SPALDING COUNTY
COMPREHENSIVE TRANSPORTATION PLAN

INCLUDING THE CITY OF GRIFFIN, THE CITY OF ORCHARD HILL AND THE CITY OF SUNNY SIDE

Final Report

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Spalding County, Georgia
Comprehensive Transportation Plan
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EXECUTIVE SUMMARY

Ask anyone what's the biggest problem in the Atlanta region, and you'll probably hear "traffic". However, if we have learned anything in the last decade, it's that we cannot build our way out of traffic congestion and secondly, traffic congestion is spreading throughout the area, including Spalding County. This leaves us at a crossroad – where the road less traveled may hold the key to how Spalding County addresses these traffic congestion issues in the future.

During the next 25 years, we can expect to share in the regional growth as we anticipate building more than ten thousand new homes. Undoubtedly, we can anticipate sharing our communities with more than fifty-five thousand new neighbors. The major appeal is our County's quality of life. While it may mean different things to different people, we can all agree that quality of life encompasses safe and livable communities, affordable housing, competitive job opportunities, a healthy environment, good schools and community facilities, and a transportation system that provides easy access to work, school and other activities in Spalding County. The Spalding County Comprehensive Transportation Plan (SCCTP) is our County's blueprint for a transportation system that enhances our quality of life and meets our current and future mobility needs.

The Spalding County Comprehensive Transportation Plan is an evaluation of the current status and future needs of all modes of the Spalding transportation system, including state highways, the local road network, transit, rail, aviation, and bicycle and pedestrian facilities. This plan complies with federal legislation enacted in 2005 titled "Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users", SAFETEA-LU.

The creation of this Comprehensive Transportation Plan is timely, given that it provides meaningful input into the State's Transportation Improvement Plan (STIP) and the Regional Transportation Plan (RTP). It is important to understand that while the Spalding County Transportation Plan does not set fourth a new transportation funding proposal; it does provide a framework for future discussions about a new transportation program. The SCCTP sets fourth a practical vision of how to maintain and improve the County's transportation system between now and 2030. It is based on an eighteen month long dialogue with the citizens of Spalding County representing many different groups that share a common interest in transportation. Other key participants included government officials, both elected and professional staff; economic development interests and private businesses; transportation planners and transportation service providers. These stakeholders have made recommendations about what Spalding County and its partners need to do to assure that the transportation needs of Spalding County's citizens and businesses are met in the future.

Our First Plan!

This document marks Spalding County's first Comprehensive Transportation Plan, which was developed to support the comprehensive land use plan completed in 2004. The foundation of the plan lies in better connecting our road network, bicycle and pedestrian facilities, freeway

and transit systems to our homes, schools, work, shopping and other activities. In this era of budget and infrastructure deficits, the ultimate success of this Plan will be measured by how well we implement smart growth as our communities are developed and redeveloped over time. To this end, the 2030 Comprehensive Transportation Plan helps strengthen the land use – transportation connection and offers transportation funding incentives to support smarter, more sustainable land use.

Improving transportation is one component of a much larger vision to sustain and improve our County's quality of life. Spalding County adopted the County Comprehensive Development Plan (CDP) in 2004 that serves as a foundation for integrating land uses, infrastructure needs and public investment strategies within the County smart growth framework. The CDP is the countywide vision to prepare for change and meet our future needs. The 2030 Spalding County Comprehensive Transportation Plan is the transportation component of the CDP.

Since this is the County's first CTP, public policy discussions have helped shape a new and evolving vision for Spalding County's future. At the heart of the CTP is the need for a Countywide Transit Plan, a 21st century strategy to develop a seamless public transportation system for the County – one that is integrated with our growing communities and that ultimately is competitive for many commuters with driving a car during rush hours.

How was the Plan Developed?

The Spalding County CTP was developed through a collaborative process between Spalding County, the City of Griffin, City of Orchard Hill, City of Sunny Side, McIntosh Trail Regional Development Center and our transportation partners – Griffin-Spalding Area Transportation Committee, Atlanta Regional Commission, Georgia Department of Transportation, Georgia Regional Transportation Authority, State Road and Tollway Authority – along with a wide range of interest groups and other agencies. This interactive approach has allowed Spalding County to establish better governmental communication, cooperation and gain consensus for the various CTP recommendations.

The Spalding County CTP looks beyond the County's boundary, at opportunities to link transportation and land use planning efforts with neighboring counties (i.e. Henry, Coweta, Butts, Lamar, Pike and Clayton Counties). The last several years have seen a steady increase in interregional commuting, as more people are choosing to live in other areas that require commutes to or through Spalding County. The 2030 Regional Growth Forecast Update recognizes these travel trends and accounts for future housing both within Spalding County, as well as outside of the county.

To accommodate the dynamic cross-county transportation system, the Spalding CTP includes major projects to improve access within and through the county. On a collective basis, these projects will modernize and transform the transportation infrastructure within Spalding County.

The Public Process – Public Involvement

The Spalding County CTP was developed through an active public involvement process in which the general public and private and public agencies were invited to participate in the development of the plan. Opportunities to participate in the plan included:

- Stakeholder Advisory Committee meetings
- Technical Advisory Committee meetings
- Mailing and Email Lists
- Newsletters
- CTP Fact Sheet
- Public Meetings
- Newspaper and Newsletter Articles
- Information at the Municipal Center, Library, and the County's Website
- Informational Booth at Wal-Mart
- Design Charrette/Workshop – Six Hours
- Presentation to Community Organizations
- Two (2) Radio Talk Show Appearances
- Griffin-Spalding Area Transportation Committee
- Spalding County Commissioner Work Sessions
- Griffin, Orchard Hill and Sunnyside City Council Work Session
- Stakeholder Interviews

Building on Our Progress

The 2030 CTP builds upon the existing transportation system in place today and the major projects in progress from the short range Transportation Improvement Program (TIP), long-range Regional Transportation Plan (RTP), State Transportation Improvement Program (STIP) and Construction Work Program (CWP). Projects completed since the start of this 2030 CTP include State Route 16 from Interstate 75 to just east of downtown Griffin. Several other projects are underway or in the early stages of planning or design. Projects that are included in the current 2008-2013 RTP/TIP includes Feasibility Study for Multi Use Facility; capacity improvement for US 19/41/SR 3 from West Ellis Road to Laprade Road, SR 16 West to Coweta County, Griffin South Bypass and US 19/41 from Laprade Road to SR 20 in Henry County; bridge upgrades at SR 92 at Flint River, 6th Street at Norfolk Southern and SR 155 and Smoak Road at Troublesome Creek; and several traffic signal upgrade and intersection improvements throughout the City of Griffin. These are just a few of the projects that are in the pipeline. Our task now, and the focus of this document, is to build upon this progress by adding additional projects and policies that enable Spalding County to meet the existing and future transportation needs of the community.

Guiding Principles

The opinions stakeholders voiced about the county's transportation system and its future had ten themes:

- Preserve and enhance the quality of life

- Serve all members of the community
- Preserve the transportation system
- Enhance local and regional mobility
- Make travel safer
- Support economic growth
- Link transportation and land use planning
- Improve accessibility
- Provide travel options – expand travel choices
- Create a balance system – bicycle and pedestrian

A Plan for Better Mobility

The Spalding County CTP is developed around four main components: Land Use, Transportation Systems Development, Transportation System Management and Demand Management. Each component has a unique, yet interdependent role in improving mobility and travel in Spalding County through the year 2030.

Land Use determines where our homes, schools, work, shopping, and other activities are located and can profoundly affect the way in which we move around the county and within our communities.

Transportation Systems Development provides needed countywide transportation improvements, viable travel choices and connections to our daily activities.

Transportation Systems Management helps to maximize system operations so that we make the best use of our existing transportation resources and provide travelers with information to assist them in making informed travel choices.

Finally, Transportation Demand Management focuses on reducing trips on the transportation system during peak periods and encouraging alternatives to driving alone (e.g., transit, carpooling, vanpooling, biking and walking).

Land Use – Transportation Connection: We Must Grow Smarter

The Spalding County CTP is founded on a land use plan – nodal growth concept – that reflects the commitments from the County and Cities to pursue a policy of “Smart Growth”. The study acknowledges that growth and change will continue in the county during the next several decades, and that all jurisdictions must make positive contributions toward preparing for change. Transportation infrastructure and services must be coordinated with land use planning if we are to avoid increased traffic congestion, reduced mobility, and a deteriorating quality of life. Figure 7 provides the Future Land Use Map for the County, showing land areas that are well positioned for medium and high density mixed use designations and potential areas for smart growth development. We cannot fix our persistent transportation problems by focusing solely on transportation. Spalding County along with neighboring jurisdictions must consider

land use and transportation choices collectively. To encourage better transportation and land use coordination, in 2000, ARC implemented a five year Livable Centers Initiative (LCI) program which allots $5 Million toward smart growth planning in the region. To further support the LCI planning activities, ARC committed $350 Million for transportation projects developed from the LCI studies. In 2004, ARC continued its LCI program by committing an additional $5 Million to LCI studies and $150 Million for LCI transportation projects. Both programs had a five year commitment from ARC.

Transportation System Development: More Travel Choices

New alternatives and better connections are planned to more efficiently move people and goods throughout Spalding County via buses, trains, cars and trucks. When implemented, the projects recommended in this plan will improve the county's transportation network and transform the entire transportation system into an effective and efficient system that alleviates congestion, improves connectivity, access and mobility. Ultimately, the timeline in which projects are to be implemented ensures the development of a seamless, integrated transportation system that improves the quality of life for County's residents and visitors alike.

Growth in truck and auto travel will increase the need for highway preservation and additional capacity. While the Spalding County population has consistently grown, vehicle and truck miles have grown at a faster rate. This trend is expected to continue. The population is projected to increase by 93% in the next 25 years, further fueling the growth of vehicle and truck traffic. This growth will significantly impact the needs of Spalding County roadway system.

The Spalding County CTP is the county's first effort to deliver a new transportation vision in the future. It focuses on providing competitive travel choices during rush hours when most of our traffic congestion occurs. Since much of this demand is driven by the need to commute to and from work and school, the plan looks at the need for encouraging alternative commuter choices – transit, bicycling and walking. The transit option is a necessity which must be convenient, fast and safe. Additionally, this plan identifies projects to create, enhance and improve facilities for biking and walking. In our fast-paced, microwave world, saving time is a very real and powerful incentive for encouraging these more sustainable travel choices.

Transportation Systems Management: Making Better Use of What We Have

Millions of dollars have already been invested in roads in Spalding County. We need to maximize the return on this significant investment through better management and more efficient operation of the existing network. A wide range of systems management strategies totaling more than $599. million is included in the Plan. Systems Management helps get the most efficiency out of our existing system, makes travel services more reliable, convenient and safe. It also reduces traffic delays caused by crashes and incidents.

Transportation Demand Management: Taking the Pressure Off The System

Steps to reduce peak-period travel or change when and how people travel will become increasingly important in the future. Transportation Demand Management (TDM) focuses on encouraging alternatives to driving alone and minimizing demand on the transportation system during the peak periods.

The strategies in the Plan to manage transportation demand are derived from best practices in the region and beyond. ARC's regional transportation demand management program, which includes carpooling, vanpooling, transit, biking and walking, teleworking and flexible work hours, represents a prime example. The Spalding CTP also includes policies that support the recommended TDM strategies.

Elements of the Plan – Here's the Story: Introduction, Plot and Finale

The Spalding County Comprehensive Transportation Plan is the first of its sort for Spalding County. The plan takes into account previous planning efforts within the county or in close proximity to the county such as the 2024 Comprehensive Land Use Plan, City of Griffin Comprehensive Land Use and Transportation Plans, Southern Regional Accessibility Study (SRAS), US 19/41 Multimodal Corridor Study, ARC Regional Freight Mobility Plan and the Bicycle Transportation and Pedestrian Walkways Plan to name a few. This plan identifies overall policies as well as specific policies and projects for three key plan elements:

- Collectors, Arterials, Highways and Freeways
- Transit
- Alternative Modes

Collectors, Arterials, Highways and Freeways

The goal of this element is to develop a balanced transportation system that reduces congestion and improves access and travel choices through the enhancement of roads.

This element describes the existing and future needs for major arterials, highways and freeways in Spalding County. Identified through comprehensive outreach efforts and studies are specific local and countywide improvement needs, costs, and available funding information for use by decision makers gauging potential funding shortfalls.

Transit

The goal of this element is to recommend the need for transit within Spalding County. Furthermore, the Plan recommends the need for Spalding County to develop a Comprehensive Transit System Plan for local buses, commuter rail and circulators to meet future demands.

The Transit System Plan should develop the estimates for daily transit trips, coverage of service, transit frequency, stops and transit stops amenities.

Alternative Modes Element

The goal of this element is to emphasize that alternative transportation modes are an integral part of travel and commuting in Spalding County. By implementing and maintaining a transportation system that provides for all modes, the county ensures that travel is convenient, safe, efficient and cost effective.

This element focuses on a wide range of proposals from ridesharing to bike routes, pedestrian trails, downtown revitalization projects and related transportation for livable community/enhancement projects. This element is intended to be innovative with regard to encouraging alternative modes of transportation and proactive by supporting a set of projects and programs, that when developed will meet the goals of this element and the CTP.

Production of the Plan- Mapping Spalding County's Future for Transportation Success

The purpose of the Spalding County Comprehensive Transportation Plan is to document the transportation system needs and examine the trends that will impact transportation over the next 25 years. It examines the entire Spalding County transportation system, including state highways and the local roadway network, transit, rail, aviation, and bicycle and pedestrian facilities. From this 18 month planning effort, the plan produced projects in the following categories:

- Capacity Improvement
- Safety and Operational Improvement
- Bicycle and Pedestrian Facilities
- System Preservation
- Transit

As part of the CTP a project map book has been compiled, which illustrates recommended projects for each of the above categories.

How Much is the Plan?

In developing the Spalding County CTP, we have estimated the funding needs and projected revenues necessary to implement projects identified in the above categories. Accumulating the needs and comparing them with combined revenue sources provides a more comprehensive look at the system and overall funding gaps. This countywide analysis will help inform discussions about the priorities for the Spalding County transportation system and allows for tradeoff discussions within and between the different modes.

The needs for Spalding County transportation system in the next 25 years are estimated to be $599 Million. This cost equates to $24 Million annually. This figure includes costs for the state highway system within Spalding County, local roads, public transit, and bicycle and pedestrian needs.

Based upon annual commitments to transportation funds from Spalding County and its municipalities, the estimated annual funding gap is $23.5 Million. By identifying this gap, Spalding County and its partners can begin discussion about priorities and tradeoffs. Preliminary discussions about priorities and tradeoffs occurred during the CTP process. As the recommendations were discussed by the topical working committees and at public meeting, a weighted system was developed based upon input.

How Do We Implement the Plan?

Implementing the Spalding County CTP requires close coordination and cooperation among all transportation agencies, local jurisdictions, and the traveling public. The Plan relies on efficient and more cost-effective use of our traditional transportation funds and expanding sources of transportation revenues to fund a higher level of investment in the proposed improvements. The Spalding County CTP Implementation Plan identifies projects that need to be undertaken by the County to support the goals and objectives of the CTP. The Implementation Plan is general in nature and focuses on the following project groupings that need to be undertaken to bring the County's operation into compliance with the plan:

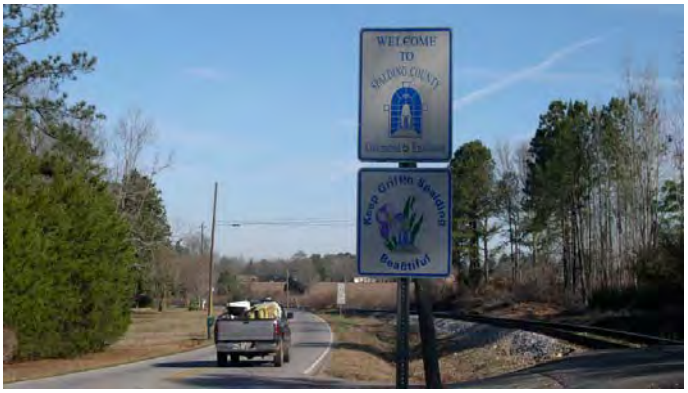
- System Preservation
- Safety and Operational
- Capacity
- Transit
- Bicycle and Pedestrian Facilities

Each year the County Staff will develop an Implementation Plan Work Program that will identify specific projects, or task within projects, to be completed within a year timeframe. The annual work program will include detailed information about required resources and funding opportunities.

INTRODUCTION

Located within the 28-county Metropolitan Atlanta region, Spalding County is poised to experience the large business and residential growth currently being seen throughout the area. The county, having recognized the challenges that are presently facing the region's transportation network, has opted to proactively address its transportation needs in an effort to prepare itself for its future growth and development as a county, as well as to meet and lend support to the region's transportation needs and vision.

Spalding County and its cities, the City of Griffin, City of Sunny Side and City of Orchard Hill, was once a highly regarded agricultural community, with Griffin being a predominant mill town. Today the county's face has changed dramatically with a large and growing business and industry sector. Current development plans include the Sun City Peachtree, 3,400 home active-adult community; a new residential and mixed use development at Heron Bay which spans the Spalding-Henry county line; and a $10 million SPLOST contribution to facilitate the University of Georgia at Griffin campus growth and expansion.



Recent work led by the Griffin-Spalding Chamber of Commerce has also secured the county's designation as an Entrepreneur Friendly Community which may foster benefits such as the provision of state grants to small businesses and resources for entrepreneurs. The 2000 US Census population estimates placed the county's population at approximately 58,417 persons, while population estimates are expected to reach roughly 80,494 by 2030 as projected by the Atlanta Regional Commission (ARC). Although these projections indicate a healthy 30% population growth from 2000 to 2030, it is expected that population growth rates may be much higher as it is stimulated by progressive growth and development initiatives undertaken in the county and region. Adjusted population projections for the county estimate that the 2030 population figures may easily reach 112,893 persons, which reflects a 93% population increase!

Spalding County, in response to its recent and expected growth, undertook a comprehensive transportation planning exercise to identify the challenges that face the county's transportation system and to ultimately recommend network improvements that would meet the projected future demands being placed on the transportation network. The Spalding County Comprehensive Transportation Plan (CTP) is intended to provide an outline for needed transportation investments within the county over the next 25 years. This plan is multi-modal in nature, addressing needs and recommending improvement investments for automobile,

freight, transit, pedestrian and bike travel. The production of this CTP was very exhaustive in nature. The process encompassed a thorough review of existing conditions, an assessment of network deficiencies and needs, and an analytical process which identified network improvement projects that would accommodate and efficiently serve the future demands placed on the transportation system.

1.0 PURPOSE AND DEVELOPMENT OF THE COMPREHENSIVE TRANSPORTATION PLAN

1.1 Purpose

The Spalding County Comprehensive Transportation Plan (CTP) was developed to address the future growth and development that is expected to occur within the county in both the near and distant future. The plan is intended to be both multi-modal in nature, addressing transportation needs for automobile, transit, freight, pedestrian and bike travel, as well as cognizant of the land use and transportation relationship which exists within the county. The primary goal of the CTP is to plan for the safe, reliable, timely, and efficient movement of goods, people, and services within, through, and around Spalding County while limiting environmental impact. To enhance coordination between transportation and land use, the CTP was part of an all-inclusive effort to plan for the County's future transportation infrastructure needs and was geared toward addressing the land use scenarios identified in the Spalding County 2024 Comprehensive Plan.

The CTP also serves as a foundation for the development of future projects for inclusion in the Atlanta Regional Commission (ARC) Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP). The CTP ultimately provides a list of infrastructure improvement projects that are deemed necessary for the county to achieve its future transportation and land use goals. By providing a plan that is technically sound, financially and politically feasible along with projects, plans or policies that address transportation issues such as safety, mobility and accessibility, the county has at its disposal a document which provides guidance to elected officials and citizens alike.

Spalding is a unique collection of communities in the midst of a dynamic, growing region. As a result, competition for scarce regional transportation funding for needed improvements is intense. With an adopted CTP and a complementary Comprehensive Plan, Spalding County will have the tools to focus on justified and needed local and regional strategies to meet increasing transportation demand.

1.2 Plan Development

The development of the Spalding County CTP was heavily community oriented since public involvement is very instrumental to the success of the study and recommended plans, programs or policies that are eventually implemented. The plan's goals and overall direction was crafted from the community's goals and future vision of the county. Input was solicited from a number of groups including the general public; county and city representatives; and community stakeholders representing the public interest, commercial interest, businesses, educational institutes, freight operators, and industries. This process of goal definition and visioning proved to be the most rigorous task in the development of the CTP since the goals and objectives derived, served as a blueprint or provided guidance and direction to all subsequent plan activities or tasks. Development of the CTP also focused on assessing the

operational, safety and infrastructure condition of varying modal facilities, identifying network and modal connectivity and system deficiencies, establishing land use and transportation relationships and transportation influences on the county's economic competitiveness and viability.

The CTP involves a number of complex and interrelated tasks conducted in a logical, all encompassing, systematic manner. These tasks include, but are not limited to the following:

- Developing a short, intermediate and long-range implementation plan which consists of a balanced listing of multi-modal projects.
- Developing strategies to improve access and mobility throughout the County.
- Enhancing institutional coordination within the long-range transportation planning process.
- Identifying operational and maintenance needs.
- Developing strategies that encourage economical use of transportation facilities. Strategies such as Transit-Oriented Development (TOD) incentives were encouraged as potential encouragements for "smart" development.
- Promoting bicycle and pedestrian accessibility, mobility and safety.
- Addressing the mobility needs of the elderly, disabled, and transit-dependent.
- Promoting livable/walkable communities.
- Promoting land use, development and transportation incentives.
- Enhancing traffic congestion management.
- Evaluating the impact of intra-regional travel, land use and environmental considerations in the development of transportation strategies.
- Developing and implementing a user-friendly, comprehensive public involvement program.

1.3 Pubic Involvement

Throughout the CTP planning process, the planning team was involved in an extensive series of public involvement activities. All public involvement activities were outlined in the Spalding County Public Involvement Plan (PIP) document. The purpose of public involvement is to ensure adequate opportunity for members of the public to engage in and understand plans that may affect them, to be aware of opportunities to engage in associated planning processes, to have an opportunity to provide meaningful input and feedback, and to understand how directions, policies and projects articulated by plans are derived. Above all, public involvement initiatives provide public participation and inclusion which leads to public buy-in into the plan.

Public involvement activities undertaken in the development of the Spalding County CTP included a series of public meetings, one half-day public workshop, a public transportation survey, and approximately 10 interviews with seventeen Spalding County stakeholders to collect the community's ideas of perceived and potential transportation needs, deficiencies and concerns pertaining to the County's transportation network, systems, and infrastructure. All comments, concerns or overall feedback arising out of these outreach initiatives were well documented in public meeting minutes, stakeholder interview summaries, transportation survey results and public workshop summaries, for future reference and use. The following listing below summarizes the major public participation methods utilized in the planning process.

1.3.1 Project Management Committee

The Project Management (PM) Committee comprising of representatives from Spalding County, City of Griffin, McIntosh Trail Regional Development Center (MTRDC) and the Atlanta Regional Commission (ARC) ensured that the CTP stayed on task, represented their agency or jurisdiction, provided access to information or data needed to facilitate analysis and provided direction and consensus in the development of the plan.

1.3.2 Steering Committee

The Steering Committee (SC) provided guidance, review and oversight for the planning process to ensure that the community's vision was properly captured and reflected in the final CTP. The Steering Committee for the Spalding County CTP was the Griffin-Spalding Area Transportation Committee (G-SATC) with additional representation from the City of Orchard Hill and the City of Sunny Side. The G-SATC is a standing committee comprised of transportation stakeholders within Spalding County with approximately 30 members. The following organizations and institutions were represented on the Griffin-Spalding Area Transportation Committee:

- Spalding County Commission
- Spalding County Administration
- City of Griffin Commission
- City of Griffin Administration
- Griffin-Spalding Chamber of Commerce
- Griffin-Spalding County School System
- Griffin-Spalding Development Authority
- Appointed Citizen Representatives

1.3.3 Technical Committee

The Technical Committee (TC) provided review of the CTP process from a regional perspective and ensured that regional transportation planning efforts were coordinated. The Technical Committee comprised of representatives from the following agencies:

- Spalding County
- City of Griffin

- McIntosh Trail Regional Development Council (MTRDC)
- Georgia Department of Transportation (GDOT)
- Atlanta Regional Commission (ARC)
- Georgia Regional Transportation Authority (GRTA)
- Neighboring Cities and Counties

1.3.4 Stakeholder Interviews

Stakeholder interviews were conducted to ensure that the Spalding County CTP was truly comprehensive and addressed the needs and reflected the visions and consensus of the community. These interviews with stakeholders and community leaders across Spalding County provided additional insight into the needs and priorities regarding the County's transportation system, policies and procedures. In all, 10 interviews were conducted involving 17 participants representing a wide cross-section of the community. Stakeholder agencies represented in this interview process included:

- City of Griffin
- Spalding County
- Griffin-Spalding Development Authority
- Spalding Regional Hospital
- University of Georgia Griffin Campus
- Griffin-Spalding County School System
- Spalding County Emergency Medical Services
- Norfolk Southern Corporation

1.3.5 Public Meetings

The public was invited to participate directly in the development of the CTP through five (5) public meetings and one (1) workshop/charrette. The public was encouraged to attend all of these meetings. The initial kick-off meeting provided the public with the necessary project background information which clearly defined the purpose of the study and the desired outcome of the process. Subsequent meetings provided the public with periodic updates to the project's development, relevant project information and materials, and presented the citizens with the opportunity to provide input and guidance to the plan. The public workshop/charrette was an intense, half day workshop at which planners and engineers addressed issues and facilitated exercises involving core areas identified from public input. This workshop was designed to be an interactive, hands-on event geared toward promoting a better understanding of community objectives and the interplay and trade-offs between land use and transportation. The areas addressed at the public workshop included:

- US 19/41 Business Route / UGA Griffin Campus / Old Wal-Mart
- County Transit / Bicycle and Pedestrian Systems
- Nodal Development – Transportation Systems
- County Transportation System and Connectivity

1.3.6 Public Survey

To gather broad-based public input, the CTP planning team distributed a survey via the City of Griffin Utility mailings, which are sent monthly, to an estimated 22,000 Spalding County households and businesses. Surveys were also distributed at all public meetings and presentations and made available through the project web site. Survey results were utilized to gauge community perceptions about the current transportation system and anticipate what changes may be needed or desired to improve the system, and what projects will be needed to accommodate growth and change within the county.

1.3.7 Project Website

Spalding County hosted a CTP project web page and provided a link on the County's official website. The web pages included information about the overall planning process, project schedule, current planning status, draft information and deliverables, and project documents. The web pages was also used to inform the public of upcoming meetings and public involvement opportunities, as well as provided a conduit for continuous public input and comments on the plan and the planning process.

1.3.8 Focus/Outreach Groups

In order to ensure adequate participation from residents and area stakeholders, the CTP Planning Team facilitated focus group meetings with targeted segments of the community that have particular interest in specific aspects of the transportation planning process or segments that might not otherwise participate in the planning process. Focus groups and targeted outreach was conducted with the guidance of the Project Management Team and Steering Committee.

1.3.9 Media

Local media such as the Griffin Daily News, WKEU AM/FM Radio Station, WHIE AM Radio Station, Griffin Journal and other media outlets were used to distribute information about public meetings and engage the community in the CTP process. Public service announcements and flyers were also prepared and distributed prior to all public meetings.

1.3.10 Newsletter

The CTP Planning team produced periodic newsletters providing highlights from the CTP Planning process, a status report and update on the plan, along with information detailing additional opportunities for community input. The newsletter also contained information regarding upcoming meetings and events.

1.4 Previous Plans and Coordination with Public Agencies

The Spalding County CTP ensured that previous plans and studies conducted in the County within recent years were considered in the development process. By building upon these prior plans and studies, the CTP provided some form of consistency amongst plans, ensured that recommendations made were in keeping with other planning efforts and also made certain that

recommendations were not duplicated. Input from these planning exercises was very valuable since it has gone through an entire planning and validation process. The following plans and studies provided the basis for developing the Spalding County Comprehensive Transportation Plan:

- Spalding County 2024 Comprehensive Plan
- City of Griffin 2024 Comprehensive Plan
- Spalding County Long Range Transportation Plan
- City of Griffin Comprehensive Transportation Plan
- Griffin Town Center Livable Centers Initiative (LCI) Study
- Southern Regional Accessibility Study
- US 19/41 Multimodal Corridor Study
- Griffin-Spalding Airport Location Study – Phase I

Many of these plans and studies either addressed transportation issues directly, or addressed issues that had direct implications on the transportation landscape.

Coordination with local and regional public agencies relevant to transportation and planning in Spalding County was also encouraged to ensure that the needs of these agencies were articulated and incorporated into the plan. These agencies also assisted in providing the applicable information or data sets needed to carry out efficient analysis of the transportation system. Lastly, these agencies ensured that the CTP planning process was in keeping with their respective planning format so that the Spalding County CTP can be integrated into the state or regional planning process with greater ease. The agencies represented included Spalding County, City of Griffin, McIntosh Trial Regional Development Center (MTRDC), Atlanta Regional Commission (ARC), Georgia Department of Transportation (GDOT), the Georgia Regional Transportation Authority (GRTA) and neighboring counties.

1.5 Goals

A major element of the early phases of the planning process was the establishment of a set of concise and consistent goals and objectives to use as guidance through out the planning process. The development of the CTP goals and objectives followed a very extensive process. The consulting team ensured that the proposed goals were a reflection of the public's desires as ascertained through initial public interaction, and consistent with prior planning efforts in Spalding County. Once a proposed list of goals was developed it was reviewed and critiqued by the County's citizenry and the CTP's Technical and Steering committees to ensure that the goals and objectives adopted addressed the transportation needs and desires of the Spalding County community while accommodating the growth and development that the county anticipates over the next 25 years. The following goals and objectives, as shown in Table 1 below, have been identified for inclusion in the Spalding County CTP.

Table 1: Spalding County Comprehensive Transportation Plan Goals

Goal 1	Involve all members of the community in the planning process to ensure that all citizens are represented. • Objective – Provide adequate opportunities for public involvement in transportation planning and decision making processes. • Objective – Notify the public and the media of transportation related meetings and events. • Objective – Ensure that all members of the community have an opportunity to express their views on transportation issues.
Goal 2	Provide mobility and accessibility for all people, goods, and services. • Objective – Support development of transit and modal alternatives. • Objective – Provide adequate transportation facilities and services throughout the county. • Objective – Provide equitable levels of transportation service throughout the county.
Goal 3	Maintain or improve transportation system performance, safety, and preservation • Objective – Increase transportation safety. • Objective – Provide funds for adequate maintenance of the transportation system. • Objective – Manage the level of traffic congestion.
Goal 4	Maintain Spalding County's rural character. • Objective – Preserve and enhance parks and open space. • Objective – Support the Comprehensive Plan and its policy of nodal development. • Objective – Minimize roadway capacity projects in rural areas. • Objective – Maintain views and scenic byways.
Goal 5	Provide adequate funding for the maintenance of the existing transportation system. • Objective – Increase funding for road resurfacing to support desired level of road network preservation. • Objective – Ensure funding for needed traffic operations improvements. • Objective – Establish and periodically review transportation maintenance standards.

Goal 6	Provide transportation facilities, projects, and policies that support County and City Comprehensive Plans • Objective – Support Village and Commercial Node transportation system development. • Objective – Promote sustainable, mixed-use development. • Objective – Provide for transportation needs of anticipated growth in an orderly way in advance of development.
Goal 7	Plan, design, and maintain streets to enhance the county's visual attractiveness and enhance the quality of life of its citizens and guests. • Objective – Support context sensitive design of transportation improvements. • Objective – Support streetscapes and urban design elements where appropriate. • Objective – Establish roadway typical standards that include landscaping and accommodation of pedestrians, bicyclists and transit as appropriate.
Goal 8	Develop transportation projects and policies that anticipate and proactively address future growth. • Objective – Establish transportation connectivity standards as part of the development review process. • Objective – Establish a County Arterial Network to provide for adequate roads to serve anticipated growth and development. • Objective – Establish standards for transportation corridor preservation.
Goal 9	Improve environmental quality. • Objective – Promote alternative transportation systems. • Objective – Protect environmentally sensitive areas. • Objective – Reduce transportation pollutant emissions.
Goal 10	Support commercial, industrial, and economic development activities while maintaining livability. • Objective – Designate and improve roads for commercial vehicle access. • Objective – Maintain and improve transportation facilities that serve commercial and industrial areas. • Objective – Provide for alternative transportation access to major commercial and industrial areas.

Goal 11	Develop and maintain a transportation planning framework to optimize funding opportunities at the local, regional, state and federal levels. • Objective – Support the Griffin-Spalding Area Transportation Committee (GSATC). • Objective – Support intra-jurisdictional transportation programs and projects. • Objective – Maintain active participation with Atlanta Regional Commission (ARC).
Goal 12	Improve transportation options between Spalding County and other regional activity centers. • Objective – Support commuter rail and other interregional transit options. • Objective – Support improvements to interregional roads that connect Spalding County to other regional activity centers. • Objective – Support projects on the ARC Regional Strategic Transportation System (RSTS).

Source: Spalding County CTP Needs Assessment Report, 2008

1.6 Performance Measures

While the plan's goals and objectives provide direction to the development of the CTP, there is also need for some measure that can quantitatively and qualitatively assess or determine progress toward the defined goals and objectives adopted in the CTP. To achieve this, the CTP has identified a number of performance measures which provide a gauge to determine how effective implemented strategies are. These measures can be fact based or quantitative, for example the number of vehicular accidents recorded, or qualitatively based, such as the public's satisfaction or perception of their involvement in the planning process. The use of performance measures assists in the planning process by setting goals and standards; detecting and correcting problems; managing, describing and improving processes; and it also helps in documenting accomplishments.

Although twelve CTP goals were identified, some of the goals and objectives are interrelated or connected in some instances and thus not every goal has a specific performance measure associated with it. However, of the twelve CTP goals identified, general goal categories have been assigned and their related performance measures have been presented in Table 2.

Table 2: CTP Goals and Related Performance Measures

Goals	Performance Measure
Safety	▪ Roadway Vehicular Crashes and Fatalities ▪ Number of High Accident Locations ▪ Pedestrian and Bike Crashes and Fatalities
System Performance	▪ Volume-to-Capacity (V/C) Ratio and Level of Service (LOS) ▪ VMT – Vehicle Miles of Travel ▪ VHT – Vehicle Hours of Travel ▪ TTI – Travel Time Index ▪ Daily Delay Hours ▪ Average Highway Speed ▪ Annual Congestion Cost ▪ Duration of Congestion ▪ System Connectivity
Transportation/Land Use	▪ Connectivity/Conditions of Sidewalks ▪ Connectivity/Conditions of Bicycle Facilities ▪ Impacts on Environmental Areas ▪ Impact on Historic Areas
System Preservation	▪ Percentage of Bridges below Standard Ratings ▪ Maintenance Costs

2.0 SYSTEM OVERVIEW

The major purpose for developing a Comprehensive Transportation Plan for Spalding County is to identify the transportation deficiencies within the county and to ultimately develop a multimodal program to meet the identified transportation needs. To identify the transportation system deficiencies, it was first important to take note of the current or existing conditions of the system. The second component needed was a clear vision of the desired transportation system which was defined by and supported within the plan's goals. Once the existing conditions were known along with the future vision for the transportation system, it was then possible to identify what was needed to effect the necessary changes to bring the transportation system to the desired, community envisioned level.

In this section, an overview of the planning area is presented. Major areas such as population and employment trends will be addressed, as well as the county's land use practices. A major tool used in determining Spalding County's transportation system performance was the use of a travel demand model. Although the Atlanta Regional Commission (ARC) has developed a regional travel model, the Spalding CTP produced an adapted or modified travel model for analytical purposes. An overview of this Spalding adapted travel model is presented in this section.

The existing condition of the study area's transportation network and the associated network needs identified will also be addressed. Since the transportation network is multimodal in nature it has been broken down into several system areas, which will be addressed by this CTP:

- Roadway Network
- Pedestrian Facilities
- Bicycle Facilities
- Transit Facilities
- Freight, Rail and Truck Facilities

2.1 Study Area Overview – Spalding County

Spalding County is located in the State of Georgia, approximately 35 miles south of Atlanta and approximately 45 miles northwest of Macon, Georgia. Spalding County's land area consists of 126,720 acres and extends approximately 11 miles from north to south; and 20 miles from east to west. The largest city in the county is Griffin, which is also the county seat. Other incorporated areas in the county are the City of Sunny Side at the north-central edge of the county, and the City of Orchard Hill at the south-eastern edge of the county. Spalding County is abutted by eight (8) other counties; Clayton, Henry, Butts, Lamar, Pike, Meriwether, Coweta and Fayette.

Figure 1: Spalding County Location Map

Spalding County is represented by the McIntosh Trail Regional Development Center (MTRDC), one of 17 Regional Development Centers in the State of Georgia. MTRDC serves the south Atlanta/middle Georgia region comprised of Butts, Lamar, Pike, Spalding and Upson counties.

Figure 2: Georgia Regional Development Centers and McIntosh Trail RDC

Spalding County is a part of the Atlanta Metropolitan Statistical Area as defined by the US Bureau of the Census. Urbanized portions of Spalding County fall within the Atlanta Metropolitan Planning Organization (MPO) Boundary as shown in Figure 3. All of Spalding County falls within the Atlanta 20-County 8-hour Ozone non-attainment area.[1] The intergovernmental agency that oversees the Atlanta MPO is the Atlanta Regional Commission.

[1] The US Environmental Protection Agency (USEPA) regulates 6 air pollutants that adversely affect human health. USEPA monitors metropolitan areas for these air pollutants and defines "non-attainment" areas; areas which exceed standards set for harmful air emissions. The Atlanta Metropolitan Area has problems with 2 air pollutants: Ozone (O3), also known as smog, and fine particulate matter (PM2.5). Spalding County is within the 20-county non-attainment area for Ozone defined by the USEPA for the Atlanta Metropolitan Area. Because of this, proposed transportation improvements must undergo an air quality analysis to determine that collectively they will not contribute to worsening air quality.

Figure 3: The 18-County Atlanta Regional Metropolitan Planning Boundary

2.2 Land Use and Demographics

2.2.1 Existing Land Use

Existing land use and future land use data were collected from the 2004 Spalding County Comprehensive Plan, the 2004 City of Griffin Comprehensive Plan and the Atlanta Regional Commission. Existing land use for Spalding County and the City of Griffin are described below and shown in Figures 5 and 6.

Agriculture, Forestry and Rural Reserve land uses are the most predominant land uses in Spalding County. Together these three land uses account for over seventy percent (70%) of the total acreage of Spalding County, contributing to the rural feel of the county, particularly in southwest Spalding County. Low density residential land uses are scattered throughout the county, becoming denser closer to the City of Griffin limits.

Due to the proximity to Henry County and Atlanta, northeast Spalding County is a rapidly growing residential and commercial area. Major traffic generators in Spalding County include the commercial and residential areas along the US 19/41 corridor, SR 155, as well as the industrial uses adjacent to SR 16. The southeast part of the county contains more industrial land uses.

Major traffic generators in the City of Griffin include commercial land uses around major highway corridors. Due to the freight rail and industrial uses located in the east and southwest areas of the City, truck traffic is generated through the downtown area. In addition to the city's central location in Spalding County and its well established downtown, Griffin contains a significant number of major employers/traffic generators for the region.

Spalding County recognizes the need to protect and enhance the existing quality of life while providing adequate infrastructure for future development and redevelopment. To prevent sprawling land use patterns, the county's Comprehensive Plan supports a nodal development concept. The Village Node concept encourages clusters of medium to high density housing, commercial and office land uses, well defined street connectivity, adequate open space and pedestrian-friendly design, as illustrated in Figure 4. Village nodes are ideally located at important crossroads. Spalding County has identified seven major village nodes for development which include Jackson Village, Rover Village, Heron Bay Village, Baptist Camp Village, Vaughn-Rio Village, Sunny Side and Orchard Hill. In addition to these village nodes, the City of Griffin remains the county's central core and regional activity center. The county is considering the development of significant pedestrian-friendly commercial areas, an Open Space Network, and fixed-route transit service to traverse the county and serve the village nodes and activity centers. Throughout the county, and particularly in the southwest, residential and commercial land uses are discouraged in agriculture areas, except for commercial crossroad uses which serve local rural residents.

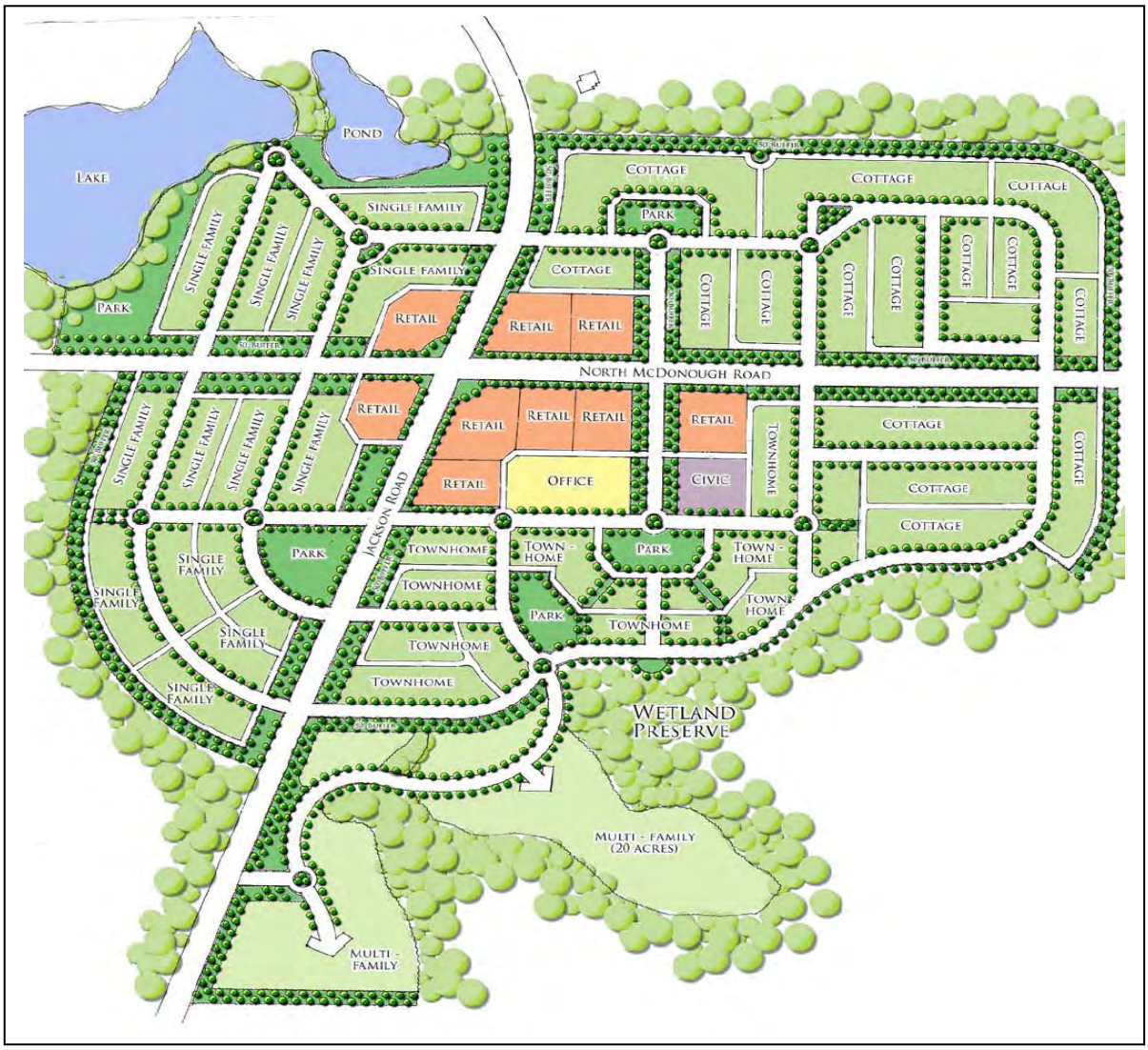


Figure 4: Illustrated Village Node Concept

As the county seat, the City of Griffin remains the major activity center and economic generator within the county and has identified several target areas in its 2004 Comprehensive Plan for future redevelopment, infill, and mixed-use development opportunities. Of these, five areas involve significant transportation corridors: Central Business District, North Expressway, SR 16 at US 19/41, S. Hill Street (SR 155) and Memorial Drive (SR 16). The Griffin Town Center LCI recommended future land use changes to include a mixed-use district surrounding the proposed commuter rail station area.

The 2004 Spalding County Comprehensive Plan and the 2004 City of Griffin Comprehensive Plan designate where growth is encouraged and where rural and agricultural land is to be

conserved. The population, household and employment projections recap just how many people and businesses will call Spalding County home in the future.

Figure 5:
Existing Land Use Map – Spalding County

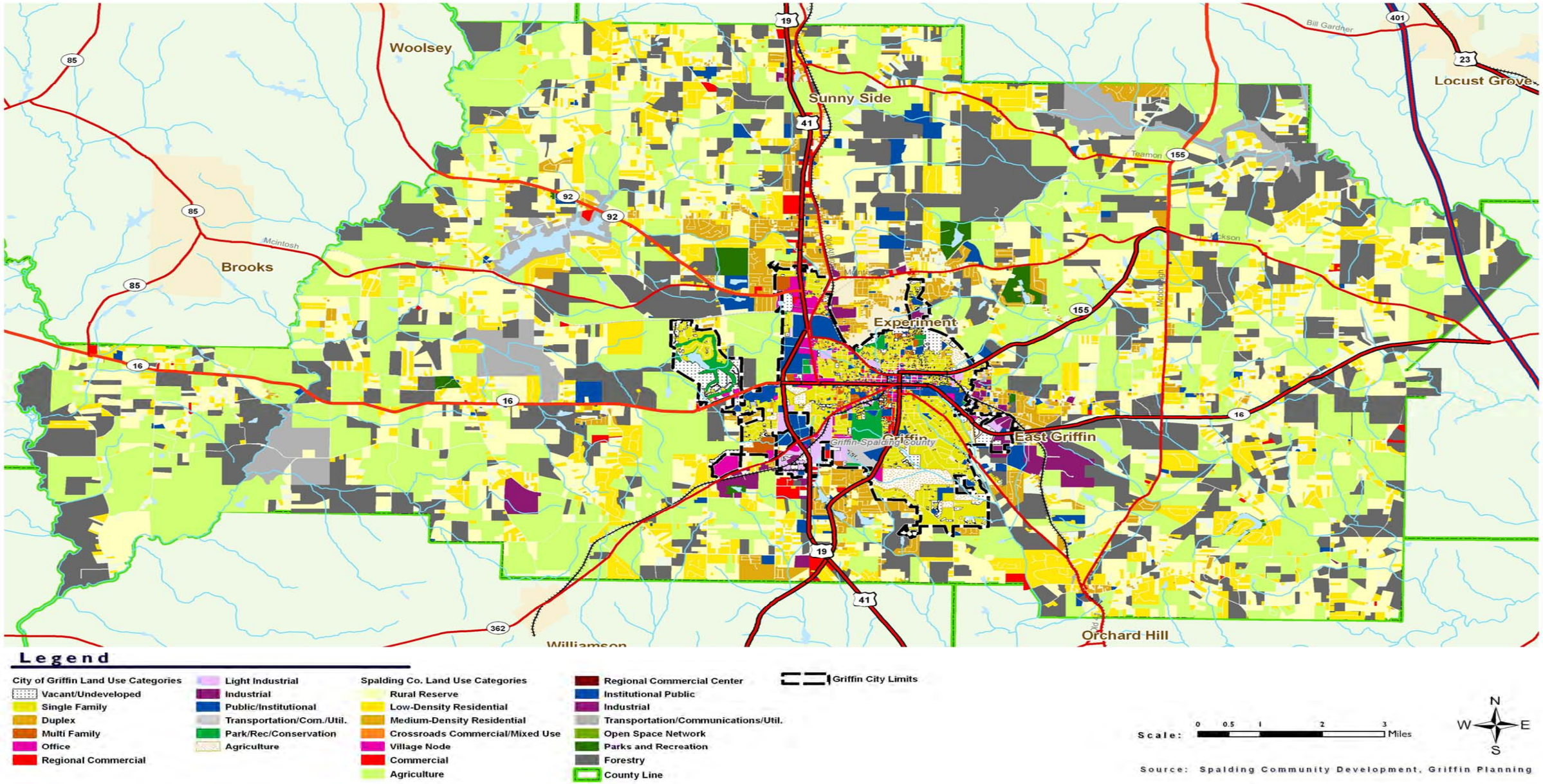
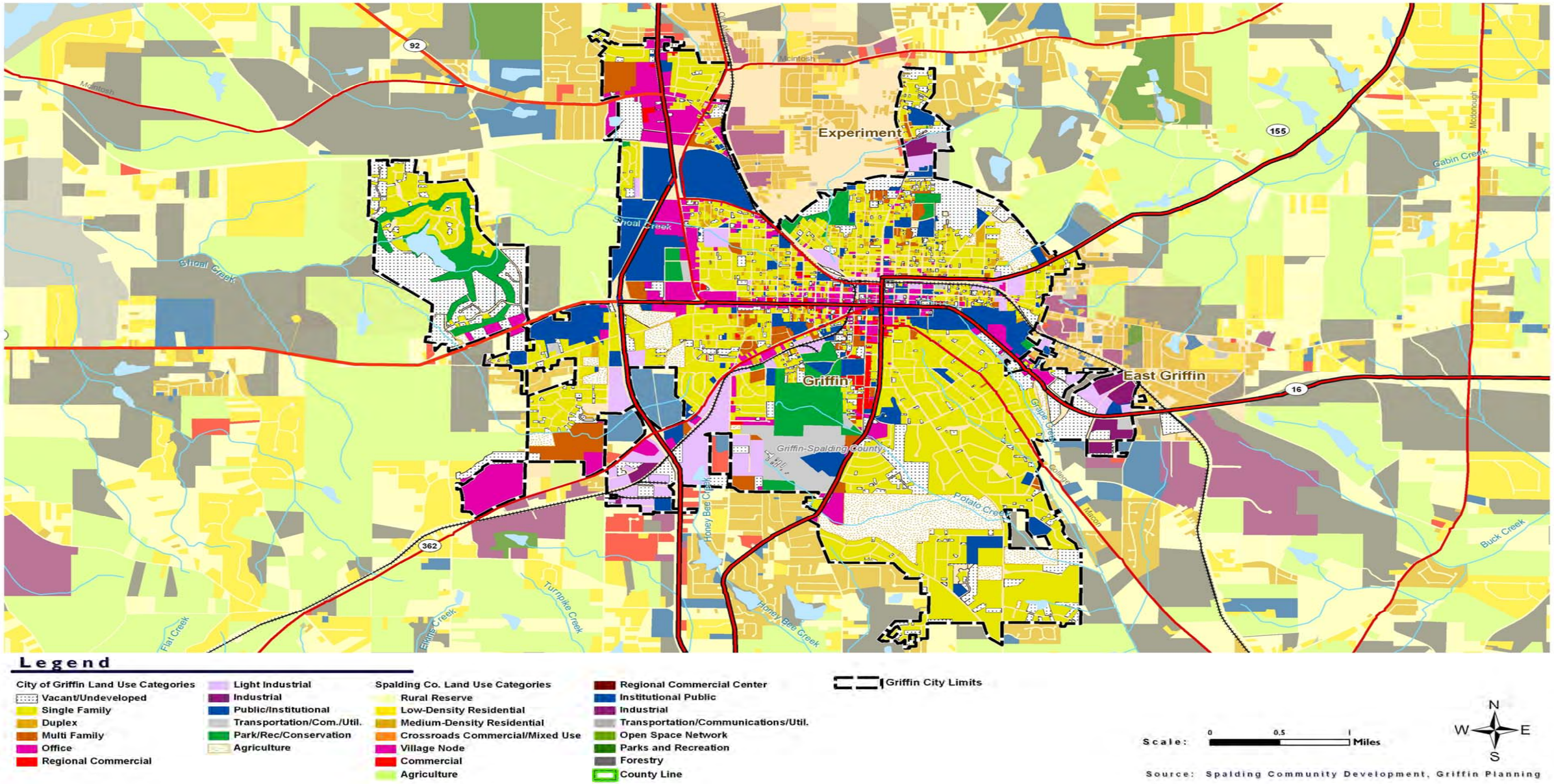


Figure 6:
Existing Land Use Map – City of Griffin



2.2.2 Population, Household and Employment Projections

Changes in population and population composition can affect the demands placed upon the transportation system. Population growth can generate increased demand on the transportation system, which can lead to congestion and eventually spur the need for transportation system improvements.

Between 1970 and 2000, unincorporated Spalding County has been receiving the bulk of the population growth in Spalding County. Meanwhile, the Cities of Griffin, Orchard Hill and Sunny Side have seen both rising and falling population growth. The projected population, household and employment projections from the Spalding County Comprehensive Plan and the ARC forecast are shown in Table 3 below. The City of Griffin is included in the projections and generally represents about 40 percent of the total population of Spalding County. The towns of Sunny Side and Orchard Hill are also included in the projections but each account for less than 1 percent of Spalding's total population.

Table 3: Population and Household Projections for Spalding County

Population	2000	2010	2015	2020	2025	2030
Low Projection	58,417	65,000	69,000	72,400	75,900	79,400
Middle Projection	58,417	70,200	75,000	79,200	83,600	87,832
High Projection	58,417	72,600	85,800	94,400	103,000	112,893
ARC Forecast	58,417	64,987	68,387	72,320	76,973	82,938
Households						
Spalding Comp Plan Forecast	21,519	27,184	31,861	37,957	31,787	-
ARC Forecast	21,523	24,130	25,847	27,716	29,854	32,311

Source: High Projection from Jordan, Jones and Goulding, 2002; Middle projection adapted from the 1998 Water Supply Report; Low projection adapted from the McIntosh Trail RDC, 2002; ARC, 2007; 2030 projections for Low, Middle and High projections by EDAW, 2007.

The low projection assumes continued constraint of the sewer system capacity and a saturated housing market as a result of new subdivision occupancy. The middle projection was taken from the projected water supply and demand for water. The high projection, developed by Jordan, Jones and Goulding, assumes that additional sewer capacity and improvements to the local school system will increase housing demand and drive new subdivision developments. The Atlanta Regional Commission (ARC) forecast is shown as well. The ARC forecast most closely mirrors the low projection included in the Spalding County Comprehensive Plan.

The ARC forecasts are created using a two-step process. First, new forecasts are produced for the 20-county study area as a whole and then disaggregated to census tracts and traffic analysis zones (TAZs) using mathematical models. Data used in the current forecasts include, but are not limited to the 2000 US Census, ARC estimates of employment by industry for census tracts and TAZs, national forecasts of employment and population produced by Economy.Com, employment estimates and forecasts produced by the Georgia Department of Labor, results of ARC travel surveys including the SMARTRAQ household travel survey, transit

on-board survey, Hartsfield-Jackson Atlanta International Airport air passenger survey, travel time studies and speed studies.

Regarding employment for the area, Table 4 shows the ARC forecasts for total employment and other major sectors of employment in Spalding County for 2000 through 2030. When the term employment is mentioned, it refers to total employment, which includes retail, construction, manufacturing, services and other employment sectors. Growth in employment plays an influential role in growth in traffic and changing commuting patterns. For example, rapid growth in the service sector may result in increased commuter demand travel, while growth in the manufacturing sector may have greater implications to freight movement in the county. Currently, more than half of Spalding County's residents work outside of the county.

Table 4: Employment Forecasts for Spalding County

Employment Sector	2000	2010	2015	2020	2025	2030
Total Employment	21,800	27,280	30,070	33,520	38,058	43,649
Total Manufacturing Employment	5,400	4,425	4,022	4,267	4,303	4,751
Total Retail Employment	4,850	5,551	6,142	6,511	7,153	7,826
Total Services Employment	4,850	5,981	6,500	7,041	8,118	9,644
Total Construction Employment	650	1,390	1,950	2,779	4,184	5,750

Source: ARC, 2007.

2.2.3 Population and Employment Density Assumptions

Household and employment density assumptions were used as inputs for transportation modeling and was tested and revised for each future land use scenario. Only those future land use categories that contribute to population and employment are included. For example, residential uses contribute to households (i.e. population); commercial uses contribute to employment, while rights-of-way, water bodies, or parks generally do not contribute to households or employment.

Population and employment density assumptions for future land use categories are from the 2004 Spalding County Comprehensive Plan and the 2004 City of Griffin Comprehensive Plan. Where densities were not specifically stated in the comprehensive plans, densities will be estimated based on other similar locations in the metropolitan Atlanta region.

2.2.4 Future Land Use Scenarios

Three future land use scenarios will be considered for the Comprehensive Transportation Plan modeling: Base/Low Growth Scenario, Nodal/Middle Growth Scenario, and Nodal/High Growth Scenario. The nodal growth scenarios were considered in keeping with the County's proposed land use as defined in the Spalding County Comprehensive Plan. These three scenarios, when combined with complementary transportation projects, will provide a range of future land

use/transportation policy options for evaluation. Future land use maps for Spalding County and the City of Griffin are shown in Figures 7 and 8.

2.2.4.1 Base/Low Growth Scenario

The Base/Low Growth Scenario predicts growth using the Atlanta Regional Commission projections. This scenario projects an expected population of 82,938 by 2030. This is relatively similar to the Spalding County Comprehensive Plan low projection (see Table 3). The low projection assumes continued constraint of the sewer system capacity and a saturated housing market as a result of new subdivision occupancy. This future land use scenario for the county is shown in Table 5.

2.2.4.2 Nodal/Middle Growth Scenario

The Nodal/Middle Growth Scenario predicts growth according to the Spalding County Comprehensive Plan Policy Area Map. This scenario projects an expected population of 87,832 by 2030 (see Table 3). The middle projection was taken from the projected water supply and demand for water. This nodal growth future land use scenario for the county is shown in Table 5.

2.2.4.3 Nodal/High Growth Scenario

The Nodal/High Growth Scenario predicts growth similar to the recent past in Spalding County with a land use pattern also following the Spalding County Comprehensive Plan Policy Area Map. This scenario projects current growth rates with an expected population of 112,893 by 2030 (see Table 3). The high projection assumes that additional sewer capacity and improvements to the local school system will increase housing demand and drive new subdivision developments. The nodal growth land use scenario for the county is shown in Table 5.

Table 5: Existing and Future Land Use – Spalding County

Land Use Category	Exist Acres	Exist %	`Future Acres	Future %
Agriculture	34,336	30%	37,870	33.1%
Commercial	719	0.6%	1,274	1.1%
Crossroads Commercial	N/A	N/A	93	0.1%
Forestry	26,082	22.8%	14,686	12.9%
Industrial	1,009	0.9%	2,614	2.3%
Institutional/Public	1.562	1.4%	1,645	1.4%
Low-Density Residential	12,993	11.4%	20,652	18.1%
Medium-Density Residential	4,116	3.6%	7,164	6.3%
Multi-Family Residential	46	0.0%	N/A	N/A
Open Space Network	N/A	N/A	17,125	15%
Parks/Recreation	690	0.6%	511	0.4%
Regional Commercial	N/A	N/A	733	0.6%
Rural Reserve	22,834	20%	6,209	5.4%
Transport/Communication/ Utilities	3,643	3.2%	3,356	2.9%
Undeveloped	6,256	5.5%	N/A	N/A
Unknown	20	0.0%	N/A	N/A
Village Node	-	-	355	0.3%
TOTAL	**114,287**	**100%**	**114,287**	**100%**

Source: Spalding County GIS, 2006

Table 6: Existing and Future Land Use – City of Griffin

Land Use Category	Exist Acres	Exist %	Future Acres	Future %
Agriculture	538	6.9	-	-
Duplex	97	1.2	-	-
Downtown Hub	-	-	118	1.5
High-Density Residential	-	-	415	5.3
Industrial	103	1.3	575	7.4
Light Industrial / Warehousing	440	5.7	73	0.9
Low-Density Residential	-	-	2,888	36.9
Medium-Density Residential	-	-	1,163	14.9
Mixed Use*	-	-	20	0.3
Multi-Family Residential	279	3.6	-	-
Neighborhood Business	-	-	314	4
Office	70	0.9	165	2.1
Office - Transitional	-	-	47	0.6
Parks/Recreation/Conservation	488	6.3	456	5.8
Public / Institutional	878	11.3	893	11.4
Regional Commercial	682	8.8	494	6.3
Single Family Residential	2,682	34.5	-	-
Transport/Communication/ Utilities	200	2.6	184	2.4
Vacant / Undeveloped	1,322	17	17	0.2
TOTAL	**7,779**	**100%**	**7,822**	**100%**

Source: City of Griffin GIS 2006 **Future land use change from City of Griffin Town Center LCI Study, 2006.*

Figure 7:
Future Land Use Map – Spalding County

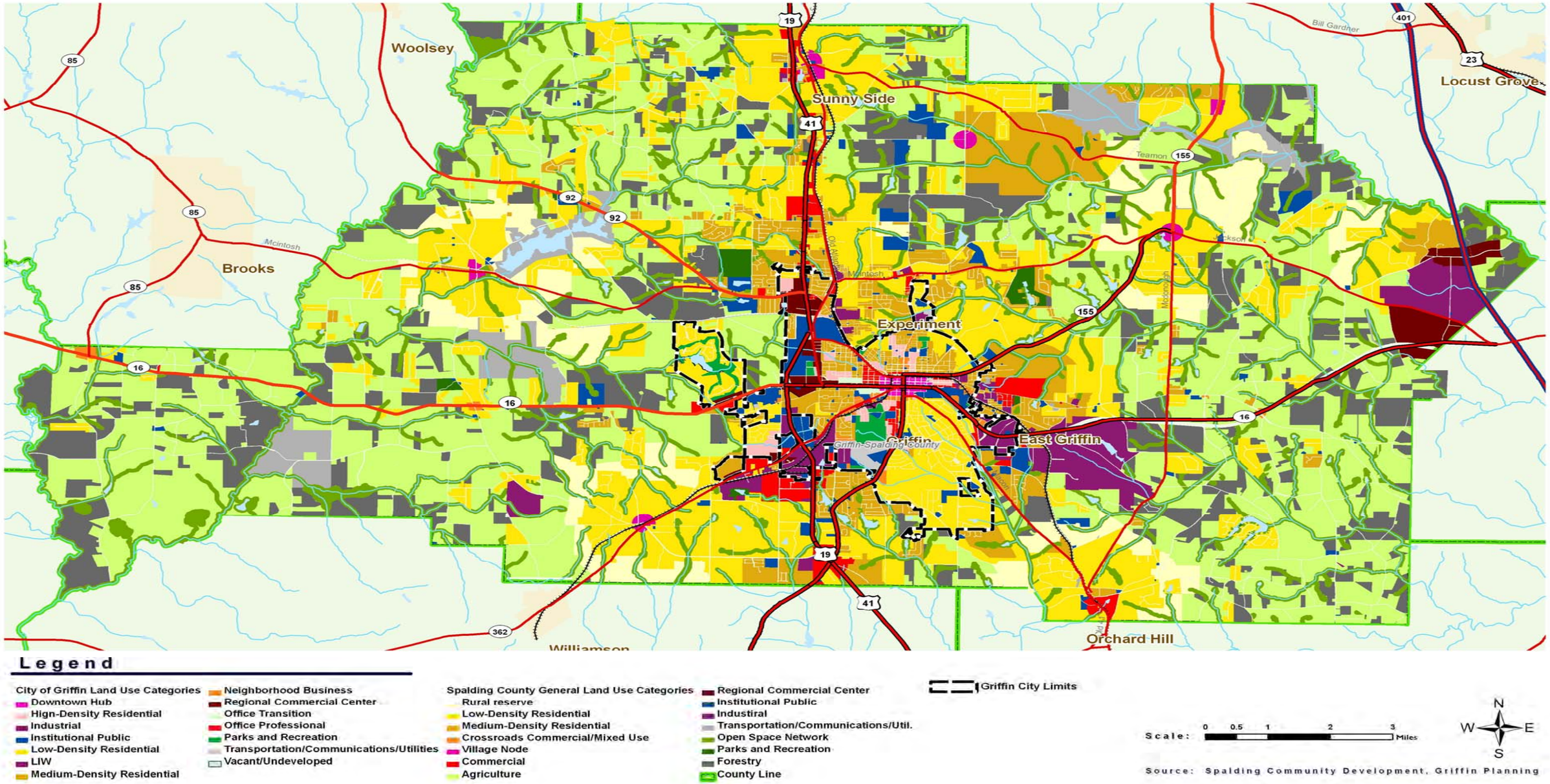
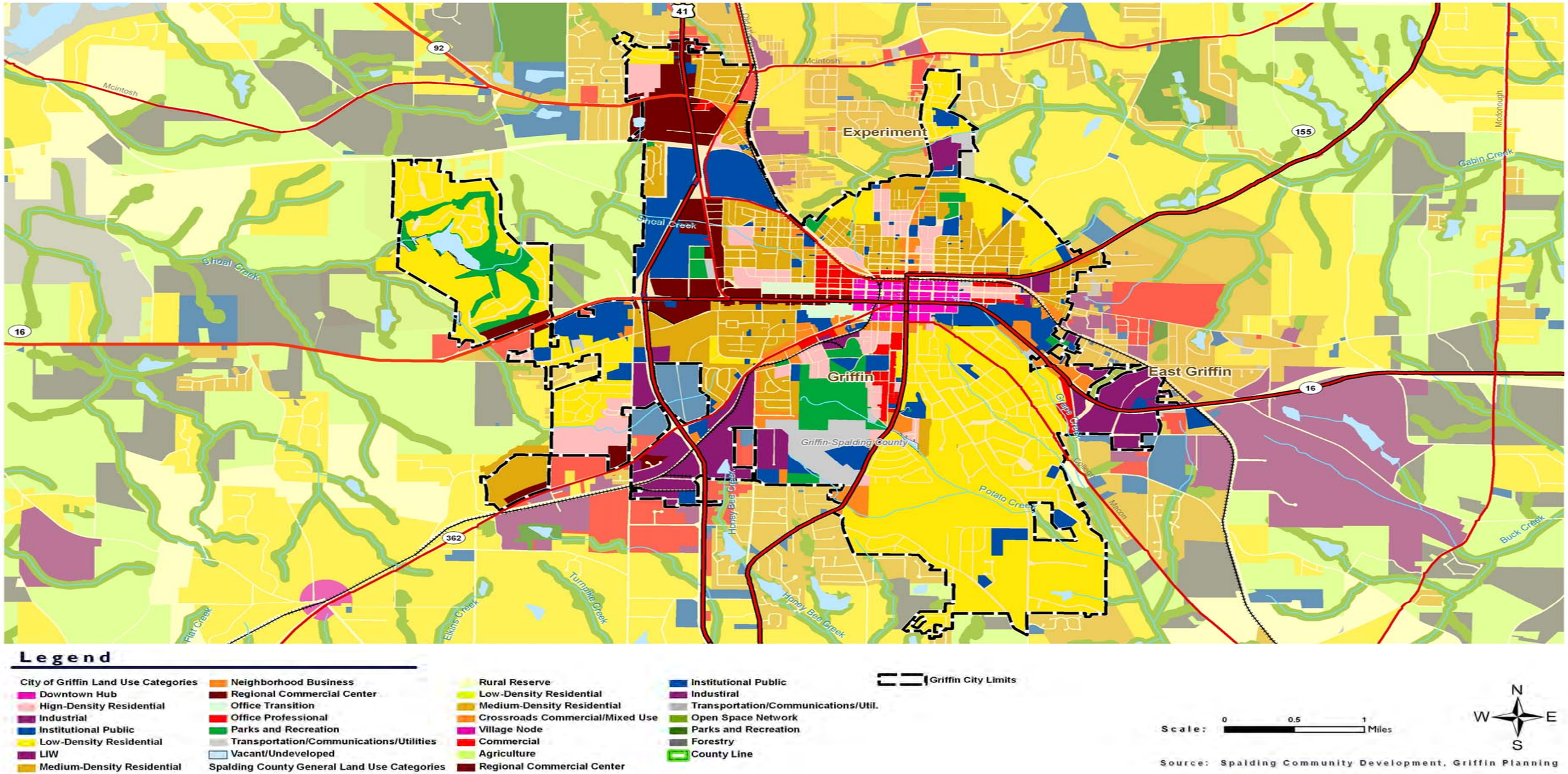


Figure 8:
Future Land Use Map – City of Griffin



2.3 Refined Model Development

To properly assess Spalding County's current and future road system needs, the road network was modeled to better understand the impact of future land use patterns not captured in the ACR 20-county model on the local transportation network. Adaptations to the ARC model were made mainly to the socio-economic and network data for Spalding County, and did not involve modifications to the modeling relationships themselves. Major changes to the fundamental model relationships were avoided since this could potentially invalidate the applicability of the ARC model at the regional level. Intentions of the Spalding County model adaptation were to enhance the model's representation of actual conditions in Spalding County, since these conditions influence travel behavior.

The first step in the adaptation process entailed a review of the facility type classifications of the ARC model network links designated for Spalding County. Proper classification of facility types was of importance since a link's facility type and surrounding area type determines its capacity and free-flow speed. Through a review of the ARC's facility type classification in light of the GDOT functional classification and a visual assessment of the characteristics of the roadways and surrounding areas, as determined by aerial photos, the facility types of the following roads, as indicated in Table 7, were adjusted.

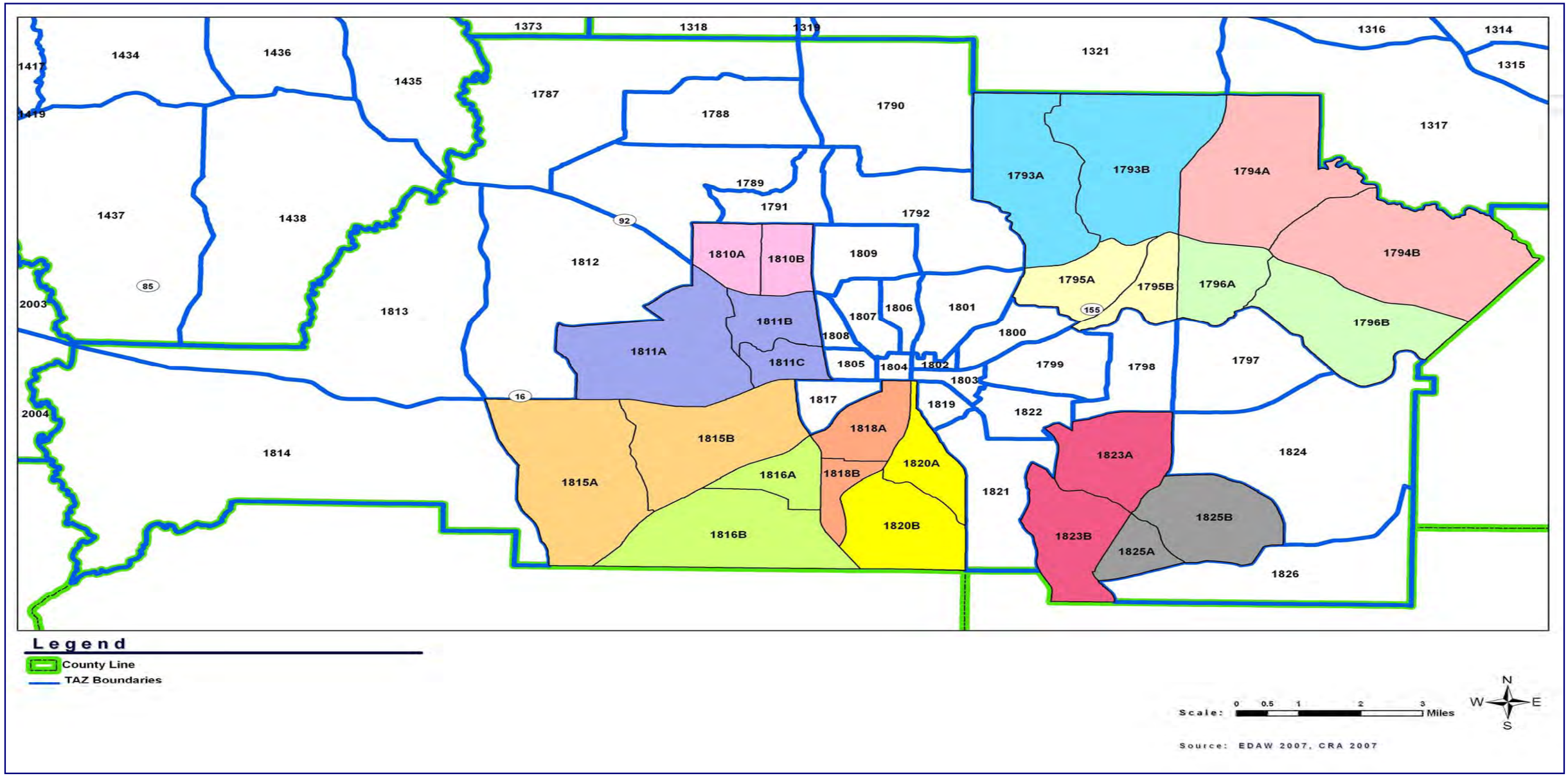
Table7: Spalding County Roadway Facility Type Modifications

Roadway	Modification From	Modification To
College Street	Major Collector	Major Collector
High Falls Road	Minor Arterial – Class II	Major Collector – Class II
McIntosh Road	Minor Arterial – Class II	Major Collector
Moreland Road	Minor Arterial – Class II	Major Collector
Rover-Zetella Road	Minor Arterial – Class II	Major Collector
Vineyard Road	Minor Arterial – Class II	Major Collector
SR-92	Principal Arterial – Class II	Principal Arterial – Class II
Vaughn Road	Minor Arterial– Class II	Major Collector
SR-155	Lane in each direction added (From 1 lane to 2)	

Source: CRA International, 2007

In addition to the facility type adjustments identified, consideration was also made to sub-dividing a number of ARC model traffic analysis zones (TAZ) in Spalding County. Refining the existing ARC model TAZ structure by zone splitting has the potential to improve the model validation and to enhance its ability to represent significant existing or planned variations in land use characteristics. Upon review of the TAZs utilized in the ARC travel demand model, 12 existing model zones were identified as possible candidates for splitting. After testing the impact of these splits and their effects on the model validation, all 12 splits were adapted creating 13 new TAZs in the process, as illustrated in Figure 9. These splits are consistent with those done while developing the model that was applied during the recent Southern Regional Accessibility Study (SRAS); one Spalding County zone was split in that study.

Figure 9:
Spalding County TAZ Splits



To accommodate the adapted county TAZ structure, it was necessary to make modifications to the highway network and socio-economic data for each zone. The highway network modifications included the addition of new highway links to provide better access to major roads from the new TAZs and to also serve as TAZ boundaries. These highway links included:

- Aerodrome Way
- Airport Road
- Cowan Road
- Futral Road
- Maddox Road
- Maloy Road
- N. Pine Hill Road
- N. Walker's Mill Road
- Smoak Road
- Wisso Road

Great effort was exerted in refining the Spalding County travel demand model so that it better reflected the current transportation system of Spalding County. The redefined model allowed alternative scenario testing to be undertaken in determining current and future system needs.

After modifications were done to the Spalding travel demand model, model runs were computed for the base 2005 and future 2030 network for the three future land use scenarios identified. These results provided baseline performance measures as it relates to the performance of the Spalding transportation network. The model also provided the capabilities to undertake alternative testing of the transportation system.

2.4 Economic and Land Use Impacts

The economic and land use impact analysis reviews the potential impacts of different transportation investment scenarios over the three different possible future land use patterns discussed previously: the Base/Low Growth, the Nodal/Middle Growth, and the Nodal/High Growth. Not every possible combination of transportation and land use pattern scenarios are considered, but a few representative scenarios have been considered to help us understand the implications of the different transportation investment scenarios in a variety of potential future land use situations.

Economic impacts considered in the analysis include effects on mobility, congestion costs, health impacts, and compatibility with Spalding County's economic development goals. The economic goals of the City of Griffin were also considered to ensure consistency with this plan. A review of Spalding County's economic development goals follows.

2.4.1 Spalding County Economic Development Goals

The 2004 Spalding County Comprehensive Plan identified the following key economic development goals.

- Attract high paying jobs to Spalding County
- Leverage existing community and economic assets
- Improve access to and from Spalding County
- Reinforce City of Griffin's place as a sub-regional retail and service center
- Improve educational opportunities within Spalding County
- Provide needed infrastructure
- Revitalize distressed areas in north and east Griffin and in isolated, older manufactured housing parks throughout Spalding County
- Encourage live-work environment for emerging businesses and cottage industries

Land use impacts considered in this analysis include compatibility with Spalding County's land use goals, compatibility with current land use trends, and new land use policies needed to implement the alternative land use scenarios.

The following discussion touches on each land use scenario in regards to mobility, property value, and quality of life; congestion costs; transportation-public health link; economic development goals; economic impacts; cumulative land use impacts; and land use policies.

A summary of the economic and land use impacts is shown in the table below. The scenarios are characterized qualitatively in comparison to one another. A narrative description of the impacts follows.

Table 8: Summary of Economic and Land Use Impacts

Scenario	Mobility, Property Value, Quality of Life	Congestion Costs	Transportation-Public Health Link	Economic Development Goals	Economic Impact	Cumulative Land Use Impacts	Land Use Policies
Base/Low Growth	M	M	M	M	M	H	L
Nodal/Middle Growth	H	L	L	H	M	L	H
Nodal/High Growth	H	M	L	H	H	L	H

H = High, M = Moderate, L = Low
Source: EDAW, 2007

2.4.2 Economic Impact of Growth Scenarios

2.4.2.1 Base/Low Growth Scenario

The Base/Low Growth Scenario presumes the extension of current land use patterns. This scenario is based on Spalding County's population, employment, and household projections through 2030, similar to the ARC forecast. Land use patterns are presumed to continue in a relatively scattered, low density pattern with some growth in the county's existing activity centers. This scenario assumes constraints on the existing sewer system capacity as a result of limited investment.

(a) Mobility, Property Value, Quality of Life

Mobility is the ability to access desired destinations at a given cost in time or money. Increased mobility improves quality of life because it offers greater lifestyle choices and options. Also, increased mobility may increase property values, because both commercial and residential properties are valued in part based on ease of access to certain resources such as regional parks, shopping, or Hartsfield-Jackson Atlanta International Airport.

The Base/Low Growth Scenario, with the extension of current land use patterns, may result in maintained mobility over time. As current development trends continue in Spalding County, greater demand will be placed on the roadway system as most travel will depend on personally owned vehicles. The Base/Low Growth Scenario will increase roadway capacity to mitigate the increase in vehicular traffic. This growth scenario will increase roadway capacity and reduce congestion, but the growth in traffic caused by low-density development patterns means that mobility may not improve despite extensive transportation investments.

(b) Congestion Costs

Traffic congestion exerts multiple costs on the mobile population. The most obvious and direct cost is the cost of time lost in traffic. Travelers consider the cost of lost time to be significant and are often frustrated by the loss thereof, which in the long run it may result in major changes in behavior, such as shopping in a different location, moving to housing in a different location, or possibly even relocating an existing business or industry. This can result in a negative economic impact to the county, as businesses and residents move to or divert their spending to less congested areas.

The Base/Low Growth Scenario will result in a low density development pattern. This can raise the cost of transportation for households by increasing the average distance of travel and by allowing the great majority of households to become auto-dependent. For many households, transportation costs represent a significant portion of household income, and continued high gas prices or volatile swings in gas prices can create a burden on lower income, auto-dependent households.

A low density development pattern usually leads to an increase in the number of vehicle miles traveled. Increased vehicle miles traveled can contribute to lower air quality, and the costs of lower air quality are primarily revealed through impacts on public health, such as increased incidence of asthma attacks and other lung-related ailments. Inability to meet federal air quality standards can lead to loss of state and federal funding for transportation projects and improvements.

The Base/Low Growth Scenario may allow the county to keep pace with transportation demand and prevent increases in overall congestion throughout Spalding County and its cities.

(c)Transportation-Public Health Link

A growing body of research is connecting the design of the physical environment which includes land use patterns, transportation systems, and urban design with public health. Some research indicates that low-density, single use development patterns correlate to lower levels of physical activity and increasing rates of obesity.

(d) Economic Development Goals

The Base/Low Growth Scenario supports the economic development goals of Spalding County and its cities. This scenario supports business growth and retention by ensuring that existing businesses continue to have adequate access to the regional transportation system and by reducing congestion on major corridors.

The county seeks to attract high paying jobs as part of stated economic development goals. However, a low density, scattered development pattern may not convey a progressive or innovative image as the county seeks to attract new business growth and higher paying jobs.

(e) Economic Impact Summary

Benefits of the Base/Low Growth Scenario include a high level of mitigation for increased congestion and increased opportunities for active living. Costs include higher estimated cost for transportation projects and worsened air quality and public health.

(f) Cumulative Land Use Impacts

The Base/Low Growth Scenario provides some support for the current land use policies of Spalding County. This scenario addresses current land use trends in the county. Increased transportation investment in growth centers and major corridors will help to promote redevelopment within the county. However, a spread-out, low density development pattern will result in the faster consumption of the supply of vacant land in Spalding County. This scenario provides some support for the trend of increased residential densities, since new transportation investments will increase mobility for dense residential development in growth centers and major corridors. However, the existing land

use pattern does not focus denser residential development in any particular locations. Strip commercial development may also be promoted by continuation of current land use patterns in this scenario. Overall, this scenario represents the county's current land use trends and should be discouraged with effective land use and transportation policies.

(g) Land Use Policies
No major new land use policies are needed to support the Base/Low Growth Scenario, since this scenario basically represents a continuation of current land use policies. The Base/Low Growth Scenario provides little support for the ARC's Envision 6 Regional Development Plan Land Use Policies.

2.4.2.2 Nodal/Middle Growth Scenario

The Nodal/Middle Growth Scenario presumes new land use patterns with development concentrated in existing and planned centers. Growth is based on Spalding County's population, employment, and household forecast for the county through 2030. Land use patterns are presumed to take on a new focused pattern with periodic concentrations of densities surrounded by less developed or undeveloped areas in between. Most new development is envisioned for the county's existing activity centers and for new compact, village-like areas. Additionally, this scenario focuses on conservation subdivisions with sewer service expansion limited to these areas.

(a) Mobility, Property Value, Quality of Life
Mobility is the ability to access desired destinations at a given cost in time or money. Increased mobility improves quality of life because it offers a wider range of lifestyle choices and options. Also, increased mobility may increase property values, because both commercial and residential properties are valued in part based on ease of access to certain resources.

The Nodal/Middle Growth Scenario may result in increased mobility over time. Focused land use patterns work to create increased mobility by clustering origins and destinations within an easy walking or bicycling distance from one another. Mobility is increased both by clustering land uses and by supporting potential transit with these transit-friendly development patterns. This scenario allows a greater number of people the option of walking or bicycling as well as providing access to transit service. Transit service becomes much more useful in terms of the destinations that become accessible via transit.

(b) Congestion Costs
Traffic congestion exerts multiple costs on the mobile population. The most obvious and direct cost is the cost of time lost in traffic. Travelers consider the cost of lost time to be significant and frustrating and in the long run it may result in behavioral changes, such as shopping in a different location, moving to a different location, or relocating an existing

business. Congestion can result in an economic impact to the county, as businesses and residents move to or divert their spending to less populated and rural areas.

The Nodal/Middle Growth Scenario may result in increased congestion overall in Spalding County, though less congestion than the Nodal/High Growth Scenario. By decreasing distances between desired destinations or providing alternative transportation options, this scenario is likely to be effective in decreasing congestion on city and county roads. It is important to note that growth in population and employment almost always results in increased demand for travel by automobile; therefore some increase in congestion is to be expected. However, the mixed land use component, in conjunction with the nodal development concept, may limit or reduce the rate of increase in travel demand. As in the other scenarios, some economic losses for the county may include relocated businesses, households, and shopping dollars as a result of increased congestion.

The Nodal/Middle Growth Scenario will help to contain congestion increases and maximize the potential availability of transportation alternatives. For example, the Griffin Town Center LCI Study recommended mixed use development adjacent to the proposed commuter rail station. As a result, this scenario is best for mitigating the costs of transportation for households. In this scenario, households are most likely to have transportation alternatives, including walking, biking, or taking transit. If transportation costs for vehicle use continue to increase, this scenario will provide greater range of transportation alternatives for households.

Transportation alternatives and a focused development pattern are most likely to result in decreased number of vehicle miles traveled per capita and decreased air pollution caused by vehicular travel relative to other scenarios. Decreased congestion will also help to reduce emissions, as vehicles will spend less time stuck in traffic. The benefits of better air quality are primarily revealed through impacts on public health, such as decreased incidence of asthma attacks and other lung-related ailments. Inability to meet federal air quality standards can also lead to loss of funding for transportation projects and improvements.

(c) Transportation-Public Health Link

A growing body of research is connecting the design of the physical environment which includes land use patterns, transportation systems, and urban design with public health. Some research indicates that low-density, single use development patterns correlate to lower levels of physical activity and increasing rates of obesity.

The active living environments created by the Nodal/Middle Growth Scenario may make a moderate contribution to the improvement of public health by enhancing active living environments in Spalding County. Also, the focused land use pattern will encourage walking and biking by increasing the number of destinations within walking distance.

Overall, this scenario is the most conducive to enhancing active living environments in the county.

(d) Economic Development Goals

The Nodal/Middle Growth Scenario supports the economic development goals of Spalding County. This scenario supports business growth and retention by ensuring that existing businesses continue to have adequate access to the regional transportation system and by reducing congestion on major corridors. With the Nodal/Middle Growth Scenario, greater emphasis is given to transit access, which is relatively more supportive of service industries than of goods-oriented manufacturing industries. However, this scenario will also help to reduce congestion, which should be positive for goods-transporting industries as well. This scenario should support the county's key growth sectors of services, manufacturing, retail trade, and government.

Spalding County also seeks to leverage existing and economic assets and improve access to and from the county as part of their economic development goals. The Nodal/Middle Growth Scenario may help improve Spalding County's image as a forward thinking community with a proactive approach to solving land use and transportation issues.

(e) Economic Impact Summary

Overall, this scenario appears to have the most economic benefit to the county as a whole. Benefits of the Nodal/Middle Growth Scenario include increased mobility, increased access to transportation alternatives, congestion mitigation, regional transportation access for businesses, improved air quality and increased opportunities for active living. Costs include the estimated cost for potential transportation projects, moderate increases in congestion, and some possible decrease in economic activity due to congestion.

(f) Cumulative Land Use Impacts

The Nodal/Middle Growth Scenario provides the best support for the current land use policies of Spalding County. Since transportation investments are focused on growth centers, this scenario promotes walkable, mixed use communities. The focus on nodal village land use patterns encourages neighboring employment, service, and housing growth centers. A decreased focus on roadways and an increased focus on pedestrian and bicycle investments work in concert with the county's goal of improving social amenities. The focused land use pattern also helps promote a sense of place by focusing development in planned growth centers. This scenario provides the highest degree of support for the county's land use policies.

This scenario also addresses prevailing land use trends. Focused development will reduce the consumption of vacant lands and encourage the conservation of open space in the county. The Nodal/Middle Growth Scenario supports the trend of increased residential densities by designating appropriate locations for higher residential densities and providing

the transportation infrastructure to support these developed areas. This scenario does not promote strip commercial development since transportation investments and land use patterns are both focused on growth centers.

(g) Land Use Policies

Spalding County will need to use many of its latest land use policies and tools to promote this scenario. The county should make use of rural conservation strategies; overlay zoning districts, including village node zoning; and engage in planning studies for its growth centers to promote proper development patterns. Supporting and implementing the Griffin Town Center LCI study and similar efforts within the municipalities of Orchard Hill and Sunny Side, as well as throughout the county can also help promote quality transportation development.

Other Spalding County policies that can promote this scenario are the Conservation Subdivision Design and the Traditional Neighborhood Development Districts. Both of these policies support nodal mixed use development and promote an increased sense of place at key locations throughout the county.

Another land use strategy that would help promote a nodal land use pattern is the Transfer of Development Rights (TDRs). A TDR program, would allow property owners to sell the development rights to their property while retaining ownership of the land. The purchaser of those development rights would use those rights to develop another more suitable parcel that can accommodate growth while the other parcel is preserved as an agricultural use or in a natural state.

On April 22, 2003, the Georgia State Legislature passed an amendment to the Transfer of Development Rights legislation (Senate Bill 86), making TDRs available to any county that adopts enabling TDR ordinances.

The Nodal/Middle Growth Scenario provides some support for the following ARC Envision 6 Regional Development Plan Land Use Policies:

- Encourage development within principal transportation corridors, the Central Business District, activity centers, and town centers.
- Increase opportunities for mixed-use development, transit-oriented development, infill and redevelopment.
- Protect environmentally-sensitive areas including wetlands, floodplains, small water supply watersheds, rivers and stream corridors.
- Increase the amount, quality, connectivity and accessibility of greenspace.
- Promote new communities that feature greenspace and neighborhood parks, pedestrian scale, support transportation options and provide an appropriate mix of uses and housing types.

2.4.2.3 Nodal/High Growth Scenario

The Nodal/High Growth Scenario presumes land use patters like the Nodal/Middle Growth Scenario with development concentrated in existing and planned centers. This scenario is based on Spalding County's high projection of population, employment, and household forecast for the county through 2030. Land use patterns are presumed to take on a new focused pattern with periodic concentrations of densities surrounded by less developed or undeveloped areas in between. Most new development is envisioned for the county's existing activity centers and for new compact, village-like areas. This scenario also focuses on conservation subdivisions with sewer service expansions, limited to these areas.

(a) Mobility, Property Value, Quality of Life

Mobility is the ability to access desired destinations at a given cost in time or money. Increased mobility improves quality of life because it offers greater lifestyle choices and options. Also, increased mobility may increase property values, because both residential and commercial properties are valued in part based on ease of access to certain resources.

The Nodal/High Growth Scenario may result in increased mobility over time. Focused land use patterns work to create increased mobility by clustering origins and destinations within an easy walking or bicycling distance from one another. Mobility is increased both by clustering land uses and by supporting potential transit amongst these transit-friendly development patterns. By supporting additional population in increased land densities provide greater potential ridership of transit. This scenario allows an even greater number of people the option of walking, bicycling and access to transit service. Transit service becomes much more viable and useful in terms of the destinations that become accessible via transit.

(b) Congestion Costs

Traffic congestion exerts multiple costs on the mobile population. The most obvious and direct cost is the cost of time lost in traffic. Travelers consider the cost of lost time to be significant and frustrating and in the long run it may result in behavioral changes, such as shopping in a different location, moving to a different location, or relocating an existing business. Congestion can result in an economic loss to the county, as businesses and residents move to or divert their spending to less populated or developed areas.

The Nodal/High Growth Scenario may result in an overall increase in congestion levels in Spalding County. Congestion levels may be greater than the other scenarios presented since it assumes higher population growth for the county. With higher population growth and employment there is the likelihood of an increased demand for travel by automobile; therefore some increase in congestion is to be expected. Still, the scenario is likely to have an overall positive impact on congestion since it also decreases distances between desired destinations and provides alternative transportation options. As with the other scenarios,

some economic losses for the county may include related businesses, households and shopping dollars as a result of increased congestion.

The Nodal/High Growth Scenario will help to relieve some congestion and maximize the potential availability and viability of transportation alternatives. For example, the Griffin Town Center LCI study recommended mixed use development adjacent to the proposed commuter rail station. As a result, this scenario helps mitigate the costs of transportation for households as households are most likely provided with transportation alternatives, including walking, bicycling, or taking transit. This scenario will provide a greater range of transportation alternatives for households, if transportation costs for vehicle use continue to increase.

Transportation alternatives and a focused development pattern are most likely to result in decreased number of miles traveled per capita and decreased air pollution caused by vehicular travel. Decreased congestion will also help to reduce emissions, as vehicles will spend less time queued in traffic. The benefits of better air quality are primarily revealed through impacts on public health, such as decreased incidence of asthma attacks and other lung-related ailments. Inability to meet federal air quality standards can also lead to loss of funding for transportation projects and improvements.

(c) Transportation-Public Health Link

A growing body of research is connecting the design of the physical environment which includes land use patterns, transportation systems, and urban design with public health. Some research indicates that low-density, single use development patterns correlate to lower levels of physical activity and increasing rates of obesity.

Similar to the Nodal/Middle Growth Scenario the Nodal/High Growth Scenario will provide a more active living environment helping assuage adverse public health conditions in Spalding County. The focused land use pattern will also encourage walking and bicycling by increasing the number of destinations within walking distance. Overall, this scenario is conducive to enhancing active living environments within the county.

(c) Economic Development Goals

The Nodal/High Growth Scenario supports the economic development goals of Spalding County. This scenario supports business growth and retention by ensuring that existing businesses continue to have adequate access to the regional transportation system and by reducing congestion on major corridors. With the Nodal/High Growth Scenario, greater emphasis is given to transit access, which is relatively more supportive of service industries than of goods-oriented manufacturing industries. However, this scenario will moderately ease congestion, which will have positive implications on industries highly involved in the movement of goods. This scenario should support the county's key growth sectors of services, manufacturing, retail trade, and government.

The county also seeks to leverage existing community and economic assets, and improve access to and from the county as part of its economic development goals. The Nodal/High growth Scenario may help improve the area's image as a forward thinking community with a proactive approach to solving land use and transportation issues. This image could ultimately assist the county as it looks toward attracting emerging businesses and cottage industries.

(d) Economic Impact Summary

This scenario, similar to the Nodal/Middle Growth can create economic benefit to the county and its cities. Benefits of the Nodal/High Growth Scenario include increased mobility, increased access to transportation alternatives, congestion mitigation, regional transportation access for businesses, improved air quality and increased opportunities for active living. Economic costs that may arise include the estimated cost for potential transportation projects, increases in congestion, and decrease in economic activity for certain sectors due to congestion.

(e) Cumulative Land Use Impacts

The Nodal/High Growth Scenario provides better support for the current land use policies of Spalding County when compared to the Base/Low Growth Scenario. Additional population can be accommodated in this scenario using the same land use pattern adopted in the Nodal/Middle Growth Scenario. Since transportation investments are focused on growth centers, this scenario promotes walkable, mixed communities. The focus on nodal village land use patterns encourages neighboring employment, service, and housing growth centers within the county. The Nodal/High Growth Scenario echoes the Nodal/Middle Growth Scenario with a decreased focus on roadways and an increased focus on pedestrian and bicycle investments which work in concert with the county's goal of improving social amenities. The focused land use pattern also helps promote a sense of place by directing development in planned growth centers. This scenario differs from that set forth in the Nodal/Middle Growth Scenario in terms of the amount of population forecasted for the county and it also provides the best support for the county's land use policies.

The Nodal/High Growth Scenario addresses prevailing land use trends. Focused development will reduce the consumption of vacant lands and encourage the conservation of open space in the county. The Nodal/High Growth Scenario supports the trend of increased residential densities by designating appropriate locations for higher residential densities and providing the transportation infrastructure to support these developing areas. This scenario does not promote strip commercial development since transportation investments and land use patters are both focused on growth centers.

(f) Land Use Policies

Spalding County will need to use many of its latest land use policies and tools to promote this scenario. The county should make use of rural conservation strategies; overlay zoning districts, including village node zoning; and engage in planning studies for its growth centers to promote desired development patters. Supporting and implementing the Griffin Town Center LCI study and its impacts throughout the county can also help promote quality transportation development.

Other Spalding County policies that can promote this scenario are the Conservation Subdivision Design and the Traditional Neighborhood Development districts. Both of these policies support nodal mixed use development and promote an increased sense of place at key locations throughout the county.

A Transfer of Development Rights (TDRs) program in the county could promote conservation of the rural character of the western portion of the county, by allowing property owners to sell the development rights to their property while retaining ownership of the land. The purchaser of those development rights would use those rights to develop another more suitable parcel in the village node areas that can accommodate growth while the other parcel is preserved for agricultural use or in a natural state. On April 22, 2003, the Georgia State Legislature passed an amendment to the Transfer of Development Rights legislation (Senate Bill 86); making TDRs available to any county that adopts enabling TDR ordinances.

The Nodal/High Growth Scenario provides some support for the following ARC Envision 6 Regional Development Plan Land use Policies:

- Encourage development within principal transportation corridors, the Central Business District, activity centers, and town centers.
- Increase opportunities for mixed-use development, transit-oriented development, infill and redevelopment.
- Protect environmentally-sensitive areas including wetlands, floodplains, small water supply watersheds, rivers and stream corridors.
- Increase the amount, quality, connectivity and accessibility of greenspace.
- Promote new communities that feature greenspace and neighborhood parks, pedestrian scale, support transportation options and provide an appropriate mix of uses and housing types.

2.5 TRANSPORATION NETWORK

2.5.1 Existing Inventory

2.5.1.1 Roadway Network

The existing transportation system within Spalding County includes a network of state and local roadways serving residential, business and regional transportation needs. Spalding County has 567 miles of roadway. This includes 504 miles of county roads and 63 miles of state routes. The distribution of roadway miles in the current functionally classified road system is show in Table 9 below.

Table 9: Spalding County Road Mileages by Type and System

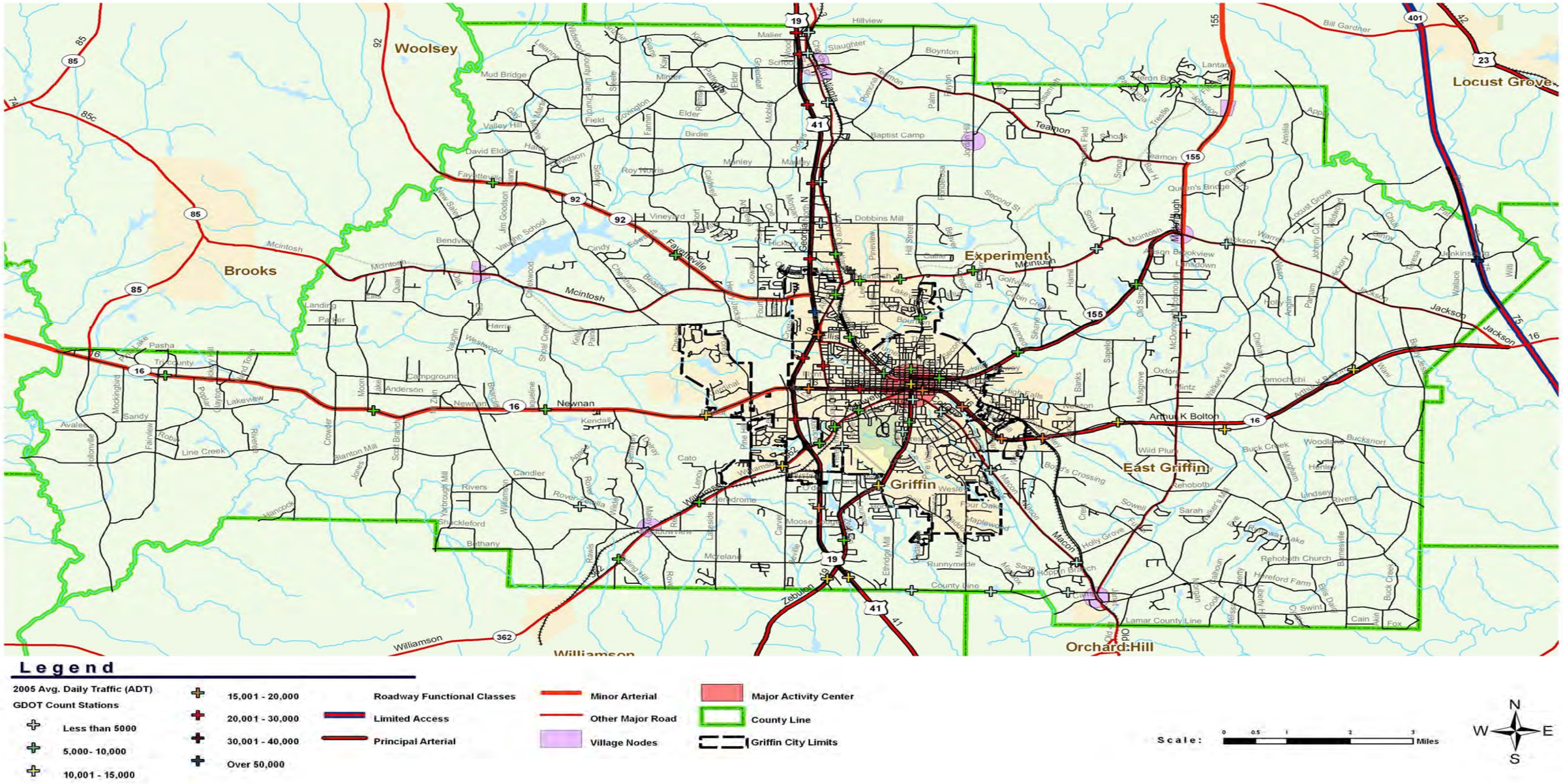
Type	State	County	Total
Interstates	1.94	0	1.94
Urban Freeways	2.93	0	2.93
Arterials	51.52	13.7	65.22
Collectors	6.6	138.6	145.2
Local Roads	0	351.55	351.55
TOTAL	62.99	503.85	566.84

Source: Spalding County CDP, 2004

Spalding County's road network is relatively sparse, in that only a limited number of arterials, mostly state routes, provide direct and continuous access and mobility throughout the county and between major activity centers. Beyond the major arterial state routes, Spalding County has relatively few secondary or collector roads providing continuous and convenient connections between arterials, residential and commercial areas, and activity centers.

While traffic volumes in Spalding County are light as compared to other counties in the Atlanta metropolitan region, the limited road network concentrates all trips, local and regional, onto the same few arterials, leading to congestion issues. One visible result of this is the heavy presence of trucks in urban commercial areas of Taylor Street and Hill Street in downtown Griffin, which has been cited repeatedly as a major area of concern and an obstacle to development. The lack of a connected road network also contributes to congestion by forcing all trips, even short local trips which might otherwise be taken on local roads, or possibly by bicycle or on foot, to be automobile-based trips requiring the use of major arterials. Figure 10 illustrates the transportation network for Spalding County. The 2005 Annual Average Daily Traffic (AADT) counts illustrated in the Spalding County transportation network map can be found in the attached appendix.

Figure 10:
Spalding County Transportation Network



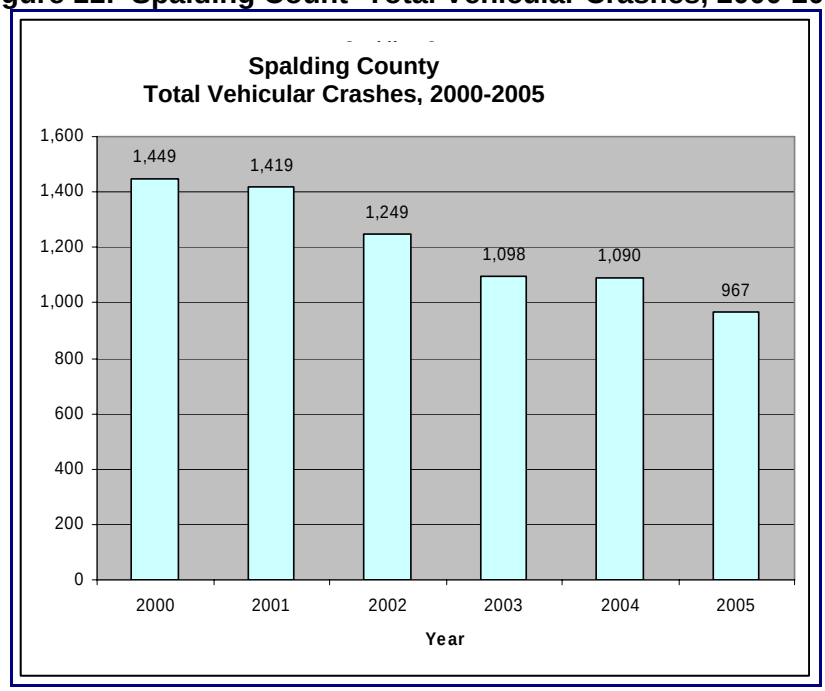
Traffic in Spalding County is heavily concentrated on this same limited network of arterials - specifically SR 16, SR 155, US 19/41, US 92, SR 362 and the North Expressway.

2.5.1.1.1 Roadway Safety

GDOT Crash records from 2000 through 2005 were analyzed using a Geographic Information System to develop a summary of road safety conditions.

In 2005, there were 967 recorded vehicular crashes in Spalding County. Overall the number of crashes in Spalding County has been declining since 2000, as illustrated in Figure 11.

Figure 11: Spalding Count- Total Vehicular Crashes, 2000-2005



GIS analysis was used to determine the intersections with the highest crash volumes. The 25 intersections with the highest crash volumes between 2000 and 2005 are listed in Table 10 and mapped in Figures 12 and 13.

Table 10: Spalding County- 25 Highest Crash-Volume Intersections; 2000-2005

			Vehicular Crashes			Total	Total	Comm.
				Total	Avg./Yr	Injuries	Fatalities	Veh. Crashes
Rank	Major Road	Minor Road	2005	'00-'05	'00-'05	'00-'05	'00-'05	'00-'05
1	US 19/41 SR 3	North Expressway	82	551	92	282	0	16
2	SR 16/Taylor St.	North Expressway	13	167	28	53	0	13
3	SR 16/Taylor St.	SR 155/Hill St.	20	160	27	66	0	25
4	US 19/41 SR 3	Ellis Rd. Exit	33	142	24	55	0	0
5	US 19/41 SR 3	Birdie Rd/Baptist Camp Rd	16	115	19	118	3	9
6	SR 16/Taylor St.	Spalding Dr	10	101	17	95	0	5
7	SR 16/Taylor St.	8th St	14	93	16	41	0	6
8	US 19/41 SR 3	SR 92	5	87	15	40	1	4
9	SR 16/Taylor St.	10th St.	13	86	14	52	0	7
10	US 19/41 SR 3	SR 16/Taylor St Exit	4	83	14	68	1	7
11	SR 16/Taylor St.	18th St	11	76	13	51	0	4
12	SR 16/Taylor St.	State St	10	75	13	21	0	2
13	North Expressway	Ellis Rd.	11	75	13	41	1	2
14	SR 16/Taylor St.	State St	8	63	11	21	0	1
15	US 19/41 SR 3	School Rd.	7	62	10	59	1	3
16	SR 16/Taylor St.	16th St.	9	62	10	56	1	0
17	SR 16/Newnan Rd.	Rover-Zetella Rd.	8	58	10	57	1	3
18	SR 155/Hill St.	Broadway St	9	58	10	17	0	7
19	SR 16/Memorial Dr.	Hamilton Blvd.	8	57	10	38	0	2
20	US 19/41 SR 3	Kalamazoo Drive/Airport Rd.	6	56	9	74	2	0
21	SR 155/Hill St.	Broad St.	10	55	9	6	0	2
22	North Expressway	Flynt St	6	54	9	29	0	1
23	Experiment St	13th Street	8	51	9	16	0	0
24	US 19/41 SR 3	SR 16	12	50	8	34	0	1
25	North Expressway	Pleasant Ave.	5	50	8	30	0	0

Figure 12:
Road and Pedestrian Safety – Spalding County

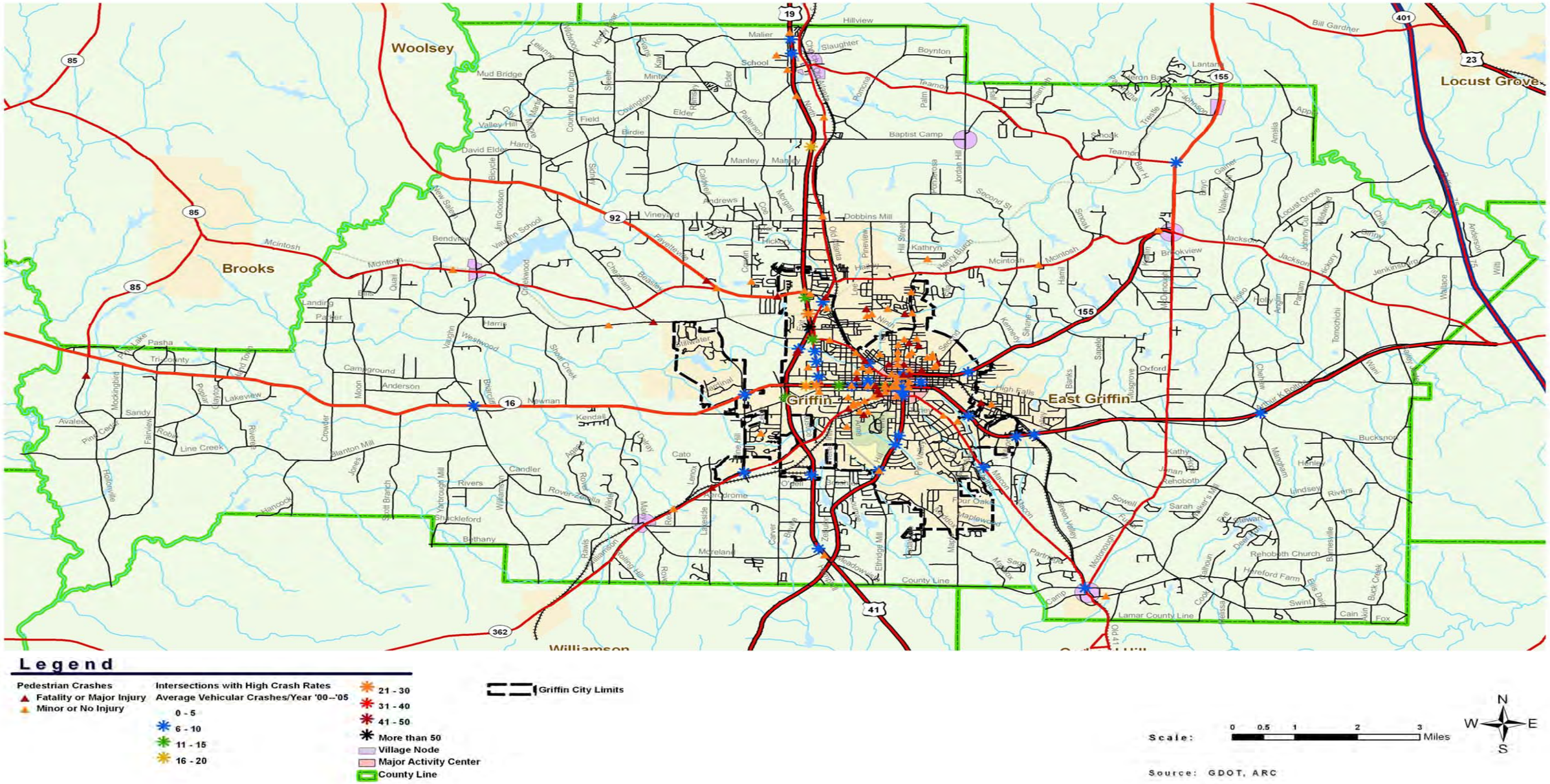
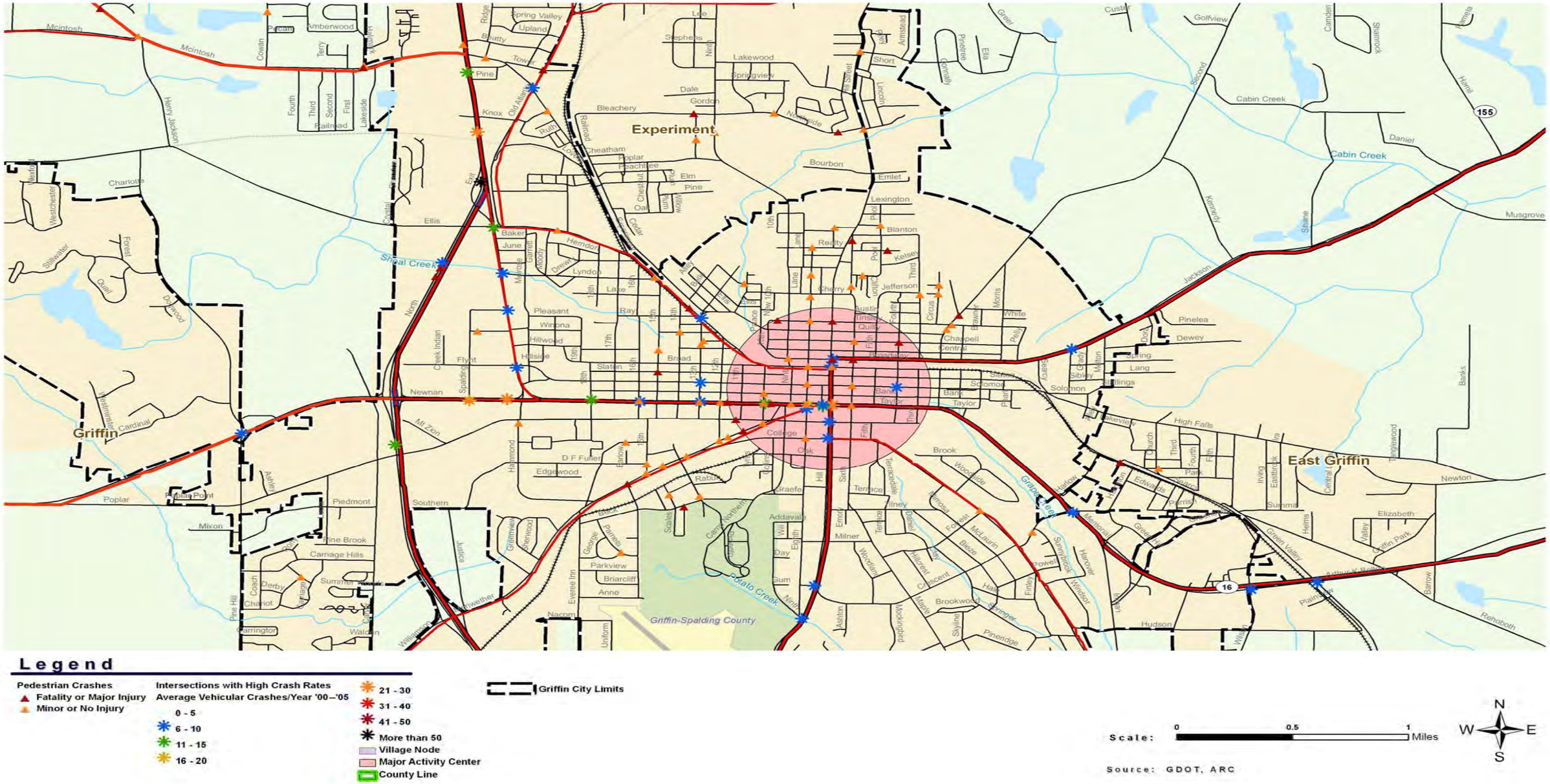


Figure 13:
Road and Pedestrian Safety – City of Griffin



GIS analysis was used to determine the road segments with significantly high crash rates in relation to traffic volume. Table 11 details crash rates for 18 key road segments, including all State Routes and arterials, as well as several key road segments with significantly high crash rates. For comparison, statewide average crash rates for similar facility types have been provided.

Table 11: All Accidents per 100 Million Vehicle Miles Traveled: Spalding County, 2000-2005

Road	From	To	Road Type	Average Crash/ Year	Crashes 100 MVM	2004 State Avg.
SR 155/ Hill St	Central Ave	College St	Princ Art, Urban	63	2,417.5	342
SR 92	Cowan Street	US 19/41	Princ Art, Urban	33	1,376.7*	342
SR 16 /W Taylor St	Third St	North Expressway	Princ Art, Urban	193	1,295.9	342
US 19/41	SR 16	North Expressway	Princ Art, Urban	191	1,009.2	185
North Expy	Taylor St	US 19/41	Princ Art, Urban	76	788.2	342
SR 155/ Hill St	College St	US 19/41	Princ Art, Urban	81	652.8	342
SR 16	McDonough Rd	Third St	Princ Art, Urban	141	588.6	342
SR 155	Hill St	N McDonough St	Princ Art, Urban	80	508.2	342
US 19/41	North Expressway	Vineyard Rd	Princ Art, Urban	87	486.3	342
Experiment St	Old Atlanta Rd	9th St	Major Col., Urban	30	478.8	544
SR 003	SR 16	SR 155	Princ Art, Urban	95	435.3	342
SR 155	N McDonough Rd	N County Line	Minor Art, Rural	40	374.1	74
McIntosh Rd.	SR 155	Old US 3	Major Col, Rural	30	328.8	273
Meriwether St	US 19/41	S County Line	Major Col, Urban	47	296.1	461
Jackson Rd	N McDonough Rd	E County Line	Major Col, Rural	21	244.4	273
SR 16	McDonough Rd	E County Line	Minor Art, Rural	30	158.3	74
SR 16	US 19/41	W County Line	Minor Art, Rural	92	156.1	74
Teamon Rd	SR 155	Old US 3	Major Col, Rural	12	125.7 *	273

*No GDOT AADT Count Available. Volume Estimated from ARC Model and Field Observation
(Data for Key Spalding County Road Segments)

The Atlanta Regional Commission's 2006 Report analyzed crash statistics for the Atlanta Metropolitan Region, including Spalding County, and ranked counties based on various safety statistics. Table 12 shows selected results from this report:

Table 12: Comparison of Crash Statistics: Spalding County vs. Atlanta Metro

Statistic	Spalding County	Region-Wide	Spalding's Rank
Vehicle Miles Traveled	1.7 Mil	135 Mil.	17
Total Crashes	2148	189,500	14
Fatal Crashes	10	518	15
Injury Crashes	801	45,754	13
Crashes Per 100 Mil. VMT	376	382.5	6
Injuries per 100 Mil VMT	208.4	137.9	1
Pedestrian Crashes	19	1389	8
Bicycle Crashes	12	378	6
Commercial Vehicle Crashes	87	8,675	14

Source: Atlanta Regional Commission: *Traffic Crash Profiles for the Atlanta Region. 2006*

2.5.1.1.2 Network Performance – V/C Ratio and LOS

At the regional and county levels, the performance of the transportation system was evaluated using an enhanced travel model with a set of measures that included the following:

- Travel time index (TTI) – the ratio of forecasted travel times (including congestion) to free-flow travel times. The ARC has designated TTI as one of its preferred measures of effectiveness.
- Annual Congestion Cost and Daily Delay Hours – measures of travel under congested conditions that indicate the degree of congestion present. Daily Delay indicates the amount of congestion in hours, while Annual Congestion Cost converts the delay into monetary units. Because TTI (described above) is the ratio of congested to free-flow travel times, Daily Delay can be thought of as a building block of TTI since it indicates the difference between congested and free-flow travel times.
- Vehicle Miles of Travel (VMT) – used as a measure of utilization of roadway system denoting the level of travel consumption.
- Vehicle Hours of Travel (VHT) – used as an indication of system travel efficiency and level of congestion. For both VMT and VHT, it is important to understand how an improvement may result in higher VMT and VHT. Due to the functioning of the feedback loop of the ARC model, a network improvement may make longer trips more accessible, and thus increase average trip lengths, which sometimes may result in higher VMT and VHT values. This situation is common in regional travel demand models with a feedback loop that includes trip distribution.
- Average Highway Speed – gives an indication of the average speed of travel across the highway network. It is calculated by dividing the regional or Spalding County total VMT by the corresponding total VHT.

- Duration of Congestion – identifies the temporal extent of delay for freeways and arterials. We compute the number of lane-miles that have different ranges of daily congestion duration using a post processing script developed by the ARC.

Table 13 below, shows the performance measures identified for Spalding County for the 2005 Base Year, the projected Base/Low Growth Scenario 2030, the Nodal/Middle Growth Scenario 2030, and the Nodal/High Growth Scenario 2030.

Table 13: Spalding County Transportation System Performance Measures 2005/2030

Measure	Spalding County 2005	Spalding County Base/Low Growth 2030	Spalding County Nodal/Middle Growth 2030	Spalding County Nodal/High Growth 2030
Regional TTI	1.07	1.22	1.30	1.40
Total Daily Delay Hours	2649	12,724	17,670	27,644
AM Delay Hours	909	3,202	4,878	8,395
PM Delay Hours	1,125	5,471	8,164	13,820
VMT	1,678,968	2,597,284	2,721,386	3,148,036
VHT	56,262	98,512	108,088	136,668
Average Speed	29.8	26.4	25.2	23.0
Total Annual Congestion Cost	$12,953,393	$65,760,150	$91,271,654	$142,766,477

Source: CRA International, 2007

The performance measures displayed in Table 13 indicate the considerable travel growth that is anticipated to occur in Spalding County between Year 2005 and Year 2030. VMT and VHT are performance measures often used to define aggregate county-level travel trends. The High Growth scenario (3,148,036) results in a VMT increase of over 87% from Year 2005 (1,678,968), with the Middle Growth scenario (2,721,386) and Base 2030 scenario (2,597,284) resulting in growth rates of 60% and 55%, respectively. The VHT growth trends are even more substantial with growth rates of roughly 75%, 90%, and 143% for the Base 2030 (98,512), Middle Growth (108,088), and High Growth (136,668) scenarios respectively. As the ARC standardized measure of congestion, TTI is an important indication of the county's transportation performance. The ARC has identified a regional TTI target of 1.35; this means that actual travel times are on average 35% higher than free-flow times on the corresponding links. The performance of two future growth scenarios reflects TTI values lower than this target, with the value increasing from 1.22 for the Base 2030 scenario to 1.30 for the Middle Growth scenario. The High Growth scenario reflects a TTI of 1.40, which is slightly higher that the target TTI. Total Daily Delay Hours and Total Annual Congestion Cost are measures that are closely associated with TTI, and the relative performance along these measures across the growth scenarios follows the same pattern as for TTI.

It is expected that transportation performance will deteriorate as population and population density increase. Thus, the increases in TTI and delay associated with the Middle and High

Growth scenarios are somewhat logical given the composition of that growth along nodes. The nodal growth patterns results in pockets of high density development, a development pattern that is conducive to transit and alternate modes. However, in Spalding County, auto is the predominant transportation mode, and thus this denser development generally results in additional highway congestion. It is worth noting that, even without realizing the benefits that greater development and use of alternate modes would provide, the nodal growth scenarios still offer the benefit of maintaining a larger area of open space. However, the full benefit from nodal growth scenarios will only be obtained by restructuring the county's current transportation system to better serve the nodal land use and activity patterns.

The level of service and delay that a road facility's users experience are determined in large part by the level and characteristics of traffic on the facility in relation to its capacity. A standard approach in planning-level analyses is to compute a facility's ratio of volume to capacity (V/C ratio) and to relate this numerical quantity to the facility's level of service (LOS), expressed as a letter from A (best) to F (worst). This type of analysis does not and is not intended to account for additional delays that may be caused by operational problems at specific locations on a roadway facility. Table 14 outlines the relationship between level of service and V/C ratios on roadways.

Table 14: Level of Service Criteria for Roadway Segments

Level of Service	Interpretation	Nominal Range to Volume-to-Capacity Ratio
A	Low volumes; primarily free-flow operations. Density is low, and vehicles can freely maneuver within the traffic stream. Drivers can maintain their desired speeds with little or no delay.	0.00 - 0.60
B	Stable flow with potential for some restriction of operating speeds due to traffic conditions. Maneuvering is only slightly restricted. The stopped delays are not bothersome, and drives are not subject to appreciable tension.	0.61 - 0.70
C	Stable operations; however, the ability to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail, but adverse signal coordination or longer queues cause delays.	0.71 - 0.80
D	Approaching unstable traffic flow, where small increases in volume could cause substantial delays. Most drivers are restricted in their ability to maneuver and in their selection of travel speeds. Comfort and convenience are low but tolerable.	0.81 - 0.90
E	Operations characterized by significant approach delays and average travel speeds of one-half to one-third the free-flow speed. Flow is unstable and potential for stoppages of brief duration. High signal density, extensive queuing, or progression/timing are the typical causes of the delays.	0.91 - 1.00
F	Forced-flow operations with high approach delays at critical signalized intersections. Speeds are reduced substantially, and stoppages may occur for short or long periods of time because of downstream congestion.	1.001+

Source: *Highway Capacity Manual*, Transportation Research Board Number 212, January 1990.

The 2024 Spalding County Comprehensive Plan recommends that Spalding County adopts level-of-service standards based on those derived by the Georgia Regional Transit Authority. These standards are shown in Table 15:

Table 15: GRTA Level of Service Standards

Facility Type	Rural/Urban	LOS Standard
Expressways	Within Urban Area	D
	Within Rural Area	C
Major Arterials	Within Urban Area	D or E
	Within Rural Area	C or D
Minor Arterials	Within Urban Area	D or E
	Within Rural Area	C or D
Collectors and Others	Within Urban Area	D or E
	Within Rural Area	C or D

A capacity analysis of major Spalding County roadways was carried out for Base Year 2005 and Future Year 2030 using the outputs of the Spalding County Enhanced Travel Demand Model. The model runs incorporated standard ARC socio-economic estimates and forecasts, and reflected anticipated network improvements included in the Transportation Improvement Program (TIP), the Statewide Transportation Improvement Program (STIP), and *Mobility 2030*, the regional long-range transportation plan. The traffic volumes output by the model for each major roadway were related to the associated roadway capacity to compute a V/C ratio; volumes were output separately for the four-hour AM and four-hour PM peak periods defined by the ARC model. The AM and PM levels of service corresponding to the computed V/C ratios were then inferred.

Figures 14 and 15 present, using color-coding, the results of this capacity analysis for 2005 AM and PM traffic conditions, respectively; Figures 16 and 17 present similar results for 2030 conditions forecast as described above.

It can be seen from Figures 14 and 15 that the Spalding County network currently experiences very few capacity problems. Most of the network operates at LOS A in both the AM and PM peak periods. The only exceptions are a few very short sections in Griffin that operate at levels B or C in the AM peak period, and C through E in the PM peak period; and a few somewhat longer sections that operate at LOS B (which is very acceptable) in the PM peak period. In general, the PM peak period is more congested than the AM peak period. This is in part because tripmaking in the AM period tends to reflect primarily the journey to work; whereas tripmaking in the PM period tends to include a variety of other trip purposes in addition to return trips home from work.

Figures 16 and 17 present the V/C ratio and LOS of major Spalding County roadways in 2030. Overall conditions are still very acceptable, with most roadways remaining at LOS A in both the AM and PM peak periods. In the AM peak, a few short sections again operate at LOS B or C, but no sections within the county exhibit a lower LOS (I-75, which forms the county's eastern border, operates at LOS D). As before, the PM peak is characterized by somewhat higher levels of congestion, with again some sections operating at levels C through E. Most of these lower performance sections are in or near Griffin, although a few sections with LOS D or E appear in other portions of the county, such as on Jackson and Jenkinsburg Roads in west Spalding and on Fayetteville Road near the Spalding border with Fayette County.

Figures 14 to 17 provide a visual representation of the modeling results for 2005 and 2030. Specifically, for the AM Peak, only three sections of roadways operate at LOS lower than A in 2005. These are a) a short section of US 19/41 north of Ellis Road near US 19/41 and US 19/41-Business split at LOS C; b) Hammond Drive between Newnan Road and Poplar Street at LOS B; c) College Road between Collins Street and Hill Street at LOS C. In 2030, several roadway sections operate at LOS B or lower. Some of the roadway sections with congested conditions in 2030 AM Peak are: a) I-75 at LOS D; b) Jackson Road between McDonough Road and Locust Grove Road at LOS C; c) Hammond Drive between Newnan Road and Poplar Street deteriorates to LOS C; d) Williamson Road between west of Carver Road and US 19/41-Business at LOS C; e) Taylor Street between Meriwether Street and Hill Street at LOS C; and f) Broadway Street between Hill Street and Third Street at LOS C. In 2030 AM Peak, several additional roadway sections start experiencing LOS B.

For the PM Peak, the roadway sections with lowest LOS in 2005 are: a) a short section of US 19/41 near US 19/41 and US 19/41-Business split at LOS F; b) College Street between Collins Street and Hill Street at LOS E; c) Hammond Drive between Taylor Street and Poplar Street at LOS E; d) a section of US 19/41 south of McIntosh Road at LOS D; e) a section of US 19/41-Business south of US 19/41 and US 19/41-Business split at LOS C; f) Taylor Street/SR 16 between Meriwether Street and Hill Street at LOS C. Several additional roadway sections operate at LOS B in 2005 PM Peak. In 2030, several roadway sections experience an increase in congestion. Some of the roadways that operate at LOS lower than C are: a) Jackson Road between McDonough Road and Locust Grove Road at LOS E; b) a section of US 19/41-Business north of Ellis Road at LOS E; c) a section of SR 92/Fayetteville Highway west of David Elder Road at LOS D; d) Locust Grove Road between Jackson Road and Amelia Road at LOS D; e) Williamson Road between Carver Road and Meriwether Street at LOS D; f) Airport Road between US 19/41 and Everee Inn Road at LOS D.

The conclusion from the capacity analysis is that overall roadway travel conditions in Spalding County are currently very satisfactory, and can be expected to remain such through 2030. Although localized performance deficiencies can be anticipated, the present and future capacity improvement needs of the County's roadways are relatively modest.

Figure 14:
Spalding County 2005 AM Peak V/C and LOS

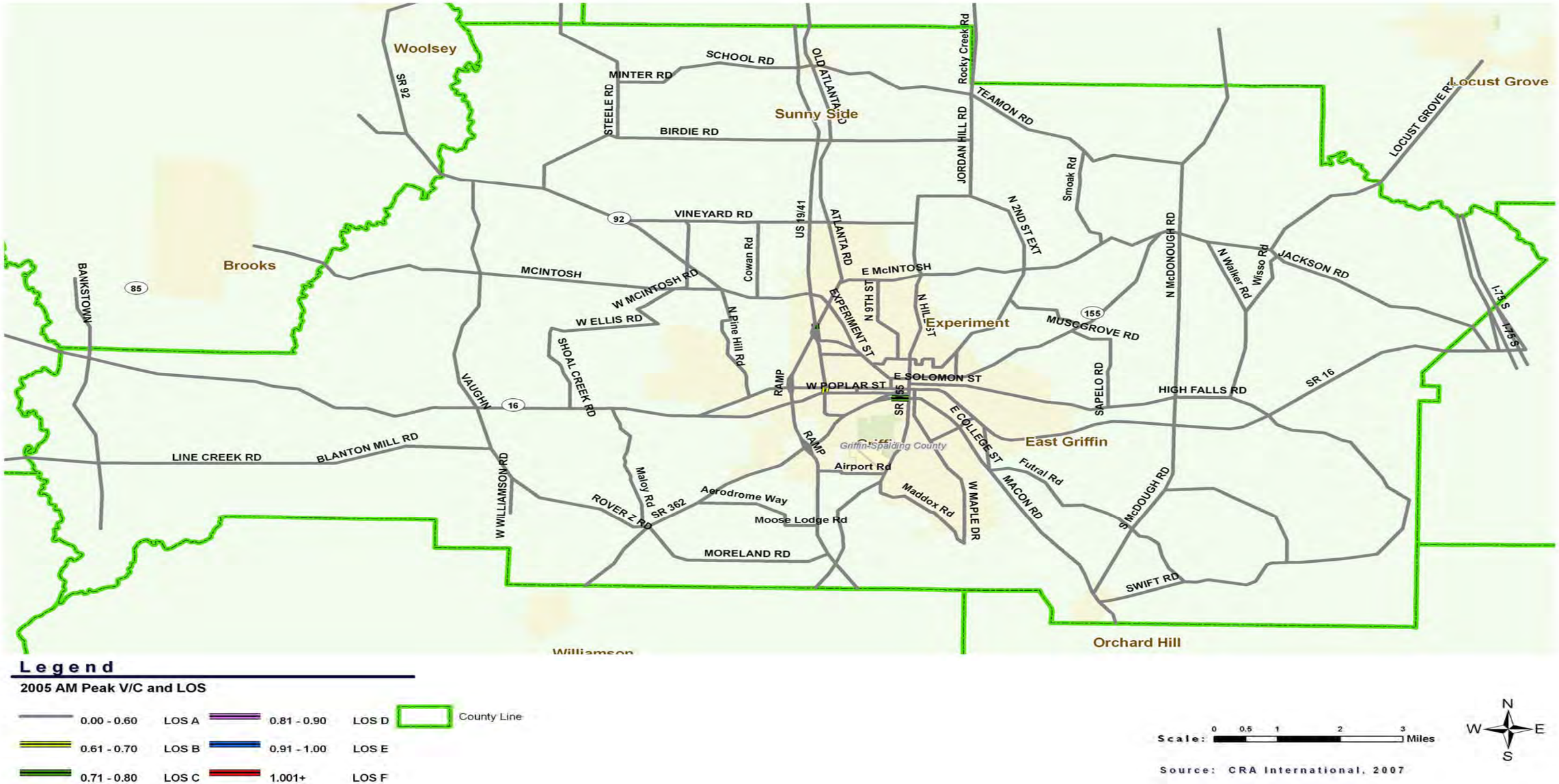


Figure 15: Spalding County 2005 PM Peak V/C and LOS

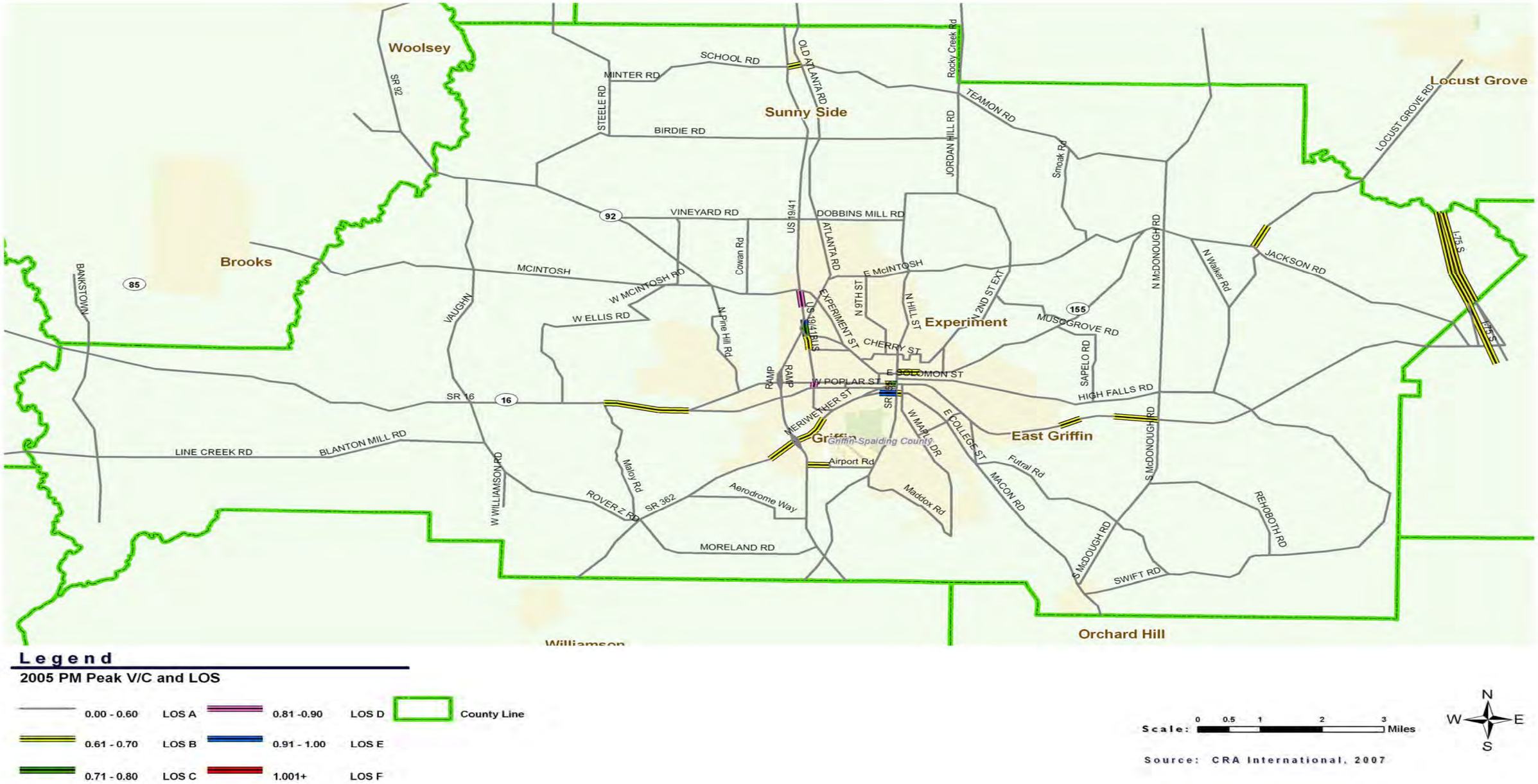


Figure 16:
Spalding County 2030 AM Peak V/C and LOS

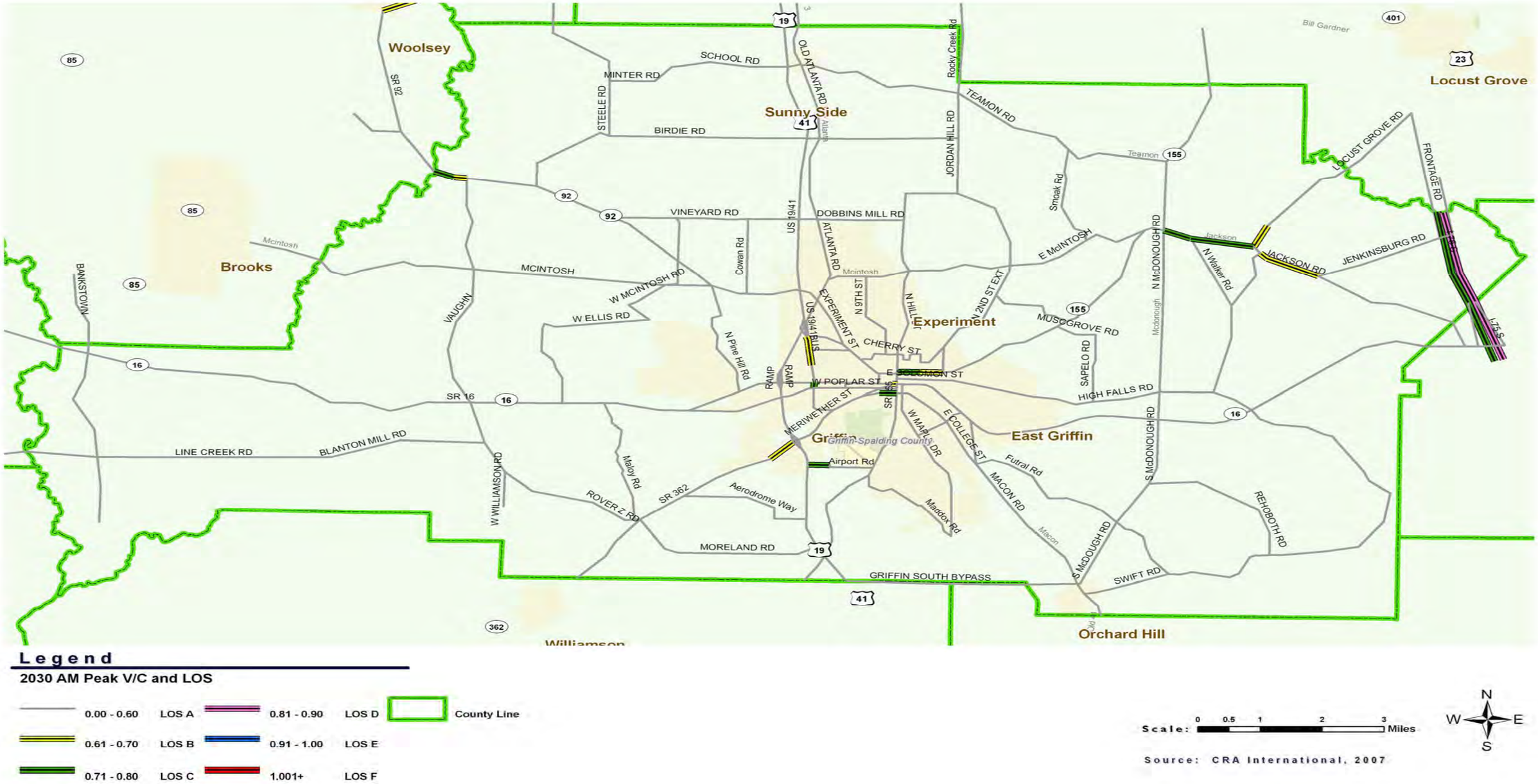
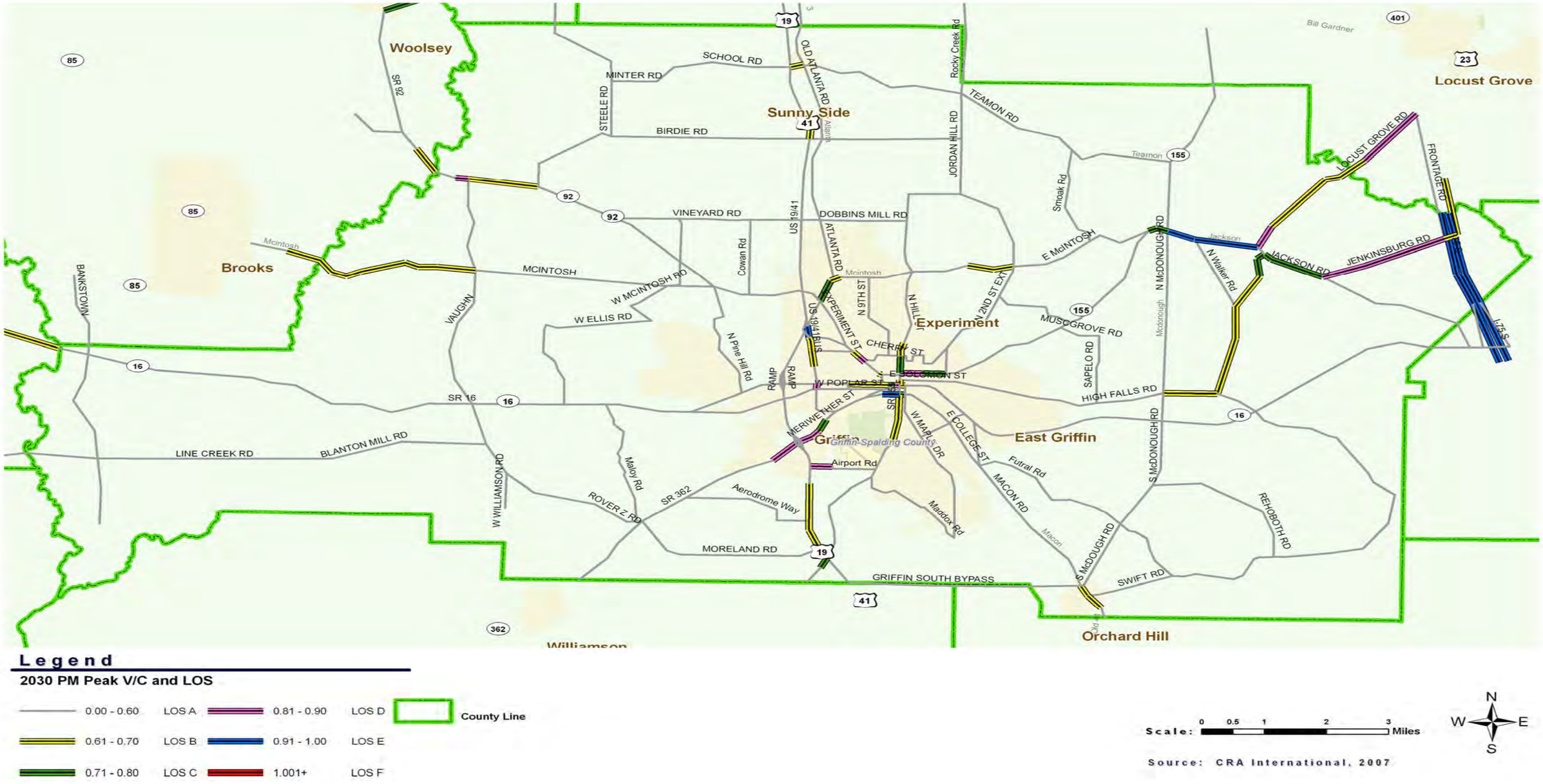


Figure 17:
Spalding County 2030 PM Peak V/C and LOS



2.5.1.2 Pedestrian Facilities

While the majority of roadways within central Griffin are equipped with sidewalks and pedestrian crossing facilities, the vast majority of roads within Spalding County are not equipped with sidewalks, pedestrian crossing facilities, or pedestrian lighting. Figures 18 and 19 illustrate the current bicycle and pedestrian facilities in Spalding County and the City of Griffin. Several parks within Spalding County are equipped with recreational pedestrian paths or trails, including Airport Road Park, Jordan Hill Road School, Orchard Hill Park, Senior Center Park, Sunny Side Park and Wyomia Tyus Olympic Park. The City of Griffin has installed new sidewalks throughout the city over the last two years not captured in the map.

2.5.1.2.1 Pedestrian Safety

Between 2000 and 2006, 115 vehicular collisions involving pedestrians occurred in Spalding County. The majority of pedestrian collisions occurred within urbanized areas, particularly the City of Griffin. Locations of pedestrian collisions are shown in Figures 12 and 13.

These pedestrian collisions involved:

- 124 pedestrians: 43 of them under 18 years old, and 13 over 65 years old;
- 7 fatalities, 21 major injuries, and 85 minor injuries;
- 48 collisions occurred at intersections, 66 in other locations.

Four intersections in Spalding County had multiple vehicle-pedestrian collisions between 2000 and 2005. These intersections are:

- SR 155/Hill Street at Broadway Street : 4 vehicle-pedestrian collisions;
- SR 16/Taylor Street at 8th Street: 3 vehicle-pedestrian collisions;
- SR 16/Taylor Street at 16th Street.: 2 vehicle-pedestrian collisions;
- Experiment Street at Knox Street: 2 vehicle-pedestrian collisions.

A 2006 Traffic Crash Profile Report by the Atlanta Regional Commission isolated road segments with high concentrations of crashes, both at intersections and mid-block. The results are shown in Table 16.

Table 16: ARC's Hot Spots for Pedestrian Crashes, Spalding County

		Crashes		
Facility	**Limits**	**2002-2004**	**Fatal**	**Injury**
E Broadway St	W Solomon St to Pelly St	5	0	5
W Taylor S	N 18th St to S 6th St	5	0	5
Northside Dr	Bleachery St to N Hill St	3	1	2
E Tinsley St	N 1st St to W Central Ave	2	1	1
N Expressway	School Rd	2	0	2
W Ellis Rd		2	0	2
Blanton Ave	S 6th St to Adams St	2	0	2
S 15th St		2	0	2
CS 779-05	Hammock St	2	0	2
Meriwether St	Pimento Ave	2	0	2

Source: Atlanta Regional Commission: *Traffic Crash Profiles for the Atlanta Region. 2006*

Figure 18:
Spalding County Bicycle and Pedestrian Facilities

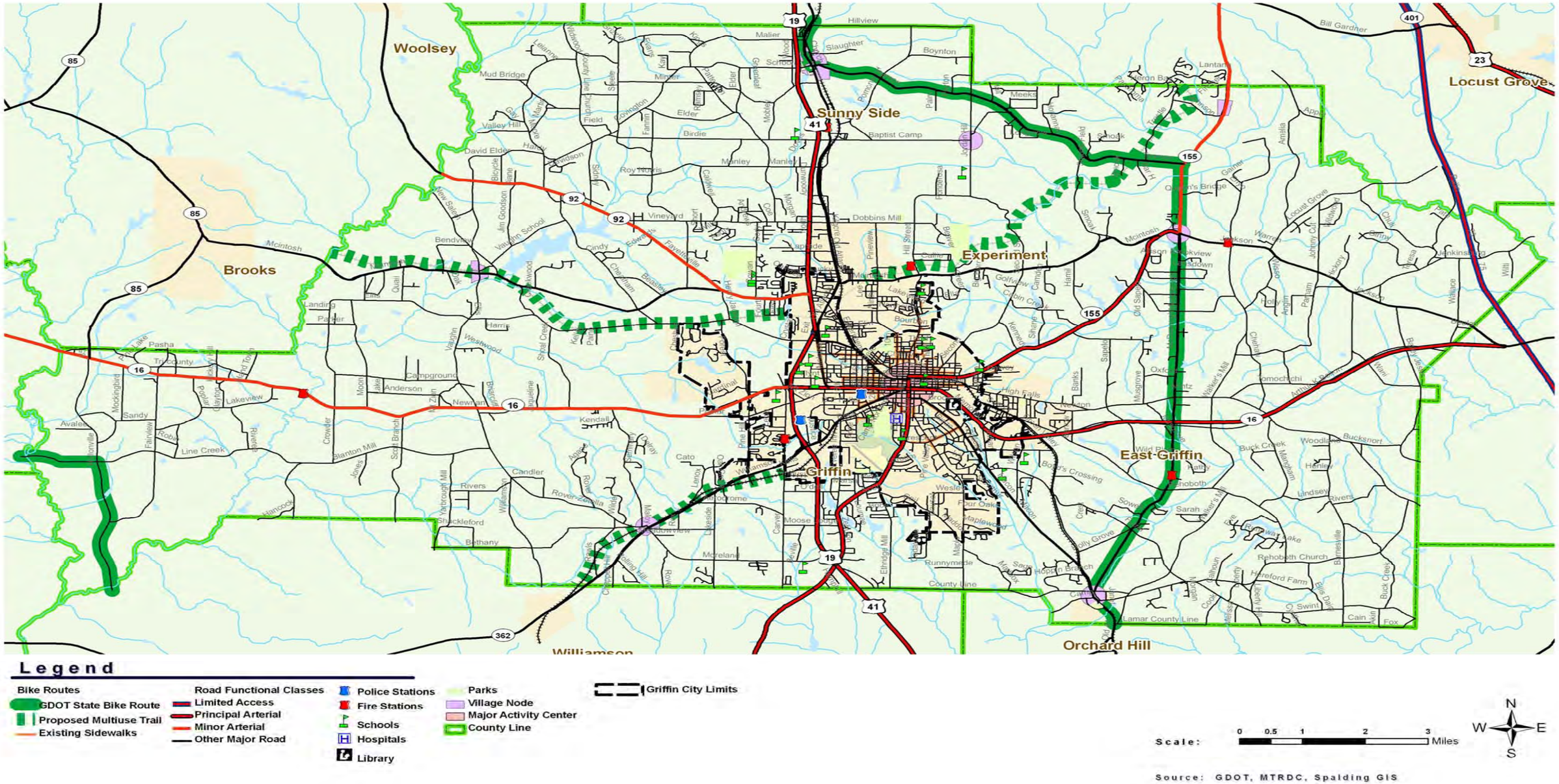
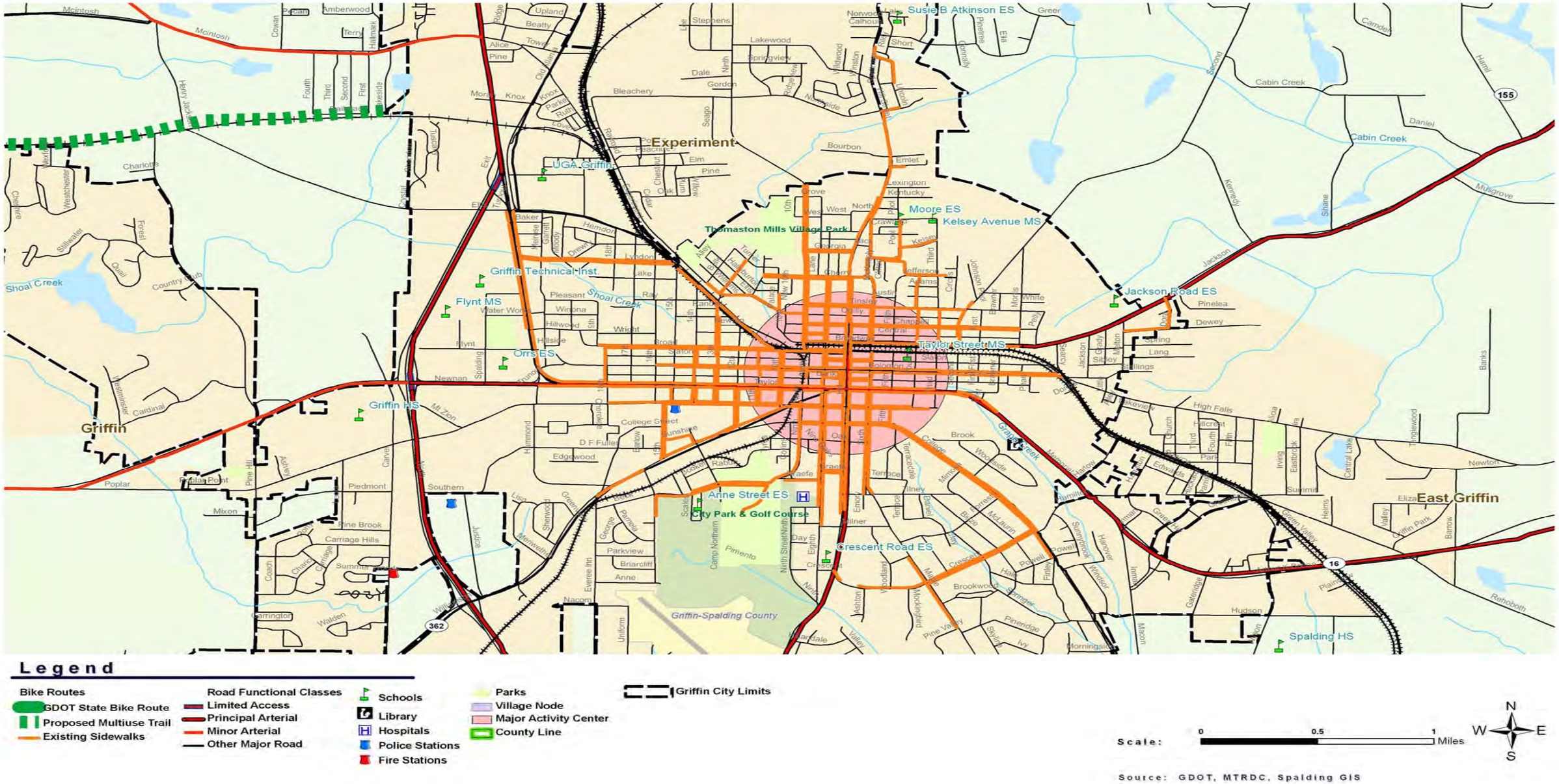


Figure 19:
City of Griffin Bicycle and Pedestrian Facilities



2.5.1.3 Bicycle Facilities

GDOT's State Bicycle Route System includes two Routes in Spalding County. Both are ASHTO Class III, commonly known as "share the road" bicycle facilities. These routes are marked by signage only. There are no other designated or marked bicycle facilities in Spalding County. Current bicycle and pedestrian facilities for both the county and City of Griffin are illustrated in figures 17 and 18.

State Bike Route 15 enters the county on US Route 3 near the city of Sunny Side, follows Teamon Road to McIntosh Road. The route continues on North and South McDonough Roads to the City or Orchard Hill, continuing to Lamar County on Macon Road. State Bike Route 45 passes through the southwestern corner of Spalding County for 3.5 miles along Line Creek Road and Hollonville Road.

A countywide bicycle network was identified during the course of this transportation planning study. Spalding County will work with the cities of Griffin, Orchard Hill and Sunny Side to begin implementing bicycle and pedestrian projects that provide the best north-south and east-west connectivity between key areas within the county. Subsequently, the county will begin implementing additional projects in other key areas with high population densities and a high volume of bicycle/pedestrian activities.

2.5.1.4 Transit Facilities

Spalding County's public transportation needs are served by a regional 5311 demand-response transit system implemented in 2006 which serves Butts, Lamar, Pike, Spalding and Upson Counties, and is operated by the Council on Aging Transportation Service and administered by MTRDC. The cost for the service is $2.00 per ride. Spalding County should also explore the opportunity to layer resources from ARC – Draft Coordinated Human Services Transportation Plan. The ARC has resources to provide additional Federal Transit Administration (FTA) program funds, 5310 – on demand service for elderly individuals and individuals with disabilities. While the ARC – Job Access and Reverse Commute (JARC 5316) and the New Freedom 5317 programs are related to MARTA in Atlanta, they show the importance of providing transit to underserved populations. These types of programs and resources are needed to provide more options to Spalding County's underserved and disabled populations. Although fixed-route transit services within Spalding County are non existent at this time, the county has begun receiving FTA 5307 urban transit funds from ARC and will soon conduct a Transit Feasibility Study.

2.5.1.5 Freight Facilities

A major element of Spalding County's and Central Georgia's economy is manufacturing and logistics. These types of industries generate heavy truck and rail traffic, which in turn have a significant impact on the county's transportation system and quality of life. While truck and rail freight transportation is an essential element of the County's viability, the increased traffic has been the source of a great deal of contention, especially within central Griffin, where heavy

truck traffic contributes to congestion. Figure 20 provides and overview of Spalding County's truck and rail infrastructure.

By state law, trucks are permitted to travel on any road:

- That is designated as a state route,
- That is designated by a local authority as a truck route
- On any local road for local pick-up or delivery.

Spalding County has no additional designated truck routes beyond the State Route system. In Spalding County two of the primary thoroughfares, State Route 16 and SR 155 are routed through the center of the City of Griffin on urban streets with significant commercial and residential activities. Due to the location of the Interstate Freeway system, Spalding County's State Routes are in many cases the most convenient route for regional and inter-county truck traffic, as well as truck traffic serving Spalding County businesses.

A plan for a southern bypass, which would be constructed by upgrading and linking a network of mostly existing roads, has been adopted into the Regional Transportation Plan as a long range project. One major benefit of this plan would be the removal of through-truck traffic from SR 16 (Taylor Street) in Downtown Griffin.

Another major issue regarding truck operations in Spalding County is the intersection of State Route 155 and the Norfolk Southern Railway in Central Griffin. Trucks traveling SR 155 must make a turn at an un-signalized intersection at Hill Street immediately adjacent to multiple railroad tracks in the center of Downtown Griffin. This has been identified in several studies, including the Griffin Town Center Livable Centers Initiative Study, as not only an operational problem, but also as an obstacle to development and redevelopment of Griffin's central business district.

Norfolk Southern owns several railroad-rights-of-ways within Spalding County, most notably the Griffin Main Line, which bisects the County from north to south, and includes many at-grade crossings. Norfolk Southern's current usage of this rail alignment is relatively light, consisting of approximately ten trains per day. Norfolk Southern is currently considering operational changes which may significantly increase freight traffic along the Griffin Main Line.

Within Spalding County, there are 70 at-grade rail crossings. Only 12 of these crossings have gates. The at-grade crossings are listed in Table 17.

Table 17: Spalding County: Public At-Grade Motor Vehicle Crossings by City and Warning Device

City		Total	None	Cross-bucks	Stop Signs	Flashing Lights	Gates
Brooks	Near	**1**		1	0		
Experiment	In	**6**	2	1	1	2	
Experiment	Near	**4**		3	0		1
Griffin	In	**27**	8	7	3	4	5
Griffin	Near	**23**	4	10	7		2
Hampton	Near	**2**		2			
Orchard Hill	In	**1**		0			1
Orchard Hill	Near	**3**		2			1
Sunnyside	In	**1**		0			1
Sunnyside	Near	**2**		1			1
TOTAL		**70**	**14**	**27**	**11**	**6**	**12**

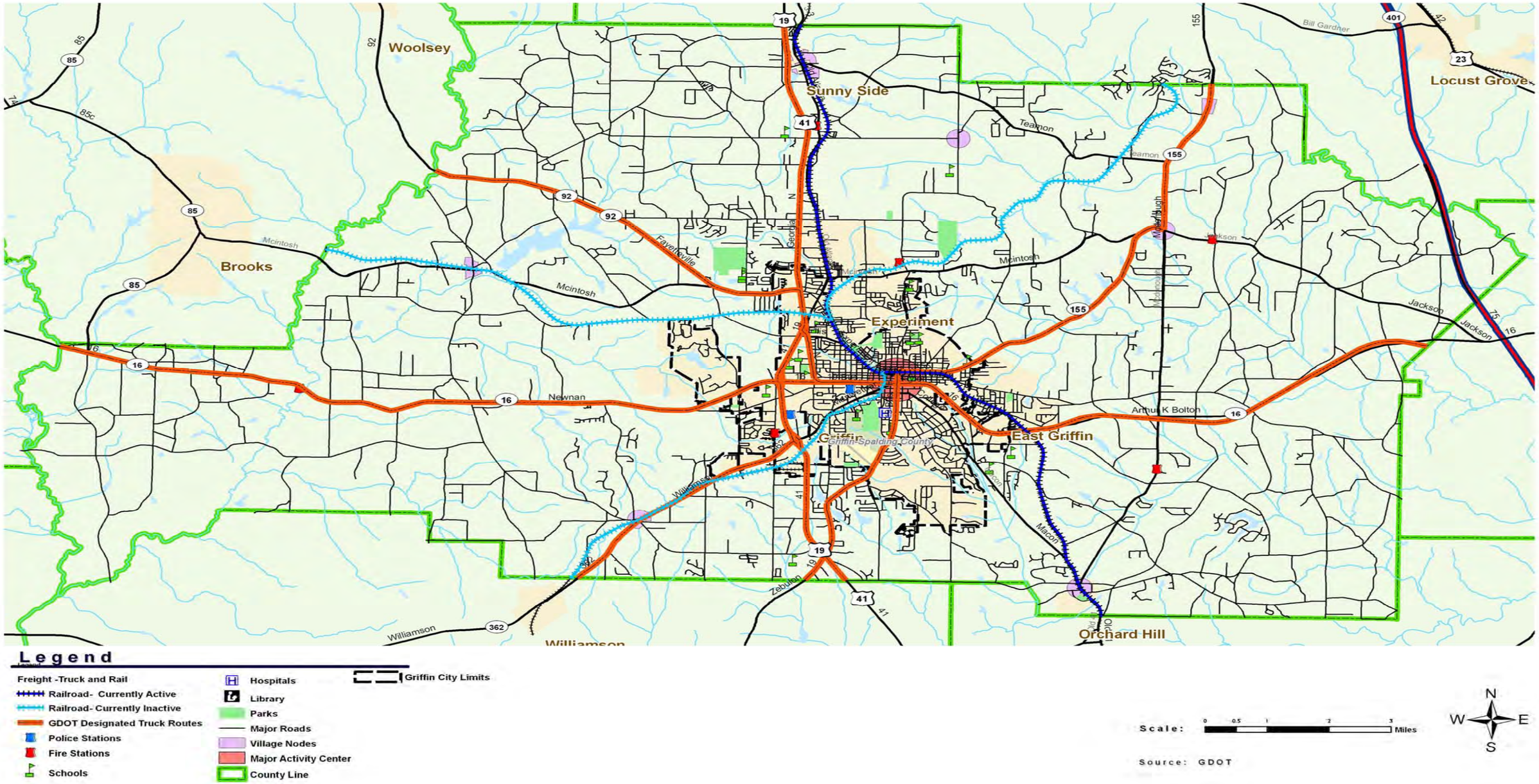
Source: Federal Rail Administration

Federal Rail Administration records report five vehicle collisions involving trains within the last ten years. These accidents resulted in one injury.

Within the entire county, there are only two grade separated crossing over the Griffin Main Line. The lack of grade separated crossings in Griffin has been cited as a serious problem by emergency service providers.

GDOT plans on building a grade separation at the intersection of the Griffin Main Line and State Route 16, near Green Valley Road. This project is scheduled for completion in 2013. State Route 155, also known as Hill Street, crosses three tracks at grade near the switching yard in central Griffin. Occasionally, trains will come to a stop across the intersection, blocking one of the county's main north-south arterials.

Figure 20:
Spalding County Freight, Truck and Rail Lines



2.5.2 Inventory Needs Analysis

2.5.2.1 Roadway Network Needs

2.5.2.1.1 Arterial System

Recommended additions to the Spalding County functional class network encompasses mainly minor arterial and collector roads. As the principal arterial system becomes more congested, this will allow short intra-county trips to remain on the secondary arterial and collector system both reducing congested conditions for through trips on the higher level arterial system and providing county residents with viable choices for intra-county trips. Minor arterial and collector roads are smaller in scale, serving short trips as access between developed land and the higher level arterial network that carries primarily longer distance inter-county and interregional trips. The minor arterial and collector road network needs to be capable of supporting planned development in areas that are currently undeveloped or sparsely developed. It is important that these roadways support increased travel demand but do not lead development. Additionally, future expansion of the network should support the orderly development envisioned by the Comprehensive Plan. The plan, which promotes village and commercial nodes to combat sprawl and focus development, seeks to preserve the rural character of Spalding County, while simultaneously accommodating growth.

2.5.2.1.2 Intra-County Access and Mobility

Improving intra-county access and mobility is a major objective of the Spalding County CTP. Improvements to access will be dealt with in part by requesting that both ARC and GDOT upgrade the functional classification of certain roadways. Upgrading roads to arterial and collector standards would facilitate the county's effort to improve the county arterial network. Mobility will be improved by making certain that there is adequate capacity and operational efficiency on the higher level road system, and the county can begin to develop alternative transportation systems as improvements and upgrades are implemented.

These access and mobility issues are very important to ensure connectivity amongst the planned developments around the county, including the Jenkinsburg and Sunny Side developments and the nodal development hubs. Public comment suggest that access improvements will ensure that business and economic activity generated by new developments will be supported by the county and will not be lost to surrounding areas. Equally important is ensuring that there are reasonable expectations and standards for local road connectivity such that as new developments are planned the local street grid is established to permit short trips to be made on local streets instead of the arterial system.

2.5.2.1.3 Regional Access and Mobility

Spalding County needs improved regional access and mobility to ensure that residents can readily access other parts of the Atlanta metropolitan area, and so that non-residents can access Spalding County. An objective of the Spalding County Comprehensive Plan is bringing

jobs to Spalding County. Maintaining and improving regional access is necessary to attract employers to the county. In addition, although there is substantial growth in jobs forecast for Spalding County, many residents work outside Spalding County in other parts of metro Atlanta and will continue to do so as the population of the county grows.

Proposed commuter rail from Atlanta to Macon, with the initial phase planned between Atlanta and Lovejoy, would be a major boost to the regional accessibility of the greater Spalding County area, which includes Pike, Lamar, Butts, Upson and Meriwether counties. Pursuing the extension of commuter rail operations from Lovejoy to Griffin should be a major policy and political objective for the county. Development of commuter rail would also support the Griffin LCI objective of revitalizing downtown Griffin with high density, mixed-use development, as well as fuel the proliferation of the University of Georgia Griffin Campus.

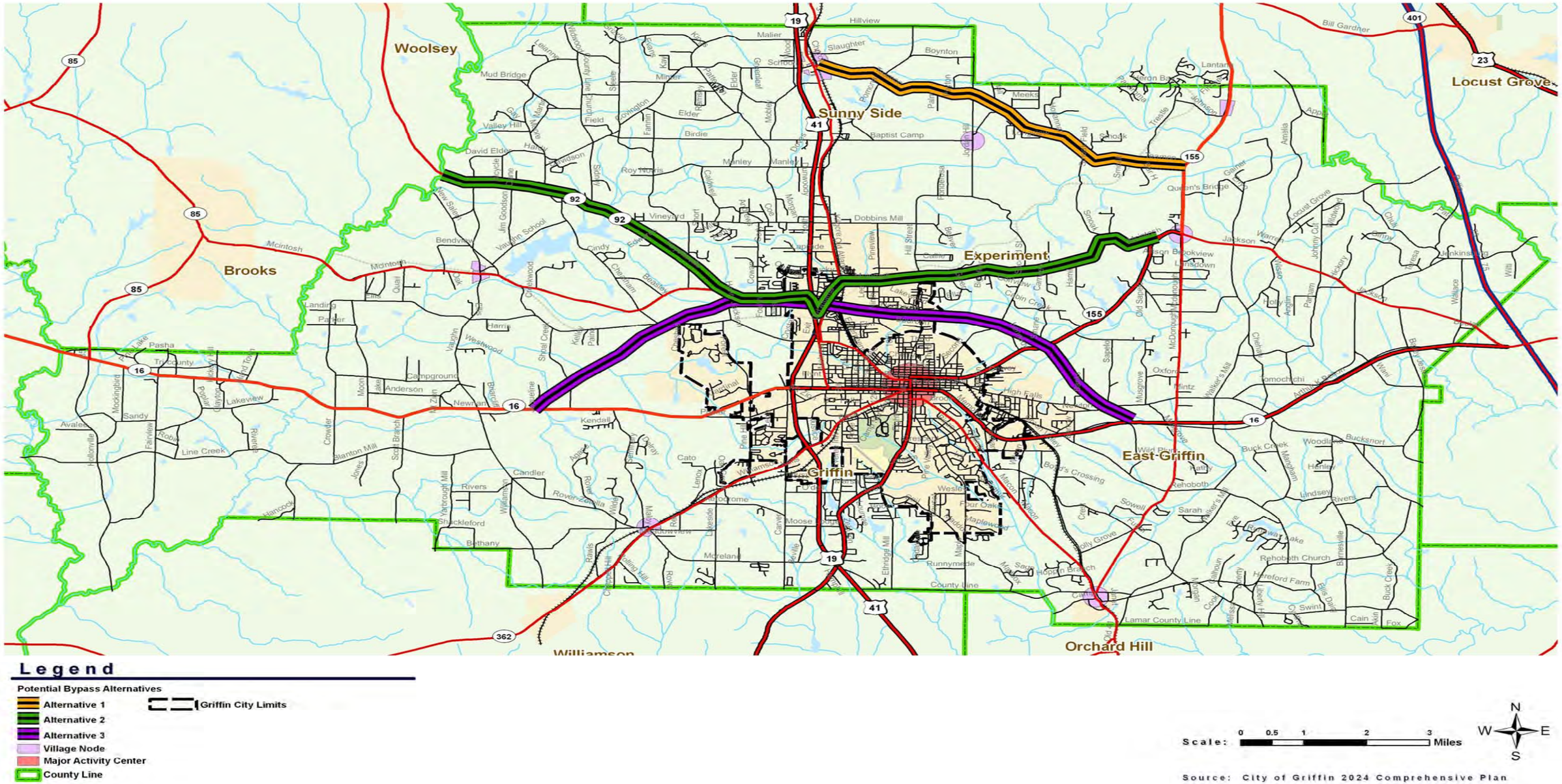
Currently, Spalding County's transit needs are served by a 5311 demand-response rural transit program that is funded in part by the Georgia Department of Transportation. This system provides cross-regional access to users on the south side of Atlanta. Local stakeholders have discussed the idea of establishing a feeder bus, as an extension of the 5311 program, to the existing GRTA bus service that operates along US-19/41 (route 440) from the Atlanta Motor Speedway, in Henry County, to downtown Atlanta. Additionally, there is a potential to extend GRTA commuter bus service (route 430), which runs from McDonough to Atlanta, south into Spalding County to the proposed interchange at I-75 at Jenkinsburg Road.

Currently there is no direct Interstate access within Spalding County. As the county grows, particularly in the northeast quadrant, the new interchange at Jenkinsburg Road that was initially proposed in the GDOT multi-county study should be further explored through an Interchange Justification Report (IJR). A new interchange would provide better access to the fastest growing portion of the county and support higher density regional commercial, industrial and mixed-use development proposed by the Spalding County Comprehensive Plan. An Interstate I-75 interchange would also support the objective of bringing jobs to Spalding County, and potentially increase the county's tax base. The Southern Regional Accessibility Study (SRAS) funded by ARC and GDOT further confirms the need for the proposed interchange.

US-19/41 and SR-16 are two primary roads that traverse Spalding County and provide the greatest levels of direct access to the county to the greatest number of vehicles. GDOT currently has plans to improve US-19/41 and recently completed a number of turn lane and intersection improvement projects in Spalding County. Capacity projects are programmed for the stretch of US-19/41 from Ellis Road to the Henry County line. Improvements to the facility were further explored and confirmed as part of the ARC's US-19/41 Tara Boulevard Multimodal Corridor Study. Spalding County, ARC and GDOT should make efforts to improve US-19/41 to maintain its capacity and operational efficiency. SR-16 is currently being widened from two to four lanes from I-75 to US-19/41. SR-16 is a vital linkage in the Atlanta Southern

Crescent between I-75 and I-85, and a major route for truck traffic. Spalding County should support the project identified in the ARC's Southern Regional Accessibility Study (SRAS) that calls for widening and improvement of SR-16 west of US-19/41 and eventually to I-85. GDOT's Office of Environment and Location is currently studying in greater detail, the proposed SR-16 truck bypass of downtown Griffin and will identify several alternative alignments for the proposed facility. Figure 21 illustrates three potential bypass alternatives as presented in the City of Griffin 2024 Comprehensive Plan. Alternatives 1 and 2 propose a potential bypass corridor along an existing alignment, while Alternative 3 proposes a potential bypass corridor on a new location.

Figure 21: Potential Bypass Alternatives



2.5.2.1.4 Case Study – US 19/41, UGA Griffin, Old Wal-Mart

One scenario or case investigated during the half-day charrette/workshop held during the course of the CTP development was an evaluation of the US 19/41, UGA Griffin and Old Wal-Mart corridor. The workshop provided an opportunity for the community to participate in developing a framework that would make the university more accessible and the corridor more functional, pleasant and viable to the county. The strategies developed as a result of this workshop identified various roadway needs in the area.

The stretch of US 19/41 and US 19/41 Business under observation is a limited access facility along a part of its length and laden with signalized intersections along its extent. It was originally built as a north-south bypass to downtown Griffin, but suburban growth has now consumed this corridor with big box retail and strip shopping centers. Besides the new Wal-Mart and other retail development around it, the study area, between Taylor Street and Laprade Road, is also home to the University of Georgia Griffin Campus and Griffin Technical College. The corridor was identified as a barrier to good east-west connectivity within the county. The large amount of through traffic which traverse this six (6) lane, limited access corridor, at high speeds, poses a challenge to pedestrian safety as well as to the economic development potential of the area.

Workshop participants identified the following goals which they thought a plan for this area should address:

- Provide access to local traffic such that local trips do not have to depend on US 19/41
- Provide for improved access on and off US 19/41
- Promote mixed use infill development and intensity to revitalize dead shopping centers
- Facilitate pedestrian access across the corridor particularly to allow easy access to UGA students and facilitate the UGA campus expansion
- Improve car carrying capacity on US 19/41
- Reduce speeds as through traffic on US 19/41 moves across this part of the town
- Improve connectivity from this area to downtown Griffin

The following strategies and Figure 22 provides one potential approach to guiding the expected investment in the area to help achieve the goals set forth by the public.

Push back the limited access

The limited access (ramps and interchanges) character of the corridor provides priority to through traffic and exacerbates the impact of the corridor as a barrier. Allowing regularly spaced intersections between Ellis road and West McIntosh Road will help east-west cross access, increase total intersection capacities, and allow for a range of strategies that will enhance the quality of place. Since there is some possibility that an interchange reconfiguration will be considered in the area, this approach could be implemented as a part of that project. US 19/41 could continue to be a limited access facility south of the Ellis Road bridge.

Separate the confluence
Two parallel routes, Old Atlanta Road and US 19/41 come together where the local street essentially serves as a ramp to the limited access corridor. Separating these key parallel routes by flattening the curve of US 19/41 will create two clear or distinct routes.

Developing equally spaced cross streets between these two routes would provide multiple access points to and from US 41/19. This would help to spread the load previously carried on one single merge or intersection to multiple intersections.

Build a network of streets and develop a small block structure
Developing north-south and east-west parallel streets is essential to enabling local access between properties, shopping centers, commercial establishments, etc. Developing these parallel connections will decrease the dependence on US 19/41 for local trips.

Blocks typically sized at about 400 feet promote a good walkable structure for places. These blocks allow for the development of a good street network and reasonable built density that can provide surface parking. As block sizes get bigger, walkability and street networks are compromised resulting in some of the problems seen on this corridor

Encourage mixed use infill development built to the street
With the street network and blocks in place, higher intensity development built to the street, can be encouraged. A mix of uses with ground story retail, will develop with sidewalks and pedestrian amenities. All key streets would be built pedestrian friendly. It could be expected that student-friendly uses such as a bookstores and restaurants would want to be in this type of environment.

The group felt that the old Wal-Mart site could be redeveloped as infill student housing with the potential to serve both Griffin Tech and the UGA campus. Building on the street and small street block structures will allow for new residential infill development to occur in place of single use retail pads with their parking lots. This design will provide for a richer live, work and play environment. With the structure and network outlined and adopted as a plan, this network development and new infill can happen incrementally over time.

Build public spaces and "front doors"
The separation of the confluence and the development of streets and blocks present an interesting opportunity for UGA to make this western edge the "front door" to their new expanded campus with buildings built to the street and new opportunity for public space.

As traffic on US19/41 slows down moving through the student activity center/UGA front door, this town center scale of development will allow for new economic development opportunities.

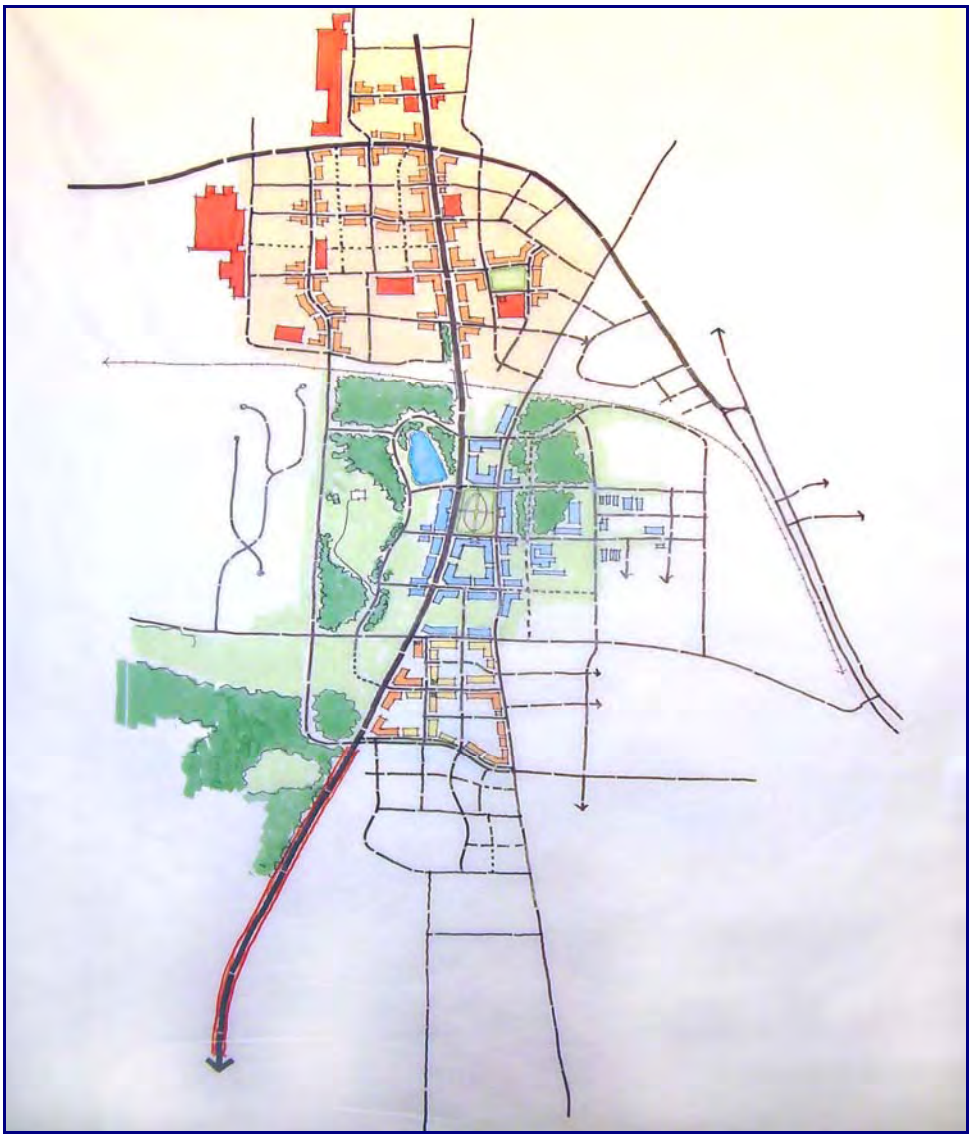


Figure 22: SR-19/41, UGA Griffin, Old Wal-Mart Development Rendering

2.5.2.1.5 Roadway Safety

GDOT crash records for Spalding County from 2000 through 2005 were analyzed using a Geographic Information System to develop a summary of road safety conditions. Figures 12 and 13 identify road and pedestrian safety locations in both Spalding County and the City of Griffin. Crash histories for intersections and key corridors were used to determine intersections with significantly high crash rates. This data is detailed in the existing conditions assessment.

Based on high vehicular crash rates, the following intersections as indicated in Table 18, have been identified as in need of detailed engineering assessment and possible improvement or modification.

Table 18: Intersection Safety Needs

Jurisdiction	Major Road	Minor Road
County	SR 16	Shoal Creek Rd.
	SR 362	Lenox Rd.
	Birdie Rd.	Moore Rd.
	US 19/41	Moreland Rd.
	SR 16	Rover-Zetella/Vaughn Rd.
	Ellis Rd.	N. Pine Hill/Henry Jackson Road
	SR 16	W. Ellis Rd./Crowder Rd.
	SR 155/Jackson Rd.	Hamil Rd.
	Macon Rd.	County Line Rd.
	North Hill St. Ext.	E. McIntosh Rd.
	US 41	County Line Road
	Teamon Rd.	Jordan Hill Rd.
	High Falls Rd.	S. Walkers Mill Rd.
	Teamon Rd.	Smoak/Smoak Field Rd.
	E. McIntosh Rd.	N. 2nd St.
	Jackson Rd.	Jenkinsburg Rd.
	High Falls/Bucksnort Rd.	Bailey Jester Rd.
	Jackson Rd.	N. Walkers Mill Rd.
Griffin	Carver Rd.	Poplar Rd.
	SR 16	Pine Hill Rd.
	SR 16/Memorial Dr.	Hamilton Blvd.
	Solomon St./High Falls Rd.	Searcy Ave.
	SR 16/Taylor St.	Spalding Dr.
	North Expressway	Ellis Rd.
	North Expressway	Varsity Rd.
Orchard Hill	County Line Rd.	Ethridge Mill Rd.
	County Line Rd.	S. Sixth St. Ext.
	Swint Rd.	Rehobeth Church Rd.
Sunny Side	Baptist Camp Rd.	Old Atlanta Rd./ Railroad Tracks
	Old Atlanta Rd.	Teamon/School Rd.
	US 19/41 SR 3	School Rd.
	US 19/41 SR 3	Mailer Rd.

Based on high vehicular crash rates (normalized by traffic volume), the following road segments shown in Table 19 below, have been identified as in need of detailed engineering assessment and possible improvement or modification:

Table 19: Road Segment Safety Needs

Jurisdiction	Road Name	From	To
County	SR 155	N McDonough Rd	N County Line
	SR 16	McDonough Rd	E County Line
County/Griffin	SR 92	Cowan Road	US 19/41
	SR 16	US 19/41	W County Line
	SR 16	McDonough Rd	Third St
	SR 155	Hill St	N McDonough Rd
	McIntosh Rd.	SR 155	Old US 3
Griffin	SR 155/ Hill St	Central Ave	College St
	US 19/41	SR 16	North Expressway
	SR 16 /W Taylor St	Third St	North Expressway
	North Expressway	Taylor St	US 19/41
	SR 155/ Hill St	College St	US 19/41
	US 19/41	North Expressway	Vineyard Rd
	SR 003	SR 16	SR 155

Potential safety issues were also observed at multiple locations throughout Spalding County. The following intersections are in need of further design and safety review based on observed deficiencies:

- High Falls Road/Solomon St & NS Railroad Tracks: Line-of-Sight, Signage roadway markings, and Railway crossing safety equipment
- N. McDonough road/Horseshoe Bend Circle: Line-of-Sight, Vertical Alignment, Signage
- E. McIntosh Road/Weldon & Cecil Jackson Road: Line-of-Sight, Horizontal Alignment
- Bailey Jester Road/Bucksnort Road: Line-of-Sight, Horizontal Alignment
- Teamon Road/Smoke Field & Smoke Road: Line-of-Sight, Horizontal Alignment

Comments collected from stakeholder interviews and public meetings indicate that safety measures need to be implemented around the road systems that border school infrastructure. Throughout the needs assessment process it was necessary to know the planned and programmed projects that were carded for Spalding County.

2.5.2.2 Pedestrian Needs

Griffin has an extensive sidewalk network, especially in the downtown area. The same is not true for the remainder of this suburban and rural county. This is unfortunate as Spalding County has a higher share of residents over age 60 when compared with the rest of the state. Spalding also has a growing population of middle-aged residents without children. The presence of sidewalks will also contribute to the success of the proposed development of commercial nodes and mixed use nodes throughout the county. The nodes will provide destinations for close-by neighborhoods, allowing people to walk to these centers to obtain everyday needs and build a sense of community as they see other people walking. Additionally, the existence, expansion and ongoing maintenance of sidewalks is important to

the mobility and health of seniors, the physically challenged, children and other citizens who do not have other transportation options.

Spalding County's Subdivision ordinance already requires that all new residential subdivision development incorporate sidewalks as a part of the development. It is further recommended that the same requirements be made for all new development and redevelopment projects in the county, whether they are multi-family development, village nodes, general commercial, industrial or mixed use development. This would allow the County to focus on infill sidewalk implementation, to connect new developments to existing development and nodes within the county, along arterial and collector roads, and develop an ongoing maintenance program for existing neighborhoods and repairs in the urban area.
Additional pedestrian safety measures often incorporated into future development include:

- No right turn on red in high pedestrian corridors.
- Increased crosswalk and pedestrian oriented signals.
- Raised medians on multi-lane segments of streets with heavy traffic to allow pedestrians a safety zone.
- Access management standards to reduce curb cuts that are hazardous to pedestrians.
- Maximum setbacks and incentives for shopping centers with rear or side parking to provide pedestrian access from the street.
- Street trees to provide shade from the sun and act as a barrier from vehicular traffic.
- Pedestrian bridges and underpasses to cross high traffic, high speed corridors.

To promote better connectivity within the county, technical staff, from observation, identified the need to fill the gaps which exist in the sidewalk system in the Griffin downtown area as well as within the County's established village nodes or centers. Gaps within the sidewalk system in the core downtown area need to be filled to provide a well connected and walkable downtown core. Proposed sidewalk needs in the City of Griffin include:

- 14th St. - Broad St. to Experiment St.
- 15th St. - Poplar St. to Experiment St.
- 16th St. – Poplar St. to Experiment St.
- 17th St. - Taylor St. to Experiment St.
- Ray St. - 17th St. to Experiment St.
- W. Solomon St. - 16th St. to North Expressway.
- W. Slaton Ave. - 10th St. to 18th St.
- 12th St. - Experiment St. to Taylor St.
- Spalding Dr. - W. Taylor St. to Varsity Rd.
- W. Poplar St. - 18th St. to Pine Hill Rd.
- Experiment St. - Lyndon Ave. to W. McIntosh Rd.
- Ellis Rd. - Experiment St. to North Pine Hill Rd.
- 5th St. - Taylor St. to Jefferson Ave.
- 3rd St. - Tinsley St. to Blanton Ave.

Sidewalk infrastructure is also needed in the village nodes to support the proposed concentrated mixed land use. While these nodes take form, and internal connections are developed to support the land use, the technical team has identified major segments along which sidewalks should be provided. These roadways include:

- SR 362
- Moreland Rd.
- East and West McIntosh Rd.
- Ellis Rd.
- Vaughn Rd.
- Jackson Rd.
- North and South McDonough Rd.
- Baptist Camp Rd.
- Smoak Rd.
- Jordon Hill Rd.
- Macon Rd.
- Teamon Rd.
- Johnson Rd.
- School Rd.
- Vaughn School Rd.

2.5.2.3 Bicycle Needs

The Spalding County 2024 Comprehensive Plan has a comprehensive network of open spaces. The plan also recommends the development of a county-wide Greenway Master Plan which would coordinate the development of sidewalks, bikeways and multiuse trails to complement and connect open spaces and nodes. Spalding County needs improved bicycle facilities, both to support destination-oriented bicycle travel, in which the bicyclists primary aim is to reach a destination, such as work or shopping, and recreational cycling, in which the cycling itself is the goal, for both recreational and health benefits. To support these goals it is necessary to develop both on- and off- street bicycle facilities.

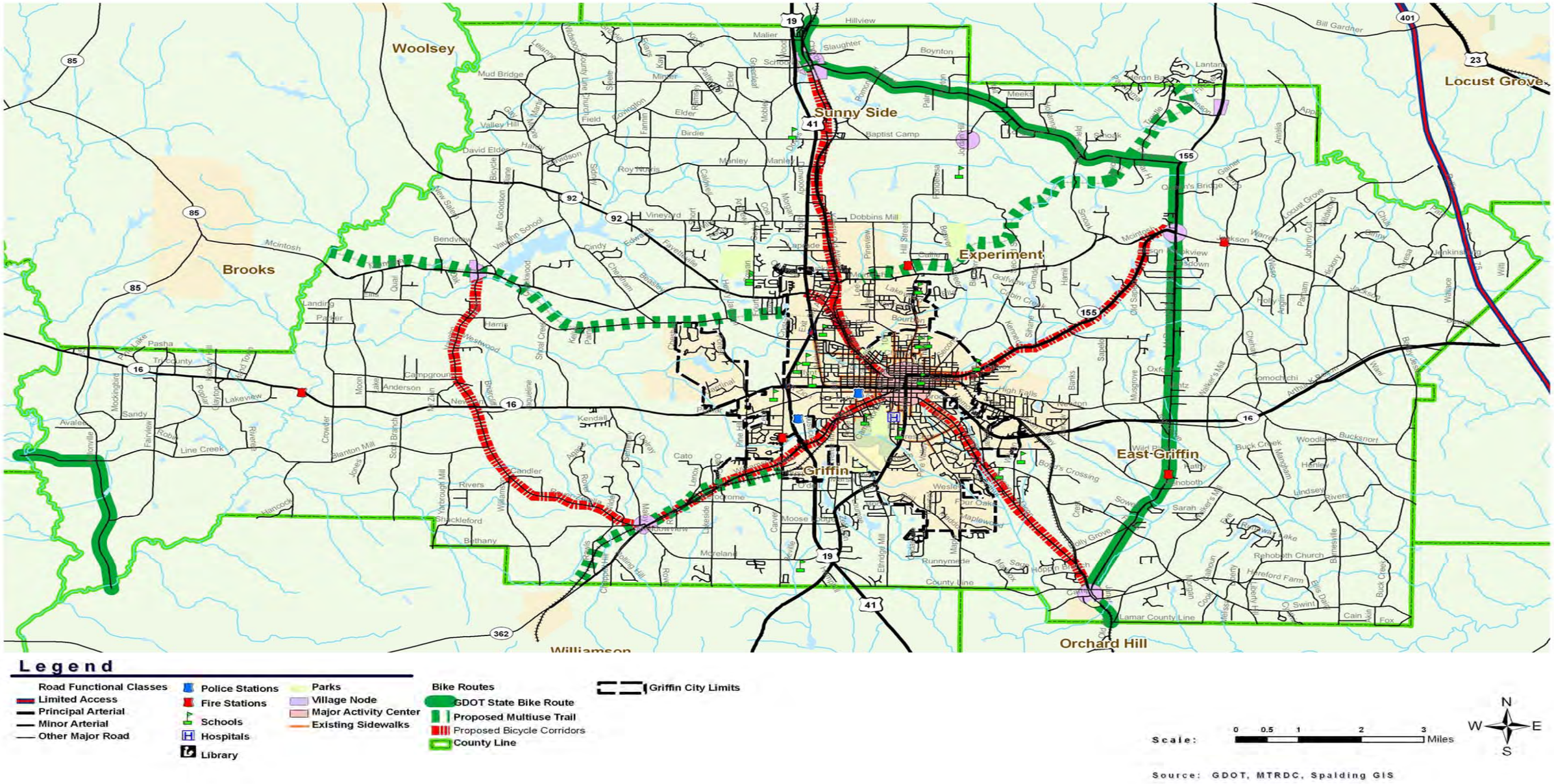
The basic framework of the county's bicycle network should be a radial system that effectively connects activity centers and village nodes throughout Spalding County. The county should implement on-street bike lanes along key corridors between centers and nodes. Adding cross-connectivity within that radial network would be on-street routes along minor arterials, collectors and local roadways.

A secondary network of off-road multi-use trails could be built along existing and proposed sewer rights-of-way, rail rights-of-way, and stream alignments. These would serve to link existing schools and parks into the bicycle network. Bicycle safety education should also be an integral part of any bicycle plan development. The technical staff, from observation, has identified major corridors that can possibly support both locally and regionally connected bicycle infrastructure. These include but are not limited to:

- Hill St.- Teamon Rd. to US 19/41
- Ellis Rd. – Experiment St. to Vaughn Rd.
- Solomon St./High Falls Rd.- N. Expressway to Barnesville Rd.
- SR 155 - N. Hill St. to E. McIntosh Rd.
- Experiment St. - N. Hill St. to W. McIntosh Rd.
- Old Atlanta Rd. - Experiment St. to Teamon Rd.
- Macon Rd. – E. College St. to S. County Line Rd.
- Williamson Rd./Meriwether St. - Taylor St. to Rover-Zatella Rd.
- Rover-Zatella Rd. - SR 362 to SR 16
- Vaughn Rd. - SR 16 to W. McIntosh Rd.

Figure 23 illustrates a potential bicycle network for the County, which integrates the GDOT bike routes, the proposed multiuse trails and the above identified corridors that can support bicycle infrastructure.

Figure 23:
Spalding County Potential Bicycle Network



2.5.2.4 Transit Needs

Spalding County's public transportation needs are served by a regional 5311 demand-response transit system implemented in 2006 which serves Butts, Lamar, Pike, Spalding and Upson Counties, and is operated by the Council on Aging Transportation Service and administered by MTRDC. The cost for the service is $2.00 per ride. Spalding County should also explore the opportunity to layer resources from ARC – Draft Coordinated Human Services Transportation Plan. The ARC plan has resources to provide additional Federal Transit Administration (FTA) program funds, 5310 – on demand service for elderly individuals and individuals with disabilities. While the ARC – Job Access and Reverse Commute (JARC 5316) and the New Freedom 5317 programs are related to MARTA in Atlanta, they show the importance of providing transit to underserved populations. These types of programs and resources are needed to provide more options to Spalding County's underserved and disabled populations.

Fixed-route transit services within Spalding County are non existent at this time. There is a clear need in Spalding County for improved public transportation options to serve the general population. As a new recipient of the Federal Transit Administration (FTA) Section 5307 Urbanized Area Transit funds, the county plans to conduct an assessment of the current and future transit needs in Spalding County and explore a number of alternatives. Further analysis should confirm or identify the following needs:

2.5.2.4.1 Commuter Rail

- Commuter rail service between Griffin and Atlanta along the proposed commuter rail alignment. As a longer term need, continued service to Macon should be considered.
- Commuter rail service and facilities, including stations, platforms, service facilities, and affiliated services such as parking.
- Upgraded or consolidated track alignment and crossing facilities to maintain safety with higher frequencies and train speeds associated with commuter rail.

2.5.2.4.2 Bus Transit

- Regional transit service between Spalding and surrounding communities including Clayton, Henry, Coweta and the City of Atlanta should be developed in accordance with the Transit Planning Board's vision for the 20-county region, "Concept 3". The Georgia Regional Transit Authority (GRTA) Xpress bus route 440 currently provides service between Atlanta and the Atlanta Motor Speedway in Henry County. This stop is only 2 miles north of the Spalding County Line and approximately 10 miles north of Griffin. This represents a long distance for households and individuals without cars. Local stakeholders recommend utilizing a dedicated 5311 demand-response bus to make AM/PM runs between the Atlanta Speedway, a new park and ride lot, and downtown Griffin, to fill this gap in service. Availability of this service would serve as an intermediary measure until commuter rail is implemented. Once service is established, it

could facilitate a reduction of commuter traffic on US 19/41, as commuters from Spalding County and surrounding counties begin to utilize it.

- Fixed-route transit service within Spalding County. Ideally, such a service would provide frequent scheduled circulation within a core area consisting of Griffin, the Hospital, business parks, industrial parks and schools to the southeast, the US-19/41 and SR-92 Commercial Corridors, and underserved neighborhoods. This core service would be augmented by less frequent radial service which would connect the core area to outlying activity nodes and provide access to neighboring transit systems such as GRTA. Since transit service is flexible and readily adaptable, new service could be added as necessary with increased development.

2.5.2.5 Freight Needs

Among the most common concerns raised throughout the Spalding County Comprehensive Transportation Planning Process was the presence of through truck traffic in historic downtown Griffin's central business district (CBD) and the inadequate capacity and turning radii along state routes within the county. The Atlanta Regional Commission recently completed the Atlanta Region Freight Mobility Plan, which indicates that truck traffic in the 20-county region will increase by an average of 83% by 2030, thus, placing 15,000-30,000 trucks per day on SR 16 in the vicinity of downtown Griffin. The ARC report also indicated that the section of I-75 between I-675 and SR 16 experiences significant movement delays, and is among the top 11 congested hotspots and corridors in the region. While concerns about this issue are nearly universal, there is a great deal of controversy regarding the appropriate response. It remains clear however, that there is a significant need in Spalding County for improvements, projects and policies to limit truck traffic in the central business district.

2.5.2.5.1 Truck Routes

Trucks are an important element of the region's economic base, and Spalding County is no exception. As such, trucks present a number of challenges and issues for the community. Solutions to the challenges and issues faced by Spalding County must provide equal or improved access for trucks; otherwise the County's public safety and economic viability may be threatened.

Key needs to be addressed are:

- State Route 16 is the southernmost, east-west designated truck route in the 20-county region. It provides important east-west access between the Interstate 75 and Interstate 85 Corridors. Currently truck traffic heavily utilizes State Route 16, which bisects the heart of Griffin. This causes significant mixing between through-truck traffic and local commercial traffic, which is further compounded by congestion due to downtown retail activity and frequent traffic signals. The widening of SR 16 between I-75 and Griffin, from 2 to 4 lanes is already underway; however as truck volumes increases along this route, the need to widen SR 16 between Griffin and I-85 and construct a bypass route will become more significant. A southern truck bypass has been proposed and

programmed to address this need. The Georgia Department of Transportation (GDOT) is currently conducting a Feasibility and Alternative Alignment Study to determine the best location for the facility.

- North-south access along the current SR-155 Corridor. The current alignment of SR-155 uses a two-lane, mostly-residential road which routes trucks into Griffin's central historic district by way of a difficult sharp turn across several rail tracks. Several proposals are currently being considered to re-route or de-designate this state-route; however, the proposals have not been amicable to all stakeholders. Despite the reluctance on the part of some stakeholders, there remains a clear need to better connect Spalding County's manufacturing and logistics businesses to the state highway network and to existing logistics businesses along SR-155 in Henry County.

2.5.2.5.2 Railroad Needs

The City of Griffin thrived in the 19th century because of the excellent rail connections between the surrounding counties and especially the passenger transportation connecting Griffin to Atlanta. Today however, Spalding County's rail network serves freight movement only. The Atlanta Regional Commission's, Atlanta Region Freight Mobility Plan indicates that rail freight will increase by 37% by 2030.

Based on existing deficiencies and anticipated changes in freight and passenger rail service, the following items are needed to maintain a reasonable level of service and safety:

- Replacement of low bridges, including the 6th Street Bridge in Griffin to allow for double-stacked freight service.
- Additional grade-separated rail crossings throughout county, particularly within the city limits of Griffin, Orchard Hill and Sunny Side.
- Safety upgrade for rail crossing at Solomon Street and High Falls Road.
- Implementation of crossing projects identified in the Georgia Commuter Rail Study Findings of No Significant Impact (FONSI).

2.5.2.6 Aviation Needs

There has been increasing public interest regarding possible expansion of the local airport that is located within the Griffin city limits, approximately one mile south of downtown. A newer regional facility would serve Spalding and adjacent counties. Based on existing deficiencies and anticipated changes in aviation service and economic development, the following items are needed at either the existing Griffin-Spalding County airport, or at a new airport location, to maintain a reasonable level of service and safety:

- Increased runway length to support mid-sized corporate and commuter jets.
- Improved ground side facilities and terminal to support corporate jets service and passenger service

2.5.2.7 Environmentally Sensitive Areas

The environmental constraints within the county consist of streams, wetlands and floodplains. This is particularly evident in the northern half, and western reaches of the county. Additions to the street network in those vicinities require additional consideration. The county's goal of conserving rural character areas, scenic areas, and the water supply, results in a need to minimize stream crossings and development in recharge areas. Where it is impossible to avoid new road development or expansion of existing roads, special attention to the promotion of environmental awareness should be incorporated into the design of streets, manholes and bridges. Figures 24 and 25 show the Floodplains and Groundwater Recharge Areas within Spalding County.

2.5.2.8 Environmental Justice

ARC guidelines indicated that census tracts where more than 9.1% of the households are below the poverty line, or census tracts that have a Black population percentage above 30.3%, qualify as Environmental Justice Communities. Figure 26 indicates the qualifying Environmental Justice communities in Spalding County. The map indicates most of the eastern part of the county qualifies, but realistically, as the mostly rural areas increase population with new development, these statistics will change. The same is not true for the north and east areas of Griffin, specifically tracts 1603,1604,1608,1609, and tract 1607 in the southwest Griffin, Meriwether corridor. The Griffin Comprehensive Development Plan recognizes these areas as redevelopment areas.

Historically, urban areas with high poverty rates have populations that are extremely dependent on public transit. Where there is no transit, the population is dependent on other modes, such as bicycles and walking. It is very important that a comprehensive multi-use trail system, safe bicycle routes and a system of well-maintained sidewalks be available to these neighborhoods. Pedestrian safety is also a major concern for neighborhoods adjacent to major traffic corridors and active rail lines. The safety of at- grade railway crossings and the proximity of the rail line to Meriwether Street need to be reviewed. Sidewalks need to be kept in good condition, and the system, including multiuse trails, needs to be expanded with public funds, such as impact fees, as there is generally less likely to be new development within the immediate area of these neighborhoods.

The county also needs to continue to lobby for commuter rail and local transit. The extension of GRTA Xpress commuter bus route 440, from Atlanta Motor Speedway stop in Henry County to Griffin, will make jobs in Atlanta more accessible to Spalding residents, and revisiting a local county transit service will provide a means for those without access to cars to seek jobs within the county and in the Atlanta area.

It is important to also ensure that the list of priority transportation projects throughout the county include a representative list of projects in environmental justice areas, with funding in the short and medium terms.

Figure 24:
Spalding County Floodplains

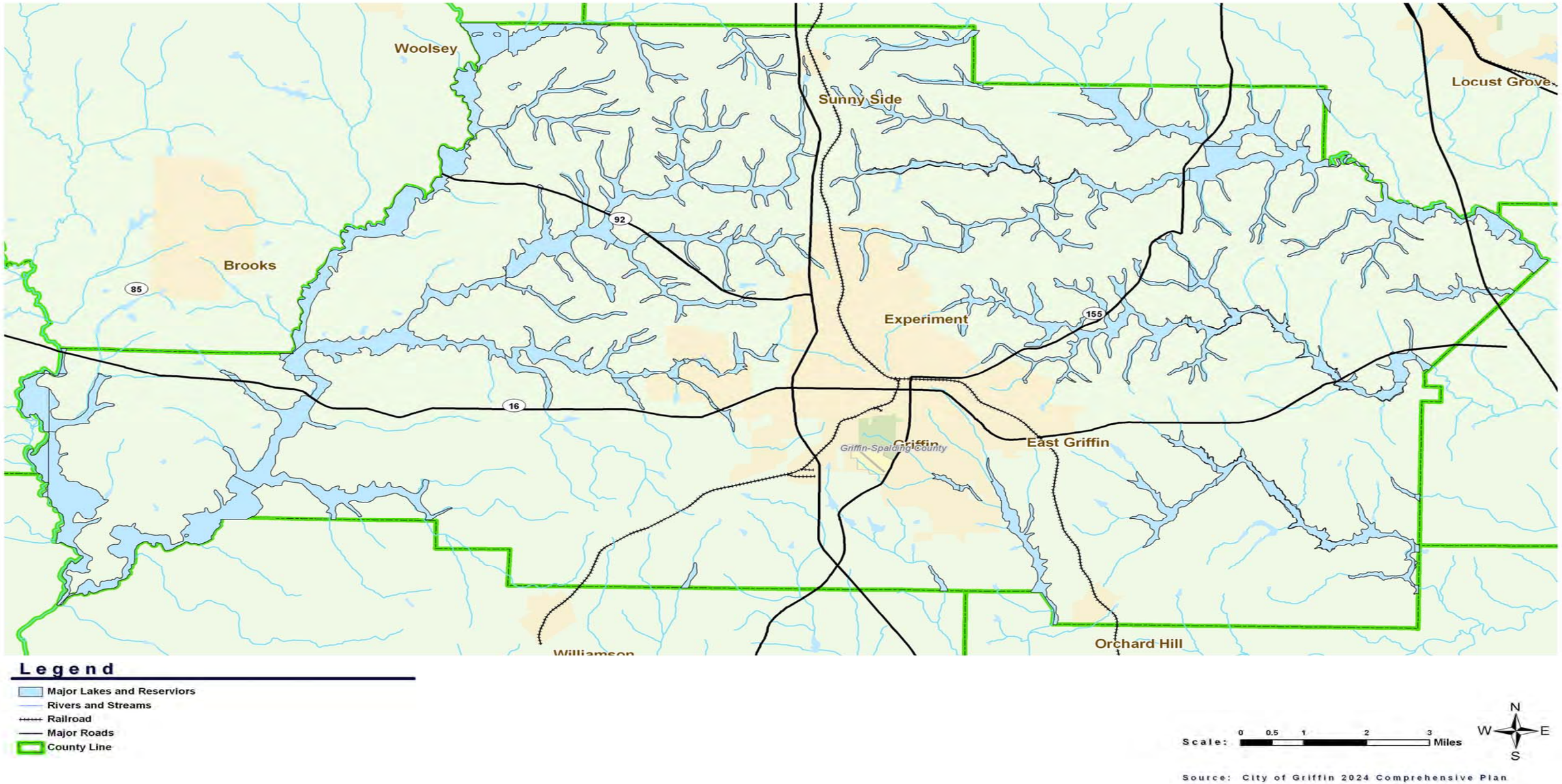


Figure 25:
Spalding County Groundwater Recharge Areas

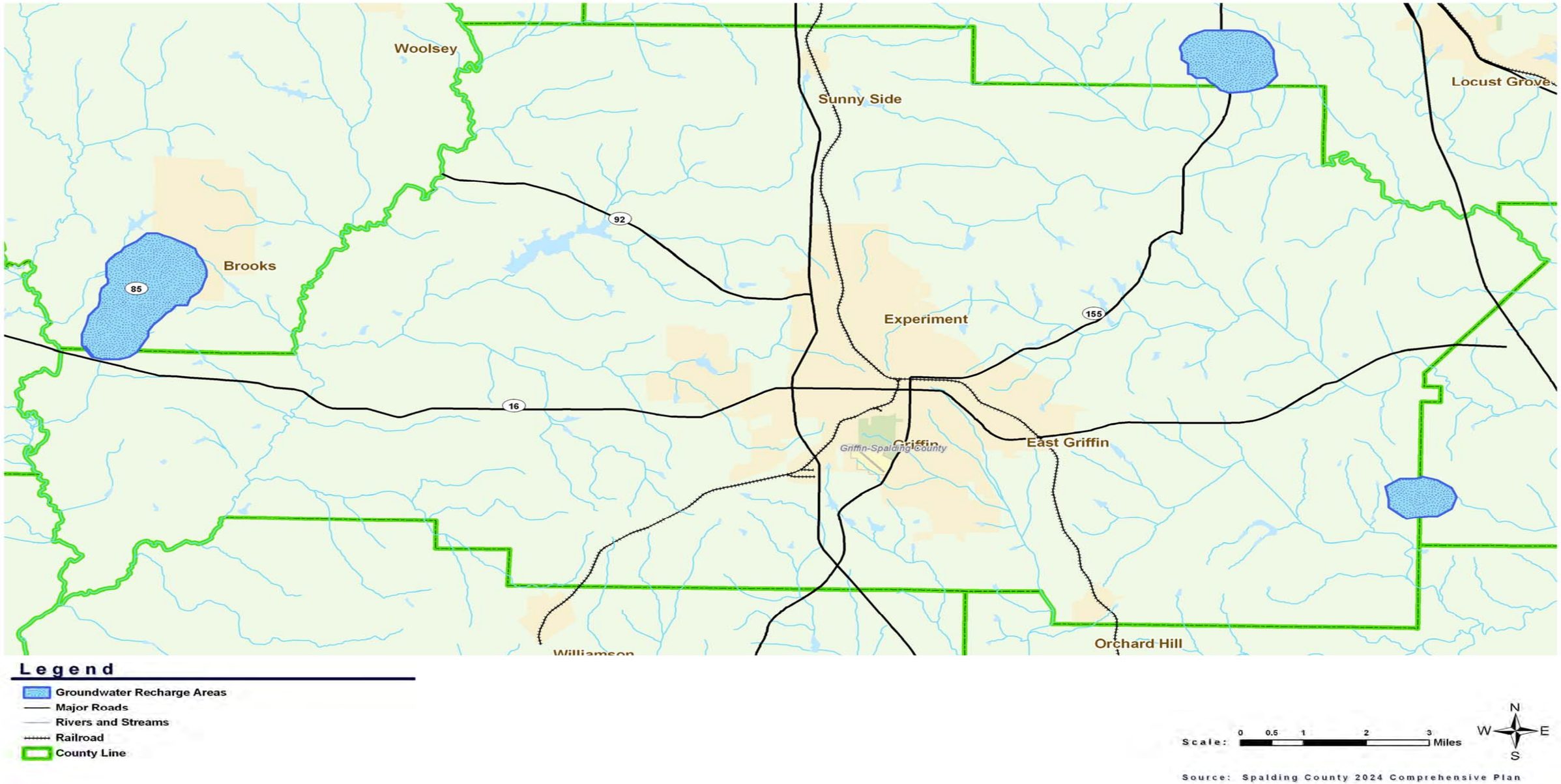
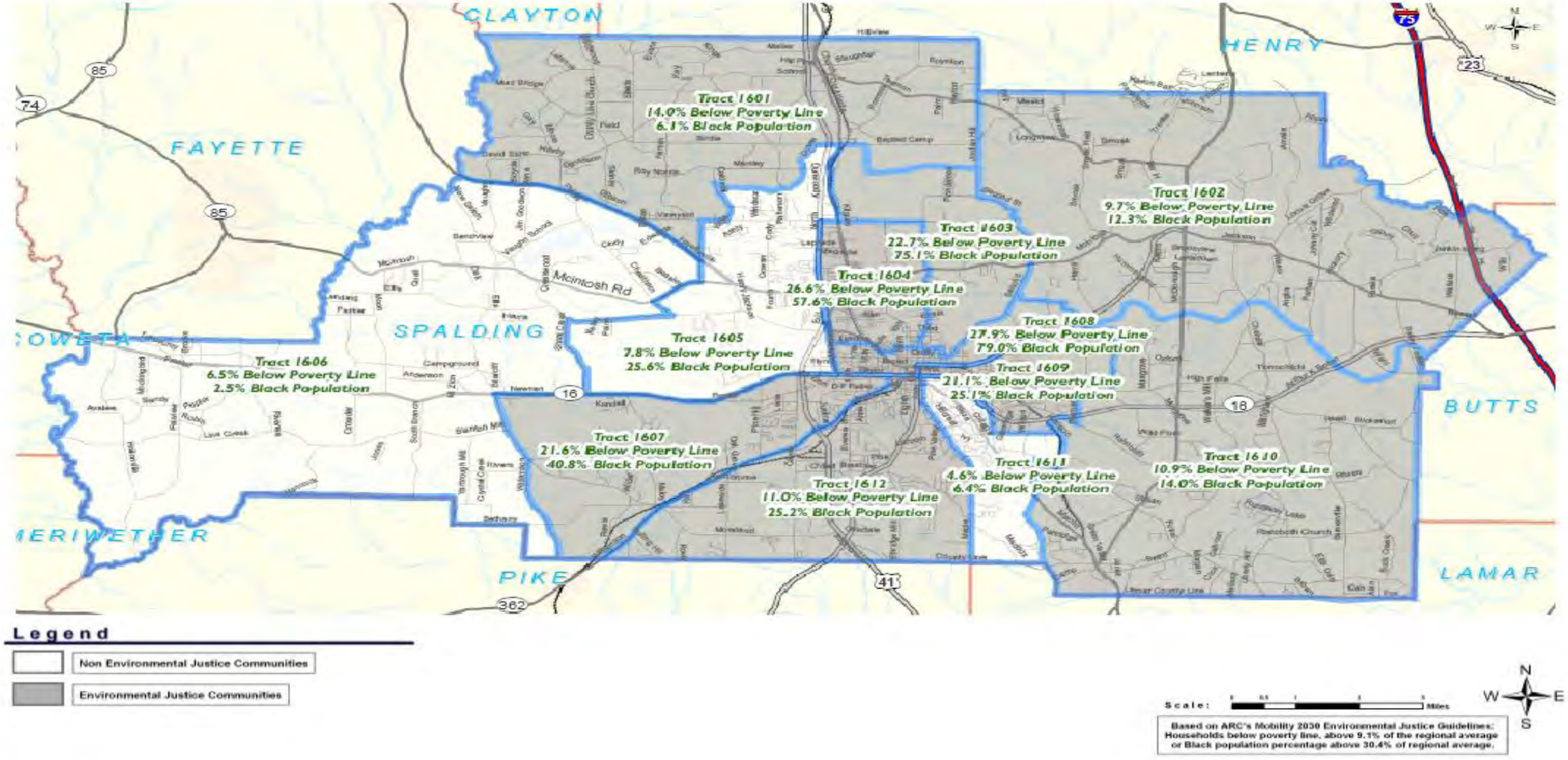


Figure 26:
Spalding County Environmental Justice Communities



3.0 RECOMMENDATIONS – POLICIES AND PROJECTS

3.1 Policy Framework

The Spalding County Comprehensive Transportation Plan was developed taking into consideration the Spalding County Comprehensive Development Plan (CDP) that was prepared and adopted in 2004.

3.1.1 Regional and County Framework

The Atlanta Regional Commission's *Envision6* Policy Plan identifies a policy framework within which the Spalding County Comprehensive Transportation Plan was developed. The key policy directions of the Atlanta Regional Commission *Envision6* Plan are to:

- Reduce travel demand;
- Increase transportation capacity through better system management;
- Replace and improve the existing highway system;
- Improve the transit system; and
- Expand highway capacity in selected areas.

Areas where the Atlanta Regional Commission *Envision6* Plan and the Spalding County Comprehensive Transportation Plan differ, namely new roadway connections, roadway classification and access management, will need to be resolved as part of the plan implementation.

3.2 Spalding County Recommended Transportation Policies

The Spalding County Comprehensive Transportation Plan is based on general policy areas, but is still specific enough to bring about change to how transportation issues are handled within the County. The following policies addressed, relate to the different components of the transportation system.

3.2.1 Roadway Design Policy

- Design roadway facilities constructed in conjunction with new developments according to the intended function.
- Upgrade existing roadways when warranted by demonstrated volume, safety or functional needs, taking into consideration environmental limitations.
- Emphasize improvements to management, maintenance and utilization of the existing street and highway system.
- Design residential street systems to discourage cut-through traffic and to be compatible with other transportation modes including transit, bicycle and walking, including traffic calming measures on local streets, and in some cases, collector streets.
- Use adequate transitions and buffers including but not limited to earth beams, walls, landscaping and distance to mitigate the undesirable impact of high volume roadways.

- Promote use of sound mitigating features for residential development adjacent to high volume roadways, and make property owners and developers responsible for noise attenuation at new developments near high volume roadways.
- Incorporate the concept of "complete streets" into planning, design and construction of all future roadways to ensure bicycle and pedestrian accommodations are included where appropriate.

3.2.2 Roadway Function and Access

- Provide logical street networks to connect residential areas to the regional highway system and local activity centers (nodes).
- Adequately control access points to the regional roadway system (including minor arterials) in terms of driveway openings and side street intersections.
- Provide access to the local street system (including collector and local streets) in a manner that balances the need to safely and efficiently operate the street system with the need for access to land.
- Encourage intra-area trips on minor arterials rather than on the principal arterial system, and promote serving regional trips on the highway system.
- Separate, to the extent possible, conflicting uses on public street system in order to minimize safety problems. Give special attention to pedestrian and bicycle routes.
- Develop a county-wide Access Management Plan to reduce the number of conflict situations with vehicles and restrict interruptions in traffic flow.
- Encourage access management plans to be developed as part of each arterial or major collector roadway widening or upgrade project concept development process.
- Ensure that access management requirements address inter-parcel connections, especially in village node developments.

3.2.3 Roadway Maintenance and Operation

- Cooperate with other agencies having jurisdiction over streets and highways in Spalding County to assure good roadway conditions and operating efficiency.
- Maintain roads by repairing potholes and other damages.
- Upgrade all traffic control devices to be in compliance with the Manual of Traffic Control Devices and the latest technology.
- Replace substandard bridges and bridges that present safety or traffic problems.
- Ensure that projects incorporate the latest ITS technology infrastructure.

3.2.4 Transit / Travel Demand Management (TDM)

- Participate in the Transit Planning Board (TPB) initiative to encourage all forms of travel demand management in order to reduce vehicle miles of travel, reduce petroleum consumption, and improve air quality.
- Review all major developments in light of potential for ridesharing including bus accessibility, preferential parking for carpools/vanpools, and mixed-use development.

- Support preferential treatments for transit and high occupancy vehicles on streets and highways.
- Include transit planning in the construction or upgrading of streets and highways.
- Require large development projects to develop supplemental TDM plans which address the need to reduce travel demand generated from the new development.
- Pursue development of a demonstration project to provide a circulator system within the Sunny Side major activity center.

3.2.5 Parking

- Review new developments for adequacy of parking based upon need, the potential for joint use of parking facilities and opportunities to encourage ridesharing.
- Limit unsafe on-street parking in and near congested commercial areas.

3.2.6 Pedestrian and Bicycle

- Provide accessibility to pedestrians and bicycles at major activity centers, including necessary storage facilities.
- Create pedestrian and bicycle interconnections among major generators, with continuity across major roadways and other barriers.
- Provide sidewalks and safe crossing in notably high pedestrian areas, including high traffic streets, commercial areas, areas with transit and in high density residential locations.
- Provide adequate signage along all bike paths including areas of conflict with pedestrians and automobile traffic.

3.2.7 Goods Movement

- Serve major truck users and intermodal facilities (warehouses, etc.) with good minor arterial access to the highway system.
- Ensure that industrial and commercial areas have good freight access via designated routes.
- Include freight planning with future land use, small area and LCI planning efforts.
- Preserve high freight accessible land for industrial and commercial development via the development of future land use designations and maps.
- Implement access management techniques on truck routes to ensure efficient movement of vehicles.
- Improve roadway geometry to accommodate large trucks and decrease danger to smaller vehicles.
- Ensure that at-grade crossings are properly maintained and do not degrade over time.
- Support the adopted Atlanta Regional Commission Freight Study completed in 2008.

3.2.8 Funding and Jurisdiction

- Pursue and support regional or multi-jurisdictional funding sources for improvements that provide regional and multi-jurisdictional benefit.

- Support of research efforts into more efficient and cost-effective management, maintenance and replacement of street surfaces.
- Support governmental jurisdiction over roadway that reflect the role of the roadway in the overall transportation system.
- Pursue Special Purpose Local Option Sales Tax (SPLOST) for implementation of the Spalding County Comprehensive Transportation Plan.

3.3 Recommended Transportation Improvement Projects

This Comprehensive Transportation Plan presents a program of recommended projects within Spalding County to include the Cities of Griffin, Sunny Side and Orchard Hill. The array of improvements recommended for Spalding County during the 2005-2030 timeframe are described in terms of their type of improvement, location, programming category and the total cost.

The transportation improvement recommendations presented here are consistent with the goals, objectives and policies of Spalding County, particularly those relating to both land use and transportation. These short, medium and long range recommendations should enhance the opportunity for an integrated, multimodal transportation system that will adequately serve Spalding County through the year 2030. State, regional and city projects are identified where they are needed to ensure a consistent and coordinated regional transportation system. Most importantly, the ARC and GDOT long range transportation planned and programmed projects have been included in this CTP process. This confirms maintaining consistency across the many different projects that may have been previously planned.

While developing a program of projects for the Spalding County CTP, the following guiding principles provided a basis for the analysis and recommendation.

3.3.1 Approach to Arterial Road Needs and Improvements

Evaluation Process for Identifying Deficiencies: The County's CTP evaluation process for state highways and county arterials and local facilities begins once a traditional travel demand modeling and forecasting effort provides estimates of current and future travel demand based on the Future Land Use Map. The evaluation process identifies roadway needs and the corresponding improvement projects aimed at maintaining the adopted LOS standard. This is accomplished through four major processes, as described below.

Process 1: State highways and county roadway network are screened by using modeled vehicular travel forecasts for 2030 to determine which roadways will experience LOS problems during either the AM or PM peak periods. State highways and county roadway network that present an adequate LOS in 2030 are identified as having no need for capacity improvement. If a LOS problem is identified for 2030, the facility is earmarked for an improvement that will enhance and improve LOS.

Process 2: All state highways and county roadway network are additionally reviewed to determine if they need improvements that are critical to highway/arterial system continuity, connections and access to developing areas. Highway and roadway network that are not expected to have LOS problems and do not represent critical gaps in the roadway system, are not selected for a major capacity-related improvement, and are not subject to any further analysis. Examples of these highways include SR 16 between downtown Griffin and the western County line. This system was upgraded on the east side of Griffin to Interstate 75. Therefore, for continuity, a project was recommended.

Process 3: For state highways and county roadway network that show a LOS problem or critical system need for 2030, improvement projects are identified that, as much as practical, would mitigate the identified problem. LOS analysis is performed for the AM and PM system peak hour periods for the 2005 and 2030 timeframe. One of the following types of improvement projects is then applied to address the problems.

- Arterial Design and Safety Standards – project improvements that allow a county roadway to meet the geometric and structural design standards as defined in the most current version of AASHTO.
- Arterial Operations – project improvements that enhance traffic flow and/or safety on a county arterial by providing site-specific operational and safety improvements such as channelization, vehicle storage and turn-lane improvements, vertical and horizontal alignment, traffic control/signalization and other positive-guidance features. The primary intent of these improvements is to resolve more immediate LOS and safety problems.
- Arterial Capacity – project improvements that enhance effective capacity and traffic flow on a county arterial by significantly widening lanes, adding through and turn lanes, adding shoulders and walkways, improving positive guidance, and implementing traffic control modifications.
- Arterial Operations and Capacity – project improvements that enhance effective capacity and traffic operations on a county roadway by adding through and turn lanes, adding shoulders and sidewalks, introducing channelization and implementing traffic control and signalization. The primary intent of these improvements is to increase arterial lane capacity, enhance traffic safety and efficient traffic operations at key intersections, and have a positive effect on area wide traffic circulation and LOS.
- New Roadway Alignments – project improvements that entail construction of a roadway or the extension of an existing roadway across a new alignment. The primary intent of these improvements is to increase arterial lane capacity, relieve congestion on existing arterials, serve developing areas of the county, and have a positive effect on area wide traffic circulation and operations.
- Interstate Facilities – project improvements that involve addition of interchanges, freeway lane capacity and capacity enhancements to various state highways. These projects would have the intent of improving the capacity and operations of the Interstate system.

- Cities' Facilities – project improvements that could involve arterial standards, arterial capacity, arterial capacity with operations, and new roadway alignments on city arterial streets. These projects would have the broad intent of meeting city's standards, enhancing traffic flow and increasing capacity on city arterials.

Process 4: The last process involves staging county improvement projects for the 2009 and 2030 timeframes and then placing them within three priority categories. The priorities relate to the county programming and implementation since they would be under the county's jurisdiction and responsibility. The three categories are:

- Transportation System Development
- Transportation System Management
- Transportation Demand Management

3.3.2 Summary of Recommended Improvement Categories

3.3.2.1 Transportation System Development: More Travel Choices

New and better connections are planned to more efficiently move people on buses, trains, cars and trucks throughout Spalding County. When implemented, the projects will improve the county's roadway network and transform it into a robust system with more connections that will alleviate congestion in areas with limited or no connections. Ultimately, as the systems are implemented as recommended in this plan, it improves the movement of goods through the region.

Growth in truck and auto travel will increase highway preservation and capacity needs. While the Spalding County population has consistently grown, vehicle and truck miles have grown at a faster rate. This trend is expected to continue. The population is projected to increase by 93% in the next 25 years, while statewide growth in vehicle and truck traffic is projected to increase by 55% and 83% respectively. This growth will significantly impact the needs of Spalding County's roadway system.

The CTP Network looks into the future to deliver a new transportation vision. It focuses on providing competitive travel choices during rush hours when most of our traffic congestion occurs. Since much of this demand is driven by the need to commute to and from work and school, the plan looks at the need for encouraging alternative commuter choices – transit. Transit is an essential that must be convenient, fast and safe. Additionally, this plan reveals the need and identifies projects to create, enhance and improve facilities for biking and walking. In our fast-paced, microwave world, saving time is a very real and powerful incentive for encouraging these more sustainable travel choices.

3.3.2.2 Transportation Systems Management: Making Better Use of What We Have

Millions of dollars have already been invested in roads in Spalding County. We need to maximize the return on this significant investment through better management and more efficient operation of the existing network. A wide range of systems management strategies are included in the Plan. Systems Management helps get the most efficiency out of our existing system, makes travel services more reliable, convenient and safe. It also reduces traffic delays caused by crashes and incidents.

3.3.2.3 Transportation Demand Management: Taking the Pressure Off The System

Steps to reduce peak-period travel or change when and how people travel will become increasingly important in the future. Transportation Demand Management (TDM) focuses on encouraging alternatives to driving alone and minimizing demand on the transportation system during the peak periods.

The strategies in the Plan to manage demand are not all new. ARC has initiated a regional transportation demand management program that includes carpooling, vanpooling, transit, biking and walking, teleworking and flexible work hours. The Spalding CTP includes policies that support these TDM initiatives.

Criteria and technical consideration that went into creating the above priority categories are presented in Table 20.

Table 20: Criteria and Considerations for Project Improvement Categories

Criteria/Consideration	Explanation
Traffic and LOS	Involves review and interpretation of existing and forecast traffic data and information such as ADT, peak hour traffic, LOS, intersection operations/LOS and traffic generation/distributions. Project gets critical consideration for early staging if either existing or forecast LOS and operating conditions are below LOS standard.
Safety	Involves review of crash reports, vehicular accident rates and type, interaction with high crash corridors on the roadway network, arterial design standards, unique geometric problems, and potential for vehicular/pedestrian conflict. Project gets critical consideration for early stage if accident rates are increasing.
Arterial Connections and Circulation	Involves denoting and testing where improved arterials and new arterials will reduce congestion and conflicts on other areawide roads and/or where new connections and circulation improvement can be achieved. Project gets critical consideration for early staging if it reduces traffic impact on other roads, eliminate circuitous routing, completes missing connections, improves potential for keeping traffic off local roads, and cost are within a feasible range.
Transportation System Benefits	Involves denoting where broader transportation system benefits can be achieved in terms of areawide LOS, reduced VMT, pedestrian/transit

	compatibility, transit vehicle circulation, and interaction between state highway, county and city arterial system. Project gets critical consideration for early staging if it helps multiple modes of travel, has compatible design standards and staging as a state and city project, and provides operational improvement that helps multiple arterials and highways.
Supports Comprehensive Plan	Involves reviewing and interpreting land use inventories and forecast, as well as denoting planned densities, types, and character of land use, community and neighborhood centers, commercial areas, and other plan features. Project gets critical consideration for early stage if it helps to adequately serve or support a provision of the land use plan, particularly urban centers, high-density residential areas and business districts.

3.3.2.4 Recommended County Arterial Road Improvements

Spalding County CTP, after careful study, recommends a number of county arterial improvements and their staging over the next 25 years. The County's plan for these improvements, when presented in combination with city, state and future transportation plans, shows a balanced investment in the various modes such as automobile, freight, transit, pedestrian, and bicycle. Importantly, the scope of improvements to county roads, state highways and city streets often includes pedestrian, bicycle and transit-supportive features and operating conditions for all modes of travel. The recommended list of Spalding County CTP Improvement Projects is presented in Appendix 1, with a cost summary for each improvement.

4.0 PLAN IMPLEMENTATION

This chapter of the CTP provides a forecast of expenditures and revenue for the period 2005-2030. The purpose is to show how Spalding County will support the land uses identified by the future land use map. Implementing the Spalding County CTP requires close coordination and cooperation among all transportation agencies, local jurisdictions, and the traveling public. The Plan relies on efficient and more cost-effective use of our traditional transportation funds and expanding sources of transportation revenues to fund higher level of investment in proposed improvements. The Spalding County CTP Implementation Plan identifies project costs that need to be undertaken by the County to support the goals and objectives of the CTP. The Implementation Plan is general in nature and focuses on five (5) types of projects that need to be undertaken to bring the County's operation into compliance with the plan:

- System Preservation
- Safety and Operational
- Capacity
- Transit
- Bicycle and Pedestrian Facilities

Each year the County Staff will develop an Implementation Plan Work Program that will identify specific projects, or task within projects, to be completed within a year timeframe. The annual work program will include detailed information about required resources and funding opportunities.

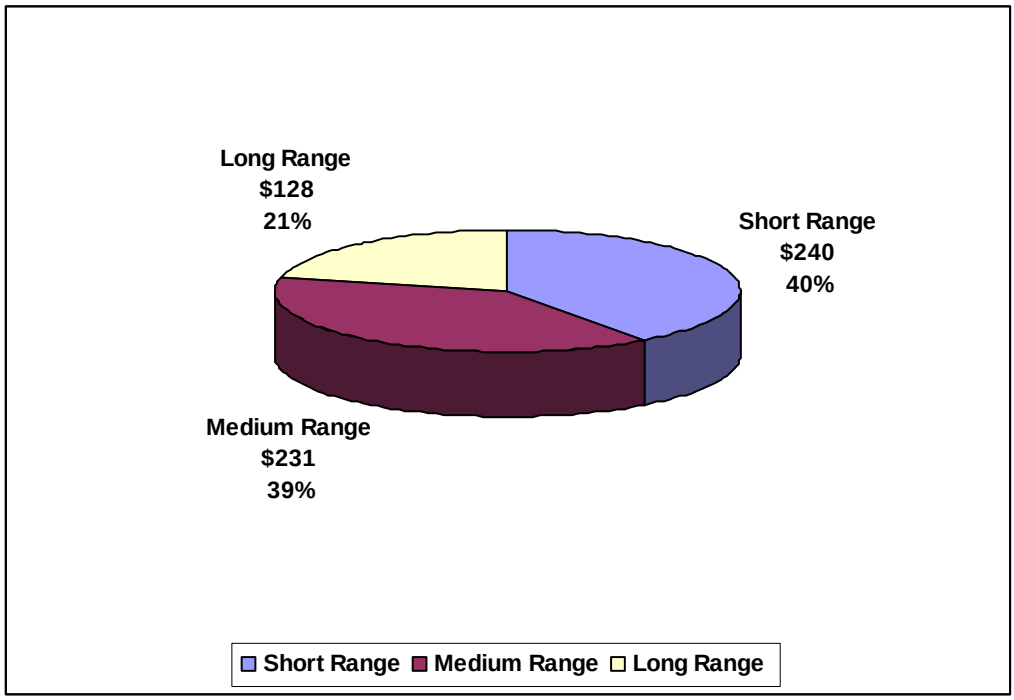
4.1 Funding and Financial Scenarios

In developing the Spalding County CTP, we have estimated needs and projected revenues of the individual components of the Spalding County transportation system. Accumulating the needs and comparing them with combined revenue sources provides a more comprehensive look at the system and overall funding gaps. This countywide analysis will help inform discussions about the priorities for the Spalding County transportation system and allows for trade-off discussions within and between the different modes.

4.2 Cost Estimation

Spalding County's CTP cost estimates were developed using ARC's 2006 Transportation Project Costing Tool (ARC – TPCT). The needs for Spalding County transportation system over the next 25 years are estimated to be $599 Million. This cost equates to $24 Million annually. This figure includes costs for the state highway system within Spalding County, local roads, public transit, and bicycle and pedestrian needs. Because the plan will be implemented over a 25 year period, projects were classified as short, medium or long range. The associated total cost for the short range, medium range and long range projects are $240 Million, $231 Million and $128 Million, respectively.

Figure 27: Project Cost by Implementation Time Period



* Costs expressed in Millions of Dollars

Based upon the County's current transportation revenue of $ 0.5 Million annually, there is an estimated annual funding gap of $23.5 Million. By identifying this gap, Spalding County and its partners can begin discussion about priorities and tradeoffs. Preliminary discussions about priorities and tradeoffs occurred during the CTP process. As the recommendations were discussed by the topical working committees and at public meeting, a weighted system was developed based upon input.

4.3 Implementation Responsible Agency

Over the next 25 years, more importantly than ever, Spalding County and the Cities of Griffin, Orchard Hill and Sunny Side would need to coordinate its transportation project efforts to achieve a comprehensive, consistent and cohesive transportation system. The process of implementation requires a champion to achieve project success. Certain projects within the program of projects that were developed for this plan would require Spalding County to be the project sponsor and the responsible agency. The larger projects that include state highways, GDOT would be expected to serve as the project sponsor and the responsible agency. And finally, the projects that falls within the Cities of Griffin, Orchard Hill and Sunny Side, it is expected that the jurisdiction in which the project exist would partner with Spalding County as co-sponsor and co-responsible agency.

4.4 Funding Strategies

The ability to finance transportation system improvements is critical to the implementation of this plan and the success of the future transportation system in Spalding County. Funding is needed to realize the capital improvements and maintenance activities outlined in this plan. This section details the potential funding sources and funding mechanisms available to accomplish these improvements.

Federal rules require that the CTP be "fiscally constrained" meaning that there must be a reasonable expectation that revenues will be available to provide for the estimated costs of implementing the 25-year list of projects contained in the plan and to support the operations and maintenance of the multimodal transportation system. The availability of federal, state and local moneys will have a significant impact on the ability to fund proposed projects. Demands on the transportation system have grown significantly over the past 20-years.

This section describes funding sources and funding strategies. A full description of each funding strategy defined by federal, state and local sources is provided in Appendix A, attached.

4.4.1 Federal Funding

The federal funding picture changed significantly with the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, and successor Acts, the Transportation Equity Act for the 21st Century (TEA-21) passed in 1998, and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) passed in August 2005. Federal funding programs now allow much greater flexibility in the way money may be used. All federal funding categories require a local "match", where the project sponsor must contribute a portion of the project cost. The percent local "match" varies in accordance to the various federal funding categories subscribed. The following provides a listing of the federal funding opportunities available to finance transportation projects:

- National Highway System (NHS)
- Surface Transportation Program (STP)
- Interstate Maintenance (IM)
- STP Enhancement
- Highway Safety Improvement Program (HSIP)
- Highway Bridge Replacement and Rehabilitation Program
- High Priority Projects Program (HPP)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Safe Routes to School
- Surface Transportation Program (STP Urban)
- Urbanized Area Formula Program: FTA Section 5307
- Clean Fuels Formula Grant Program: FTA Section 5308
- New Starts Program: FTO Section 5309

- Grants for Transportation for the Elderly Persons and Persons with Disabilities: FTA Section 5310
- Rural Public Transportation Program: FTA Section 5311
- Jobs Access and Reverse Commute: FTA Section 5316
- New Freedom Program: FTA Section 5317
- Growing States and High Density States: FTA Section 5340
- Recreational Trails Program

4.4.2 State Funding

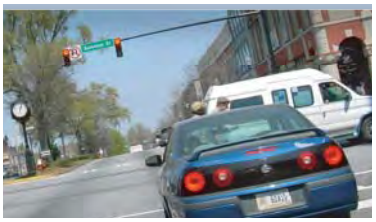
State funding sources are another important component of transportation project funding. State funds are primarily utilized for capital projects. These funding sources include the following:

- Fuel Excise Tax
- Fuel Sales Tax
- Fast Forward Bond Program
- Recreational Trails Program
- Additional Transportation Revenue

4.4.3 Local Funding

Local funding sources can also be used to finance transportation projects that are not on major state or federal routes. These funding sources include the following:

- Special Local Option Sales Tax (SPLOST)
- General Funds
- Tax Allocation District (TAD)
- Community Impact District (CID)
- Impact Fees



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