs

### *Intensive Agricultural*

- A majority of the County is zoned for Agriculture

### *Commercial Uses*

- Cities of Monticello and Shady Dale

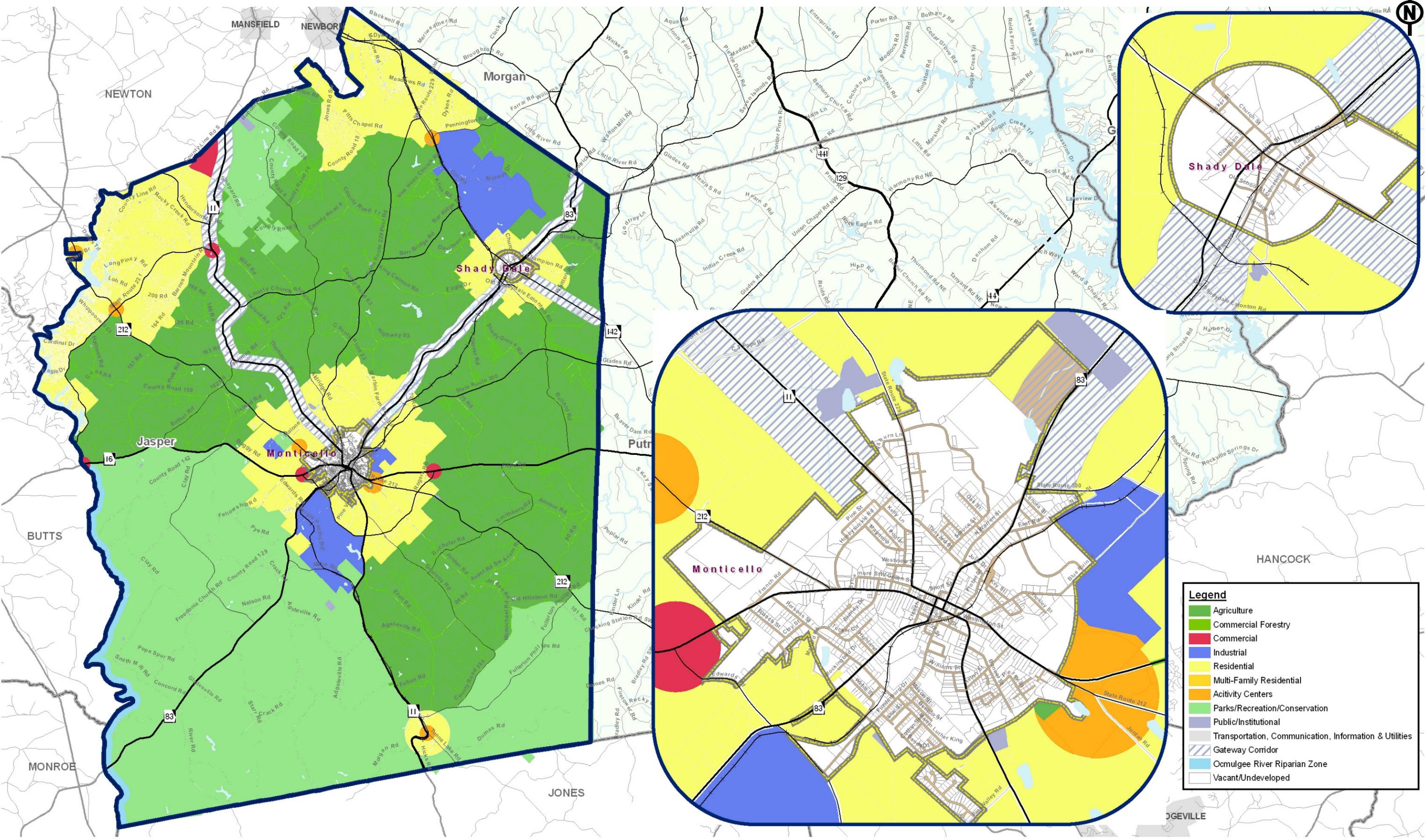
### *Industrial Uses*

- Cities of Monticello and Shady Dale

### *Parks/Recreation/Conservation*

- Lake Jackson
- Charlie Elliot Wildlife Center
- Oconee National Forest

The future land use map is presented in Figure 4.2.



**Legend**

- Agriculture
- Commercial Forestry
- Commercial
- Industrial
- Residential
- Multi-Family Residential
- Activity Centers
- Parks/Recreation/Conservation
- Public/Institutional
- Transportation, Communication, Information & Utilities
- Gateway Corridor
- Ocmulgee River Riparian Zone
- Vacant/Undeveloped

**Future Land Use**  
East Georgia Multi-County Transportation Study

Figure No: 4.2

## 5.0 Previous Studies

An effective Transportation Plan coordinates with other planning efforts to ensure continuity between planning documents and to ensure that goals and related projects for the transportation system are consistent with the established community vision. It is important to recognize that this Plan is not the first transportation planning effort for the County. GDOT continually conducts planning efforts throughout the state – this study will build on these efforts. The following planning studies and programs were reviewed and key results summarized:

- GDOT's State Transportation Improvement Program and Six Year Construction Work Program;
- GDOT's Statewide Bicycle and Pedestrian Plan;
- Northeast Georgia Regional Bicycle and Pedestrian Plan; and,
- Jasper County's Comprehensive Plan;

### 5.1 GDOT's State Transportation Improvement Program & Six Year Construction Work Program

In addition to current studies, there are several planned and programmed multi-modal improvements in Jasper County. Programmed improvements, for the purpose of this study, refer to projects with a construction phase included in the State Transportation Improvement Program (STIP) within the first three years of the planning horizon – 2006, 2007, and 2008 with a dedicated funding source identified. Planned projects refer to projects with a construction phase included in the last three years of the Six Year Construction Work Program (CWP). The following list highlights the general types of planned and programmed improvements for the County:

- Bicycle and Pedestrian Enhancements;
- Roadway Widening;
- New Roadways; and,
- Railroad Crossing Enhancements.

The STIP and CWP were reviewed for projects within and impacting the County and these projects are displayed in Table 5.1. Additionally, these projects are mapped in Figure 5.1. Programmed projects were carried forward and included in the existing conditions network for analysis of future (beyond 2008) transportation scenarios.

**Table 5.1**  
**2006 – 2008 STIP & 2006-2011 CWP**

Map Id	Project Id	Prime Work Type	Description	Program	Construction Date
J-1	423	Widening	SR 16 Widening @ West City Limits of Monticello (3-Lane Section)	STIP	2012
J-2	1939	Roadway Project	Monticello NE Bypass from SR 16 to SR 83	STIP	2012
J-3	2337	TE-Landscape/ Beautify	Monticello Downtown Streetscape and Scenic Byway Bikeway	STIP	Lump
J-4	4444	Guardrail	SR 212 @ Lake Jackson - Guardrail along approaches	STIP	Lump
J-5	4912	Roadway Project	SR 83 Bypass from SR 83/380 northwest on new location to SR 11	CWP	LR
J-6	7593	Sidewalks	Sidewalks; Lighting & Landscaping in Monticello	CWP	2008
J-7	231730	Passing Lanes	SR 83 Passing Lanes between Ocmulgee River and Shady Dale	CWP	LR
J-8	M000355	Miscellaneous Improvements	SR 83 @ Church St in Monticello - Drainage Improvements	STIP	Lump
J-9	S008159	Resurfacing & Maintenance	Apt-to-Miss Rd (CR 89)	CWP	PRECST

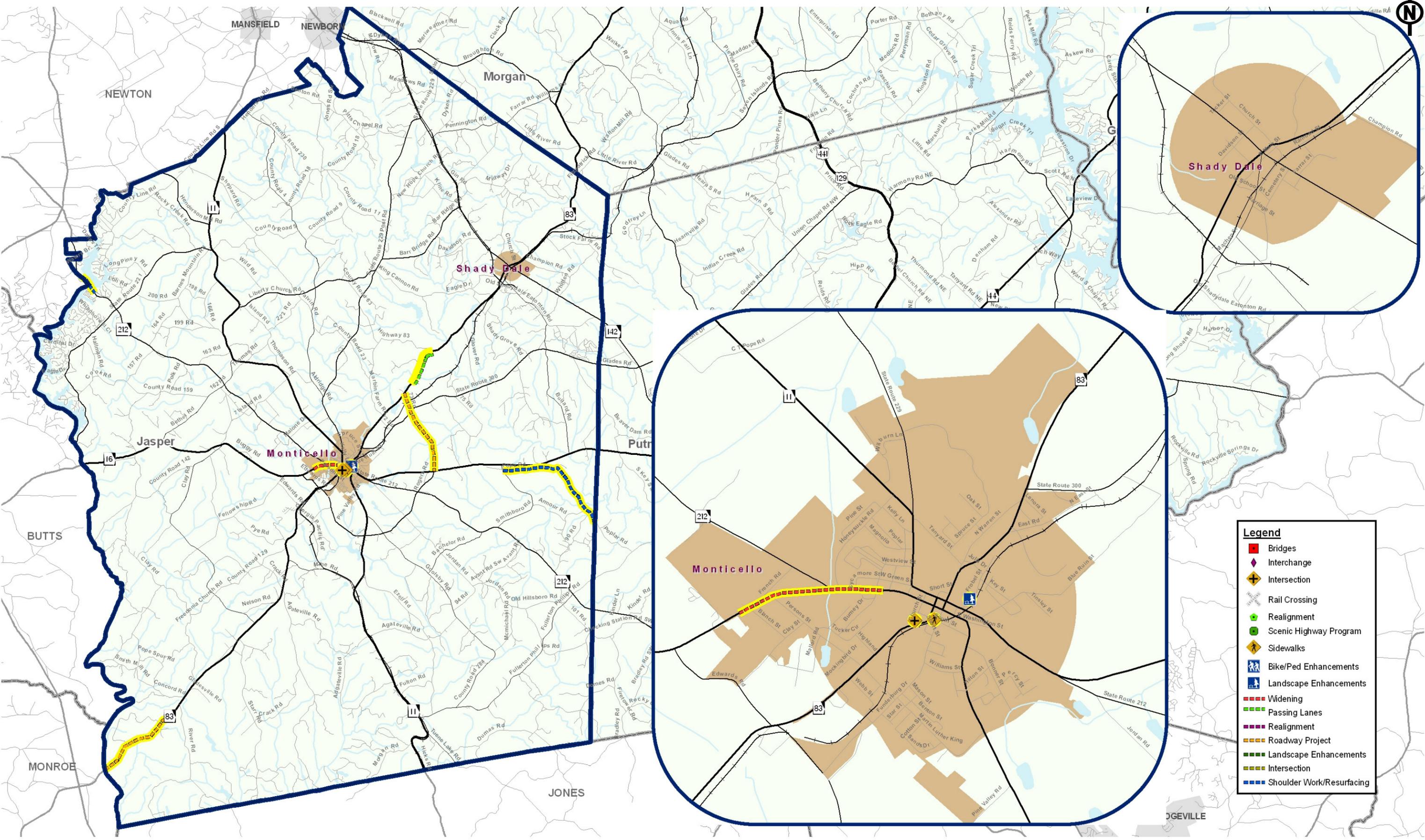
Source: GDOT Department of Planning

Some of the planned projects may have a dramatic effect on the movement of traffic in the County. For example, the Monticello Bypass could help traffic through the downtown area by providing additional connectivity.

## 5.2 GDOT's Statewide Bicycle & Pedestrian Plan

GDOT's Bicycle and Pedestrian Plan (GABPP) was approved in August 1997 and focuses on developing a statewide primary route network. The network contains 14 routes totaling 2,943 miles. A statewide advisory committee consisting of staff from GDOT, the Federal Highway Administration, Metropolitan Planning Organizations, Regional Development Centers, the Association of County Commissioners of Georgia, the Georgia Municipal Associations, local planning departments, bicycle clubs, and other state agencies evaluated each proposed corridor and defined routes. The goals developed as part of that study include:

- Promote non-motorized transportation as a means of congestion mitigation;
- Promote non-motorized transportation as an environmentally friendly means of mobility;
- Promote connectivity of non-motorized facilities with other modes of transportation;
- Promote bicycling and walking as mobility options in urban and rural areas of the state;
- Develop a transportation network of primary bicycle routes throughout the state to provide connectivity for intrastate and interstate bicycle travel; and,



**GDOT's Planned & Programmed Projects**  
East Georgia Multi-County Transportation Study

Figure No: 5.1

- Promote establishment of US numbered bicycle routes in Georgia as part of a national network of bicycle routes.

Several factors were used in evaluating routes, including: accident history; total traffic volumes and truck volumes; speeds; shoulder and travel lane width; pavement condition; network connectivity; access to cities and to major points of interest; aesthetics; and the presence of potentially hazardous spot conditions. Bicyclists were considered the primary users of this route network, however pedestrian friendly designs are used in urban areas and paved shoulders are constructed on rural sections.

GDOT's Statewide Bicycle and Pedestrian Plan was reviewed to identify proposed facilities through Jasper County. There are currently no routes in the plan located in Jasper County.

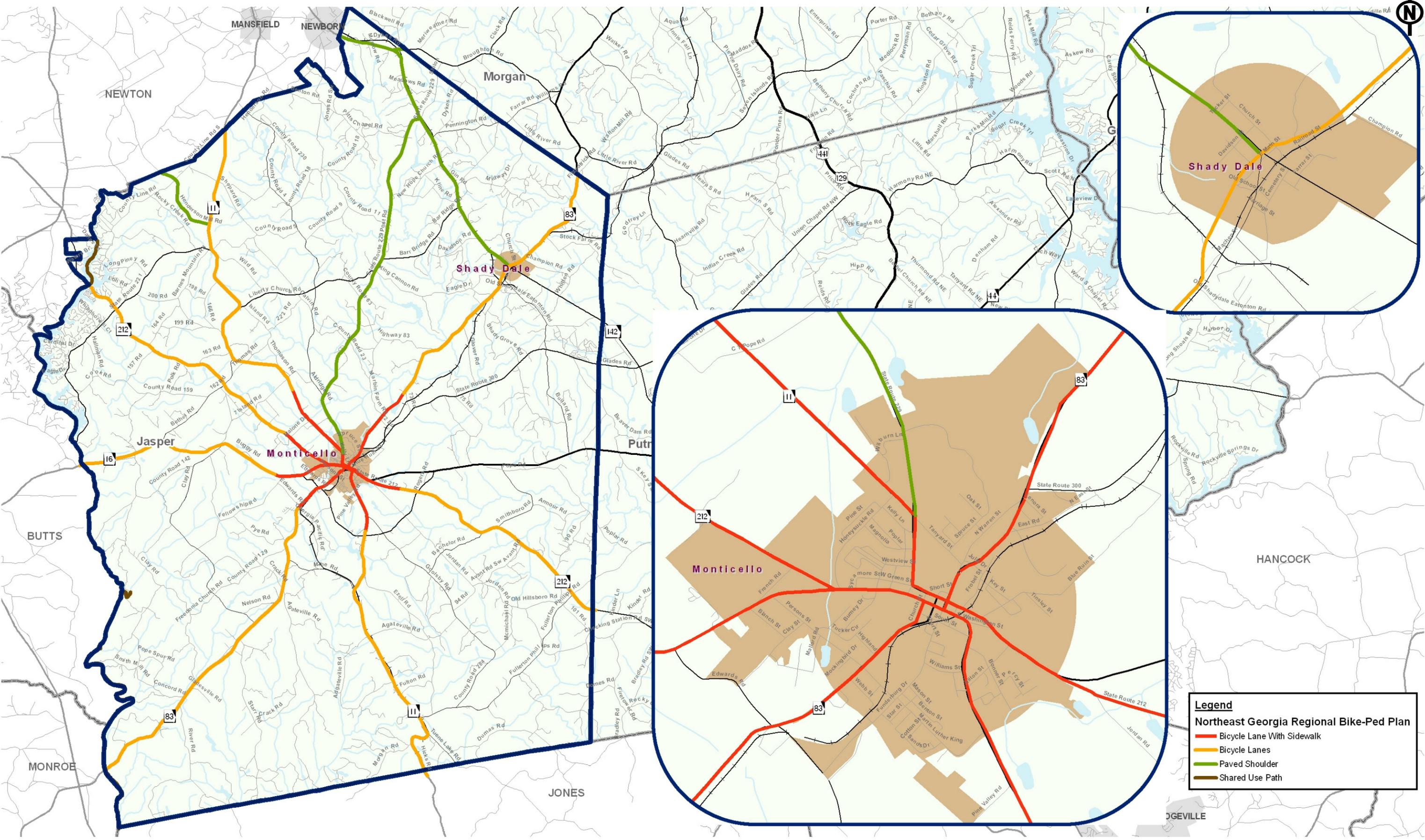
### 5.3 Northeast Georgia Regional Bicycle and Pedestrian Plan

The NEGRDC, with funding support from GDOT, developed the *Northeast Georgia Regional Bicycle and Pedestrian Plan*. The plan was completed in April 2005 and focuses to establish a system of streets, roads, and highways designed to provide a safe, convenient, and accessible environment for bicycles and pedestrians. Further, the plan intends to provide opportunity for integration of bicycle and pedestrian facilities into the existing transportation framework and to enhance the natural environment, improve public health, and improve the quality of life in the Northeast Georgia region. As part of this effort the following goals were created:

- Promote and encourage bicycling and walking as a means of transportation, healthy living, and environmental preservation;
- Create a safe, convenient, and accessible network of bicycle and pedestrian facilities that meets the needs of a wide range of users;
- Integrate bicycle and pedestrian transportation issues into land use decisions; and,
- Actively seek funding resources from local, state, and federal agencies, as well as private sources, for planning, constructing, and maintaining a regional bicycle and pedestrian network.

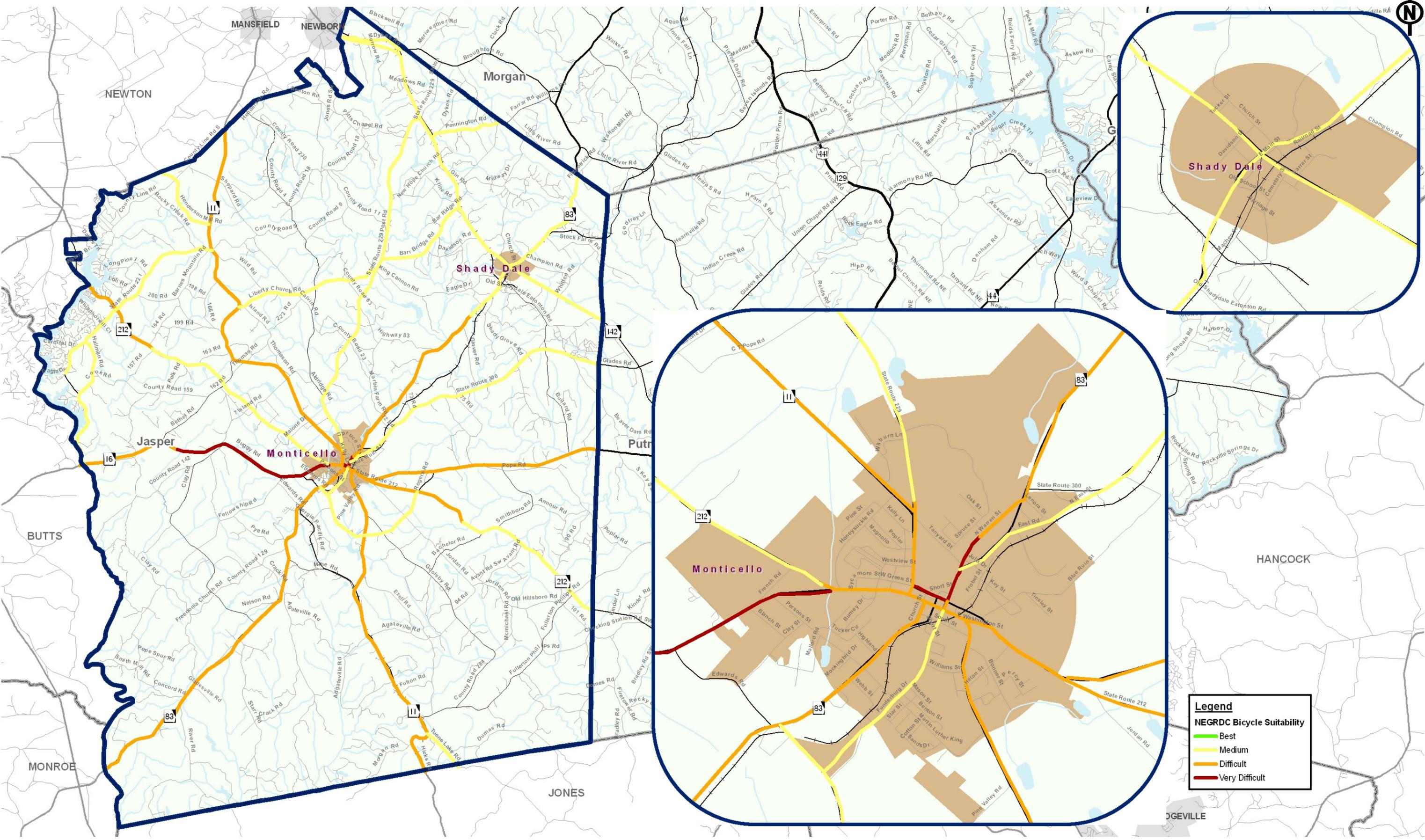
The Bicycle and Pedestrian Plan includes several types of routes for Jasper County such as bike lanes, paved shoulders, sidewalks and shared use paths. The routes total 70 miles in Jasper County. Recommendations from the *Northeast Georgia Regional Bicycle and Pedestrian Plan* are presented in Figure 5.3.1.

Additionally, the *Northeast Georgia Regional Bicycle and Pedestrian Plan* identifies the suitability of major roadways in the twelve-county Northeast Georgia Region for bicycling considering traffic volume, posted speed limit, shoulder width, volume of truck traffic, and roadway functional classification. Figure 5.3.2 illustrates the findings in Jasper County ranging from "Very Difficult" to "Medium" regarding cycling conditions on the existing roadways in the County. No routes in Jasper County were identified as "Best" for cycling.



**NEGRDC's Bicycle & Pedestrian Plan**  
East Georgia Multi-County Transportation Study

Figure No: 5.3.1



**Legend**

**NEGRDC Bicycle Suitability**

- Best
- Medium
- Difficult
- Very Difficult

**NEGRDC's Bicycle Suitability Map**  
East Georgia Multi-County Transportation Study

Figure No. 5.3.2

### 5.4 Jasper County Comprehensive Plan

The Jasper County Comprehensive Plan was updated and completed in 2004. The Comprehensive Plan was developed to guide the growth of the County through 2024. To the greatest extent possible, the transportation planning effort is being developed with respect to land use issues and opportunities in Jasper County. It is important to review the Comprehensive Plan because of the critical linkage between land use and transportation. Table 5.4 presents key findings in the Comprehensive Plan.

**Table 5.4  
Summary of Jasper County Comprehensive Plan**

Key Data/Trends	Description		
<b>Population</b>	<b>RDC Estimates (W&amp;P)</b>		<b>US Census Estimates</b>
	1980:	7,553	7,553
	1990:	8,453	8,453
	2000:	11,426	11,426
	2005:	13,443	N/A
	2010:	15,324	15,500
	2015:	17,614	17,340
<b>Commute Patterns</b>	Living and working in Jasper:	37.3%	
	Living in Jasper and working in Greene:	0.1%	
	Living in Jasper and working in Morgan:	2.4%	
	Living in Jasper and working in Putnam:	1.5%	
	Living in Jasper and working elsewhere:	58.7%	
<b>Largest Employers in 2000</b>	Jasper County Superintendent (380 employees)		
	Georgia Pacific (187employees)		
	Jasper Memorial Hospital (130 employees)		
<b>Land Uses</b>		<b>1992</b>	<b>2012</b>
	Agriculture/Forestry:	85.00%	84.70%
	Residential (single family and mobile homes):	1.30%	1.96%
	Public/Institutional:	0.12%	0.16%
	Transportation/Communications/Utilities:	N/A	N/A
	Commercial:	0.03%	0.05%
	Industrial:	0.16%	0.22%
Parks/Recreation/Conservation:	12.19%	11.71%	
Undeveloped:	1.20%	1.20%	

Key Data/Trends	Description
<p><b><i>Growth Areas in the County</i></b></p>	<p style="text-align: center;"><b>Residential Uses</b></p> <ul style="list-style-type: none"> <li>• Residential land use comprises only 1.3% of the total land area which is 237,160 acres.</li> </ul> <p style="text-align: center;"><b>Intensive Agricultural (Poultry Farms, etc.)</b></p> <ul style="list-style-type: none"> <li>• Agriculture is the largest land use in the County consuming 202,695 acres; representing 85% of the total land area.</li> </ul> <p style="text-align: center;"><b>Commercial Uses</b></p> <ul style="list-style-type: none"> <li>• The County intends to concentrate future commercial development in nodes.</li> </ul> <p style="text-align: center;"><b>Industrial Uses</b></p> <ul style="list-style-type: none"> <li>• 16% of the total unincorporated land in the County is used for industrial purposes.</li> <li>• Industrial locations are in Shady Dale and Farrar.</li> </ul> <p style="text-align: center;"><b>Parks/Recreation/Conservation</b></p> <ul style="list-style-type: none"> <li>• Parks and Recreation land use comprises 2% of the total land area.</li> <li>• Charlie Elliot Wildlife Center, Oconee National Forest, Cedar Creek Wildlife Management Area, and Piedmont National Wildlife Refuge make up approximately 10-15% of the County.</li> <li>• Turtle Cove, Hunter Pope Country Club, and small areas on Lake Jackson.</li> </ul>
<p><b><i>Planning Issues in Cities</i></b></p>	<ul style="list-style-type: none"> <li>• No major problems exist with the present land use design in the City of Monticello.</li> <li>• The City’s annexations have made the boundaries somewhat irregular. The City may want to annex additional parcels of land to make the city’s boundaries uniform; though they are causing no problems at this time.</li> </ul>
<p><b><i>Land Use Issues</i></b></p>	<ul style="list-style-type: none"> <li>• Present land use reveals no major problems at this time.</li> </ul>
<p><b><i>Transportation-Related Goals, Objectives, and Strategies</i></b></p>	<ul style="list-style-type: none"> <li>• The only signalized intersections currently operating are located in downtown Monticello around the square.</li> <li>• No comprehensive sidewalk inventory in the County.</li> <li>• Bicycle and pedestrian mobility is becoming more important as alternative modes.</li> </ul>

## 6.0 Assessment of Transportation Facilities

Extensive data was collected for the transportation facilities within Jasper County. This data collection effort included inventorying existing roadways, bicycle and pedestrian facilities, transit, freight, bridges, traffic collisions, rail, and airport services. The following sections provide an overview of the existing transportation system. This information will form the basis for evaluating its performance and determining potential future improvements.

Based on the existing conditions inventory and assessment, an analysis of operating conditions was conducted for the following elements:

- Public Transportation;
- Freight Transport;
- Airport Facilities;
- Bicycle and Pedestrian Facilities;
- Bridges;
- Safety;
- Roadway Characteristics;
- Roadway Operating Conditions; and,
- Citizen and Stakeholder Input.

This analysis documents the baseline operating conditions for each element of the transportation system and forms the foundation for development of improvement recommendations.

### 6.1 Public Transportation

There is currently no rural transportation program in Jasper County. The Senior Center owns a van and provides limited meal delivery.

Planning for a future rural transit program needs to consider the current population of elderly, disabled, and low-income citizens as well as projections for these populations in the future. All of these groups would benefit from increased access to medical care, shopping, employment, educational, and recreational facilities.

Jasper County's population of persons age 65 represented 11.8% of its total population in the year 2000. This percentage exceeds the Georgia statewide average of 9.6%. The US Census projects that the number of elderly persons will increase by as much as 30% in the next twenty years, reaching 1,772 persons by the year 2025. Table 6.1 below presents US Census projections for the years 2000, 2010, and 2025.

**Table 6.1**  
**US Census Population Projections**

	2000		2010		2025	
	Number of Persons	Percent of County	Number of Persons	Percent of County	Number of Persons	Percent of County
Total Population	11,426	–	13,363	–	16,267	–
Population 65 years of age or older	1,353	11.8%	1,521	11.3%	1,772	10.9%

Source: US Bureau of the Census

In the year 2000, approximately 22.8% of Jasper County's households had income below \$20,000 per year according to the US Census. This significant portion of the County's population is likely at a disadvantage with private transportation and access to employment, medical, educational, and recreational opportunities.

Moreover, the population of persons with a disability, age 21 and over, was 2,127, or 18.6% of the County's total population. A rural transit program could greatly benefit these individuals by offering improved access to medical centers, shopping, jobs, and other day to day destinations.

## 6.2 Freight Transport

The identification of freight corridors and preservation of freight mobility is a key component of the Jasper County Multi-Modal Transportation Plan. There are currently two roadways in Jasper County that are designated as truck routes and two active rail lines. The following section summarizes the existing freight activity and facilities in Jasper County.

Two railroads provide service to Jasper County. Norfolk Southern operates a north-south line between Madison and Macon. Twenty miles of this line are located in Jasper County. On average, four trains traverse this line each day. Rail traffic density along this portion of the Norfolk Southern line is approximately 3 million gross ton miles per mile of track per year (MGTM/M). Rail traffic density provides an indication of the relative use of the rail system and demand for service along a particular track section. By comparison, some of Georgia's most heavily used mainlines transport more than 30 MGTM/M per year.

In addition to the Norfolk Southern rail line, the Great Walton Railroad, a short line railroad, operates a 28-mile line between Covington and Machen (just south of Shady Dale). Approximately 10 miles of this route are located in Jasper County, transporting 941 carloads per mile of rail through the County each year.

Several commodities originate within Jasper County, that is, they are transported by rail from within the County to destinations outside of Georgia. Approximately 300,000 tons of lumber and wood products as well as 300,000 tons of clay, concrete, glass, and stone

products are transported out of Jasper County each year. Products transported into the County from sources outside state boundaries include clay, concrete, glass, stone products, and lumber and wood products. Nearly 500,000 tons of these commodities terminate within Jasper County each year.

The Great Walton Railroad carries additional commodities through the County. These include farm products and non-metallic minerals. While the transportation of farm products has been decreasing, the transportation of non-metallic minerals has increased by 82% in recent years.

Jasper County has 74 railroad crossings. All are at-grade with the exception of one underpass and one overpass. According to GDOT, the crossing at SR 16 (Green Street) experiences the heaviest volume of traffic. GDOT's AADT counts show an average of 3,200 vehicles on SR 16 (Green Street) in the vicinity of this crossing every day.

The Federal Railroad Administration, Office of Safety Analysis, reports fifteen accidents at Jasper County rail crossings between 1975 and 2005. SR 16 (Green Street) and CR 127 have experienced the highest number of accidents in this timeframe, each with four. Table 6.2 displays the accidents which have occurred in the last 10 years.

**Table 6.2**  
**Rail Crossing Accidents between 1995 and 2005**

Crossing ID	Location	City	Date of Incident	Highway User Involved	Position	Injuries
733251U	Funderberg Dr	Monticello	10/10/02	Truck	Moving over crossing	No injuries
733249T	SR 16 (Green St)	Monticello	02/23/01	Truck-trailer	Moving over crossing	No injuries
			03/22/01	Truck-trailer	Moving over crossing	No injuries
733253H	Short St	Monticello	08/22/00	Auto	Moving over crossing	No injuries
733243C	CR 363	Monticello	02/26/97	Truck-trailer	Moving over crossing	No injuries

*Source: Federal Railroad Administration – Highway-Rail Grade Crossing Accident/Incident Report, 2006*

There are no programmed railroad improvements in the GDOT Construction Work Program scheduled for Jasper County at this time.

**Surface Freight Movement**

The primary surface freight movement in Jasper County is occurring on SR 83, SR 11, and SR 142. In order to better understand the movement of freight in Jasper County, local industries were surveyed to determine the average number of trucks entering and exiting their facilities on a daily basis as well as the predominant route the freight traffic uses coming to and departing from their facilities. This information along with truck traffic counts

entering and exiting the County will be calculated to ensure that freight movement is accounted for in the transportation planning process.

Figure 6.2 displays the freight and rail facilities in the County.

### 6.3 Airport Facilities

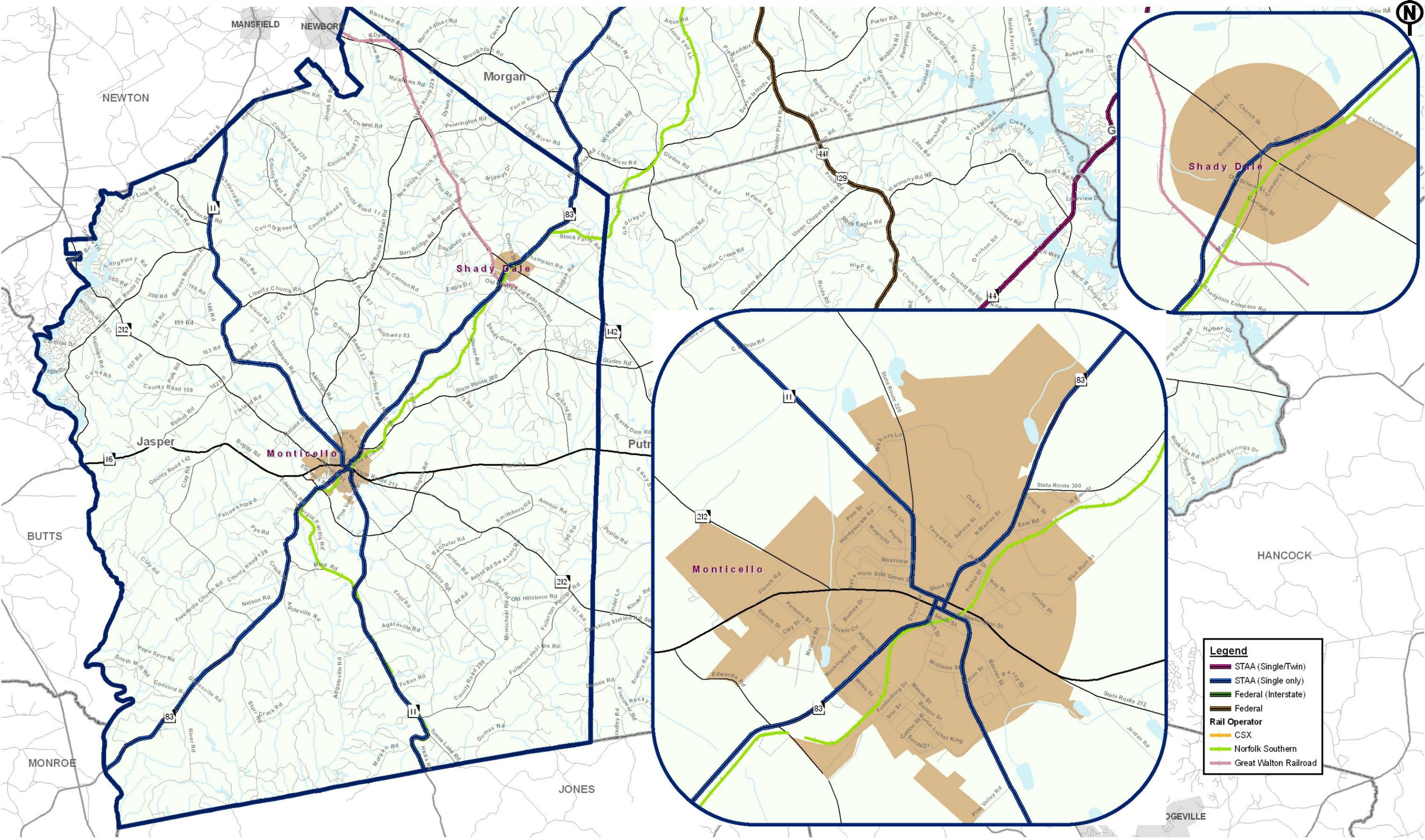
Jasper County does not have an airport but there are several minor landing strips in the County. Nearby commercial airports are the Middle Georgia Regional Airport in Macon, and Hartsfield-Jackson Atlanta International Airport in Atlanta. The Baldwin County Airport, located in Milledgeville, offers Level III general aviation services including a 5,500 foot long by 100 foot wide runway, medium intensity runway lights, a full parallel taxiway, visual approach indicator lights, and a GPS approach system. Other services include a full-service fixed-base operator, aviation and jet fuel, a 1,050 square foot terminal, hangar and auto parking, and a rental car agency.

### 6.4 Bicycle and Pedestrian Facilities

Bicycle and pedestrian facilities are an important part of a multi-modal transportation system designed to efficiently move people. It is important to consider that everyone is a pedestrian at one point in almost every trip, even if the primary mode of travel for a trip involves a personal vehicle or transit. Sidewalks are an important element along roadways near local activity centers such as schools, commercial centers, and public recreation areas, all of which attract significant pedestrian and vehicular traffic. Crosswalks at roadway intersections in areas with pedestrian activity can be utilized to minimize conflicts between motor vehicles and pedestrians. Fortunately, bicycle and pedestrian planning is already well underway in Jasper County with assistance from the NEGRDC.

Jasper County has many recreational attractions that inspire the need for alternative forms of transportation to enable residents and tourists to enjoy all the County has to offer. Several examples of these attractions are Monticello Crossroads Scenic Byway, Jackson Lake, Historic Monticello, Seven Island Stage Coach Road, Oconee National Forest, Ocmulgee River, and Charlie Elliott Wildlife Center. These attractions will be considered when developing recommendations for additional facilities to foster bicycle and pedestrian connectivity.

The sidewalk network in Jasper County is very sparse. The City of Monticello maintains an adequate network of sidewalks connecting the downtown to surrounding residential areas. The City of Monticello has been very active in upgrading sidewalks and the streetscape through the GDOT's Transportation Enhancement (TE) Program. Jasper County also maintains a strong network of Georgia Scenic Byways along SR 83 and SR 11 which fosters increased bicycle activity in the vicinity of the byways and increased pedestrian activity in downtown Monticello. A bicycle route from downtown Monticello north on SR 83, west on Broughton Road and south on SR 11 into Monticello has been detailed to enable



**Freight Transportation Facilities**  
East Georgia Multi-County Transportation Study

Figure No: 6.2

residents and visitors to enjoy the Scenic Byway by bicycle. Another scenic byway along SR 142 through Shady Dale is currently being considered.

According to GDOT's crash database, from 2003 to 2005, there were three reported bicycle and pedestrian related crashes in Jasper County. None of these crashes resulted in a fatality. A review of the information in the crash database did not identify system contributing causes.

### **Existing Recommendations**

The Northeast Georgia Regional Bicycle and Pedestrian Plan identifies the suitability of major roadways in the twelve-county Northeast Georgia Region for bicycling considering traffic volume, posted speed limit, shoulder width, volume of truck traffic, and roadway functional classification. Figure 5.3.2 previously illustrated the findings in Jasper County ranging from "Very Difficult" to "Best" regarding cycling conditions on the existing roadways in the County. No routes in Jasper County were identified as "Best" for cycling. The routes listed below were identified as "Medium" indicating the most favorable routes in the County:

- Perimeter Road from SR 83 east to SR 212;
- SR 212 from Smithboard Road east to the Putnam County Line;
- Rock Eagle Road from SR 83 east to the Putnam County Line;
- Pennington Road from SR 142 east to the Morgan County Line;
- SR 142 from the Newton County Line east to the Putnam County Line;
- SR 83 from Alexander Road north to the Morgan County Line;
- Liberty Church Road from SR 11 to Post Road;
- Post Road from SR 11 north to SR 83;
- Barr Bridge Road from Post Road east to SR 83;
- Jackson Lake Road from the Butts County Line to SR 11;
- Rocky Creek Road from Jackson Lake Road north to the Newton County Line; and,
- SR 212 from SR 16 north to Jackson Lake Road.

The Northeast Georgia Regional Bicycle and Pedestrian Plan outlines recommendations for future improvements to the transportation system to better accommodate bicyclists and pedestrians. Table 6.4 shows these recommended improvements as previously presented in Figure 5.3.1.

**Table 6.4**  
**Proposed Jasper County RDC Bicycle and Pedestrian Facility Improvements**

Location	Description
SR 11 from SR 129 to Seven Island Rd	Bicycle Lane with Sidewalk
SR 11 from SR 16 to Perimeter Rd	Bicycle Lane with Sidewalk
SR 16 from SR 212 to Fellowship Rd	Bicycle Lane with Sidewalk
SR 16/SR 212 from SR 16/SR 212 to SR 11	Bicycle Lane with Sidewalk
SR 212 from SR 16 to Malone Dr	Bicycle Lane with Sidewalk
SR 212 from SR 11 to Perimeter Rd	Bicycle Lane with Sidewalk
SR 83 from SR 16 to Edwards Rd	Bicycle Lane with Sidewalk
SR 83 from SR 16 to CR 73	Bicycle Lane with Sidewalk
SR 11 from Newton County Line to Seven Island Rd	Bicycle Lanes
SR 11 from Perimeter Rd to Jones County Line	Bicycle Lanes
SR 16 from Fellowship Rd to Butts County Line	Bicycle Lanes
SR 212 from Malone Dr to Newton County Line	Bicycle Lanes
SR 212 from Perimeter Rd to Putnam County Line	Bicycle Lanes
SR 83 from CR 73 to Morgan County Line	Bicycle Lanes
SR 83 from Edwards Rd to Butts County Line	Bicycle Lanes
Broughton Rd from Morgan County Line to SR 142	Paved Shoulder
SR 142 from SR 83 to Newton County Line	Paved Shoulder
SR 229 from SR 11 to SR 142	Paved Shoulder
Henderson Mill Rd from SR 11 to Newton County Line	Paved Shoulder
Rutledge Rd from Newton County Line to Morgan County Line	Paved Shoulder
Ocmulgee River from Jones County Line to Jackson Lake	Shared Use Path

*Source: Northeast Georgia Regional Bicycle and Pedestrian Plan*

### **Additional Considerations**

Locations such as schools, major recreational sites, and activity centers within the County should also be considered for bicycle and pedestrian improvements. Jasper County has four public schools:

- Jasper County Primary School in Monticello;
- Washington Park Elementary School in Monticello;
- Jasper County Middle School in Monticello; and,
- Jasper County High School in Monticello.

Jasper County is currently in the process of building a new high school on the west side of SR 11 north of Monticello just north of Malone Drive. As the potential for new bicycle and pedestrian facilities are being evaluated, these locations will be considered as primary locations that would be desirable for improved bicycle and pedestrian access.

To help reduce overall costs of implementing a bicycle and pedestrian network, new facilities should be implemented concurrent with subdivision development and roadway resurfacing, widening, or utility upgrade improvements. Recommendations for

development of a countywide system for bicyclists and pedestrians will focus on connectivity with the existing designated bicycle routes, system of sidewalks, neighborhood streets, and pathway connections. Select planned improvements, listed below, included in the GDOT's Construction Work Program will be evaluated to ensure that any opportunities for the inclusion of bicycle or pedestrian facilities in the project scope are considered.

- #423 – Widening SR 16 at West City Limits of Monticello
- #1939 - Roadway project along Monticello NE Bypass from SR 16 to SR 83
- #2337 - Monticello Downtown Streetscape and Scenic Byway Bikeway
- #4912 - Roadway project along SR 83 Bypass from SR 83/380 northwest on new location to SR 11
- #7593 - Sidewalks, lighting and landscaping in Monticello
- #231730 - Passing lanes along SR 83 passing lanes between Ocmulgee River and Shady Dale
- #M003346 - Resurface and maintenance of Charles Elliott triple surface treatment
- #S008159 - Resurface and maintenance of Apt-to-Miss Road

Public outreach identified bicycle and pedestrian enhancements as a desired quality of life improvement in selected areas including downtown areas and around schools. Field observations were conducted to identify existing deficiencies in the pedestrian and bicycle networks. There are areas where sidewalks have been provided, but in a limited manner that inhibits their usefulness by breaking up the sidewalks with a gap of unfinished surface. Another deficiency common to all areas is the lack of pedestrian accommodation at intersections. Several locations lack pedestrian signals, crosswalk striping, or both.

There may be opportunities for new multi-use trails linking town centers, recreational areas, schools, and other locations. Transportation improvements to the pedestrian, bicycle, and trail networks should be considered in the appropriate areas and corridors to better meet the needs of pedestrians and bicyclists in Jasper County.

### **Bicycle System Elements**

Once a location for improved bicycle connectivity is determined, the type of improvement must also be considered. Factors such as lane width, vehicle speed, sight distance, frequency of intersections, pavement surface quality, and hazard removal need to be considered in the facility selection and design process. In addition to facility selection and design, bicycle systems should be designed to ensure the security of bicycles at typical bicyclist destinations. Primary destinations such as schools, public recreation areas, commercial businesses, and restaurants should include bicycle racks or lockers for securing bicycles.

There are four primary types of bicycle facilities: bike paths, bike routes, bike lanes, and bike shoulders. A description of each type of facility along with design considerations are listed below. Transportation Planners and Engineers should refer to AASHTO's Guide for the Development of Bicycle Facilities when selecting and designing bicycle facilities.

- **Bike Paths** - A bike path is a special pathway designated for the exclusive use of bicycles where cross flows by pedestrians and motorists are minimized. A bike path is usually buffered from vehicular roadways through the use of a landscaped strip or physical barrier. It is also usually grade separated but may have at-grade crossings. Bike paths are identified through proper signing and also may have pavement markings.

The paved width and the operating width of the bicycle path are primary design factors. Under most conditions, a paved width for a two-directional shared (bicycles and pedestrians) path is 10 feet. In rare instances, a reduced width of 8 feet may be adequate. Under certain conditions including anticipated high use or the need for maintenance vehicle use, a paved width of 12 feet is required. A minimum of 2-foot width graded area should be maintained adjacent to both sides of the paving.

- **Bike Routes** - A bike route is a roadway identified as a bicycle facility by guide signage only. There are no special lane markings and bicycle traffic shares the roadway with motor vehicles. There are several reasons for designating signed bike routes. A route may be signed if it provides continuity to other bicycle facilities such as bike lanes or bike paths. A route may be signed if it is a common route for bicyclists through a high demand corridor or if the route is preferred for bicycling due to low motor vehicle traffic or paved shoulder availability. Route signage may be preferred if the route extends along local neighborhood streets and collectors leading to an internal destination such as a park, school, or commercial district.

Bicycle routes should be plainly marked and easy for the bicyclist to interpret. The route should provide through and direct travel in bicycle-demand corridors. Traffic control devices (stop signs and signals) should be adjusted to accommodate bicyclists on the route. Street parking should be removed where possible to increase the safety of the rider. A smooth surface should be provided and maintained. Wide curbs are desirable on designated bike routes.

- **Bike Lanes** - A bike lane is a designated strip usually located along the edge of the paved area outside the travel lanes or between the parking lane and the outside motor vehicle through lane. Bike lanes should be one way facilities and carry bike traffic in the same direction as adjacent motor vehicle traffic. On one way streets, bike lanes should typically be placed on the right side of the street. Bike lanes are identified by "Bike Lane" markings on the pavement and other pavement markings or signs deemed appropriate to give adequate guidance to users of the facility. Bicyclists usually have exclusive use of a bike lane for travel, but must be aware of cross flows by motorists at driveways and intersections and also by pedestrians.

For roadways with no curb and gutter, the minimum bicycle lane width is 4 feet. If parking is permitted, the bike lane should be placed between the travel lane and the parking area and should have a minimum width of 5 feet. If a curb and gutter is present, the minimum width from the face of the curb to the bike lane stripe should

be 5 feet if the gutter pan is smooth for bicycle travel. Four feet of maneuverable surface is always necessary.

- **Bike Shoulders** - Bike shoulders are paved shoulders that are smooth and sufficiently wide enough for use by bicyclists. Paved shoulders are used by bicyclists if they are relatively smooth, sufficiently wide enough, and kept clean of debris. Adding or improving paved shoulders often can be the best way to accommodate bicyclists in rural areas. Paved shoulders also provide valuable maneuvering room and reduce potential motor vehicle conflicts for slow-moving bicycles traveling up a hill.

Ideally, a paved bicycle shoulder should be at least 4 feet wide. However, where 4 feet cannot be accommodated, any shoulder is better than none. Rumble strips used to alert motorists that they are driving on the shoulder are not recommended on bike shoulders in the travel path of the cyclist. If rumble strips are placed on the shoulder, there should be additional shoulder adequate for bicycle travel in order to designate a shoulder as a bike shoulder. A bike shoulder is multi-faceted in that it can serve more than one function (i.e. it can serve as a temporary parking lane, an emergency lane, or a bus stop as well as an area for cyclists to travel within).

### **Pedestrian System Elements**

There are also several considerations when selecting the type of pedestrian facility to implement. Along local streets in residential areas, sidewalks with a four-foot clear width should be used. Five-foot clear width sidewalks should be used along collector streets, and six-foot clear width should be used along arterials. In commercial areas with high pedestrian and vehicular volumes, sidewalks of six or more feet should be considered. In order to maintain clear sidewalk widths, obstructions such as traffic signs, utility poles and supports should be placed outside the specified 4 to 6 foot sidewalk width. Grades on sidewalks should be limited to 6 to 8 percent in order to allow a consistent walking pace and ease of wheelchair use. Handicapped accessible ramps should be provided at driveways and intersections to provide accessibility to the system for everyone.

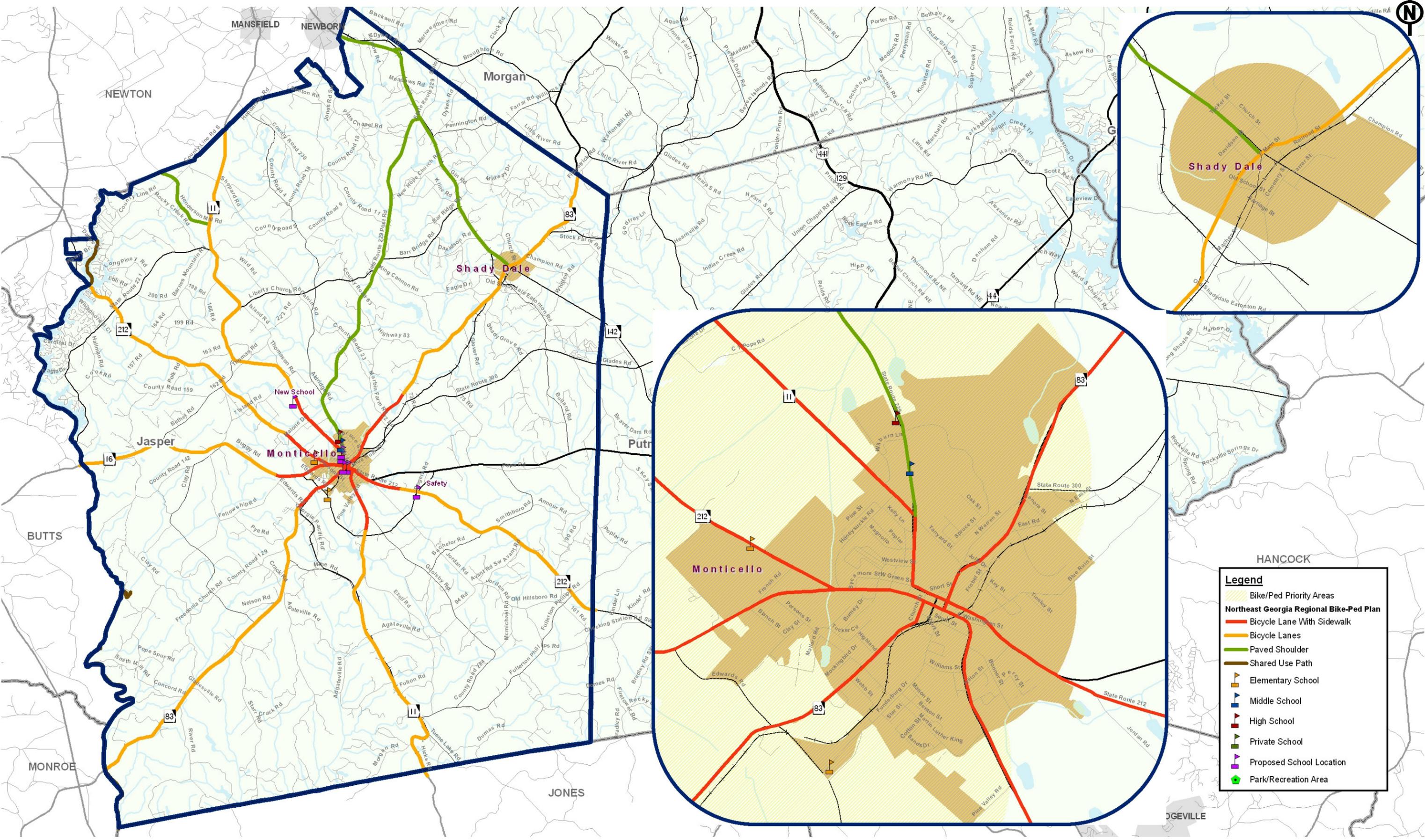
The following criteria are provided as a basis for determining when sidewalks should be considered:

- When streets are within ½ mile of a school;
- When a street is classified as a collector or arterial;
- When health and safety are threatened due to pedestrian/vehicular traffic conflicts;
- When sidewalks would provide system continuity between existing pedestrian destinations;
- When parks, playgrounds, libraries, or other attractors of small children are not served by sidewalks;
- When there is an existing, frequently traveled, unpaved path along a roadway; and,
- When sidewalks would provide an easy and safe route for pedestrians to gain access to public transportation.

Priorities for enhancing bicycle and pedestrian facilities are based on proximity to schools, libraries, and activity centers. The goal is to provide a bicycle and pedestrian network to serve the local and regional needs of the communities. Criteria were developed to identify and prioritize potential bicycle and pedestrian enhancements beyond those established in the RDC's Bicycle and Pedestrian Plan. Key bicycle and pedestrian prioritization criteria include:

- Proximity to Schools and other public facilities;
- Infill – Connecting existing pieces of the sidewalk network;
- Connectivity – Access between major bicycle and pedestrian origins and destinations;
- Roadway Expansion – Where roads are reconstructed or constructed along new alignments, provide sidewalks as appropriate;
- As new development occurs, encourage development to provide adequate right of way for bicycle and pedestrian facilities;
- Consistency with the GDOT Statewide Bicycle and Pedestrian Plan; and,
- Consistency with the Northeast Georgia Regional Bicycle and Pedestrian Plan.

The bicycle and pedestrian priority areas are mapped in Figure 6.4.



**Bicycle & Pedestrian Priority Improvement Areas**  
East Georgia Multi-County Transportation Study

Figure No: 6.4

## 6.5 Bridges

One of the critical concerns for the County was bridge conditions. The County's bridges were evaluated to determine the need for potential improvement. Deficient bridges pose a major obstacle to a fully functional road network due to load limits or other restrictions. The study area was reviewed to identify all bridges and assess the need for potential improvements.

To facilitate the completion of this effort GDOT provided bridge condition reports for each bridge within the study area. A general measure of the condition of each bridge is the sufficiency rating. The sufficiency rating is used to determine the need for maintenance, rehabilitation or reconstruction of a bridge structure. Consultation with structural/bridge engineers shows that generally a bridge with a sufficiency rating above 75 should maintain an acceptable rating for at least 20 years with adequate maintenance. Structures with a sufficiency rating of 75 or lower have a useful life of less than twenty years and will require major rehabilitation or reconstruction work during the study horizon. All bridges with a sufficiency rating of fifty (50) or lower were identified as potentially deficient.

The study area was reviewed to identify all bridges within Jasper County and document a sufficiency rating. Currently, 64 bridges exist within the County. Table 6.5 displays the collected information.

**Table 6.5**  
**Bridge Inventory**

Road	Feature	Sufficiency Rating
Pitts Chapel Rd	Pittman Branch	15.57
Old Agateville Rd	Cedar Creek	17.09
Lane Rd	Kinnard Creek	17.33
Kinnard Creek Rd	Kinnard Creek Tributary	18.04
Cook Rd	Herds Creek	20.04
Guy Jones Rd	Pittman Branch	20.52
Wicker Rd	Whiteoak Creek	26.10
Ellis Rd	Robinson Creek	26.71
Whitten Rd	Hanna Branch	26.79
Ozborne Rd	Herds Creek Tributary	28.06
River Rd	Jack Creek	28.77
Gaissert Rd	Pittman Creek	28.83
Benton Rd	Herds Creek	39.19
Post Rd	Pittman Creek	41.66
Goolsby Rd	Cedar Creek	45.45
Post Rd	Murder Creek	46.23
Lake Jackson Rd	Herds Creek	47.78
Post Rd	Pearson Creek	52.78
Fullerton-Phillip	Cedar Creek	59.73
Smithboro Rd	North Fork Wolf Creek	62.11
Post Rd	Lowry Branch	65.88

Road	Feature	Sufficiency Rating
King Plow Rd	Murder Creek	67.41
Rock Eagle Rd	Murder Creek	68.69
SR 16	Murder Creek	72.83
SR 83	Murder Creek	72.97
SR 11	Norfolk Southern Railroad (733263N)	74.78
CR 309	Wise Creek	77.65
Clay Rd	Wise Creek	80.67
Aldridge Rd	Lowry Branch	80.80
Post Rd	Popes Branch	81.19
SR 83	Shoal Creek	84.48
Dumas Rd	Cedar Creek	86.40
SR 83	Gap Creek	86.50
Aldridge Rd	Murder Creek	87.19
Bar Bridge Rd	Murder Creek	89.13
Monroe Tyler Rd	Kinnard Creek	89.44
SR 83	Gladesville Creek	89.61
SR 212	Pearson Creek	91.26
SR 212	Hardys Creek	91.37
SR 212	Herds Creek	91.37
Murder Creek Rd	Sheppard Creek	91.90
SR 11	Cedar Creek	92.22
Lake Jackson Rd	Ocmulgee River Tributary	92.24
Dykes Rd	Gap Creek	92.29
SR 16	Whiteoak Creek	92.37
New Hope Ch Rd	Gladesville Creek	92.45
Concord Rd	Pittman Creek	92.47
SR 212	North Fork Wolf Creek	98.52
SR 212	South Fork Wolf Creek	99.00
SR 212	Avant Branch	99.00
SR 11	Pearson Creek	99.36
Apt-to-Miss Rd	Wolf Creek	99.72
SR 212	Whiteoak Creek	99.87
SR 11	Popes Branch	99.87
Alexander Rd	Shoal Creek	99.90
John Tillman Rd	Falling Creek	99.91
Felton Michael Rd	Stalking Head Creek	99.91
Smith Hill Rd	Kinnard Creek	99.92
Armour Rd	South Fork Wolf Creek	99.93
Smith Hill Rd	Long Branch	99.94
Smith Hill Rd	Crow Branch	99.94
Post Rd	Blackwell Creek	99.95
Hodges Farm Rd	Rocky Creek	99.97
Allen Rd	Whiteoak Creek	99.98

Source: GDOT

Based on the sufficiency rating, a majority of the bridges are in good condition and not in need of any major maintenance or upgrade activities. There are seventeen (17) bridges that have a sufficiency rating below 50 and are potentially in need of maintenance and rehabilitation.

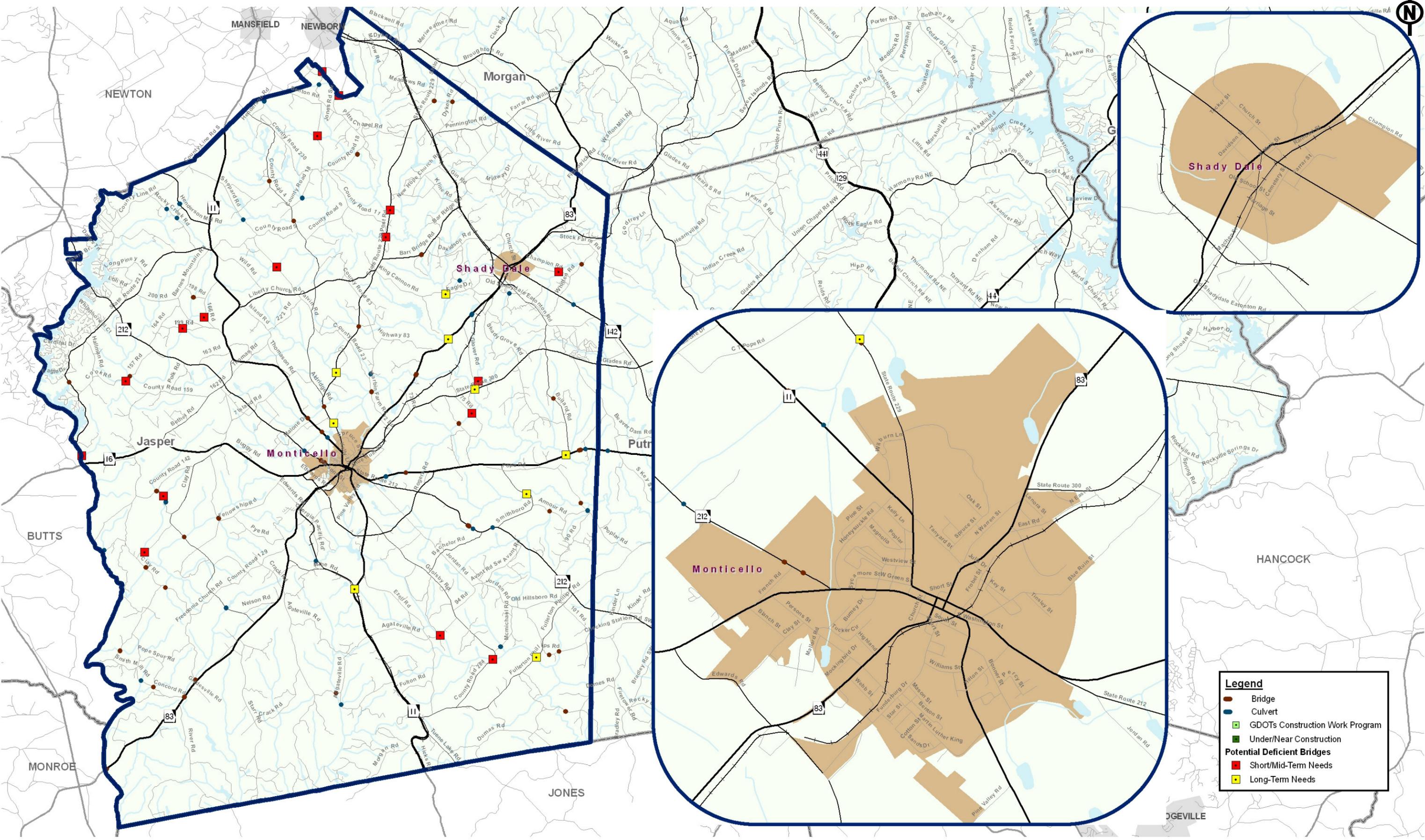
- Pitts Chapel Road at Pittman Branch
- Old Agateville Road at Cedar Creek
- Lane Road at Kinnard Creek
- Kinnard Creek Road at Kinnard Creek Tributary
- Cook Road at Herds Creek
- Guy Jones Road at Pittman Branch
- Wicker Road at Whiteoak Creek
- Ellis Road at Robinson Creek
- Whitten Road at Hanna Branch
- Osborne Road at Herds Creek Tributary
- River Road at Jack Creek
- Gaissert Road at Pittman Creek
- Benton Road at Herds Creek
- Post Road at Pittman Creek
- Goolsby Road at Cedar Creek
- Post Road at Murder Creek
- Lake Jackson Road at Herds Creek

There are currently no bridges listed in the STIP or CWP for Jasper County.

Additionally, there are nine (9) bridges that have a sufficiency rating below 75 and should be considered candidates for maintenance and rehabilitation within the next 20 years. The following bridges have a sufficiency rating below 75.

- Post Road at Pearson Creek
- Fullerton-Phillip at Cedar Creek
- Smithboro Road at North Fork Wolf Creek
- Post Road at Lowry Branch
- King Plow Road at Murder Creek
- Rock Eagle Road at Murder Creek
- SR 16 at Murder Creek
- SR 83 at Murder Creek
- SR 11 at Norfolk Southern Railroad

The candidate bridges for maintenance and rehabilitation are mapped in Figure 6.5.



**Bridges for Potential Maintenance or Rehabilitation**  
East Georgia Multi-County Transportation Study

Figure No: 6.5

## 6.6 Safety

The latest three years of available vehicular crash data from GDOT (2003, 2004, and 2005) was collected and analyzed for Jasper County. The crash data was used to determine roadway locations with potential safety deficiencies throughout the study area. Jasper County experienced a total of 358 crashes with 151 injuries and 6 fatalities during the three-year period.

When analyzing the crash data, it was determined that a threshold of 10 crashes over the three-year period (averaging over 3 crashes per year) would serve to identify “high crash” locations for planning purposes. This provided the ability to pinpoint locations that may potentially have safety issues. Table 6.6 displays the intersections with the highest amount of crashes in the County.

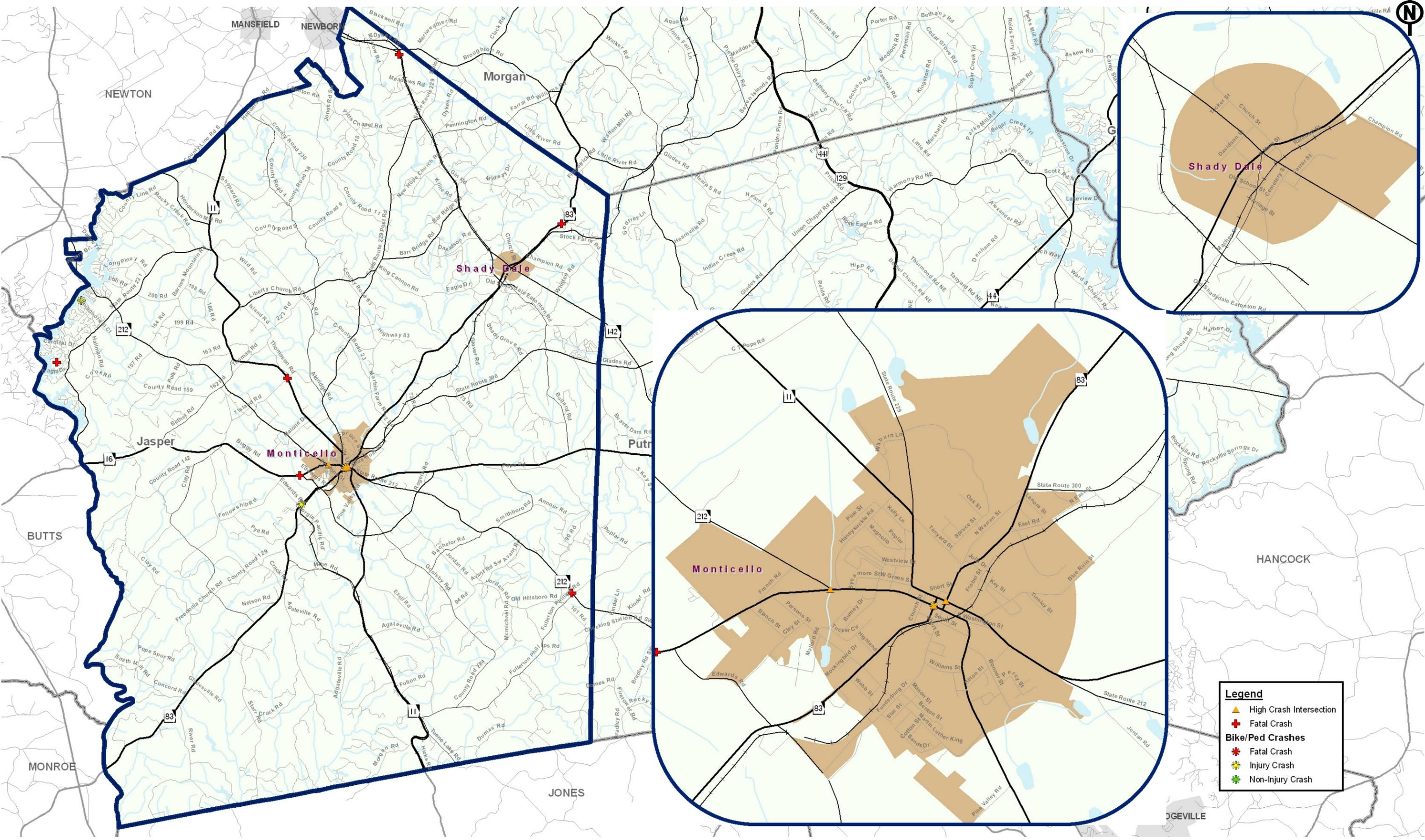
**Table 6.6**  
**High Crash Segments**

Roadway	Intersection	Crashes	Fatalities	Injuries
SR 11 (Green St)	SR 16 (E Green St)	19	0	4
SR 11 (Green St)	SR 11-SO (Forsyth St)	10	0	1
SR 16 (Washington St)	SR 212 W	10	0	2

In addition to the high crash locations, an area of focus and concern was the location of fatal crashes. The locations listed below experienced at least one (1) fatality crash during the three-year analysis period.

- Partridge Drive at Partridge Court
- SR 11 between Seven Island Road and Palalto Road
- SR 83 between milepost 25.2 and 25.7
- SR 142 between Reese Road and Meadows Road
- SR 16 between Brazey Road and Blanche Street
- SR 212 at Old Hillsboro Road

A review of the fatality locations did not identify system contributing causes. Figure 6.6 shows intersections with more than 10 crashes over the three year analysis period as well as fatality and pedestrian related crash locations.



**High Crash Intersections & Fatality Locations**  
East Georgia Multi-County Transportation Study

## 6.7 Roadway Characteristics

This section reviews various conditions of the roadways in Jasper County. The data is provided from GDOT's most recent Roadway Conditions (RC) Database. The following data was reviewed to facilitate the study process:

- Functional Classification;
- Road Lanes;
- Roadway Surface Type; and,
- Roadway Shoulders.

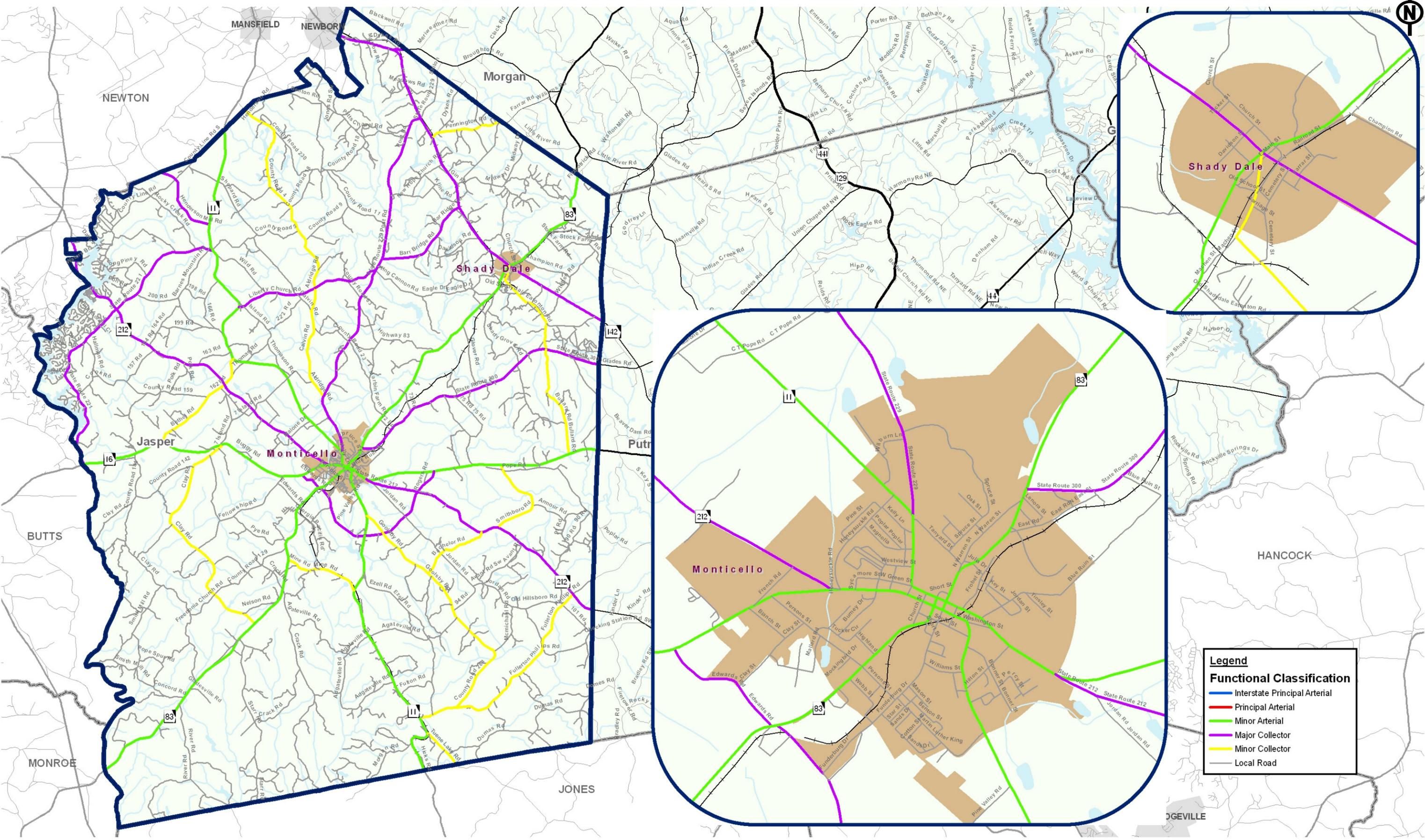
### 6.7.1 Functional Classification

Roadways are grouped into functional classes according to the character of traffic they are intended to serve. There are four highway functional classifications: expressway/freeway, arterial, collector, and local roads, and these can be defined as:

- **Expressway/Freeway** - Provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.
- **Arterial** - Provides the next highest level of service at moderate to high speeds, with some degree of access control. Arterials are typically classified as major arterial and minor arterial.
- **Collector** - Provides a lower level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials. Collectors are typically classified as major collector and minor collector.
- **Local** - Consists of all roads not defined as arterials or collectors; primarily provides access to land with little or no through movement.

There are no expressways/freeways in Jasper County. Jasper County has approximately 70 miles of arterial facilities in the study area and 527 miles of collectors and local streets. Figure 6.7.1 displays the functional class of roadways in Jasper County.

Table 6.7.1 displays the mileage and vehicle miles traveled (VMT) for the different roadway classifications in Jasper County. The County is served by multiple State Roads, (approximately 18% of the lane miles) which handle a majority of the traffic (51%). This closely matches the statewide average of 16% State Roads; however, with a statewide average of 63% total traffic on state roads, Jasper County exhibits less dependency on state roads. To ensure future mobility, it will be important to evaluate and identify needed improvements to the State Road system through close coordination with GDOT.



**Functional Classification**  
East Georgia Multi-County Transportation Study

Figure No: 6.7.1

**Table 6.7.1  
Existing Mileage and Vehicle Miles Traveled**

County	State Roads		County Roads		Local Roads		Total	
	Miles	VMT	Miles	VMT	Miles	VMT	Miles	VMT
Jasper	111	242,281	459	222,490	67	8,390	597	473,161
State	18,084	190,346,464	83,549	89,443,319	14,669	23,508,912	116,303	303,298,695

Source: GDOT

### 6.7.2 Road Lanes

Another important attribute reviewed from GDOT’s RC Database is the number of lanes provided on each road. The roads in Jasper County predominately serve traffic in both directions. Additionally, the majority of the roads in the County are 2-lane facilities. The dependency on a largely 2-lane roadway network may become strained in the future as traffic levels increase. Section 6.8 will analyze the existing and future forecasted traffic on the current roadway network and determine potential deficiencies.

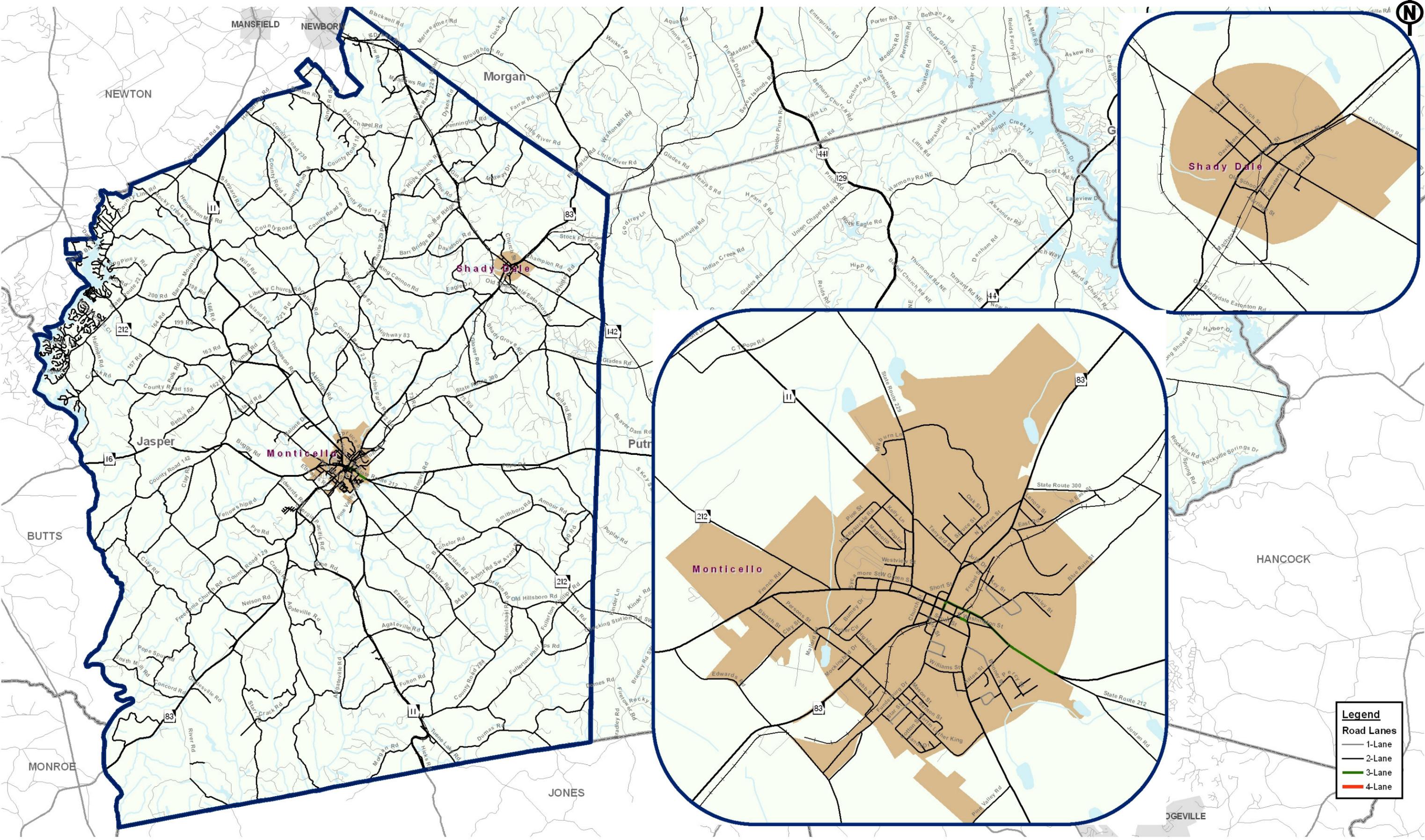
Figure 6.7.2 displays the number of lanes on the roads in Jasper County.

### 6.7.3 Roadway Shoulders

The final attribute reviewed from GDOT’s RC Database is roadway shoulder. For this analysis, both the shoulder type and shoulder width were reviewed to determine segments of roadways in need of potential upgrade. A wide variety of shoulder widths and types are present throughout Jasper County. The objective of this analysis is to determine areas where the shoulder is potentially deficient. Insufficient shoulder width can contribute to travel speed reductions, potential impact safety and influence bicycle and pedestrian usage. The following guidelines were used to determine potential shoulder deficiencies:

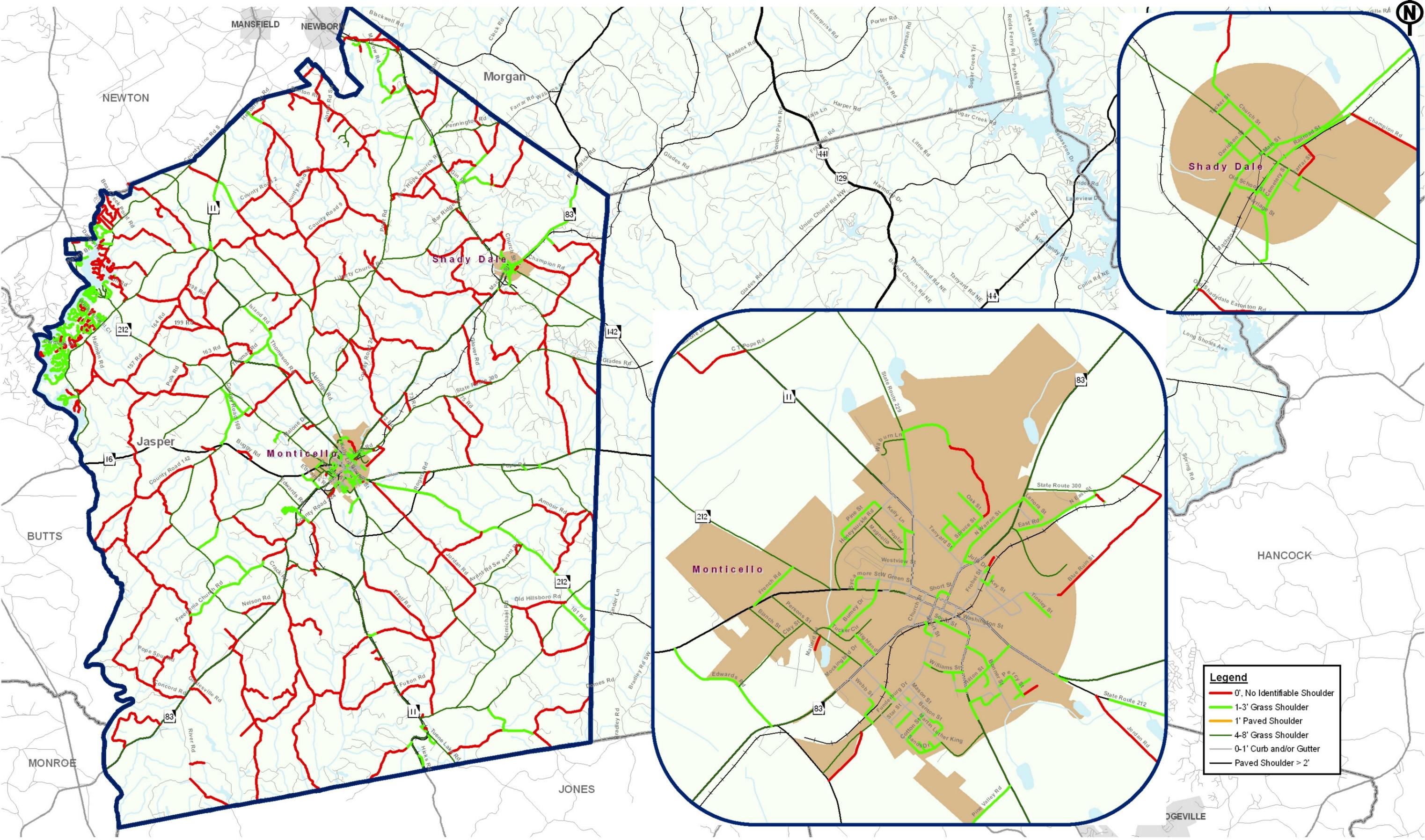
- No shoulder or an unidentifiable shoulder;
- Grass shoulder less than 4 feet; and,
- Paved Shoulder less than 2 feet.

Figure 6.7.3 displays the roadway shoulder type and widths according to GDOT’s RC Database for the County. Roadway segments with potential deficient shoulders will become candidates for recommended upgrades.



**Roadway Lanes**  
East Georgia Multi-County Transportation Study

Figure No: 6.7.2



**Legend**

- 0', No Identifiable Shoulder
- 1-3' Grass Shoulder
- 1' Paved Shoulder
- 4-8' Grass Shoulder
- 0-1' Curb and/or Gutter
- Paved Shoulder > 2'

**Roadway Shoulders**  
East Georgia Multi-County Transportation Study

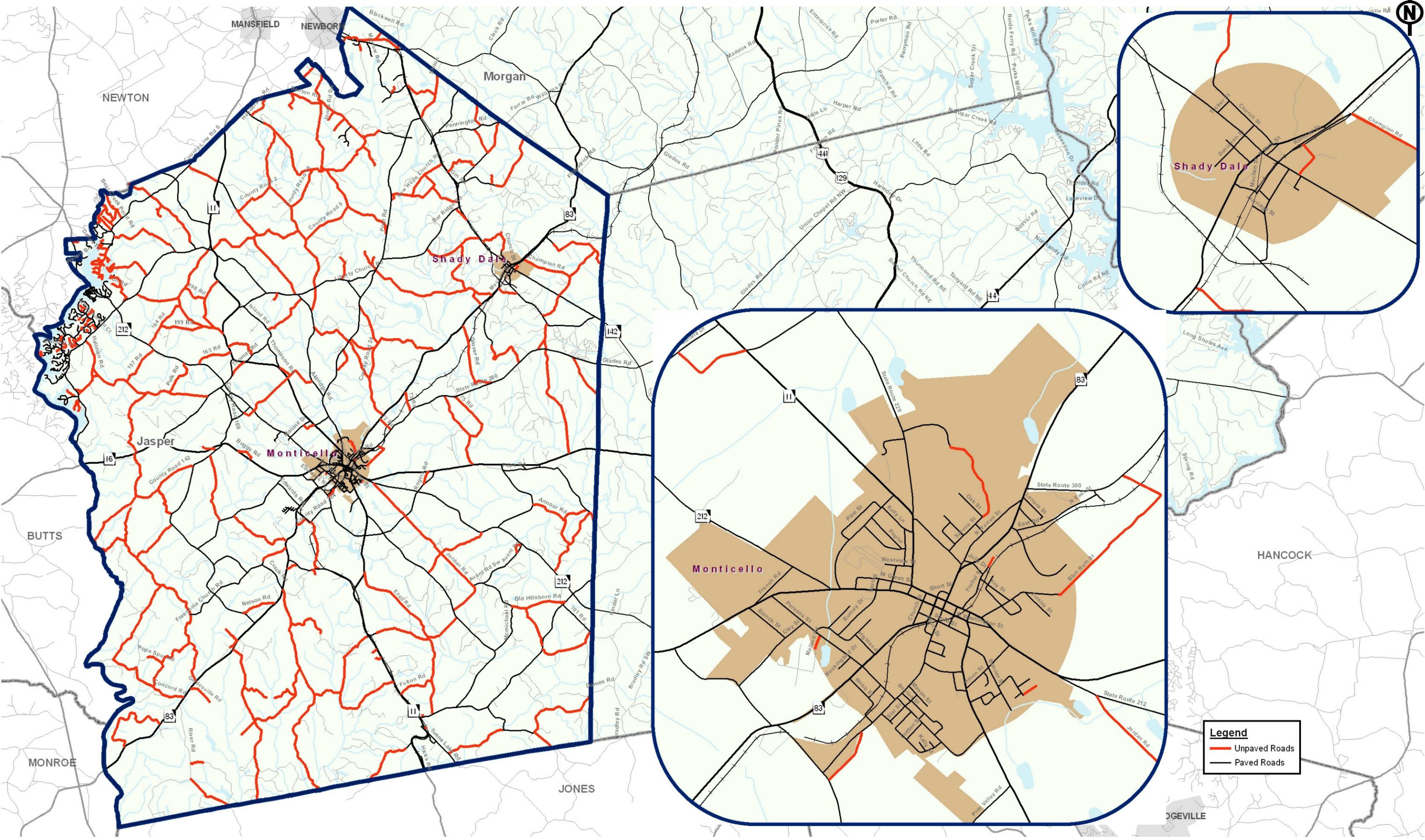
Figure No: 6.7.3

### 6.7.4 Roadway Surface Type

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

- Paved Roads
  - High Rigid - Portland cement concrete pavements with or without bituminous surface if less than one inch.
  - High Flexible - Mixed bituminous penetration road on a rigid or flexible base with a combined (surface and base) thickness of seven inches or more. Includes any bituminous concrete, sheet asphalt, or rock asphalt.
  - Mixed Bituminous Penetration - Low type (less than seven inches combined thickness surface and base). Surface is one inch or more.
  - Mixed Bituminous Pavement - A road, the surface course of which is one inch or more in compacted thickness composed of gravel, stone, sand, or similar material, mixed with bituminous material under partial control as to grading and proportions.
  - Bituminous Surfaced Treated - An earth road, a soil-surfaced road, or a gravel or stone road to which has been added by any process a bituminous surface course with or without a seal coat, the total compacted thickness which is less than one inch. Seal coats include those known as chip seals, drag seals, plant mix seals, and rock asphalt seals.
- Unpaved Roads
  - Gravel or Stone Road - A road, the surface of which consists of gravel or stone. Surfaces may be stabilized.
  - Graded and Drained - A road of natural earth aligned and graded to permit reasonable convenient use by motor vehicles and drained by longitudinal and transverse drainage systems (natural and artificial) sufficient to prevent serious impairment of the road by normal surface water, with or without dust palliative treatment or a continuous course of special borrow material to protect the new roadbed temporarily and to facilitate immediate traffic service.

A majority of the roads in Jasper County are dirt or gravel. It may be appropriate to upgrade and pave some of these facilities to provide better connectivity throughout the study area. Figure 6.7.4 displays the roadway surface type according to GDOT's RC Database for the study area.



**Roadway Surface Type**  
East Georgia Multi-County Transportation Study

Figure No: 6.7.4

## 6.8 Roadway Operating Conditions

A travel demand model was developed to assist in the evaluation of existing and future travel conditions through the 4-County Region. More detailed information regarding the model and model development process is presented in the *Model Development Technical Memorandum*. The key output from the travel demand model is volume to capacity ratio for each roadway segment. The volume to capacity ratios correspond to a level of service based on accepted methodologies from the 2000 Highway Capacity Manual. Existing (2005) and future (2030) operating conditions for the study are summarized in the following sections.

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

- **LOS A** – Drivers perceive little or no delay and easily progress along a corridor.
- **LOS B** – Drivers experience some delay but generally driving conditions are favorable.
- **LOS C** – Travel speeds are slightly lower than the posted speed with noticeable delay in intersection areas.
- **LOS D** – Travel speeds are well below the posted speed with few opportunities to pass and considerable intersection delay.
- **LOS E** – The facility is operating at capacity and there are virtually no useable gaps in the traffic.
- **LOS F** – More traffic desires to use a particular facility than it is designed to handle resulting in extreme delays.

The recommended approach to determine deficient segments in Jasper County was to analyze the volume of traffic on the roadway segments compared to the capacity of those segments, also known as the volume to capacity (V/C) ratio. For daily operating conditions, any segment identified as LOS D or worse was considered deficient.

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

- $V/C < 0.35$  = LOS C or better;
- $0.35 > V/C < 0.55$  = LOS D;
- $0.55 > V/C < 1.00$  = LOS E; and,
- $V/C > 1.00$  = LOS F.

### 6.8.1 Existing Operating Conditions

The existing conditions scenario results derived from the 4-County travel demand model were used to determine deficient roadway segments in Jasper County. Deficient segments were determined by analyzing the volume of traffic on the roadway segments compared to the capacity of those segments. The corresponding V/C ratios were related to LOS. The minimum acceptable LOS for daily roadway operating conditions is LOS C based on GDOT standards.

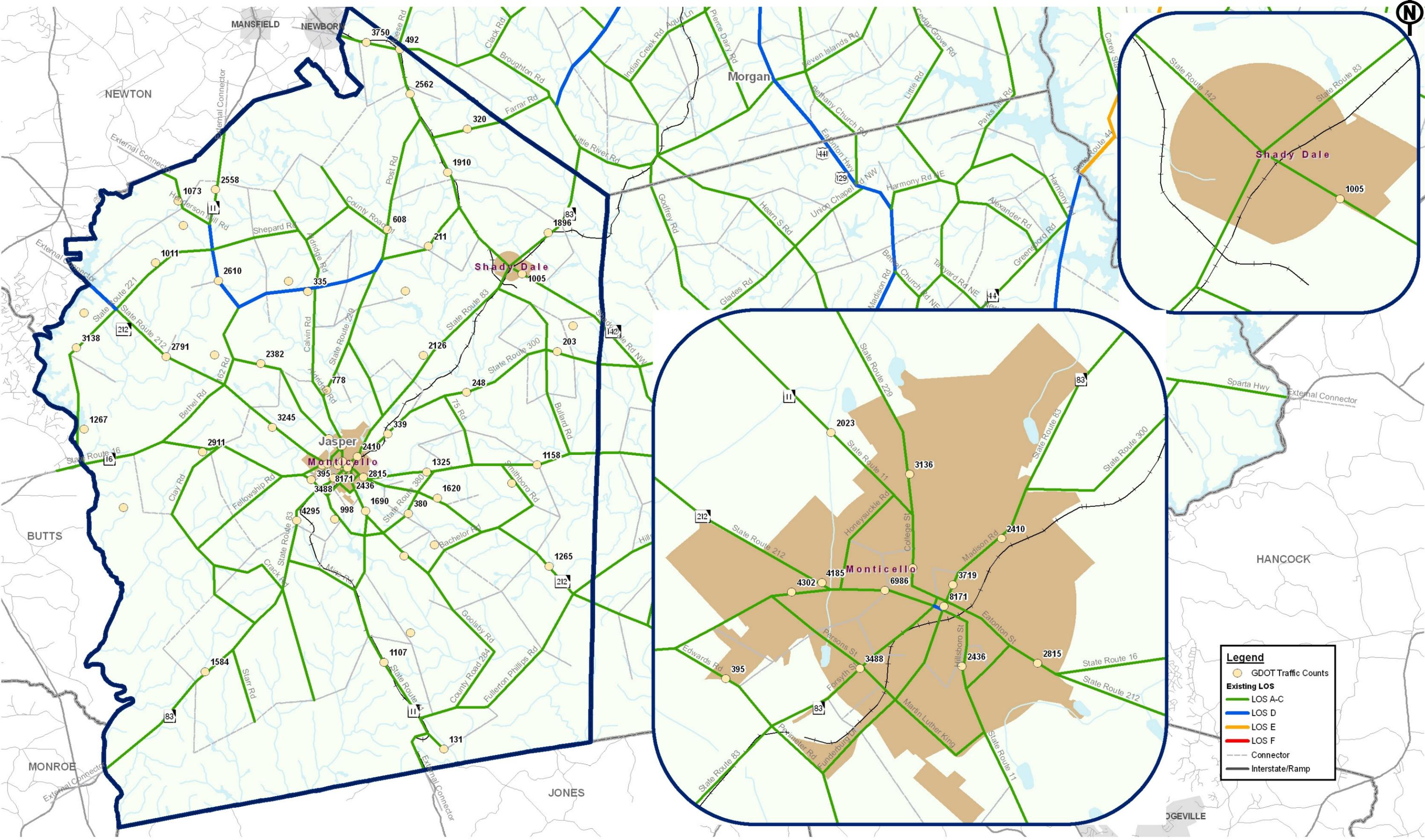
The existing analysis shows that three segments currently operate at or below LOS D under daily conditions. Table 6.8.1 displays the deficient roadway segments with the LOS for daily operating conditions. Figure 6.8.1 displays the existing LOS for Jasper County.

**Table 6.8.1**  
**Existing (2005) Deficient Segments**

Roadway	From	To	Volume <sup>(1)</sup>	V/C	LOS
Liberty Church Rd	SR 11	SR 229	3,840	0.40	D
SR 11	Henderson Mill Rd	Liberty Church Rd	5,888	0.46	D
SR 212	Newton County Line	SR 221	4,940	0.46	D

*(1) - Two-way volumes*

It can be seen that generally the majority of roadways in Jasper County operate at an acceptable LOS during daily conditions. As traffic volumes continue to increase, it is likely that some of these roadways will degrade to an unacceptable LOS.



**Legend**

- GDOT Traffic Counts
- Existing LOS**
- LOS A-C
- LOS D
- LOS E
- LOS F
- Connector
- Interstate/Ramp

**Existing Daily Deficient Segments**  
East Georgia Multi-County Transportation Study

Figure No: 6.8.1

### 6.8.2 Future Operating Conditions

Future operating conditions were evaluated for the years 2015 and 2030, the study interim and horizon years respectively. In order to develop and evaluate future travel conditions an existing plus committed (E+C) network was developed based on the existing network with the addition of committed projects identified in GDOT’s Construction Work Program. Table 6.8.2 displays the capacity enhancing projects that were considered committed for Jasper County.

**Table 6.8.2  
Committed Capacity Projects**

Project Id	Prime Work Type	Description	CST
423	Widening	SR 16 Widening @ West City Limits of Monticello	2012
1939	Roadway Project	Monticello NE Bypass from SR 16 to SR 83	2010

The evaluation of the future travel conditions provides an opportunity to determine how well the E+C roadway network will serve 2015 and 2030 population and employment in Jasper County. It is useful to point out that the long-term projections for population and employment are the least reliable. This is not due to any inaccuracies with projection techniques but simply because it requires the judgment of stakeholders to assign population and employment throughout the study area. This in turn impacts estimates of traffic demand. These long term results should be considered preliminary and when the transportation plan is updated every 3 to 5 years, the projects should be amended as necessary.

The 2015 analysis shows that four segments can be expected to operate at or below LOS D under daily conditions. Table 6.8.2.1 displays the 2015 roadway segments operating at an unacceptable LOS.

**Table 6.8.2.1  
2015 Deficient Segments**

Roadway	From	To	Volume <sup>(1)</sup>	V/C	LOS
Liberty Church Rd	SR 11	Post Road	5,714	0.59	E
Post Rd	Liberty Church Rd	SR 142	3,972	0.41	D
SR 11	Newton County Line	Liberty Church Rd	6,324	0.48	D
SR 212	Newton County Line	SR 16	4,238	0.43	D

(1) - Two-way volumes

Additionally, the following roadways segment is approaching LOS D and/or has short links associated with them that are currently operating below LOS C:

- Jackson Lake Road from SR 212 to SR 16

Figure 6.8.2.1 presents the 2015 daily deficient segments along the existing plus committed roadway network.

The 2030 analysis shows that nine segments can be expected to operate at or below LOS D under daily conditions. Table 6.8.2.2 displays the 2030 roadway segments operating at an unacceptable LOS.

**Table 6.8.2.2  
2030 Deficient Segments**

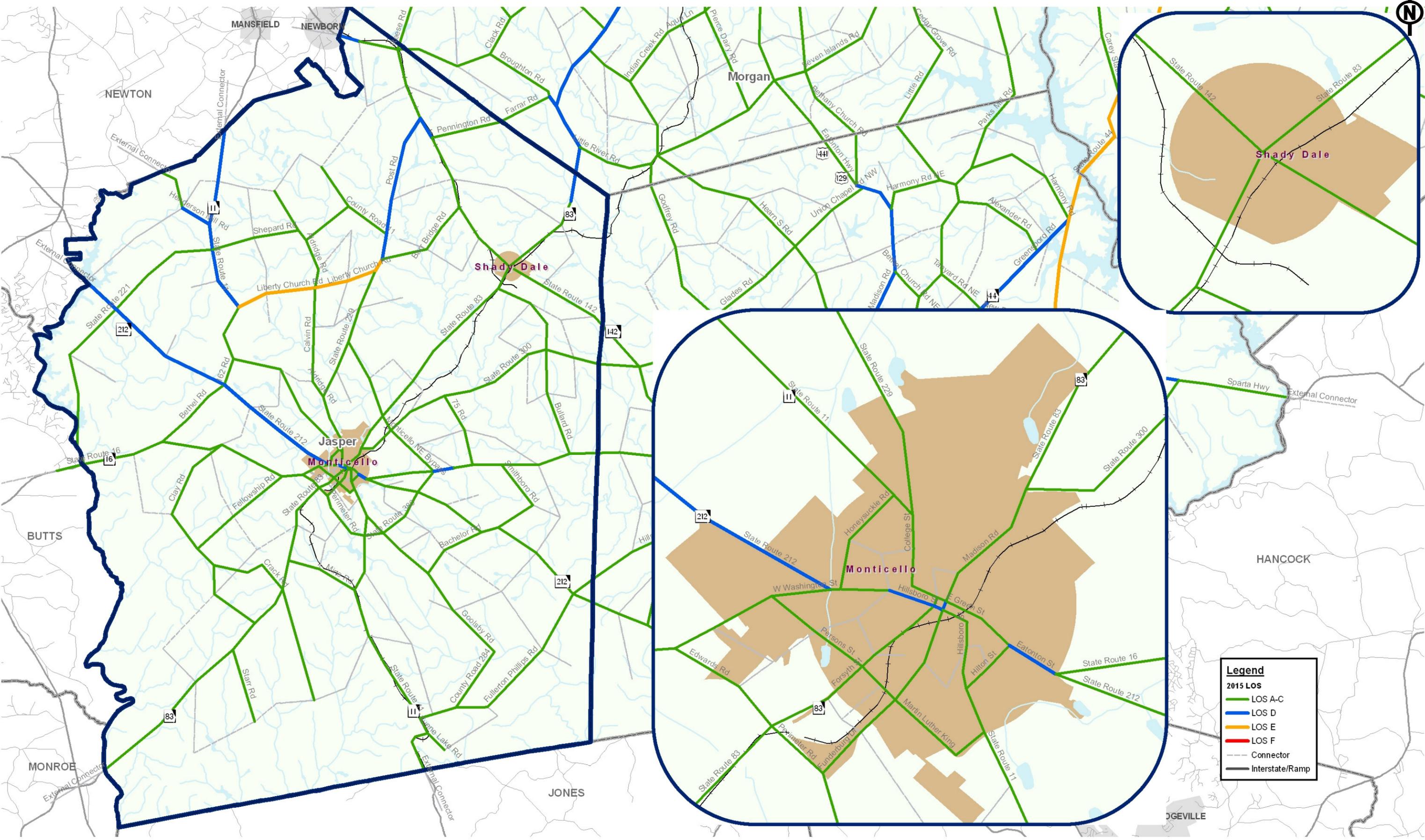
Roadway	From	To	Volume <sup>(1)</sup>	V/C	LOS
SR 11 / SR 16	SR 11 @ Post Road	SR 16 @ SR 212	5,930	0.37	D
Liberty Church Rd	SR 11	Post Rd	6,916	0.71	E
Pennington Rd	Morgan County Line	SR 142	4,330	0.55	E
Post Rd	SR 142	Liberty Church Rd	5,216	0.53	D
Shepard Rd / CR 42 / CR 11	SR 11	Post Rd	3,016	0.42	D
SR 11	Newton County Line	Post Road	6,264	0.48	D
SR 142	Newton County Line	Pennington Rd	3,836	0.42	D
SR 16	SR 380	Putnam County Line	4,540	0.40	D
SR 212	Newton County Line	SR 16	6,048	0.60	E

(1) - Two-way volumes

Additionally, the following roadways segments are approaching LOS D and/or have short links associated with them that are currently operating below LOS C:

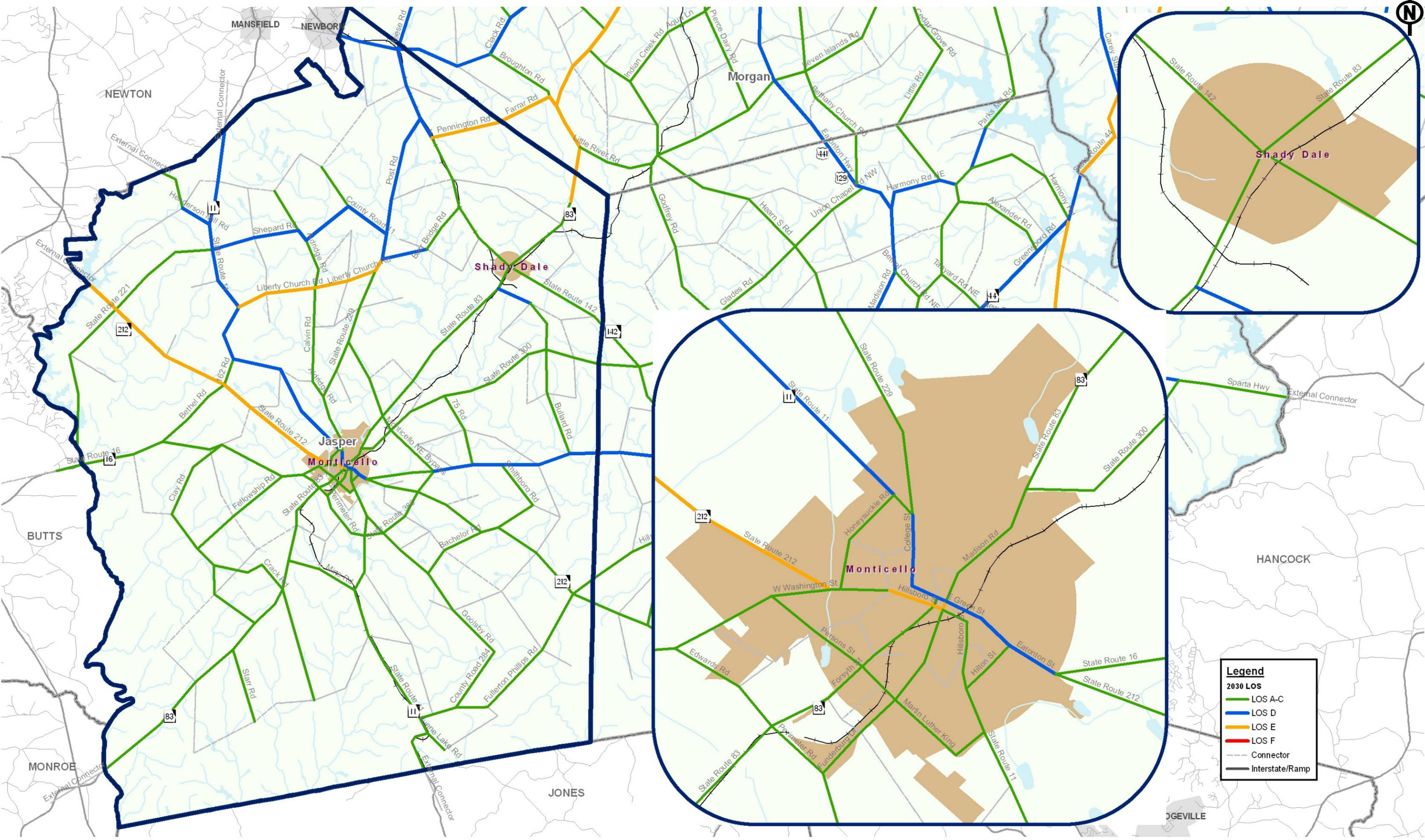
- SR 83 from Morgan County Line to SR 142
- SR 83 from SR 11 to SR 380
- Jackson Lake Road from SR 212 to SR 16

Figure 6.8.2.2 presents the 2030 daily deficient segments along the existing plus committed roadway network.



**2015 Daily Deficient Segments**  
East Georgia Multi-County Transportation Study

Figure No 6.8.2.1



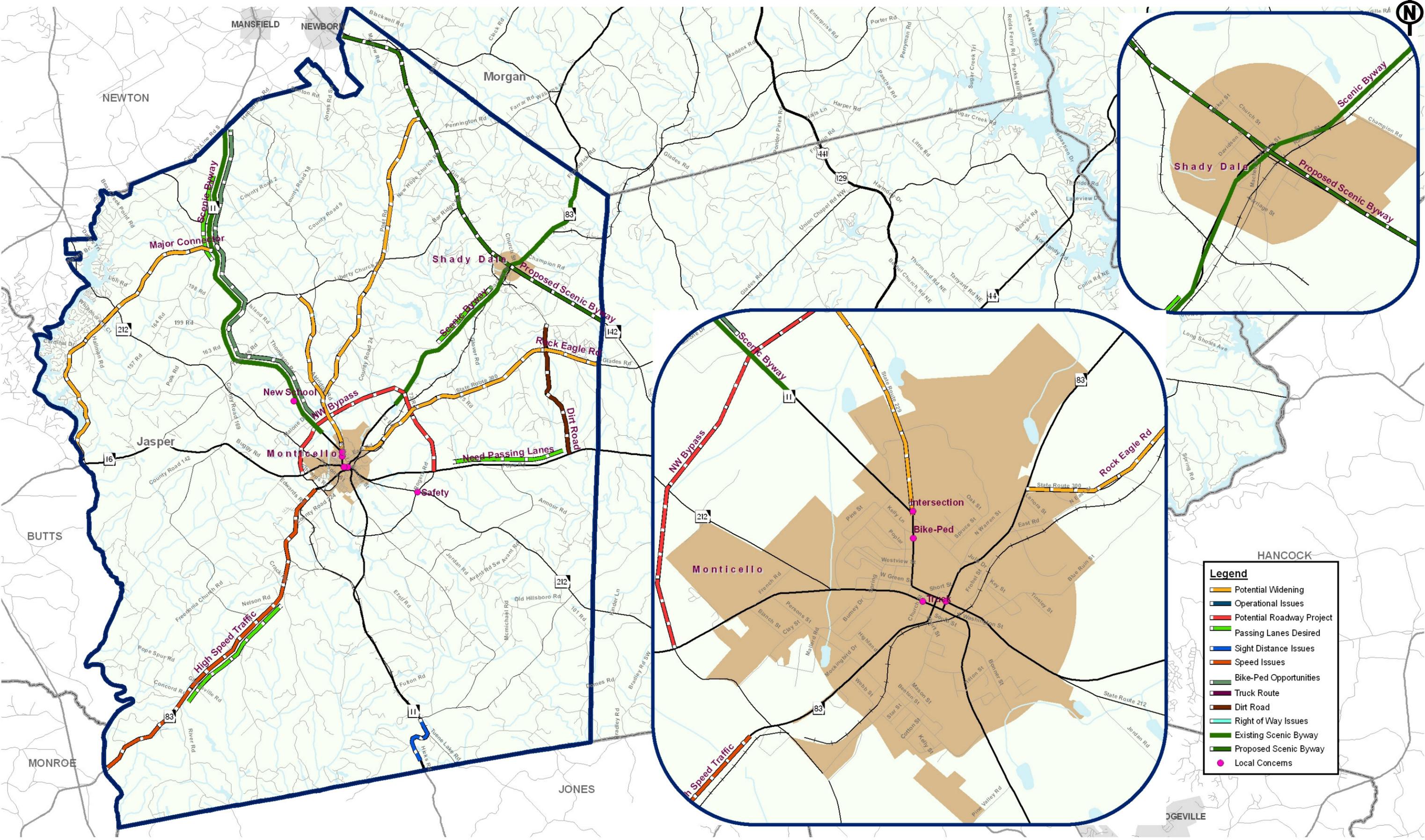
**2030 Daily Deficient Segments**  
East Georgia Multi-County Transportation Study

## 6.9 Citizen and Stakeholder Input

It was important to understand deficiencies as perceived by citizens and key stakeholders in addition to those identified through technical analysis. In combination, technical analysis, and citizen and stakeholder input should clearly define transportation issues and opportunities in Jasper County. The Study Team met individually with the County, City, and key stakeholders to discuss their issues and concerns. Additionally, comment cards were used to collect thoughts and ideas from local citizens during the Public Workshops and throughout the study process. Table 6.9 summarizes the general themes expressed by citizens and stakeholders relative to transportation issues, opportunities, and needs. Figure 6.9 displays the citizen and stakeholder comments.

**Table 6.9  
Citizen & Stakeholder Input**

<b>Transportation &amp; Land Use</b>
<ul style="list-style-type: none"> <li>• Need for Bypass extension of SR 380 north to SR 83</li> <li>• Proposed scenic byway along SR 142</li> <li>• Poor connectivity in County</li> <li>• Growth in Newton County will effect Jasper County</li> <li>• Redesignate Jackson Lake Rd as a state road (SR 221)</li> </ul>
<b>Roadway and Operational Improvements</b>
<ul style="list-style-type: none"> <li>• SR 11 needs passing lanes north of Monticello</li> <li>• SR 83 needs passing lanes north of Monticello</li> <li>• Sight distance issues along SR 11 in Hillsboro</li> <li>• Several blind driveways on SR 83 north of Monticello</li> <li>• Issue with traffic signals in Monticello</li> <li>• Jackson Lake Rd needs upgrades</li> <li>• Traffic congestion around Monticello square</li> <li>• Improve Calvin, Aldrich and Murder Creek Rd as minor arterials</li> <li>• Improve Post Rd, Jackson Lake Rd, and Rock Eagle Rd</li> </ul>
<b>Intersection Improvements</b>
<ul style="list-style-type: none"> <li>• SR 212 and SR 380 needs clearing and signage</li> <li>• SR 212 and Church St</li> <li>• Turn lanes on SR 11 at new school</li> <li>• SR 11 and Post Rd</li> </ul>
<b>Maintenance</b>
<ul style="list-style-type: none"> <li>• Several dirt roads in County</li> <li>• Trucks tear up roads, bridges and drainage systems</li> </ul>
<b>Bicycle and Pedestrian</b>
<ul style="list-style-type: none"> <li>• Limited sidewalks in Monticello</li> <li>• Bike lanes along SR 11 from Monticello to Charlie Elliot Park</li> <li>• Provide shoulders on Bypasses for bike lanes</li> <li>• Improve pedestrian safety in Monticello square</li> </ul>
<b>Public Transportation</b>
<ul style="list-style-type: none"> <li>• Desire to establish a rural transit service</li> <li>• Commuter rail option to Atlanta</li> <li>• Park and Ride facilities along I-20</li> </ul>
<b>Freight &amp; Rail</b>
<ul style="list-style-type: none"> <li>• Trucks an issue in downtown areas</li> <li>• Need a truck route around Monticello</li> <li>• High truck volumes along SR 83</li> </ul>



**Citizen & Stakeholder Input**  
East Georgia Multi-County Transportation Study

Figure No: 6.9

## 7.0 Goals and Objectives

Goals and Objectives are the building block components of the long range planning process. They guide the development of the LRTP by providing a basis for evaluating Transportation Plan improvements by reflecting the intentions that the Plan is meant to achieve. It is necessary to establish long-range goals and objectives to guide the Transportation Plan development process for Jasper County. The goals represent the general themes and overall directions that Jasper County, GDOT, and the local planning authorities envision for the County. The objectives provide additional specificity and focus for each associated goal. Combined, they provide the policy framework for development and implementation of the Transportation Plan.

### 7.1 Background

Goals and Objectives should be consistent with relevant federal, state, and local plans and legislation. With the passage of SAFETEA-LU, eight factors must now be considered when a Metropolitan Planning Organization (MPO) develops a LRTP. **It is understood that Jasper County is not within an MPO service area; however, the guidelines for MPO's were followed to provide a strong framework for transportation decisions.** Specifically, the LRTP must be designed to:

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

### 7.2 Methodology

The goals and objectives were developed based on a review of relevant planning documents including the Jasper County Comprehensive Plan and the GDOT Statewide Transportation Plan. Additionally, through input obtained at various public workshops, development of the goals and objectives was also tailored to reflect the vision of County residents and business owners.

Table 7.2, excerpted from the "SAFETEA-LU Users Guide," shows how LRTP policies and Transportation Improvement Program (TIP) evaluation criteria are related. There can be

different ways of evaluating projects for the same SAFETEA-LU planning factors, depending on whether systems or individual projects are being evaluated.

**Table 7.2**  
**Applying the SAFETEA-LU Planning Factors**

Factor	Long Range Considerations	Project Selection Criteria	Sample Projects
1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency	<ul style="list-style-type: none"> <li>• Intermodal facilities</li> <li>• Rail and port access</li> <li>• Public/private partnerships</li> <li>• Land use policies</li> <li>• Economic development</li> <li>• Energy consumption</li> </ul>	<ul style="list-style-type: none"> <li>• Community integration</li> <li>• Long-term, meaningful employment opportunities</li> <li>• Accessibility</li> <li>• Modal connectivity</li> <li>• Infrastructure impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Demand management</li> <li>• System preservation</li> <li>• Planned community development</li> <li>• Transit-oriented design</li> </ul>
2. Increase the safety of the transportation system for motorized and non-motorized users	<ul style="list-style-type: none"> <li>• Community access</li> <li>• Social equity</li> <li>• System upgrades</li> </ul>	<ul style="list-style-type: none"> <li>• Number of crashes</li> <li>• Number of rail grade crashes</li> <li>• Bicycle and pedestrian crashes</li> </ul>	<ul style="list-style-type: none"> <li>• Sidewalks</li> <li>• Rail crossing upgrades</li> <li>• Traffic calming</li> <li>• Dedicated right-of-way for different modes</li> </ul>
3. Increase the security of the transportation system for motorized and non-motorized users	<ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Reliability</li> </ul>	<ul style="list-style-type: none"> <li>• Crashes</li> <li>• Potential for security hazard</li> <li>• Access to critical infrastructure</li> <li>• Access to power sources</li> <li>• Access to reservoirs</li> <li>• Access to population centers</li> </ul>	<ul style="list-style-type: none"> <li>• System access and security</li> <li>• Bridge security</li> </ul>
4. Increase the accessibility and mobility of people and for freight	<ul style="list-style-type: none"> <li>• Multi-modal considerations</li> <li>• Transit accessibility and level of service</li> </ul>	<ul style="list-style-type: none"> <li>• Prevention of bottlenecks</li> <li>• Segmentation prevented</li> <li>• Intermodal connectivity</li> <li>• Community-based economic development</li> </ul>	<ul style="list-style-type: none"> <li>• System maintenance</li> <li>• Intermodal facilities</li> <li>• Planned Communities</li> <li>• Mixed use zoning</li> <li>• Transit-oriented development</li> <li>• Land use controls</li> </ul>
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns	<ul style="list-style-type: none"> <li>• Air and water quality</li> <li>• Energy consumption</li> <li>• Livability of communities --social cohesion, physical connection, urban design, and potential for growth</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental impact</li> <li>• Emissions reductions</li> <li>• Waterway preservation</li> <li>• Preservation and conservation of resources</li> </ul>	<ul style="list-style-type: none"> <li>• Demand management</li> <li>• Scenic and historic preservation</li> <li>• Planned community development</li> <li>• Transit services</li> <li>• Transit-oriented development</li> </ul>

Factor	Long Range Considerations	Project Selection Criteria	Sample Projects
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight	<ul style="list-style-type: none"> <li>• Intermodal transfer facilities</li> <li>• Rail access roads</li> <li>• Container policies</li> <li>• Freight policies/needs</li> </ul>	<ul style="list-style-type: none"> <li>• Intermodal connectivity</li> <li>• Accessibility for people and freight</li> <li>• Congestion relief</li> </ul>	<ul style="list-style-type: none"> <li>• Intermodal facilities</li> <li>• Modal coordination with social services</li> </ul>
7. Promote efficient system management and operation	<ul style="list-style-type: none"> <li>• Life cycle costs</li> <li>• Development of intermodal congestion strategies</li> <li>• Deferral of capacity increases</li> </ul>	<ul style="list-style-type: none"> <li>• Use of existing system</li> <li>• Congestion impacts</li> <li>• Community and natural impacts</li> <li>• Maintenance of existing facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic, incident and congestion management programs</li> </ul>
8. Emphasize the preservation of the existing transportation system	<ul style="list-style-type: none"> <li>• Maintenance priorities</li> <li>• Demand reduction strategies</li> <li>• Reasonable growth assumptions</li> <li>• Alternative modes</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance vs. new capacity</li> <li>• Reallocates use among modes</li> <li>• Reflects planning strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Management System development</li> <li>• Maintenance of roads, bridges, highways, rail</li> <li>• Traffic calming</li> <li>• Take-a-lane HOV</li> <li>• Enhancement of alternative modes</li> </ul>

Source: SAFETEA-LU Users Guide

### 7.3 Consistency with Other Planning Documents

In addition to SAFETEA-LU, goals and objectives should also be consistent with other state and local plans, such as local comprehensive plans and regional policy plans. In this way, the goals and objectives of the LRTP support the planning efforts of local governments and agencies. In particular, emphasis was placed on the Comprehensive Plan for Jasper County. Key transportation related goals, objectives and strategies from Jasper County’s most recently adopted Comprehensive Plan include:

- Upgrade and expand the existing transportation facilities, as needed, to accommodate future growth in the most efficient manner;
- Improve the mobility of pedestrians and bicyclists throughout the County;

### 7.4 Goals and Objectives

Using existing plans, meetings with County and GDOT staff and input received from the general public, the following Goals and Objectives were established to guide the transportation decision-making process for Jasper County.

**GOAL 1.0 Systematic Process for Transportation Investment Prioritization**

- Objective 1.1 All transportation engineering studies and designs shall consider life cycle costs of capital investments.*
- Objective 1.2 Existing and future roadway deficiencies, based on level of service standards, shall be mitigated through a continuous roadway or transportation system improvement program.*
- Objective 1.3 Update the Long Range Transportation Plan a minimum of every five years to evaluate and provide for future needed transportation system links within the County.*

**GOAL 2.0 Strategic Investments to Provide Connectivity and Accessibility throughout the County**

- Objective 2.1 In coordination with the County and municipalities, develop a cooperative program to maintain existing transportation facilities in the County - capitalizing on the recommendations of the Transportation Plan.*
- Objective 2.2 As development is permitted, review the impact to the transportation system to ensure mobility is protected as parcel level development occurs.*
- Objective 2.3 The County shall encourage each member unit of government (with responsibility) to properly maintain the various types of transportation facilities including streets, sidewalks, trails, and other modes.*

**GOAL 3.0 Enhance the Quality of Life in Downtown Areas through Transportation Investment**

- Objective 3.1 Landscape transportation rights-of-way with native and/or "low-impact" vegetation on shoulders and medians, in order to conserve water, reduce pesticide use, conserve energy, and reduce costs by minimizing maintenance requirements.*
- Objective 3.2 Reduce transportation related accidents, injuries, and deaths through regular analysis of high crash locations and identification of safety related funding streams.*
- Objective 3.3 Develop and review annually the Transit Development Plan (TDP) and Transportation Disadvantaged Service Plan (TDSP) to provide for public transit and Paratransit.*

*Objective 3.4 Consider transportation investments and land use management strategies that remove or discourage heavy trucks from cutting through downtown areas.*

GOAL 4.0 Improve the Mobility of Pedestrians and Bicyclists

*Objective 4.1 Ensure that funding is established for bicycle and pedestrian improvements identified in the Long Range Transportation Plan.*

GOAL 5.0 Maintain and Improve Connection between Land Use and Transportation Decisions

*Objective 5.1 The Long Range Transportation Plan shall be reviewed annually in conjunction with the annual project priority listing to evaluate the impact of any changes in the future land use element of the local government Comprehensive Plans, approved during the previous year, on the overall transportation system.*

*Objective 5.2 Identify intermodal roadway linkages between major travel destinations such as downtowns and population concentrations that are operating, or will operate, below acceptable minimum levels of service and develop transportation and land use strategies to overcome these conditions.*

*Objective 5.3 Coordinate transportation and land use decision-making to encourage viability of alternative modes.*

GOAL 6.0 Preserve & Enhance the Rural Character of the Historical and Natural Resources in the County

*Objective 6.1 Consider the overall social, land use, economic, energy, and environmental effects when making transportation decisions.*

*Objective 6.2 Encourage local governments to develop a Transportation Corridor Management Plan (Right-of-Way or Thoroughfare Plan Map) that coordinates with local government Comprehensive Land Use Plan and the Long Range Transportation Plan.*

*Objective 6.3 Maximize the use of existing transportation facilities through the use of Transportation System Management (TSM), Transportation Demand Management (TDM), and Access Management strategies.*

*Objective 6.4 Identify and preserve corridors that contain outstanding intrinsic resources: cultural, historical, archeological, recreational, scenic and social. Maximize the impacts and benefits of these resources*

*through the identification, promotion and enhancement possibilities allowed through a scenic byway designation.*

Table 7.4 shows how the 2030 Goals and Objectives address the Federal guidelines as presented in SAFETEA-LU.

**Table 7.4**  
**L RTP Goals and Objectives**  
**Compared to SAFETEA-LU Planning Factors**

Objective	SAFETEA-LU Planning Factors							
	Economic	Safety	Security	Accessibility	Environment	Intermodalism	Efficiency	Preservation
1.1	✓						✓	
1.2		✓	✓	✓			✓	✓
1.3	✓		✓	✓			✓	
2.1	✓	✓	✓				✓	✓
2.2	✓			✓			✓	✓
2.3		✓	✓			✓		✓
3.1					✓		✓	
3.2	✓	✓	✓					
3.3	✓						✓	✓
3.4	✓	✓	✓				✓	✓
4.1	✓	✓		✓		✓		
5.1				✓		✓	✓	
5.2	✓			✓		✓	✓	
5.3	✓			✓		✓	✓	
6.1	✓	✓	✓		✓		✓	✓
6.2	✓		✓				✓	✓
6.3	✓	✓					✓	✓
6.4	✓				✓			✓

*Note: The eight Planning Factors are listed in their entirety on page 66.*

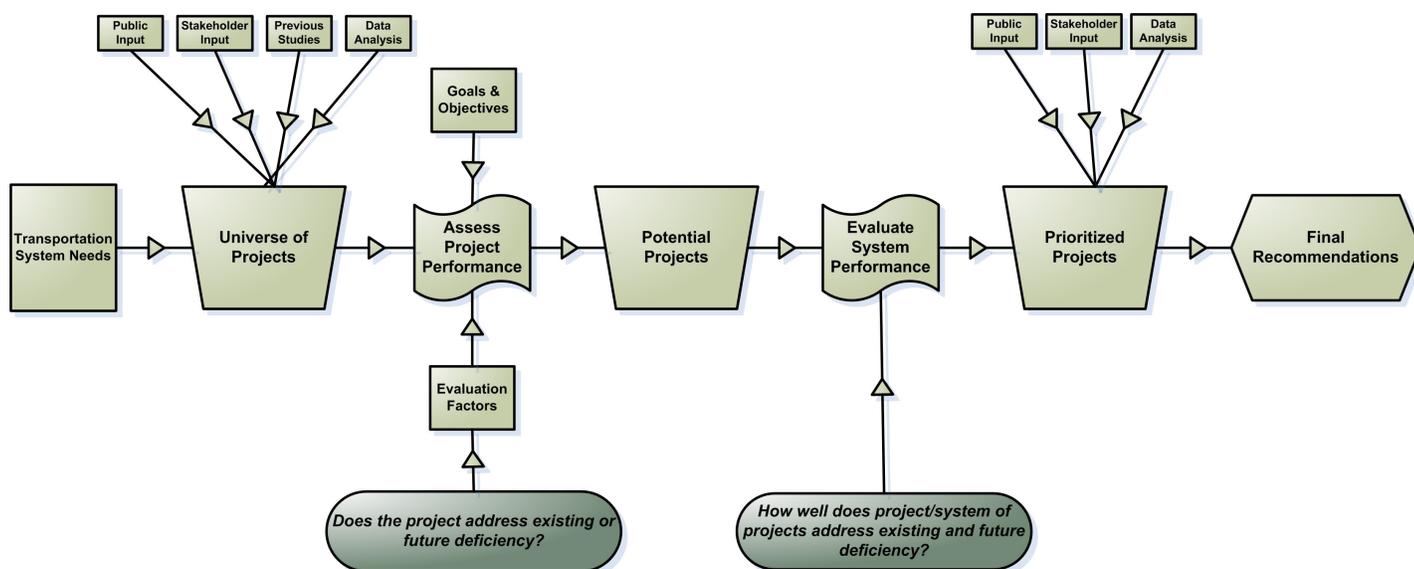
The Goals and Objectives were determined to be consistent with the needs and vision for the County, based on input from GDOT, Jasper County, and the public. The study’s Goals and Objectives adhere to the SAFETEA-LU planning factors and can be used as the foundation for ranking or choosing among individual projects.

## 8.0 Improvement Development Process

After the existing and future conditions were evaluated, strategies were developed to address identified deficiencies. Improvements were developed for each element of the transportation system:

- Deficient Roadways;
- Bicycle and Pedestrian;
- Public Transportation;
- Freight;
- Aviation; and,
- Citizen and Stakeholder Input.

The following sections document the potential improvements in detail, ultimately producing preferred improvements for Jasper County’s transportation system which are documented in Section 10. The figure below illustrates the improvement development process.



### 8.1 Deficient Roadways

With the aid of the travel demand model, which was developed as part of this study, future travels volumes were forecasted and operating conditions analyzed. This analysis revealed that the E+C roadway network generally serves Jasper County well through the year 2015. From the 2030 operational analysis it was revealed that some roadways begin to perform below the acceptable level of service.

Based on the operational analysis results presented in Section 6.8, the following roadway segment is recommended for upgrade:

- SR 212 from SR 16 to Newton County.

Additionally, review of the existing roadway typical sections, conducted in Section 6.7, revealed several of the facilities in the County do not meet the ideal typical section of 12-foot lanes with 2-foot paved shoulders. Key corridors were selected based on traffic volumes and input from the SAG. These corridors include:

- Jackson Lake Road from SR 11 to SR 16;
- Calvin Road / Aldridge Road from Post Road to Newton County;
- Post Road from SR 11 to SR 142;
- Rock Eagle Road from SR 83 to Putnam County;
- Liberty Church Road from SR 11 to Post Road;
- Bethel Church Road from SR 16 to SR 11;
- Clay Road from SR 16 to SR 83;
- Fullerton Phillips Road from SR 11 to SR 212;
- Aikenton Road from SR 83 to Rock Eagle Road;
- Bullard Road from Rock Eagle Road to SR 16; and,
- Smithboro Road from SR 212 to SR 16.

## 8.2 Bicycle and Pedestrian Improvements

The evaluation of existing bicycle and pedestrian systems in the study area revealed the presence of a fairly well developed sidewalk network in Monticello and a very limited sidewalk network in Shady Dale. Where the sidewalk system is developed, there remain gaps in connectivity between downtown Monticello and Shady Dale and nearby residential areas. The schools in Jasper County are not located near the concentrated residential areas such as to warrant the likelihood of children walking to the schools. Some gaps were also identified in commercial areas where people may desire to walk between businesses or from their homes to businesses. The network adjacent to each of the elementary, middle, and high schools and established commercial areas was examined carefully to identify locations where sidewalk placement would be beneficial.

The designated bicycle network is currently non-existent in Jasper County. The NEGRDC recently developed a Bicycle and Pedestrian Plan for Jasper County. During the development of the plan, RDC staff worked with an advisory committee to determine detailed locations for bicycle facilities. Along with newly identified sidewalk segments identified through this study, the bicycle facilities identified in the Northeast Georgia Bicycle and Pedestrian Plan have been incorporated into this plan.

The sidewalk improvements are targeted in the vicinity of the residential and commercial areas in and near downtown Monticello and Shady Dale. The bicycle network is aimed at connecting the populations of Monticello and Shady Dale to each other, to recreational destinations within and near the County, and to other proposed bicycle networks outside the County.

## Monticello

There are several schools within the city limits of Monticello and are as follows:

- Jasper County Primary School;
- Washington Park Elementary School;
- Jasper County Middle School; and,
- Jasper County High School.

There is no walking potential to Primary School, Elementary School, Piedmont Academy or new high school as they are all located on major highways away from residential areas. There are no sidewalks to Middle School; however, there is really very little walking potential to this school.

### ***Recommendations:***

- Construct sidewalks on the east side of Funderburg Street from Webb Street to Fred Smith Street.
- Construct sidewalks on the east side of Funderburg Street from Wilson Street to Fred Smith Street.
- Provide a pedestrian crossing at Funderburg Street railroad crossing.
- Construct sidewalks on the west side of SR 83 from Highland Avenue to mile marker 13.
- Construct sidewalks on one side of North Warren Street from SR 83/Tanyard Street to SR 83/Lenora Street.

## Shady Dale

Sidewalks in Shady Dale are either in poor condition or are non-existent.

### ***Recommendations***

- Construct sidewalks on both sides of SR 142 from Cemetery Road to SR 83.
- Construct sidewalks on the south side of SR 142 from Tucker Street to Davidson Road.
- Construct sidewalks on both sides of SR 83 from Park to Calvery United Methodist Church.
- Construct sidewalks on the east side of South Railroad Street from SR 142 to Aikenton Road.
- Construct sidewalks on the west side of Providence Street from SR 142 to Railroad.

## Additional Bicycle Needs

While the majority of the County is rural, there are key locations, such as schools and parks outside of the city limits, where bicycle transportation is a desirable alternative mode. Improving bicycle transportation, specifically, the continuity of the bicycle transportation network was a topic discussed by several attendees of the public workshops.

### ***Recommendations:***

- Widen SR 11 from SR 16 to Newton County to include extra pavement for bicycles.
- Provide a multi-use trail along SR 212 from SR 16 to Bethel Church Road.

- Provide a multi-use trail along Rock Eagle Road from SR 83 to Putnam County.

### 8.3 Public Transportation Improvements

Jasper County does not currently have a rural transit program. The Senior Center provides limited meal delivery using a Center owned van, and the Georgia Department of Human Resources (DHR) provides transportation services for a number of the County's eligible elderly and mentally and physically disabled individuals via a sub-contracted provider.

The County operated the Section 5311 – Rural Transportation Program in past years, but discontinued the program because of funding constraints. This GDOT program is a fare-based, on-demand service with the goal of enhancing residents' access to health care, shopping, education, employment, public services and recreation, and development and promotion of the use of transit by the public. Typically, the program requires that residents make reservations 24-hours in advance for van pick-up and delivery to a desired destination. A fare is charged to cover the cost of the service. GDOT provides assistance to rural local governments for infrastructure purchases (vans, computer, etc.) and operation costs to offset the local government share of costs for the program.

Residents typically utilizing the 5311 program are the elderly, the disabled, and low-income individuals who are limited in their transportation options. Jasper County's elderly population alone is expected to increase by 200% between 2000 and 2025, when the 4,068 elderly individuals will comprise 18.4% of the County's population. (Comprehensive Plan for Jasper County and the Cities of Monticello and Shady Dale, draft, 2005-2025). The County's average household income lags that of Georgia, a trend that is expected to continue, indicating a higher percentage of households without an automobile to provide access to jobs, education, medical services, shopping, and recreation. And, there are individuals who need transportation but do not qualify for DHR-provided transportation services, thereby reinforcing the need for some type of rural transit service in the County.

It is important for Jasper County to assess the transportation requirements of its residents to determine likely destinations and how often they need to travel to these destinations. While the 5311 program can be ideal for trips to a variety of activity centers, the on-demand structure of the service can be limiting for individuals needing to get to work, school, or other destinations on a daily basis. The van operating hours may not be coordinated with work schedules, and daily reservations must be made for service. The location of a job may be outside of the city limits, where service is usually more expensive, or outside of the service area entirely. The 5311 program does allow the local government to implement a fixed route service with scheduled stops, but additional planning would be required to determine the best location for these routes.

An important planning activity is underway which should help Jasper County evaluate its needs and service options. DHR, in conjunction with the GDOT, is developing a Public Transit - Coordinated Human Services Plan for each DHR region. By federal statute, the plan will be required prior to future funding for projects under the following federal programs:

- Section 5310 – Elderly Persons and Persons with Disabilities, a program whose goal is to improve mobility for elderly individuals and individuals with disabilities;
- Section 5316 – Job Access and Reverse Commute, a program that offers job access and reverse commute services to provide transportation for low income individuals who may live in the city core and work in suburban locations; and
- Section 5317 – New Freedom, a new program under SAFETEA-LU which provides transportation for the disabled that goes beyond those required by the Americans with Disabilities Act.

The overall goal of the coordinated planning process is to identify the need for and gaps in transportation services and to recommend strategies/projects to address the need. The plans must be locally developed, coordinated, and include participation by the public as well as transportation and human services providers. The Georgia DHR Region Five Plan, which includes Jasper County, is expected to be completed by May of 2007.

### **Park and Ride Facility**

GDOT provides park and ride facilities through its Rideshare Program in locations where there is a need for commuter options. Jasper County's Comprehensive Land Use Plan, draft 2005-2025, reports that, in 2000, the majority of workers residing in Jasper County work outside of Jasper County (63%) while 37% commute within the county. Moreover, more than 50% travel more than 30 minutes to work, indicating the prevalence of long commutes. Newton County is the largest recipient of Jasper County commuters, with over 18%. Metro Atlanta absorbs the majority of the remaining commuter population with Rockdale, Fulton, and DeKalb Counties attracting 14%, 5%, and 5% respectively.

Given the high commute rate, it would appear that a park and ride facility would be beneficial for residents of Jasper County. The SAG has also expressed this interest. At present, the nearest Rideshare facility is located in Newton County off I-20 at US 278, nearly 28 miles away from Monticello. This facility is currently at capacity and is in the process of being expanded from 55 spaces to 110 spaces.

### ***Recommendations:***

- Jasper County should actively participate in the coordinated human services planning process being led by the DHR Region Five Coordinator (Peggy Hackett 706-227-5306). According to DHR, targeting the needs of and gathering data about the general public will be difficult without participation/communication from the counties.
- The coordinated human services planning process, described above, will address needs to be met by the aforementioned programs. The County should ensure that the transportation needs of all of its residents are identified (low-income individuals, individuals ineligible for DHR services, etc.), not just those whose needs can be met by one of these programs.

- The coordinated plan will also likely make recommendations regarding the 5311 Rural Transportation Program. As such, the County will need to re-evaluate the feasibility, costs, and funding required to implement the 5311 program or explore options to partner with a neighboring county to contract public transportation services. The 5311 program typically starts with two vans and may struggle initially to be cost effective. The County would need to work closely with GDOT to establish a program that is financially feasible for the County to operate. (Contact GDOT District Two Office: Cecilia Ashley – (478) 552-4634).
- The SAG has expressed interest in a regional transit service that would accommodate public transportation to surrounding counties. Although the 5311 program does permit vans to cross county lines, many county-operated programs do not transport residents beyond county lines due to scheduling and cost constraints. Greene, Jasper, Morgan, Putnam, and other interested counties need to instigate exploratory planning initiatives for this regional connectivity with GDOT.
- Coordinate with GDOT to further analyze commuter patterns to determine possible locations for a park and ride facility. The SR 212, SR 11, and SR 83 corridors offer potential logical sites.

#### 8.4 Freight & Rail Improvements

Norfolk Southern operates a rail line in Jasper County, averaging four trains per day over 20 miles of track. The Great Walton Railroad also operates rail along 10 miles of track. Jasper County has a total of 74 railroad crossings. All are “at grade” with the exception of one underpass and one overpass.

Highway-rail crossings which are “at grade” pose risks because the train always has the right of way. These crossings require traffic control devices (passive and active) to permit reasonably safe and efficient operation of both the rail and traffic. Passive devices are signs and pavement markings that are not activated by trains. Types of passive devices include:

- Highway-Rail Grade Crossing Crossbuck Signs, the white crisscrossed sign with RAILROAD CROSSING in black lettering. These are required in each highway approach to every highway-rail grade crossing, either alone or in combination with other traffic control devices.
- Stop and Yield Signs, formerly recommend with crossbucks only where two or more trains operate daily, but now recommended along with crossbucks for all crossings. A YIELD sign should be the default choice, with a STOP sign required when an engineering study deems conditions necessary for a vehicle to make full stop. Factors to be considered include:
  - The line of sight from an approaching highway vehicle to an approaching train;
  - Characteristics of the highway, such as the functional classification, geometric conditions, and traffic volumes and speed;

- Characteristics of the railroad including frequency, type and speed of trains, and number of tracks;
- Crossing crash history; and,
- Need for active control devices.

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

- Flashing-Light Signals, two red lights in a horizontal line flashing alternately at approaching highway traffic.
- Cantilever Flashing Light Signals, additional one or two sets of lights mounted over the roadway on a cantilever arm and directed at approaching highway traffic. Supplemental to the standard flashing light, used frequently on multi-lane approaches, high speed, two lane highways, roads with a high percentage of trucks or where obstacles obstruct visibility of standard flashing lights.
- Automatic Gates, consisting of a drive unit and gate arm. Supplemental to flashing and cantilever lights.
- Additional Flashing Light Signals, used for additional approaches to active highway rail grade crossings. These lights can be mounted on existing flashing light masts, extension arms, additional traffic signal masts, cantilever supports, and in medians or other locations on the left side of the road.
- Active Advance Warning Signs with Flashers, a train activated advance warning sign, considered at locations where sight distance is restricted on the approach to a crossing and the flashing light signals can not be seen until an approaching driver has passed the decision point. Two amber lights can be placed on the sign to warn drivers in advance of a crossing where the control devices are activated. The continuously flashing amber caution lights can influence driver speed and provide warning for stopped vehicles ahead.
- Active Turn Restriction Signs which display 'No Right Turn' or 'No Left Turn' on a parallel street within 50 feet of the tracks, at a signalized highway intersection.
- Barrier devices, which are median separation devices to prohibit crossing gate violations.

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

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

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

An examination of existing rail crossing accident data coupled with input from the public and the SAG brings to light concern areas with rail crossings in the County. As a result, several Jasper County crossings have been pinpointed as requiring further examination by the GDOT Railroad Crossing Program Manager. Each of these is discussed below.

### **East Washington Street (Crossing #733250M)**

This crossing has limited sight distance in both directions. It is currently equipped with flashing signal lights, but may possibly warrant gates.

#### ***Recommendation:***

- Review crossing with GDOT to determine if gates are warranted.



*East Washington Street crossing has limited site distance.*

### Funderburg Drive/South Street (Crossing #733251U)

The railroad crosses this intersection diagonally. There are sight distance limitations in both directions.

**Recommendation:**

- This crossing is currently equipped with a flashing light signal. Review crossing with GDOT to determine if gates are warranted.



*Funderburg Drive and South Street crossing.*

### Green Street (Crossing #733249T)

This crossing has the greatest traffic volume and has experienced accidents. There are sight distance limitations in both directions.

**Recommendation:**

- This crossing is currently equipped with a flashing light signal. Review crossing with GDOT to determine if gates are warranted.



*The Green Street crossing has heavy traffic volume.*

**CR 127/Georgia Pacific Spur (Crossing #733261A)**

There have been accidents with injuries at this crossing. There is a great deal of vehicle activity in and out of Georgia Pacific. Trucks ignore the stop signs entering/exiting the Georgia Pacific yard.

***Recommendation:***

- Review crossing with GDOT. Install a larger STOP sign on both approaches and enforce the stop signs.



*Heavy truck activity at the CR127/Georgia Pacific Spur.*

**Short Street (Crossing #733253H)**

There are crossbucks but no STOP sign at the Short Street crossing. Drivers have limited warning of the crossing.

***Recommendation:***

- Review crossing with GDOT. Recommend adding warning signage on both approaches from SR 83 to alert motorists that the railroad crosses over Short Street. Install STOP sign on Short Street before the railroad tracks.



*Crossing over Short Street at SR83 has limited warning signage.*

### **Rock Eagle Road (Crossing #733243C)**

This crossing has limited warning and faded signage.

#### ***Recommendation:***

- Review crossing with GDOT. Replace faded STOP signs with larger STOP signs and paint stop bars on road. Install “Stop Sign Ahead” signage on both approaches.



*Faded STOP sign at Rock Eagle Road crossing needs to be replaced.*

### **Railroad Street (Crossing #733160N)**

There are three tracks at this crossing and limited warning of the crossing.

**Recommendation:**

- Review crossing with GDOT. Install larger STOP signs and paint stop bars on roadway.



*Railroad Street crossing requires vehicles to cross three tracks.*

**South Railroad Street (Crossing #733161V)**

Limited railroad warning of the crossing.

**Recommendation:**

- Install STOP sign northbound on South Railroad Street.



*South Railroad Street and Providence Street crossing.*

**North Railroad Street (Crossing #733163J)**

Limited railroad warning of the crossing.

**Recommendation:**

- Install STOP signs on both sides of the railroad track.



*STOP signs on both sides of the tracks would improve safety at the North Railroad Street crossing.*

There are no programmed railroad improvements in the GDOT Construction Work Program scheduled for Jasper County at this time.

**Commuter and Intercity Rail**

The Georgia Rail Passenger Program (GRPP) proposes two passenger rail options which will be accessible to Jasper County residents. An intercity rail service is proposed between Atlanta, Madison and Augusta which will operate three daily trains each way, stopping in each city. In addition to this, a commuter train from Atlanta to Madison is also planned. This train will make stops in Newton, DeKalb, and Fulton Counties. Multi-modal train stations will be constructed in Madison and in Augusta to accommodate both of these services. The 2006 timeline shows service to Madison being implemented by 2017 and extended to Augusta by 2019.

**Recommendations:**

- Participate in appropriate planning activities with GDOT, the Georgia Passenger Rail Authority (GRPA), and the Georgia Regional Transportation Authority (GRTA). Working with the Northeast Georgia RDC, develop options for transit services to provide/enable/encourage use of the passenger rail service by county citizens. Provide methods to facilitate transportation (via vans, buses, vanpools, carpools, etc.) between households to the multi-modal terminal and to park and ride facilities.

**Overall Recommendations**

- Crossings described above should be reported to the GDOT Railroad Crossing Program Manager at the following:

Key Phillips  
Railroad Crossing Program Manager  
Georgia Department of Transportation  
Office of Traffic Safety and Design  
Phone – 404-635-8120  
Fax – 404-635-8116

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

- Limit construction of any new “at grade” rail crossings. The County has a high number of these crossings which pose risks for vehicular and pedestrian accidents.
- GDOT offers local government incentive payments for at-grade rail-highway crossing closures, a provision of U.S. Code 23, section 130 (SAFETEA-LU section 1401(d)). The amount of the incentive grant may be up to \$7,500 to local governments for the permanent closure of public-at-grade crossings if matched by the railroad involved, for a total incentive of \$15,000. The local government receiving the incentive payment must use the portion received from the State for transportation safety improvements. Types of safety improvements include:
  - Grading, paving and drainage improvements associated with crossing removal;
  - Guardrail, barricades and barrier wall;
  - Traffic signals;
  - Highway signs;
  - Turn lanes;
  - Pavement markings;
  - Sidewalks;
  - Emergency vehicles primarily responding to highway incidents;
  - Emergency equipment (i.e. “Jaws of Life”);
  - Sirens and flashing lights for emergency response vehicles;
  - Radar guns; and,
  - Sponsorship of a community driver’s education class.
- Report train standing problems to the Federal Railroad Administration at:

61 Forsyth Street, SW – Suite 16T20  
Atlanta, Georgia 30303-3104  
Phone – 404-562-3800  
Hot Line – 1-800-724-5993  
[www.fra.dot.gov](http://www.fra.dot.gov)

- Utilize available programs to address crossings with safety concerns and crossing violations.

The Georgia Operation Lifesaver Program is a national, non-profit education and awareness program dedicated to ending tragic collisions, fatalities and injuries at highway-rail grade crossing and on railroad rights of way. The organization promotes safety through:

- Education for drivers and pedestrians to make safe decisions at crossings and around railroad tracks;
- Active enforcement of traffic laws relating to crossing signs and signals; and
- Continued engineering research and innovation to improve the safety of railroad crossings.

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

Georgia Operation Lifesaver Program  
P.O. Box 76526  
Atlanta, Georgia 30358  
Phone – 770-393-2711  
Fax – 770-393-3751  
georgiaol.org

## 8.5 Aviation Improvements

Jasper County does not have a local airport but does have several private landing strips located throughout the County. Nearby small aircraft airports include the Madison Municipal Airport in Madison and the Baldwin County Airport, located in Milledgeville. Commercial airport needs are met by the Middle Georgia Regional Airport, located in Macon, and Hartsfield-Jackson Atlanta International Airport, located south of Atlanta.

### ***Recommendations***

- None

## 8.6 Citizen and Stakeholder Input

Throughout the course of the study public comment and stakeholder input contributed significantly to the development of projects for improving travel conditions through Jasper County. Projects identified by the public and stakeholders are documented in Table 8.6.

All comments received from the public are important and care was taken to evaluate each recommendation for inclusion in the plan. If the recommendation addressed issues beyond the scope of the plan, these were forwarded to the appropriate agency to address. Similarly, some recommendations could not be supported with technical planning or

engineering justifications – these instances are noted and these recommendations were flagged for reevaluation as the Plan is periodically updated in the future.

**Table 8.6**  
**Suggested Improvements**

#	Comment or Concern	Comment Type	Response	Recommended for Inclusion in Plan
1	Need for Bypass extension of SR 380 north to SR 83	Roadway Project	This project is currently in GDOT's CWP	Yes
2	SR 11 needs passing lanes north of Monticello	Passing Lanes	This project is a recommended improvement	Yes
3	SR 83 needs passing lanes north of Monticello	Passing Lanes	This project is currently in GDOT's CWP	Yes
4	Sight distance issues along SR 11 in Hillsboro	Geometric	This is recommended to be monitored for crash activity.	No
5	Poor connectivity in County	Operational	This issue is being addressed by several improvements	Yes
6	Several blind driveways on SR 83 north of Monticello	Operational	This is recommended to be monitored for crash activity.	No
7	Issue with traffic signals in Monticello	Operational	This is beyond the scope of the project and the comment has been forwarded to GDOT	No
8	Jackson Lake Rd needs upgrades	Operational	The improvement of this roadway is a recommended improvement	Yes
9	Traffic congestion around the Monticello Square	Operational	Improvements such as the Monticello Bypass will help address this issue	Yes
10	Improve Calvin Rd, Aldrich and Murder Creek Rd as minor arterial	Operational	Calvin Rd and Aldrich Rd have been recommended for improvements as part of this study.	Yes
11	Improve Post Rd and Rock Eagle Rd	Operational	The improvement of these roadways are recommended improvements	Yes
12	Turn lanes on SR 11 at new school	Operational	This intersection is recommended for improvement	Yes
13	SR 212 and Church St	Intersection	This intersection is recommended for improvement	Yes
14	SR 11 and Post Rd	Intersection	This intersection is recommended for improvement	Yes
15	Redesignate Jackson Lake Rd as a state road (SR 221)	Institutional	This is beyond the scope of the project and the comment has been forwarded to GDOT	No
16	Proposed scenic byway along SR 142	Scenic Byway	This is beyond the scope of this project	No
17	SR 212 and SR 380 needs clearing and signage	Maintenance	This intersection is recommended for improvement	Yes
18	Several dirt roads in County	Maintenance	The County is actively pursuing paving several roads	Yes
19	Trucks tear up roads, bridges and drainage systems	Maintenance	Improvements such as the Monticello Bypass will help address this issue	Yes
20	Limited sidewalks in Monticello	Bike-Ped	This project is currently in GDOT's CWP	Yes

#	Comment or Concern	Comment Type	Response	Recommended for Inclusion in Plan
21	Bike lanes along SR 11 from Monticello to Charlie Elliot Park	Bike-Ped	This improvement is being recommended	Yes
22	Provide shoulders on Bypasses for bike lanes	Bike-Ped	Bike lanes will be considered for all improvements	Yes
23	Improve Pedestrian safety in Monticello Square	Bike-Ped	This project is currently in GDOT's CWP	Yes
24	Desire to establish a rural transit service	Transit	This is being recommended as part of this study	Yes
25	Commuter rail option to Atlanta	Transit	This is being investigated as part of another study	No
26	Park and Ride facilities along I-20	Transit	Park and ride lots are being recommended at several locations along I-20	Yes
27	Trucks an issue in downtown areas	Freight	Improvements such as the Monticello Bypass will help address this issue	Yes
28	High truck volumes along SR 83	Freight	SR 83 is part of the State Truck Route System	No
29	Trucks Route needed around Monticello	Freight	Improvements such as the Monticello Bypass will help address this issue	Yes

## 9.0 Improvement Recommendations

Jasper County has received moderate growth over the last two decades. This growth is expected to accelerate and the transportation infrastructure of the County needs to be maintained and enhanced to accommodate this growth. County needs for transportation improvements are supported by the deficiencies identified in Section 6.0. These deficiencies include:

- Public Transportation;
- Freight Transport;
- Airport Facilities;
- Bicycle and Pedestrian Facilities;
- Bridges;
- Safety;
- Roadway Characteristics; and,
- Roadway Operating Conditions.

Several transportation improvements were identified in Section 8.0, which address these deficiencies. This section will identify the recommended improvements and the estimated costs associated with these improvements.

### 9.1 Estimated Costs

A necessary element of the LRTP is estimating the costs associated with the numerous recommended improvements. An estimated cost needs to be associated with each project to aid the County in planning for, and funding of, recommended improvements. GDOT is currently updating their cost information; however the Atlanta Regional Commission (ARC) recently completed a costing tool. This costing tool presents cost estimates for both urban and rural conditions and was the tool used to develop costs for this study. The rural cost estimates were used for the proposed projects in Jasper County.

The estimated costs were generated for planning purposes and may vary from actual costs. **The cost of right of way was omitted from the cost estimate due to the high variation associated with this cost.** Therefore, the estimated costs can be expected to be considerably less than actual costs. Additional variations in cost could be the result of several factors, such as, design, utility relocation or environmental impacts. Typical roadway cost estimates can be found in Table 9.1.

**Table 9.1  
ARC Construction Cots**

Project Name	Construction Costs	
	with Median (\$/Lane Mile)	without Median (\$/Lane Mile)
<b>Roadways</b>		
Surface Street Widening	\$1,960,000	\$1,740,000
Surface Street Upgrade		\$680,000
Surface Street New	\$2,720,000	\$2,450,000
<b>Intersections</b>	Const Cost per Each	
Arterial to Arterial	\$2,300,000	
Arterial to Collector	\$1,900,000	
Collector to Local	\$1,400,000	
Traffic Signal Upgrade	\$160,000	
<b>Interchanges &amp; Grade Separations</b>	Const Cost per Each	
Compressed Diamond	\$11,800,000	
Single Point Urban	\$20,200,000	
Diamond	\$10,200,000	
Half Diamond	\$6,100,000	
Grade Sep - 4 lanes	\$7,300,000	
Grade Sep - 2 lanes	\$4,700,000	
<b>Non-Vehicular Elements</b>	Const. Cost per Mile	
Multi-Use Trail (10 ft)	\$590,000	
Sidewalk (2 @ 5 ft)	\$190,000	
Park Ride Lot	\$1,000	per space

Source: ARC Costing Tool

A review of recent GDOT bridge costs revealed that bridges are generally being constructed for approximately \$140 per square foot. This value was used to estimate the cost for improving the deficient bridges in Jasper County.

These estimates were used to develop costs for the recommended improvements presented in Section 9.2 (Table 9.2). These costs should be considered preliminary in nature and taken with appropriate care. **Costs do not include right of way.** More detailed engineering studies are required to identify highly accurate cost estimates.

Over the past several years construction material costs have increased dramatically throughout the United States. Some typical GDOT pay items have increased over 60% in the last few years. Much of this cost increase can be attributed to the demand for construction materials in the Gulf Coast area and Iraq. As one of the most variable components of the LRTP, it is important that costs are revisited on a regular basis to ensure accuracy. In recognition of this situation, GDOT is in the process of evaluating all project costs in the Construction Work Program and establishing guidelines for cost updates.

## 9.2 Summary of Recommended Improvements

Based on the analysis completed as part of this study, a listing of recommended projects was created for Jasper County. This information is presented in Table 9.2. This listing includes:

- Capacity Improvements and New Roadways;
- Minor Roadway Widening (increasing travel lane widths and/or shoulders);
- Intersection and Geometric Improvements;
- Bridge Improvements;
- Bicycle and Pedestrian Improvements;
- Rail Improvements; and,
- Transit Improvements.

For each recommendation several informational elements were produced including: facility; limits; existing and improved configuration; comments; source; improvement type; need; anticipated benefit; phasing; cost and potential funding sources. For successful implementation of these projects it is recommended that additional detailed engineering studies be conducted to determine the most appropriate design, cost and phasing of the particular project. Additionally, successful project implementation will require identified funding mechanisms, political support, and public recognition of the project need and benefit.

Recommended roadway improvements are mapped in Figure 9.2.1 and recommended bicycle and pedestrian improvements are mapped in Figure 9.2.2

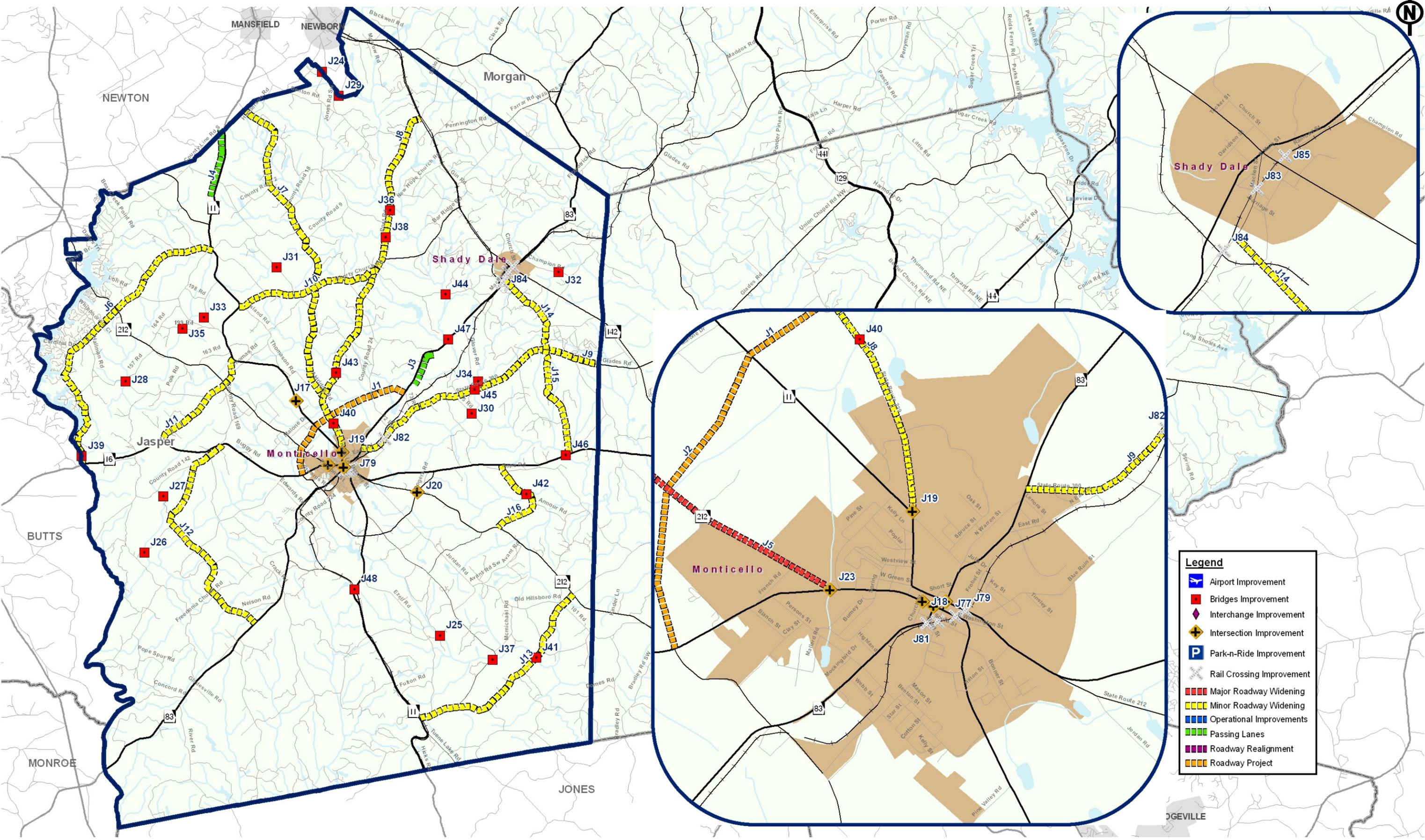
Table 9.2  
Recommended Improvements

Project Ref. No.	Facility	Segment Limits		Existing Configuration	Improved Configuration	Notes/Comments	Source	Improvement Type	Need	Anticipated Benefit	Implementation			Estimated Cost	Potential Funding Source			
		From	To								Near	Mid	Long		Federal	State	County	Local
<b>Capacity Improvements/New Roadways</b>																		
J1	SR 83 NW Bypass	SR 83/380 NW	SR 11	N/A	2-Lanes	2.94 miles	CWP	New Roadway	Connectivity	Improved Connectivity	✓			\$4,573,000	✓	✓	✓	
J2	SR 83 SW Bypass	SR 11	SR 16	N/A	2-Lanes	1.80 miles	Public	New Roadway	Connectivity	Improved Connectivity	✓			\$8,820,000	✓	✓	✓	
J3	SR 83 Passing Lanes	Ocmulgee River	Shady Dale		Passing Lanes	2.73 miles	CWP	Passing Lanes		Increase Capacity & Improved Safety			✓	\$4,746,000	✓	✓	✓	
J4	SR 11 Passing Lanes	S of Shepard Rd	Newton County		Passing Lanes	2.30 miles	Public	Passing Lanes		Increase Capacity & Improved Safety		✓		-	✓	✓	✓	
J5	SR 212	SR 16	Newton County	2-Lanes	4-Lanes, Divided	12.20 miles	Analysis	Arterial Widening	Capacity Deficiency	Increase Capacity & Improved Safety	✓			\$47,824,000	✓	✓	✓	
														\$65,963,000				
<b>Minor Widening</b>																		
J6	Jackson Lake Rd	SR 11	SR 16	< ideal typical section	12' lanes and 2' paved shoulders	10.55 miles	Public	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity			✓	\$7,174,000		✓	✓	✓
J7	Calvin Rd / Aldridge Rd	Post Rd	Newton County	< ideal typical section	12' lanes and 2' paved shoulders	11.15 miles	Public	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity			✓	\$7,582,000		✓	✓	✓
J8	Post Rd	SR 11	SR 142	< ideal typical section	12' lanes and 2' paved shoulders	12.30 miles	Public	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity	✓			\$8,364,000		✓	✓	✓
J9	Rock Eagle Rd	SR 83	Putnam County	< ideal typical section	12' lanes and 2' paved shoulders	9.15 miles	Public	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity				\$6,222,000		✓	✓	✓
J10	Liberty Church Rd	SR 11	Post Rd	< ideal typical section	12' lanes and 2' paved shoulders	4.95 miles	Analysis	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity	✓			\$3,366,000		✓	✓	✓
J11	Bethel Church Rd	SR 16	SR 11	< ideal typical section	12' lanes and 2' paved shoulders	3.87 miles	Analysis	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity	✓			\$2,631,600		✓	✓	✓
J12	Clay Rd	SR 16	SR 83	< ideal typical section	12' lanes and 2' paved shoulders	8.25 miles	Analysis	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity		✓		\$5,610,000		✓	✓	✓
J13	Fullerton Phillips Rd	SR 11	SR 212	< ideal typical section	12' lanes and 2' paved shoulders	7.31 miles	Analysis	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity			✓	\$4,970,800		✓	✓	✓
J14	Aikenton Rd	SR 83	Rock Eagle Rd	< ideal typical section	12' lanes and 2' paved shoulders	2.92 miles	Analysis	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity			✓	\$1,985,600		✓	✓	✓
J15	Bullard Rd	Rock Eagle Rd	SR 16	< ideal typical section	12' lanes and 2' paved shoulders	3.78 miles	Analysis	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity			✓	\$2,570,400		✓	✓	✓
J16	Smithboro Rd	SR 212	SR 16	< ideal typical section	12' lanes and 2' paved shoulders	3.25 miles	Analysis	Minor Widening	Sub-Standard Typical Section	Improved Safety & Capacity			✓	\$2,210,000		✓	✓	✓
														\$52,686,400				
<b>Intersection/Geometric Improvements</b>																		
J17	SR 11	new School			Turn Lanes		Public	Intersection Improvement	Operational & Safety Issues	Improved Safety & Capacity		✓		\$250,000	✓	✓	✓	✓
J18	SR 212	Church St					Public	Intersection Improvement	Operational & Safety Issues	Improved Safety & Capacity	✓			\$250,000	✓	✓	✓	✓
J19	SR 11	Post Rd					Public	Intersection Improvement	Operational & Safety Issues	Improved Safety & Capacity	✓			\$250,000	✓	✓	✓	✓
J20	SR 212	SR 380					Public	Intersection Improvement	Operational & Safety Issues	Improved Safety & Capacity	✓			\$250,000	✓	✓	✓	✓
J21	SR 11 (Green St)	SR 16 (E Green St)				19 crashes	Analysis	Intersection Improvement	Operational & Safety Issues	Improved Safety & Capacity	✓			\$250,000	✓	✓	✓	✓
J22	SR 11 (Green St)	SR 11-SO (Forsyth St)				10 crashes	Analysis	Intersection Improvement	Operational & Safety Issues	Improved Safety & Capacity		✓		\$250,000	✓	✓	✓	✓
J23	SR 16 (Washington St)	SR 212 W				10 crashes	Analysis	Intersection Improvement	Operational & Safety Issues	Improved Safety & Capacity	✓			\$250,000	✓	✓	✓	✓
														\$1,750,000				
<b>Bridge Improvements</b>																		
J24	Pitts Chapel Rd	Pittman Branch		324 sq ft		15.57 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$49,896	✓	✓	✓	✓
J25	Old Agateville Rd	Cedar Creek		432 sq ft		17.09 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$66,528	✓	✓	✓	✓
J26	Lane Rd	Kinnard Creek		391 sq ft		17.33 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$60,214	✓	✓	✓	✓
J27	Kinnard Creek Rd	Kinnard Creek Tributary		392 sq ft		18.04 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$60,368	✓	✓	✓	✓
J28	Cook Rd	Herd Creek		540 sq ft		20.04 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$83,160	✓	✓	✓	✓
J29	Guy Jones Rd	Pittman Branch		360 sq ft		20.52 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$55,440	✓	✓	✓	✓
J30	Wicker Rd	Whiteoak Creek		479 sq ft		26.10 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$73,828	✓	✓	✓	✓
J31	Ellis Rd	Robinson Creek		624 sq ft		26.71 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$96,096	✓	✓	✓	✓
J32	Whitten Rd	Hanna Branch		372 sq ft		26.79 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$57,288	✓	✓	✓	✓
J33	Ozborne Rd	Herd Creek Tributary		445 sq ft		28.06 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations		✓		\$68,530	✓	✓	✓	✓
J34	River Rd	Jack Creek		564 sq ft		28.77 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations		✓		\$86,856	✓	✓	✓	✓
J35	Benton Rd	Herd Creek		408 sq ft		39.19 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$62,832	✓	✓	✓	✓
J36	Post Rd	Pittman Creek		6,051 sq ft		41.66 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$931,854	✓	✓	✓	✓
J37	Goolsby Rd	Cedar Creek		4,709 sq ft		45.45 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$725,155	✓	✓	✓	✓
J38	Post Rd	Murder Creek		3,792 sq ft		46.23 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$583,968	✓	✓	✓	✓
J39	Lake Jackson Rd	Herd Creek		3,082 sq ft		47.78 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$474,628	✓	✓	✓	✓
J40	Post Rd	Pearson Creek		3,082 sq ft		52.78 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$474,628	✓	✓	✓	✓
J41	Fullerton-Phillip	Cedar Creek		4,270 sq ft		59.73 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations		✓		\$657,580	✓	✓	✓	✓
J42	Smithboro Rd	North Fork Wolf Creek		3,363 sq ft		62.11 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations		✓		\$517,902	✓	✓	✓	✓
J43	Post Rd	Lowry Branch		2,889 sq ft		65.88 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$444,906	✓	✓	✓	✓
J44	King Plow Rd	Murder Creek		5,648 sq ft		67.41 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$869,792	✓	✓	✓	✓
J45	Rock Eagle Rd	Murder Creek		8,988 sq ft		68.69 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$1,384,152	✓	✓	✓	✓
J46	SR 16	Murder Creek		10,618 sq ft		72.83 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$1,635,172	✓	✓	✓	✓
J47	SR 83	Murder Creek		11,731 sq ft		72.97 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations	✓			\$1,806,574	✓	✓	✓	✓
J48	SR 11	Norfolk Southern Railroad (733263N)		4,664 sq ft		74.78 sufficiency rating	Analysis	Upgrade Bridge	Rehabilitation or Maintenance	Improved Safety & Operations		✓		\$718,256	✓	✓	✓	✓
														\$12,045,603				
<b>Bicycle &amp; Pedestrian Improvements</b>																		
J49	Funderburg St Sidewalks	Webb St	Fred Smith St	no sidewalk on west	sidewalk on west	0.15 miles	Analysis	Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$15,000	✓	✓	✓	✓
J50	Funderburg St Sidewalks	Wilson St	Fred Smith St	no sidewalk on east	sidewalk on east	0.15 miles	Analysis	Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System		✓		\$15,000	✓	✓	✓	✓
J51	Railroad Crossing	Funderburg St			pedestrian crossing		Analysis	Pedestrian Crossing	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$500	✓	✓	✓	✓
J52	SR 83 Sidewalks	Highland Ave	mile marker 13	no sidewalk on west	sidewalk on west	0.23 miles	Analysis	Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$23,000	✓	✓	✓	✓
J53	N Warren Sidewalks	SR 83 (S)	SR 83 (N)	no sidewalks	sidewalk on one side	0.54 miles	Analysis	Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System		✓		\$54,000	✓	✓	✓	✓
J54	SR 142 Sidewalks	Cemetery Rd	SR 83	no sidewalks	sidewalks on both sides	0.17 miles	Analysis	Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$34,000	✓	✓	✓	✓
J55	SR 142 Sidewalks	Tucker St	Davidson Rd	no sidewalks	sidewalk on south side	0.19 miles	Analysis	Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$19,000	✓	✓	✓	✓
J56	SR 83 Sidewalks	Park	Calvary United Methodist Church	limited sidewalks	sidewalks on both sides	0.34 miles	Analysis	Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$68,000	✓	✓	✓	✓
J57	South Railroad St Sidewalks	SR 142	Aikenton Rd	no sidewalk on east	sidewalk on east	0.57 miles	Analysis	Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$57,000	✓	✓	✓	✓
J58	Providence St Sidewalks	SR 142	Railroad	no sidewalk on west	sidewalk on west	0.23 miles	Analysis	Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System		✓		\$23,000	✓	✓	✓	✓
J59	SR 11 Bike Lanes	SR 16	Newton County Line	no bike lanes/narrow shoulder	bike lanes on both sides	14.04 miles	Analysis	Bike Lane	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$2,106,000	✓	✓	✓	✓
J60	SR 212 Multi-Use Trail	SR 16	Bethel Church Rd	2 schools and a rec center	multi-use path	4.45 miles	Analysis	Multi-Use Path	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$1,557,500	✓	✓	✓	✓
J61	Rock Eagle Rd Multi-Use Trail	SR 83	Putnam County		multi-use path	9.17 miles	Public	Multi-Use Path	Bike/Ped Facilities	Enhanced Multi-Modal System		✓		\$3,209,500	✓	✓	✓	✓
J62	SR 11 Bike Lanes & Sidewalks	SR 16	SR 380	no bike lanes/narrow shoulder	bike lanes and sidewalks on both sides	2.42 miles	RDC	Bike Lane & Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$847,000	✓	✓	✓	✓
J63	SR 16 Bike Lanes & Sidewalks	SR 212	Fellowship Rd	no bike lanes/narrow shoulder	bike lanes and sidewalks on both sides	1.91 miles	RDC	Bike Lane & Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$668,500	✓	✓	✓	✓
J64	SR 16/212 Bike Lanes & Sidewalks	SR 16/212	SR 11	no bike lanes/narrow shoulder	bike lanes and sidewalks on both sides	0.62 miles	RDC	Bike Lane & Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$217,000	✓	✓	✓	✓
J65	SR 212 Bike Lanes & Sidewalks	SR 11	SR 380	no bike lanes/narrow shoulder	bike lanes and sidewalks on both sides	2.54 miles	RDC	Bike Lane & Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$889,000	✓	✓	✓	✓
J66	SR 83 Bike Lanes & Sidewalks	SR 16	Edwards Rd	no bike lanes/narrow shoulder	bike lanes and sidewalks on both sides	2.12 miles	RDC	Bike Lane & Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$742,000	✓	✓	✓	✓
J67	SR 83 Bike Lanes & Sidewalks	SR 16	CR 73	no bike lanes/narrow shoulder	bike lanes and sidewalks on both sides	3.18 miles	RDC	Bike Lane & Sidewalk	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$1,113,000	✓	✓	✓	✓
J68	SR 11 Bike Lanes	SR 380	Jones County Line	no bike lanes/narrow shoulder	bike lanes on both sides	9.50 miles	RDC	Bike Lane	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$1,425,000	✓	✓	✓	✓
J69	SR 16 Bike Lanes	Fellowship Rd	Butts County Line	no bike lanes/narrow shoulder	bike lanes on both sides	7.07 miles	RDC	Bike Lane	Bike/Ped Facilities	Enhanced Multi-Modal System	✓			\$1,060,500	✓	✓		

**Table 9.2  
Recommended Improvements**

Project Ref. No.	Facility	Segment Limits		Existing Configuration	Improved Configuration	Notes/Comments	Source	Improvement Type	Need	Anticipated Benefit	Implementation			Estimated Cost	Potential Funding Source			
		From	To								Near	Mid	Long		Federal	State	County	Local
J77	CR 127/ Georgia Pacific Spur Crossing	Norfolk Southern #733261A			Upgrade crossing		Analysis	Upgrade Crossing - upgrade stop signs	Operational & Safety Issues	Improved Safety & Operations	✓			\$300		✓	✓	✓
J78	Short St Crossing	Norfolk Southern #733253H			Upgrade crossing		Analysis	Upgrade Crossing - install signage	Operational & Safety Issues	Improved Safety & Operations	✓			\$450		✓	✓	✓
J79	Rock Eagle Rd Crossing	Norfolk Southern #733243C			Upgrade crossing	old signage, limited warning	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	✓			\$600		✓	✓	✓
J80	Railroad St Crossing	Norfolk Southern #733160N			Upgrade signage	limited warning, 3 sets of tracks	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	✓			\$350		✓	✓	✓
J81	South Railroad St Crossing	Norfolk Southern #733161V			Upgrade signage	limited warning	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	✓			\$150		✓	✓	✓
J82	North Railroad St Crossing	Norfolk Southern #733163J			Upgrade signage	limited warning	Analysis	Upgrade Crossing	Operational & Safety Issues	Improved Safety & Operations	✓			\$350		✓	✓	✓
														\$377,200				
<b>Transit Improvements</b>																		
J83	Rural Transit Service						Public	Transit	Commute Options	Enhanced Multi-Modal System		✓		-	✓	✓	✓	✓
J84	Park & Ride Lot	SR 212, SR 11 or SR 83			50 parking spaces		Analysis	Transit	Commute Options	Enhanced Multi-Modal System		✓		\$50,000	✓	✓	✓	✓
														\$50,000				
														\$157,113,203				

Notes: 1. Intersection Improvements listed include all intersections developed through the public involvement process. Many of these locations may not warrant improvements, however additional study is required to make this determination.  
2. Intersection costs assumed a unit cost of \$250,000  
3. Bridge replacement costs are based off of \$140 per square foot  
4. Estimated costs DO NOT include Right of Way

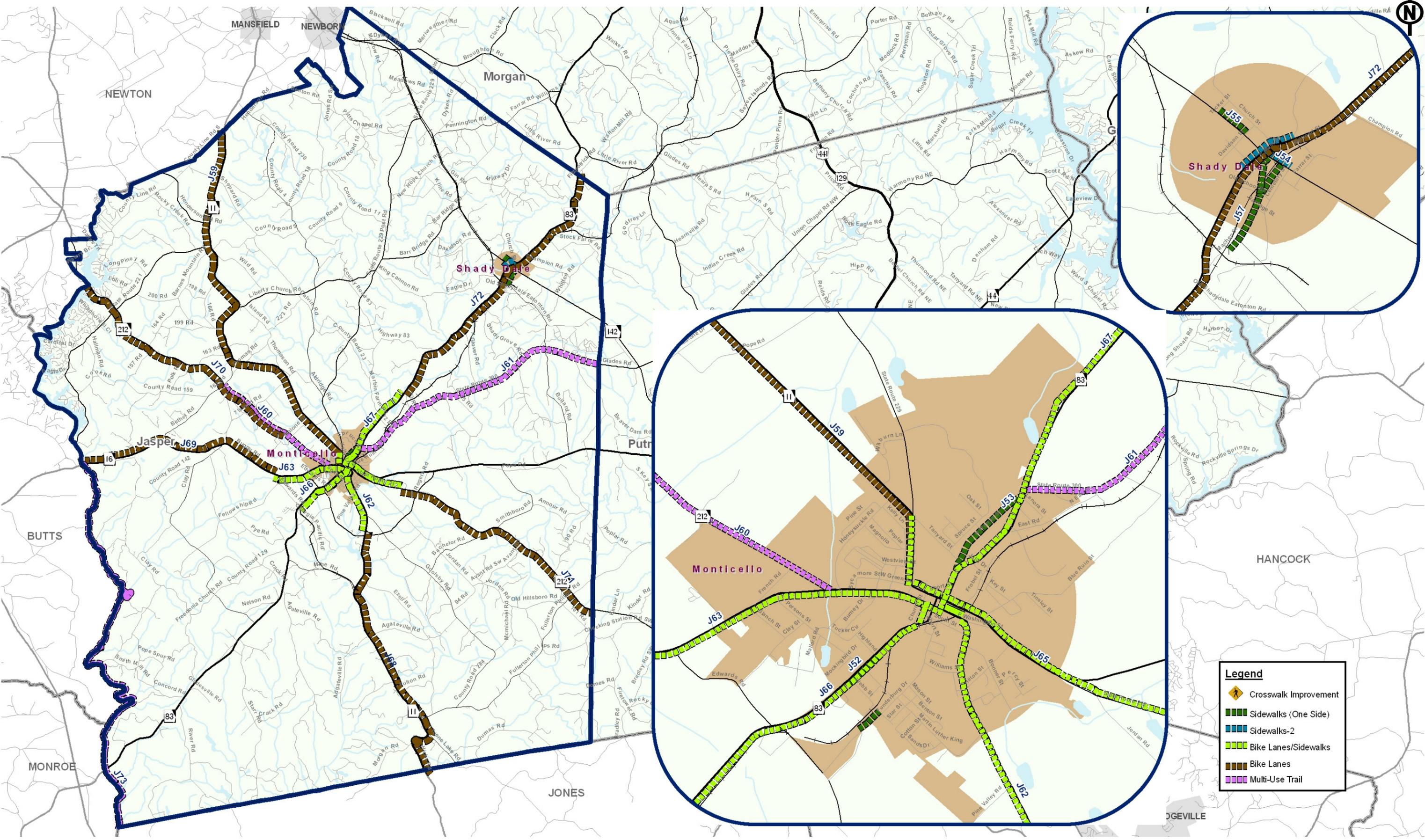


**Legend**

- Airport Improvement
- Bridges Improvement
- Interchange Improvement
- Intersection Improvement
- Park-n-Ride Improvement
- Rail Crossing Improvement
- Major Roadway Widening
- Minor Roadway Widening
- Operational Improvements
- Passing Lanes
- Roadway Realignment
- Roadway Project

**Recommended Improvements - Roadway**  
East Georgia Multi-County Transportation Study

Figure No: 9.2.1



**Recommended Improvements – Bicycle & Pedestrian**  
East Georgia Multi-County Transportation Study

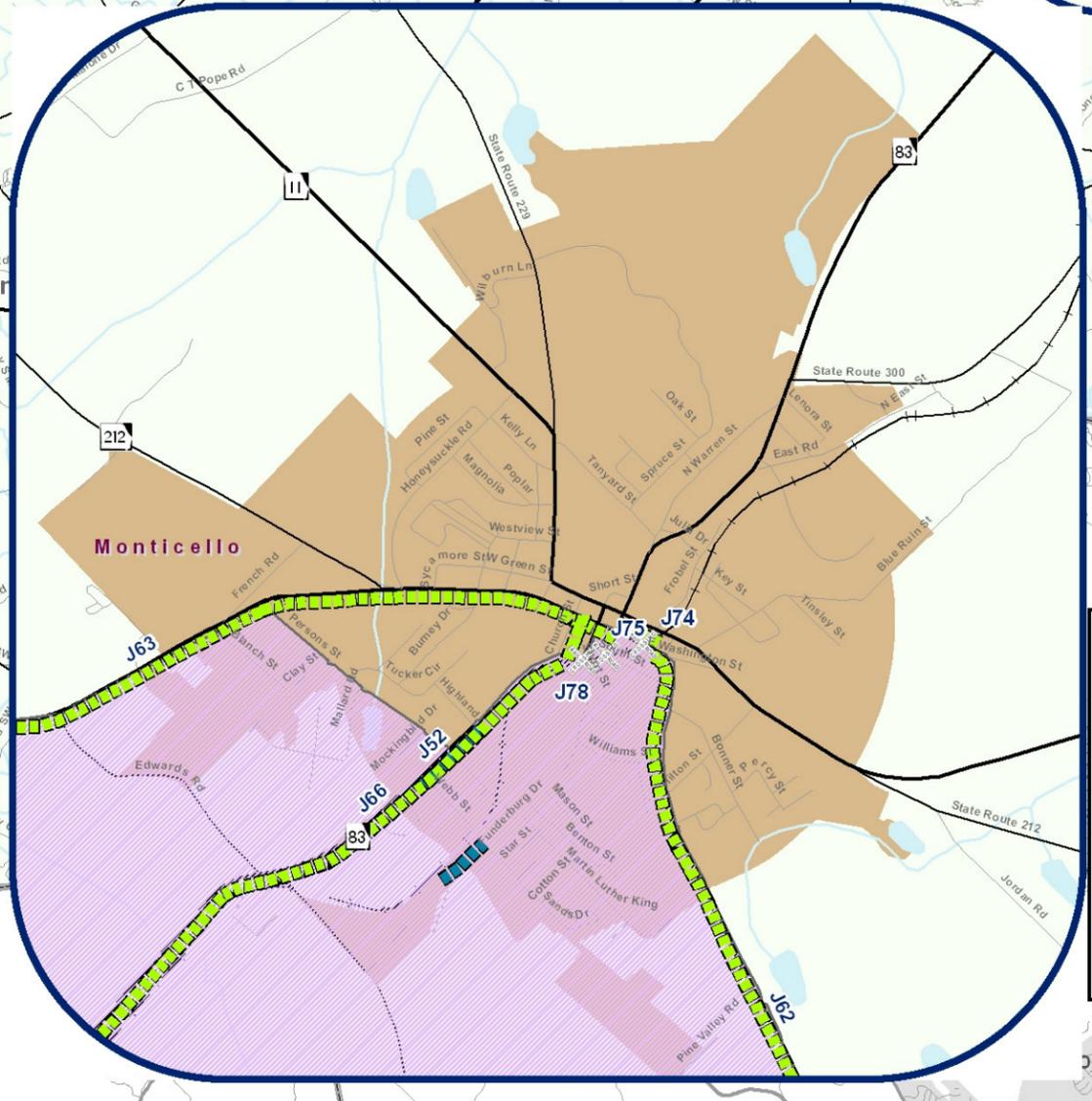
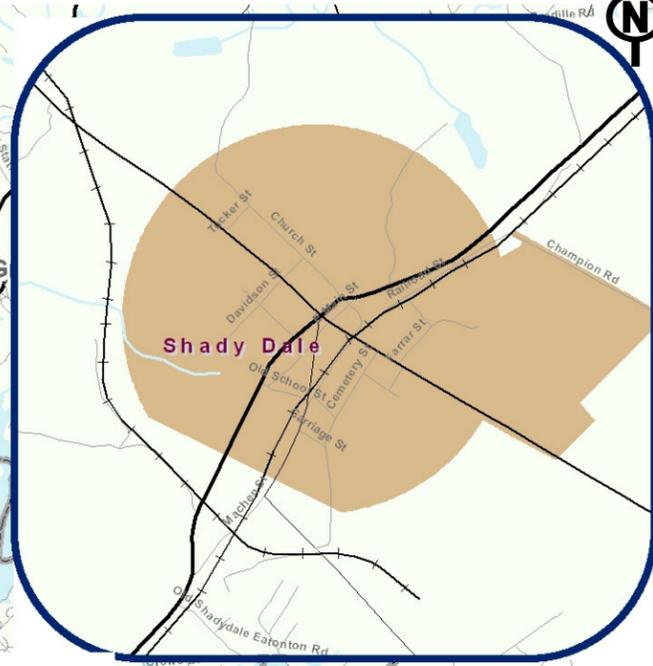
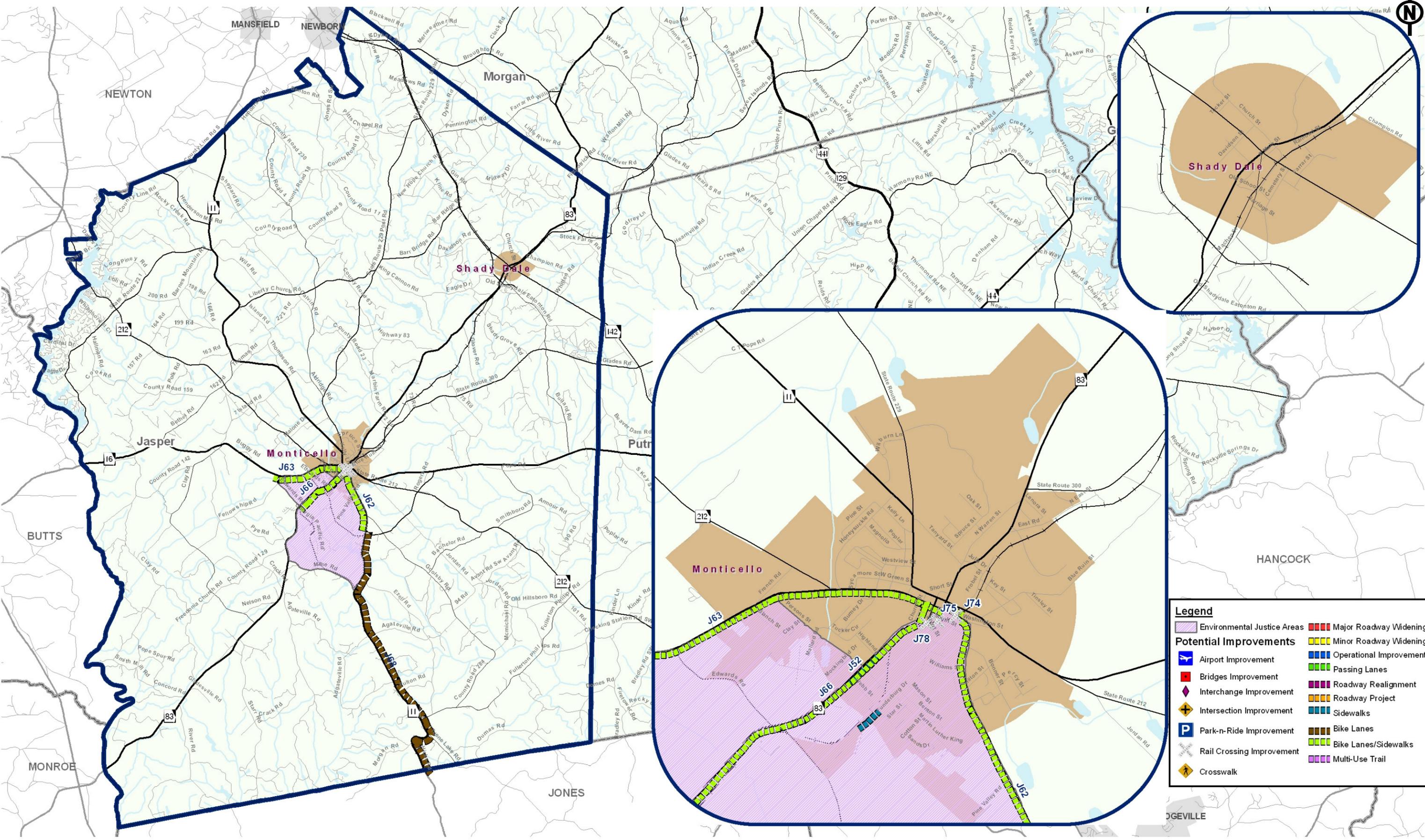
Figure No: 9.2.2

### 9.3 Environmental Justice Considerations

Another key point of concern in evaluating proposed transportation improvements is environmental justice. This ensures that areas with high concentrations of low-income or minority populations are not adversely impacted by transportation improvements. The following recommended projects are located in EJ areas:

- Sidewalks along Funderburg Street from Webb Street to Fred Smith Street;
- Sidewalks along Funderburg Street from Wilson Street to Fred Smith Street;
- Sidewalks along SR 83 from Highland Avenue to mile marker 13;
- Bike lanes and sidewalks along SR 11 from SR 16 to SR 380;
- Bike lanes and sidewalks along SR 16 from SR 212 to Fellowship Road;
- Bike lanes and sidewalks along SR 16/SR 212 from SR 16/SR 212 to SR 11;
- Bike lanes and sidewalks along SR 83 from SR 16 to Edwards Road;
- Bike lanes along SR 11 from SR 380 to Jones County Line;
- Railroad crossing upgrade at Funderburg Drive /South Street; and,
- Railroad crossing upgrade at Short Street.

The recommended improvements will improve safety, mobility, and access for all users on a county-wide basis. Additional projects that will benefit the EJ communities include: bicycle and pedestrian improvements; transit park and ride lots; and, numerous safety and capacity enhancements throughout the County, as shown in Table 9.2. Figure 9.3 shows the recommended projects in the vicinity of the environmental justice areas.



**Legend**

Environmental Justice Areas	Major Roadway Widening
Airport Improvement	Minor Roadway Widening
Bridges Improvement	Operational Improvements
Interchange Improvement	Passing Lanes
Intersection Improvement	Roadway Realignment
Park-n-Ride Improvement	Roadway Project
Rail Crossing Improvement	Sidewalks
Crosswalk	Bike Lanes
	Bike Lanes/Sidewalks
	Multi-Use Trail

**Environmental Justice Evaluation**  
East Georgia Multi-County Transportation Study

Figure No: 9.3

## 10.0 Project Prioritization

In order to aid GDOT and County staff, potential improvements were ranked by mode based on several evaluation factors. The following sections document the prioritization of improvements for Jasper County.

### 10.1 Corridor Prioritization

Qualitative and Quantitative Evaluation Factors were established so that the potential improvements for Jasper County could be evaluated objectively by County staff. These factors were developed by HNTB with the assistance of the SAG, public comment, and GDOT. This evaluation serves as a ranking for potential projects, resulting in a prioritization of improvement options to meet the County's transportation needs. Prioritization criteria were developed for four types of projects – roadway capacity, bicycle and pedestrian improvements, intersections, and bridges.

#### Qualitative Criteria

Qualitative criteria were established to evaluate the deficient corridors based on various conditions or standards established through the study process. The following list documents the qualitative criteria established for the roadway network improvement evaluation. These correspond to the vision established in the Goals and Objectives documented in Section 7.0.

- Continuation of Existing Road Widening Project
- Supports the Comprehensive Plan
- Right of Way Protection Corridor
- Connectivity and Accessibility
- Construction Designs in Progress
- Parallel Relief
- Protection of Downtown
- Ideal Typical Section
- Natural Preservation
- Transportation - Land Use Linkage

By comparing potential projects to these established criteria, it was possible to determine which projects scored highest against these critical measures. This information was used as an input for prioritizing projects. Table 10.1.1 displays the qualitative criteria and the associated scoring. The total points established by the Qualitative Criteria range from 0 to 32 points. These points were added to the points received from the Quantitative Criteria, which are documented on the following pages.

**Table 10.1.1  
Qualitative Criteria and Scoring**

Corridor Prioritization Criteria	Possible Points
<b>Continuation of Existing Road Widening Project</b> Is the proposed project a continuation of any previously completed or current project providing added lanes to the specific transportation corridor?	No = 0 Yes = 4
<b>Supports Comprehensive Plan</b> Is the proposed project identified in the Comprehensive Plan?	No = 0 Yes = 2
<b>Right of Way Protection Corridor</b> Is the proposed project located in a developing area where right of way protection or early acquisition is needed?	No = 0 Yes = 3
<b>Connectivity and Accessibility</b> Does the proposed project improve access between activity centers or link existing or proposed projects or provide regional connectivity?	No = 0 Yes = 4
<b>Construction Designs in Progress</b> Are the design plans for the proposed project already complete or in the process of being completed?	No = 0 Yes = 3
<b>Parallel Relief</b> Does the proposed project provide relief to parallel congested / deficient corridors?	No = 0 Yes = 4
<b>Protection of Downtown</b> Does the proposed project enhance the quality of life in downtown areas?	No = 0 Yes = 4
<b>Ideal Typical Section</b> Does the proposed project address upgrading sub standard roadway segments?	No = 0 Yes = 4
<b>Natural Preservation</b> Does the proposed project protect our natural resources?	No = 0 Yes = 2
<b>Transportation – Land Use Linkage</b> Has the proposed project coordinated with, or support, land use decisions in the area?	No = 0 Yes = 2
<b>Sub-Total Possible Points</b>	<b>32</b>

### Quantitative Criteria

Quantitative criteria were set up to evaluate the deficient corridors based on various measurable conditions. The following list documents the quantitative criteria established for the roadway network improvement evaluation.

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

Table 10.1.2 displays the quantitative criteria and the associated scoring. The total points established by the Quantitative Criteria range from 0 to 25 points.

**Table 10.1.2  
Quantitative Criteria and Scoring**

Corridor Prioritization Criteria	Possible Points
<b>Volume to Capacity Ratio</b>	
0.00 - 0.349	0.00
0.350 - 0.399	2.00
0.400 - 0.449	2.50
0.450 - 0.499	3.00
0.500 - 0.549	3.50
0.550 - 0.599	4.00
0.600 - 0.649	4.50
0.650 - 0.699	5.00
0.700 - 0.749	5.50
0.750 - 0.799	6.00
0.800 - 0.849	6.50
0.850 - 0.899	7.00
0.900 - 0.949	7.50
0.950 - 1.049	8.00
1.050 - 1.149	9.00
1.150 - 1.249	10.00
1.250 - 1.349	11.00
1.350 - 1.449	12.00
1.450 - 1.549	14.00
1.550 - 1.649	16.00
1.650 -	18.00
<b>Ratio of Corridor Crash Rate to Statewide Crash Rate</b>	
0.01-0.49	0.50
0.50-0.99	1.00
1.00 -1.99	1.50
2.00-2.49	2.00
2.50-2.99	2.50
3.00-3.99	3.00
4.00-5.99	3.50
6.00	4.00
<b>Number of Fatalities</b>	
1	1
2 or more	3
<b>Sub-Total Possible Points</b>	<b>25</b>

The total points that a facility can receive for both the qualitative and quantitative criteria is 57 points. Based upon the identified improvements and the evaluations made during the quantitative and qualitative evaluation, a set of recommended near, mid, and long-term transportation projects was established. The scoring for the deficient corridors is displayed in Table 10.1.3.

Table 10.1.3  
Corridor Prioritization

Project Ref. No.	Facility	Segment Limits		Qualitative Criteria	Continuation of Existing Road Widening Project	Supports Comprehensive Plan	Right of Way Protection Corridor	Connectivity and Accessibility	Construction Designs in Progress	Parallel Relief	Protection of Downtown	Ideal Typical Sections	Natural Preservation	Transportation Land Use Linkage	Sub-Total Qualitative Criteria	Quantitative Criteria	Volume/Capacity Ratio	Ratio of 100 Million VMT to Statewide Average	Number of Fatalities	Sub-Total Quantitative Criteria	Total Score for Project
		From	To		0-4	0-2	0-3	0-4	0-3	0-4	0-4	0-4	0-2	0-2	0-4		0-2				
J1	SR 83 NW Bypass	SR 83/380 NW	SR 11		✓	✓	✓				✓			✓	15.00		0.00	0.00	0	0.50	15.50
J2	SR 83 SW Bypass	SR 11	SR 16		✓	✓	✓				✓			✓	15.00		0.00	0.00	0	0.50	15.50
J3	SR 83 Passing Lanes	Ocmulgee River	Shady Dale					✓					✓		5.00		0.33	0.42	0	0.50	5.50
J4	SR 11 Passing Lanes	S of Shepard Rd	Newton County										✓		2.00		0.60	0.21	0	5.00	7.00
J5	SR 212	SR 16	Newton County		✓					✓				✓	8.00		0.60	0.33	0	5.00	13.00
J6	Jackson Lake Rd	SR 11	SR 16									✓			4.00		0.34	0.56	0	1.00	5.00
J7	Calvin Rd / Aldridge Rd	Post Rd	Newton County									✓			4.00		0.09	0.00	0	0.50	4.50
J8	Post Rd	SR 11	SR 142		✓							✓		✓	8.00		0.36	1.06	0	3.50	11.50
J9	Rock Eagle Rd	SR 83	Putnam County									✓			4.00		0.06	0.00	0	0.50	4.50
J10	Liberty Church Rd	SR 11	Post Rd				✓			✓		✓			12.00		0.71	1.71	0	7.00	19.00
J11	Bethel Church Rd	SR 16	SR 11				✓					✓			8.00		0.10	0.33	0	0.50	8.50
J12	Clay Rd	SR 16	SR 83				✓					✓			8.00		0.03	0.33	0	0.50	8.50
J13	Fullerton Phillips Rd	SR 11	SR 212				✓					✓			8.00		0.07	0.33	0	0.50	8.50
J14	Aikenton Rd	SR 83	Rock Eagle Rd				✓					✓			8.00		0.18	0.00	0	0.50	8.50
J15	Bullard Rd	Rock Eagle Rd	SR 16				✓					✓			8.00		0.03	0.35	0	0.50	8.50
J16	Smithboro Rd	SR 212	SR 16									✓			4.00		0.06	0.00	0	0.50	4.50

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

- Liberty Church Road from SR 11 to Post Road;
- SR 83 NW Bypass from SR 83/380 NW to SR 11;
- SR 83 SW Bypass from SR 11 to SR 16;
- SR 212 from SR 16 to Newton County;
- Post Road from SR 11 to SR 142;
- Bethel Church Road from SR 16 to SR 11;
- Clay Road from SR 16 to SR 83;
- Fullerton Phillips Road from SR 11 to SR 212;
- Aikenton Road from SR 83 to Rock Eagle Road; and,
- Bullard Road from Rock Eagle Road to SR 16.

Corridors with higher points are considered to achieve more of the goals and objectives established for the LRTP. The points are not meant to be the final decision on whether a project should be implemented or not. Instead these rankings should be employed in conjunction with input from key technical staff from the County and GDOT; input from political decision makers; and, public comment. However, the total points, from the Qualitative and Quantitative scoring, could be used to establish a priority ranking.

## 10.2 Bicycle & Pedestrian Prioritization

Criteria were established to evaluate the potential bicycle and pedestrian improvements based on various conditions or standards established through the study process. The following list documents the criteria established for the bicycle and pedestrian evaluation. These correspond to the established Goals and Objectives and project evaluation factors.

- Is the project within a bicycle or pedestrian priority area (1-mile buffer around schools, parks & libraries)?
- Did a bicycle or pedestrian related injury or fatality occur in the proposed project area?
- Does the proposed project improve access between activity centers or link existing or proposed projects or provide regional bicycle and pedestrian connectivity?
- Was the proposed project previously identified (STIP, RDC Bike/Ped Plan, Comprehensive Plan)?
- Does the proposed project link to a major bicycle or pedestrian origin or destination?

By comparing potential projects to these established criteria, it was possible to determine which projects scored highest against these critical measures. This information was used as a means for prioritizing projects. Table 10.2.1 documents the scoring used for the bicycle and pedestrian prioritization and Table 10.2.2 displays the scoring applied to the proposed bicycle and pedestrian improvements.

**Table 10.2.1  
Bicycle & Pedestrian Scoring Criteria**

Corridor Prioritization Criteria	Possible Points
<b>Bike Ped Priority Area</b> Is the project within a bicycle or pedestrian priority area (1-mile buffer around schools, parks & libraries)?	No = 0 Partial = 5 Yes = 10
<b>Injury or Fatality</b> Did a bicycle or pedestrian related injury or fatality occur in the proposed project area?	None = 0 Injury = 5 Fatality = 10
<b>Connectivity</b> Does the proposed project improve access between activity centers or link existing or proposed projects or provide regional bicycle and pedestrian connectivity?	No = 0 Yes = 5
<b>Previously Identified Improvement</b> Was the proposed project previously identified (STIP, RDC Bike/Ped Plan, Comprehensive Plan)?	No = 0 Yes = # * 2
<b>Origin &amp; Destination</b> Does the proposed project link to a major bicycle or pedestrian origin or destination?	No = 0 Yes = # * 2

# \* 2 – the number of projects or origins/destinations multiplied by 2

The prioritization scoring resulted in the following ranking of bicycle and pedestrian improvements:

- Bike lanes and sidewalks along SR 16/SR 212 from SR 16/SR 212 to SR 11;
- Bike lanes and sidewalks along SR 83 from SR 16 to Edwards Road;
- Bike lanes and sidewalks along SR 212 from SR 11 to SR 380;
- Bike lanes and sidewalks along SR 11 from SR 16 to SR 380;
- Bike lanes and sidewalks along SR 16 from SR 212 to Fellowship Road;
- Bike lanes and sidewalks along SR 83 from SR 16 to CR 73;
- Bike lanes along SR 11 from SR 16 to Newton County Line;
- Sidewalks along Funderburg Street from Webb Street to Fred Smith Street;
- Sidewalks along Funderburg Street from Wilson Street to Fred Smith Street;
- Funderburg Street Pedestrian crossing at railroad;
- Sidewalks along SR 83 from Highland Avenue to mile marker 13;
- Sidewalks along N Warren Road from SR 83 (S) to SR 83 (N);
- Sidewalks along SR 142 from Cemetery Road to SR 83;
- Sidewalks along SR 142 from Tucker Street to Davidson Road;
- Sidewalks along SR 83 from Park to Calvery United Methodist Church; and,
- Sidewalks along South Railroad Street from SR 142 to Aikenton Rd.

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

**Table 10.2.2  
Bicycle & Pedestrian Prioritization**

Road	From	To	Priority Area	Fatality	Connectivity	Previously Id	O & D	Score
Funderburg St Sidewalks	Webb St	Fred Smith St	✓					10
Funderburg St Sidewalks	Wilson St	Fred Smith St	✓					10
Railroad Crossing	Funderburg St		✓					10
SR 83 Sidewalks	Highland Ave	mile marker 13	✓					10
N Warren Sidewalks	SR 83 (S)	SR 83 (S)	✓					10
SR 142 Sidewalks	Cemetery Rd	SR 83	✓					10
SR 142 Sidewalks	Tucker St	Davidson Rd	✓					10
SR 83 Sidewalks	Park	Calvery United Methodist Church	✓					10
South Railroad St Sidewalks	SR 142	Aikenton Rd	✓					10
Providence St Sidewalks	SR 142	Railroad	✓					10
SR 11 Bike Lanes	SR 16	Newton County Line			✓		3	11
SR 212 Multi-Use Trail	SR 16	Bethel Church Rd			✓			5
Rock Eagle Rd Multi-Use Trail	SR 83	Putnam County			✓	1		7
SR 11 Bike Lanes & Sidewalks	SR 16	SR 380	✓			1		12
SR 16 Bike Lanes & Sidewalks	SR 212	Fellowship Rd	✓			1		12
SR 16/212 Bike Lanes & Sidewalks	SR 16/212	SR 11	✓	I	✓	1	2	26
SR 212 Bike Lanes & Sidewalks	SR 11	SR 380	✓		✓	1	2	21
SR 83 Bike Lanes & Sidewalks	SR 16	Edwards Rd	✓	I	✓	1	2	26
SR 83 Bike Lanes & Sidewalks	SR 16	CR 73	✓			1		12
SR 11 Bike Lanes	SR 380	Jones County Line				1		2
SR 16 Bike Lanes	Fellowship Rd	Butts County Line				1		2
SR 212 Bike Lanes	Malone Dr	Newton County Line				1		2
SR 212 Bike Lanes	SR 380	Putnam County Line				1		2
SR 83 Bike Lanes	CR 73	Morgan County Line			✓	1		7
Ocmulgee Trail	Jones County Line	Jackson Lake Rd				1		2

### 10.3 Intersection Prioritization

Criteria were established to evaluate the potential intersection improvements based on various conditions or standards established through the study process. The following list documents the criteria established for the intersection evaluation. These correspond to the established Goals and Objectives and project evaluation factors.

- What is the Average Annual Daily Traffic (AADT) on the facility?
- How many crashes occurred at the intersection between 2003 and 2005?
- Did a fatality occur at the intersection?
- Was the intersection currently identified by the County/City?
- Can operational issues be addressed without installing a traffic signal?

By comparing potential projects to these established criteria, it was possible to determine which projects scored highest against these critical measures. This information was used as a means of prioritizing projects. Table 10.3.1 documents the scoring used for the intersection prioritization and Table 10.3.2 displays the scoring applied to the proposed intersection improvements.

**Table 10.3.1  
Intersection Scoring Criteria**

Corridor Prioritization Criteria	Possible Points
<b>AADT</b> What is the Average AADT at the intersection?	> 4,000 = 5 2,500 - 4,000 = 4 1,000 - 2,500 = 2 < 1,000 = 0
<b>Crashes</b> How many crashes occurred at the intersection between 2002 and 2004?	> 20 = 10 10 - 20 = 5 5 - 10 = 2 <5 = 0
<b>Fatality</b> Did a fatality occur at the intersection?	No = 0 Yes = 10
<b>Previously Identified Improvement</b> Was the intersection currently identified by the County/City?	No = 0 Yes = 5
<b>Improvement Opportunities</b> Can operational issues be addressed without installing a traffic signal?	No = 0 Yes = 5

**Table 10.3.2**  
**Intersection Prioritization**

Project Ref. No.	Road	Intersection	AADT	Crashes	Fatalities	County / City List	Score
J17	SR 11	new School	960	0	0	✓	5
J18	SR 212	Church St	2,520	3	0	✓	7
J19	SR 11	Post Rd	1,300	5	0	✓	7
J20	SR 212	SR 380	330	0	0	✓	5
J21	SR 11 (Green St)	SR 16 (E Green St)	1,643	19	0		5
J22	SR 11 (Green St)	SR 11-SO (Forsyth St)	2,270	10	0		5
J23	SR 16 (Washington St)	SR 212 W	1,480	10	0		5

The prioritization scoring resulted in the following ranking of intersection improvements:

- SR 212 and Church Street;
- SR 11 and Post Road;
- SR 11 (Green Street) and SR 16 (E Green Street);
- SR 11 (Green Street) and SR 11-SO (Forsyth Street); and,
- SR 16 (Washington Street) and SR 212 W.

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

#### 10.4 Bridge Prioritization

Bridges with a sufficiency rating of 75 or lower were recommended for improvements. The sufficiency rating was also used to prioritize the bridges in need of rehabilitation or maintenance. The lower the sufficiency rating, the higher the improvement priority.

The prioritization scoring resulted in the following ranking of bridge improvements:

- Pitts Chapel Road at Pittman Branch;
- Old Agateville Road at Cedar Creek;
- Lane Road at Kinnard Creek;
- Kinnard Creek Road at Kinnard Creek Tributary;
- Cook Road at Herds Creek;
- Guy Jones Road at Pittman Branch;
- Wicker Road at Whiteoak Creek;
- Ellis Road at Robinson Creek;
- Whitten Road at Hanna Branch;
- Osborne Road at Herds Creek Tributary;
- River Road at Jack Creek;
- Benton Road at Herds Creek;
- Post Road at Pittman Creek;
- Goolsby Road at Cedar Creek;
- Post Road at Murder Creek; and,
- Lake Jackson Road at Herds Creek.

The remaining bridges have a higher sufficiency rating and, at this time, should be considered a lower priority.

## 11.0 Funding

Several funding sources will be used to construct as many of the recommended projects as possible. This is usually controlled by the agencies responsible for maintaining and operating the roadway. Most major facilities in Jasper County are either operated by GDOT or the County. Should the County desire to accelerate projects on state owned and maintained facilities, it is highly likely that overmatching of local funds could accelerate the process.

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

- Federal Title I Apportionments;
  - State Motor Fuels Taxes;
  - State License Tag Fees;
  - State Title Registrations;
  - State Motor Carrier Fuels Tax;
  - State Personal Property Tax; and,
  - Tax Allocation Districts.
- } Accounts for approximately 98% of the budget

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

While GDOT funding components have positive growth rates, the Department is experiencing some funding challenges. Construction costs have increased up to 65% over the past two to three years forcing the Department to continually assess which projects it can reasonably fund. It is anticipated that in the future local funding sources will become more significant. A review of project implementation shows that locations with a Special Purpose Option Sales Tax (SPLOST) have been in the best position to leverage funds and ultimately construct projects.

### 11.1 Federal Funding Sources for Transportation

A substantial portion of GDOT funding comes from the Federal Government through Federal Title I Apportionments. The primary funding source for Title I is the Federal gasoline tax collected at the state level. The US Congress authorizes federal transportation funding to the states and other public entities, generally every six years. The previous authorization was known as the "Transportation Efficiency Act for the 21st Century" or TEA 21. The reauthorization of TEA 21 in August 2005 was SAFETEA-LU which authorizes the Federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005 through 2009.

Based on the reauthorization, Table 11.1 illustrates funding levels for major highway transportation programs and apportionments and allocations to Georgia over the five-year time frame (FY 2005, 2006, 2007, 2008, and 2009).

**Table 11.1**  
**Estimated Five-Year SAFETEA-LU Highway Apportionments and Allocations\***

Area	Georgia	US
Interstate Maintenance	\$922	\$25,202
National Highway System	\$859	\$30,542
Surface Transportation System	\$1,119	\$32,550
Bridge Replacement & Rehabilitation	\$272	\$21,607
Congress Mitigation & Air Quality	\$186	\$8,609
Appalachian Development Highway System	\$90	\$2,350
Recreational Trails	\$10	\$370
Metropolitan Planning	\$37	\$1,481
Safety	\$141	\$5,064
Rail Highway Crossings	\$30	\$880
Safe Route to Schools	\$18	\$612
High Priority Projects	\$350	\$14,832
Equity Bonus	\$2,324	\$40,896
<b>Total</b>	<b>\$6,356</b>	<b>\$183,466</b>

\* In millions of dollars (rounded to the nearest million) for FY 2005 through 2009.

Source: US Department of Transportation

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

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

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

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

## 11.2 Federal Funds for Public Transportation

The need for better mobility and access to transportation extends far beyond city limits. In Jasper County, no public transportation services are available for people who cannot or choose not to drive their private autos. As the population grows and demographic trends change with a larger percentage of the population being elderly, the needs for special public transit to serve seniors and disabled people will grow.

In addition, as the study area urbanizes and households with workers are formed, there will be growing demands to serve commuter travel needs. Commuter-oriented public transportation services, such as vanpooling programs and express bus services as well as transit facilities, such as park and ride lots will be needed in the area. All of these programs are eligible for federal funding, with the local share ranging from 10 percent for transit vehicle purchases and the construction of park and ride lots up to 50 percent for rural transit operating assistance.

As Jasper County evolves, the County should monitor its needs for local and regional public transportation services and identify opportunities to tap into the available federal sources for these programs. Table 11.2 shows the estimated federal funds included in SAFETEA-LU. Generally, for public transit projects proposed in Jasper County, the federal funding programs will be the Non-Urbanized Area Program; the Rural Transit Assistance Program; Transit for Elderly and Disabled Persons, Job Access and Reverse Commute; and SAFETEA’s New Freedom Program.

**Table 11.2**  
**Four-Year Apportionments and Allocations for Public Transportation\***

Area	Georgia	US
Urban Areas	\$308	\$12,723
Fixed Guideway Motorization	\$150	\$6,076
Non-Urbanized Areas	\$62	\$1,880
Rural Transit Assistance Program (RTAP)	\$1	\$29
Job Access/Reverse Commute Program	\$13	\$603
Elderly & Persons with Disabilities	\$12	\$490
New Freedoms	\$10	\$339
Metropolitan Planning	\$9	\$343
State Planning	\$2	\$72
Total	\$567	\$22,598

\* in millions of dollars (rounded to the nearest million) for the period from FY 2006 – 2009.

Source: US Department of Transportation

### 11.3 State Funding Sources for Transportation

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

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

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

### 11.4 Local Funding Sources for Transportation

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

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

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

According to the Georgia Department of Community Affairs (DCA), the County's "own source" revenues, including revenues from property taxes, sales taxes, excise and special use taxes and service charges and fees were estimated. Own source revenues are relevant because a portion of these funds could be provided as local matching funds for federally and state-funded transportation improvements or for locally-funded projects, depending on the County's other funding priorities. Table 11.4 illustrates this data. In 2004, Jasper County had per capita own source amounts of \$582, which is less than the statewide average of \$611.

**Table 11.4  
Own Source Revenues**

County	2000 Own Source Revenues	2004 Own Source Revenues	% Change from 1996 to 2000	Per Capita Amount*
Jasper County	\$6.9 million	\$7.5 million	9.0%	\$582

\* Statewide per capita amount equals \$736.  
Source: Georgia Department of Community Affairs

**11.5 GDOT State Transportation Improvement Program (STIP)**

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

In its 2006-2008 STIP, GDOT estimated that nearly \$8 billion were allocated for various transportation functions throughout Georgia. Table 11.5.1 shows the allocation of these funds across major functional areas.

**Table 11.5.1  
STIP Fund Allocations (2006 – 2008)**

Transportation Function	Amount Allocated	Percent of Total
New Construction	\$517,556,000	6.44%
Reconstruction and Rehabilitation	\$2,692,175,000	33.52%
Bridges	\$1,151,520,000	14.34%
Safety	\$778,927,000	9.70%
Maintenance	\$785,263,000	9.78%
Transportation Enhancement	\$348,825,000	4.34%
Transit	\$1,393,728,000	17.35%
Other	\$363,293,000	4.52%
Total	\$8,031,287,000	100.00%

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

According to GDOT's latest STIP for Jasper County, a total of 8 major projects have been programmed utilizing nearly \$26 million in federal and state funds. Table 11.5.2 summarizes these programmed amounts.

**Table 11.5.2**  
**GDOT State Transportation Improvement Program (STIP)**

Project	Total Funds Programmed
SR 16 Widening @ West City Limits of Monticello	\$2,893,000
Monticello NE Bypass from SR 16 to SR 83	\$15,886,000
Monticello Downtown Streetscape and Scenic Byway Bikeway	\$500,000
SR 212 @ Lake Jackson Guardrail along approaches	\$280,000
Sidewalks; Lighting & Landscaping in Monticello	\$1,120,000
SR 83 Passing Lanes between Ocmulgee River and Shady Dale	\$4,362,000
SR 83 @ Church St in Monticello - Drainage Improvements	\$653,000
Apt-to-Miss Road (CR 89)	\$109,831
<b>TOTAL PROGRAMMED FUNDS</b>	<b>\$25,803,831</b>

## 11.6 Future Transportation Funding Needs

A combination of federal, state, local, and private funding sources should be pursued for individual projects to improve transportation facilities in the study area. These sources should be pursued depending on GDOT (state), regional and local investment priorities considering the safety, convenience, and economic benefits of the projects throughout the planning period.

## 12.0 Conclusions

Growth in Greene, Jasper, Morgan, and Putnam Counties has resulted in increased travel demand through the 4-County Region. GDOT Office of Planning, in conjunction with these four Counties, initiated the East Georgia Multi-County Transportation Study to develop a LRTP to serve the 4-County Region through the planning horizon, 2030. Recommended projects were identified and selected according to all applicable rules and regulations with the intent of enhancing the quality of life for County residents and visitors. Efforts were taken to ensure that proposed projects impacted the community as little as possible while providing maximum benefits. Analysis was conducted to ensure that the projects benefited and did not disproportionately impact low-income and minority communities. Ultimately, the study identified multi-modal improvements and prioritized project implementation in the form of a Long Range Transportation Plan.

HNTB coordinated with GDOT, Greene, Jasper, Morgan, and Putnam Counties, local cities, citizens, and other partners in the planning, development, review, and approval of potential improvements. Additionally, a comprehensive and interactive public involvement program was conducted. This ensured that alternative transportation improvements were not only coordinated with various governments, but afforded individual citizens and interested groups the opportunity to provide their input in developing and evaluating potential improvements to each County's transportation network.

The end product for this study was a LRTP that provided for the efficient movement of people and goods within and through Jasper County through the horizon year of this study, 2030. Interim year analysis was conducted for the year 2015. As part of this effort existing and future operating conditions were documented for the following modes: highways and bridges, bicycle and pedestrian improvements, freight, transit, railways and airports.

This document should be reviewed and updated periodically to ensure that the planning factors and other assumptions are still relevant and effectively address transportation needs. This document should serve as the foundation for Jasper County's transportation planning efforts and a starting point for addressing transportation needs.