



## **Inventory of Existing Conditions**

### **Douglas County Comprehensive Transportation Plan**

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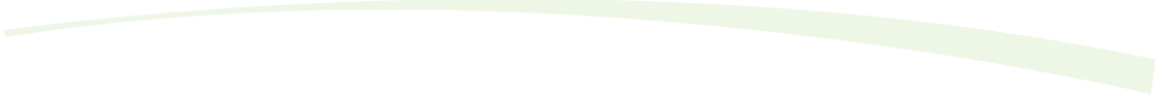
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## INTRODUCTION

The intent of the transportation inventory is to establish a baseline understanding of the existing roadway network, transit program and other services, available modes, and safety or capacity needs. From the inventory, determinations of future needs can be made based on the projected growth in the area. Existing conditions are a snapshot of the transportation system as it exists right now. This glimpse provides a framework for identifying problems, such as traffic congestion, lack of sidewalks, and/or insufficient public transportation.

The scope for the transportation inventory included the following steps:

- Researching and downloading files from Atlanta Regional Commission (ARC), Georgia Department of Transportation (GDOT), and the U.S. Bureau of the Census.
- Coordination with Douglas County and Douglasville representatives to discuss transportation and land use issues.
- Review of current and recent transportation studies within the county, including the 1990 transportation plan and ongoing corridor studies.

The inventory results were developed into spreadsheet files and GIS layers, providing a basis for the assessment of needs for the Douglas County Comprehensive Transportation Plan (CTP). The summary of existing conditions follows by subsection.

## DEMOGRAPHIC PROFILE

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%. The employment in Douglas County in 2005 was estimated to be approximately 38,000 and forecast to almost 83,000 in 2030. This is an increase of over 118%. The current transportation system is already congested in many areas in the county. To meet the doubling of people and jobs, changes need to be made in the transportation system 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.

## 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 is being considered the base year while 2030 is being used as the forecast year. Figures 1 and 2 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 are from the regional model used by ARC to evaluate transportation in the metropolitan region. The regional TAZs will be 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. This is because 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.

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.

## 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 this 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 7 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.

## 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).

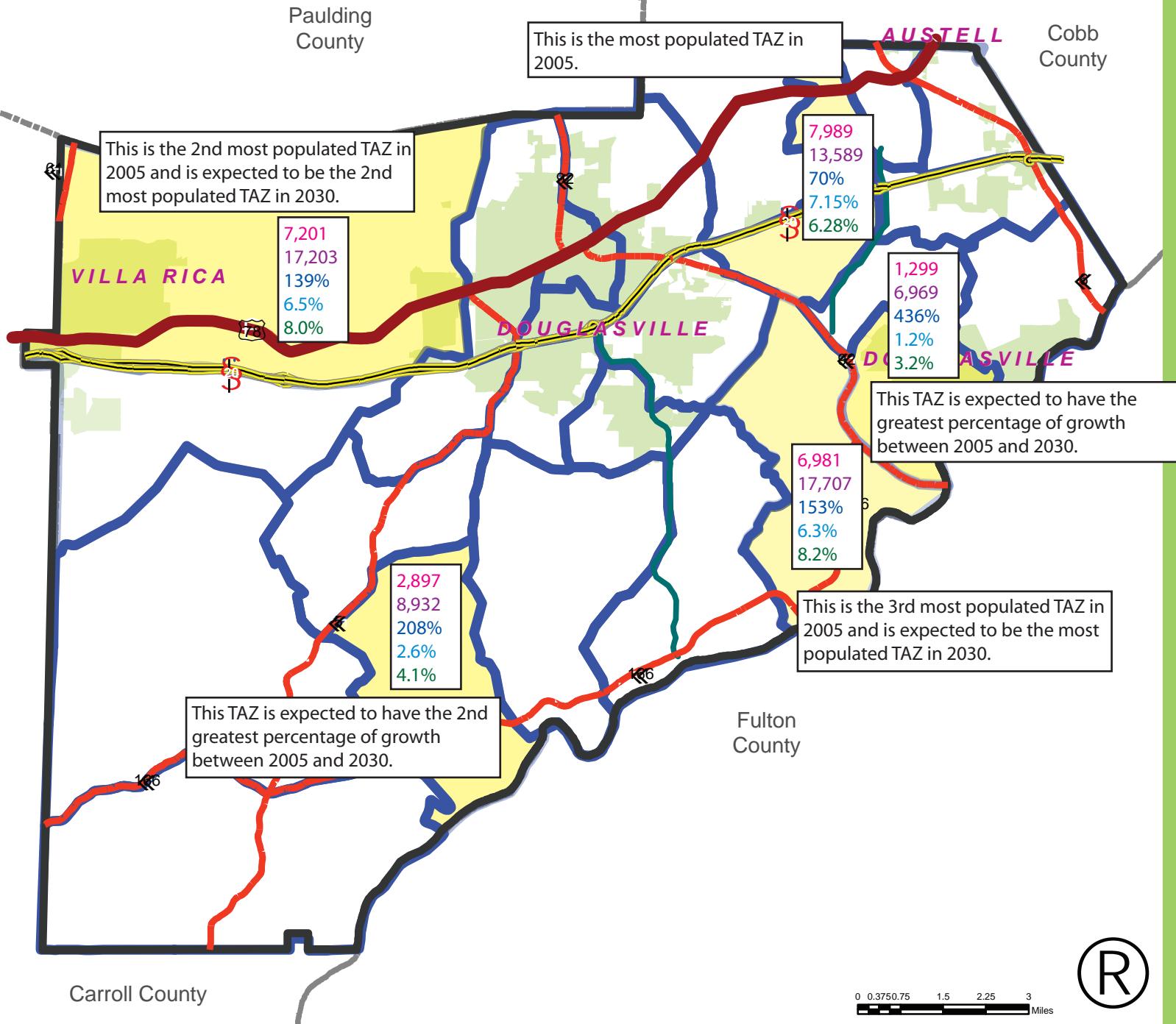
According to the 2006 ARC-Carl Vinson Institute survey, 41 percent of Douglas County's older adults (age 55 and above) are currently employed, the highest proportion within the ten-county ARC planning area, including 27 percent employed full-time. Among this working population, at least 49 percent of those surveyed intend to continue working at least part-time, while only 41 percent have near-term plans for retirement.



# DOUGLAS COUNTY, GEORGIA COMPREHENSIVE TRANSPORTATION PLAN

## POPULATION TRENDS BY ENVISION6 TAZ

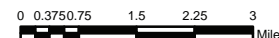
Figure 1



### 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



Carroll County

Fulton County

Paulding County

Cobb County

VILLA RICA

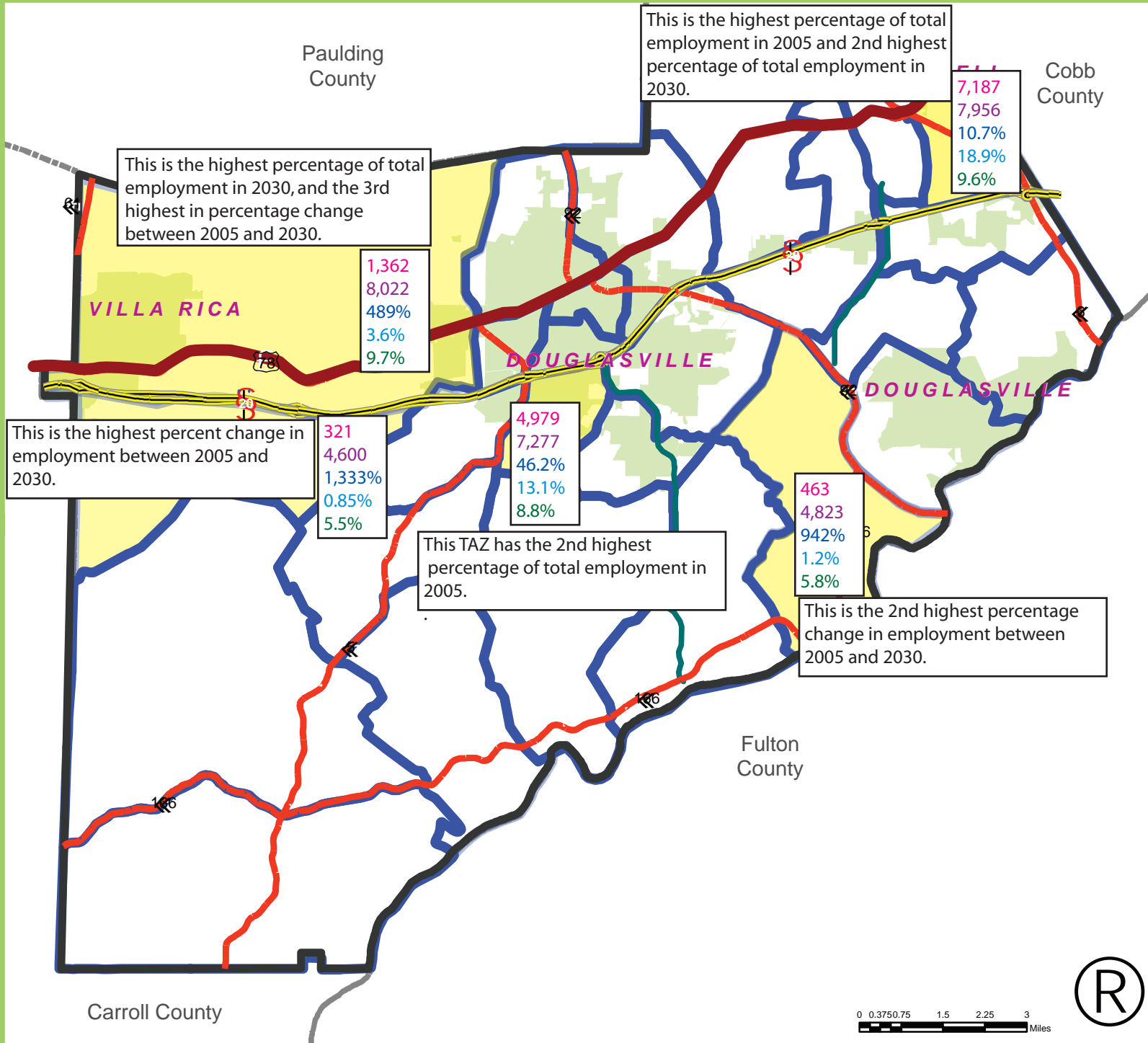
DOUGLASVILLE

DOUGLASVILLE

# DOUGLAS COUNTY, GEORGIA COMPREHENSIVE TRANSPORTATION PLAN

## EMPLOYMENT TRENDS BY ENVISION6 TAZ

Figure 2



### 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



## ROADWAY CHARACTERISTICS AND INVENTORY

A network of streets and highways provides access to/through or circulation within Douglas County. A road's function is an important parameter in planning improvements to the roadway network. Function translates into appropriate design features such as right-of-way needs and the maximum density for curb cuts or at-grade intersections. Figure 3 shows the roadways in Douglas County and their associated functional classification.

Roads are designated into one of the following four classifications: freeway, arterial, collector or local. The inventory data include name, functional classification, lanes, and jurisdiction

### FREEWAYS

Freeways are divided highways with full control of access. The only freeway in Douglas County, I-20, spans the entire east-west length of the County, approximately 18 miles, with access at the following seven interchanges.

- Exit 44 — SR 6 (Thornton Road)
- Exit 41 — Lee Road
- Exit 37 — SR 92 (Fairburn Road)
- Exit 36 — Chapel Hill Road / Campbellton Street
- Exit 34 — SR 5 (Bill Arp Road)
- Exit 30 — Post Road
- Exit 26 — Liberty Road



Additional regional access is provided via US 78 (Bankhead Highway), which runs generally parallel to and north of I-20.

### ARTERIALS

Arterial roads provide “the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.” In Douglas County, most of the arterial roads interchange directly or indirectly with I-20.

In evaluating and planning a local transportation system, it is advantageous to divide arterial roads into two subgroups: major and minor arterials. Major arterials serve longer distance trips, offer slightly higher average travel speeds and generally accommodate higher volumes of traffic in comparison with minor arterials. Minor arterials typically have cross streets and driveways spaced closer together than their major arterial counterparts. Average travel speeds are lower and they generally carry lower volumes of traffic. In this classification, the facilities provide for through traffic but the function begins to include more collection and distribution to local collector roads.



Major arterials within Douglas County include the following State Routes:

- SR 92/Dallas Highway
- SR 5/Bill Arp Road
- SR 6/C.H. James Parkway
- SR 166

These major routes within Douglas County run east-west with many connections to major and minor thoroughfares that facilitate movement and provide access throughout the entire region. In addition, major and minor arterials connect collector roads and local roads to the state, US, and interstate routes. Among the other arterials are the following:

- Chapel Hill Road
- Central Church Road
- Liberty Road
- Post Road
- Tyree Road
- Big A Road
- Cedar Mountain Road/Chicago Avenue
- Main Road
- Bright Star Road
- Campbellton Street
- Lee Road
- Burnt Hickory Road
- Sweetwater/Mt. Vernon Road
- Pool Road
- Ephesus Church
- S. Flat Rock
- Dorris Road
- Kings Highway



## COLLECTOR ROADS

Collector roads provide “a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials.” A collector street system collects traffic from local streets in residential areas, major activity centers, and central business districts (CBD) and carries the traffic to an arterial highway system. Moreover, collector streets provide access to private property and abutting land. Average travel speeds in urban areas are typically in the 25 to 35 miles per hour range. Outside the urbanized portion of the County, average travel speeds may be much higher as the intensity of land use diminishes and intersection conflicts drop.

Outside of the urbanized area, collectors typically are not broken into major and minor facilities. Like most U.S. counties, there are a large number of collector roads serving the rural areas of the County.

## LOCAL ROADS

Local roads “consist of all roads not defined as freeways, arterials or collectors; they primarily provide access to land with little or no through movement.” These streets provide direct access to properties, both residential and commercial/industrial. They are two-lane facilities that may permit parking on one or both sides, and are characterized by frequent driveway cuts and slow speeds. All roads not classified as collectors or arterials are considered to be local streets.

## TRAFFIC VOLUMES

In a transportation system, two competing variables—traffic demand and roadway capacity—jointly determine the performance of traffic operations. If the demand (or volume) approaches or exceeds the capacity, the performance of traffic operation will not be as satisfactory as expected. If the capacity is greater than the demand, it means the roadway system is able to accommodate more traffic without significantly deteriorating the level of service (LOS).

Traffic volume is typically reported as average annual daily traffic (AADT), which is the amount of traffic measured over an average 24-hour period. Existing AADT data provided by GDOT indicates that I-20 has the highest AADT in Douglas County. The 2005 AADT for Douglas County is shown in Figure 4.

Capacity is an indicator of a road's ability to carry traffic and is a combination of laneage, speed limit, and other factors. Roadway capacity is usually determined by strict methodologies described in the Highway Capacity Manual (HCM), especially for detailed traffic operation studies. However, in this large-scale planning study, it is imperative to make some assumptions to simplify the process of obtaining roadway capacities so that determining the general traffic operation performance is feasible. It is assumed that the freeway and arterial capacities are 1,950 passenger cars per lane per hour (pcplph) and 900 pcplph, respectively based on state averages for similar roadways of the same functional classification.

Using the traffic volumes and roadway capacities, the ratio of volumes to capacities (V/C ratio) was calculated for the freeway and state routes in Douglas County. Volume to Capacity Ratio (V/C ratio) is one of the primary factors for understanding the traffic congestion of a route system. The V/C ratio map (Figure 5) illustrates traffic operations in Douglas County. Most of the freeway and state routes in the northeast part of the county are very congested with V/C ratios near or above 1.0. The major east-west corridors (I-20 and US 78) and north-south corridors (Thornton Road, Dallas Highway and SR 5) are all located within this northeast area.







## SIGNALIZATION

Traffic signals play a critical role in allocating the proper right-of-way to traffic flows and conveying important messages such as speed reduction to travelers. Traffic signals are operated and maintained by different agencies. Signals on state routes are under the jurisdiction of GDOT. Douglas County, City of Douglasville and City of Villa Rica also are responsible for many signals within their own jurisdictions.

Douglas County has 105 signals, including both conventional traffic signals as well as flashing beacons. The majority of the signals are under the jurisdiction of GDOT and Douglas County. Table 1 provides the current distribution of signals in Douglas County according to the jurisdiction as well as the signal type. Figure 6 graphically displays the signalized intersection locations.

**Table 1 – Signal Inventory**

| Signal Type         | Jurisdiction       |                      |                |      | Total |
|---------------------|--------------------|----------------------|----------------|------|-------|
|                     | City of Villa Rica | City of Douglasville | Douglas County | GDOT |       |
| Conventional signal | 1                  | 14                   | 25             | 42   | 82    |
| Flashing Beacon     | 0                  | 1                    | 8              | 14   | 23    |
| Total               | 1                  | 15                   | 33             | 56   | 105   |

## SIGNAGE

Efficient travel can be affected significantly by the adequacy of signs and traffic signals. A physical inventory was conducted in Spring 2004 to determine the types and locations of signs and the locations of traffic signals throughout Douglas County.

The inventory of signage is not intended to serve as an exhaustive list, but rather as a comprehensive review of the types of signs, their typical locations and features, and observed deficiencies. The results of the inventory are shown in Table 2.

Overall, the guide signs for I-20 access and major arterials are efficient and highly visible. However, guide signs and street signs on arterials and collectors are in some locations too small, obscured, or missing, limiting a driver's ability to make safe and efficient decisions. Some school zones have inadequate signs, and existing railroad crossing signs have limited visibility.





**Table 2 – Sign Inventory**

| <b>Route Name</b>  | <b>Side Street</b>                   | <b>Sign Function</b>     | <b>Problem Description</b>   |
|--------------------|--------------------------------------|--------------------------|--|
| SR 5 (Bill Arp Rd) | Bill Arp E.S.                        | Regulatory & Guide Signs | Limited use and visibility of school zone signs                    |
| Dorsett Shoals Rd  | Dorsett Shoals E.S.                  | Regulatory & Guide Signs | Limited use and visibility of school zone signs                    |
| Kings Hwy          | Yeager M.S.                          | Regulatory & Guide Signs | Limited use and visibility of school zone signs                    |
| Parkway South      | Arbor Station E.S.                   | Regulatory & Guide Signs | Limited use and visibility of school zone signs                    |
| Pope Rd            | Chestnut Log M.S.                    | Regulatory & Guide Signs | Limited use of school zone signs                                   |
| Duralee Ln         | Eastside E.S.                        | Regulatory & Guide Signs | Poor use and visibility of school signs and school zone signs      |
| Connally Dr        | Burnett E.S.                         | Regulatory & Guide Signs | No use of school signs or school zone signs                        |
| SR 8 / US 78       | Burnt Hickory Rd                     | Guide Signs              | No use of street name signs  |
| Burnt Hickory Rd   | Railroad Crossing                    | Warning Sign             | Limited use and visibility of RR crossing signs                    |
| Florence Dr        | Lithia Springs E.S.                  | Regulatory & Guide Signs | Poor use and visibility of school signs and school zone signs      |
| Skyview Dr         | Maxham Rd                            | Guide Signs              | Limited use and poor visibility of street name signs               |
| Lee Rd             | Ride Share Facility                  | Guide Signs              | Limited use and poor visibility of Ride Share Facility signs       |
| Duralee Ln         | Crossroads M.S.                      | Regulatory & Guide Signs | Poor use and visibility of school signs and school zone signs      |
| Old Lower River Rd | New Manchester E.S.                  | Regulatory & Guide Signs | No use of school zone signs and limited visibility of school signs |
| Post Rd            | Ride Share Facility                  | Guide Signs              | Limited use and poor visibility of Ride Share Facility signs       |
| Thornton Rd        | Ride Share Facility                  | Guide Signs              | Limited use and poor visibility of Ride Share Facility signs       |
| Dorris Rd          | Douglas County Transportation Center | Guide Signs              | Limited use and poor visibility of Transportation Center signs     |

| <b>Table 2 – Sign Inventory</b> |                                      |                          |  |
|---------------------------------|--------------------------------------|--------------------------|--|
| <b>Route Name</b>               | <b>Side Street</b>                   | <b>Sign Function</b>     | <b>Problem Description</b>   |
| SR 5 (Bill Arp Rd)              | Bill Arp E.S.                        | Regulatory & Guide Signs | Limited use and visibility of school zone signs                    |
| Dorsett Shoals Rd               | Dorsett Shoals E.S.                  | Regulatory & Guide Signs | Limited use and visibility of school zone signs                    |
| Kings Hwy                       | Yeager M.S.                          | Regulatory & Guide Signs | Limited use and visibility of school zone signs                    |
| Parkway South                   | Arbor Station E.S.                   | Regulatory & Guide Signs | Limited use and visibility of school zone signs                    |
| Pope Rd                         | Chestnut Log M.S.                    | Regulatory & Guide Signs | Limited use of school zone signs                                   |
| Duralee Ln                      | Eastside E.S.                        | Regulatory & Guide Signs | Poor use and visibility of school signs and school zone signs      |
| Connally Dr                     | Burnett E.S.                         | Regulatory & Guide Signs | No use of school signs or school zone signs                        |
| SR 8 / US 78                    | Burnt Hickory Rd                     | Guide Signs              | No use of street name signs  |
| Burnt Hickory Rd                | Railroad Crossing                    | Warning Sign             | Limited use and visibility of RR crossing signs                    |
| Florence Dr                     | Lithia Springs E.S.                  | Regulatory & Guide Signs | Poor use and visibility of school signs and school zone signs      |
| Skyview Dr                      | Maxham Rd                            | Guide Signs              | Limited use and poor visibility of street name signs               |
| Lee Rd                          | Ride Share Facility                  | Guide Signs              | Limited use and poor visibility of Ride Share Facility signs       |
| Duralee Ln                      | Crossroads M.S.                      | Regulatory & Guide Signs | Poor use and visibility of school signs and school zone signs      |
| Old Lower River Rd              | New Manchester E.S.                  | Regulatory & Guide Signs | No use of school zone signs and limited visibility of school signs |
| Post Rd                         | Ride Share Facility                  | Guide Signs              | Limited use and poor visibility of Ride Share Facility signs       |
| Thornton Rd                     | Ride Share Facility                  | Guide Signs              | Limited use and poor visibility of Ride Share Facility signs       |
| Dorris Rd                       | Douglas County Transportation Center | Guide Signs              | Limited use and poor visibility of Transportation Center signs     |

Source: Kimley-Horn and Associates, Inc., 2004.

## INTELLIGENT TRANSPORTATION SYSTEM (ITS)

Intelligent transportation systems (ITS) are intended to enhance transportation efficiency, mobility and safety by the application of a broad range of wireless and wire line communications-based information and electronics technologies. Intelligent transportation systems (ITS) have been widely applied in freeway management, transit management, incident management, arterial management, emergency management, and electronic payment and pricing of tolls and fares, as well as numerous other applications.

The State of Georgia started discussing ITS concepts in the late 1980's to maximize the efficiency of transportation systems. The 1996 Olympics accelerated ITS deployment in Atlanta, and today the system is known as the NAVIGATOR. As part of NAVIGATOR, a Transportation Management Center (TMC) and several Transportation Control Centers (TCC) have been established to process information collected via detectors, cameras, and other electronic technologies. Changeable message signs are installed and located above I-75, I-85, I-285, SR 400 and I-20 in the region to relay up-to-the-minute traffic information to travelers.

Relying on the real-time traffic information, the Highway Emergency Response Operators (HEROs) are able to minimize the negative traffic impacts created by lane-blocking incidents. Currently, Douglas County is covered by the NAVIGATOR system on I-20. The county does not possess any independent Intelligent Transportation Systems other than fiber optic loops utilized by the school board. Signal coordination throughout the county is a priority.

## PUBLIC TRANSPORTATION

### DOUGLAS COUNTY RIDESHARE PROGRAM

The Douglas County Rideshare Program is a commuter based program that operates vanpools and offers carpool-matching services. The vanpool service operates Monday through Friday from 6:00 am to 7:00 am and 3:45 pm to 5:00 pm. Rideshare operates 40 daily vanpools to work locations within the Atlanta metropolitan area. The route schedules and descriptions are provided in Appendix A. Vanpool participants meet at a designated point in Douglas County in the morning and are driven to or near their work location. In the afternoon, participants are picked up at or near their work location and driven back to the designated point. The number of riders on a van, the daily round trip mileage of the van and the van's history of repairs and expenses determine individual passenger fares. Monthly fares are paid in advance. The average current monthly fare is approximately \$85. In 2006, Rideshare provided more than 115,000 one-way passenger trips. During each of the last two years more than 500 commuters made at least one trip on a Douglas County Rideshare vanpool. Specifically, Rideshare provides alternatives to the single-occupant vehicle by operating work-trip vanpools, providing carpool matching assistance, and building



and maintaining commuter facilities. Rideshare is a department of the Douglas County Government, and is governed by the Douglas County Board of Commissioners. Van drivers are volunteers who drive in exchange for not having to pay a monthly fare. In order to drive, an individual must complete an application, provide Rideshare with a copy of their Motor Vehicle Record, take a Defensive Driving Course, pass a drug screening and be approved by the Rideshare staff. The drivers and vans are covered by the Douglas County government's fleet insurance.

### EXPRESS BUS SERVICE

The Georgia Regional Transportation Authority (GRTA) offers express bus service (GRTA Xpress) between Douglas County and downtown Atlanta and midtown Atlanta Monday through Friday. Buses leave from and return to the Douglas County Transportation Center in Douglasville. Route 460 provides service from the Douglas County Transportation Center to Downtown Atlanta, with an additional stop in Douglas County at Arbor Place Mall. This route connects to MARTA at either the Five Points or Civic Center Station. Route 461 provides service from the Douglas County Transportation Center to Midtown Atlanta, with only the one stop in Douglas County. This route has three stops in Midtown: MARTA Civic Center Station, MARTA Arts Center Station and Spring Street at 5th Street. Table 3 shows the average daily ridership for the two Xpress bus routes serving Douglas County.

**Table 3 – Average Daily Ridership GRTA Xpress Bus**

| GRTA Route   | Average Daily Ridership |       |       |        |
|--|-------------------------|-------|-------|--------|
|  | 2004*                   | 2005  | 2006  | 2007** |
| 460<br>(Arbor Place-Douglasville-<br>Downtown Atlanta) | 170.5                   | 307.5 | 335.1 | 404.9  |
| 461<br>(Douglasville – Midtown Atlanta)                |                         |       | 183.8 | 210.0  |

\*Service beginning July 2004

\*\*Services through May 2007

The “Xpress” bus service operates during morning and afternoon peak hour traffic. Fares may be purchased as one-way (\$3), round-trip (\$5), 20-one-way ride pass (\$45), 40-one-way ride pass (\$85) or a 31-day unlimited travel pass (\$80). “Xpress” bus passengers are eligible for a free taxi voucher back to a park and ride lot in case of an emergency.

### BRIDGE INVENTORY

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

obtained from GDOT, as shown in Appendix B. The inventory includes location, facility type, size, length, year built, and sufficiency rating.

Table 4 presents the structures (countywide) that either have a sufficiency rating at 50 or below and those structures approaching or exceeding 50 years in age. Eight bridges, highlighted in bold text, are considered deficient: State Route 166 at Anneewakee Creek, Anneewakee Creek 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, and Stockmar Road at Mud Creek. Five additional structures are approaching or exceeding 50 years in age. Figure 7 shows the locations of the bridges in Douglas County.

| <b>Table 4 – Existing Bridges of Concern</b> |                            |                   |                           |
|--|----------------------------|-------------------|---------------------------|
| <b>Facility Carried</b>                      | <b>Feature Intersected</b> | <b>Year Built</b> | <b>Sufficiency Rating</b> |
| Bill Arp Road                                | Hurricane Creek            | 1956              | 98.45                     |
| Bill Arp Road                                | Hurricane Creek Tributary  | 1956              | 98.45                     |
| State Route 61                               | Mud Creek                  | 1937              | 89.80                     |
| State Route 166                              | Bear Creek                 | 1957              | 66.34                     |
| State Route 166                              | Anneewakee Creek           | 1957              | <b>31.82</b>              |
| Anneewakee Creek Road                        | Anneewakee Creek           | 1963              | <b>48.43</b>              |
| North County Line Road                       | Interstate 20              | 1963              | <b>35.17</b>              |
| Bridge Road                                  | Sweetwater Creek Tributary | 1958              | 63.50                     |
| Lee Road                                     | Beaver Run Creek           | 1958              | 87.33                     |
| Lee Road                                     | Interstate 20              | 1962              | <b>48.57</b>              |
| Rose Avenue                                  | Anneewakee Creek           | 1955              | 90.09                     |
| Chapel Hill Road                             | Anneewakee Creek           | 1949              | 87.24                     |
| Burnt Hickory Road                           | Interstate 20              | 1962              | <b>41.76</b>              |
| Mason Creek Road                             | Mobley Creek Tributary     | 1936              | <b>9.89</b>               |
| West Tyson Road                              | Keaton Creek Tributary     | 1956              | <b>21.36</b>              |
| Stockmar Road                                | Mud Creek                  | 1950              | <b>16.04</b>              |
| Post Road                                    | Dog River                  | 1951              | 52.41                     |

Source: GDOT Bridge Maintenance Office, 2007.





## PLANNED AND PROGRAMMED IMPROVEMENTS

### ENIVISION 6+ REGIONAL TRANSPORTATION PLAN/2008-2013 TRANSPORTATION IMPROVEMENT PROGRAM

As a member county within the Atlanta Regional Commission's jurisdiction, Douglas County participates in the project development process through the ARC's transportation improvement program (TIP). The TIP is a component of the long-range regional transportation plan (RTP). The 2008-2013 TIP, adopted in February 2007, is the current TIP pulled from the Envision6 RTP. Table 5 lists the projects for Douglas County, those identified as "programmed" are in the existing TIP, and those identified as "long range" are in the RTP. Figure 8 presents the projects in Douglas County that are in the TIP and RTP.

**Table 5 – Envision6 RTP Including FY 2008-2013 TIP**

| Project ID | Project Type                     | Project Status | Project Description                             |
|------------|----------------------------------|----------------|---|
| AR-H-201   | Managed Lanes (Auto/Bus)         | Programmed     | I-20 West Managed Lanes                         |
| AR-616     | Transit Facilities               | Programmed     | Park and ride facilities for Xpress bus service |
| DO-220A    | General Purpose Roadway Capacity | Programmed     | Lee Road Segment 2                              |
| DO-009     | General Purpose Roadway Capacity | Programmed     | Durelee Lane Road Extension                     |
| DO-016     | General Purpose Roadway Capacity | Long Range     | US 78 (Bankhead Highway)                        |
| DO-019     | General Purpose Roadway Capacity | Long Range     | SR 166 (Fairburn Road/Campbellton Road)         |
| DO-021     | General Purpose Roadway Capacity | Long Range     | Riverside Parkway                               |
| DO-022     | General Purpose Roadway Capacity | Programmed     | Lee Road/South Sweetwater Road                  |
| DO-031A    | General Purpose Roadway Capacity | Long Range     | Douglas Boulevard Extension: Segment 1          |
| DO-031B    | General Purpose Roadway Capacity | Long Range     | Douglas Boulevard Extension: Segment 2          |
| DO-252A    | General Purpose Roadway Capacity | Long Range     | Chapel Hill Road                                |
| DO-252B    | General Purpose Roadway Capacity | Long Range     | Chapel Hill Road                                |
| DO-252C    | General Purpose Roadway Capacity | Long Range     | Chapel Hill Road                                |
| DO-282B    | General Purpose Roadway Capacity | Programmed     | SR 92 Realignment: Phase II                     |
| DO-282C    | General Purpose Roadway Capacity | Programmed     | SR 92: Realignment Phase III                    |

| Project ID  | Project Type                     | Project Status | Project Description   |
|-------------|----------------------------------|----------------|---|
| DO-285      | Bicycle/Pedestrian Facility      | Programmed     | Douglas County Pilot Segment Along Chatahoochee River in Boundary Waters Park |
| DO-AR-219   | Pedestrian Facility              | Programmed     | Douglasville Residential Sidewalk   |
| DO-AR-BP072 | Pedestrian Facility              | Programmed     | Douglasville Sidewalk Program   |
| DO-220B     | Bridge Capacity                  | Programmed     | Lee Road Bridge   |
| DO-230      | Bridge Upgrade                   | Programmed     | Mason Creek Road  |
| DO-262      | Roadway Operational Upgrades     | Programmed     | Central Church Road   |
| DO-275      | Bridge Upgrade                   | Programmed     | Anneewakee Road   |
| DO-280      | Roadway Operational Upgrades     | Programmed     | SR 92 (Dallas Highway)  |
| DO-281      | Roadway Operational Upgrades     | Programmed     | Thompson Street Realignment   |
| DO-282A     | General Purpose Roadway Capacity | Programmed     | SR 92 Realignment: Phase I – Overpass   |
| DO-284B     | Roadway Operational Upgrades     | Programmed     | Chapel Hill Road  |
| DO-284C     | Roadway Operational Upgrades     | Programmed     | Chapel Hill Road  |

### 2006-2011 TRANSPORTATION IMPROVEMENT PROGRAM

ARC provides an update of programmed projects for each fiscal year from the TIP in which that year is included in their Breaking Ground series. Two Breaking Ground Reports were prepared for the FY 2006-2011 TIP, for FY 2006 and FY 2007. The status of projects is defined as one of the following categories: projects advancing, delayed, or dropped from the current program. Advancing projects are those with a fiscal year phase that was began between July 1 and June 30 of that fiscal year. A delayed project is one that was originally programmed within the evaluated fiscal year phase and was reprogrammed to the next fiscal year or later. A dropped project is one that was entirely removed from the TIP, generally because a delay was too substantial to overcome. The funding category for the projects influences the need for advancement of the projects. Projects that are a component of a Livable Centers Initiative (LCI) or are funded from FHWA Surface Transportation Program (STP) funds need to be completed within a set timeframe or the funding is no longer available. The following section describes the project status and identifies the funds if it is from LCI or STP.

## Projects Advancing

**Table 6 – Projects Advancing (during FY 2006)**

| ARC Project ID | Project Description            | NOTES               | STP/LCI |
|----------------|--------------------------------|---------------------|---------|
| DO-AR-057      | I-20 West                      | FY 2006             |         |
| DO-AR-BP072    | Douglasville Sidewalk Program  | FY 2006             |         |
| DO-252C1       | Chapel Hill Road               | FY 2006<br>Complete | STP     |
| DO-AR-BP054    | Rose Avenue                    | FY 2006<br>Complete | STP     |
| DO-022         | Lee Road/South Sweetwater Road | FY 2007             | LCI     |
| DO-AR-217      | Douglasville Gateways          | FY 2007<br>Complete | LCI     |

## Projects Delayed

**Table 7 – Projects Delayed**

| ARC Project ID | Project Description                      | NOTES                | STP/LCI |
|----------------|--|----------------------|---------|
| DO-284A        | Chapel Hill Road                         | Reprogrammed<br>2008 | STP     |
| DO-284B        | Chapel Hill Road                         | Reprogrammed<br>2008 | STP     |
| DO-284C        | Chapel Hill Road                         | Reprogrammed<br>2008 | STP     |
| DO-282A        | SR 92 Realignment: Phase I -<br>Overpass | Reprogrammed<br>2008 |         |
| DO-282B        | SR 92 Realignment: Phase II              | Reprogrammed<br>2008 |         |
| DO-282C        | SR 92 Realignment: Phase III             | Reprogrammed<br>2009 |         |
| DO-262         | Central Church Road                      | Reprogrammed<br>2008 | STP     |
| AR-H-201       | I-20 West HOV Lanes                      | Reprogrammed<br>2008 |         |
| DO-230         | Mason Creek Road                         | GDOT Delay           |         |
| DO-274         | Post Road                                | GDOT Delay           |         |
| DO-275         | Anneewakee Road                          | Reprogrammed         |         |

| ARC Project ID | Project Description                | NOTES             | STP/LCI |
|----------------|------------------------------------|-------------------|---------|
|                |                                    | 2008              |         |
| DO-022         | Lee Road/South Sweetwater Road     | Reprogrammed 2008 | LCI     |
| DO-220A        | Lee Road: Segment II               | Reprogrammed 2008 | LCI     |
| DO-220B        | Lee Road Bridge                    | Reprogrammed 2010 | LCI     |
| DO-AR-219      | Douglasville Residential Sidewalks | Reprogrammed 2008 | LCI/STP |

### Projects Dropped

The Thompson Street Realignment (DO-281) is the only project that has been dropped from the 2006-2011 TIP.



## BICYCLE AND PEDESTRIAN FACILITIES

Sidewalks and dedicated on-road or off-road bicycle facilities are limited in Douglas County. Some sidewalks exist and are required along public right-of-way as part of the adopted Unified Development Code. However, the sidewalks that currently exist do not provide a connective system. Dedicated on-road bicycle lanes are located near some schools, but they are not extensive. This section identifies the existing and proposed bicycle and pedestrian facilities in Douglas County.

### GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) PLANS

Plans for bicycle facilities for Douglas County have been developed at the state and regional level. GDOT has designated a network of on-street bicycle routes in their *BIKE GA 2002 Plan*. Within this network, the Central Route Corridor (Route 15) crosses through Douglas County. Central Route Corridor (Route 15) enters Douglas County in the south where SR 92 crosses the Chattahoochee River and exits along North Sweetwater Road into Cobb County. Route 15 includes 10.8 miles through Douglas County that are suitable for experienced bicyclists and is located along environmental areas such as Sweetwater Creek. However, existing pavement conditions along portions of Route 15 are in need of rehabilitation. In addition, there are rumble strips along shoulders and adjacent to intersections that discourage bicycle use.

### ATLANTA REGIONAL COMMISSION (ARC) PLANS

The development of the *Atlanta Regional Bicycle and Pedestrian Walkways Plan* was initiated in June 2006 and a Draft Final Report was published in June 2007. The plan is an update to the former (2002) *Atlanta Regional Commission Bicycle and Pedestrian Plan* and covers the 18-county ARC region. The intent of the plan is to create a regional bicycle network that includes on-road and off-road facilities/multi-use trails, and to enhance pedestrian connectivity within activity nodes, schools, and transit stations. The plan includes priorities for the implementation of projects and improvements within Douglas County.

The 775-mile regional-scale bicycle network, which includes Douglas County, is designated as the Regional Strategic Transportation System (RSTS) Bicycle Study Corridor Network. The designated RSTS route within Douglas County follows Bankhead Highway (US 78) from Bill Arp Road (SR 5) in Douglasville and extends east into Cobb County. This route was determined to have a Level of Service (LOS) rating of “D” and “E”.

In order for this route to meet LOS standards of “B” and/or “C”, the ARC recommended that paved shoulders be added for the majority of the route with the exception of a portion between SR 5 and Fairburn Road in Douglasville, and a portion located between Thornton Road and the Douglas/Cobb County line. For these two locations, the ARC recommended a detailed corridor study to determine the best solution.

The ARC completed a Latent Demand analysis for the study network for bicycling and pedestrian modes. The Latent Demand analysis is a method used to quantify both ends of bicycling and walking trips and considers all generators and attractors.

Each segment within the network is provided a score, which represents the segment’s potential level of bicycling and walking based on the segment’s proximity to trip generators and attractors. The scores are based on a **0-100 scale** with higher scores indicating greater latent demand. The results of the analysis for the Regional Strategic Transportation System route within Douglas County indicated a relatively low score for latent demand and are shown below:

**Table 8 - Latent Demand Results**

| <b>Latent Demand Results for Douglas County Strategic Bicycle Corridor</b>    |   |
|---|---|
| 0-20  | Segment Portions – generally located between SR 5 to SR 92 and another portion from Thornton Road to the Douglas/Cobb County line |
| 21-40   | Segment Portion – SR 92 to Thornton Road  |
| <b>Latent Demand Results for Douglas County Strategic Pedestrian Corridor</b> |   |
| 0-20  | Segment Portion – generally located between SR 5 and Rose Avenue  |
| 21-40   | Segment Portion – located from Rose Avenue to the Douglas/Cobb County line  |

Note: Scores range between 1- 100, with the score of 100 having the greatest potential of generating bicycling and walking trips, while the score of 1 provides the least potential.

In addition, the ARC completed a suitability ranking to rate the County roadways for bicycle viability within the existing conditions of Douglas County. The ratings range from best to difficult in ease of use for cyclists on the road. The rating categories are:

- **Best Conditions for Bicycling** – These roads typically have low traffic volumes, lower speed limits, wide right lane, bikeable shoulder, low truck traffic, and very few, if any, right turn lanes and commercial driveways.
- **Medium Conditions for Bicycling** – Requires more caution than Best Conditions. Includes two or more of the following conditions: Low traffic volumes, lower speed limits, wide right bikeable lane, low truck traffic, and few right turn lanes or commercial driveways.
- **Difficult Conditions for Bicycling** – Cyclist should exercise high level of caution and awareness when cycling on these roads. These roads typically have all or most of the following conditions: high traffic volumes, high traffic

speed, relatively narrow lanes, high truck traffic, and a high number of right lanes and commercial driveways.

The average suitability rating for bicycle travel routes within Douglas County was between medium and difficult conditions for bicycling. Bankhead Highway, Fairburn Road, SR 92, SR 166, Capps Ferry Road, and SR 5 were all considered to be difficult for bicyclists and were rated low. Fairburn Road and SR 92 are both part of the Central Route Corridor (Route 15) of the State Bicycle Routes Network, as mentioned above. As documented in the state plan, rehabilitation of existing corridors would be necessary to properly serve cyclists on these routes. However, some travel routes within Douglas County were determined to have the best conditions for bicycling. These included Willow Ridge Road, Sweetwater Industrial Boulevard, and East Church Street between Campbellton Street and Fairburn Road.

### CITY OF DOUGLASVILLE

The City of Douglasville has the most concentration of existing, programmed, and proposed sidewalks predominantly in the areas north and south of Bankhead Highway (US 78), as seen in Figure 9 – City of Douglasville Sidewalk/Bicycle/Multi-Use Path Map. A west/east multi-use trail exists along Selman Drive between SR 5 and Campbellton Street.

Proposed multiuse trails are 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. Another trail is proposed west of Interstate 20 connecting the relocation of Dorris Road and Prestley Mill Road. At the north end of Malone Street, a trail is proposed to connect a proposed sidewalk to Autry Circle. In addition, bike paths are proposed 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).

### LIVABLE CENTERS INITIATIVE (LCI)

The LCI program was developed by the ARC to help create sustainable, livable, and walkable communities by linking transportation and land use planning consistent with local and regional policies. Since 2000, the LCI program has provided \$3.6 million to implement projects in the City of Douglasville. Douglas County recently completed a Draft LCI Plan for the Highway 92 Emerging Corridor after receiving a LCI grant from the ARC in March 2007. The Highway 92 study corridor begins at Lake Monroe Road and continues northwest to Interstate 20. One of the primary goals of the program is to provide access to a range of travel modes, including walking and bicycling to enable access to all uses within the study area.

As part of the draft plan, the study team illustrated a number of potential trails parallel to and intersecting Highway 92. One of the trails runs south along Highway 92, east of Pine Drive, and continues east to the proposed Lee Road extension. Other south/north trails are proposed through the study area along Hillcrest Drive, Midway Road, Pope Road, proposed Lee Road extension, and along a proposed unnamed street connecting Douglas County Soccer Association and Deer Lick Park.



These proposed trails will serve as a guide for recommending future bicycle/pedestrian facilities within Douglas County.

### CHATTAHOOCHEE HILL COUNTRY REGIONAL GREENWAY TRAIL MASTER PLAN

There are trails proposed throughout Douglas County as part of the Chattahoochee Hill Country Regional Greenway Trail Master Plan. All of the proposed trails originate from the larger network along the Chattahoochee River and branch northward into Douglas County. This 98-mile trail is proposed to connect four counties and will enter Douglas County at locations along the Chattahoochee River. One trail is proposed to follow Sweetwater Creek and continue north through the park. Another trail will continue northward into Douglas County near the Boundary Waters Park. There is also a trail proposed linking the river to Dog River Park and continuing northward.



## RAILROADS AND AIRPORTS

This section describes the rail and aviation services and facilities available in Douglas County.

### PASSENGER RAIL

Currently there is no passenger rail service in Douglas County. Amtrak operates from Atlanta to Birmingham and runs through Douglas County, but the intercity rail passenger service does not stop in the county.

The Georgia Rail Passenger Program (GRPP) includes future plans to develop a line from Bremen to Atlanta with stops in Haralson, Carroll, Douglas, Cobb, and Fulton counties. Douglasville is the planned site for the stop in Douglas County. Initial capital cost is estimated at \$310 million, with a further \$53 million needed to handle the 2030 level of forecast passengers. At the mid-range level fares, 1.1 million passengers are expected to ride the trains each year, with operating assistance of \$3.9 million per year in the year 2030. (GRPP 2006 Fact Sheet)

The GRPP proposes seven commuter lines to serve approximately 45 stations in the metro Atlanta area to provide peak period capacity. The seven intercity lines would link nine of Georgia's largest cities and towns with the metro Atlanta/Macon area, as well as two of the largest travel markets in adjoining states, and connect with two federally-designated high-speed rail corridors.



### FREIGHT RAIL

Norfolk Southern has an active line that runs from Atlanta to Birmingham passing through Douglas County. The tracks run parallel to US 78 and carry freight as well as Amtrak's passenger rail service. No stations for freight or passenger rail exist in Douglas County.

Norfolk Southern also has double main tracks running from Atlanta to Austell that represent the heaviest rail traffic density in Georgia. These tracks split with the west line heading towards Douglas County and the north line feeding into the John W. Whitaker intermodal terminal. This terminal is a truck-train transfer facility with truck traffic having access to the terminal from Interstate 20 via State Route 6.

The majority of the rail lines running through Douglas County are at-grade and run parallel to major roadways. As a result the rail crossings are safety hazards for drivers and train operators. A detailed study of area rail crossings was conducted in 2004. The railroad crossings in Douglas County were inventoried to provide insight into the interaction between vehicular traffic and train traffic. The rail crossings within Douglas County are shown in Table 9 and Figure 10.

| <b>Table 9 – Railroad Crossings</b> |                       |          |
|-------------------------------------|-----------------------|----------|
| Inventory Number                    | Location              | Type     |
| 726604M                             | Tyson Road            | At-grade |
| 726603F                             | Nalley Road           | At-grade |
| 726602Y                             | Andy Mountain Road    | At-grade |
| 726601S                             | Richardson Road       | At-grade |
| 726606B                             | Conners Road          | Overpass |
| 726599T                             | Mann Road             | At-grade |
| 726594J                             | Baggett Road (E)      | At-grade |
| 726595R                             | N. Baggett Road (W)   | At-grade |
| 904198J                             | Cedar Mountain Road   | At-grade |
| 726590G                             | Rose Ave.             | At-grade |
| 726588F                             | Cambellton Road       | At-grade |
| 726598L                             | Strawn Road           | At-grade |
| 726589M                             | McCarley Street       | At-grade |
| 726586S                             | Brown St              | At-grade |
| 726583W                             | McIntosh Rd           | At-grade |
| 726587Y                             | SR 92                 | At-grade |
| 726582P                             | Municipal Parkway     | At-grade |
| 726579G                             | N. Burnt Hickory Road | At-grade |
| 726580B                             | Maries Lake Road      | At-grade |
| 726577T                             | Marony Mill Road      | At-grade |
| 726576L                             | Ben Hill Road         | At-grade |
| 726573R                             | Harper St             | At-grade |
| 726569B                             | Hyde Street           | At-grade |
| 726570V                             | Sweetwater Rd         | At-grade |
| 726571C                             | Temple Street         | At-grade |



## AIRPORTS AND HELIPORTS

Douglas County has four private airfields. Chattahoochee Air Park Airport (4GA6) and Miller Farm Airport (25GA) are located in southeast Douglas County where SR 92 crosses the Chattahoochee River; Kolibri Airport (6GA5) is located in the southwest corner of Douglas County; and Stockmar Airport (20GA) is located in the northwest corner of Douglas County, north of Villa Rica. None of these airports are part of the Georgia Airport System Plan.

The two heliports in Douglas County are for private medical use. Both are situated close to I-20 with Parkway Medical Center Heliport (6GA3) being near the eastern border of Douglas County and Wellstar Douglas Hospital Heliport (3GE6) being within the City of Douglasville.

Fulton County Airport is located approximately 15 miles outside of Douglas County, with access from I-20 and Bankhead Highway. From I-20 and I-285, Douglas County also is located within approximately 30 miles of Hartsfield-Jackson Atlanta International Airport.

## PARKING FACILITIES

In coordination with the Douglas County DOT, a review of significant parking facilities was conducted. The inventory of spaces at park-and-ride lots is shown in Table 10. The lots are located primarily along highly traveled corridors including I-20, SR 92 and SR 6. Significant parking facilities at Arbor Place Mall and Douglas County Courthouse are shown in Table 11.

| Location  | Number of Spaces | Utilization |
|---|------------------|-------------|
| I-20 & Lee Road                                 | 145              | 60%         |
| I-20 & Thornton Road                            | 110              | 60%         |
| I-20 & Post Road                                | 78               | 95%         |
| SR 92 & East Church Street                      | 40               | N/A         |
| SR 6 & US 78                                    | 60               | N/A         |
| Douglas County Transportation Center            | 650              | 75%         |
| Total   | 1,083            |             |
| Source: 2004 Georgia Transit Programs Fact Book |                  |             |

**Table 11 – Significant Parking Facilities**

| Location                  | # of Spaces |
|---------------------------|-------------|
| Arbor Place Mall          | 6,500       |
| Douglas County Courthouse | 585         |
| Total                     | 7,085       |

Source: Douglas County DOT, 2007

## SAFETY AND MAINTENANCE

### ACCIDENT HISTORY

According to the accident data provided by the GDOT Office of Traffic Safety and Design, a total of 14,876 crashes were recorded in Douglas County during the 3-year period from 2003 to 2005. Among them, 51 fatalities and 6,698 injuries occurred. Excluding the accident data without RC Link Identifier or Milepost, the accident locations of the top thirty highest crash frequencies of Douglas County were identified and listed in Table 12.

According to the data in Table 13, the top 5 locations where the highest number of crashes occurred in Douglas County were not on I-20. However, 43 percent of the top 30 locations were on I-20.

As previously discussed, Volume to Capacity Ratio (V/C ratio) is a primary factor for understanding traffic congestion, and based on the Douglas County data, there appears to be a relationship between accidents and V/C ratio. The eastern portion of I-20 within Douglas County had a V/C ratio of more than 0.9, which corresponds to highly congested conditions, and the V/C ratio decreased gradually on the western portion of I-20. Figure 11 displays the accident points among the top 30 crash frequency locations that occurred on I-20 and its interchanges between 2003 and 2005. They were all within the segments with highly congested conditions. Moreover, 85 percent of I-20 accident locations among the top 30 crash frequency locations were within the Douglasville City limits.

As shown in Table 12, the majority of accidents have been rear end and angle collisions. Sight distance problems and stop-and-go conditions at driveways and unsignalized intersections may result in a higher number of rear-end collisions. Angle collisions typically occur at attempted turns into unsignalized intersections and locations with sight distance problems. This is evident from the data for accident events on I-20 in Table 12. For the top 30 crash frequency locations not on I-20, most of them are signalized. Thus, the high number of angle collisions at these locations are likely attributed to sight distance problems.

| Rank | Route         | Milepost | # of Crashes | People Injured | Fatality | Manner of Collision* |   |     |    |   |    | 3-Year Ave of Crashes |
|------|---------------|----------|--------------|----------------|----------|----------------------|---|-----|----|---|----|-----------------------|
|      |               |          |              |                |          | 1                    | 2 | 3   | 4  | 5 | 6  |                       |
| 1    | SR 5          | 12.82    | 232          | 42             | 0        | 87                   | 4 | 105 | 29 | 1 | 6  | 77.3                  |
| 2    | Douglas Blvd  | 0.73     | 189          | 59             | 0        | 74                   | 5 | 83  | 25 | 1 | 1  | 63.0                  |
| 3    | US 78(SR 78)  | 23.53    | 150          | 67             | 0        | 36                   | 8 | 86  | 15 | 0 | 5  | 50.0                  |
| 4    | SR 6          | 2.15     | 136          | 51             | 0        | 33                   | 5 | 70  | 23 | 1 | 4  | 45.3                  |
| 5    | SR 6          | 3.01     | 132          | 45             | 0        | 25                   | 5 | 82  | 14 | 1 | 5  | 44.0                  |
| 6    | I-20 (SR 402) | 9.52     | 131          | 41             | 0        | 16                   | 1 | 97  | 11 | 0 | 6  | 43.7                  |
| 7    | SR 92         | 10.25    | 118          | 24             | 0        | 48                   | 4 | 52  | 8  | 1 | 5  | 39.3                  |
| 8    | I-20 (SR 402) | 9.06     | 115          | 30             | 0        | 13                   | 0 | 92  | 7  | 0 | 3  | 38.3                  |
| 9    | SR 92         | 9.17     | 112          | 89             | 0        | 67                   | 1 | 33  | 2  | 5 | 4  | 37.3                  |
| 10   | SR 6          | 3.84     | 103          | 39             | 0        | 26                   | 4 | 55  | 14 | 2 | 2  | 34.3                  |
| 11   | I-20 (SR 402) | 18.60    | 101          | 34             | 0        | 11                   | 2 | 49  | 24 | 0 | 15 | 33.7                  |
| 12   | I-20 (SR 402) | 12.38    | 91           | 21             | 0        | 14                   | 0 | 64  | 7  | 0 | 6  | 30.3                  |
| 13   | I-20 (SR 402) | 12.02    | 91           | 23             | 0        | 13                   | 1 | 68  | 2  | 1 | 6  | 30.3                  |
| 14   | I-20 (SR 402) | 11.90    | 90           | 34             | 0        | 33                   | 4 | 44  | 4  | 2 | 3  | 30.0                  |
| 15   | I-20 (SR 402) | 18.99    | 82           | 27             | 1        | 7                    | 1 | 48  | 16 | 0 | 10 | 27.3                  |
| 16   | I-20 (SR 402) | 9.08     | 77           | 25             | 0        | 31                   | 3 | 32  | 8  | 0 | 3  | 25.7                  |
| 17   | SR 92         | 9.61     | 76           | 40             | 0        | 52                   | 2 | 16  | 4  | 1 | 1  | 25.3                  |
| 18   | I-20 (SR 402) | 8.73     | 74           | 35             | 0        | 36                   | 1 | 26  | 6  | 1 | 4  | 24.7                  |



| Rank | Route         | Milepost | # of Crashes | People Injured | Fatality | Manner of Collision* |   |    |    |   |    | 3-Year Ave of Crashes |
|------|---------------|----------|--------------|----------------|----------|----------------------|---|----|----|---|----|-----------------------|
|      |               |          |              |                |          | 1                    | 2 | 3  | 4  | 5 | 6  |                       |
| 19   | SR 6          | 3.30     | 72           | 32             | 0        | 26                   | 2 | 32 | 12 | 0 | 0  | 24.0                  |
| 20   | SR 5          | 13.27    | 71           | 14             | 0        | 44                   | 0 | 12 | 5  | 0 | 10 | 23.7                  |
| 21   | I-20 (SR 402) | 12.36    | 69           | 29             | 0        | 23                   | 3 | 30 | 8  | 0 | 5  | 23.0                  |
| 22   | SR 5          | 12.64    | 68           | 16             | 0        | 15                   | 2 | 40 | 9  | 0 | 2  | 22.7                  |
| 23   | SR 92         | 9.97     | 67           | 34             | 0        | 31                   | 1 | 29 | 5  | 0 | 1  | 22.3                  |
| 24   | SR 92         | 8.32     | 64           | 52             | 0        | 26                   | 2 | 29 | 5  | 1 | 1  | 21.3                  |
| 25   | I-20 (SR 402) | 18.91    | 56           | 25             | 0        | 8                    | 0 | 31 | 10 | 0 | 7  | 18.7                  |
| 26   | SR 5          | 12.35    | 55           | 34             | 0        | 16                   | 2 | 32 | 3  | 1 | 1  | 18.3                  |
| 27   | US 78(SR 78)  | 16.61    | 54           | 10             | 0        | 17                   | 0 | 32 | 5  | 0 | 0  | 18.0                  |
| 28   | I-20 (SR 402) | 8.68     | 54           | 9              | 0        | 6                    | 0 | 38 | 5  | 0 | 5  | 18.0                  |
| 29   | I-20 (SR 402) | 10.57    | 53           | 6              | 0        | 6                    | 0 | 34 | 3  | 0 | 10 | 17.7                  |
| 30   | US 78(SR 78)  | 8.33     | 52           | 10             | 0        | 24                   | 1 | 25 | 1  | 0 | 1  | 17.3                  |

\*Manner of Collision: 1 = Angle, 2 = Head On, 3 = Rear End, 4 = Sideswipe Same Direction, 5 = Sideswipe Opposite Direction, 6 = Not With Motor Vehicle



## EVACUATION ROUTES

Evacuation routes are designated to carry traffic from Douglas County to an incident-specific destination in the event that the entire county or region is evacuated due to severe weather, hazardous materials leak, or other large-scale emergency. Such an event, though not on record as occurring in recent years, would require clear signage and adequate facilities to handle the extremely high volumes of traffic. Evacuation routes and procedures are set by the Georgia Emergency Management Agency (GEMA).

According to GEMA representatives, the primary evacuation route in Douglas County is I-20, which also would serve the same role for other counties. In addition, SR 166, Chapel Hill Road, and Bill Arp Road (SR 5) are designated as evacuation routes (shown on Existing Safety and Maintenance Conditions).

## LOCAL MAINTENANCE ACTIVITIES

Preservation of the County's existing system of roads and bridges is an integral part of the transportation plan. The current maintenance program includes such activities as: road repairs, signal repairs, sign upkeep and visibility, drainage repair, traffic calming and even minor improvements for traffic control at intersections.

Douglas County funds local maintenance activities and other transportation initiatives through its Special Purpose Local Option Sales Tax (SPLOST) program. The approximate SPLOST budget for a five-year program beginning in 2002 was over \$41 million to be divided among Douglas County, Douglasville, Villa Rica, and Austell. A new referendum for six-year SPLOST is anticipated to be on the ballot in the future.

The SPLOST program has enabled the County to make progress on some of the highest maintenance priorities. Remaining funds have been available to undertake intersection projects, drainage projects, and a study of short-term (operational) and longer-term (enhancement/capacity) improvements on major corridors. The future SPLOST implementation would continue this trend if approved.

## LAND USE

The Future Land Use map (Figure 12) 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.

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.

Douglas County is primarily a bedroom community for the metropolitan Atlanta Region. The citizens of Douglas County see the County's current rural and small town nature as central to the quality of life they enjoy. The majority of the developed land uses within the county (excluding agricultural and public institutional) is residential, over 90 percent, and of that total, over 90 percent of all housing units within the county are single-family residences. 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 non-residential development in Douglas has clustered largely within two areas, the unincorporated area adjacent to the City of Douglasville and the Western end of the County along the Thornton Road Area. Arbor Place Mall within the City of Douglasville and the Chapel Hill Corridor are the center of the County's retail growth. As residences age and traffic becomes heavier, the Highway 5 corridor has seen some transition from residential to small retail establishments. Careful transportation, land use planning and transitional compatible growth within these corridors area are extremely important in ensuring the County's livability in the future.

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

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

## LAND USE AND TRANSPORTATION

It is imperative that the proposed Comprehensive Transportation Plan (CTP) supports the Comprehensive Plan to assure coordination and consistency in 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 very well influence significant change in land use character and patterns. Likewise, land use changes will dictate needs for expansion of the transportation infrastructure.

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 mobility in northern unincorporated areas of the county as external growth increases.

Douglasville is the urban core area/activity center in the county. The impact of the City lessens on the south side of I-20 except in areas of commercial centers around the interstate interchanges. I-20 is both a blessing and a burden for the County. It acts as a barrier to north south mobility in the county but also serves the county well for 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. 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 non-dependent automobile users (especially seniors and children), transportation choices are an important element 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 options to the Single Occupant Vehicle (SOV) must be incorporated into future plans. Transit, Transportation Demand Management, and walkable and pedestrian 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. Figure 13 shows the locations of DRIs in Douglas County. These planned developments will place increased demands on the transportation infrastructure.





## STATE STUDIES AND PLANS

### STATE TRANSPORTATION IMPROVEMENT PROGRAM

GDOT develops the State Transportation Improvement Program (STIP) annually in order to receive federal transportation project funds. The STIP is a list of statewide priority projects over a three year period, and includes all highway, bridge, bicycle, pedestrian, safety, transportation enhancement, and transit projects proposed for federal funding, as well as non-federally funded regionally significant transportation projects. Projects listed in the STIP are identified through GDOT's ongoing planning processes and are coordinated with the MPOs to include the current TIPs of the major metropolitan areas in the state. Improvements are prioritized according to regional and statewide goals. The STIP is fiscally balanced, programming only those projects with funding available for the fiscal years included.

The State Transportation Board adopted the most recent STIP (Fiscal Year 2007-2009) on September 21, 2006, and it was approved by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) on October 10, 2006. The STIP lists federally-funded transportation projects that are located outside Metropolitan Planning Organization (MPO) boundaries; each MPO develops its own Transportation Improvement Program (TIP), which becomes a part of the STIP, included by reference. Douglas County improvement projects are included in the Atlanta Regional Commission's TIP (discussed in Section 1.5 Programmed Improvements).

### GEORGIA BICYCLE AND PEDESTRIAN PLAN

The State Transportation Board approved the Georgia Bicycle and Pedestrian Plan on August 21, 1997. The Plan defined a statewide network of bicycle routes. The network contains 14 routes, totaling 2,943 miles. Bicyclists are considered the primary users of the route network, however, pedestrians also benefit from the pedestrian friendly designs used in urban areas and the paved shoulders constructed on rural sections.

The two key elements of the Plan implementation included: (1) signing each of the State Bicycle Routes (SBRs); and (2) incorporation of Bicycle and Pedestrian facilities (e.g. paved shoulders, bike lanes, sidewalks) into already programmed improvement projects along the route network as they move through the design and construction stages. Four SBRs have been signed: SBR 95/Coastal Route; SBR 10/Southern Crossing; SBR 85/Savannah River Run and SBR 50/Augusta Link. The approach of providing extra curb lane width, wide, paved shoulders, bike lanes, and sidewalks routinely during construction or reconstruction activities is expected to result in nearly all of the network being designed to standards that allow the safe and efficient movement of bicyclists, pedestrians, and motorists within the next 20 years.



## 2005-2035 GEORGIA STATEWIDE TRANSPORTATION PLAN UPDATE

The GDOT Office of Planning is responsible for developing the Statewide Transportation Plan (SWTP). The 2005-2035 SWTP is the most recently completed SWTP. The SWTP was adopted by the State Transportation Board in January 2006.

The SWTP assessed the current and future performance of all major transportation modes across the state, and developed new 30-year statewide transportation demand and economic forecasts to 2035. The SWTP defines financially constrained and unconstrained statewide transportation programs, estimates the cost of these programs, and forecasts available and potential funding. The Plan was not intended to identify specific projects, but rather to present a programmatic assessment of the state's transportation systems.

The key finding of the Plan update is that there is a major funding gap between needs and approved programs and available funding. Total revenues available for transportation expenditures are forecast to be \$86 billion for the 30-year Plan period, compared to total costs of a Build/Financially-Unconstrained scenario of \$160 billion, leaving a funding gap of \$74 billion.

## 2005-2035 GEORGIA STATEWIDE FREIGHT PLAN

During the development of the 2005-2035 SWTP, GDOT conducted a comprehensive analysis of freight, including the origin and destinations for freight inside and outside of Georgia, the commodities that are transported, and the modes that are used. The analysis documented the flow of freight as tonnage, to better understand the demands placed on the transportation infrastructure, and the flow of freight as a dollar value to better understand the importance to the economy. This documentation is known as the 2005-2035 Statewide Freight Plan. As summarized in the Plan, the major findings are:

- More than 600 million tons of goods worth over \$1 trillion are transported to and from Georgia annually.
- By 2035, the tonnage of freight moved in Georgia is forecast to increase by 171 percent, or 2.7 percent per year, to 1.7 billion tons per year, and the value of freight moved in Georgia is forecast to increase by 204 percent, or 3.1 percent per year, to \$3.3 trillion.
- A substantial amount of Georgia's existing freight is only passing through Georgia. Through freight is currently 33 percent of the weight and 37 of the value of all freight, and by 2035, through freight is forecast to be 29 percent of the weight and 33 percent of the value of the freight on Georgia's transportation system.
- The commodities carried in Georgia are primarily those that support Georgia's service-oriented economy.
- Trucking is the dominant mode for carrying freight in Georgia. The existing mode share of trucking is 72 percent of the tonnage and 82 percent of the value. By 2035, trucks' mode share is expected to be 79 percent by weight and 86 percent by value. The performance of the highway system is critical for transporting the overwhelming majority of Georgia's freight.

- The vast majority of Georgia's freight, 73 percent of the tonnage and 80 percent of the value, travels less than 500 miles from Georgia's borders. Since freight shipment by rail is competitive with trucking only at distances greater than 500 miles, this helps to explain the dominant mode share of trucking and the difficulty in changing that mode share.
- Freight primarily originates and terminates in Georgia's urban counties. The top 15 counties in Georgia, ranked by the weight of freight that they ship or receive, represent over 64 percent of the tonnage and 66 percent of the value of all freight in Georgia. These counties are almost exclusively in urban areas, with half in the Atlanta region and the remainder representing Georgia's other large metropolitan regions. The transport of freight both affects and is affected by congestion in these urban areas. This pattern will not significantly change in the future.
- The interstate highways carry the highest volumes of freight by both tonnage and value at present. While the interstate highway volumes are expected to increase by as much as 177 percent by 2035, a number of Governor's Road Improvement Program (GRIP) and other arterial highways are forecast to carry significant freight volumes in 2035. The preservation and improvement of the interstate system and the development of secondary highways to accommodate freight will be necessary to provide continued accessibility for Georgia's freight.
- CSX and Norfolk Southern railroads transport most of the rail freight in Georgia. While their track system provides less coverage than the highway system, sections of rail tracks carry freight tonnage comparable to the interstate highways.
- The water freight in Georgia is carried primarily through the Atlantic Ocean Ports of Savannah and Brunswick. Savannah transports more than 10 times the domestic tonnage of Brunswick with a similar relationship for international cargo. This relationship is forecast to continue.
- Air cargo in Georgia is almost exclusively shipped through Hartsfield-Jackson Atlanta International Airport (HJIA). Air cargo tonnage is currently a small share of freight in Georgia, but it carries higher value goods and is growing much faster than other modes.

### GEORGIA RAIL FREIGHT PLAN UPDATE 2000

The State Rail Freight Plan Update was prepared to fulfill Federal Railroad Administration (FRA) requirements for updating the plan at regular intervals in order to receive Local Rail Freight Assistance funds. The State Rail Freight Plan was originally published by GDOT in 1978 to address a series of rail abandonments. Subsequent updates were published in 1980, 1985, and 1989. The Georgia Rail Freight Plan Update provides updated general information about the state's railroads and identifies needed rail programs to rehabilitate and preserve rail freight transportation.

The Georgia rail system is comprised of 4,693 route miles of railroad, over which 19 rail carriers operate. Two Class I railroads, Norfolk Southern and CSX Transportation, own or operate approximately 73 percent (3,558 miles) of the total mileage. The remaining 27 percent (1,294 miles) is operated by 17 Class III (shortline) railroads. In addition, the state of Georgia has acquired 10 line segments,

totaling 281 miles of track, and rehabilitated another 352 miles. Douglas County has one of the busiest railroads in the region.

According to the Plan, nearly 200 million tons of freight moved over the rail system in 1998. Sixty-seven million tons terminated in the state after originating outside of the state. Twenty-three million tons were shipped from Georgia to other states, 15 million moved exclusively within the state, and 88 million passed through the state. The largest originating commodities were clay, concrete, glass and stone products, representing 26 percent, and the largest terminating commodity was coal, representing 49 percent. Other major rail commodities included lumber, pulp and paper, farm products, nonmetallic minerals, and chemicals.

A list of shortline railroad future capital investment needs was developed. An estimated total of \$107 million (in year 2000 dollars) is reportedly needed for capital improvements, with short-term capital needs (0-5 years) totaling \$58.4 million and long-term needs (5-10 years) totaling \$48.5 million. There are no shortline railroads serving Douglas County.

## **REGIONAL STUDIES AND PLANS**

### **ENVISION 6+ - ATLANTA REGIONAL COMMISSION REGIONAL TRANSPORTATION PLAN**

The Atlanta Regional Commission (ARC) is the MPO for the 18-county Atlanta metropolitan area, which includes Douglas County. ARC adopts a long-range Regional Transportation Plan (RTP) every four years and a six-year Transportation Improvement Program (TIP) annually. Envision6 is the most recent long-range RTP adopted by ARC, and approved in December 2007.

The RTP is a “long-range plan which includes a balanced mix of projects such as bridges, bicycle paths, sidewalks, transit services, new and upgraded roadways, safety improvements, transportation demand management initiatives and emission reduction strategies.” Envision6 emphasizes, as did the previous 2030 RTP, the need to meet air quality requirements, but also identifies roadway congestion as a top priority. Envision6 integrates transportation, land use and water resource planning. The RTP forms the basis upon which the short-range element, the TIP, is developed.

The Envision6 RTP is the first plan that was developed with a funding shortfall and as a result projects from the previous RTP, Mobility 2030, were classified as unfunded needs. Federal regulations require that metropolitan transportation plans include only those projects for which funding is actually available, the financially constrained Envision6 has about \$67.1 billion in funds. The Aspirations Plan from Mobility 2030 is still desired unfunded projects that are estimated to be about \$21 billion, and an additional \$4.25 billion, which are those projects classified as unfunded needs under Envision6.

## 2008-2013 ATLANTA REGIONAL COMMISSION TRANSPORTATION IMPROVEMENT PROGRAM

The Transportation Improvement Program (TIP) is the short-term element of the RTP. The TIP allocates federal funds for use in construction of the highest priority transportation projects in the near term of the RTP, including the list of projects scheduled to be undertaken over the next six fiscal years. The TIP must be consistent with the long-range objectives of the RTP and must be financially balanced. The FY 2008-2013 TIP was adopted in February 2008.

The FY 2008-2013 TIP primarily reflects the progression of projects and programs defined in the previous TIP. Schedules and costs have been updated if early planning estimates turned out to be incorrect once detailed engineering was completed. A small number of new projects which do not impact air quality conformity or fiscal constraint were also added. No major shifts in regional priorities have occurred.

The TIP contains hundreds of projects totaling about \$10 billion. Douglas County has 19 projects programmed in the 2008-2013 TIP and they are discussed earlier in this document.

## HOV STRATEGIC IMPLEMENTATION PLAN FOR THE ATLANTA REGION

The HOV system is a primary component of the long-range RTP. The 2030 RTP includes HOV lanes on key arterial and freeway corridors, including 262 new miles of HOV lanes and 55 HOV ramp additions or improvements. In September 2001, GDOT initiated an 18-month project to develop an HOV Strategic Implementation Plan for the Atlanta Region. The purpose of the plan was to provide an approach for expediting HOV projects into construction, including scheduling and funding mechanisms.

Phase I of the study consisted of a detailed analysis of HOV corridors identified in the 2030 RTP. The highest ranking projects based on constructability (ease and cost) were identified and presented to GDOT so that work could commence on those key projects immediately. Phase II evaluated feasible improvements to the existing lanes and potential extensions of the HOV system beyond the 2030 RTP to the 21-county non-attainment area under the Clean Air Act.

The methodology for evaluation of the study area and prioritization of projects was based on several planning and constructability factors, including congestion (the HOV volume threshold is 20,000 AADT per lane); travel time savings per mile during peak hour; connectivity to the transportation network; existence of transit/express bus service; potential HOV lane reliability; available right of way; typical section and associated cost; and bridge replacements.

All projects were rated on individual criteria and relationship to the entire HOV system, as well as the transportation network as a whole. Projects were then prioritized and grouped by tier, with each project within a tier having the same priority. The tier system allows for flexibility when projects are funded. Recommended tiers range from 1 through 7. Tiers 1 through 4 were recommended

for inclusion in the 2030 RTP. Tier 5 projects were evaluated on a project-by-project basis for inclusion in the 2030 RTP. Tiers 6 and 7 may be studied for inclusion in later RTP updates. One Tier 1 project and two Tier 5 projects are located in Douglas County:

- Tier 1
  - I-20 West from SR6/Thornton Road to SR5/Bill Arp Road
- Tier 5
  - I-20 West from SR5/Bill Arp Road to Liberty Road
  - I-20 West from Liberty Road to SR113

The report also includes access location recommendations, system to system interchange recommendations, park and ride location recommendations, enforcement strategies, project construction cost estimates, and identification of potential funding sources.

## ATLANTA REGION BICYCLE TRANSPORTATION & PEDESTRIAN WALKWAYS PLAN

In June 2007, ARC produced an update to the Atlanta Region Bicycle Transportation and Pedestrian Walkways Plan (Bike/Ped Plan). The previous plan, developed in 2002, encouraged regional coordination of non-motorized planning efforts. The current Bike/Ped Plan update builds on the strategies of the previous plan with the intention of creating both a regional scale bicycle network that includes both on-road facilities and shared use pathways and a pedestrian network focused around major activity centers. In addition, the current Plan update has a horizon year of 2030, and it includes all areas within the 18-county MPO planning boundary.

The Bike/Ped Plan update comprises an Existing Conditions Report, a Needs Assessment Report, and policy and program recommendations. The Existing Conditions Report describes and analyzes the level of accommodation for bicyclists and pedestrians on roadways within the Atlanta region, finding that the region's roadways poorly accommodate bicycling and walking. The Needs Assessment Report proposes methodologies for evaluating projects submitted to ARC for funding assistance, and contains an approach to prioritization of projects in the bicycle Study Network. The following Tier 1 priority projects were identified in Douglas County:

| Road Name    | From          | To              | Facility Need       |
|--------------|---------------|-----------------|---------------------|
| Bankhead Hwy | SR92          | Sweetwater Road | add paved shoulders |
| Bankhead Hwy | SR5           | Whitley Drive   | add paved shoulders |
| Bankhead Hwy | Sweetwater Rd | Thornton Road   | add paved shoulders |

The recommendations of the current Bike/Ped Plan update are intended to encourage non-motorized transportation. The policy recommendations include: “adopting a clarified project funding approach; taking steps to routinely accommodate bicyclists and pedestrians in roadway construction projects; guidance on retrofitting existing facilities to better accommodate bicyclists; guidance on improving accommodation of pedestrians at un-signalized intersections and mid-block crossing locations; guidance on land-planning practices to increase bicycle and pedestrian

connections from residential areas; and continuing the growth of planning and programming to improve bicycle transportation and pedestrian walkways.”

### ATLANTA REGIONAL FREIGHT MOBILITY PLAN

Freight planning is a significant part of the RTP. The Mobility 2030 RTP focuses on transportation improvement projects on regionally significant transportation corridors that have a high volume of freight traffic, such as the Thornton Road corridor in Douglas County. ARC developed a Freight Advisory Task Force as part of the Mobility 2030 planning process. The Task Force recognized the need for a strategic plan to address freight issues, and the idea for the Atlanta Regional Freight Mobility Study emerged from this Task Force.

In October 2005, ARC undertook the development of the Regional Freight Mobility Plan for the Atlanta metropolitan area. The purpose of the study is to identify and prioritize improvements and strategies that accommodate and enhance mobility of people and goods while mitigating the negative impacts on congestion, safety, the environment, and quality of life.

The ongoing study involves data collection; identification and assessment of existing and future freight movement and regional infrastructure for all modes; quantification of economic significance of freight in the region; development of freight-supported land use guidelines; examination of social and environmental impacts related to freight movement; and development of a regional freight action plan.

The following are some key findings of the study:

- Atlanta is among the top three inland distribution centers in the nation.
- Approximately 43 percent of all trucks traveling in the region are passing through.
- Trucks carry over 87 percent of goods moved throughout the region.
- Food, lumber, and non metallic products comprise 82 percent of the total tonnage of the region’s goods movement.

Draft recommendations of the study include:

- Develop a regional truck route system.
- Develop truck only by-pass around the region to address through truck traffic without origin or destination in the region.
- Develop Integrated Logistics Centers at key freight areas such as Fulton Industrial Blvd, Fort Gillem, Fairburn.
- Reduce the number of at-grade rail crossings on the Regional Strategic Transportation System and Core Freight network.

The Plan identified the following key facts related to freight movement in Douglas County:

- Despite the small size of the logistics sector, it provides tremendous support to freight intensive industries, namely manufacturing, construction, wholesale and retail, trades. Together these industries comprise 72 percent of the jobs in Douglas County. Of the jobs depending on efficient freight movement in Douglas County, manufacturing, wholesale and retail trades account for 46, 10, and 33 percent respectively, totaling 89 percent, while construction provides 11 percent of jobs.

- The logistics sector in Douglas County is dominated by trucking operations. Truck transportation provides 64 percent of the jobs in the logistics sector. Support services for transportation and postal services provide 13 percent of jobs each.
- Douglas County businesses ship fewer goods outbound than they receive inbound. Efficient freight movement is key to importing industries and consumers in the county.
- Of Douglas County's freight generation, 72 percent and 5 percent terminate in Metro Atlanta and other parts of Georgia respectively. Other parts of US consume approximately 25 percent.
- Freight terminating in Douglas County comes from all throughout the U.S. with 39 percent coming from within the Atlanta metro region, 36 percent coming from the rest of the U.S. The remaining 25 percent originate in parts of Georgia outside of the Atlanta metro region.
- In 2005, 4.66 million tons of freight flowed on the transportation system in Douglas County. In terms of tonnage, the construction industry is largest freight generator in the County as evidenced by the fact that broken stones, ready-mix concrete and other construction materials total 3.7 million tons or 79 percent of total traded freight.

## LOCAL STUDIES AND PLANS

### DOUGLAS COUNTY COMPREHENSIVE PLAN

The Douglas County Comprehensive Plan update was adopted in October 2004. The Transportation Element of the Plan addresses mobility needs primarily in unincorporated areas of Douglas County, including roadway, public transit, bicycle, and pedestrian needs. The Transportation Element includes an existing transportation inventory, which provides the basis for the assessment of current and future transportation needs, and it identifies programmed and recommended projects, as well as potential projects for future planning studies. The Transportation Element was considered the first phase of planning for this CTP.

The inventory of existing conditions indicates a lack of modal choices, a roadway network with pavement and maintenance needs, and growing congestion due to rapid growth. Congested north-south corridors were identified as the future primary deficiency of the overall transportation system from a roadway perspective, and to a lesser extent, east-west corridors to reach other alternatives for north-south flow.

### STATE ROUTE 6 TRANSPORTATION CORRIDOR STUDY

In early 2006, ARC initiated a corridor study for State Route 6, a portion of which is located in Douglas County (SR6/Thornton Road). The SR6 Corridor Study (also called the Connect Six project) will identify recommendations for inclusion in the RTP and the TIP. Specific study activities include the identification of transportation needs in the corridor, assessment of the benefits and costs of alternative solutions, and building consensus on a preferred set of integrated transportation and land use alternatives.

The study area is divided into four individual segments of varying length, in order to better manage the data and to draw greater attention to the unique needs of different sections of the 32-mile corridor. Portions of two segments, Segments 2 and 3, are located in Douglas County. Segment 2 begins at the Whitaker Intermodal Terminal and extends 5.75 miles to the intersection with I-20 in Douglas County; Segment 3 begins at I-20 and extends 12 miles to the intersection of SR 6 and I-285.

A Baseline Conditions Report was completed in December 2006, and a Needs Assessment Report was completed in April 2007. The next task in the study is to identify and evaluate alternative improvement scenarios.

The needs assessment process considered the corridor from different perspectives including: transportation needs by mode; land use and development needs; market and economic development trends and demand; and environmental sensitivity. The following is a summary of major findings and needs:

- **Transportation Needs**
  - Roadway - Much of the corridor will experience failing level of service by 2030. The greatest travel growth will occur in the section of SR 6 from Dallas to I-20, indicating a need for mobility improvements. Bottlenecks are anticipated at high-volume cross-streets. Segment 2 generates and attracts a significant portion of the trips that begin or end in the corridor study area; Segment 3 generates and attracts the least number of trips that begin or end in the corridor study area. Major cross-streets with high traffic volumes in Segment 2 include US 27/278/SR 5, Maxham Road, I-20; major cross-streets with high traffic volumes in Segment 3 include I-20, I-285, and Fulton Industrial Boulevard.
  - Freight - Significant freight movement occurs in the corridor via rail and roadway. Hindrances to efficient freight movement include numerous at-grade rail crossings and conflicts with vehicles.
  - Transit - Portions of the corridor have underserved transit markets. Existing bus routes and stops are not well supported with pedestrian facilities.
  - Pedestrian/Bicycle - Other than the Silver Comet Trail, few pedestrian and bicycle facilities exist in the corridor to support transit service or connect activity and employment centers to residential areas.
- **Land Use and Development Needs**
  - Throughout the corridor, policies and programs are needed to preserve open space, coordinate development activities across jurisdictions, and broaden development types, particularly for housing. The corridor has a significant amount of commercially-zoned property.
- **Market and Economic Demand**
  - The greatest demand for housing, retail, office and industrial development is anticipated in the Paulding and Douglas portions of the corridor. The corridor currently has a jobs-to-housing imbalance and needs to attract more jobs.
- **Environmental Sensitivity**
  - Overall, the SR 6 corridor has a high concentration of natural as well as historic, cultural and archeological resources.



## HIGHWAY 92 CORRIDOR LIVABLE CENTERS INITIATIVE (LCI) STUDY

This study, completed in March 2008, was funded in part by the **Livable Centers Initiative (LCI)**, a program offered by the Atlanta Regional Commission that encourages local jurisdictions to plan and implement strategies that link transportation improvements with land use development strategies to create sustainable, livable communities consistent with regional development policies.

The projects and priorities that have resulted are organized in several key areas. Provided here is a summary and highlight of the plan's projects and priorities from the study's Executive Summary.

**Pedestrian Enhancements & Streetscape** – The plan focuses on pedestrian improvements along Highway 92 and in the surrounding neighborhoods.

- The plan recommends widened sidewalks and catalyst streetscape projects along key portions of the Highway 92 corridor to coincide with new developments.
- In addition, the plan identifies new sidewalks on key neighborhood streets that are currently without sidewalks.
- The plan recommends upgrading pedestrian crossings with pedestrian crosswalk markings, ADA access and countdown ped signals to create a safer walking environment. Combined with streetscape projects, these crossings could be designed with landscaped islands that promote traffic calming and provide a pedestrian refuge.

**New Street Network** – There are several large development opportunities along the corridor that can and should accommodate new street network. These new connections will serve to provide added transportation capacity in the corridor, create smaller, walkable blocks, and reconnect these large sites to the surrounding neighborhoods.

- Key among these is a new 2-lane street parallel to Highway 92 from Lake Monroe to just east of Pine Street and the planned extension of Lee Road to Bomar Road.

**Intersections** – the plan recommends the installation of new traffic signals at key locations along the corridor to:

- Allow multiple points of access to the new street network that will develop over time as new development is planned on Highway 92.
- Provide full access to key large development sites that in-turn connect to other streets and help enhance connectivity in the area.

**Transit** – Connecting the corridor with enhanced transit opportunities is a key long-term goal identified by the community.

- Long term recommendations include making Highway 92 a key regional transit route that can connect downtown Douglasville with industrial areas along the Chattahoochee, employment centers in South Fulton County and the Atlanta Airport.

**Open Space, Trails & Greenways** – The area includes several unique open space and trail opportunities.

- New park and open spaces as a part of new development will help supplement existing key open spaces like the Deer Lick Park and the Douglas Co. Soccer Association.

- A number of new trails are proposed in the plan to connect neighborhoods to schools, parks and regional attractions like the Sweetwater Creek State Park.
- Many of these multi-use trail recommendations are developed to supplement the Atlanta Region Bicycle Transportation and Pedestrian Walkways Plan developed by the ARC in 2002.

**Land Use** – The plan identifies critical future land use changes necessary to promote the proposed redevelopment and open space recommendations. Also, throughout the corridor, there is a need to enhance the design and site planning standards to strengthen the existing Village Overlay Ordinance.

- These include intensifying residential use from low density single family residential to medium density residential developed around a pattern of streets and blocks with a mix of housing types based on TND guidelines.
- Allowing the development of Retail uses as a part of the existing transitional land use with specific commercial development guidelines.
- In addition, the plan outlines “development standards” for traditional neighborhood development and commercial development in order to help regulate future mixed-use redevelopment projects with the intent to enhance connectivity and make new developments pedestrian friendly.

### CHAPEL HILL ROAD AND STEWART MILL ROAD TRANSPORTATION CORRIDOR STUDY (2005)

This study was completed using funds from the Douglas County Special Purpose Local Option Sales Tax (SPLOST). The purpose of the Transportation Corridor Study was to identify transportation deficiencies along both the corridors studied and recommend short-range (immediate) and long-range (20-year) improvements to mitigate the identified deficiencies. The interim recommendations were based on 2004 traffic data and the long-range on project 2024 traffic data. Ten intersection improvements and three signal improvements were identified in the short-term and 22 intersection, widening and technology improvements were recommended for long-range.

### CITY OF DOUGLASVILLE

The City of Douglasville has had numerous corridor, traffic and signal studies completed over the past decade. The following provides brief descriptions of each of those studies:

#### **Prestley Mill Road Corridor Study (2006)**

The objective of this study was to develop recommendations to balance the functional needs of the road from a commercial and residential perspective. Recommendations to improve bicycle and pedestrian safety along the route were also made. The study recommended the following nine projects:

- Replace the existing bridge over I-20
- Construct 3-lane segment on Prestley Mill from Hospital Drive to Timber Ridge Road
- Align north and south legs of Timber Ridge Road, construct turn lanes and install signal

- Construct 10 foot multi-use path along northside of Prestley Mill Road from multi-modal center to Slater Mill Road
- Construct five foot sidewalk along southside of Prestley Mill Road from St. Theresa Church to Hospital Drive
- Construct entry feature to eastern segment of Prestley Mill Road
- Remove existing deceleration lanes and relocate stop bars at three locations
- Construct roundabouts on Prestley Mill Road at the intersections with Frank Lane and Saddlebrook Way
- Install speed signage, curve warning signs and guardrail

### **Broad Street Downtown Douglasville Traffic Analysis (2001)**

The purpose of this study was to identify immediate cost-effective geometric and operational modifications that could be made to provide short-term congestion relief in the downtown area prior to the implementation of the SR 92 relocation project.

Three alternative scenarios of varying complication were recommended but the study did not select a preferred.

### **Douglasville Livable Centers Initiatives (LCI) Plan (2001)**

The Douglasville LCI study identified development opportunities and key areas for infill and redevelopment as well as improvements that increase pedestrian, bicycle and future transit connections. The study also recommended public and private actions needed to implement the plan, including zoning changes, public infrastructure investment, and appropriate redevelopment projects and incentives. The transportation related recommendations included:

- 33 bicycle and pedestrian improvements
- 3 parking recommendations
- 25 intersection improvements
- 1 traffic diversion
- 1 roadway widening
- 1 street closure
- 1 geometric improvement
- 3 future studies, and
- 6 transit recommendations.

### **City of Douglasville Transportation Study (2000)**

The purpose of this study was to prioritize projects that were identified for SPLOST funds. The prioritization system for the SPLOST projects was based on safety, the magnitude of the deficiency and the importance of the roadway. The final step of the study was a SPLOST Project Implementation Plan, which is the prioritized project list and implementation schedule. The intent of the prioritization is to ensure that projects are ready to advance as new SPLOST monies become available and that the City can maximize its return on these monies by building those projects of highest priority that have the greatest impact. The study recommended 17 priority projects that could be selected for SPLOST funding requiring a County referendum for implementation.

### **Traffic Signal Warrant Analysis Dallas Highway at Forrest Avenue and Upshaw Mill Road (2000)**

This analysis was completed to determine if a signal was warranted at the intersection of Dallas Highway and Forrest Avenue and/or at the intersection of Dallas Highway and Upshaw Mill Road. A signal was warranted at Dallas Highway and Forrest Avenue but not at Dallas Highway and Upshaw Mill Road.

### **Traffic Signalization Study Stewarts Mill Road at Creekwood Drive (1999)**

The purpose of this study was to determine if a signal would be warranted at the intersection of Creekwood Drive and Stewarts Mill Road based on anticipated traffic that would result from the opening of Arbor Place Mall. The study indicated that even with the addition of traffic from Arbor Place Mall a signal was not warranted at the intersection of Creekwood Drive and Stewarts Mill Road.

### **Chapel Hill Road/Stewarts Mill Road Intersection Vicinity Land Use and Zoning Study (1999)**

The purpose of this study was to assess the land use and zoning within a one-half mile radius of the intersection of Chapel Hill Road and Stewarts Mill Road. It was recommended that the land use plan not be changed and that it adequately supported the type of development in the area and the anticipated traffic.

### **Downtown Transportation Study (1998)**

The purpose of this study was to analyze the potential traffic impacts to downtown, especially along the Campbellton Road corridor that would result from increased traffic generated by the construction of Arbor Place Mall. Twenty transportation projects were recommended as part of the plan. The following implementation actions were recommended in the study:

- Conduct a detailed traffic analysis for the area immediately adjacent to the mall. Ensure the impacts of the Downtown Transportation Study are incorporated into that study.
- Identify sources of funding and secure funding for short range projects identified in the plan.
- Present an improvements program to local elected officials for approval.
- Develop a program for the selection of the preferred traffic calming devices along Campbellton Street.
- Schedule public meetings for the implementation of traffic calming projects along Campbellton Street.
- Begin design of immediate-term projects.
- Work with the local police department to establish a stringent speed enforcement program along Campbellton Street.

### **Douglasville Marketplace Traffic Impact Evaluation and Signal Warrant Study (1998)**

This report examined the traffic impacts associated with the development of the Douglasville Marketplace on Douglas Boulevard and Highway 5. The purpose of the study was to examine the impacts that the proposed development would have on traffic operations along Douglas Boulevard and if a traffic signal would be warranted

at the main driveway to the site and Douglas Boulevard. The results of the study recommended several improvements to driveways for the site and demonstrated that a signal was warranted.

### **Arbor Place Mall Transportation Study Interim Report Tasks 1 and 2**

The purpose of this report was to document the existing and future traffic conditions around the proposed Arbor Place Mall. The results of the traffic analysis will be incorporated into the future study activities detailed in the report which include the development of a traffic model of Douglasville to be compatible with the regional model, and recommendations of viable options for traffic management in the study area.

### **Signal System Analysis SR 5/Bill Arp Road (1997)**

An operations plan was conducted on the Bill Arp Road Signal System to identify and correct operating deficiencies and to optimize operation. As a result of the analysis, the signal system was changed to operate on the Traffic Responsive mode. In general, this means daily operating plans are selected based on current traffic conditions.