

Forsyth County Comprehensive Transportation Plan

May 2011



Approved by Forsyth County Board of Commissioners





Submitted by Wilbur Smith Associates



Forsyth County Comprehensive Transportation Plan (CTP)

Recommendations Report



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SECTION I. INTRODUCTION

The previously submitted *Forsyth County Needs Assessment Report* provided a foundation for identifying appropriate policy and project recommendations. Consistent with the previous three decades, Forsyth County will respond effectively to current and future (30-year) needs through this Recommendations Report. The county's ability to proactively advance transportation policy and infrastructure to remain compatible with changing technology will be key to meeting future needs. The Forsyth County Comprehensive Transportation Plan process involved decision-makers and the public in plan development to ensure that transportation needs were comprehensively identified and appropriate policy and program choices were offered.

The early and continuous involvement of interested parties aided in plan development and reduced costly conflict. A broad base of stakeholders was included in the process to holistically address transportation facility development. Often the needs of one group conflict with those of another. Bringing groups together through the Advisory Committee created a balance between the desired facilities and provided an improved understanding of how different modes and users of the transportation system interact.

The intent of the recommendations report is to develop solutions to the deficiencies in the existing and anticipated roadway network and other multimodal transportation efforts. From the inventory and comprehensive needs assessment, it was clear that responsive transportation programs and policies were needed to meet current and future county needs.

Significant effort was invested to ensure a realistic and comprehensive picture of the future demographic characteristics and transportation needs of Forsyth County. Recommendations developed during the Comprehensive Transportation Plan (CTP) process will meet the growth challenge by supporting the Comprehensive Plan's population and housing forecasts, natural and cultural resource protection, economic development policies and land use policy and plans.

The *Inventory of Existing Conditions* and *Needs Assessment Report* provided a framework for identifying problems, such as traffic congestion, lack of multimodal transportation infrastructure, and/or insufficient public transportation. The purpose of this report is to document recommendations to meet Forsyth County's transportation needs through 2040.

The scope for the recommendations report included the following steps:

- Development of a program of projects and recommended policies to meet identified needs.
- Application of the travel demand model to determine if solutions are effective.
- Coordination with Forsyth County representatives to ensure recommended projects and policies are realistic and effective solutions to future transportation and land use issues.



Background

As part of the federally mandated transportation planning process, metropolitan planning organizations (MPOs) prepare long range transportation plans for their region. The Atlanta Regional Commission (ARC), the designated MPO for the region, initiated a funding assistance program in 2005 to encourage member counties and their municipalities to develop joint long-range transportation plans. The CTP process culminates with the recommendations report that serves as input in developing ARC's future regional transportation plans. Working cooperatively with ARC and county municipalities, the CTP process is a vehicle to implement short-term and long-range strategies, policy, and program planning. The CTP is an excellent opportunity to meet transportation challenges head-on and to proactively anticipate countywide future multimodal transportation demands within the local and regional framework.

Located approximately 40 miles north of Atlanta, Forsyth County is a bedroom community that offers a high quality of life and has sustained economic vitality. Characterized by significant growth over the past decades, the county has diligently maintained infrastructure to support and sustain growth.

The population of Forsyth County in 2008 was estimated to be over 158,000 people according to the U.S. Census Bureau. Based on analysis conducted for the *Needs Assessment Report* using future land use and approved Developments of Regional Impact (DRI), population is expected to increase to approximately 454,000 by 2040. Employment in Forsyth County for 2010 was estimated to be 71,405 and forecast to be almost 239,000 by 2040 - a 225 percent increase over the next three decades. **Figure 1** shows the location of the DRIs in Forsyth County.

Growth has caused congestion on the county's transportation system. The doubling of population and significant increase in employment will require changes in the transportation infrastructure to continue to support growth. The current economic downturn has temporarily slowed new developments in Forsyth County communities. However the county has continued to attract growth in population and employment throughout the recession.

The Forsyth County Department of Engineering works to strategically identify and meet the challenges of a rapidly urbanizing county along an extensive transportation network. The purpose of the Forsyth County Comprehensive Transportation Plan (CTP) is to evaluate current and future transportation demands resulting from significant current and predicted residential and business growth over the next 30 years within the context of the Atlanta region. The CTP provides policy guidance and recommends projects to be implemented in Forsyth County through local and regional planning efforts to meet identified needs and offers a framework for future updates for planning and managing the county transportation system.





SECTION II. COMPREHENSIVE TRANSPORTATION PLAN (CTP) DEVELOPMENT

Elements of the Forsyth County CTP process included:

- Significant and detailed data collection from local, regional, and state public and private sector sources
- Comprehensive public and stakeholder involvement in planning aspects of the process
- Coordination with the many institutions involved in the regional transportation planning process including GDOT, GRTA, ARC, municipalities, county departments, elected officials, private sector institutions, and the news media
- Refinement and application of the travel demand model
- Identification and assessment of multimodal transportation needs
- Policy and program development

Vision, Goals and Objectives

The purpose of the Forsyth County Comprehensive Transportation Plan (CTP) is to identify transportation needs and potential multimodal solutions for the county through 2040. Needs and solutions will be coordinated with regional transportation planning concepts and land use planning goals of the Forsyth County Comprehensive Plan. The CTP will also build on the 2002 and 2006 Major Transportation Plan updates.

The mission of the most recent Comprehensive Plan is to ensure that "Forsyth County will be a dynamic, thriving community, which melds the development of an exemplary quality of life with the preservation of its unique natural and cultural resources." Also the county "will continue to build upon and encourage the unique characteristics found throughout the community while working together towards common goals."

To address short and long-term multimodal transportation needs in the county, the following draft vision statement, goals, and objectives were developed based on a review of statewide, regional, and local goals and input received from city and county staff.

- Vision Statement To offer travelers and residents a comprehensive and integrated transportation system designed to complement the county's character and enhance livability while providing connectivity, mobility, and access appropriate to attract and retain development anticipated by the county's Comprehensive Plan.
- **Goals** Plan goals will include:
 - Develop project and policy strategies to complement and implement the county's Comprehensive Plan vision
 - Preserve and enhance the existing and future transportation system through appropriate strategies including transportation demand and access management techniques
 - Enhance safety and security for motorized and non-motorized travel
 - Ensure financial viability of transportation system



- Manage congestion
- Conserve natural and built resources
- Promote appropriate economic development relevant to desired land use
- Provide alternative solutions for transportation consistent with local, regional, and statewide jurisdictions
- Develop mobility and connectivity within and between transportation modes
- Encourage sustainable development
- o Accommodate growth within and immediately adjacent to county
- Facilitate the movement of goods
- Promote complete street concept by ensuring balance for all users
- Support reduction of greenhouse gases consistent with pending federal policies
- Position infrastructure recommendations to take advantage of multiple funding sources, including the priority funding provisions proposed as part of the Surface Transportation Authorization Act of 2009.

Data Collection and Analysis

Land use and transportation data was collected from state, regional and local sources such as Forsyth County, City of Cumming, ARC, Georgia Department of Transportation, and the Georgia Regional Transportation Authority (GRTA). Data was collected to ensure that up-to-date and comprehensive data was used to prepare the plan. Data collected by source is identified in **Table 1**.

Data Source	Data Collected
Forsyth County	Comprehensive Plan including updates, GIS shapefiles, previous and ongoing studies, project programming, and strategic direction
City of Cumming	Comprehensive Plan and strategic direction
ARC	Travel demand modeling information and ongoing studies
GDOT	Traffic counts, bridge ratings, crash data
GRTA	DRI information and Xpress bus data

Table 1. Data Collection

As part of the data collection effort, **Appendix A** at the end of this report provides a listing of existing facilities and appropriate data, such as required right-of-way widths, existing and future traffic and functional classifications.



Travel Demand

As fully discussed in the Needs Assessment Report, travel demand was forecasted through the use of mathematical computer modeling. The Needs Assessment Report also discussed how the regional travel demand model was refined to include additional roadway network and traffic analysis zones to ensure accurate demand forecasts for Forsyth County's road network. The refinement and application of the model showed that population growth is expected to top 454,000 and employment is forecast to total almost 239,000 by 2040.

Much of the growth and resulting increased congestion is a result of the seventeen Developments of Regional Impact (DRIs) expected within the County by 2030. The ARC model was refined to capture unique Forsyth County trends to better forecast specific changes for the future. Model refinements are discussed in detail in the *Needs Assessment Report*. To ensure proper detail smaller Traffic Analysis Zones (TAZs) were assigned mostly in areas anticipated to experience significant growth and increasing densification. The existing 38 TAZs were subdivided to provide more detail for a total for 221 TAZs countywide. **Figure 2** shows the refinement of the TAZs.



Figure 2. TAZ Refinement

To determine future needs the refined travel demand model was applied using base year 2010 and future year 2040 data to determine the impact of growth on the transportation system. The impact of forecast growth on the transportation system is significant. If no action is taken and growth continues as expected, over 44 percent of the county's transportation network will be operating at more than capacity, causing unacceptable congestion. **Table 2** shows the percentage of the network by level of service (congestion) for 2010 and 2040 existing plus committed network.

Level of Service	Volume/Capacity ratio	% of network Congested 2010	% of network Congested 2040
A & B	<0.5	62.0%	27.2%
С	0.5 to 0.7	12.4%	15.1%
D	0.7 to 0.85	7.7%	13.4%
E	0.85 to 1.0	9.2%	11.7%
F	=>1.0	8.7%	32.7%

Table 2 - Percentage	of Network Congested
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Another measure of performance for the network is average speed. The travel demand forecasting model predicts a significant decrease in travel speed on the 2040 network. As **Table 3** shows, the estimated average travel speed in 2010 will decrease on the average from 35 mph to 16 mph in 2040. All functional classifications are impacted.

Functional Class	2010 Speed	2040 Speed	Percentage Difference
Arterial	42.8 mph	20.1 mph	-53.0%
Collector	35.2 mph	17.4 mph	-50.6%
Local	32.3 mph	14.8 mph	-54.2%
Total	35.3 mph	16.7 mph	-52.6%

Table 3 - Average Speed by Functional Classification

Figure 3 maps the anticipated congestion of the 2040 network using the 2010 existing plus committed projects (E+C) network and reflects model results that forecast significant congestion resulting from the county's growth. Even though the County's roadway grid network appears substantial, additional improvements are required to maintain acceptable service to match the pace of growth.





Advisory Committee and Public Meetings

The Advisory Committee met to provide guidance and recommendations on plan elements. Meetings in April and October 2010 offered members the opportunity to hear project progress reports and to provide input on key plan elements, including major transportation deficiencies and citizen concerns and issues.

Participation by Committee members was instrumental in the development of the project goals and objectives. Their input was used to draft recommended goals and objectives to present to the public during the community visioning sessions. Members also participated in the development and analysis of transportation needs in the county. The participation of the Committee members has been invaluable in attracting attention to the CTP and in involving Forsyth County residents and employees.

Traditional public outreach activities include those that establish an identity for the project and proactively offer opportunities for input to the public. Community outreach meetings were held in November 2010 and February 2011 to garner an understanding of what the public would like to see in the transportation network. **Table 4** is the list of Committee members.

Organization	Name	Title
ARC	Regan Hammond	Principal Planner
	Jean Hee Park	Principal Planner
GRTA	Brian Borden	
GDOT	Andrew Heath	
District 1 Commissioner	Charlie Laughinghouse	Chairman
District 2 Commissioner	Brian Tam	
District 3 Commissioner	Jim Harrell	Vice Chairman
District 4 Commissioner	Patrick B. Bell	
District 5 Commissioner	Jim Boff	Secretary
Planning & Development	Tom Brown, AICP	Assistant Director
Engineering	Tim Allen	Assistant Director
Chamber of Commerce	James McCoy	President and CEO
	Brian Dill	Vice President of Econ Dev
City of Cumming	Steve Bennett	Assistant City Administrator
	Scott Morgan	Planning and Zoning Director
Forsyth Co Schools	Dr. L.C. Evans	Superintendent
	Deana Bowen	

Table 4. Advisory Committee



SECTION III. TRANSPORTATION NEEDS

Land Use and Transportation

As stated previously and fully documented in the *Needs Assessment Report*, population and employment data from the Atlanta Regional Commission's Envision 6 model plus local DRI and permit data was used to support trends and forecast changes for the future. Consideration of existing and future land use may reveal specific transportation system needs. The *Needs Assessment Report* discussed Forsyth County's existing and proposed future land use largely dominated by residential uses with strategically placed employment uses.

Until recently, residential development has dominated the county. However, during the past decade, new non-residential development in Forsyth has appeared clustered largely within three areas; the City of Cumming, the southern end of the SR 400 corridor and the area east of SR 400 in south Forsyth County. The center of retail growth in the county, the Cumming Marketplace area in the vicinity of the SR 400/SR 20 interchange, is a location of significant employment growth. As the market grows and traffic becomes heavier, the SR 20 corridor has transitioned from residential to small retail establishments. The Comprehensive Plan emphasizes careful transportation and land use planning and how to adequately support transitional compatible growth within these corridors to ensure sustained livability.

The future land use map (**Figure 4**) was developed to illustrate the most desirable pattern of land use that will accommodate continued growth in Forsyth County. Land use reflects the future demographic changes resulting from patterns illustrated on the county's existing land use map, the current zoning map, approved planned unit developments (PUDs), Master Planned Districts (MPDs), developments of regional impact (DRIs) and other developments, topographic characteristics, natural resource sensitivity, the availability of infrastructure, and needs demonstrated by residential and employment forecasts. A review of the future land use map highlights areas where transportation infrastructure improvements may be needed to support proposed land uses.

Forsyth County's Comprehensive Plan emphasizes development that maintains the county's current quality of life. The majority of the developed land uses within the county (excluding agricultural and public institutional) is residential, over 90 percent, and of that total, over 90 percent of all housing units within the County are single-family residences. Cumming's land use accounts for a large portion of the multi-family units within the County. Although master planned developments and village retail areas are planned, unincorporated Forsyth County is expected to continue to be predominately single family residential in nature.





As demonstrated by **Figure 1**, a large number of DRIs are being planned. The Georgia Regional Transportation Authority defines DRI as a large-scale development likely to affect areas outside of its local jurisdiction. Impact on the transportation system by DRIs was measured through the travel demand modeling process. Demographic changes resulting from planned DRIs were incorporated into the socio-economic elements of the travel demand model so that transportation impacts were quantified. To measure the impact of land use on the transportation network, ARC's *Envision 6* travel demand model was significantly refined to include an accurate forecast of future (2040) population, households and employment assignments to specific and smaller traffic analysis zones.

Forsyth County is updating its Comprehensive Plan simultaneously with the Comprehensive Transportation Plan. As a result, information generated as a part of the CTP process is being used to inform the Comprehensive Plan update and vice versa. Elements of the final CTP will be included in the transportation chapter of the Comprehensive Plan update. An example of complementary use of the CTP and the Comprehensive Plan is considering future land use, population, and development intensity when determining the need for transportation facilities and appropriate freight routes through the County. Enhanced density may offer a market for travel demand management strategies such as increased vanpool, park and ride lots, and carpooling.

Project stakeholders recognized that the changes in area land use are outpacing the improvements and changes to transportation infrastructure. Short-term projects that can improve conditions and are compatible with existing land uses should be considered in the interim as a means of closing the gap between new development and the existing transportation infrastructure.

Safety

The *Needs Assessment Report* included a thorough discussion of the county safety needs. A total of 12,893 crashes were recorded in Forsyth County during the 3-year period from 2006 to 2008. The crashes were responsible for 40 fatalities and 4,137 injuries. The locations of the top thirty highest crash frequencies in Forsyth County were identified. The highest five roadways for number of crashes between 2006 and 2008 in Forsyth County were on SR 369, SR 9, SR 20, SR 400 and SR 141.

Recent crash history is a predictor of future concerns in the absence of improvements. Therefore, projects recommended in the CTP address locations with historically significant safety concerns.

Freight

The Atlanta region is one of the strongest and fastest growing logistics clusters in the nation. Metro Atlanta ranks fifth in the nation in transportation and logistics employment and the State of Georgia was recently ranked as the best state for logistics because of its air, ground, rail and sea facilities as well as corporate logistics centers and intellectual capital. As a result of the strategic role the region plays in the nation's freight system, identifying and programming effective improvements to accommodate increasing freight, goods, and services movement in the Atlanta area is critical to the region's economic vitality and quality of life. **Figure 5** shows local and state truck routes in Forsyth County.





Atlanta Strategic Truck Route Master Plan (ASTRoMaP)

Adopted by the ARC Board in June 2010, the Atlanta Strategic Truck Route Master Plan (ASTRoMap) identified non-interstate regional truck routes designed to provide intraregional north-south and east-west mobility without resorting to the often congested interstate system. An interstate-alternative network, ASTRoMaP, identified existing routes that offer significant connectivity and enhanced mobility while requiring only minor improvements. No new location routes were recommended, only current arterial and collector roadways that offer truck traffic regional alternatives to the often-congested interstate system.

ASTRoMap routes in Forsyth County include SR 20 and SR 369, both established arteries for truck and other vehicle movement through Forsyth County to Hall County and other counties throughout the region. SR 20 and SR 369 offer complementary relief and access to SR 400, the county's major freeway. ASTRoMaP routes bear a close relationship to the economic geography, and are not only the routes that businesses developed around as well as they are the routes for getting *between* businesses.

Atlanta Local Truck Route Master Plan (ALTRoMaP)

With the additional emphasis on freight transportation planning in the region and at the national level, counties should be preparing for more intense local freight planning. In order to accommodate growing levels of freight movement and to position the County to maximize benefit of increasing potential funding for freight projects, additional local truck routes are necessary to supplement the regional ASTRoMaP to serve the "first mile" and "last mile" of freight movement within the county. Forsyth County has a well developed network of roadways that, with some improvement, can serve as truck routes and play specific roles in network distribution of goods.

It is recommended that Forsyth County consider joining adjacent counties in preparing an ALTRoMaP study to identify and prioritize significant "first mile" and "last mile" truck routes.

Design Standards for Freight Infrastructure

Officially recognized infrastructure and operational design guidelines implemented by jurisdictions within the county are a fundamental element of effective freight and goods movement planning. Following are a few guidelines recommended to enhance Forsyth County's freight movement capacity.

Design Guidelines for Roadway Elements - Truck traffic causes a disproportionate amount of roadway wear in comparison to passenger vehicles. Designated truck routes should be designed to higher lane and curb lane widths, as well as shoulder widths. Pavement condition ratings, as well as intersection radii, should also be designed to accommodate significantly higher volumes of freight traffic.

Signalization Guidelines - Special traffic signalization considerations should be made along freight facilities. Signal timing plans along freight corridors should be adjusted to account for the larger size and slower acceleration of trucks. Inter-jurisdictional cooperation is essential to ensure coordination of signal timing for maximum benefit.



Signage - Guidelines for sign design and placement facilitate the efficient movement of goods, especially for drivers not familiar with the area. This applies to roadway identification and directional signage. Areas without specific guidelines regarding the placement of address signs consequently produce businesses and residences that either lack address signage or place signs in locations difficult to see from the street, making it difficult for unfamiliar delivery drivers to locate individual stops. This can result in delivery trucks having to stop several times to find the right location, which adds to congestion problems, vehicle miles traveled (VMT), fuel consumption, and air pollution.

Incorporating Trucks into Traffic Design

Truck turning radii on narrow roads and narrow roads with roadside ditches are potential barriers facing process shippers and motor carriers. For a large truck, and especially for a driver unfamiliar with the surroundings, ditches can be hazardous; a solution might be a program to cover the trenches with grates, in heavily traveled freight zones. The same problem of road width is exacerbated in a different form by the encroachment of structures on the right of way. Traffic design issues often contribute to a less reliable freight network. By developing a defined local network to supplement the ARC ASTRoMaP freight network and understanding the specific freight roles played by the highways, roadway improvement strategies are likely to be more successful. Roadway design standards to accommodate truck traffic include:

- Intersection Design;
- Cross-Section and Geometric Design;
- Signalization; and
- Separation.

Intersection Design affects accessibility through delayed right turns due to oncoming traffic. To avoid oncoming traffic, trucks may be forced to "cut corners" onto curbs, while in other instances "curb hopping" may be attributed to lane-dividing medians. In either case, when forced onto curbs or medians while negotiating a right turn, trucks run the risk of load shifts and cargo damage, not to mention damage to the roadway, curb, and sidewalk.

Left hand turning requirements can be accommodated through offset turn lanes where vehicles are held back to a stop bar short of an intersection creating wider turning space for commercial vehicles negotiating corners. Offset turn lanes were cited by motor carriers as sensible management for narrow road widths in districts with significant truck activity. Appropriate intersection design throughout the county to introduce offset lanes where practical should be planned for implementation over a defined time period.

Cross-Section and Geometric Design – The geometry of a specific roadway, including the turning radii, lane widths, and other cross-sectional factors should be based upon the intended use or role of the facility. Interstate truck routes tend to accommodate large, as well as smaller trucks and, therefore, should be designed to accommodate those vehicles without creating significant traffic impacts. Local truck routes also should accommodate a variety of truck sizes.

Signalization – Signal timing optimization is often performed using data collected from only one or two days and typically does not include truck volumes. Studies to develop better signal plans for heavily traveled truck corridors would benefit the county. The



spacing of traffic signals and the individual timing patterns, while accounting for lightvehicle mobility, in many instances fails to account for the time necessary for heavy truck traffic to reach a reasonable speed or to stop. Abrupt starting and stopping by heavy trucks wastes fuel, increases transport costs, diminishes air quality, and creates additional delay. Truckers must maintain tight delivery schedules so the less delivery schedules are impeded by inadequate signalization or intersection maneuverability, the greater the ability for drivers to consolidate multiple deliveries into one trip.

Bridge Maintenance/Preservation

Bridges are critical links in the roadway network and in the consideration of safety and capacity. The GDOT Bridge Maintenance Office conducts periodic inspections on structures and prepares a Bridge Conditions Report every two years. The report includes a National Bridge Inspection rating known as the sufficiency rating. As described in the *Needs Assessment Report*, on a range of 0 to 100, a bridge is considered deficient and in need of rehabilitation/replacement when its score is 50 or below. Another indicator is the age of a structure. While the age alone does not determine a bridge's condition, most structures are designed for a 50-year life. The Forsyth County bridge data was obtained from GDOT and includes location, facility type, size, length, year built, and sufficiency rating.

As a rule of thumb, federal funding may be used for bridge rehabilitation if structurally deficient and functionally obsolete bridges have a sufficiency rating below 80 on a range of zero to 100. Federal funding may be used to replace structurally deficient or functionally obsolete bridges if their sufficiency rating is below 50. The inventory includes location, facility type, size, length, year built, designation and sufficiency rating.

Table 5 presents the structures (countywide) that are either functionally obsolete, structurally deficient and/or have a sufficiency rating below 80.

		Structurally Deficient/ Functionally	Sufficiency
Roadway	Feature Intersected	Obsolete	Rating
Browns Bridge Road	Two Mile Creek (Lake Lanier)	FO	33.5
Bolling Bridge	Chestatee River (Lake Lanier)	FO	39.4
Browns Bridge Road	Chattahoochee River	FO	39.4
Bethelview Road	Big Creek	SD	41.2
Browns Bridge Road	Six Mile Creek (Lake Lanier)	FO	43.5
Dr. Bramblett Road	Settingdown Creek	FO	49.3
Wallace Tatum Road	Settingdown Creek	FO	56.2
James Burgess Road	James Creek	SD	58.0
Matt Highway	Settingdown Creek	FO	59.3
US 19	Settingdown Creek	SD	66.1
McFarland Pkwy	SR 400/US 19 & Ramp	FO	70.0
Dahlonega Highway	Settingdown Creek	FO	76.0

Table 5. Bridge Inventory



		Structurally Deficient/ Eunctionally	Sufficiency
Roadway	Feature Intersected	Obsolete	Rating
Old Federal Road	Etowah River	NA	56.9
Pilgrim Mill Road	SR 400 (US 19)	NA	69.0
Briarwood Trail	No Name Creek	NA	72.5
Union Hill Road	SR 400 (US 19)	NA	72.8
McFarland Pkwy (NBL)	Big Creek	NA	73.4
US 19 (NBL)	Big Creek	NA	75.1
US 19 (SBL)	Big Creek	NA	75.1
Browns Bridge Road	Four Mile Creek	NA	76.4
Trammel Road	Daves Creek	NA	77.3
Baldridge Road (EBL)	SR 400 (US 19)	NA	77.3
Wright Bridge Road	Settingdown Creek	NA	78.5
Poole Mill Road	Settingdown Creek	NA	79.6
US 19 (NBL)	Sawnee Creek	NA	79.7
US 19 (SBL)	Sawnee Creek	NA	79.7

Source: GDOT Bridge Maintenance Office, 2009.

It is recommended that the county monitor bridge reports and develop appropriate maintenance and replacement projects as needed.



SECTION IV. ALTERNATIVE TRANSPORTATION

Travel demand management (TDM) strategies represent a broad range of mobility options that improve overall transportation efficiency. TDM strategies aimed at improving person throughput via bicycle/pedestrian facilities, programs or public transportation choices were discussed in the *Needs Assessment Report*. Existing programs that provide alternative transportation services are inventoried below.

Public Transportation

Statistics and strategies related to the GRTA Xpress bus program were discussed in the *Needs Assessment Report*. Daily ridership on the Cumming/North Springs Station/Downtown Atlanta route (GRTA Xpress Route 400) is between 180 and 200. Because the route attracts steady commuter ridership, it removes large numbers of vehicles from the County's roadway network. As a result, it is recommended that the route be encouraged, publicized and ultimately enhanced as growth occurs. No future plans for transit are in place.

Pedestrian and Bicycle Facilities

As described in the *Needs Assessment Report*, effective pedestrian and bicycle facilities are increasingly essential elements of the transportation network, providing opportunities for daily mobility as well as recreation. Pedestrian and bicycle trips offset automobile trips, reducing the need for expensive and invasive roadway capacity projects.

Downtown Cumming has sidewalks on most of the roads emanating from the city, though there are noticeable coverage gaps. Subdivisions were built with internal sidewalk networks, but only a few major corridors have sidewalks including the length of Windermere Parkway, most of Ronald Reagan Boulevard, McGinnis Ferry Road, Market Place Boulevard, Mathis Airport Road, and James Burgess Road. In general, however, the majority of through roads in Forsyth County lack dedicated bicycle and pedestrian facilities and the network is hostile to non-motorized mode users.

Forsyth County adopted its first bicycle and pedestrian plan in 2002 in order to streamline multimodal transportation facility development. In 2008, an update to the Bicycle Transportation and Pedestrian Walkways plan was adopted and further assessed the progress of the earlier recommendations. The 2008 update included a GIS inventory of existing and proposed facilities in Forsyth and neighboring communities, and identified locations eligible for Safe Routes to School funding.

As described, there are three critical Regional Strategic Transportation System (RSTS) corridors in Forsyth County: Atlanta Highway (SR 9) between Cumming and the City of Milton in Fulton County, Buford Highway (SR 20) between Cumming and City of Sugar Hill in Gwinnett County, and McGinnis Ferry Road along the length of the southern Forsyth/Fulton County border, all with some latent walking and bicycling demand. It is recommended that these corridors ultimately should have sidewalks. According to the 2007 Atlanta Regional Bicycle Transportation and Pedestrian Walkways Plan, bicycle-related needs can be satisfied by providing sufficiently wide shoulders, at a minimum.



Specific initiatives to enhance non-motorized mobility were identified through the existing conditions analysis and field review process in the *Needs Assessment Report*. Specific strategies recommended include:

- Lane Diets Opportunities may exist to reallocate roadway pavement width for wide outside lanes or striped bike lanes by narrowing travel lanes. As roadways are scheduled for resurfacing, they should be evaluated for the ability to restripe in a manner to provide additional width for bicycle lanes or accommodations in the outside lane. By narrowing travel lanes to 11 feet, lane diets can provide much needed on-road facilities and help close the existing bicycle network gaps.
- Park and Ride Lots Facilities for bicycles should be provided at the major Park and Ride facilities to encourage patrons of the GRTA Xpress or carpools to consider using bicycles to commute from home to the Park and Ride lot. Xpress allows and has facilities for bicycles on their vehicles; supplementary amenities could be provided at the facilities such as bike racks. Installation of these type amenities could be accomplished at the Xpress Park and Ride on Old Atlanta Road/GA 9 near the Merchants Square Shopping Center south of Cumming and at the Fairgrounds Park and Ride in southern Cumming.
- Bike Lanes, Shoulders, Routes, and Multi-Use Paths As stated previously, there are opportunities to retrofit bicycle facilities on existing roadways through initiating lane diets and restriping as resurfacing occurs. Additionally, new construction could include provisions for sidewalks and bicycle facilities on local and state roadways within Forsyth County. Finally, the County could seek opportunities to provide multi-use pathways along rights-of-way within corridors to connect facilities and to build a non-motorized mobility system that not only serves a recreational purpose, but also can be a viable alternative for commuter traffic. Specific corridors that should be evaluated are:
 - GA 400 There may be opportunities to develop a multi-use trail within the right-of-way of sections of GA 400. A similar approach was used in North Augusta, South Carolina, with the opening of the final five mile stretch of the Palmetto Parkway/I-520. Opportunities to incorporate a trail should be explored along this corridor.
 - Lake Lanier Trail/Buford Dam Trail An opportunity may exist to build upon the scenic trail that runs across the top of the Buford Dam at Lake Lanier. While unlikely to be a commuter link for cyclists, extensions of this trail could allow for county residents to access Lake Lanier and the surrounding parks without a car.
 - Utility Easements A comprehensive evaluation of utility easements could yield opportunities for walking and bicycling system connectivity.
 - Blueways/Floodplains Finally, mapping and evaluation of stream beds and floodplains may yield opportunities to provide multi-use facilities that could serve not only as system connectors, but also as educational trails.

Complete Streets Policy

Complete Streets are those that are designed to be safe and operable for users of all ages and abilities, and employing any mode of transportation including cars, transit, bicycles, or feet. It is anticipated that at a national level when the surface transportation bill is reauthorized, projects receiving federal funding will need to demonstrate some level of Complete Streets compliance. As a result, it is recommended that Forsyth County develop and adopt a Complete Streets policy.



New and retrofitted streets within the County could be designed to balance the needs of anticipated users, regardless of their selected mode of travel. The policy could apply to all roadways within the County, including state, county, and local facilities, and could be applied to new construction and retrofits of existing facilities, including resurfacing.

Furthermore, street standards should be expanded and incorporated into development regulations to include, among other provisions, a requirement to provide dedicated pedestrian circulation facilities both within sites and along every site driveway to provide direct access to front doors from adjacent roadways. Parking lots and landscaped buffer zones should not be considered proxies for sidewalks.

Safe Routes to School

The Needs Assessment Report contains an extensive narrative regarding eligibility for the Federal Safe Routes to School program. The results of the sidewalk access analysis were that most schools have inadequate sidewalk accessibility and neighborhood connectivity standpoint. It is recommended that facilities be provided in the vicinity of the schools that are within walking distance of residential neighborhoods. In addition, infrastructure initiatives within a two-mile radius of eligible schools qualify for SRTS funding. Identified initiatives through this plan update can be considered for SRTS funding if they are located within these radii and contribute to the safety of children who walk or bike to school. There are currently nine middle schools and 19 elementary schools in Forsyth County eligible for infrastructure funding through the SRTS program.



SECTION V. LAND USE

Expanding and enhancing the current roadway network alone will not meet the County's future transportation challenges. Innovative and integrated policies and practices are critical to determine solutions to future travel demand. Effective and proactive land use planning is important to favorably impact future travel demand.

The adopted Future Land Use map represents goals, policies, and practices adopted through the County's Comprehensive Plan. Represented by the Future Land Use map, the County's desired pattern of land use effectively clusters intense land uses adjacent to major transportation facilities:

- SR 400
- SR 9
- SR 20
- SR 141
- SR 369
- SR 306
- McFarland Parkway
- Ronald Reagan Boulevard

Figure 6 shows the corridors designed to access the intense development including employment centers. Much of the traffic generated on these corridors is attracted by the employment opportunities; however, through traffic from land uses outside the county accounts for over a quarter of the total traffic yet must be accommodated by these corridors.

Corridor improvements are necessary to support continued growth of commercial land use. Focused intense development requires preservation of transportation corridors and encourages traffic to utilize appropriate transportation facilities that access the development. Spread throughout the county, these non-residential growth centers would require significantly more high-use facilities for access. The county focused its intense development to spur economic activity and preserve the attractive nature of its residential areas. Also, more intense land uses along improved corridors, similar to transit oriented development, offer increased opportunities for alternative mode facilities such as bicycle, pedestrian, ride-sharing and transit.

To measure the impact of land use on the transportation network, the county's travel demand model includes current and future (2040) population, households and employment assignments to specific traffic analysis zones. As a result, traffic volumes are forecast for anticipated land uses. The model's projections are based on future population, employment and household numbers for the horizon year of 2040. Forsyth County's currently approved future land use plan is depicted in **Figure 4** (page 14).





Forsyth County is currently in the process of updating its Comprehensive Plan. The Comprehensive Transportation Plan was developed with close coordination with the county's comprehensive planning staff. Information generated as a part of the CTP process was being used to inform the Comprehensive Plan process. Elements of the final CTP will be included in the transportation chapter of the Comprehensive Plan update. Examples of complementary use of the CTP and the Comprehensive plan included:

- Determining forecast socioeconomic data to be modeled
- Considering future land use, population, and development intensity when determining need for transportation facilities and appropriate freight routes

As one of the country's fastest developing counties, Forsyth must strive to implement needed infrastructure while maintaining current facilities and activity centers. Development activities are more prevalent in the county as the population increases in a denser pattern. As growth occurs, a need exists for new development strategies such as overlay districts, access management, and other urban design controls.



SECTION VI. RECOMMENDATIONS

Project Selection Methodology

The transportation needs in Forsyth County were determined by applying multiple criteria including, projected population and employment, roadway deficiencies, travel demand model results and community input. Needs were assessed and documented in the Needs Assessment Report and summarized in earlier sections of this report.

In order to select projects to be recommended, appropriate and relevant criteria were developed from adopted transportation goals (**Table 6**). The following relevant criteria are listed in order of significance:

- Congestion-travel demand model results
- Safety-crash analysis
- Land use-compatibility for future land use
- Cost-estimates developed using GDOT Cost Estimation Tool
- Multimodalism-connectivity to multimodal facilities
- Freight-truck route designation
- Public/stakeholder input-where appropriate
- Economic development-similar to land use. Compatibility and potential stimulation of job-related economic development. Proximity to targeted economic development areas.

Because congestion, safety, land use and cost were determined to be criteria of particular interest to Forsyth County, projects that offer some positive impact in these criteria, were assigned additional priority for inclusion in the program of projects. **Table 6** demonstrates how project selection criteria matched established goals and objectives by showing project goals and matched criteria.

Table 6 – Project Criteria by Goals

Goal	Criteria
Complement and implement Comp Plan	Land use, economic development
Transportation demand/access management	Multimodalism
Enhance safety	Safety/crash analysis
Determine financial viability	Cost estimate
Manage congestion	Travel demand model results
Conserve resources	Cost, land use, freight routes
Promote economic development	Land use, economic development
Recommend alternative solutions	Multimodalism
Mobility and connectivity between modes	Multimodalism, congestion
Encourage sustainable development	Land use, economic development
Accommodate growth	Land use, economic development,
	congestion
Facilitate movement of goods	Congestion, freight
Promote complete streets	Policy recommendation
Support reduction of greenhouse gases	Congestion, land use
Position recommendations for funding	All criteria recommended



Program of Projects

In order to meet the county's needs short-term, mid-range, and long-term projects were recommended. **Appendix C** is a table showing 167 recommended projects phased over the next 30 years. Estimates of project costs were developed using the adopted GDOT Cost Estimation Tool. Benefits were determined by impact on congestion through travel demand model results from modeled recommended projects. The source of the bicycle and pedestrian projects was the 2008 Bicycle Transportation and Pedestrian Walkways Plan. The short-term projects (mapped in **Figure 6**) constitute the 5-year action plan. The mid-range and long-term projects (**Figures 7 and 8**) complete the 30-year plan. The projects total costs are shown in **Table 7**.

Term	Number of Projects	Total Est. Cost
Short-term	49	\$437,763,000
Mid-range	55	\$281,450,000
Long-term	59	\$1,958,608,000
Total	167	\$2,677,821,000

Table 7 - Number of Projects by Phase

Highlights of significant projects included in the program of project follow:

- SR 9 widening from Fulton County line to SR 371 will increase future level of service from unacceptable (LOS F) to acceptable (LOS B)
- Old Atlanta Road widening will increase future level of service from LOS F to LOS B
- SR 20 widening will also increase future level of service from LOS F to LOS B
- Similar results are demonstrated for SR 306, SR 369, Bethelview Road, and McGinnis Ferry Road

Figures 7-9 are maps demonstrating the location of the recommended projects. The refined travel demand model was applied using the recommended projects by phase and the impact of projects is shown on the **Figure 10**, 2040 build scenario. In addition, **Table 8 and 9** also demonstrate the positive impact of the recommended projects on congestion and speed.

Level of Service	V/C ratio	% of network Congested 2010	% of E+C network Congested 2040	% of Build network Congested 2040
A & B	<0.5	62.0%	27.2%	27.5%
С	0.5 to 0.7	12.4%	15.0%	15.1%
D	0.7 to 0.85	7.7%	13.4%	26.0%
Ê	0.85 to 1.0	9.2%	11.7%	13.7%
F	=>1.0	8.7%	32.7%	17.7%

Table 8 - Percentage of Network Congested



Functional Class	2010Speed	2040 E+C Speed	2040 Build Speed
Arterial	42.8 mph	20.1 mph	26.2 mph
Collector	35.2 mph	17.4 mph	17.4 mph
Local	32.3 mph	14.8 mph	15.4 mph
Total	35.3 mph	16.7 mph	20.3 mph

Table 9 - Average Speed by Functional Classification











Monitoring Progress

The Engineering Department develops and maintains the county's transportation program. Engineering staff is responsible for implementation and monitoring progress as projects are designed and constructed. In previous years, the Department has been diligent in maintaining updated transportation plans to keep pace with rapid growth and to provide a program of projects for SPLOST renewals. Major transportation plans were developed in 2002 and 2006. In addition, the Forsyth County Bicycle Transportation and Pedestrian Walkways 2025 Plan was prepared and adopted in 2008.

Engineering staff attends regional meetings at GDOT and ARC to monitoring implementation of the TIP. They also sponsor individual project meetings and provide reports to the Board of Commissioners on a regular basis. In addition, the County's Capital Improvements Program and operating Budget require annual project monitoring to ensure budget allocations and capital projects improvement plans are correct. Plus SPLOST projects require monitoring and updating for each election.

Policy Recommendations

Often innovative and effective county policy-making offers quality of life benefits to the community for a longer term than improvements from a recommended program of projects. Following are recommended policy considerations.

Land Use

Consider the following when updating comprehensive plan, zoning ordinance, and development regulations.

- Encourage transit-oriented development strategies to be applied near the designated public transportation corridor (GA 400).
- Promote high-density residential and neo-traditional development within commercial districts to encourage the use of public transportation.

Intelligent Transportation Systems (ITS)

Advancing technology offers opportunities for ITS improvements to local governments that maintain awareness and continue education for staff. Strategies that will assist Forsyth County follow:

- Provide an institutional environment that emphasizes efficient operations of the transportation system and provides technological tools that enhance the operations of all transportation and incident response agencies
- Plan for a communications network to provide direct, real time vital transportation information to any local and state agency that participates in transportation and/or emergency management operations within the region
- Create a Forsyth County Traffic Command and Control Center
- Connect to other command and control centers
- Ensure that fiber optics are included in road construction projects
- Maintain effective communications by integrating with GDOT's ITS infrastructure so the county system can enhance GDOT's system and vice versa
- Provide real-time traveler information through various media to the public



- Develop a process that monitors system performance and allows for system growth and enhancement. Plan for developing ITS features such as:
 - Network Surveillance
 - Surface Street Control
 - Regional Traffic Control
 - Incident Management
 - Traffic Information Dissemination Arterial Changeable Message Signs
 - Provide signal preemption for fire stations as needed
 - Speed Monitoring

Alternative Transportation and Travel Demand Management

To expand the use of alternative transportation, several policies, strategies, and techniques are suggested and listed below:

- Support the continued operation of the GRTA Xpress Service (Route 400) to provide a direct link between Cumming and Downtown/Midtown Atlanta
- Explore incentives for car and vanpooling at major activity centers
- Work with GRTA to conduct transit-oriented development workshops and training for county and city staff.
- Identify opportunities to encourage Forsyth County employers to develop "preferred parking" strategies, incentivizing the placement of ridesharing spaces in commuter parking areas as close as possible to employment destinations, and advancing awareness of the program
- Continue to promote and implement trails and other facilities proposed as part of the 2008 Bicycle and Pedestrian Walkways Plan
- Continue to implement policies recommended by the 2008 update of the Bicycle and Pedestrian Walkways Plan including coordination with neighboring jurisdictions
- Prioritize programming and construction of pedestrian and bicycle transportation facilities by public and private sector organizations
- Consider inclusion of bicycle facilities whenever a new arterial or collector road is planned and, when feasible, where additional lanes are added to existing arterial or collector roads
- Design, construction, and reconstruction of intersections along arterial and collector routes should address bicycle needs. Include experienced cyclist lanes and sidewalk, whenever possible.
- Identify corridors for off-road bicycle paths such as utility, transit, and drainage right of ways
- Continue to coordinate with the School Board to annually update a priority list of sidewalk needs near schools



- Identify intersections for "No Right on Red when Pedestrian/Cyclist Present" signs
- Continue to create an environment that promotes bicycling or walking to work/school and other utilitarian trips including shopping
- Look into the development and implementation of Complete Streets standards for roadway construction and maintenance projects
- Consider plans for expansion of demand response transit service since no plans currently exist

Forsyth County may wish to consider a local example of travel demand management strategies implementation. The Clean Air Campaign is a non-profit organization, sponsored by a selection of the largest corporations in the country, which serves 1,600 employers in the region. Its activities include efforts to reduce the number of vehicles on our roads such as:

- Encourage employers to promote incentives for commuters
 - Designing custom commute options for the particular needs of the firm
 - Creating a telework, flextime, or compressed work week program
 - Establishing van pools with incentives to participate
- Working with commuters
 - Find a partner or partners to share commute in car pool
 - Guaranteed ride home program

Significant low-cost benefits can be realized through travel demand management programs. Working with the Clean Air Campaign to implement their commuter and employer programs will ultimately enhance the county's transportation system as residents, employees, and employers become familiar with the programs.

School-related Transportation

A high percentage of trips on the Forsyth County transportation system are a direct result of the school system. To enhance countywide travel, improvements in school related transportation could be pursued.

- Continued coordination between the Forsyth County and the school system. An institutionalized regularly scheduled meeting is appropriate.
- Consider a policy to support walking or bicycling to school within Forsyth County
- Develop plan to provide bike/ped infrastructure for proposed school properties
- Locate schools within walking and bicycling distance of their student populations
- Prepare a transportation plan for each new school to specify access for vehicles, pedestrians, buses, and bicyclists



- Provide assistance for developing individual school Safe Routes To School (SRTS) plans
- Conduct activities such as bicycle rodeos to educate students on how to bicycle safely
- Develop informational materials and surveys for use in developing a SRTS plan
- Perform walking audits around schools to identify potential safety issues and concerns
- Provide incentives to children at participating schools to encourage walking and bicycling to school
- Assist with data collection to aid schools with SRTS programs

Freight Transportation

The metro Atlanta region is a major freight transportation hub. Forsyth County plays a major role in transporting freight. Strategies recommended include:

- Study local "first mile" and "last mile" truck routes with neighboring counties to establish an ALTRoMaP.
- Consider incorporating truck friendly design standards
- Proactively pursue through the planning process integration of compatible land uses and adequate buffering while promoting freight mobility
- Locate warehouse and distribution facilities along major corridors and protect them from encroachment by less intense uses
- Maintain status as employment and shopping hub by continuing to locate industrial and high employment areas near excellent access to arterial roadways
- Truck routes should be added to planning policy and zoning ordinances. Also development regulations should include enhanced road design standards for truck routes including road design, signalization and signage

Access Management

As discussed in the *Needs Assessment Report*, congestion cannot consistently be addressed through intrusive and expensive road widening. In keeping with the plan objective to explore creative transportation solutions that are less expensive and intrusive, the county is evaluating access management policy and practices. Access management is the "systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to the roadway." Effective access management policy and practices protect roadway network investment by enhancing safety for all modes, access, mobility, land use integration, and preservation of roadway functional integrity and efficiency.



The Forsyth County Board of Commissioners adopted the GDOT Regulations for Driveway and Encroachment Control on September 15, 2005. The GDOT regulations were determined to be pertinent standards for constructing curb, gutter, ingress, egress, acceleration lanes, deceleration lanes and turn lanes. To effectively administer an access management policy, coordination between land use planning and transportation planning is essential. The County uses the transportation planning process to develop and implement access management solutions in a seamless and professional manner. Retrofitting access management solutions is more costly and more disruptive than adopting and consistently administering established policy and practices. It is recommended that the county consider extending control over congested corridors by requiring new development to provide appropriate access management studies. Though it has no policy currently, the county should also consider access management studies on corridors that would benefit from access retrofits including:

- SR 20
- SR 9
- Pilgrim Mill Road
- SR 400 (controlled access segment)

Access management treatments that should be under consideration include:

- Driveway consolidations
- Adjoined parking areas
- Pullovers and auxiliary lanes
- Intersection control modifications
- Median and lane separation treatments
- Turn restrictions and channelization

Potential Funding Sources

Funding for transportation improvements including roadway operations and capacity, and pedestrian projects can be assembled through traditional sources such as the Atlanta Regional Commission Transportation Improvement Program (TIP) process. The primary funding source for transportation, the TIP process, administered by ARC for member counties, allocates federal and state funding through the regional transportation planning process defined by SAFETEA-LU. Federal funding offers a significant opportunity for the county to afford major projects, however, a local funding source is required to generate the compulsory match.

Federal, state, and local funds are not available to fully complete the recommended transportation program. As a result, innovative funding strategies should be investigated to narrow the funding gap.

Potential funding sources available for transportation capital projects include:



- National Highway System (NHS) Funding of major roadways, including 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 multiuse trails.
- **Georgia Department of Transportation (GDOT)** Provides for significant state funding for various projects on and off the state route system.
- Surface Transportation Program (STP) Funding for transportation improvements on routes functionally classified as urban collectors or higher. STP provides funds for projects related to improving quality of life, such as Livable Centers Initiatives (LCI) and Transportation Enhancements (TE).
- High Priority Projects (HPP) Discretionary funding for specific projects (federal earmarks).
- Highway Safety Improvement Program (HSIP) Targets most critical safety needs. Includes funding for projects in the state's strategic highway safety plan and Railway-Highway Crossing program.
- Safe Routes to School As discussed in Section IV, federal funds are available for pedestrian and bicycle projects within two miles of a school. These funds are distributed through GDOT and are available for grades kindergarten through eight. Funding can be assigned to each individual school by following the program's two steps. First, the school must develop a plan which includes a program for promoting bicycling and walking and any proposed infrastructure projects. The second step is to implement the plan. Safe Routes to School funding is also available for this step. GDOT is developing specific guidelines for the program through a special Safe Routes to School Office. The funding is limited; therefore, the application process is highly competitive.
- Transportation Community Service Preservation Program (TCSP) Provides funds to establish greater connections with transportation, land use planning, business activities and environmental preservation.
- Congestion Mitigation and Air Quality (CMAQ) Improvement Program Provides funding for projects contributing to attainment of national ambient air quality standards. Eligible projects include transit projects, shared-ride services, traffic flow improvements, transportation demand strategies, bicycle and pedestrian projects, and alternative fuel programs.
- Bridge Program Fund SAFETEA-LU authorized the Secretary of Transportation to allocate \$4.3 billion for the Bridge Program. The county will be allocated a share of the Georgia annual apportionment.
- *Earmarks* Funding for specific projects designated by Congress.



 Fast Forward Bond Program – Initiated by Governor Perdue in 2005, this is a bond program designed to relieve traffic congestion through short-term projects.

Additional funding sources and opportunities offered by SAFETEA-LU include establishing public-private partnerships for implementing transportation facilities. Similarly, locally collected revenue sources used to fund transportation projects include Special Purpose Local Option Sales Tax (SPLOST) programs, potentially the Transportation Investment Act of 2010 (HB 277 regional sales tax), and General Fund monies. Historically, SPLOST funds produced funding for roads, streets and bridges. Without SPLOST funding local sources of transportation revenue are limited. Other, primarily local, funding opportunities and resources include:

- Tax Allocation District A strategy for funding infrastructure projects in a limited area targeted for accelerated growth. A TAD finances infrastructure projects from the growth of property taxes based on new development and increased property values. Establishing a TAD and creating a plan for the district can spark redevelopment in the TAD area, which in turn serves to finance TAD bond funds. Funds can be spent on a number of projects in the TAD area, including transportation projects. Therefore, TAD planning promotes redevelopment while also helping to create a dedicated source of infrastructure funding for that area. New pedestrian and bicycle facilities and streetscapes are typical TAD projects, though TAD funds are often used for non-transportation infrastructure as well. TADs are an appropriate tool for financing some types of transportation projects, especially in connection with the denser redevelopment of a particular area such as an activity center.
- Community Improvement District A strategy for funding infrastructure projects in a limited area at the discretion of existing property interests. CIDs are essentially self-taxing areas, where property owners organize to raise funds to improve property values in the area. CIDs may organize to market an area, work to increase safety in that area, and collect and use funds for all types of transportation projects. CIDs are an innovative source of funding for transportation projects, but the scope of their activities is limited by property owner interests and a defined geographic area.
- Transportation Management Associations TMAs bring public and private organizations together to tackle traffic congestion and air-quality issues that affect a specific area. One advantage is that TMAs give members a unified voice with which to address local government and transportation policies. TMA's work with local employers and property managers to educate, provide incentives and influence commuter behavior so that more sustainable modes of transportation are utilized for commuters traveling to and from work. TMA's use transportation demand management (TDM) strategies optimizing the movement of people, rather than motor vehicles. TMAs emphasize partnerships with local business interests while prioritizing public transit, ridesharing and non-motorized travel options for commuters.
- Developer Contributions All opportunities to stretch limited public sector funding through partnership with the business community should be explored. To flourish, businesses require sufficient and adequate public infrastructure.



Increasing congestion may choke economic development therefore businesses throughout the metro Atlanta region are joining together to invest needed resources to bring infrastructure to standard and continue to attract customers. Projects that directly benefit the development and retail community could be partially funded through accepted private sector techniques that could bring mutual benefit to the area's continued prosperity. Awaiting a windfall from public sector funding options may be futile as recent trends demonstrate that traditional public funding sources are diminishing. As Forsyth County grows, opportunities to encourage the development community to invest in needed infrastructure should be explored.



APPENDIX A. Thoroughfare Plan

			Right of	2040	
		Functional	Way	Forecast	2010
Roadway Name	From/To	Classification	Width	Volume	Volume
AC Smith Road	SR 9 to Hopewell Road	Collector	80	7,310	2,740
Aaron Sosebee					
Road	SR 20 to Bethelview Road	Collector	80	5,200	3,040
Anderson Lake			60	4 000	4 000
Road	Pea Ridge Road to SR 53	Local	60	4,980	1,900
Antioch Road	Pilgrim Mill Road to SR 9	Collector	80	8,950	4,100
Bagley Drive	SR 141 to Mathis Airport Road	Minor Arterial	100	18,200	3,000
Bagley Road	SR 141 to Mathis Airport Parkway	Collector	80	7,910	4,100
Bald Ridge Marina Road	SR 400 SB Ramps to Peachtree Rd	Collector	120	13,960	7,240
Bannister Road	SR 369 to SR 9	Minor Arterial	100	8,910	8,200
Bennett Road	Cross Roads Road to Jot Em Down Rd	Local	60	3,600	2,600
Bentley Road	Campground Road to SR 371	Collector	80	3,630	2,551
,	McGinnis Ferry Road to			,	,
Bethany Road	Fulton Co Line	Minor Arterial	80	9,620	5,200
Bethel Road	0.4 Miles S of SR 369 to End	Collector	60	6,870	4,500
Bethelview					
Road	SR 9 to SR 20	Major Arterial	120	39,340	18,250
Bettis-Tribble					
Gap Rd	SR 306 to Spot Road	Collector	80	5,000	2,900
Bluegrass Lakes	McFarland Parkway to Cul-				
Pkwy	de-Sac	Local	60	5,200	3,200
Bluegrass Valley	McFarland Parkway to	Lacal	120	24 500	4 000
PKWy Pluo Pidgo	Lot Em Down Pood to	LUCAI	120	24,500	4,000
Overlook	Dawson Co Line	Collector	80	5 480	3 500
Bottoms Rd	SR 400 to Settingdown Rd	Local	60	11,680	2,980
Brannon Road	SR 141 to Old Atlanta Boad	Collector	80	6 550	3 500
Brookwood	McGinnis Ferry Road to SR	Concetor	00	0,000	3,300
Road	141	Minor Arterial	100	20,970	9,550
Buford Dam				·	,
Road	SR 9 to Gwinnett Co Line	Minor Arterial	100	25,610	9,650
Burruss Mill					
Road	SR 369 to Parks Road	Collector	80	6,410	1,700
Burruss Road	SR 9 to Hopewell Road	Collector	80	7,000	2,000
Campground	Cherokee Co Line to SR 9	Collector	80	10,450	5,500



Road					
	Brookwood to Christopher				
Caney Road	Robin	Collector	80	6,510	3,700
	Jot-Em-Down Road to Jett				
Cantrell Road	Road	Local	60	2,200	1,400
Castleberry			100	22.222	0.000
Road	SR 9 to W Main Street	Minor Arterial	100	22,200	9,200
Champlee Gap	SP 20 to Kally Mill Dood	Collector	20	2 000	2 700
Chattaboochee	Holtzclaw Rd to Shady Grove	Collector	80	5,000	2,700
Road	Rd	Minor Arterial	100	6 860	3 310
Christopher	McGinnis Ferry Boad to	Winter Arteria	100	0,000	3,310
Robin Road	Canev Rd	Collector	80	5,750	3,300
	Oak Grove Circle to				
Concord Road	Bannister Road	Local	60	4,400	3,080
Cross Roads					
Road	SR 400 to Jot Em Down Road	Collector	80	8,380	6,050
	Parks Road to Picklesimer				
Crow Road	Road	Local	60	4,650	2,210
Crystal Cove					
Trail	SR 53 to Lake Lanier	Collector	80	4,910	3,300
Daves Creek	Old Atlanta Rd to Trammel				
Drive	Rd	Collector	60	6,680	3,500
Daves Creek	Daves Creek Dr to Haw	Collector	60	4 700	4 100
RUdu	SP 271 to Drow Compareund	Collector	60	4,700	4,100
Dickerson Road	Rd	Local	60	6 400	3 000
Doc Sams Road	SR 20 to Heardsville Road	Collector	60	8 080	3 300
Dr Bramblett	Sit 20 to Heardsville Road	conector	00	8,080	3,300
Road	SR 20 to SR 369	Minor Arterial	100	19,290	9.800
Drew			100	13)230	5,000
Campground	Cherokee Co Line to SR 371	Collector	80	10,481	5,000
Road				,	,
Echols Road	SR 20 to SR 20	Local	60	7,300	4,300
Elmo Road	Mt Tabor Road to SR 369	Collector	80	5.300	3.300
Fowler Road	Mullinax Road to SR 369	Collector	80	6.720	4.200
Francis Road	Fulton Co Line to SR 9	Collector	80	10.810	3 500
Franklin		concetor	00	10,010	3,300
Goldmine Road	Cherokee Co Line to SR 20	Local	60	6,600	3,200
Freedom					
Parkway	SR 306 to Pilgrim Mill Road	Minor Arterial	100	18,810	8,200
Friendship					
Circle	SR 20 to Hurt Bridge Road	Collector	80	6,510	5,300
	Heardsville Road to				
Frix Road	Cherokee Co Line	Local	60	5,200	2,300



Gilbert Road	Old Atlanta Road to Trammel Road	Local	60	7,500	3,100
Govan Road	Bannister Road To Dawson Co Line	Local	60	2,300	1,200
Gravitt Road	Spot Road to SR 369	Local	60	4,100	2,600
Grindle Road	SR 306 to Jot-Em-Down Road	Local	60	3,000	1,160
Hamby Road	Fulton Co Line to SR 9	Collector	80	10.500	4.500
Haw Creek	Haw Creek Cir to Ronald			-,	,
Road	Reagan Blvd	Local	60	7,000	3,940
	Westray Road to Mount				
Harris Drive	Tabor Road	Local	60	4,120	1,360
Heard Road	Shady Grove Road to Young Deer Crk Pk	Local	60	2.600	1,400
Heardsville	Heardsville Road to	Local	00	2,000	1,100
Circle	Heardsville Road	Local	60	3.200	930
Heardsville				-,	
Road	SR 20 to Heardsville Circle	Minor Arterial	100	11,460	8,200
Hendrix Road	John Burruss Road to SR 369	Collector	80	9,610	3,000
	Hurt Bridge Road to Dr.				
Holbrook Road	Bramblett Road	Local	60	3,440	2,140
Holtzclaw Road	Pilgrim Mill Road to SR 369	Collector	80	12,620	8,000
Hopewell Road	SR 9 to Dawson Co Line	Collector	80	13,150	8,000
Howard Road	Cherokee Co Line to Drew Campground Rd	Local	60	8,860	4,080
Hubbard Town					
Road	Hopewell Road to SR 400	Collector	80	10,090	3,840
Hubert Martin					
Road	SR 369 to Oak Grove Circle	Local	60	7,900	4,000
Hurt Bridge	Friendship Circle to				
Road	Heardsville Rd	Collector	80	8,220	3,780
Hutchinson	Castleberry Road to SR 9	Collector	80	13 550	5 780
Hyde Road	Drew Road to SR 20	Collector	80	4 350	3 300
lames Burgess		Collector	80	4,550	3,300
Road	Old Atlanta Rd to SR 20	Collector	80	14.685	9.470
Jewell Bennett				,	0,0
Road	SR 9 to AC Smith Road	Local	60	2,000	1,400
John Burruss					
Road	Karr Road to SR 369	Collector	80	7,700	5,406
John's Creek	McGinnis Ferry Rd to M.				
Pkwy	Ferry Rd	Local	60	14,500	4,000
Jot-Em-Down			400		6.060
Road	Hopewell Road to SR 369	Collector	100	11,/30	6,960
Julian Road	SR 53 to Happy Hollow Trail	Local	60	4,250	2,260
Kelly Mill Road	SR 371 to SR 20	Minor Arterial	100	11,850	9,930



Laurei Springs Pkwy	SR 141 to Old Atlanta Road	Collector	80	12,074	9,000
Little Mill Road	SR 369 to SR 306	Collector	80	9,910	4,200
Majors Road	Post Road to SR 141	Collector	80	8,610	6,204
Market Place Parkway/Boule vard	SR 20 to Bald Ridge Marina Road	Major Arterial	100	40,100	19,890
Martin Road	SR 9 to SR 306	Collector	80	8,720	4,200
Mary Alice Park					
Road	SR 9 to Lake Lanier	Collector	80	8,610	3,036
Mathis Airport					
Pkwy	SR 141 to Old Atlanta Road	Minor Arterial	120	23,620	12,370
Mathis Airport					
Road	SR 141 to SR 20	Minor Arterial	100	23,170	6,020
Mayfield Drive	SR 306 to Jot Em Down Road	Collector	80	5,440	4,200
McFarland					
Parkway	SR 9 to McGinnis Ferry Road	Major Arterial	150	86,510	37,190
McGinnis Ferry	Fulton Co. Line to Union Hill				
Road	Road	Minor Arterial	120	35,850	20,000
McGinnis Ferry	Union Hill Road to				
Road	McFarland Parkway	Minor Arterial	120	66,510	19,890
McGinnis Ferry Road	McFarland Parkway to Gwinnett Co. Line	Major Arterial	120	60,420	22,100
Millwood Road	SR 306 to Cul-De-Sac	Local	60	2,000	1,500
Mt. Tabor Road	SR 369 to Elmo Road	Collector	80	4,740	2,512
Mullinax Road	SR 9 to Union Hill Road	Collector	80	19,230	11,200
Nichols Cove					
Road	Nix Road to Cul-De-Sac	Local	60	2,000	1,110
Nichols Drive	James Burgess Rd to Cul-De- Sac	Local	60	9,000	2,670
	Old Atlanta Road to Nichols				
Nichols Road	Drive	Local	60	9,000	2,670
Nuckolls Road	SR 20 to Buford Dam Road	Collector	80	6,000	5,844
North Old	Hutchinson Road to Ronald	1 1	60	13 500	6.200
Atlanta Road	Reagan	Local	60	12,500	6,200
Oak Grove					
Circle	SR 9 to Riley Road	Collector	80	5,920	4,020
Old Atlanta	McGinnis Ferry Road to				
Road	Sharon Road	Minor Arterial	120	29,430	19,180
Old Atlanta					
Road	Sharon Road to SR 9	Minor Arterial	100	24,990	14,220
Old Alpharetta	McGinnis Ferry Road to SR				
Road	141	Minor Arterial	100	32,130	17,500
Old Federal					
Road	SR 369 to Cherokee Co Line	Local	60	12,000	4,200



Old Keith					
Bridge Road	SR 306 to Lake Lanier	Collector	80	3,840	3,000
Parks Road	SR 306 to Little Mill Road	Collector	80	6,990	3,520
Pea Ridge Road	Jot Em Down Road to SR 53	Collector	80	9,500	6,010
Pendley Road	SR 9 to Old Atlanta Road	Collector	80	7,450	3,477
	Cumming City Limits to				
Pilgrim Road	Antioch Rd	Local	60	13,500	4,000
Pilgrim Mill				24.040	40 770
Road Bine Crewe	Main Street to Lake Lanier	Collector	80	21,940	12,770
Pine Grove Road	Shiloh Rd Fast	Local	60	8 /00	1 200
Pinev Grove		Local	00	0,400	4,200
Road	Castleberry Road to SR 9	Collector	80	9,630	4,500
	Post Road to Bethelview			ŕ	
Pittman Road	Road	Collector	80	7,330	3,659
Pleasant Grove	Hurt Bridge Road to Dr.				
Road	Bramblett Road	Collector	80	5,730	4,520
Pooles Mill		1 1	60	c coo	4.040
Road	Heardsville Cir to SR 369	Local	60	6,600	4,048
Ronaid Reagan Blyd	SR 20 to Majors Road	Minor Arterial	100-120	36,000	17 500
Ronald Reagan	Majors Road to Ivey Summit		100 120	30,000	17,500
Blvd	Road	Minor Arterial	80	36,000	17,500
Ronald Reagan	Majors Road to McFarland				
Blvd	Boulevard	Minor Arterial	100-120	36,000	17,500
Ronald Reagan	McFarland Boulevard to	Minor Arterial	100-120	36.000	17.500
Blvd	McGinnis Ferry Road				,
Bonor Bood	Friendship Circle to Dr.	Local	60	6 280	2 250
корег коай	Oak Grove Circle to	LUCAI	00	0,280	2,250
Riley Road	Bannister Road	Collector	80	4.800	3.020
Samples Road	SR 20 to Buford Dam Road	Collector	80	7,710	3.300
campies near	SR 20 to Mary Alice Park			.,	0,000
Sanders Road	Road	Collector	80	8,880	4,370
Settingdown					
Circle	SR 400 to Settingdown Rd	Local	60	8,400	3,800
Settingdown					
Road	SR 369 to Cross Roads Road	Collector	80	9,130	4,370
Sattlas Dood	Southers Cir to Grand	Lacal	60	F 640	2 200
Settles Rodu	Martin Dood to SD 206	LULdi	80	5,640	3,000
Shady Grove	SR 369 to Chattaboochee	Conector	80	9,270	3,520
Road	Road	Collector	80	8,950	3.680
Shady Grove	Chattahoochee Road to	Concettor	00	0,000	0,000
Road	Lanier Drive	Collector	80	10,200	5,950



Charron Dood	From SR 141 to Old Atlanta		120	10 702	14 220
Sharon Road		Ivinor Arterial	120	18,702	14,220
Shilon Road	MicFarland Road to SR 9	Collector	80	14,260	4,917
Road	Pilgrim Mill Road to End	Local	60	3,100	2,000
Southers Circle	James Burgess Rd to Sterling Drive	Local	60	6,200	2,500
Spot Road	Dr. Bramblett Road to SR 9	Collector	100	8,670	6,020
Spot Road					
Connector	SR 20 to Dr Bramblett Road	Local	60	12,500	3,800
CD 400	Fulton Co Line to Dawson Co	_	200	4.42.04.0	70.070
SR 400	Line	Freeway	300	142,810	70,370
SR Q	Fuiton Co. Line to Main	Major Arterial	120	45 160	1/1 390
SR 9	Main Street to SR 369	Major Arterial	120	35 730	15 720
SR 9	SR 369 to Dawson Co. Line	Minor Arterial	120	20 790	7 970
51(5)	Cherokee Co. Line to Manle	MINO ALCENT	120	20,750	7,570
SR 20	Street	Major Arterial	120	42,560	20,810
SR 20	SR 9 to Gwinnett Co. Line	Major Arterial	150-200	67,880	30,970
SR 53	Dawson Co. Line to SR 306	Major Arterial	120	25,860	10,330
SR 53	SR 306 to Hall Co. Line	Major Arterial	120	29,540	13,590
SR 141	Fulton County Line to SR 9	Major Arterial	150-200	64,220	37,100
SR 371	SR 20 to SR 369 (Heardsville	,		,	,
Extension	Road)	Minor Arterial	120	8,500	0
SR 306	SR 20 to GA 400	Major Arterial	120	42,570	11,340
SR 306	GA 400 to SR 369	Major Arterial	150	42,590	25,290
SR 306	SR 369 to SR 53	Major Arterial	150	45,930	18,100
SR 369	Cherokee Co. Line to SR 306	Minor Arterial	120	58,160	22,000
SR 369	SR 306 to Hall Co. Line	Major Arterial	120	39,130	19,120
SR 371	SR 9 to Kelly Mill Road	Major Arterial	120	22,710	16,880
SR 371	Kelly Mill Road to SR 20	Major Arterial	120	19,470	5,760
Stoney Point					
Road	Shiloh Road to SR 141	Collector	80	11,680	4,382
Strickland Road	McGinnis Ferry Road to SR 9	Collector	80	9,750	3,760
Trammell Road	Windermere Pkway to SR 20	Collector	80	5,970	4,268
Tribble Road	SR 20 to Watson Road	Collector	80	8,500	3,020
Turner Road	Bald Ridge Marina Road to End	Local	60	5,100	2,300
Union Hill Road	McGinnis Ferry Road to Mullinax Road	Collector	100	19,290	6,200
Union Hill Road	Mullinax Road to Shiloh Road	Collector	80	6,510	3,220
Vanns Tavern	SR 369 to Lake Lanier	Collector	80	4,860	3,200



Road					
Veterans Memorial Blvd	SR 9 to Main Street	Major Arterial	120	31,650	14,770
Waldrip Road	SR 369 to SR 306	Collector	80	9,760	4,200
Wallace Tatum					
Road	Heardsville Road to SR 369	Collector	80	7,540	4,020
Wallace Wood	Jot Em Down Road to				
Road	Waldrip Road	Local	60	5,200	2,000
	Heardsville Road to Hurt				
Watson Road	Bridge Road	Collector	80	7,310	4,200
Westbrook					
Road	SR 306 to SR 53	Collector	80	10,240	3,020
	Elmo Road to Dawson Co				
Westray Road	Line	Local	60	4,200	1,400
Whitmire Road	Mount Tabor Road to SR 369	Collector	80	4,860	4,200
Windermere					
Pkwy	Old Atlanta Rd to SR 20	Minor Arterial	140	20,290	9,800
Winding Creek	Doc Sams Road to Loop				
Drive	Road	Local	60	2,200	1,100
Witts End Drive	Pea Ridge Road to End	Local	60	1,960	1,020



APPENDIX B. Public Involvement Summary

Public involvement meetings were conducted on November 1, 2010 and February 28, 2011. The November 1, 2010 meeting was designed to solicit comments on the findings of the needs assessment. Figures from the needs assessment report were displayed in the Forsyth County Board of Commissioners meeting room from 5:00 pm to 7:30 pm. Fact sheets were distributed along with sign-in sheets and comment forms. A flip chart was made available for further comments. Also, comments were hand-written on the maps as appropriate. Forsyth County staff and elected officials attended and were available to respond to questions along with the consultant representatives.

Comment sheets and sign in sheets are attached. Comments on the flip chart from the November meeting included:

- Need a signal at the SR 20/Suwannee Dam Road intersection in Gwinnett County
- Bethelview Road and SR 20 need truck passing lanes
- SR 141 at McGinnis Ferry needs widening
- Would like to see more bike paths, bus routes, sidewalks, and train capabilities, etc. More diversity in transportation.
- SR 369 should be four lane from Gainesville to I-75

No flip chart comments were recorded at the February 28, 2011 public meeting.





Forsyth County Comprehensive Transportation Plan Public Information Meeting February 28, 2011

February 28, 2011				
Name	Address	Phone	Email	\
Teresa O'Leary	2960 Chamonix Dr. Cumming Ga 30041	2878 ७४४ ०८८	tmolearye bellsout	h. d
KEN TIMPSON	3160 MAIN STREET SUITEIOU DULUTH, GM 30096	770 813.0882	KEN. TIMPSON® STANTEC	. Cox
JOHN CUNARD	110 E. MAWST. CUMMING, GA. 30042	770 781-2165	JVCUNARD @ FORSVTACO.	car
TIM MERRITT	IDE MAIN ST. Cumming	770-781-2101	TEMERRITTEFORSYTH	co.com
Alyosa LaRensie	Forsith County News 302 Vetering Menunial Bd. Cumming, Gra 3004	770-205-8974	alyssa larenzie@forsyth	.com
George Gyston	6165 For hope Lane Cumming Ga 30040	770 887 5051		
RICH LITTLE	8185 Rocky Ridge	618 513 3036	RICH8185@BellSon	rk.vet
Linda Stewart	5155 Howard Rd Cumming 30040	770-887-6988	stewarts@lyesoe	e con
Rick MARMeci	7790 Nicholson RD Cummarc, GA 30025	770 862-6299	rick. Marucci Osucc	con









Forsyth County Comprehensive Transportation Plan Public Information Meeting November 1, 2010

Name	Address	Phone	Email	
RT KORTELING	110 RIVERVIEW DR	678-513-6801		
Ruth Goode	P.O. Box 1350 Camming	770-781-4110		
Lewis Darnell	1376 ale atl Ad any	770-887-6290		
BUBBY TROOP	2030 CHADWICK DR	678-513-0639		
DAILON & PATPARE	PO BOK 218 BALL GRUND GA 30107	L		
Mary ELLEN RADICS	6420 Westchester PL Comminut	678-455-685		
Roy SANDERS	2750 Consider this CAMBRIDGE HILLS TE	3776588-3988		
Ricia L. Maxie	+845 Rose Arbor Ct. Cumming 30040	707-280-2404	Ricia LMeao	l.com
Greg Grant	138 GRAND ANC Sumaner	720-889-4777	ty 138@concast. net	t
<u>_</u>	· · · · · · · · · · · · · · · · · · ·		Jan	



Forsyth County Comprehensive Transportation Plan Public Information Meeting November 1, 2010

Name	Address	Phone	Email	
Sandy Lake	6975 Weybridge Dr.	678.807.7744	sandy. lake @ comea	ust.net





Forsyth County Comprehensive Transportation Plan Public Information Meeting November 1, 2010

Nomo	Addroco	Phone	Email	
iname	Audress Zon 21/	Filone	Eillan	
Andy Odom	6620 Bridle wood Way	678-947-5339	anday & brajah. con	н
JOHN CUNARD	110 EAST MANN ST. SUITE 120 SUITE 120 SUITE 120 CARAING CA. 30040	770-781-2165	JYCUDARO @ FURSYTI	cacon
SAMEER PATHARKAR		205-222-1034	spatharkar aforesiteg	oupinc .
Avan Hay Que	5200 Shady Came Pol Cumming , Gar 30041	770-889-0929		
Karl Paquette	504 Settles RJ Summer, 6A 30024	770.888.7939		
Jim Klinkenberg	6615 Club Velley Ct. Suwanez, GA 30074	770-888-4836	Wink abolsouthing	4
LOBTRA RADIES	6420 WESTCHESTER PL. CUMMING GA 30040	678 455 6815	rdradies concest	. net
JON KENNEDY	220 MARY ALTOE PKED. Chimmetries 64. 30040	678-28-963	ion. Kenned 1050 Val	00.50
TIM MERRITT	110 E. MAIN ST. CUMMING, GA 30040	770-281- 2101	trmerritte Foesithco.com	







Forsyth County Comprehensive Transportation Plan Comment Sheet November 1, 2010 Comments: Make Hur 369 Lanes from Gamesulle to Eantersville (Interstate 75 this is a major truck Route, it should been ago. have done Submitted by (please print): Hendrix shady Give red **Complete address:** SZOO 30041 um m ma son. **Submit Comments To** Forsyth County CTP c/o 2835 Brandywine Road Suite 400 Atlanta, GA 30341 Email-scbrown@wilbursmith.com Fax 770-936-8656



Forsyth County **Comprehensive Transportation Plan** Comment Sheet November 1, 2010 Comments: START + Berthrenien (ere omo WIDENING BE TO 51 W MANY NDENET VCKS A 10-MUCH 100 AN 5 5 ER 2 Δ 400 FRAM ESSURE 77) WIDEN 5 TO McFar INDWA Ph Ø1 IN WITH L EXTENSION, THE tod Submitted by (please print): 15. VAA Complete address: Weste MAM 180 004 6 1 **Submit Comments To** Forsyth County CTP c/o 2835 Brandywine Road Suite 400 Atlanta, GA 30341 Email-scbrown@wilbursmith.com Fax 770-936-8656



APPENDIX C. Projects

	Snort-Kange Recommended Program of Projects														
					I	anes		ESTIMATED COSTS (\$ Millions)							
Project II	Road	Project Type	From	То	Existing	Planne d	Length (mi)	PE		ROW	CST	TOTAL	LOCAL		
Short-Ra	ort-Range: 2011-15 Roadway Capacity														
24	SR 20 (Buford Highway): Segment 4	Widening-2 to 4 lanes for 2.87mi	Samples Road/Trammel Road	James Burgess Road	2	4	2.87	\$	-	\$ 19.960	\$ 11.347	\$ 31.307	\$ -		
27	SR 20 (Canton Highway)	Widening-2 to 4 lanes for 8.40 mi	SR 371	SR 400	2	4	8.40	\$	-	\$ 50.360	\$ 24.000	\$ 74.360	\$ -		
18	McGinnis Ferry Road - Regional Project	Widening-2 to 4 lanes for 7.80 mi	Sargent Road	Union Hill Road	2	4	7.80	\$ 2.	500	\$ 5.000	\$ 25.222	\$ 32.722	\$ 7.500		
17	SR 306 (Keith Bridge Road): Segment 2	Widening-2 to 4 lanes for 1.13 mi	SR 400	SR 369 (Browns Bridge Road)	2	4	1.13	\$	-	\$ 2.791	\$ 4.525	\$ 7.316	\$ -		
7	SR 369 (Browns Bridge Road): Segment 2	Widening-2 to 4 lanes for 7.9 mi	SR 306 (Keith Bridge Road)	Hall County Line	2	4	7.90	\$	-	\$ 5.849	\$ 27.491	\$ 33.340	\$ -		
6	SR 369 (Browns Bridge Road): Segment 1	Widening-2 to 4 lanes for 1.79 mi	SR 9 (Dahlonega Highway)	SR 306 (Keith Bridge Road)	2	4	1.79	\$ 1.	200	\$ 7.775	\$ 4.225	\$ 13.200	\$ -		
3	Bethelview Road	Widening-2 to 4 lanes for 3 mi	SR 9 (Atlanta Highway)	Castleberry Road	2	4	1.00	\$	-	\$ 1.850	\$ 6.840	\$ 8.690	\$ -		
3a	Bethelview Road	Widening-2 to 4 lanes for 3 mi	Castleberry Road	SR 20 (Canton Highway)	2	4	5.00	\$ 0.	650	\$ 4.600	\$ 34.190	\$ 39.440	\$ 0.650		
25	Union Hill Road/Mullinax Road: Segment 2	Widening-2 to 4 lanes for 2.35 mi	McFarland Parkway	SR 9 (Atlanta Highway)	2	4	2.35	\$	-	\$ 1.700	\$ 5.460	\$ 7.160	\$ 1.700		
25a	Union Hill Road	Widening-2 to 4 lanes for 1.67 mi	SR 400	McFarland Parkway	2	4	1.67	\$ 1.	200	\$ 4.500	\$ 6.800	\$ 12.500	\$ 5.700		
10	Brookwood Road	Widening-2 to 4 lanes for 1.09 mi	McGinnis Ferry Road	SR 141 (Peachtree Parkway)	2	4	1.09	\$	-	\$ 0.792	\$ 4.870	\$ 5.662	\$ 5.662		
22	Old Atlanta Road	Widening-2 to 4 lanes for 0.7 mi	Nichols Road	James Burgess Road	2	4	0.70	\$	-	\$ -	\$ 2.400	\$ 2.400	\$ 2.400		
22a	Old Atlanta Road	Widening-2 to 4 lanes for 1.60 mi	Sharon Road	Nichols Road	2	4	1.60	\$	-	\$ 0.450	\$ 5.800	\$ 6.250	\$ 6.250		
22b	Old Atlanta Road	Widening-2 to 4 lanes for 3.1 mi	James Burgess Road	McGinnis Ferry Road	2	4	3.10	\$	-	\$ 7.500	\$ 22.600	\$ 30.100	\$ 30.100		
21	Sharon Road	Widening-2 to 4 lanes for 1.21 mi	SR 141 (Peachtree Parkway)	Old Atlanta Road	2	4	1.21	\$	-	\$ 0.580	\$ 5.460	\$ 6.040	\$ 6.040		
23	SR 371 (Post Road)	Widening-2 to 4 lanes for 3.82 mi	SR 9 (Atlanta Highway)	Kelly Mill Road	2	4	3.82	\$ 1.	877	\$ 6.150	\$ 12.514	\$ 20.541	\$ 20.541		
14	Ronald Reagan Boulevard: Segment 3	New Road-2 mi of 4 lanes	Shiloh Road	Majors Road	0	4	2.00	\$ 1.	825	\$ 6.440	\$ 12.168	\$ 20.433	\$ 20.433		
5	Castleberry Road	Widening-2 to 4 lanes for 1.35 mi	City Limits	Piney Grove	2	4	1.35	\$ 1.	220	\$ 7.780	\$ 4.450	\$ 13.450	\$ 13.450		
5a	Castleberry Road	Widening-2 to 4 lanes for 1.52 mi	Piney Grove	Bethelview Road	2	4	1.52	\$ 1.	298	\$ 7.900	\$ 4.980	\$ 14.178	\$ 14.178		
13	Ronald Reagan Boulevard: Segment 2	New Road-1.3 mi of 4 lanes	McFarland Parkway	Shiloh Road	0	4	1.30	\$ 1.	186	\$ 4.186	\$ 7.909	\$ 13.281	\$ 13.281		
9	McFarland Parkway: Segment 1	Widening-4 to 6 lanes for 1 mi	McGinnis Ferry Road	SR 400	4	6	1.00	\$ 0.	300	\$ 0.100	\$ 3.276	\$ 3.676	\$ 3.676		
A8	Pilgrim Mill Road	Widening-2 to 4 lanes for 1 mi	City Limit	Freedom Parkway	2	4	1.00	\$ 1.	320	\$ 4.655	\$ 7.261	\$ 13.236	\$ 13.236		
26	Church St. Extension	New Road-0.11 mi of 2 lanes	Tribble Gap Road	Intersection of Hudson St. @ Woodland S	0	2	0.11	\$	-	\$ 0.200	\$ 0.550	\$ 0.750	\$ 0.750		
								\$ 14.5	577	\$ 151.117	\$ 244.339	\$ 410.033	\$ 165.548		



	Short-Range Recommended Program of Projects													
					I	anes		ESTIMATED COSTS (\$ Millions)						
Project ID	Road	Project Type	From	То	Existing	Planne d	Length (mi)	P	PE	ROW	CST	TOTAL	LOCAL	
Short-Ran	hort-Range: 2011-15 Roadway Operational Improvements													
47	Chamblee Gap Road	Roadway Operational Upgrades	Bethelview Road	Current end of graveled section	2	2	1.04	\$	0.050	\$ 0.100	\$ 0.500	\$ 0.650	\$ 0.650	
49	Intersection Improvements along SR 369 at Doc Bramlett Road, Hendrix Road, Hotzcław Road, Shady Grove/Elrod Roads. Jot Em Down/Bethel Road, and Wakirip Road	Roadway Operational Upgrades/intersection improvements	n/a	n/a	n/a	n/a	n/a				\$ 3.852	\$ 3.852		
42	Kelly Mill Road	Roadway Operational Upgrades	SR 371 (Post Road)	Bethelview Road	2	2	1.53	\$	-	\$ 0.918	\$ 3.213	\$ 4.131	\$ 4.131	
42a	Kelly Mill Road	Roadway Operational Upgrades	Bethelview Road	City Limits				\$	-	s -	\$ 2.620	\$ 2.620	\$ 2.620	
53	Old Atlanta Road @ Gilbert Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
54	Old Atlanta Road @ Brannon Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
55	Old Atlanta Road @ Ivey Falls Drive	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
56	Old Atlanta Road @ Northern Oaks Drive	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
59	Jot-em-down Road @ Pearidge Road/Mayfield Drive	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
60	Hopewell Road @ Jot-em-down Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
63	SR 371 @ Bentley Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
64	SR 371 @ Dickerson Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
65	SR 371 @ Pittman Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
66	SR 371 @ Drew Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
67	SR 371 @ Evans Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
68	SR 306 @ Mayfield Drive	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
69	SR 53 @ Truman Mountain Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.750	\$ 0.750	
70	SR 53 @ Chestatee Heights Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.750	\$ 0.750	
72	SR 9 @ Antioch Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
73	SR 9 @ Fowler Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
74	SR 9 @ Hopewell Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
75	SR 9 @ Bannister Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
A21	Old Alpharetta Road @ Pine Grove/Caney Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a					\$ 0.500	\$ 0.500	
50b	SR 369 (Browns Bridge Road)	Roadway Operational Upgrades	Cherokee County Line	Hightower Circle	n/a	n/a	3.25	\$	0.070	\$ 0.770	\$ 1.035	\$ 1.875	s -	
								s	0.120	\$ 1.788	\$ 11.220	\$ 23.128	\$ 17.401	
Chart D	as 2011 15 Diavala Dadastrian		<u> </u>											
BR-3	SR 369 (Matt Highway)	Bridge Ungrade	Settingdown Creek	n/a	2	2	0.40			\$ 2,845	\$ 1.405	\$ 4 250		
BR-3	SR 53 (at Chestatee River) - Bridge Upgrade	Bridge Upgrade	Chestatee River	n/a	2	2	0.40	\$	0.150	\$ 0.050	\$ 0.152	\$ 0.352		
								s	0.150	\$ 0.050	\$ 0.152	\$ 4.602	s -	
												\$ 437.763	\$ 182.949	



	Mid-Range Recommended Program of Projects																
					I	anes	-			ESTIN	IATED COSTS	(\$ Millions)					
Project ID	Road	Project Type	From	То	Existing	Planned	Length (mi)	PE		ROW	CST	TOTAL	I	LOCAL			
Mid-Rang	e: 2016-2030 Roadway Capacity																
29	SR 9 (Atlanta Highway): Segment 2	Widening 2 to 4 lanes for 2.22 mi	McFarland Parkway	SR 371 (Post Road)	2	4	2.22	\$ 0	.680	\$ 3.950	\$ 11.722	\$ 16.3	2 \$	-			
28	SR 9 (Atlanta Highway): Segment 1	Widening 2 to 4 lanes for 0.89 mi	Fulton County Line	McFarland Parkway	2	4	0.89	\$ 0	.325	\$ 1.583	\$ 4.699	\$ 6.6	7 \$	-			
30	SR 9 (Atlanta Highway): Segment 3	Widening 2 to 4 lanes for 3.79 mi	SR 371 (Post Road)	SR 141 (Peachtree Parkway)	2	4	3.79	\$ 1	.895	\$ 6.743	\$ 20.011	\$ 28.6	9 \$	-			
40	SR 306 Extension	New 4 lane alignment for 3.79	SR 9 (Dahlonega Highway)	SR 20 (Canton Highway)	0	4	3.79	\$ 2	.250	\$ 13.485	\$ 41.084	\$ 56.8	9 \$	-			
36	Bagley Drive	Widening 2 to 4 lanes for 0.44 mi	SR 141 (Peachtree Parkway)	Mathis Airport Parkway	2	4	0.44	\$ 0	.150	\$ 0.960	\$ 2.385	\$ 3.4	5 \$	3.495			
								\$ 5.	300	\$ 26.721	\$ 79.901	\$ 111.92	2 \$	3.495			
Mid-Rang	e: 2016-2030 Bridge																
BR-2	SR 369 (Browns Bridge Road) - Bridge Upgrade	Bridge Upgrade	Six Mile Creek	n/a	2	2	0.40	\$ 0	150	\$ 0.200	\$ 2,425	\$ 2.7	5 \$	-			
BR-3	SR 369 (Browns Bridge Road) - Bridge Upgrade	Bridge Upgrade	Settingdown Creek	n/a	2	2	0.40	\$ 0	.150	\$ 0.200	\$ 2.472	\$ 2.8	2 \$	-			
BR-4	SR 369 (Browns Bridge Road) - Bridge Upgrade	Bridge Ungrade	Two Mile Creek	n/a	2	2	0.40	\$ 0	850	\$ 1,230	\$ 16.295	\$ 18.3	5 \$	-			
BR-5	Union Hill Road	Bridge Upgrade			2	2	0.4		\$0.45	0	\$ 5,500	\$ 5.9	0	0.45			
											\$ 26.692	\$ 29.92	2				
Mid-Rang	e: 2016-2030 Roadway Capacity: New Projects																
N18	SR 20 (Buford Highway)	Widening-4 to 6 lanes for 2.26 mi	SR 9	Samples Road/Trammell Road	4	6	2.26	\$ 1	.111	\$ 3.638	\$ 10.396	\$ 15.14	5 \$	15.145			
N13	SR 53 (Dawsonville Highway)	Widening-2 to 4 lanes for 1.58 mi	SR 306	Hall County Line	2	4	1.58	\$ 0	.776	\$ 2.544	\$ 7.268	\$ 10.5	8 \$	10.588			
N29	James Burgess Road	Widening-2 to 4 lanes for 1.05 mi	Old Atlanta Road	Nichols Drive	2	4	1.05	\$ 0.	.516	\$ 1.690	\$ 4.830	\$ 7.0	6 \$	7.036			
N5	SR 9 (Dahlonega Highway)	Widening-2 to 4 lanes for 0.89 mi	SR 306 (Browns Bridge Road)	Hopewell Road	2	4	0.89	\$ 0	.437	\$ 1.433	\$ 4.094	\$ 5.9	4 \$	5.964			
N17	Buford Dam Road	Widening-2 to 4 lanes for 5 mi	SR 9	Gwinnett County Line	2	4	5.00	\$ 2	.457	\$ 8.050	\$ 23.000	\$ 33.50	17 \$	33.507			
N10	SR 53 (Dawsonville Highway)	Widening-2 to 4 lanes for 3.5 mi	SR 306 (Keith Bridge Road)	Dawson County Line	2	4	3.50	\$ 1	.720	\$ 5.635	\$ 16.100	\$ 23.4	5 \$	23.455			
N31	Stoney Point Road	Widening-2 to 4 lanes for .90 mi	Stoney Ridge Road	SR 141 (Peachtree Parkway)	2	4	0.90	\$ 0	.442	\$ 1.449	\$ 4.140	\$ 6.0	1 \$	6.031			
								\$ 7.	459	\$ 24.439	\$ 69.828	\$ 101.72	6 \$	101.726			



	Mid-Range Recommended Program of Projects														
]]	Lanes			ESTIN	MATED COSTS (\$ Millions)					
Project ID	Road	Project Type	From	То	Existing	Planned	Length (mi)	PE	ROW	CST	TOTAL	LOCAL			
Mid-Range	lid-Range: 2016-2030 Roadway Operational Improvements: New Projects														
52	Old Atlanta Road @ Daves Creek Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a			5	0 500 5	3 0 500			
61	Hopewell Road @ Hubbardtown Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a			5	0.500 \$	\$ 0.500			
A20	SR 9 @ Dr. Dunn Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a			ŝ	0.500 \$	\$ 0.500			
A22	SR 9 @ Piney Grove Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a			5	0.500 \$	s 0.500			
A23	SR 9 @ Oak Grove Cir	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.500 \$	§ 0.500			
A24	SR 400 @ Jot Em Down	Intersection improvements	n/a	n/a	n/a	n/a	n/a			5	0.500 \$	s 0.500			
A25	Cross Roads Rd @ Bennett Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.500 \$	§ 0.500			
A26	Settingdown Road @ Martin Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			5	0.750 \$	s 0.750			
A27	John Burruss Rd @ Karr Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.750 \$	s 0.750			
A28	Bannister Rd @ Elmo Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			5	0.500 \$	i 0.500			
A29	Bannister Rd @ Riley Rd/Govan Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.500 \$	0.500			
A30	Wallace Tatum Rd @ Wright Bridge Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.500 \$	0.500			
A31	Wallace Tatum Rd @ Burnt Bridge Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			5	0.500 \$	0.500			
A32	Holbrook Rd @ Burnt Bridge Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			5	0.500 \$	0.500			
A33	Hurt Bridge Rd @ Watson Road	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.500 \$	0.500			
A34	SR 20 @ Woodland Hills Drive	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.500 \$	0.500 ز			
A35	Bethelview Rd @ Pittman Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.500 \$	0.500			
A36	Campground Rd @ Dickerson Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.500 \$	i 0.500			
A37	SR 369 @ Pooles Mill Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.500 \$	0.500			
A38	SR 369 @ Old Federal Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			\$	0.750 \$	0.750 و			
A39	SR 369 @ Mount Tabor Rd	Intersection improvements	n/a	n/a	n/a	n/a	n/a			ş	0.750 \$	0.750			
A40	SR 369 @ SR 9	Intersection improvements	n/a	n/a	n/a	n/a	n/a	\$ 0.060	\$ 0.100	\$ 0.500 \$	0.660 \$	0.660			
										\$	12.160 \$	12.160			
Mid-Range	e: 2016-2030 Bicycle Pedestrian Projects		T				-								
BP-1	SR 9	New Bicycle Friendly Shoulder	SR 371	Bethelview	0	N/A	20,100 ft	\$ 0.080	\$ 0.100	\$ 0.620 \$	0.800	0.800			
BP-2	Jones Road	New Bicycle Friendly Shoulder	Bluegrass Pkwy	Dalesford Rd	0	N/A	4500 ft	\$ 0.010	\$ 0.040	\$ 0.140 \$	0.190 \$	0.190			
BP-3	Pilgrim Mill Road	New Bicycle Friendly Shoulder	City limits	Tidwell Park	0	N/A	25900 ft	\$ 0.090	\$ 0.120	\$ 1.000 \$	1.210	1.210			
BP-4	Buford Dam Road	New Sidewalk	Sanders Road	Chattahoochee River	0	N/A	20,500 ft	\$ 0.100	\$ 0.100	\$ 2.100 \$	2.300 \$	2.300			
BP-5	Freedom Parkway	New Sidewalk	Pilgrim Mill Road	Keith Bridge	0	N/A	8,600 ft	\$ 0.020	\$ 0.050	\$ 0.290 \$	0.360 \$	0.360			
BP-6	Echols Road	New Sidewalk	Buford Hwy	Hudgins Road	N/A	N/A	9,400 ft	\$ 0.080	\$ 0.120	\$ 0.900 \$	1.100 \$, 1.100			
BP-7	Canton Road	New Sidewalk	Post Road	City limit	N/A	N/A	25,000 ft	\$ 0.300	\$ 0.800	\$ 1.800 \$	2.900 \$, 2.900			
BP-8	Haw Creek Road	New Sidewalk	Haw Creek Circle	Haw Creek Drive	N/A	N/A	2,500 ft	\$ 0.030	\$ 0.080	\$ 0.180 \$	0.290 \$	0.290			
BP-10	Shiloh Road	New Sidewalk	McFarland Pkway	Shiloh	N/A	N/A	19,000 ft	\$ 0.060	\$ 0.110	\$ 0.600 \$	6 0.770 S	, 0.770			
BP-11	Union Hill Road	New Sidewalk	McFarland Pkway	SR 9	N/A	N/A	12,500 ft	\$ 0.090	\$ 0.130	\$ 1.150 \$	1.370 \$	1.370			
BP-12	Trammel Road	New Sidewalk	Buford Hwy	Hudgins Road	N/A	N/A	6,000 ft	\$ 0.050	\$ 0.100	\$ 0.500 \$	0.650 \$	0.650			
										\$	11.940 \$	11.940			
Mid-Range	e: 2016-2030 LCI Projects: New Projects	D 1 (MEL IN I	11 · 11210 · 1	0	N	N	e 0.200	e 1.000	c 2000 c	2 200	2 200			
TP-15	New road parallel to Konald Reagan Boulevard	Roadway/access management	Nichariand Parkway	Union Hill Road	0	Not specified	Not specified	\$ 0.200 © 0.200	5 1.000 e 1.000	<u>\$ 2.000</u>	3.200	3.200			
TP-14	New E-w connector: Shiloh Road East Extension	Roadway/access management	Shilon Koad	Child Deed could have d	0	Not specified	Not specified	\$ 0.200 © 0.200	\$ 1.000 c 1.000	5 2.000 S	3.200 \$	3.200			
TP-15 TP-16	New N-S connector: Reagan alternative east of Big Creek	Roadway/access management	Sniion Koad northbound	Sniion Koad Southbound	0	Not specified	Not specified	\$ 0.200 \$ 0.100	\$ 1.000	5 2.000 S	5.200	3.200			
TP-10 TP-17	Internal Roadway Natwork: New Local Access Streats	Roadway/access management	To be determined	To be determined	0	Not specified	Not specified	\$ 0.000	\$ 0.500	3 1.000 S	1.000 \$	1.000			
TD 19	GRTA Park and Ride Facility	Transit: New Facility	To be determined	To be determined	- U Ν/Δ	N/A	N/A	3 0.080 TBD	3 0.250 TBD	3 2.230 3 TBD	TBD 2.360 3				
11-10	SALL FOR ARA INCOMENT	randa, ivew i dendy	ro oo determined	ro se determined	11/11	11/14	11/13	\$ 0.780	\$ 3 750	\$ 9250 \$	13 780 \$	13 780			
									\$ 5.750	\$ 9.200 G	10.700 3	15.780			
										S	281.450 \$	143.101			



	Long-Range Recommended Program of Projects												
					Lanes					ESTIMA	TED COSTS	(\$ Millions)	
Project ID	Road	Project Type	From	То	Existing	Planned	Length (mi)	PE		ROW	CST	TOTAL	LOCAL
Long-Ran	ong-Range: 2031-2040 Roadway Capacity												
37	Old Alpharetta Road	Widening -2 to 4 lanes for 2.5 mi	McGinnis Ferry Road	SR 141 (Peachtree Parkway)	2	4	2.50	\$	0.970	\$ 1.850	\$ 13.550	\$ 16.370	\$ 16.370
38	SR 306 (Keith Bridge Road): Segment 1	Widening -2 to 4 lanes for 1.09 mi	SR 9 (Dahlonega Highway)	SR 400	2	4	1.09	\$	0.545	\$ 1.939	\$ 5.908	\$ 8.392	\$ -
34	McFarland Parkway Segment 2	Widening -4 to 6 lanes for 1.39 mi	SR 400	SR 9	4	6	1.39	\$	0.480	\$ 2.473	\$ 7.339	\$ 10.292	\$ 4.420
41	SR 400	Widening -4 to 6 lanes for 6.94 mi	McFarland Parkway	SR 20 (Buford Highway)	4	6	6.94	\$	3.805	\$ 12.347	\$ 38.050	\$ 54.202	\$ -
32	SR 20 (Canton Highway): Segment 1	Widening-2 to 4 lanes for 6.37 mi	SR 369 (Hightower Road) in Cherokee County	SR 371 (Post Road)	2	4	6.37			\$ 11.333	\$ 33.634	\$ 44.967	
								\$ 5	.800	\$ 29.942	\$ 98.481	\$ 134.223	\$ 20.790
Long Don	go: 2031 2040 Booduny Congrity												
ASP-2	SR 369 (Browns Bridge Road)	Aspirations / Illustrative	Cherokee County Line	SR 9 (Forsyth County)	2	4	16.61	\$	6.063	\$ 11.627	\$ 76.406	\$ 94.096	\$ 94.096
ASP-4	SR 369 (Browns Bridge Road) Segment 2	Aspirations / Illustrative	SR 306	Hall County	2	4						\$ 44,994	\$ 44.994
ASP-5	SR 306 Segment 3	Aspirations / Illustrative	SR 369	SR 53	2	4						\$ 52,123	\$ 52.123
ASP-6	SR 369	Aspirations / Illustrative	SR 20	SR 9	2	4						\$ 156,000	\$ 156,000
ASP-7	SR 20	Aspirations / Illustrative	SR 400	Gwinnett County	4	6						\$ 92.900	\$ 92.900
ASP-8	SR 20	Aspirations / Illustrative	Spot Road	Kelly Mill Road	2	4						\$ 33.600	\$ 33.600
ASP-9	SR 9	Aspirations / Illustrative	McFarland Parkway	Mullinax Road	2	4						\$ 23.900	\$ 23.900
ASP-10	SR 141	Aspirations / Illustrative	McGinnis Ferry Road	SR 9	4	6						\$ 80.000	\$ 80.000
ASP-11	SR 20	Aspirations / Illustrative	Scott Road	SR 369	2	4						\$ 75.451	\$ 75.451
ASP-12	SR 9	Aspirations / Illustrative	SR 141	SR 20	2	4						\$ 44.286	\$ 44.286
ASP-13	SR 9 Segment 5	Aspirations / Illustrative	SR 20	SR306	2	4						\$ 15.000	\$ 15.000
ASP-3	SR 400 HOV	Aspirations / Illustrative	McFarland Parkway	SR 141 (Bethelview Road)	0	2/4	4.20	\$	4.561	\$ 6.000	\$ 45.614	\$ 56.175	\$ 56.175
								\$ 10	.624	\$ 17.627	\$ 122.020	\$ 768.525	\$ 768.525



Long-Ran	ge: 2031-2040 Roadway Capacity: New Proje	cts												
N34	SR 400	Widening- 4to 6 lanes for 11.6mi	SR 20	Dawson County Line	4	6	11.60	\$ 10).179 \$	18.675	\$ 67.8	50 \$	96.714	\$ 96.714
N6	Jot Em Down Road	Widening- 2to 4 lanes for 1.58 mi	Hopewell Road	Cross Roads Road	2	4	1.58	\$ (0.776 \$	2.544	\$ 7.2	δ8 \$	10.588	\$ 10.588
N16	Baldrige Marina	Widening- 2to 4 lanes for 1.2 mi	Lake Lanier	SR 400	2	4	1.20	\$ (0.590 \$	1.932	\$ 5.5	20 \$	8.042	\$ 8.042
N9	Hopewell Road	Widening- 2to 4 lanes for 1.1 mi	SR 9 (Dahlonega Highway)	Skyland Parkway	2	4	1.10	\$ (0.520 \$	1.771	\$ 5.0	60 S	7.351	\$ 7.351
N23	North Old Atlanta Road	Widening- 2to 4 lanes for 0.5 mi	Ronald Reagan Boulevard	SR 9 (Atlanta Highway)	2	4	0.50	\$ (0.246 \$	0.805	\$ 2.3	00 \$	3.351	\$ 3.351
N1	SR 369 (Matt Highway)	Widening- 2to 4 lanes for 3.38 mi	Whitmire Road	Hubert Martin Road	2	4	3.38	\$ 1	.661 \$	5.442	\$ 15.5	50 \$	22.652	\$ 22.652
N2	SR 369 (Matt Highway)	Widening- 2to 4 lanes for .85 mi	SR 9 (Dahlonega Highway)	Gravitt Road	2	4	0.85	\$ (0.418 \$	1.368	\$ 3.9	10 \$	5.696	\$ 5.696
N19	Marketplace Blvd.	Widening- 4 to 6 lanes for .82 mi	SR 20	Buford Dam Road	4	6	0.82	\$ (0.403 \$	1.320	\$ 3.7	72 \$	5.495	\$ 5.495
N22	Veterans Memorial Boulevard	Widening- 4 to 6 lanes for 1.37 mi	SR 9	Main Street	4	6	1.37	\$ (0.673 \$	2.206	\$ 6.3	02 \$	9.181	\$ 9.181
N7	Hubbard Town Road	Widening- 2to 4 lanes for .88 mi	Hopewell Road	SR 400	2	4	0.88	\$ (0.432 \$	1.417	\$ 4.0	48 \$	5.897	\$ 5.897
N30	Tribble Road	Widening- 2to 4 lanes for 1 mi	SR 20	Watson Road	2	4	1.00	\$ (0.491 \$	1.610	\$ 4.6	00 \$	6,701	\$ 6,701
N8	Hopewell Road	Widening- 2to 4 lanes for .83 mi	Hubbard Town Road	Jot Em Down Road	2	4	0.83	\$ (0.408 \$	1.336	\$ 3.8	18 \$	5,562	\$ 5,562
N33	McGinnis Ferry Road	Widening- 2to 4 lanes for .67 mi	Union Hill Road	Tidwell Drive	2	4	0.67	\$ (.329 \$	1.079	\$ 3.0	82 \$	4,490	\$ 4,490
N35	Ronald Reagan Boulevard	Widening- 4 to 6 lanes for 1.3 mi	Old Atlanta Road	North Old Atlanta Road	4	6	1.30	\$ 1	.232 \$	2.093	\$ 8.2	13 \$	11.538	\$ 11.538
	SR 20 (Buford Highway)	Widening- 4 to 6 lanes for 4.96 mi	SR 400	Gwinnett County Line	4	6	4.96	\$ 2	2.430 \$	7,986	\$ 22.8	16 \$	33.232	\$ 33.232
	SR 20 (Canton Highway)	Widening- 4 to 6 lanes for 3 1 mi	Spot Road	Kelly Mill Road	4	6	3 10	\$ 1	519 \$	4 991	\$ 14.2	60 \$	20 770	\$ 20,770
	Dr. Bramblett Road	Widening- 2to 4 lanes for 1.2 mi	SR 20	Roper Road	2	4	1.20	\$ (0.588 \$	1.932	\$ 5.5	20 \$	8.040	\$ 8.040
LR4	McGinnis Ferry Road	Widening- 4 to 6 lanes for 1 89 mi	McFarland Parkway	Brookwood Road	4	6	1.89	\$ (926 \$	3 043	\$ 86	94 \$	12.663	\$ 12.663
	SR 141 (Peachtree Parkway)	Widening- 4 to 6 lanes for 6.46 mi	McGinnis Ferry Road	SR 9 (Atlanta Highway)	4	6	6.46	\$ 3	3.165 \$	10.401	\$ 29.7	16 \$	43.282	\$ 43.282
	Pine Grove Road	Widening- 2to 4 lanes for .53 mi	Shiloh Road East	Old Alpharetta Road	2	4	0.53	\$ (0.260 \$	0.853	\$ 2.4	38 \$	3,551	\$ 3.551
	SR 371 (Post Road)	Widening- 2 to 4 lanes for 4 mi	Majors Road	SR 20 (Canton Highway)	2	4	4 00	\$ 1	960 \$	6 440	\$ 18.4	00 \$	26 800	\$ 26,800
	SR 9 (Atlanta Highway)	Widening- 4 to 6 lanes for 2.25 mi	McFarland Parkway	Mullinax Road	4	6	2.25	S 1	103 \$	3.623	\$ 10.3	50 \$	15.075	\$ 15.075
	SR 20 (Canton Highway)	Widening- 4 to 6 lanes for 4 8 mi	Cherokee County Line	Spot Road	4	6	4 80	\$ 2	2 352 \$	7 728	\$ 22.0	80 \$	32,160	\$ 32,160
	SR 53 (Dawsonville Highway)	Widening- 4 to 6 lanes for 5 08 mi	Dawson County Line	Hall County Line	4	6	5.08	\$ 2	489 \$	8 179	\$ 23.3	68 \$	34 036	\$ 34.036
	Dr. Bramblett Road	Widening- 2to 4 lanes for 3.51 mi	Roper Road	SR 369 (Matt Highway)	2	4	3.51	\$ 1	.720 \$	5,651	\$ 16.1	46 \$	23.517	\$ 23.517
LR5	SR 400	Widening- 6 to 8 lanes for 13.32 mi	McFarland Parkway	SR 369 (Browns Bridge Road)	6	8	13.32	\$ (5.527 \$	21.445	\$ 61.2	72 \$	89.244	\$ 89.244
LR3	McGinnis Ferry Road	Widening- 4 to 6 lanes for 6.4 mi	Brookwood Road	Gwinnett County Line	4	6	6.40	\$	3.136 \$	10.304	\$ 29.4	40 \$	42.880	\$ 42.880
LR1	SR 9 (Atlanta Highway)	Widening- 2to 4 lanes for 2.8 mi	SR 141	SR 20	2	4	2.80	\$ 4	1.577 \$	20.852	\$ 20.3	43 S	45,772	\$ 45,772
	SR 9 (Atlanta Highway)	Widening- 2to 4 lanes for 1.3 mi	City Limit	SR 306	2	4	1.30	\$ 1	.318 \$	2.420	\$ 9.4	41 \$	13.179	\$ 13.179
	SR 306 (Keith Bridge Road): Segment 3	Widening- 2to 4 lanes for 6.77 mi	SR 369 (Browns Bridge Road)	SR 53 (Dawsonville Highway)	2	4	6.77	\$ (5.866 \$	12,604	\$ 49.1	88 \$	68.658	\$ 68,658
	McFarland Parkway	Widening- 6 to 8 lanes for 2.4 mi	McGinnis Ferry Road	Union Hill Road	6	8	2.40	\$ 2	2.086 \$	1.341	\$ 17.4	33 \$	20,860	\$ 20,860
	McGinnis Ferry Road	Widening- 6 to 8 lanes for 8.5 mi	McFarland Parkway	Gwinnett County Line	6	8	8.50	\$ 8	3.620 \$	15.825	\$ 61.7	50 \$	86,195	\$ 86,195
	SR 20 (Buford Highway)	Widening- 6 to 8 lanes for 4.96 mi	SR 400	Gwinnett County Line	6	8	4.96	\$ 8	3.108 \$	36,938	\$ 36.0	36 \$	81.082	\$ 81.082
LR2	SR 369 (Matt Highway)	Widening- 4 to 6 lanes for 6.5mi	SR 9 (Dahlonega Highway)	Jot Em Down Road	4	6	6.50	\$ 6	5.592 \$	12.102	\$ 47.2	28 \$	65.922	\$ 65.922
	Jot Em Down Road	Widening- 2to 4 lanes for 1.6 mi	Cross Roads Road	Mayfield Drive	2	4	1.60	\$ 1	.614 \$	2.979	\$ 11.5	49 \$	16.142	\$ 16.142
	Jot Em Down Road	Widening- 2to 4 lanes for 1.6 mi	Mayfield Drive	SR 369	2	4	5.30	S S	5.346 \$	9.868	\$ 38.2	56 \$	53.470	\$ 53.470
	Cross Roads Road	Widening- 2to 4 lanes for 1.2 mi	Jot Em Down Road	SR 400	2	4	1.20	\$ 1	.211 \$	2.234	\$ 8.6	<u>67</u> \$	12.112	\$ 12.112
		<u> </u>						\$ 92	.872 5	\$ 253.335	\$ 705.6	94 S	1,051.901	\$ 1,051.901
Long-Ran	ge: 2031-2040 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	TBI)	TBD	TBD		TBD	TBD
TP-20	McGinnis Ferry/ SR 400 Interchange	Roadway/New Facility	To be determined	To be determined	N/A	N/A	N/A	\$ 1	.200 \$	-	\$ 12.0	00 S	3 13.200	\$ 13.200
								\$ 0	.160 5	6 0.320	\$ 1.50)0 S	1.980	\$ 1.980
Long-Ran	ge: 2031-2040 Bicycle Pedestrian Projects: N	ew Projects			·							<u> </u>		
BP-13	Waldrip Road	Bicycle Friendly Shoulder	Keith Bridge	SR 369	N/A	N/A	20,000 ft	\$ (0.050 \$	0.100	\$ 0.6	50 \$	0.800	\$ 0.800
BP-14	Bald Ridge Marina exit bridge	Sidewalk	Bald Ridge Marina	Bald Ridge Marina	N/A	N/A	700 ft	\$ (0.010 \$	0.020	\$ 0.0	50 \$	0.080	\$ 0.080
BP-15	SR 20	Sidewalk	Post Road	Cherokee County line	N/A	N/A	9,500 ft	\$ (0.100 \$	0.200	\$ 0.8	00 S	1.100	\$ 1.100
												\$	1.980	\$ 1.980
									0	Frand Total		S	1,958.608	\$ 1,845.176

