



# **Final Recommendations Report**

## **Douglas County Comprehensive Transportation Plan**

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# 1. INTRODUCTION

Roadways are increasingly congested. Crashes and other incidents are causing back-ups. Transit infrastructure is limited and infrastructure costs are increasing while revenue drops. The future for transportation in Douglas County is challenging. As a result, the Atlanta Regional Commission, Douglas County, and its municipalities partnered to fund and conduct a long range and comprehensive multimodal transportation planning process designed to identify needs and potential strategies for improvement.

According to the Futurecar documentary mini-series telecast on the Discovery Channel, the future is bright for transportation. Existing paradigms are rapidly giving way to exciting technological break-throughs. Moore's Law, which says that the capability of technology doubles every two years, offers hope plus real solutions to our dire transportation future. Described by Discovery Channel, the "Automatrix" is currently being developed to replace existing, outdated and unresponsive transportation systems.

The life of traditional roadways clogged by gasoline fueled internal combustion engines will be extended by GPS wireless technology, drive-by-wire, customized software, and satellite radio technology being developed now. Nanotechnology will produce vehicles with an electronic skin which senses problems and automatically make corrections by the Comprehensive Transportation Plan's horizon year, 2030. Automobiles are becoming wireless web-mobile IT platforms offering seamless internet access at home, work and in between. Smart roadways are possible and looming in our future including digital rumble strips that include high-speed collision avoidance and real time information to process rerouting around incidents. Traffic decongestants are realistic-smaller cars, no lane marking, parking close together, and more precise contact between vehicles allowing more efficient use of the roadways. With smart vehicles interacting precisely with smart infrastructure, high speeds are possible with only inches of clearance, again extending the useful life of existing infrastructure. Looking to the future, especially the next 25 years, Douglas County wants to be responsive to current needs while proactively advancing transportation to be compatible with changing technology.

## 1.1. BACKGROUND

Douglas County, located 17 miles southwest of downtown Atlanta, typifies the natural beauty of the Georgia Piedmont from rolling hills, abundant pine and hardwood forests, to scenic rivers and streams. The image of Douglas County as expressed through the county's vision is that of a small town with ties to its rural and scenic roots. The proximity to Atlanta has spurred development and transformed the county from rural to urban.

Previously a bedroom community for the metropolitan Atlanta region, the county's population more than doubled between 1980 and 2000. Forecasts indicate continued population escalation. Between 2005 and 2030 county population is anticipated to increase by over 90 percent while county total employment is expected to increase by more than 110 percent.

The Comprehensive Transportation Plan (CTP) process helped to meet the growth challenge by supporting the County's Comprehensive Plan population and housing forecasts, natural and cultural resource protection, economic development policies and land use policy and plans. In some cases transportation demand and the lack of adequate systems may influence significant change in land use character and patterns. Likewise, land use changes will dictate needs for expansion of the transportation

infrastructure. The purpose of this report is to document the plan development process and identify implementation strategies to meet the county's multimodal transportation needs through 2030.

## **1.2. COMPREHENSIVE TRANSPORTATION PLAN DEVELOPMENT**

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 strategic, policy, and program planning. The CTP was an excellent opportunity to meet transportation challenges head-on and to proactively anticipate countywide future transportation demands within the local and regional framework.

Elements of the CTP process included:

- Significant and detailed data collection from local, state and regional public and private sector sources
- Comprehensive public and stakeholder involvement in planning aspects of the process
- Rigorous 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
- Development and application of the travel demand model
- Identification and assessment of multimodal transportation needs
- Enhanced elements: ITS, transportation demand management, safe routes to school, bicycle and pedestrian and freight movement
- Policy and program development

### **1.2.1. Data Collection and Analysis**

Land use and transportation data was collected from state, regional and local sources. County, City, ARC, Georgia Department of Transportation, Georgia Regional Transportation Authority (GRTA) Transit Planning Board (TPB) and adjoining counties cooperated to ensure that up-to-date and comprehensive data was used to prepare the plan. Data collected by source is identified in Table 1.

<b>Table 1- Data Collection</b>	
<b>Data Source</b>	<b>Data Collected</b>
Douglas County	Comprehensive Plan, GIS data, ongoing studies
Cities	Traffic studies, GIS data
ARC	Modeling information, ongoing studies
GDOT	Traffic counts, Bridge ratings
GRTA	DRI information, Xpress bus data
TPB	Concept 3 – Regional Transit Plan, public survey results

### **1.2.2. Public Participation Program and Results**

Public outreach and education was integral to the success of this project. The planning process included conducting an extensive public outreach and involvement program. Maintaining a continuous dialogue and engaging diverse interests throughout its development enhanced the CTP by:

- Providing the project with a local users perspective of the transportation system; and
- Providing the general public a sense of ownership of the CTP by having input throughout its development.

Traditional public involvement activities include those that serve to establish an identity for the project and provide outreach to the “mainstream” public. The traditional public involvement techniques, while generally reaching the majority of the public, are not as effective in engaging the “traditionally underserved” including low-income and minority populations and the disabled. The outreach techniques detailed in this section reflect the public outreach program that served all segments of the Douglas County population through use of both traditional and nontraditional techniques. Assuring equity in the planning process is not only a Federal requirement and sound public policy, but also a key ingredient in project streamlining.

#### **Public Involvement Techniques Applied**

Traditional techniques employed to engage the public during the CTP development follow:

- Project Advisory Team - A Project Advisory Team (PAT) served as an advisory body for overall direction and guidance in the development of the technical aspects of the Douglas County CTP. The PAT consisted of diverse representation including state, regional, and local agencies; business and

industry; special populations and citizen advocates. Individual PAT members represented their organization relative to countywide transportation issues, shared information with their organizations and encouraged public participation in the process. As a group, the PAT met regularly to discuss project developments. The purpose of the PAT was multi-faceted:

- Allowed Douglas County and the municipalities to build partnerships and share information with their major planning partners. The PAT provided a continuing forum for direct input into the planning process and was a known opportunity for people to participate. It was also a forum for education, exchange, understanding, and clarification.
- Acted as punctuation points of the technical planning process. By meeting regularly, PAT meetings served as a check and balance on plan development in terms of political consensus and meeting the diverse transportation needs of a broad-based constituency.
- Public Meetings – A total of seven public meetings were held throughout the development of the CTP. These meetings included:
  - Six (6) Community Visioning Workshops to gather input on transportation issues and perceived needs for the County.
  - One (1) Open House to present and gather feedback on the findings and recommendations of the CTP.
- Newsletters – Two newsletters were developed and distributed to the general public. The first newsletter provided general information on the CTP and the second provided an overview of transportation issues and potential strategies identified through the CTP analysis and public outreach activities to date. Both newsletters contained information on how to participate in public involvement activities associated with the CTP.
- Speakers Bureau and Roving Displays - Several opportunities to appear on the agendas of scheduled meetings were presented and the consultant team and Douglas staff participated in activities of organized groups and events throughout the County. This was an effective way to enhance public involvement and education. Brief presentations were made offering information including various ways citizens can participate. Questions were answered and printed material left behind. The Speakers Bureau was an effective way to reach out to special populations such as non-English-speaking groups and environmental justice communities.
- Contact Database – A database of contacts to assist with the communications during the CTP planning process was developed and updated as the project progressed. This database contains a mailing list and E-mail distribution list and was provided to the County.
- Web Page – Maps, reports, and other project related materials were posted to the Douglas County Web Site. Other agencies such as local municipalities provided links to the web site for related studies.

- Surveys – A qualitative survey to gather public input was developed and distributed at the first public meeting. Survey results were posted to the project web site.
- Media Coverage/Advertisements – Press releases, public service announcements, and newspaper advertisements were developed and managed through the Douglas County Communications and Community Relations office.

Nontraditional public involvement techniques recognize the constraints that may characterize low-income and minority populations, including:

- Disposable incomes that limit potential media contact, such as internet access and/or newspaper subscriptions;
- Semi-literacy or illiteracy which limits comprehension of written information such as newsletters, newspaper advertisements, and websites;
- Shift work that precludes attendance at traditional evening meetings; and
- Inadequate transportation and/or child care to allow attendance of public meetings.

The following procedures were integrated into the traditional techniques described in the previous section:

- Newsletters and other project information materials were written in a manner that is technically sound but tailored to be understood by individuals from a wide range of education levels
- Locations accessible to a greater number of low-income and minority populations such as schools, churches, and community centers were used to present study information
- Minority organizations, business and community leaders were targeted for inclusion on the Stakeholder Committee
- Minority media outlets within Douglas County were identified and communicated with through the County's Communications and Community Relations staff

### **Stakeholders**

There are a number of organizations within the County that were engaged by the process in a variety of capacities. The CTP planning process reached out to involved groups to establish relationships for public involvement and education. Local government agencies responsible for coordination, planning and implementation of transportation projects were valued participants in the process. Participant organizations are listed below:

- Atlanta Regional Commission (ARC)
  - Committee on Aging
  - Public Involvement Advisory Board (PIAG)
  - Regional Workforce Board
- Douglas County Government
- Douglas County Greenway Trails Alliance
- City of Austell Government
- City of Douglasville Government
- City of Villa Rica Government
- Cobb County Government
- Paulding County Government
- Georgia Department of Transportation (GDOT)
- Georgia Regional Transportation Authority (GRTA)
- Georgia House and Senate Representatives
- Transportation Planning Board
- Wellstar Douglas Hospital
- Arbor Place Mall
- Douglas County School Board
- Douglas Chamber of Commerce
- Rotary Club
- Optimists Club
- American Legion
- Douglas Historical Society
- A Gift of Love Services
- Junior League of Douglas County
- Kiwanis Club of Douglas County
- S.H.A.R.E.House
- SAVII, Inc.
- Douglas County Literacy Council, Inc
- Family Transition Center
- Mercer University

A series of stakeholder interviews were conducted at project inception to develop an overall understanding of the transportation issues confronting Douglas County. A total of eight interviews were held with local elected officials, transportation and planning staff, and citizen organizations.

Public outreach activities are directly related to the project schedule and the completion of major milestones. Public outreach activities were scheduled around milestones to insure adequate input and feedback.

- Project Kick-off Meeting, April 30, 2007
- Project Advisory Team Meeting, June 26, 2007

- Board of Commissioners Public Hearing 1, August 2007
- Project Advisory Team Meeting, September 13, 2007
- Community Visioning Workshops (6), September 26 and 27, 2007
- Elected Officials Briefing, October 2, 2007
- Project Advisory Team Meeting, October 23, 2007
- Project Advisory Team Meeting, December 4, 2007
- Project Advisory Team Meeting, February 26, 2008
- Project Advisory Team Meeting, April 22, 2008
- Elected Officials Briefing, June 16, 2008
- Project Advisory Team Meeting, June 24, 2008
- Public Open House, June 26, 2008

### **1.2.3. Institutional Coordination**

Coordination with regional and state agencies, as well as the surrounding counties, is important to ensuring the development of a CTP that addresses the transportation needs of Douglas County in a manner consistent with local, state, and regional policy directives. As a result, the CTP was developed through coordination with:

- Atlanta Regional Commission (ARC);
- Georgia Department of Transportation (GDOT);
- Georgia Regional Transportation Authority (GRTA);
- Cities of Douglasville, Austell and Villa Rica; and
- Adjacent counties – Cobb, Fulton, Paulding, and Carroll.

The project team met with each the agencies listed above to gather input concerning issues to be considered during the development of the CTP.

The ARC Public Involvement Advisory Group (PIAG) played a significant role in agency coordination. All public outreach activities were coordinated through PIAG to avoid conflicts with outreach activities associated with other plans and studies being conducted by the agencies listed above.

### **1.2.4. CTP Goals and Objectives**

The PAT and community input assisted in the development of the CTP goals and objectives. The goals and objectives are the guiding principles for the development of

CTP projects and policies. The following are the goals and associated objectives for the CTP:

- **Goal: Enhance safety and mobility for all travelers**
  - Objective: Incorporate multimodal facilities into transportation planning
  - Objective: Provide safe, accessible, and efficient transportation facilities
  - Objective: Prioritize and balance transportation projects with political and public support
- **Goal: Preserve and protect neighborhood integrity**
  - Objective: Preserve existing neighborhood characteristics and aesthetics
  - Objective: Maintain consistency with comprehensive land use plans
  - Objective: Implement density appropriate facilities
- **Goal: Preserve the environment**
  - Objective: Incorporate connectivity to greenways
  - Objective: Identify priority environmental resources
  - Objective: Sustain water quality
  - Objective: Support alternative modes that reduce negative air quality impacts
- **Goal: Promote economic development**
  - Objective: Focus new developments in economically depressed areas
  - Objective: Locate transportation facilities near economic development activities
- **Goal: Encourage public involvement**
  - Objective: Provide updated information through various media in accessible locations
  - Objective: Offer multiple opportunities for participation

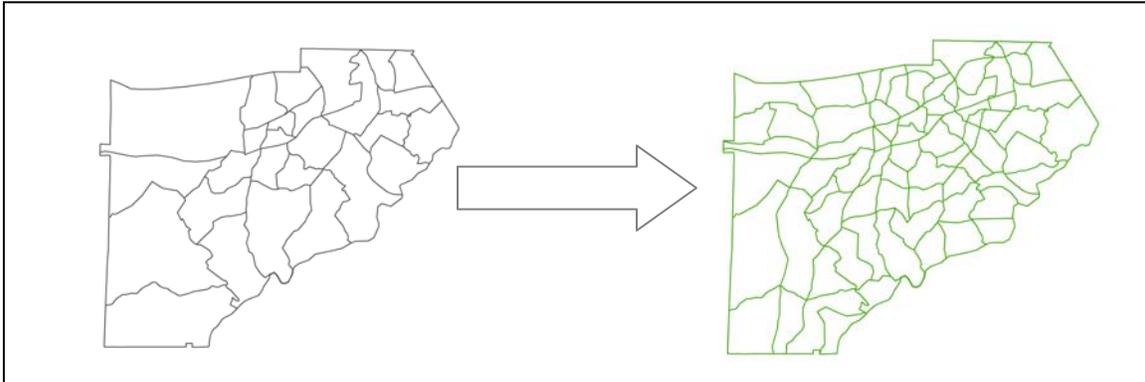
#### **1.2.5. Model Development**

The ARC regional travel demand model was used as a basis for measuring congestion in Douglas County by using the appropriate travel network and existing and future population, households, and employment. To ensure proper detail additional traffic analysis zones (TAZs) were created and assigned socio-economic data. The existing 27 TAZs were subdivided to provide more detail for a total for 78 TAZs countywide. Smaller

TAZs were assigned mostly in areas anticipated to experience significant growth and increasing densification. Figure 1 shows the refinement of the TAZs.

The refined travel demand model was applied using base year 2005 and future year 2030 data to determine the impact of growth on the transportation system. The model network remained unchanged with the exception of additional capacity-adding projects from the approved Envision 6 Regional Transportation Plan (RTP). The results of the travel demand modeling are discussed in detail in Chapter 3.

**Figure 1 – Traffic Analysis Zone Refinement**



## 2. ENHANCED ELEMENTS

Part of the CTP process is to explore enhanced elements of transportation planning that can improve multimodal use and mobility, and also be incorporated into the Comprehensive Plan update that creates compatibility between land use and transportation functionality. The CTP enhanced elements include, sub-area studies, intelligent transportation systems (ITS), alternative transportation modes and transportation demand management (TDM), bicycle and pedestrian facilities, safe routes to school, and freight movement. Separate technical documents were prepared for each of the enhanced elements and are provided in the appendices.

### 2.1. SUB-AREAS

Three sub-areas were identified and analyzed within Douglas County in coordination with the PAT and in more detail with the Cities of Douglasville, Villa Rica and Austell.

#### 2.1.1. Arbor Place Mall

The Arbor Place subarea is anchored by the Arbor Place Mall located on Douglas Boulevard and is roughly bordered by SR 5/Bill Arp Road to the west, I-20 to the north, Chapel Hill Road to the east, and Arbor Parkway to the south. The Arbor Place Mall is a major economic engine for Douglas County and more specifically for the city of Douglasville. The mall draws patrons from across the metropolitan Atlanta region concentrating primarily on the western suburbs and the eastern parts of Alabama. A large amount of “big-box” retailers such as Kohl’s, Target, Wal-Mart, Lowe’s and Home Depot have also opened augmenting the tremendous amount of commercial square feet available to shoppers in the area. The combination of the mall and surrounding retail establishments have put a tremendous burden on the two intersections that serve as the gateways to the Mall – Douglas Boulevard at SR 5/Bill Arp Road and Douglas Boulevard at Chapel Hill Road.

Previous studies including the *Douglasville Livable Centers Initiative (LCI)* (2001), the *City of Douglasville Transportation Study* (2000) and the *Arbor Place Mall Transportation Study* (1999) recommended improvements to the intersections serving the mall entrances. Many of these recommendations have been implemented and other long-range recommendations (by 2010) are now placed within a different context based on the continued growth of the area. The Arbor Place Mall Transportation Study recommended two right turn lanes from southbound Chapel Hill to westbound Douglas Boulevard. Only one right turn lane is currently in place. The parcel immediately adjacent to the existing right turn lane is vacant, providing an opportunity to implement the long-range recommendation of a second right turn lane at that location. The same study also recommended two left turn lanes from southbound SR 5 to eastbound Douglas Boulevard. Currently only one left turn lane is in place at this location. New developments surround this intersection and adding an additional left turn lane may not be feasible because of roadway constraints.

The focal point of this subarea is access to and traffic around the mall. Three entrances provide access directly to the mall; a northeast and northwest entrance off of Douglas Boulevard and a southeast entrance accessed via Chapel Hill Road. The mall serves not only local residents but is also a major regional retail hub. Non-local visitors access the mall from I-20; and may use either SR 5 or Chapel Hill Road. City and county staff have expressed that the intersection and signal timing has been maximized.

Needs identified in the Arbor Place Mall sub-area include:

- Improve the northeast entrance
- I-20 ramps to Chapel Hill Road
- Diversion of local traffic from I-20 (I-20 being used as local connection)
- Alleviation of safety hazards; primarily on Chapel Hill Road and Douglas Boulevard
- Better signage directing travelers to mall entrances

### **2.1.2. Downtown/Government Center**

The Downtown/Government Subarea includes two key activity nodes. The first node includes the businesses along Broad Street (US 78) as well as the City government buildings along Church Street all of which fall within the Douglasville Historic District. Connected by Campbellton Street, the second node to the south includes the Douglas County Courthouse, Wellstar Douglas Hospital, the Douglas County Transportation Center, and the Woodie Fite Senior Center. This node is bordered by Campbellton Street to the west and SR 92 to the east. The node is bisected by Hospital Drive which serves as the main access facility.

Previous studies including the *Douglasville Livable Centers Initiative* (LCI) (2001), the *Broad Street Downtown Douglasville Traffic Analysis* (2001), the *City of Douglasville Transportation Study* (2000) and the *Downtown Transportation Study* (1998) recommended improvements for transportation facilities in Downtown Douglasville, many of which have been implemented.

The predominant downtown transportation corridors are Broad and Campbellton Streets. Broad Street lies within the Downtown Douglasville Historic District and fronts a series of shops and restaurants. Thirty-five trains a day on average utilize the east-west Norfolk Southern corridor including Amtrak service. As part of the principal alternate to I-20, Broad Street experiences some level of congestion especially during train crossing events. Coupled with angled and parallel parking along a short segment of the road, Broad Street can become bottlenecked at certain times of the day.

As traffic volumes have increased, the need for additional capacity has been suggested. However, most concepts have suggested removing buildings in the immediate area around the Campbellton Street intersection. The SR 92 relocation project, which ties into the existing SR 92 at Brown Street to the north and Hospital Drive to the south, would bypass the downtown district completely, greatly reducing the cut-through traffic currently using Campbellton Street. Campbellton Street serves as the major thoroughfare from the downtown area and points north to the Arbor Place Mall. City officials as well as residents would like to see Campbellton Street used as was originally intended, a residential street. Returning Campbellton Street to a strictly residential street would be a challenging task in the absence of the SR 92 relocation project.

A series of major destinations are located within the southern node of this subarea. Situated along Hospital Drive are the Douglas County Courthouse, Douglas County Transportation Center, Woodie Fite Senior Center, Wellstar Douglas Hospital,

Douglasville-Douglas County Water and Sewer Authority (WSA) and a variety of smaller businesses that are major traffic generators. A project to widen Hospital Drive to four lanes from Prestley Mill Road to SR 92/Fairburn Road was recently completed adding much-needed capacity to this vital link connecting SR 92 to the Campbellton Street/Chapel Hill Road area. However, as the area continues to grow, Hospital Drive will likely begin to see more peak hour congested conditions.

Needs identified in the Downtown/Government Center sub-area include:

- Relieve congestion on downtown streets
  - Broad Street
  - Campbellton Street
  - Hospital Drive
  - Fairburn Road/Highway 92
- Improve safety conditions, especially at railroad crossings
- Enhance walkability
- Provide truck loading locations

### **2.1.3. SR 6 Industrial Area**

The southeastern quadrant of Douglas County (including parts of the City of Douglasville) is quickly becoming one of the major freight distribution centers in the north Georgia region. The majority of freight transported in the United States is by truck. For this analysis, the SR6 Industrial Subarea was identified due to its unique character and need to address certain issues before the area becomes less vibrant or desirable. The area is partially located within the city of Douglasville bisected by SR 6/Thornton Road from south of I-20 and along the Cobb and Fulton County borders to Riverside Parkway. Major intersections within this subarea include the SR 6 intersections with Factory Shoals Road, Douglas Hill Road and Riverside Parkway as well as parts of the Six Flags Parkway corridor to the east and parallel to SR 6. The area's southern border is nestled along the Chattahoochee River with easy southern access to the Fulton Industrial Boulevard industrial district and I-285 and equally simple access to I-20 and the Norfolk-Southern Intermodal Center in Austell to the north. This area has seen a significant amount of growth in industrial uses over the last decade. Mainly concentrated on light- and medium-industrial use such as warehousing and distribution, the amount of truck traffic has increased exponentially.

Previous studies have addressed issues related to freight movement and operational changes needed to support truck traffic including the *SR 6 Corridor Study* and the ARC's *Atlanta Regional Freight Mobility Plan*. A detailed freight movement analysis is being conducted as part of the CTP and the findings are presented in a separate technical document. The SR 6 corridor is a major freight hub linking the industrial complexes of Douglas, Fulton and Cobb Counties.

Needs identified in the SR 6 Industrial sub-area include:

- Upgrade to truck friendly design standards
- Provide alternative routes for vehicular traffic
- Improve area aesthetics to buffer industrial from residential areas
- Improve safety of SR 6 because this roadway has the highest frequency of injury in Douglas County
- Reconfigure the interchange of SR 6 and I-20

## **2.2. INTELLIGENT TRANSPORTATION SYSTEMS**

To meet future challenges, traffic operations strategies are essential and affordable alternatives to major capacity additions. The goal of Intelligent Transportation Systems (ITS) is to maximize the performance of the county's existing transportation infrastructure to facilitate safer, faster travel and enhanced mobility for the public. Douglas County has identified ITS as an important strategy to meeting future transportation needs. The ITS emphasis coupled with the CTP process exemplifies the Douglas County Mission Statement which is:

*Douglas County will greet the future, while at the same time preserving its small town feel, its safe and rural environment, its valued historic and natural resources, and the continued creation of a quality built environment, while maintaining and developing a reasonable, balanced tax base.*

Although ITS is not specifically mentioned in the mission statement, it will help prepare the county for the future. ITS provides a communications infrastructure and physical devices in the field, that when managed by a proactive and well-trained operations staff, can improve mobility and mitigate congestion. A key ITS service that is Advanced Traffic Management Systems (ATMS), which includes hardware, software, networking, and operations necessary to monitor and control traffic signals and other ITS devices.

ITS-related infrastructure in the county primarily consists of traffic signal systems. However, a fiber optic network services the Douglas County School System that could be used to provide the School System's Transportation Department real-time access to county traffic information. In addition, there are other communication medium, legacy twisted pair and wireless, installations as well as several fiber optic cabling projects in the county in various stages of completion that will provide communication to signals and other ITS field devices in the near future.

## **2.3. ALTERNATIVE TRANSPORTATION MODES AND TRAVEL DEMAND MANAGEMENT**

Travel demand management (TDM) strategies represent a broad range mobility options that may improve overall transportation efficiency. Often a TDM plan combines multiple strategies to effectively address transportation issues such as congestion, air quality and accessibility. TDM strategies that are aimed at improving person throughput via special facilities, programs or public transportation choices were evaluated. Other TDM strategies such as Intelligent Transportation Systems (ITS), bicycle and pedestrian

facilities, freight movement and access management were addressed in separate CTP technical memoranda.

The report reviewed existing services such as Douglas County Rideshare, GRTA Xpress bus serving Douglas County, and the recommendations of the Transit Planning Board. Based on the analysis additional recommendations for projects and services, policies and marketing strategies were made.

## **2.4. SAFE ROUTES TO SCHOOL**

Defining transportation needs at and around schools within Douglas County is important because schools are major traffic generators, particularly during the morning peak period, when school traffic and commuter traffic use the transportation system during the same time, often with undesired consequences, such as congestion and perception of decreased safety for students traveling to school.

The school-related transportation needs assessment has focused on screening Douglas County schools to determine if the transportation and development characteristics around the school can support safe walking or bicycling to school. Nationally, the Safe Routes to School (SRTS) federally funded program supports transportation alternatives for the school trip. The SRTS supports efforts to enable students in kindergarten through eighth grade to walk or bicycle to school. This effort is intended to assist Douglas County in implementing existing programs and garnering available resources to support walking and bicycling to school.

The analysis included an overview of the SRTS program and its potential application for Douglas County, findings of a school-related transportation needs assessment, potential strategies for Douglas County to consider related to alternative transportation needs at schools, and a listing of resources at the national, state, and local level for SRTS initiatives.

## **2.5. FREIGHT MOVEMENT**

The freight movement analysis was completed using a three-phased approach, developing a goods movement profile, evaluation of freight corridors and recommendations for the incorporation of freight traffic with transportation planning and development. Goods movement is a major element of the economy of Douglas County and maintaining freight flow for trucks and rail is important to the economic success of the area. However, the interaction between freight and general purpose traffic often creates delays and also presents significant safety issues. Transportation planning needs to include the freight element to balance the needs of both the traveling public and the movement of goods on a safe and efficient system.

The freight movement analysis identified freight needs in the area which are discussed in Chapter 3 and identified freight corridors and policy recommendations for improving freight mobility throughout Douglas County.

## **3. NEEDS ASSESSMENT**

The transportation needs in Douglas County were determined using multiple criteria including, projected population and employment, roadway deficiencies, travel demand model results and community input. The following summarizes the transportation needs for Douglas County.

### **3.1. DEMOGRAPHICS**

The population of Douglas County in 2005 was estimated to be over 111,000 people, and is expected to increase to more than 216,000 people in 2030, an increase of over 93 percent. The employment in Douglas County in 2005 was estimated to be approximately 38,000 and forecast to be almost 83,000 in 2030. This is an increase of over 118 percent. The current transportation system is already operating at unacceptable levels of service in many areas in the county. To meet the doubling of people and jobs, essential changes in the transportation system are required to support this growth. New developments in Douglas County including Tributary, Riverwalk and Mirror Lake communities are attracting much of the projected growth in population and employment.

#### **3.1.1. Population and Employment**

Population and employment data from the Atlanta Regional Commission's Envision 6 model were used to explain trends and forecast changes for the future. The data is divided in several different categories to highlight specific areas of interest that provide insight for the needs assessment. For the CTP, 2005 was considered the base year while 2030 was used as the forecast year. Figures 2 and 3 show the estimated population and employment for the years 2005 and 2030, the percent change in population or employment between 2005 and 2030 and the percentage of total population or employment for both 2005 and 2030.

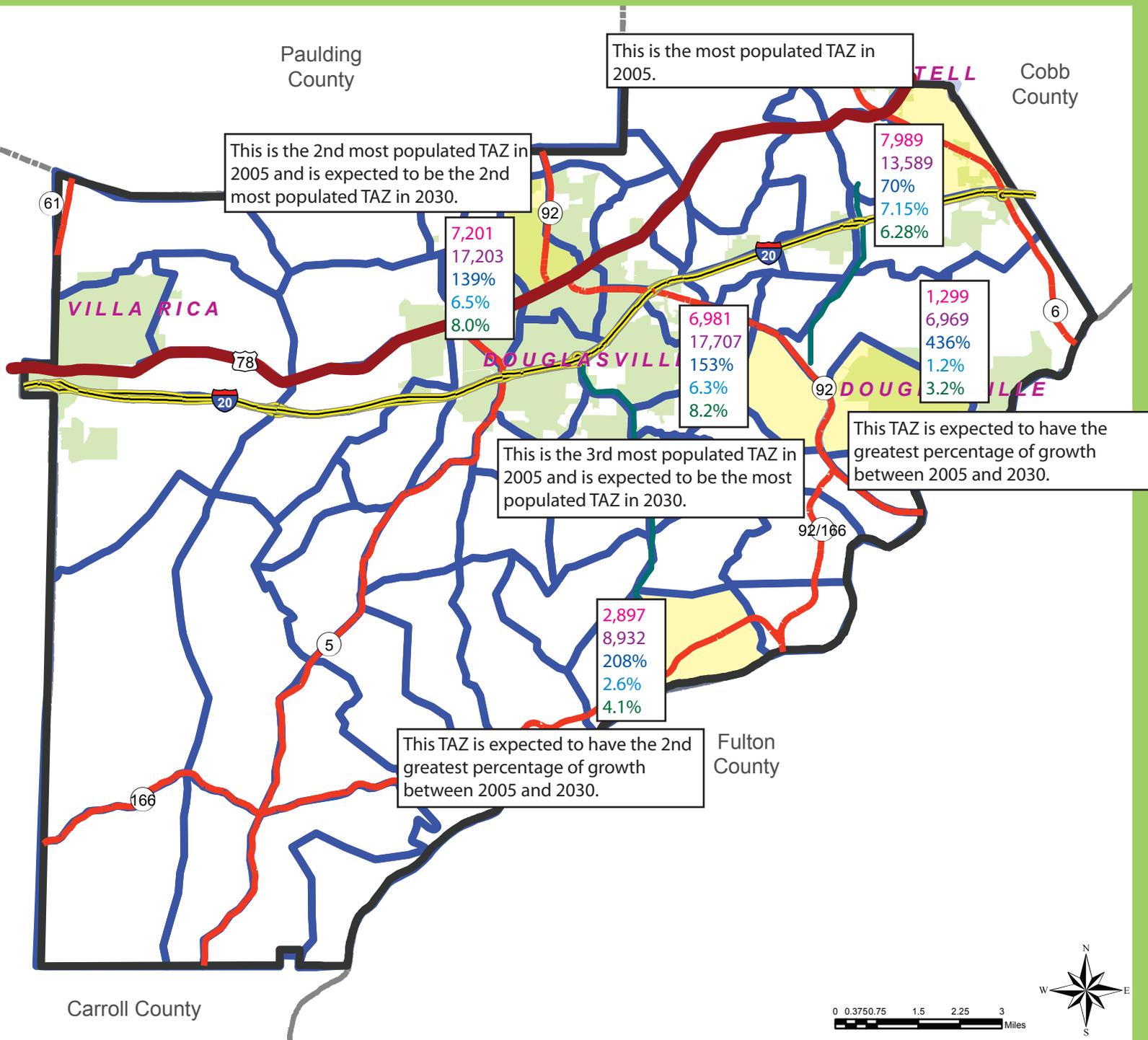
The data was calculated using transportation analysis zones (TAZs). A TAZ is a geographic unit used by transportation professionals in computerized models to understand transportation patterns for vehicles, transit and bicycle and pedestrian use. The TAZs presented in Figures 1 and 2 were created from necessary refinements of the regional model used by ARC to evaluate transportation in the metropolitan region. The regional TAZs were divided into smaller TAZs during the Needs Assessment phase of study to provide a more precise level of detail.

The most populated area of the county in 2005 was on both sides of I-20 and to the west of Lee Road. Growth is moving south of this area, surrounding the Highway 92 corridor. The TAZ to the east of Highway 92 at the county's border will have the greatest percentage of growth between 2005 and 2030; increasing by more than 400 percent. The increase is a result of the amount of residential development that has occurred in this area bordering Fulton County. The TAZ that encompasses the portion of Villa Rica within Douglas County is the second most populated in 2005 and is expected to remain the second most populated in 2030. Villa Rica has experienced substantial residential growth in the portion of the city with the Mirror Lake developments.

**DOUGLAS COUNTY, GEORGIA  
COMPREHENSIVE  
TRANSPORTATION  
PLAN**

**POPULATION TRENDS  
IN DOUGLAS COUNTY**

**Figure 2**



**Legend**

- Transportation Analysis Zone Boundary
- County Boundary
- Interstate
- US Highway
- State Highway
- Major County Road
- City Limits

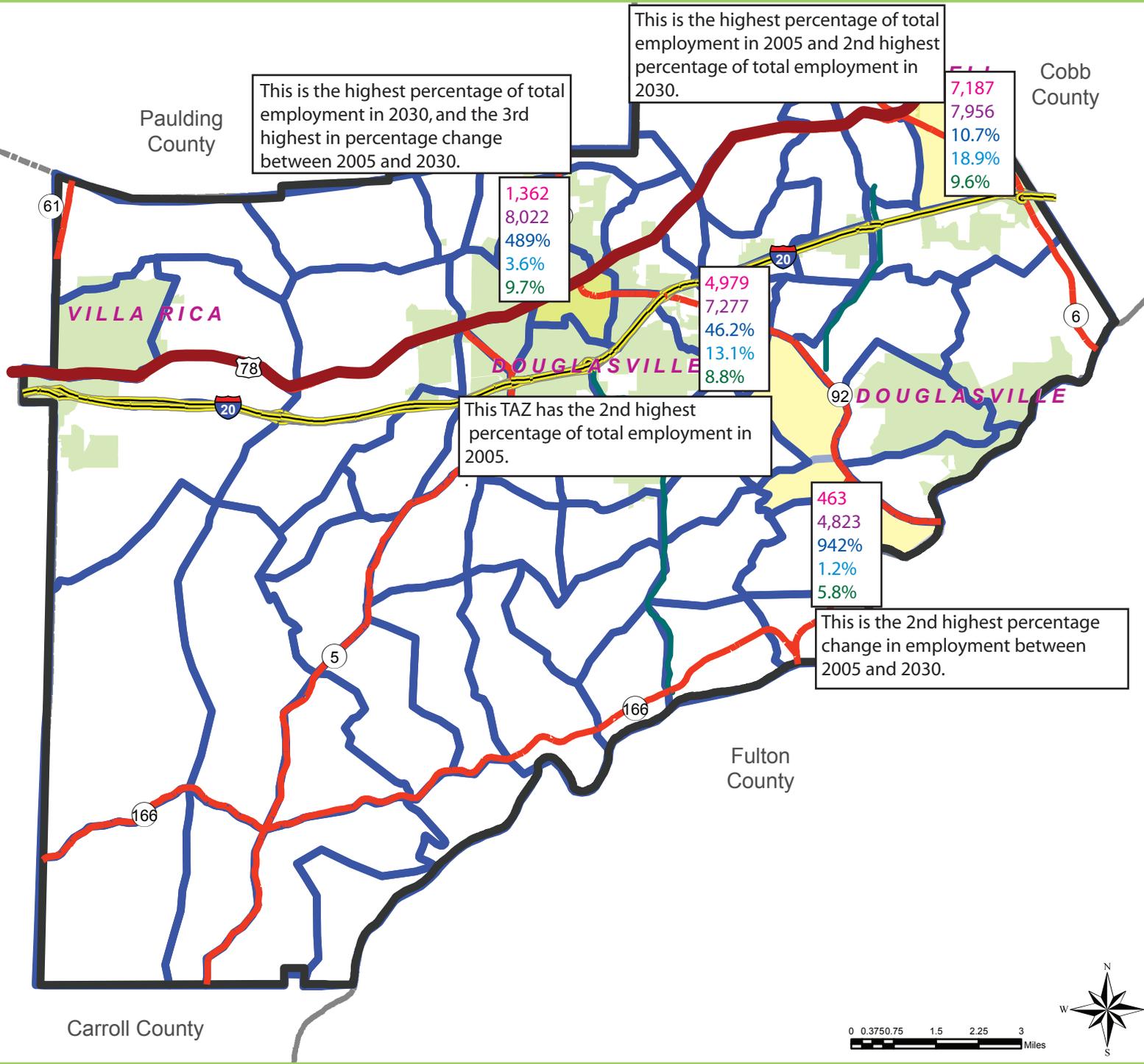
- Total Population in 2005
- Total Population in 2030
- Change in Population Between 2005 and 2030
- Percent of Total Population in 2005
- Percent of Total Population in 2030



# DOUGLAS COUNTY, GEORGIA COMPREHENSIVE TRANSPORTATION PLAN

## EMPLOYMENT TRENDS IN DOUGLAS COUNTY

Figure 3



- Legend**
- Transportation Analysis Zone Boundary
  - County Boundary
  - Interstate
  - US Highway
  - State Highway
  - Major County Road
  - City Limits
- Total Employment in 2005  
 Total Employment in 2030  
 Change in Employment Between 2005 and 2030  
 Percent of Total Employment in 2005  
 Percent of Total Employment in 2030



The majority of the employment in the county in 2005 is on the eastern edge bordering with Cobb County and in the TAZ that contains the Arbor Place Mall. However, employment opportunities through 2030 are spread throughout the county. Employment just south of I-20 on the western side of the county is expected to increase by more than 1,000 percent. North of I-20 in the Villa Rica area, employment is expected to increase by nearly 500 percent. Another emerging employment center in Douglas County is west of Highway 92 toward the south side of the county. The two areas with the highest employment in 2005 will remain heavy employment centers, but additional employment centers are emerging countywide.

### **3.1.2. Housing and Density**

The 2000 population density within the City of Douglasville (1.47 persons per acre) was the lowest among 14 cities above 20,000 population in ARC's ten-county planning area. According to census tract data by ARC, residential densities in 2006 were highest in central Douglasville (1.2 dwelling units per acre) and the Arbor Place/Northern Chapel Hill area (1.1 dwelling units per acre).

From 2000 to 2006, multifamily housing growth slightly outpaced the growth in single-family housing. Census Bureau data obtained by ARC indicates there were no multifamily permits issued in 2006 by Douglas County, one of only two counties in the Atlanta urbanized area that did not issue permits during that year. Nonetheless, several areas of Douglas County experienced significant growth in multifamily housing units between 2000 and 2006. Based on census tract data from ARC, notable areas of multifamily housing growth include the Bright Star area (increase from seven to 305 units), the West Lithia Springs/County Line Road area (increase from 68 to 610 units) and central Douglasville (increase from 611 to 1,202 units). Multifamily housing units within the entire City of Douglasville grew by 78.8 percent during this period, the highest rate among twelve cities in the ARC planning area with more than 3,000 multifamily units. Meanwhile, the 2004-2025 Comprehensive Plan reports a high proportion of three-bedroom apartments, approximately 40 percent of all rental units, within the unincorporated area.

### **3.1.3. Race and Age**

ARC estimates indicate that the proportion of minority populations in the Douglas County population increased from 22.7 percent in 2000 to 27.0 percent in 2006. The minority population in Douglas County is predominantly African-American.

About 16.2 percent of the Douglas County population is aged 55 years and above, similar to the 16.5 percent of the population for the ten core counties in the ARC planning area (which includes Douglas County). ARC estimates also indicate the 2000-2005 percentage growth rate among older adults for Douglas County (26.3 percent) lags behind that of the ten-county ARC planning area (30.6 percent). However, ARC projects the growth of persons age 55 and older in Douglas County to grow by 235 percent between 2000 and 2030, compared to a projected growth of 127 percent for the ten-county ARC planning area (including Douglas County).

According to the 2006 ARC-Carl Vinson Institute survey, 41 percent of Douglas County's older adults (age 55 and above) are currently employed, the highest proportion within the ten-county ARC planning area, including 27 percent employed full-time. Among this

working population, at least 49 percent of those surveyed intend to continue working at least part-time, while only 41 percent have near-term plans for retirement.

### **3.1.4. Community Needs**

The following community needs were identified based on community input, stakeholder interviews and the analysis of the area demographics.

- Explore lower cost solutions rather than increasing capacity
  - Signal timing
  - Turning lanes
- Consider bicycle and pedestrian facilities when developing new transportation projects or improving existing
- Reduce bottlenecks and manage congestion
  - Arbor Place Mall
  - Chapel Hill Road
  - Thornton Road
  - Highway 5
  - Fairburn Road/Highway 92
  - Rose Avenue
  - Liberty Road
- Safety improvements
  - Better signing and marking
  - School areas and connections

## **3.2. LAND USE AND DEVELOPMENT**

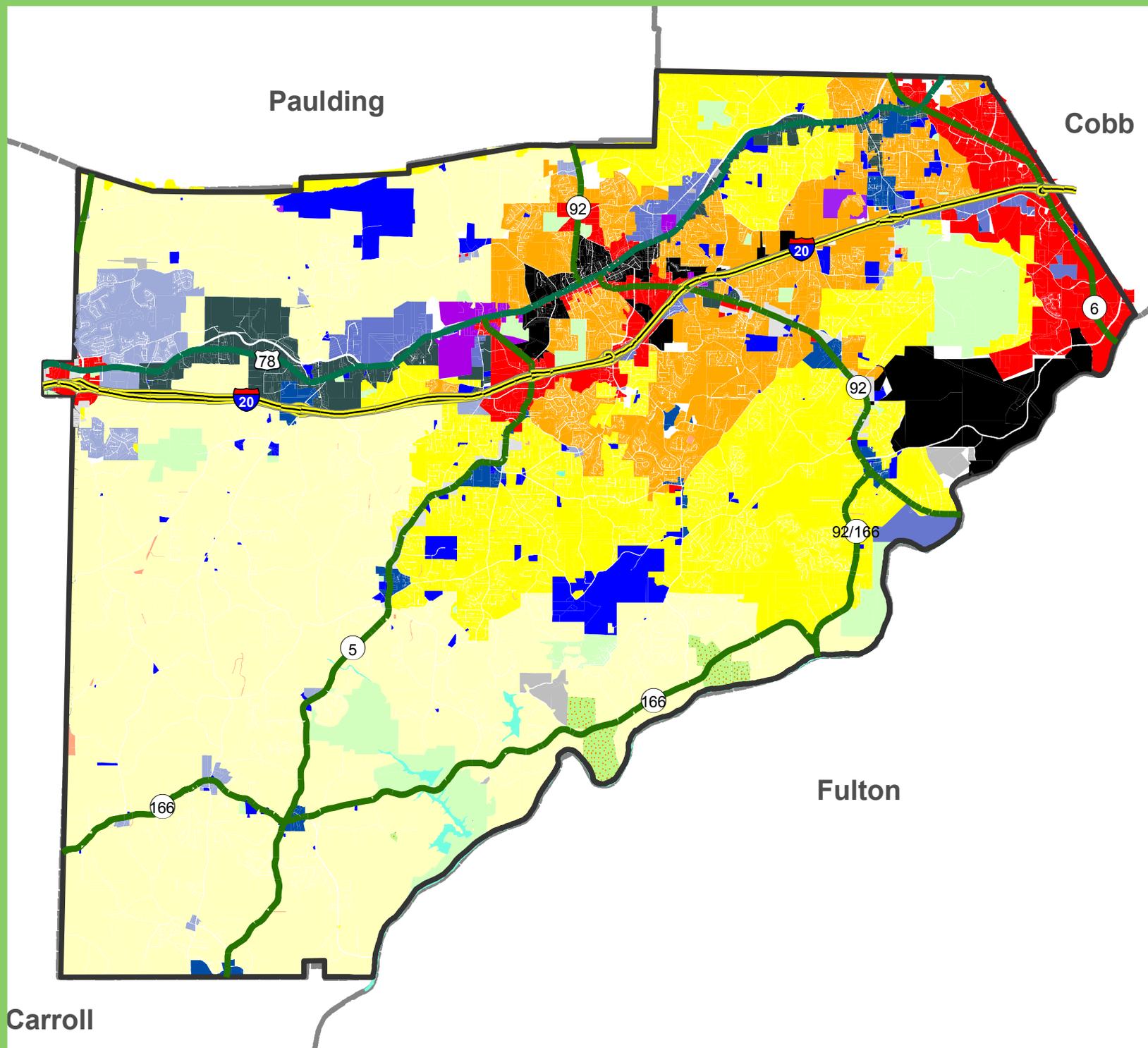
Expanding and enhancing the current roadway network alone will not meet the County's future transportation challenges. Innovative and integrated policies and practices are critical to determine solutions to future travel demand. Effective and proactive land use planning is important to favorably impact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

Specific transportation system needs are identified through the consideration of existing and future land use circumstances. The Future Land Use map (Figure 4) is a representation of the Comprehensive Plan's goals and policies and indicates where various types of land uses are permitted. The plan map designations indicate predominant types of land uses, including, commercial, residential, industrial, agricultural, parkland and rural.

# DOUGLAS COUNTY, GEORGIA COMPREHENSIVE TRANSPORTATION PLAN

Future Land Use

Figure 4



### Legend

- INTERSTATE
- STATE
- US Hwy
- Other
- County Boundary
- Land Use**
- Unknow
- Agricultural
- Commerce Center
- Community Village Center
- Intensive Industrial
- Mixed Use Corridor
- Neighborhood Village Center
- Parks / Recreation / Conservation
- Public / Institutional
- ROW
- Rural Places
- Suburban Living
- Transitional Corridor
- Transportation / Communication / Utilities
- Urban Residential
- Workplace Center
- city
- water



Carroll

Paulding

Cobb

Fulton

The Future Land Use Plan map was developed to illustrate the most desirable pattern of land use in Douglas County. The Future Land Use Plan map was developed taking into consideration the land use patterns illustrated on the County's Existing Land Use Plan Map, the Current Zoning Map, approved Planned Unit Developments (PUDs), Developments of Regional Development (DRIs) and other developments, topographic characteristics, natural resource sensitivity, the availability of infrastructure, and needs demonstrated by residential and employment forecasts. Figure 5 shows the DRIs in the county.

The majority of the urban area land use within the county is residential, over 90 percent, and of that total, over 90 percent of all housing units within the county are single-family residences. The cities of Douglasville, Villa Rica and Austell contain a large portion of the multi-family units within the county as is appropriate within a more urban setting. Although master planned developments and village retail areas are planned, unincorporated Douglas County will continue to be predominately single family residential in nature.

Over the last 10 years, new commercial/industrial development in Douglas County has clustered largely within two areas, the unincorporated area adjacent to the City of Douglasville and the southeast end of the county along Thornton Road. Arbor Place Mall within the City of Douglasville and the Chapel Hill Corridor are the centers of retail growth. As residences age and traffic becomes heavier, the Highway 5 corridor has seen some transition from residential to small retail establishments. Carefully coordinated transportation and land use planning may result in transitional compatible growth within these corridors, which is extremely important in ensuring the county's livability and economic vitality in the future.

During the overall review of existing land use several problem land use patterns emerged:

- Extensive single-use districts;
- Strip commercial development;
- Incompatible districts adjacent to the City of Douglasville; and
- Extensive single-use districts.

### **3.2.1. Land Use and Transportation**

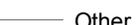
It is imperative that the proposed Comprehensive Transportation Plan (CTP) supports the Comprehensive Plan to assure coordination and consistency between population and housing forecasts, natural and cultural resource protection, economic development policies and land use policy and plans. The CTP is intended to become the transportation element of the Comprehensive Plan in the next update. In some cases transportation demand and the lack of adequate systems may very well influence significant change in land use character and patterns. Likewise, land use changes will dictate needs for expansion of the transportation infrastructure. Developing joint policies for land use and transportation can direct and control growth.

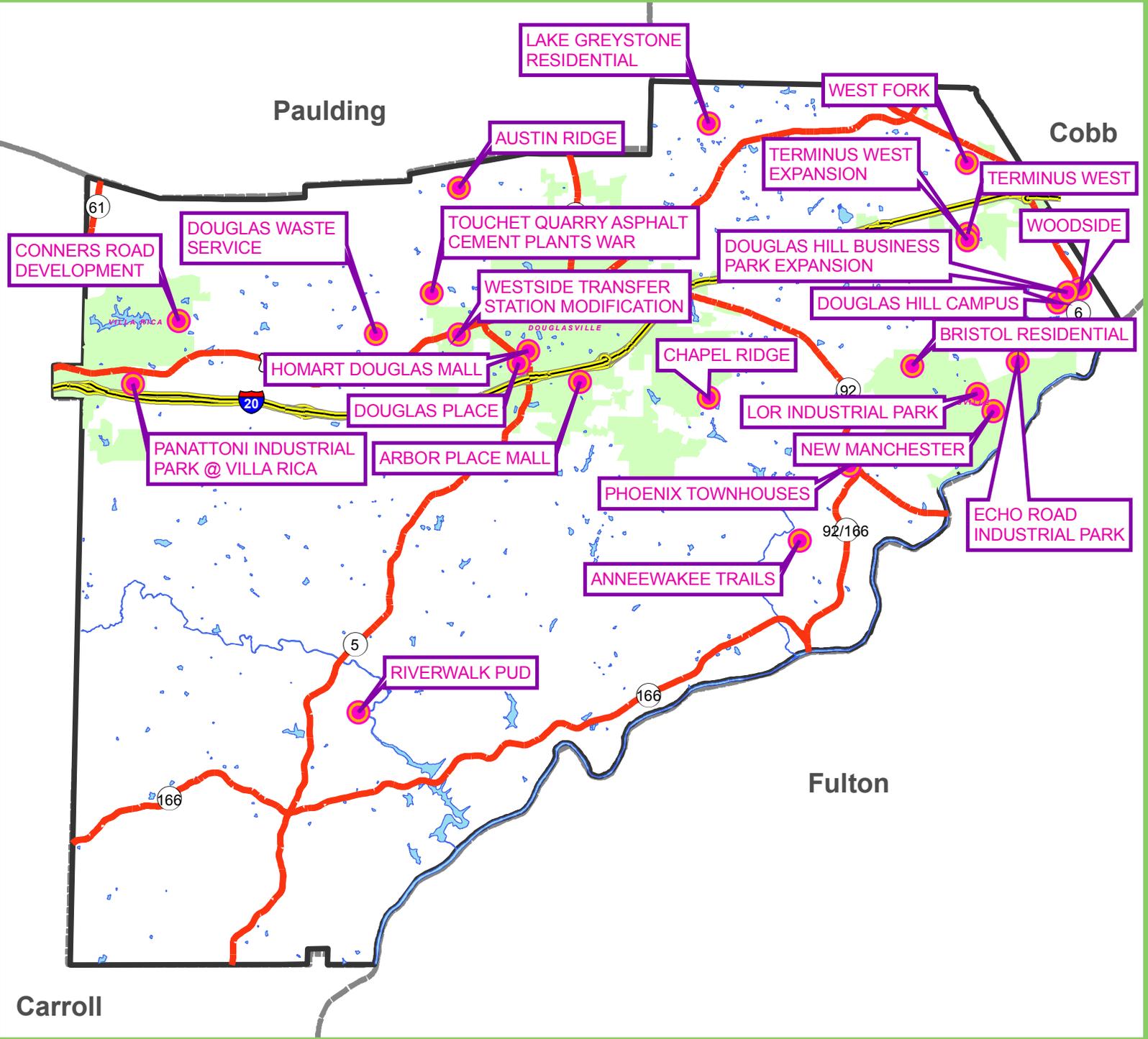
**DOUGLAS COUNTY, GEORGIA  
COMPREHENSIVE  
TRANSPORTATION  
PLAN**

**Developments of  
Regional Impact (DRI)  
(April 2007)**

**Figure 3**

**Legend**

-  DRI
-  INTERSTATE
-  STATE
-  US Hwy
-  Other
-  Lake/Pond
-  City Limits
-  County Boundary



Douglas County is impacted by its relationship to metropolitan Atlanta, and is also on the edge of a major tourist generator for the region (Six Flags). The county is significantly affected by external growth of Paulding County and lack of options to move traffic across the railroad barrier. This barrier also has caused negative impact to person and freight mobility in northern unincorporated areas of the county as external growth increases. Transportation improvements have been tested to ensure they meet elements of future land use needs such as economic development, environmental impact, regional land use plans, and essential transportation system performance measures.

The City of Douglasville is the urban core area/activity center in the county. The transportation system is impacted by both local and regional travel much of which travels through the city on interstates and state routes. The county and the city need to coordinate improvement and development efforts on these corridors to ensure balance between local and regional travel needs. I-20 is both a blessing and a burden for the County, acting as a barrier to north-south mobility in the county but also providing access to the rest of the region. The impact of the interstate has certainly influenced jobs, population growth and the local economy of the county. Even though it is unlikely that additional interchanges will be approved in the short-term, other than HOV access interchanges, it is important to determine the long-term need for additional interchange(s). Interstate short-trips are common within the county and are a function of inadequate surface street connectivity for east-west movements.

Providing people with more choices in housing, shopping, communities and transportation is a key aim of “smart growth”. In response to predicted worsening traffic congestion and a diversity of transit-dependent users (especially seniors and children), transportation modal options are important elements of the CTP. The county is coupling a multimodal approach to transportation with supportive land-use patterns that create a wider range of transportation options such as concentrated villages and centers that provide a high level of land use interaction and internal and external linkages. Multi-modal systems offering alternatives to the automobile travel, especially single occupant vehicles (SOVs), must be incorporated into future plans. Transit, Transportation Demand Management, and pedestrian and bicycle friendly communities will become increasingly more important as the county’s population grows and opportunities and funds to expand conventional transportation systems diminish due to air quality issues and related federal, state and regional mandates. Understanding future development facilitates efficient choices when considering transportation improvements. These planned developments will place increased demands on the transportation infrastructure.

### **3.2.2. Land Use and Transportation Needs**

- Ensure compatibility between land use and transportation infrastructure
- Implement policies that evaluate land use as a component of transportation project development
- Apply access management strategies
- Retrofit roadways for improved access management:
  - Chapel Hill Road

- Fairburn Road/Highway 92
- State Route 6
- Bankhead Highway/US 78
- Consider the following access management treatments as appropriate for associated land use and travel demand
  - Driveway consolidations
  - Adjoined parking areas
  - Pullovers and auxiliary lanes
  - Intersection control modifications
  - Median and lane separation treatments
  - Turn restrictions and channelization

### 3.3. TRAVEL DEMAND MODEL

The impact of forecast growth on the transportation system is dramatic. The following table shows the percentage of the network by level of service (congestion) for 2005 and 2030.

<b>Table 2 - Percentage of network congested</b>			
<b>Level of Service</b>	<b>Volume/Capacity ratio</b>	<b>% of network Congested 2005</b>	<b>% of network Congested 2030</b>
A	<0.5	22.3%	13.4%
B	0.5 to 0.69	12.4%	13.0%
C	0.7 to 0.84	25.5%	8.0%
D	0.85 to 1.0	17.2%	13.2%
F	=>1.0	22.6%	52.4%

If no action is taken and growth continues as expected, over 52 percent of the county's transportation network will be operating at more than capacity, causing unacceptable congestion. Another interesting measure of performance for the network is average speed. The travel demand forecasting model predicts a significant decrease in travel speed on the 2030 network. As Table 3 shows the estimated average travel speed in 2005 will decrease on the average from 28 mph to 24 mph 2030. All functional classifications are impacted.

<b>Table 3 - Average Speed by Functional Classification</b>			
<b>Functional Class</b>	<b>2005 Speed</b>	<b>2030 Speed</b>	<b>Percentage Difference</b>
Freeway	42 mph	36.8 mph	-12.4%
Arterial	32.9 mph	27.2 mph	-17.3%
Collector	25.6 mph	21.3 mph	-16.8%
Local	11.9 mph	11.6 mph	-2.5%
<b>Total</b>	<b>28.1 mph</b>	<b>24.2 mph</b>	<b>-13.8%</b>

Figure 6 maps anticipated congestion of the 2030 using the 2005 network and reflects model results that forecast significant congestion resulting from the county's growth. Over one-half of the network will be operating at an unacceptable level of service (LOS) spread throughout the study area. There are significant deficiencies in the transportation networks as shown by the anticipated LOS. Major areas of concern detected using the model are limited improvements to north-south connections to major routes such as I-20 and US 78, commuter traffic from outside the county and a limited number of river crossings between Fulton and Douglas Counties.

# DOUGLAS COUNTY, GEORGIA COMPREHENSIVE TRANSPORTATION PLAN

2030 Existing  
plus Committed

Figure 6



## Legend

- 2030 E+C  
LOS
- A/B
  - C
  - D
  - E
  - F
  - Railroad
  - Roadways
  - City Limits

Roadways needing improvements based on the travel demand model results include:

- I-20 westbound from the Cobb County line to Lee Road
- I-20 eastbound and westbound, west of Bright Star Road
- Highway 5 from I-20 to S. Giles Road
- Bright Star Road between I-20 and Highway 5
- US 78
- All north-south links connecting Paulding and Cobb Counties north of I-20
  - Paulding Connections
    - Dorris Road/S. Flat Rock Road
    - SR 92
    - Burnt Hickory Road
  - Cobb Connections
    - Brownsville Road
    - Sweetwater Road
    - SR 6
- Chattahoochee River crossings
  - Capps Ferry Road
  - Campbellton/Fairburn/Highway 92

### **3.4. SAFETY**

Resolution of transportation capacity needs will meet some safety concerns. However, high crash rates were used to identify locations to be reviewed for potential roadway deficiencies. The following locations have been identified as high accident locations and are shown in Figure 7:

- SR 6 and I-20
- SR 6 and US 78
- SR 92 and I-20
- SR 92 and US 78
- SR 92 between I-20 and US 78

- Chapel Hill Road and I-20
- SR 5 and I-20
- SR 5 and Douglas Boulevard
- SR 5 and US 78

### **3.5. RAILROAD CROSSINGS**

Douglas County's Norfolk Southern railroad provides significant east-west freight service with an average of 35 trains per day passing through downtown. Suggestions to meet needs caused by rail traffic follow:

- Reduce the number of at-grade crossings
- Improve the geometrics of existing at-grade crossings
- Consider ITS treatments to better manage interaction between trains and traffic

### **3.6. BRIDGES**

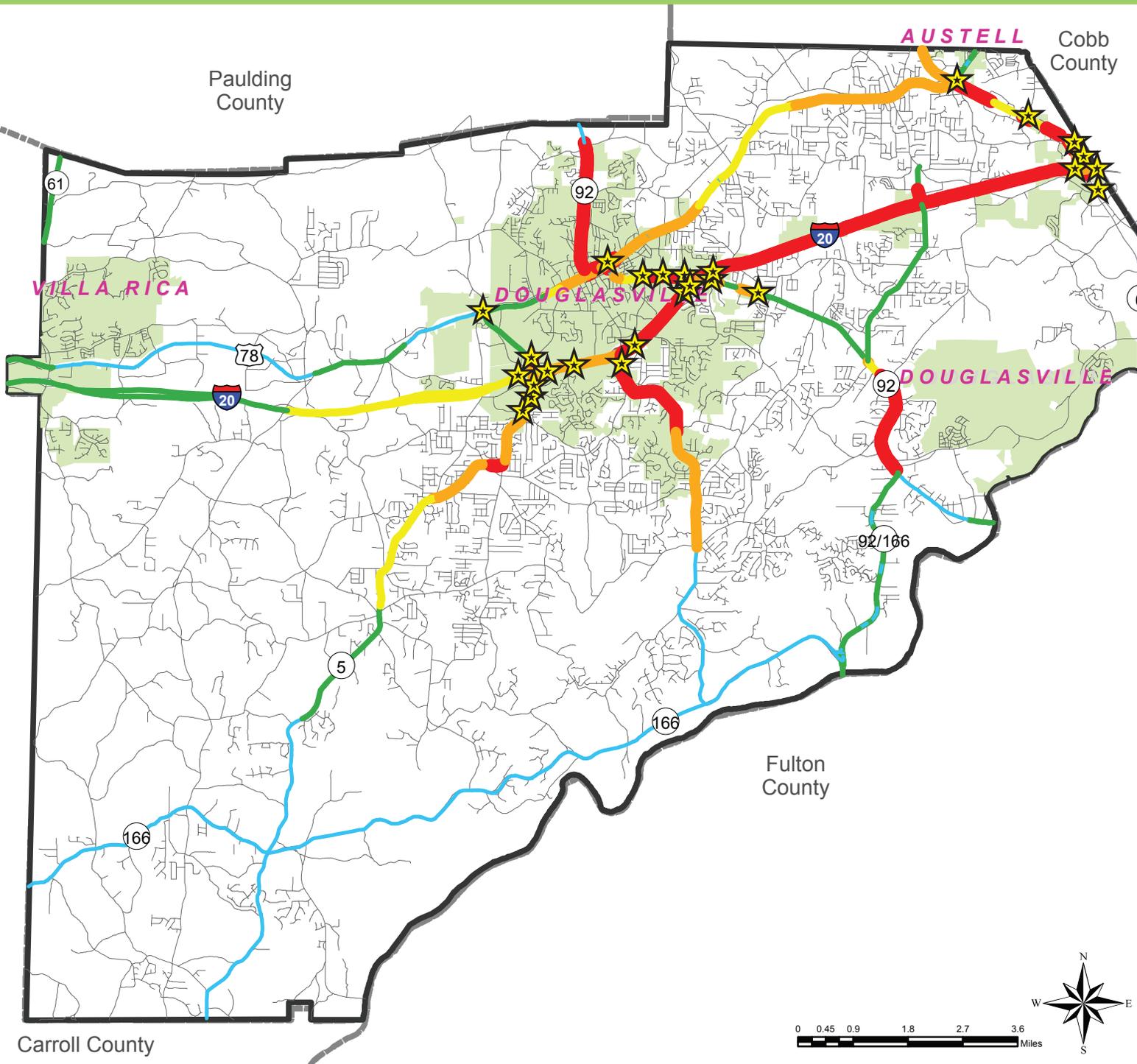
A survey of bridge conditions in Douglas County revealed that some had low sufficiency ratings and should be addressed. The location of the bridges is shown on Figure 8. A summary of bridge conditions follows:

- Replace or rehabilitate bridges with low sufficiency ratings
  - SR 166 at Anneewakee Creek
  - Anneewakee Road at Anneewakee Creek
  - North County Line Road at I-20
  - Lee Road at I-20
  - Burnt Hickory Road at I-20
  - Mason Creek Road at Mobley Creek Tributary
  - West Tyson Road at Keaton Creek Tributary
  - Stockmar Road at Mud Creek
- When possible combine bridge project with roadway improvement project

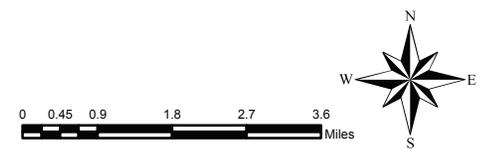
**DOUGLAS COUNTY, GEORGIA  
COMPREHENSIVE  
TRANSPORTATION  
PLAN**

**High Accident Clusters  
(2003-2005)**

**Figure 7**



- Legend**
- High Accident Cluster
  - LOS A
  - LOS B
  - LOS C
  - LOS D
  - LOS E or worse
  - Local Roads
  - City Limits
  - County Boundary



Carroll County

Fulton County

Paulding County

Cobb County

VILLA RICA

DOUGLASVILLE

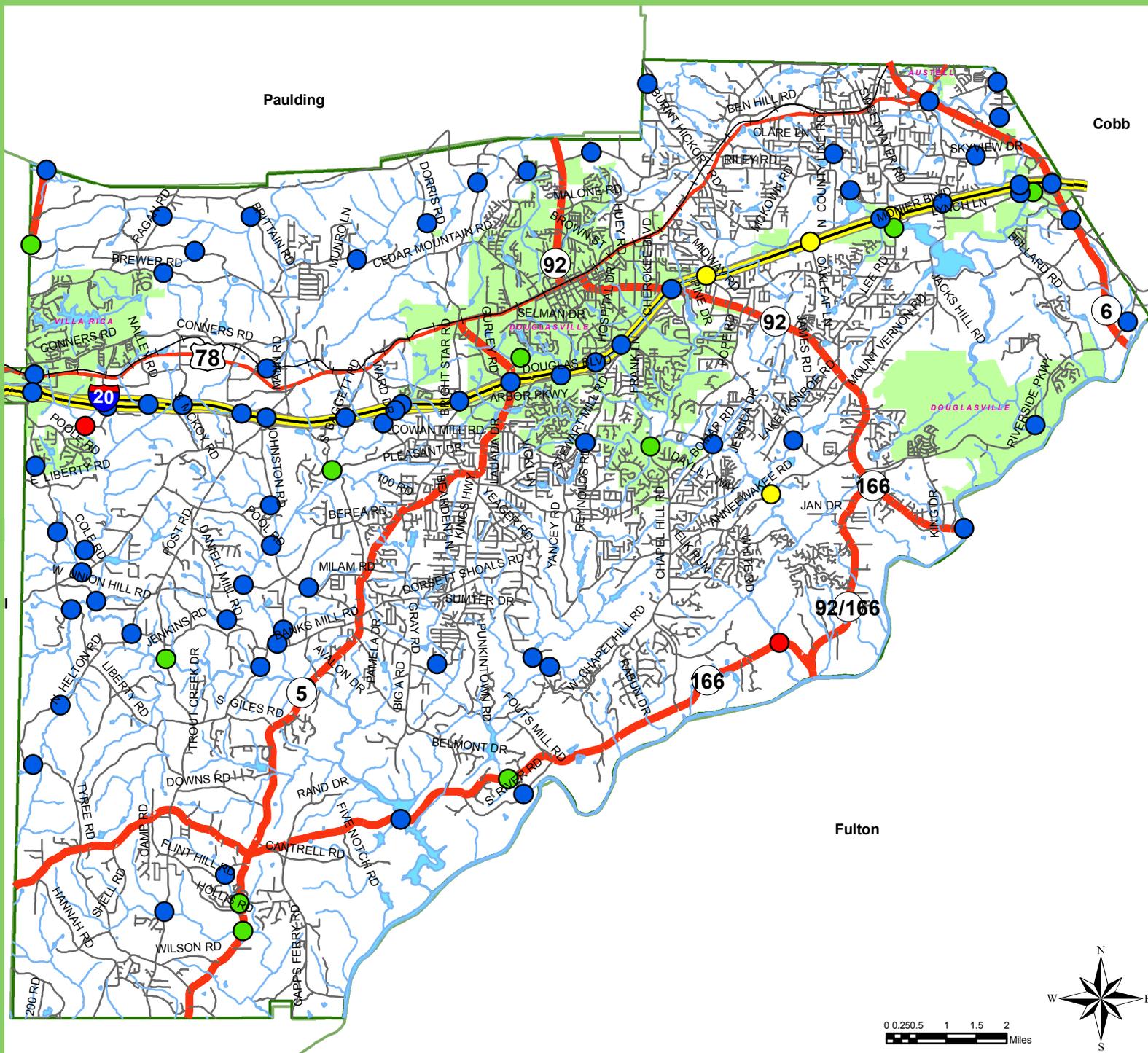
AUSTELL

DOUGLASVILLE

# DOUGLAS COUNTY, GEORGIA COMPREHENSIVE TRANSPORTATION PLAN

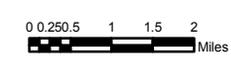
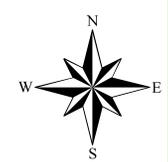
## Bridge Locations and Sufficiency Status

Figure 8



### Legend

- Sufficient
- Low Sufficiency
- Low Sufficiency and Older than 50 years
- Older than 50 years
- INTERSTATE
- STATE
- US Hwy
- Other
- Lake/Pond
- City Limits
- County Boundary



## 4. MULTIMODAL TRANSPORTATION PROGRAM OF PROJECTS

To meet needs identified in the Needs Assessment Report and summarized earlier, an initial list of projects was developed. This list included projects from the current TIP and RTP, previous studies and projects in the area and additional projects resulting from the needs analysis. This list was refined to reduce redundancy where multiple projects were identified for a given location. The refined list was generated by technical analysis, public involvement, stakeholder input, and institutional comments from planning partners. The prioritized list is referred to as the needs or aspiration program of projects, is provided in Appendix A.

### 4.1. METHODOLOGY

A methodology was developed for prioritizing the needs program of projects to identify those that are the highest priority to move forward in the regional planning process. The methodology for developing the needs program included development and implementation of project prioritization criteria identified in Table 4.

**Table 4 - Project Prioritization Criteria**

<b>Criteria</b>				<b>Weight</b>
<b>Congestion</b>				<b>50%</b>
2030 E+C Volume to Capacity Ratio				
	<b>3</b>	<b>2</b>	<b>1</b>	
V/C Ratio over 1.0		V/C Ratio from .80 to 1.0	V/C Ratio under .80	
<b>Safety</b>				<b>15%</b>
Roadway Crashes or Bridge Sufficiency Rating				
	<b>3</b>	<b>2</b>	<b>1</b>	
High accident location			other locations	
	<b>3</b>	<b>2</b>	<b>1</b>	
Sufficiency under 25		Sufficiency between 25 and 49	Sufficiency over 50	
<b>Land Use</b>				<b>10%</b>
Supports or is in contradiction of the Future Land Use Plan				
	<b>3</b>	<b>2</b>	<b>1</b>	
Supports Future Land Use		No relation to Future Land Use	Contradicts Future Land Use	
<b>Multimodal</b>				<b>5%</b>
Connectivity to multimodal facility				

3	2	1
Contains or connects to multimodal facility		Does not connect to multimodal facility

**Economic Development**

5%

Proximity to economic development area from Future Land Use Plan

3	2	1
Within identified economic development area	In proximity to economic development area	Outside proximity to economic development area

**Public/PAT Input**

5%

Public or stakeholder support or opposition to project

3	2	1
Comments in favor of project	No comments	Comments in opposition of project

**Access Management Corridor**

3%

Thoroughfare functional classification

3	2	1
Thoroughfare plan arterial	Thoroughfare plan collector	Thoroughfare plan local

**Freight**

3%

Primary or secondary truck route designation

3	2	1
Primary Truck Route	Secondary Truck Route	Not a Truck Route

**Preservation of the Environment**

2%

Adverse impact or near environmental constraint

3	2	1
No potential for adverse impact	Near environmental constraint	Potential for adverse impact

**RSTS**

1%

On, connecting to, or off ARC's Regional Strategic Transportation System

3	2	1
On RSTS	Connects to RSTS	Off RSTS

**UGPM**

1%

Supports or is in contradiction of the ARC's Unified Growth Policy Map

3	2	1
Supports UGPM		In contradiction to the UGPM

Applied to the list of needs, the prioritization criteria led to an objectively prioritized list of projects designed to meet short- and long-term transportation needs. This program of projects is not constrained by available revenue; it is merely a list of projects needed to provide travelers on the Douglas County transportation system a level-of-service that is acceptable through 2030 based on anticipated growth.

## 4.2. RECOMMENDED PROJECTS

The recommended projects were determined based on countywide and regional needs. Previous plans and programs were reviewed and those that met the needs are included in the CTP. The projects identified for Douglas County in the 2008-2013 TIP are all included in the CTP by reference. Several projects were included in the prioritization process to demonstrate the need for the projects and ensure that they move forward in the regional planning process. Those projects are:

- DO-252A-C – Chapel Hill Road widenings
- DO-282A-C – Metro Arterial Connector – Realignment and widening of SR 92
- DO-220A-B – Lee Road widening and improvements
- DO-22 – Lee Road widening and operational improvements

All but two of the Envision6 RTP projects are included in the CTP. It is recommended that the Douglas Boulevard Extension, Segment 1 (DO-31A) and Segment 2 (DO-31B) be removed from the RTP. It has been determined that recommended improvements to Timber Ridge Road would meet the needs and that these two projects are no longer needed. The other long-range projects were included in project prioritization process.

Recommendations from several other studies are included by reference. These include all the projects included in the ARC sponsored studies:

- SR 6 Corridor Study
- City of Douglasville Livable Centers Initiative
- SR 92/Fairburn Road Livable Centers Initiative

A total of 42 projects were recommended from the needs assessment beyond those projects in the TIP and RTP. The needs based list of projects were divided by project type and include roadway capacity adding projects, roadway operational improvements, intersection improvements, bridge upgrades, new interchanges, interchange modifications, operational improvements and roadway capacity projects. Three of the recommended projects generated comments from the City of Douglasville. CTP-6A, I-20 West at SR 5 interchange modification and CD system, which included HOV restrictions;

CTP-6B, I-20 West at Bright Star Road interchange modification and CD system, which is recommended to be a general purpose interchange; and CTP-9A, relocation of the state route designation from SR 5 to Post Road are recommended to be subject to significant additional study before incorporation by the County into its transportation program<sup>1</sup>. Table 5 lists the recommended projects based on the needs assessment and they are shown by type in Figure 9. Project details and priorities are located in Appendix A.

<b>Table 5 – CTP Project Recommendations</b>	
<b>Project Number</b>	<b>Project</b>
CTP-1	Chapel Hill Road Extension (including new Chattahoochee River crossing)
CTP-2	Outer Southern Arc-four Phases
CTP-3	Inner Southern Arc-four phases
CTP-4	I-20 West at SR 6
CTP-5	New interchange-N. County Line Rd at I-20W
CTP-6A	I-20 West at SR 5 interchange modification and CD system concept
CTP-6B	I-20 West at Bright Star Road interchange modification and CD system concept
CTP-7	SR 5/Kings Highway/Central Church Road
CTP-8	US 78 at Post Road/Mann Road
CTP-9A	Relocate SR 5 to Post Road
CTP-9B	Post Road/Tyree Road
CTP-10	Burnt Hickory Road
CTP-11	Ragan Road/Friendship Church Road Connector
CTP-12	Dorris Road
CTP-15	Adaptive Traffic Signal Pilot Program - Chapel Hill Road/SR 5/CBD area
CTP-16	Unconventional intersection design at SR 166 and Chapel Hill Road
CTP-17	Roundabout at SR 166 and Post Road
CTP-18	Unconventional Intersection design at SR 166 and SR 92
CTP-19	Stewart Mill Road
CTP-20	Blairs Bridge Road
CTP-21	SR 5/Bill Arp Road
CTP-24	Bright Star Road at Cowan Mill Road
CTP-25	Kings Highway at Yeager Road
CTP-26	East County Line Road at N. County Line Road
CTP-27	Pope Road at Bomar Road
CTP-28	Groovers Lake Road at Vulcan Drive

<sup>1</sup> The City of Douglasville completed a separate Citywide Comprehensive Transportation Plan in November 2008.

<b>Table 5 – CTP Project Recommendations</b>	
<b>Project Number</b>	<b>Project</b>
CTP-29	Central Church Road at Yancey Road
CTP-30	Dorsett Shoals Road at Coursey Lake Road
CTP-31	Mason Creek Road/Johnston Road Bypass Improvements
CTP-33	US 78 at S. Baggett Road and John West Road
CTP-34	Skyview Drive Bridge
CTP-35	Mount Vernon Road Bridge
CTP-36	West Tyson Road Bridge
CTP-39	Prestley Mill Road
CTP-43	Chicago Avenue/Cedar Mountain Road
CTP-44	Chapel Hill Road operational improvements
CTP-45a	Timber Ridge Road Widening
CTP-45b	Timber Ridge Road widening and Managed Lane Connection
CTP-46	Mann Road/Brewer/Stockmar
CTP-47	Liberty Road at I-20 improvements
CTP-52	Chapel Hill Road
CTP-53	Stewarts Mill Road operational
DO-019	SR 166/Fairburn Road/Campbellton Road
DO-021	Riverside Drive
DO-022	Lee Road - Widening - Bankhead to I-20 and Bankhead to County Line
DO-031A	Douglas Boulevard Extension: Segment 1
DO-031B	Douglas Boulevard Extension: Segment 2
DO-220A	Lee Road: Segment 2
DO-220B	Lee Road (including bridge over I-20 West)
DO-252A	Chapel Hill Road
DO-252B	Chapel Hill Road
DO-252C	Chapel Hill Road
DO-282A	Metro Arterial Connector - SR 92 Realignment Phase I - Underpass
DO-282B	Metro Arterial Connector - SR 92 Realignment Phase II
DO-282C	Metro Arterial Connector - SR 92 Realignment Phase III
AR-H-201	I-20 West Managed Lanes (SR 6 to Bright Star)

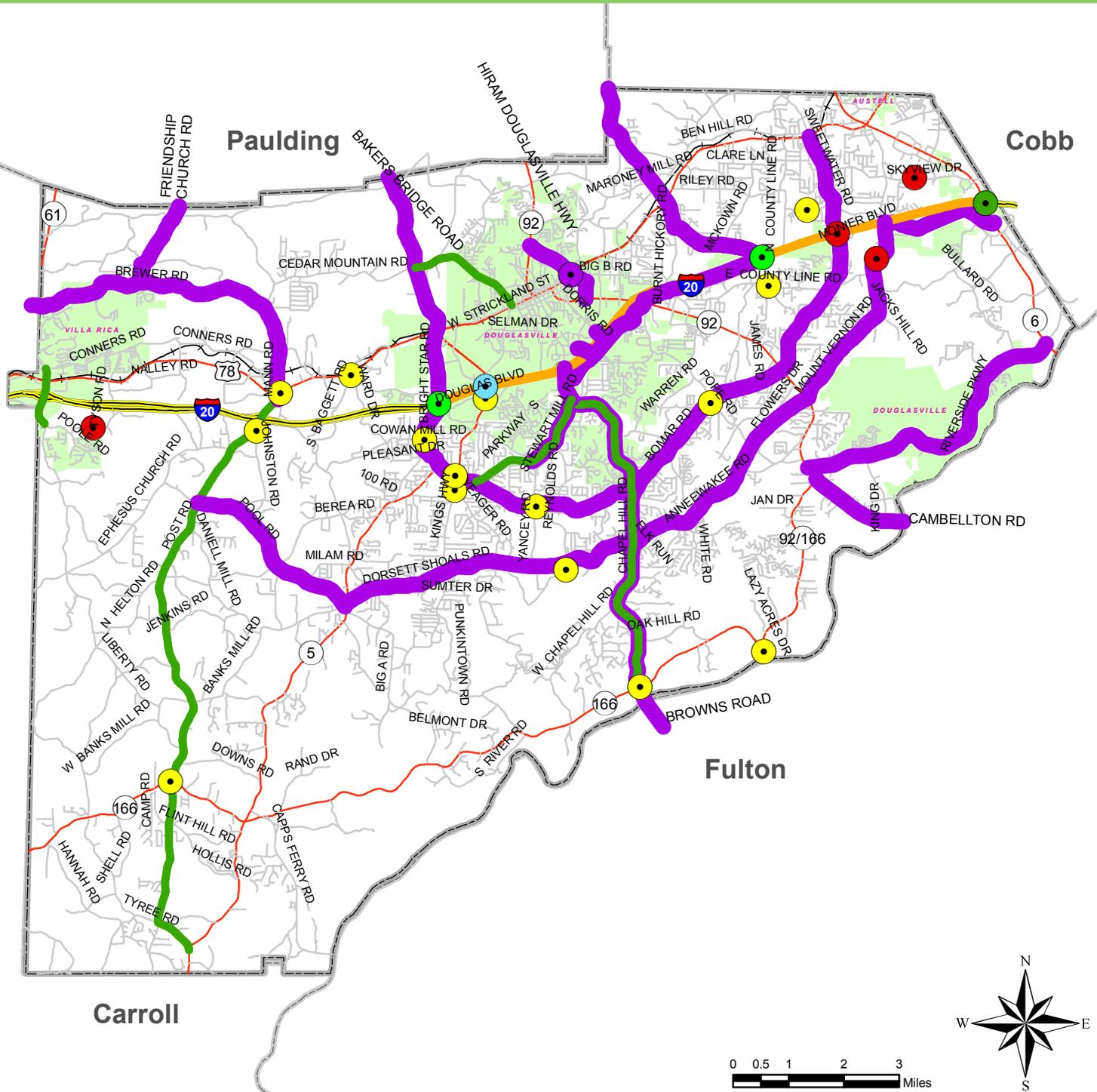
# DOUGLAS COUNTY, GEORGIA COMPREHENSIVE TRANSPORTATION PLAN

## Recommended and Proposed Projects

Figure 9

### Legend

- Bridge Upgrade
- Modify Interchange
- Modify Intersection
- New Interchange
- Operational Improvements
- Roadway Capacity
- Interstate Improvements
- Operational Improvements
- Roadway Capacity
- Local
- Interstate
- State
- US Hwy
- +— Railroad
- City Limits



### 4.3. ENHANCED ELEMENT RECOMMENDED PROJECTS

Each of the technical documents for the enhanced elements recommends projects and policies. The policies are listed in Chapter 6, the projects are listed here. The majority of the projects are lower cost improvements that could be implemented locally to improve conditions in the short-term.

#### 4.3.1. Sub-area Studies

Projects identified for the Arbor Place Mall sub-area are:

- Chapel Hill Road at I-20 east bound off-ramp-add east bound right turn lane for Chapel Hill Road SB traffic and add north bound lane within median for the north bound left turn movement for I-20 west bound
- Chapel Hill Road at I-20 west bound on-ramp-consider signaling south bound, through, and north bound left turn lane and correct west bound right turn skew
- Douglas Blvd new Mall entrance-consider roundabout option within mall property or roundabout intersection
- SR 5 at I-20 west bound ramp, add south bound lane within existing road section for south bound left turn movement for I-20 east
- SR 5 at I-20 east bound ramp, add north bound lane into median for north bound left turn movement to I-20 west
- Arbor Place Blvd at The Landing Drive-improve Arbor Place Blvd typical section also potential roundabout
- Arbor Place Blvd at Mall Ring Road-improve traffic circle to multi lane roundabout
- I-20 collector-distributor system
- SR 5 at Arbor Pkwy-add dual left turn lanes south bound and west bound
- SR 5 at Wesley Pond-add directional median opening

Projects identified for the Downtown sub-area are:

- SR 92 at US 78-convert EB RT to channelized free flow; add dual left turn lanes for north bound left turn movement; remove unnecessary signage and replace with clear, concise signage for SR 92 truck traffic (possibly overhead)
- Hospital Drive at Dorris Road-improve southeast radius to accommodate GRTA buses and improve sight distance
- SR 92 at Strickland St-add overhead signage for traffic direction

- Dorris Road at Transportation Center Drive-reconfigure intersection and improve signage
- US 78/Mozely St/Strickland St-enhance signal phasing/detection/operations and improve signage
- Campbellton St at Prestley Mill Road-potential single lane roundabout
- Campbellton St at Woods Valley Road-potential single lane roundabout
- Campbellton St at Selman Avenue-potential single lane roundabout
- Campbellton St at Woodrow Avenue-potential single lane roundabout
- SR 92 at Hospital Drive-convert turn lanes to free flow (channelized)
- Sidewalks/Context Sensitive projects-Prestley Mill Road to Campbellton and Hospital Drive

Projects identified for the SR 6 sub-area are:

- SR 6 at Riverside Parkway-add dual turn lanes for east and west bound traffic
- Six Flags Road at Factory Shoals-intersection improvements, potential roundabout
- Six Flags Road at Interstate West Parkway-intersection improvements, potential truck friendly roundabout
- Rockhouse Road/Factory Shoals Road/Bullard Road-improve horizontal alignment
- Factory Shoals Road at Douglas Hill Road-improve vertical alignment
- Riverside Parkway at Six Flags Road-signalize or potential unconventional intersection improvements
- SR 6 at Douglas Hill Road-signage or dynamic signage for left turn truck traffic
- SR 6 at Oak Ridge Road-add west bound right turn lane
- SR 6 at North Blairs Bridge Road- add west bound right turn lane

#### **4.4. INTELLIGENT TRANSPORTATION SYSTEMS (ITS)**

Recommendations regarding ITS include:

- Develop an ITS Master Plan
- Consider the following potential ITS treatments:
  - Traffic Control Center (TCC)
  - Closed Circuit Television (CCTV) Cameras
  - Speed monitoring
  - Railroad crossing signals

## **4.5. ALTERNATIVE TRANSPORTATION RECOMMENDATIONS**

Three of the enhanced elements technical documents include recommendations for alternative modes of transportation. These include Transportation Demand Management, Bicycle and Pedestrian Needs Assessment and School Related Transportation Needs. The school related transportation is predominantly policy recommendations and is included in Chapter 6.

### **4.5.1. Transportation Demand Management and Public Transportation**

The County will not be able to build capacity to meet future demand fast enough to prevent decreasing levels of service. Travel demand management and public transportation projects include:

- Centralizing transportation demand management both from a management and technology perspective
- Conduct a bus feasibility study for local service
- Accept all project in Concept 3 recommended by the Transit Planning Board

### **4.5.2. Bicycle and Pedestrian**

Below are eight recommended corridors to be considered to enhance local and regional long range bicycle and pedestrian facilities. These corridors are presented in Figure 10.

- Bright Star Road/Central Church Road – This segment from Douglas Boulevard south to Stewart Mill Road will allow a connection between the existing sidewalk along Douglas Boulevard to the proposed sidewalk on Stewart Mill Road. Furthermore, a Park and Ride Lot is proposed near the intersection of Douglas Boulevard and Bright Star Road.
- US 78/Bankhead Highway – As more analysis is completed for the Bankhead Highway Corridor, it is recommended that any opportunities be identified for connecting a bicycle/pedestrian network along this corridor between the City of Douglasville and the City of Villa Rica.
- South Hillcrest Drive – A bike path and sidewalk are proposed for Prestley Mill Road in the City of Douglasville terminating at Slater Mill Road. As part of the LCI study for Highway 92, a trail is proposed along South Hillcrest Drive between

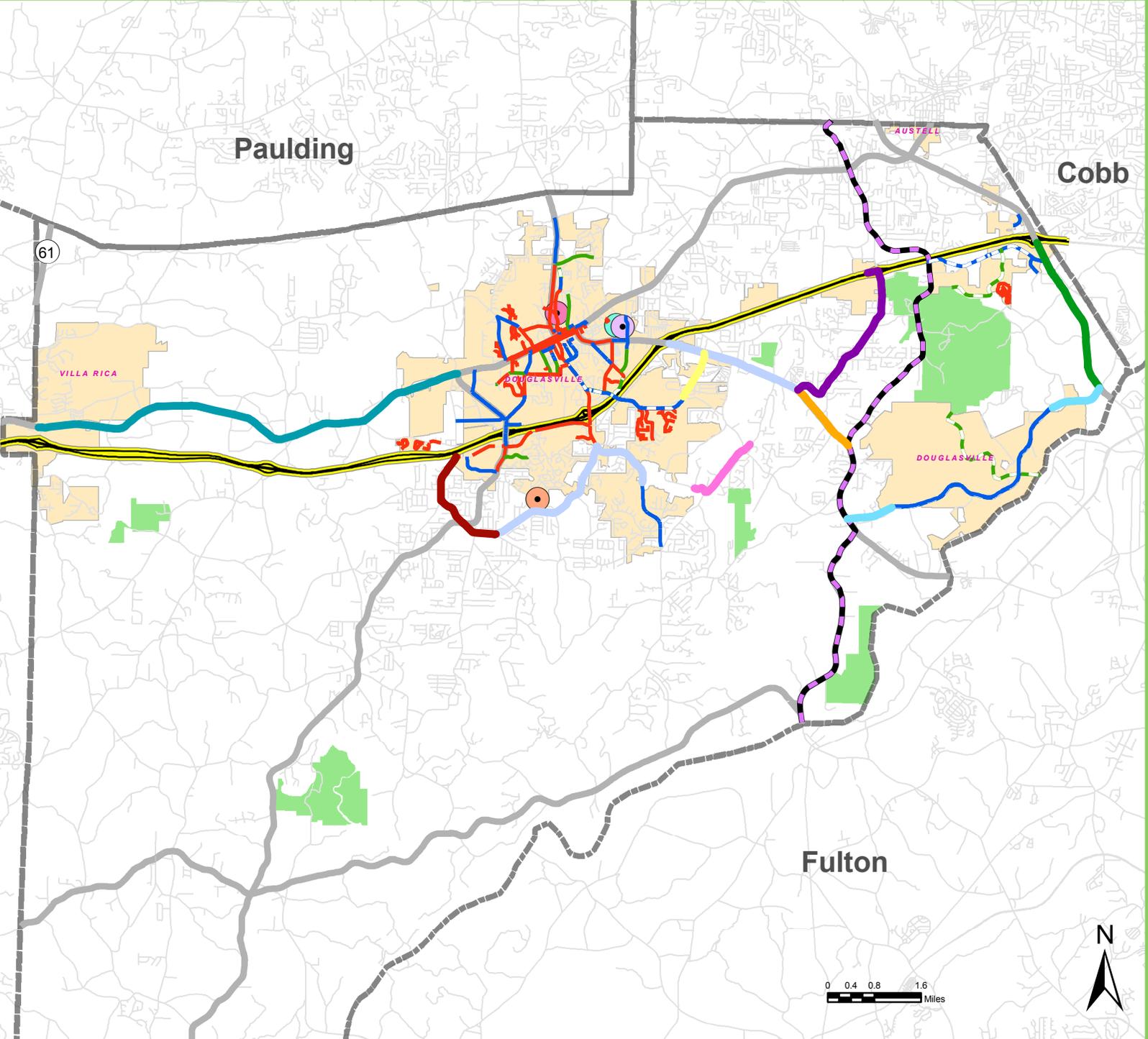
Longview Drive and Midway Road. If implemented, there is an opportunity to continue a trail south along Hillcrest Drive connecting these two segments.

- Lee Road – The portion of roadway between Interstate 20 and Highway 92 should be considered to provide connectivity between attractors such as the Highway 92 Activity Center, the Park and Ride Lot near the Interstate 20 interchange, and access to roads leading to Sweetwater Creek State Park.
- Highway 92/Riverside Parkway – A bike path and sidewalk are proposed along Riverside Parkway in the City of Douglasville. With trails proposed as part of the Highway 92 LCI study, there may be an opportunity to connect these two segments by continuing the facilities along Riverside Parkway west to Highway 166/Fairburn Road, then north to the proposed trails along Highway 92. Further analysis should be completed to determine if a trail could be located along or parallel to the highway.
- Riverside Parkway – A bike path and sidewalk are proposed along Riverside Parkway in the City of Douglasville. A portion of Riverside Parkway, east of the Douglasville city limits, continues east to Thornton Road. With a new Park and Ride Lot proposed near the intersection of Riverside Parkway and Thornton Road, there is an opportunity to continue the trail along this portion of roadway.
- Thornton Road – To extend the Riverside Parkway segment, bicycle/pedestrian facilities implemented along the portion of roadway between I-20 and Riverside Parkway could contribute to the regional network that connects attractors across the county and into the City of Douglasville and the City of Villa Rica. A Park and Ride Lot exists near the I-20 interchange and a lot is proposed near the intersection of Thornton Road and Riverside Parkway.
- Brookmont Parkway/Bomar Road – A trail is proposed to Bomar Road, northeast of Pope Road as part of the Highway 92 LCI study. If implemented, there is an opportunity to connect the trail to the proposed sidewalk along the intersection of Chapel Hill Road and Brookmont Parkway. Furthermore, this portion of the network could link Fowler Field, Douglas County Soccer Complex, and Deer Lick Park.

**DOUGLAS COUNTY, GEORGIA  
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PLAN**

**Long Term  
Bicycle & Pedestrian  
Recommendations**

**Figure 3**



- Legend**
- Long Term 1
  - Long Term 2
  - Long Term 3
  - Long Term 4
  - Long Term 5
  - Long Term 6
  - Long Term 7
  - Long Term 8
  - Other Planned Connections
- Douglasville Bicycle & Pedestrian Plan**
- Existing Sidewalk
  - Programmed Sidewalk
  - Proposed Sidewalk
  - Existing Multi-use Trail
  - Programmed Multi-use Trail
  - Proposed Bike Path
  - GDOT Central Route 15
- Tier 1 Identified Schools**
- Arbor Station Elementary
  - Burnett Elementary
  - Eastside Elementary
  - Stewart Middle
- Roadways**
- INTERSTATE
  - STATE
  - US Hwy



## 4.6. FREIGHT MOVEMENT

Primary and secondary truck routes were recommended for inclusion in the Unified Development Code and are listed below. The primary and secondary truck route recommendations are shown in Figure 11.

### 4.6.1. Primary Truck Routes

Based on the understanding of the existing and forecasted flow of commodities into and out of Douglas County and other important factors, such as the weight of freight commodities, how many vehicles are carried per day, and the amount of inbound and outbound freight, outlined in the Goods Movement Profile of the Freight Movement Report, the following routes were chosen as primary truck routes based on their ability to handle a higher volume of freight related travel.

- Interstate 20 - Also known as Tom Murphy Freeway, I- 20, which carries almost 120,000 vehicles per day through Douglas County, runs west to east across the county. The route consists of six to eight lanes.
- US Highway 78 - US Highway 78 lies north of Interstate 20 and runs west to east. It consists of two to four lanes with a continuous center turn lane on portions of the route. US 78 is also known as Bankhead Highway, Veterans Memorial Highway, and Broad Street.
- State Route 92 - State Route 92, which carries over 30,000 vehicles per day through Douglas County, runs northwest to southeast across the county. It consists of two to four lanes, is median divided on portions of the route and has a continuous center turn lane on other portions. SR 92 is also known as Dallas Highway and Campbellton Street north of I-20 and Fairburn Road south of I-20.
- State Route 6 - State Route 6, which carries nearly 60,000 vehicles per day across Douglas County, runs northwest to southeast across the eastern part of the county. It consists of four to eight lanes and is median divided. SR 6 is also known as Thornton Road.
- State Route 5 - State Route 5, which carries over 30,000 vehicles per day, runs south to north across the center of the county. It consists of two to four lanes and is partially median divided. SR 5 is also known as Bill Arp Road.

### 4.6.2. Secondary Truck Routes

Based on the same factors and research that identified primary truck routes in the county, secondary truck routes are not considered the principal means of truck travel, but are considered adequate to handle less volume and capacity than primary routes. The following routes have been identified as secondary truck routes within Douglas County.

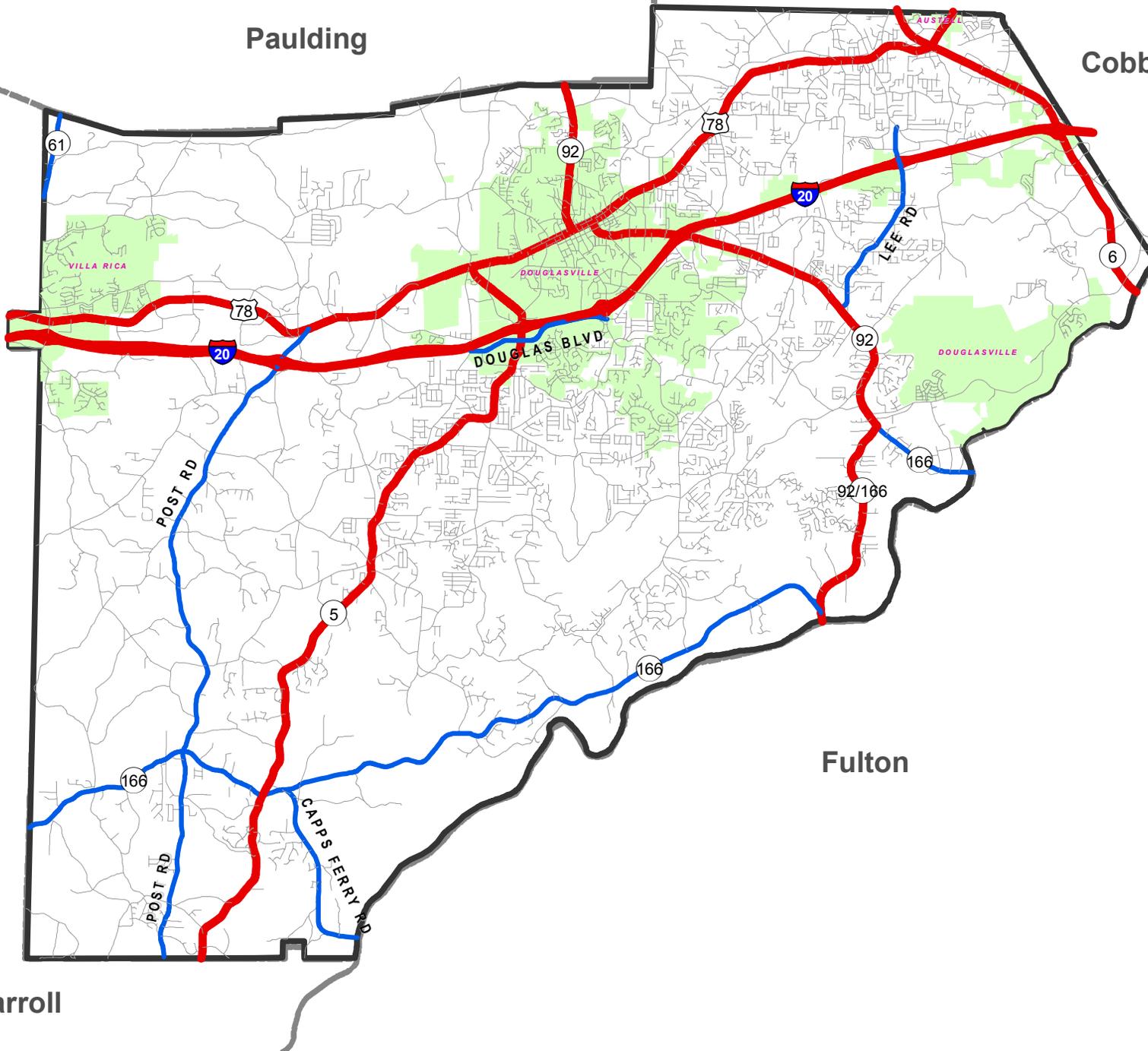
- State Route 166 - State Route 166 runs west to east across the southern part of Douglas County. It consists of two lanes with a continuous center turn lane on a portion of it. S.R. 166 is also known as J. Ebb Duncan Memorial Highway.

- State Route 61 - State Route 61 runs south to north across the northwest corner of the county and consists of two lanes. It is also known as Dallas Highway and Villa Rica Highway.
- Capps Ferry Road - Capps Ferry Road runs south to north in the southern part of the county and consists of two lanes.
- Post Road - Post Road runs south to north along the western part of Douglas County and consists of two lanes.
- Lee Road - Lee Road is a short road that runs southwest to northeast on the east side of the county and consists of two lanes.
- Douglas Boulevard - Douglas Boulevard is a short road that runs west to east just south of Interstate 20 in the middle of the county. It consists of four lanes with a continuous center turn lane.

**DOUGLAS COUNTY,  
GEORGIA  
COMPREHENSIVE  
TRANSPORTATION  
PLAN**

**Primary & Secondary  
Truck Routes**

**Figure 11**



**Legend**

**Local Routes**

-  Primary Truck Routes
-  Secondary Truck Route
-  Other Routes
-  City Limits
-  County Boundary



## 5. IMPLEMENTATION PLAN

### 5.1. ESTIMATED TRANSPORTATION REVENUE

Available revenue from public funding sources is no longer reliable and is consistently decreasing while costs, related to petroleum prices are increasingly volatile trending upward. As a result traditional funding sources are drying up.

To support the recommendations in the CTP, a complementary Financial Plan, estimating future expenditures and corresponding revenue, is necessary. Unfortunately, anticipated revenue from conventional resources is insufficient to meet future challenges. Innovative and comprehensive revenue sources must be uncovered to offer the County the opportunity to implement improvement options in the current environment of dramatically increasing costs and declining traditional revenue.

#### 5.1.1. Funding Sources

Funding for transportation improvements including roadway operations and capacity, transit, bicycle 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 roadway, transit, bicycle and pedestrian projects, 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.

Historic funding levels for Douglas County reveal a potential shortage of funds to implement projects required to address identified deficiencies and needs. The referendum to renew the SPLOST program failed leaving no dedicated source of revenue for meeting required match for intergovernmental transportation funding. Additionally, non-roadway projects compete with other transportation needs for a limited pool of federal, state and local funding. 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 the Interstate system, a large percentage of urban and rural principal arterials, the Strategic Highway Network (STRAHNET), and strategic highway connectors.
- **Recreational Trails (Rec Trails)** – Funding for the creation, rehabilitation, and maintenance of 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).
- **Congestion Mitigation and Air Quality (CMAQ)** - Funding for projects and programs in air quality nonattainment and maintenance areas for ozone, carbon monoxide (CO), and particulate matter (PM-10, PM-2.5) which reduce transportation related emissions. Examples of potentially eligible projects include transportation demand management, sidewalks and signal coordination.
- **Safe Routes to School** – 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. Funding is available for up to \$10,000 per school (up to \$100,000 per system) to develop these plans. The second step is to implement the plan. Safe Routes to School funding is also available for this step. Infrastructure projects, which can be sidewalks, bicycle lanes or crosswalks, have a funding limit of \$500,000 while non-infrastructure projects, which can include publicity programs, activities and indirect costs, have a funding limit of \$10,000. GDOT is developing specific guidelines for the program through a special Safe Routes to School Office. The funding is limited to \$16 million through 2009; therefore, the application process will be highly competitive. The Safe Routes to School Office is expected to issue its first call for applications shortly.
- **Transportation Community Service Preservation Program (TCSP)** – Provides funds to establish greater connections with transportation, land use planning, business activities and environmental preservation.
- **Railway Crossing Safety Funds** – SAFETEA-LU authorized the Secretary of Transportation to allocate at least \$200 million for the elimination of hazards and the installation of protective devices at railway-highway crossings. For a relatively small geographically Georgia county, Douglas County has 26 rail-highway crossings only one of which is grade separated. As a result, Douglas County should receive a share of the slightly over \$8 million annually allocated to Georgia for railway crossing improvements.
- **Bridge Program Fund** – SAFETEA-LU authorized the Secretary of Transportation to allocate \$4.3 billion for the Bridge Program. With seventeen bridges of concern and twelve bridge projects delayed, Douglas County will be allocated a share of the \$54.5 million Georgia annual apportionment.
- **Federal Transit Administration (FTA) Programs** – Funding for planning, capital and operating assistance, major capital needs such as light or commuter rail system development, large bus or rail fleet purchases, construction of transit facilities, passenger equipment for special needs, intercity bus programs, and state administration of projects of a transit nature. Specific FTA programs applicable to Douglas County include:

- Section 5311 – Provides transit assistance to rural areas for capital, operating and administrative costs.
- Section 5310, Elderly and Persons with Disability – Provides transit capital assistance through the state to private non-profit organizations and public bodies providing specialized transportation services to elderly and/or disabled persons.

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 and General Fund monies. Historically, SPLOST funds produced approximately \$5 million per year for funding 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.
- **Impact Fees** – Though the process for establishing them can be difficult, needed transportation projects may be funded by impact fees in Georgia. Impact fees are one-time fees charged in association with a new development and are designed to cover part of the cost of providing public facilities to support the development. The impact fee amount charged to a particular development must be directly tied to the amount of new infrastructure the development will require. Impact fees are often employed as a way to steer development into appropriate areas (those areas already best served by existing infrastructure). Impact fees must also be tied to a specific capital improvement program, so that it is clear which projects the impact fees will finance. In short, impact fees can be complex to develop and administer, but they are effective in tying financing for new transportation infrastructure to new development. Douglas County is currently working to evaluate impact fees for funding new infrastructure other than transportation. Imposed fees should be equitable, which means that the assessed fee should only reflect the development's fair share – on new facilities and upgrades and should not be used to correct infrastructure deficiencies that existed before the new development. The impact fee system should be legally defensible, practicable to administer and incorporated into a community and budgetary process. Based on existing facility inventory and analyses, an impact fee ordinance, and fee assessment formulas should be carefully developed. For

local areas, the impact fee can be imposed based on either project-by-project negotiation or individual municipal ordinances. The former option requires each community to negotiate impact fees with developers based on a determination by the Planning and Zoning Board. The latter requires each community to draft impact assessment ordinances. For larger projects, it is suggested that the county adopt consistent requirements with Georgia Department of Transportation (GDOT) and Georgia Department of Community Affairs (GDCA).

- **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 Douglas County grows, opportunities to encourage the development community to invest in needed infrastructure should be explored.

The 2008-2013 ARC Transportation Improvement Program includes funding for Douglas County projects from several sources including State Bonds, Surface Transportation Program (STP), General Federal Aid, National Highway System (NHS), Earmarks, Bridge Funding, High Priority Projects (HPP), Local Funds, and set-asides for the Livable Communities Initiatives (LCIs). Total funding allocated to Douglas County projects over the life of the TIP is approximately \$37.4 million per year. In addition, Douglas County intends to renew its SPLOST which is anticipated to provide

approximately \$5 million per year in transportation funding. As a result, over the life of the CTP, 22 years, transportation revenue could total \$930 million.

### 5.1.2. Estimated Program Capital Costs

Estimated project costs were determined using GDOT's methodology accepted by ARC's Congestion Mitigation Task Force. Projects that were recommended through previous studies use the cost identified in the study. The tool uses the following unit prices when calculating the costs:

- New roadway, by lane mile - \$1,000,000
- Widen roadway, by lane mile - \$1,125,000
- Intersection upgrade, per intersection - \$650,000
- Bridge repair, standard bridge - \$600,000
- Sidewalk, per lane mile - \$320,000
- Multi-use trail, per mile - \$1,000,000
- Commercial right of way, per lane mile - \$900,000
- Residential right of way, per lane mile - \$ 168,000

The total estimated cost for the program of projects is \$968,204,700. Of this total cost, \$39,914,600 is for preliminary engineering (PE), \$312,148,400 for right of way (ROW), and \$616,141,700 for construction (CST).

## 5.2. CONSTRAINED PROJECT ACTION PLAN

The recommended projects were separated into three phases, Phase I, Short-term Need and Long Range Need. Phase I is the Constrained Project Action Plan. The Short-term Need projects are minor intersection or operation projects that can improve travel conditions and are lower cost and may be implemented at the local level. Long Range Needs are major projects that are highly needed but are not financially feasible at this time. As funding issues are resolved at the federal, state and local level, projects may be revisited and moved into short-term or Phase I as funding becomes available.

Table 6 lists the projects in the Constrained Action Plan and the projects by phase are shown in Figure 12. Details on the Constrained Action Plan and the short-term and long range projects are located in Appendix A.

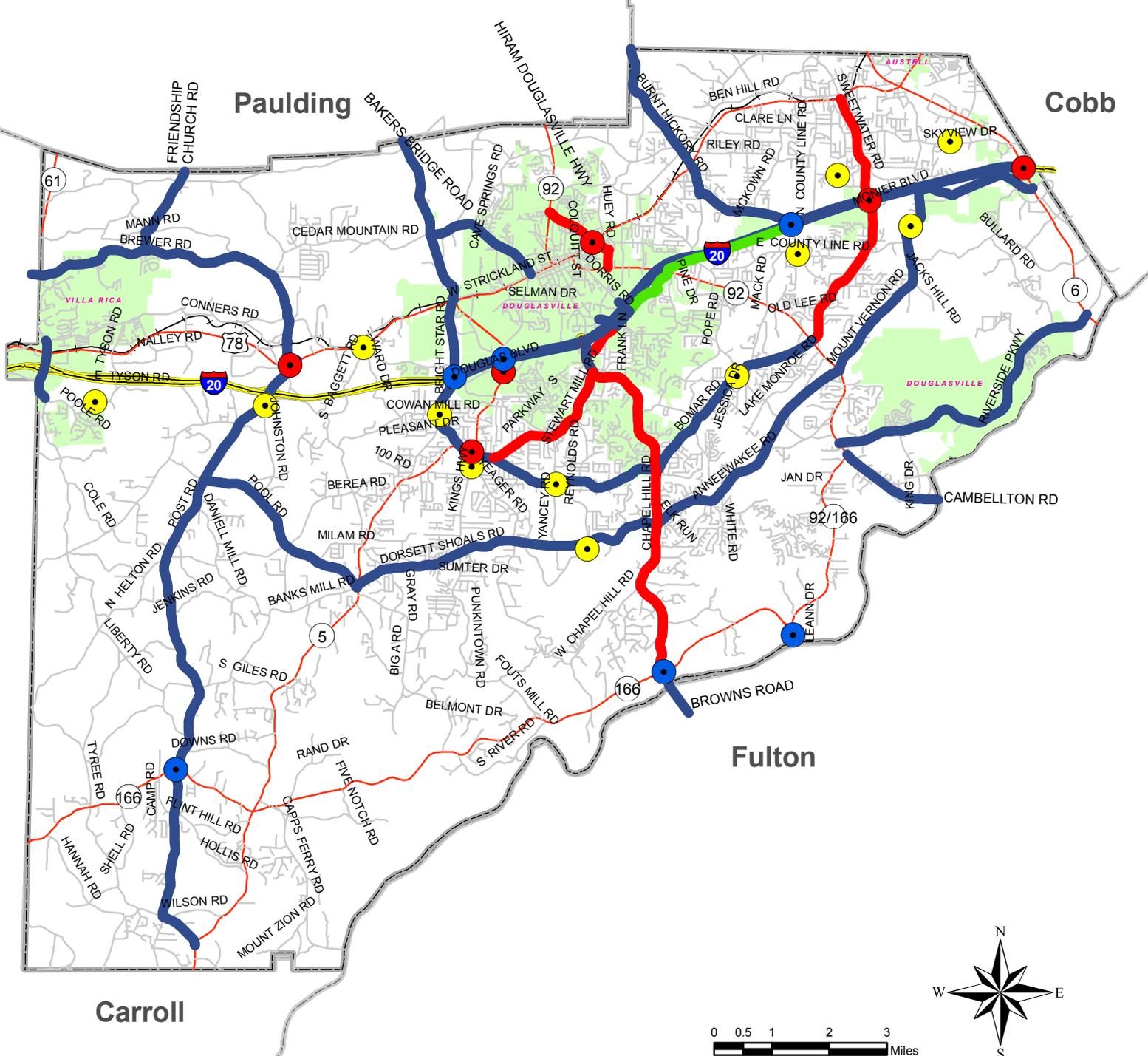
<b>Table 6 – Constrained Project List</b>	
<b>Project Number</b>	<b>Project</b>
DO-282A	Metro Arterial Connector - SR 92 Realignment Phase I - Underpass
DO-282B	Metro Arterial Connector - SR 92 Realignment Phase II

<b>Table 6 – Constrained Project List</b>	
<b>Project Number</b>	<b>Project</b>
DO-282C	Metro Arterial Connector - SR 92 Realignment Phase III
DO-220A	Lee Road: Segment 2
DO-220B	Lee Road (including bridge over I-20 West)
DO-022	Lee Road - Widening - Bankhead to I-20 and Bankhead to County Line
CTP-4	I-20 West at SR 6
CTP-7	SR 5/Kings Highway/Central Church Road
CTP-8	US 78 at Post Road/Mann Road
CTP-15	Adaptive Traffic Signal Pilot Program - Chapel Hill Road/SR 5/CBD area
CTP-21	SR 5/Bill Arp Road
CTP-44	Chapel Hill Road operational improvements
CTP-45a	Timber Ridge Road Widening
CTP-53	Stewarts Mill Road operational

# DOUGLAS COUNTY, GEORGIA COMPREHENSIVE TRANSPORTATION PLAN

## Recommended and Proposed Projects

Figure 12



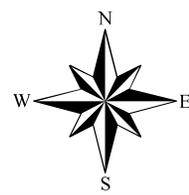
- Legend**
- Phase I
  - Short-term Need
  - Long Range Need
  - Phase I
  - Long Range Need
  - Remove from RTP
  - Local
  - Interstate
  - State
  - US Hwy
  - +— Railroad
  - City Limits

Carroll

Paulding

Cobb

Fulton



## 6. TRANSPORTATION POLICIES AND STRATEGIES

Possibly more enduring and valuable than projects, transportation and land use policy recommendations are offered for consideration. 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.

### 6.1. LAND USE

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

- Develop a Transportation Management Association (TMA) at the Mall or downtown Douglasville
- Encourage transit-oriented development strategies to be applied designated public transportation corridors (Bankhead Highway) and to potential commuter rail station areas
- Promote high-density residential and neo-traditional development within commercial districts to encourage the use of public transportation.

### 6.2. 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 Douglas County in maintaining its “cutting edge” technology 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
- Develop an extensive communications network that will provide direct, real time vital transportation information to any local and state agency that participates in transportation and/or emergency management operations within the ten-county Atlanta region
- Connect to other command and control centers
- Ensure that fiber optics are included in road construction projects
- Maintain effective communications with GDOT so the county system can enhance GDOT and vice versa
- Consider off-the-shelf alternatives for short-term remote ITS devices
- Provide real-time traveler information through various media to the public
- Recognize early-winner projects by: Analyze stakeholder input from the surveys and the February 20, 2008 workshops Identify present and future high-level and mid-level congested corridors (as identified in the Comprehensive Transportation Plan)
- Conduct a gap analysis of the existing and planned ITS projects
- Develop and follow implementation strategy
  - Develop ITS capital projects
  - Engage the local agencies
  - Focus on collection of data to support traveler information systems

- Integrate ITS into construction and maintenance projects/activities
- Develop a process that monitors system performance and allows for system growth and enhancement. System should include the following relevant market packages
  - Network Surveillance
  - Surface Street Control
  - Regional Traffic Control
  - Incident Management
  - Traffic Information Dissemination – Arterial Changeable Message Signs
  - Emergency Response – AVL and MDT in emergency vehicles
  - Speed Monitoring
  - Standard Railroad Grade Crossing

### **6.3. ALTERNATIVE TRANSPORTATION AND TRAVEL DEMAND MANAGEMENT**

To expand the transit service market several policies, strategies, and techniques are suggested and listed below:

- Support the continued operation of the GRTA Xpress Service (460, 461) to the Arbor Place Mall to provide a direct link between Douglasville and Downtown/Midtown Atlanta
- Develop opportunities to increase service and modes served at the Douglas County Multimodal Transportation Center for passenger transportation including, but not necessarily limited to, public and private buses, taxis, airport limousines, paratransit, private trolleys and shuttles, cars, and bicycles
- Target regional employee travel markets currently served by Douglas County Rideshare which may experience growth in demand for vanpool services. Consider marketing employment centers such as:

Atlanta/Midtown – Atlantic Station  
 Atlanta/Midtown – Georgia Tech/Coca-Cola  
 Atlanta/Southwest – Hartsfield-Jackson Atlanta International Airport  
 Atlanta/Buckhead – Lenox Mall/Phipps Plaza  
 Cobb County – Kennesaw State University  
 DeKalb County – Stonecrest Mall  
 Fulton County – North Point Mall  
 Gwinnett County – Mall of Georgia

- Join the “Breeze” program to create seamless transit opportunities
- Offer a Guaranteed Ride Home program
- Offer 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.

- Incorporate the Rideshare program into the Douglas County DOT under a new transit/TDM division
- Develop a transit-oriented marketing and promotional identity and brand/trademark/logo. Rebrand Rideshare program as Douglas County Connect. WSA produced some logo alternatives for review.
- Target growing and underserved regional employee travel markets for continued expansion and outreach of information regarding Douglas County Rideshare services
- Continue establishing partnerships between Douglas County and employers and employee groups
- Identify opportunities to encourage Douglas 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 gather resources and supportive marketing materials from the Association for Commuter Transportation (ACT)
- Conduct outreach, surveys and research of employee needs in areas of highly concentrated employment activity
- Provide public information about existing, new, and proposed transit services via the strategic placement of kiosks
- Coordinate with Douglas County members of the Atlanta Apartment Association to advise regarding implementation progress and identify needs for multimodal accessibility to proposed transit stops
- Apply market segmentation techniques to identify the needs and interests of other groups relating to local bus transit
- Consult representatives of seniors and persons with disabilities to identify connectivity and accessibility needs
- Consider materials provided in the Promotional Materials Clearinghouse, and other resources prepared by the Marketing Institute of Florida State University for transit and TDM professionals
- Consider award-winning marketing efforts identified by the American Public Transportation Association (APTA) as part of its annual AdWheel awards program
- Consider resources coalesced by the U.S. Department of Transportation's Federal Transit Administration (FTA)

- Consult peer agencies providing new fixed-route transit services to identify lessons learned in generating support and ridership for public transit at the local level
- Work with GRTA to initiate shuttle service from the Douglas County Transportation Center to Hartsfield-Jackson Atlanta International and to develop regional route mapping, signage and other commuter aids for the Douglas County Transportation Center
- Consider promoting free-fare opportunities to initiate new riders through direct mail and other municipal agency activities
- Specific recommendations for the Douglas County Rideshare
  - Upgrade existing fleet with new low-emission vans. Replace all vans with more than 100,000 miles or five years of service
  - Upgrade and renovate Douglas County Transportation Center
  - Add two new park-and-ride facilities. Potential locations are Thornton Road south of I-20, Douglas Blvd near Bright Star Road, and near I-20 and Blair's Bridge Road
  - Upgrade signage at existing park-and-ride facilities
  - Improve technology to bolster revenue collection
  - Implement customer interface capacities
  - Serve and promote new bus routes: Route 462, 465, 463, and 466 (GRTA)

#### **6.4. BICYCLE AND PEDESTRIAN**

Consider the following suggestions when developing Bicycle and Pedestrian policy:

- Develop bicycle facility standards for on-roadway bike lanes utilizing the Atlanta Regional Commission and/or Georgia DOT standards as a guide
- Prioritize programming and construction of pedestrian and bicycle transportation facilities by public and private sector organizations
- Consult representatives of transit, pedestrian and bicycle transportation, and active-living advocacy groups in metropolitan Atlanta to identify connectivity needs while partnering for promotional outreach regarding new and potential services
- Create a network of bicycle facilities to link residential areas with activity centers, the river, and the park system

- Bicycle facilities shall be provided whenever a new arterial or collector road is built 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 shall address bicycle needs. Include experienced cyclist lanes and sidewalk, whenever possible.
- Identify corridors for off-road bicycle paths such as railroad, utility, transit, and drainage right of ways
- Coordinate with the City of Douglasville in the implementation of their Bicycle Pedestrian Master Plan. Projects include:
  - Proposed multi-trails located north and south of Sweetwater Creek State Park, with the northern segment terminating at Blairs Bridge Road and the southern segment terminating at the Douglas/Fulton County line
  - Proposed trail west of Interstate 20 connecting the relocation of Dorris Road and Prestley Mill Road
  - Proposed trail to connect a proposed sidewalk to Autry Circle
  - Proposed bike paths in three locations: along the entire portion of Prestley Mill Road continuing north along Campbellton Street connecting with the existing multi-use trail at Selman Drive; along the entire Riverside Parkway existing within the city limits and along Blairs Bridge Road between Mount Vernon Road and Thornton Road (SR 6)
- Create a network of pedestrian facilities to link residential areas, riverfront, recreation, and activity centers, particularly those that are pedestrian intensive, such as schools, recreation sites, and urban or neo-traditional commercial areas
- Continue to budget funds in the Capital Improvement Program for sidewalk improvements
- Continue to coordinate with the School Board to annually update a priority list of sidewalk needs near schools
- Develop a program for intersection improvements to aid pedestrian mobility
- Implement Article 10 – Project Design & Construction Standards, Section 1013 of the Douglas County Unified Development Code and Article VIII – Required Improvements, Section 87 of the Douglas County Code of Ordinances requiring sidewalks on all new streets
- Require existing sidewalks adjacent to the property lines to be in acceptable condition before new occupational licenses or certificates of occupancy are issued for new or remodeled buildings

- Identify intersections for "No Right on Red when Pedestrian/Cyclist Present" signs
- Develop a requirement that places the burden of maintenance (and liability) of sidewalks on adjacent property owners
- Create an environment that promotes bicycling or walking to work/school and other utilitarian trips including shopping
- Promote and implement trails proposed as part of the Chattahoochee Hill Country Regional Greenway Trail Master Plan

## **6.5. SCHOOL-RELATED TRANSPORTATION**

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

- Continued coordination between the Douglas County Department of Transportation and the Douglas County School System. An institutionalized regular meeting is appropriate.
- Institute a policy change to support walking or bicycling to school within Douglas 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
- Issue a periodic newsletter, KidsWalk Express, to share peer school program information
- Provide incentives to children at participating schools to encourage walking and bicycling to school
- Provide educational and promotional materials to reduce vehicle idling around schools and raise awareness about smog alert days

- Conduct an educational show for schools featuring the Better Air Bear (BAIR) to educate students and teachers about air quality and health information and how to reduce air pollution
- Assist schools to develop environmental education lesson plans for grades four through eight
- Promote Walk There! For Cleaner Air, Ride There! For Cleaner Air, and SchoolPool programs to facilitate changes in how the school trip is made by encouraging walking, riding the bus, or carpooling to school
- Conduct training workshops and sponsor a “Solution to Pollution Challenge” for elementary and middle school students
- Assist with child education on safe walking and bicycling, grant writing, and information gathering to aid schools with SRTS programs

## 6.6. FREIGHT TRANSPORTATION

The metro Atlanta region is a major freight transportation hub. Douglas County plays a major role in transporting freight. Its major rail line, the east-west Norfolk Southern line, accommodates 35 trains per day. Strategies recommended include:

- 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
- Offer land use buffers or transitioning from more intense uses (industrial or freight intensive) to less intense uses (residential)-at minimum a landscape buffer between uses
- Industrial, freight intensive land uses have the potential to precipitate noise, air, and light pollution problems. These types of issues can be limited by having an effective future land use plan and by ensuring proper zoning is in place when considering re-zonings for new developments
- Shape development patterns through zoning and planning policies to establish the proper guidelines for accommodating land uses compatible with freight activities between boundaries
- Adjacent land uses are more compatible than in the previous Comprehensive Land Use Plans, but compatibility issues between the unincorporated sections of the County and the City of Douglasville include areas, primarily concerning established single-family communities adjacent to the City, that remain unstable. As the City of Douglasville continues to increase its non-residential tax base

through annexation, these areas will continue to be under development pressure to rezone

- Commercial Zoning ordinance should be amended to include Warehouse Distribution zone
- Primary and secondary truck routes should be added to Unified Development Code. Also development regulations should include enhanced road design standards for primary and secondary truck routes-road design, signalization and signage