



## **Sub-Area Needs Assessment**

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

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## INTRODUCTION

Subarea studies assist local governments in determining improvements needed in smaller activity centers or nodes to keep pace with existing and anticipated growth as well as increasing transportation demands. The subareas are defined with a particular geographic focus, such as adjacent to a mall or major retail center and are used to better refine projects, programs, and concepts for inclusion in larger countywide or regional plans.

As part of the Douglas County Comprehensive Transportation Plan, county staff requested the analysis of subareas. The selection of the subareas was based upon a number of factors including:

- Activity nodes;
- Existing and future land uses;
- Existing and anticipated development patterns;
- Economic development trends;
- Community boundaries;
- Areas of major congestion, especially those centered about major attractions/destinations (e.g. busy shopping corridors/activity centers);
- Traffic counts;
- Information about transit, bicycle, and pedestrian facilities and usage;
- Collision/crash data;
- Descriptions of the roadway, pedestrian, bicycle, transit facilities/service, and roadways in the subarea;
- Previous transportation studies, and;
- Information on planned and/or programmed projects.

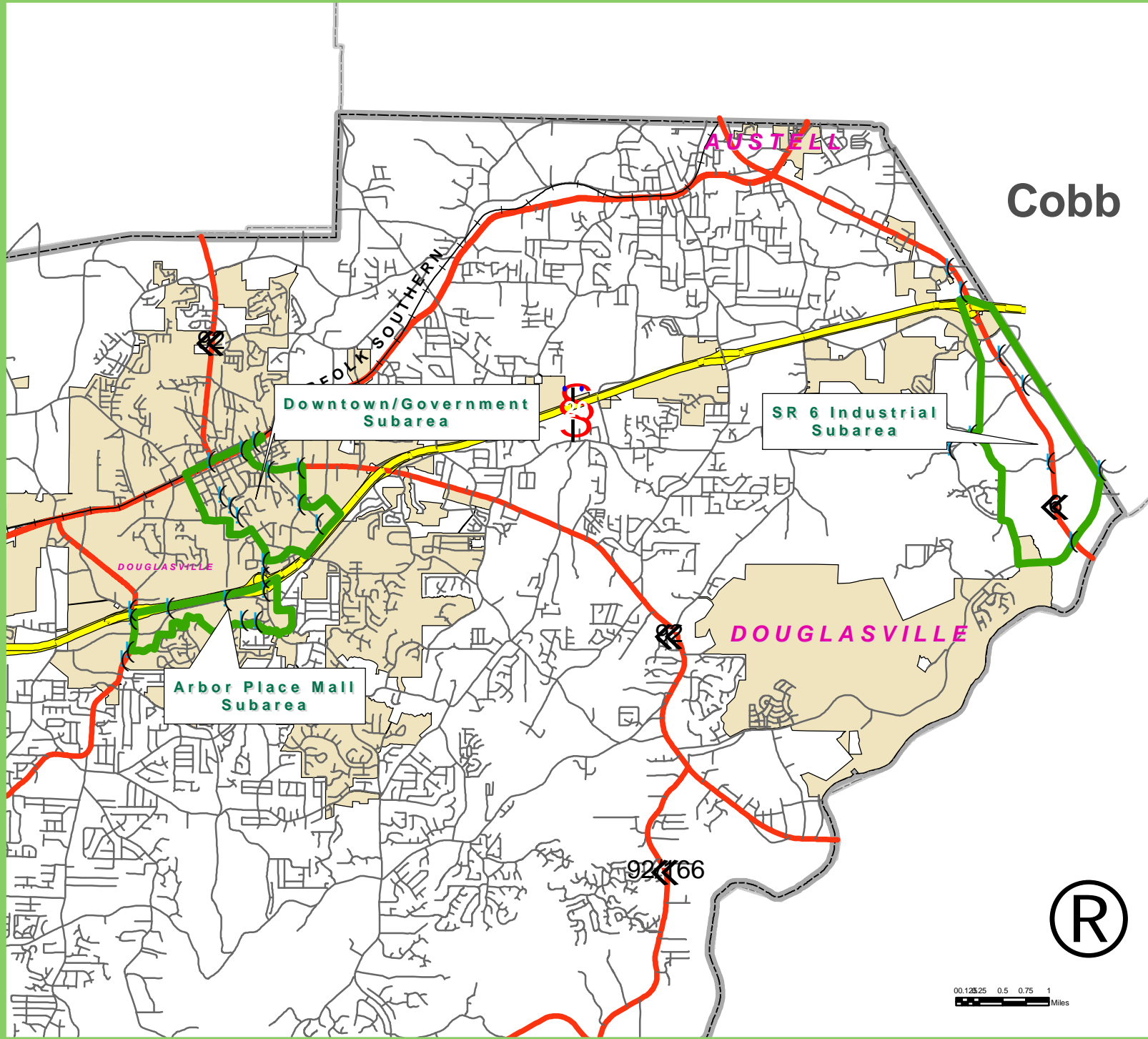
The sub-areas were determined with input from the Project Advisory Team and revised in a work session with the Cities of Douglasville, Austell and Villa Rica. Subareas were defined with the primary goal of the identification of short and long-term transportation system improvements for each area that will enhance connectivity and mobility for internal/local trips while easing demand on the surrounding major corridors so that they may serve broader inter-county and regional function. The subarea selection process focused on regional destinations within Douglas County with unique traffic generation characteristics. As a result of this analysis, three subareas were recommended and are shown in Figure 1:

- Arbor Place Subarea
- Downtown/Government Subarea
- SR 6 Industrial Subarea

**DOUGLAS COUNTY, GEORGIA  
COMPREHENSIVE  
TRANSPORTATION  
PLAN**

**Subarea Studies  
Locations**

**Figure 1**



**Cobb**

- Legend**
- ( ) Subarea Project Location
  - Subarea
  - Interstate
  - U.S. Highway
  - State Route
  - Local Road
  - + Railways
  - City Limits
  - ▭ County Boundary

## ARBOR PLACE SUBAREA



The Arbor Place subarea, shown in Figure 2 is anchored by the Arbor Place Mall located on Douglas Boulevard and is roughly bordered by SR 5/Bill Arp Road to the west, I-20 to the north, Chapel Hill Road to the east, and Arbor Parkway to the south. The Arbor Place Mall is a major economic engine for Douglas County and more specifically for the city of Douglasville. The mall draws patrons from across the metropolitan Atlanta region concentrating primarily on the western suburbs and

the eastern parts of Alabama. A large amount of “big-box” retailers such as Kohl’s, Target, Wal-Mart, Lowe’s and Home Depot have also opened augmenting the tremendous amount of commercial square feet available to shoppers in the area. The combination of the Mall and surrounding retail establishments have put a tremendous burden on the two intersections that serve as the gateways to the Mall – Douglas Boulevard at SR 5/Bill Arp Road and Douglas Boulevard at Chapel Hill Road.

### SUBAREA BACKGROUND

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

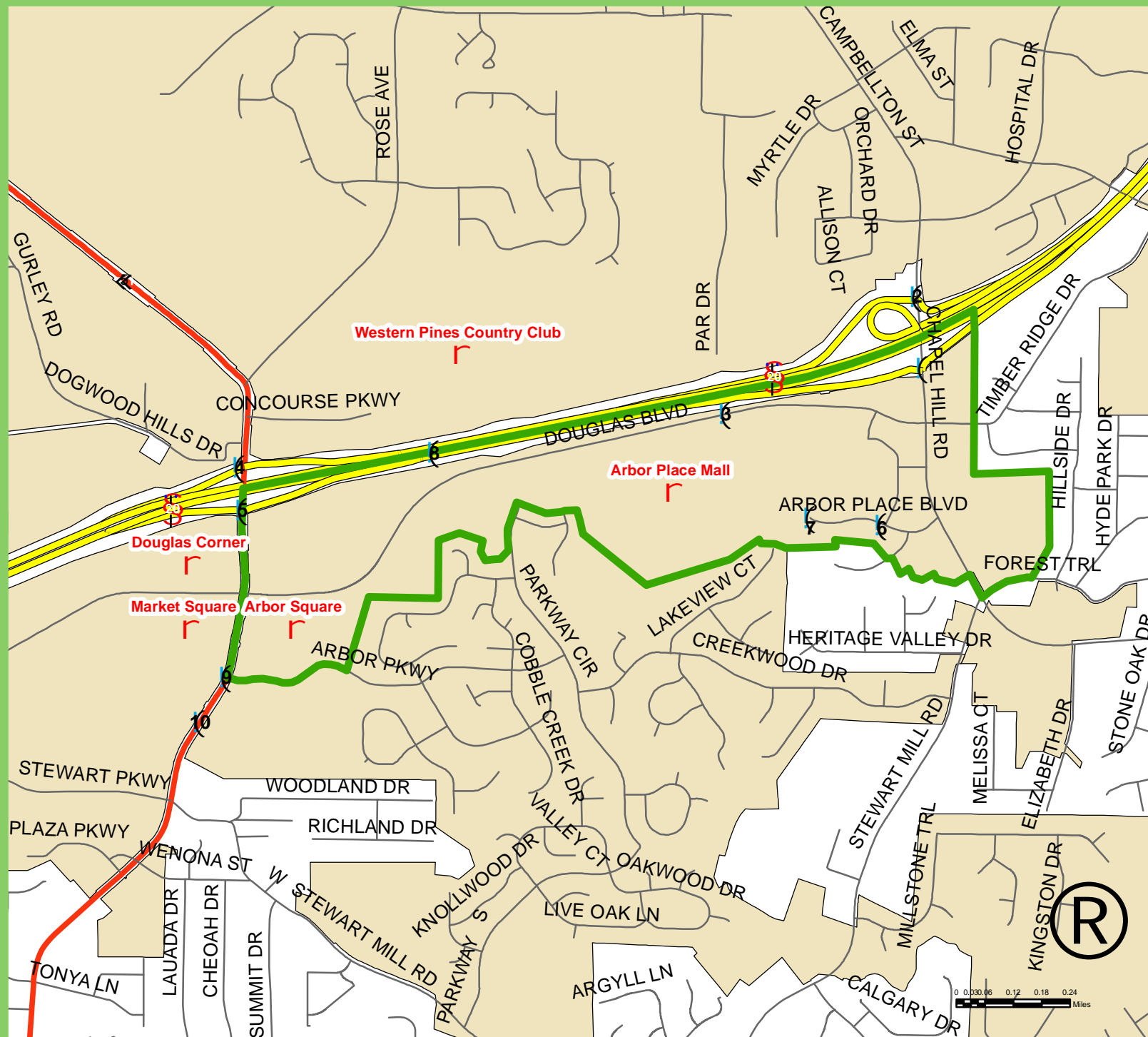
### Safety & Mobility

Traffic crash data for the 18-county Atlanta metro area was gathered by the Atlanta Regional Commission (ARC) for the years 2002 to 2004 in order to identify the safety and mobility needs of each county. These needs are identified by examining roadways that have marked congestion as well as identifying “hot spots” where injury accidents occur.











**DOUGLAS COUNTY,  
GEORGIA  
COMPREHENSIVE  
TRANSPORTATION  
PLAN**

**Arbor Place  
Sub Area**

**Figure 8**



**Legend**

-  PointsofInterest
-  Arbor Place Projects
-  Interstate
-  U.S. Highway
-  State Route
-  Local Road
-  Railways
-  City Limits
-  County Boundary
-  Arbor Place Sub Area



Douglas County experienced 4,729 total crashes between 2002 and 2004 with an average of 1,337 crashes per year. Of the total number of crashes, fourteen were fatal. One location near Arbor Place Mall was noted as having a high rate of injury crashes. On a segment of SR 5 from West Stewarts Mill Road to Rose Avenue, 101 injury crashes were recorded. This is the only roadway that was reported to have high injury crashes within the Arbor Place Mall subarea.

Within the subarea, three roadways are currently being examined by ARC on the Congestion Monitoring Network (CMN). The CMN is a part of the ARC's Congestion Management Process (CMP) - a federally mandated process that identifies congested areas in the Atlanta metro area. Roadways that have been identified on the CMN which have an impact on the subarea are shown in Table 1.

**Table 1 - Roadways Listed on the CMN**

Location	Boundary
Chapel Hill Road	SR 166 to I-20 West
Douglas Boulevard	Bright Star Road to Chapel Hill Road
I-20 West	Douglas/Carroll County line to SR 6/Thornton Road/Camp Creek Parkway

### Level-of-Service

Level-of-service (LOS) is a designation given to roadways to describe their level of mobility. LOS A is the highest rating expressing traffic that moves freely between lanes and is traveling at or above the designated speed. LOS F is the lowest rating possible and is represented by highly difficult movement in traffic at well below the designated speed.

All three subareas were analyzed using traffic counts from the Georgia Department of Transportation (GDOT). This data can potentially be limited as it is only available at designated spots where GDOT has installed traffic counting equipment. Table 2 shows the LOS for all traffic counting stations in and around the Arbor Place Mall subarea.

**Table 2 - LOS**

Roadway Segment	GDOT Count Station ID	Existing LOS
I-20 east of Campbellton Street	116	D
Douglas Boulevard east of SR 5	4181	D
SR 5 at Dogwood Hills Drive	14	D

While these levels-of-service are not the worst rating possible, it does identify a need to address diminished mobility in and around the mall area. A greater number of traffic count collection devices would benefit this area. Additionally, these stations do not record specific truck data which would provide a more complete profile of LOS in this subarea.

### **Land Use**

As described earlier, the Arbor Place Mall is surrounded by residential neighborhoods. These areas are designated by the City of Douglasville as “medium density residential” or generally up to four units per acre of land. The Arbor Place Mall, as well as the length of Douglas Boulevard is designated a “regional activity center” which also generally allows for higher densities. The designation is primarily commercial but could also include office uses.

### **Population & Employment**

In 2005, the population within the Arbor Place Mall subarea was estimated at 10,522. The population of the area is comprised of 8,456 white and 2,066 being designated as African-American or “Other”. The top employer segment in the census tract which encompasses this subarea is the “private or non-government sector” with “retail” and “services” following in second and third.

## **SUBAREA TRANSPORTATION ISSUES AND NEEDS**

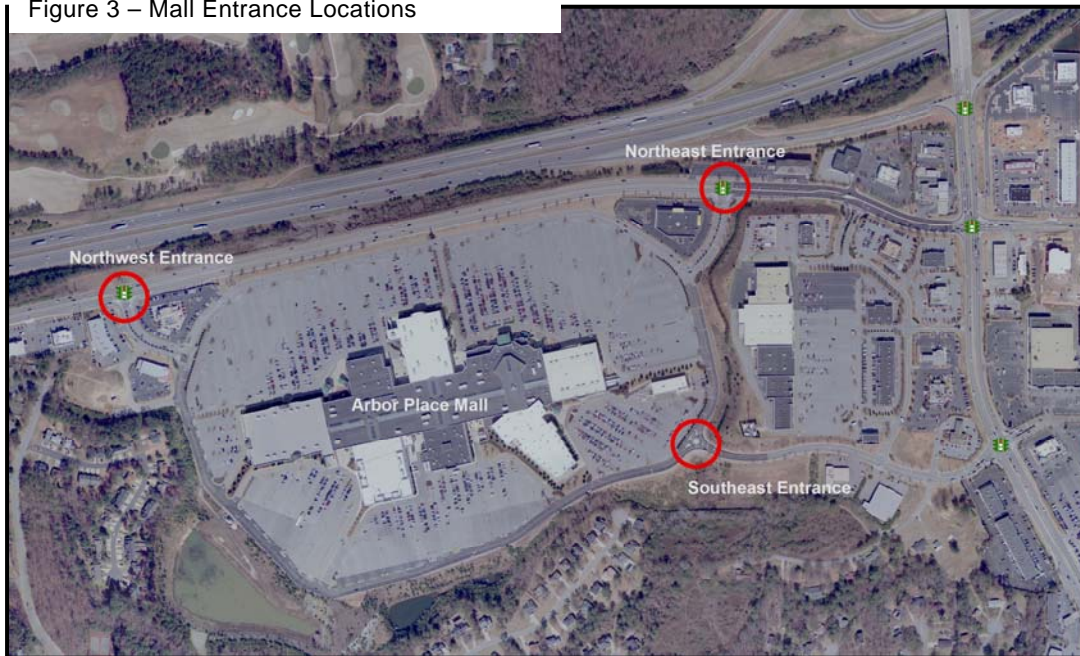
### **Mall Access**

As the focus point of this subarea access to and traffic around the mall is the primary transportation need. Three entrances provide access directly to the mall; a northeast and northwest entrance off of Douglas Boulevard and a southeast entrance accessed via Chapel Hill Road. The mall serves not only local residents but is also a major regional retail hub. Non-local visitors access the mall from I-20; and may use either SR 5 or Chapel Hill Road. The mall entrance points are shown in Figure 3.

The proximity of the northeast entrance to the Douglas Boulevard/Chapel Hill Road intersection creates traffic queuing along Chapel Hill Road and down the I-20 exit ramp. A variety of solutions have been implemented over the years since the mall’s opening in October 1999, mainly involving lane configurations, signal coordination and timing and dedicated striping. City and county staff have expressed the current configuration represents the fourth iteration of improvements and maximizes the available land and signal timing capabilities.



Figure 3 – Mall Entrance Locations



As patrons exit I-20, most are using the northeast entrance to access the mall not the southeast entrance off Chapel Hill Road. A protected right turn lane from southbound Chapel Hill Road to westbound Douglas Boulevard helps in reducing turning conflicts at the intersection by allowing traffic to continue to move; however, weaving issues and driveways in the  $\frac{1}{4}$  mile between the mall and the intersection create conflicts as commuters try to access the northeast mall entrance. There is an option for patrons to travel  $\frac{1}{2}$  mile further west on Douglas Boulevard to use the northwest entrance, but this is an exception. This creates overuse of the northeast entrance and bottlenecks the segment of Douglas Boulevard between the mall entrance and Chapel Hill Road.

The mall is bordered on the south and west sides by residential neighborhoods. New entrances to the mall in these areas would potentially adversely impact the neighborhood character. Potential new entrances were explored that would connect the existing residential roadways, such as Lakewood Drive, Arbor Parkway, or Heritage Valley Drive, but the change in character of the roadway from low-volume residential street to a potentially high-volume thoroughfare would not provide enough benefit to justify the change. It is anticipated that area residents would not support these changes. Furthermore, there is a wetland buffer between the neighborhoods on the southeast side of the mall property where Heritage Valley Drive ends. The addition of a new roadway in this area may require significant environmental analysis prior to design. As part of the original development of the mall property this land was purchased to mitigate wetland impacts resulting from the mall construction. New entrances to the south of the mall are not recommended because of the disruption to neighborhoods and impacts to environmentally sensitive areas, which does not support the goals and objectives of preserving neighborhoods and protecting the environment established for the CTP.

The intersection of SR 5/Bill Arp Road and Douglas Boulevard is another major access point for the mall area and surrounding retail. As is the case at Chapel Hill Road, this intersection experiences a large amount of congestion throughout the day but more so during peak hours. Development in the area has been allowed up to the right-of-way line and therefore, any additional improvements to the intersection would require significant property takings which can make even a simple turn lane cost prohibitive. The addition of the second left turn lane as recommended in the *Arbor Place Mall Study* is no longer a feasible option. City and county staff have expressed that the intersection and signal timing has been maximized. Further detailed study is recommended.

Three potential solutions were considered to reduce the bottlenecks in and around the mall. A schematic of the recommendations is shown in Figure 4.

- Improved Signing
  - Signing should be placed along Chapel Hill Road southbound alerting drivers that a second entrance to the mall is available ¼ mile south. The signing would need to be large enough to gain attention and clearly convey there is an optional access point to the mall.
  - Another signing option is to improve signing along I-20 eastbound to alert drivers that both the SR 5 exit and Chapel Hill Road exit may be used to access the mall. The majority of traffic off of I-20 eastbound is using Chapel Hill Road to access the mall.
- Install Right-turn Lane
  - Installing an additional right-turn lane from Chapel Hill Road to Douglas Boulevard as recommended in the 1999 Arbor Place Mall Study would reduce the driveway conflicts on Douglas Boulevard and provide a better flow of traffic onto Douglas Boulevard.
- Relocate the Northeast Entrance
  - Relocating the northeast entrance to the mall further west on Douglas Boulevard would reduce traffic queuing and improve traffic flow. The approximate location would be ¼ mile to the west where the mall's main marquee sign now stands. The new entrance would tie into the existing loop road and not result in the loss of any parking spaces. The creation of this new entrance would increase the storage capacity of Douglas Boulevard's eastbound approach to the Chapel Hill Road intersection. Specifically, the new entrance would accommodate dual turn lanes into and out of the mall. This new entrance could also become the mall's gateway entrance allowing the mall's owners to introduce beautification and other improvements to increase the visibility and aesthetics of the mall property. The existing northeastern entrance would be to reconfigure the intersection to a "right-in/right-out" access with proper turning prohibitions for access to Douglas Boulevard.



## I-20 Serving Local Traffic

Given the limited amount of east-west mobility options south of I-20, residents use I-20 as a local road between major exits. The use of I-20 as a local road adds unnecessary volume to an already congested facility and puts additional pressure on the interchanges of Chapel Hill Road, SR 92/Fairburn Road and SR 5, especially during peak hours and holidays. Potential solutions that would alleviate local trip movements along the I-20 corridor were evaluated.

Multiple studies have explored options for removing local traffic from I-20. The primary recommendations to date have been an extension of Douglas Boulevard, the roadway would align with the existing Douglas Boulevard starting at Chapel Hill Road. Using Timber Ridge Drive, the “new” road would cross Prestley Mill Road continuing to Slater Mill Road and Shawnee Trail continuing to an intersection with SR 92/Fairburn Road just south of I-20. The “new” road would continue on Vanscant Road and then on new alignment parallel to I-20 to North County Line Road. Crossing North County Line Road, the new road would continue east on new alignment to the Monier Avenue/Lee Road intersection. Following Monier Avenue and Blairs Bridge Road, this new Douglas Boulevard would terminate at SR 6/Thornton Road south of I-20.

Two segments of the Douglas Boulevard extension are in the *Envision6* RTP, as projects DO-031A and B. A review of the project information reveals the right-of-way and construction costs estimates have not been updated. The City of Douglasville has expressed interest in an additional extension to the west from Bright Star Road to Post Road. Two potential options in lieu of the Douglas Boulevard extension are under consideration for improving the east-west connections and possibly relieving I-20 from local traffic.

The use of I-20 as a local road has highlighted the need for improved east-west connections and mobility. Two options for improving east-west connectivity are under consideration based on the needs assessment; and inner and outer arc to the south of I-20. The inner arc would provide a connection from North County Line Road to Lee Road to SR 5. The outer arc would provide a connection from Mount Vernon Road to Post Road.

Another potential solution is to add collector-distributor lanes to I-20 between the SR 6/Thornton Road (Exit 44) and Chapel Hill Road (Exit 36) exits. A collector-distributor system will smooth transitions from merging or exiting traffic to the mainline roadway. Under this scenario, a new lane is formed by the on-ramp at an interchange and would drop off at the next exit. An example of a similar system using auxiliary lanes exists between the Chapel Hill Road and SR 5 exits in central Douglas County. Auxiliary lanes were most recently used along SR 400 in north Fulton County between Windward Parkway (Exit 11) and Holcomb Bridge Road (Exit 7). The addition of a collector-distributor system to this segment of I-20 allows through traffic to continue unimpeded while affording some degree of mobility to residents wishing to travel the length of the County. The system is not funded and due to its significant cost, it may not be funded within the horizon of the Comprehensive Transportation Plan, 2030.

The projects recommended for the Arbor Place Mall subarea include:

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

## DOWNTOWN/GOVERNMENT SUBAREA



The Downtown/Government Subarea is shown in Figure 5. This subarea includes two key nodes of activity. The first node includes the businesses along Broad Street (US 78) as well as the City government buildings along Church Street all of which fall within the Douglasville Historic District. Connected by Campbellton Street, the second node to the south includes the Douglas County Courthouse, Wellstar Douglas Hospital, the Douglas County Transportation Center, and the Woodie Fite Senior Center. This

node is bordered by Campbellton Street to the west and SR 92 to the east. The node is bisected by Hospital Drive which serves as the main access facility.

### SUBAREA BACKGROUND

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

### Safety & Mobility

Within the Downtown/Government Subarea only I-20 is currently being examined by ARC on the Congestion Monitoring Network (CMN). Safety often has an inverse relationship with mobility however, injuries decrease as mobility becomes increasingly limited. Especially concerning injury crashes, an accident caused by a slower-moving vehicle will likely have less severity of injury than an accident involving a faster-moving vehicle. This does not mean that there will be no injury crashes, as evidenced by the fact that Fairburn Road is listed as one of the areas “hot spots” for injury crashes. From Newman Street to Eunice Street, Fairburn Road experienced 65 injury crashes between 2002 and 2004.

### Level-of-Service

There is a significant amount of data available about level-of-service (LOS) within this subarea. Georgia DOT has set up a number of traffic counting stations. Table 3 shows LOS for the subarea. Broad Street and SR 92 have the worst LOS in the subarea, D or F. The worst location for Campbellton Street was at Church Street earning the score of F. SR 92 recorded LOS D at its intersection with Spring Street and near Hospital Drive. SR 92 recorded LOS F at the Thompson Street intersection – the worst along the entire corridor within this subarea. Conversely, Chicago Avenue, Campbellton Street (south of Church Street) and Prestley Mill Road all received high ratings of LOS A-B. As was the case in the previous subarea, truck traffic data was not available.



**Table 3 - LOS**

<b>Roadway Segment</b>	<b>GDOT Count Station ID</b>	<b>Existing LOS</b>
Broad Street at Eunice Street	27	D
Campbellton Street at Broad Street and Church Street	25	F
Broad Street at Club Drive	23	D
SR 92 at Thompson Street	85	F
SR 92 at Spring Street	83	D
SR 92 near Hospital Drive	97	D
Chicago Avenue north of Strickland Street	209	A
Campbellton Street at Adair Place	201	B
Campbellton Street at Wood Valley Drive	198	B
Prestley Mill Road at Vansant Street	196	B

### Land Use

The Downtown/Government subarea has multiple land uses. The shops and restaurants abutting Broad Street are all designated as a “community activity center” which is similar to a “regional activity center”, described previously, however on a smaller scale. Land use in the area is mostly classified as commercial and office. Across the street north of Strickland Street is designated “mixed-use” which is generally a mix of residential and commercial uses. At Spring Street and south, the land is designated “medium-density residential”. From just north of Country Club Drive and following Campbellton Street south to I-20 is designated as “low-density residential”. The area around Hospital Drive and the Douglas County Transportation Center is designated as “community activity center” with a small portion of “mixed use” in the south near I-20.

### Population & Employment

In 2005, the population within the Downtown/Government subarea was estimated at 9,994. Of those residents, 6,359 are white with 3,635 designated as African American or “other”. As with the Arbor Place Mall subarea, the number one employer in the census tract which encompasses this subarea is the “private or non-government sector” followed by “services” and “retail”.



## SUBAREA TRANSPORTATION ISSUES AND NEEDS

### Downtown

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

As traffic volumes have increased, the need for additional capacity along the corridor has been suggested. However, most concepts have suggested removing buildings in the immediate area around the Campbellton Street intersection. Other concepts have suggested creating a one-way pair utilizing Church Street for eastbound movement and the existing Broad Street for westbound movement. This analysis will not duplicate recommendations from these concepts. As a matter of priority, the downtown area's main north-south connection, Campbellton Street, is suffering from more day-to-day issues and therefore, should have priority attention.

Campbellton Street bisects the downtown historic district and also serves as a popular cut-through route for residents from Paulding and Cobb Counties to access the Arbor Place Mall shopping area and I-20 to the south. North of Broad Street, Campbellton Street becomes Dallas Street and carries SR 92. A large amount of freight traffic travels into the downtown area using SR 92 to access I-20 as well the western metropolitan area via Paulding and Cobb Counties. Freight coupled with the existing commuter traffic exacerbates the bottlenecking effect in the central downtown area. When a train is crossing during peak hours, delays can become extreme. Freight traffic wishing to continue on SR 92 south through downtown cannot cross over the railroad tracks at Campbellton Street because of the steep incline. Trucks must drive east down Strickland Street (parallel to Broad Street to the north of the railroad tracks), make a turn to cross at Malone Street then turn again on Broad Street and lastly turn onto SR 92 south. This extra maneuvering contributes to area congestion due to the large turning radii required for semi-trucks as well as the delay caused by starting and stopping several times over a short distance. Several years ago, the City of Douglasville began design on a project that would relocate SR 92 about ½ miles to the east of its southern leg. The new roadway will tunnel under Broad Street (US 78) and the railroad effectively removing the need to detour tractor-trailer trucks through a maze of city streets. The SR 92 relocation project is included in the ARC's Envision6 RTP as projects DO-282A, DO-282B and DO-282C. Right-of-way acquisition is expected to begin in 2009.



The SR 92 relocation project, which ties into the existing SR 92 at Brown Street to the north and Hospital Drive to the south, would bypass the downtown district completely, greatly reducing the cut-through traffic currently using Campbellton Street. Campbellton Street serves as the major thoroughfare from the downtown area and points north to the Arbor Place Mall. City officials as well as residents would like to see Campbellton Street used as was originally intended, a residential street. Returning Campbellton Street to a strictly residential street would be a challenging task in the absence of the SR 92 relocation project.

Looking to mitigate traffic impacts in the residential areas south of the downtown area, the City of Douglasville installed a series of traffic calming measures including speed tables and all-way stops as recommended in the *Downtown Transportation Study*. The measures were met with significant opposition from commuters and residents. As a result, the speed tables were removed. The all-way stops remain and tend to create significant congestion especially during peak commuting times and when the Douglas County Comprehensive High School is in session. A small segment of Campbellton Street between Broad Street and Church Street is within the downtown historic district. Modifications to this segment of Campbellton Street could be challenging as many of the buildings abutting the road may be eligible for listing on the National Register of Historic Places. This would make acquiring right-of-way challenging and roadway improvements (including sidewalks and streetscaping) may require significant mitigation to minimize their impact.

Coupled with the SR 92 Relocation project, if a minimal amount of right-of-way could be acquired for the length of Campbellton Street, (as far south as Hospital Drive), the corridor could take on a more “Main Street” feel with wide sidewalks, bike lanes/paths, streetscaping, and the like. Additionally, landscaping in a center median or on corners coupled with street lighting and sign branding could also add to the aesthetic beauty of the street giving the area an identity. A rendering of landscaping and wide sidewalks from the SR 92 LCI study is shown in Figure 6. Campbellton Street serves as the main entrance for the Douglas County Comprehensive High School. Mitigating the impact of this traffic to Campbellton Street could be achieved



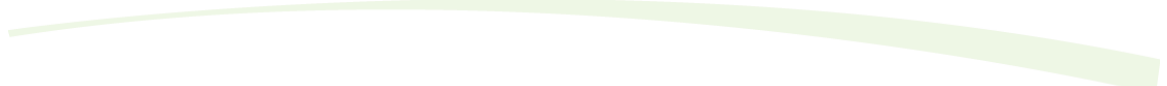
Figure 6 – “Main Street” design

by relocating the main entry and exit points to Selman Drive. If this reorientation is made, traffic could be encouraged to use Rose Avenue (via Selman Avenue) for north-south travel rather than Campbellton Street.

## Government Complex

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

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

Many opportunities exist for ensuring transportation facilities in this vital area are maintained. Starting with the walkability of this area, there are sidewalks available; however, crosswalks are lacking except at signalized intersections. Also, there is a center turn lane that runs for nearly the entire length of Hospital Drive. This provides no refuge for pedestrians wishing to cross at non-signalized intersections. In essence, Hospital Drive acts as an obstacle to pedestrians between the residential areas to the north and destinations to the south.

The addition of medians with landscape treatments along Hospital Drive could raise the aesthetic value of the corridor for those wishing to walk. An added benefit of landscaped medians is the propensity of vehicles to slow down given a perceived narrower roadway. Coupled with the installation of mid-block pedestrian crossings along certain points along Hospital Drive, specifically near the Courthouse, the Hospital, and the retail centers near SR 92 and Hospital Drive would encourage more walking, remove short vehicle trips from area roadways and improve overall health of the surrounding community.

During early discussions at the beginning of the Comprehensive Transportation Plan, county staff expressed an interest in performing a Transit Study to look at the feasibility of providing local transit service throughout the county. The Courthouse and Hospital are major destinations and therefore, routes will likely focus on these destinations. Coupled with these destinations, the Douglas County Transportation Center will act as a hub for local and regional bus service. As GRTA's Xpress bus service brings riders into the county, the transition of riders to the local bus system will strengthen employment opportunities throughout the county. An intra-county shuttle could connect major activity centers in the county including the Downtown area and Arbor Place Mall to address the shorter trips as well as provide the complete trips for the transit user on the Xpress bus by serving other destinations. A separate Technical Document has been prepared assessing the transit and travel demand management strategies that would be appropriate in Douglas County.

Projects identified for the Downtown sub-area are:

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

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

## SR 6 INDUSTRIAL SUBAREA



The southeastern quadrant of Douglas County (including parts of the City of Douglasville) is quickly becoming one of the major freight distribution centers in the north Georgia region. The majority of freight transported in the United States is by truck. For this analysis, the SR6 Industrial Subarea was identified due to its unique character and need to address certain issues before the area becomes less vibrant or desirable. The area is partially located within the city of Douglasville bisected by SR 6/Thornton

Road from south of I-20 and along the Cobb and Fulton County borders to Riverside Parkway. Major intersections within this subarea include the SR 6 intersections with Factory Shoals Road, Douglas Hill Road and Riverside Parkway as well as parts of the Six Flags Parkway corridor to the east and parallel to SR 6. The area’s southern border is nestled along the Chattahoochee River with easy southern access to the Fulton Industrial Boulevard industrial district and I-285 and equally simple access to I-20 and the Norfolk-Southern Intermodal Center in Austell to the north. (See Figure 7) This area has seen a significant amount of growth in industrial uses over the last decade. Mainly concentrated on light- and medium-industrial use such as warehousing and distribution, the amount of truck has increased exponentially.

### SUBAREA BACKGROUND

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

### Safety and Mobility

Traffic crash data for the SR 6 Industrial subarea was examined and identified three roadways within the subarea that are currently on the Congestion Monitoring Network (CMN). Those roads identified shown are in Table 4.

Table 4 - Roadways listed on the CMN

Location	Boundary
SR 6/Camp Creek Parkway	I-285 to I-20 West
I-20 West	SR 6/Camp Creek Parkway to I-285
Riverside Parkway	SR 92 to SR 6/Camp Creek Parkway



Injury crash data for the SR 6 Industrial subarea is shown in Table 5. With a total of 205 crashes, SR 6/Thornton Road experienced the highest amount of injury crashes in Douglas County. Since this is the logistics center of Douglas County, these accidents frequently involve freight trucks and smaller vehicles. It is understandable that these accidents would be more prone to injury than in other areas. High-speed movement along SR also contributes to the high volume of injury crashes.

**Table 5 - Injury Crashes**

Location	Boundary	Total Injury Crashes
SR 6/Thornton Road	Oak Ridge Road to South Blairs Bridge Road	141
SR 6/Thornton Road	South Blairs Bridge Road	64

### Level-of-Service

There is a large amount of data available for level-of-service (LOS) within the SR 6 Industrial subarea. Table 6 shows LOS for the subarea. Overall the SR 6 Industrial Subarea averaged the best LOS of all three subareas reviewed. The majority of stations reported LOS of A or B. The worst rating was given to I-20 at SR 6/Thornton Road which received a LOS of F. This is understandable for a variety of reasons including confusing ramp configurations, area topography and large peak hour movements. While visually the subarea shows a large amount of truck movement, there were no truck counts available for analysis.

**Table 6 - LOS**

Roadway Segment	GDOT Count Station ID	Existing LOS
I-20 at SR 6/Thornton Road	126	F
SR 6/Thornton Road at Interstate West Parkway	325	B
SR 6/Thornton Road north of Riverside Parkway	323	B
SR 6/Thornton Road south of Riverside Parkway	321	B
Six Flags Road south of Interstate West Parkway	4185	B
Six Flags Road north of Riverside Parkway	785	A
Riverside Parkway east of SR 6/Thornton Road	167	B
Six Flags Road north of Factory Shoals Road	43	A

## Land Use

Of the portion of this subarea that lies within the City of Douglasville, mainly the area surrounding I-20 at SR 6/Thornton Road, land use is designated as a “regional activity center”. The southern portion of the subarea (closer to the Chattahoochee River) lies within Douglas County. There is one small area in the southeast quadrant which is zoned “mixed use”.

## Population and Employment

In 2005, the population within the SR 6 Industrial subarea was estimated at 10,198. Of those residents, 5,692 are white with 4,506 designated as African American or “Other”. Employment within the SR 6 Industrial subarea mirrors the Downtown/Government subarea with the number one employer being “private or non-government” followed by “services” and “retail”.

## SUBAREA TRANSPORTATION ISSUES AND NEEDS

Most roadways are designed to accommodate smaller-sized passenger vehicles rather than large multi-axle tractor-trailer vehicles. Large three, four and sometimes five-axle trucks have an entirely different relationship with the road than smaller vehicles and their impact can be magnified. Heavier vehicles put more wear on roads requiring more frequent resurfacing. The SR 6 Industrial subarea infrastructure could benefit from improvements made for the anticipated increase in the number of trucks. Freight movement is an integral part of an economy and mobility is key to maintaining and expanding the local and regional economy.



Roadway design should consider the percentage of truck traffic because turning radii for trucks is much larger than for smaller vehicles, and when not anticipated, medians, curbs and shoulders can be damaged. By increasing the radii of curves and turns at intersections, trucks can make turns without creating significant damage. Turn lane storage could also be lengthened to accommodate larger vehicles. Typically, one tractor-trailer truck takes up the equivalent of three passenger cars on the roadway. If a turn lane is designed to hold six cars, it can be filled with just two trucks. This would create a potential safety issue by forcing turning traffic to queue in the through lanes at certain intersections. SR 6 is a high-speed principal arterial roadway serving as a major connection to Hartsfield-Jackson Atlanta International Airport to the south. The invitation of queuing traffic into the mainline could create potentially unsafe conditions.

Congestion is also a major concern in the subarea. A sizeable amount of congestion exists outside of the study area at the SR 6 intersections of Fulton Industrial Boulevard and I-20. As the subarea continues to grow and truck volumes continue to increase, the potential for significant peak hour congestion exists.

The majority of the area is comprised of warehousing and distribution land uses, making roadway modifications easier than in a purely residential area, such as those



discussed above. The shoulders along SR 6 are wide and the buildings are set well off of the roadway. Acquiring right-of-way may be less difficult because fewer property owners are involved with large industrial parcels and may have less impact to commercial structure. This should in turn allow for the smoothing of curves and driveway entrances, the provision of additional turn lanes as necessary, and the reduction of roadway grades to prevent congestion due to slow-moving vehicles.

Further improvements to the SR 6 Industrial subarea could include aesthetic improvements once again focusing on branding and marketing the area. As its name states, this subarea has an industrial feel to it. Therefore, upgrades could be made to make the area more driver-friendly and aesthetically pleasing. The branding suggested for the Downtown/Government subarea could work at this location as well. Branding creates a greater sense of community and makes the area more personal. Landscape treatments in the median of SR 6 as well as along the other major roadways in the area could be an option. The use of stone treatments for signs and building façades could make the area more appealing to a visitor.

This subarea is a key component of the freight industry in Douglas County as well as the Atlanta region. Freight trucking is the number one means of transporting goods for sale, followed by rail, water and air. Increasing mobility and access for freight benefits the economy as a whole. It is in the best interest of the region to improve access and egress around distribution centers and warehouses. Methods for improving freight mobility and integrating freight with general purpose transportation issues is discussed for the entire county in the *Freight Transportation Technical Report* completed for the CTP.

Projects identified for the SR 6 subarea are:

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

- SR 6 at North Blairs Bridge Road-add west bound right turn lane

## SUMMARY

Three specified subareas were assessed for transportation needs and potential solutions. Each subarea is summarized below.

### ARBOR PLACE SUBAREA

Congestion and safety issues identified in previous studies such as the *Douglasville Livable Centers Initiative (LCI)*, the *City of Douglasville Comprehensive Transportation Plan (CTP)* and the *Arbor Place Mall Transportation Study* are significant in the Arbor Place subarea. Despite improvements implemented through previous studies, travel demand forecast modeling has identified continued congestion. Several transportation needs were identified and assessed in the Arbor Place Subarea.

- **Northeast Mall entrance.** Traffic queuing at the northeast mall entrance due to proximity to the Douglas Boulevard/Chapel Hill Road intersection creates a bottleneck on Douglas Boulevard between the mall entrance and Chapel Hill Road. A variety of solutions have been implemented since the mall opened mainly involving lane configurations, signal coordination and timing and dedicated striping. City and county staff have expressed the current configuration represents the fourth iteration of improvements and maximizes the available land and signal timing capabilities.
- **Use of Interstate 20 as a local connector road.** Given the limited amount of east-west mobility options south of I-20, local residents use I-20 as a connector to move across the County. This “puddle-jumping” from exit to exit adds local volume to an already congested facility and pressures interchanges such as Chapel Hill Road, SR 92/Fairburn Road and Lee Road, especially at peak hours. Potentially, auxiliary lanes that serve the collector-distributor function can be used to smooth transitions from merging or exiting traffic to the mainline roadway by adding a lane at the entrance ramp which drops at the next exit. An example exists between the Chapel Hill Road and SR 5 exits in central Douglas County.
- **Safety** issue on SR 5 from West Stewarts Mill Road to Rose Avenue. 101 injury crashes were recorded on this segment. This is the only roadway that was reported to have high injury crashes within the Arbor Place Mall subarea.

Three potential solutions were considered to reduce the bottlenecks in and around the mall.

- **Improved Signaling**
  - Signaling should be placed along Chapel Hill Road southbound alerting drivers that a second entrance to the mall is available ¼ mile south. The signaling would need to be large enough to gain attention and clearly convey there is an optional access point to the mall.
  - Another signaling option is to improve signaling along I-20 eastbound to alert drivers that both the SR 5 exit and Chapel Hill Road exit may be used to access the mall. The majority of traffic off of I-20 eastbound is using Chapel Hill Road to access the mall.
- **Install Right-turn Lane**

- Installing an additional right-turn lane from Chapel Hill Road to Douglas Boulevard as recommended in the 1999 Arbor Place Mall Study would reduce the driveway conflicts on Douglas Boulevard and provide a better flow of traffic onto Douglas Boulevard.
- **Relocate the Northeast Entrance**
  - Relocating the northeast entrance to the mall further west on Douglas Boulevard would reduce traffic queuing and improve traffic flow. The approximate location would be ¼ mile to the west where the mall's main marquee sign now stands. The new entrance would tie into the existing loop road and not result in the loss of any parking spaces. The creation of this new entrance would increase the storage capacity of Douglas Boulevard's eastbound approach to the Chapel Hill Road intersection. Specifically, the new entrance would accommodate dual turn lanes into and out of the mall. This new entrance could also become the mall's gateway entrance allowing the mall's owners to introduce beautification and other improvements to increase the visibility and aesthetics of the mall property. Improvements to the existing northeastern entrance would be to reconfigure the intersection to a "right-in/right-out" access with proper turning prohibitions for access to Douglas Boulevard.

## DOWNTOWN/GOVERNMENT CENTER SUBAREA

Transportation needs that were identified and assessed in the Downtown/Government Center Subarea follow.

- **Broad Street congestion.** Broad Street experiences some level of congestion especially during train crossing events. As a result of increasing traffic volumes, the need for additional capacity along the corridor has been suggested. Unfortunately, most concepts included removing buildings in the immediate area around the Campbellton Street intersection.
- **Campbellton Street congestion.** Freight movement coupled with commuter traffic exacerbates the bottleneck in the central downtown area. Freight traffic on SR 92 south through downtown cannot cross over the railroad tracks at Campbellton Street due to the steep incline. Extra maneuvering contributes to area congestion due to the large turning radii of these vehicles as well as the delay caused by starting and stopping several times over a short distance.
- **Hospital Drive congestion and walkability.** Hospital Drive was recently widened to four lanes from Prestley Mill Road to SR 92/Fairburn Road adding much-needed capacity to this vital link connecting SR 92 to the Campbellton Street/Chapel Hill Road area. However, as the area continues to grow, Hospital Drive is forecast for peak hour congestion.
- **Safety.** From Newman Street to Eunice Street, Fairburn Road experienced 65 injury crashes between 2002 and 2004.
- **Congestion.** Roadways in the subarea were modeled for level of service. Broad Street and SR 92 currently are operating at LOS D or F. Campbellton Street at Church Street earned the score of F. SR 92 recorded LOS D at its intersection with Spring Street and near Hospital Drive. SR 92 recorded LOS F at the Thompson Street intersection.

Potential solutions include the SR 92 relocation project and increased walkability enhancements. The SR 92 relocation project moves SR 92 about ½ mile to the east of its southern leg to a grade separated crossing under Broad Street (US 78) and the railroad effectively removing the need to detour tractor-trailer trucks through a maze of city streets. Design work for this project is nearly complete and right-of-way acquisition will begin shortly thereafter. Construction of the project is scheduled for several years into the future. The relocation project, which ties into the existing SR 92 at Brown Street to the north and Hospital Drive to the south, bypasses the downtown district and reduces cut-through traffic on Campbellton Street, a major thoroughfare from the downtown area and points north to Arbor Place Mall.

To improve walkability of this area, additional crosswalks are needed to complement existing sidewalks. Coupled with the SR 92 Relocation project and a minimal amount of additional right-of-way for the length of Campbellton Street, (as far south as Hospital Drive), the corridor could be enhanced with wide sidewalks, bike lanes/paths, and pedestrian-scale streetscaping. Additionally, landscaping in a center median or on corners coupled with street lighting and sign branding could also add to the aesthetic beauty of the street giving the area an identity. Mitigating the impact of the high school traffic to Campbellton Street could be achieved by relocating the main entry and exit points to Selman Drive. If this reorientation is made, traffic could be encouraged to use Rose Avenue (via Selman Avenue) for north-south travel rather than Campbellton Street.

Hospital Drive could also be enhanced with the addition of medians with landscape treatments which could raise the aesthetic value of the corridor for those wishing to walk. An added benefit of landscaped medians is the propensity of vehicles to slow down given a perceived narrower roadway. Coupled with the installation of mid-block pedestrian crossings along certain points along Hospital Drive, specifically near the Courthouse, the Hospital, and the retail centers near SR 92 would encourage more walking, remove short vehicle trips from area roadways and improve overall health of the surrounding community.

## SR 6 INDUSTRIAL SUBAREA NEEDS

Transportation needs that were identified and assessed in the SR 6 Industrial Subarea follow.

- **Truck traffic.** Significant truck traffic in the subarea increases the potential for congestion and safety issues. Also, turning radii for trucks are much larger than for smaller vehicles, and must be accommodated. SR 6 is a high-speed principal arterial roadway serving as a major connection to Hartsfield-Jackson Atlanta International Airport to the south and as a result attracts significant truck traffic.
- **Congestion.** A sizeable amount of congestion exists at the SR 6 intersections with Fulton Industrial Boulevard and I-20. As the subarea continues to grow and truck volumes continue to increase, the potential for significant peak hour congestion exists.
- **Aesthetics.** The subarea is highly industrialized and requires attention to aesthetics.

- **Safety.** Analysis of crash data for the SR 6 Industrial subarea identified three roadways within the subarea that are currently on the Congestion Monitoring Network (CMN). With a total of 205, SR 6/Thornton Road experienced the highest frequency of injury crashes in Douglas County. Since this is the logistics center of Douglas County, these accidents frequently involve freight trucks and smaller vehicles. It is understandable that these accidents would be more prone to injury than in other areas. High-speed movement along SR 6 also contributes to the high volume of injury crashes.
- **Congestion.** Overall the SR 6 Industrial Subarea averaged the highest LOS of the subareas reviewed. The lowest rating was given to I-20 at SR 6/Thornton Road which received a LOS of F.

Potential solutions include right-of-way acquisition to smooth curves and driveway entrances, the provision of additional turn lanes as necessary, and the reduction of roadway grades to prevent congestion due to slow-moving vehicles. Further improvements to the SR 6 Industrial subarea could include aesthetic improvements once again focusing on branding and marketing the area. Upgrades could be made to make the area more driver-friendly and aesthetically pleasing. The branding suggested for the Downtown/Government subarea could work at this location as well. Branding creates a greater sense of community and makes the area more personal. Landscape treatments in the median of SR 6 as well as along the other major roadways in the area could also be an option. The use of stone treatments for signs and building façades could make the area more appealing to a visitor. Increasing mobility and access for freight benefits the economy as a whole. It is in the best interest of the region to ease ingress and egress around distribution centers and warehouses. Methods for improving freight mobility and integrating freight with general purpose transportation issues is discussed for the entire county in the *Freight Transportation Technical Report* completed for the CTP.

Riverside Parkway can be an effective arterial to accommodate east-west mobility needs. The County and City may wish to explore alternatives to enhance the roadway including state route designation and a unified effort to control access and maintain the roadway's level of service.

This analysis cannot fully address implementation of the recommended strategies and future changes in land use. Funding improvements will be a significant challenge. As transportation funds at all levels of government become less and less available, it is vital to prioritize improvements and find innovative ways to fund projects and strategies. For example, working with local businesses in the area, the Arbor Place Mall area improvements could be funded through a self-imposed tax in a Business Improvement District (BID) or Community Improvement District (CID) such as those that exist in the Town Center Mall, Perimeter Mall, and Cumberland/Galleria areas. Also, a countywide special purpose local option sales tax or SPLOST could be explored for fund generation.

Each of the three subareas will require attention to unique issues. Maintaining the balance between the communities' needs and each area's transportation needs will result in land uses and multimodal transportation options that will benefit those who

live, work, and/or recreate in and around each subarea. Addressing current issues can ensure the areas experience continued prosperity and growth and will offer the citizens of Douglas County improved quality of life.