



# **SOUTH FULTON PARKWAY TRANSIT FEASIBILITY STUDY**



## **Final Feasibility and Recommended Actions Report**

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Metropolitan Atlanta Rapid Transit Authority

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## EXECUTIVE SUMMARY

### Purpose of Report

This report is the third and final deliverable associated with Work Order 2009-01 and serves to document the actions recommended for the implementation of transit along the South Fulton Parkway. This deliverable builds on the:

- *Baseline Conditions Report*, which provided an assessment of factors that influence transit propensity such as demographics, transportation and land use; and
- *Alternatives Scenarios Testing Report*, which provided an overview of the factors influencing the development of transit and land use alternatives, the means by which these alternatives were tested and the results of the testing process.

The purpose of this report is to detail the actions needed for the implementation of transit along South Fulton Parkway to serve the needs identified through the previous efforts noted above. This includes actions from MARTA, local jurisdictions along the corridor, and regional planning partners such as GDOT and ARC.

### Service Enhancement Recommendations

#### Potential Short Term Recommendations

While the implementation of service along will need to be a cooperative effort, there are actions that can be implemented in a short-time frame to facilitate the phasing of transit service along South Fulton Parkway and/or that have been identified through the assessment of the baseline conditions. They are reflected in **Table ES-1** below.

**Table ES-1: Potential Immediate Actions**

Action	Rationale	Agencies
Administer preference survey to gauge potential demand for park-and-ride services	Based upon the high number of externally bound work trips and Stakeholder input, forecasting techniques such as travel preference surveys are needed to better gauge the feasibility of express bus service.	MARTA and/or GRTA
Enhance pedestrian access and safety along Roosevelt Highway by providing additional sidewalks and/or crosswalks.	Much of Roosevelt Highway is characterized by a lack of sidewalks and, as a result, pedestrian access to MARTA stops along the roadway – both in and out of the study area. This is particularly true for the side of the roadway adjacent to the abutting CSX line. In addition, some stops, such as that across from Brenau University in Fairburn, may warrant crosswalks to help facilitate pedestrian safety.	City of College Park City of Union City Fulton County City of Fairburn City of Palmetto GDOT

**Table ES-1: Potential Immediate Actions (continued)**

Action	Rationale	Agencies
Identify areas best suited for park-and-ride stops and develop area plans to facilitate their evolution into more dynamic TOD areas; area plans should be developed in a manner that promotes more pedestrian friendly	The establishment of area plans and location of areas identified for park-and-ride stops establishes a conceptual 'blueprint' for future service options.	City of College Park City of Union City Fulton County
Investigate upgrading transit service along the Old National Highway corridor	Enhancement of transit service along the corridor will further the objectives of the Old National LCI study and strengthen the presence of transit that can be parlayed into promoting TOD at the Old National node along the corridor.	MARTA

## Phase I Recommendations – Initial Commuter Services

### Service Characteristics

The initial service recommended for the corridor is an express service with two stops in the vicinity of Stonewall Tell Road and Old National Highway. A map of the potential alignment for Phase I service is provided in **Figure 7-1**. As a start-up service, the initial service would be provided to the more urbanized sections of the corridor in order to allow for development to occur in the western portions of the corridor. Other potential characteristics of the initial commuter services would be as follows:

- Peak-Hour Service
- Operates in shared right-of-way
- +/- 30-minute headways (dependent on preference survey results)
- Signal and ROW enhancements limited to park-and-ride stop locations for access

### Feasibility Indicators for Recommended Service Type

The primary indicator for the need for initial service will be the results of a preference survey reflecting as such. As noted throughout this document, other requisite actions needed for the implementation of service include:

- Development of station area plans along the corridor to facilitate development along the service
- Construction of the park-and-ride facility with appropriate design elements to accommodate the expansion of development and turning movements
- Continued development of the surrounding single-family residential developments in order to increase the catchment area for transit services and the attractiveness of the site for retail services
- Signalization and/or intersection enhancements at park-and-ride-lots access points

### Station Area Development

Given the need to create synergy at stop locations, it is recommended that the park and ride facility be initially constructed with adjacent retail and/or residential development. A conceptual station layout and three dimensional image of a proposed station area are provided in **Figure 7-2** and **Figure 7-3**, respectively. Some of the characteristics that apply to these plans are:

- Sufficient area available for future phases of development;
- Visibility from South Fulton Parkway;
- Access from existing roadway that intersects South Fulton to avoid need for additional access point; and
- Parking located to the rear of the property to increase the visibility of the transit access and retail development.

### Agency Coordination Needs

At no point in the development of a transit service for South Fulton will interagency coordination be as important as during the establishment of initial service. This is primarily due to the fact that the mechanisms established during this phase of development will establish communication lines for future phases of transit service. As such, the establishment of the recommended service in Phase I will require the following:

- Coordination between the local municipalities and MARTA to ensure the areas identified for park-and-ride facilities have the required distance and parking capacity to accommodate the proposed service based on the results of the preference survey. Coordination with MARTA and local governments is also needed to ensure station area plans conform to the vehicle requirements needed for vehicle movement, ingress, and egress
- Coordination will be needed between the local municipalities and GDOT to ensure that land use and zoning decisions do not impact their intentions to restrict access and jeopardize the promotion of nodal development that is more favorable to the recommended service
- Coordination between MARTA and GDOT will be necessary that adequate intersection improvements and turn lanes are provided in order to accommodate the transit service

## Phase II Recommendations – Enhanced Bus Services

### Service Characteristics

The second phase of service recommended for the corridor is an enhanced bus service along the corridor and the extension of service to SR 154. A map of the potential alignment for Phase II service is provided in **Figure 7-4**. Building upon the initial service, enhancements such as queue jumpers, signal preemptions, etc. will be implemented in the segments subject to the initial service as demand dictates. Service along the remainder west of Stonewall-Tell Road will be similar to that implemented in Phase I, with right-of-way and other transit enhancements coming online as the feasibility indicators listed in the in the next subsection come to fruition. Other potential characteristics of the enhanced bus services would be as follows:

- All day service



- 15-minute peak hour headways, 30-minute off-peak headways
- Transit enhancements such as signal preemption, queue jump lanes, etc. along South Fulton Parkway and, if necessary, further intersection improvements at park-and-ride stop access points to accommodate the additional vehicular traffic associated with increased site development

### **Feasibility Indicators for Recommended Service Type**

The primary indicators for the feasibility of this type of service are as follows:

- Development of station area plans and provision of park-and-ride facilities along the western portions of the corridor
- Expansion of TOD at existing stations along eastern portions of corridor that warrant the potential for all day service
- Further development of the surrounding single-family residential developments, particularly in the vicinity of SR 154, in order to increase the catchment area for transit services that warrant the capital investment for transit enhancements and support the expansion of the TOD at the station areas
- Sufficient ridership of service and use of park-and-ride lots to indicate need for increased headways during peak hours
- The construction of pedestrian facilities to connect the park-and-ride locations to surrounding development
- MARTA establishment of service to provide better transit connectivity to the stations in the eastern portions of the corridor, either through new service or modification of existing routes
- Signalization and/or intersection enhancements at park-and-ride-lots access points

### **Station Area Development**

The station area development characteristic of the Phase II transit service reflects the additional demand created by ongoing development of single-family residential communities planned around the station areas. This could be represented by an additional retail, office, or residential component dependent on market demands. A conceptual station layout and three dimensional image of a proposed station area are provided in **Figure 7-5** and **Figure 7-6**, respectively. Some of the characteristics that apply to these plans are:

- Even after second phase of development, sufficient area available for future phases of development;
- Maintenance of visibility from South Fulton Parkway, but no additional access points along the roadway;
- Conversion of the parking at the rear of the property to structured parking to maintain the principle of smart growth and allow for more intense development on the station site and to maintain the visibility of the transit access and retail development.

### **Agency Coordination Needs**

Building off of the mechanisms needed for the establishment of initial service, the recommended service in Phase II will require the following:

- Coordination of service enhancements between MARTA and local municipalities to ensure adequate demand (or desire) for service enhancements and, therefore, if the capital expenditures for said projects are warranted. Coordination between these agencies will also be necessary to ensure that land use and zoning decisions are not jeopardizing the viability of TOD expansion at station areas and, therefore, future success of the service.
- Coordination will be needed between the local municipalities and GDOT to reaffirm that land use and zoning decisions are still in accordance with their intentions to restrict access and promote traffic movement along the roadway.
- Coordination between MARTA and GDOT will be necessary for the implementation of transit enhancements such as queue jumpers and signal preemption and additional intersections needed at park-and-ride locations at the western portions of the corridor. This would include the identification of where such enhancements are needed.

### **Phase III Recommendations – Long Term Fixed Guideway Services**

#### **Service Characteristics**

The third phase of service recommended for the corridor is a fixed guideway service along the corridor from the College Park MARTA Station to SR 154. As reflected in the testing results, a circulator bus system will be critical to the success of this service option. A map of the potential alignment for long term guideway service is provided in **Figure 7-7**. Building upon the enhancements provided for Phase II service, this phase of service will require portions of the service operating in exclusive ROW. Much like the transit enhancements of Phase II, these portions will likely be phase from the eastern segments of the service to the west as needed. Service along the remainder west of Stonewall-Tell Road will be similar to that implemented in Phase II, with transit enhancements along intersections between station locations. Other potential characteristics of the fixed guideway services would be as follows:

- All day service
- 10-minute peak hour headways, 15-minute off-peak headways

#### **Feasibility Indicators for Recommended Service Type**

The primary indicators for the feasibility of this type of service are as follows:

- Buildout of the surrounding single-family residential developments and the park-and-ride station areas, including office development that would represent a significant increase of employment in the corridor in order to facilitate the live-work-play environments necessary for successful TOD and all day service
- Related to the indicator above, build-out of the Parkway South Economic Development Plan and/or other development similar with respect to population and employment densities
- Modifications to the area roadway network to provide the connectivity necessary for circulator bus service

## Station Area Development

As previously noted, long term fixed guideway service will require buildout of the station area plans along the corridor as well as the single-family communities in and around the station areas. A conceptual station layout and three dimensional image of a proposed station area are provided in **Figure 7-8** and **Figure 7-9**, respectively. It should be noted that the mixed use component for each station location could be represented by an additional retail, office, or residential component dependent on market demands. Some of the characteristics that apply to these plans are:

- Development of each station area mature enough to create an activity center with an identifiable sense of place beyond that of just a transit station;
- Maintenance of visibility from South Fulton Parkway, but no additional access points along the roadway.

## Agency Coordination Needs

Building off of the mechanisms previously discussed, the recommended service in Phase III will require the following:

- Coordination of service enhancements between MARTA and local municipalities to ensure adequate demand (or desire) for service enhancements and, therefore, if the capital expenditures for said projects are warranted.
- Coordination between MARTA and GDOT will be necessary for the acquisition of ROW needed for fixed guideway service transit enhancements and additional such as queue jumpers and signal preemption and additional intersections needed at park-and-ride locations at the western portions of the corridor.

## Conclusion

The recommendations that this effort has produced are based primarily off of the results of the alternatives testing and input from Stakeholders in the corridor. With this said, there are three overriding factors that will shape future transit service along the South Fulton Parkway Corridor:

- ***The type of service along South Fulton Parkway is dependent upon the type of development and land use policies local governments are willing to implement.***  
The phased recommendations for service options are all dependent on the development and implementation of station area plans and a commitment to nodal development along the corridor. Should either of these initiatives not be carried forward throughout the corridor, then the recommendations contained in this document are moot. In the same perspective, local jurisdictions have the option to decide whether the station area planning and land use initiatives necessary to promote long-term guideway service is in the best interest of their respective communities.
- ***The implementation of transit services along South Fulton cannot occur without cooperation from and coordination with GDOT.*** All of the phases recommended within this report are dependent on some level of improvements to the roadway by GDOT. These improvements range from minor intersection improvements for Phase I recommendations to the transit enhancements (queue jump lanes, signal preemption, etc.) and dedication of ROW for later phases.

- ***The amount of available funding will also determine the service implemented along the corridor.*** Given recent changes in federal policy, discussions of a regional tax for transit, and the instability of existing tax-based funding sources related to economic factors the amount of funding available for the implementation of service is uncertain. Regardless, the implementation of any of the transit service recommended within will require a substantial investment of capital from local municipalities (for the provision of necessary infrastructure), GDOT (for enhancements to South Fulton Parkway), and MARTA (for the provision of transit services). It is for this reason that agency coordination is paramount. The amount of investment committed by one of these parties will provide the onus for commitment by the other parties involved. It should also be noted that, given the prevalence of large vacant tracts of land and vast development potential throughout the corridor, opportunities for private sector partnerships should be explored. Several transit agencies throughout the U.S. have employed such partnerships to assist with funding facilities, supporting roadway improvements, and/or supporting infrastructure needed for TOD.

## Next Steps

Given the needed steps to promote the transit service and station area development and noted within, the following represent the next steps in furthering transit along South Fulton Parkway:

- Local jurisdictions to create Task Force in order to:
  - Establish overall vision for the South Fulton Parkway Corridor
  - Identify specific locations to focus TOD activities
  - Address land use issues along the corridor in a unified fashion
- In order to facilitate and gauge its demand, MARTA will need to conduct a preference survey for initial commuter services. No service can be implemented until sufficient demand is shown for the initial commuter based services; however, upon the establishment for a common vision for the corridor local governments can initiate activities for TOD that can facilitate the initial service recommended in Phase I.
- As noted throughout, local jurisdictions need to create transit supportive zoning districts in order for the service options described in Section 7. This will be facilitated in large part by the activities of MARTA in its outreach associated with the development of its TOD Guidelines.
- In order to further the initiatives, particularly with respect to promoting nodal development to strengthen the TOD described herein, MARTA and local jurisdictions to participate in GDOT access management study to ensure the potential for future transit service options is recognized and preserved.
- As part of its commitment to serving its constituents in South Fulton, MARTA will to continue to monitor development activities in the corridor and plan for phased service improvements based on the land use and zoning actions carried forward.

## 1.0 INTRODUCTION

### 1.1 Study Overview

The purpose of Work Order 2009-01, the South Fulton Parkway Transit Feasibility Study, is to advance the Transit Planning Board (TPB) recommendation concerning the parkway by providing a high-level assessment and evaluation of potential transit improvements in south Fulton County. The corridor extends from SR 166 in Douglas County to the College Park MARTA Station, as shown in **Figure 1-1**. The study will result in the identification of issues impacting the feasibility of transit investment in the corridor and provide scenarios that focus on viable transit solutions. The study will also describe the precedents for transit feasibility and present results that can be anticipated in terms of traffic congestion, multimodal capacity, and related land use patterns, for the South Fulton area.

### 1.2 Purpose of Report

This report is the third and final deliverable associated with Work Order 2009-01 and serves to document the actions recommended for the implementation of transit along the South Fulton Parkway. This deliverable builds on the:

- *Baseline Conditions Report*, which provided an assessment of factors that influence transit propensity such as demographics, transportation and land use; and
- *Alternatives Scenarios Testing Report*, which provided an overview of the factors influencing the development of transit and land use alternatives, the means by which these alternatives were tested and the results of the testing process.

The purpose of this report is to detail the actions needed for the implementation of transit along South Fulton Parkway to serve the needs identified through the previous efforts noted above. This includes actions from MARTA, local jurisdictions along the corridor, and regional planning partners such as GDOT and ARC.

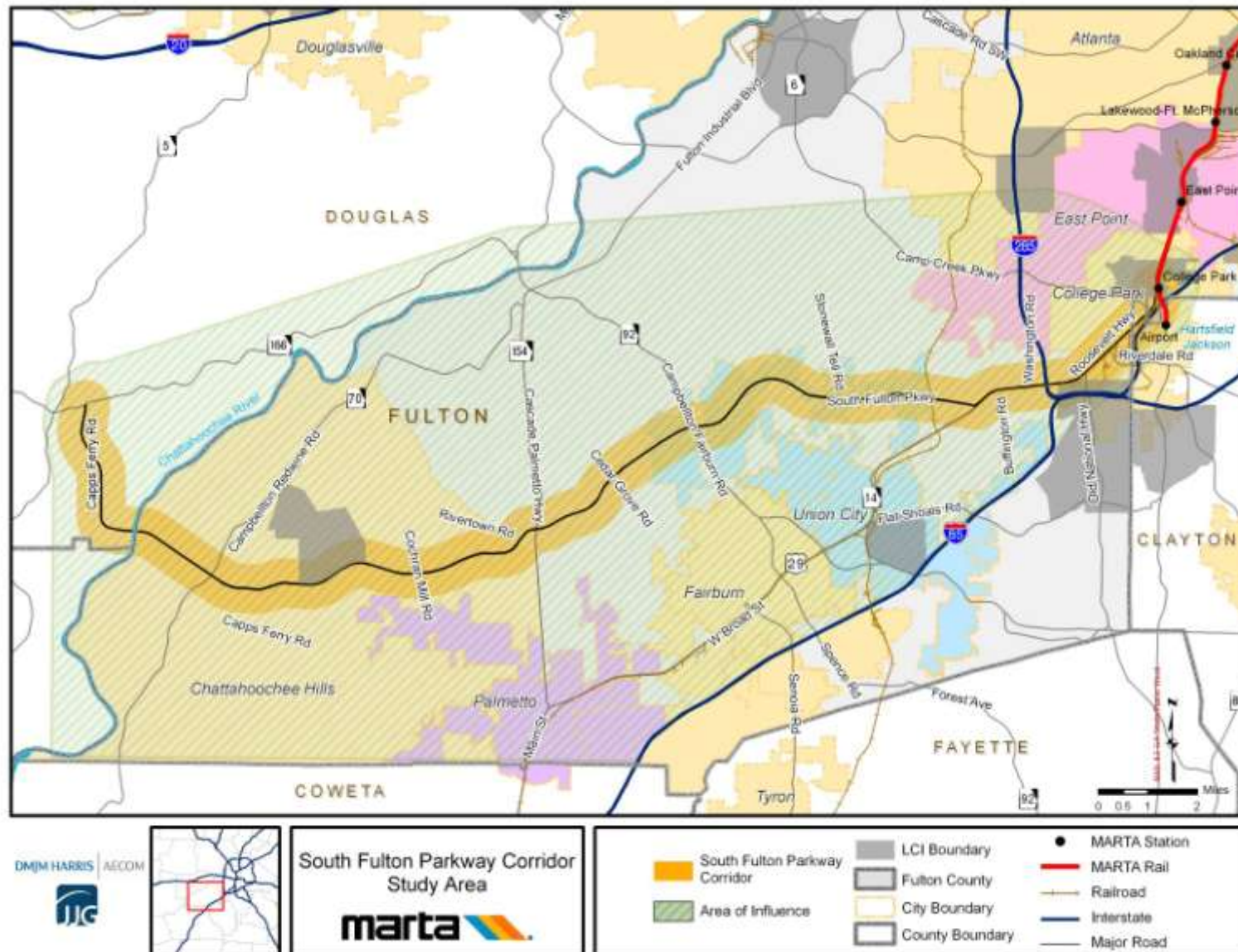
### 1.3 Report Organization

Given the purpose of this report, the organization of the remainder of the document is as follows:

- Section 2 provides highlights from the baseline conditions assessment that provide the context for the development of transit alternatives and land use scenarios;
- Section 3 details the methodology in which the transit alternatives were evaluated;
- Section 4 provides an overview of the methodology that led to land use scenarios and initial transit alternatives;
- Section 5 summarizes the results of the initial testing of alternatives given the different land use scenarios and implications for refined alternatives testing;
- Section 6 presents factors that will influence the land use and transit alternative scenarios to be carried forward as part of this effort; and
- Section 7 details the major findings and next steps to develop an implementation strategy for transit along South Fulton Parkway.



Figure 1-1: Study Area Map



## 2.0 RECAP OF BASELINE CONDITIONS

The section of the report details the major findings of the Baseline Conditions Assessment for this project. For more detail on the

The baseline conditions analysis was an assessment of factors which are traditionally inventoried to determine the potential for transit services:

- Demographics and Forecasts – Investigating the concentration of populations within the study area that are more likely to ride transit as well as population and employment estimates (2005) and projections (2030) developed by ARC;
- Land Use and Development Trends - Assessing the existing and future land uses planned throughout the corridor in addition to recent development trends to identify areas with existing and planned transit-supportive initiatives;
- Transportation Conditions – Analyzing the current and projected roadway levels of service, travel trends with respect to origin and destination and mode choice, and the planned and programmed improvements in the area to provide a context of the potential travel characteristics needed for the area;

Collectively, they provide the basis to gauge the overall potential for transit services, transit market that would be served, and service characteristics needed within the study area.

In addition, other studies conducted by the various agencies throughout the region also provide a context of these conditions.

## 2.1 Demographic Analysis

The highlights of the demographic analysis herein include:

- Traditionally transit dependent populations - low-income persons, minorities and zero-vehicle households - are found primarily in the eastern portion of the corridor. Conversely, the distribution of elderly populations throughout the study area is fairly widespread. While elderly populations make up a larger percentage of the Census block groups in the western portion of the corridor, it is important to note that these areas are also the least populated and, therefore, the higher concentrations are not reflective of large populations of elderly persons. However, this would indicate a potential need for paratransit services to complement any line haul service provided within the study area.
- Pursuant to the 2030 ARC projections, areas within the Cities of Union City, College Park, East Point, and the Old National Highway development area are forecasted to have the greatest number of population. Projected population densities are highest in the study area's eastern portion, with densities of over four persons per acre along I-285 and I-85 and in the cities of East Point and College Park. Similar to population densities, employment densities in general are projected to be low in 2030. Only the H-JAIA and two smaller areas—the Camp Creek Parkway and I-285 interchange area and the area around I-285/85—are expected to support more than 6 jobs per acre.
- It should be noted that the populations projections developed by the ARC may be understated given the recent development trends and, more specifically, the number of residential DRIs approved in the study area since 2000. As a result, coordination

will be necessary with the ARC as transit and land use scenarios are developed to ensure consistency with the population control totals for the Atlanta region as a whole.

## 2.2 Land Use and Development Trends

### 2.2.1 Existing and Planned Land Uses

Because there are six different jurisdictions with various land use classifications within the study area, ARC's LandPro2007 data was used to determine the distribution of existing land uses in the study area. As presented in **Figure 2-2**, there is a dramatic difference in the land uses within the eastern and the western portions of the study area.

Unlike many areas considered for transit implementation, a significant portion of the study area is undeveloped, consisting of forest, agriculture uses or vacant property – particularly in the portion of the corridor west of Cascade-Palmetto Highway (SR 154). The majority of existing development is auto-oriented, single-family residential development. As detailed in the sections that follow, much more single-family development has been planned or permitted within this area. The distribution of land uses is provided in **Figure 2-1**. As shown, under the broad assumption that transit supportive land uses would consist of residential densities of at least four units per acre along with concentrations of commercial and office uses would be transit supportive, only 5.7% of the existing land uses within the study area met this criteria. In reality, given the auto-oriented nature of commercial development along with the type of industrial uses in the study area, this percentage is likely overstated.

A significant amount of warehousing and distribution centers have located in the eastern portion of the study area due to its proximity to H-JAIA, I-85 and I-285. Some of the older industrial uses in the study area developed around the rail lines near Roosevelt Highway are also still present. Linear auto-oriented commercial development is present along the more established travel corridors in the area, such as Roosevelt Highway and Old National Highway. Notwithstanding, a significant amount of single-family development is also prevalent in this portion of the study area.

**Figure 2-1: Distribution of Existing Land Uses in the Study Area**

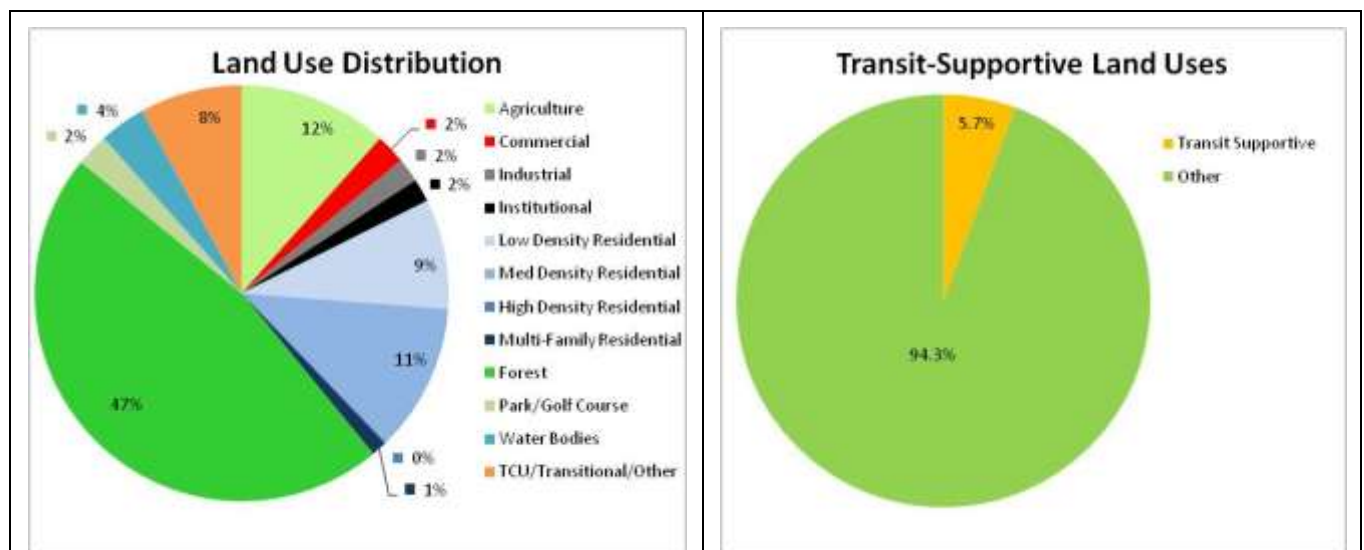
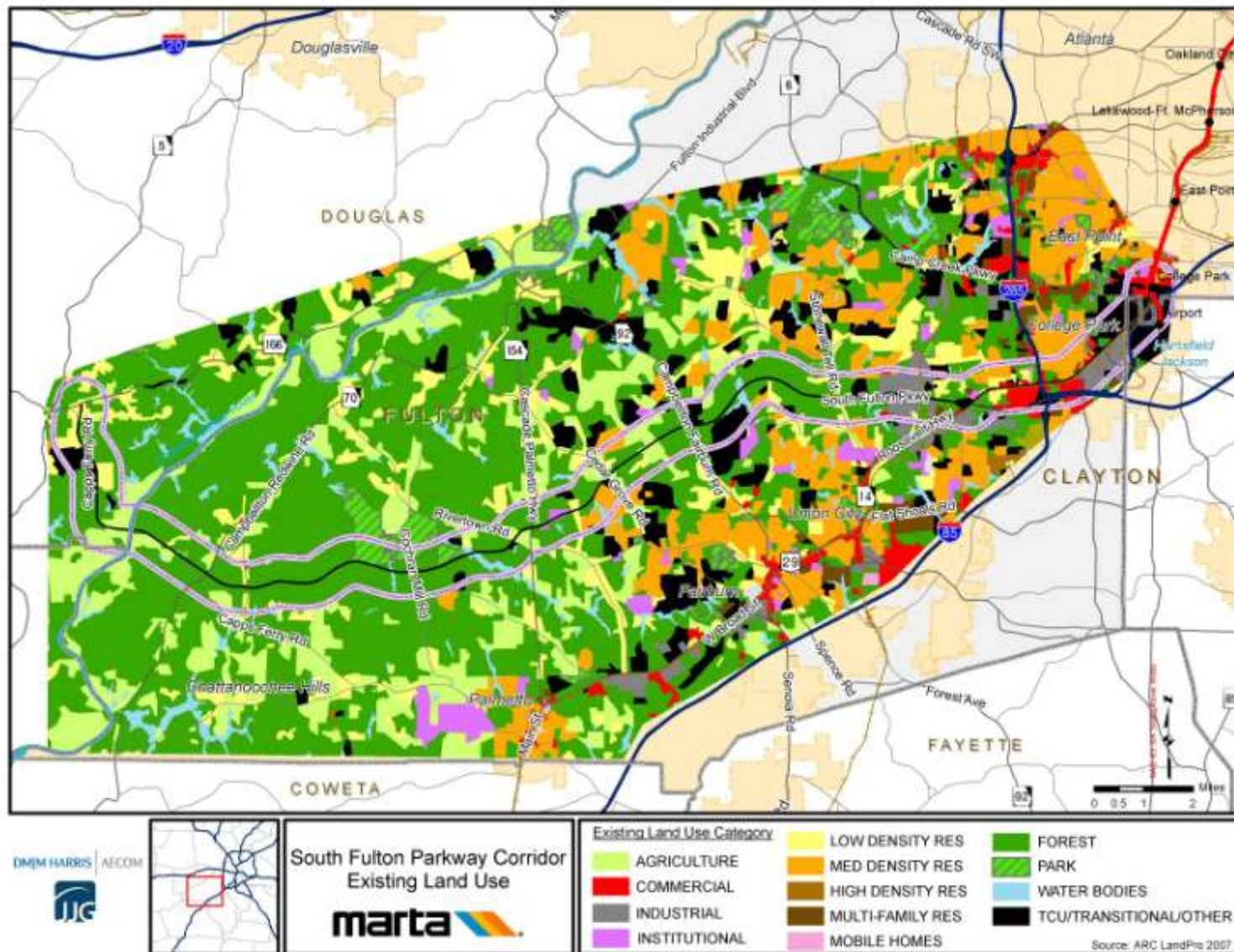




Figure 2-2: Existing Land Uses



### 2.2.2 Future Land Uses

Overall, future land uses planned along the corridor consist of high levels of suburban residential development complemented by modest nodal commercial development at major intersections. The exceptions to this planned development pattern are within the cities of College Park and Union City. These cities foresee their respective portions of the study corridor with more intense patterns, which would serve to transition into a more urban environment.

Aside from a few pockets denoting planned communities, the entire Chattahoochee Hills area west of Cascade-Palmetto Highway (SR 154) is designated as Agriculture/Conservation use. Conversely, the unincorporated Fulton County on the east side of the study area is mostly characterized by low-density housing on the periphery of the study area with higher density housing and mixed uses planned for areas directly along South Fulton Parkway.

### 2.2.3 Development Trends

This section contains the first phase of the market data collection and analysis for the study area. This includes an overview of major ongoing development activity, including developments of regional impact, and a preliminary market assessment related to recent new home sales activity in the study area.

The data collected in the first phase of this study will form the basis for a more detailed real estate market analysis. Activities currently under way will further refine this data to develop refined projections for the various land use scenarios under consideration for the transportation modeling elements of the study.

#### Developments of Regional Impact

South Fulton County has planned for a massive amount of large-scale development activity in the past five years. Since 2005, 13 applications for Developments of Regional Impact (DRI) have been approved in the study area. Together, these DRIs indicate that developers intend to build the following between 2005 and 2022:

- 17,054 housing units
- 1.2 million square feet of retail space
- 417,000 square feet of office space
- Over 1.3 million square feet of mixed-use and institutional space
- 2.3 million square feet of industrial space

**Table 2-1** on the following page provides additional detail on the DRIs approved in the study area since 2005. All of the DRIs approved in the study area since 2000 are reflected in **Figure 2-3** to help illustrate the amount of development activity occurring in the study area.

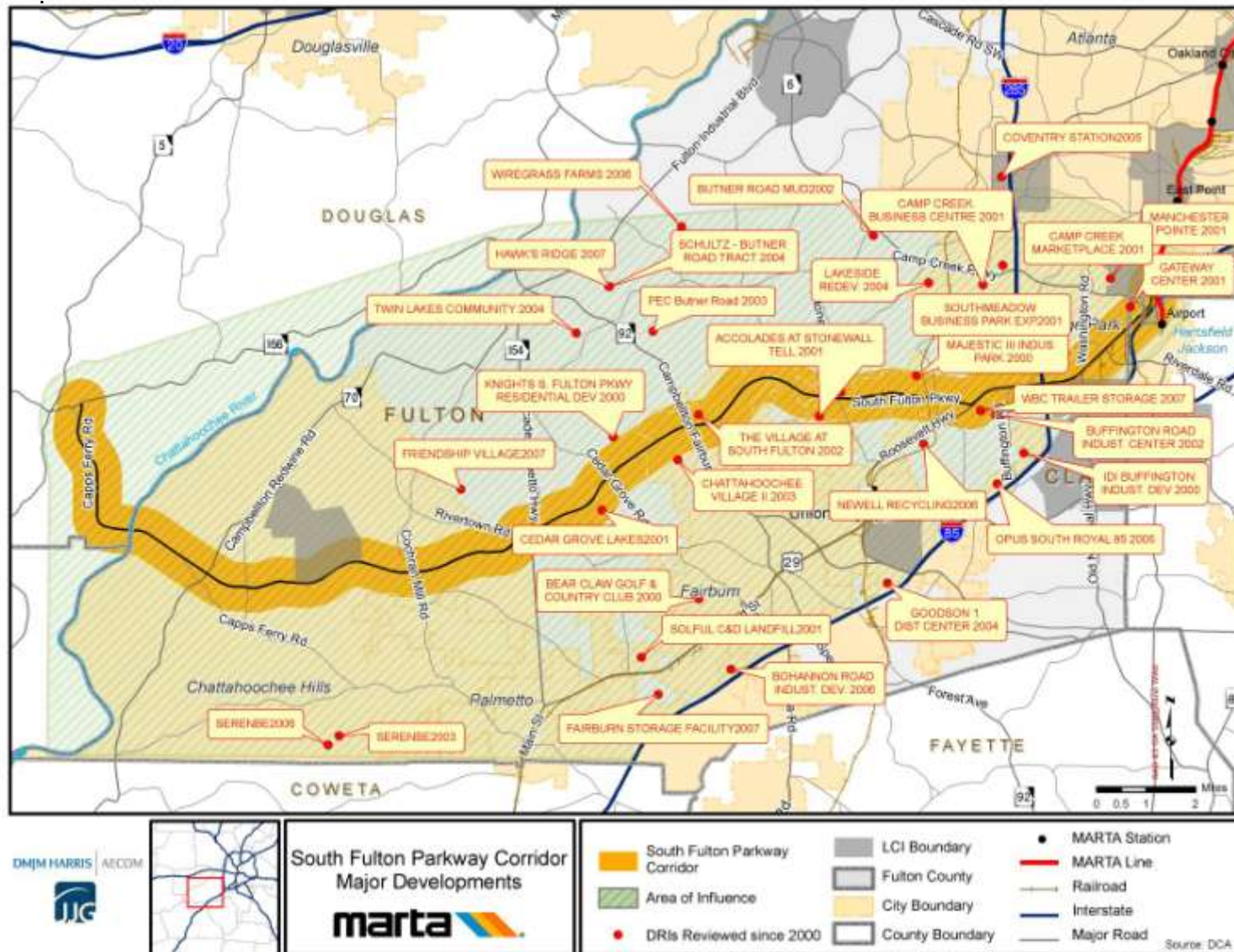
**Table 2-1: List of Developments of Regional Impact, 2005-2009**

DRI Year	Name	Municipality	Cross St 1	Cross St 2	Build Out Yr	Acres	Residential Dwelling Units				Commercial SF (in thousands)			
							Multi- Family	Single Family	Town- house	Total DU	Retail SF	Office SF	Mixed- Use SF	Indus. SF
2004	Gables at Stonewall Tell	S Fulton	Stonewall Tell	S Fulton Pkwy	2008	87	308	34	132	474	-	-		-
2004	Twin Lakes	S Fulton	Cascade Palmetto Hwy	Campbellton-Fairburn Rd	2011	1,002	150	1,430	790	2,370	200	-		-
2006	Fairburn Renaissance	Fairburn	Senoia Rd (GA 74)	Milam Rd	2008	139			50	50	796	29.6		-
2007	Fairburn Storage	S Fulton	Gullatt Rd		2008	61	-	-	-	-	-	-		
2008	Village at Redwine	East Point	Camp Ck. Pkwy	Redwine Rd	2012	81	833	46	108	987	8	34		-
2004	Oakley Township	S. Fulton	Fayetteville Rd		2012			984		984	-	-		-
2005	Oakley Township Expansion	S Fulton	Fayetteville Rd		2012	90		283		283	-	-		-
2005	Majestic Airport Center 3	Union City	Oakley	Industrial Blvd	2007	193	-	-	-	-	-	-		2.3
2007	Friendship Village	S Fulton/ Chatt Hills	Cascade Palmetto Hw	S Fulton Pkwy	2022	1,998	2,884	2,747	350	5,981	238.3	174	581.6	
2007	Hawk's Ridge	S Fulton	Cascade Palmetto Hw	Butner Rd	2012	360		522		522				
2006	Wiregrass Farms (Hathcock)	S Fulton	West Stupps Rd	DeMooney Rd	2009	272		353	116	469				
2009	Foxhall Village	Palmetto	Cochran Mill	Rico Tatum Rd	2028	1,333	800	1,822	1,878	4,500		180	420	
2006	Cascade Acres	East Point	Ben Hill Rd	Welcome All Rd	2008	152	100	182	152	434			320	
<b>TOTAL</b>						<b>5,768</b>	<b>5,075</b>	<b>8,403</b>	<b>3,576</b>	<b>17,054</b>	<b>1,242.3</b>	<b>417.6</b>	<b>1,321.6</b>	<b>2.3</b>

Source: ARC



Figure 2-3: Developments of Regional Impact and Major Developments



### **Other Significant Development**

The eastern section of South Fulton Parkway corridor including Roosevelt Highway (US 29) is home to major industrial and commercial developments due to its access to major roads, railroads, interstate highways and H-JAIA. Transit connections along this corridor has the potential to serve one of the largest convention facilities in the state, the Georgia International Convention Center (GICC), located just west of Roosevelt Highway (US 29) across from the airport. The Consolidated Rental Agency Complex (CONRAC) currently located inside the airport is planned for relocation next to the GICC as part of the Gateway Center development (Phase 1). CONRAC will be connected to the airport by an automatic people mover that is built over I-85. It should be noted that the CONRAC facility will be accessible to automobile traffic only through the airport's roadway system and not from surface streets in College Park. The construction of Phase 1 of the Gateway Center development, which also includes Class A office space and a hotel, is already underway with a completion date planned for 2010.

Parkway Village is the first of several commercial centers currently under construction along South Fulton Parkway. It is located at the northeast corner of South Fulton Parkway and Campbellton Fairburn Road (SR 92). A total of 35 businesses, including Publix as the main anchor, are expected to populate this development.

While not a large development in the context of total housing units compared to some of the other development activity in the study area, the Serenbe community is worthy of note because it serves as an example of an environmentally sustainable community. Located south of South Fulton Parkway in Chattahoochee Hills, the first phase of Serenbe was completed in 2004 with a variety of residential housing and retail development. Phase II is currently under construction and is planned as a farming community. The last phase is still in the planning stages with plans for spas and upscale boutiques as well as assisted living facilities.

### **2.2.4 Key Land Use Findings**

The following comprise the major findings with respect to development and land use trends in the study area that warrant consideration in developing transit and land use alternatives for the South Fulton corridor:

- Only 5.7% of the existing development within the study area would be considered transit-supportive under the broad assumption that residential densities of at least four units per acre along with commercial, institutional and industrial land uses would meet this criteria. In reality, given the auto-oriented nature of commercial development along with the type of industrial uses in the study area, this percentage is likely overstated.
- Overall, future land uses planned along the corridor consist of high levels of suburban residential development complemented by nodal commercial development at major intersections. The exceptions to this planned development pattern are within the cities of College Park and Union City. These cities foresee their respective portions of the study corridor with more intense patterns, which would serve to transition into a more urban environment from the suburban development planned for the western portions of the corridor.
- South Fulton County has planned for a significant amount of large-scale development activity in the past five years. Since 2005, thirteen applications for DRI have been approved in the study area.

- Transit along the eastern section of the study corridor has the potential to serve one of the largest convention facilities in the state, the Georgia International Convention Center, located just west of Roosevelt Highway (US 29) across from the airport.

## 2.3 Transportation Conditions

This section provides an overview of transportation characteristics in the study area, including:

- Trip-making and travel trends;
- Existing and projected roadway characteristics, including planned improvements;
- Existing and proposed transit services;
- Existing and planned bicycle and pedestrian facilities.

### 2.3.1 Trip-Making and Travel Trends

This section summarizes the existing and projected trip patterns and mode choice for travel to and from the study area. Specifically, home-based work trips are discussed in terms of trip attractions into the study area and trip productions from the study area. These measures assist in identifying the trip patterns that most need to be served. In addition, mode choice gauges the existing and projected demand for transit in the study area.

**Table 2-2** presents the existing and future home-based work trip attractions to the study area. Consistent with the growth and development planned for the study area, the overall number of trip attractions is expected to increase by 130% by 2030. Although the number of internal trips will increase significantly, the share of internal trips will still remain relatively low when compared to total external trips.

In 2005, the largest workforce drawing commuters into the study area was provided by the county and city residents living closest to the study area (Clayton, DeKalb and City of Atlanta). By 2030, Coweta County residents are expected to have the greatest share of commuters into the study area, followed by Clayton County and City of Atlanta. The projected distribution of trips reveals that a greater share of workforce commuting into the study area will originate from counties south of the study area. Therefore, improvements to the transportation facilities that provide connections to the southern part of the study area should be considered to enhance the overall trip-making into and out of the South Fulton County.

As shown in **Table 2-3**, home-based work trip productions from the study area are expected to increase by 74% by 2030. As with trip attractions, there will be a substantial increase in the number of internal trips produced in the study area. Not surprisingly, a major share of work trips are destined for major employment centers located north of the study area, namely the City of Atlanta and H-JAIA. This trend is expected to continue into the future. Currently, the average AM commute time from the study area to downtown Atlanta can range from 30 to 45 minutes. By 2030, the travel time is expected to increase to more than an hour. As such, there is a need to provide alternative commute options for study area residents to better access regional employment centers.

**Table 2-2: Home-Based Work Trip Attractions**

<b>Daily Trips to South Fulton Parkway Corridor (Attractions)</b>				
	Year 2005	Trip Share	Year 2030	Trip Share
Internal Trips	5,872	17.3%	17,456	22.5%
External Trips				
Clayton	4,502	13.3%	8,313	10.7%
DeKalb	3,014	8.9%	5,026	6.5%
City of Atlanta	3,310	9.7%	7,507	9.7%
Fayette	2,789	8.2%	6,447	8.3%
Coweta	2,759	8.1%	9,156	11.8%
Cobb	2,133	6.3%	3,380	4.4%
Henry & Newton	1,809	5.3%	5,201	6.7%
Rest of S Fulton County	1,710	5.0%	3,304	4.3%
Douglas	1,588	4.7%	4,949	6.4%
Other	4,465	13.2%	6,846	8.8%
<b>Total</b>	<b>33,949</b>	<b>100.0%</b>	<b>77,583</b>	<b>100.0%</b>

Source: ARC Regional Travel Demand Model

**Table 2-3: Home-Based Work Trip Productions**

<b>Daily Trips from South Fulton Parkway Corridor (Productions)</b>				
	Year 2005	Trip Share	Year 2030	Trip Share
Internal Trips	5,872	10.9%	17,456	18.6%
External Trips				
City of Atlanta	17,681	19.0%	26,180	16.8%
Airport	4,910	9.1%	7,703	8.2%
Clayton	3,884	7.2%	6,245	6.6%
DeKalb	3,879	7.2%	4,419	4.7%
Cobb	3,226	6.0%	5,035	5.4%
Fulton Industrial Boulevard	2,648	4.9%	3,736	4.0%
Fayette	1,842	3.4%	4,979	5.3%
Rest of S Fulton County	1,170	2.2%	4,864	5.2%
Other	8,837	16.4%	13,304	14.2%
<b>Total</b>	<b>53,948</b>	<b>100.0%</b>	<b>93,921</b>	<b>100.0%</b>

Source: ARC Regional Travel Demand Model

**Table 2-4** displays the modal choice data in terms of home-based work trips within the study area. The overwhelming majority within the study area commutes by auto (92%), and this trend is anticipated to increase in the future. This is indicative of the lack of transit options currently available and planned for the residents of the study area to access their jobs.

**Table 2-4: Home-Based Work Mode Split**

<b>South Fulton Parkway Corridor Mode Split</b>				
	2005		2030	
Mode	Productions	Attractions	Productions	Attractions
Transit	8.3%	3.1%	7.5%	2.6%
Auto	91.7%	96.9%	92.5%	97.3%

Source: ARC Regional Travel Demand Model



### 2.3.2 Roadway Characteristics

This section will detail major roadway characteristics such as functional classification, lane configuration, median treatment, and posted speed limits that are relevant to roadway design and operations. This section also includes a discussion on the existing and forecast volumes and roadway level of service (LOS). Lastly, freight and goods movement conditions are also discussed.

Following the overview of the study area, the major roadways analyzed in greater detail include:

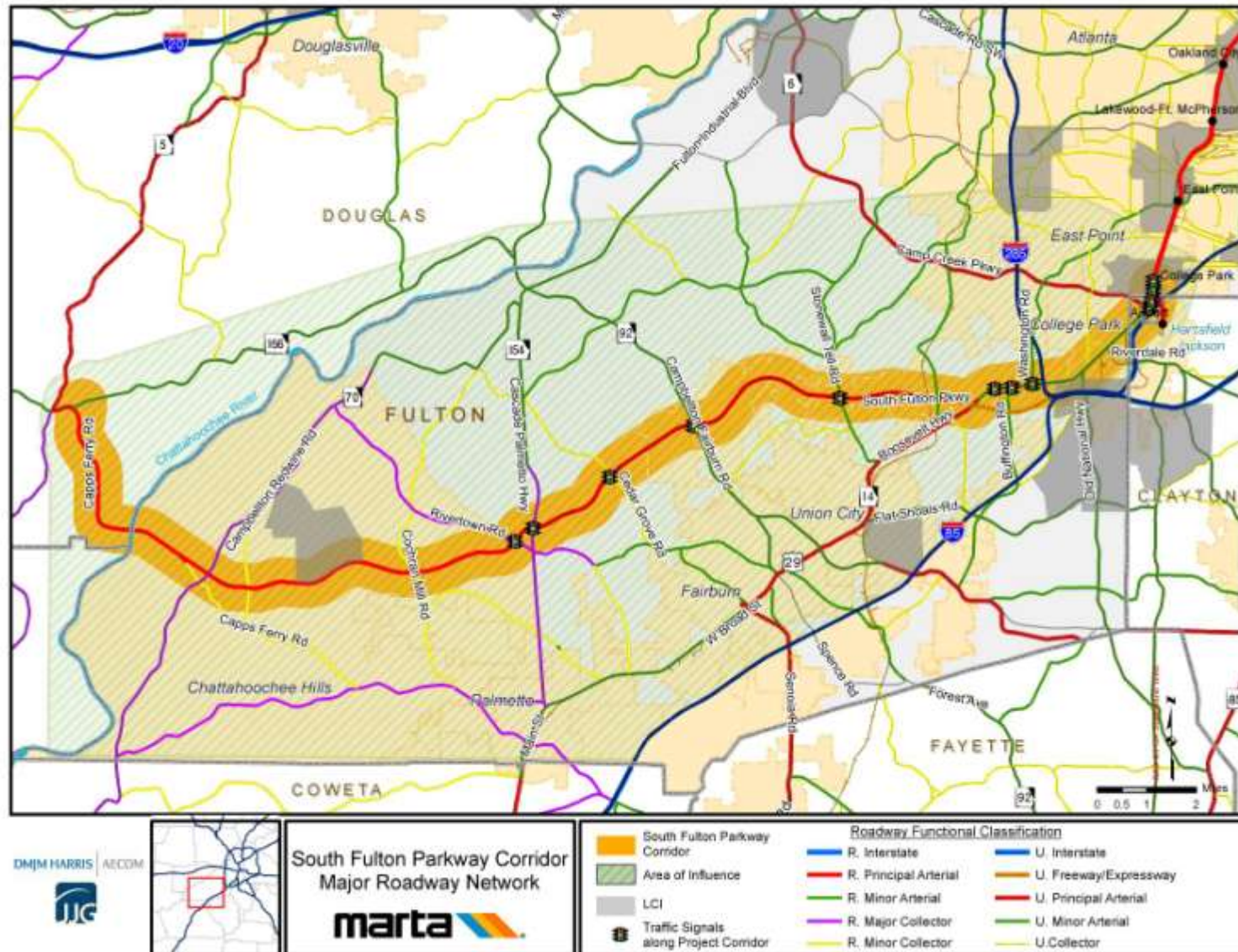
- South Fulton Parkway;
- Roosevelt Highway (East of South Fulton Parkway);
- Roosevelt Highway (West of South Fulton Parkway);
- I-85;
- Old National Highway (SR 279);
- Campbellton Fairburn Road (SR 92);
- Cascade Palmetto Highway (SR 154);
- Stonewall Tell Road; and
- Fulton Industrial Boulevard (SR 70).

The roadways that make up the study area network are mostly two-lane collectors and minor arterials that provide north-south connectivity. These roadways provide connections between the South Fulton Parkway and the Cities of Chattahoochee Hills, Palmetto, Fairburn, Union City, and College Park, as well as existing activity centers and proposed developments in the surrounding area.

The road network relies upon two principal arterials, South Fulton Parkway and Roosevelt Highway (US 29), to provide the primary east-west connections. Roosevelt Highway (US 29) generally parallels I-85 South within the study area. Thus, there is a lack of east-west roadway connections. This observation is also recognized in the South Fulton Parkway Corridor Study as well as the Parkway South Development Plan. North-south connections are much more prevalent since almost all of the minor arterials and collectors are oriented in this manner. The general lane configurations for the major roadways consist of mostly undivided two-lane facilities with a few four-lane and five-lane facilities. Consistent with the low-density characteristics of the study area, the posted speed limits range from 35 to 55 MPH, with majority of roadways having at least a 45 MPH designation. **Figure 2-4** illustrates the major roadway network.



Figure 2-4: Major Roadway Network



## Planned and Programmed Improvements

Future roadway improvements are illustrated in **Figure 2-5**. These include all planned and programmed improvements (with the exception of bridge projects) in the study area. Of these projects, the most relevant to transit feasibility would be a long range project that calls for the addition of one lane in each direction to Roosevelt Highway (US 29), between Old National Highway (SR 279) and the Clayton County line. This widening project would create a greater potential for shared right-of-way and general improvement in traffic flow. However, as noted previously, Roosevelt Highway (US 29) currently has two lanes of travel immediately east of the South Fulton Parkway interchange. Widening of the eastern segment of Roosevelt Highway (US 29) was removed from the fiscally-constrained RTP during the Envision6 RTP reprioritization process. Thus, plans to widen only the section of Roosevelt Highway (US 29) north of Old National Highway (SR 279) could worsen the bottleneck currently experienced at the interchange of South Fulton Parkway.

## Traffic Volumes

Existing traffic volumes were derived from the 2007 Georgia's State Traffic and Report Statistics (STARS) database managed by GDOT. In general, the roadways in the eastern portion of the study area are shown to carry higher average daily traffic (ADT) as a result of proximity to the interstate system, H-JAIA and downtown Atlanta. According to the 2007 GDOT counts, ADT along South Fulton Parkway ranges from 10,000 to 15,000 in the eastern section of the corridor, but is significantly less for the segment west of Campbellton-Palmetto Highway (SR 154), at roughly 4,000 trips per day. The two-lane section of Roosevelt Highway (US 29) east of South Fulton Parkway currently carries approximately 12,000 vehicles, while the five-lane section west of South Fulton Parkway carries the greatest ADT in the study area with 21,000 vehicles.

Campbellton Fairburn Road (SR 92) is also a significant carrier of traffic with approximately 10,000 vehicles, most of which appear to be cut-through traffic to and from I-85 during congested hours. Cascade Palmetto Highway (SR 154) is another important north-south connector, with approximately 5,000 to 7,000 vehicles per day.

## Level of Service

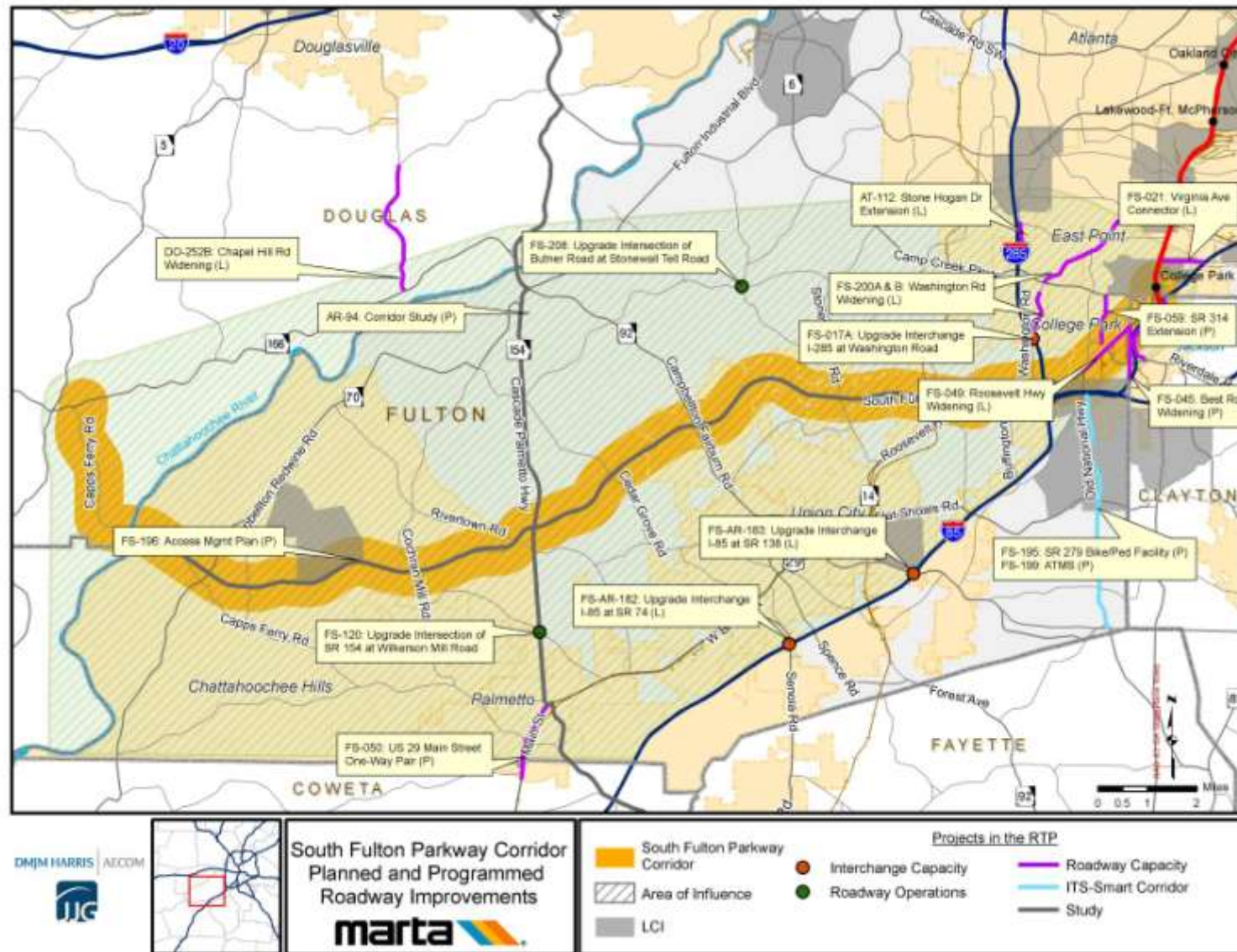
Simply stated, level of service (LOS) represents how well a roadway moves the traffic volumes it was designed to accommodate. LOS is an important consideration in analyzing potential demand for transit services. It identifies areas in need of additional mobility options and where problems may arise with transit alternatives proposed along right-of-way shared by automobile traffic. **Table 2-5** presents the LOS standards adopted by the ARC.

In the Atlanta region, the ARC calculates LOS as a function of three variables:

- Generally observed functionality of the roadway;
- Ratio of traffic volumes to design capacity (v/c ratio); and
- Average traffic volumes divided by average travel time.



Figure 2-5: Future Roadway Improvements



**Table 2-5: ARC Level of Service Thresholds**

LOS	General Characteristics	V/C Ratio	Average Daily Volume by Second
A	Free flow traffic with individual users virtually unaffected by the presence of others in the traffic stream;	.00-.55	<10
B	Stable traffic flow with a high degree of freedom to select speed and operating conditions but with some influence from others;	.00-.55	10-20
C	Restricted flow which remains stable but with significant interactions with others in the traffic stream. The general level of comfort and convenience declines noticeably at this level;	.55-.77	20-35
D	High-density flow in which speed and freedom to maneuver are severely restricted, and comfort and convenience have declined even though flow remains stable.	.77-.93	35-55
E	At capacity; unstable flow at or near capacity levels with poor levels of convenience and comfort, and very little, if any, freedom to maneuver;	.93-1.00	55-80
F	Forced traffic flow in which the amount of traffic approaching a point exceeds the amount that can be served. LOS "F" is characterized by stop and go waves, poor travel times, low comfort and convenience and increased accident exposure.	>1.00	>80

Source: ARC

It is important to note the discrepancies in the travel demand model-generated volumes reported for the study area's roadways when compared to actual traffic counts provided in GDOT's STARS database. In general, the ARC model overestimates the existing volumes on the eastern segment of South Fulton Parkway and on Campbellton Fairburn Road (SR 92). The model underestimates the volumes on Roosevelt Highway (US 29) within the study area. Thus, LOS on the eastern section of South Fulton Parkway and Campbellton Fairburn Road (SR 92) may be overstated, while the LOS on Roosevelt Highway (US 29) may be understated.

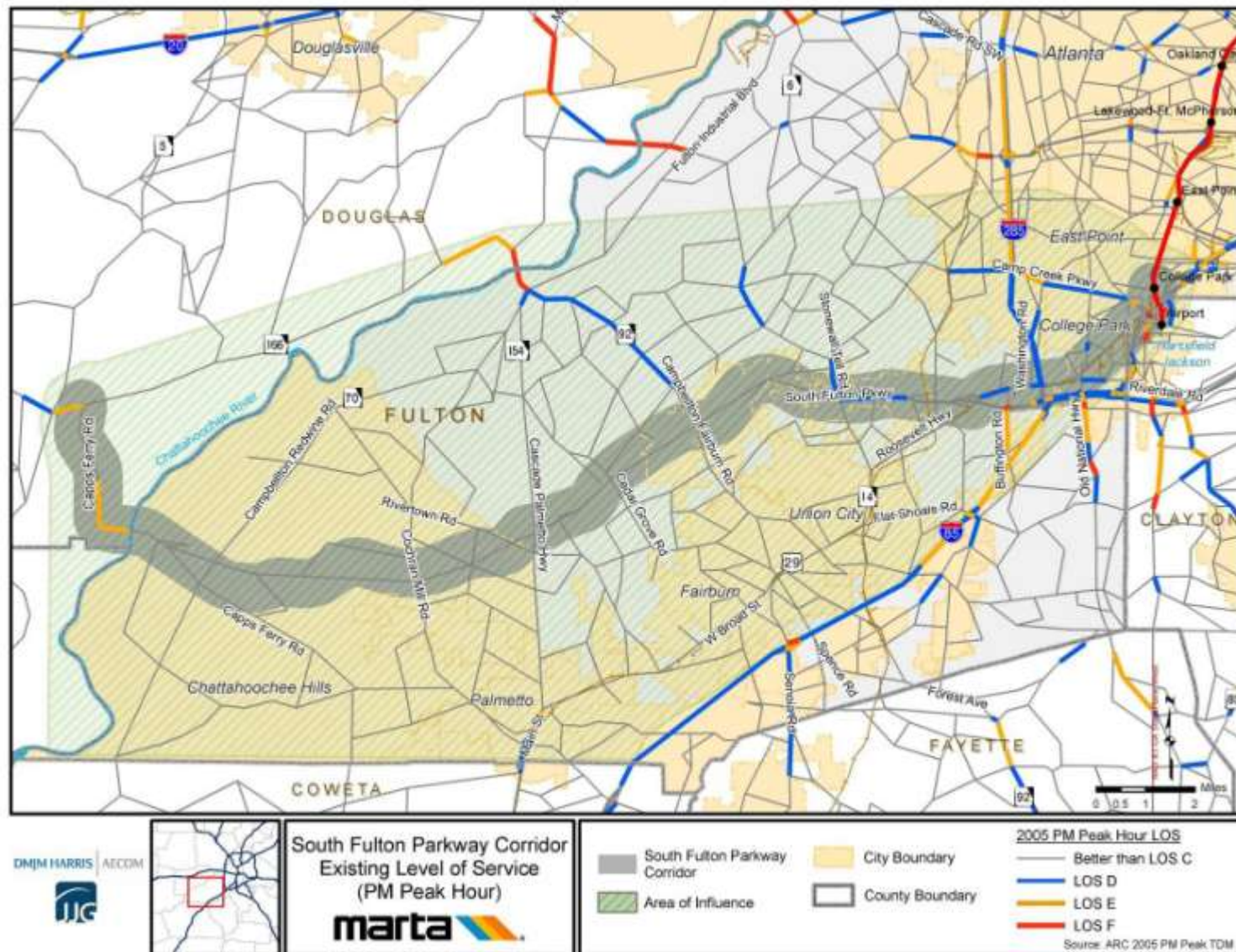
**Figure 2-6** depicts the existing PM peak hour LOS derived from the ARC's 2005 roadway network. In general, the majority of the roadways in the area operate with little congestion. Segments with deficient LOS include:

- Buffington Road;
- Capps Ferry Road just west of the river; and
- I-85 between SR 92 and SR 14 Spur.

In addition, an inventory of 2030 projected LOS for the major roadways in the study area was conducted using the ARC travel demand model as well. The 2030 ARC loaded network, which assumes implementation of all projects within the fiscally-constrained Envision6 RTP, was utilized for projected LOS analysis.



Figure 2-6: Existing Roadway Level of Service



**Figure 2-7** shows the projected roadway LOS in 2030. Due to the anticipated growth along South Fulton Parkway, coupled with the lack of capacity improvement currently planned and/or programmed, the general LOS along the corridor is forecast to deteriorate by 2030, particularly in the following locations:

- South Fulton Parkway east of Stonewall Tell Road; and
- Roosevelt Highway (US 29) west of Old National Highway (SR 279).

Other facilities within the study area expected to operate under failing LOS include:

- Stonewall Tell Road;
- Camp Creek Parkway (SR 6);
- Buffington Road;
- Washington Road;
- Old National Highway (SR 279), and
- Riverdale Road (SR 139).

The findings from the LOS analysis indicate that most of the major multi-lane facilities in the study area will operate under acceptable LOS. Therefore, alleviating congestion is not as high a priority as providing better connections and commute choices to and from region activity centers.

### 2.3.3 Freight Characteristics

Atlanta is among the top three inland distribution centers in the nation. The study area is home to major freight generators such as the Fulton Industrial Boulevard, H-JAIA and several other notable industrial complexes. ARC's Freight Mobility Study identified Fulton Industrial Boulevard and the City of Fairburn as two key freight areas and potential locations for integrated logistics centers. Fulton Industrial Boulevard provides access to the largest concentration of warehousing and manufacturing industries in the southeast. CSX operates a 24-hour terminal in Fairburn that opened June 1999, and ranks as the 9th largest freight terminal in the nation in terms of lift volume.

In addition to being a generator of freight, the study area also provides detour routes for trucks traveling to and from Fulton Industrial Boulevard to I-85 South. According to the travel demand model, critical north-south connectors such as Campbellton Fairburn Road (SR 92) and Cascade Palmetto Highway (SR 154) currently carry at least 10-15% medium to heavy trucks on a daily basis. As shown in **Table 2-6**, the vehicle miles traveled (VMT) for medium and heavy trucks within the study area is expected to grow from 386,000 miles in 2005 to 589,000 miles in 2030, which translates to an increase of more than 50%. Therefore, alleviating the potential conflicts between freight and vehicular traffic should be a priority for the study area.

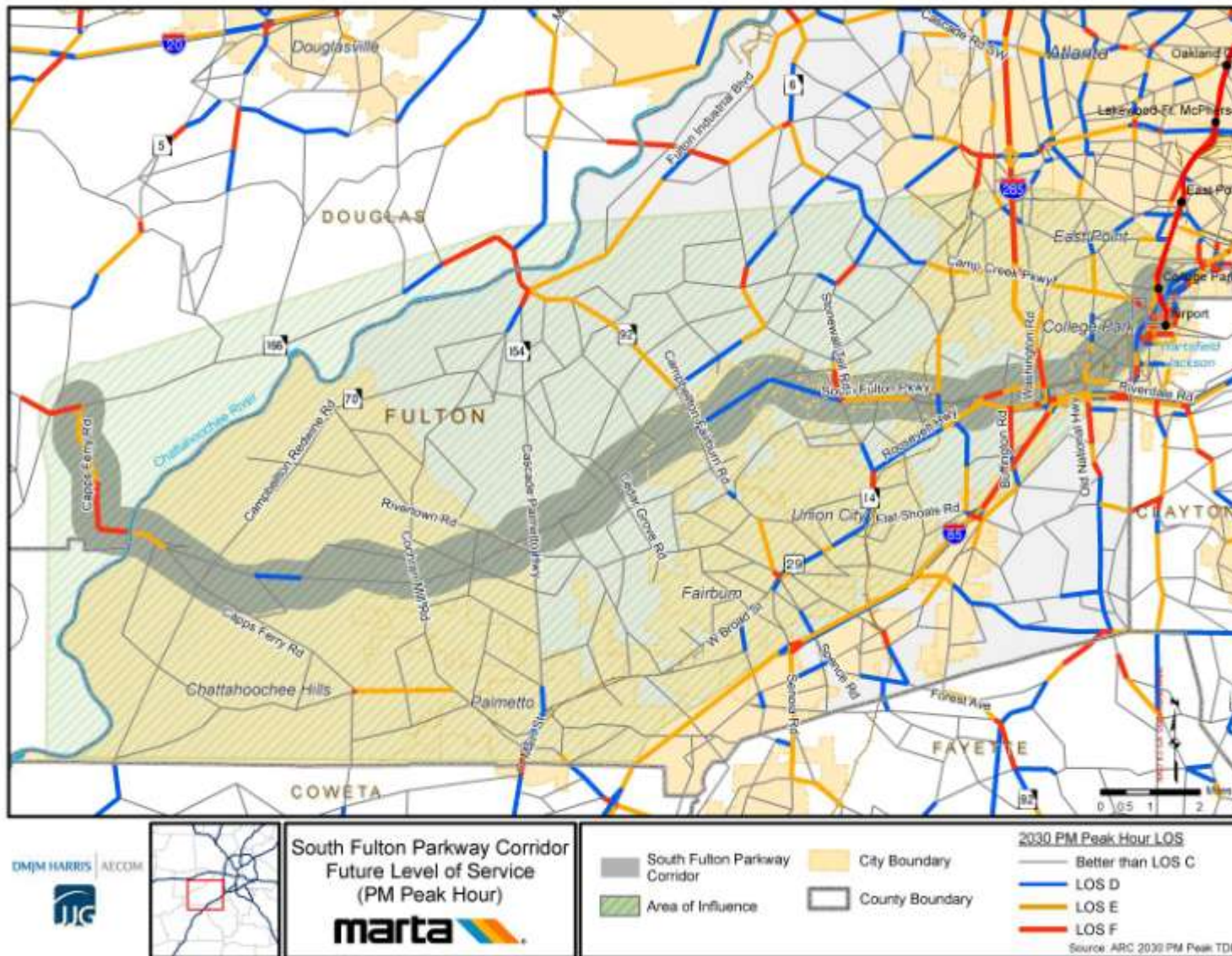
**Table 2-6: Truck Traffic Vehicle Miles Traveled**

Vehicle Type	2005		2030	
	VMT	% SHARE	VMT	% SHARE
Medium Truck	131,700	4.8%	209,000	5.0%
Heavy Truck	254,100	9.3%	380,100	9.1%
Other	2,343,200	85.9%	3,610,800	86.0%
Total	2,729,000	100.0%	4,199,900	100.0%

Source: ARC Regional Travel Demand Model



Figure 2-7: Future Roadway Level of Service



### 2.3.4 Transit Characteristics

MARTA provides both heavy rail and bus service within the study area. In addition to heavy rail at the College Park MARTA Station, the following MARTA local bus routes also serve the study area:

- 82 - Camp Creek / Barge Rd Park & Ride – This route connects the College Park Station to the Barge Road park-and-ride lot including the Camp Creek Market Place. It primarily serves Camp Creek Parkway before turning north on to Fairburn Road towards the park-and-ride. Route 82 operates weekdays from 5:30 am to 1 am with 20 minute headways during peak hours and at 30 minute headways during non-peak hours.
- 84 - East Point / Camp Creek – This route provides connections between the East Point Station and the Camp Creek Market Place. The majority of the route traverses along Washington Road west and intersects Camp Creek Parkway north to the Market Place. Route 84 operates weekdays from 5:00 am to 12:30 am with 20 minute headways during peak hours and 40 minute headways during non-peak hours.
- 88 - Camp Creek / Welcome All – This route begins at the College Park Station and ends at the Camp Creek Market Place by making a loop from Camp Creek Parkway to Washington Road to Roosevelt Highway, then back onto Camp Creek Parkway and terminating at the Market Place. Route 88 operates weekdays from 4:30 am to 1:00 am with 20 minute headways during peak hours and 30 minute headways during non-peak hours.
- 180 - Fairburn / Palmetto – This route provides the most direct access from Palmetto, Fairburn and Union City to the College Park Station. The route begins at the College Park Station and takes East Main Street south to merge with Roosevelt Highway (US 29) through the city centers. Route 180 operates weekdays from 5:00 am to 12:30 am with 20 minute headways during peak hours and 30 minute headways during non-peak hours.
- 181 - South Fulton Park & Ride / Fairburn – This route makes its way south from the College Park Station along Main Street to I-85, then gets off at Buffington Road to make a stop at the South Fulton park-and-ride lot. The route continues southwards on I-85 to make another stop at the Union City Mall along Jonesboro Road (SR 138), then gets onto Roosevelt Highway (US 29) to terminate in Fairburn. Route 181 operates weekdays from 5:15 am to 12:15 am with 30 minute headways during peak hours and 40 minute headways during non-peak hours.

As described above and illustrated in **Figure 2-8**, only the Roosevelt Highway section of the project corridor has direct access to transit. Transit routes are clustered together in the eastern portion of the study area and connect to rail service at the College Park and East Point stations.

It should be noted that, because of a shortfall of revenues associated with the current economic times, budget constraints have caused MARTA to consider service cuts that may affect the routes, headways, and hours of operation described above.

**Table 2-7** presents the average weekday boardings collected between August 2008 and December 2008. As shown, the ridership for the routes in the corridor average approximately 2,000 riders per day, which does not rate highly among other routes in the MARTA system. However, as noted in the previous section, the coverage of these routes includes only a small portion of the study area. Therefore, ridership characteristics of



these routes shed very little insight on the overall demand for transit services in the study area other than those areas in proximity to College Park and East Point.

**Table 2-7: Transit Ridership**

<b>MARTA Bus Route</b>	<b>Average Weekday Ridership</b>
82 - Camp Creek / Barge Rd Park/ Ride	2,060
84 - East Point / Camp Creek	1,894
88 - Camp Creek / Welcome All	2,849
180 - Fairburn / Palmetto	2,546
181 - South Fulton Park & Ride / Fairburn	1,808

Source: MARTA

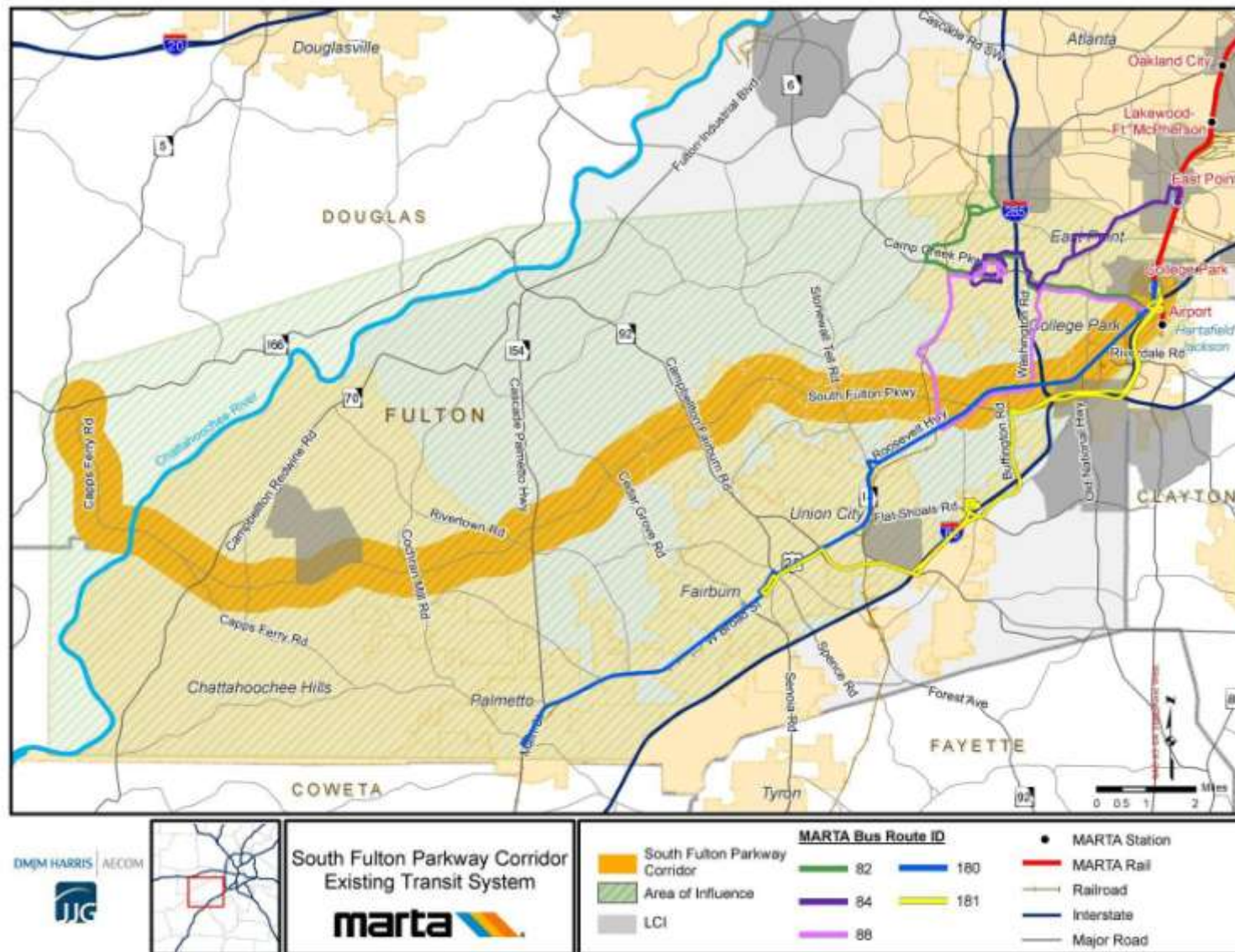
### **Planned and Programmed Improvements**

As stated previously, South Fulton Parkway was recommended for BRT in the TPB's Concept 3. Given that the main travel demand originating from the growing residential areas in South Fulton County is to downtown Atlanta and activity centers further north, Concept 3 recognizes that BRT is warranted along South Fulton Parkway. This service would be operated with over-the-road motor coach buses that would stop at park-and-ride lots along South Fulton Parkway and terminate at the College Park MARTA Station. Additionally, feeder service will be provided by local community neighborhood shuttle bus services. The Concept 3 report also noted that with the significant growth anticipated for this corridor, coordination with GDOT is key for identifying right-of-way needs for potential alternatives. This study builds on the Concept 3 analysis and takes a closer, more detailed look at the characteristics that would influence the feasibility of potential transit alternatives along South Fulton Parkway.

Another improvement included in TPB Concept 3 is a proposed commuter rail service from Atlanta to Senoia along the CSX rail corridor. The proposed alignment for this improvement would enter the study area in the vicinity of Union City and travel along the CSX corridor that runs parallel to Roosevelt Highway into the proposed multi-modal transportation center in downtown Atlanta. In conjunction with the transit alternative along South Fulton, an opportunity to foster transit oriented development at the nexus of these alignments could be created.

Outside of the TPB Concept 3, there are no other proposed transit improvements within the study area nor included within the cost-feasible Envision6 RTP.

Figure 2-8: Existing Transit Services



### 2.3.5 Bicycle and Pedestrian Facilities

Although the Fulton County Comprehensive Plan designated South Fulton Parkway as a major thoroughfare that promotes pedestrian oriented development, the existing connections across South Fulton Parkway do not encourage pedestrian access. Also, at this time, South Fulton Parkway does not have separate bicycle lanes or other facilities to support its use as a bicycle route.

As presented in **Table 2-8** and illustrated in **Figure 2-9**, there are six bicycle and pedestrian improvements within the study area that are programmed in the 2008-2013 TIP. Although none of these projects are planned along South Fulton Parkway, a few bicycle and pedestrian facilities are programmed along various roadways intersecting the corridor. These include South Fulton Scenic Byway Multi-Use Trail (Phase I) and Buffington Road Multi-Use Trail, and the Phoenix Multi-Use Trail. These planned bicycle and pedestrian connections would provide a safer and a more enjoyable environment for bicyclists and pedestrians to access South Fulton Parkway.

The Parkway South Development Plan proposes to create a more pedestrian-friendly environment for the nine-mile segment of South Fulton Parkway between Stonewall Tell Road and Cascade Palmetto Highway (SR 154). Recommendations include providing a continuous multi-use path along South Fulton Parkway with tree-lined sidewalks, a parallel off-road bike path, signalization at various key nodes, designating pedestrian versus vehicle zones, and creating inter-parcel access.

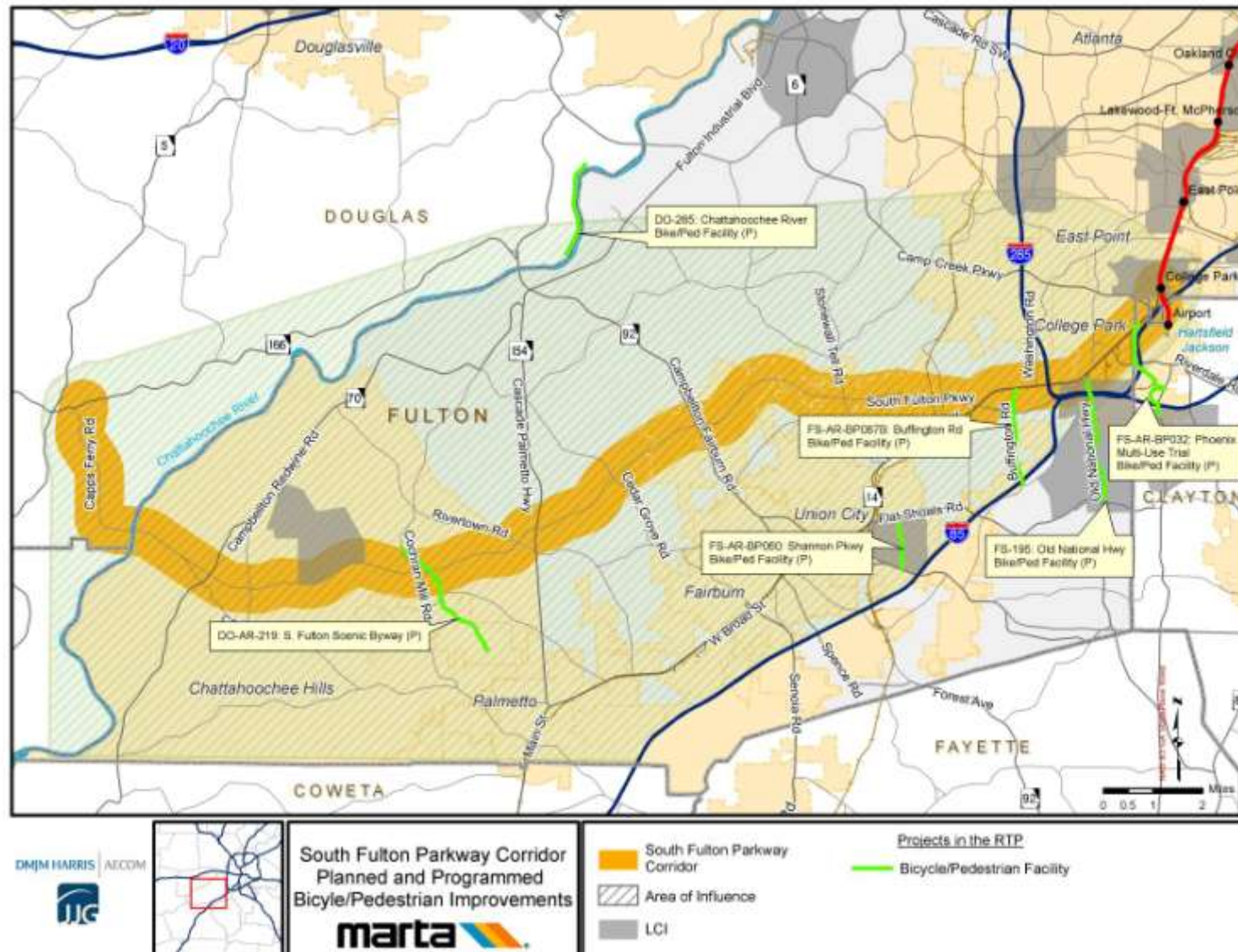
**Table 2-8: Planned and Programmed Bicycle and Pedestrian Improvements**

ARC ID	Project Type	Location	Plan	Description
FS-AR-BP060	Pedestrian Facility	South Fulton	TIP (2011)	Shannon Parkway
FS-AR-BP087B	Multi-Use Bike/Ped Facility	South Fulton	TIP (2012)	Buffington Road: Segment 2
DO-285	Bicycle/Ped Facility	Douglas County	TIP (2011)	Douglas County Pilot Segment Along Chattahoochee River In Boundary Waters Park
FS-195	Bicycle/Ped Facility	South Fulton	TIP (2012)	SR 279 (Old National Highway) Transit Oriented Development Implementation Program
FS-209	Multi-Use Bike/Ped Facility	South Fulton	TIP (2011)	South Fulton Scenic Byway Multi-Use Trail - Phase I
FS-AR-BP032	Multi-Use Bike/Ped Facility	South Fulton	TIP (2010)	Phoenix Multi-Use Trail

Source: ARC Transportation Improvement Plan and Regional Transportation Plan



**Figure 2-9: Planned and Programmed Bicycle and Pedestrian Improvements**



### 2.3.6 Key Transportation Findings

Based on the findings from the baseline transportation characteristics, the following major findings have been derived:

- The study area is anticipated to be a major trip generator by 2030 with an increase of 130% in the overall number of commuter trips over the present day. However, the share of external trips to other employment centers will still remain significantly higher than those coming into the study area for work.
- An overwhelming majority (greater than 90%) of all work trips in the study area are made by automobile, with commute times to the major employment centers reaching 45 minutes during peak hours. These travel conditions are projected to significantly worsen in the future without alternative commute options.
- The findings from the LOS analysis indicate that most of the major multi-lane facilities in the study area will operate under acceptable LOS. Therefore, alleviating congestion is not as high a priority as providing better connections and commute choices within the study area as well to and from other activity centers in the region.
- Given the auto-oriented development patterns within the study area, maintaining traffic flow will continue to be a top priority for South Fulton Parkway. At the same time, a lack of commuter options will perpetuate a greater auto-dependency, which is contrary to the smart growth strategies developed for South Fulton Parkway.
- South Fulton Parkway is designed to carry high volumes of traffic at high speeds. There is an inherent conflict between facilitating an efficient movement of vehicles versus providing a safe environment for pedestrians and bicyclists.
- Truck traffic in the study area is expected to grow by more than 50% and this will result in the increase in potential for conflicts between vehicular and truck traffic.
- Current transit options do not meet the future needs of the residents in the study area. In fact, in addition to having no transit improvements currently programmed in the RTP, service cuts are being considered for the existing bus routes. It is clear that given the expected growth coupled with limited alternatives to single occupant vehicle travel, increased demand for transit is anticipated.
- Another improvement proposed in TPB Concept 3 is a proposed commuter rail service from Atlanta to Senoia along the CSX rail corridor. The proposed alignment for this improvement would enter the study area in the vicinity of Union City and travel along the CSX corridor that runs parallel to Roosevelt Highway into the proposed multi-modal transportation center in downtown Atlanta. In conjunction with the transit alternative along South Fulton, an opportunity to foster transit oriented development at the nexus of these alignments could be created.
- There is a general lack of bicycle and pedestrian facilities in the study area. However, a few of bicycle and pedestrian facilities are programmed along various roadways intersecting South Fulton Parkway.

## 2.4 Review of Relevant Studies

This section provides an overview of studies and planning initiatives undertaken by the various planning partners within the study area. In conjunction, these studies provide a sound policy basis for developing the transit and land use scenarios appropriate for the South Fulton Parkway corridor. As such, these studies are summarized with a strong emphasis on the transportation and land use elements related to transit feasibility. The studies reviewed for this effort included the following:

**Table 2-9: Relevant Studies Reviewed**

<b>Regional Studies and Plans</b>	<b>Comprehensive Plans</b>
<ul style="list-style-type: none"> <li>• Envision6 Regional Transportation Plan</li> <li>• Regional Development Plan</li> <li>• Transit Planning Board Concept</li> <li>• Southern Regional Accessibility Study</li> <li>• Atlanta Regional Freight Mobility Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Fulton County</li> <li>• City of College Park</li> <li>• City of Union City</li> <li>• City of Fairburn</li> <li>• City of Palmetto</li> <li>• City of Chattahoochee Hills</li> </ul>
<b>Livable Centers Initiative (LCI) Studies</b>	<b>Other Studies</b>
<ul style="list-style-type: none"> <li>• Union City LCI Study</li> <li>• Old National Highway LCI Study</li> <li>• Chattahoochee Hill Country LCI Study</li> <li>• College Park LCI Study</li> </ul>	<ul style="list-style-type: none"> <li>• South Fulton Parkway Corridor Study</li> <li>• Parkway South Development Plan</li> <li>• Union City Urban Redevelopment Plan</li> <li>• GDOT Access Management Plan</li> </ul>

Through the review of the various policy documents listed in Table 2-9, the recommendations and/or policy directives that influence the development of transit and land use alternatives along the South Fulton Parkway Corridor can be organized by the following subjects:

- Transit and Transportation Enhancements
- Land Use and Development
- Access Management
- Freight Considerations

The remainder of this section discusses policy direction per these areas of emphasis.

### **Transit and Transportation Enhancements**

Most of the recommendations for transit service are associated with extending bus and/or commuter services along South Fulton Parkway, including:

- Findings from the Chattahoochee Hill Country LCI emphasized the need for transit connections to the regional transit system including MARTA express bus, potential bus rapid transit, and future regional commuter rail.
- Transit recommendations in the South Fulton Parkway Corridor Study were developed under two scenarios. In the near term, coordination with MARTA is recommended to extend current routes further into the study area or provide a new MARTA bus route with direct service to either the College Park MARTA station or H-JAIA. In the long term, as land uses are intensified by these measures, investigation of higher-level transit service would be warranted. In this regard, it concluded that the right-of-way along South Fulton Parkway is sufficient to allow dedication of a transit corridor. This may take the form of an express lane for buses or bus rapid transit, or right-of-way for rail construction.
- Unlike the above referenced study, the City of Fairburn is focused on enhancing transit along the Roosevelt Highway as opposed to South Fulton Parkway. The city has a desire to set up express bus service from Fairburn to the College Park MARTA station. The current bus service has a number of stops, which discourages its use as alternative means of commuting. The City has expressed a long-term desire to locate a MARTA rail station in downtown Fairburn. This would provide better transit access for residents and create a critical mass of people in the downtown area to support commercial development.

- To increase development densities without creating more congestion along South Fulton Parkway, both the South Fulton Parkway Corridor Study and the Parkway South Development Plan propose parallel access roads and new roadways that would cross South Fulton Parkway to encourage nodal development at intersections along the Parkway.

### **Land Use and Development**

The Fulton County Comprehensive Plan classifies the area immediately surrounding South Fulton Parkway east of Cascade Palmetto Highway (SR 154) as a “Live-Work” district, which allows a mix of uses that are pedestrian-oriented and incorporates open space. Although most of the Live-Work area along South Fulton Parkway has a Neighborhood Live-Work designation, the future land use plan identified three Community Live-Work nodes - located at Stonewall Tell Road, Campbellton-Fairburn Road (SR 92), and Cascade Palmetto Highway (SR 154) – which allow higher densities.

Both the South Fulton Parkway Corridor Study and the Parkway South Development Plan call for the development of a live-work-shop-play community along a nine-mile long corridor along South Fulton Parkway east of Cascade Palmetto Highway (SR 154). This type of development is supportive of transit investment.

### **Access Management**

Of the documents reviewed, no capacity improvements were recommended for South Fulton Parkway. Instead, to prepare for growth in South Fulton County, the establishment of an access management plan to monitor and guide this growth was recommended for South Fulton Parkway in both the SRAS and Fulton Comprehensive Plan. To this end, the ARC programmed the completion of an access management study for the corridor within the Envision6 RTP, which will be undertaken by GDOT in cooperation with ARC and Fulton County in the coming year.

### **Freight Considerations**

South Fulton Parkway, I-85 and I-285 are the major truck routes in the study area. The ARC Regional Freight Mobility Plan identifies the area surrounding the intersection of I-85 and I-285, including those along South Fulton Parkway, as a key area of industrial growth. In order to accommodate this growth in freight traffic projected, the plan recommends the reconstruction of I-85 interchanges at Fairburn Industrial Boulevard (SR 74) and Jonesboro Road (SR 138) and the possible construction of a new interchange at Gullatt Road, between the cities of Fairburn and Palmetto. With respect to rail freight, the rail lines within the corridor will approach capacity by 2030 given planned CSX expansion of rail operations.

## 3.0 PUBLIC OUTREACH

### 3.1 Stakeholder Committee Input

In order to provide context on the conditions within the study area, a Project Stakeholder Committee (PSC) was established comprised of staff representatives from local jurisdictions, state and regional agencies, and citizen and business organizations within the study area. The agencies and organizations participating on the project stakeholder committee are provided in **Table 3-1**.

**Table 3-1: Stakeholder Agencies**

<p><b>Regional and State Agencies</b></p> <ul style="list-style-type: none"> <li>Atlanta Regional Commission</li> <li>Georgia Department of Transportation</li> <li>Georgia Regional Transportation Agency</li> <li>Hartsfield-Jackson Atlanta International Airport (H-JAIA)</li> </ul> <p><b>Business Groups / Contacts</b></p> <ul style="list-style-type: none"> <li>South Fulton Chamber of Commerce</li> <li>South Fulton Parkway Alliance</li> <li>Old National Merchants Association</li> <li>South Fulton CID/Tri-County Alliance</li> <li>Publix Supermarket (in Study Area)</li> </ul>	<p><b>Local Jurisdictions</b></p> <ul style="list-style-type: none"> <li>Fulton County <ul style="list-style-type: none"> <li>Board of Commissioners</li> <li>Board of Education</li> <li>Planning and Zoning</li> <li>Public Works</li> </ul> </li> <li>City of Union City</li> <li>City of College Park</li> <li>City of Fairburn</li> <li>City of Palmetto</li> <li>City of Chattahoochee Hills</li> </ul> <p><b>Citizens Groups</b></p> <ul style="list-style-type: none"> <li>Chattahoochee Hills Civic Association</li> <li>Cliftondale Homeowners Association</li> <li>Union City Planning Commission</li> </ul>
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A total of three stakeholder committee meetings were held throughout the course of the project. They were as follows:

- April 20, 2009
- June 8, 2009
- November 13, 2009

#### Major Themes – April 20, 2009

The major themes of this input are provided in the bullet points provided below.

- The study should assist in identifying the best locations for transit oriented development.
- Transit needs to provide connectivity to shopping destinations.
- Preserving limited access should be a priority along South Fulton Parkway.
- The corridor is not conducive to local bus service; it is more conducive to commuter services.
- There is interest in how this study will tie into Concept 3.
- H-JAIA is receptive to transit alternatives that can alleviate demand on limited parking resources.



- Connectivity to employment centers is important.
- Preserving the rural character of the area should be a priority.
- Internal trips need to be increased.
- There are new schools approved in the area that will have an effect on congestion.
- Large suburban developments will be the primary land use for the area.

**Major Themes – June 8, 2009**

- There is a lack of coordination between the study area jurisdictions which could hurt the success of Parkway traffic and transportation planning efforts.
- Development plans are not always reality and should be verified for actual implementation prior to submitting the final plan.
- There are plans for village concepts in Chattahoochee Hills but there is no planned development along the Parkway.
- The current study area population is not conducive to transit at this time.
- From an economic development stand point, various alternatives should be included in the final document that will allow jurisdictions to plan for development that will justify future transit investments.
- Ridership opportunities appear to be more generally suited for the eastern part of the study area (Union City/College Park) at this time.
- Public involvement is key to educating citizens about the planning process and understanding the political component.

**Major Themes – November 13, 2009**

- More information/education is needed to the local jurisdictions on how to plan for transit
- The potential for South Fulton Parkway to develop as a live-work-play environment is unlimited given the amount of vacant land along the corridor and its proximity to Hartsfield-Jackson Atlanta International Airport (H-JAIA)
- The public also needs to be educated on the benefits of TOD and how it can be accomplished without radically changing the character of the corridor
- Given the amount of growth projected within the corridor, there will be a lot of newcomers to the South Fulton area that may not share the sentiment of those that participated in this effort

## 3.2 Stakeholder Interviews

In addition to the Stakeholder Committee meeting, stakeholder interviews were held between from April 21 through June 8 in order to gather more detailed perspectives on the transit and land use characteristics that best meet the objectives of individual stakeholders. Targeted for the initial round of interviews were staff from those agencies responsible for the development of land use and transportation policy that could provide input on the types of transit that would be most favorable to residents in the corridor. Those interviewed included staff from the following:

- GDOT
- ARC
- Fulton County
- City of Chattahoochee Hills
- City of Union City
- City of College Park
- City of Palmetto
- City of Fairburn
- Clifondale Homeowners Association
- Fulton County Board of Education
- Georgia Regional Transportation Authority (GRTA)
- Hartsfield-Jackson Atlanta International Airport
- Old National Merchants Association
- South Fulton Parkway Alliance
- Tri-County Alliance (Fayette, Fulton and Coweta Counties)
- Chattahoochee Hills Civic Association
- Publix Grocery Store

The input from these interviews, which generally reflects the same sentiments voiced at the Stakeholder Committee meetings, is summarized in the following section. Although perspectives varied from participants, common themes from the responses received include:

### **How do you envision the corridor developing through the year 2030?**

- Most interviewed envision the corridor in 2030 being characterized by a high level of suburban development with nodal commercial centers. However, a notable exception is that Union City has identified the corridor as an opportunity to develop a transitional zone into a more urbanized environment that includes land use types that are more transit supportive at all times of the day, not just peak hour service.

### **What are the primary issues you would like to see addressed throughout this effort? What would you like most for this study to achieve?**

- Maintaining the rural character, limiting access to the parkway and not allowing the parkway to become over-developed are the overwhelming priorities of those interviewed.
- The City of College Park would like to utilize a transit investment along South Fulton Parkway to implement a shuttle service along Old National Highway to assist with economic revitalization efforts along the corridor, which is consistent with the recommendations of their Old National Highway LCI study.
- Alternatives for transit that will be attractive enough to promote choice ridership should be prioritized.

### **Are there any specific studies and/or development initiatives that need to be considered in the development of land use and transit alternatives?**

- A clear inventory of approved developments should be considered, especially the numerous DRIs in the area.
- Nodal development rather than a strip commercial development pattern is preferred along the corridor.
- The study needs to account for new schools that are planned for the area.
- Development in Douglas County will be a major influence on the corridor.

**What are some of the more pressing transportation needs within the corridor, both as a whole and within your respective jurisdiction?**

- Overall, alternatives suggested along South Fulton Parkway are commuter related services such as park-and-ride facilities with BRT and/or express service.
- Better bicycle and pedestrian connectivity is needed in the study area.

**What is the overall opinion of transit among your residents and/or constituents?**

- With the exception of Fairburn, which would prefer commuter rail along the Roosevelt Highway (US 29) corridor, most interviewed are not proponents of rail technology because of the goal to maintain flexibility at park-and-ride locations and/or transit oriented development nodes.
- Residents would be generally in favor of an alternative that could move them efficiently to Atlanta employment centers, such as a competitive connection to MARTA heavy rail.
- More park-and-ride facilities are needed for the area.

**What types of transit investments do you feel are most needed in the corridor, both currently and in the future as the corridor continues to grow?**

- Bus lanes should be considered along the facility in the future.
- Any investments should maintain acceptable traffic flow along corridor.
- South Fulton Parkway may compete with I-85 with respect to travel demand.

### **3.3 Elected Officials Briefing**

On October 12, 2009 all of the elected officials along the corridor were invited to participate in briefing conducted by MARTA to update them on the major findings of the project and provide guidance on what would be needed from the local jurisdictions in order to facilitate service along the corridor. Among the input received:

- Consensus needs to be reached among the local governments along the corridor on an overall vision and function of South Fulton Parkway.
- Close coordination with GDOT for signoff on this vision and their willingness to implement measures to further this vision is paramount. This will include participation by the local jurisdictions and MARTA in the upcoming GDOT Access Management Study for South Fulton Parkway.
- MARTA needs to educate both the citizens and local officials on just exactly what actions will be required to implement TOD and the specific development guidelines to implement within local development codes. While this effort will provide some guidance in this regard, more detailed guidance on development codes will be provided in large part by MARTA outreach activities associated with the development of its TOD Guidelines.



## 4.0 ALTERNATIVES DEVELOPMENT AND TESTING

This section describes the methodology in which alternatives were developed and tested for the purposes of gathering preliminary ridership of certain transit options along the corridor. As such, this section describes:

- Development and profiles of land use scenarios and transit alternatives; and
- Travel demand modeling methodology and results.

### 4.1 Development of Land Use Scenarios

To assess the feasibility of various transit technologies along the corridor, three land use scenarios were tested. They include ARC's Travel Demand Model scenario, a current Trend scenario, and an Intensive Development scenario.

In the baseline conditions report it was determined that population and employment projections from the ARC model may be low, given recent trends and expected development. Given the largely undeveloped (59 percent) nature of the study area, transit feasibility will vary considerably depending on the intensity of future development. To test for differing levels of development two scenarios were modeled in addition to the ARC Travel Demand Model scenario. One was based upon current development trends and the other on future plans for the corridor. The ARC model is based largely upon historic patterns. Since the area will likely break from these patterns, testing just this scenario would prove inadequate. The study area remains one of the few undeveloped areas in the region in close proximity to the Downtown/Midtown Central Business District and H-JAIA. Historically, it has been an area characterized by extensive suburban growth and not experienced the same degree of development interest as the northern portions of the Atlanta region.

With the construction of the South Fulton Parkway, mobility and travel times have been markedly improved, making the area more attractive to development. This is evident in the pace of large-scale Developments of Regional Impact (DRIs) in recent years. There is a firm commitment to control access points to the parkway promoting faster speeds through limited access. Given the area's location advantages, improved/continued access and mobility, and available developable land, it is development will occur here at greater than historic levels. It is also likely that development in the study area will attract development that would have occurred in surrounding areas.

#### 4.1.1 Baseline for Land Use Scenario Development

As a basis for the development of the land use scenarios, the population and employment projections from the ARC travel demand model for traffic analysis zones (TAZs) in the study area were utilized to identify land use densities.

The scenario shows modest growth in the study area between 2005 and 2030. The following **Table 4-1** describes the overall population and employment growth within the study area.

**Table 4-1: Population and Employment Growth in Current Travel Demand Model**

Total Population Growth (2005-2030)	Percentage Growth of Population	Total Employment Change (2005-2030)	Percentage of Employment Growth
58,335	39%	62,720	121%

Source: ARC

A significant amount of the population growth is shown in the eastern portion of the study area. Concentrations are found in the cities of College Park, East Point, Atlanta, Fairburn, Union City, and Palmetto. Employment growth is also heavily concentrated in the eastern portion of the study area. Concentrations are found in East Point and College Park. The significance of H-JAIA as a major employment center is also shown.

## 4.2 Profiles of Land Use Scenarios

In order to forecast ridership projections for transit alternatives along the South Fulton Parkway corridor, two land use scenarios were developed through the use of ARC population projections, market trends, and planned development along the corridor - the Trend and Intensive Development land use scenarios. The details of each of these scenarios are provided in the section that follows.

### 4.2.1 Trend Scenario

The population and employment forecasts for this scenario are based upon those of ARC's model, but further refined to reflect recent development. Population and employment increases were scaled and distributed based on several additional inputs. These inputs include:

- Revised area-wide population forecasts (the methodology for this is described in **Appendix B**).
- Existing development trends between 2000 and 2009, based on certificate of occupancy issuances, building permits, field observations, and stakeholder interviews. The revised population and employment growth was subjectively and objectively allocated to TAZs based upon these factors.
- Proposed development approved through the DRI process requirements, but not yet built.

The scenario shows significant growth in the study area between 2005 and 2030. **Table 4-2** details the overall population and employment growth within the study area. This is shown geographically in **Figure 4-1** and **Figure 4-2**. The general distribution of employment and population growth is similar to ARC's model, with a significant share found in the eastern portion of the study area.

**Table 4-2: Population and Employment Growth, Trend Scenario**

Total Population Growth	Percentage of Population Growth	Total Employment Growth	Percentage of Employment Growth
184,093	124%	130,355	251%

Figure 4-1: Trend Scenario Population Densities

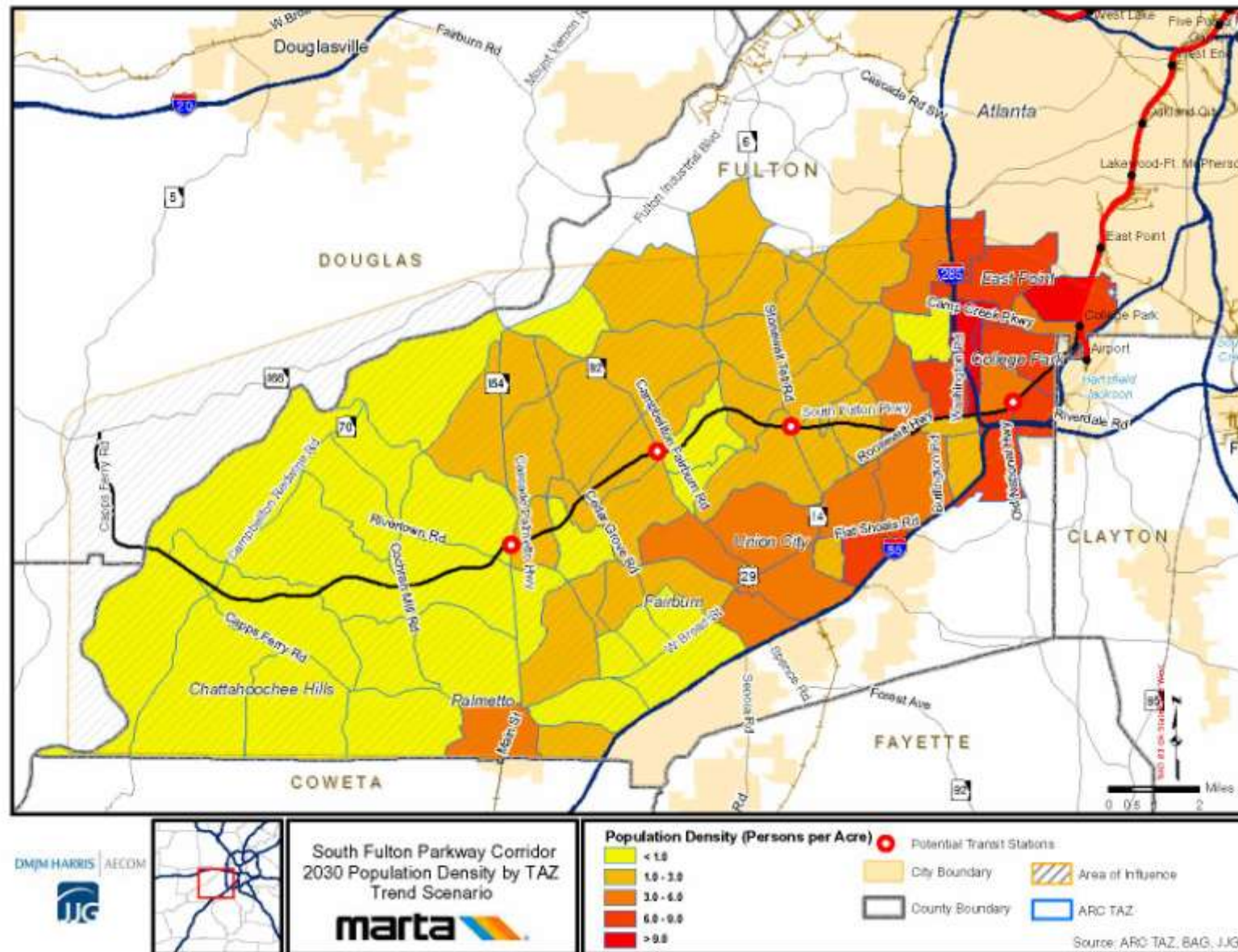
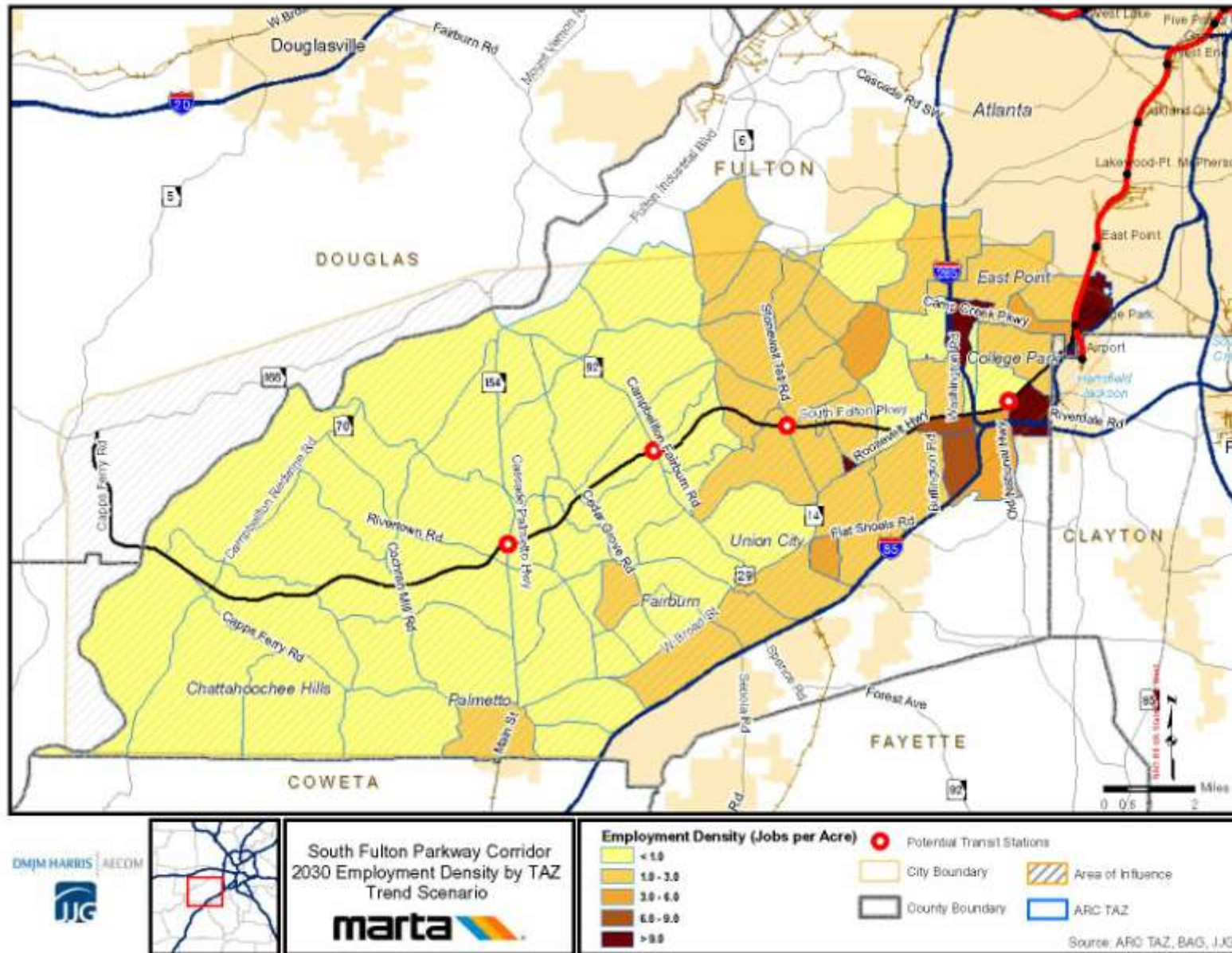




Figure 4-2: Trend Scenario Employment Densities





### 4.2.2 Intensive Development Scenario

The Intensive Development scenario was developed using the Trend Scenario as a base, with additional growth added from seven high-density mixed-use nodes along the parkway. This scenario embodies the corridor vision shared by some major stakeholders that a series of compact developments be located at major intersections.

Plans for six of these nodes were taken from the 2008 Parkway South Economic Development Master Plan and translated into population and employment projections. The plan was developed by private sector interests in cooperation with the South Fulton Parkway Alliance. It has the support of Union City officials who view it as a future land use plan for the city. It incorporates a large portion of the corridor from Stonewall Tell Road to Cascade-Palmetto Highway.

The plan is conceptual; therefore, some assumptions were made to determine corresponding population and employment figures. To determine 2030 projections, the plans were analyzed at full build-out. To translate the plan to projections, the following process and assumptions were made:

- A typical mix of development types for each land use category shown was estimated. For example the Mixed-Use Residential Focus category was estimated to be 5 percent office, 10 percent retail, 30 percent multi-family, 30 percent townhomes, and 25 percent single-family.
- For each development type an average coverage of square feet or dwelling units per acre was assumed. For example, 10,000 square feet of retail per acre or 12 units per acre for townhomes.
- For each land use, dwelling units per acre or square footages per acre for non-residential land uses was calculated.
- By using ARC model's 2030 estimate of 2.47 people per household and typical employee counts by square footage of non-residential land uses projections were then derived for population and employment increases that would result from the plan. For example, five acres of townhomes at 12 units per acre with an average household size of 2.47 would equal a population of 148.
- Once the land use plans were translated to projections, they were compared to TAZ boundaries and allocated geographically. Since many existing TAZs were large in size and incompatible with the road network they were split, with population and employment reallocated to them accordingly. In total 15 TAZs were split resulting in 19 TAZs being added to the zonal geography.

In addition to the six development nodes found in the plan, one other node was added at Old National Highway. This node was identified by area stakeholders as a prime site for a future TOD. The area is expected to develop as a mixed-use center with a residential focus. To maintain consistency in the analysis with the Parkway South plan, the same land use mix assumptions were used. It was assumed this site would represent the mix of the Mixed-Use Residential Focus land use category. To determine the corresponding area of the development of the typical station characteristics, the typical walking distance of a quarter-mile from a transit node associated with TOD was used. Lastly, the resulting employment and population projections were allocated geographically in the appropriate TAZ.

The Intensive Development scenario shows significant growth throughout the study area, particularly in areas adjacent to the parkway. **Table 4-3** details the overall population

and employment growth in the study area. This is displayed geographically in **Figure 4-3** and **Figure 4-4**. The general distribution of employment and population, like the other scenarios, shows the majority of growth in the eastern portions of the study area.

**Table 4-3: Population and Employment Growth, Intensive Development Scenario**

Total Population Growth	Percentage of Population Growth	Total Employment Growth	Percentage of Employment Growth
213,469	144%	185,863	358%

## 4.3 Travel Demand Modeling Methodology and Assumptions

In order to provide ridership estimates for the transit alternatives to be tested, the ARC travel demand model was refined by using the following steps:

1. Review and refinement of traffic analysis zones (TAZs);
2. Allocation of socioeconomic (SE) data per the new TAZ structure;
3. Reassigning the SE data totals from other portions of the region for each of the land use scenarios developed; and
4. Refining the model structure to reflect the transit alternatives.

A more detailed methodology on the travel demand modeling activities is provided in **Appendix A**. In addition, the results of the modeling activities detailed in this section are provided in Sections 5 and 6 herein.

### 4.3.1 Review and Refinement of Traffic Analysis Zones

The first step in the process to evaluate the transit options in the South Fulton Parkway was to review the traffic analysis zones (TAZs) along the South Fulton Parkway in the study area. Many of the TAZs along the corridor were not compatible with the road network system and were also very large in size. As a result, the travel demand model would be less responsive to changes in the land use and transit alternatives for the testing. Thus, the TAZs were redesigned to be smaller and more reflective of the corridor.

### 4.3.2 Allocation of Socio-Economic Data

The next step was to prepare the procedures to allocate the socio-economic data to the new TAZs. The ARC Envision6 RTP 2030 socio-economic forecasts at the TAZ level were used as the base for this effort. The initial allocation of the socio-economic data was based on a proportional redistribution of data resize to resized TAZs. The allocation was reviewed and refined based on the location of the new TAZs in relation to the proposed development along the South Fulton Parkway. Some of the TAZs closer to the parkway were assigned more employment while other TAZs located further away from the facility were assigned more population. The original ARC distribution of households by size and income and employment by type were used initially for the existing and new TAZs. Based on a review of the revised forecasts, slight adjustments were made to the distribution of employment to reflect the proposed development scenarios.

Figure 4-3: Intensive Development Scenario Population Densities

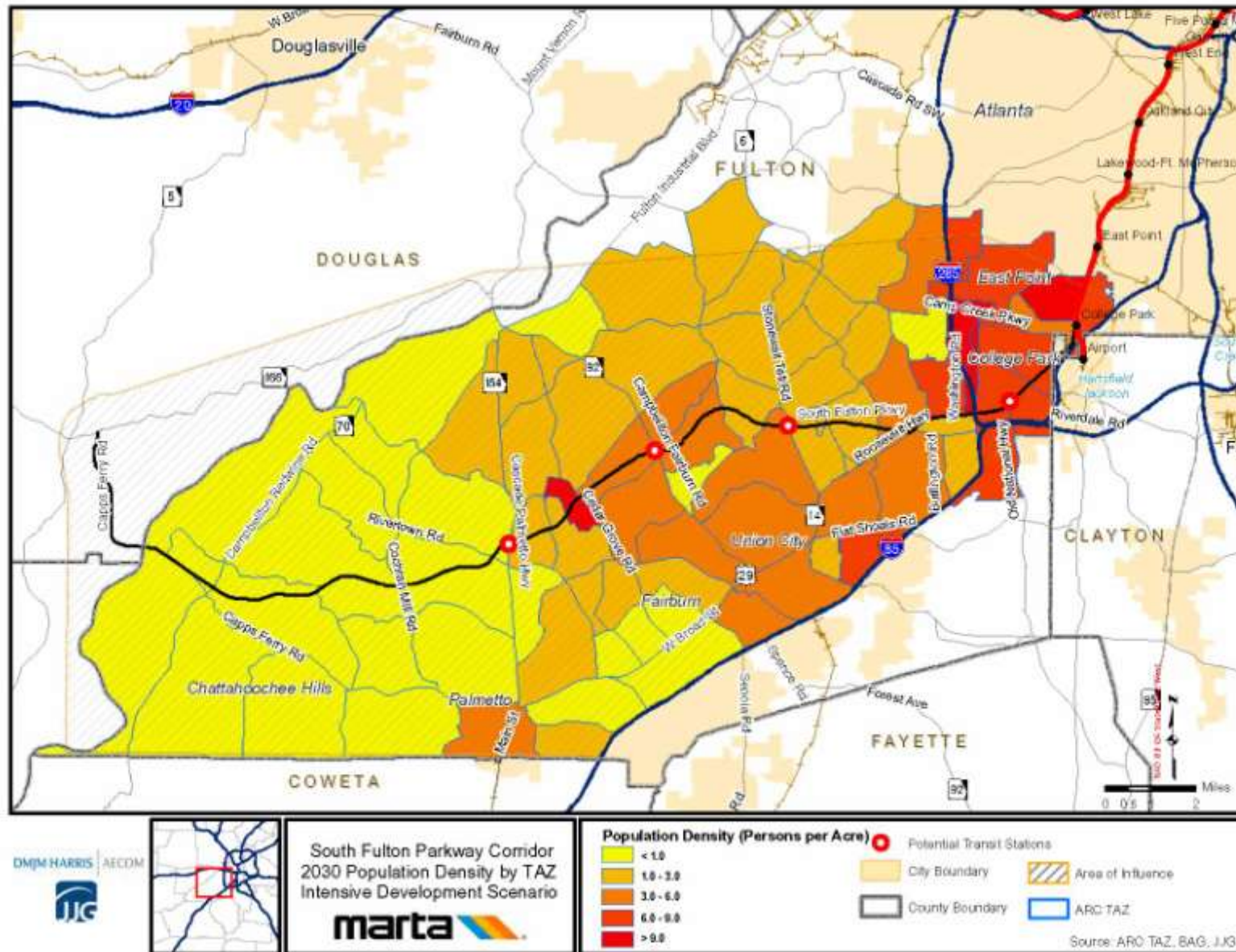
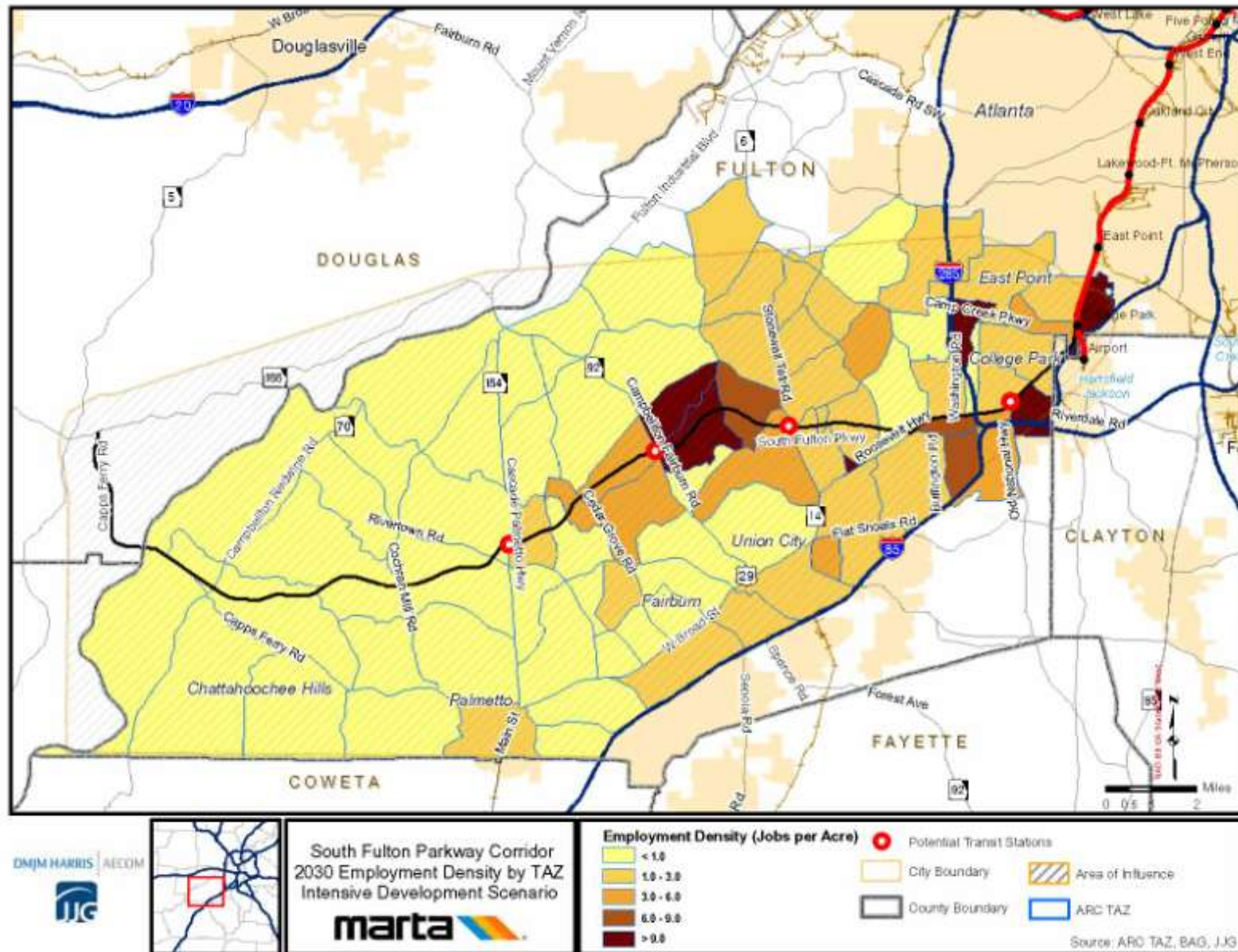




Figure 4-4: Intensive Development Scenario Employment Densities





This process was performed for the following three land use assumptions:

- 2030 ARC Envision6 RTP Forecasts
- Scenario 1 – Trend Scenario
- Scenario 2 – Intensive Development Scenario

As part of a separate task for this effort, population and employment forecasts were reviewed and revised for the study area. Two new growth scenarios were developed for the study area. Scenario 1 represents the review of the current growth trends in the study area and the development of a revised set of growth forecasts based on trend analysis. Scenario 2 included additional development based on current development plans for the Parkway South area. Documentation on the methodology to develop the revised population and employment forecasts for the study area is documented in Section 4. **Table 4-4** lists the 2005 and 2030 population and employment forecasts in the study area for the current ARC travel demand model.

**Table 4-4: Socio-Economic Forecasts by Scenario for Study Area**

<b>Scenario</b>	<b>Population</b>	<b>Households</b>	<b>Employment</b>
ARC 2005 Estimates	148,446	56,711	51,895
ARC Envision6 RTP (2030)	206,781	83,704	114,615
<i>Net Change b/t 2005 and 2030</i>	<i>58,335</i>	<i>26,993</i>	<i>62,720</i>
<i>Percent Change b/t 2005 and 2030</i>	<i>39.3%</i>	<i>47.6%</i>	<i>120.9%</i>
Scenario 1 - Trend Analysis (2030)	332,539	134,610	182,250
<i>Net Change b/t Envision6 and Scenario 1</i>	<i>125,758</i>	<i>50,906</i>	<i>67,635</i>
<i>Percent Change b/t Envision6 and Scenario 1</i>	<i>60.8%</i>	<i>60.8%</i>	<i>59.0%</i>
Scenario 2 – Intensive Development (2030)	361,915	146,503	237,758
<i>Net Change b/t Envision6 and Scenario 2</i>	<i>155,134</i>	<i>62,799</i>	<i>123,143</i>
<i>Percent Change b/t Envision6 and Scenario 2</i>	<i>75.0%</i>	<i>75.0%</i>	<i>107.4%</i>

#### 4.3.3 Reassigning Data from Other Portions of the Atlanta Region

The project team met with ARC staff to discuss the future growth scenarios. ARC has a policy of maintaining regional control totals for population and employment forecasts. Since the Scenarios 1 and 2 add more development and growth to the study area, growth had to be subtracted from other areas in the Atlanta Region to maintain the regional control totals. It was determined that population and employment from counties on the south side of the region, which include Carroll, Clayton, Coweta, Douglas, Fayette, Henry, and Paulding Counties, would be impacted by the re-allocation of growth to the South Fulton study area. This methodology was approved by ARC staff.

#### 4.3.4 Refining Model Structure

The highway and transit networks were revised to reflect the change in the zonal geography. Centroid connectors were revised for the existing TAZs that were modified and centroid connectors were added for the new TAZs. The model setup and scripts

were then revised to reflect the change in the zonal geography and the addition of the TAZs. A variety of data files were renumbered to accommodate the additional TAZs.

## 4.4 Context for Alternatives Development

In order to properly gauge the needs of the study area, a full range of service types were initially considered for the South Fulton Parkway Corridor, which included:

**Table 4-5: Definition of Service Types Initially Considered**

Service Type	Description
Local Bus	A bus service that picks up and discharges passengers at frequent, designated places (stops) on city streets.
Express Bus	A bus service with a limited number of stops, either from a collector area directly to a specific destination or in a particular corridor with stops en route at major transfer points or activity centers. Express bus service usually uses freeways or busways where they are available.
Enhanced Bus	Express or local bus service with a system of traffic controls in which buses are given special treatment over general vehicular traffic (e.g., bus priority lanes, preemption of traffic signals, or adjustment of green times for buses.)
Bus Rapid Transit (BRT)	A bus operation providing service similar to rail transit, but at a lower cost. BRT systems are characterized by several of the following components: exclusive transitways, enhanced stations, easily identified vehicles, high-frequency all-day service, simple route structures, simplified fare collection, and ITS technologies. Integrating these components is intended to improve bus speed, reliability, and identity
Light Rail Transit (LRT)	As defined by the TRB Subcommittee on Light Rail Transit, “a metropolitan electric railway system characterized by its ability to operate single cars or short trains along exclusive rights-of-way at ground level, on aerial structures, in subways, or occasionally, in streets, and to board and discharge passengers at track or car floor level.”

Source: Transportation Research Board (TRB) Transit Cooperative Research Program (TCRP), Transit Capacity and Quality of Service Manual—2nd Edition, 2009

The following findings, based on existing and planned corridor conditions as well as stakeholder input, provide the context for developing the initial alternatives to be tested to gauge potential travel demand for difference service types.

- Local, frequent stop bus service is not appropriate along South Fulton Parkway** – Given the sparse development patterns and high travel speeds, and lack of pedestrian facilities along the corridor, to implement local bus service in the near future would be highly problematic. In fact, development along the corridor throughout its length is hardly visible from the roadway. GDOT and Fulton County have collectively worked to preserve the right-of-way along South Fulton Parkway.
- Routing flexibility is critical** – Much of the land along the corridor, including at major intersections, remains vacant. The desire to limit access and preserve right-of-way along the corridor was specifically expressed by GDOT, ARC, and Fulton County during stakeholder interviews. As such, routing flexibility to access stations off of the facility is a necessity because it provides local jurisdictions more development options to develop higher-density, transit supportive nodes while minimizing the potential for operational conflicts along the roadway.
- Commuter service is preferred by stakeholders and initially appears most favorable** – The proliferation of low-density residential development in the area and, conversely, the lack of employment in the area has created a 90% share of external

trips during the peak period – most to areas accessible by the MARTA rail system (Downtown, Midtown, et al.). Furthermore, while local jurisdictions identified the major intersections along South Fulton for nodal development, planned development throughout the rider catchment areas along the corridor is more of the low-density suburban residential development that currently exists.

- **The typical transit patron will be a choice rider** – The TCRP identifies two primary types of transit users – captive riders and choice riders. Captive riders are those that do not have a private vehicle available or cannot drive (for any reason) and who must use transit to make the desired trip. Conversely, choice riders are those that have means of transportation other than transit readily available – such as a private automobile. Other than the areas in the eastern portion of the study area, demographic characteristics along the corridor indicated a need for an alternative that would be more competitive to the private automobile and, thus, attractive to the choice rider.
- **Rail technology is not preferred or supported by stakeholders** – In conjunction, overwhelming stakeholder opposition and future land uses within the area indicate that a rubber-wheeled technology was more favorable than rail technology to be carried forward.

Given these factors, the three transit service types identified as potential alternatives were express bus, enhanced bus, and BRT. A more detailed description of these service types is provided below primarily because they were rubber-wheeled technologies that allowed routing flexibility to station areas and represent a logical progression of service enhancement as the corridor matures.

It should be noted that while light rail transit (LRT) is not being tested as a technology alternative, it could still be a long-term alternative as transit ridership increases and development along the corridor intensifies. In summary, bus transit was considered for the following factors:

- **Flexibility.** Bus routes can change and be enhanced (with bus priority systems or when needed. For example,
  - Routes can change if a roadway is closed;
  - Destinations can change due to development activity;
  - Or demand changes so that enhancements are warranted.
- **Requires no special facilities.** Buses can use existing roadways and general traffic lanes could potentially be converted into HOV lanes and/or busways through coordination with GDOT and ARC.
- **More suitable for lower density land uses and dispersed nodal development.** Also, buses can circulate to provide convenient walk access within a specific area.
- **Several routes can converge onto one busway, reducing the need for transfers.** For example, buses that start at several suburban communities can all use a busway to a city center.
- **Typically lower capital costs than rail technology.** While further analysis is needed as a more detailed transit concept for the corridor materializes, TPB Concept 3 cost estimates developed in 2008 assumed the following costs for both technologies:
  - High capacity regional rail - \$45-75 million per mile

- Arterial rapid bus - \$3-5 million per mile

## 4.5 Alternatives Testing Results

**Table 4-6** summarizes the alternatives tested based on the factors noted in Section 4-4. It should be noted that the operational characteristics noted below are conceptual and developed solely for model related purposes.

**Table 4-6: Alternatives Subject to Testing**

Mode	Limits	Stations	Service Characteristics
Express Bus 1	SR 154 to College Park MARTA Station	<ul style="list-style-type: none"> <li>• SR 154</li> <li>• SR 92</li> </ul>	Peak hour – 30 minute headways
Express Bus 2	SR 154 to Downtown via I-85	<ul style="list-style-type: none"> <li>• SR 154</li> <li>• SR 92</li> <li>• Stonewall Tell Road</li> </ul>	Peak hour – 30 minute headways
Bus Rapid Transit (BRT)	SR 154 to College Park MARTA Station	<ul style="list-style-type: none"> <li>• SR 154</li> <li>• SR 92</li> <li>• Stonewall Tell Road</li> <li>• Old National Highway</li> </ul>	Peak hour – 15 minutes Off Peak – 30 minutes
Enhanced Bus	College Park MARTA Station to Stonewall Tell Road	<ul style="list-style-type: none"> <li>• Stonewall Tell</li> <li>• Old National</li> </ul>	Peak hour – 15 minutes Off Peak – 30 minutes
Bus Rapid Transit w/ Circulator Routes	SR 154 to College Park MARTA Station	<ul style="list-style-type: none"> <li>• SR 154</li> <li>• SR 92</li> <li>• Stonewall Tell Road</li> <li>• Old National Highway</li> </ul>	Peak hour – 15 minutes Off Peak – 30 minutes
Enhanced Bus w/ Circulator Routes	SR 154 to College Park MARTA Station	<ul style="list-style-type: none"> <li>• SR 154</li> <li>• SR 92</li> <li>• Stonewall Tell Road</li> <li>• Old National Highway</li> </ul>	Peak hour – 15 minutes Off Peak – 30 minutes

The ridership results of the testing described above is provided in **Table 4-7**.

**Table 4-7: Daily Line Volumes from Tested Alternatives**

Transit Alternative	Current ARC Model	Trend Scenario	Intensive Development Scenario
Express Bus 1	20	50	60
Express Bus 2	60	80	100
Enhanced Bus	440	660	670
BRT	1,520	2,290	2,180
Enhanced Bus with Circulator Routes	-	1,940	2,250
BRT with Circulator Routes	-	5,020	6,590

## 4.6 Major Findings from Alternatives Testing

Major findings of the alternatives testing include:

- Because South Fulton Parkway is a relatively new roadway, development along the roadway has not had much time to materialize. However, given its proximity to H-JAIA and the interstate system, the corridor has potential for live-work-play development. Notwithstanding the uncertainty of time required for this development

to occur, the best approach for implementing transit service along South Fulton Parkway is phasing service along the corridor. Because of the sparse development patterns currently within the area, short term recommendations resulting from this study will need to be oriented toward furthering land use initiatives to foster transit markets along the corridor. This would include recommendations for specific zoning regulations and the development of overlay districts consistent with the Transit Oriented Development (TOD) guidelines currently being developed by MARTA. A specific example could include coordination by Union City officials with the Parkway South developers to refine their current development plans to include provisions for TOD.

- It should be noted that the ridership estimates for the tested alternatives were relatively low when compared to the current ridership on existing MARTA routes. However, it should be noted that the current routes operate in the eastern portion of the corridor, which is currently much more urbanized with much higher percentages of persons lacking private automobiles fact, when modeled in the trend scenario, most of the existing bus routes showed a substantial increase due to projected increase in development
- Projections from the regional travel demand model display low ridership for express bus service. Therefore, corridor-focused ridership forecasting techniques, such as travel preference surveys, should be employed to better gauge the feasibility of express bus service.
- A phased fixed route concept with limited stops to serve commuter purposes should be analyzed further. Initially, a commuter-based service with park-and-ride stops configurations to allow implementation of TOD is recommended. The concept will initially consist of park-and-ride lots located near or adjacent to South Fulton Parkway at major nodes, so that station areas will not conflict with corridor preservation efforts undertaken by GDOT and can transition into more vibrant TOD areas. The alternatives tested provide a footprint for potential transition to more premium services such as LRT dependent on development trends.



## 5.0 TRANSIT SERVICE FACTORS

The following section describes the factors to be taken into consideration when determining the appropriate service types for the South Fulton Parkway corridor taken from the Transportation Research Board (TRB) *Transit Capacity and Quality of Service Manual, 2<sup>nd</sup> Edition*. As such, the discussion in this section focuses on factors that determine potential ridership and potential service types based on certain characteristics of the study area.

### 5.1 Overriding Ridership Factors

Pursuant to the TRB, the two primary categories that reflect the passenger's point-of-view are:

- Availability; and
- Comfort and Convenience.

Of these categories, availability is the most important, because it determines whether or not transit is even a potential mode choice, regardless of the quality of the trip. Unlike the automobile mode, which has near-universal access to locations, and (for those who have access to an automobile) provides the ability to be used for trips at any desired time, transit service is limited to specific areas and specific times. Further, transit service is usually not available to one's door, so a potential transit passenger must find a way to get to a location served by transit.

Unlike transit availability, the kinds of questions weighed by potential passengers when assessing the comfort and convenience of transit service are often not absolute. Each person assesses particular comfort and convenience factors differently, depending on his or her own needs and situation. A passenger's decision to use transit rather than a competing mode (when transit is an option) will depend on how well transit service quality compares with that of competing modes.

#### 5.1.1 Transit Availability

There are a number of conditions that affect transit availability, all of which need to be met for transit to be an option for a particular trip:

- **Transit must be provided near one's trip origin.** If demand-responsive service is not provided to one's door, a transit stop must be located within walking distance and the pedestrian environment in the area should not discourage walking (e.g., due to a lack of sidewalks, steep grades, or wide or busy streets). Persons with disabilities require a continuous ADA-accessible path to the transit stop. One may also be able to ride a bicycle to a transit stop if bicycle storage facilities are available at the stop or if bicycles can be carried on transit vehicles. Similarly, one may be able to drive to a park-and-ride lot if such a lot is provided along the way and space is available in the lot.
- **Transit must be provided near one's destination.** The same kinds of factors discussed for the trip origin apply to the trip destination as well, except that bicycles or automobiles left behind at the boarding transit stop will not be available to passengers at their destination.
- **Transit must be provided at or near the times required.** In most cases, service must be available for both halves of a round trip—from one's origin to one's

destination, as well as for the return trip. If passengers perceive a risk of missing the final return trip of the day, or if transit is available for only one of the two halves of passengers' round trips, transit is less likely to be an option for those passengers.

- **Passengers must be able to find information on when and where transit service is provided and how to use transit.** If passengers are unable to find out where to go to board transit, where they need to transfer, how much the fare will be, and so forth, transit will not be an option.
- **Sufficient capacity must be provided.** If a transit vehicle must pass up passengers waiting at a stop because the vehicle is already full, transit service was not available at that time to the passengers waiting at the stop.

If all of these conditions are met, transit is an option for a particular trip. Whether or not a passenger will decide to use transit will depend on the comfort and convenience of the service relative to competing modes.

### 5.1.2 Comfort and Convenience

Unlike transit availability, the kinds of questions weighed by potential passengers when assessing the comfort and convenience of transit service are often not all-or-nothing. Each person assesses particular comfort and convenience factors differently, depending on his or her own needs and situation. A passenger's decision to use transit rather than a competing mode (when transit is an option) will depend on how well transit service quality compares with that of competing modes.

Some of the more important factors that affect transit comfort and convenience are the following:

- Passenger loads aboard transit vehicles. It is more uncomfortable to stand for long periods of time and the time spent standing may not be able to be used for more productive or relaxing purposes, such as reading.
- The kinds of passenger amenities provided at transit stops.
- The reliability of transit service. Are passengers assured of getting to their destinations at the promised time or must they allow extra time for frequently irregular service?
- Door-to-door travel times, by themselves, and in relation to other modes.
- The out-of-pocket cost of using transit, relative to other modes.
- Passengers' perceptions of safety and security at transit stops, on board vehicles, and walking to and from transit stops.
- Whether transfers are required to complete a trip.
- The appearance and comfort of transit facilities.

### 5.1.3 Quality of Service Framework

The key measures in the areas of transit availability and transit comfort and convenience that are important to passengers and can be relatively easily quantified are presented in the form of a quality of service framework. This framework, which is summarized in **Table 5-1**, provides service measures of availability and service measures of comfort and convenience. The availability measures, along with the travel time measures, are particularly suited to short- and long-term planning efforts, while the remaining comfort

and convenience measures in each framework are well suited for ongoing service delivery monitoring.

As not every factor that affects transit quality of service can be accounted for by these service measures, it is important for planners and analysts not to lose sight of the broader issues that influence transit quality of service by concentrating solely on calculations of LOS.

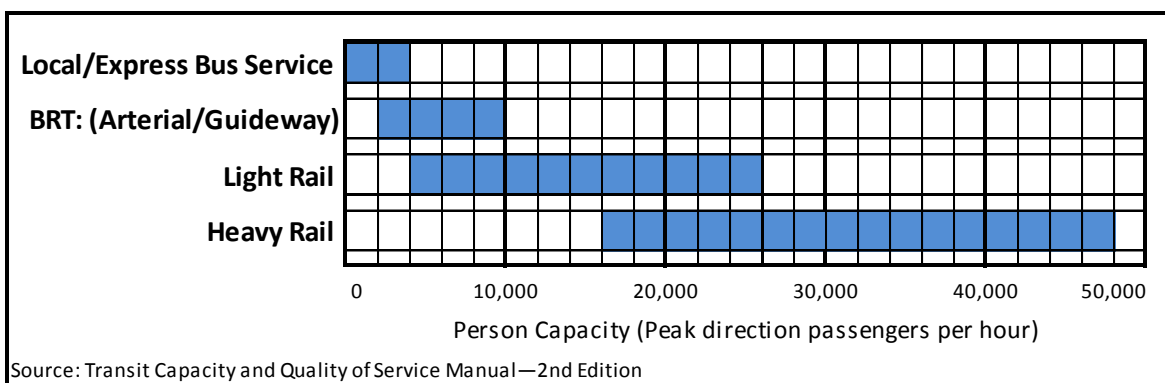
**Table 5-1: Quality of Service Framework**

	Transit Stop	Route Segment	System
Availability	Frequency	Hours of Service	Service Coverage
Comfort and Convenience	Passenger Load	Reliability	Transit-Auto Travel Time

## 5.2 Implications for South Fulton Parkway

The TRB has identified typical capacity ranges and supportive land use densities for different service types, which have been provided in **Figure 5-1** and **Table 5-2**.

**Figure 5-1: Typical Capacity Ranges for Transit Service Types**



**Table 5-2: Typical Density Thresholds for Transit**

Service Type	Residential (du/ acre)	Employment (emp/ acre)
Local/ Express Bus	4-15	50-200
BRT	9-12	80-500
Light Rail	15-50	500+
Heavy Rail	35-50	500+
<b>South Fulton Existing and Projected Characteristics</b>		
2005*	1-3	1-5
2030**	1-14	1-20

It should be noted that the ranges reflected above represent peak direction passengers per hour. As reflected in Section 4 herein, the ridership of the enhanced bus and BRT alternatives tested ranged from approximately 2,100 to 5,500 *daily* riders. Given the ranges in **Figure 5-1**, it is further indicated that initial services should be an express bus with a phased approach to enhanced bus and, if desired, an arterial BRT service. To

further this assumption, the typical density ranges for land uses that support different service types shown in **Table 5-2** for rail oriented service types are well above those projected within the corridor under either land use scenario developed for this study (as detailed in Section 4).

More detail on how local jurisdictions can facilitate the desired land uses and infrastructure needed for enhanced bus and arterial BRT service is provided in the sections that follow.

## 6.0 STATION AREA DEVELOPMENT FACTORS

An important factor in developing a corridor that is conducive to transit is fostering land uses that are supportive of transit investment, or transit oriented development (TOD). The purpose of this section is to provide a development context as it currently exists and an overview of needed actions by the local jurisdictions along the corridor to foster TOD.

It should also be noted that TOD initiatives along South Fulton Parkway extend well beyond the policy objective of establishing a transit corridor and promoting TPB Concept 3 in that it:

- Promotes Sustainable Growth – A major objective highlighted by the project stakeholders during the public involvement process was to retain the rural character of the area surrounding South Fulton Parkway
- Supports the State of Georgia's IT3 Initiative – The state's "IT3" plan—Investing in Tomorrow's Transportation Today—is designed to focus transportation investments on promoting economic growth, ensuring public safety, maximizing the value of the state's assets, and protecting the environment. By creating mixed use live-work-play environments TOD supports all four of those goals.
- Enhances Potential for Funding – At the federal level, as environmental issues are taking more federal policy priority, projects with positive impacts on land use, energy consumption, and greenhouse gas emissions will fare better in the competition for scarce dollars. Also, development proposals currently in place (i.e., Park South) as well as the overall development potential along the corridor present opportunities for private sector partnerships. If private investment is to be attracted to transit projects, it is far more likely to happen where development and transit go hand-in-hand.

### 6.1 Summary of Applicable MARTA TOD Guidelines

MARTA is in the process of developing guidelines to foster TOD throughout its service area, which would include the South Fulton Parkway corridor. In doing so, MARTA has primarily focused on the areas surrounding its existing heavy rail stations since these areas already have the transit in place and are more urbanized. However, given that one of the onuses of developing these guidelines is to foster development in developing areas such as South Fulton, the MARTA TOD guidelines also provide some principles that can be employed to areas that have been targeted for system expansion within TPB Concept 3. South Fulton Parkway has been identified within Concept 3 as an Arterial Bus corridor and, therefore, the concepts within the MARTA guidelines should be considered when promoting TOD along the corridor.

#### 6.1.1 Station Typology

Stations and the districts they serve are different and, therefore, a station typology is helpful in understanding and shaping real-world TOD opportunities. The station typology developed by MARTA has seven categories: urban core, town center, commuter town center, neighborhood, arterial corridor, special regional destination, and collector. These categories are meant to illustrate thematic similarities and differences. However, given the dynamic nature of development and real estate markets, some stations will inevitably share characteristics of two or more types.

MARTA's station typology was developed with three objectives in mind:



- Typology reflects not only location, land use, and density, but transit operations as well. Of particular importance is the degree to which a station is a “capture point” for commuter park-and-ride, which may compete with TOD for space, local street capacity, and resources. Given the level of undeveloped land along South Fulton Parkway, this is an important consideration for local governments when planning for TOD.
- Typology takes into consideration new stations that are created in the expanded network of Concept 3 – which includes the South Fulton Parkway Corridor. By incorporating the expanded network, the MARTA guidelines establish a common regional vocabulary of station types.
- Typology serves to implement those aspects of TOD that are consistent with the station’s primary function. For example, even with the creation of TOD plans along the corridor, all of the stations will need to serve some commuter purposes given the high level of external work trips from the area and the sparse nature of the development patterns within the study area. Therefore, as an Arterial Bus Corridor in Concept 3, the Arterial Corridor station type that includes a certain level of parking to complement TOD will be appropriate for the South Fulton corridor.

### 6.1.2 Arterial Corridor Stations

An important component of the region’s emerging transit network is a series of arterial rapid bus corridors. These projects will provide frequent transit service with limited stops, enhanced passenger amenities, and improved travel times, including bus-only lanes where feasible. The intent of these new arterial transit routes is not merely to improve mobility. It is to transform the pattern of land use along these corridors, which contain long stretches of automobile-oriented commercial development and frequent “dead zones”. Unlike the closely spaced, walk-in stations typical of neighborhood bus or streetcar lines, arterial rapid bus stations will be farther apart, lending themselves to more nodal development patterns. Some stations will be primarily residential or commercial, while those at major arterial intersections should attract mixed uses.

**Table 6-1: MARTA Arterial Bus Station Characteristics**

Ideal Land Use Mix and Scale of Development	<ul style="list-style-type: none"> <li>• Multi-family residential and/or mixed-use replacing auto-oriented strip pattern on a major arterial.</li> <li>• Maintain lower-density development between stations.</li> <li>• Scale varies; mixed-rise typical.</li> </ul>
Transit Mode and Function	<ul style="list-style-type: none"> <li>• Arterial BRT or light rail, on a corridor that may be radial or cross-regional.</li> <li>• May be a transit origin and destination.</li> <li>• Stations may have park-and-ride.</li> </ul>
Public Realm	<ul style="list-style-type: none"> <li>• Enhanced stations are at-grade, either on sidewalk or in dedicated median.</li> <li>• Pedestrian environment is critical.</li> </ul>
Keys to Success	<ul style="list-style-type: none"> <li>• Create a transformative, pedestrian environment from scratch.</li> <li>• Market the TOD/BRT concept.</li> </ul>
Density Ranges	<ul style="list-style-type: none"> <li>• FAR: 1.0-6.0</li> <li>• Residential Units/acre: 15-50</li> <li>• Height (in floors): 2-10</li> </ul>

## 6.2 TOD Guidance for Local Governments

In its efforts to better tie transportation and land use initiatives and promote smart growth, the ARC developed a toolkit to assist local governments in developing TOD within the context of a jurisdictional Comprehensive Plan. The following sections summarize the document, entitled *Community Choices – Quality Growth Toolkit*, which is also attached as **Appendix C**.

### 6.2.1 Needed Planning Tools

The ARC identified four critical planning tools needed for TOD implementation:

- **Station Area Development Plans** – Station area development plans serve as the overall strategy for implementing TOD at a particular location. As such they include the critical elements of TOD planning such as: land use; layouts of public streets and open spaces; vehicular, pedestrian, and bicycle circulation, parking design, parks and green space; station-specific design guidelines; capital improvements programming; and phasing. Many of the LCI studies completed throughout the Atlanta region, particularly those along the MARTA rail system, have included station area plans as a component. Once these plans have been developed, the framework is established for developing zoning ordinances to further TOD.
- **Zoning Ordinances** – Following the development of station area plans, zoning ordinances to support the elements within the Plan must be developed and adopted. These can take place either in the form of a new district or as an overlay district. Some TOD ordinances employ techniques such as density bonuses for providing additional access and/or ROW for transit vehicles or facilities. Specific standards of traditional zoning ordinances that may need elimination or revision include requirement of one use per parcel, buffer requirement of similar uses, setback regulations, minimal parcel size, minimum street width, and minimum parking requirements. As part of their TOD toolkit, the ARC included model ordinances that could be applied in potential stop locations along the South Fulton corridor, which are also included in **Appendix C**.
- **Subdivision Regulations** – Standards should be adopted within subdivision regulations that permit and promote compact, pedestrian oriented development patterns, including grid street patterns.
- **Transit Station Plans** – Detailed plans for each of the transit element of the station areas - including engineering and architectural plans – should be developed in cooperation with MARTA. It is common practice for transit station plans to be incorporated within station area plans.

### 6.2.2 Stop Site Selection Factors

Ideally, properties having existing paved areas that are not used during weekday working hours are given first consideration for park-and-ride stations. These may include vacant properties, churches, or civic centers. However, given the general lack of development along South Fulton Parkway, these factors generally do not apply. However, the abundance of developable land creates an opportunity to consider multiple sites. Therefore, a set of criteria should be established for use in evaluating each site. Given the intent to foster TOD around these transit stops, the criteria should also consider factors that influence the attractiveness of developers to a particular site. Based on the characteristics of the corridor, the following factors could be considered:

1. Right-of-Way and/or Availability. Right-of-way costs can often be more than construction costs, particularly when located in densely developed corridors. As a result, this may be the most important factor for determining feasibility.
2. Access. A site must be easily and directly accessible by automobiles and transit vehicles, where transit service is planned. Lots should not divert commuters more than 2 to miles out of their normal travel path. Access should be safe, with signal control if warranted.
3. Site Size for Parking. Sites that are too large result in an over-expenditure of funds, and inefficient use of space. A factor of 300 square feet per stall is typical for surface lots, while 325 square feet per stall is conservative for structures.
4. Visibility. Sites should be visible from adjacent travel routes. Visibility contributes to recognition of an available park-and-ride lot, and is a deterrent to crime. Landscaping should not obscure visibility.

### 6.2.3 Community Concerns

While sound public policy in promoting sustainable growth, local officials should be aware that certain community issues can arise when TOD is proposed in and around their communities. This is particularly true in areas with the suburban and rural character of the South Fulton corridor. These concerns include:

- Citizens Concerns – Primary concerns are typically related to density and potential traffic impacts. The notion of introducing more dense development in these areas could create fear that more dense development patterns will change the character of their area, introduce a different income level into their communities in the residential components of TOD, and, therefore, represent a threat to their respective property values. There is also a concern that additional development, particularly at the higher densities typical of TOD, will create additional traffic issues. The best way to appease community concerns is to educate the public early and often in the process of beginning to plan for TOD and effective agency coordination to ensure that proper roadway enhancements are made to accommodate the additional auto travel generated by TOD.
- Developer Concerns – Developers concerns generally include developer segmentation and financing. TOD can require a more sophisticated approach that is beyond the capabilities of many developers. The development industry is highly segmented by land use (single-family, retail, etc.) and each category has unique practices, markets, trade associations and financing sources. Also, securing financing can be difficult because rigid underwriting requirements make the potential to resale the loan in the secondary market more problematic. Much like the development community, the secondary loan market tends to be fragmented much like the development industry as a whole.
- Costs Concerns – As noted throughout, TOD will likely need to be implemented on undeveloped sites with little infrastructure in place. As such, there will be additional costs to both the local jurisdiction and/or the prospective developer by having to provide additional design and construction for streets and other public spaces. Also, because TOD requires more detailed site design and building layout than convention suburban development, the costs associated with these elements are typically higher because the work is more specialized than site planning for generic suburban layouts. Therefore, public-private partnerships could likely be a vital component to the successful implementation of TOD along South Fulton Parkway.

## 6.3 Issues and Opportunities

Through the assessment of baseline conditions and stakeholder input, the following issues and opportunities to promote TOD along the corridor have been identified.

### 6.3.1 Abundance of Vacant Land

Sparse development patterns, particularly at major nodes, present both opportunities and challenges. While the abundance of large tracts of vacant property along the corridor offers flexibility in developing sites for TOD, the general lack of infrastructure currently present will require additional investment by developers and/or local governments. Also, the lack of population concentrations throughout much of the corridor makes the establishment of transit service to attract development activity more difficult.

### 6.3.2 Access Management

Access management has been identified by stakeholders – particularly GDOT and Fulton County - as a critical need to maintain traffic flow, reduce potential conflicts along the roadway with a projected increase in general and freight traffic, maintaining the rural character of the area, and promoting commercial development at major nodes. By restricting access along the roadway, the number of potential sites for park-and-ride lots is reduced and the process of identifying sites for TOD is less problematic.

### 6.3.3 Parkway South

The Parkway South Economic Development Master Plan was developed in 2008 is the most predominate opportunity for TOD along South Fulton Parkway currently in place. The plan includes development concepts, and the land uses to support them, for the transformation of a nine-mile long corridor along South Fulton Parkway into a live-work-shop-play community. The Parkway South corridor extends from one-half mile east of Stonewall Tell to Cascade-Palmetto Highway (SR 154). The overall character of the planned corridor emphasizes mixed use communities, with modal alternatives associated with successful mixed use development. The plan proposes bus transit and multi-use pathways along South Fulton Parkway.

The nodes created by this plan include:

- Rivertown Business Park at Cascade Palmetto Highway (SR 154) - with greenspace and office uses;
- The Village at Rivertown at Cedar Grove Road - with mixed-use residential and greenspace uses;
- Town Center at Parkway South at Campbellton-Fairburn Road (SR 92) - with mixed-use business, mixed use village and greenspace uses;
- Stonewall Tell Corporate Center at Derrick Road - with mixed use business, retail and greenspace uses;
- Accolades at South Fulton Parkway at Stonewall Tell Road, with mixed use residential, mixed use village and retail uses; and
- Thompson Park at Thompson Road - with mixed park uses.

As the Parkway South Plan mirrors that of the South Fulton Corridor Plan developed by Union City, it reflects the manner in which Union City officials envision the section of South Fulton Parkway between Stonewall Tell Road and SR 154 being developed.



Realization of this plan will require continued coordination between Union City and the private sector interests as well as GDOT to ensure enhancements to South Fulton Parkway to support the plan take place.

## 6.4 Land Use Actions Needed by Jurisdiction

The analysis of current land use and needed actions to promote Transit Oriented Development (TOD) along the corridor is taken from the governmental jurisdictions with property along the South Fulton Parkway – City of Chattahoochee Hills, Fulton County, Union City, and College Park – and their relationship to specific segments of the corridor. For the purposes of this report, the discussion pertains to jurisdictions from west to east.

### 6.4.1 Chattahoochee Hills

**Current Land Use and Zoning:** Most of the property along the portion of the corridor between the Douglas County line and SR 154 falls within the newly incorporated City of Chattahoochee Hills. As shown on Figure 2-1 (which has been provided again on the following page), most of the segment of South Fulton Parkway is undeveloped. However, the Fulton County future land use plan designated the Chattahoochee Hill Country Villages as Regional Live-Work Nodes, which permits 14 residential units per acre per village. In order to develop within the village, Transfer of Development Rights must be used to prohibit the traditional sprawl-like patterns in areas designated as for agricultural uses. The unconventional development strategy calls for a Conservation Subdivision, which encourages small-lot development in exchange for preserving significant areas of land for ecological and recreational purposes. The Conservation Subdivision planned in Chattahoochee Hills was projected to accommodate a population of 20,000 or more.

#### **Needed Actions for City:**

- Coordinate with MARTA on viability of expansion of commuter services to Chattahoochee Hill Country Villages as development along the corridor matures and transit service comes online.

### 6.4.2 Fulton County

**Current Land Use:** The land use goals in the South Fulton planning area focus on strategically increasing density in areas where growth is projected while encouraging land preservation. While the current land use plan calls for Community Live Work districts at SR 154, SR 92, and Stonewall Tell Road, much of the property remains undeveloped and zoned for agricultural uses.

#### **Needed Actions:**

- Identify areas appropriate for TOD and/or park-and-ride stops
- Develop station area plans for areas targeted for park-and-ride locations
- Create a TOD-specific zoning district based on the MARTA TOD Guidelines and ARC Toolkit that includes site plan regulations to accommodate for park-and-ride facilities and transit vehicles
- Amend current zoning code to reflect land use plan
- Coordinate with GDOT in the upcoming access management study to ensure adequate provisions are made for future transit expansion along the corridor in areas identified for future TOD

- Explore opportunities for private sector partnerships in the development of TOD areas, once they have been identified, in the development of live-work-play environments in a manner consistent with the future land use plan

### 6.4.3 Union City

**Current Land Use:** Just as Fulton County, much of the land along South Fulton Parkway is undeveloped. However, the plans for the Union City are much more aggressive in that the current zoning for most of the property within their jurisdiction is zoned falls within a mixed use district that allows for very intensive development patterns, including those within the Parkway South Development Plan. It should also be noted that Union City will be updating its Comprehensive Plan. Therefore, the opportunity is presented to adopt goals, objectives and policies that promote TOD within the updated Comprehensive Plan.

#### **Needed Actions by City:**

- Identify areas appropriate for TOD and/or park-and-ride stops
- Develop Station Area Development Plans for locations targeted for park-and-ride locations
- Working off of the mixed use zoning district currently in place along South Fulton Parkway, develop a TOD-specific zoning district based on the MARTA TOD Guidelines and ARC Toolkit that includes site plan regulations to accommodate for park-and-ride facilities and transit vehicles
- Continue to work with the private sector to develop the live-work-play environment called out in the South Fulton Parkway Corridor Study and Parkway South Economic Development Plan
- Coordinate with GDOT in the upcoming access management study to ensure adequate provisions are made for future transit expansion along the corridor in areas identified for future TOD

### 6.4.4 College Park

**Current Land Use:** Unlike the other jurisdictions along the corridor, the initiatives along Roosevelt Highway within College Park would need to focus on redevelopment instead of the development of greenfields. Currently, all of the area along Roosevelt Highway within along the study corridor is zoned within its Convention Center District. While there is a significant amount of development ongoing along Roosevelt, most is associated with the CONRAC facility that is linked solely to the airport. Therefore, the opportunities to build TOD off of this facility are limited. Nonetheless, there are several underutilized parcels along Roosevelt Highway that present opportunities for TOD.

#### **Needed Actions by City:**

- Identify opportunities for redevelopment and TOD near the Old National Highway node
- Develop a Station Area Development Plan for the Old National Node
- Unlike that developed for the downtown area that focuses on uses for a Central Business District, develop a TOD-specific zoning district based on the MARTA TOD Guidelines and ARC Toolkit that includes site plan regulations to accommodate for park-and-ride facilities and transit vehicles

- Coordinate with GDOT and ARC for the widening of Roosevelt Highway to better accommodate transit vehicles along the roadway and promote redevelopment activities at the Old National Node

## 7.0 SERVICE ENHANCEMENT RECOMMENDATIONS

This section provides the recommendations for future transit service along South Fulton Parkway. As such, this section illustrates a phased approach to implementing transit based on the completion of actions from these jurisdictions and agencies. In doing so, it is organized as follows:

- Potential Immediate Recommendations (Section 7.1) – Actions that can be carried out in a relatively short time frame to improve transit within South Fulton and further the implementation of transit along South Fulton Parkway:
- Phase 1 Recommendations (Section 7.2) – Actions needed to initiate and a profile of potential park-and-ride commuter based service along South Fulton upon the determination of market demand.
- Phase 2 Recommendations (Section 7.3) – Actions needed to facilitate greater TOD at stops along the corridor to increase transit demand and to support potential enhanced bus service and a profile of that service.
- Phase 3 Recommendations (Section 7.4) – Actions needed to upgrade enhanced bus service to a service type with portions operating in exclusive ROW and a profile of that service.

It is important to note that there are no specific timelines for each of the phases listed above because the type of service implemented along the corridor will depend greatly on the policy actions of the local jurisdictions along the corridor as well as regional planning partners such as GDOT and ARC.

### 7.1 Potential Short Term Recommendations

While the implementation of service along will need to be a cooperative effort, there are actions that can be implemented in a short-time frame to facilitate the phasing of transit service along South Fulton Parkway and/or that have been identified through the assessment of the baseline conditions. They are reflected in **Table 7-1** below.

**Table 7-1: Potential Immediate Actions**

Action	Rationale	Agencies
Administer preference survey to gauge potential demand for park-and-ride services	Based upon the high number of externally bound work trips and Stakeholder input, forecasting techniques such as travel preference surveys are needed to better gauge the feasibility of express bus service.	MARTA and/or GRTA



**Table 7-1: Potential Immediate Actions (continued)**

Action	Rationale	Agencies
Enhance pedestrian access and safety along Roosevelt Highway by providing additional sidewalks and/or crosswalks.	Much of Roosevelt Highway is characterized by a lack of sidewalks and, as a result, pedestrian access to MARTA stops along the roadway – both in and out of the study area. This is particularly true for the side of the roadway adjacent to the abutting CSX line. In addition, some stops, such as that across from Brenau University in Fairburn, may warrant crosswalks to help facilitate pedestrian safety.	City of College Park City of Union City Fulton County City of Fairburn City of Palmetto GDOT
Identify areas best suited for park-and-ride stops and develop area plans to facilitate their evolution into more dynamic TOD areas; area plans should be developed in a manner that promotes more pedestrian friendly	The establishment of area plans and location of areas identified for park-and-ride stops establishes a conceptual 'blueprint' for future service options.	City of College Park City of Union City Fulton County
Investigate upgrading transit service along the Old National Highway corridor	Enhancement of transit service along the corridor will further the objectives of the Old National LCI study and strengthen the presence of transit that can be parlayed into promoting TOD at the Old National node along the corridor.	MARTA

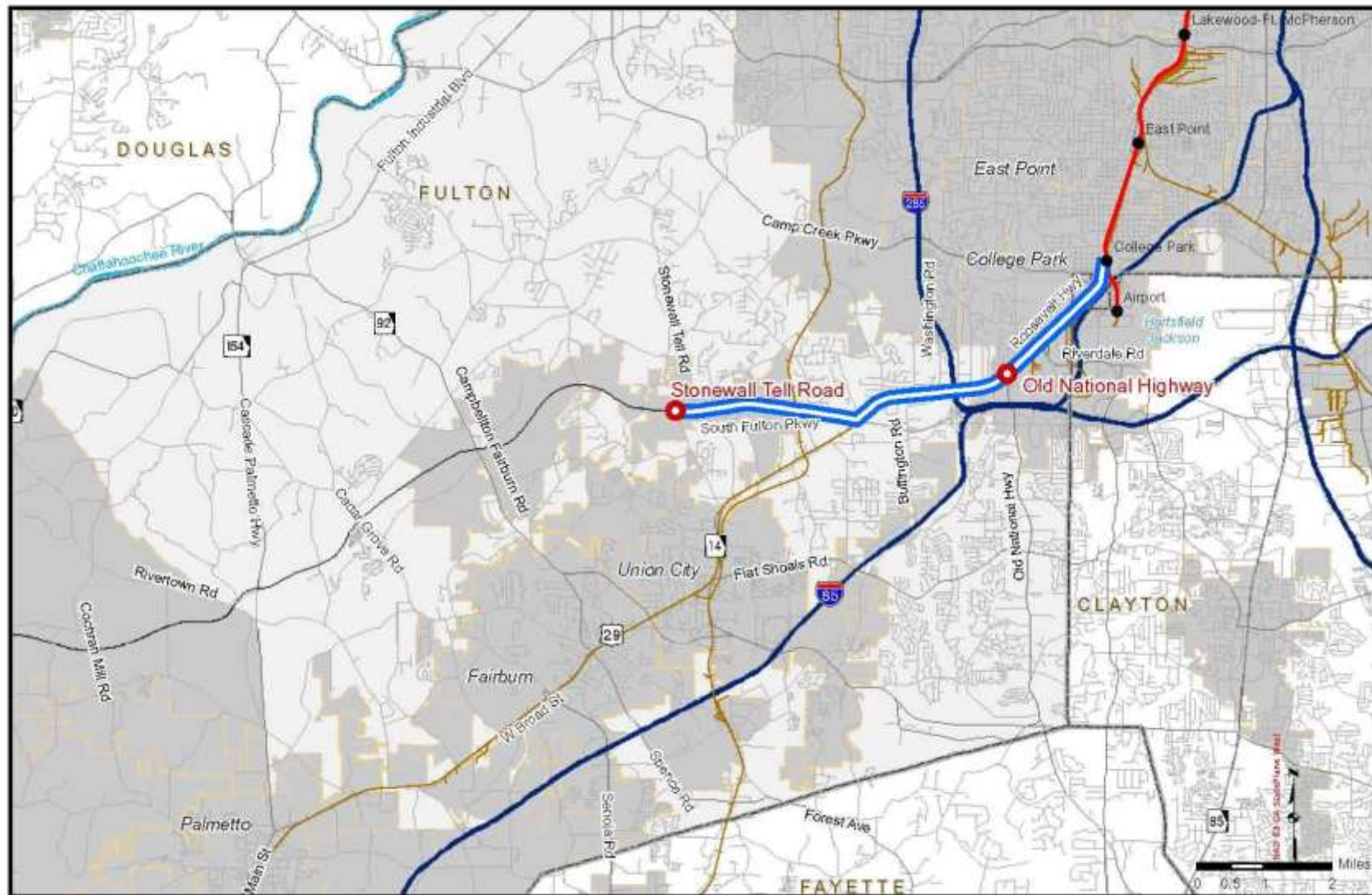
## 7.2 Phase 1 Recommendations

### 7.2.1 Initial Service Characteristics

As reflected in the testing results, the initial service recommended for the corridor is an express service with two stops in the vicinity of Stonewall Tell Road and Old National Highway. A map of the potential alignment for Phase I service is provided in **Figure 7-1**. As a start-up service, the initial service would be provided to the more urbanized sections of the corridor in order to allow for development to occur in the western portions of the corridor. Other potential characteristics of the initial commuter services would be as follows:

- Peak-Hour Service
- Operates in shared right-of-way
- +/- 30-minute headways (dependent on preference survey results)
- Signal and ROW enhancements limited to park-and-ride stop locations for access

Figure 7-1: Potential Phase I Alignment – Initial Express Bus



### 7.2.2 Feasibility Indicators for Recommended Service Type

The primary indicator for the need for initial service will be the results of a preference survey reflecting as such. As noted throughout this document, other requisite actions needed for the implementation of service include:

- Development of station area plans along the corridor to facilitate development along the service
- Construction of the park-and-ride facility with appropriate design elements to accommodate the expansion of development and turning movements
- Continued development of the surrounding single-family residential developments in order to increase the catchment area for transit services and the attractiveness of the site for retail services
- Signalization and/or intersection enhancements at park-and-ride-lots access points

### 7.2.3 Station Area Development

Given the need to create synergy at stop locations, it is recommended that the park and ride facility be initially constructed with adjacent retail and/or residential development. A conceptual station layout and three dimensional image of a proposed station area are provided in **Figure 7-2** and **Figure 7-3**, respectively. Some of the characteristics that apply to these plans are:

- Sufficient area available for future phases of development;
- Visibility from South Fulton Parkway;
- Access from existing roadway that intersects South Fulton to avoid need for additional access point; and
- Parking located to the rear of the property to increase the visibility of the transit access and retail development.

### 7.2.4 Agency Coordination Needs

At no point in the development of a transit service for South Fulton will interagency coordination be as important as during the establishment of initial service. As such, the establishment of the recommended service in Phase I will require the following:

- Coordination between the local municipalities and MARTA to ensure the areas identified for park-and-ride facilities have the required distance and parking capacity to accommodate the proposed service based on the results of the preference survey. Coordination with MARTA and local governments is also needed to ensure station area plans conform to the vehicle requirements needed for vehicle movement, ingress, and egress
- Coordination will be needed between the local municipalities and GDOT to ensure that land use and zoning decisions do not impact their intentions to restrict access and jeopardize the promotion of nodal development that is more favorable to the recommended service
- Coordination between MARTA and GDOT will be necessary that adequate intersection improvements and turn lanes are provided in order to accommodate the transit service

Figure 7-2: Conceptual Station Layout for Phase I





**Figure 7-3: Three Dimensional Station Concept - Phase I**



## 7.3 Phase 2 Recommendations – Enhanced Bus

### 7.3.1 Service Characteristics

The second phase of service recommended for the corridor is an enhanced bus service along the corridor and the extension of service to SR 154. A map of the potential alignment for Phase II service is provided in **Figure 7-4**. Building upon the initial service, enhancements such as queue jumpers, signal preemptions, etc. will be implemented in the segments subject to the initial service as demand dictates. Service along the remainder west of Stonewall-Tell Road will be similar to that implemented in Phase I, with right-of-way and other transit enhancements coming online as the feasibility indicators listed in the in the next subsection come to fruition. Other potential characteristics of the enhanced bus services would be as follows:

- All day service
- 15-minute peak hour headways, 30-minute off-peak headways
- Transit enhancements such as signal preemption, queue jump lanes, etc. along South Fulton Parkway and, if necessary, further intersection improvements at park-and-ride stop access points to accommodate the additional vehicular traffic associated with increased site development

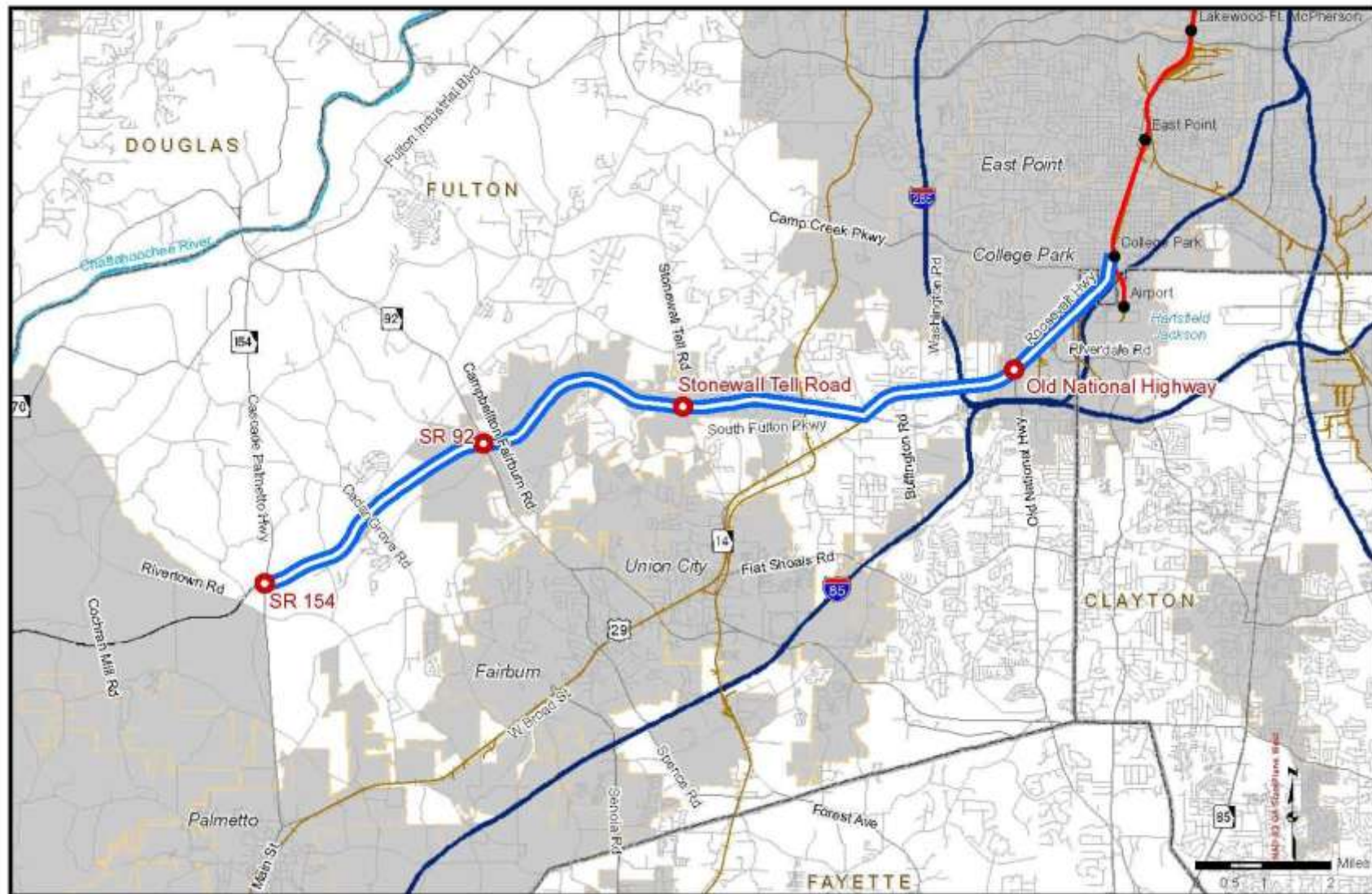
### 7.3.2 Feasibility Indicators for Recommended Service Type

The primary indicators for the feasibility of this type of service are as follows:

- Development of station area plans and provision of park-and-ride facilities along the western portions of the corridor
- Expansion of TOD at existing stations along eastern portions of corridor that warrant the potential for all day service
- Further development of the surrounding single-family residential developments, particularly in the vicinity of SR 154, in order to increase the catchment area for transit services that warrant the capital investment for transit enhancements and support the expansion of the TOD at the station areas
- Sufficient ridership of service and use of park-and-ride lots to indicate need for increased headways during peak hours
- The construction of pedestrian facilities to connect the park-and-ride locations to surrounding development
- MARTA establishment of service to provide better transit connectivity to the stations in the eastern portions of the corridor, either through new service or modification of existing routes
- Signalization and/or intersection enhancements at park-and-ride-lots access points



**Figure 7-4: Potential Phase II Alignment – Enhanced Bus**



### 7.3.3 Station Area Development

The station area development characteristic of the Phase II transit service reflects the additional demand created by ongoing development of single-family residential communities planned around the station areas. This could be represented by an additional retail, office, or residential component dependent on market demands. A conceptual station layout and three dimensional image of a proposed station area are provided in **Figure 7-5** and **Figure 7-6**, respectively. Some of the characteristics that apply to these plans are:

- Even after second phase of development, sufficient area available for future phases of development;
- Maintenance of visibility from South Fulton Parkway, but no additional access points along the roadway;
- Conversion of the parking at the rear of the property to structured parking to maintain the principle of smart growth and allow for more intense development on the station site and to maintain the visibility of the transit access and retail development.

### 7.3.4 Agency Coordination Needs

Building off of the mechanisms needed for the establishment of initial service, the recommended service in Phase II will require the following:

- Coordination of service enhancements between MARTA and local municipalities to ensure adequate demand (or desire) for service enhancements and, therefore, if the capital expenditures for said projects are warranted. Coordination between these agencies will also be necessary to ensure that land use and zoning decisions are not jeopardizing the viability of TOD expansion at station areas and, therefore, future success of the service.
- Coordination will be needed between the local municipalities and GDOT to reaffirm that land use and zoning decisions are still in accordance with their intentions to restrict access and promote traffic movement along the roadway.
- Coordination between MARTA and GDOT will be necessary for the implementation of transit enhancements such as queue jumpers and signal preemption and additional intersections needed at park-and-ride locations at the western portions of the corridor. This would include the identification of where such enhancements are needed.

## 7.4 Phase 3 (Long Term) Recommendations

### 7.4.1 Service Characteristics

The third phase of service recommended for the corridor is a fixed guideway service along the corridor from the College Park MARTA Station to SR 154. As reflected in the testing results, a circulator bus system will be critical to the success of this service option. A map of the potential alignment for long term guideway service is provided in **Figure 7-7**. Building upon the enhancements provided for Phase II service, this phase of service will require portions of the service operating in exclusive ROW. Much like the transit enhancements of Phase II, these portions will likely be phase from the eastern segments of the service to the west as needed.

Figure 7-5: Conceptual Station Layout for Phase II

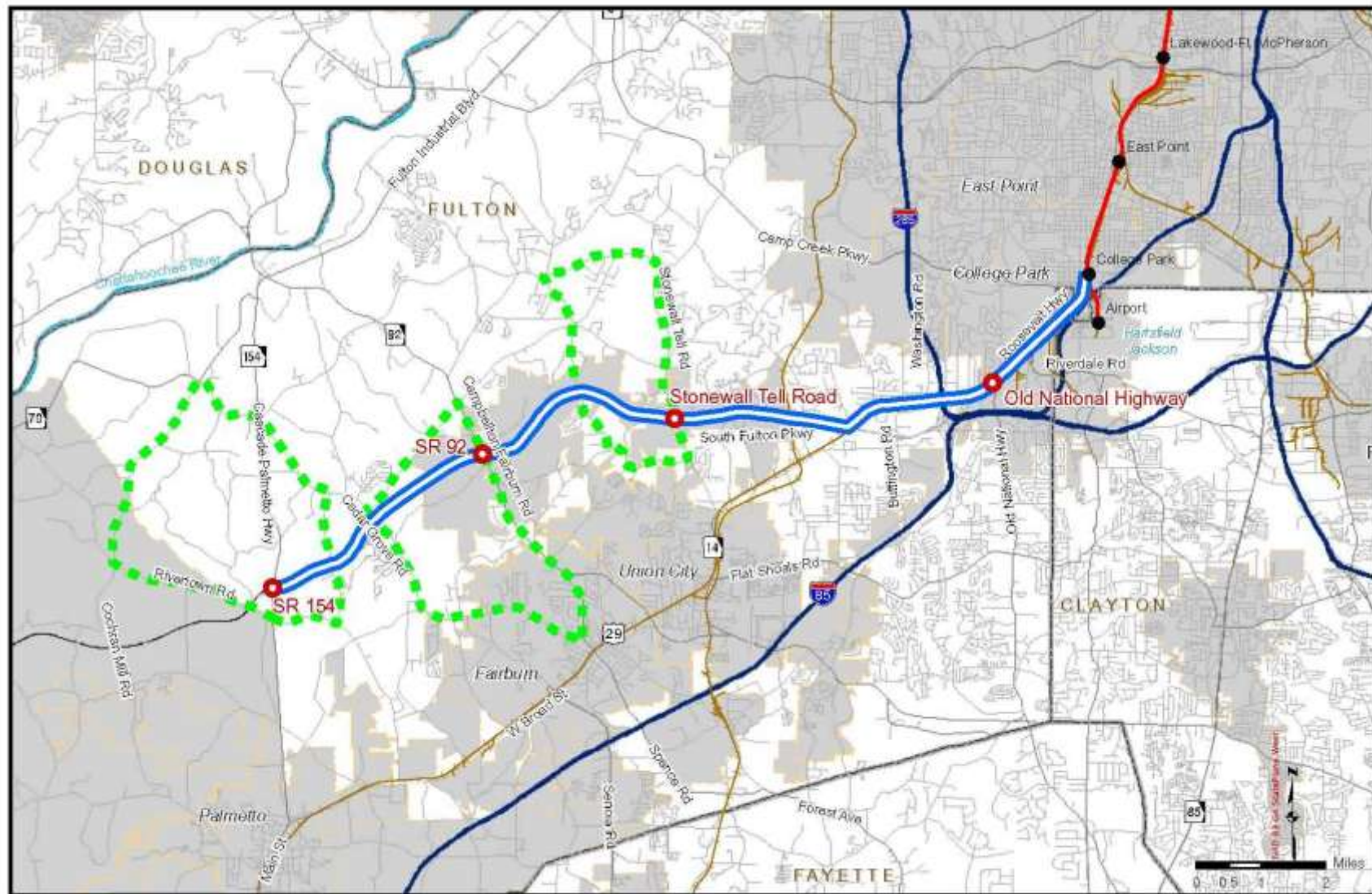




Figure 7-6: Three Dimensional Station Concept - Phase II



**Figure 7-7: Potential Phase III Alignment – Long-Term Fixed Guideway Service**





Service along the remainder west of Stonewall-Tell Road will be similar to that implemented in Phase II, with transit enhancements along intersections between station locations. Other potential characteristics of the fixed guideway services would be as follows:

- All day service
- 10-minute peak hour headways, 15-minute off-peak headways

#### **7.4.2 Feasibility Indicators for Recommended Service Type**

The primary indicators for the feasibility of this type of service are as follows:

- Buildout of the surrounding single-family residential developments and the park-and-ride station areas, including office development that would represent a significant increase of employment in the corridor in order to facilitate the live-work-play environments necessary for successful TOD and all day service
- Related to the indicator above, build-out of the Parkway South Economic Development Plan and/or other development similar with respect to population and employment densities
- Modifications to the area roadway network to provide the connectivity necessary for circulator bus service

#### **7.4.3 Station Area Development**

As previously noted, long term fixed guideway service will require buildout of the station area plans along the corridor as well as the single-family communities in and around the station areas. A conceptual station layout and three dimensional image of a proposed station area are provided in **Figure 7-8** and **Figure 7-9**, respectively. It should be noted that the mixed use component for each station location could be represented by an additional retail, office, or residential component dependent on market demands. Some of the characteristics that apply to these plans are:

- Development of each station area mature enough to create an activity center with an identifiable sense of place beyond that of just a transit station;
- Maintenance of visibility from South Fulton Parkway, but no additional access points along the roadway.

#### **7.4.4 Agency Coordination Needs**

Building off of the mechanisms previously discussed, the recommended service in Phase III will require the following:

- Coordination of service enhancements between MARTA and local municipalities to ensure adequate demand (or desire) for service enhancements and, therefore, if the capital expenditures for said projects are warranted.
- Coordination between MARTA and GDOT will be necessary for the acquisition of ROW needed for fixed guideway service transit enhancements and additional such as queue jumpers and signal preemption and additional intersections needed at park-and-ride locations at the western portions of the corridor.

Figure 7-8: Conceptual Station Layout for Phase III



Figure 7-9: Three Dimensional Station Concept - Phase III





## 8.0 CONCLUSION AND NEXT STEPS

### 8.1 Conclusion

The recommendations that this effort has produced are based primarily off of the results of the alternatives testing and input from Stakeholders in the corridor. With this said, there are three overriding factors that will shape future transit service along the South Fulton Parkway Corridor:

- ***The type of service along South Fulton Parkway is dependent upon the type of development and land use policies local governments are willing to implement.*** The phased recommendations for service options are all dependent on the development and implementation of station area plans and a commitment to nodal development along the corridor. Should either of these initiatives not be carried forward throughout the corridor, then the recommendations contained in this document are moot. In the same perspective, the station area planning and land use initiatives necessary to promote long-term guideway service along South Fulton Parkway may never be realized based on the desires of the respective communities along the corridor.
- ***The implementation of transit services along South Fulton cannot occur without cooperation from and coordination with GDOT.*** All of the phases recommended within this report are dependent on some level of improvements to the roadway by GDOT. These improvements range from minor intersection improvements for Phase I recommendations to the transit enhancements (queue jump lanes, signal preemption, etc.) and dedication of ROW for later phases.
- ***The amount of available funding will also determine the service implemented along the corridor.*** Given recent changes in federal policy, discussions of a regional tax for transit, and the instability of existing tax-based funding sources related to economic factors the amount of funding available for the implementation of service is uncertain. Regardless, the implementation of any of the transit service recommended within will require a substantial investment of capital from local municipalities (for the provision of necessary infrastructure), GDOT (for enhancements to South Fulton Parkway), and MARTA (for the provision of transit services). It is for this reason that agency coordination is paramount. The amount of investment committed by one of these parties will provide the onus for commitment by the other parties involved. It should also be noted that, given the prevalence of large vacant tracts of land and vast development potential throughout the corridor, opportunities for private sector partnerships should be explored. Several transit agencies throughout the U.S. have employed such partnerships to assist with funding facilities, supporting roadway improvements, and/or supporting infrastructure needed for TOD.

### 8.2 Next Steps

Given the needed steps to promote the transit service and station area development and noted within, the following represent the next steps in furthering transit along South Fulton Parkway:

- Local jurisdictions to create Task Force in order to:
  - Establish overall vision for the South Fulton Parkway Corridor
  - Identify specific locations to focus TOD activities

- Address land use issues along the corridor in a unified fashion
- In order to facilitate and gauge its demand, MARTA will need to conduct a preference survey for initial commuter services. No service can be implemented until sufficient demand is shown for the initial commuter based services; however, upon the establishment for a common vision for the corridor local governments can initiate activities for TOD that can facilitate the initial service recommended in Phase I.
- As noted throughout, local jurisdictions need to create transit supportive zoning districts in order for the service options described in Section 7. This will be facilitated in large part by the activities of MARTA in its outreach associated with the development of its TOD Guidelines.
- In order to further the initiatives, particularly with respect to promoting nodal development to strengthen the TOD described herein, MARTA and local jurisdictions to participate in GDOT access management study to ensure the potential for future transit service options is recognized and preserved.
- As part of its commitment to serving its constituents in South Fulton, MARTA will to continue to monitor development activities in the corridor and plan for phased service improvements based on the land use and zoning actions carried forward.

## **APPENDIX A: DETAILED TRAVEL DEMAND MODELING METHODOLOGY**

## **APPENDIX B: DETAILED METHODOLOGY IN DEVELOPING TREND LAND USE SCENARIO**



## **APPENDIX C: ARC TOOLKIT FOR TRANSIT ORIENTED DEVELOPMENT**