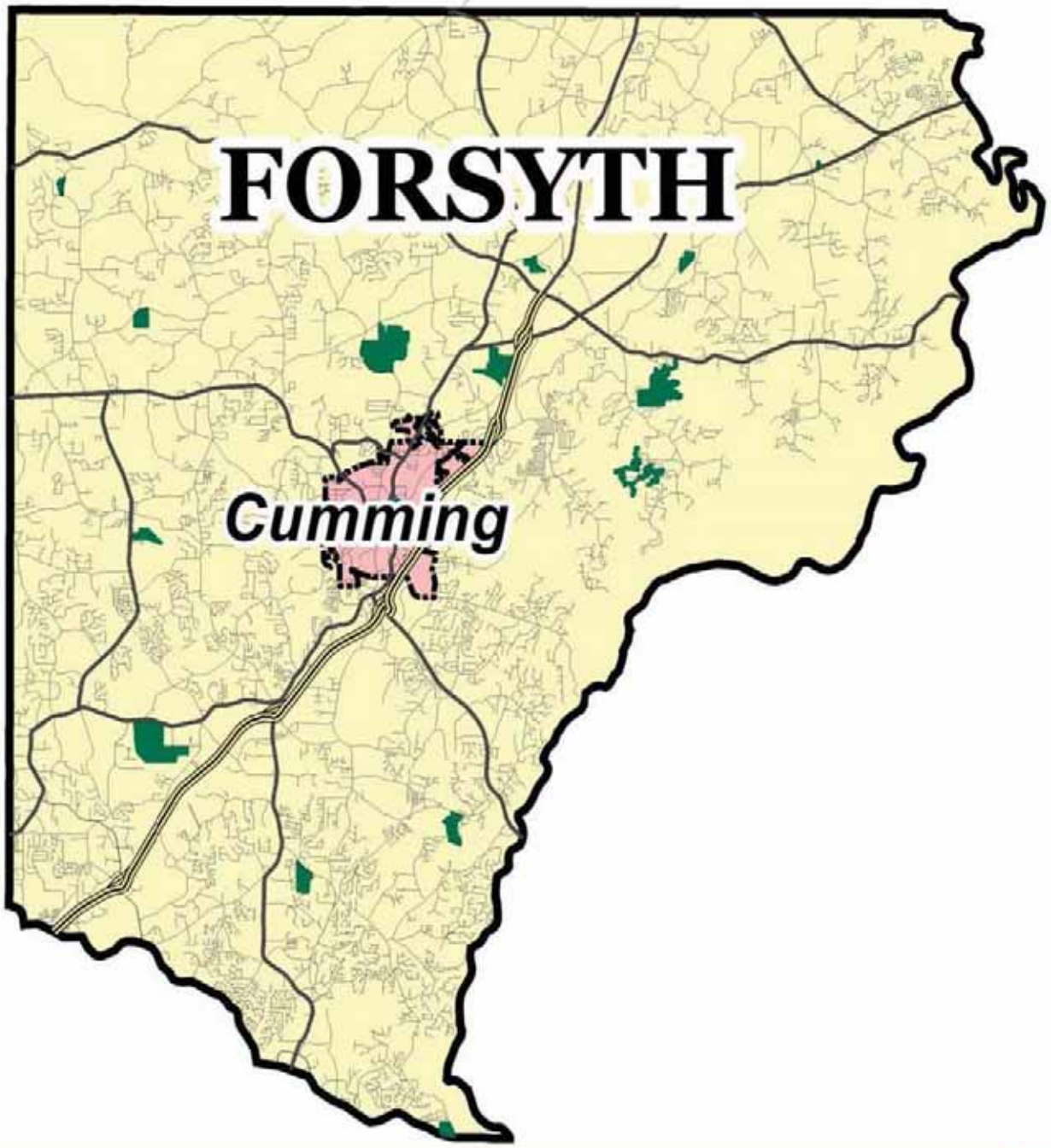

Forsyth County, Georgia

FORSYTH COUNTY MAJOR TRANSPORTATION PLAN - 2006 UPDATE

November 2006

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One Source, One Firm™

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1 Introduction

The *Forsyth County Major Transportation Plan – 2006 Update* represents the most recent evaluation of Forsyth County's transportation needs. Forsyth maintains an aggressive pace of population growth, leading Georgia and the Atlanta Region in attracting new residents. The pace of population growth is mirrored in increased employment and development, with upscale residential and commercial construction maintaining strong momentum. The county's transportation network continues to feel the impacts of demands from increased population and employment growth, which is projected to continue over the next several decades. Figure 1 represents the Forsyth County study area, including major roads, parks, schools, Livable Center Initiative (LCI) boundaries and adjacent counties. Forsyth County has anticipated and is prepared to address the need for improved transportation and access by monitoring transportation operations and continuously evaluating needs outlined in transportation plans.

The value of a long range transportation plan is accentuated in areas with aggressive growth. Typical transportation projects require an extended period of time to come to fruition. As project costs increase, it takes more time to identify and program needed financial resources. Assembling needed rights-of-way, completing environmental reviews and developing designs all take more time to ensure federal and state processes have been addressed adequately. A long range transportation plan update is a valuable tool to review developing needs and assess the adequacy of current transportation plans to address those needs.

Study Purpose

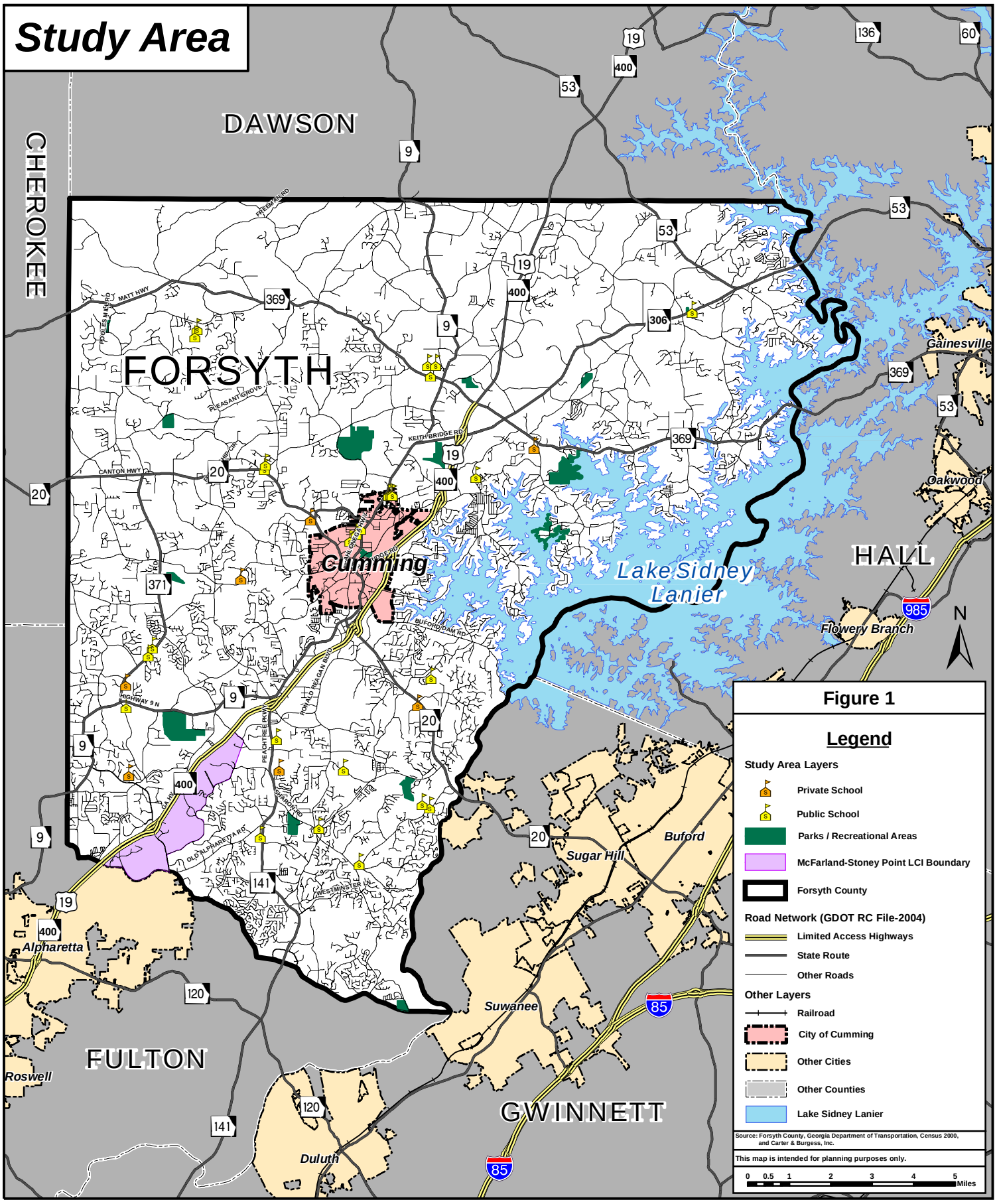
The purpose of the plan update is to ensure that the county's transportation needs are identified, analyzed and addressed. The primary focus of the plan update was on roads; however, recommendations for sidewalks, bike trails and transit were also reviewed as part of a more complete transportation system network, which relies on roads to access multimodal facilities. The process of updating the current plan has involved specific efforts to maintain close coordination with the *Forsyth County Comprehensive Plan*, most notably by using the 2025 land use model and associated land use policies to guide transportation recommendations. The transportation plan update analyzed transportation needs at present and in the future. The study's findings were the topic of briefings and comments by the Board of Commissioners and Stakeholder Advisory Committee. Public comments were sought and considered in developing the plan's final recommendations.

The plan update utilized a number of sources to determine transportation needs, establish priorities and develop recommendations. Reviews of previous County plans and activities, analysis of system operations and safety, and insights provided by public comments were all considered in developing plan recommendations. Forsyth County's transportation plans are coordinated with the Atlanta Regional planning process, managed by the Atlanta Regional Commission (ARC). Because Forsyth is part of Atlanta's air quality nonattainment area, transportation plan recommendations are expected to contribute to attaining ozone air quality standards set for the Region.

Previous Plans

The last update to the *Forsyth County Major Transportation Plan*, completed in 2002, identified a list of major roadway improvements, including widening of roads, new roads, turn lanes, new interchanges, and intersection improvements, to be funded with federal, state and local funds. The plan has been instrumental in advancing the transportation program over the past few years. The current update includes a review of other transportation studies, plans and databases that relate to the Forsyth's transportation program.

Forsyth County Transportation Plan Update



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The *Forsyth County Comprehensive Plan* provided insights into current and future strategies for land use and development. The *Forsyth County Bicycle Transportation and Pedestrian Walkways 2025 Plan* reviewed the history of bicycle and pedestrian plans, identified existing facilities and recommended bicycle and pedestrian projects for implementation. The *Needs Assessment Report* outlined current and future transportation needs using a transportation demand model in conjunction with input from local stakeholders and County staff.

The results and findings from these previous plans set the stage for current study efforts by providing a good foundation for current activities through identified needs and recommended solutions. Building on this information, the update process reviewed current and future conditions to 2030 as a means of assessing the current and proposed projects and identifying additional improvements necessary to address mobility and safety in the county.

The *Forsyth County Major Transportation Plan – 2006 Update* took into account growth in surrounding counties and its potential impacts on Forsyth's transportation system network. Developments along the county line have resulted in congestion problems on major county roads. Continued coordination with neighboring counties is important to analyze the use of existing resources and capacity in the regional network passing through Forsyth.

The *Forsyth County Major Transportation Plan – 2006 Update* is organized into four parts:

- Review of study process
- Current and anticipated future conditions
- Needs assessment
- Recommended plan and implementation

A listing of acronyms used throughout the plan update report is presented in Appendix A.

The *Forsyth County Major Transportation Plan – 2006 Update* recommends a road transportation plan that outlines implementation of transportation improvements to meet anticipated needs in 2030, when the county's population is projected to reach 394,000. Analysis of transportation needs has been coordinated with future land use plans and County policies on development. As a member of the Atlanta Region, Forsyth County's transportation plans have also taken into account regional issues such as air quality attainment and the need for regional mobility.

2 Plan Development Process

The 2006 update of the transportation plan followed a standard process that uses the most current available data to analyze existing conditions. The Forsyth County portion of the ARC transportation demand model was used to evaluate current and future transportation needs, ensuring consistency with the process used by ARC to identify needed projects and improvements. The Forsyth County transportation demand model was adapted to reflect projected population and employment levels.

Process Overview and Schedule

Plan update development occurred under a concentrated schedule resulting in project completion within six months. An additional two months were added to allow for further review and comment by the public and stakeholders. The study team relied on existing data sources available from the US Census, GDOT, ARC and, most importantly, County staff. The data was reviewed with the County and carefully coordinated to reflect development in Forsyth.

The update primarily focused on roads; however, the study considered compatibility of improvements with other modes including sidewalks, bicycle trails and transit. In every case, accessibility to anticipated multimodal improvements was noted and considered in evaluating road project recommendations.

Data and Resources

An array of databases, plans and reports were assembled for the 2006 update. The use of each was specific to its topic and the county's transportation system. Roadway inventory data included a combination of GDOT and Forsyth County databases. Appendix B includes a full list of data inventoried for the update.

Several visits to the field produced important information on system operations at key locations. These findings were considered in evaluating quantitative results from the various planning tools used to identify transportation deficiencies. County staff commented on the feasibility of proposed recommendations. Comments from stakeholders also brought useful perspectives from various groups in the community. Public comments were used in considering recommendations, prioritizing projects and understanding the public's expectations of the transportation system.

Technical Evaluation

The 2006 update relies on a balance of quantitative and qualitative analysis to identify recommendations for the 2030 horizon year. Quantitative analysis uses planning tools and analysis to locate specific deficiencies in the system. These deficiencies reflected less than optimal conditions based on performance criteria of roadway operations. Qualitative evaluations provide the local perspective, introducing the expectations of citizens and stakeholders regarding the transportation system into the update's recommendations

Goals and Performance Measures

Update goals relied on previously identified transportation targets consistently used in other Forsyth County plans due to their importance to the transportation program. A comparison of goals from three plan sources – the *GDOT Forsyth County Transportation Plan*, *Forsyth County Major Transportation Plan 2002 Update* (based on the previous Forsyth County Comprehensive Plan), and current *Forsyth County Comprehensive Plan 2004–2025* (Community Goals for Transportation) – showed a common theme throughout. Table 1 includes a comparison of transportation goals.

Table 1 – Forsyth County Goals for Transportation and Land Use

GDOT Forsyth County Transportation Plan	Forsyth County Major Transportation Plan – 2002 Update	Forsyth County Comprehensive Plan 2004-2025
Provide accessibility and mobility of people and goods	Develop and implement a set of functional road classification categories that will provide guidelines for future right-of-way requirements, number of lanes, and future travel capacities, based upon population growth estimates and anticipated land development	Provide accessibility and mobility of people and goods
Support the attainment of air quality in conjunction with neighboring counties	Present a comprehensive transportation system that will provide safe, convenient and efficient service to the general public and will promote and encourage the most desirable timing and patterns of land development	Support the attainment of air quality in conjunction with neighboring counties
Integrate land use decisions with transportation analysis and planning	Promote a transportation system that will provide access and movement through and within the county wile limiting the negative impacts to the environment that might result from unplanned development	Integrate land use decisions with transportation analysis and planning
Improve safety, environment and quality of life	Protect the safety and traffic-carrying capacity of the interchange areas and major thoroughfare corridors from adverse land development and minimize curb cuts along such corridors	Improve environment and quality of life
	Ensure that vehicular circulation within development areas function safety and efficiently	
	Achieve a transportation system that minimizes traffic congestion and travel time within the region and promotes energy conservation	
	Develop a transportation system that will be compatible with existing and future land use patterns	
	Ensure provision of adequate right-of-way for future road improvements based upon anticipated level of the future use of these roads	

Similarities between the three sets of plan goals are apparent, with priority given to achieving a transportation system that functions efficiently and supports land use development. The goals included in the *Forsyth County Comprehensive Plan 2004-2025* appeared to be the most appropriate and were used for the 2006 update.

Performance measures are indicators of transportation operations that denote the efficiency of the system. Performance measurement is a process of assessing progress toward achieving predetermined goals. Performance measures have many functions, and can be used to:[1]

- Frame what attributes of the transportation system are most important
- Provide information on current conditions and trends
- Evaluate the success of implemented and ongoing projects

[1] FHWA / FTA, Getting More by Working Together — Opportunities for Linking Planning and Operations, November, 2004.

- Provide a metric for communicating with decision makers and the public about past, current, and expected future conditions
- Serve as criteria for investment decisions in the transportation planning process

In developing the methodology for evaluating transportation needs, performance measures were used to identify how well the system functioned. Table 2 describes the performance measures and their relation to the plan's goals.[2]

Table 2 – Goals and Performance Measures

	Goal	Performance Measure
1	Provide accessibility and mobility of people and goods	• Per capita vehicle miles traveled (VMT) • Per capita vehicle hours traveled (VHT) • Peak period volume to capacity (v/c) ratio • Average congested roadway speed • Average travel time
2	Support the attainment of air quality in conjunction with neighboring counties	• Change of VMT
3	Integrate land use decisions with transportation analysis and planning	• Ongoing monitoring of development review process to measure property development's reliance on single occupancy vehicle trip making
4	Improve environment and quality of life	• Accident rates

Assessment Tools

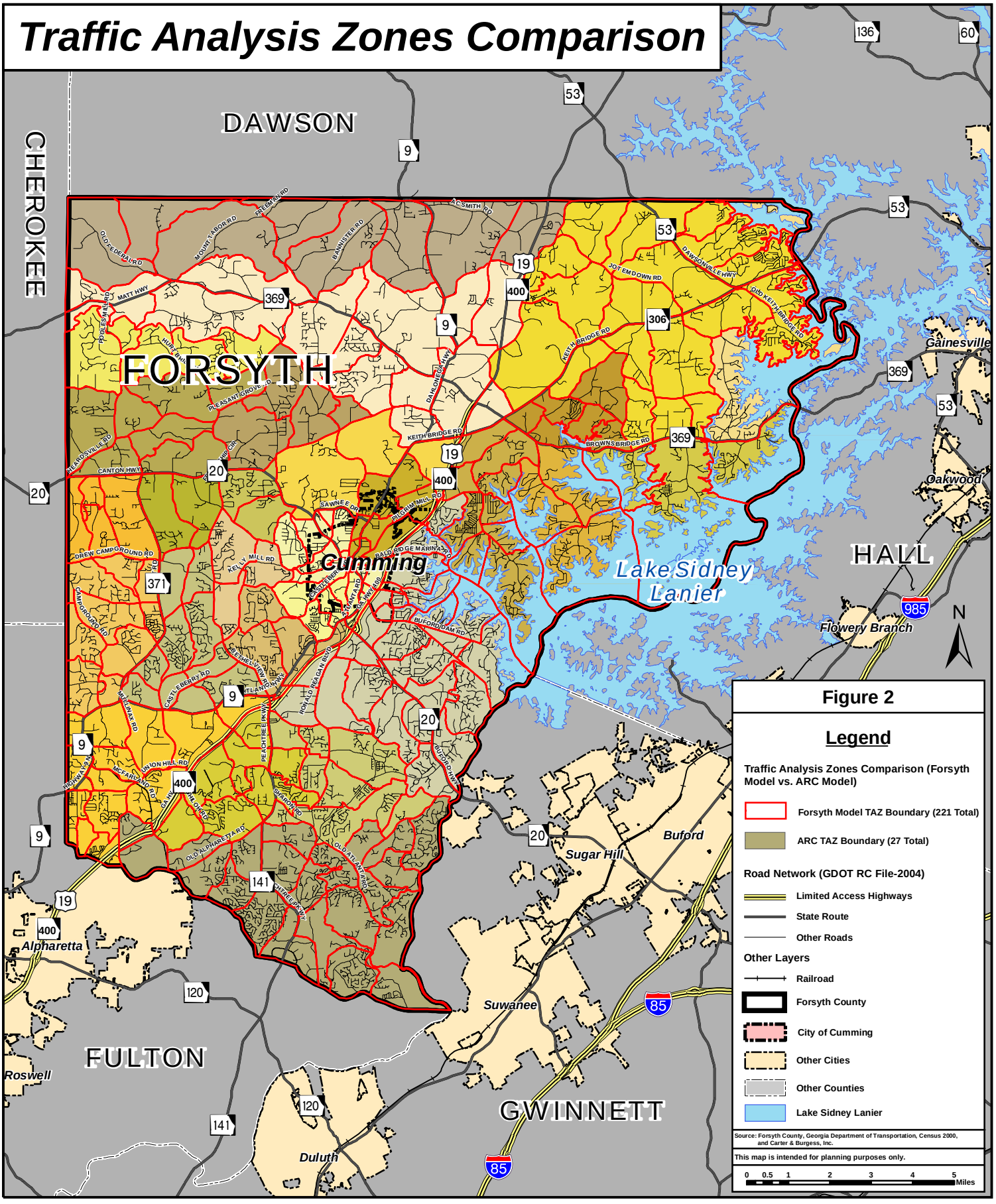
Planning assessment tools are important to identify transportation needs. There are a variety of assessment tools that can be part of a transportation evaluation; however, the tool sets applied should be selected to best serve the purpose of the analysis. The plan update utilized a number of different tools to identify transportation needs in the county and potential solutions. Ultimately, a transportation needs analysis must address mobility, safety and access. Planning tools provide valuable information which, coupled with experience and knowledge of the area's system, can point to possible solutions and improvement recommendations.

The major planning tool used for the *Forsyth County Major Transportation Plan – 2006 Update* was the travel demand model. The study effort reviewed the existing travel demand models for Forsyth County, which included ARC's TP+ model for the *2030 Regional Transportation Plan* (RTP), GDOT's TP+ model for the *Suburban Atlanta Counties Multimodal Transportation Study*, and the QRS II model used for previous transportation plan update.

In consultation with County staff, the decision was made to use the ARC model with a refined Traffic Analysis Zone (TAZ) geography that allowed for more detailed analysis. The number of TAZs was increased from 27 in the ARC TP+ model to 221, disaggregated from the original 27 ARC TAZs. The travel demand model also included the GDOT functional classification road network. Figure 2 presents the Forsyth County 221 TAZs overlaid with the 27 ARC TAZs.

[2] Forsyth County Long Range Transportation Plan, January 2003.

Traffic Analysis Zones Comparison



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The travel demand model used socioeconomic data control numbers for population, households and employment that were adjusted to reflect County estimates. Forsyth's track record for fast paced population growth is expected to continue into the future, with the 2000 population of 98,407 forecast to grow to 393,600 by 2030, according to County estimates. The ARC control totals anticipate a population of 262,488 by 2030. Using the more aggressive population figures will result in transportation needs being identified earlier than would be anticipated if more conservative population growth is assumed.

Current and projected land use was also used in analysis. Existing land use in Forsyth County is dominated by residential development; however, commercial, industrial and mixed use developments are anticipated to become more prevalent in the future. The socioeconomic data by TAZ included both land use and socioeconomic distributions from the *Forsyth County Comprehensive Plan*, with input from County staff.

Statistical Assessment

Using data from an array of sources including Forsyth County, GDOT and ARC, the study carried out a series of statistical assessments to evaluate the operations of Forsyth's network. Most important were the following:

- Traffic volumes for daily traffic and annual counts. Special attention was paid to traffic volumes by functional classification of the facility.
- V/C (volume to capacity) ratios are used to assess deficiencies in a transportation system. A v/c ratio compares the amount of traffic on the road (volume) to the capacity of the road. A lower ratio indicates less congestion, while a higher ratio is evidence of more congestion. A ratio of 1.0 indicates that all capacity is being used.
- Safety statistics screen locations of potential traffic safety problems on the system. The location and frequency of accidents provide valuable information to identify intersections and roadways that should be considered for safety improvements.
- VMT/VHT (vehicle miles traveled/vehicle hours traveled) are useful measures for gauging congestion and change in trip lengths.

Average speed on freeways, arterials and collectors is another measure of roadway operations and also an indication of congestion. Posted speed limits range from 15 mph to 65 mph throughout the county. The travel demand model analyzed the change in speeds on different types of roads as traffic increased over time, bringing with it additional demands on the system.

Qualitative Input

Forsyth County developed a Stakeholder Advisory Panel to provide input to plan development and ensure that study results reflect community priorities. The Stakeholder Advisory Panel included a broad cross section of public, private, business, educational and community representatives. The list of Stakeholder Advisory Panel members is included in Appendix C. The Panel met on January 23, 2006, to review study findings to date and again on February 20, 2006, to comment on recommendations.

Public involvement was also welcomed in the process. A citizen meeting was held to review study recommendations and document citizen comments. The involvement of stakeholders and citizens in the process provided comments, perspectives and opinions about transportation operations, which helped ensure that study update results reflect local priorities as well as the support of a broad base of Forsyth County communities.

As part of the evaluations, the counties adjacent to Forsyth were contacted as a way of confirming developments near their border with Forsyth that might impact traffic and mobility. Table 3 represents a summary of the interviews conducted with the adjacent counties. The impact of these developments on Forsyth traffic was taken into account in the travel demand model, as well as in analyzing traffic patterns in the future.

Table 3 – Adjacent County Interview Summary

County	Results
Dawson County	The *Dawson County Economic Development Plan* calls for encouraging development along the GA 400 corridor, with a Welcome Station at the Dawson County line. The plan, approved by the Etowah Water & Sewer Authority, Dawson County School Board, Dawson County Commissioners and Dawsonville City Council, anticipates a balanced tax base with 60 percent residential and 40 percent commercial development.
Cherokee County	Cherokee's development next to Forsyth is moderate, with commercial development anticipated along the SR 369 and SR 20 corridors. It is anticipated that residential and commercial development will not be as intense on Cherokee's eastern boundary as it is along its southern boundary with Cobb and along I-575.
Gwinnett County	In the area contiguous to Forsyth, the level of residential and nonresidential development is moderate. The largest amount of 2004 nonresidential space was permitted in the Lawrenceville/Central Gwinnett Planning Area (1.4 million square feet) followed by the Duluth/Suwanee Planning Area (about 1 million square feet). The least amount of nonresidential space (281,186 square feet) was permitted in the Buford/Sugar Hill Planning Area. This planning area is one of the smallest planning areas in the county and the vast majority of the area is within the cities of Buford and Sugar Hill, where mostly nonresidential development is occurring.
Fulton County	Residential and office development in north Fulton County along the southern Forsyth County line is expected to continue to be intense. Development in the area has put a burden on the transportation network and infrastructure. Improvements to GA 400 and on McFarland Road are expected to alleviate some of the congestion problems. Developments such as North Point Mall will expand with development for mixed use. The newest phase, which offers approximately 200 acres on the west side of GA 400 currently zoned for office and commercial development, will offer Class A office space and commercial development.
Hall County	Two developments are expected in the area. For 2011, The Seasons at Lanier will consist of 750 single family detached homes and 80,000 square feet commercial. A second development, for 2009, is REL Development at Mundy Mill Road, with 1,148 single family detached homes, 578 attached single family, 460 apartments, 672,000 square feet office or warehouse, and 585,000 square commercial retail.

Coordination with Metropolitan Planning Process

After the Census 2000 results, ARC became the Metropolitan Planning Organization (MPO) for Forsyth County. The MPO is responsible for regional transportation planning, testing for air quality attainment and developing an RTP that meets air quality standards.

Forsyth County participates actively in the Atlanta Regional Transportation Planning Process, especially in the Transportation and Air Quality Committee (TAQC) and Transportation Coordinating Committee (TCC). The 29-member TAQC, which includes Forsyth representation, functions as the transportation policy committee of the ARC Board. It serves as the body to

develop consensus among ARC, MARTA (Metropolitan Atlanta Rapid Transit Authority), GDOT, Georgia Environmental Protection Division (GA EPD), and GRTA (Georgia Regional Transportation Authority). The TAQC addresses metropolitan and multi-jurisdictional transportation related policy matters affecting the Atlanta region. TAQC submits recommendations directly to the ARC Board and holds regular scheduled meetings that are open to the public.

Forsyth County also has representation on the TCC, a 24-member group that provides technical input to the regional planning process. In addition to ARC Transportation Planning Division and local government staffs, the TCC is responsible for providing technical advice to the TAQC regarding metropolitan or multi-jurisdictional transportation related matters potentially affecting the area. The TCC submits recommendations directly to the TAQC. Proposed projects are tested by ARC staff for compliance with air quality standards and approved for inclusion in the Region's Transportation Improvement Program (TIP). Testing of proposed transportation improvements in the air quality emissions model is a condition for all projects, required by the Federal Highway Administration (FHWA) and Environmental Protection Agency (EPA) in air quality nonattainment areas.

3 Socioeconomic Data and Land Use/Development Factors

Transportation demand is influenced by socioeconomic (SE) and land use factors. Employment, population and land use are "drivers" of transportation demand, demonstrating the cause of current traffic patterns and providing insight to the location and severity of future demands. The transportation plan update looked at 2004 and 2030 socioeconomic and land use development projections using those factors to evaluate the effectiveness of current transportation improvements and identify future needs. The socioeconomic and land use development factors were part of travel demand model development, an important planning tool for analyzing transportation needs.

Population and Employment

Forsyth is the fastest growing county in the Atlanta Region, and the pace of growth is expected to continue in the coming decades to 2030. According to the 2000 Census, the population is 92 percent white, 6 percent Hispanic, 1 percent African American, and 1 percent Asian. The 8 percent of the population that is non-white is dispersed throughout the county, with higher density in the southern part that abuts the Fulton County line. The Census reports that about 7 percent of the population is over the age of 65 and 5 percent are below the poverty line.

Existing Data Base

Developing socioeconomic data involved a review of multiple sources of population numbers and projections, including the U.S. Census, ARC, *Forsyth County Comprehensive Plan*, University of Georgia's Information Technology Outreach Services (ITOS) and GDOT projections completed for the *Suburban Atlanta Counties Multimodal Transportation Study*. The SE data was distributed into 221 TAZs for 2004 and the 2030 horizon year. The 221 TAZs represent an improvement to the grain of the model analysis from the ARC Regional Transportation Demand Model, which includes only 27 TAZs for Forsyth. The increased number of TAZs allows for more refined analysis of Forsyth specific transportation, as well as for better quality input to the regional model maintained by ARC.

The distribution of population and employment into the refined 221 TAZs was an extensive effort that involved County transportation and comprehensive planning staff. The distributions for the current and future year SE data reflect the comprehensive plan's recommendations, thereby ensuring that the study has assessed the interaction of land use and transportation dynamics on the transportation system.

There is a wide variance between the Census, ARC and GDOT *Suburban Atlanta Counties Multimodal Transportation Study* projections for Forsyth County. Table 4 presents a summary of the various population and employment forecasts, underscoring these differences.

Table 4 – Forsyth County Socioeconomic Projections

Source	2030 Population	2030 Employment
Forsyth Major Transportation Plan 2002	326,261	111,321
Forsyth County Comprehensive Plan 2004-2025	227,819 (2025)	83,167 (2025)
Atlanta Regional Commission – Mobility 2030 Approved Travel Demand Model	262,488	93,342
GDOT Suburban County Study	393,581	182,107

The most current Census estimate for Forsyth County indicates that the 2005 population was 140,393, a 42.7 percent increase from 2000, when Forsyth registered a population of 98,407. Based on discussions with County staff, the decision was made to use the GDOT *Suburban Atlanta Counties Multimodal Transportation Study* projections for the 2030 horizon year, anticipating 393,581 as the 2030 population.

Forecasting Methodology and Future Projections

Forsyth's average household size is 2.37, resulting in a total of 166,332 households for 2030. Distribution of households used a GIS based methodology that calculates future land use plan acres by TAZ expected to be used for LDR (low density residential), MDR (medium density residential), and HDR (high density residential) uses. The *Forsyth County Comprehensive Plan* (amended in December 13, 2004) provides density ranges for each residential category. Household units were calculated using the comprehensive plan density ranges as a guide. Population distribution assumed a relation to household and was distributed based on the average household size. The City of Cumming's future land use plan was referenced to determine the appropriate distribution within the city. Figure 3 presents the projected population change in Forsyth County between 2000 and 2030.

The GDOT *Suburban Atlanta Counties Multimodal Transportation Study* estimate for 2030 employment was used, which projected 182,107 employees in 2030. Total employment categories include construction, manufacturing, TCU (transportation/communications/utilities), wholesale, retail, FIRE (financial, insurance, real estate), services and government. These employment categories were distributed by TAZ using an approach similar to the one applied for distribution of residential density. Using the future land use maps, acres of 2030 development were calculated for each TAZ. The categories targeted included GC (general commercial), CT (corridor transitional), NC (neighborhood commercial), I (industrial), PI (public/institutional) and TCU (transportation/communications/utilities). Employment for 2030 was distributed by category (construction, manufacturing, TCU, wholesale, retail, FIRE, and services) into 221 TAZ by the percentage of acreage identified for each in the County's land use plan. In addition, there were adjustments made to reflect future school locations. In this exercise, the City of Cumming's land use plan was consulted to provide information for distribution within the city limits. Figure 4 presents the projected employment change in Forsyth County between 2000 and 2030.

The socioeconomic data, population, households and employment were reviewed by Forsyth County staff and presented to the Stakeholders Advisory Panel for comment. This provided a final check on the data distribution by TAZ geography that was used in the travel demand model and transportation analysis.

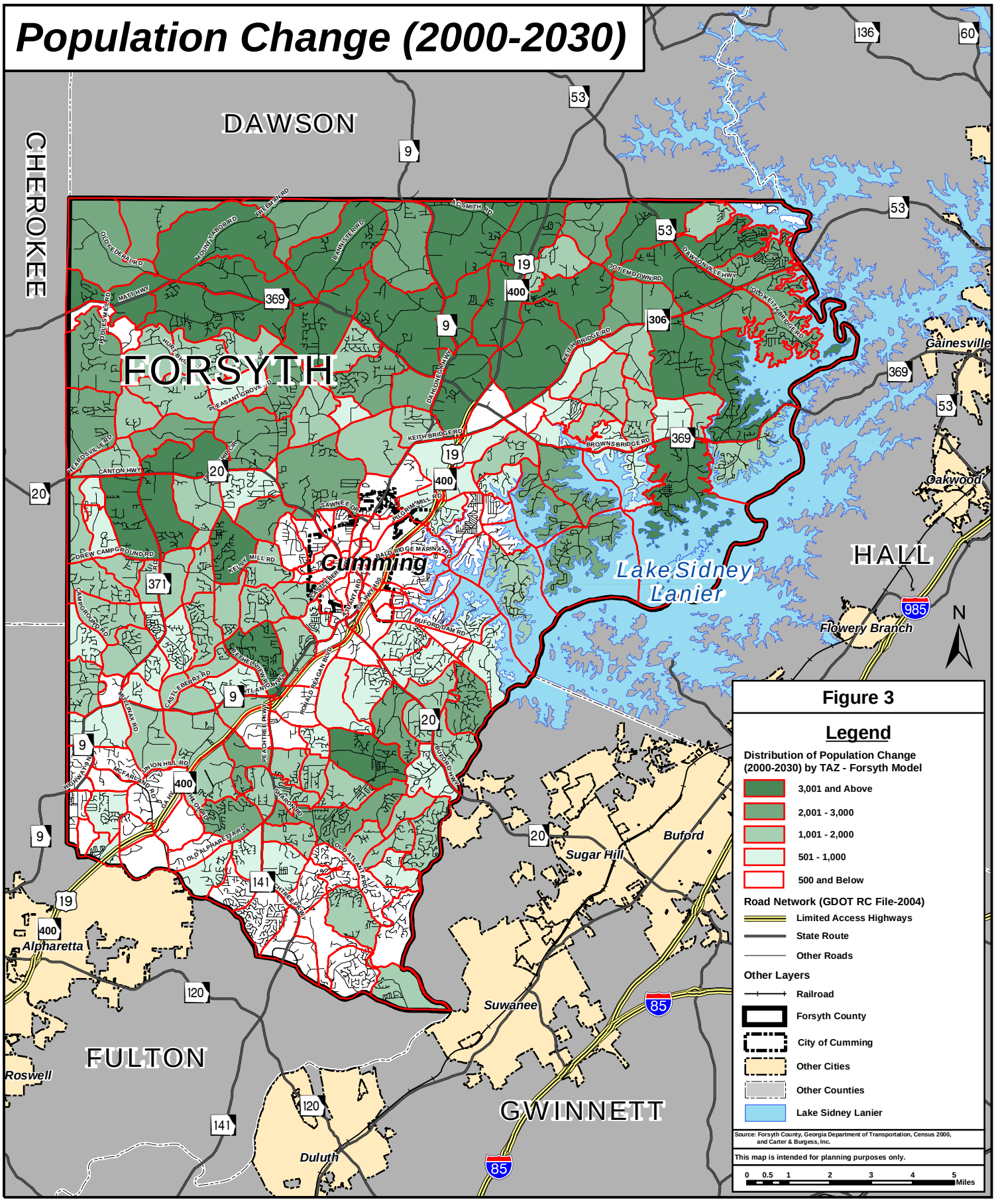
Land Use

Existing land use in Forsyth County continues to be predominantly residential development, with over 90 percent of the current land use dedicated to housing. The projected growth in county based employment is anticipated to increase the amount of land dedicated to commercial and industrial land use. Other land use such as agriculture, forestry, parks, recreation and conservation, public and semi public and undeveloped and unused land will decrease as Forsyth progresses.

Forsyth County

The expansion of the sewer system in the county follows the established trend for residential growth and land use. Residential density is relatively low at present, with 0.79 units per residential acre. This is expected to change in the future as people move into higher density development. Future residential growth will require an estimated 58,433 additional acres of land.

Population Change (2000-2030)



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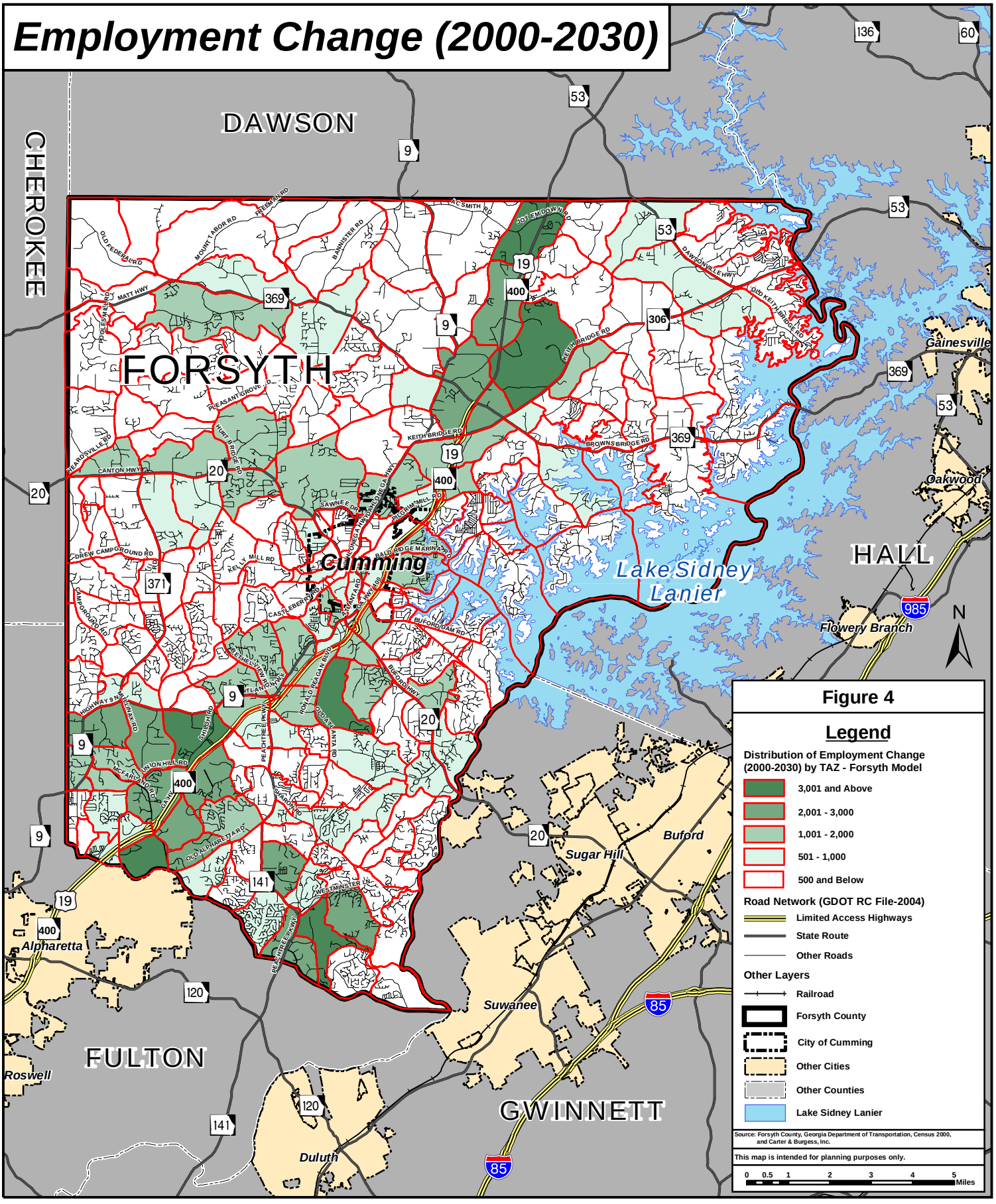
Employment Change (2000-2030)



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Similarly, employment growth will require additional acreage for development. The *Forsyth County Comprehensive Plan* anticipates using an additional 2,688 acres for development related to employment uses. The majority of this use will be for construction, manufacturing, retail and wholesale trade and services.

Inter-county Influences

Growth at the borders of Forsyth and in surrounding counties will be intense as the region's growth continues its trend northward. Forsyth's strategic location with major north/south and east/west facilities will make it a cross roads for travel. Close coordination with neighboring counties and participation in the regional transportation planning process will continue to be important to Forsyth's ability to address demands from future growth.

Development Patterns and Trends

Projected population distribution indicates a steady northward migration, with the highest projected change in the less developed areas of north Forsyth County. Development will continue aggressively in rural portions of the county and areas adjacent to Lake Lanier. The majority of development in the northern parts of the county is expected to be primarily low density residential, with scattered developments of medium density residential in those areas adjacent to GA 400 and SR 369. Medium density residential development in the central and southern reaches of the county is expected to increase, while high density residential development is expected to be limited to acres adjacent to GA 400 as compared to the total residential development in the county.

Projected future employment will be more concentrated along the GA 400 corridor and along the north Fulton County line. The area surrounding the City of Cumming will also see an increase in employment, with additional businesses and jobs locating in the city's retail and wholesale developments.

Land Use / Development Considerations

Forsyth continues to be among the fastest growing counties in both the state and the nation. Recent trends indicate that, geographically, residential growth continues to outpace employment growth, thereby increasing the jobs/housing imbalance. Forsyth County residents and business owners are well aware of the associated worsening commute times and inter-local travel.

Regionally and nationally there has been continued emphasis on the interconnection of land use and transportation planning. The ARC McFarland Stoney Point LCI study, as well as the ARC Envision6 process, has provided Forsyth County with potential alternatives to traditional development. These initiatives are aimed at promoting alternative options for development in select locations that may enhance mobility and thereby improve quality of life for residents, business owners, and stakeholders. Policies aimed at improving access management, multimodal transportation, mixed use development, and transit oriented solutions within existing and emerging activity centers should be further studied and considered by Forsyth County.

4 Transportation System

Roadway Inventory

Forsyth's existing roadway network of highways and streets consists of facilities classified into four main categories by their function and predominant use: freeway/interstate, arterial, collector and local road. The Federal-Aid Highway Act of 1973 required the use of functional highway classification to update and modify the Federal-aid highway systems. This legislative requirement is still effective today[3] and is used for planning and funding roadway needs.

Functional Classification

Functional classification groups streets and highways into systems according to the character of service they are intended to provide. This classification recognizes how individual roads and streets serve travel as part of an interconnected network, which must function in a coordinated fashion to optimize mobility. Optimizing travel requires the functional classification of each street/road for the best operations, resulting in a logical and efficient network that facilitates the flow of trips and channelizes traffic through a highway system.

Partner to the idea of traffic channelization is the dual role the highway network plays in providing (1) access to property, and (2) travel mobility. Access is a fixed requirement, necessary at both ends of any trip. Local streets emphasize the land access function. Arterials emphasize a high level of mobility for through movement. Collectors offer a compromise between both functions.

Mobility along the path of such trips can be provided at varying levels, usually referred to as "level of service." It can incorporate a wide range of elements (riding comfort or constant speed), but the most basic is operating speed or travel time. Examples and descriptions of each functional classification are listed in Table 5, while Appendix D presents a listing of the functional classifications for the major roadways (collectors and above) for Forsyth County, as well as existing right-of-way widths for these facilities.

Table 5 – Sample of Functional Classifications within Forsyth County

Functional Classification	Example	Description
Freeway/ Interstate	None (although GA 400 from Fulton County to SR 306 was constructed under Interstate design requirements)	Significant highways with limited access and continuous, high speed movements
Arterial	SR 400, SR 20, McFarland Road, Windermere Parkway, Ronald Reagan Parkway, Mathis Airport Parkway	Classified as major or minor, they connect activity centers and typically carry large volumes of traffic at moderate speeds
Collector	Kelly Mill Road, Majors Road	Allowing access to activity centers from residential areas, their purpose is to "collect" traffic and connect with arterial facilities
Local Streets	Pine Grove Road	Feed into the collector system from low volume residential and commercial areas

Major Roads

Major roads, as defined by higher traffic volumes, provide the backbone of transportation mobility for citizens, business and commerce in Forsyth County. Most of the county's major

[3] FHWA Administration, Functional Classification Guidelines, revised 1989.

roads are on the State Highway System, which makes up 16 percent of the total road network statewide but serves 44 percent of the total traffic. State roads in Forsyth County represent about 8 percent of the total, or 104 miles of the 1300 miles of road in the county[4]. The State roads have annual vehicle miles traveled summing to 60 percent of the total (2,282,038 VMT of the total 3,813,056 VMT in the county[5]). About 77 percent of the total travel was on roads in the urbanized portions of the county. Major roads in Forsyth County include:

- North/South: SR 400, SR 9, SR 141, SR 371, Ronald Reagan Parkway, Windermere Parkway, Mathis Airport Parkway, Bethelview Road
- East/West: SR 369, SR 20, SR 53, SR 306, McGinnis Ferry Road, McFarland Road

Travel volumes on all roads in Forsyth County have increased dramatically with gains in population and employment, resulting in congestion. Three key aspects of congestion are severity, extent, and duration. The severity of congestion refers to the magnitude of the problem at its worst. The extent of congestion is defined by the geographic area or number of people affected. The duration of congestion is the length of time that the traffic is congested, often referred to as the "peak period" of traffic flow. For Forsyth County, like other Atlanta regional areas, the major operational performance issue is that peak congestion is getting worse and spreading to occupy an increasing part of the travel day.

SR 400 is a major state facility providing regional access. A majority of GA 400 is four-lane divided highway with a functional classification of Rural Principal Arterial in GDOT's RC file. The posted speed limit alternates between 55 mph and 65 mph depending on the level of development. For instance, the speed limit on either side of the North Georgia Outlets Shopping Center at Dawson Forest Road is posted at 55 mph. A grade section begins at SR 306, with the first at-grade intersection on SR 400 at SR 369. Along the entire corridor, an at-grade access point (street or driveway) occurs approximately every quarter mile. The frequency of access is greatest in Forsyth and Dawson counties. Ten crossings are controlled by four-way traffic signals (SR 369, Settingdown Road, Hubbard Town Road, Jot-em-Down Road, Dawson Forest Road, SR 53, Harmony Church Road, SR 136, Burnt Stand Road, and SR 60). Other crossings have yield or stop controls for access onto SR 400.

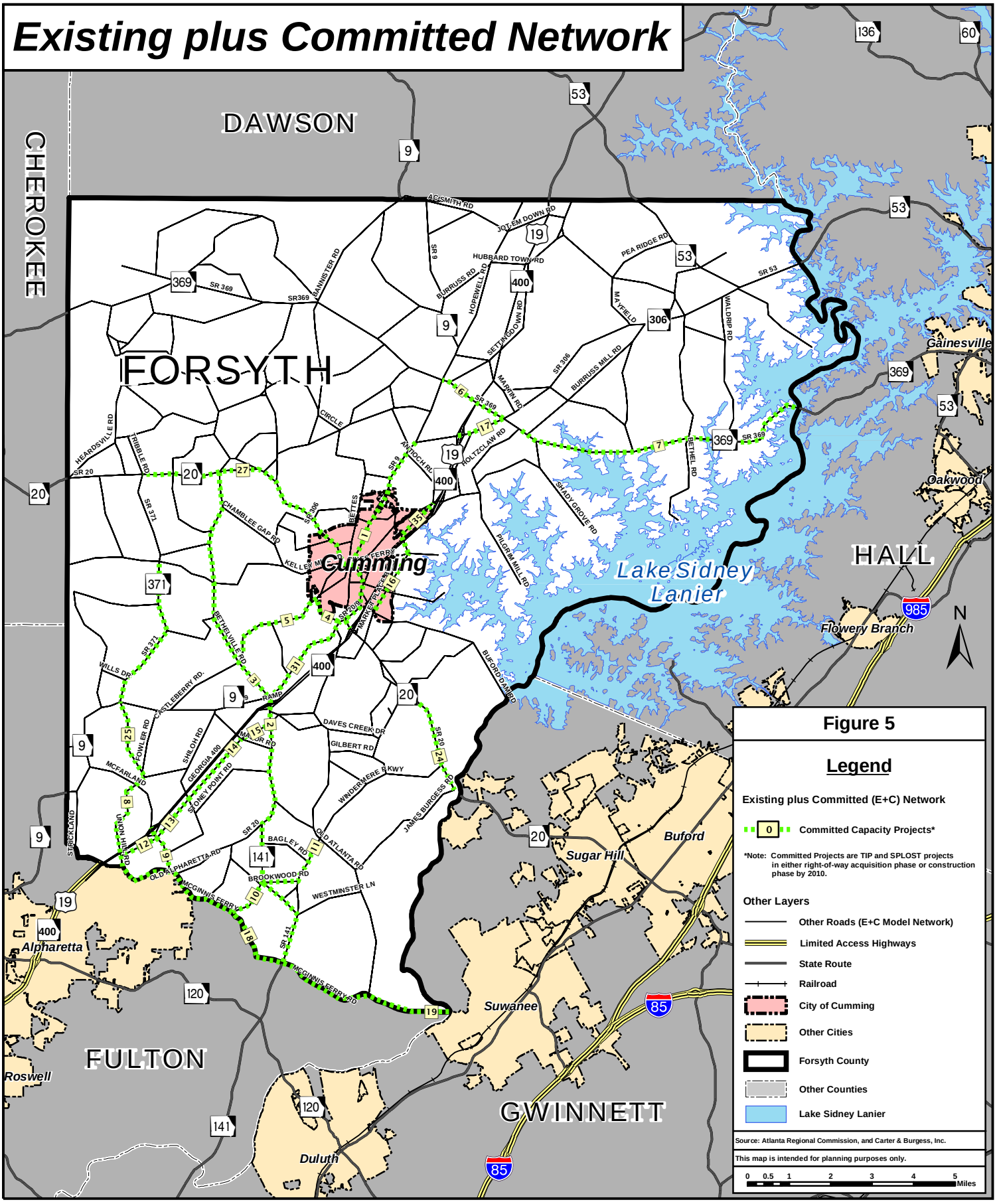
The current State policy to focus on reducing congestion has spurred the programming of projects to improve traffic flow on SR 400 and other facilities with reduced levels of service (SR 20, SR 9, SR 141 and other State roads). ARC's TIP[6] for the Forsyth County area includes 37 projects to add road capacity. These are mostly widening projects, with three new road projects. In addition, the ARC TIP for 2006-2011 includes roadway and access management improvements, bridge upgrades and roadway operational upgrades.

The TIP programs federal, state and local funds for PE (preliminary engineering), ROW (right-of-way) and CS (construction) projects. Seven widening projects in the TIP are expected to be in construction before 2010, with an additional seven in construction by 2015. Another 17 projects are expected to be in construction before 2020, with the remaining balance by 2030. Taken together, these projects will improve traffic operations and flow of Forsyth County roads.

As part of the travel demand analysis, the E+C (Existing plus Committed) network for the Forsyth County 2006 plan update includes those TIP projects projected to be in right-of-way acquisition or construction by 2011. Figure 5 shows the Forsyth County roadway network and locations of the E+C projects.

[4] Note: these denote lane miles for each road system
[5] GDOT 445 Report, December 31, 2004.
[6] ARC Transportation Improvement Program 2006-2011.

Existing plus Committed Network



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A list of the committed projects and 2006-2011 TIP projects is included in Table 6, reflecting those projects approved for inclusion in the regional planning process. Table 6 also references the projects included on Forsyth County's existing SPLOST V (2003-2008), as well as those recommended for inclusion on the future SPLOST VI (2008-2013).

Table 6 – Forsyth County Committed, TIP and SPLOST Projects

Project ID	Road	From	To	Committed by 2011 (TIP & SPLOST)	2006-2011 TIP	Existing SPLOST V (thru 2008)	Future SPLOST VI (2008-2013)
Roadway Capacity Projects							
24	SR 20 (Buford Highway): Segment 4	Samples Road/Trammel Road	James Burgess Road	X	X	X	X
9	McFarland Road: Segment 1	McGinnis Ferry Road	SR 400	X	X	X	X
19	McGinnis Ferry Road - Regional Project	Chattahoochee River	Sargent Road	X	X	X	X
3	Bethelview Road	SR 9 (Atlanta Highway)	SR 20 (Canton Highway)	X		X	X
25	Union Hill Road/Mullinax Road: Segment 2	McFarland Road	SR 9 (Atlanta Highway)	X	X	X	X
16	Marketplace Boulevard: Segment 1	Buford Dam Road	Baldridge Marina Road	X	X	X	X
10	Brookwood Road	McGinnis Ferry Road	SR 141 (Peachtree Parkway)	X	X	X	X
8	Union Hill Road: Segment 1	McGinnis Ferry Road	McFarland Road	X	X	X	X
5	Castleberry Road	Bethelview Road	Hutchinson Road	X	X	X	X
12	Ronald Reagan Boulevard: Segment 1	McGinnis Ferry Road & Union Hill Road	McFarland Road	X	X	X	X
2	SR 141 (Peachtree Parkway)	0.6 Mile North of Fulton County Line	SR 9 (Atlanta Highway)	X	X	X	
23	SR 371 (Post Road)	SR 9 (Atlanta Highway)	Kelly Mill Road	X	X	X (PE)	X
18	McGinnis Ferry Road - Regional Project	Sargent Road	Union Hill Road	X	X		X

Table 6 – Forsyth County Committed, TIP and SPLOST Projects

Project ID	Road	From	To	Committed by 2011 (TIP & SPLOST)	2006-2011 TIP	Existing SPLOST V (thru 2008)	Future SPLOST VI (2008-2013)
17	SR 306 (Keith Bridge Road): Segment 2	SR 400	SR 369 (Browns Bridge Road)	X	X		X
31	SR 9 (Atlanta Highway): Segment 4	SR 141 (Peachtree Parkway)	SR 20 (Buford Highway)	X	X		X
14	Ronald Reagan Boulevard: Segment 3	Shiloh Road	Majors Road	X	X		X
13	Ronald Reagan Boulevard: Segment 2	McFarland Road	Shiloh Road	X	X		X
27	SR 20 (Canton Highway)	SR 371	SR 400	X	X		
7	SR 369 (Browns Bridge Road): Segment 2	SR 306 (Keith Bridge Road)	Hall County Line	X	X		
6	SR 369 (Browns Bridge Road): Segment 1	SR 9 (Dahlonega Highway)	SR 306 (Keith Bridge Road)	X	X		
1	SR 9 (Atlanta Road/Pilgrim Mill Road): Segment 5	SR 20 (Buford Highway)	SR 306 (Keith Bridge Road)	X	X		
35	Marketplace Boulevard: Segment 2	Baldridge Marina Road	Pilgrim Mill Road	X	X		
26	Church St. Extension	Tribble Gap Road	Intersection of Hudson Street @ Woodland Street	X	X		
Roadway Operational Projects							
43	Buford Dam Road	SR 9 (Atlanta Highway)	Sanders Road	X	X		
45	Mary Alice Park Road **(CITY OF CUMMING)**	SR 9 (Atlanta Highway)	Mary Alice Park	X	X		
46	Pilgrim Mill Road	SR 9 (Atlanta Highway)	Freedom Parkway	X	X		
47	Chamblee Gap Road	Bethelview Road	Current end of graveled section	X	X		

Table 6 – Forsyth County Committed, TIP and SPLOST Projects

Project ID	Road	From	To	Committed by 2011 (TIP & SPLOST)	2006-2011 TIP	Existing SPLOST V (thru 2008)	Future SPLOST VI (2008-2013)
48	Intersection Improvements along SR 9 at Hamby Road, Post/Mullinax Roads, Castleberry Road, Majors/Shiloh Roads, Spot Road, and AC Smith Road and SR 20 at Post/Tribble Road	n/a	n/a	X	X	X	
49	Intersection Improvements along SR 369 at Doc Bramlett Road, Hendrix Road, Hotzclaw Road, Shady Grove/Elrod Roads. Jot Em Down/Bethel Road, and Waldrip Road	n/a	n/a	X	X	X	
50	SR 306 (Keith Bridge Road) Intersection Improvements at SR 53, Shadburn/Parks, and Waldrip Road	n/a	n/a	X	X	X	
50a	SR 141, Bethelview Road at SR 9	n/a	n/a	X	X		
50b	SR 369 (Browns Bridge Road)	Cherokee County Line	Hightower Circle	X	X		
Bridge Projects							
BR-1	SR 369 (Matt Highway)	Settingdown Creek	n/a	X	X		
BR-3	SR 53 (at Chestatee River) - Bridge Upgrade	Chestatee River	n/a	X	X		

Travel Patterns and Characteristics

Travel patterns in Forsyth are predominantly north/south using SR 400 as the major access route. Movements east/west are also growing, mostly on SR 20, SR 369, and McGinnis Ferry Road. The limited number of east/west connectors in Forsyth causes congestion on these facilities. East/west travel is generated in large measure by trips from adjacent counties connecting with SR 400.

Daily work trips are especially important to the overall transportation system and its efficiency because the majority of work-related travel occurs during peak demand periods. Travel time, VMT and VHT are important metrics generated by the travel demand model as it evaluates current and future conditions and the impact of potential improvements on the transportation network. Table 7 shows where resident of Forsyth County, Dawson and Lumpkin County work, providing some clues to the work travel patterns. Table 8 shows the residence counties for the workers in the same three counties. Increasingly the road network in Forsyth will be involved in providing access to residents and employment that is oriented to the northern parts of the Atlanta Region. The attractiveness of the area will continue to draw development, employment and residents into the county, further taxing the ability of the transportation network to provide mobility at a level of service expected by county residents.

Table 7 – Where Forsyth Area Residents Work (SR 400 Corridor)

County (# of Residents)*	Forsyth (51,224)	Dawson (8,082)	Lumpkin (10,118)
Top 3 Work Counties	Forsyth 41% Fulton 30% Gwinnett 11%	Dawson 34% Forsyth 20% Fulton 15%	Lumpkin 51% Hall 16% Dawson 8%

* Workers (age 16 years and over) living in county.
Source: 2000 U.S. Census

Table 8 – Where Study Area Workers Live (SR 400 Corridor)

County (# of Workers)*	Forsyth (42,509)	Dawson (5,277)	Lumpkin (7,460)
Top 3 Resident Counties	Forsyth 49% Fulton 13% Gwinnett 9%	Dawson 53% Lumpkin 15% Forsyth 14%	Lumpkin 70% Hall 9% Dawson 5%

* Workers (age 16 years and over) commuting in county.
Source: 2000 U.S. Census

Freight Transportation

Forsyth County has a network of roads used for freight transportation. Freight routes are designated by either the State or the county's Board of Commissioners. Trucks and motor vehicles in excess of 36,000 pounds or longer than 30 feet have to use truck routes except when accessing a terminal, parking lot, repair garage, headquarters, or place of pickup or delivery. Forsyth has nine State designated truck routes and an additional nine County roads that serve the same purpose. Truck traffic in Forsyth has steadily increased over the years. The 2000 base year travel demand model includes a truck ratio of 15 percent, which increases to 22 percent in the 2030 horizon year. There is renewed emphasis and attention being given to freight routes that support economic development and provide trucks with access to business and industry in the county. The expectation is that truck traffic will continue at a fast pace and will need to penetrate all reaches of the county in support of demands from residents and visitors. Designated Forsyth truck routes are presented in Table 9, and shown on Figure 6.

Freight Facilities

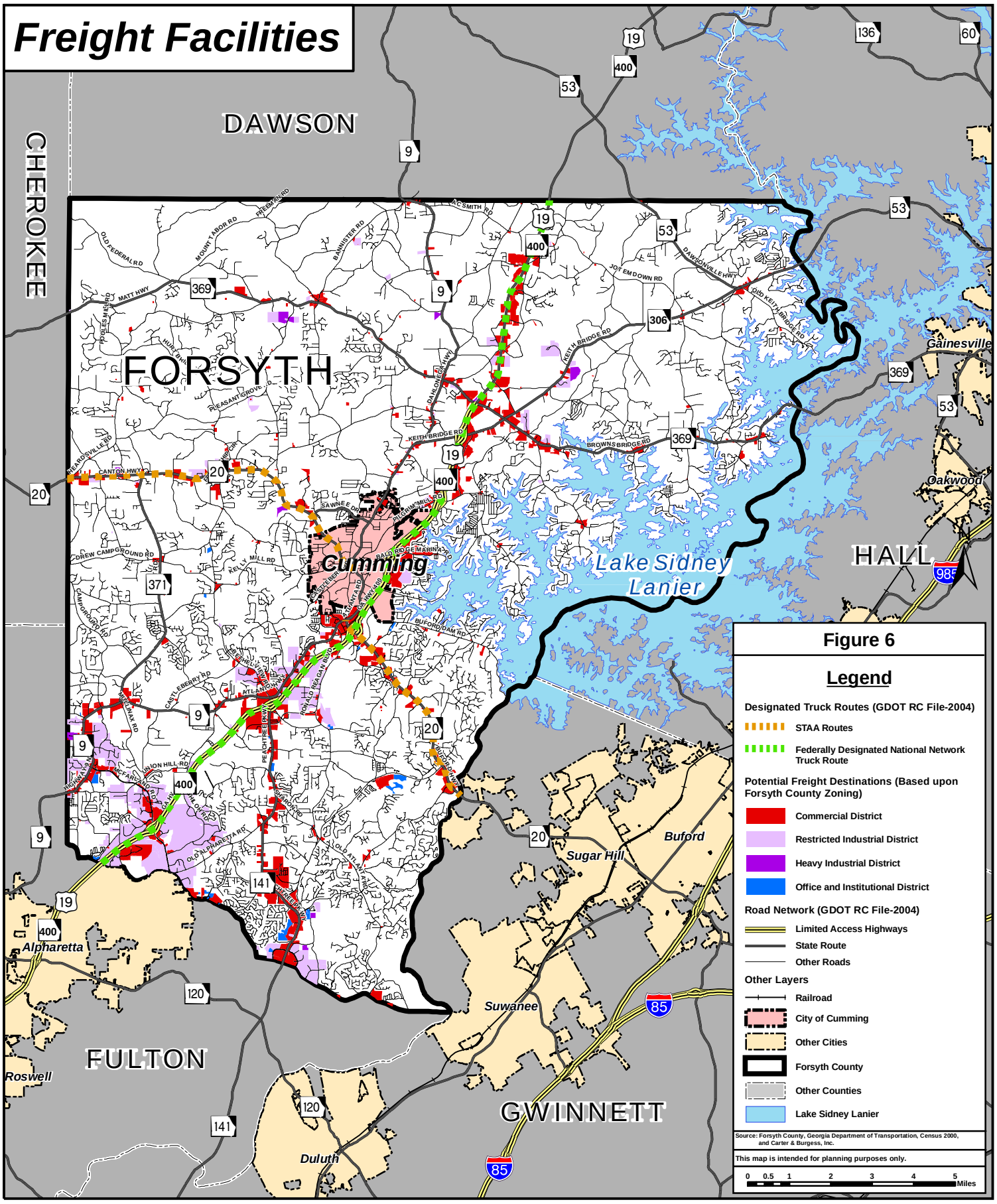

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Table 9 – Truck Routes within Forsyth County

Truck Route	From	To
SR 9	Fulton County	Dawson County
SR 20	Gwinnett County	Cherokee County
SR 53	Hall County	Dawson County
SR 141	Fulton County	SR 9
SR 306	SR 9	SR 53
SR 306	SR 20	SR 9
SR 369	Hall County	Cherokee County
SR 371	SR 9	SR 20
SR 400	Fulton County	Dawson County
CR - Spot Road Connector	Dr. Bramblett Road	SR 20
CR - Spot Road	SR 9	Dr. Bramblett Road
CR - Hutchinson Road	SR 9	Caslteberry Road
CR - Dr. Bramblett Road	Spot Road	Spot Road Connector
CR - Old Buford Road	SR 9	SR 20 (Main Street)
CR - Bethelview Road	SR 9	SR 20
CR - McFarland Road	McGinnis Ferry Road	SR 9
CR - McGinnis Ferry Road	Gwinnett County	McFarland Road
CR - North Old Atlanta Road	SR 9	Ronald Reagan Boulevard
CR - Pendley Road	SR 9	Old Atlanta Road
Ronald Reagan Boulevard	SR 141	SR 20

Existing System Performance

Performance measures have been part of the *Forsyth County Major Transportation Plan* for some time. The County has long recognized that performance measures can impact decision making, resulting in more implementable plan recommendations that are grounded in solid technological evaluations and focused on improving transportation operations.

Performance measurement can be used to assess progress toward achieving predetermined goals. By focusing attention on system characteristics important to the traveling public, performance measures can help focus on the day-to-day experience of transportation system users. This provides important balance and greater focus on the typical daily characteristics of the system, including the issues faced in incident response, work zone management, and provision of traveler information.

Performance measures can be grouped into three categories:

- Input measures, which generally address the supply of resources
- Output measures, which address the delivery of transportation programs, projects, and services
- Outcome measures, which address the degree to which the transportation system meets policy goals

Performance measures were discussed earlier in *Section 2 – Plan Development Process*, along with the goals for the transportation program (see Table 2). The performance measures identified included:

- Per capita VMT
- Per capita VHT
- Peak period v/c ratio
- Average congested roadway speed
- Average travel time
- Change of VMT
- Ongoing monitoring of development review process to measure property development's reliance on single occupancy vehicle trip making
- Accident rates
- Level of service (LOS)

Traffic volumes on Forsyth roads have impacted some facilities dramatically, reducing service on those roads to unacceptable ratings. Level of service (LOS) is a performance measurement used to gauge traffic operations by measuring the ratio of traffic volume to roadway capacity. LOS ratings range from A to F, with A being ideal conditions and F being congested conditions nearing gridlock. Future 2030 traffic will affect state and county roads such that existing and proposed improvements will struggle to maintain system operations. The selected measures were used to analyze transportation need for the base year (2000) and future (2030) conditions. Project packages were tested to determine the most effective combination of projects to improve the operations of the road system.

Traffic Volumes

Traffic counts are collected by GDOT on a scheduled basis, providing data for annual average daily traffic (AADT) at traffic counter locations. Forsyth County traffic volume has increased two and three fold on some facilities between 1990 and 2000. Trends from 2000 to 2004 show growth in traffic volumes, especially in southern parts of the county.

Three-year averages comparing AADT for 1992 to 1994 and 2002 to 2004 show growth countywide, on both State and County roads. Table 10 shows the increase in averaged three-year traffic counts for select roads in Forsyth.

Table 10 – Sample of Forsyth County AADT[7]

GDOT Traffic Counter Number	Location	Begin / End Intersections	3-year average (1992-1994)	3-year average (2002-2004)	Rank (from 1 to 82)	
					Based on Absolute Change	Based on Percent Change
0104	CR 61 (Mathis Airport Road)	Westminister Lane / Bagley Road	467	4,567	54	1
0103	CR 59 (Mathis Airport Parkway)	SR 141 / Old Atlanta Road	796	5,963	48	2
0180	CR 522(East Maple Street)	SR 9 / Bald Ridge Road	738	5,513	52	3
0111	CR 450 (James Burgess Road)	Old Atlanta Road / SR 20	1,334	8,103	33	4
0080	SR 400	Union Hill Road / McFarland Road	38,146	76,013	1	34
0083	SR 400	SR 141 / SR 20	32,109	69,100	2	24
0086	SR 400	Bald Ridge Road / Pilgrim Mill Road	27,571	58,657	3	25
0085	SR 400	SR 20 / Bald Ridge Road	28,204	54,403	4	40

The largest percent increases in traffic were felt on County roads, although the largest absolute increases were on State roads. The increase in traffic volumes for all roads indicates the need to have a balanced program that addresses the needs of both County roads (which are the responsibility of the County) and State roads (the responsibility of GDOT). The County has been working closely with GDOT to support and accelerate State project improvements for roads.

The Forsyth County Travel Demand Model was used to identify current and future congestion on the transportation network. A base year of 2000 and horizon year of 2030 were utilized to coincide with the ARC existing/approved travel demand models. The County model analyzed v/c ratios (traffic volume to road capacity) to measure the amount of congestion on the system. A lower v/c ratio indicates that there is a better balance between traffic and capacity (i.e., less congestion), while a higher v/c ratio indicates that the road is approaching full capacity with a resulting increase in congestion. The Forsyth travel demand model used a v/c ratio of 0.85 as the criterion for “acceptable” traffic to road capacity for a roadway segment. As the v/c ratio approaches 1.0, the road is more congested and movement is more difficult because capacity is being reached.

Figure 7 presents the LOS for the 2000 base year conditions. Travel demand model results for base year 2000 showed that several segments of roadway had a v/c ratio of more than 0.85:

- SR 369 between Burrus Mill Road and SR 400
- SR 20 between Gwinnett County line to Bethelview Road
- SR 400 between McGinnis Ferry Road and Pilgrim Mill Road
- McGinnis Ferry Road between McFarland Road and Gwinnett County Line
- SR 141 between McGinnis Ferry Road and SR 9

[7] Source: Georgia Department of Transportation Traffic Count Data

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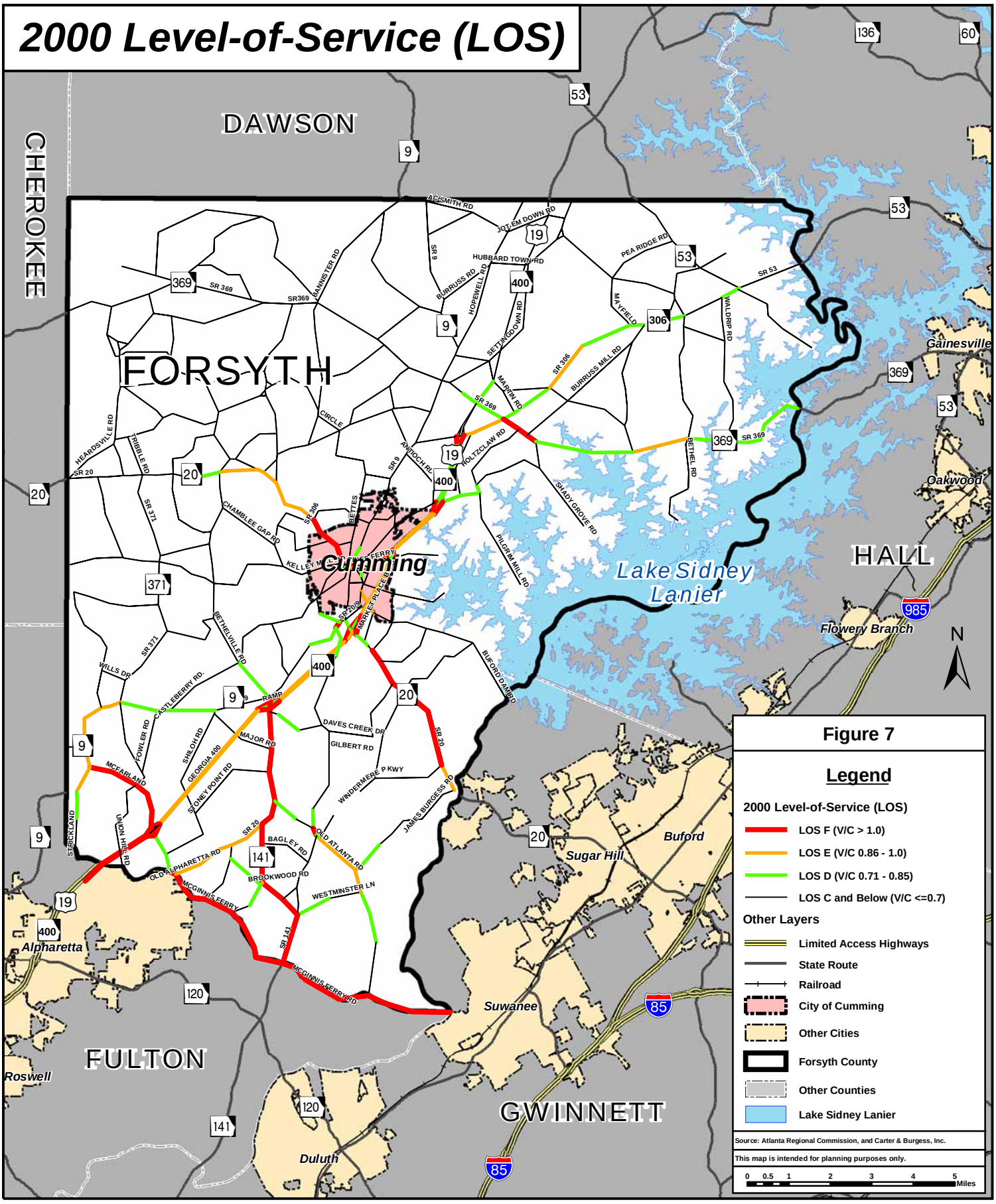
2000 Level-of-Service (LOS)



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The 2030 horizon year travel demand model results indicate a worsening of conditions. Figure 8 presents the v/c ratios after completion of the E+C projects. Figure 9 presents the LOS after completion of the 2030 RTP projects (which include the committed projects). As Figure 9 shows, even after the current 2030 RTP projects are completed, the system will continue to have a substantial amount of congestion. The programmed projects will improve network operations, but the press from growth in population and employment will continue to burden the roadway system, with almost 35 percent of the roadway miles in congested condition (LOS E or F).[8]

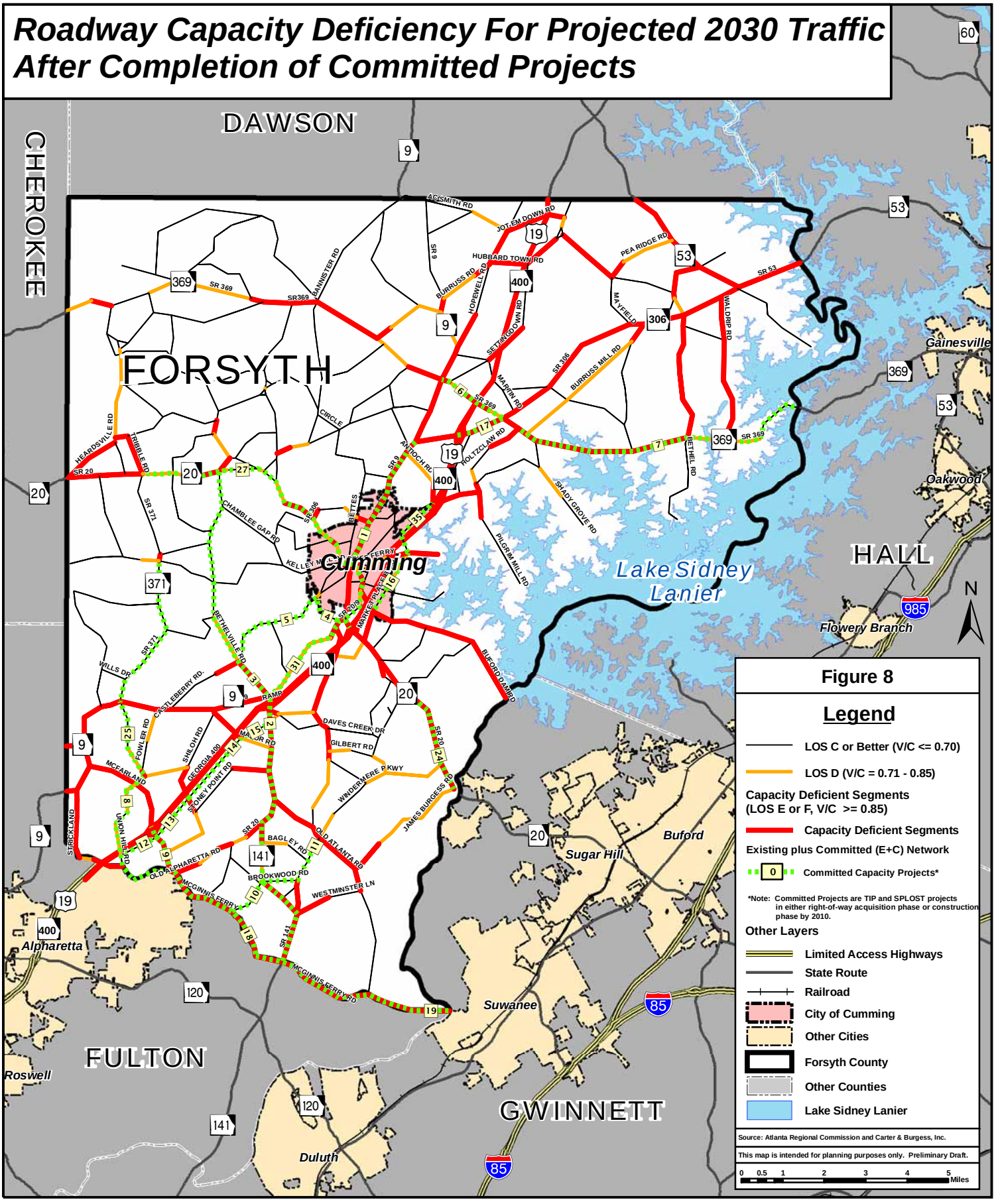
Table 11 lists the identified roadway deficiencies remaining (LOS E or F) for those segments containing an RTP project.

Table 11 – 2030 Deficiencies on Segments with 2030 RTP Projects

Project ID	Road Segment	From	To	2030 v/c
24	SR 20 (Buford Highway): Segment 4	Samples Road/Trammel Road	James Burgess Road	1.64
9	McFarland Road: Segment 1	McGinnis Ferry Road	SR 400	1.55
2	SR 141 (Peachtree Parkway)	0.6 Mile North of Fulton County Line	SR 9 (Atlanta Highway)	1.53
27	SR 20 (Canton Highway)	SR 371	SR 400	1.52
18	McGinnis Ferry Road - Regional Project	Sargent Road	Union Hill Road	1.48
17	SR 306 (Keith Bridge Road): Segment 2	SR 400	SR 369 (Browns Bridge Road)	1.43
19	McGinnis Ferry Road - Regional Project	Chattahoochee River	Sargent Road	1.38
34	McFarland Road: Segment 2	SR 400	SR 9	1.25
41	SR 400	McFarland Road	SR 20 (Buford Highway)	1.16
31	SR 9 (Atlanta Highway): Segment 4	SR 141 (Peachtree Parkway)	SR 20 (Buford Highway)	1.16
39	SR 306 (Keith Bridge Road): Segment 3	SR 369 (Browns Bridge Road)	SR 53 (Dawsonville Highway)	1.11
7	SR 369 (Browns Bridge Road): Segment 2	SR 306 (Keith Bridge Road)	Hall County Line	1.04
32	SR 20 (Canton Highway): Segment 1	SR 369 (Hightower Road) in Cherokee County	SR 371 (Post Road)	1.03
6	SR 369 (Browns Bridge Road): Segment 1	SR 9 (Dahlonega Highway)	SR 306 (Keith Bridge Road)	1.01
1	SR 9 (Atlanta Road/Pilgrim Mill Road): Segment 5	SR 20 (Buford Highway)	SR 306 (Keith Bridge Road)	1.01
29	SR 9 (Atlanta Highway): Segment 2	McFarland Road	SR 371 (Post Road)	1.01
37	Old Alpharetta Road	McGinnis Ferry Road	SR 141 (Peachtree Parkway)	0.92
38	SR 306 (Keith Bridge Road): Segment 1	SR 9 (Dahlonega Highway)	SR 400	0.91
3	Bethelview Road	SR 9 (Atlanta Highway)	SR 20 (Canton Highway)	0.85

[8] 35% is based upon the 1,155 miles of regionally-significant roadways included in the Forsyth County travel demand model.

Roadway Capacity Deficiency For Projected 2030 Traffic After Completion of Committed Projects



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Roadway Capacity Deficiency For Projected 2030 Traffic After Completion of 2030 RTP Projects

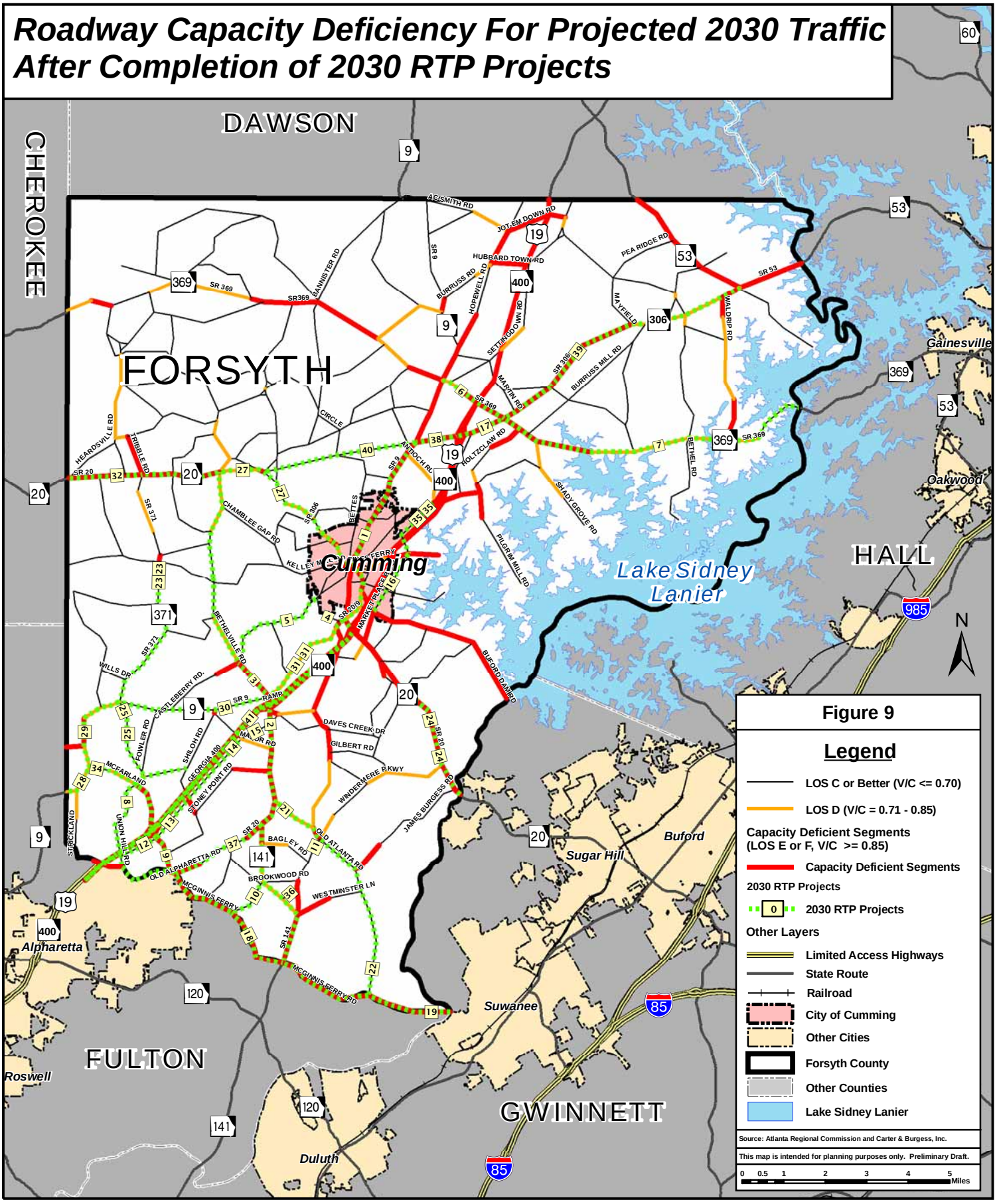

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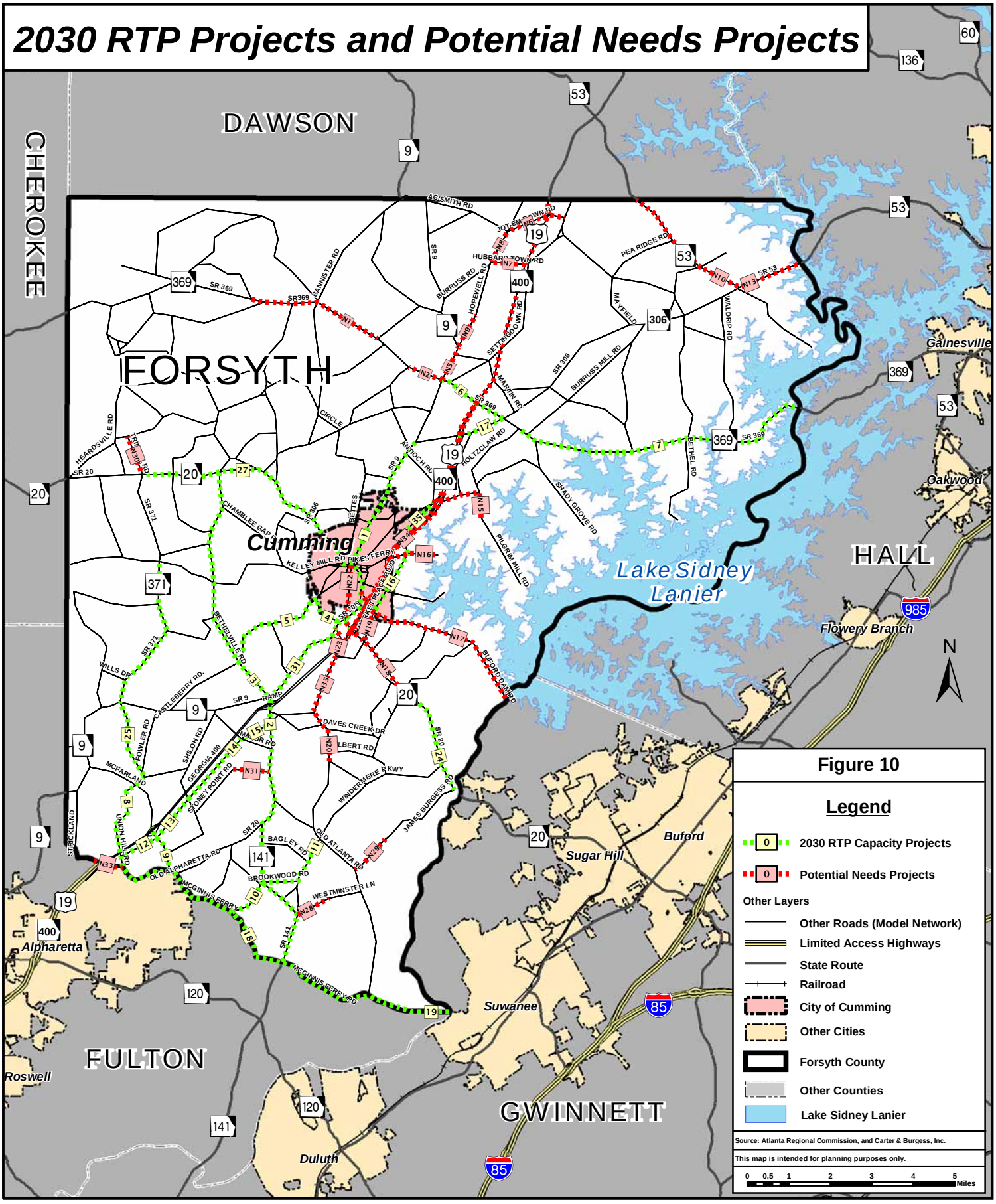
Table 12 lists additional roadway deficiencies and needs for those segments *not* containing an RTP project. The potential needs are presented on Figure 10.

Table 12 – 2030 Deficiencies on Segments without 2030 RTP Projects

Project ID	Road Segment	From	To	2030 v/c
N18	SR 20 (Buford Highway)	SR 400	Samples Road/Trammell Road	1.82
N13	SR 53 (Dawsonville Highway)	SR 53 (Dawsonville Highway)	Hall County Line	1.76
N29	James Burgess Road	Old Atlanta Road	SR 20	1.73
N15	Pilgrim Mill Road	Sinclair Shores Road	SR 400	1.72
N34	SR 400	SR 20	Dawson County Line	1.68
N17	Buford Dam Road	SR 9	Gwinnett County Line	1.67
N5	SR 9 (Dahlonega Highway)	SR 306 (Browns Bridge Road)	Hopewell Road	1.50
N10	SR 53 (Dawsonville Highway)	SR 306 (Keith Bridge Road)	Dawson County Line	1.31
N20	Old Atlanta Road	Melody Mizner Lane	Ronald Reagan Parkway	1.28
N6	Jot Em Down Road	Hopewell Road	Cross Roads Road	1.16
N16	Baldrige Marina	Lake Lanier	SR 400	1.12
N31	Stoney Point Road	Stoney Ridge Road	SR 141 (Peachtree Parkway)	1.07
N9	Hopewell Road	SR 9 (Dahlonega Highway)	Skyland Parkway	1.06
N23	North Old Atlanta Road	Ronald Reagan Parkway	SR 9 (Atlanta Highway)	1.05
N28	Laurel Springs Parkway	Peachtree Parkway	Chattsworth Lane	1.01
N1	SR 369 (Matt Highway)	Whitmire Road	Hubert Martin Road	1.00
N2	SR 369 (Matt Highway)	SR 9 (Dahlonega Highway)	Gravitt Road	0.97
N19	Marketplace Blvd.	SR 20	Buford Dam Road	0.96
N22	Veterans Memorial Boulevard	SR 400	Amos Drive	0.96
N7	Hubbard Town Road	Hopewell Road	SR 400	0.93
N30	Tribble Road	SR 20	Watson Road	0.91
N8	Hopewell Road	Hubbard Town Road	Jot'Em Down Road	0.86
N33	McGinnis Ferry Road	Union Hill Road	Tidwell Drive	0.86
N35	Ronald Reagan Boulevard	Old Atlanta Road	North Old Atlanta Road	0.84

2030 RTP Projects and Potential Needs Projects



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Traffic Operations / Controls

Traffic operations improvements are often credited with enhancing system operations and efficient network performance. These can include traffic signals, medians, intersection modifications, access management and other traffic operations measures that improve the efficiency of existing roads without widening. The Forsyth program of projects includes a number of such initiatives.

Often these improvements address specific location deficiencies or community needs, addressing issues of sight distance, placement of signage, signals and similar operations problems. Many of the proposed improvements can be incorporated into the existing roadway network without adding capacity, yet still enhancing the functionality and operability of the facility. These improvements can be expedited, typically have a short time frame schedule and cost less than widening a roadway or constructing a new roadway.

Signals are an important component of traffic operations and control. The County maintains 42 signals in different parts of the county. In addition, the City of Cumming maintains signals at 4 locations, Fulton County maintains 3 signals on McGinnis Ferry Road, and the City of Alpharetta maintains 1 signal on McGinnis Ferry Road. The remaining 64 signals are maintained by GDOT. Signs are developed, installed and maintained by GDOT on State roads and by the County on County roads. Intelligent Transportation System (ITS) cameras, incident management and variable message signs have also been found to be effective ways of improving traffic operations.

Integration with Multimodal Transportation Systems

The 2006 plan update explored the potential for other Transportation Demand Management (TDM) options, including vanpooling, carpooling and express bus, which should also be considered. In the 21st century, strategies to manage demand will be as critical to transportation operations as strategies to increase capacity (supply) of facilities. Demand oriented approaches are needed to address the transportation issues created by growth and the variability in demand for use of the systems. Forsyth County, working with regional transit operators, will continue to explore TDM options for the county, especially in those areas where density and demand for services present the opportunity for successful implementation.

Safety

Safety and crash information for Forsyth County reveals that accidents have increased over time concurrent with the increase in traffic volumes. The Crash Analysis Statistics and Information (CASI) Report provide the rate of crashes per 10,000 licensed drivers. The recorded number of accidents in Forsyth has steadily increased from 1996 (2,305 crashes) to 2003 (3,909 crashes). During the eight year period from 1996 to 2003, Forsyth experienced a total of 25,426 accidents. The rate of accidents per 10,000 drivers reached 459.5, the fourth lowest of the six surrounding counties (Cherokee had 350.2, Dawson had 363.2, Gwinnett had 477.8, Hall had 552.8, and Fulton had 856.0).

Multiple factors often combine to produce a crash, and those that contribute to fatal crashes can be different than those common in non-fatal crashes. The diverse factors include physical conditions, roadway and vehicle factors, driver behavior, experience and physical condition, and many others. Roadway factors include design and engineering (such as proper shoulder design), road condition and maintenance (such as clear striping). Vehicle factors include condition, body type, weight, engineering, and safety devices (such as seatbelts or airbags, which clearly affect crashes, injuries and fatalities). Physical conditions can include weather such as rain, snow or sun glare. Driver behavior, experience, and physical condition are all

factors in motor vehicle crashes. Sociological factors involving group dynamics (such as multiple teens in a vehicle) or anthropological aspects (such as a culture of speed) also play a part.

CASI reports varying reasons for crashes in Forsyth County. Of the 25,426 crashes reported between 1996 and 2003, 10 percent (2,522 crashes) were due to speeding, 4.4 percent attributable to driving under the influence, and 2 percent involved accidents caused by hitting a deer. Overall, 84 percent of Forsyth County drivers used safety belts.

Reviewing more recent information from January 2000 to July 2005 shows that Forsyth County experienced 3,223 crashes per year. On average there were 15 fatalities and 648 crashes with injuries, which accounts for about 20 percent of the total. On average each year, the types of crashes included 834 right angle accidents, 121 head-on accidents, 1420 rear-end accidents, 27 DUI accidents, and 848 various other accidents.

One corridor with high accident experience is SR 20, which connects to I-985 and I-85 in Gwinnett. This congested roadway has averaged 514 accidents per year over the last five years. The majority of the crashes have been rear-end accidents (282 per year), right angle crashes (163 per year) and head-on collisions (11 per year).

Another high accident corridor is SR 141 south of SR 400. This road is currently a two-lane arterial connecting developments in north Fulton County to SR 400. The road experienced 236 crashes per year, including rear-end crashes (129 per year), right angle crashes (60 crashes per year) and head-on crashes (8 per year).

SR 9 also experienced a substantial number of crashes. SR 9 is well utilized as a main cross-county corridor connecting Fulton County in the south and Dawson County in the north. Running roughly parallel to SR 400, SR 9 experienced 376 crashes per year on average. Right angle crashes accounted for 120 per year, while rear-end crashes were 174 per year. This corridor had the most head-on collisions at about 14 per year.

SR 400 also experienced a high rate of accidents with 327 per year. This congested corridor had mostly rear-end accidents. Figure 11 presents the high crash intersection locations for the period between 2001 and 2004, based upon data provided by GDOT.

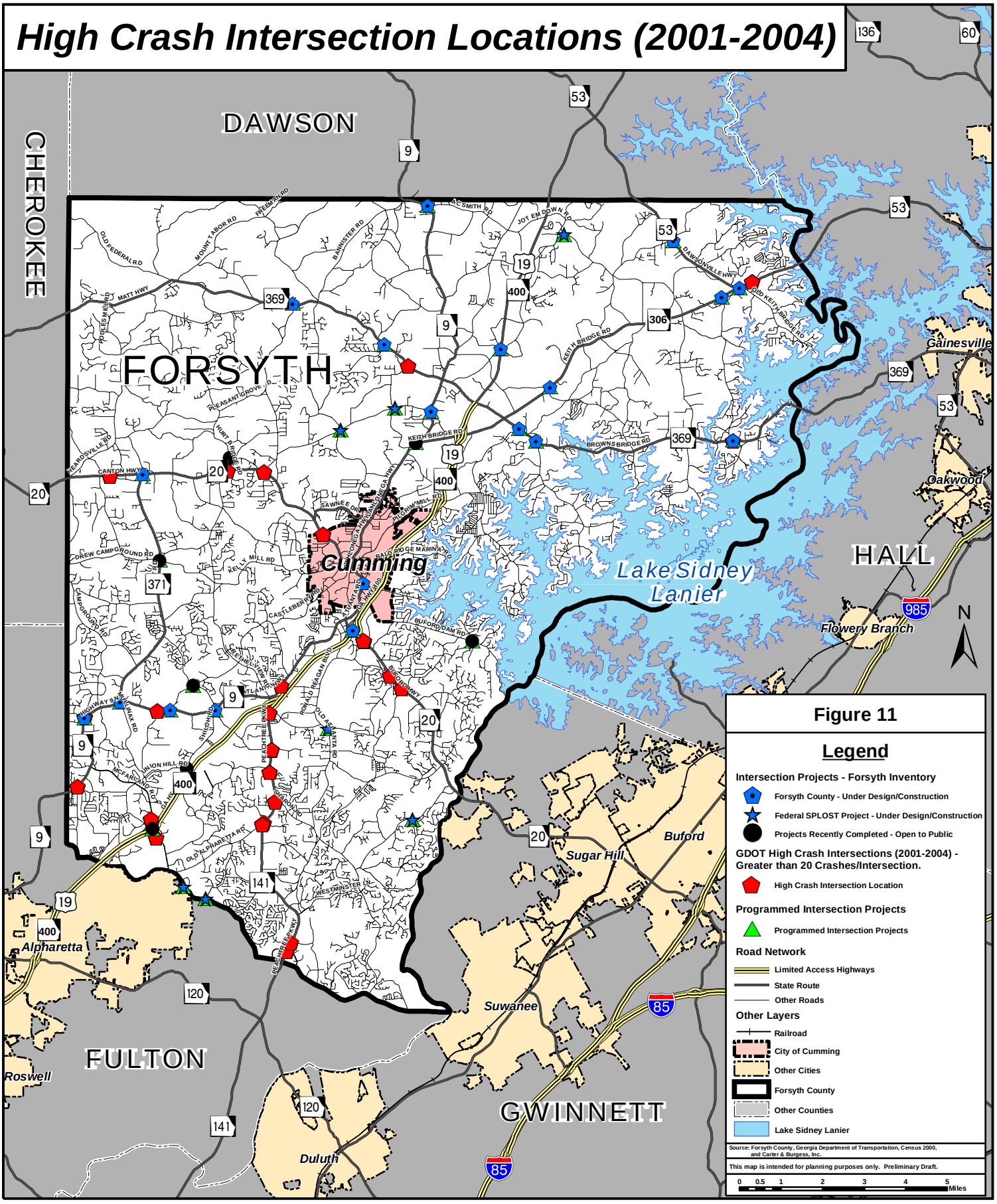
The plan update took into account accident data, using it to locate high accident locations where safety improvement projects are needed. Almost all identified locations are part of the SPLOST projects approved by the county's citizens for intersection improvements. Often improvements that add capacity or improve traffic operations also have the advantage of addressing safety needs, resulting in a reduction of crashes.

Maintenance

Federal legislation and State DOT policy has traditionally emphasized maintenance of roads and bridges, making those priorities for available funding. Maintenance of State roads and bridges is the responsibility of GDOT, while County facilities are maintained by the County. All bridges, regardless of ownership, are inspected by GDOT, with federal and state funds available for bridge maintenance. Local bridges found to be unsafe must be posted and weight limited.

Forsyth has 89 bridges on its road network system, ranging in age from 66 years old (built in 1940) to 5 years old (built in 2001). Bridges vary in condition, with those found to be deficient programmed for maintenance or replacement. The County paves approximately 40 to 50 miles of road annually and inspects approximately 100 miles of pavement per year, focusing on pavement reported as sub-standard. GDOT inspects State roads on a three to five year cycle and bridges every two years.

High Crash Intersection Locations (2001-2004)



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Of the 1300 miles of roadway in Forsyth, 1196 miles are County roads. A majority of roads (97 percent) are paved, including all State roads. Forsyth County has 40 miles of unpaved roads, which have either stone or gravel surfaces.

The County has made a concerted effort to maintain roadways and bridges through optimum use of SPLOST funds and available federal and state funds. The current SPLOST V has a broad listing of project activities, including improvements to State roads, intersection improvements, resurfacing, paving gravel roads and traffic safety improvements. A majority of these projects have been completed, and those remaining are in advanced stages of project development. The SPLOST projects have been included in the travel demand model as committed projects. The current analysis takes into account their contribution to travel quality.

Programmed and Planned Projects

Forsyth County has an ambitious program of projects included in the ARC TIP, as shown previously in Table 6. The list includes widening, intersection/operational improvements, and bridge improvements. The SPLOST V funded projects were also included in Table 6.

The plan update has analyzed the impact of programmed projects and projects recommended in the previous 2002 Plan. The study effort identified additional road widening needs, road operational upgrades and traffic operations improvements. The list of projects identified by the Plan Analysis is included in Appendix E.

The update has also considered the availability of funding. Based on comments from the Stakeholder Committee and Forsyth County staff, and using guidance from performance measures, the projects were prioritized into short, medium and long-term time frames. An additional listing includes “aspirations” projects, needed projects that could not be funded. These projects are listed as potentials for consideration if additional funding can be identified.

5 Roadway System Needs Assessment

Identification of needed roadway improvements was based on:

- Technical analysis using transportation planning data tools and analytical evaluations that identified system deficiencies in the current and future network
- Goals and performance measures that provided the criteria for findings of system deficiencies
- Stakeholder and public input
- Consideration of potential impacts

Identified deficiencies were further refined to consider potential solutions. In evaluating solutions and proposing project improvements, the study took into account funding, potential for environmental impacts and stated public priorities. The following recaps the needs assessment findings that resulted in the recommended Program of Projects and recommended strategic directions for the County's transportation program to 2030.

Overview of Technical Analysis and Model Development

The travel demand model is an effective tool that allows for identification of potential roadway deficiencies based upon future growth socioeconomic data projections. As discussed in Section 2, the Forsyth County travel demand model utilized the ARC model framework, but at a finer grain that allowed for more in-depth analysis of current and future roadway system operations. TAZ boundaries were adapted from the recently completed GDOT 21-County model, with the refined network utilizing 221 TAZs and the ARC model network structure. The network was updated to reflect the current roadway system including newly completed regionally significant facilities in Forsyth County. The newly developed Forsyth County model represents a more robust planning tool, developed in close coordination with Forsyth County staff.

The Forsyth County model incorporated the same base year (2000) and horizon year (2030) to enable possible incorporation of the finer grained analysis back into the ARC regional model sometime in the future. The 2030 E+C and 2030 RTP project runs were completed to determine future year 2030 v/c ratios, thereby identifying deficiencies, aiding in prioritization and re-prioritization (if needed) of the existing RTP and SPLOST projects.

The travel demand model results provide a technical foundation for identifying current deficiencies and projecting future roadway capacity deficiencies and needs. The need for smaller scale improvements such as intersection and operational improvements, however, is not as easily determined using the travel demand model. These require careful data and field reviews. The Forsyth County model will serve the county in the future by providing the means for continued evaluation, analysis and testing of transportation needs and potential solutions based upon changing growth and travel circulation pattern dynamics.

Future Transportation System Performance

As discussed in Section 2, the identified study performance measures provide the framework for Forsyth County to monitor roadway system performance. Table 13 presents a summary of the performance measures utilized for identification of needs and potential improvements.

Table 13 – Future Transportation System Performance

Goal	Performance Measure	Evaluation Scenario		
		2000 Base Year	2030 E+C "No-Build"	2030 "Build"
1 – Provide accessibility and mobility of people and goods	Total congested[1] miles of modeled roadway network	51 miles	147 miles	82 miles
	Percent of modeled roadway network congested[1]	13%	36%	20%
	Systematically average speed	21 mph	13 mph	15 mph
	Total VMT	3,531,689	7,672,581	7,830,760
	Per Capita VMT	35.9	19.5	19.9
	Total VHT	171,101	581,080	511,117
	Per Capita VHT	1.7	1.5	1.3
2 – Support the attainment of air quality in conjunction with neighboring counties	Change of VMT from 2000 Base Year	n/a	4,140,892	4,299,071
	Change of VHT from 2000 Base Year	n/a	409,979	340,016

[1] Congested roadways are those on the model network with LOS E or F (v/c >=0.85)

As this table depicts, future system performance shows improvements between the 2030 E+C "no build" and 2030 "build" scenarios. The slight increase in VMT may be due to deviation in future trip pathing, which refers to the length of trips between origins and destinations. Improvements included under the "build" scenario may slightly increase trip lengths (and overall VMT for the system); however, these same improvements may also result in shortened trip lengths (in minutes) by providing less congested routes. A primary indicator of the future system improvement associated with the 2030 build scenario is the decrease of VHT. This decrease in VHT indicates a significant travel time savings in 2030 for Forsyth County drivers.

The 2006 transportation plan update achieves Goal 3 – *Integrate land use decisions with transportation analysis and planning* – by incorporating results from the McFarland Stoney Point LCI and other initiatives that balance countywide mobility with prudent land use policy and growth management. Further gains in this regard should be considered as part of subdivision regulations and access management improvements that enhance multimodal connectivity throughout Forsyth and adjacent counties.

Goal 4 – *Improve environment and quality of life* is also achieved through the 2006 transportation plan update. Existing high crash locations identified will be improved through the recommended intersection and operational projects included in the short and mid-range projects. Additionally, a decrease in the total mileage of congested roadway facilities and decreased per capita VHT will also improve quality of life for all Forsyth residents, businesses and visitors.

Community Input

The *Forsyth County Major Transportation Plan – 2006 Update* was presented to citizens as part of the March 9, 2006, public meeting. In addition, the Stakeholder Advisory Panel was consulted

twice during plan update development (January 23 and February 20, 2006). The public meeting held on March 9, 2006, presented the proposed recommended plan projects to the 15 individuals in attendance.

Comments received from both the public and County staff included specific recommendations to proposed projects and project prioritization. Comments focused on the need for improvements that would address congestion, as well as how to best finance the improvements, including consideration of adopting impact fees in the future. A majority of comments seemed to note that there was a need for improvements to the road network. There was less understanding of the more complicated ARC regional planning process that Forsyth participates in due to the air quality nonattainment designation. Copies of sign-in sheets and comments received through the Stakeholder Advisory Panel meetings and public meeting are included in Appendix C. Comments were taken into account in the development of final recommendations.

Impact Considerations

Transportation projects are intended to provide better access to destinations and improved mobility for the community at large. It is clear from responses to date that the community supports improvements to the transportation system that limit impacts to the environment and neighborhoods. The majority of transportation improvements considered were located in previously developed settings. The impact to communities and the environment as a result of these recommendations is expected to be minimal. The transportation project development process requires that transportation improvements address environmental and community impacts that may result and propose mitigation strategies. These evaluations are required prior to project construction.

Steps have been taken as part of the *Forsyth County Comprehensive Plan* to protect rural areas in landmark locations, such as the Sawnee Mountains and Eagle's Beak formation of the Etowah River. Forsyth County purchased 750 acres of land on the Sawnee Mountain for a passive recreation park, as well as 67 acres in the southern part of the county. Work has also been initiated to update the *Forsyth County Greenspace Plan*. To protect vistas, the County has adopted a sign ordinance restricting the heights of advertising signage throughout the county. Transportation projects in environmentally sensitive areas, including protected river corridors, must be appropriate to the location and limit any adverse impact.

6 Implementation Plan and Financial Plan

Funding is key to any public improvement program, and several established funding sources for transportation exist. Forsyth County has been very aggressive and strategic in the use of SPLOST funds to leverage federal and state monies for needed transportation projects. Federal and state funds are conditioned on establishing "transportation need" for a project – the project must improve transportation operations, safety or access. Typically those projects are on state system roads. Federal regulations require that transportation improvements recommended for implementation should have an identified source of funding. Projects that do not have an identified source of funding can be considered "aspirations" if they have established transportation need. These projects can be moved into the program once a source of funding has been identified.

The following section presents a summary of the implementation plan and financial information developed for the Forsyth County Major Transportation Plan – 2006 Update. The implementation schedule, recommended policy considerations and regional planning action plan are detailed in the following sub-sections.

Implementation Schedule

The recommended program of projects has been split into three distinct planning periods:

- Short-range (2006-2011)
- Mid-range (2012-2020)
- Long-range (2021-2030)

The three planning periods were chosen to coincide with the same periods included in the ARC Mobility 2030 RTP update. In determining which recommended transportation project improvements should be included in each period, the update process considered technical analysis results, stakeholder and public input, and the stream of funding available for each period. A detailed discussion regarding project prioritization follows.

Needs Prioritization

The technical analysis utilized model results, safety evaluations and County input for development of a project list to address current and future transportation deficiencies. While a substantial number of projects had previously been identified through other planning efforts, a large number of additional projects were the result of the update process analysis.

The approach applied to prioritize projects built on the current program, maintaining momentum in implementation of the current programmed improvement list. All projects on the current programmed list of projects for Forsyth County re-established "transportation need" in the current analysis.

Development of the final program of projects was completed with the following criteria in mind:

- Is the project on the 2006-2011 TIP?
- Is the project on the 2030 RTP?
- Is the project on the existing SPLOST V list or recommended for the SPLOST VI list?
- Travel service performance measures (v/c ratios for projects)
  - 2000 base year (Is the improvement needed now?)
  - 2030 E+C (Is the improvement needed by 2030?)

- Potential safety benefits
- Potential support for economic development
- Public and Stakeholder Advisory Panel comments
- Total estimated project cost

Projects currently on the ARC approved project list for the TIP and RTP were given priority. Those projects were tested and analyzed as part of the 2006 plan update and found to meet the established criteria. The majority of projects in the TIP and RTP listings are also on the SPLOST list. This follows a Forsyth County policy to leverage County money with federal and state funds. Projects not programmed in the TIP or RTP but identified as needed were arrayed by the v/c ratio, safety benefits, potential need for economic development and project costs.

To accomplish a financially constrained plan, it was necessary to prioritize the improvements included in the 2006-2011 TIP, 2030 RTP, existing SPLOST V and recommended SPLOST VI. The prioritization was necessary to ensure that projects addressing established goals and identified needs would ultimately be included in the earliest planning periods. The 2030 E+C projects were assumed complete as part of the evaluation of 2030 RTP projects.

Project priorities were established through a two-step process. First, the consultant team analyzed each planned and programmed project from the 2002 plan against the TIP, RTP and SPLOST projects. The analysis was conducted within a quantitative and qualitative evaluation framework based on the performance measures established early in the plan development process. The second step involved prioritization of the new projects (designated with an "NP" project identification number). New projects were those identified through the planning process, and were prioritized based upon travel service performance and available funding by planning period.

Figure 12 identifies projected transportation funding through 2030 by funding source.

Figure 12
Projected 2030 Transportation Funding ($ Millions)

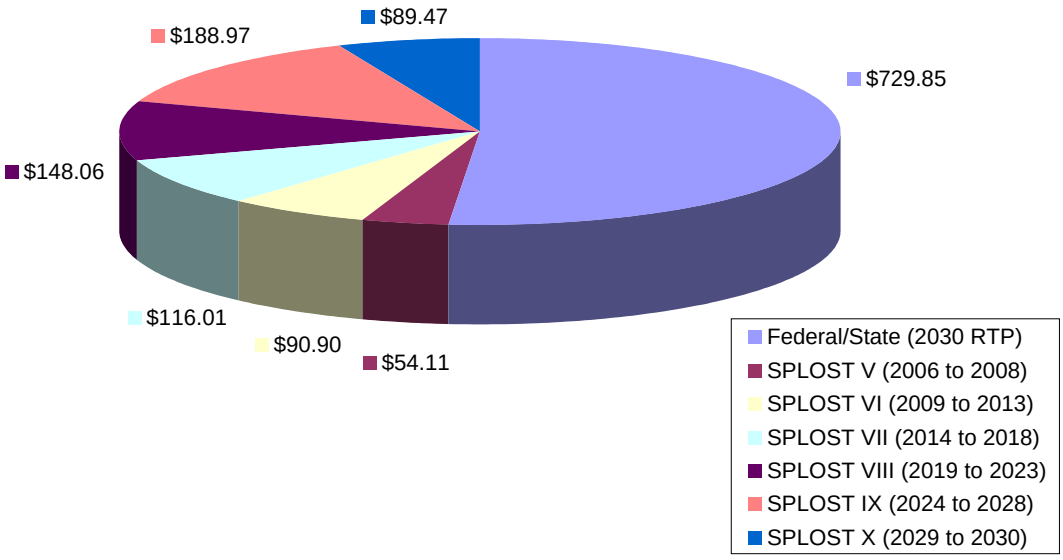


Figure 13 summarizes available and potential funding by planning period.

Figure 13
Funding by Planning Period

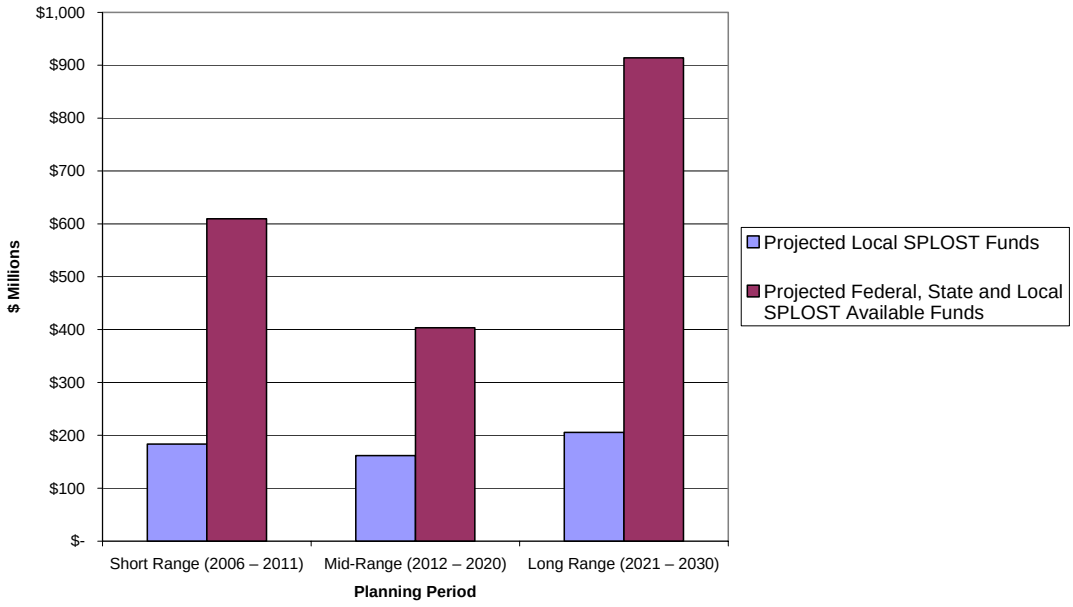


Figure 14 identifies the types of projects by planning period.

Figure 14
Program of Projects by Type

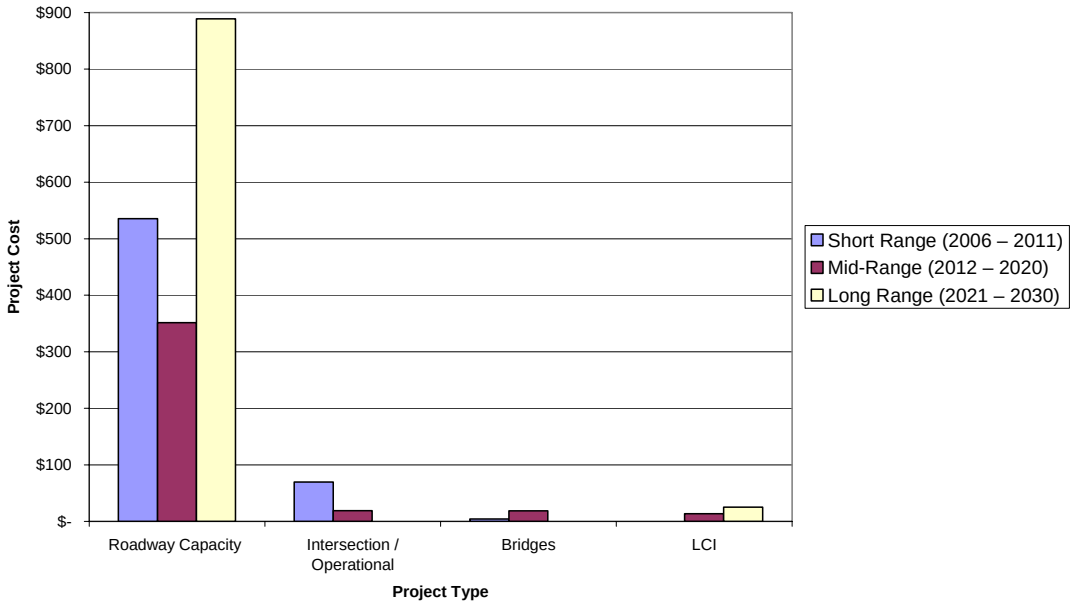


Table 14 summarizes of the number of projects and estimated cost by project type for the entire plan period (2006-2030).

Table 14 – Number of Projects and Estimated Costs for Plan Period (2006-2030)

Category*	Number of Projects	Estimated Cost ($ millions)
Capacity	83	$1,814.963
Operations, Safety and ITS	37	$88.610
Bridge	4	$23.322
Total	124	$1,926.895

* Includes only roadway and bridge improvement projects; excludes transit, bicycle and pedestrian projects.

Tables 15, 16 and 17 summarize the number of projects and estimated cost by project type for the short, mid and long range planning periods, respectively.

Table 15 – Number of Projects and Estimated Cost for Short-Range Planning Period (2006-2011)

Category*	Number of Projects	Estimated Cost ($ millions)
Capacity	25	$535.456
Operations, Safety and ITS	9	$69.520
Bridge	2	$4.602
Total	36	$609.578

* Includes only roadway and bridge improvement projects; excludes transit, bicycle and pedestrian projects.

Table 16 – Number of Projects and Estimated Cost for Mid-Range Planning Period (2012-2020)

Category*	Number of Projects	Estimated Cost ($ millions)
Capacity	23	$365.530
Operations, Safety and ITS	28	$19.090
Bridge	2	$18.720
Total	53	$403.340

* Includes only roadway and bridge improvement projects; excludes transit, bicycle and pedestrian projects.

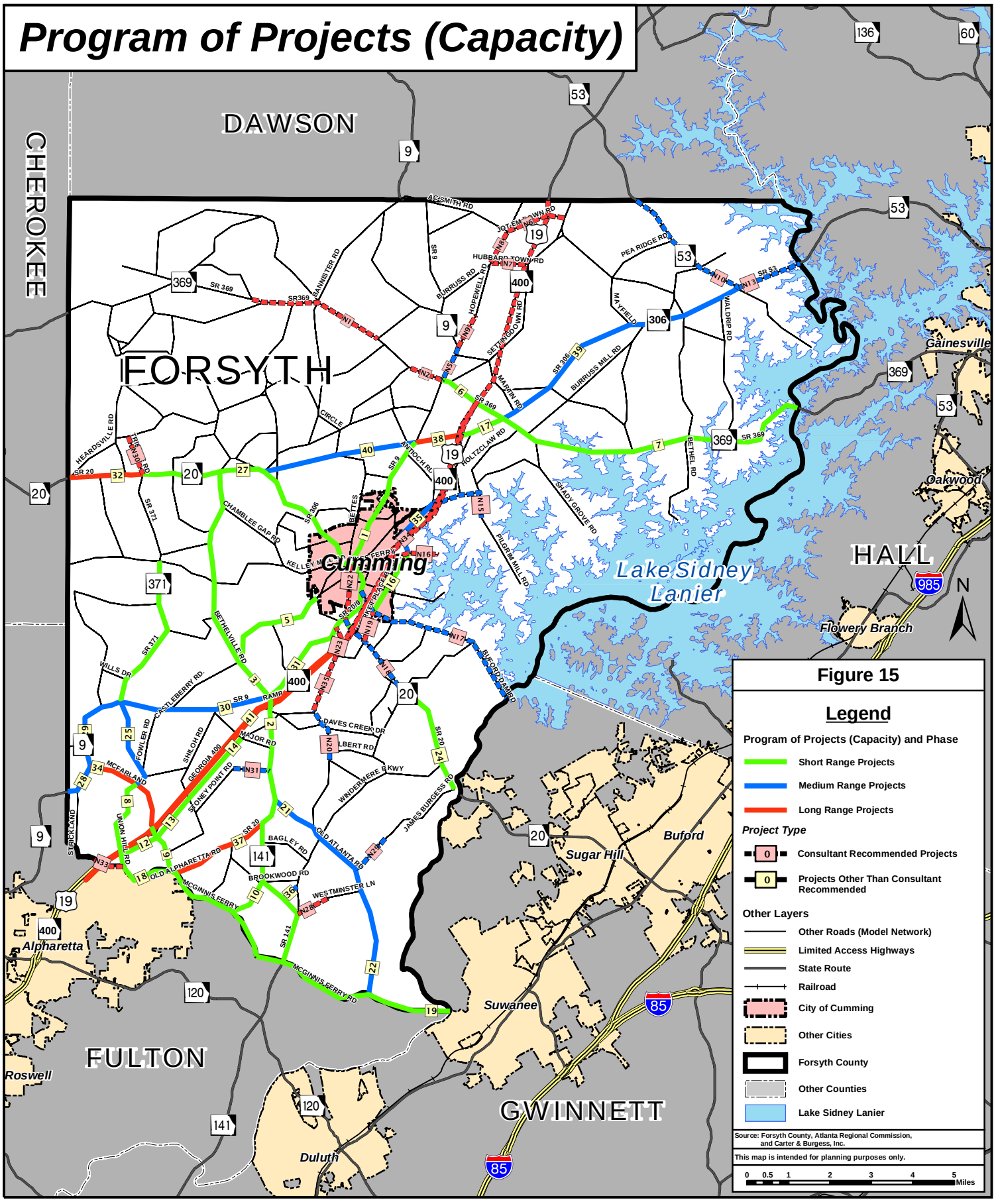
Table 17 – Number of Projects and Estimated Cost for Long-Range Planning Period (2021-2030)

Category*	Number of Projects	Estimated Cost ($ millions)
Capacity	35	$913.977
Operations, Safety and ITS	0	0
Bridge	0	0
Total	35	$913.977

* Includes only roadway and bridge improvement projects; excludes transit, bicycle and pedestrian projects.

Figure 15 presents the recommended program of projects, and Figure 16 the LOS for the recommended projects. Tables 18, 19 and 20 identify the recommended short-range (2006-2011), mid-range (2012-2020), and long-range (2021-2030) program of projects, respectively. Appendix E provides supplemental information regarding the recommended projects.

Program of Projects (Capacity)



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2030 Build Level-of-Service (LOS)

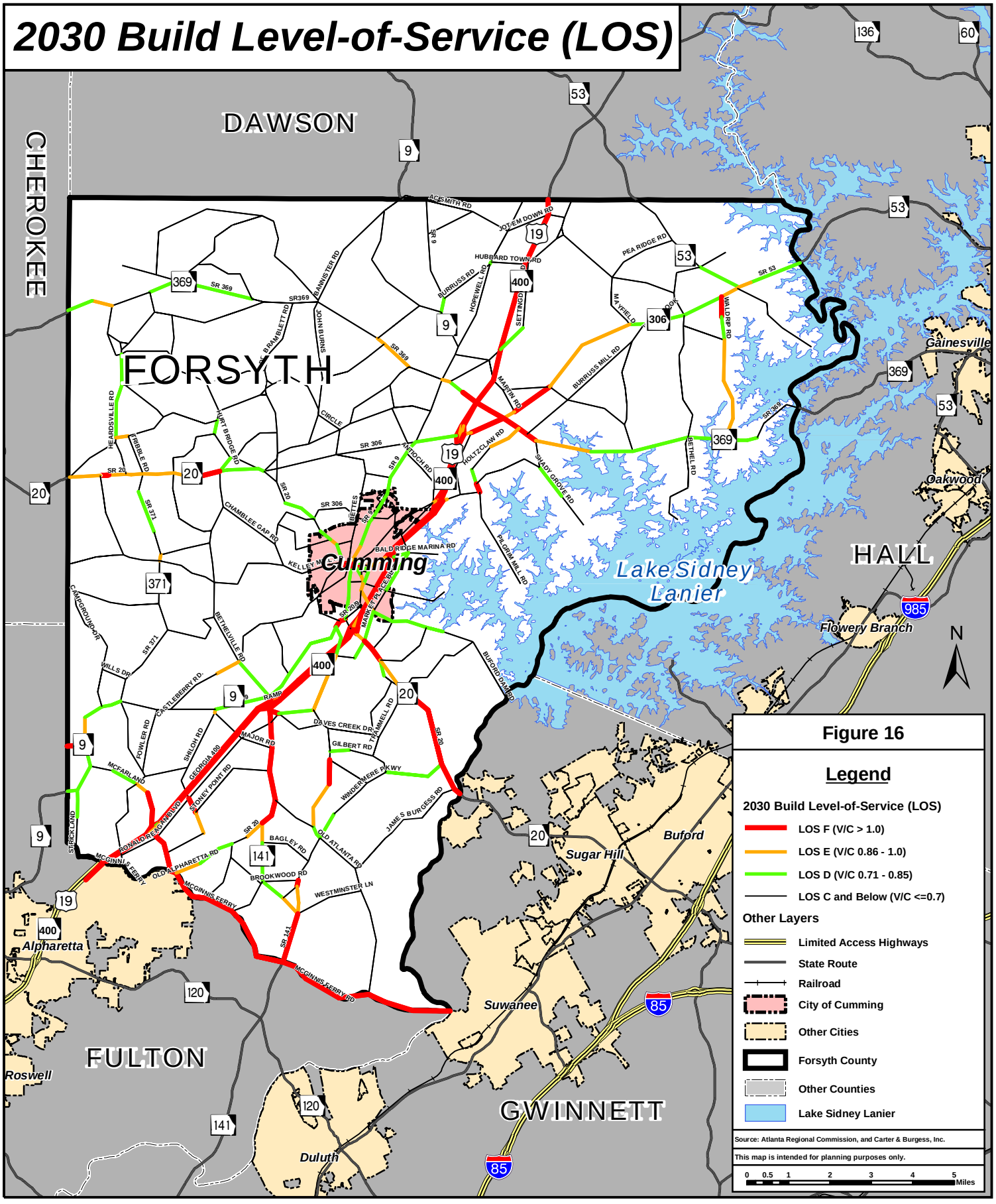

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Table 18 – Recommended Short-Range Projects (2006-2011)

Project ID	Road Segment	From	To	Lanes		Length (mi)	Cost ($ Millions)	
				Existing	Planned		Total	Local
Roadway Capacity (TIP)								
24	SR 20 (Buford Highway): Segment 4	Samples Road Road/Trammel Road	James Burgess Road	2	4	2.87	$31.307	
9	McFarland Road: Segment 1	McGinnis Ferry Road	SR 400	4	6	1.00	$7.392	
2	SR 141 (Peachtree Parkway)	0.6 Mile North of Fulton County Line	SR 9 (Atlanta Highway)	2	4	6.81	$49.968	
27	SR 20 (Canton Highway)	SR 371	SR 400	2	4	8.40	$74.360	
18	McGinnis Ferry Road - Regional Project	Sargent Road	Union Hill Road	2	4	7.80	$32.722	$7.500
17	SR 306 (Keith Bridge Road): Segment 2	SR 400	SR 369 (Browns Bridge Road)	2	4	1.13	$7.316	
19	McGinnis Ferry Road - Regional Project	Chattahoochee River	Sargent Road	2	4	5.39	$47.300	$4.300
31	SR 9 (Atlanta Highway): Segment 4	SR 141 (Peachtree Parkway)	SR 20 (Buford Highway)	2	4	2.82	$16.994	
7	SR 369 (Browns Bridge Road): Segment 2	SR 306 (Keith Bridge Road)	Hall County Line	2	4	7.90	$33.340	
6	SR 369 (Browns Bridge Road): Segment 1	SR 9 (Dahlonega Highway)	SR 306 (Keith Bridge Road)	2	4	1.79	$13.200	
1	SR 9 (Atlanta Road/Pilgrim Mill Road): Segment 5	SR 20 (Buford Highway)	SR 306 (Keith Bridge Road)	2	4	2.85	$10.361	$1.740
3	Bethelview Road	SR 9 (Atlanta Highway)	SR 20 (Canton Highway)	2	4	6.11	$27.470	
25	Union Hill Road/Mullinax Road: Segment 2	McFarland Road	SR 9 (Atlanta Highway)	2	4	2.35	$1.234	$1.234
22	Old Atlanta Road	McGinnis Ferry Road	Sharon Road	2	4	4.78	$2.349	$2.349
21	Sharon Road	SR 141 (Peachtree Parkway)	Old Atlanta Road	2	4	1.21	$0.595	$0.595

Table 18 – Recommended Short-Range Projects (2006-2011)

Project ID	Road Segment	From	To	Lanes		Length (mi)	Cost ($ Millions)	
				Existing	Planned		Total	Local
23	SR 371 (Post Road)	SR 9 (Atlanta Highway)	Kelly Mill Road	2	4	3.82	$20.541	$1.877
16	Marketplace Boulevard: Segment 1	Buford Dam Road	Baldridge Marina Road	0	4	1.79	$13.974	$9.618
35	Marketplace Boulevard: Segment 2	Baldridge Marina Road	Pilgrim Mill Road	0	4	1.35	$45.295	$45.295
10	Brookwood Road	McGinnis Ferry Road	SR 141 (Peachtree Parkway)	2	4	1.09	$5.755	$5.755
14	Ronald Reagan Boulevard: Segment 3	Shiloh Road	Major Road	0	4	2.00	$29.945	$29.945
8	Union Hill Road: Segment 1	McGinnis Ferry Road	McFarland Road	2	4	2.23	$12.492	$12.492
13	Ronald Reagan Boulevard: Segment 2	McFarland Road	Shiloh Road	0	4	1.30	$19.286	$18.100
5	Castleberry Road	Bethelview Road	Hutchinson Road	2	4	2.88	$9.435	$9.435
12	Ronald Reagan Boulevard: Segment 1	Union Hill Road	McFarland Road	0	4	1.25	$14.800	$8.025
26	Church St. Extension	Tribble Gap Road	Intersection of Hudson St. @ Woodland St.	0	2	0.11	$8.025	$8.025
						SUB-TOTAL	**$535.456**	**$166.284**
Roadway Operational (TIP)								
43	Buford Dam Road	SR 9 (Atlanta Highway)	Sanders Road	2	2	1.19	$4.000	$2.880
45	Mary Alice Park Road (CITY OF CUMMING)	SR 9 (Atlanta Highway)	Mary Alice Park	2	2	1.90	$7.800	$4.612
46	Pilgrim Mill Road	SR 9 (Atlanta Highway)	Freedom Parkway	2	2	3.23	$22.012	$6.007
47	Chamblee Gap Road	Bethelview Road	Current end of graveled section	2	2	1.04	$17.439	$0.650
48	Intersection Improvements along SR 9 at Hamby Road, Post/Mullinax Roads, Castleberry Road, Majors/Shiloh Roads, Spot Road, and AC Smith Road and SR 20 at Post/Tribble Road	n/a	n/a	n/a	n/a	2.40	$8.408	$1.682

Table 18 – Recommended Short-Range Projects (2006-2011)

Project ID	Road Segment	From	To	Lanes		Length (mi)	Cost ($ Millions)	
				Existing	Planned		Total	Local
49	Intersection Improvements along SR 369 at Doc Bramlett Road, Hendrix Road, Hotzclaw Road, Shady Grove/Elrod Roads. Jot Em Down/Bethel Road, and Waldrip Road	n/a	n/a	n/a	n/a	n/a	$3.852	$0.771
50	SR 306 (Keith Bridge Road) Intersection Improvements at SR 53, Shadburn/Parks, and Waldrip Road	n/a	n/a	n/a	n/a	n/a	$4.134	$0.827
50a	SR 141 Bethelview Road at SR 9	n/a	n/a	n/a	n/a	n/a		
50b	SR 369 (Browns Bridge Road)	Cherokee County Line	Hightower Circle	n/a	n/a	3.25	$1.875	
						SUB-TOTAL	**$69.520**	**$17.429**
Bridge (TIP)								
BR-1	SR 369 (Matt Highway)	Settingdown Creek	n/a	2	2	0.40	$4.250	
BR-3	SR 53 (at Chestatee River) - Bridge Upgrade	Chestatee River	n/a	2	2	0.40	$0.352	
						SUB-TOTAL	**$4.602**	
						GRAND TOTAL	**$609.578**	**$183.713**

Table 19 – Recommended Mid-Range Projects (2012-2020)

Project ID	Road Segment	From	To	Lanes		Length (mi)	Cost ($ Millions)	
				Existing	Planned		Total	Local
Roadway Capacity (RTP)								
25	Union Hill Road/Mullinax Road: Segment 2	McFarland Road	SR 9 (Atlanta Highway)	2	4	2.35	$16.918	$4.181
22	Old Atlanta Road	McGinnis Ferry Road	Sharon Road	2	4	4.78	$34.890	$34.890
21	Sharon Road	SR 141 (Peachtree Parkway)	Old Atlanta Road	2	4	1.21	$8.831	$8.831
39	SR 306 (Keith Bridge Road): Segment 3	SR 369 (Browns Bridge Road)	SR 53 (Dawsonville Highway)	2	4	6.77	$52.122	$3.385
29	SR 9 (Atlanta Highway): Segment 2	McFarland Road	SR 371 (Post Road)	2	4	2.22	$14.672	
28	SR 9 (Atlanta Highway): Segment 1	Fulton County Line	McFarland Road	2	4	0.89	$6.607	
30	SR 9 (Atlanta Highway): Segment 3	SR 371 (Post Road)	SR 141 (Peachtree Parkway)	2	4	3.79	$28.649	
40	SR 306 Extension	SR 9 (Dahlonega Highway)	SR 20 (Canton Highway)	0	4	3.79	$54.569	
36	Bagley Drive	SR 141 (Peachtree Parkway)	Mathis Airport Road	2	4	0.63	$12.327	$9.034
						SUB-TOTAL	**$229.585**	**$60.321**
Roadway Intersection Operational (RTP)								
42	Kelly Mill Road	SR 371 (Post Road)	Bethelview Road	2	2	1.53	$4.590	$2.020
						SUB-TOTAL	**$4.590**	**$2.020**
Bridge (RTP)								

Table 19 – Recommended Mid-Range Projects (2012-2020)

Project ID	Road Segment	From	To	Lanes		Length (mi)	Cost ($ Millions)	
				Existing	Planned		Total	Local
BR-2	SR 369 (Browns Bridge Road) - Bridge Upgrade	Six Mile Creek	n/a	2	2	0.40	$2.425	
BR-4	SR 369 (Browns Bridge Road) - Bridge Upgrade	Two Mile Creek	n/a	2	2	0.40	$16.295	
						SUB-TOTAL	**$18.720**	
Roadway Capacity: New Projects								
N18	SR 20 (Buford Highway)	SR 9	Samples Road/Trammell Road	4	6	2.26	$15.145	$1.111
N13	SR 53 (Dawsonville Highway)	SR 53 (Dawsonville Highway)	Hall County Line	2	4	1.58	$10.588	$0.776
N29	James Burgess Road	Old Atlanta Road	Nichols Drive	2	4	1.05	$7.036	$7.036
N15	Pilgrim Mill Road	Sinclair Shores Road	SR 400	2	4	2.05	$13.738	$13.738
N5	SR 9 (Dahlonega Highway)	SR 306 (Browns Bridge Road)	Hopewell Road	2	4	0.89	$5.964	$0.437
N17	Buford Dam Road	SR 9	Gwinnett County Line	2	4	5.00	$33.507	$33.507
N20	Old Atlanta Road	Melody Mizner Lane	Ronald Reagan Parkway	2	4	1.00	$6.701	$6.701
N10	SR 53 (Dawsonville Highway)	SR 306 (Keith Bridge Road)	Dawson County Line	2	4	3.50	$23.455	$1.720
N31	Stoney Point Road	Stoney Ridge Road	SR 141 (Peachtree Parkway)	2	4	0.90	$6.031	$6.031
						SUB-TOTAL	**$122.165**	**$71.057**

Roadway Operational Improvements: New Projects

Table 19 – Recommended Mid-Range Projects (2012-2020)

Project ID	Road Segment	From	To	Lanes		Length (mi)	Cost ($ Millions)	
				Existing	Planned		Total	Local
51	Dr. Bramblett Road @ Spot Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
52	Old Atlanta Road @ Daves Creek Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
53	Old Atlanta Road @ Gilbert Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
54	Old Atlanta Road @ Brannon Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
55	Old Atlanta Road @ Ivey Falls Drive	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
56	Old Atlanta Road @ Northern Oaks Drive	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
57	Old Atlanta Road @ Melrose Trace	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
58	James Burgess Road @ Southers Circle	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
59	Jot-em-down Road @ Pearidge Road/Mayfield Drive	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
60	Hopewell Road @ Jot-em-down Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
61	Hopewell Road @ Hubbardtown Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
62	Bethelview Road @ Polo Fields Parkway	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
63	SR 371 @ Bentley Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
64	SR 371 @ Dickerson Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
65	SR 371 @ Pittman Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
66	SR 371 @ Drew Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
67	SR 371 @ Evans Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
68	SR 306 @ Mayfield Drive	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
69	SR 53 @ Truman Mountain Road	n/a	n/a	n/a	n/a	n/a	$0.750	$0.750
70	SR 53 @ Chestatee Heights Road	n/a	n/a	n/a	n/a	n/a	$0.750	$0.750
71	SR 53 @ Pearidge Road	n/a	n/a	n/a	n/a	n/a	$1.000	$1.000
72	SR 9 @ Antioch Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
73	SR 9 @ Fowler Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
74	SR 9 @ Hopewell Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
75	SR 9 @ Bannister Road	n/a	n/a	n/a	n/a	n/a	$0.500	$0.500
N35	Main Street	SR 20	SR 9	2	2	0.58	$0.500	$0.500
N36	Maple Street	SR 20	SR 9	2	2	0.58	$0.500	$0.500

Table 19 – Recommended Mid-Range Projects (2012-2020)

Project ID	Road Segment	From	To	Lanes		Length (mi)	Cost ($ Millions)	
				Existing	Planned		Total	Local
						SUB-TOTAL	**$14.500**	**$14.500**
LCI Projects: New Projects								
TP-13	New road parallel to Ronald Reagan Boulevard	McFarland Road	Union Hill Road	0	Not specified	Not specified	$3.200	$3.200
TP-14	New E-W connector: Shiloh Road East Extension	Shiloh Road	Ronald Reagan Boulevard	0	Not specified	Not specified	$3.200	$3.200
TP-15	New N-S connector: Reagan alternative east of Big Creek	Shiloh Road northbound	Shiloh Road southbound	0	Not specified	Not specified	$3.200	$3.200
TP-16	New E-W connector: Stoney Ridge Drive Improvement	Not Specified	Not Specified	0	Not specified	Not specified	$1.600	$1.600
TP-17	Internal Roadway Network: New Local Access Streets	To be determined	To be determined	0	Not specified	Not specified	$2.580	$2.580
TP-18	GRTA Park and Ride Facility	To be determined	To be determined	N/A	N/A	N/A	TBD	TBD
						SUB-TOTAL	**$13.780**	**$13.780**
						GRAND TOTAL	**$403.340**	**$161.678**

Table 20 – Recommended Long-Range Projects (2021-2030)

Project ID	Road Segment	From	To	Lanes		Length (mi)	Cost ($ Millions)	
				Existing	Planned		Total	Local
Roadway Capacity (RTP)								
37	Old Alpharetta Road	McGinnis Ferry Road	SR 141 (Peachtree Parkway)	2	4	2.50	$32.664	$32.664
38	SR 306 (Keith Bridge Road): Segment 1	SR 9 (Dahlonega Highway)	SR 400	2	4	1.09	$8.392	
34	McFarland Road: Segment 2	SR 400	SR 9	4	6	1.39	$10.292	$4.420
41	SR 400	McFarland Road	SR 20 (Buford Highway)	4	6	6.94	$54.202	
32	SR 20 (Canton Highway): Segment 1	SR 369 (Hightower Road) in Cherokee Co.	SR 371 (Post Road)	2	4	6.37	$44.967	
						SUB-TOTAL	**$150.517**	**$37.084**
Roadway Capacity (Aspirations)								
ASP-2	SR 369 (Browns Bridge Road)	SR 20 (Cherokee County)	SR 9 (Forsyth County)	2	4	16.61	$94.096	
ASP-3	SR 400 HOV	McFarland Road	SR 141 (Bethelview Road)	0	2/4	4.20	$56.175	
						SUB-TOTAL	**$150.271**	
Roadway Capacity: New Projects								
N34	SR 400	SR 20	Dawson County Line	4	6	11.60	$96.714	
N6	Jot Em Down Road	Hopewell Road	Cross Roads Road	2	4	1.58	$10.588	$10.588
N16	Baldrige Marina	Lake Lanier	SR 400	2	4	1.20	$8.042	$8.042
N9	Hopewell Road	SR 9 (Dahlonega Highway)	Skyland Parkway	2	4	1.10	$6.831	$6.831

Table 20 – Recommended Long-Range Projects (2021-2030)

Project ID	Road Segment	From	To	Lanes		Length (mi)	Cost ($ Millions)	
				Existing	Planned		Total	Local
N23	North Old Atlanta Road	Ronald Reagan Parkway	SR 9 (Atlanta Highway)	2	4	0.50	$3.351	$3.351
N1	SR 369 (Matt Highway)	Whitmire Road	Hubert Martin Road	2	4	3.38	$22.652	
N2	SR 369 (Matt Highway)	SR 9 (Dahlonega Highway)	Gravitt Road	2	4	0.85	$5.696	
N19	Marketplace Blvd.	SR 20	Buford Dam Road	4	6	0.82	$5.495	$5.495
N22	Veterans Memorial Boulevard	SR 9	Main Street	4	6	1.37	$9.181	$9.181
N7	Hubbard Town Road	Hopewell Road	SR 400	2	4	0.88	$5.897	$5.897
N30	Tribble Road	SR 20	Watson Road	2	4	1.00	$6.701	$6.701
N8	Hopewell Road	Hubbard Town Road	Jot'Em Down Road	2	4	0.83	$5.562	$5.562
N33	McGinnis Ferry Road	Union Hill Road	Tidwell Drive	2	4	0.67	$4.490	$4.490
N35	Ronald Reagan Boulevard	Old Atlanta Road	North Old Atlanta Road	4	6	1.30	$11.538	$11.538
	SR 20 (Buford Highway)	SR 400	Gwinnett County Line	4	6	4.96	$33.232	
	SR 20 (Canton Highway)	Spot Road	Kelly Mill Road	4	6	3.10	$20.770	
	Dr. Bramblett Road	SR 20	Roper Road	2	4	1.20	$8.040	$8.040
	McGinnis Ferry Road	McFarland Road	Brookwood Road	4	6	1.89	$12.663	$12.663
	SR 141 (Peachtree Parkway)	McGinnis Ferry Road	SR 9 (Atlanta Highway)	4	6	6.46	$43.282	
	Pine Grove Road	Shiloh Road East	Old Alpharetta Road	2	4	0.53	$3.551	$3.551
	SR 371 (Post Road)	Majors Road	SR 20 (Canton Highway)	2	4	4.00	$26.800	

Table 20 – Recommended Long-Range Projects (2021-2030)

Project ID	Road Segment	From	To	Lanes		Length (mi)	Cost ($ Millions)	
				Existing	Planned		Total	Local
	SR 9 (Atlanta Highway)	McFarland Road	Mullinax Road	4	6	2.25	$15.075	
	SR 20 (Canton Highway)	Cherokee County Line	Spot Road	4	6	4.80	$32.160	
	SR 53 (Dawsonville Highway)	Dawson County Line	Hall County Line	4	6	5.08	$34.036	
	Dr. Bramblett Road	Roper Road	SR 369 (Matt Highway)	2	4	3.51	$23.517	$23.517
	SR 400	McFarland Road	SR 369 (Browns Bridge Road)	6	8	13.32	$89.244	
	McGinnis Ferry Road	Brookwood Road	Gwinnett County Line	4	6	6.40	$42.880	$42.880
						SUB-TOTAL	**$587.989**	**$168.327**
LCI Projects: New Projects								
TP-19	MARTA Station (dedicated lanes or rail)	To be determined	To be determined	N/A	N/A	N/A	TBD	TBD
TP-20	McGinnis Ferry/ SR 400 Interchange	To be determined	To be determined	N/A	N/A	N/A	$25.200	
						SUB-TOTAL	**$25.200**	
						GRAND TOTAL	**$913.976**	**$205.411**

Identification of Project Type (Local / Regionally Significant)

A regionally significant transportation project is on a facility serving regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc. or transportation terminals). These facilities are normally included in the modeling of a metropolitan area's transportation network, such as principal arterial highways that offer an alternative to regional highway travel. Projects that are regionally significant, regardless of funding source, must be included in the regional emissions analysis in accordance with Section 93.105(c) (1) (ii) of the Transportation Conformity Rule.

Projects included in the program of projects that are on the ARC 2006-2011 TIP and 2030 RTP (presented in Section 5) are included in the ARC model network. A total of 24 new roadway capacity projects have been recommended as part of the 2006 plan update. All but 4 of the 24 projects are currently on the ARC model network. Appendix D presents the 2030 ADTs for the build scenario for each major roadway within Forsyth County. Appendix E presents detailed information regarding which newly proposed projects are included in the ARC regional model network.

Program Costs and Funding

Project costs were estimated using planning level unit costs approved by the Forsyth County Engineering department. The unit costs were developed based upon recent Forsyth County roadway construction costs including right-of-way acquisition.

Existing Funding Sources

The 2006 plan update assumed the same allocation of federal/state dollars to Forsyth County as through *Mobility 2030*. Similarly, the federal/state and local allocations for Forsyth County short-range projects were developed using the ARC TIP (2006-2011) for this same period.

Table 21 presents a summary of the TIP and 2030 RTP funding allocation assumptions for Forsyth County programmed and planned projects.

Table 21 – TIP and RTP Funding Summary
($ Millions)

	PE	ROW	CST	TOTAL	FEDERAL/STATE	LOCAL
2006-2011 TIP						
Roadway Capacity	$32.097	$164.118	$339.241	$535.456	$369.172	$166.284
Roadway Operational Improvements	$0.520	$3.608	$65.392	$69.520	$52.091	$17.429
Bridges	$0.150	$2.895	$1.557	$4.602	$4.602	
2006-2011 TIP TOTAL	**$32.767**	**$170.621**	**$406.190**	**$609.578**	**$425.865**	**$183.713**
2030 RTP						
Roadway Capacity	$47.558	$248.846	$619.154	$915.558	$651.869	$263.689
Roadway Operational Improvements	$0.979	$4.526	$68.605	$74.110	$54.661	$19.449
Bridges	$0.150	$2.895	$20.277	$23.322	$23.322	
2030 RTP TOTAL	**$48.687**	**$256.267**	**$708.036**	**$1,012.990**	**$729.852**	**$283.138**

A review of the existing Forsyth County SPLOST V and proposed future SPLOSTS was also completed as part of the 2030 funding constraint development. Per guidance received from Forsyth County, the existing SPLOST V revenues were extrapolated to 2030 using a straight-line 5 percent growth rate. The extrapolation was carried through 2030, covering five future SPLOSTS (SPLOST VI through X), with the final SPLOST covering a two-year period.

The current SPLOST V revenues allocated to transportation improvement projects (excluding safety, bicycle/pedestrian, and resurfacing projects) is 55 percent of the gross SPLOST revenues. This same ratio was applied to future SPLOSTS VI through SPLOST X to obtain the SPLOST "transportation allocation" used to constrain the local match portion of the 2030 constrained budget. Table 22 presents a summary of the Forsyth County 2030 SPLOST Projections based upon a 5 percent annual straight-line growth rate. Using a 5 percent growth rate, SPLOST revenues between 2006 and 2030 are expected to be approximately $687.5 million. Assuming a more conservative 3 percent growth rate, SPLOST revenues for this same period would be approximately $546.90 million, or $140.60 million less.

Using the SPLOST revenues projected through 2030 and the federal/state allocations to Forsyth County prescribed in the TIP and RTP, the prioritized projects were grouped into the three planning periods – short, mid and long-range – based upon available funding amounts for each period.

The *Forsyth County Major Transportation Plan – 2006 Update* is a financially-constrained plan with a projected budget of $1,417.37 million. A breakdown of the 2030 anticipated funding is provided in Table 23.

Table 22 – Forsyth County SPLOST Revenue Projections (2006-2030)

		SPLOST Period			Planning Period		
Year	SPLOST Revenues [1]	SPLOST No.	5-Year Total	5-Year Transportation Allocation [2] (55%)	Transportation Allocation by Planning Period	Planning Period	Transportation Allocation (55%)
2003	$ 7,608,333						
2004	$ 25,587,267						
2005	$ 28,406,065						
2006	$ 32,262,124						
2007	$ 37,643,741						
2008	$ 28,484,471	**SPLOST V**	$ 159,992,001	$ 87,995,601	**$ 54,114,685**	**Short-Range (2006-2011)**	**$ 105,972,623**
2009	$ 29,908,695						
2010	$ 31,404,129						
2011	$ 32,974,336				**$ 51,857,938**		
2012	$ 34,623,053						
2013	$ 36,354,205	**SPLOST VI**	$ 165,264,417	$ 90,895,429	**$ 39,037,492**		
2014	$ 38,171,915						
2015	$ 40,080,511					**Mid-Range (2012-2020)**	**$ 209,975,324**
2016	$ 42,084,537						
2017	$ 44,188,764						
2018	$ 46,398,202	**SPLOST VII**	$ 210,923,929	$ 116,008,161	**$ 116,008,161**		
2019	$ 48,718,112						
2020	$ 51,154,017				**$ 54,929,671**		
2021	$ 53,711,718						
2022	$ 56,397,304						
2023	$ 59,217,169	**SPLOST VIII**	$ 269,198,321	$ 148,059,077	**$ 93,129,406**		
2024	$ 62,178,028						
2025	$ 65,286,929						
2026	$ 68,551,276					**Long-Range (2020-2030)**	**$ 371,569,121**
2027	$ 71,978,840						
2028	$ 75,577,782	**SPLOST IX**	$ 343,572,854	$ 188,965,070	**$ 188,965,070**		
2029	$ 79,356,671						
2030	$ 83,324,504	**SPLOST X (2-years only)**	$ 162,681,175	$ 89,474,646	**$ 89,474,646**		
TOTALS			**$ 1,311,632,697**	**$ 721,397,983**	**$ 687,517,068**	**Totals**	**$ 687,517,068**

[1] Year 2003-2008 revenue projections from Capital Improvement Schedule approved by B.O.C. on 6-02-03; 2009-2030 projections based upon 5% straight line growth in annual revenues

[2] Excludes traffic safety improvements, bike/ped projects and resurfacing projects; 55% based upon transportation allocation for SPLOST V

Table 23 – Projected 2030 Funding Availability

Funding Source	Amount (Millions)
Federal/State (2030 RTP)	$729.852
SPLOST V (2006 to 2008)	$54.115
SPLOST VI (2009 to 2013)	$90.895
SPLOST VII (2014 to 2018)	$116.008
SPLOST VIII (2019 to 2023)	$148.059
SPLOST IX (2024 to 2028)	$188.965
SPLOST X (2029 to 2030)	$89.475
TOTAL	**1,417.369**

[1] Transportation Projects Only (excluding traffic safety improvements, bike/ped and resurfacing)
[2] 2009-2030 SPLOST revenues projected assuming 5% growth per year from 2008 SPLOST V anticipated annual revenue
[3] SPLOST VI total includes only intersection improvements, widening projects and utility relocations

Tables 24, 25 and 26 summarize costs for project needs and anticipated revenues by the three financially-constrained planning periods.

Table 24 – Short-Range (2006-2011) Funding Needs and Sources*

Project Type	$ (Millions)		
	Federal/State	Local	Total
Roadway Capacity	$369.172	$166.284	$535.456
Roadway Operational Improvements	$52.091	$17.429	$69.520
Bridges	$4.602		$4.602
TOTAL	**$425.865**	**$183.713**	**$609.578**

Funding Sources for the Short-range (2006-2011)	
Federal/State	$425.865
SPLOST V (2006-2008)	$54.110
SPLOST VI (2009-2011)	$51.860
TOTAL	**$531.835**

**TIP Program Costs approved by ARC Board*

Table 25 – Mid-Range (2012-2020) Funding Needs and Sources

Project Type	$ (Millions)		
	Federal/State	Local	Total
Roadway Capacity (RTP/2030)	$169.264	$60.321	$229.585
Roadway Operational Improvements (RTP/2030)	$2.570	$2.020	$4.590
Roadway Capacity (New Projects)	$51.108	$71.057	$122.165
Roadway Operational Improvements (New Projects)		$14.500	$14.500
Bridges (RTP/2030)	$18.720		$18.720
TOTAL	**$241.662**	**$161.678**	**$403.340**

Funding Sources for the Mid-range (2012-2020)	
Remaining from Short-range period	($77.740)
Federal/State	$241.662
SPLOST VI (2012-2013)	$39.037
SPLOST VII (2014-2018)	$116.008
SPLOST VIII (2019-2020)	$54.930
TOTAL	**$373.897**

Table 25 – Long-Range (2021-2030) Funding Needs and Sources

Project Type	$ (Millions)		
	Federal/State	Local	Total
Roadway Capacity (RTP)	$113.433	$37.084	$150.517
Roadway Capacity (Aspirations)	$150.271		$150.271
Roadway Capacity (New Projects)	$419.662	$168.327	$587.989
Roadway Operations Improvements			
Bridges			
LCI Projects	$25.200		$25.200
TOTAL	**$708.566**	**$205.411**	**$913.977**

Funding Sources for the Long-range (2021-2030)	
Remaining from Mid-Range Period	($29.443)
Federal/State	$708.566
SPLOST VIII (2021-2023)	$93.129
SPLOST IX (2024-2028)	$188.965
SPLOST X (2029-2030)	$89.475
TOTAL	**$1,050.692**

Potential Funding Sources

There are several sources of potential funds that Forsyth County should consider as part of implementation of the 2006 transportation program of projects. These sources include the following:

- ***National Highway System (NHS)*** – Funding of major roadways, including the Interstate system, a large percentage of urban and rural principal arterials, the Strategic Highway Network (STRAHNET), and strategic highway connectors.
- ***Recreational Trails (Rec Trails)*** – Funding for the creation, rehabilitation, and maintenance of multi-use trails.
- ***Georgia Department of Transportation (GDOT)*** – Provides for 100 percent state funding by the state for various projects on the state route system.
- ***Surface Transportation Program (STP)*** – Funding for transportation improvements to routes functionally classified as urban collectors or higher. STP funds projects related to improving quality of life, such as Livable Centers Initiative (LCI) and Transportation Enhancements (TE).
- ***High Priority Projects (HPP)*** – Discretionary funding for specific projects (federal earmarks).
- ***Congestion Mitigation and Air Quality (CMAQ)*** – Funding for transit, pedestrian, and bicycle projects that mitigate roadway congestion without impacting air quality.
- ***Safe Routes to School*** – Federal funding for pedestrian and bicycle projects within two miles of a school.
- ***Transportation Community Service Preservation Program (TCSP)*** – The Transportation Community Service Preservation Program (TCSP) provides funds to establish greater connections with transportation, land use planning, business activities, and environmental preservation.
- ***Federal Transit Administration (FTA) Programs*** – Funding for planning, capital and operating assistance, major capital needs such as light or commuter rail system development, large bus or rail fleet purchases, construction of transit facilities, passenger equipment for special needs, intercity bus programs, and state administration of projects of a transit nature. Specific FTA programs applicable to Forsyth County include:
    - ***Section 5307 – Urbanized Area Formula*** – Provides funds to urbanized areas with populations more than 50,000 for transit operating and capital assistance and for transportation related planning. Funds are apportioned based on population, population density, and transit data.
    - ***Section 5309 – Capital Program*** – Provides transit capital assistance for the construction of major fixed-guideway projects, such as rail lines and dedicated busways, as well as the improvement and maintenance of existing systems.
    - ***Section 5310 – Elderly and Persons with Disability*** – Provides transit capital assistance through the state to private non-profit organizations and public bodies that provide specialized transportation services to the elderly and/or disabled persons.

- ***Additional transportation revenue*** – In addition to the above sources, the revenue from a one percent sales tax (SPLOST) is collected for use operation and maintenance as well as capital expenditures. Other locally collected revenue sources used to fund transportation projects include:
    - Community Improvement Districts (CIDs) – CIDs provide another option for generating revenue for completion of projects specific to a self-taxing district. Through the completion of the McFarland Stoneypoint LCI, and other emerging regional activity centers, CIDs provide an excellent opportunity for completing enhancements necessary to maintain mobility and local connectivity.
    - Bond issues
    - General fund
    - Impact Fees – Impact fees provide a viable source for future transportation system funding. Fees levied against planned developments provide a mechanism for paying for additional system enhancements while minimizing the cost to existing users.
    - Overlay Districts
    - Private Developers – The private development community can also be utilized to leverage transportation system enhancements through several mechanisms. Proposed developments can include the construction of local roadways to serve both local and countywide needs. Another mechanism is for private developers to donate right-of-way for construction of local roadways paid for by County sources.
    - Tax Allocation Districts (TAD)

Implementation Actions and Responsibilities

The 2006 plan update provides Forsyth County with a framework to address short, mid and long-range needs balanced against anticipated future revenues. The plan provides the County with a program of projects that should be considered as part of the 2006-2011 TIP, 2030 RTP update, and 2035 RTP. Monitoring of countywide growth patterns should continue to ensure project priorities match actual growth needs. Similarly, SPLOST revenues should also be tracked to monitor the County's ability to provide local matching funds and/or expedite state/federally funded projects by paying for design.

The potential funding sources listed previously should also be further evaluated for use by the County. With an increasing demand for decreasing state/federal transportation monies, the need for innovative financing on a local scale will continue to escalate.

APPENDICES

APPENDIX A
Acronyms

ACRONYMS

ADA	Americans with Disabilities Act of 1990
ADT	Average Daily Traffic
ARC	Atlanta Regional Commission
CAA	Clean Air Act
CAAA	Clean Air Act Amendments of 1990
CBD	Central Business District
CMAQ	Congestion Mitigation and Air Quality
CMS	Congestion Management System
CST	Construction
E+C	Existing plus committed network
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year
GDOT	Georgia Department of Transportation
GIS	Geographic Information Systems
HOV	High Occupancy Vehicle
IM	Interstate Maintenance funds
ISTEA	Inter-modal Surface Transportation Efficiency Act of 1991
ITS	Intelligent Transportation Systems
LOS	Level of Service
LRTP	Long Range Transportation Plan
MPO	Metropolitan Planning Organization
NEPA	National Environmental Policy Act
NHS	National Highway System
NOx	Nitrogen Oxides
PE	Preliminary Engineering
RTP	Regional Transportation Plan
ROW	Right-of-Way
SAFETEA-LU	Safe, Accountable, Flexible and Efficient Transportation Act: A Legacy for Users
SIP	State Implementation Plan (for air quality)
SR	State Route
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TAZ	Traffic Analysis Zone
TCC	Technical Coordinating Committee
TDM	Transportation Demand Management
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TMA	Transportation Management Association
TSM	Transportation System Management
UPWP	Unified Planning Work Program
V/C	Volume to Capacity
VHT	Vehicles Hours Traveled
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds

APPENDIX B
Data Inventory

Forsyth County Data Inventory for Transportation Plan Update

Data or Report [GIS Shapefiles]	Description	Usage	Source	GIS	Have	Need
PLANS						
Forsyth County Bicycle Transportation and Pedestrian Walkways 20205 Plan (April 2002)	Bike/Ped Plan	Background information as needed for Transportation Plan update	Forsyth County		◆	
Major Transportation Plan 2002 Update (August 2002)	Previous roadway plan	Understanding previous plan and model; provide background information for 2005 update	Forsyth County		◆	
Forsyth County Comprehensive Plan (December 2004)	Comprehensive Plan	Area understanding, land use, and background information	Forsyth County		◆	
Forsyth County Transportation Plan (August 2002)	GDOT suburban counties study	Area understanding, land use, and background information	GDOT/DWA		◆	
ROADWAY INVENTORY						
GDOT Traffic Counts 1990-2004	GDOT Coverage Counts	Validate model, describe historic and present conditions, mapping	GDOT	◆	◆	
Bridge Inventory – 2005 file	FHWA National Bridge Inventory report (inc. location and condition of bridges)	Inventory and needs assessment, mapping	GDOT	◆	◆	
Bridge Inventory – Forsyth [Bridges]	Forsyth County bridge inventory	Inventory and needs assessment, mapping	Forsyth County	◆	◆	
Road Characteristics File (Nov. 2004)	GDOT centerline file with roadway characteristics	System inventory, description, mapping	GDOT	◆	◆	
Forsyth County roadway inventory [StreetCenterlines]	Forsyth roadway centerline file	System inventory, description, mapping	Forsyth County	◆	◆	
County Truck Routes [State_County_TruckRoutes]	Contains county and state truck routes	System inventory, description, mapping	Forsyth County	◆	◆	
Crash Data - GDOT (2001-2004)	Crash data	Roadway safety assessment	GDOT	◆	◆	
Crash Data – Forsyth	Crash data 1999 – 2005; electronic database	Roadway safety assessment	Forsyth County		◆	
Traffic Controls	Location of county traffic signals and flashing beacons - list	System inventory, description, mapping	Forsyth County		◆	
Pavement condition (note: Have	Pavement rating;	System inventory, description,	Forsyth	◆	◆	

Data or Report [GIS Shapefiles]	Description	Usage	Source	GIS	Have	Need
resurfacing lists; RoadwaysTIP Shapefile contains pavement type)	paved/unpaved	mapping	County			
LAND USE/DEVELOPMENT						
Zoning – Forsyth	Existing zoning classification	Land use/transportation assessment, mapping	Forsyth County	◆	◆	
Future land use [FutureLandUse2004]	Future land use	Land use/transportation assessment, mapping	Forsyth County	◆	◆	
Future Schools [School_Site_Areas_of_Interest]	Planned school locations	Land use/transportation assessment and model, mapping	Forsyth County	◆	◆	
Schools [Schools]	Existing schools	Land use/transportation assessment and model, mapping	Forsyth County	◆	◆	
Parks [Parks]	Existing parks	Land use/transportation assessment and model	Forsyth County	◆	◆	
Subdivisions [Subdivisions]	Subdivision locations	Land use/transportation assessment and model	Forsyth County	◆	◆	
Aerial Photography (note: County indicated that existing aerial photography is not transferable.)		Reference, inventory and mapping	Forsyth County	◆		◆
MODEL						
[TAZ]	The information contained in TransPlanModel.shp and TAZ is described in the Major Transportation Plan 2002 Update report. It contains Annual Average Daily Traffic for Base year 2000 in the Field Vol2000, and several other projections. The field F2000CLA1 contains functional classification.	Model reference	Forsyth County	◆	◆	
[TransPlanModel]		Model reference	Forsyth County	◆	◆	
PLANNED PROJECTS						
Projects		Model	Forsyth	◆	◆	

Data or Report [GIS Shapefiles]	**Description**	**Usage**	**Source**	**GIS**	**Have**	**Need**
[ForsythTrans_Projects_081705]			County			
Intersection Projects [FC_IntersectionProjects_081705]		Model	Forsyth County	◆	◆	
SPLOST Project List (Note: Have SPLOST V status report and)			Forsyth County		◆	

APPENDIX C
Stakeholder Advisory Panel/Public Comments

Stakeholder Panel Meeting
Thursday, January 23, 2006

Name	Title/Organization	Address	Phone/Fax	Email
Tim Allen	Assistant Director of Engineering	110 East Main St.	770-781-2165	TAllen@ForsythCo.com
Tammy Wright	Keep Forsyth Beautiful	875 Lanier 400 Parkway Suite 112	770 205-4573	tlwright@forsythco.com
Carol Haag	Aide to Chairman Jack Conway - F.C.	110 East Main St.	678-513-5850	cghaag@forsythco.com
Jeanne Marie Cowdrey	Aide to Comm. Linda Ledbetter	"	770 886 2799	jmcowdrey@forsythco.com
Rhonda OConnor	Asst. County Mgr. Forsyth Co.	" "	770-886-2801	RPOConnor@Forsythco.com
Shawn Scott	Aide to Vice Chairman Brian Tam	" "	770 886 2809	SLSCOTT@FORSYTHCO.COM
Tim Amerson	Forsyth County Schools Facilities Planner	1120 Dahlonega Hwy. Cumming, GA 30040	770 887 2461 x2125	tamerson@forsyth.k12.ga.us

Stakeholder Panel Meeting
Thursday, January 23, 2006

Name	Title/Organization	Address	Phone/Fax	Email
Pam Bowman	Legislative Affairs & Tourism Director Cumming-Forsyth County Chamber of Commerce	312 Kelly Mill Rd Cumming, GA 30040	770-887-6461	pbowman@cumming forsythchamber.org
Jerry Bowman	GRTA Board Member Forsyth Cty	5035 Heardsville Road Cumming, Ga. 30041	678-521-3355	jbowman@cardlg.com
Jimmy Vaughan	MAGI / Forsyth Co	[illegible] Cumming, Ga. 30040	770-781-5507	N/A
Jack Conway	Chairman Forsyth Co	110 E Main St. Cumming GA 30040	770-781-2101	jaconway@forsythco.com
Mary Helen McGruder	Planning Commissioner	725 Pilgrim Mill Rd. Cumming, Ga. 30040	678 926-0308 770 889-2344	maryhelenJ@aol.com
Pam Sessions	HEDGEWOOD PROP. INC. CUMMING/FORSYTH CHAMBER CHAIR	5920 Odell St. Cumming, GA 3004	770-889-3667 x 211 770-205-0163 fax 404-597-8575 cell	psessions@hedgewoodhomes.com
Rick O'Brien	TECHNOLOGY PARK JOHNS CREEK/PRES. CHAIR - Forsyth County Board of Tax Assessors	11555 Medlock Bridge Road Duluth, GA.	770.205.2154 770.232.6014 404-368-9061	rick.obrien@techparkatl.com

Forsyth County 2006 Transportation Plan Update

Stakeholder Panel Meeting
Thursday, January 23, 2006

Name	Title/Organization	Address	Phone/Fax	Email
Wayne Plummer	formerly President of FEDERATION of FORSYTH Co. HOMEOWNERS	5695 Devonshire Way Cumming GA 30040	Cell 678.464.7522 HomE 678-947-0224	wayne.plummer@att.net
Lynn Jackson	Northside Hospital-Forsyth	1200 Northside Forsyth Dr. Cumming, GA 30041	770-844-3219 Fax 770 844-3227	lynn.jackson@northside.com

Stakeholder Panel Meeting
Monday, February 20, 2006

Name	Title/Organization	Address	Phone/Fax	Email
Jimmy Vaughan	Forsyth Program Mgr. / MARI	100 Veterans Memorial Parkway	770-781-5507	
Rick O'Brien	Technology Park Johns Creek	11555 Medlock Bridge Rd Duluth	770.232.6014	Rick.obrien@techparkatl.com
Wayne Plummer	Director, The Castleview Company	5695 Devonshire Way Cumming GA 30040	cell 678.464.7522 home 678.947.0224	wayne.plummer@att.net
Jason Crane	GDOT - Planning Planning Engineer	#2 Capitol Square, SW. Atlanta, GA 30334	404-463-0010	jason.crane@dot.state.ga.us
James McCoy	Pres/CEO Cumming-Forsyth Co. Chamber	212 Kelly Mill Rd Cumming GA 30040	770-[redacted]6461 887	jmccoy@cummingforsythchamber.org
Shawn Scott	Aide to Comm. Brian Tam		(1)886-2806	slscotte forsythco com
Tammy Wright	Keep Forsyth County Beautiful	875 Lanier 400 Parkway Suite 112 Cumming GA 30040	770 205-4573	tlwright@forsythco.com

Forsyth County 2006 Transportation Plan Update

Stakeholder Panel Meeting
Monday, February 20, 2006

Name	Title/Organization	Address	Phone/Fax	Email
Tim Allen	Assistant Director of Engineering, FC	110 E. Main St. Suite 120 Cumming, GA 30040	770-781-2165 Ext. 2786	TCAllen@forsythco.com
Carol Haag	Forsyth County Aide to Commissioner Jade Conway	110 E. Main St. Suite 210 30040	678-513-5850	cghaag@forsythco.com
Tim Amerson	Forsyth County Schools	1120 Dahlonega Hwy Cumming, GA 30040	770-887-2461 x2125 F 770 781 6625	tamerson@forsyth.k12.ga.us
Jeff Quesenberry	Forsyth County Mgr.	110 E. Main St. ~~Suite 100~~ Cumming, GA 30040	7-886-2820	JLQuesenberry@forsythco.com
Pam Sessions	Hedgewood Prop., Inc Chair - Cumming/Forsyth Chamber	5920 Odell St. Cumming, GA 30040	7) 889-3667 cell 404-597-8575	psessions@hedgewoodhomes.com

Forsyth County 2006 Transportation Plan Update

Public Information Meeting, South Forsyth High School

Thursday, March 9, 2006, 6-8 PM

Name	Title/Organization	Address	Phone/Fax	Email
JOHN CUNARD	FORSYTH COUNTY	110 E. MAIN ST. CUMMING, GA 30506	770 886-2785 770 781-2104	JVCUNARD @ FORSYTHCO.COM
Bill Hatley	GMDA	6380 Polo Dr Cumming, GA 30040	404-861-9237	billshatley@AOL.com
Neil Moore	[illegible]	380 Dahlonega [illegible]	6781[illegible]	[illegible]
Bell Fitch	Retired	1215 Haddenham Dr Cumming GA 30041	678 455 [illegible]	William.F[illegible]
Tim Allen	Forsyth County	110 EAST Main St.	770-781-2165	TCALLEN@forsythco.com
Neil Kantner	GDOT-Dist 1	Gainesville	770-532-5530	
Jimmy Vaughn	MARTA	7548 Hambrick Circle	770-781-5507	

DWA
Day Wilburn Associates, Inc.

Forsyth County 2006 Transportation Plan Update

Public Information Meeting, South Forsyth High School

Thursday, March 9, 2006, 6-8 PM

Name	Title/Organization	Address	Phone/Fax	Email
David Moellering		3630 Valley Crest Way	770-887-4558	dmoe@moellering.com
Rick / Bobby Frost		4995 Lido Dr	678-910 6693	xfrost@[illegible].net
Joyce Hewitt		7210 Knowlton Tr		
Mark & Marlene Kobes		6360 [illegible] Dr Cumming	770-888-4691	mmkobes@bellsouth.net
Tony Parker	Pond & Company	3500 Parkway Lane Norcross GA 30092	678/336-7740	parkerT@pondco.com
Charles Laughinghouse	Forsyth Co.			CLLAUGHINGHOUSE@forsythco.com
Ida + Bob Pratt	SGFC	3745 [illegible]	7)886-1898	robertapratt@[illegible].net

Forsyth County 2006 Transportation Plan Update

Public Information Meeting, South Forsyth High School

Thursday, March 9, 2006, 6-8 PM

Name	Title/Organization	Address	Phone/Fax	Email
Annette Satterfield		5415 Kettlewood Ct Cumming		[illegible]

Forsyth County 2006 Transportation Plan Update

Center for Quality Growth Briefing – Forsyth County Committee

Monday, March 27, 2006

Name	Title/Organization	Address	Phone/Fax	Email
John Pearson	Paramount Grading Vice Pres	4405 Canton Hwy. Cumming GA 30040	770-844-5885	Jpearson@paramount.net.
Walt Rekuc	Jim Cowart Residential LLC Vice President	3740 DaVinci Ct, Suite 450 Norcross, Ga 30092	770-263-9124 x-307 770-263-6281	Wrekuc@jimcowart.com
Cindy J Mills	Bryan Properties	4116 Pirkle Ferry Rd SK100 Cumming, Ga 30040	770 844-6274 Fax 7)844-6275	holdon2022@aol.com
Emory Hipwood	Lipscomb Johnson	112 N. Main ST Cumming Ga 30040	770-887-1961 fax 7-889-8123	emory@lipscomb johnson.com

DWA
Day Wilburn Associates, Inc.

FACSIMILE

Date: March 13, 2006

To: Steve Cote
Day Wilburn Assoc., Inc.
1718 Peachtree St., NW Ste 461
Atlanta GA 30309

Fax: 404-249-7705

Fr: Robert A. Pratt
3745 Bridle Ridge Dr
Suwanee GA 30024
770-886-1838

No. of Pages: 2 including cover page

Re: Forsyth County 2006 Transportation Plan Update

Forsyth County 2006 Transportation Plan Update

Comment Form

Please take a moment to provide us your thoughts and ideas on transportation for the update of the Forsyth County Transportation Plan. We want and need your input. Thank you.

1. ***Are there any specific programmed or planned projects with which you either strongly agree or disagree?***
Widening of Brookwood Rd should take place only after the widening of McGinnis Ferry Rd from Sargent Rd to McFarland. Logic dictates this for continuous traffic flow on Brookwood.

2. ***Do you have any improvements or recommendations that you would suggest instead?***
To relieve the bottleneck on north bound SR141 from Johns Creek Pkwy to Laurel Springs Dr, there is only 1,000± feet of paving required to open a second lane to allow the flow of 10,000 cars per day to flow onto Laurel Springs Dr, even if it is a temporrary expedient. The county should take the initiative.

3. ***In selecting transportation projects for implementation, what is the most important thing the County should consider?***
To avoid non-attainment delays, require a DRI for all commercial strip malls or similar having the sum of 70,000 square feet of retail or greater. The county must demonstrate an initiative for meeting EPA air quality standards and therefore attract Federal and/or State funding for roads.

4. ***Do you have any other comments regarding the update of the long range transportation plan or related needs in this area?***
Provide a simplified aerial view for the general public to view all intended ramps and traffic lights for the SR141 and McGinnis Ferry Rd highway projects in South Forsyth. Currently there is nothing to reference except detailed plans which is not practical for constructive discussions and inputs at this level.

5. ***Other Comments (use back if necessary):***

Name: Robert A. Pratt
Affiliation: SGFC
Mailing Address: ~~3745 Bridle Ridge Drive 30024~~
Email: robertapratt@bellsouth.net

PLEASE RETURN TO STEVE COTE BY MARCH 23, 2006. THANK YOU!!

For questions or more information, please contact:
John Cunard, County Engineer, 770-888-8868, fax 770-781-2104 jvcunard@forsythco.com
Steve Cote, Day Wilburn Associates, Inc., 404-249-7550, fax 404-249-7705, scote@daywilburn.com

Please place form in the box provided. If you prefer, you can mail your comments to Steve Cote, Day Wilburn Associates, Inc, 1718 Peachtree Street, NW. Suite 461, Atlanta GA 30309

March 2006

Forsyth County 2006 Transportation Plan Update

Comment Form

Please take a moment to provide us your thoughts and ideas on transportation for the update of the Forsyth County Transportation Plan. We want and need your input. Thank you.

1. Are there any specific programmed or planned projects with which you either strongly agree or disagree?

The Bus lane on 400 does NOT make ANY SENSE since you rarely see a Bus on 400. We Also do NOT need A relief lane on 400 for tractor Trailers. I Additional lane in general for everyone's use makes much more sense.

2. Do you have any improvements or recommendations that you would suggest instead?

STRONG Need for a light now at RT 9 and majors Road

3. In selecting transportation projects for implementation, what is the most important thing the County should consider?

1) Safety 2) what short term projects CAN be completed now 3) Public approval of those who live near the project.

4. Do you have any other comments regarding the update of the long range transportation plan or related needs in this area?

5. Other Comments (use back if necessary):

Name: MARK Kobus

Affiliation: None

Mailing Address: 6360 Stallion Drive, Cumming GA 30040

Email: mjc kobus @ BellSouth.net

PLEASE RETURN TO STEVE COTE BY MARCH 23, 2006. THANK YOU!!

For questions or more information, please contact:
John Cunard, County Engineer, 770-888-8868, fax 770-781-2104 jvcunard@forsythco.com
Steve Cote, Day Wilburn Associates, Inc., 404-249-7550, fax 404-249-7705, scote@daywilburn.com

Please place form in the box provided. If you prefer, you can mail your comments to Steve Cote, Day Wilburn Associates, Inc, 1718 Peachtree Street, NW. Suite 461, Atlanta GA 30309

March 2006

KEEP FORSYTH COUNTY BEAUTIFUL
875 LANIER 400 PARKWAY, SUITE 112
CUMMING, GA 30040
OFFICE (770) 205-4573
FAX (678) 455-6571

DATE: 1/27/06

TO: Steve Cote

FAX #: 404 249-7705

FROM: Tammy Wright

NUMBER OF PAGES (including cover page) : 2

RE:

Forsyth County 2006 Transportation Plan Update

Comment Form

Please take a moment to provide us your thoughts and ideas on transportation for the update of the Forsyth County Transportation Plan. We want and need your input. Thank you.

1. ***Are there any specific programmed or planned projects with which you either strongly agree or disagree?***

Transportation is a new area for me I enjoyed learning but do not feel I have enough knowledge to disagree.

2. ***Do you have any improvements or recommendations that you would suggest instead?***

3. ***In selecting transportation projects for implementation, what is the most important thing the County should consider?***

I represent the environmental needs of the county so of course that would be my main concern. Unfortunately growth is a given and our way of life requires more roads.

4. ***Do you have any other comments regarding the update of the long range transportation plan or related needs in this area?***

We should look at initiatives to encourage carpooling, walking etc. But, the road must go forward this will only supplement the other is my job.

5. ***Other Comments (use back if necessary):***

Name: Tammy Wright
Affiliation: Keep Forsyth County Beautiful
Mailing Address: 875 Lanier 400 Parkway Suite 112
Email: tlwright@forsythco.com

PLEASE RETURN TO STEVE COTE BY MONDAY, JANUARY 30th. THANK YOU!!

For questions or more information, please contact:
John Cunard, County Engineer, 770-888-8868, fax 770-781-2104 jvcunard@forsythco.com
Steve Cote, Day Wilburn Associates, Inc., 404-249-7550, fax 404-249-7705, scote@daywilburn.com

Please place form in the box provided. If you prefer, you can mail your comments to Steve Cote, Day Wilburn Associates, Inc. 1718 Peachtree Street, NW, Suite 461, Atlanta GA 30309

January 2006

APPENDIX D
Functional Classification, Right-of-Way Width and 2030 ADT for Major Roadways

Functional Classification and Right-of-Way Width
Forsyth County 2006 Transportation Plan Update

Roadway Name	From/To	Functional Classification and Right-of-Way Width for Forsyth County 2006 Transportation Plan Update			2030 Forecasted Volume	2005 Traffic Counts*
		Functional Classification	Rationale/Note for Function Classifcation Variance from 2002 Transportation Plan	Right-of-Way Width		
A.C. Smith Road	SR 9 to Hopewell Road	Collector		80	4,680	1,560
Aaron Sosebee Road	SR 20 to Bethelview Road	Collector		80	2,560	1,000
Antioch Road	Pilgrim Mill Road to SR 9	Collector		80	7,940	**2,500**
Bagley Drive	SR 141 to Mathis Airport Road	Minor Arterial		100	16,230	**1,600**
Bagley Road	SR 141 to Mathis Airport Road	Collector		80	5,130	2,850
Bannister Road	SR 369 to SR 9	Minor Arterial		100	8,980	**3,880**
Bentley Road	Campground Road to SR 371	Collector		80	3,450	**1,740**
Bethelview Road	SR 9 to SR 20	Major Arterial		120	26,380	**11,920**
Bettis-Tribble Gap Road	SR 306 to Spot Road	Collector		80	4,460	**1,800**
Brannon Road	SR 141 to Old Atlanta Road	Collector		80	6,230	3,120
Brookwood Road	McGinnis Ferry Road to SR 141	Minor Arterial	Changed in accordance with GDOT functional classification definitions	100	19,500	**7,500**
Buford Dam Road	SR 9 to Gwinnett County Line	Minor Arterial		100	23,920	**9,490**
Burruss Mill Road	SR 369 to Parks Road	Collector		80	1,500	500
Burruss Road	SR 9 to Hopewell Road	Collector		80	6,000	1,200
Campground Road	Cherokee County Line to SR 9	Collector		80	9,800	**4,500**
Caney Road	Brookwood Road to Christopher Robin Road	Collector		80	6,010	**3,300**
Castleberry Road	SR 9 to W. Main Street	Minor Arterial		100	21,400	**8,300**
Chamblee Gap Road	SR 20 to Kelly Mill Road	Collector		80	1,590	590
Chattahoochee Road	Holtzclaw Road to Shady Grove Road	Minor Arterial	Changed in accordance with GDOT functional classification definitions	80	6,300	**3,220**
Christopher Robin Road	McGinnis Ferry Road to Caney Road	Collector		80	5,350	2,350
Cross Roads Road	SR 400 to Jot-Em-Down Road	Collector		80	6,000	**2,470**
Crystal Cove Trail	SR 53 to Lake Lanier	Collector		80	4,300	3,260

* 2005 traffic counts are in bold. Others are projected 2030 traffic volumes (traffic counts are not available for these roads).

Roadway Name	From/To	Functional Classification and Right-of-Way Width for Forsyth County 2006 Transportation Plan Update			2030 Forecasted Volume	2005 Traffic Counts*
		Functional Classification	Rationale/Note for Function Classifcation Variance from 2002 Transportation Plan	Right-of-Way Width		
Dr. Bramblett Road	SR 20 toSR 369	Minor Arterial		100	10,130	**5,410**
Drew Campground Road	Cherokee County Line to SR 371	Collector		80	9,500	4,200
Elmo Road	Mt. Tabor Road to SR 369	Collector		80	4,500	1,860
Fowler Road	Mullinax Road to SR 9	Collector		80	5,260	**2,600**
Francis Road	Fulton County Line to SR 9	Collector		80	10,820	3,450
Freedom Parkway	SR 306 to Pilgrim Mill Road	Minor Arterial		100	17,000	6,200
Friendship Circle	SR 20 to Hurt Bridge Road	Collector		80	6,290	4,600
SR 400	Fulton County Line to Dawson County Line	Freeway / Major Arterial	Changed in accordance with regional model and Forsyth County functional classification definitions	300	64,980 - 143,590	**29,870 - 74,420**
Hamby Road	Fulton County Line to SR 9	Collector		80	8,500	**3,500**
Heardsville Road	SR 20 to Heardsville Circle	Minor Arterial		100	10,460	2,760
Hendrix Road	John Burruss Road to SR 369	Collector		80	8,320	**2,800**
Holtzclaw Road	Pilgrim Mill Road to SR 369	Collector		80	11,990	**6,350**
Hopewell Road	SR 9 to Dawson County Line	Collector		80	9,090	**2,790**
Hubbard Town Road	Hopewell Road to SR 400	Collector		80	7,600	2,860
Hurt Bridge Road	Friendship Circle to Heardsville Road	Collector		80	7,940	2,750
Hutchinson Road	Castleberry Road to SR 9	Collector		80	10,710	4,710
Hyde Road	Drew Road to SR 20	Collector		80	3,950	1,950
James Burgess Road	Old Atlanta Road to SR 20	Collector		80	13,810	**8,760**
John Burruss Road	Karr Road to SR 369	Collector		80	7,250	**4,800**
Jot-Em-Down Road	Hopewell Road to SR 369	Collector		100	10,480	2,480
Kelly Mill Road	SR 371 to SR 20	Minor Arterial		100	7,390	**2,830**
Laurel Springs Parkway/Westminister Lane	SR 141 to Old Atlanta Road	Collector		80	13,230	**8,900**
Little Mill Road	SR 369 to SR 306	Collector		80	5,200	2,300
Majors Road	SR 371 to SR 141	Collector		80	6,500	3,450

* 2005 traffic counts are in bold. Others are projected 2030 traffic volumes (traffic counts are not available for these roads).

Roadway Name	From/To	Functional Classification and Right-of-Way Width for Forsyth County 2006 Transportation Plan Update			2030 Forecasted Volume	2005 Traffic Counts*
		Functional Classification	Rationale/Note for Function Classifcation Variance from 2002 Transportation Plan	Right-of-Way Width		
Market Place Boulevard	SR 20 to Pilgrim Mill Road	Major Arterial		100	17,660 - 44,890	17,660 - 44,890
Martin Road	SR 9 to SR 306	Collector		80	6,320	**1,600**
Mary Alice Park Road	SR 9 to Lake Lanier	Collector		80	4,790	2,350
Mathis Airport Parkway	SR 141 to Old Atlanta Road	Minor Arterial		120	17,200	
Mathis Airport Road	Laural Springs Parkway to Mathis Airport Parkway	Minor Arterial		100	14,300	3,360
Mayfield Drive	SR 306 to Jot-Em-Down Road	Collector		80	2,930	1,930
McFarland Road	SR 9 to McGinnis Ferry Road	Major Arterial		150	70,090	**16,250**
McGinnis Ferry Road	Fulton County Line to Union Hill Road	Minor arterial	Changed in accordance with GDOT functional classification definitions	120	34,500	19,760
	Union Hill road to McFarland Road.	Minor Arterial		120	19,760	4,780
	McFarland Road to Gwinnett County Line	Major Arterial		120	41,930 -70,340	**23,400-27,800**
Mt. Tabor Road	SR 369 to Elmo Road	Collector		80	3,780	1,780
Mullinax Road	SR 9 to Union Hill Road	Collector		100	15,540	**7,850**
Oak Grove Circle	SR 9 to Riley Road	Collector		80	3,620	3,620
Old Alpharetta Road	McGinnis Ferry Road to SR 141	Minor Arterial		100	30,700	**8,200**
Old Atlanta Road	McGinnis Ferry Road to Sharon Road	Minor Arterial		120	29,180	12,900
	Sharon Road to Ronald Reagan Boulevard	Minor Arterial		100	21,990	**10,550**
Old Keith Bridge Road	SR 306 to Lake Lanier	Collector		80	3,580	2,580
Parks Road	SR 306 to Little Mill Road	Collector		80	6,300	3,300
Pea Ridge Road	Jot-Em-Down Road to SR 53	Collector		80	6,480	3,480
Pendley Road	SR 9 to Ronald Reagan Boulevard	Collector		80	6,550	**3,200**
Riley Road	Oak Grove Circle to Bannister Road	Collector		80	4,550	**2,100**
Pilgrim Mill Road	Main Street to Lake Lanier	Collector		80	19,680	**8,900**
Piney Grove Road	Castleberry Road to SR 9	Collector		80	8,500	4,200
Pittman Road	SR 371 to Bethelview Road	Collector		80	6,400	**2,800**
Pleasant Grove Road	Hurt Bridge Road to Dr. Bramblett Road	Collector		80	4,200	4,200

* 2005 traffic counts are in bold. Others are projected 2030 traffic volumes (traffic counts are not available for these roads).

Roadway Name	From/To	Functional Classification and Right-of-Way Width for Forsyth County 2006 Transportation Plan Update			2030 Forecasted Volume	2005 Traffic Counts*
		Functional Classification	Rationale/Note for Function Classifcation Variance from 2002 Transportation Plan	Right-of-Way Width		
Ronald Reagan Boulevard	SR 20 to McGinnis Ferry Road	Minor Arterial		100-120	9,330 - 38,440	9,330
Samples Road	SR 20 to Buford Dam Road	Collector		80	6,830	3,200
Sanders Road	SR 20 to Mary Alice Park Road	Collector		80	8,300	**3,900**
Settingdown Road	SR 369 to Cross Roads Road	Collector		80	6,680	3,460
Shadburn Road	Martin Road to SR 306	Collector		80	6,800	3,150
Sharon Road	SR 141 to Old Atlanta Road	Minor Arterial		120	21,630	**12,950**
Shiloh Road	McFarland Road to SR 9	Collector		80	11,360	4,800
Spot Road	Dr. Bramblett Road to SR 9	Collector		100	8,500	5,800
SR 9	Fulton County Line to Main Street	Major Arterial		120	19,170 - 48,290	19,170 - 48,290
	Main Street to SR 306	Major Arterial		120	35,200	**15,000**
	SR 306 to SR 369	Major Arterial		120	18,900	**7,640**
	SR 369 to Dawson County Line	Minor Arterial		120	19,640	**7,670**
SR 20	Cherokee County Line to Maple Street	Major Arterial		120	26,770 - 42,640	**12,160-22,690**
	SR 9 to Gwinnett County Line	Major Arterial		150-200	37,190 - 66,410	**20,750-30,380**
SR 53	Dawson County Line to Hall County Line	Major Arterial	Changed in accordance with GDOT functional classification definitions	120	24,210	**9,740**
	SR 306 to Hall County Line	Major Arterial		120	29,150	**12,560**
SR 141	Fulton County Line to SR 9	Major Arterial		150-200	32,470 - 60,240	**22,730-33,930**
SR 306	SR 20 to SR 400	Major Arterial		120	31,750	**6,420**
	SR 400 to SR 369	Major Arterial		150	42,430	42,430
	SR 369 to SR 53	Major Arterial		150	44,350	**11,890**
SR 369	Cherokee County Line to SR 306	Major Arterial		120	17,170 - 45,850	**7,650-18,380**
	SR 306 to Hall County Line	Major Arterial		120	40,740	**23,640**

* 2005 traffic counts are in bold. Others are projected 2030 traffic volumes (traffic counts are not available for these roads).

Roadway Name	From/To	Functional Classification and Right-of-Way Width for Forsyth County 2006 Transportation Plan Update			2030 Forecasted Volume	2005 Traffic Counts*
		Functional Classification	Rationale/Note for Function Classifcation Variance from 2002 Transportation Plan	Right-of-Way Width		
SR 371	SR 9 to Kelly Mill Road	Major Arterial		120	20,240	**11,570**
	Kelly Mill Road to SR 20	Major Arterial		120	12,120	**5,240**
Stoney Point Road	Shiloh Road East to SR 141	Collector		80	10,860	4,300
Strickland Road	McGinnis Ferry Road to SR 9	Collector		80	8,950	2,460
Trammel Road	Windermere Parkway to SR 20	Collector		80	5,460	3,330
Tribble Road	SR 20 to Watson Road	Collector		80	7,980	2,860
Union Hill Road	McGinnis Ferry Road to Mullinax Road	Collector		100	18,920	**6,000**
	Mullinax Road to Shiloh Road	Collector		80	6,450	3,170
Vanns-Tavern Road	SR 369 to Lake Lanier	Collector		80	3,600	**2,500**
Veterans Memorial Boulevard	SR 9 to Main Street	Major Arterial		120	27,970	**14,430**
Waldrip Road	SR 369 to SR 306	Collector		80	9,480	**2,950**
Wallace Tatum Road	Heardsville Road to SR 369	Collector		80	6,850	3,940
Watson Road	Heardsville Road to Hurt Bridge Road	Collector		80	7,010	2,600
Westbrook Road	SR 306 to SR 53	Collector		80	6,750	2,360
Roads Added Since 2002 Plan						
Nuckolls Road	SR 20 to Buford Dam Road	Collector	Added per regional model	80	4,500	**3,300**
Whitmire Road	Mount Tabor Road to SR 369	Collector	Added per regional model	80	4,680	2,150
Windermere Parkway	Old Atlanta Road to SR 20	Minor Arterial	Added per regional model	140	18,710	6,500
Roads Added (Speed limit 30 mph or over)						
Anderson Lake Road	Pea Ridge Road to SR 53	Local		60	3,500	**1,480**
Bald Ridge Marina Road	SR 400 SB Ramps to Peachtree Road	Collector		120	12,590	6,800
Bennett Road	Cross Roads Road to Jot-Em-Down Road	Local		60	3,200	**2,400**
Bethany Road	McGinnis Ferry Road to Fulton County Line	Minor Arterial		80	9,200	4,800

* 2005 traffic counts are in bold. Others are projected 2030 traffic volumes (traffic counts are not available for these roads).

Roadway Name	From/To	Functional Classification and Right-of-Way Width for Forsyth County 2006 Transportation Plan Update			2030 Forecasted Volume	2005 Traffic Counts*
		Functional Classification	Rationale/Note for Function Classifcation Variance from 2002 Transportation Plan	Right-of-Way Width		
Bethel Road	0.4 Miles south of SR 369 to End	Collector		60	6,450	3,800
Bluegrass Lakes Parkway	McFarland Boulevard to Cul-de-Sac	Local		60	4,590	**2,850**
Bluegrass Valley Parkway	McFarland Boulevard to Ronald Reagan Boulevard	Local		120	18,500	3,460
Blue Ridge Overlook	Jot-Em-Down Road to Dawson County Line	Collector		80	5,180	3,180
Bottoms Road	SR 400 to Settingdown Road	Local		60	9,300	**1,400**
Cantrell Road	Jot-Em-Down Road to Jett Road	Local		60	1,800	**1,200**
Concord Road	Oak Grove Circle to Bannister Road	Local		60	3,900	**2,800**
Crow Road	Parks Road to Picklesimer Road	Local		60	3,850	**1,800**
Daves Creek Drive	Old Atlanta Road to Trammel Road	Collector		60	6,200	**3,100**
Daves Creek Road	Daves Creek Drive to Haw Creek Circle	Collector		60	4,350	3,350
Dickerson Road	SR 371 to Drew Campground Road	Local		60	4,500	**2,100**
Doc Sams Road	SR 20 to Heardsville Road	Collector		60	5,940	2,940
Echols Road	SR 20 to SR 20	Local		60	6,300	**3,800**
Franklin Gold Mine Road	Cherokee County Line to SR 20	Local		60	5,300	**2,600**
Frix Road	Heardsville Road to Cherokee County Line	Local		60	4,200	**1,800**
Gilbert Road	Old Atlanta Road to Trammel Road	Local		60	6,300	**2,600**
Govan Road	Bannister Road to Dawson County Line	Local		60	1,850	**950**
Gravitt Road	Spot Road to SR 369	Local		60	3,610	**2,350**
Grindle Road	SR 306 to Jot-Em-Down Road	Local		60	2,390	**850**
Harris Drive	Westray Road to Mount Tabor Road	Local		60	3,200	**900**
Haw Creek Road	Haw Creek Circle to Ronald Reagan Boulevard	Local		60	6,300	**3,600**
Heard Road	Shady Grove Road to Young Deer Creek Park	Local		60	2,200	**1,200**
Heardsville Circle	Heardsville Road to Heardsville Road	Local		60	1,800	**650**
Holbrook Road	Hurt Bridge Road to Dr. Bramblett Road	Local		60	2,940	1,940
Howard Road	Cherokee County Line to Drew Campground Road	Local		60	6,800	**3,400**

* 2005 traffic counts are in bold. Others are projected 2030 traffic volumes (traffic counts are not available for these roads).

Roadway Name	From/To	Functional Classification and Right-of-Way Width for Forsyth County 2006 Transportation Plan Update			2030 Forecasted Volume	2005 Traffic Counts*
		Functional Classification	Rationale/Note for Function Classifcation Variance from 2002 Transportation Plan	Right-of-Way Width		
Hubert Martin Road	SR 369 to Oak Grove Circle	Local		60	6,200	3,200
Jewell Bennett Road	SR 9 to A.C. Smith Road	Local		60	1,200	1,200
John's Creek Parkway	McGinnis Ferry Road to McGinnis Ferry Road	Local		60	9,500	**2,600**
Julian Road	SR 53 to Happy Hollow Trail	Local		60	3,500	**1,950**
Millwood Road	SR 306 to Cul-de-Sac	Local		60	1,100	1,100
Nichols Cove Road	Nix Road to Cul-de-Sac	Local		60	950	950
Nichols Drive	James Burgess Road to Cul-de-Sac	Local		60	6,950	**1,600**
Nichols Road	Old Atlanta Road to Nichols Drive	Local		60	6,950	**1,600**
Pooles Mill Road	Heardsville Circle to SR 369	Local		60	6,500	**3,800**
North Old Atlanta Road	Hutchinson Road to Ronald Reagan Boulevard	Local		80	9,500	5,800
Old Federal Road	SR 369 to Cherokee County Line	Local		60	10,840	4,100
Pilgrim Road	Cumming City Limits to Antioch Road	Local		100	11,500	**2,900**
Pine Grove Road	Old Alpharetta Road to Shiloh Road East	Local		60	6,400	**3,200**
Roper Road	Friendship Circle to Dr. Bramblett Road	Local		60	4,280	2,080
Settingdown Circle	SR 400 to Settingdown Road	Local		60	6,900	**2,100**
Settles Road	Southers Circle to Grand Cascades S/D	Local		60	4,900	**3,400**
Shady Grove Road	SR 369 to Chattahoochee Road	Collector		60	9,240	**3,430**
Shady Grove Road	Chattahoochee Road to Lanier Drive	Collector		60	7,310	3,200
Sinclair Shores Road	Pilgrim Mill Road to End	Local		60	2,300	**1,800**
Southers Circle	James Burgess Road to Sterling Drive	Local		60	5,800	**1,800**
Spot Road Connector	SR 20 to Dr. Bramblett Road	Local		60	9,800	**2,300**
Turner Road	Bald Ridge Marina Road to End	Local		60	4,200	**2,100**
Wallace Wood Road	Jot-Em-Down Road to Waldrip Road	Local		60	4,500	**1,600**
Westray Road	Elmo Road to Dawson County Line	Local		60	3,600	**1,200**
Winding Creek Drive	Doc Sams Road to Loop Road	Local		60	1,850	**950**
Witts End Drive	Pea Ridge Road to End	Local		60	1,600	**650**

* 2005 traffic counts are in bold. Others are projected 2030 traffic volumes (traffic counts are not available for these roads).

APPENDIX E
Supplemental Information Regarding the Recommended Projects

Table E-1: Short-Range Recommended Program of Projects

Project ID	Road	Project Type	From	To	Lanes		Length (mi)	Committed by 2011 (TIP & SPLOST) (1)	DRAFT 2006-2011 TIP (1)	SPLOST 5 (thru 2008) (2)	SPLOST 6 (2008-2013) (2)	2030 RTP	Completion Year (ARC)	ESTIMATED COSTS ($ Millions)					2002 Transportation Plan Update	2030 Volume-to-Capacity Ratio (V/C) *Utilizing Forsyth County 2030 Growth Projections*
					Existing	Planned								PE	ROW	CST	TOTAL	LOCAL		
Short-Range: 2006-2011 Roadway Capacity (TIP)																				
24	SR 20 (Buford Highway): Segment 4	Widening	Samples Road/Trammel Road	James Burgess Road	2	4	2.87	X	X	X	X	X	2013		$ 19.960	$ 11.347	$ 31.307		2005	1.64
9	McFarland Road: Segment 1	Widening	McGinnis Ferry Road	SR 400	4	6	1.00	X	X	X	X	X	2010	$ 2.112		$ 5.280	$ 7.392		2005	1.55
2	SR 141 (Peachtree Parkway)	Widening	0.6 Mile North of Fulton County Line	SR 9 (Atlanta Highway)	2	4	6.81	X	X	X		X	2007	$ 13.979	$ 11.005	$ 24.984	$ 49.968	$ -	2005	1.53
27	SR 20 (Canton Highway)	Widening	SR 371	SR 400	2	4	8.40	X	X			X	2016		$ 50.360	$ 24.000	$ 74.360		2005/2010	1.52
18	McGinnis Ferry Road - Regional Project	Widening	Sargent Road	Union Hill Road	2	4	7.80	X	X		X	X	2017	$ 2.500	$ 5.000	$ 25.222	$ 32.722	$ 7.500	2010	1.48
17	SR 306 (Keith Bridge Road): Segment 2	Widening	SR 400	SR 369 (Browns Bridge Road)	2	4	1.13	X	X		X	X	2014		$ 2.791	$ 4.525	$ 7.316		2005	1.43
19	McGinnis Ferry Road - Regional Project	Widening	Chattahoochee River	Sargent Road	2	4	5.39	X	X	X	X	X	2008		$ 16.400	$ 30.900	$ 47.300	$ 4.300	2020	1.38
31	SR 9 (Atlanta Highway): Segment 4	Widening	SR 141 (Peachtree Parkway)	SR 20 (Buford Highway)	2	4	2.82	X	X		X	X	2014		$ 5.868	$ 11.126	$ 16.994		2005	1.16
7	SR 369 (Browns Bridge Road): Segment 2	Widening	SR 306 (Keith Bridge Road)	Hall County Line	2	4	7.90	X	X			X	2015		$ 5.849	$ 27.491	$ 33.340		2005/2010	1.04
6	SR 369 (Browns Bridge Road): Segment 1	Widening	SR 9 (Dahlonega Highway)	SR 306 (Keith Bridge Road)	2	4	1.79	X	X			X	2013	$ 1.200	$ 7.775	$ 4.225	$ 13.200		2010	1.01
1	SR 9 (Atlanta Road/Pilgrim Mill Road): Segment 5	Widening	SR 20 (Buford Highway)	SR 306 (Keith Bridge Road)	2	4	2.85	X	X			X	2015	$ 1.740	$ 2.921	$ 5.700	$ 10.361	$ 1.740	2005	1.01
3	Bethelview Road	Widening	SR 9 (Atlanta Highway)	SR 20 (Canton Highway)	2	4	6.11	X		X	X	X	2020		$ 6.956	$ 20.514	$ 27.470		2005	0.85
25	Union Hill Road/Mullinax Road: Segment 2	Widening	McFarland Road	SR 9 (Atlanta Highway)	2	4	2.35	X	X	X	X	X	2015	$ 1.234			$ 1.234	$ 1.234	2005	0.81
22	Old Atlanta Road	Widening	McGinnis Ferry Road	Sharon Road	2	4	4.78		X		X	X	2015	$ 2.349			$ 2.349	$ 2.349	2005	0.75
21	Sharon Road	Widening	SR 141 (Peachtree Parkway)	Old Atlanta Road	2	4	1.21		X		X	X	2015	$ 0.595			$ 0.595	$ 0.595	2005	0.68
23	SR 371 (Post Road)	Widening	SR 9 (Atlanta Highway)	Kelly Mill Road	2	4	3.82	X	X	X (PE)	X	X	2014	$ 1.877	$ 6.150	$ 12.514	$ 20.541	$ 1.877	2005/2010	0.67
16	Marketplace Boulevard: Segment 1	New Road	Buford Dam Road	Baldridge Marina Road	0	4	1.79	X	X	X	X	X	2008			$ 13.974	$ 13.974	$ 9.618	2010	0.61
35	Marketplace Boulevard: Segment 2	New Road	Baldridge Marina Road	Pilgrim Mill Road	0	4	1.35	X	X			X	2012	$ 1.500	$ 10.675	$ 33.120	$ 45.295	$ 45.295	2010	0.51
10	Brookwood Road	Widening	McGinnis Ferry Road	SR 141 (Peachtree Parkway)	2	4	1.09	X	X	X	X	X	2010			$ 5.755	$ 5.755	$ 5.755	2010	0.49
14	Ronald Reagan Boulevard: Segment 3	New Road	Shiloh Road	Major Road	0	4	2.00	X	X		X	X	2012	$ 1.825	$ 6.440	$ 21.680	$ 29.945	$ 29.945	2010	0.48
8	Union Hill Road: Segment 1	Widening	McGinnis Ferry Road	McFarland Road	2	4	2.23	X	X	X	X	X	2009			$ 12.492	$ 12.492	$ 12.492	2010	0.37
13	Ronald Reagan Boulevard: Segment 2	New Road	McFarland Road	Shiloh Road	0	4	1.30	X	X		X	X	2011	$ 1.186	$ 4.550	$ 13.550	$ 19.286	$ 18.100	2010	0.37
5	Castleberry Road	Widening	Bethelview Road	Hutchinson Road	2	4	2.88	X	X	X	X	X	2010		$ -	$ 9.435	$ 9.435	$ 9.435	2005	0.36
12	Ronald Reagan Boulevard: Segment 1	New Road	Union Hill Road	McFarland Road	0	4	1.25	X	X	X	X	X	2009		$ 1.250	$ 13.550	$ 14.800	$ 8.025	2010	0.22
26	Church St. Extension	New Road	Tribble Gap Road	Intersection of Hudson St. @ Woodland St	0	2	0.11	X	X			X	2009		$ 0.168	$ 7.857	$ 8.025	$ 8.025	Not in plan	
													Total	**$ 32.097**	**$ 164.118**	**$ 339.241**	**$ 535.456**	**$ 166.284**		
Short-Range: 2006-2011 Roadway Operational Improvements (TIP)																				
43	Buford Dam Road	Roadway Operational Upgrades	SR 9 (Atlanta Highway)	Sanders Road	2	2	1.19	X	X			X	2009	$ 0.400	$ 0.800	$ 2.800	$ 4.000	$ 2.880	Not in plan	n/a
45	Mary Alice Park Road (CITY OF CUMMING)	Roadway Operational Upgrades	SR 9 (Atlanta Highway)	Mary Alice Park	2	2	1.90	X	X			X	2010			$ 7.800	$ 7.800	$ 4.612	Not in plan	n/a
46	Pilgrim Mill Road	Roadway Operational Upgrades	SR 9 (Atlanta Highway)	Freedom Parkway	2	2	3.23	X	X			X	2010		$ 1.938	$ 20.074	$ 22.012	$ 6.007	Not in plan	n/a
47	Chamblee Gap Road	Roadway Operational Upgrades	Bethelview Road	Current end of graveled section	2	2	1.04	X	X			X	2015	$ 0.050	$ 0.100	$ 17.289	$ 17.439	$ 0.650	Not in plan	n/a
48	Intersection Improvements along SR 9 at Hamby Road, Post/Mullinax Roads, Castleberry Road, Majors/Shiloh Roads, Spot Road, and AC Smith Road and SR 20 at Post/Tribble Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	2.40	X	X	X		X	2009			$ 8.408	$ 8.408	$ 1.682	Not in plan	n/a
49	Intersection Improvements along SR 369 at Doc Bramlett Road, Hendrix Road, Hotzclaw Road, Shady Grove/Elrod Roads. Jot Em Down/Bethel Road, and Waldrip Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a	X	X	X		X	2011			$ 3.852	$ 3.852	$ 0.771	Not in plan	n/a
50	SR 306 (Keith Bridge Road) Intersection Improvements at SR 53, Shadburn/Parks, and Waldrip Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a	X	X	X		X	2007			$ 4.134	$ 4.134	$ 0.827	Not in plan	n/a
50a	SR 141 Bethelview Road at SR 9	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a	X	X			X	2008						Not in plan	n/a
50b	SR 369 (Browns Bridge Road)	Roadway Operational Upgrades	Cherokee County Line	Hightower Circle	n/a	n/a	3.25	X	X			X	2011	$ 0.070	$ 0.770	$ 1.035	$ 1.875	$ -	Not in plan	n/a
													Total	**$ 0.520**	**$ 3.608**	**$ 65.392**	**$ 69.520**	**$ 17.429**		
Short-Range: 2006-2011 Bridge (TIP)																				
BR-1	SR 369 (Matt Highway)	Bridge Upgrade	Settingdown Creek	n/a	2	2	0.40	X	X			X	2010		$ 2.845	$ 1.405	$ 4.250		Not in plan	n/a
BR-3	SR 53 (at Chestatee River) - Bridge Upgrade	Bridge Upgrade	Chestatee River	n/a	2	2	0.40	X	X			X	2014	$ 0.150	$ 0.050	$ 0.152	$ 0.352		Not in plan	n/a
													Total	**$ 0.150**	**$ 2.895**	**$ 1.557**	**$ 4.602**	**$ -**		
													Grand Total				**$ 609.578**	**$ 183.713**		

RTP project improvement will be sufficient (LOS D or better) through 2030

(1) Committed projects are those scheduled to at lease be in right-of-way (ROW) acquisition phase by 2011 (moving into construction). Projects included in existing + committed (E+C) network for travel demand modeling.

(2) Some activity (PE, ROW or CST) occurring by 2011.

BOLD On Atlanta Regional Commission's Travel Demand Model Network

Segments at LOS F by 2030 (v/c >= 1.0) utilizing Forsyth County 2030 projected growth

Table E-2: Mid-Range Recommended Program of Projects

Project ID	Road	Project Type	From	To	Lanes		Length (mi)	Committed by 2011 (TIP & SPLOST) (1)	DRAFT 2006-2011 TIP (1)	SPLOST 5 (thru 2008) (2)	SPLOST 6 (2008-2013) (2)	2030 RTP	Completion Year (ARC)	ESTIMATED COSTS ($ Millions)					2002 Transportation Plan Update	2030 Volumes (V) *Utilizing Forsyth Co. 2030 Growth Projections*	2030 Volume-to-Capacity Ratio (V/C) *Utilizing Forsyth County 2030 Growth Projections*
					Existing	Planned								PE	ROW	CST	TOTAL	LOCAL			
Mid-Range: 2012-2020 Roadway Capacity (RTP)																					
25	Union Hill Road/Mullinax Road: Segment 2	Widening	McFarland Road	SR 9 (Atlanta Highway)	2	4	2.35	X	X	X	X	X	2015		$ 4.181	$ 12.737	$ 16.918	$ 4.181	2005	18,920	0.59
22	Old Atlanta Road	Widening	McGinnis Ferry Road	Sharon Road	2	4	4.78		X		X	X	2015		$ 8.504	$ 26.386	$ 34.890	$ 34.890	2005	29,180	0.91
21	Sharon Road	Widening	SR 141 (Peachtree Parkway)	Old Atlanta Road	2	4	1.21		X		X	X	2015		$ 2.152	$ 6.679	$ 8.831	$ 8.831	2005	21,630	0.68
39	SR 306 (Keith Bridge Road): Segment 3	Widening	SR 369 (Browns Bridge Road)	SR 53 (Dawsonville Highway)	2	4	6.77					X	2020	$ 3.385	$ 12.044	$ 36.693	$ 52.122	$ 3.385	2005	44,350	1.11
29	SR 9 (Atlanta Highway): Segment 2	Widening	McFarland Road	SR 371 (Post Road)	2	4	2.22			X (PE)	X	X	2020		$ 3.950	$ 10.722	$ 14.672		2005	40,250	1.01
28	SR 9 (Atlanta Highway): Segment 1	Widening	Fulton County Line	McFarland Road	2	4	0.89				X	X	2020	$ 0.325	$ 1.583	$ 4.699	$ 6.607		2010	32,900	0.82
30	SR 9 (Atlanta Highway): Segment 3	Widening	SR 371 (Post Road)	SR 141 (Peachtree Parkway)	2	4	3.79				X	X	2020	$ 1.895	$ 6.743	$ 20.011	$ 28.649	$ -	2005	26,830	0.67
40	SR 306 Extension	New Road	SR 9 (Dahlonega Highway)	SR 20 (Canton Highway)	0	4	3.79					X	2020		$ 13.485	$ 41.084	$ 54.569		2010	19,430	0.49
36	Bagley Drive	Widening	SR 141 (Peachtree Parkway)	Mathis Airport Road	2	4	0.63					X	2020	$ 3.586	$ 1.570	$ 7.171	$ 12.327	$ 9.034	2005	16,230	0.51
													Total	**$ 9.191**	**$ 54.212**	**$ 166.182**	**$ 229.585**	**$ 60.321**			
Mid-Range: 2012-2020 Bridge (RTP)																					
BR-2	SR 369 (Browns Bridge Road) - Bridge Upgrade	Bridge Upgrade	Six Mile Creek	n/a	2	2	0.40					X	2015			$ 2.425	$ 2.425		Not in plan	n/a	n/a
BR-4	SR 369 (Browns Bridge Road) - Bridge Upgrade	Bridge Upgrade	Two Mile Creek	n/a	2	2	0.40					X	2015			$ 16.295	$ 16.295		Not in plan	n/a	n/a
													Total			**$ 18.720**	**$ 18.720**				
Mid-Range: 2012-2020 Roadway Capacity: New Projects																					
N18	**SR 20 (Buford Highway)**	**Widening**	**SR 9**	**Samples Road/Trammell Road**	**4**	**6**	**2.26**							$ 1.111	$ 3.638	$ 10.396	$ 15.145	$ 1.111	2010	76,580	1.82
N13	**SR 53 (Dawsonville Highway)**	**Widening**	**SR 306**	**Hall County Line**	**2**	**4**	**1.58**							$ 0.776	$ 2.544	$ 7.268	$ 10.588	$ 0.776	2010	31,620	0.98
N29	**James Burgess Road**	**Widening**	**Old Atlanta Road**	**Nichols Drive**	**2**	**4**	**1.05**							$ 0.516	$ 1.690	$ 4.830	$ 7.036	$ 7.036	Not in Plan	13,810	0.43
N15	**Pilgrim Mill Road**	**Widening**	**Sinclair Shores Road**	**SR 400**	**2**	**4**	**2.05**							$ 1.007	$ 3.300	$ 9.430	$ 13.738	$ 13.738	Not in Plan	19,680	0.62
N5	**SR 9 (Dahlonega Highway)**	**Widening**	**SR 306 (Browns Bridge Road)**	**Hopewell Road**	**2**	**4**	**0.89**							$ 0.437	$ 1.433	$ 4.094	$ 5.964	$ 0.437	Not in Plan	19,530	0.61
N17	**Buford Dam Road**	**Widening**	**SR 9**	**Gwinnett County Line**	**2**	**4**	**5.00**							$ 2.457	$ 8.050	$ 23.000	$ 33.507	$ 33.507	Not in Plan	23,430	0.73
N20	**Old Atlanta Road**	**Widening**	**Melody Mizner Lane**	**Ronald Reagan Parkway**	**2**	**4**	**1.00**							$ 0.491	$ 1.610	$ 4.600	$ 6.701	$ 6.701	2005	21,990	0.69
N10	**SR 53 (Dawsonville Highway)**	**Widening**	**SR 306 (Keith Bridge Road)**	**Dawson County Line**	**2**	**4**	**3.50**							$ 1.720	$ 5.635	$ 16.100	$ 23.455	$ 1.720	2010	24,200	0.76
N31	Stoney Point Road	Widening	Stoney Ridge Road	SR 141 (Peachtree Parkway)	2	4	0.90							$ 0.442	$ 1.449	$ 4.140	$ 6.031	$ 6.031	Not in Plan	10,860	0.34
													Total	**$ 8.958**	**$ 29.349**	**$ 83.858**	**$ 122.165**	**$ 71.057**			
Mid-Range: 2012-2020 Roadway Operational Improvements (RTP)																					
42	Kelly Mill Road	Roadway Operational Upgrades	SR 371 (Post Road)	Bethelview Road	2	2	1.53		X			X	2017	$ 0.459	$ 0.918	$ 3.213	$ 4.590	$ 2.020	Not in plan	n/a	n/a
													Total	**$ 0.459**	**$ 0.918**	**$ 3.213**	**$ 4.590**	**$ 2.020**			
Mid-Range: 2012-2020 Roadway Operational Improvements: New Projects																					
51	Dr. Bramblett Road @ Spot Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
52	Old Atlanta Road @ Daves Creek Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a			X	X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
53	Old Atlanta Road @ Gilbert Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
54	Old Atlanta Road @ Brannon Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
55	Old Atlanta Road @ Ivey Falls Drive	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
56	Old Atlanta Road @ Northern Oaks Drive	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
57	Old Atlanta Road @ Melrose Trace	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
58	James Burgess Road @ Southers Circle	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
59	Jot-em-down Road @ Pearidge Road/Mayfield Drive	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
60	Hopewell Road @ Jot-em-down Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
61	Hopewell Road @ Hubbardtown Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
62	Bethelview Road @ Polo Fields Parkway	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
63	SR 371 @ Bentley Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
64	SR 371 @ Dickerson Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
65	SR 371 @ Pittman Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
66	SR 371 @ Drew Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
67	SR 371 @ Evans Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
68	SR 306 @ Mayfield Drive	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
69	SR 53 @ Truman Mountain Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.750	$ 0.750	Not in plan	n/a	n/a
70	SR 53 @ Chestatee Heights Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.750	$ 0.750	Not in plan	n/a	n/a
71	SR 53 @ Pearidge Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 1.000	$ 1.000	Not in plan	n/a	n/a
72	SR 9 @ Antioch Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
73	SR 9 @ Fowler Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
74	SR 9 @ Hopewell Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
75	SR 9 @ Bannister Road	Roadway Operational Upgrades	n/a	n/a	n/a	n/a	n/a				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
N35	Main Street	Roadway Operational Upgrades	SR 20	SR 9	2	2	0.58				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
N36	Maple Street	Roadway Operational Upgrades	SR 20	SR 9	2	2	0.58				X						$ 0.500	$ 0.500	Not in plan	n/a	n/a
													Total				**$ 14.500**	**$ 14.500**			
Mid-Range: 2012-2020 LCI Projects: New Projects																					
TP-13	New road parallel to Ronald Reagan Boulevard	Roadway/access management	McFarland Road	Union Hill Road	0	Not specified	Not specified							$ 0.200	$ 1.000	$ 2.000	$ 3.200	$ 3.200	2009-2010	n/a	n/a
TP-14	New E-W connector: Shiloh Road East Extension	Roadway/access management	Shiloh Road	Ronald Reagan Boulevard	0	Not specified	Not specified							$ 0.200	$ 1.000	$ 2.000	$ 3.200	$ 3.200	2012-2015	n/a	n/a
TP-15	New N-S connector: Reagan alternative east of Big Creek	Roadway/access management	Shiloh Road northbound	Shiloh Road southbound	0	Not specified	Not specified							$ 0.200	$ 1.000	$ 2.000	$ 3.200	$ 3.200	2012-2015	n/a	n/a
TP-16	New E-W connector: Stoney Ridge Drive Improvement	Roadway/access management	Not Specified	Not Specified	0	Not specified	Not specified							$ 0.100	$ 0.500	$ 1.000	$ 1.600	$ 1.600	2012-2015	n/a	n/a
TP-17	Internal Roadway Network: New Local Access Streets	Roadway/access management	To be determined	To be determined	0	Not specified	Not specified							$ 0.080	$ 0.250	$ 2.250	$ 2.580	$ 2.580	varies	n/a	n/a
TP-18	GRTA Park and Ride Facility	Transit: New Facility	To be determined	To be determined	N/A	N/A	N/A							TBD	TBD	TBD	TBD	TBD	2008-2010	n/a	n/a
													Total	**$ 0.780**	**$ 3.750**	**$ 9.250**	**$ 13.780**	**$ 13.780**			
													Grand Total				**$ 403.340**	**$ 161.678**			

RTP project improvement will be sufficient (LOS D or better) through 2030

(1) Committed projects are those scheduled to at lease be in right-of-way (ROW) acquisition phase by 2011 (moving into construction). Projects included in existing + committed (E+C) network for travel demand modeling.

(2) Some activity (PE, ROW or CST) occurring by 2011.

BOLD On Atlanta Regional Commission's Travel Demand Model Network

Segments at LOS F by 2030 (v/c >= 1.0) utilizing Forsyth County 2030 projected growth

Table E-3: Long-Range Recommended Program of Projects

Project ID	Road	Project Type	From	To	Lanes		Length (mi)	Committed by 2011 (TIP & SPLOST) (1)	DRAFT 2006-2011 TIP (1)	SPLOST 5 (thru 2008) (2)	SPLOST 6 (2008-2013) (2)	2030 RTP	Completion Year (ARC)	ESTIMATED COSTS ($ Millions)					2002 Transportation Plan Update	2030 Volume-to-Capacity Ratio (V/C) *Utilizing Forsyth Co. 2030 Growth Projections*
					Existing	Planned								PE	ROW	CST	TOTAL	LOCAL		
Long-Range: 2021-2030 Roadway Capacity (RTP)																				
37	Old Alpharetta Road	Widening	McGinnis Ferry Road	SR 141 (Peachtree Parkway)	2	4	2.50				X	X	2020	$ 1.440	$ 2.424	$ 28.800	$ 32.664	$ 32.664	2010	0.92
38	SR 306 (Keith Bridge Road): Segment 1	Widening	SR 9 (Dahlonega Highway)	SR 400	2	4	1.09					X	2020	$ 0.545	$ 1.939	$ 5.908	$ 8.392		Not in plan	0.91
34	McFarland Road: Segment 2	Widening	SR 400	SR 9	4	6	1.39					X	2030	$ 0.480	$ 2.473	$ 7.339	$ 10.292	$ 4.420	2005	1.25
41	SR 400	Widening	McFarland Road	SR 20 (Buford Highway)	4	6	6.94					X	2030	$ 3.805	$ 12.347	$ 38.050	$ 54.202		2010	1.16
32	SR 20 (Canton Highway): Segment 1	Widening	SR 369 (Hightower Road) in Cherokee County	SR 371 (Post Road)	2	4	6.37					X	2030		$ 11.333	$ 33.634	$ 44.967		2010	1.03
													Total	**$ 6.270**	**$ 30.516**	**$ 113.731**	**$ 150.517**	**$ 37.084**		
Long-Range: 2021-2030 Roadway Capacity (Aspirations)																				
ASP-2	SR 369 (Browns Bridge Road)	Aspirations / Illustrative	Cherokee County Line	SR 9 (Forsyth County)	2	4	16.61					n/a	n/a	$ 6.063	$ 11.627	$ 76.406	$ 94.096	$ -	2010	1.00
ASP-3	SR 400 HOV	Aspirations / Illustrative	McFarland Road	SR 141 (Bethelview Road)	0	2/4	4.20					n/a	n/a	$ 4.561	$ 6.000	$ 45.614	$ 56.175		2010	1.16
													Total	**$ 10.624**	**$ 17.627**	**$ 122.020**	**$ 150.271**	**$ -**		
Long-Range: 2021-2030 Roadway Capacity: New Projects																				
N34	**SR 400**	**Widening**	**SR 20**	**Dawson County Line**	4	6	11.60							$ 10.179	$ 18.675	$ 67.860	$ 96.714		2020	1.68
N6	**Jot Em Down Road**	**Widening**	**Hopewell Road**	**Cross Roads Road**	2	4	1.58							$ 0.776	$ 2.544	$ 7.268	$ 10.588	$ 10.588	2020	1.16
N16	**Baldrige Marina**	**Widening**	**Lake Lanier**	**SR 400**	2	4	1.20							$ 0.590	$ 1.932	$ 5.520	$ 8.042	$ 8.042	Not in Plan	1.12
N9	**Hopewell Road**	**Widening**	**SR 9 (Dahlonega Highway)**	**Skyland Parkway**	2	4	1.10							$ -	$ 1.771	$ 5.060	$ 6.831	$ 6.831	Not in Plan	1.06
N23	**North Old Atlanta Road**	**Widening**	**Ronald Reagan Parkway**	**SR 9 (Atlanta Highway)**	2	4	0.50							$ 0.246	$ 0.805	$ 2.300	$ 3.351	$ 3.351	Not in Plan	1.05
N1	**SR 369 (Matt Highway)**	**Widening**	**Whitmire Road**	**Hubert Martin Road**	2	4	3.38							$ 1.661	$ 5.442	$ 15.550	$ 22.652		2010	1.00
N2	**SR 369 (Matt Highway)**	**Widening**	**SR 9 (Dahlonega Highway)**	**Gravitt Road**	2	4	0.85							$ 0.418	$ 1.368	$ 3.910	$ 5.696		2010	0.97
N19	Marketplace Blvd.	Widening	SR 20	Buford Dam Road	4	6	0.82							$ 0.403	$ 1.320	$ 3.772	$ 5.495	$ 5.495	2010	0.96
N22	**Veterans Memorial Boulevard**	**Widening**	**SR 9**	**Main Street**	4	6	1.37							$ 0.673	$ 2.206	$ 6.302	$ 9.181	$ 9.181	2010	0.96
N7	**Hubbard Town Road**	**Widening**	**Hopewell Road**	**SR 400**	2	4	0.88							$ 0.432	$ 1.417	$ 4.048	$ 5.897	$ 5.897	Not in Plan	0.93
N30	Tribble Road	Widening	SR 20	Watson Road	2	4	1.00							$ 0.491	$ 1.610	$ 4.600	$ 6.701	$ 6.701	Not in Plan	0.91
N8	**Hopewell Road**	**Widening**	**Hubbard Town Road**	**Jot'Em Down Road**	2	4	0.83							$ 0.408	$ 1.336	$ 3.818	$ 5.562	$ 5.562	Not in Plan	0.86
N33	**McGinnis Ferry Road**	**Widening**	**Union Hill Road**	**Tidwell Drive**	2	4	0.67							$ 0.329	$ 1.079	$ 3.082	$ 4.490	$ 4.490	2005	0.86
N35	**Ronald Reagan Boulevard**	**Widening**	**Old Atlanta Road**	**North Old Atlanta Road**	4	6	1.30							$ 1.232	$ 2.093	$ 8.213	$ 11.538	$ 11.538	Not in Plan	0.84
	SR 20 (Buford Highway)	**Widening**	**SR 400**	**Gwinnett County Line**	4	6	4.96							$ 2.430	$ 7.986	$ 22.816	$ 33.232		2010	n/a
	SR 20 (Canton Highway)	**Widening**	**Spot Road**	**Kelly Mill Road**	4	6	3.10							$ 1.519	$ 4.991	$ 14.260	$ 20.770		2010	n/a
	Dr. Bramblett Road	**Widening**	**SR 20**	**Roper Road**	2	4	1.20							$ 0.588	$ 1.932	$ 5.520	$ 8.040	$ 8.040	2010	n/a
	McGinnis Ferry Road	**Widening**	**McFarland Road**	**Brookwood Road**	4	6	1.89							$ 0.926	$ 3.043	$ 8.694	$ 12.663	$ 12.663	2010	n/a
	SR 141 (Peachtree Parkway)	**Widening**	**McGinnis Ferry Road**	**SR 9 (Atlanta Highway)**	4	6	6.46							$ 3.165	$ 10.401	$ 29.716	$ 43.282		2010	n/a
	Pine Grove Road	Widening	Shiloh Road East	Old Alpharetta Road	2	4	0.53							$ 0.260	$ 0.853	$ 2.438	$ 3.551	$ 3.551	2010	n/a
	SR 371 (Post Road)	**Widening**	**Majors Road**	**SR 20 (Canton Highway)**	2	4	4.00							$ 1.960	$ 6.440	$ 18.400	$ 26.800		2010	n/a
	SR 9 (Atlanta Highway)	**Widening**	**McFarland Road**	**Mullinax Road**	4	6	2.25							$ 1.103	$ 3.623	$ 10.350	$ 15.075		2020	n/a
	SR 20 (Canton Highway)	**Widening**	**Cherokee County Line**	**Spot Road**	4	6	4.80							$ 2.352	$ 7.728	$ 22.080	$ 32.160		2020	n/a
	SR 53 (Dawsonville Highway)	**Widening**	**Dawson County Line**	**Hall County Line**	4	6	5.08							$ 2.489	$ 8.179	$ 23.368	$ 34.036		2020	n/a
	Dr. Bramblett Road	**Widening**	**Roper Road**	**SR 369 (Matt Highway)**	2	4	3.51							$ 1.720	$ 5.651	$ 16.146	$ 23.517	$ 23.517	2020	n/a
	SR 400	**Widening**	**McFarland Road**	**SR 369 (Browns Bridge Road)**	6	8	13.32							$ 6.527	$ 21.445	$ 61.272	$ 89.244		2020	n/a
	McGinnis Ferry Road	**Widening**	**Brookwood Road**	**Gwinnett County Line**	4	6	6.40							$ 3.136	$ 10.304	$ 29.440	$ 42.880	$ 42.880	2020	n/a
													Total	**$ 46.014**	**$ 136.172**	**$ 405.803**	**$ 587.989**	**$ 168.327**		
Long-Range: 2021-2030 LCI Projects: New Projects																				
TP-19	MARTA Station (dedicated lanes or rail)	Transit: New Facility	To be determined	To be determined	N/A	N/A	N/A							TBD	TBD	TBD	TBD	TBD	2023-2025	n/a
TP-20	McGinnis Ferry/ SR 400 Interchange	Roadway/New Facility	To be determined	To be determined	N/A	N/A	N/A							$ 1.200	$ 12.00	$ 12.000	$ 25.200	$ -	2031	n/a
													Total	**$ 1.200**	**$ 12.000**	**$ 12.000**	**$ 25.200**	**$ -**		
													Grand Total				**$ 913.976**	**$ 205.411**		

RTP project improvement will be sufficient (LOS D or better) through 2030

(1) Committed projects are those scheduled to at lease be in right-of-way (ROW) acquisition phase by 2011 (moving into construction). Projects included in existing + committed (E+C) network for travel demand modeling.

(2) Some activity (PE, ROW or CST) occurring by 2011.

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Segments at LOS F by 2030 (v/c >= 1.0) utilizing Forsyth County 2030 projected growth