



## **Land Use and Transportation**

# Douglas County Comprehensive Transportation Plan

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## INTRODUCTION

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

## EXISTING LAND USE/ZONING

Specific transportation system needs are identified through the consideration of existing and future land use circumstances. The Inventory of Existing Conditions report discussed Douglas County's existing and proposed future land use. Land use was also an important criteria in identifying strategies and potential projects in the Recommendations Report.

Douglas County is primarily a bedroom community for the metropolitan Atlanta Region. The Comprehensive Plan emphasized the County's current rural and small town nature as central to the quality of life. The majority of the developed land uses within the county (excluding agricultural and public institutional) is residential, over 90%, and of that total, over 90% of all housing units within the county are single-family residences. Not surprisingly, Douglasville, Villa Rica and Austell contain a large portion of the multi-family units within the County. 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 eastern end of the County along the Thornton Road corridor. 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 SR 5 corridor has transitioned from residential to small retail establishments. The Comprehensive Plan emphasized careful transportation, land use planning and transitional compatible growth within these corridors to ensure sustained livability.

The Future Land Use Plan map was developed to illustrate the most desirable pattern of land use in Douglas County. Criteria used to develop the Future Land Use Plan included:

- Land use patterns illustrated on the County's Existing Land Use Plan Map
- Current Zoning Map
- Approved Planned Unit Developments (PUDs)
- Developments of Regional Impact (DRIs) and other developments
- Topographic characteristics

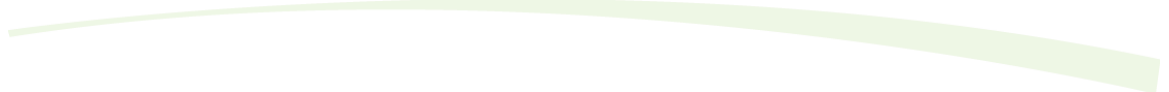
- Natural resource sensitivity
- The availability of infrastructure
- Needs demonstrated by residential and employment forecasts

The proposed Comprehensive Transportation Plan (CTP) supports the Comprehensive Plan by use of consistent population and housing forecasts, natural and cultural resource protection, economic development policies and land use policy and plans. In some cases transportation demand and the lack of adequate systems may influence significant change in land use character and patterns. Likewise, land use changes will dictate needs for additional transportation infrastructure. Tests for potential transportation improvements against future land use scenarios were run to determine impact on the network. Preliminary transportation improvements have been tested against land use scenarios:

- Transportation Network
- Quality of Life (level of service vs. cost)
- Evaluate environmental impacts
- Support economic development
- Anticipate future demand (population, employment and new development)
- Evaluate the impacts of current and proposed policies
- Impact and influence of the region on the transportation network

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. It is unlikely that additional interchanges will be approved in the county other than HOV access interchanges. Interstate short-trips are a common occurrence 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 helps make efficient choices when considering transportation improvements.

## **FUTURE LAND USE PLAN**

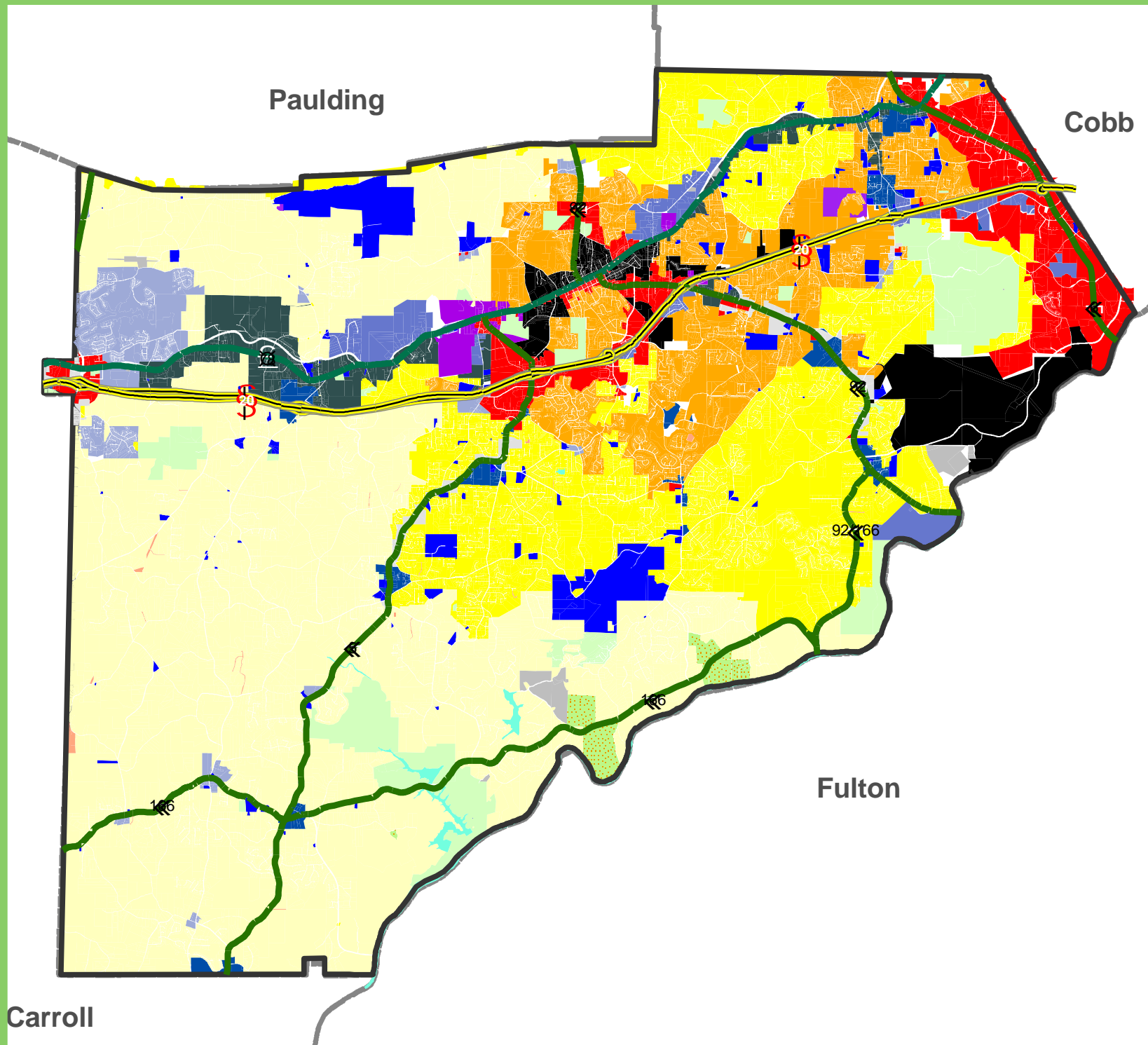
The adopted Future Land Use map represents goals, policies, and practices adopted through the County's Comprehensive Plan. Represented by the Future Land Use map, the County's desired pattern of land use effectively clusters intense land uses adjacent to major transportation facilities, I-20, Bankhead Highway, Fairburn Road, and SR 5.

To measure the impact of land use on the transportation network, ARC's *Mobility 2030* travel demand model includes current and future (2030) population, households and employment assignments to specific traffic analysis zones. As a result, traffic volumes are forecast for anticipated land uses. The model's projections are based on future population, employment and household numbers for the horizon year of 2030.

# DOUGLAS COUNTY, GEORGIA COMPREHENSIVE TRANSPORTATION PLAN

## Future Land Use

Figure 1



### Legend

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



Information generated as a part of the CTP process will be used to inform future updates of the Comprehensive Plan. The final CTP will be included in the Comprehensive Plan as the Transportation element. An example of complementary use of the CTP and the Comprehensive plan was considering future land use, population, and development intensity when determining need for transportation facilities, transit services, and appropriate freight routes through the County.

A quickly developing county, Douglas must strive to implement needed infrastructure while maintaining current facilities and activity centers. Development activities are becoming more prevalent in the county as the population continues to increase and become more densely populated. As anticipated in the Comprehensive Plan, most of the future growth will be concentrated in the municipalities and along major corridors. As growth occurs, there is need for new development strategies such as overlay districts and other urban design controls.

### Access Management

Traditionally, congestion has been addressed through intrusive and expensive road widenings. In keeping with the plan objective to explore creative congestion solutions that are less expensive and intrusive, the County has adopted access management policy and practices. Access management is the “systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to the roadway.” Effective access management policy and practice protect taxpayer roadway network investment by enhancing safety for all modes, access, mobility, land use integration, and preservation of roadway functional integrity and efficiency.

Access management practices include traffic control and geometric treatments within the roadway right of way to reduce interference and conflicting traffic movements. Also measures such as consolidating driveways and parking lots involve significant collaboration with adjacent property owners and developers. Key elements of an effective access management program are:

- Thoroughfare Plan including functional classification system to apply appropriate access management standards
- Level of access permitted
  - Direct property access
  - Traffic control device, i.e. signal, raised median, roundabout
  - Spacing and setback standards
- Policy development and institutional administration
- Coordination with land use planning department/agency

To effectively administer access management policy, coordination between land use planning and transportation planning is essential. The County uses the transportation planning process to develop and implement access management solutions in a seamless and professional manner. Retrofitting access management solutions is more costly and more disruptive than adopting and consistently administering established policy and practices.

In response to a request for a permit to access a roadway, County staff refers to access management policy established in the Unified Development Code Section 607d, Driveway Access, and Section 10, Project Design and Construction Standards. Section 10 also refers to the Georgia Department of Transportation (GDOT) access management standards.

Access management treatments that are recommended include:

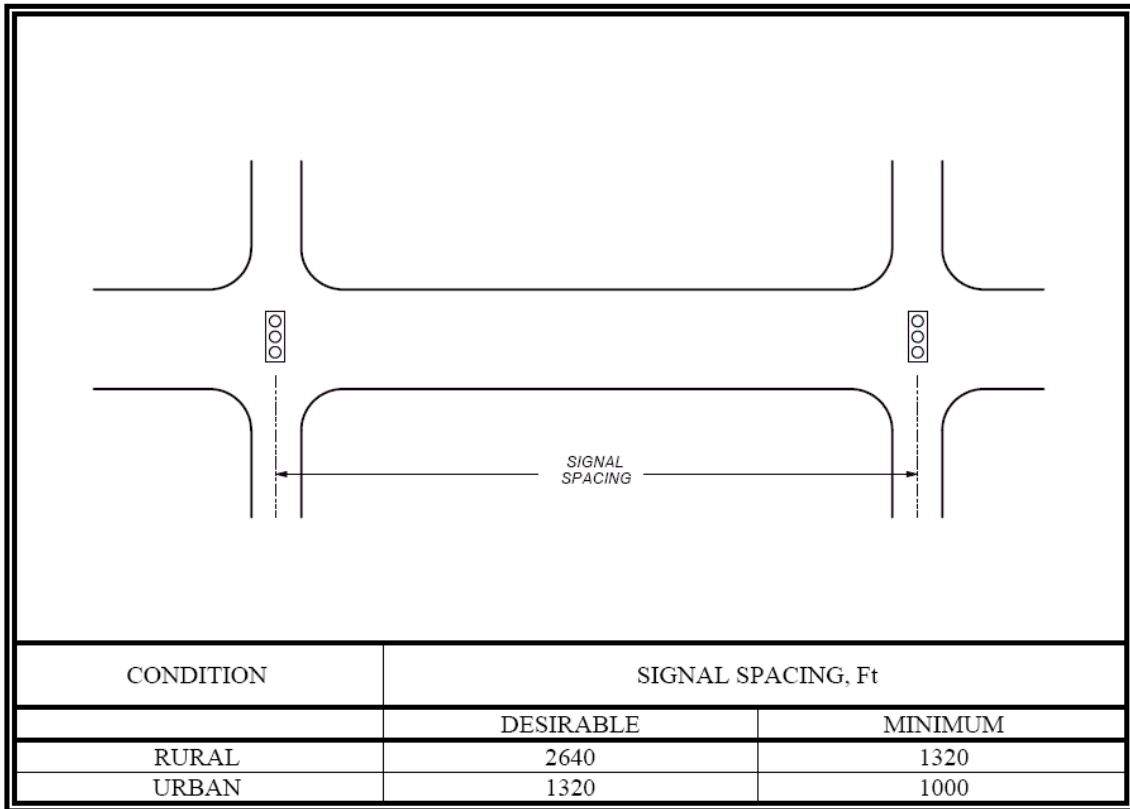
- Driveway consolidations
- Adjoined parking areas
- Pullovers and auxiliary lanes
- Intersection control modifications
- Median and lane separation treatments
- Turn restrictions and channelization

The following access management standards, aiming at encouraging safe and efficient traffic operation conditions, are recommended:

(1) Intersection Spacing

Similar to driving spacing, the inappropriate existence of too many intersections causes excessive delay, high crash rates and congestion. The following table is taken from Table 3-3, *GDOT Regulations for Driveway and Encroachment Control* (2004). It is recommended that the county explicitly adopt the same or similar standards for the spacing between signalized intersections on major arterials within the jurisdiction of the county. An exception should be only allowed when analyses show that traffic operation will not be degraded.

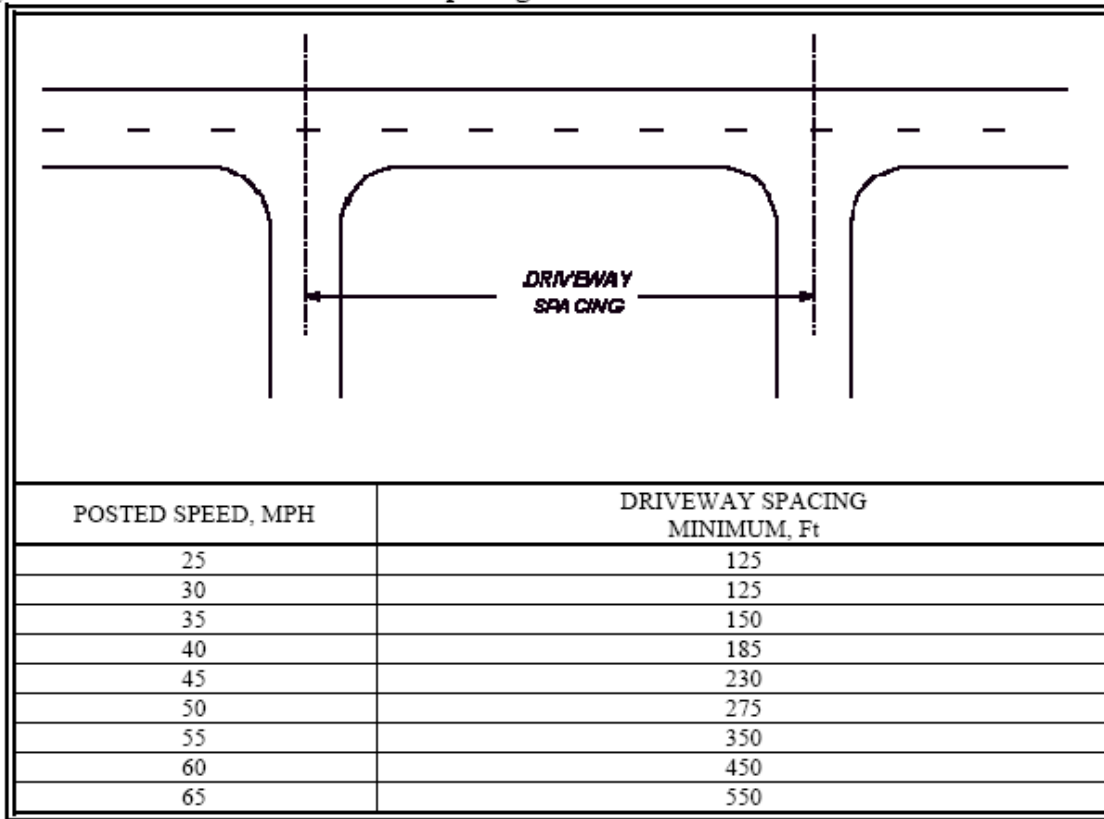
**Spacing of signalized intersections**



(2) Driveway spacing

Maintaining proper spacing between driveways is crucial to insure the necessary safety and efficiency of traffic operation. Specific criteria should be consistent with Chapter 3, *GDOT Regulations for Driveway and Encroachment Control* (2004). In the design stage, the notion that two or more adjacent properties share the same driveway for ingress and egress should be encouraged. Excessive driveway density and inappropriate driveway alignment should not be allowed. Any unique design in violation of the standards should be approved by the county maintaining agency. The general driveway spacing requirement is shown in the following table, which is copied from Table 3-1, *GDOT Regulations for Driveway and Encroachment Control* (2004).

**Driveway spacing criteria**



**(3) Parking Lot design**

Proper parking lot design should be employed to ensure that cars will not back into a road unless there is no practicable alternative. Channelizing storage space should be provided at entrances and exits to minimize the possible queues.

**Thoroughfare Plan**

To ensure effective interface between transportation facilities and land use, a thoroughfare plan that defines the functional classification of roadways specific to Douglas County is necessary. An adopted Thoroughfare Plan will offer a guide describing the County's desired function for each of its roadways. As a result, as roadways are planned, designed and constructed, the County's plan will help dictate the roadway's typical section.

The Thoroughfare Plan is the hierarchical categorization of public streets and roads in the County based upon intended transportation and land use functions. The Thoroughfare Plan provides the classification of County roadways as arterials, major collectors, minor collectors, and local streets, which are maintained by the County Department of Transportation and the Georgia Department of Transportation. It also includes some streets that traverse and are maintained by the incorporated cities. The Thoroughfare Plan is a result of various factors which include, but are not limited

to, changing land use and its relationship to the County's Comprehensive Plan, as well as roadway improvements constructed within the County.

Roadways in Georgia are classified based on function as determined by the Georgia Department of Transportation (GDOT). Table x shows the County's major thoroughfares and their GDOT functional classification as well as their proposed classification based on the recommendations of the Comprehensive Transportation Plan. A major thoroughfare can be defined as any public road or highway defined as an arterial, major collector or minor collector. Further definitions follow.

- **Freeway** – interstate roadway that primarily is used by regional through-traffic over relatively long distances with limited access to abutting land.
- **Arterial** – roadway that primarily is used by through-traffic over relatively long distances across the county, while also providing access to abutting land.
- **Major Collector** – primarily used by traffic making moderate length trips between arterial streets and/or activity centers while also providing access to abutting land
- **Minor Collector** – primarily used by traffic making minor length trips from local streets and subdivisions to an activity center or higher classification roadway while also providing access to abutting land
- **Local Street** - primarily provides access to abutting land while also providing for local traffic circulation. Local streets include any public roadway not classified as a freeway, arterial, or collector in the County's thoroughfare plan.

Table 1: Thoroughfare Plan

Segment	From	To	2005 ADT	2030 ADT	GDOT Functional Class	CTP Thoroughfare Plan
Interstate 20	Cobb County	Carroll County	113000	135000	Urban Interstate Princ Arterial	Freeway
SR 6	Cobb County	Fulton County			Urban Principal Arterial	Major Arterial
SR 5	I-20	Dukes Road	9000	21000	Urban Principal Arterial	Major Arterial
SR 5	Dukes Road	SR 166	6500	13200	Rural Principal Arterial	Major Arterial
SR 5	SR 166	Carroll County	3900	8200	Rural Major Collector	Major Arterial
US 78	SR 6	Cobb County			Urban Principal Arterial	Major Arterial
US 78	SR 6	Richardson Rd			Urban Minor Arterial	Major Arterial
US 78	Richardson Rd	Carroll County	2500	10400	Rural Minor Arterial	Major Arterial
SR 92	Paulding County	US 78			Urban Minor Arterial	Major Arterial
SR 92 (Fairburn Rd)	US 78	Fulton County			Urban Minor Arterial	Major Arterial
Cambellton St	US 78	Prestley Mill Rd			Urban Minor Arterial	Arterial
Chapel Hill Rd	Prestley Mill Rd	SR 166			Urban Minor Arterial	Major Arterial
Lee Rd	Sweetwater Rd	SR 92			Urban Minor Arterial	Major Arterial
Sweetwater Rd	US 78	Lee Rd			Urban Minor Arterial	Major Arterial
Timber Ridge Rd	Chapel Hill Rd	Prestley Mill Rd			Urban Minor Arterial	Arterial
Blairs Bridge Rd	Lee Rd	SR 6			Urban Minor Arterial	Arterial
Six Flags Rd	SR 6	Cobb County			Urban Minor Arterial	Arterial
Riverside Pkwy	SR 92	SR 6			Urban Minor Arterial	Major Arterial
Old Lower River Rd	SR 6	Cobb County			Urban Minor Arterial	Collector
SR 166	Dog River	Fulton County			Urban Minor Arterial	Major Arterial
Prestley Mill Rd	Cambellton St	Timber Ridge Rd	5800	9800	Urban Minor Arterial	Arterial
Maxham Rd	SR 6	Cobb County			Urban Minor Arterial	Arterial
SR 166	SR 5	Carroll County	9100	16100	Rural Minor Arterial	Major Arterial
SR 166	Dog River	Capps Ferry Rd	4000	7000	Rural Minor Arterial	Major Arterial

Segment	From	To	2005 ADT	2030 ADT	GDOT Functional Class	CTP Thoroughfare Plan
SR 61	Carroll County	Paulding County			Rural Minor Arterial	Major Arterial
SR 166	Capps Ferry Rd	SR 5	12400	20800	Rural Principal Arterial	Major Arterial
Douglas Blvd	Chapel Hill Rd	Bright Star Rd			Urban Minor Arterial	Major Arterial
Bright Star Rd	Douglas Blvd	SR 5			Urban Minor Arterial	Arterial
Capps Ferry Rd	SR 166	Fulton County	8600	16400	Rural Principal Arterial	Major Arterial
Hospital Dr	SR 92 (Fairburn Rd)	Cambellton St			Urban Collector Street	Arterial
SR 1138 (Duralee Ln)	US 78	Dorris Rd			Urban Collector Street	Collector
McIntosh Rd	US 78	Malone Rd			Urban Collector Street	Local
Malone Rd	McIntosh Rd	SR 92			Urban Collector Street	Arterial
Dorris Rd	Cedar Mountain Rd	Paulding County			Urban Collector Street	Arterial
Cedar Mountain Rd	Dorris Rd	Chicago Av			Urban Collector Street	Arterial
Chicago Av	Cedar Mountain Rd	US 78			Urban Collector Street	Arterial
Bright Star Rd	Douglas Blvd	US 78			Urban Collector Street	Arterial
Rose Av	US 78	SR 5			Urban Collector Street	Arterial
Burnt Hickory Rd	Cobb County	Midway Rd			Urban Collector Street	Arterial
Midway Rd	Burnt Hickory Rd	SR 92 Fairburn Rd			Urban Collector Street	Collector
Central Church Rd	SR 5	Chapel Hill Rd			Urban Collector Street	Arterial
Kings Hwy	SR 5	Big A Rd			Urban Collector Street	Collector
Big A Rd	Johnston Rd	SR 166	1700	4900	Urban Collector Street	Arterial
Anneewakee Rd	Chapel Hill Rd	Chatham Rd			Urban Collector Street	Arterial
Chatham Rd	Anneewakee Rd	SR 92			Urban Collector Street	Local
Post Rd	Ephesus Church Rd	US 78	12700	24700	Rural Major Collector	Arterial
Post Rd	Tyree Rd	Ephesus Church Rd	6500	14000	Rural Minor Collector	Arterial
Ephesus Church Rd	Carroll County	Post Rd	4800	9800	Rural Major Collector	Major Arterial

Segment	From	To	2005 ADT	2030 ADT	GDOT Functional Class	CTP Thoroughfare Plan
Liberty Rd	Carroll County	SR 166	3500	13200	Rural Major Collector	Major Arterial
Tyree Rd	Post Rd	SR 5	500	1700	Rural Minor Collector	Major Arterial
Pool Rd	Post Rd	Johnston Rd	3200	15000	Rural Minor Collector	Major Arterial
Dorris Rd	SR 92	Prestley Mill Rd			Local	Arterial
Cedar Mountain Rd	US 78	Chicago Av			Local	Arterial
Cedar Mountain Rd	Dorris Rd	Brittain Rd			Local	Arterial
Banks Mill Rd	Tyree Rd	SR 5			Local	Collector
Dorsett Shoals Rd	SR 5	Anneewakee Rd			Local	Local
Tyree Rd	SR 166	Post Rd	50	200	Local	Arterial
Anneewakee Rd	dead end	Chapel Hill Rd			Local	Local
Stewarts Mill Rd	Central Church Rd	Chapel Hill Rd			Local	Arterial
Brown St	SR 92	E. Strickland St			Local	Local
Strickland/Broad St	Cedar Mountain Rd	Huey Rd			Local	Local
Henry Rd	Strickland Rd	Maroney Mill Rd			Local	Local
Maroney Mill Rd	SR 92	Burnt Hickory Rd			Local	Local
Flat Rock Rd	Paulding County	US 78			Local	Arterial
Johnston Rd	Ephesus Church Rd	Pool Rd			Local	Local
Mt. Vernon Rd	SR 92	US 78			Local	Arterial
Brownsville Rd	Cobb County	Ben Hill Rd			Local	Local
Ben Hill Rd	N. Sweetwater Rd	US 78			Local	Arterial
N. Sweetwater Rd	US 78	Cobb County			Local	Local
Skyview Dr	Sweetwater Rd	SR 6			Local	Arterial
Maxham Rd	Skyview Dr	SR 6			Local	Arterial
Beechwood Dr	Sweetwater Rd	Mt. Vernon Rd			Local	Collector
E/W County Line Rd	SR 92	Lee Rd			Local	Arterial
N/S County Line Rd	US 78	Lee Rd			Local	Arterial
Riley Rd	US 78	N County Line Rd			Local	Arterial

Segment	From	To	2005 ADT	2030 ADT	GDOT Functional Class	CTP Thoroughfare Plan
Pope Rd	SR 92	Anneewakee Rd			Local	Arterial
Bomar Rd	Chapel Hill Rd	SR 92			Local	Arterial
Mack Rd	SR 92	W County Line Rd			Local	Local
Prestley Mill Rd	Timber Ridge Rd	Slater Mill Rd			Local	Arterial
Slater Mill Rd	SR 92	Pope Rd			Local	Collector
N/S Baggett Rd	US 78	Mason Creek Rd			Local	Local
Mason Creek Rd	Post Rd	SR 5			Local	Local
N/S Halton Rd	Tyree Rd	Post Rd			Local	Local
Daniel Mill Rd	Banks Mill Rd	Post Rd			Local	Local
Berea Rd	Daniel Mill Rd	SR 5	2600	8400	Local	Local
N/S McKoy Rd	Ephesus Church Rd	US 78			Local	Local
Conners Rd	Liberty Rd	US 78			Local	Local
Brittain Rd	High Point Rd	Cedar Mountain Rd			Local	Arterial
Mann Rd	Brewer Rd	US 78			Local	Arterial
Pool Rd	Ephesus Church Rd	Post Rd	3000	11500	Local	Arterial
Stockmar Rd	Carroll County	High Point Rd			Local	Local
High Point Rd	SR 61	Brittain Rd			Local	Local
Cowan Mill Rd	Mason Creek Rd	Bright Star Rd			Local	Local
John West Rd	US 78	Bright Star Rd			Local	Local
Union Grove Rd	Ben Hill Rd	Cobb County			Local	Local
W Chapel Hill Rd	Chapel Hill Rd	SR 166	3000	4200	Local	Collector
Yeager Rd	W Chapel Hill Rd	Kings Hwy	1200	2200	Local	Local
W Stewarts Mill Rd	SR 5	Stewarts Mill Rd			Local	Local
Stewart Parkway	Douglas Blvd	SR 5			Local	Local
Yancey Rd	Stewarts Mill Rd	Dorsett Shoals Rd			Local	Arterial

