CONNECT400

GA 400 TRANSIT INITIATIVE

Alternatives Analysis

EXISTING CONDITIONS AND FUTURE TRENDS REPORT: TECHNICAL APPENDIX

Prepared for:
Metropolitan Atlanta Rapid Transit Authority

Prepared by:
AECOM/Jacobs-JJG Joint Venture
Atlanta, GA

November 2012

marta

Page Left Intentionally Blank

TABLE OF CONTENTS

TABLE OF CONTENTS cont.

LIST OF TABLES

LIST OF TABLES cont.

LIST OF TABLES cont.

LIST OF FIGURES

LIST OF FIGURES cont.

Page Left Intentionally Blank

1.0 Introduction

This Technical Appendix is intended to provide an inventory of relevant data that supplement and support the findings in the GA 400 Alternatives Analysis (AA) - Existing Conditions and Future Trends Report. The appendix includes the analyses of socioeconomic trends, land use and development patterns, mobility trends, and environmental characteristics of the study area.

2.0 Socioeconomic Conditions

This chapter presents a description of the following characteristics of the study area:

- Population
- Employment
- Households
- Low-Income Population
- Minority Population
- Transit-Dependent Population
- Elderly Population
- Neighborhoods
- Community Resources
- Land Use and Development Characteristics

Data presented are from the ARC 2040 Demographic Forecasts, the US Census Bureau, and the websites of the cities in the study area. Tables 2-1, 2-2, and 2-4 through 2-8 present the totals for the cities within the study area, but the figures for the study area and northern Fulton County data are a composite average of Census Tracts within their respective geographies.

2.1 Population

As shown in Table 2-1, approximately 145,156 persons resided in the study area in 2010. The study area population grew by 22 percent from 2000 to 2010 and it is projected to increase by about 13 percent by 2040. Of the cities in the study area, Alpharetta and Milton experienced the highest population growth from 2000 to 2010 at 65 and 80 percent, respectively. Conversely, Dunwoody and Sandy Springs are projected to have the highest growth in population from 2010 to 2040 at 17 and 14 percent, respectively. Figure 2-1 and Figure 2-2 show the population densities for 2010 and 2040.

2.2 Employment

As shown in Table 2-2, employment in the study area declined slightly from 2000 to 2009. However, it is projected to increase by approximately 45 percent by 2040. Roswell, Alpharetta, and Milton experienced employment increases from 2000 to 2009 while Sandy Springs and Dunwoody saw decreases in employment during the same period. All cities in the study area are projected to experience employment increases from 2009 to 2040 with Roswell projected to have the highest increase of 60.3 percent. Figure 2-3 and Figure 2-4 depict 2009 and 2040 employment densities in the study area.

2.2.1 Major Employers

Major employers are listed by city in Table 2-3. The 25 shown in italics are within the study area. At the inception of this AA, a survey of employment was considered, and some data was collected to support the transportation modeling effort. At this time, a full survey is not planned, but additional data may be collected later during the modeling process.

2.3 Households

Table 2-4 presents a summary of household data for the study

area. Between year 2000 and 2010, the study area experienced a 24 percent increase in households. While all areas saw increases between 2000 and 2010, Alpharetta and Milton had the highest increases of 56 and 99 percent, respectively. Household projections show increases from year 2010 to 2040 ranging from 12 percent in Roswell to 20 percent in Alpharetta. Figure 2-5 and Figure 2-6 depict study area household densities for 2010 and 2040.

2.4 Low-Income Population

Low-income households include any households with income at or below the US Census poverty thresholds[1] . Table 2-5 presents data pertaining to 2009 median household income and the population below the poverty level.

Data are listed for each city as a whole, while the study area and northern Fulton incomes are a composite average of Census Tracts within their respective geographies. The 2009 median income of households in the study area was approximately $86,667. Of the cities in the study area, Milton had the highest median income at about $117,608.

According to US Census data, 8.3 percent of the study area population was living below the poverty level in 2009 as compared 15.7 percent in all of Fulton County and 5.8 percentin northern Fulton County. Of the cities in the study area, Sandy Springs and Roswell had the highest percentage of the population living below the poverty level, at approximately seven percent. Figure 2-7 depicts the distribution of low-income households throughout the study area.

2.5 Minority Populations

The US Department of Transportation Order (5610.2) on Environmental Justice provides clear definitions of the four minority groups[2] to be addressed through Executive Order 12898.[3] Table 2-6 shows the number and percentage of minorities residing in each city, the study area, and northern Fulton County. In 2010, 44.4 percent of the population in the study area was minority. Alpharetta and Sandy Springs had the highest concentration of minority populations at 32.1 and 34.7 percent, respectively. Figure 2-8 depicts the distribution of minority populations throughout the study area.

2.6 Zero-Car Households

Transit-dependent populations are generally defined as households with no vehicle or workers 16 years and older using public transportation to get to work. By definition, public transportation includes bus or trolley bus, streetcar or trolley car, subway, railroad, ferryboat, or taxi. Five percent of the households in the study area had no vehicle and 3.8 percent used public transportation to get to work. Sandy Springs had the highest percentage of zero-car households. Sandy Springs and Dunwoody had the highest percent of workers 16 years and older using public transportation to get to work. Figure 2-9 shows the distribution of zero-car households and workers using public transportation to get to work.

2.7 Elderly Populations

Elderly populations are defined as persons that are age 65 or over. Table 2-8 shows the number and percentage of elderly residing in each city, within the study area, and northern Fulton County. The distribution of the elderly population in the study area is shown in Figure 2-10. According to the 2010 U.S. Census, approximately 9.4 percent of the population in the study area was elderly. The largest numbers of elderly in the study area reside in Sandy Springs and Roswell while Dunwoody has the largest percentage of elderly population.

2.8 Communities

This section provides a list, organized by city, of the neighborhoods and subdivisions located within the study area. This information was collected from various sources including the websites of Sandy Springs, Roswell and Alpharetta, Community Neighborhood Association websites for Dunwoody, a Google Maps survey, and a windshield survey.

2.8.1 Sandy Springs

The city occupies 38.8 square miles in northern Fulton County between the cities of Atlanta and Roswell. Its western boundary is the Chattahoochee River, and to the City's east are DeKalb County and a small portion of Gwinnett County.

The City of Sandy Springs was incorporated on December 1, 2005. It has the second-largest population of the cities in Metro Atlanta and the seventh largest in the Georgia. In 2010, the population was 46,267. It is forecast to have increased by 16.9 percent to 54,063 in 2040. The following neighborhoods are

1 According the to the US Census Bureau, "Following the Office of Management and Budget's (OMB) Statistical Policy Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index (CPI-U). The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps)."

2 Black - a person having origins in any of the black racial groups of Africa; Hispanic - a person of Mexican, Puerto Rican, Cuban, Central or South American descent, or of other Spanish culture or origin, regardless of race; Asian American - a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands; and, American Indian and Alaskan Native - a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.

3 Executive Order 12898 directs federal agencies to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high adverse human health or environmental effects of its activities on minority and low-income populations.

within the Sandy Springs portion of the study area based on review of the Comprehensive Plan and Google Earth. The list may not be comprehensive. •

- Aberdeen
- Autumn Chace
- Bakers Glen
- Briars of Dunwoody
- Carrington Place
- Carroll Manor
- Dunwoody Lake
- Dunwoody Springs
- Dunwoody Square Townhomes
- Gates at Glenridge
- Glen Meadow
- Glenridge Close
- Glenridge Park
- Greater Branches

2.8.2 Dunwoody

Dunwoody occupies 13.24 square miles in northern DeKalb County, west of Norcross and east of Sandy Springs. To the north it is bordered by Dunwoody Country Club and to the south by Interstate 285. In 2010, the population was 95,853. It is forecast to have increased by 13.9 percent to 106,924 in 2040.

The following neighborhoods are within the Dunwoody portion of the study area based on review of the Comprehensive Plan and Google Earth. The list may not be comprehensive.

- Devonshire
- Dunwoody Village
- Georgetown
- Jett Ferry/ Williamsburg
- Kings Down
- Perimeter Center
- North Springs
- Olde Village
- Tilly Mill
- Winters Chapel
- Withmere

2.8.3 Roswell

Roswell occupies 41.73 square miles in Fulton County, approximately 20 miles from Atlanta and nine miles from I-285. The city charter was by The Georgia General Assembly in 1854. Today, Roswell is the eighth largest city in Georgia. In 2010, the population was 88,346. It is forecast to increase by 8.5 percent to 93,835 in 2040.

The following neighborhoods are within the Roswell portion of the study area based on review of the Zoning Map and Google Earth. The list may not be comprehensive:

- Arbor Creek
- Aspen Point
- Barrington Farms
- Belcourt
- Bent Willow
- Carriage Station
- Chatham Park
- Concept 21
- The Gables
- Greenway Country Club Estates
- Grimes Bluff
- Heatherton
- Hembree Grove, Cove and Springs
- Hilton Hills
- Holcomb's Crossing
- Kings Bridge
- Liberty Square
- Martin's Landing
- Old Roswell Corners
- Olde Roswell
- Park Ridge
- Pine Valley Estates
- Riverview Estates
- Roswell Heights
- Roswell North
- Roswell Station
- Shadowbrook
- Taylor Oaks

- Whitehall
- Windsor Forest

2.8.4 Alpharetta

Alpharetta occupies 27.24 square miles in Fulton County north of Roswell, and south of Milton In 2010, the population was 57,551. It is forecast to have increased by 10.4 percent to 63,527 in 2040.

Although a majority of Alpharetta in the study area is dedicated to office and commercial uses, a review of the Zoning Map shows the following lists the neighborhoods in the study area (the list may not be comprehensive):

- Bluffs
- Compass Pointe
- Country Place
- Creek Ridge
- Glen Abbey
- Jamestowne
- Jecca Hills
- Manchester at Mansell
- Mannings Ridge
- Penbrooke
- Plymouth Colony
- Poplar Ridge
- The Preserve at Academy Park
- Signal Pointe
- Somerby at Westside
- Stone Brook Common
- Wedgewood Forest
- Westwind
- Westwood Park

2.8.5 Milton

Milton occupies 39.16 square miles in Fulton County, but only a small portion is located within the northern portion of the study area. It was incorporated on July 18, 2006, from the then unincorporated northwestern part of northern Fulton County.

It is bounded by the cities of Roswell and Alpharetta on the south, Forsyth County on the east, and Cherokee County on the north and west. In 2010, the population was 32,661. It is forecast to have increased by 3.7 percent to 33,859 in 2040.

Due to the small portion of Milton within the study area, only two neighborhoods are within the study area:

- Avensong
- Manor View

2.8.6 Johns Creek

The City of Johns Creek is not directly within the study area, but it occupies 31.39 square miles nearby in the eastern portion of northern Fulton County. It is bound by Alpharetta on the north, Roswell on the west and Gwinnett County on the south and east. Incorporated on December 1, 2006, Johns Creek includes the remaining lands in eastern portion of northern Fulton County not previously incorporated into Alpharetta and Roswell. Today, Johns Creek is an affluent suburb boasting a calm bucolic lifestyle. In 2010, the population was 76,728.

2.9 Community Facilities

Community facilities data in the study area was gathered from an ARC database and from a Google Earth survey. Table 2-9 shows the number of facilities in the study area by city and type. Table 2-10 lists the community facilities in the study area by name and city. Each resource with an asterisk in Table 2-10 indicates the facility is part of the ARC database. Figure 2-11 maps these facilities.

2.10 Land Use and Development Characteristics

Land use plans and policies are core drivers of the potential for public transit. This section presents the study area's applicable land use planning policies of regional entities and of each city, as well as existing and planned land uses.

2.10.1 Regional Plans and Policies

While the cities are the only jurisdictions with the power to make land use decisions, regional entities like MARTA and ARC can influence the general transit-supportive nature of land use. The means of influence include financial incentive programs, technical support, or, in the case of MARTA, acting as the developer around transit stations.

2.10.1.1 ARC's Unified Growth Policy Map

The Unified Growth Policy Map (UGPM) and Plan 2040 Regional Development Guide (ARC 2011) provide a regional perspective and give direction for growth by combining local and regional

plans from around the Atlanta Region and defining regional context zones. The cities located within the study area lie within an area classified as an Established Suburb. [4] The recommended policies in the UGPM for Established Suburbs include:

- Maintain the existing transportation facilities in a state of good repair;
- Maintain and expand access to regional transit services, including bus rapid transit (BRT), light rail, and heavy rail;
- Establish strategies for improved road design, such as establishing minimum connections to existing road networks;
- Promote programs that encourage safe walking and biking while reducing traffic congestion; and
- Create neighborhood-scale mixed-use and walkable places near existing residential neighborhoods.

2.10.1.2 Livable Centers Initiative (LCI)

The ARC has had a strong role in encouraging transit oriented development (TOD) throughout the region, in particular through its LCI program. The LCI program utilizes federal transportation monies to fund planning studies designed to integrate land use and transportation planning in small areas.

This program has greatly influenced the promotion of TOD planning in the region. LCI studies have resulted in master plans for at least 11 MARTA station areas. These studies have resulted in numerous jurisdictions changing land use policies to support TOD. The following LCI studies have been completed in, or near, the study area:

- Roswell Road Corridor (City of Sandy Springs)
- Sandy Springs LCI
- Perimeter
- Dunwoody Town Center
- SR 9 – Atlanta Road
- Roswell Town Square/Atlanta Street Corridor
- North Point Activity Center LCI Study Alpharetta
- Alpharetta Town Center
- Milton – SR 9
- McFarland – Stoney Point
- Georgetown / North Shallowford Master Plan

2.10.1.3 MARTA Sponsored Transit-Oriented Development

As a regional transit provider and community stakeholder, MARTA is a strong proponent of Transit-Oriented Development or (TOD). TOD is a type of community-based development that is compact, viable, & sustainable, and within an easy walk - 1/4 to 1/2 mile - of a transit station or stop. TODs are generally comprised of a compatible mix of residential, retail, and office uses, and may include other uses – such as hotels, recreational and civic facilities. Mixed use development encourages pedestrian friendly street design with safe routes for pedestrians and bicyclists, and with convenient and safe access to transit facilities. Such development should be well-suited to and compatible with its' surrounding neighborhood.

To provide guidance and a common understanding among transit agencies, local governments, regional planners, community groups and developers, MARTA reviewed the best practices of ten other North American transit systems, and issued Transit-Oriented Development Guidelines. MARTA's TOD Guidelines encourages consistent, quality development and sound land use and infrastructure decisions that are based upon a shared set of standards for the region. These guidelines were approved and adopted by the MARTA Board of Directors in 2010.

In addition to planning support and outreach, MARTA has been an active joint development partner in TOD projects around several of its rail stations since 1987. One Atlantic Center, MARTA's first joint development, was completed in 1987 and was the tallest building in Atlanta until 1992. Lindbergh City Center, MARTA's largest TOD, is comprised of over 1 million square feet of Class A office space, 700+ multifamily units, and over 200,000 square feet of retail. Other, smaller scale joint development projects can be found adjacent to the Chamblee, Lakewood/Ft. McPherson, Lenox and Medical Center MARTA Stations.

2.10.1.4 Community Improvement Districts

A community improvement district (CID) is a self-taxing business entity with the purpose of promoting the needs of the business community. Because transportation accessibility is critical to businesses, many CID initiatives are related to transportation. The two CIDs in the study area are the North Fulton CID and the Perimeter Center CID.

The North Fulton CID, organized in 2003, includes the cities of Alpharetta, Milton and Roswell. The cities collaborate with the CID on projects, planning and initiatives. The CID's vision for the future is detailed in the Blueprint North Fulton master plan, a strategic land use and transportation plan, designed to create a cohesive vision for future growth and development along the Georgia 400 Corridor. The following is a list of projects proposed

4 Established Suburbs are characterized by suburban style development patterns that primarily function around an automobile-dependent transportation system. Greenfield residential development is typically built out, and redevelopment is unlikely to occur in the single-family residential neighborhoods. Future growth is most likely to occur in existing commercial and industrial nodes. Where new development can occur, land use and transportation related general policies are laid out by the UGPM for how new development can best function in order to serve the surrounding community.

in the plan:

- Advocate for GA 400 improvements
- Add sidewalks and bike lanes to Encore Park bridge (RTP project #FN-253)
- Construct Big Creek to Encore Park bikeway/sidewalk
- Reconstruct Windward Parkway/Windward Concourse intersection
- Reconstruct Haynes Bridge streetscaping
- Install landscaped entryways at Haynes Bridge, SR 120, and Windward Parkway
- Extend Mansell Road streetscaping to Westside Parkway and Big Creek Greenway
- Install wayfinding signs for the District/ coordinate traffic signals in the District
- Incorporate Blueprint plan into municipal land-use plans
- Develop graphic standards for land use in the District
- Create model zoning regulations for the District

The Perimeter CID (PCID) supports several large projects in the commercial and office district surrounding Perimeter Mall including:

- Hammond Half-Diamond Interchange
- Ashford Dunwoody Diverging Diamond Interchange
- Streetscapes at the Medical Center, along Lake Hearn Drive, along Perimeter Center Parkway, Ashford Dunwoody South, Peachtree Dunwoody Road
- Sidewalk installation and intersection improvements along Ashford Dunwoody Road, Perimeter Center West, Peachtree Dunwoody Road and Mt. Vernon Highway

2.10.2 City Comprehensive Plans

Summarized below are the comprehensive plans prepared for each city in the study area. All plans follow the Standards and Procedures for Local Comprehensive Planning adopted by the Georgia State Department of Community Affairs (DCA) in May 2005. When examining the policy framework of the cities, the following factors were assessed to gauge transit support:

- Community vision, goals, and policies relating to encouraging a transit-supportive environment found within a city's comprehensive plan
- Implementation strategies, and short-term action items supporting transit, found within a city's comprehensive plan.

Transit-supportive land uses such as mixed-use and higher-density residential shown on the city's future land use or future development map.

2.10.2.1 Sandy Springs

The City of Sandy Springs, Georgia 2027 Comprehensive Plan (City of Sandy Springs 2007) represents the City's vision for its future over a 20-year period and contains the policies and capital projects intended to implement that vision.

The plan is intended to assist the City with future decisions in policy areas, such as land use and transportation, and to provide a framework for evaluating future development proposals. Seven transportation goals in five themes are included in the Plan. They are as follows:

- Mobility
- System Balance
- Safety
- Land Use
- Quality of Life

Several areas in the study area have been designated as character areas [5]. Each character area is a planning sub-area where more detailed, small-area planning and implementation of certain policies, investments, incentives, or regulations may be applied in order to preserve, improve, or otherwise influence its future development patterns. Examples include the following:

Regional Transit-Oriented Activity Center: This designation corresponds with the large regional employment center, Perimeter Center, located around the Perimeter Mall area. Development consists of high-intensity, mid- and high-rise office towers, and an orientation to the MARTA rail stations. In the parts of this district outside reasonable walking distance of MARTA rail stations, development is or will be oriented toward bus transit available along major corridors.

Urban Residential: This category applies to higher-density residential developments, mostly apartments. Densities are generally at least eight units per acre with most complexes developed at densities of 12 to 14 units per acre. Some townhouse developments are found in this category, usually at lower than average densities. These character areas are located within or adjacent to the Roswell Road corridor or between GA 400 and Roswell Road. Character consists mostly of "garden style" apartments. In the case of fee-simple townhouses, character consists of small, narrow lots (20' by 100' typical) oriented to a public or private street grid pattern. Some of these communities may be gated, and most are within walking distance to bus transportation

5 Character areas are defined in the Sandy Springs Comprehensive Plan as specific geographic areas with:

•unique or special characteristics to be preserved or enhanced such as downtown, a historic district, or a transportation corridor;

•the potential to evolve into a unique area with more intentional guidance of future development through adequate planning and implementation; or

•a need for special attention due to unique development issues.

Employment: This category corresponds with areas in Sandy Springs near I-285 at Powers Ferry and GA 400 that have been developed primarily with office towers. Some commercial uses may also exist in these developments. The character of these areas is one where the development pattern focuses private vehicle transportation, though provisions for pedestrians are provided. Parking is provided primarily in decks. Some employment areas are lower intensity, single-story office and business parks. These districts are close to commercial areas and are generally served by bus transit.

2.10.2.2 Dunwoody

The City of Dunwoody Comprehensive Plan (City of Dunwoody 2010) covers the 2010-2030 planning period, establishes a long-range vision, and commits the City to a short-term action plan. Land use and transportation related goals established for the area in this plan include:

- Creatively address parking and congestion as a part of new local development
- Identify solutions for structural parking
- Establish bicycle network for new connectivity throughout the City so that "all roads lead to the Village"[6]
- Reduce surface parking and promote livable centers in the immediate areas surrounding MARTA station
- Promote/establish new connectivity
- Coordinate with the City of Sandy Springs for LCI Updates and implementation
- Coordinate with the ARC for implementation of future LCI study updates
- Coordinate with MARTA regarding BRT (or other regional service) and urban design surrounding all transit stations
- Establish infrastructure thresholds that new developments must meet.

General transportation goals and policies were also identified in the Community Agenda. In summary, the goals and policies related to transportation and land use in and around Dunwoody emphasize:

- Safe and efficient bicycle and pedestrian access
- Improved transit access
- Maintenance of a multi-modal balance within the transportation network
- Maintenance of an efficient roadway network not overburdened by congestion
- Improvements to efficiency along roadways while carefully balancing solutions that involve increased roadway capacity against potential impacts to the multi-modal environment and area character
- Maximizing the use of existing infrastructure and minimizing the conversion of undeveloped land at the urban periphery by encouraging development or redevelopment of sites closer to the downtown or traditional urban core of the community

2.10.2.3 Roswell

Imagine Roswell 2030 Comprehensive Plan (City of Roswell 2011) Community Agenda establishes the vision, policy, and development framework for the 20-year planning horizon to the year 2030. The transportation goals in the Plan are:

- *Enhance Safety – not just for vehicles, but for all users: motorized vehicle operators, pedestrians, bicyclists and transit riders*
- *Manage Congestion – focus on providing innovative yet realistic options for local traffic including key intersections, as well as creating new connections*
- *Increase Bicycle, Pedestrian and Transit Mobility – ensure that all City residents have safe bicycle and pedestrian mobility options and that transit service is as accessible to residents and visitors as possible*
- *Support Redevelopment – provide transportation systems that support redevelopment while preserving Roswell's character. This will allow the City to plan for a prosperous future.*

2.10.2.4 Alpharetta

The City of Alpharetta Comprehensive Plan 2030 (City of Alpharetta 2011) is a long-range plan for guiding development in the city for the next twenty years. The overall goal of the plan is to accommodate development in a timely, orderly, and efficient arrangement of land uses and public facilities and services that meet the needs of the present and future residents and businesses of Alpharetta.

The transportation goal of the plan is provide a transportation system that continues to keep pace with growth and integrates various modes of travel in order to allow mobility options. Policies and strategies that relate to the project that were established to accomplish this goal include:

- *Increase transportation accessibility and mobility*
- *Enhance connectivity to community destinations with a street network that expands route options for people driving, biking, walking and riding public transportation*
- *Support transit friendly streets, bicycle routes and walkable communities that provide linkages to activity centers within the city*
- *Promote the development of compact mixed-use and transit-oriented development in appropriate locations*
- *Provide multi-modal transportation options*
- *Develop "Complete Streets" guidelines that encourage a system that accommodates all modes of travel while still providing flexibility to allow designers to tailor the project to unique circumstances*

6 "Village" refers to the Dunwoody Village character area, as indicated their comprehensive plan. The Village has historically been the 'heart' of Dunwoody and is represented by the area surrounding Chamblee-Dunwoody Rd., Mt. Vernon Rd., and Dunwoody Village Pkwy

- *Extend rail transit to Alpharetta, improve park and ride lots, provide express bus service and expand local bus and shuttle services*
- *While examining new development proposals, assess their ability to offer transportation alternatives and reduce the number of vehicular trips*
- *Improve the environment and air quality*
- *Minimize transportation impacts on social, environmental, and historic resources by reducing total vehicle emissions*
- *Require development designs to encourage pedestrian activity that reduces on-site vehicular dependence*
- *Encourage accommodations for alternative fuel vehicles*

2.10.2.5 Milton

The City of Milton 2030 Comprehensive Plan: Community Agenda (City of Milton 2011) is the vision and set of policies developed for the community's future. Transportation and land use goals of the Plan related to the project are:

- Encourage mixed-use developments, where appropriate, that are human scale, less auto-oriented and include neighborhoods that are walkable, bicycle and wheelchair friendly
- Encourage walking, biking, car-pooling, and other alternative transportation choices in making development decisions
- Target and encourage transportation improvements that support desired development patterns for the community

2.10.2.6 Johns Creek

Although not directly in the study area, Johns Creek's development patterns and policies will have an effect on the travel patterns for the surrounding sub-regions, including northern Fulton County. The City of Johns Creek 2009- 2030 Comprehensive Plan (City of Johns Creek 2009) provides a vision and policy framework for shaping the City's future – its social, built and green environment. Transportation and land use goals of the Plan related to the project are:

- Enforce existing sidewalk regulations and support additional measures to accommodate pedestrians Citywide. Promote walkability between homes, schools, shopping, civic uses and open space
- Consider enhancement of multi-modal transportation
- Promote travel demand management strategies to reduce trips
- Encourage increased mixed-use development/ redevelopment
- Support Georgia Regional Transportation Authority (GRTA), MARTA, and Georgia Department of Transportation (GDOT) efforts related to express transit service and commuter rail

2.10.3 Existing Land Uses

This section presents an overview of existing land uses within the study area. It describes the land use composition and geographic distribution of existing land uses. The ARC's 2009 Land Pro data was used to assess the existing land use data. Land Pro is the ARC's land use and land cover data set developed for regional planning.

An analysis of existing land uses shows that the principal land use is residential with 52.1 percent of the study area. Open space and Commercial land uses also comprise substantial portions with 12.8% and 23.7%, respectively. Conversely, industrial, institutional, water, other urban, and transportation-communication-utilities (TCU) land uses comprise a small portion, with a combined 11.8 percent. The distribution of existing land uses is included in Table 2-11, depicted in Figure 2-12, and mapped in Figure 2-13. They are described by city in the following subsections.

2.10.3.1 Sandy Springs

Sandy Springs represents approximately 27.1 percent of the study area. Within the Sandy Springs portion of the study area, existing land uses are primarily residential and commercial, which is predominantly office and institutional uses, though some neighborhood commercial uses may also exist. Figure 2-14 shows the distribution of land uses in the Sandy Springs portion of the study area.

2.10.3.2 Dunwoody

Dunwoody represents approximately 14.6 percent of the study area. Within the Dunwoody portion of the study area, existing land uses are primarily residential and commercial. Figure 2-15 shows the distribution of land uses in the Dunwoody portion of the study area.

2.10.3.3 Unincorporated DeKalb County

A small portion of unincorporated DeKalb County represents approximately 1.3 percent of the study area. Within the unincorporated DeKalb County portion of the study area, existing land uses are primarily residential and commercial. Figure 2-16 shows the distribution of land uses in the unincorporated DeKalb County portion of the study area.

2.10.3.4 Roswell

Roswell represents approximately 26.2 percent of the land area in the study area. Within the Roswell portion of the study area, existing land uses are primarily residential, open space, and commercial. Figure 2-17 shows the distribution of land uses in the Roswell portion of the study area.

2.10.3.5 Alpharetta

Alpharetta represents approximately 26.1 percent of the land

area in the study area. Within the Alpharetta portion of the study area, existing land uses are primarily commercial, open space, and residential.

Figure 2-18 shows the distribution of land uses in the Alpharetta portion of the study area.

2.10.3.6 Milton

Milton represents approximately 4.8 percent of the land area in the study area. Within the Milton portion of the study area, existing land uses are primarily residential, commercial, and open space. Figure 2-19 shows the distribution of land uses in the Milton portion of the study area.

2.10.4 Future Land Uses

The future land uses are summarized below by city. Each city is reviewed separately because an aggregation of the different categories into one overall corridor plan would not provide the level of detail necessary for analysis. Each city creates its own unique land use categories appropriate for their community, but generally, these categories include some version of residential, commercial, office, open space or conservation, mixed-use, warehouse, and institutional.

2.10.4.1 Sandy Springs

Sandy Springs has adopted a future land use map that also includes the concept of Land Use Nodes. There are 14 different Land Use Nodes throughout the city of varying size, intensity and character. The five of these nodes within the study area are described below.

Land Use Node #6: PCID (Perimeter Community Improvement District - Live Work Regional only)

In the PCID, properties are situated along the GA-400 Corridor, generally located within the boundaries of the PCID. The vision for this area is as follows:

- Parcels around the Dunwoody, Sandy Springs and Medical Center MARTA transit stations should have high-density developments incorporating a mix of land uses including residential, commercial and institutional uses.
- New developments should incorporate internal roads creating a network of secondary roads that distribute the vehicular traffic to include inter-parcel access whenever possible.
- New development should incorporate open and green space features such as plazas, parks and similar features.
- Preserve single-family neighborhoods surrounding the PCID's residential core.
- New residential development should encourage home ownership in balance with rental housing.
- Encourage the inclusion of institutions and schools in the area, in order to create a true urban center.

Land Use Node #11 PCID- No Retail

The boundaries of this node are GA 400, Peachtree-Dunwoody Road, and some parcels on its east side to the north of Abernathy Road, Live-Work Neighborhood and office parcels. The vision for this node is as follows:

- Parcels adjacent to the North Springs MARTA Station shall be developed consistent with the Live-Work and residential densities.
- Preserve single-family neighborhoods and provide appropriate land use transitions.
- Uses transition in density and intensity from the Land Use Node to the residential neighborhoods to the east and north.

Land Use Node #12 Dalrymple

The boundaries incorporate all properties with frontage along Roswell Road at the intersection with Dalrymple Road. The vision for this node is:

- The assemblage of smaller lots should be encouraged to accommodate a more consistent character in terms of architecture and uses, and provide for an elimination or reduction of curb cuts along Roswell Road.
- Projects should incorporate transitions to existing neighborhoods through reductions in height, the incorporation of less intense uses, the use of compatible architecture, the utilization of traditional or natural materials, and open and green space.

Land Use Node #13 Northridge

This node includes all properties with frontage along Roswell Road at the intersection with Northridge Road. The vision for the node is as follows:

- The area should be developed with a mix of commercial, office, and residential uses, with consideration given to the proximity of the area to the GA-400 corridor and the possible need to continue to provide automobile oriented commercial businesses in keeping with redevelopment efforts.
- Single-use developments in this area, especially office developments, should be discouraged. Accessory commercial uses should be incorporated into office developments to assist in limiting vehicular trips.

Land Use Node #14 Dunwoody Place

Located on the northeast corner of the Roswell Road and Dunwoody Place intersection, this node includes the properties bounded by Roswell Road on the west, North River Parkway on the north, Winding River on the east (with some exceptions), and Dunwoody Place on the south. The majority of the existing development in the area is characterized by largely disjointed commercial and multi-family residential development. The vision for this node is as follows:

- A mix of commercial, office and residential uses at a substantial density should be allowed to encourage redevelopment and to support the market of the northern portion of the City.

- Consolidation of properties and the collective redevelopment of multiple properties should be encouraged in the area to perpetuate economic vitality, increased green space, and an improved transportation system.

Future Land Use Outside of Land Use Nodes

Sandy Springs is a well-established community with little undeveloped property remaining. Because of this, most of the Future Land Use designations reflect the existing development patterns. Much of the area not in Land Use Nodes is designated for residential or commercial, with commercial along major corridors and higher density residential closer to GA 400.

From the southern point of the study area, a large pocket of Residential (2-3 Units per Acre) is sandwiched between the Land Use Nodes along Roswell Road and GA-400. Farther north, along Abernathy road, a section is designated for Residential (3-5 Units per Acre) adjacent to an existing neighborhood designated for Residential (2-3 Units per Acre). Along Pitts Road, a large parcel is designated for Residential (12-20 Units per Acre). In the northern most point of the city, adjacent to the Chattahoochee River national Recreation Area, is a large section of land designated for Residential (8-12 Units per Acre).

2.10.4.2 Dunwoody

The City of Dunwoody has adopted a Character Area map rather than the traditional parcel-based Future Land Use Map. The two Character Areas in the Dunwoody portion of the study area are described below:

Suburban Neighborhood

The vision for the Suburban Neighborhood is a stable, owner-occupied single-family residential area that is characterized by a traditional suburban pattern of development with accessible sidewalks, extensive landscaping, and access to parks and functional greenspace, places of worship and schools.

Perimeter Center

The vision for the Perimeter Center is to create a "livable" regional center with first-class office, retail and high-end restaurants in a pedestrian and bicycle-oriented environment that serves as a regional example of high quality design standards. By 2030, the area will add public gathering space and pocket parks, continue to create transportation alternatives, mitigate congestion, and reduce remaining excessive surface parking. All future development continues to emphasize high quality design standards and building - materials and incorporates the current national best practices on energy efficiency, where possible. Dunwoody recognizes the value of creating mixed-use, transit-oriented development within walking distance of public transit stations. However, the City has concerns about the impact of such development on the City's infrastructure and schools. To ensure proper controls on residential growth, the City recommends zoning changes to require Special Land Use Permits (SLUP) for future high-density housing projects.

Development within the Perimeter Center Character Area that abuts the Suburban Neighborhood Character Area should demonstrate conformance with the principles of a transitional area. Unless accompanied by an exceptional buffering and usable open space provisions, density should be no greater than 4-8 units to the acre and commercial uses should be less than 20,000 square feet.

2.10.4.3 Roswell

The City of Roswell Future Land Use Map from the 2025 Comprehensive Plan primarily maintains the existing development patterns. The southern boundary of Roswell is adjacent to the Chattahoochee River National Recreation Area and is designated as Parks/Recreation/Open Space. North of this area, west of GA 400, is a large area of Low Density Residential (1-1.5 Units per Acre), which appears to be an existing residential community.

The majority of the land in the study area in Roswell is designated for residential use with High Density Residential (5-8 Units per Acre) located adjacent to GA 400. It appears that existing neighborhoods are designated Medium Density Residential (3-5 Units per Acre) and Suburban Residential. Holcomb Bridge Road is shown as General Commercial. Office Campus is the designated use for land adjacent to the eastern edge of GA 400 and along Old Alabama Road. The northern boundary of Roswell is another large area designated for Parks/ Recreation/ Open space where the Roswell Greenway Trail is located.

2.10.4.4 Alpharetta

The City of Alpharetta Future Land Use Map from the Comprehensive Plan designates most of the land adjacent to the GA 400 corridor for Office Center uses. A large portion of the area around North Point Mall is designated for Retail Sales and Services. The eastern boundary of the study area is almost parallel with the Big Creek Greenway, a linear park and conservation area.

The western boundary of the study area is located closer to the SR 9 and the central business district of Alpharetta, and the future land use generally reflects existing development patterns. A large business, manufacturing and warehouse park is planned directly across GA 400 from the North Point Mall, surrounded by Office Center designation. Farther north, Professional Office is planned along Old Milton Parkway. In the northern most section, pockets of Medium and High Density Residential closer to the GA 400 border an established neighborhood of Low Density Residential.

2.10.4.5 Milton

Only the southeastern most corner of Milton is located in the study area. A large portion is designated as Retail and Services between Windward Parkway and Webb Road. The land adjacent to GA 400 corridor east of McGinnis Ferry Road is designated for Office and Residential- 8-12 Units/Acre.

2.10.4.6 Johns Creek

The Future Development Map for Johns Creek is not parcel based. It is divided into 12 Character Areas. The objective of most of the Character Areas is to preserve the existing suburban or bucolic nature of the city. Eight activity nodes are targeted for possible future commercial growth on Jones Bridge Road, Abbotts Bridge Road, Old Alabama Road, States Bridge Road,

Bell Road and Medlock Bridge Road. A Technology Park Character Area is highlighted as having the need for transit access.

2.10.5 Zoning

Table 2-12 lists the zoning designations for the study area. These categories include the potential for a wide variety of land uses from agricultural to industrial. The array of residential districts includes large-lot requirements, small-lot requirements, and some apartments. The study area also contains some property zoned for mixed use.

2.10.6 Developments of Regional Impact

Several major land development projects classified as "Developments of Regional Impact" (DRI)[7] have been proposed and/or constructed in the study area. Table 2-13 provides a list of DRIs within the study area filed with the ARC since the year 2000 by city and date of filing. These are shown geographically in Figure 2-20.

7 DRIs are large developments where the impacts on the surrounding community are reviewed by regional entities to ensure that the community's infrastructure is capable of managing the potential new users.

3.0 Environmental Features

This chapter describes the study area's environmental conditions and features. Topics include:

- Water Resources;
- Protected, Threatened, and Endangered Species;
- Hazardous Materials;
- Noise;
- Air Quality;
- Parks; and
- Cultural and Historic Resources.

3.1 Water Resources

This section describes the water bodies, wetlands, and floodplains within the study area. For the purposes of this Existing Conditions and Future Trends Report, a desktop survey to identify water resources was performed.

3.1.1 Water Bodies

The study area includes numerous water bodies including rivers, streams, lakes and ponds. The named rivers and streams in the study area include Long Island Creek, March Creek, Chattahoochee River, Big Creek, Foe Killer Creek, and Camp Creek. Numerous unnamed streams are intermittent or perennial. There are no significant lakes or ponds in the study area. Figure 3-1 depicts the water bodies within the study area. ARC and GDOT provided the data.

3.1.2 Wetlands

The National Wetlands Inventory (NWI) indicates the approximately 681 acres of recorded wetlands within the study area. Figure 3-1 depicts wetlands within the study area.

3.1.3 Floodplains

According to the Flood Insurance Rate Maps provided by the Federal Emergency Management Agency (FEMA), there are approximately 2,016 acres of floodplains within the study area. They are illustrated in Figure 3-2.

3.2 Protected, Threatened, and Endangered Species

Table 3-1 identifies protected plant and animal species listed by the Georgia Department of Natural Resources (GADNR) and the US Fish and Wildlife Service (USFWS) for Fulton, DeKalb, and Forsyth Counties. The GADNR characterizes these as known occurrences within a particular county of special concern plants, animals and natural communities, and "rare elements".

3.3 Hazardous Materials

A preliminary search for sites within the study area containing contaminated or hazardous materials relied upon the EPA's Geospatial Data Access Project GIS Shapefile, http://www.epa.gov/enviro/geo_data.html, October 2011, and the Multisystem Envirofacts Query Form (http://www.epa.gov/enviro/html/

multisystem.html). These sources provide data from multiple EPA environmental databases of permitted-facility information including toxic chemical releases, water discharge permit compliance, hazardous waste handling processes, Superfund status, and air emission estimates.

The EPA Geospatial Data Download file(s) includes records from the following sources:

- Superfund National Priorities List (NPL)
- Resource Conservation and Recovery Act Information (RCRAInfo) - EPA and State Treatment, Storage, Disposal facilities
- Toxic Release Inventory System - All reported years including 2009
- Integrated Compliance Information System (ICIS) and Permit Compliance System (PCS) - National Pollutant Discharge Elimination System (NPDES) Majors
- RCRAInfo - Large Quantity Generators (LQG)
- Air Facility System (AFS) - Major discharges of air pollutants
- RMP - Risk Management Plan
- SSTS - Section Seven Tracking System (Pesticides)
- Assessment Cleanup and Redevelopment Exchange System (ACRES) - Brownfield Properties

The Georgia Department of Natural Resources (GADNR), Environmental Protection Division (GEPD) maintains a Hazardous Site Inventory (HIS) database (Revised July 2011). In November 2011, one site was identified, the Huntridge Shopping Center located at 8540 Roswell Road, Sandy Springs, 30350. It has a suspected toxic chemical release (HIS site number 10758).

3.3.1 Hazardous Waste Designations

As detailed in Table 3-2, the preliminary EPA Geospatial Data Download found five sites within the study area that meet the following designations.

3.3.1.1 Air Facility System (AFS)

The Air Facility System (AFS) is a computer-based repository for information about air pollution in the United States. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. There are two AFS sites within the study area.

3.3.1.2 Resource Conservation and Recovery Act Information (RCRAInfo) Sites

Those that generate, handle, and dispose of hazardous waste are required to provide information on their activities to state environmental agencies. These agencies then provide the information to regional and national EPA offices through the RCRAInfo System. Information on cleaning up after a release of hazardous materials must also be reported through RCRAInfo. There are two RCRA sites within the study area.

3.3.1.3 Toxic Release Inventory (TRI) Sites

The TRI provides information on the release and transfer of toxic chemicals from federal and industrial facilities in any given area. The TRI contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment. Manufacturers of these chemicals are required to report the locations and quantities of chemicals stored on-site to state and local governments. The reports are submitted to the USEPA and state governments. USEPA compiles this data in an on-line database. There are two TRI sites within the study area.

3.3.1.4 Section Seven Tracking System (SSTS)

SSTS tracks the registration of all establishments producing pesticides and tracks annually the types and amounts of pesticides, active ingredients, and related devices that are produced, sold, or distributed.

3.4 Noise

The Federal Transit Administration's (FTA) Transit Noise and Vibration Impact Assessment guidance manual (May 2006) provides a basis for the identification of potential noise sensitive land uses within the study area. Table 3-3 shows the FTA land use categories. This information provides a general assessment of the land uses that are noise-sensitive. Table 3-4 identifies the existing land uses within the study area and provides the FTA land use category that applies.

3.5 Air Quality

Metropolitan Atlanta currently exceeds national ambient air quality standards and is designated an air quality "nonattainment" area for ozone and particulate matter 2.5 by the USEPA. However, as of January 25, 2012, Atlanta now meets the Federal one-hour ozone standard, one of several measurements to determine when air becomes unhealthy. The region still must demonstrate a plan to continue meeting the standards over the next 20 years.

This project is not included in the approved ARC's Plan 2040 RTP. As such, the project is not part of the Conformity Determination Report and is not included within the air quality model and travel demand modeling processes. However, air quality impacts

will be assessed as part of the alternative development process. Additionally, once the Locally Preferred Alternative is selected for this project, it can be submitted for inclusion into the next RTP update.

3.6 Parks

Information identifying and describing public parks within the study area was obtained from ARC and each city. Table 3-5 lists the public parks, the responsible jurisdiction, type, total acreage, and acreage within study area. There are 31 public parks, totaling approximately 1,850 acres within the study area. This group of parks extends beyond the study area to cover a total of approximately 8,547 acres.

The study area contains parks of different types including 17 Community parks, one Greenway, one Forest, one Conservation park, one historic site, one municipal park, two county parks, and seven Recreational Facilities. Table 3-5 lists these parks by type with the responsible jurisdiction and both total acreage and acreage within the study area. Figure 3-3 presents a map depicting parks.

3.7 Historic and Cultural and Resources

This section discusses the historic resources identified within the study area. The following sources were reviewed to complete this survey:

- National Register of Historic Places (NRHP). This is a register of buildings and districts within the United States maintained by the National Park Service.
- Natural Archaeological Historical Resources Geographical Information System (NAHRGIS) database. This is a statewide collection of buildings, structures, landscapes and districts surveyed by the Georgia Historic Preservation Division, the DCA, and GDOT. The NAHRGIS database also includes Historic American Building Survey (HABS) data and Historic American Engineering Record (HAER) data. The archaeological elements of this database are collected by the ARC and are not distributed to the public in order to protect the integrity of the sites.
- Section 106 Survey data. The ARC collects multiple data sources for Historic and Cultural Resources, including the Section 106 Surveys completed by GDOT to meet requirements of the National Historic Preservation Act (36 CFR 400). Section 106 surveys include both structures and districts.
- Cemetery data. The ARC collects historic cemetery data from local jurisdictions, the National Register and NAHRGIS.
- Georgia Historic Bridge Survey (GHBS). This survey is maintained by GDOT and lists historic covered bridges in the state.

The cities were contacted in order to identify any additional resources or regulatory requirements for historical sites or districts in the study area. Based upon this research, no additional resources were identified.

The following websites for local historical societies also were reviewed for any additional information:

- Alpharetta Historical Society
- Dunwoody Preservation Trust
- Roswell Historical Society
- Sandy Springs Historic Preservation Society

The following sections discuss the findings of each source that was reviewed. Figure 3-4 depicts all of the resources within the study area except for the archaeological sites.

3.7.1 National Register of Historic Places and Districts

One NRHP-listed district is located within the study area, the Roswell Historic District. Eight properties in the study area are listed on the NRHP:

- The Cheek-Spruill House (Dunwoody),
- Glenridge Hall (Sandy Springs),
- Barrington Hall (Roswell),
- Bulloch Hall (Roswell),
- Founders Cemetery (Roswell),
- Independence High School (Roswell),
- Ivy Hall (Roswell),
- Roswell Mill Buildings A and C (Roswell).

3.7.2 NAHRGIS Sites

There are 527 surveyed sites in the study area, mapped in Figure 3-4, including the nine NRHP-listed places and districts identified above. Most of these sites are clustered around the Roswell Historic District. The sites were surveyed between 1977 and 2000, and include various structures from single-family homes to commercial and religious buildings. Due to the time lapse since the last surveys, the NRHP eligibility will need to be reviewed.

Eleven identified archaeological sites within the study area are located in Roswell, Alpharetta and Milton. Identification, local jurisdiction and eligibility are provided in Table 3-6.

3.7.3 Section 106 Surveys

Section 106 of the National Historic Preservation Act of 1966 requires federal agencies and those entities utilizing federal monies or obtaining federal permits to take into account the effects of the projects on properties listed or eligible for listing

on the NRHP. The ARC has collected data provided by GDOT from previous Section 106 considerations for projects within the study area.

It includes seven districts in the study area, all located near I-285 and mapped in Figure 3-4. Surveyed in 2010, all but one district is proposed eligible for NRHP listing. All of the districts incorporate neighborhoods built in the ranch or colonial revival architectural styles.

3.7.4 Cemeteries

The ARC also tracks cemeteries in the region based on submittals from local jurisdictions as well as from NAHRGIS and the NRHP. Eight potentially historic cemeteries are located in the study area, depicted in Figure 3-4:

- Arlington Cemetery in Sandy Springs
- Providence Baptist Church in Sandy Springs
- Lebanon Cemetery in Roswell
- Old Roswell Cemetery
- Roswell Presbyterian
- Greenlawn Cemetery in Roswell
- Maxwell Cemetery in Alpharetta next to Fire Station #3
- Resthaven Cemetery and the Ruth Teasley Upshaw Memorial in Alpharetta

3.7.5 Georgia Historic Bridge Survey

No historic bridges were identified within the study area.

4.0 Transportation Conditions

The GA 400 study area, like much of the Atlanta region, is burdened by congested roadways. The operating conditions on the roadway network in the design year 2040 are forecast to worsen based upon current and forecast volume to capacity (V/C) ratios [7]. Of the nineteen arterial roadways in the study area, only seven had a V/C ratio under 1.0 in 2010. In 2040, only three are forecast to have a V/C ratio under 1.0 and two roads, McGinnis Ferry Road and Glenridge Connector, are forecast to have a V/C ratio of 2.0. In 2010, GA 400 had a V/C ratio of 1.4, which is forecast to remain the same in 2040.

Except for the southern portion of the study area, which is served by MARTA heavy rail in Sandy Springs and Dunwoody near the Medical Center and Perimeter Center, transit travel times are not competitive with roadway travel.

These projected conditions should be viewed against a background of increased travel demand, especially during peak periods. Between 2010 and 2040, Home Based Work Trip (HBW) attractions, are projected to increase by 51.8 percent. These figures represent total person trips regardless of mode. Although transit HBW attractions are projected to increase 48.1 percent and productions are projected at 38.0 percent, transit mode share would remain below 10 percent based on current land-use assumptions and programmed transportation investments. These projections explain the forecasts of increased congestion on roadways. Mobility in the study area would continue to be less than desirable.

The following discussions include tables that describe the existing and planned transit and roadway facilities and the existing and projected operating conditions.

7 V/C ratios are measures of congestion in which a ratio of 1.0 indicates that the volume is identical to the capacity.

4.1 Transit Services

Transit service to and within the study area is provided primarily by MARTA heavy rail and bus. GRTA also operates two lines that connect the southern portion of the study area with express bus service at peak hours from the north and southeast from outside the study area. Rail service extends from Downtown Atlanta to the major retail and employment centers, including the Medical Center and Perimeter Center in Dunwoody and Sandy Springs in the southern portion of the study area. MARTA Bus service primarily functions as feeder service to MARTA heavy rail from areas to the north, including Roswell, Alpharetta and Milton. A number of the bus routes and the MARTA heavy rail stations service park and ride facilities.

4.1.1 MARTA Rail Service

The MARTA heavy rail Red Line serves the study area at the four northernmost stations: Medical Center, Dunwoody, Sandy Springs, and North Springs. The Red Line operates on 15-minute headways during peak and mid-day periods on weekdays and 20-minute headways during off-peak periods and on weekends. The Red Line connects the southern portion of the study area to Buckhead, Midtown, Downtown Atlanta, and Hartsfield-Jackson Atlanta International Airport. Red Line rail service turns back at the Lindbergh Center Station after 7:00 PM daily.

- The Medical Center Station has 200 parking spaces and serves Northside Hospital, Scottish Rite Hospital, and St. Joseph's Hospital. MARTA Bus Lines 25 Peachtree Industrial Boulevard and 148 Medical Center/Riveredge Parkway provide connecting service to the station.

- The Dunwoody Station has 1,048 parking spaces and serves the Perimeter Mall. Connections to the MARTA bus network are provided by 5 Piedmont Road/Sandy Springs, 87 Roswell Road/ Morgan Falls, and 150 Perimeter Center/Dunwoody Village.
- The Sandy Springs Station has 1,170 parking spaces and serves numerous retail establishments in the Perimeter Center vicinity.
- The North Springs Station has 2,325 parking spaces directly accessible by a ramp from southbound GA 400. The immediate area includes a high-density residential community. Connections to the MARTA bus network are provided by 85 Roswell/Mansell Road, 87 Roswell Road/Morgan Falls, 140 North Point/Mansell Park/Ride, 143 Windward Park / Ride, and 185 Alpharetta/Holcomb Bridge Rd.

4.1.2 MARTA Bus Routes

The following presents more detail on the MARTA bus routes providing connections to the MARTA stations and serving the study area. The headways shown are for weekday peak hours. Off-peak and weekend operations may differ, and, in one case, do not operate. Table 4 -1 provides additional bus route detail; Figure 4-1 depicts these routes.

- 5 Piedmont Rd/Sandy Springs connects to Lindbergh Center at 15-minute headways.
- 25 Peachtree Industrial Boulevard connects to Doraville Station and Lenox Station at variable headways of approximately 40 minutes.
- 85 Roswell/Mansell Rd connects the Mansell Rd Park and Ride with North Springs Station at 30-minute headways
- 87 Roswell Rd/Morgan Falls connects North Springs and Dunwoody Stations via Roswell Rd on the west side of GA 400 at 20-minute headways.
- 103 Shallowford Rd/Peeler Rd connects the Chamblee Station with Dunwoody Medical Center and the eastern portion of Dunwoody at 40-minute headways.
- 140 North Point/Mansell P/R connects Windward Parkway Park and Ride, downtown Alpharetta, and Mansell Park and Ride with the North Springs Station. Headways from Windward Parkway Park and Ride to Alpharetta are 20 minutes and from there to North Springs are approximately 15 minutes.
- 143 Windward Park/Ride connects the park and ride facility and the area to the north with North Springs Station at headways of approximately 20 minutes.
- 148 Medical Center/Riveredge Parkway connects the vicinity of the I-285 interchange with Northside Drive to the west of GA 400 with Medical Center Station at variable headways and operates during weekday peak hours only.
- 150 Perimeter Center/Dunwoody Village connects Dunwoody Village Shopping Center with Dunwoody Station via Perimeter Center at 30-minute headways.
- 185 Alpharetta/Holcomb Bridge Rd connects the Windward Park and Ride with North Springs Station via Alpharetta and Roswell on the western side of GA 400 at 30-minute headways.

4.1.3 GRTA Xpress Bus Service

GRTA operates two Xpress Bus Routes in the GA 400 corridor.

- 400 Cumming Park and Ride operates from Cumming in Forsyth County outside of the study area to the North Springs MARTA Station and Downtown Atlanta.
- 428 Panola Road to Perimeter Center enters the study area from the southeast on I-285, and provides stops at Perimeter Shopping Center, and the Dunwoody and Medical Center MARTA Stations.

4.2 Roadway System

The roadway system in the study area consists of a freeway spine, GA 400, extending north from the regional core inside I-285. It provides connections to a network of arterial roadways that provide east – west travel. Many of the roadways have had capacity additions, and many capacity improvements are programmed, as presented in Table 4-4, but congestion is forecast to increase.

4.2.1 Roadway and Transit Connections

Connections between roadways and transit occur primarily through park and ride lots as shown on Figure 4-1. The North Springs Station provides a southbound ramp directly from GA 400 into the parking decks at the station. While the other park and ride lots at Windward Parkway and Mansell Road function in a similar manner, the transfer is to the bus system, which must then make its way on shared roadways.

4.2.2 Roadway Functional Classification and Capacity

There is one freeway, GA 400, which is a north south roadway. All connecting roadways and other major roadways in the study area are arterials with less capacity and, frequently, lower posted speeds. Figure 4-2 depicts the functional classifications and number of travel lanes of the roadways within the study area. Table 4-2 lists information on functional class and other characteristics of the major roadways in the study area.

4.2.3 Roadway Traffic Volumes and Congestion

As discussed earlier, the roadway network is congested and forecasts indicate that this condition will worsen by 2040. Table 4-3 identifies those roadways that currently have V/C ratios above 1.0 and changes that are forecast for the year 2040 during the PM peak period. No roadway has an improved V/C ratio from one period to the other and only GA 400 shows no worsening of congestion. While traffic volumes are forecast to increase on GA 400, congestion levels are forecast to remain constant, likely a result of planned roadway capacity adding projects. Figure 4-3 and Figure 4-4 depict the years 2010 and 2040 Level of Service (LOS) for the roadways within the study area [8].

8 Level of Service (LOS) uses the V/C ratio to categorize traffic volumes into different general levels, using the letters A through F, with A signifying relative free flow conditions, while F signifies the worst traffic condition. The Atlanta Regional Travel Demand Model provides each link with a LOS rating, based on a specific V/C

4.3 Planned Transportation System Improvements

The ARC as the Metropolitan Planning Organization (MPO) for the Atlanta region is responsible for maintaining a Regional Transportation Plan (RTP). One element of this planning process is to prepare and maintain a Transportation Improvement Program (TIP), which lists the financially constrained projects from among those identified in the RTP. Figure 4-5 displays the RTP projects within the study area. Table 4-4 present the roadway projects from the RTP that are within the study area. Those indicated as programmed in the Status column are listed in the TIP. Table 4-5 presents the transit projects from the RTP that are within the study area. Those indicated as programmed in the Status column are listed in the TIP. Additional information regarding Plan 2040, the current RTP, is found in Section 6.0.

In addition to the RTP, projects were identified by the Georgia Transportation Investment Act of 2010 (TIA) [9]. In a number of instances, the intent of these projects is the same as the projects in the RTP. The TIA roadway and transit projects that could have an effect on the study area are found in Table 4-6.

4.4 North Fulton and Jurisdiction Comprehensive Transportation Plans

The Comprehensive Transportation Plans (CTP) prepared for the northern Fulton County sub-region and by the study area cities are summarized below. Most of the cities prepared their CTPs concurrently with their Comprehensive Plans so that both plans reflect their overall vision and policies.

4.4.1 North Fulton Comprehensive Transportation Plan

Recognizing the complex and regional nature of transportation planning, Sandy Springs, Roswell, Alpharetta, Mountain Park, Johns Creek and Milton joined with the ARC to produce a CTP incorporating all of northern Fulton County. A key result of the North Fulton CTP is a list of cross-jurisdictional projects that the cities collectively support.

The North Fulton CTP discusses the potential for fixed-route transit along the GA 400 corridor. Further, it recommends high-capacity transit service to operate along or parallel to GA 400 as far north as Windward Parkway in the long-term, but it concludes that at the time the report was written, current conditions and zoning regulations limit the feasibility of such an investment. The plan recommends land use changes in order to provide the necessary ridership base for high-capacity transit. Short-term transit recommendations include:

- Express bus operations within managed lanes along GA 400, and
- Preserve right-of-way (ROW) within the corridor for future potential rail transit and transit stations during plan approval for major developments and redevelopments.

Two express bus recommendations include:

- SR 140/ Rucker Road to GA 400 transit, and
- SR 120/ State Bridge Road.

The report recommends that the cities consider redevelopment potential of key nodes along these corridors to support future bus routes or enhanced transit service.

The CTP continues with recommendations for transportation demand management, bicycle facilities, and roadways. Of these, two roadway projects and four bicycle projects on the Tier 1 project list are within the study area:

- VH109: Widen Hammond Drive to four lanes between SR 9 and Glenridge Drive, and to six lanes from GA 400 to DeKalb County. Bike lanes, sidewalks, and infill sidewalk gaps are included in the project.
- VH106: widen Windward Parkway to 6 lanes from Deerfield Parkway to Union Hill Road
- BP103: Morgan Falls Power Easement multi-use trail connecting existing system in Cobb County with on-road facilities in Dunwoody
- BP104: East-West bicycle/ pedestrian facilities starting at Eves Road to Holcomb Bridge Road, continuing to Gwinnett County
- BP102: Big Creek Greenway Connection to Chattahoochee River Walk
- BP106: Milton connection to Big Creek Greenway via Webb Road, Morris Road and McGinnis Ferry Road.

4.4.2 Sandy Springs

The Sandy Springs Transportation Master Plan (TMP) was prepared in concert with the Comprehensive Plan. Both plans establish the same vision for the community. The TMP establishes six overarching guiding principles to achieve this vision, each with coordinating performance measures:

- Provide efficient use of existing infrastructure
- Improve congestion at bottlenecks and "Hot Spots"
- Park once and circulate in downtown Sandy Springs via transit and pedestrian modes
- Provide for future travel demand
- Promote pedestrian and bicycle travel for access to parks and community facilities
- Serve mobility needs in residential areas while preserving neighborhoods

The projects in the Sandy Springs TMP are summarized in Table 4-7

4.4.3 Dunwoody

The Dunwoody CTP identifies transportation strategies and

ratio range.

9 TIA provides a legal mechanism in which regions throughout the state have the ability to impose a 1 percent sales tax to fund needed transportation improvements within their region. The GA 400 study area is within the ten county region comprised of Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, and Rockdale Counties. In the summer of 2012, voters will determine the future of this method of funding transportation projects.

projects based on the policy and goal statements set forth in Dunwoody's Comprehensive Land Use Plan. The guiding principles center around three core values: choice, connectivity, and community: The Dunwoody CTP projects are listed in Table 4-8.

- Choice:
  - Provide a transportation system that emphasizes choice by increased mobility for all users, increased connectivity, and increased health enrichment options
  - View the street as a public space with the intent to serve multiple functions
  - Provide for equal access by all users in transportation expenditures
- Connectivity:
  - Create an integrated network of transportation facilities that connects people to where they want to go, both in the community and destinations near city limits
  - Establish a maintenance and safety program that will enhance the existing system
  - Prioritize multi-modal transportation options
- Community:
  - Enhance the Dunwoody community first and the Atlanta region second in transportation investments
  - Provide opportunities for increased interaction within the community, increased recreational opportunities, and increased active living opportunities

4.4.4 Roswell

Roswell completed its transportation master plan in 2006 and updated it in 2011. The four main goals of the plan are to:

- Enhance Safety for all users: private and commercial vehicle operators, pedestrians, bicyclists and transit riders.
- Manage Congestion by providing innovative yet realistic options for local traffic including key intersections, as well as creating new connections.
- Increase Bicycle, Pedestrian and Transit Mobility to assure that all City residents have safe bicycle and pedestrian mobility options and that transit service is as accessible to residents and visitors as possible.
- Support Redevelopment by providing transportation systems that support redevelopment while preserving Roswell's character.

Projects in the study area are described in Table 4-9

4.4.5 Alpharetta

Alpharetta currently does not have a stand-alone comprehensive transportation plan. It relies upon its comprehensive plan and the Northern Fulton CTP to guide its transportation decisions.

4.4.6 Milton

Milton completed its CTP in 2009 concurrently with the development of the Comprehensive Plan. Coordination with the land use policies is a central element to insure the creation of a "sense of place" so strongly articulated in the Comprehensive Plan. In addition to the list of recommended transportation projects, the Milton CTP also includes three local area plans around Crabtree Crossroads, Birmingham Crossroads and SR 9. The SR 9 projects are summarized below:

- Widen Morris Road from Webb Road to McGinnis Ferry Road. The addition of a wide shoulder could accommodate bicycle traffic,
- Widen State Route 9 to 4 lanes, also in the RTP,
- Signalize the main intersections along Morris Road from the southern city boundary to McGinnis Ferry Road. Roundabouts are not recommended at Morris Road and Webb Road due to projected future connections to GA 400, and
- As rail transit serving all areas of Milton may not be feasible, increase Xpress bus routes between Milton and the Perimeter Center and study the feasibility of dedicated bus lanes along GA 400 should be explored.

4.4.7 Johns Creek

The development of the Johns Creek Transportation Master Plan was coordinated with that of the City's Comprehensive Plan in 2010. As a result, the land use policies and other recommendations proposed through the Comprehensive Plan process are complemented by the strategies and improvements provided in this Transportation Master Plan. The six transportation policies for the City are:

- Facilitate safe and efficient movement of traffic along key corridors to minimize congestion.
- Apply innovative approaches and technologies to improve mobility, safety, and environmental quality.
- Enhance capacity along key corridors while preserving the existing character of the two-lane residential roads in Johns Creek.
- Connect the sidewalk and multi-use trail network to allow safe pedestrian and bicycle travel throughout Johns Creek.
- Explore public transportation options for Johns Creek commuter travel to the Atlanta core, Hartsfield-Jackson Atlanta International Airport, and surrounding communities.
- Whenever possible, interconnectivity should be encouraged.
- As Johns Creek does not fall within the study area, the Johns Creek CTP does not identify any projects within the study area

4.4.8 Forsyth

The Forsyth County Transportation Master Plan (CTP) was finalized in May 2011. The vision statement and goals of the plan are listed below.

Vision Statement – To offer an integrated transportation system designed to complement the county's character and enhance livability while providing connectivity, mobility, and access

appropriate to attract and retain development anticipated in the Comprehensive Plan.

Goals:

- Develop project and policy strategies to complement and implement the county's Comprehensive Plan vision
- Preserve and enhance the existing and future transportation system through appropriate strategies including transportation demand and access management techniques
- Enhance safety and security for motorized and non motorized travel
- Ensure financial viability of transportation system
- Manage congestion
- Conserve natural and built resources
- Promote appropriate economic development relevant to desired land use
- Provide alternative solutions for transportation consistent with local, regional, and statewide jurisdictions
- Develop mobility and connectivity within and between transportation modes
- Encourage sustainable development
- Accommodate growth within and immediately adjacent to county
- Facilitate the movement of goods
- Promote complete street concept by ensuring balance for all users
- Support reduction of greenhouse gases consistent with pending federal policies
- Position infrastructure recommendations to take advantage of multiple funding sources, including the priority funding provisions proposed as part of the Surface Transportation Authorization Act of 2009.
- Highlights of the recommendations resulting from the Forsyth County CTP affecting the study area include:
- Short Range:
- Encourage enhancing the use of the existing GRTA Xpress route 400.
- Widen Union Hill Road from two to four lanes and McFarland Parkway (Segment 1) from four to six lanes
- Mid-Range:
- GRTA Park and Ride Facility
- Long Range
- Widen McFarland Parkway (Segment 2) from four to six lanes, McGinnis Ferry Road from four to six lanes, and SR 400 from six to eight lanes
- SR 400 HOV lanes
- MARTA Station (dedicated lanes or rail)
- McGinnis Ferry / SR 400 Interchange

4.5 Travel Trends

The ARC develops and maintains a Regional Travel Demand Model to forecast travel patterns in the Atlanta region to support the development of long-range transportation plans. The data summarized in this section results from the model using the most recent RTP update, Plan 2040. Analysis was conducted for the base year 2010 model results and for the forecast year of 2040, which includes all transportation projects in the RTP.

For analysis purposes, the region is divided into geographic travel districts. The study area is largely comprised of three travel districts: Perimeter in the south, North Point/Holcomb Bridge in the center, and Windward in the north as shown in Figure 4-6. All data required to run the model was obtained from the ARC.

4.5.1 Study Area Trips

The number of 2010 trips and 2040 forecasted trips, for all trip types, was calculated for the study area. Table 4 10 presents the trip volumes from, to, and within the study area.

The volume of trips between the study area and the various travel districts of the region is shown in Figure 4 -7 and Figure 4-8. The figures indicate the productions and attractions for 2010 and 2040.Table 4-11 and Table 4-12 list the volumes.

Table 4-13 presents the percent of the total trips by trip purpose for 2010 and 2040. The trip purposes are Home Based Work (HBW), Home Based Other (HBO), and Not Home Based (NHB).

4.5.2 Home Based Work Trips

An analysis of Home Based Work (HBW) trips indicates that in 2010 the study area experienced 332,000HBW trips of which 14.7 percent were productions and 23.6 percent were attractions. Of these trips, 17 percent began and ended within the study area. Table 4 -14 presents the ten most frequently occurring origins of HBW trips in 2010.

In 2040, the number of HBW trips is forecast to increase from 332,000 in 2010 by 42.2 percent to 472,100. The HBW trips generated in the study area would increase slightly from 17.0 percent to 17.9 percent.

The 2040 forecast origins of study area HBW trips are found in Table 4-15. As in 2010, the trips are either internal or have origins outside the study area. It is interesting to note that the origins of these top ten pairs are the same as in 2010. Together, the top ten trip pairs account for 85.9 percent of the HBW trips forecast in 2040 compared with 86.3 percent in 2010.

4.5.2.1 Major Origins and Destinations for HBW Trips

Table 4-16 presents the volume of trips to the study area from various districts, as defined by the Regional Travel Demand Model. Table 4-17 presents the volume of trips from the study area to the various districts. Each table includes the changes in trip volumes from year 2010 to 2040.

4.5.3 Travel Time

The Regional Travel Demand Model also provides data pertaining to the time required to travel between various origins and destinations. It provides these data specific to travel modes. Table 4-18 presents automobile travel and transit trip times between Downtown Atlanta and the three study area districts. With the exception of Perimeter, which is served by MARTA heavy rail, automobile travel times are shorter than transit. The transit travel times include out of vehicle time such as time spent walking, waiting, or transferring. From the Windward and North Point districts, there is no direct heavy rail transit service to Downtown and trips require a transfer and use of a bus to access the MARTA North Springs station before continuing to Downtown. Buses operate in mixed roadway traffic and are generally slower than passenger cars due to time spent at bus stops. All travel times presented are based on AM peak period conditions.

4.5.4 Travel Mode Share

The Atlanta Regional Travel Demand forecasts the percentages of trips made by travel modes including driving alone, shared ride, transit, and walking/bicycling. Table 4-19 indicates that the predominant travel mode in the year 2010 for all trips is driving alone. In both 2010 and 2040, approximately 40 percent of trips originating in the study area (productions) are made by means of either shared ride (39 and 38 percent) or transit (2 percent). Trips destined to the study area (attractions) in both 2010 and 2040 exhibit the same proportion of shared ride and transit trips.

Table 4-20 indicates that the predominant travel mode in the 2010 for HBW trips is driving alone. In both 2010 and 2040, approximately 17 percent of trips originating in the study area (productions) are made by means of either shared ride (11 percent) or transit (6 percent). Trips destined (attractions) to the study area in both 2010 and 2040 have a slightly lower proportion of shared ride or transit trips at approximately 14 percent. Forecasts indicate no change in this pattern for the year 2040.

4.5.5 Transit Travel Trends

Table 4-21 presents volumes of transit trips originating in the study area to various destinations. Table 4-22 presents volumes of transit trips from various origins to the study area.

5.0 Bicycle and Pedestrian Conditions

The bicycle and pedestrian facilities in the study area vary as some of the cities in the study area provide bicycle and pedestrian networks. Bicycle and pedestrian facilities can include several types of infrastructure such as multi-use paths and trails both within and off existing roadway rights-of-way.

5.1 Bicycle Facilities

Table 5-1 is a summary of existing bicycle facilities in the study area, and Figure 5-1 shows these facilities. There are two types of on-street bike facilities: bicycle lanes and bicycle shoulders. Bicycle lanes are marked facilities whereas bicycle shoulders are unmarked shoulders along the travel way suitable for bicycles. Off-street multi-use trails are described in Section 5.3.

5.2 Pedestrian Infrastructure

Thorough and accurate data pertaining to existing pedestrian infrastructure does not currently exist for a majority of the study area. Therefore, a qualitative assessment is necessary. The pedestrian infrastructure for the study area varies from being good in certain areas to being poor in others. In most of the more densely developed areas there are some well-maintained sidewalks along with pedestrian features such as clearly defined crosswalks, pedestrian signals and benches. Conversely, there are other locations in the study area with poor pedestrian conditions due to high-traffic speeds, unsafe intersections and the overall lack of pedestrian facilities. Some facilities lack connectivity, regular maintenance, and adequate buffers from the roadways. This makes safe pedestrian access to community facilities and business establishments difficult.

5.3 Multi-Use Trails

The study area contains several multi-use trails. A multi-use trail is separate from vehicular traffic and located in an independent ROW adjacent to a roadway or along a creek or utility easement. Multi-use trails are not sidewalks but can be designed to allow pedestrian use similar to sidewalks. Table 5-2 lists the existing multi-use trails in the study area.

5.4 Planned and Programmed Bicycle and Pedestrian Improvements

The ARC's Plan 2040 RTP/TIP includes one bicycle/pedestrian facility (Encore Parkway) within the study area. Although they are not within the study area, there are other planned bicycle and pedestrian projects that could enhance accessibility to major arterial roadways in the study area. These projects are also identified in this section. These arterial roadways have the potential for future transit improvements (i.e. bus stops) and the enhancement of the pedestrian accessibility could support the transit improvements. Plan 2040 includes five proposed bicycle and pedestrian improvements to augment and enhance the existing network in northern Fulton, as presented in Table 5-3. Each of the cities also identified planned bicycle and pedestrian improvements that are described in Section 4.4.

Several substantial projects are planned for the next TIP update. Most are north-south routes, such as SR 9, that may help to provide an alternative route for non-motorized traffic. Others, such as Encore Parkway, potentially provide east-west connections to potential stations.

6.0 Related Plans and Efforts

Several previous planning studies are relevant to this GA 400 Corridor AA and the development of the GA 400 corridor because of either geographic proximity or their position in the regional planning process. A summary of local transportation plans are included in Section 4.4, as well as the North Fulton Comprehensive Transportation Plan.

6.1 Draft ATL Northside Strategy: A Northern Metro Atlanta Suburbs Comprehensive Transit Feasibility Study

Perimeter Center CID, North Fulton CID, Cumberland CID, and Town Center CID, Ongoing

The purpose of the ongoing ATL Northside Strategy is to identify actions that will lead to the implementation of candidate transit projects linking the CIDs of North Fulton, Perimeter, Cumberland and Town Center to each other and to the existing MARTA rail system. It also will consider connectivity to other regional transit improvements included in Concept 3. The study area for the ATL Northside Strategy includes the US 41/I-75 corridor in Cobb County, the GA-400 corridor into northern Fulton County with connections to Gwinnett County, and the segment of the I-285 corridor that connects them.

While previous studies have focused on technical and engineering requirements for transit improvements, this study analyzes market potential, operating plans, infrastructure improvements, and cost effectiveness. The findings will be used to prepare an implementation roadmap.

The study is being conducted in the following five stages:

- Review Previous Studies and Existing Conditions
- System Analysis
- Segment and Station Analysis
- Financial/Institutional Planning
- Project Implementation Planning

A draft of the Review of Previous Studies and Existing Conditions has been completed and is a resource available to supplement this AA.

6.2 Strategic Regional Thoroughfare Plan

ARC, Adopted July 2011

The Strategic Regional Thoroughfare Plan (SRTP) was a planning process intended to address the following problem statement quoted here from the ARC project website:

"Plan Mission Statement: To develop an innovative and sustainable thoroughfare network and management plan that will enhance the region's accountability in providing acceptable levels of service for all thoroughfare users, prioritize future

investment and strengthen the link between transportation planning and traffic management and operations. The Regional Thoroughfare Network (RTN) was integrated into the Regional Strategic Transportation System (RSTS), which the ARC Board adopted in July 2011."

The SRTP evaluated roadway segments within the region to determine whether they would be included on the RTN. The "RTN Criteria" used to in the decision making process included, "Mobility of People and Freight", "Land Use Connectivity", "Network Connectivity", and "Multimodal Functionality".

Building on these classification criteria, the SRTP assigned to each RTN segment an ordinal level (I, II or III) indicating its overall degree of contribution in these different dimensions of thoroughfare service, in order from high (I) to low (III). The ratings resulting from each criterion served to determine a "composite" rating for each roadway. The SRTP identifies segments of the following roadways within the study area to be included on the Regional Thoroughfare Network:

Regional Thoroughfare – Level 1

- Roswell Road
- Hammond Drive
- Glenridge Drive
- Johnson Ferry Road
- Holcomb Bridge Road
- Old Milton Parkway

Regional Thoroughfare – Level 2

- Johnson Ferry Road
- Marietta Highway
- Holcomb Bridge Road
- Alpharetta Highway
- Windward Parkway

Regional Thoroughfare – Level 3

- Old Alabama Road

6.3 Plan 2040 Regional Transportation Plan (RTP)

ARC, Adopted July 2011

In recent years, a regional policy debate has centered around the adverse impact of congestion and limited water resources on regional growth. However, trends have indicated that the region's growth has remained resilient despite these concerns. Against this background, PLAN 2040 includes a detailed examination of alternative regional growth and development options. This discussion provides an enhanced understanding of the impacts of alternative growth patterns.

The option determined to be the most desirable was the Local Policy scenario that provides a balance between land use decisions and transportation investments. It maximizes household and employment growth in LCI areas, while employing the minimum densities recommended in the Unified Growth Policy Map (UGPM) for the rest of the region. The result is a reallocation of 50 percent of the growth previously expected in rural areas to areas near employment centers, LCI areas, and other activity centers in the region. In short, the Local Policy scenario concentrates growth in areas that already have infrastructure. Coupled with aggressive investment in transportation infrastructure, this improves upon many measures of congestion.

Inherent in this policy is the designation of the constituent parts of the region through the definition of the varying levels of density and existing transportation infrastructure. Important to the GA 400 corridor is its designation as a Regional Employment Corridor. These corridors represent the densest development outside of the Region Core. The Regional Employment Corridors connect the various Regional Centers and the Region Core via existing or planned high capacity transportation facilities. These are the areas in which there is a need to increase in housing and employment density, and focus primarily on improving connectivity between Centers and the Region Core.

Regional Employment Corridors often face greater peak hour congestion. Therefore, transit station areas and transit ROW should be preserved in these corridors.

6.4 Georgia Statewide Strategic Transportation Plan (SSTP)

GDOT, Adopted June 2010

The SSTP put in place a new investment strategy supported by new resources to transform Georgia's transportation network, improve performance, and improve GDP and job growth over the next 30 years. The priorities and recommendations from the SSTP provided additional guidance in the development of the PLAN 2040 RTP. As the ARC worked closely with State policymakers in developing statewide planning visions, including an emphasis on developing a managed lane network to improve access to employment centers the documents are consistent.

The SSTP focuses the new resources across three broad categories:

- Statewide freight and logistics,
- Individual mobility in the Atlanta region, and
- Individual mobility in the rest of the state.

6.5 Concept 3 Transit Vision

Atlanta Region Transit Planning Board, Adopted August 2008

Concept 3 is the Atlanta region's long-range vision for transit, which includes a high capacity regional rail system, potentially LRT, along the GA 400 corridor from Perimeter Center to Windward Parkway via North Point. It also includes two Arterial Rapid Bus routes, one running north-south along SR 9 from SR 120 south to Lindberg MARTA station, and the other running east-west along SR 120 from SR 9 to Lawrenceville in Gwinnett County. Concept 3 includes two Expressway Bus routes in the study area, one along GA 400 from Cumming in Forsyth County to the terminus of the high capacity regional rail project along GA 400, the other along SR 140 from Canton in Cherokee County, along Holcomb Bridge Road in the study area to Norcross in Gwinnett County.

The plan was developed through a collaborative, multi-year effort led by the Transit Planning Board, a predecessor to today's Regional Transit Committee (RTC). The vision now serves as the transit element of the Aspirations Plan of the RTP. The Aspirations Plan represents all transportation needs identified in the region.

6.6 MARTA North Line Transit Oriented Development (TOD) Study

MARTA, Adopted June 2006

In February 2003, MARTA initiated the North Line Alternatives Analysis to evaluate potential expansion alternatives and select a LPA for a North Line extension. During the course of this analysis, ridership projections suggested that the study area was not sufficiently transit supportive because of relatively high incomes and low household and employment densities.

As a result, the planning activities were redirected to undertake the North Line Transit Oriented Development Study. This was a land use and market analysis to assess the potential for TOD and to encourage new development patterns along the GA 400 corridor in support of future MARTA expansion in northern Fulton County.

The study examined transit supportive development patterns in seven potential TOD cluster areas along the corridor. There was a focus on density, diversity, and design of future land uses. The study provided an opportunity to examine transit expansion feasibility in the corridor through the implementation of new development patterns. The study was coordinated with and modeled after the ARC LCI program, under MARTA sponsorship, to enhance the potential for acceptance as a future LCI community.

The study was guided by a comprehensive development strategy that supported the following ARC regional program goals for the development of an emerging regional center:

- Encourage diversity of residential neighborhoods, employment, shopping, and recreation choices at the activity/town center level;
- Provide a strong focus to create mixed-income neighborhoods and support the concept of aging in place;
- Encourage development that offers access to a range of travel modes and land uses;
- Provide connectivity to major activity and employment centers and to institutional facilities; and
- Implement an outreach process that promotes involvement of all stakeholders.

The southernmost cluster was centered at Northridge Road and the northernmost cluster was just south of McGinnis Ferry Road. The TOD cluster areas, from south to north, were as follows.

- Northridge at the interchange of GA 400 and Northridge Road;
- Holcomb Bridge at the interchange of GA 400 and Holcomb Bridge Road;
- North Point, the largest of the clusters, extends from the interchange of GA 400 and Mansell Road to Haynes Bridge Road;
- Old Milton at the interchange of GA 400 and Old Milton Parkway;
- Windward South to the south and east of the interchange of GA 400 and Windward Parkway;
- Windward North the west and north of the interchange of GA 400 and Windward Parkway; and
- McGinnis Ferry at the Fulton County/Forsyth County line, where McGinnis Ferry Road crosses GA 400.

Based on the preliminary analysis of existing demographic, land use and transportation conditions, Northridge, Holcomb Bridge, North Point, and Old Milton demonstrated the highest potential for TOD.

- The Northridge cluster area ranked highest in terms of the travel pattern evaluation factor and was associated with the highest number of daily transit trips.
- The Holcomb Bridge cluster area exhibited the greatest trip activity in 2005 and resulted in the second highest number of daily commute trip productions.
- The Old Milton cluster area had a moderate amount of daily commute and other trips within the corridor, but the street network connectivity measure for Old Milton was low.
- The Northridge, Holcomb Bridge, and North Point cluster areas were associated with the highest street network connectivity values.

These findings were reviewed with stakeholders and the public to narrow down the number of cluster areas for more detailed analysis and development of a preliminary concept. Stakeholders felt strongly that the cluster areas with higher percentages of undeveloped land and strong redevelopment potential should be given higher standing. They also recommended that the Windward South and Windward North

clusters be combined. The Northridge cluster did not advance because of the limited amount of developable land, and the McGinnis Ferry cluster exhibited poor performance in a majority of evaluation factors. As a result, the original seven clusters were narrowed to four: Holcomb Bridge, North Point, Old Milton and Windward, which combined the North and South Windward clusters.

The next step included:

- An Emerging Regional Center Analysis, a market overview for each of the remaining clusters based on demographic characteristics, market, development, and real estate trends; and
- A Transit Suitability Analysis of specific sites to evaluate their potential as a future TOD site based on development densities, accessibility, connectivity, walkability, land availability, and appropriateness as a potential MARTA station.

The market analysis ranked the alternative clusters to determine the most suitable site for a future MARTA station and TOD based on:

- The anticipated demand for transit services from the existing residents and employees,
- The future growth of residents and employees in the cluster areas,
- The future growth of demand from commercial real estate growth in the current development pipeline and
- The presence of developable land

The North Point cluster was found to have the greatest potential for TOD, followed by the Windward and Old Milton cluster areas. Holcomb Bridge was the least desirable, based on its relatively small existing population and employment base, low growth potential and lack of new planned development and available sites.

The transit suitability analysis first identified possible locations for the future MARTA stations. Two basic criteria for locating transit stations are spacing and accessibility. Typically, MARTA stations are spaced between one and three miles apart and are located close to major roadways for area and regional access. Easy access and visibility from major roadways is also a major component of successful TOD projects. Based on these criteria, the most logical choices for potential station sites, starting from the south, include:

- GA 400 at Holcomb Bridge Road,
- GA 400 at Mansell Road in North Point cluster,
- Center Bridge Road in North Point cluster,
- GA 400 at Haynes Bridge Road in North Point cluster,
- GA 400 at Old Milton Parkway, and
- GA 400 at Windward Parkway.

The next step in the transit suitability analysis was to identify surrounding areas at these locations that were suitable for development or redevelopment. Based on this investigation, the clusters found to have the highest potential for TOD were Old Milton Parkway, Center Bridge Road (Encore Parkway) and Mansell Road.

The combined market analysis and transit suitability analysis suggested that either the Center Bridge Road or Mansell Road, both in the North Point cluster, would be most suitable for TOD. The analysis combined with stakeholder and public input identified the Center Bridge Road location as the best location for development of a prototypical MARTA TOD station.

Although a MARTA station could be located in any one of the four quadrants of the intersection of GA 400, for the purpose of this analysis the proposed North Point MARTA station was located on the southwest corner of the intersection. While detailed future engineering and transportation analysis may dictate other locations within the market area for the station, this location currently is considered the best potential station location to encourage transit-oriented development.

6.7 Revive 285, Top End, Environmental Impact Statement

GDOT/GRTA, Ongoing

The Revive 285 Top End project is currently examining high-capacity transit along the northern segment of I-285 in the corridor between I-75 (Windy Hill Road) and I-85. This project would intersect the MARTA North Line at Perimeter Center. This primarily east-west project will affect the North Line by increasing the number of destinations that can be accessed by high quality transit services.

The initial alternatives have been screened and currently there are four remaining, the No-Build and three Build Alternatives. The Build Alternatives are briefly described below:

Alternative 4: "Express Bus + Operational Improvements"

Express Bus Service: Buses operate in the general purpose lanes with stops only in the Cumberland and Perimeter areas.

Operational Improvements:

- Braided ramps: vertically separating off and on ramps (one ramp passes over the other).
- Auxiliary lanes: a lane that runs between interchanges and gives drivers more time to merge. The lane is created when an entrance ramp at one interchange meets the highway and drops out at the next interchange as an exit ramp with an "Exit Only" sign.
- Collector-distributor lanes: one-way lanes that run adjacent to the interstate and provide access to additional exits/off ramps that do not touch the interstate.
- Reconstructing interchanges
- Building new ramps

- Reconfiguring some local roadways

Alternative 6A: "Managed Lanes (new) + Express Bus + Fixed Guideway Transit ROW + operational Improvements"

Managed Lanes: Adds two lanes in both directions, located on either side of existing general purpose lanes, and are physically separated by a concrete median barrier. Congestion in the lanes is managed by a tolling system where the pricing could vary based on demand. Access points include I-285, I-75, Akers Mill Road, SR 400 (to/from the north), Perimeter Center Parkway, Chamblee Dunwoody Road, Peachtree Industrial Boulevard (to/from the north), and I-85 (to/from the north).

Express Bus Service: Buses operate in the managed lanes and the general purpose lanes depending on the designated route.

Fixed Guideway Transit ROW: Acquisition of additional ROWs for potential future Bus Rapid Transit or Light Rail Transit.

Operational Improvements:

- Braided ramps: vertically separating off and on ramps (one ramp passes over the other).
- Auxiliary lanes: an extra lane that runs between interchanges and gives drivers more time to merge. The lane is created when an entrance ramp at one interchange meets the highway and drops out at the next interchange as an exit ramp (with an "Exit Only" sign).
- Collector-distributor lanes: one-way lanes that run adjacent to the interstate and provide access to additional exits/off ramps that do not touch the interstate.
- Reconstructing interchanges
- Building new ramps
- Reconfiguring some local roadways

Alternative 6B: "Managed Lanes + Express Bus + Fixed Guideway Transit ROW + Operation Improvements"

Managed Lanes: Similar to Alternative 6A, but adds the managed lanes in the center of the existing general purpose lanes, separated by a painted buffer. Additionally, the general purpose lanes would be reduced to four lanes in both directions. Congestion in the lanes is managed through Electronic Toll Collection technology. Tollbooths are not required. This technology works like the Cruise Card electronic transponders used on Georgia 400 today. Instead of paying a toll at a booth, the accounts of registered users will be read and/or debited every time they use a HOT lane. Pricing for the lanes will vary based on demand and drivers will see the price before entering the system. Access points include I-285, I-75, Akers Mill Road, SR 400 (to/from the north), Perimeter Center Parkway, Chamblee Dunwoody Road, Peachtree Industrial Boulevard (to/from the north), and I-85 (to/from the north).

Express Bus Service: Buses operate in the general purpose lanes with stops only in the Cumberland and Perimeter areas.

Fixed Guideway Transit ROW: Acquisition of additional ROWs for potential future Bus Rapid Transit or Light Rail Transit.

Operational Improvements: These modifications improve travel flow and safety, and include:

- Braided ramps: vertically separating off and on ramps (one ramp passes over the other).
- Auxiliary lanes: an extra lane that runs between interchanges and gives drivers more time to merge. The lane is created when an entrance ramp at one interchange meets the highway and drops out at the next interchange as an exit ramp (with an "Exit Only" sign).
- Collector-distributor lanes: one-way lanes that run adjacent to the interstate and provide access to additional exits/off ramps that do not touch the interstate.
- Reconstructing interchanges
- Building new ramps
- Reconfiguring some local roadways

6.8 Regional Transit Action Plan

GRTA, Adopted 2003

The Regional Transit Action Plan (RTAP) was completed in the fall of 2003. Transit improvements identified by the RTAP were prioritized and included in the RTP and TIP updates. As part of the RTAP, the Regional Express Bus Service Plan includes four regional express bus routes scheduled to begin service between 2004 and 2010 along GA 400 North through the study area. Additionally, four other express routes originate outside of the corridor and terminate at Perimeter Center. These express bus routes will affect both local bus service and heavy rail service in the study area by increasing demand, since more riders will be able to reach the study area by transit.

6.9 Northern Sub-Area Study/GA 400 Corridor Analysis

GRTA and GDOT, 2003

The 1998 Atlanta Transportation Agreement between USDOT, USEPA, GDOT, and ARC provided the Atlanta region with a foundation for transportation and land use planning. A focus of that agreement was the GA 400 corridor. The following year a Settlement Agreement between citizen groups and the transportation agencies included a comprehensive sub-area study of transportation, land use, and air quality issues in the northern portion of the region. These agreements resulted in

two studies integrated into a single effort, the Northern Sub-Area Study/GA 400 Corridor Analysis. The Northern Sub-Area (NSA) is the portion of the Atlanta non-attainment area north of I-285 and extending 3 miles beyond I-75, GA 20, and I85 on the west, north and east, including portions of six counties.

The NSA has been referred to as the engine of the regional economy. The NSA represents over one-third of the metropolitan area's population, households and jobs and has an economic impact far out of proportion to its size. Its growth rate has substantially outpaced the rest of the region over the past two decades, attracting nearly half of the 13-county region's population and employment growth since 1990. However, despite its impressive growth, the NSA has experienced many common problems, especially with land use patterns that have influenced travel patterns. Formerly, the dominant direction of travel was in the north-south direction, to and from Atlanta. The greatest growth is projected to be in east-west travel. The following problems were identified:

- A generally dispersed pattern of development
- Independent uses on separate parcels or developments
- Lack of interconnected, mixed-use zones
- Lack of connection between uses
- No common or consistent vision across multiple jurisdictions
- Heavily auto-dependent development pattern

Throughout the course of the study, NSA residents expressed concern that development, and the congestion it produces, is beginning to threaten their quality of life. The quality of life is one of the reasons people have moved into the NSA. The concern is that the quality of life will deteriorate in the future unless the development pattern changes and mobility choices are expanded. The business community is aware of the cost of congestion and the impact it has on mobility and employee recruiting. Residents are particularly attuned to the increased time needed to reach destinations and to provide mobility to young and elderly residents. Options for walking and recreation do not exist in many areas, and affordable housing is not readily available near jobs.

The study scope was divided into the following four phases, and produced two sets of results: Alternative land use and transportation scenarios and Short, Intermediate, and Long Range recommendations.

PHASE 1 – STUDY MOBILIZATION AND GA 400 CORRIDOR ANALYSIS – Phase I consisted of community outreach; consultation with experts in transportation planning, policy, and economic development; and the GA 400 analysis. The analysis identified near-term mobility strategies that could be folded into the region's Years 2003-2005 TIP. These included highway intersection improvements, road widenings on the most congested sections of GA 400, expanded bus services and the use of improved shoulders on GA 400 for bus operation from Windward Parkway south to the North Springs MARTA station. Many of these improvements were adopted by GDOT and acted upon before the Study was completed.

PHASE 2 – NEEDS ANALYSIS / DEVELOPMENT OF NSAS SCENARIOS - Phase 2 identified and analyzed seven distinct land use scenarios to better understand the potential impacts and benefits associated with a range of land use policies and related transportation improvements.

The themes that defined the Phase 2 Scenarios

1. Current ARC Forecast – Development is spread throughout the subarea with the greatest concentrations in the southern portion.
2. Existing Communities – Development is largely concentrated in and around existing communities and activity centers in the sub-area.
3. Transit Oriented Development – Development is concentrated along a grid of radial and east-west transit lines.
4. Equity (East-West Corridor) – Development is concentrated along east west corridors and transit is enhanced.
5. Managed Growth – Development is distributed in "hamlets" of balanced residential and commercial development in the north.
6. Local Plans – Development follows the plans of the local jurisdictions and total development is greater than projected by ARC.
7. Less Growth – Development is roughly half of ARC projections and little highway capacity is added.

PHASE 3 – IDENTIFICATION AND EVALUATION OF FINAL THREE ALTERNATIVES - Based on the land use scenario analysis, Phase 3 identified and evaluated three conceptual alternatives defined by the project's Steering Committee. These alternatives were given to the ARC for its consideration in the transportation plan update process. These alternatives differed from the then current transportation plan (the 2025 Regional Transportation Plan (RTP) Limited Update) in the proposed changes to land use, road network, and transit services in the NSA. The alternatives are as follows:

- Alternative 1, Needs Based
- Alternative 2, Policy Based
- Alternative 3, the Local Plan-based

PHASE 4 – FINANCIAL ANALYSIS AND IMPLEMENTATION

OPTIONS - This phase examined implementation concepts for transportation and land use. The GA 400 Corridor Analysis proposed that buses be operated as:

- BRT service, using HOV lanes to provide service between special HOV interchange stations on GA 400, and
- Express bus routes on the arterial highways feeding into GA 400.

The last stop to the north for each route would be a park-and-ride lot near GA 400. All service would stop at the North Springs station, with several buses continuing to other employment locations

The analysis also found that HRT and BRT result in approximately the same number of transit riders in the corridor at a point just north of I-285. Farther north, BRT attracts significantly more trips. Therefore, the study recommends HOV/BRT service as the more cost-effective transit strategy in the corridor. This recommendation does not preclude implementation of HRT beyond the 25-year period of the study. It also concluded that one HOV lane in each direction provided the most efficient and cost effective approach to HOV construction.

Short-Term Improvements (+/- 5 years)

In addition to the projects listed below, recommendations are that employees, employers, and transportation management associations take advantage of the available travel demand management strategies and initiate new ones.

GA 400 Improvements:

- One general purpose lane in each direction in the GA 400 median: Haynes Bridge Road to McFarland Road.
- One general purpose lane northbound: Holcomb Bridge Road to Windward Parkway.
- Extend the southbound on-ramp: Holcomb Bridge Road to the Chattahoochee River.

Other Roadway Improvements:

- Widen SR 20: GA 400 to Samples Road.
- Widen SR 141: Fulton County line to SR 9.
- Widen State Bridge Road: Kimball Bridge Road to SR 141.
- Improve intersections in the corridor on major arterials that connect to GA

Transit Improvements:

- Improve shoulders: North Springs MARTA station to Windward Parkway for express bus operations.
- Add new express bus routes—SR 306, Cumming/Old Atlanta Road, McFarland Road, Doraville/East Roswell, and W. Roswell.
- Purchase 27 new buses.
- Build six park-and-ride lots with a total of 2,100 spaces.
- Build a new maintenance/fueling/storage bus facility.
- Improve pedestrian access to transit stops.

Recommended Land Use Policies:

- Provide incentives to developers to locate near transit centers
- Consider existing and planned transportation services when evaluating proposed developments.
- Coordinate with adjacent jurisdictions to provide integrated development decisions.
- Encourage affordable housing near employment centers.
- Encourage walkable and bicycle-friendly developments.

Intermediate-Term Improvements (10-15 years)

GA 400 Improvements:

- Build general purpose lanes in the median: McFarland Road to SR 20.
- Convert shoulders to general purpose lanes: North Springs station to Windward Parkway.
- Build a southbound general purpose lane: Holcomb Bridge Road to Windward Parkway.
- Build collector-distributor (CD) system: I-285 to north of Spalding Drive.
- Extend the Holcomb Bridge Road southbound ramp across the river to the CD system.
- Convert center general purpose lanes: Spalding Drive to Windward Parkway to HOV use.
- Build concurrent HOV lanes in the median: Windward Parkway to Old Atlanta Road.
- Build HOV ramp south: Spalding Drive to the North Springs station and CD system.
- Build an access road: North Springs station to Spalding Drive and a northbound HOV on-ramp at Spalding Drive.

Transit Improvements:

- Shift express buses to HOV lanes: Spalding Drive to Old Alabama Road.
- Increase service frequencies as justified by ridership.

Long-Term Improvements (15-25 years)

GA 400 Improvements:

- Complete auxiliary lane in northbound directions: CD lanes to Holcomb Bridge Road.
- Build general purpose lanes in the median in both directions: SR 20 to SR 306.
- Build general purpose lanes in the shoulder in both directions:

Windward Parkway to SR 141.

- Build HOV-only interchanges at Old Alabama Road extended, Center Bridge Road, Kimball Bridge Road, Webb Bridge Road, McGinnis Ferry Road, and Old Atlanta Road.

Transit Improvements:

- Purchase 53 buses.
- Build four park-and-ride lots with a total of 930 spaces.
- Add transit routes accessing HOV lanes on GA 400 HOV interchanges.
- Add BRT from Old Atlanta Road to the North Springs station stopping at HOV interchanges.
- Further increase service frequencies as justified.

6.10 MARTA Three Corridors Study

MARTA, Adopted 1998

MARTA initiated the Three Corridors Feasibility Study to compare and prioritize three areas for potential heavy rail extensions. Proposed corridor extensions included:

- North Line from North Springs station along GA 400 to Windward Parkway,
- West Line from Hamilton E. Holmes station to Fulton Industrial Boulevard, and
- Hapeville Branch from East Point Station to the City of Hapeville.

Each extension was evaluated across a broad range of performance measures. Based on the analysis of performance measures, the study concluded that both the West and North Line Corridors are feasible alternatives for extending the MARTA rail system. The MARTA Board of Directors adopted the West Line as a first priority for heavy rail extension, with the North and East Lines adopted as "equally important" secondary priorities.

7.0 Conclusion

7.1 Key Findings

This Existing Conditions and Future Trends Report provides background information pertaining to known features, trends, opportunities and constraints that may warrant further analysis as the project advances through the study process. This chapter discusses the key findings of the report and strategies to be addressed in the AA process.

7.1.1 Socioeconomic Conditions

Key findings regarding socioeconomic conditions include the following:

- **Population Growth** – The study area population has grown at a more rapid rate than the surrounding portions of northern Fulton County during this last decade. In 2000, the study area population was 76,335 residents. The 2010 US Census indicated that it increased by 22 percent to 93,136. The population is forecast to grow to 102,182 by 2040, a 10 percent increase over the year 2010 population. A growing population will continue to place demands for additional transportation capacity on an already overburdened transportation system in the study area and the region.
- **Employment Growth** – Forecasts predict the study area will become an increasingly important destination for work trips. Employment is forecast to grow from 95,096 jobs in 2009 to nearly 141,329 by 2040, a 49 percent increase. Assessments of transportation impacts will need to consider the changing travel patterns that are likely to result from this growth in employment and changes to the housing and employment balance in the corridor.
- **Transit Use** – According to the US Census, approximately four percent of the residents 16 years of age and older in the study area currently use transit to get to work. Improvements in transit, bicycle, and pedestrian facilities in the corridor may provide significant mobility and quality of life enhancements for these residents as well as those who own private automobiles but may choose to use other modes of transportation for a share of their trips. According to the ARC's Travel Demand Model, approximately two percent of the study area population uses transit for all trips.
- **Community Diversity** – About 41 percent of study area residents are from minority populations; about eight percent of all residents are in poverty, as defined by the US Census; and approximately eight percent are over the age of 65. Maintaining and enhancing the character and functionality of the study area neighborhoods will be an important consideration in assessing potential project impacts.

The AA will provide an assessment of socioeconomic characteristics of each community within the study area. It will assess, at a general level, the project's potential effects and benefits to community services and community cohesion. The analysis will also begin to discuss potential mitigation strategies addressing negative impacts.

7.1.2 Land Use, Zoning, and Local Plans

Key findings regarding land use, zoning and local plans include the following:

- **Land Use** – Predominate existing land uses in the study area include residential (42%), commercial (26%), and open space (16%). Future land use plans show that residential

uses will continue to be the dominate type of use, but mixed-use development will increase, especially along major corridors. DRIs have been concentrated in the Perimeter Center area and the northern portion of the study area.

- **Related Plans and Efforts** – In addition to the planning efforts of local jurisdictions, several regional entities and CIDs have contributed guidelines and incentives to guide land development. The ARC's LCI program continues to promote transit-supportive developments, as has MARTA's TOD guidelines and station area developments.

During the AA planning process, an assessment of effects on land use and zoning will assist in making an informed decision for the LPA. The analysis will provide descriptions of the general locations where potential land use conversions might occur and where existing or planned zoning is inconsistent with the proposed action. The analysis will include a statement of potential economic impact of the alternatives and begin to discuss strategies to avoid or minimize potential adverse land use impacts.

7.1.3 Water Resources

Preliminary research identified 681 acres of wetlands, 2,016 acres of floodplains, and six named rivers and streams within the study area. The crossing of the Chattahoochee River could be a significant consideration in the development and analysis of potential alternatives. Many of the water resources within the study area are co-located with parks. The AA will provide the locations of identified resources and an "order of magnitude" area of potential impacts to those resources as a way to compare alternatives.

7.1.4 Contaminated and Hazardous Materials Sites

Preliminary assessments have identified five sites of potential concern. Further research conducted as part of the study process may yield more potential contaminated and hazardous materials sites. The AA will identify areas of known and potential contamination and consider these when determining the LPA.

7.1.5 Parks

The study area includes 1,069 acres of parkland that consists of portions of 11 public parks. Parks are frequently along natural areas and water resources. Local plans show considerable community support for parks and a desire for physical continuity and community access. The development of the LPA should consider improved accessibility and connectivity of these parks while avoiding or minimizing the potential for any negative impacts to parklands.

The AA will identify park and recreational facilities in the study area and assess potential impacts. It will also identify ownership of the resources for purposes of assisting the Section 4(f) evaluation. The parks and recreational resources analysis will identify the type of impacts to each resource and discuss potential mitigation strategies.

7.1.6 Historic and Cultural Resources

Preliminary research has identified two National Register historic sites in the study area. Forty-two other surveyed sites and three districts were identified as having potential historic significance. Two historic cemeteries and eight archaeological sites are also located in the study area. Historic and cultural resources are predominantly found along SR 9, the study area's original travel corridor and location of the historic town centers of Alpharetta, Roswell, and Sandy Springs.

7.1.7 Transportation Conditions

In the study area, as in the Atlanta region as a whole, roadway congestion coupled with a high dependence on roadway travel have an adverse impact on mobility. Of the nineteen arterial roadways in the study area, only seven have a V/C ratio under 1.0 in the year 2010. In 2040, three are forecast to have a V/C ratio under 1.0 and two roads, McGinnis Ferry Road and Glenridge Connector are forecast to have a V/C ratio of 2.0.

In addition, transit service in the study area is not time competitive with automobile travel or used as frequently. According to ARC's travel demand model, transit travel times are significantly longer relative to automobile travel, and transit provides a significantly smaller share of all trips. Without an exclusive ROW, the buses that provide transit service to the North Springs MARTA Station must share the congested roadways with other motor vehicles. The planned introduction of managed lanes on GA 400, if shared with transit, could improve transit travel times. However, between the years 2010 and 2040, as additional improvements are completed, forecasts predict the number of transit trips produced by and attracted to the study area will increase by 38 and 48 percent, respectively. Table 7-1 presents the trip volumes to, from, and within the study area as forecast by the regional travel demand model.

Between the years 2010 and 2040, the travel demand model forecasts an increase of trips from the study area of 28.7 percent, trips to the study area of 45.4 percent, and trips within the study area of 35.6 percent. Trips to and from Forsyth County are forecast to increase by approximately 90 percent during this period.

In accordance with the findings of Plan 2040, the GA 400 corridor is designated as a Regional Employment Corridor. These corridors represent the densest development outside of the Regional Core and connect the various Regional Centers and the Regional Core via existing and planned high capacity transportation facilities. These are the areas proposed for

increased housing and employment density, and the focus of improved connectivity between Centers and the Region Core.

Page Left Intentionally Blank

TABLE 2-1: Population 2000 to 2040

Area	2000*	2010	2040	Percent Growth		Number in Study Area	Percent in Study Area
				2000 to 2010	2010 to 2040	2010	2010
Sandy Springs	85,781	93,853	106,924	9.4	13.9	46,078	49.1
Dunwoody	32,808	46,267	54,063	41.0	16.9	27,714	59.9
Roswell	79,334	88,346	95,853	11.4	8.5	35,070	39.7
Alpharetta	34,854	57,551	63,527	65.1	10.4	27,826	44.4
Milton	18,133	32,661	33,859	80.1	3.7	6,931	21.2
Study Area	**119,082**	**145,156**	**164,150**	**21.9**	**13.9**	---	---
North Fulton County	291,829	349,861	372,628	19.9	6.5	---	---

Source: US Census 2000 and 2010, ARC

*The cities of Sandy Springs, Dunwoody, and Milton did not exist in the year 2000. However, the US Census Bureau provides data for these cities reflecting conditions prior to their incorporation.

TABLE 2-2: Employment 2000 to 2040

Area	2000*	2009	2040	Percent Growth		Number in Study Area	Percent in Study Area
				2000 to 2010	2010 to 2040	2010	2010
Sandy Springs	109,293	95,444	136,158	-12.7	42.7	53,179	55.7
Dunwoody	49,884	34,439	44,332	-31.0	28.7	30,065	87.3
Roswell	37,240	39,548	63,404	6.2	60.3	22,969	66.7
Alpharetta	45,428	61,804	96,230	36.0	55.7	35,835	58.0
Milton	6,207	12,247	19,295	97.3	57.5	2,932	23.9
Study Area	**155,998**	**147,144**	**212,861**	**-0.6**	**44.7**	---	---
North Fulton County	215,002	228,977	341,855	6.5	49.3	---	---

Source: ARC 2011

*The cities of Sandy Springs, Dunwoody, and Milton did not exist in the year 2000. However, the ARC provides data for these cities reflecting conditions prior to their incorporation.

TABLE 2-3: Major Employers

Employer	Number of Employees	Employer	Number of Employees
Sandy Springs		Alpharetta	
Cisco Systems, Inc.	1,922	ADP	2,000
IBM Corporation	1,536	McKesson HBOC	1,800
United Parcel Service	1,534	LexisNexis	1,076
AT&T Mobility	766	Hewlett Packard	953
RBS Lynk Inc.	576	Verizon	817
COX Enterprises Inc.	544	AT&T Mobility	751
Arby's Restaurant Group	517	Comcast Cable	729
Ceridian Corporation	497	Cox Communications	676
Global Payments, Inc.	496	Equifax	675
ACS State Healthcare, LLC	467	E Trade Financial	587
Dunwoody		**Milton**	
Six Continents Hotels	967	Verizon	1,628
Macy's Corporate	785	Fulton County Board of Education	820
T Mobile	767	Infor Global Solutions	460
Walden Security	606	Wal-Mart	313
Philips Healthcare	492	Fry's Electronics	300
UHS of Peachford LP	453	Alltell	280
Autotrader Com Inc.	435	Exide Technologies	265
Computer Generated Solutions	420	Publix	182
Macy's #20	412	Target Store	173
ER Solutions Inc.	400	Home Depot	137
Roswell			
Kimberly-Clark Corporation	1,453		
North Fulton Regional Hospital	1,016		
Verizon Wireless	975		
City of Roswell	900		
Prommis Solutions, LLC	649		
Target Store	509		
Witness Systems, Inc	411		
Wal-Mart Supercenter	371		
Publix Super Markets, Inc.	276		
The Home Depot	272		

Source: *City of Sandy Springs, GA Comprehensive Annual Financial Report* 2010; *City of Dunwoody, Georgia Comprehensive Annual Financial Report* 2009; *Alpharetta, Georgia Comprehensive Annual Financial Report* 2010; *City of Milton Comprehensive Annual Financial Report* 2010

TABLE 2-4: Households 2000 to 2040

Area	2000*	2010	2040	Percent Growth		Number in Study Area	Percent in Study Area
				2000 to 2010	2010 to 2040	2010	2010
Sandy Springs	39,288	43,334	50,258	10.3	16.0	22,630	52.2
Dunwoody	13,746	19,994	23,827	45.5	19.2	12,585	62.9
Roswell	30,207	33,945	38,126	12.4	12.3	13,296	39.2
Alpharetta	13,911	21,742	26,091	56.3	20.0	11,426	52.6
Milton	5,847	11,659	13,790	99.4	18.3	2,962	25.4
Study Area	**51,310**	**63,582**	**73,945**	**23.9**	**16.3**	---	
Northern Fulton County	114,294	136,193	153,649	19.2	12.8	---	

Source: US Census Bureau 2000 and 2010, ARC 2011

*The cities of Sandy Springs, Dunwoody, and Milton did not exist in the year 2000. However, the US Census Bureau provides data for these cities reflecting conditions prior to their incorporation.

TABLE 2-5: Population below Poverty Level (2009)*

Area	Median Household Income (dollars)	Population for whom Poverty Status is Determined	Population Below Poverty Level	Percent of Population Below Poverty
Sandy Springs	76,477	84,308	5,878	7.0
Dunwoody	87,227	38,587	1,853	4.8
Roswell	79,733	85,580	6,379	7.5
Alpharetta	95,888	49,864	1,558	3.1
Milton	117,608	15,562	732	4.7
Study Area	**86,667**	**125,721**	**10,380**	**8.3**
Northern Fulton County	92,551	295,909	17,183	5.8

Source: : US Census Bureau 2009

*Data are listed for each city as a whole, while study area and northern Fulton incomes are a composite average of Census Tracts within their respective geographies.

TABLE 2-6: Minority Populations 2010

Area	Total Population	Minority Population	Percent Minority Population
Sandy Springs	93,553	32,474	34.7
Dunwoody	45,415	13,359	29.4
Roswell	87,206	21,543	24.7
Alpharetta	57,511	18,485	32.1
Milton	34,402	7,125	20.7
Study Area	**145,156**	**64,410**	**44.4**
Northern Fulton County	349,861	108,091	30.9

Source: US Census Bureau 2010

TABLE 2-7: Transit Dependent Populations (2000)*

Area	Total Households	Zero-Car Households	Percent Zero-Car Households	Workers 16 Years and Older	Percent Using Public Transportation to Get to Work*
Sandy Springs	39,288	2,460	6.3	50,786	5.2
Dunwoody	13,746	746	5.4	20,195	5.1
Roswell	30,207	961	3.2	43,224	2.0
Alpharetta	13,911	368	0.8	24,450	1.3
Milton	5,847	153	2.6	9,925	1.3
Study Area	**51,310**	**2,634**	**5.1**	**69,742**	**3.8**
Northern Fulton County	114,294	4,326	3.8	158,884	2.8

Source: U.S. Census Bureau 2000

*Data are listed for each city as a whole, while study area and northern Fulton data are a composite average of Census Tracts within their respective geographies.

**Represents total household percent in study area who use public transportation to get to work. Not all are necessarily transit dependent, however.

TABLE 2-8: Elderly Populations (2010)

Area	Total Population	Elderly Population	Percent Elderly Population
Sandy Springs	93,553	10,116	10.7
Dunwoody	45,415	5,712	12.3
Roswell	87,206	9,199	10.4
Alpharetta	57,511	3,951	6.8
Milton	34,402	2,546	7.8
Study Area	**145,156**	**13,644**	**9.4**
Northern Fulton County	349,861	30,673	8.8

Source: U.S. Census Bureau 2010

TABLE 2-9: Number of Community Facilities by Category

Resource Type	Sandy Springs	Dunwoody	Roswell	Alpharetta	Milton	Total
Cemetery	0	1	0	4	0	5
Community Center	3	0	0	0	0	3
Educational	30	1	12	14	2	59
Emergency	2	1	1	4	0	8
Government	4	0	1	1	0	6
Hospital/ Health	8	0	0	6	0	14
Library	1	0	0	0	0	1
Recreational	1	1	1	0	0	3
Religious	14	1	8	6	0	29
Total	**63**	**4**	**24**	**35**	**2**	**128**

Source: Google Earth 2011 and ARC Community Facilities GIS Data 2009

TABLE 2-10: Community Facilities

City	Facility Type	Resource	
Sandy Springs	Community Center	Community Action Center	Renew Youth Center
		Mary Hall Freedom House	
	Educational	American Intercontinental University	My Mother's Helper Pre-School Learning Center
		Amit School	North Springs High School *
		Apostles Learning Center	Rivercliff Lutheran School
		Argosy University	Sandy Springs Middle School *
		Art Institute of Atlanta	Sanford-Brown College
		Atlanta Academy, Inc. *	Sophia Academy *
		Atlanta Country Day School	South University
		Crestwood High School	St Jude the Apostle Catholic School *
		Cumberland Academy	Superior Court Reporting School
		The Alfred & Adele Davis Academy *	Troy State University
		Dunwoody Springs Elementary School *	University of Phoenix
		The Goddard School	Webb School
		Ison Springs Elementary School	The Weber School
		KinderCare Learning Center	Woodland Elementary School *
		Mount Vernon Presbyterian School *	
	Emergency	Fulton County Police North Precinct *	Fulton County Fire Station #6 *
		Fulton County Fire Station #2 *	Fulton County Fire Station #16 *
	Government	Consul of the Netherlands	Fulton County Tax Office
		Fulton County Board of Education	U.S. Internal Revenue Service
	Hospital/Health	Eagle Hospital Physicians	Premier Care for Women
		Metro Atlanta Gastroenterology	RediClinic
		Northside Hospital *	Saint Joseph Hospital *
		Perimeter Surgery Center of Atlanta	Sanus Medical
	Library	Sandy Springs Regional Library *	

TABLE 2-10: Community Facilities cont.

City	Facility Type	Resource	
Sandy Springs Cont.	Recreational	Sandy Springs Tennis Center	
	Religious	Congregation B'Nai Torah*	North Springs United Methodist *
		Ebenezer Church	Providence Church *
		First Baptist Church	Rameshori Buddhist Center North
		Jehovah's Witnesses	Rivercliff Lutheran Church *
		Lords Atlanta Temple	Sharon Church *
		Morgan Falls Church *	St Jude the Apostle Catholic Church *
		Mount Vernon Presbyterian *	The Church of Jesus Christ of Latter Day Saints
Dunwoody	Cemetery	Martin Cemetery *	
	Educational	Atlanta North School of Seventh Day Adventists *	Dunwoody High School *
		Austin Elementary School*	North Atlanta Pre-School
		Chamblee Middle School *	Occupational Education Center DeKalb *
		Deo Preparatory School *	Vanderlyn Elementary School *
	Emergency	DeKalb County Fire Station #12 *	North DeKalb Police Precinct *
		DeKalb County Fire Station #21 *	
	Hospital/Health	Emory Dunwoody Medical Center *	
	Library	Dunwoody Branch Library*	
	Recreational	Redfield Swim & Tennis	
	Religious	New Hope Preschool	North Atlanta Church of Christ
Roswell	Educational	The Atlanta Academy	Jackson Elementary School *
		Brimarsh Academy *	Mimosa Elementary School *
		Cottage School *	Montessori School of Roswell *
		Crabapple Middle School *	My Little World
		Discovery Point	Northwood Elementary School *
		Eaton Learning Lab *	Roswell North Elementary School *
		Ekins Pointe Middle School *	St David's Episcopal Preschool
		Fulton County Charter High Math & Science *	Strayer University
		Hembree Springs Elementary School *	Swift School
		Independence High School*	

TABLE 2-10: Community Facilities cont.

City	Facility Type	Resource	
Roswell Cont.	Emergency	Fire and Rescue Department HQ*	Fire and Rescue Station #4 *
		Fire and Rescue Station #1 *	Fire and Rescue Station #5 *
		Fire and Rescue Station #2 *	Police Department *
	Government	Roswell City Hall *	Roswell Recycling Center *
		Roswell Law Enforcement Center/ Jail *	Roswell Water System *
	Hospital/Health	North Fulton Regional Hospital	
	Library	Roswell Branch Library *	
	Recreational	Riverwood Pool	
	Religious	Church of the Savior	Old Alabama Road Baptist Church *
		Epiphany Byzantine Catholic Church*	St Andrew Catholic Church *
		Gethsemane Garden Missionary Church *	St David's Episcopal Church *
		Northview Church of Christ	St Peter's Place
Alpharetta	Cemetery	Alpharetta Cemetery *	Morris Cemetery *
		Maxwell Cemetery *	
	Educational	Alpharetta Elementary School *	Knowledge Beginnings
		Alpharetta High School	Manning Oaks Elementary School *
		Alpharetta Methodist Christian Academy *	Milton High School *
		DeVry University	New Prospect Elementary School *
		Fulton Science Academy Middle School	Preston Ridge Montessori *
		Haynes Bridge Middle School	Primrose School of Mansell Road
		Imagine That! Future Tech Science, Robotics & Art	University of Phoenix
		Keller Graduate School of Management	Windward Academy
		Kids R Kids of Alpharetta	
	Emergency	Fire Department Station 1 *	Fire Department Station 3 *
		Fire Department Station 2 *	Police Department and Dispatch *

TABLE 2-10: Community Facilities cont.

City	Facility Type	Resource	
Alpharetta Cont.	Government	Alpharetta City Hall *	Detention Center *
		Alpharetta Police HQ and	
	Hospital/Health	Chattahoochee Pediatrics	North Fulton Health Center
		Kaiser Permanente Medical Center	Renaissance Medical Center
		MedHelp Urgent Care	TenderCare Pediatrics
	Library	Alpharetta Branch Library*	
	Religious	Abundant Life Community Church	Habakkuk Center Ministries
		Cedar Springs Church	North Minster Reformed Presbyterian
		Clear Springs Missionary Baptist	St James United Methodist Church *
Milton	Educational	Montessori Scholars	Red Apple Montessori

Source: Google Earth 2011 and ARC Community Facilities GIS Data 2009. Items marked with a (*) are part of the ARC database.

TABLE 2-11: Existing Land Use

Area	Residential	Commercial	Industrial	Open Space	Institutional	Water	Urban Other	TCU*	TOTAL
Acreage of City's Area within Study Area									Total
Sandy Springs	5,372	1,773	59	1,075	312	121	2	390	9,104
Dunwoody	3,502	949	0	142	192	0	0	134	4,919
Roswell	4,575	1,899	237	1,266	472	249	86	86	8,799
Alpharetta	2,871	2,863	402	1,581	284	344	56	362	8,763
Milton	915	330	0	215	96	10	8	34	1,609
DeKalb Co.	260	144	0	27	3	2	0	4	439
Study Area	17,495	7,958	698	4,306	1,358	726	152	1,010	33,632
Percentage of City's Area within Study Area									Percent of Study Area
Sandy Springs	59.0%	19.5%	0.7%	11.8%	3.4%	1.3%	0.0%	4.3%	27.1%
Dunwoody	71.2%	19.3%	0.0%	2.9%	3.9%	0.0%	0.0%	2.7%	14.6%
Roswell	52.0%	21.6%	2.7%	14.4%	5.4%	2.8%	0.2%	1.0%	26.2%
Alpharetta	32.8%	32.7%	4.6%	18.0%	3.2%	3.9%	0.6%	4.1%	26.1%
Milton	56.9%	20.5%	0.0%	13.4%	6.0%	0.6%	0.5%	2.1%	4.8%
DeKalb Co.	59.2%	32.8%	0.0%	6.0%	0.6%	0.4%	0.0%	0.9%	1.3%
Study Area	52.1%	23.7%	2.1%	12.8%	4.0%	2.2%	0.5%	3.0%	100%*

Source: : ARC LandPro 2009

*Includes mathematical rounding

TABLE 2-12: Zoning

Zoning Designation	Description
Sandy Springs	
A	Medium Density Apartment
A-L	Apartment Limited Dwelling
A-1	Apartment Dwelling
AG-1	Agricultural
A-O	Apartment Office
C-1	Community Business District
C-2	Commercial District
CUP	Community Unit Plan
MIX	Mixed Use
M-1	Light Industrial
NUP	Neighborhood Unit Plan District
O-I	Office and Institutional
R-1 through R-5A	Single-family Dwelling
TR	Townhouse Residential Districts
Dunwoody	
C-1	Local Commercial
C-2	General Commercial
NS	Neighborhood Shopping
OCR	Office-Commercial-Residential
O-D	Office- Distribution
O-I	Office and Institutional
O-I-T	Office- Institution- Transitional
R-50, R-100, R-150, R-A5	Single-family Residential
R-CH	Single-family Cluster Residential
RM-100, RM-HD	Multi-family Residential
Roswell	
C-1	General Commercial
C-2	Neighborhood Commercial
C-3	Highway Commercial
CUP	Community Unit Plan
E-2	Single-Family Low Density Residential
H-R	Historic Roswell
I-1	Office and business Distribution
O-P	Office-Professional
OCMS	Office-Commercial Multi-Story Mixed Use
R-3 through R-4A	Multi-family Residential
R-TH	Fee-Simple Townhouse
Alpharetta	
AG	Agriculture
C-1	Neighborhood Commercial
C-2	General Commercial
L-1	Light Industrial
CUP	Community Unit Plan
O-I	Office-Institutional
O-P	Office-Professional
PSC	Planned Shopping Center
R	Single Family Detached Residential
RE	Residential Estate
R-22	Single Family Detached Residential
R-15	Single Family Detached Residential
R-12	Single Family Detached Residential
R-10	Single Family Detached Residential
R-4A	Single Family Detached Residential- Low Density
R-8A	Single Family Detached Residential- Medium Density
R-10M	Multiple-family Residential
R-12	Single-family Detached Residential
SU	Special Use
Milton	
A	Medium Density Apartment
AG-1	Agricultural
C-1	Community Business
C-2	Community Business
MIX	Mixed Use
O-I	Office and Institutional
R-1 through R-5A	Single Family Dwelling
TR	Townhouse Residential

Source: City of Sandy Springs Zoning Map, City of Dunwoody Zoning Map, City of Roswell Zoning Map City of Alpharetta Zoning Map, City of Milton Zoning Map

TABLE 2-13: Development of Regional Impact

Name	City	Year
St. Joseph Medical Office Buildings	Sandy Springs	2000
Roberts North Springs Development	Sandy Springs	2000
Northpark Mixed Use Development	Sandy Springs	2000
Perimeter Ford Redevelopment	Sandy Springs	2003
Corporate Campus	Sandy Springs	2005
Cosmopolitan North	Sandy Springs	2005
Concourse	Sandy Springs	2005
Palisades Development	Sandy Springs	2006
Lakeside Redevelopment	Sandy Springs	2007
Hammond Center	Sandy Springs	2008
Perimeter Town Center	Dunwoody	2002
211 Perimeter Town Center	Dunwoody	2003
Perimeter Center	Dunwoody	2003
Dunwoody Park Apartments- Casden Properties	Dunwoody	2003
Gables Metropolitan III	Dunwoody	2004
High Street	Dunwoody	2007
245 Perimeter Center	Dunwoody	2007
The Terraces	Dunwoody	2007
Perimeter Center East Mixed Use Development	Dunwoody	2007
236 Perimeter Mixed Use Development	Dunwoody	2007
Mansell 400	Alpharetta	2000
Cousins Westside Master Plan	Alpharetta	2003
Forum at Alpharetta	Alpharetta	2005
Office at Prospect Park	Alpharetta	2006
Parkway 400	Alpharetta	2007
Windward Mill	Alpharetta	2007
MetLife Tract (GA 400 Center)	Alpharetta	2007
D7 Webb Road	Milton	2005
Deerfield Place	Milton	2007

Source: ARC 2009

Table 3-1: Protected, Threatened and Endangered Species

Species Name	Type of Species	Listing	Fulton	DeKalb
Altamaha Shiner – Cyprinella xaenura	Fish	State Protected		X
Amber Darter – Percina antesella	Fish	Federally & State Protected-endangered		
Bachman's Sparrow – Aimophila aestivalis	Bird	State Protected	X	
Bald Eagle – Haliaeetus leucocephalus	Bird	Federally & State Protected	X	X
Barren Strawberry – Waldsteinia lobata	Plant	State Protected-threatened	X	X
Bay Star-vine – Schisandra glabra	Plant	State Protected-threatened	X	X
Black-spored Quillwort – Isoetes melanospora	Plant	Federally & State Protected		X
Bluestripe Shiner – Cyprinella callitaenia	Fish	State Protected-threatened	X	
Chattahoochee Crayfish – Cambarus howardi	Crustacean	State Protected	X	X
Cherokee Darter – Etheostoma scotti	Fish	Federally & State Protected-threatened	X	
Coosa Chub – Macrhybopsis sp. 1	Fish	State Protected		
Delicate Spike – Elliptio arctata	Mussel	State Protected	X	X
Dwarf Hatpins – Eriocaulon koernickianum	Plant	State Protected		X
Dwarf Sumac – Rhus michauxii	Plant	Federally & State Protected	X	
Etowah Darter – Etheostoma etowahae	Fish	Federally & State Protected-endangered		
Flatrock Onion – Allium speculae	Plant	State Protected		X
Georgia Aster – Symphyotrichum georgianum	Plant	Federally Protected-candidate	X	X
Granite Stonecrop – Sedum pusillum	Plant	State Protected		X
Gulf Moccasinshell – Medionidus penicillatus	Mollusk	Federally & State Protected-endangered	X	
Henslow's Sparrow – Ammodramus henslowii	Bird	State Protected	X	
Highscale Shiner – Notropis hypsilepis	Fish	State Protected-threatened	X	
Indian Olive – Nestronia umbellula	Plant	State Protected	X	X
Monkeyface Orchid – Platanthera integrilabia	Plant	Federally & State Protected		
Mountain Witch-alder – Fothergilla major	Plant	State Protected	X	
Ozark Bunchflower – Veratrum woodii	Plant	State Protected		X
Peregrine Falcon – Falco peregrinus	Bird	State Protected	X	
Piedmont Blue Burrower – Cambarus harti	Crustacean	State Protected		X
Pink Ladyslipper – Cypripedium acaule	Plant	State Protected	X	
Pool Sprite – Amphianthus pusillus	Plant	Federally & State Protected		X
Rock Darter – Etheostoma rupestre	Fish	State Protected		
Shinyrayed Pocketbook – Hamiota subangulata	Mussel	Federally & State Protected-endangered	X	
Sweet Pinesap – Monotropsis odorata	Plant	State Protected	X	
Yellow Ladyslipper – Cypripedium parviflorum	Plant	State Protected	X	

Source: GADNR, www.georgiawildlife.com site accessed November 2011; USFWS, www.fws.gov site accessed November 2011

Table 3-2: Contaminated and Hazardous Materials Sites

Site / Business Name	Address	ZIP Code	Type of Facility	US EPA Environmental Data Source listed Within
Bako Pathology Services LLC	2001 Westside Parkway, Ste. 290, Alpharetta	30004	Medical Laboratories, Type: Large Generator	RCRAInfo
Lafarge Alpharetta Concrete Plant	11550 Wills Road, Alpharetta	30009	Ready-Mix Concrete Manufacturing	AFS, TRI
Herman Miller Incorporated Roswell Operations	1000 Mansell Road, Roswell	30076	Wood Office Furniture Manufacturing	AFS, RCRAInfo, TRI
Northside Hospital	1000 Johnson Ferry Road, Sandy Springs	30342	Hospital	RCRAInfo, AFS
Water Visions Intl. Inc.	115 Perimeter Center Place, Dunwoody	30346	Pesticide Producer	SSTS

Source: US EPA's EPA Geospatial Data Access Project, http://www.epa.gov/enviro/geo_data.html, October 2011, Multisystem Envirofacts Query Form and US Environmental Protection Agency http://www.epa.gov/enviro/html/multisystem.html Accessed November 2011.

Table 3-3: FTA Land Use Categories and Noise Metrics

Land-Use Category	Noise Metric	Description
1	Leq(h)	Tracts of land set aside for serenity and quiet, such as outdoor amphitheaters, concert pavilions and historic landmarks.
2	Ldn	Buildings used for sleeping such as residences, hospitals, hotels and other areas where nighttime sensitivity to noise is of utmost importance.
3	Leq(h)	Institutional land-uses with primarily daytime and evening uses including schools, libraries, churches, museums, cemeteries, historic sites and parks and certain recreational amenities used for study or meditation.

Source: Federal Transit Administration 2006

Table 3-4: Applicable FTA Land Use Categories for Study Area Existing Land Uses

Existing Land Use	Applicable FTA Land Use Category	Acres of Land Use within Study Area	Percent of Land Use within Study Area
Open Space/Parks	1, 3	4,306	12.8%
Residential	2	17,495	52.1%
Institutional	3	1,358	4.0%

Source: ARC 2009, LandPro09 existing land use data set.

Table 3-5: Parks

Park Name	Jurisdiction	Park Type	Total Acres	Acres within Study Area
Alpharetta Pocket Park I	Alpharetta	Community	0.03	0.03
Alpharetta Pocket Park II	Alpharetta	Community	0.06	0.06
Azalea Park	Roswell	Community	73	26
Big Creek Greenway	Alpharetta	Greenway	421	301
Big Creek Park	Roswell	Community	141	141
Brook Run Park	DeKalb	Community	104	39
Chattahoochee River National Recreation Area	Multiple	Conservation	7,122	850
City Square Park	Alpharetta	Community	0.23	0.23
Cogburn Park	Alpharetta	Community	5	5
Don White Memorial Park	Roswell	Community	6	6
Dunwoody Park	DeKalb	County	35	35
Hammond Park	Sandy Springs	Community	14	14
Heart of Roswell Park	Roswell	Community	0.51	0.51
Hembree Park	Roswell	Recreational	35	23
John Ripley Forbes Big Trees Forest Preserve	Sandy Springs	Forest	21	21
Maddox Park	Alpharetta	Community	0.4	0.4
Murphey Candler Park	DeKalb	County	116	14
North Fulton Tennis Center	Sandy Springs	Recreational	27	27
North Park	Alpharetta	Recreational	83	4
Old Mill Park	Roswell	Community	2	2
Riverside Park	Roswell	Community	46	46
Roswell Area Park	Roswell	Recreational	71	71
Roswell Riverwalk	Roswell	Community	2	2
Sandy Springs Historic Site and Park	Sandy Springs	Historic Site	2	2
Town Square Park	Roswell	Community	1	1
Vernon Springs Park	DeKalb	Community	1	1
Waller Park Extension	Roswell	Recreational	36	36
Waller Park Recreation Center	Roswell	Recreational	22	22
Wells Tract	Roswell	Community	38	38
Wills Park	Alpharetta	Municipal	118	118
Woodstock Soccer Complex	Roswell	Recreational	5	5
			8,547	1,850

Source: ARC, 2006, and review of the jurisdiction websites of Sandy Springs, Dunwoody, Roswell, Alpharetta, Milton, and Forsyth County November 2011.

Table 3-6: Archaeological Sites (NAHRGIS) by Jurisdiction

Site	Jurisdiction	National Registry Status
9FU201	Alpharetta	Recommended Eligible 1996
9FU226	Roswell	Listed with Georgia Register
9FU235	Roswell	Recommended Eligible 1994
9FU257	Alpharetta	Recommended Eligible 1996
9FU272	Alpharetta	Recommended Eligible 1996
9FU278	Roswell	Listed with Georgia Register
9FU295	Milton	Recommended Eligible 1997
9FU296	Milton	Recommended Eligible 1997
9FU309	Alpharetta	Recommended Eligible 1997
9FU311	Milton	Recommended Eligible 1997
9FU313	Milton	Recommended Eligible 1997

Source: NAHRGIS

Table 4-1: MARTA Bus Routes - Weekday Service

Route	Name	Weekday Span of Service	Peak / Off-Peak Headway (minutes)	September 2011 Average Weekday Ridership*
5	Piedmont/Sandy Springs	5:10 AM – 12:50 AM	15/30	5,188
25	Peachtree Industrial Blvd	5:20 AM – 12:15 AM	40	773
85	Roswell/Mansell Rd	5:22 AM – 12:55 AM	30	1,809
87	Roswell Rd/Morgan Falls	5:14 AM – 12:12 AM	20/30	3,580
103	Shallowford Rd/Peeler RD	4:51 AM – 12:45 AM	40	845
140	North Point/Mansell P/R	6:18 AM – 12:40 AM	15/35	2,057
143	Windward P/R	5:30 AM – 8:01 PM	20	1,123
148	Medical Center/Riveredge	6:10 AM – 6:43 PM	50	175
150	Perimeter Center/Dunwoody Village	6:11 AM – 10:40 PM	30/50	559
185	Alpharetta/Holcomb Bridge Rd	5:25 AM – 12:40 AM	30	2,068

Source: MARTA Bus Schedules and other route information. *Total Average Weekday Ridership: 18,177

Table 4-2: Roadway Functional Class, Lanes, Travel Lanes, and Posted Speed

Roadway	Functional Class	Travel Lanes	Posted Speed
GA 400	Urban Freeway & Expressway	8	55/65
Holcomb Bridge (SR 140)	Principal Arterial	4/6	45
Mansell Road	Principal Arterial	6	45
Old Milton Parkway (SR 120)	Principal Arterial	6	45
Abernathy Road	Minor Arterial	4	35
Ashford Dunwoody Road	Minor Arterial	8	45
Chamblee Dunwoody Road	Minor Arterial	4	40
Crossville Road	Minor Arterial	6	45
Dunwoody Club Drive	Minor Arterial	2	25
Glenridge Connector	Minor Arterial	4	35
Hammond Drive	Minor Arterial	4	35
Haynes Bridge	Minor Arterial	6	45
Johnsons Ferry Road	Minor Arterial	2	35
Mount Vernon Road	Minor Arterial	2	35
Old Alabama Road	Minor Arterial	4	40
Roberts Drive	Minor Arterial	2	35
Peachtree Dunwoody Road	Minor Arterial	4	35
Perimeter Center Parkway	Minor Arterial	4	35
Riverside Road	Minor Arterial	2	45
Roswell Road (SR 9)	Minor Arterial	4	35
Windward Parkway	Minor Arterial	4	45
Kimball Bridge Road	Major Collector	2	45
McGinnis Ferry Road	Major Collector	2	55
Crabapple Road	Collector	2	35
Old Roswell Road	Collector	2	35
Spalding Drive	Collector	2	35
Webb Bridge Road	Collector	2	45
Westside Parkway	Collector	4	30
North Point Parkway	Local	6	25

Table 4-3: Roadway Volume and V/C Ratios (PM Peak Period)

Roadway	2010 Volume	2010 V/C Ratio	2010 LOS	2040 Volume	2040 V/C Ratio	2040 LOS
GA 400	24,626	1.4	F	39,373	1.4	F
Holcomb Bridge (SR 140)	11,300	1.2	F	12,710	1.4	F
Mansell Road	11,608	1.0	E	14,822	1.2	F
Old Milton Parkway (SR 120)	8,725	.94	E	14,447	1.2	F
Abernathy Road	12,959	1.0	F	15,322	1.2	F
Ashford Dunwoody	16,061	1.2	F	17,490	1.0	F
Chamblee Dunwoody Road	3,558	1.2	F	4,402	1.5	F
Crossville Road	13,668	1.1	F	16,854	1.3	F
Dunwoody Club Drive	1,671	.86	E	1,934	.98	E
Glenridge Connector	4,937	1.5	F	6,484	2.0	F
Hammond Drive	5,042	1.1	F	5,881	1.3	F
Haynes Bridge	10,476	.98	E	16,083	1.5	F
Johnsons Ferry Road	2,201	.88	E	2,361	.94	F
Mount Vernon Road	2,209	.93	E	5,695	1.2	F
North Point Parkway	3,904	.55	C	6,840	.97	E
Old Alabama Road	4,910	1.2	F	4,814	1.4	F
Roberts Drive	2,311	.91	E	2,633	1.1	F
Peachtree Dunwoody Road	5,931	1.4	F	7,631	1.6	F
Perimeter Center Parkway	7,094	.99	E	7,680	1.07	F
Riverside Road	2,884	1.0	F	3,786	1.3	F
Roswell Road (SR 9)	8,292	1.2	F	10,434	1.4	F
Windward Parkway	5,688	.97	E	7,329	1.2	F
Kimball Bridge Road	2,865	.97	E	4,94	1.3	F
McGinnis Ferry Road	2,764	1.1	F	5,279	2.0	F
Crabapple Road	2,808	1.1	F	3,815	1.5	F
Old Roswell Road	1,968	.66	D	3,075	1.0	F
Spalding Drive	2,704	1.1	F	3,138	1.2	F
Webb Bridge Road	1,657	.56	C	2,705	.92	E
Westside Parkway	4,298	.72	D	5,854	.99	E
North Point Parkway	3,904	.51	C	6,377	.90	E

Source: ARC Regional Travel Demand Model

* Traffic volume and V/C ratios are one-direction, worst case (compared to the opposing direction) values at the study area crossing point. Volume refers to PM Peak Period.

Table 4-4: *Plan2040* RTP/TIP Roadway Projects

ARC ID#	Project	Location	Sponsor	Project Type	Status
AR-956	I-285 North Resurfacing: Paces Ferry Road to Ashford Dunwoody Road	Regional – Perimeter	GDOT	Operations & Safety	Programmed
AR-ML-200	I-285 North Managed Lanes and CD Improvements: I-75 North to I-85 North	Regional - Perimeter	GDOT	Managed Lanes	Long Range
AR-ML-300	SR 400 Managed Lanes: I-285 North to McFarland Road	Regional - North	GDOT	Managed Lanes	Long Range
ASP-AR-ML-310	GA 400 Managed Lanes: I-85 North to I-285 North	Regional - Central	TBD	Managed Lanes	Aspirations
ASP-AR-ML-320	GA 400 Managed Lanes: Holcomb Bridge Road to Peachtree Parkway	Regional - North	TBD	Managed Lanes	Aspirations
ASP-FN-268	Hammond Drive Widening: GA 400 to Ashford Dunwoody Road	Regional - North	TBD	General Purpose Capacity	Aspirations
ASP-FN-271	SR 120 (Old Milton Parkway) Widening: SR 400 to Kimball Bridge Road	Fulton County (North)	TBD	General Purpose Capacity	Aspirations
ASP-FN-272	GA 400 Interchange Modifications at SR 140 (Holcomb Bridge Road)	Fulton County (North)	TBD	Interchange Upgrade	Aspirations
ASP-FT-320	GA 400 New Interchange at McGinnis Ferry Road	Regional - North	TBD	Interchange Capacity	Aspirations
ASP-FT-325	McGinnis Ferry Road Widening: Union Hill Road to Tidwell Drive	Forsyth County	TBD	General Purpose Capacity	Aspirations
DK- 400	I-285N interchange upgrade at Ashford Dunwoody Road	Regional- Perimeter	GDOT	Interchange Upgrade	Long Range
DK-401	I-286 North Collector Lanes: Ashford Dunwoody to SR 141	Regional- Perimeter	GDOT	Interchange Capacity	Long Range
FN-067A	SR 9 widening: Academy Street to Windward Parkway	Fulton County (North)	GDOT	General Purpose Capacity	Programmed
FN-067B	SR widening: Upper Hembree Road to Academy Street	Fulton County (North)	GDOT	Operations & Safety	Programmed
FN-126B	SR 140: Mansell Road to Rucker Road	Fulton County (North)	GDOT	Operations & Safety	Long Range
FN-126C	Rucker Road operational improvements: Hardscrabble Road to Wills Road	Fulton County (North)	GDOT	Operations & Safety	Long Range
FN-140	Mansell Road Extension: SR 92 to SR 9	Fulton County (North)	City of Roswell	General Purpose Capacity	Programmed
FN-145	Commerce Parkway Extension: Old Roswell Road to SR 140 (Holcomb Bridge Road)	Fulton County (North)	City of Roswell	General Purpose Capacity	Long Range
FN-203	SR 140 (Holcomb Bridge Road) ATMS: SR 9 (Alpharetta Highway) to Barnwell Road	Fulton County (North)	City of Roswell	Operations & Safety	Programmed
FN-204	SR 92 ATMS: Cobb County Line to SR 9	Fulton County (North)	City of Roswell	Operations & Safety	Programmed
FN-221	Johnson Ferry Road Capacity and Operational Improvements	Fulton County (North)	City of Sandy Springs	General Purpose Capacity	Programmed

Table 4-4: *Plan2040* RTP/TIP Roadway Projects cont.

ARC ID#	Project	Location	Sponsor	Project Type	Status
FN-222	SR 9 (Cumming Highway): Windward Parkway to McFarland Road	Fulton County (North)	GDOT	General Purpose Capacity	Long Range
FN-230	Johnson Ferry Road at Sandy Springs Circle upgrades	Fulton County (North)	City of Sandy Springs	Operations & Safety	Programmed
FN-267	Hammond Drive Widening: SR 9 (Roswell Road) to Glenridge Drive	Fulton County (North)	City of Sandy Springs	General Purpose Capacity	Long Range
FN-269	SR 9 (Atlanta Street) Reversible Lane Removal and Widening: Marietta Highway to Riverside Drive	Fulton County (North)	TBD	General Purpose Capacity	Long Range
FN-276	GA 400 Restriping to Create Continuous Fourth Lane In Southbound Direction: Windward Parkway to Southbound Ramp At SR 140 (Holcomb Bridge Road)	Fulton County (North)	GDOT	General Purpose Capacity	Programmed
FN-AR-100A	GA 400 Addition Of 4-Lane Collector/Distributor System: Vicinity of Hammond Drive And Abernathy Road to North of Spalding Drive	Fulton County (North)	GDOT	General Purpose Capacity	Long Range
FN-AR-185	I-285N Auxiliary westbound lane: US 19 to Riverside Drive	Regional-Perimeter	GDOT	General Purpose Capacity	Long Range
FN-AR-191	GA 400 Interchange Upgrade At Northridge Road	Regional - North	GDOT	Interchange Capacity	Programmed
FN-AR-203	I-285N at SR 9 upgrade	Regional-Perimeter	GDOT	Interchange Capacity	Long Range

Table 4-5: *Plan2040* RTP/TIP Transit Projects

ARC ID#	PROJECT	LOCATION	SPONSOR	Project Type	STATUS
AR-409A	I-285 North Corridor High Capacity Rail Service - Protective ROW Acquisition: Cumberland/Galleria Area to Perimeter Center	Regional - Perimeter	TBD	Rail Capital	Long Range
AR-410A	I-285 North Corridor High Capacity Rail Service - Protective ROW Acquisition : Perimeter Center to Norcross	Regional - Perimeter	TBD	Rail Capital	Long Range
ASP-AR-409B	I-285 North Corridor High Capacity Rail Service: Cumberland / Galleria Area to Perimeter Center	Regional - Perimeter	TBD	Rail Capital	Aspirations
ASP-AR-410B	I-285 North Corridor High Capacity Rail Service: Perimeter Center to Doraville Marta Station	Regional - Perimeter	TBD	Rail Capital	Aspirations
ASP-AR-424	North Corridor High Capacity Rail Service: Perimeter Center to SR 140 (Holcomb Bridge Road)	Regional - North	TBD	Rail Capital	Aspirations
ASP-AR-425	North Corridor High Capacity Rail Service: SR 140 (Holcomb Bridge Road) to North Point Mall Area	Regional - North	TBD	Rail Capital	Aspirations
ASP-AR-426	North Corridor High Capacity Rail Service: North Point Mall Area to Windward Parkway	Regional - North	TBD	Rail Capital	Aspirations

Table 4-6: TIA 2010 Projects along GA 400 Corridor

TIA ID#	Project Name	Type	Subregion	Delivery	Network Year	Funding In Millions $			
						TIA	Federal	Local	Total
TIA-FN-013	Hammond Drive: SR 9 (Roswell Road) to SR 400 - Improvements	Roadway	North Subregion	Medium	2030	10.0	-	23.5	33.5
TIA-FN-014	GA 400: I-285 North to Spalding Drive - Collector Distributor Lanes	Roadway	North Subregion	High	2030	60.0	30.0	-	190.0
TIA-FN-035	SR 9 (Atlanta Street): Chattahoochee River to SR 120 (Marietta Highway) - Widening and Corridor Improvements	Roadway	North Subregion	Medium	2030	20.4	-	-	20.4
TIA-FN-003	SR 120 (Old Milton Parkway): GA 400 to Kimball Bridge Road - Widening	Roadway	North Subregion	Medium	Aspirations	37.0	-	-	37.0
TIA-DK-069	Mt Vernon Road: Fulton County Line to Dunwoody Club Drive - Corridor Improvements	Roadway	North Subregion	N/A	Exempt	12.0	-	-	12.0
TIA-FN-005	SR 120 (Old Milton Parkway) at GA 400 and Morris Road - Interchange/Intersection Improvements	Roadway	North Subregion	N/A	Exempt	1.9	-	-	1.9
TIA-FN-034	GA 400 at SR 140 (Holcomb Bridge Road) - Interchange Improvements	Roadway	North Subregion	Medium	N/A	23.0	25.0	-	48.0
TIA-AR-030	I-285 North at GA 400 - Interchange Improvements	Roadway	I-285 Corridor	Low	N/A	112.5	337.5	-	450.0
TIA-M-005	MARTA Tunnel and Platform Lighting Upgrade	Transit	Regional	N/A	Exempt	28.0	-	-	28.0
TIA-M-006	MARTA Tunnel Ventilation Rehabilitation	Transit	Regional	N/A	Exempt	0.7	-	-	0.7
TIA-AR-037	MARTA North Heavy Rail Line Extension to SR 140 - Project Development Activities	Transit	North Subregion	Low	Aspirations	37.0	-	-	37.0

Source: TIA/ARC 2011

Table 4-7: Sandy Springs TMP Projects in Study Area

Project ID No.	Project	Sponsor	Time Period
B2	Reconstruct Northridge Road at SR 400 interchange (coordinate with GDOT's SR 400 improvements)	GDOT	Long
B4	Construct collector/distributor road system including Hammond Drive ramps at SR 400 (coordinate with GDOT's SR 400 improvements)	GDOT/ RTP	Short
B5	Provide intersection capacity/operational improvements to include turn lane modifications, median segments near intersections, pedestrian crosswalks and sidewalk enhancements at congested intersections along Roswell Road to include (but not limited to): Roberts Drive, North River Parkway, Hightower Trail, Pitts Road, Morgan Falls Road, Trowbridge Road, Dalrymple Road, Glenridge Drive, Mount Paran Road, and Windsor Parkway.	Sandy Springs	Short
B6	Provide intersection capacity/operational improvements to include minor intersection geometrics, installation of turn lanes, and/or implementation of signal or roundabout at congested intersections to include (but not limited to): Glenridge Drive at Hammond Drive, Glenridge Drive at Johnson Ferry Road, Hammond Drive at Lake Forrest Drive, Mount Paran Road at Powers Ferry Road, Peachtree Dunwoody Road at Lake Hearn Drive, Spalding Drive at Dunwoody Club Drive, Spalding Drive at Pitts Road, Spalding Drive at Jett Ferry Road, Peachtree-Dunwoody Road at Spalding Drive, and Peachtree- Dunwoody Road at Abernathy Drive.	Sandy Springs	Short
C4	Prepare design and implementation plan for transit circulator in downtown Sandy Springs, express bus service to Perimeter Center, and express bus service to Sandy Springs MARTA Rail Station	Sandy Springs	Short
C5	Provide streetscape improvements along Roswell Road from Abernathy Road to Hilderbrand Drive, from Hammond Drive to Cliffwood Drive, and from I-285 to the City of Atlanta	Sandy Springs	Short
C10	Widen Hammond Drive from Glenridge Drive to Peachtree Dunwoody Road to increase roadway capacity and provide sidewalks on both sides.	Sandy Springs	Short
C18	Provide express transit service between downtown Sandy Springs and Perimeter Center via Hammond Drive (include one intercept parking structure as anchor point for service)	Sandy Springs	Mid
C20	Provide express transit service between downtown Sandy Springs and MARTA Sandy Springs Station via Mount Vernon Road (include one intercept parking structure as anchor point for service)	Sandy Springs	Long
D1	Improve Johnson Ferry Road from the Chattahoochee River to Abernathy Road and widen Abernathy Road from Johnson Ferry Road to Roswell Road to provide 4 through lanes with bike lanes and 8-foot sidewalk	GDOT	Short
D4	Complete concept design and continue planning/engineering for Hammond Drive corridor between Glenridge Drive and Roswell Road to improve as a "complete street" to include automobile, pedestrian, transit, bicycle, and landscaping/aesthetic components	Sandy Springs	Short
E2	Construct sidewalks with bike lanes along River Valley Road from Johnson Ferry Road to Riverside Drive	Sandy Springs	Short
E3	Construct sidewalks with bike lanes along Riverside Drive from River Valley Road to Heards Ferry Road and extend sidewalks north on Riverside Drive to swim and tennis club	Sandy Springs	Short

Source: Sandy Springs Transportation Master Plan 2008

Table 4-8: Dunwoody CTP Projects in Study Area

Project ID	Type	Project Description	Party	Date
2	Bicycle/ Pedestrian	Includes signed bike route and/or sharrows: North Peachtree Road, Tilly Mill Road, Peachford Road, Old Spring House Lane, Dunwoody Park, Perimeter Center East, Valley View Road, Meadow Lane Road, Vermack Road, Peeler Road, Happy Hollow Road Womack Road, Olde Perimeter Way, Ridgeview Road.	City of Dunwoody, ARC, PCID	2011 - 2015
11	Intersection	Chamblee Dunwoody Road at Spalding Drive: Reconfigure intersection to increase safety	City of Dunwoody, ARC, T-SPLOST	2011- 2015
14	Bicycle/ Pedestrian	On-street bike lane or multi-use path adjacent to the roadway along Chamblee Dunwoody Road from North Shallowford Road to Mount Vernon Road and Roberts Drive to Spalding Drive. See also Dunwoody Village Master Plan, Five Year	City of Dunwoody, ARC, TSPLOST*	2016- 2020
19	Bicycle/ Pedestrian	Neighborhood Trails: Residential bicycle/pedestrian connections to surrounding neighborhoods – As shown in the Dunwoody Village Master Plan, Five Year Implementation Plan, Project #6	City of Dunwoody, LCI, ARC	2021 - 2030
20	Bicycle/ Pedestrian	New path connection between Ridgeview Road (North) and Ridgeview Road (South) Multi-use trail along Dunwoody Gables Drive	City of Dunwoody	2021 - 2030
21	Bicycle/ Pedestrian	On-street bike lane or multi-use path adjacent to the roadway along Spalding Drive to connect to future Sandy Springs facility	City of Dunwoody, Georgia DOT	2021 - 2030
22c	Center Turn Lane	Add center turn lane, 4' bike lanes, and 6' sidewalks with a 2' buffer to Mount Vernon Road between Dunwoody City Limit and Ashford Dunwoody Road	City of Dunwoody, ARC, TSPLOST*	Long Range
25	Multi-modal, Georgetown/ North Shallowford Master Plan	Cotillion multi-modal improvements - As shown in the Georgetown/North Shallowford Master Plan, Five Year Implementation Plan, Project #11	City of Dunwoody, LCI, ARC, GDOT	2021 - 2030

Source: City of Dunwoody Comprehensive Transportation Plan 2011

Table 4-9: Roswell Projects in Study Area

Project Number	Project Title	Project Type	Description	Timeframe for Completion
02-1008	Riverside Road Bicycle Lanes	Bicycle	Add bicycle lanes along Riverside Road from Dogwood Road to Old Alabama Road.	Long Range FY 2017-2025
02-1009	Riverside Road Bicycle Lanes	Bicycle	Add bicycle lanes in the narrow pavement gap between the Riverside Road/Old Alabama Road intersection and a point between Old Alabama Road and Martin Road.	Long Range FY 2017-2025
03-1004	Multi-Use Bridge over Holcomb Bridge Road (SR 140)	Bridge	Install a multi-use bicycle and pedestrian bridge over Holcomb Bridge Road (SR 140) at Market Boulevard. This will connect the trail system between the Chattahoochee River and Big Creek Park.	Long Range FY 2017-2025
03-1005	SR 400 Bridge Multi-Use Path	Bridge	Construct a 10' multi-use bridge supported on the existing SR 400 bridge supports connecting Don White Park with Island Ford Park in the city of Sandy Springs.	Long Range FY 2026-2035
05-1025	Riverside Road	Intersection Improvement	Construct a roundabout and remove the existing traffic signal.	Long Range FY 2026-2035
05-1032	Old Alabama Road	Intersection Improvement	Construct a roundabout at the intersection of Old Alabama Road and Riverside Road facilitating the removal of the traffic signal. Also included in this project will be accommodations for pedestrians and bicyclists.	Long Range FY 2026-2035
05-1036	Grimes Bridge Road	Intersection Improvement	Construct a roundabout at the intersection of Grimes Bridge Road and Dogwood Road facilitating the removal of the traffic signal. Also included in this project will be accommodations for pedestrians and bicyclists.	Long Range FY 2026-2035
06-1001	Dogwood Road Multi-Use Trail -	Multi-Use Path	Add a 12-foot multi-use trial along the eastern side of Dogwood Road from Riverside Road to Grimes Bridge Road.	Long Range FY 2017-2025
06-1002	Big Creek Multi-Use Trail across Holcomb Bridge Road (SR 140)	Multi-Use Path	Construct a multimodal facility to connect the existing multi-use path on Old Alabama Road south of Holcomb Bridge Road (SR 140) with Big Creek Park along Old Alabama Road. Given the congestion at the intersection of Old Alabama Road and Holcomb Bridge Road (SR 140), this trail will cross Holcomb Bridge Road (SR 140) one block west at Market Boulevard at an at grade crosswalk. (See also RDOT# 03-1004)	Long Range FY 2017-2025
06-1006	Old Dogwood Road Multi-Use Trail	Multi-Use Path	Add a 12-foot multi-use trail along the east side of Dogwood Road/SR 400 ROW.	Long Range FY 2017-2025
06-1009	Old Holcomb Bridge Road Multi-Use Trail	Multi-Use Path	Install a 12-foot multi-use trial along the east side of Dogwood Road/SR 400 ROW. This project would include a bicycle and pedestrian bridge over Holcomb Bridge Road (SR 140).	Long Range FY 2017-2025
07-1039	Old Dogwood Road Sidewalks	Pedestrian	Construct missing sidewalk on the eastern side of Old Dogwood Road at the Grimes Bridge/Dogwood Road intersection.	Long Range FY 2026-2035
07-1015	Old Holcomb Bridge Road Sidewalks	Pedestrian	Add a sidewalk along the western side of road from Dogwood Road to Chadds Ford Way.	Long Range FY 2026-2035

Table 4-9: Roswell Projects in Study Area cont.

Project Number	Project Title	Project Type	Description	Timeframe for Completion
09-1005	Big Creek Bridge Road Phase 1	Roadway	Create a new multi-modal connection between Old Holcomb Bridge Road and Old Alabama Road. The two-lane roadway will include 11-foot lanes and 4-foot bicycle lanes on each side with a 5-foot sidewalk on one side and a 10-foot multi-use trail on the other. This phase includes a new bridge over SR 400 between Exits 7 and 8. There will be no access to SR 400 from the bridge.	In CIP
09-1013	Big Creek Bridge Road Phase 3	Roadway	Create a new connection between Big Creek Bridge Road and Mansell Road along the eastern side of SR 400.	Long Range 2017-2025
09-1024	Big Creek Bridge Road - Phase 4	Roadway	Create a new connection between the current end of Old Holcomb Bridge Road and Mansell Road near Davis Drive in Alpharetta.	Long Range FY 2026-2035
09-1046	SR 400 Northbound Off-Ramp	Roadway	Add a slip ramp from SR 400 northbound, before Exit 7A/B, to Market Boulevard to alleviate congestion at the Holcomb Bridge Road (SR 140) interchange.	Long Range FY 2017-2025
11-1007	Transit Center	Other	Construct a Transit Center to facilitate transfers between transit modes including local bus, BRT, LRT, HRT or any combination of these modes to anchor redevelopment of certain parcels that would benefit from the visibility and proximity to transit services.	Long Range FY 2026-2035
11-1001	Park and Ride Lot	Other	Construct a park and ride lot at or adjacent to the Holcomb Bridge Road (SR 140) and SR 400 interchange. The space count and location will be determined later.	Long Range FY 2017-2025

Source: Roswell Transportation Master Plan 2006, 2011

Table 4-10: Daily Person Trips

	2010	2040
From study area (Productions)	362,900	467,100
To study area (Attractions)	682,600	992,600
Within study area (Productions and Attractions)	454,500	616,200

Table 4-11: Total Person Trip Productions from Study Area

District	2010		2040		Change	Percent Change
	Trips	Percent of All Trips	Trips	Percent of All Trips		
To District						
Study Area	454,500	40.0%	616,200	38.3%	161,700	35.6%
NW Fulton	22,900	2.0%	25,500	1.6%	2,600	11.4%
NE Fulton	38,600	3.4%	49,900	3.1%	11,300	29.3%
Downtown/Midtown	16,300	1.4%	20,700	1.3%	4,400	27.0%
Buckhead	28,700	2.5%	39,800	2.5%	11,100	38.7%
Central Fulton	34,600	3.0%	44,900	2.8%	10,300	29.8%
S Fulton	6,800	0.6%	8,000	0.5%	1,200	17.6%
N DeKalb	57,100	5.0%	70,600	4.4%	13,500	23.6%
S DeKalb	5,700	0.5%	7,200	0.4%	1,500	26.3%
Forsyth	26,300	2.3%	37,900	2.4%	11,600	44.1%
Gwinnett	47,000	4.1%	65,200	4.1%	18,200	38.7%
Cobb	63,100	5.5%	75,900	4.7%	12,800	20.3%
Cherokee	9,500	0.8%	15,100	0.9%	5,600	58.9%
Hall	800	0.1%	600	0.0%	-200	-25.0%
Bartow/Paulding	800	0.1%	800	0.0%	0	0.0%
Carroll/Coweta/Douglas	1,200	0.1%	1,400	0.1%	200	16.7%
Bartow/New/Roc/Wal	800	0.1%	900	0.1%	100	12.5%
Clayton/Fayette/Hen/Spa	2,700	0.2%	2,700	0.2%	0	0.0%
Total	**817,400**	**71.9%**	**1,083,300**	**67.3%**	**265,900**	**32.5%**

Table 4-12: Total Person Trip Attractions to Study Area

District	2010		2040		Change	Percent Change
	Trips	Percent of All Trips	Trips	Percent of All Trips		
From District						
Study Area	454,500	40.0%	616,200	38.3%	161,700	35.6%
NW Fulton	47,400	4.2%	55,300	3.4%	7,900	16.7%
NE Fulton	80,100	7.0%	100,100	6.2%	20,000	25.0%
Downtown/Midtown	8,000	0.7%	12,100	0.8%	4,100	51.3%
Buckhead	22,600	2.0%	33,600	2.1%	11,000	48.7%
Central Fulton	53,400	4.7%	71,600	4.5%	18,200	34.1%
S Fulton	16,800	1.5%	21,400	1.3%	4,600	27.4%
N DeKalb	84,300	7.4%	102,900	6.4%	18,600	22.1%
S DeKalb	23,500	2.1%	27,800	1.7%	4,300	18.3%
Forsyth	64,900	5.7%	135,600	8.4%	70,700	108.9%
Gwinnett	93,300	8.2%	134,600	8.4%	41,300	44.3%
Cobb	110,400	9.7%	152,000	9.4%	41,600	37.7%
Cherokee	39,400	3.5%	71,100	4.4%	31,700	80.5%
Hall	5,700	0.5%	10,900	0.7%	5,200	91.2%
Bartow/Paulding	6,800	0.6%	13,400	0.8%	6,600	97.1%
Carroll/Coweta/Douglas	6,700	0.6%	15,200	0.9%	8,500	126.9%
Bartow/Newton/Roc/Wal	7,800	0.7%	18,900	1.2%	11,100	142.3%
Clayton/Fayette/Hen/Spa	11,500	1.0%	16,100	1.0%	4,600	40.0%
Total	**1,137,100**	**100.0%**	**1,608,800**	**100.0%**	**471,700**	**41.5%**

Table 4-13: Study Area Trips by Type

Trip Purpose	Total Productions (Includes Internal Trips)		Total Attractions (Includes Internal Trips)	
	2010	2040	2010	2040
HBW	14.7%	14.3%	23.6%	25.0%
HBO	34.4%	30.8%	39.8%	38.0%
NHB	51.0%	54.9%	36.7%	37.0%

Source: ARC Travel Demand Model 2011

Table 4-14: 2010 Top HBW Trips (Both Directions)

Rank	From	To	Daily Trips	Percent of Study Area Total
1	Study Area	Study Area	56,400	17.0%
2	Cobb	Study Area	50,600	15.2%
3	Gwinnett	Study Area	41,900	12.6%
4	N DeKalb	Study Area	31,700	9.5%
5	Forsyth	Study Area	26,800	8.1%
6	NE Fulton	Study Area	20,200	6.1%
7	Cherokee	Study Area	19,400	5.8%
8	Central Fulton	Study Area	18,300	5.5%
9	NW Fulton	Study Area	11,400	3.4%
10	S DeKalb	Study Area	9,900	3.0%
Total of Top 10			**286,600**	**86.3%**
Total Study Area HBW Trips			**332,000**	**100.0%**

Source: ARC Travel Demand Model

Table 4-15: 2040 Top HBW Trips (Both Directions)

Rank	From	To	Daily Trips	Percent of Study Area Total
1	Study Area	Study Area	84,700	17.9%
2	Cobb	Study Area	66,600	14.1%
3	Gwinnett	Study Area	53,800	11.4%
4	N DeKalb	Study Area	50,900	10.8%
5	Forsyth	Study Area	40,500	8.6%
6	NE Fulton	Study Area	32,300	6.8%
7	Cherokee	Study Area	27,200	5.8%
8	Central Fulton	Study Area	25,600	5.4%
9	NW Fulton	Study Area	14,700	3.1%
10	S DeKalb	Study Area	9,400	2.0%
Total			**405,700**	**85.9%**
Total Study Area HBW Trips			**472,100**	**100.0%**

Source: ARC Travel Demand Model 2011

Table 4-16: HBW Person Trip Attractions to Study Area

From District	2010		2040		Change	Percent Change
	Trips	Percent	Trips	Percent		
Internal	56,400	21.0%	84,700	21.1%	28,300	50.2%
Cobb	38,500	14.3%	53,900	13.4%	15,400	40.0%
Gwinnett	33,300	12.4%	44,800	11.1%	11,500	34.5%
Forsyth	22,500	8.4%	47,300	11.8%	24,800	110.2%
N DeKalb	20,100	7.5%	26,000	6.5%	5,900	29.4%
Cherokee	18,100	6.7%	30,900	7.7%	12,800	70.7%
NE Fulton	17,400	6.5%	23,200	5.8%	5,800	33.3%
Central Fulton	12,300	4.6%	17,200	4.3%	4,900	39.8%
NW Fulton	9,900	3.7%	13,000	3.2%	3,100	31.3%
S DeKalb	9,100	3.4%	8,900	2.2%	-200	-2.2%
Other	30,900	11.5%	52,000	12.9%	21,100	68.3%
Total	**268,500**	**100.0%**	**401,900**	**100.0%**	**133,400**	**49.7%**

Source: ARC Travel Demand Model 2011

Table 4-17: HBW Person Trip Productions from Study Area

To District	2010		2040		Change	Percent Change
	Trips	Percent	Trips	Percent		
Internal	56,400	47.1%	84,700	54.6%	28,300	50.2%
Cobb	12,100	10.1%	12,700	8.2%	600	5.0%
Gwinnett	11,600	9.7%	14,400	9.3%	2,800	24.1%
Forsyth	8,600	7.2%	9,000	5.8%	400	4.7%
N DeKalb	6,400	5.3%	6,000	3.9%	-400	-6.3%
NE Fulton	6,000	5.0%	8,400	5.4%	2,400	40.0%
Cherokee	4,800	4.0%	7,300	4.7%	2,500	52.1%
NW Fulton	4,300	3.6%	3,600	2.3%	-700	-16.3%
Central Fulton	2,800	2.3%	4,000	2.6%	1,200	42.9%
S DeKalb	1,500	1.3%	1,700	1.1%	200	13.3%
Other	5,300	4.4%	3,200	2.1%	-2,100	-39.6%
Total	**119,800**	**100.0%**	**155,000**	**100.0%**	**35,200**	**29.4%**

Source: ARC Travel Demand Model 2011

Table 4-18: AM Peak Period Average Travel Times (Minutes: Automobile/Transit)

District	To Downtown (Minutes for Automobile/Transit)		From Downtown (Minutes for Automobile/Transit)	
	2010	2040	2010	2040
Windward	65 / 94	89 / 116	53 / 91	70 / 98
North Point	59 / 77	77 / 84	49 / 77	68 / 79
Perimeter	42 / 41	54 / 41	42 / 41	56 / 41

Source: ARC Travel Demand Model 2011

Table 4-19: Total Trips Mode Shares (Percent)

Mode	2010		2040	
	Productions (Percent)	Attractions (Percent)	Productions (Percent)	Attractions (Percent)
Drive Alone	59	59	60	59
Shared Ride	39	39	38	39
Transit	2	2	2	2
Total	**100**	**100**	**100**	**100**

Source: ARC Travel Demand Model 2011

Table 4-20: HBW Mode Shares (Percent)

Mode	2010		2040	
	Productions (Percent)	Attractions (Percent)	Productions (Percent)	Attractions (Percent)
Drive Alone	83	86	83	86
Shared Ride	11	10	11	10
Transit	6	4	6	4
Total	**100**	**100**	**100**	**100**

Source: ARC Travel Demand Model 2011

Table 4-21: Transit Trip Productions From Study Area

To District	2010		2040		Change	Percent Change
	Trips	Percent	Trips	Percent		
Study Area	7,200	55.4%	9,100	51.7%	1,900	26.4%
CBD/Midtown	2,100	16.2%	2,600	14.8%	500	23.8%
N DeKalb	1000	7.7%	1,600	9.1%	600	60.0%
Central Fulton	1000	7.7%	1,700	9.7%	700	70.0%
Buckhead	800	6.2%	1,400	8.0%	600	75.0%
Other	900	6.9%	1,200	6.8%	300	33.3%
Total	**13,000**	**100.0%**	**17,600**	**100.0%**	**4,600**	**35.4%**

Source: ARC Travel Demand Model 2011

Table 4-22: Transit Trip Attractions to Study Area

From District	2010		2040		Change	Percent Change
	Trips	Percent	Trips	Percent		
Study Area	7,200	38.5%	9,100	34.0%	1,900	26.4%
N DeKalb	2,400	12.8%	3,100	11.6%	700	29.2%
Central Fulton	1700	9.1%	2,200	8.2%	500	29.4%
S Fulton	1300	7.0%	2,000	7.5%	700	53.8%
S DeKalb	1000	5.3%	1,900	7.1%	900	90.0%
Other	5,100	27.3%	8,500	31.7%	3400	66.7%
Total	18,700	100.0%	26,800	100.0%	8,100	43.3%

Source: ARC Travel Demand Model 2011

Table 5-1: Existing Bicycle Facilities

Roadway*	Facility Type	Jurisdiction
Riverside Road	Bicycle Shoulder	Roswell
Old Alabama Road	Bicycle Lane	Roswell
Martin Road	Bicycle Lane	Roswell
Azalea Road	Bicycle Shoulder	Roswell
Hollyberry Drive	Bicycle Shoulder	Roswell
Warsaw Road	Bicycle Shoulder	Roswell
Houze Way	Bicycle Shoulder	Roswell
Woodstock Road	Bicycle Shoulder	Roswell
Crabapple Road	Bicycle Shoulder	Roswell
Pine Grove Road	Bicycle Shoulder	Roswell

Source: ARC Bicycle Inventory 2008

Table 5-2: Existing Multi-Use Trails

Name	Jurisdiction
Big Creek Greenway Trail	Alpharetta
North Park	Alpharetta
Willis Park	Alpharetta

Source: ARC Bicycle Inventory 2008

Table 5-3: Plan 2040 Planned and Programmed Bicycle and Pedestrian Improvements

ARC ID#	Project	Project Type	Location	Project Cost	Programmed Year
FN-253	SR 9 @ Chattahoochee River	Pedestrian Facility	Roswell	$3,775,625	2016
FN-259*	Encore Parkway	Bicycle/Pedestrian Facility	Alpharetta	$11,091,646	2016
FN-260	SR 9 (Roswell Rd.)	Pedestrian Facility	Sandy Springs	$1,801,400	2016
FN-275	Sandy Springs Circle – Phase II	Pedestrian Facility	Sandy Springs	$3,459,254	2016
FN-AR-BP104	SR 9 (Roswell Rd.) From Abernathy Rd. to Johnson Ferry Rd.	Pedestrian Facility	Sandy Springs	$4,115,180	2016

Source: ARC Plan 2040 RTP/TIP 2011

Table 7-1: Daily Person Trips

	2010	2040
From study area (Productions)	362,900	467,100
To study area (Attractions)	682,600	992,600
Within study area (Productions and Attractions)	454,500	616,200

Source: ARC Travel Demand Model 2011

Page Left Intentionally Blank

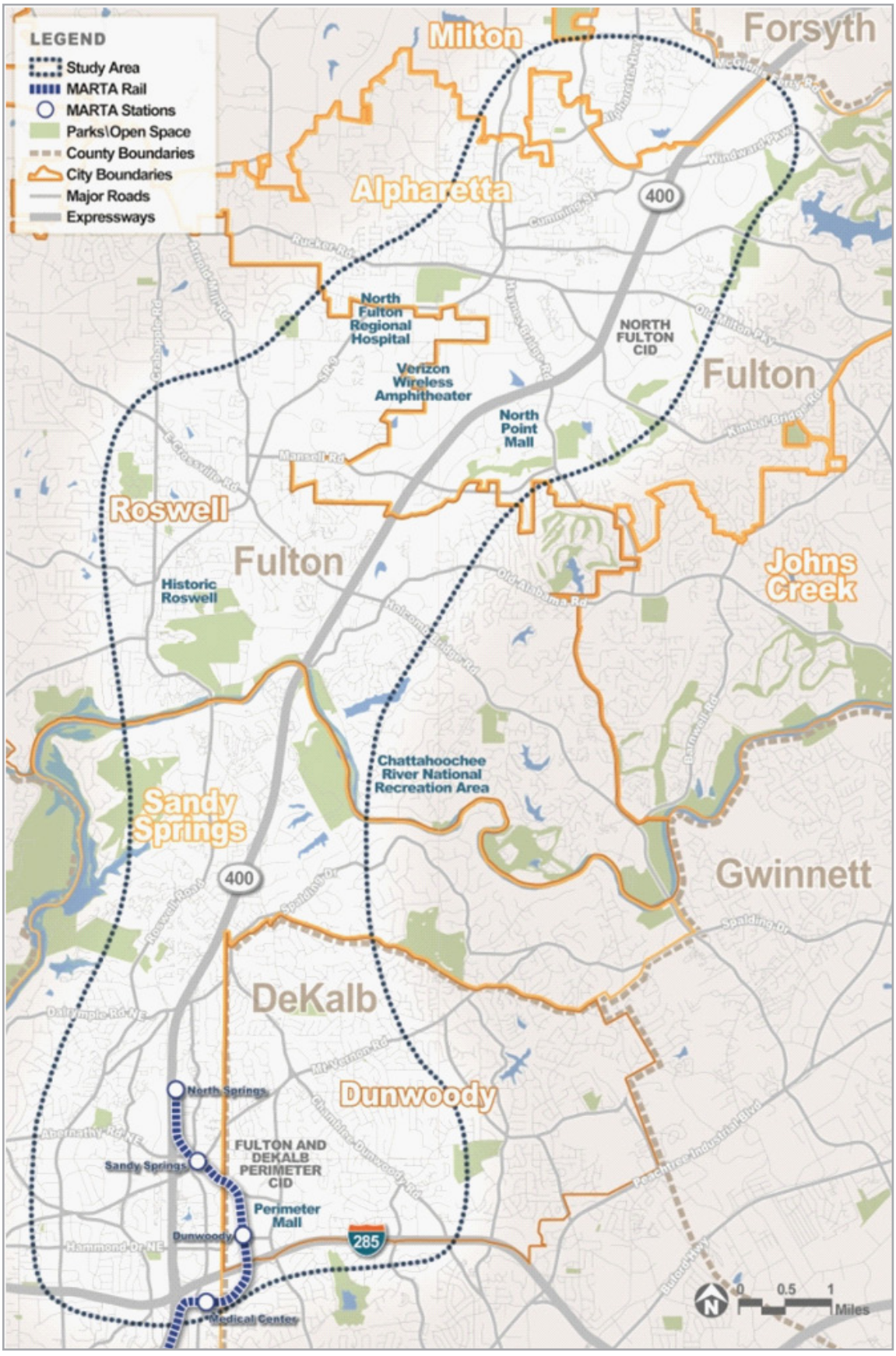
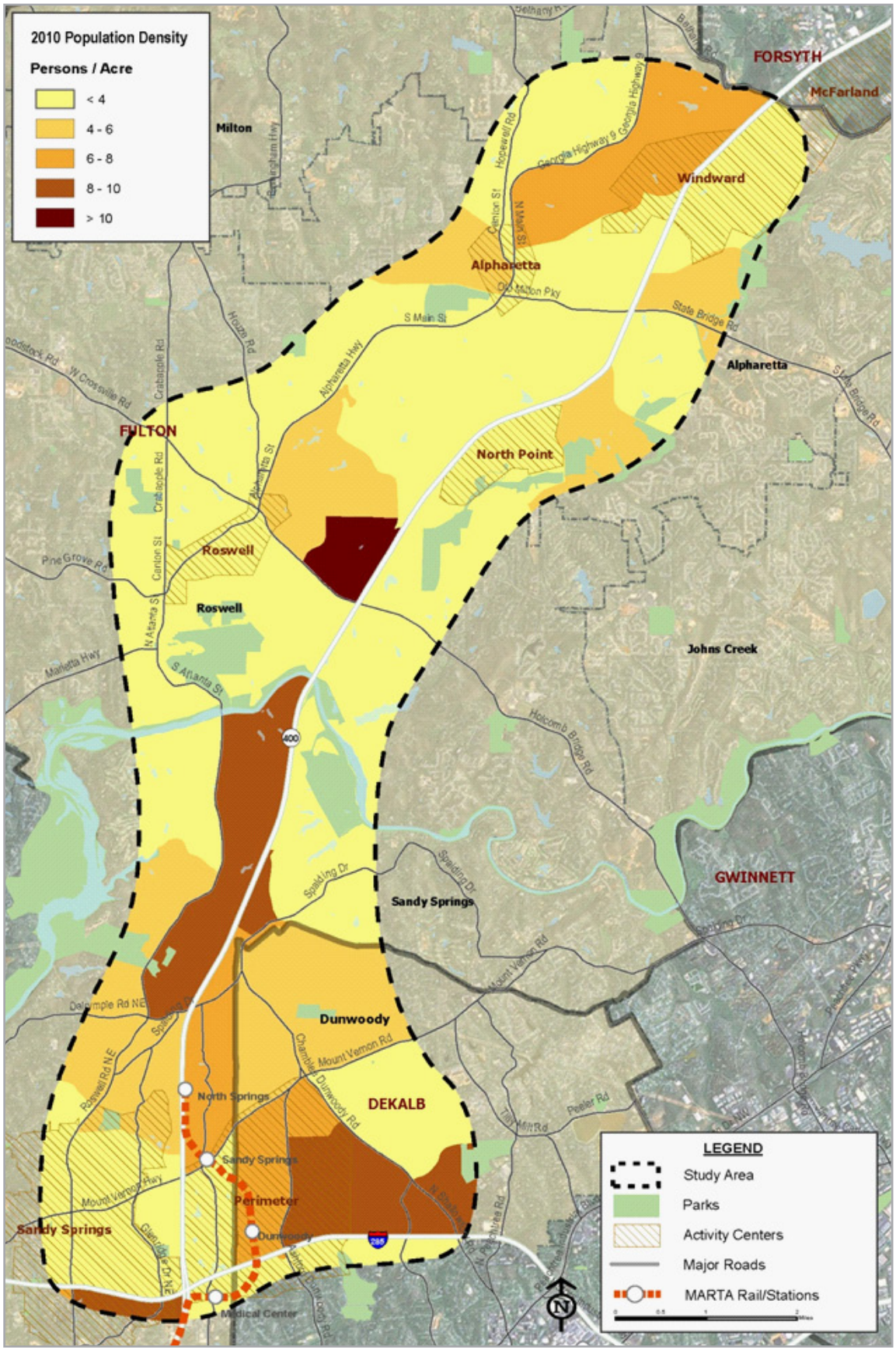


FIGURE 1-1:
GA 400 Corridor Study Area

Source:
AECOM/JJG Joint Venture

FIGURE 2-1:
2010 Population Density



Source:
US Census Bureau 2010

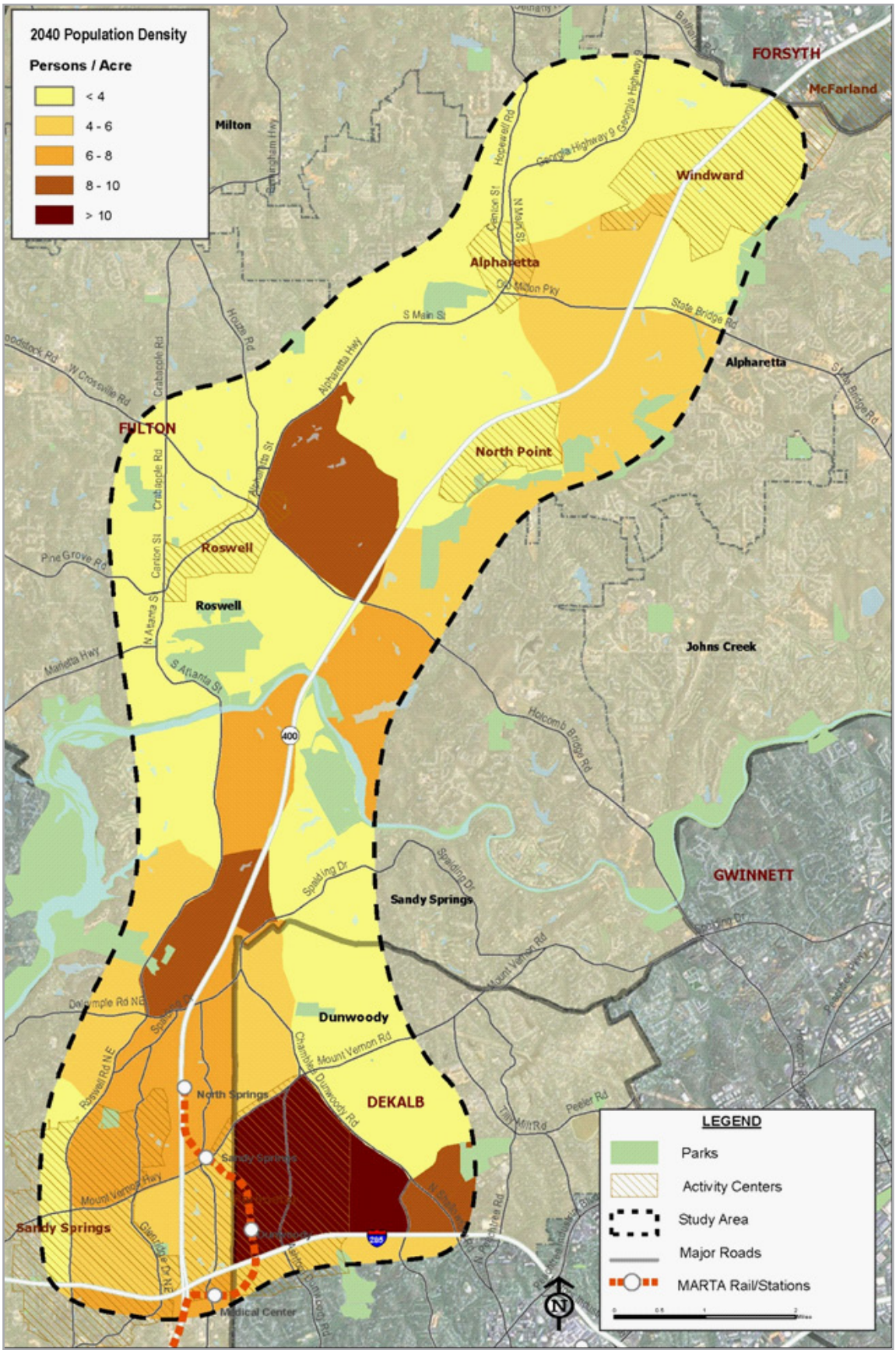
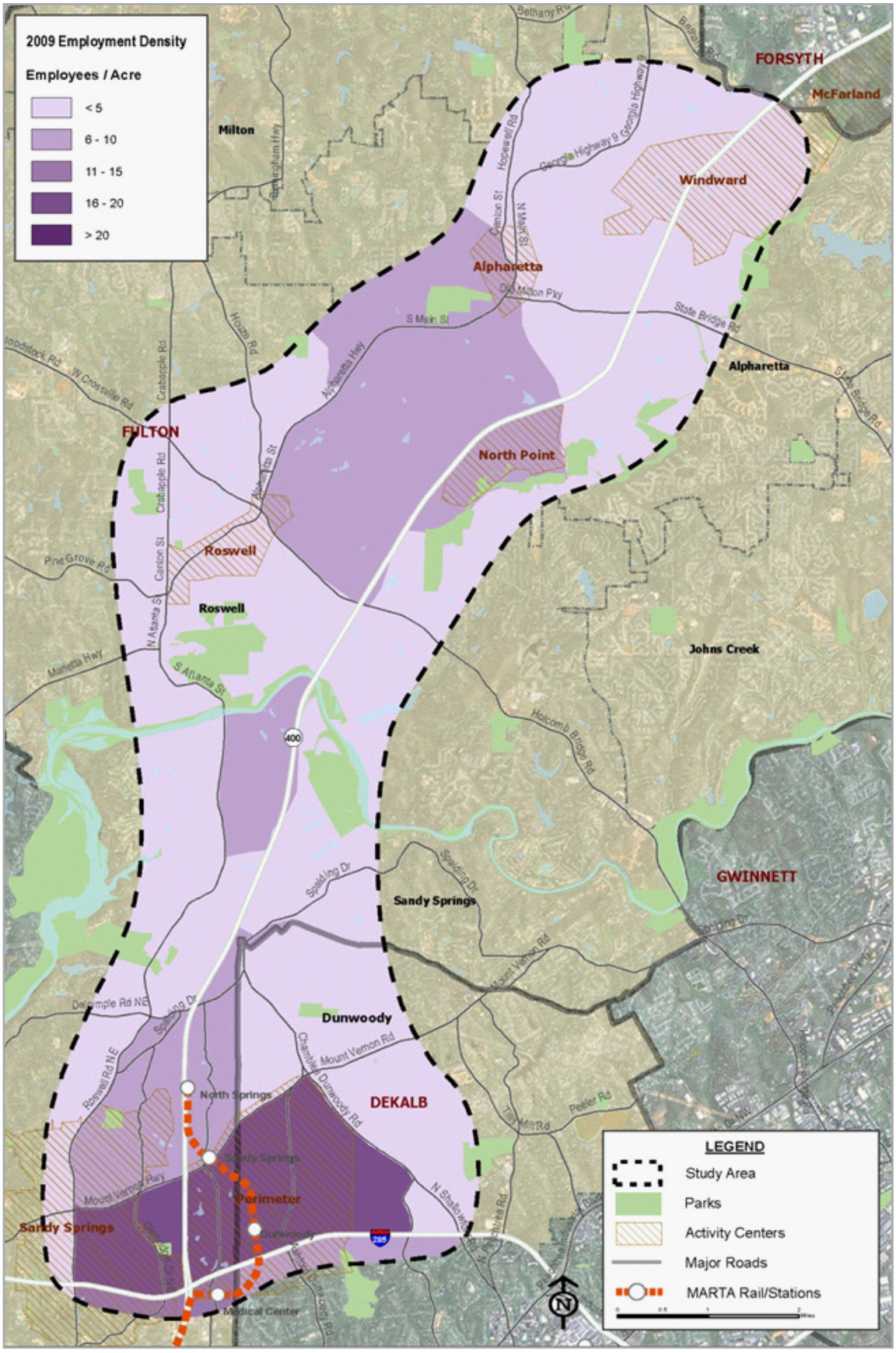


FIGURE 2-2: 2040 Population Density

Source:
US Census Bureau, ARC 2011

FIGURE 2-3:
2009 Employment Density



Source:
ARC 2011

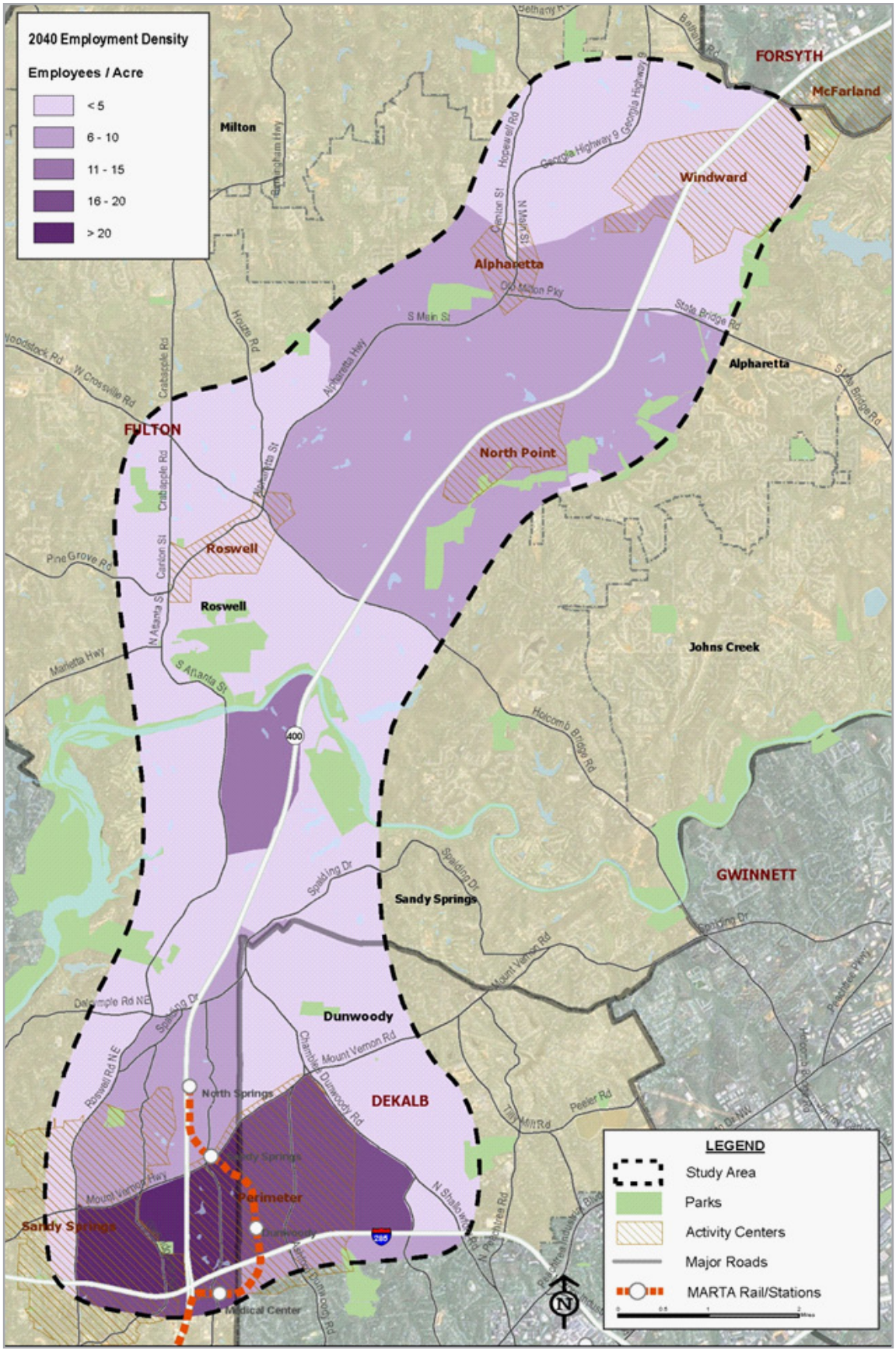
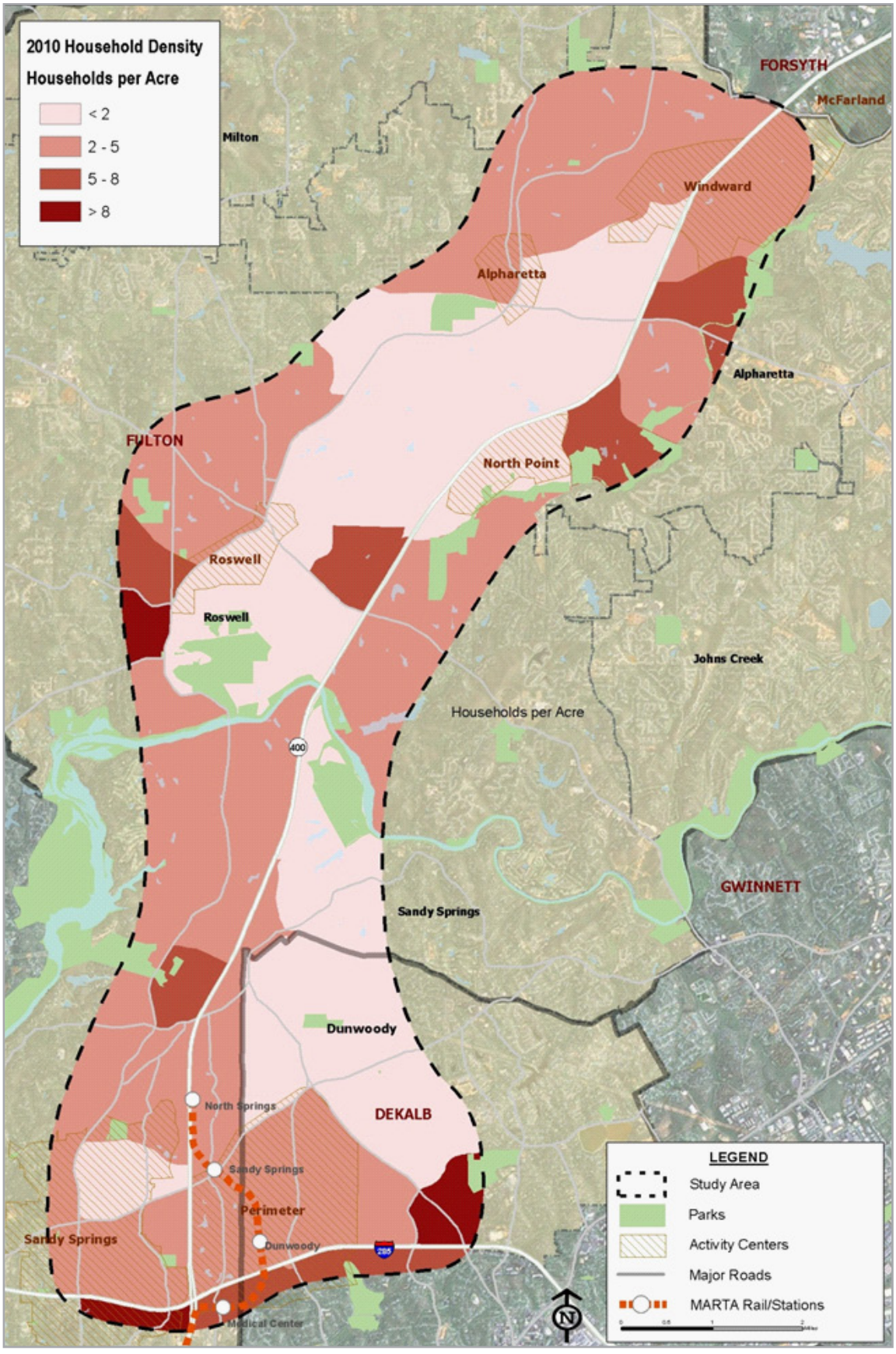


FIGURE 2-4: 2040 Employment Density

Source: ARC 2011

FIGURE 2-5:
2010 Household Density



Source:
U.S. Census Bureau 2010, ARC 2011

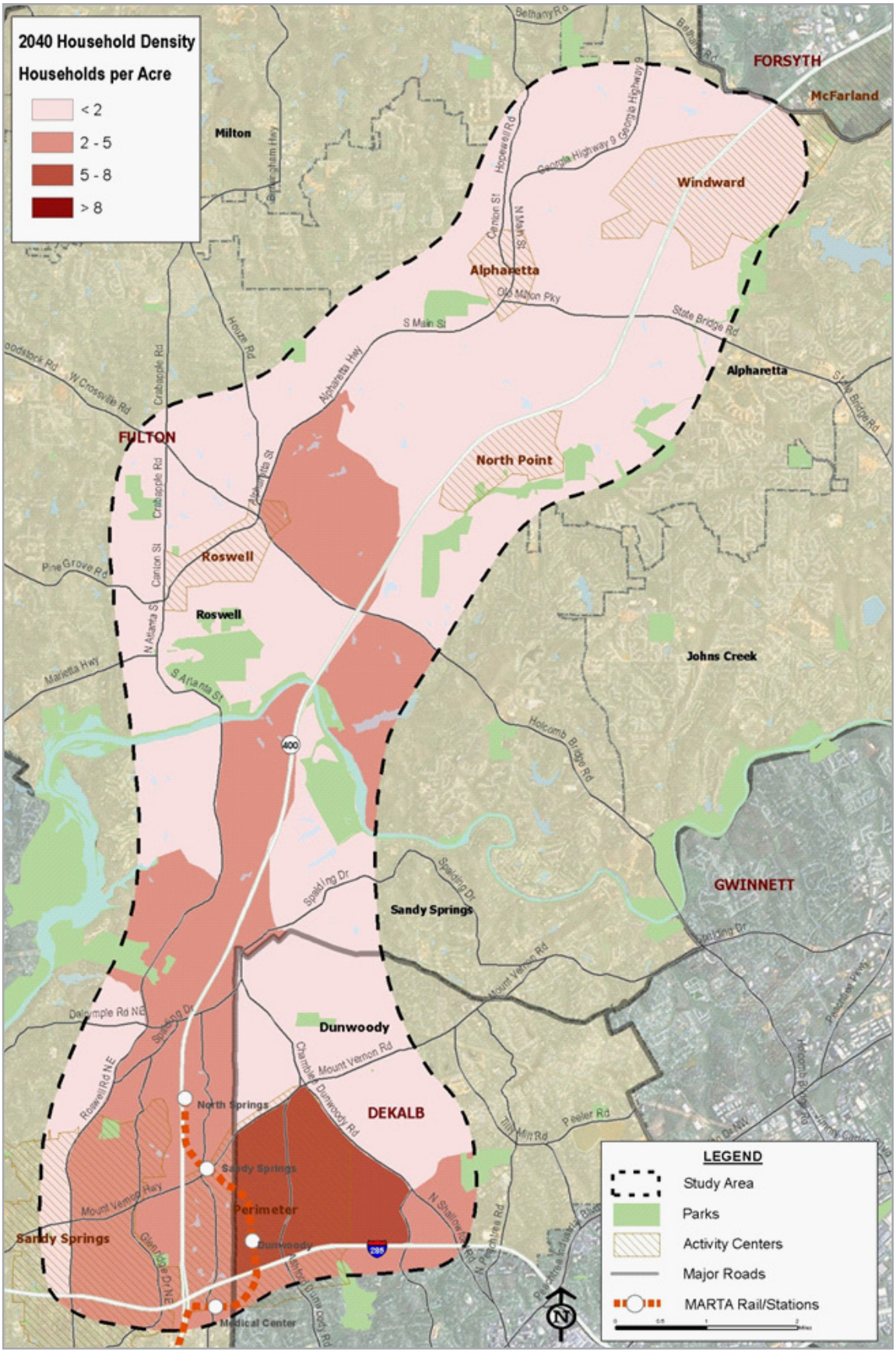
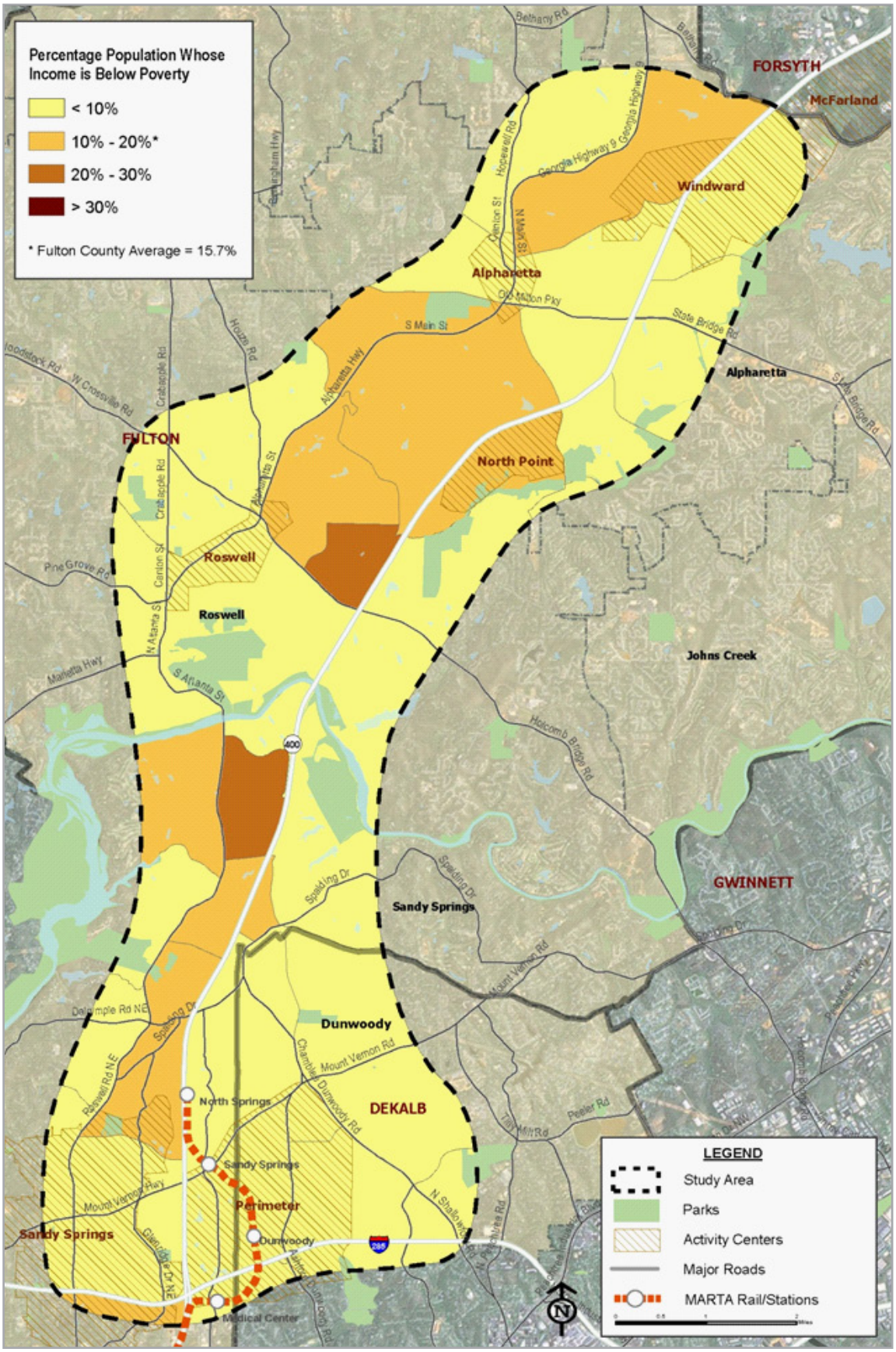


FIGURE 2-6: 2040 Household Density

Source:
U.S. Census Bureau 2010, ARC 2011

FIGURE 2-7: Population below Poverty Level (2009)



Source:
U.S. Census Bureau 2009

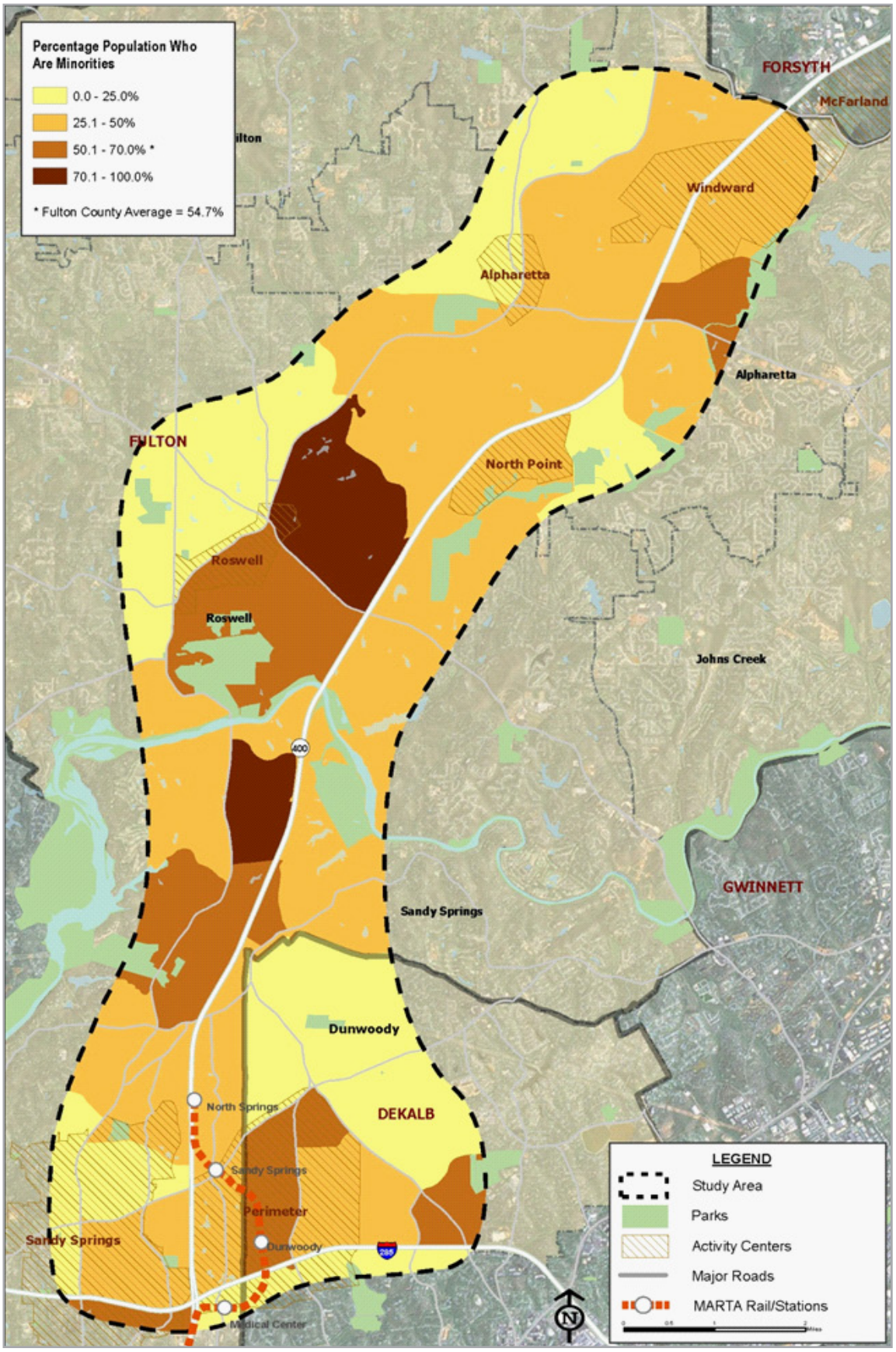
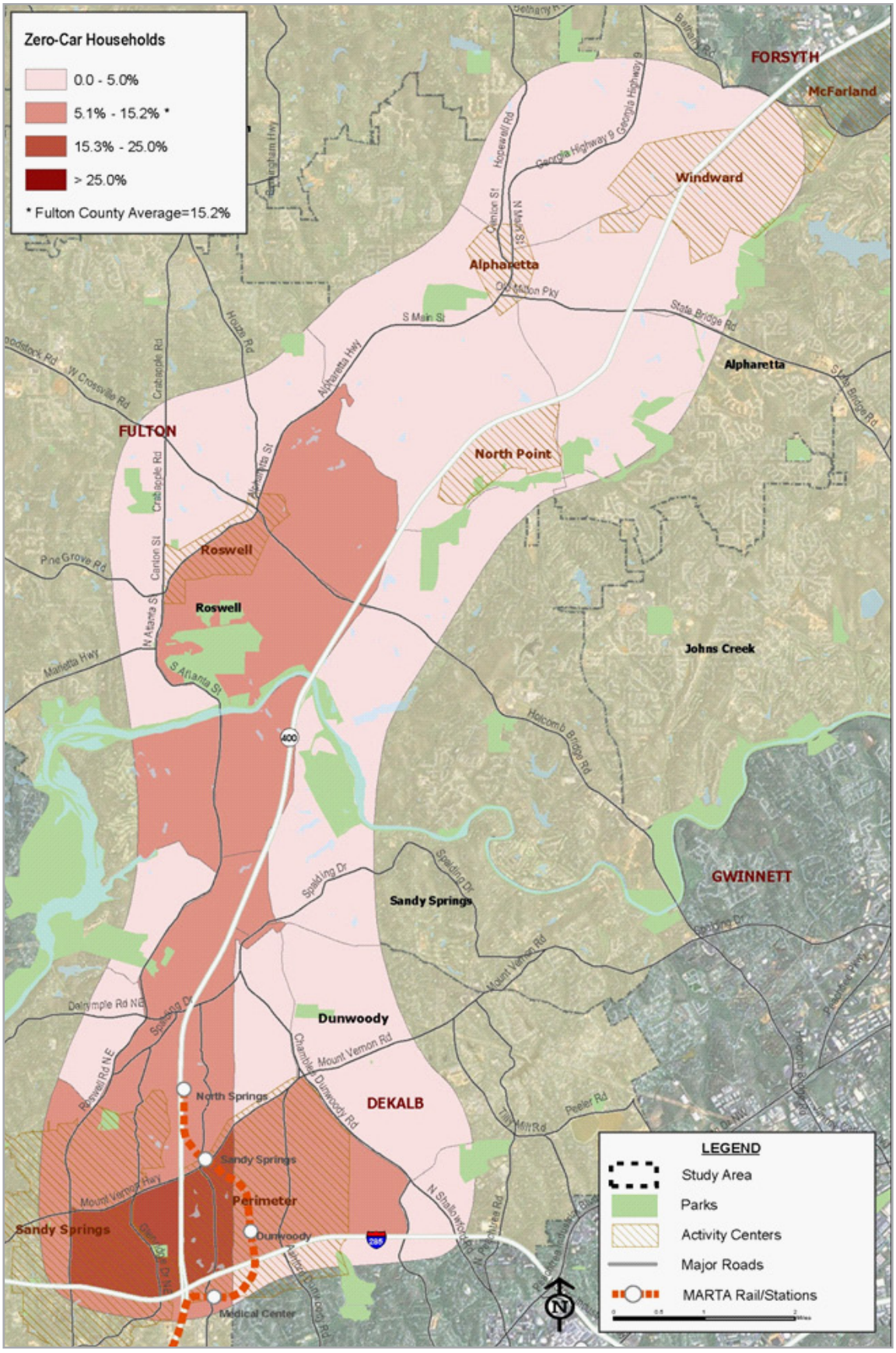


FIGURE 2-8: Concentrations of Minority Populations (2010)

Source:
U.S. Census Bureau 2010

FIGURE 2-9: Zero-Car Households (2000)



Source:
U.S. Census Bureau 2000

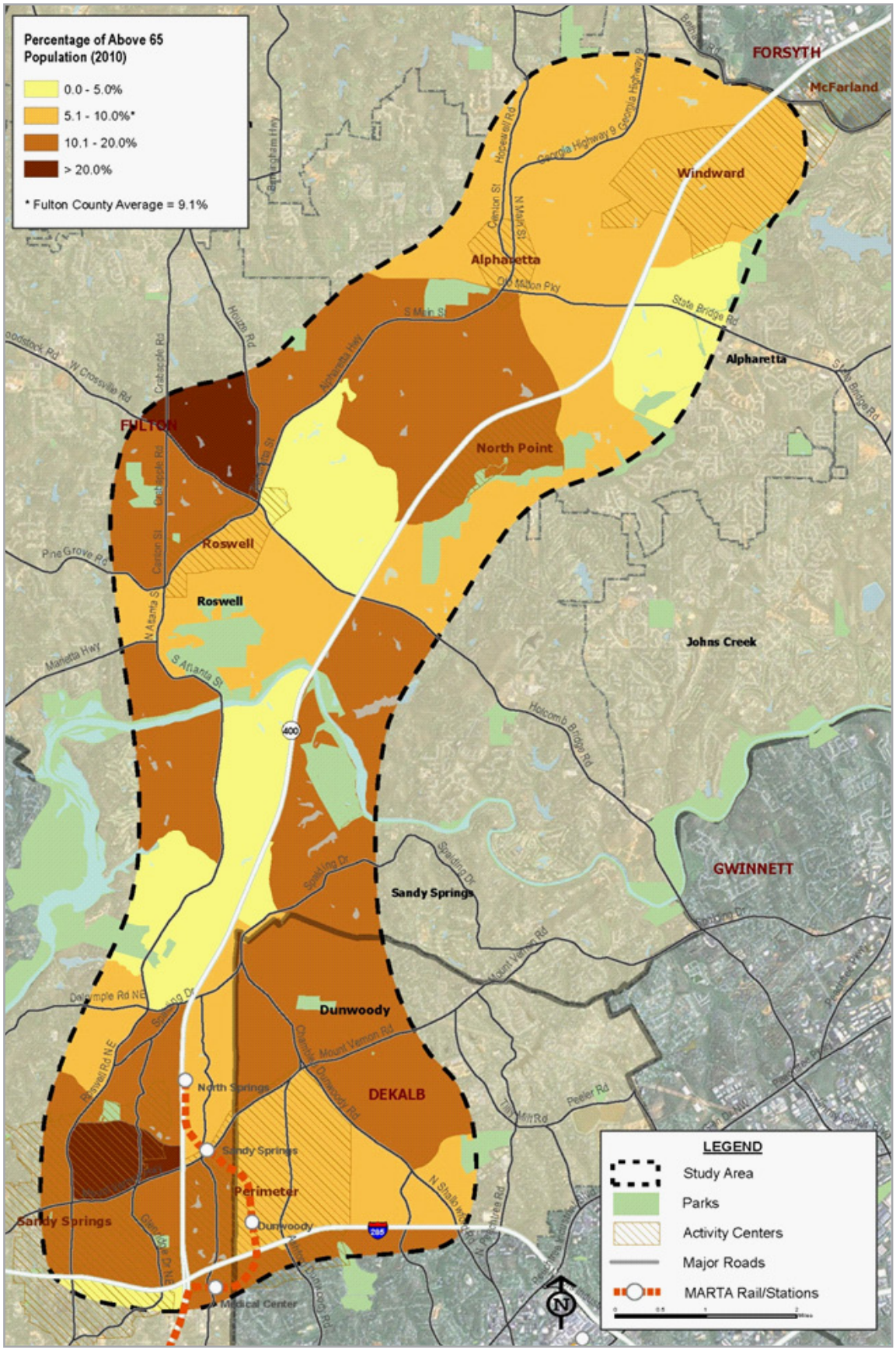


FIGURE 2-10: Concentrations of Elderly Populations (2010)

Source:
U.S. Census Bureau 2010

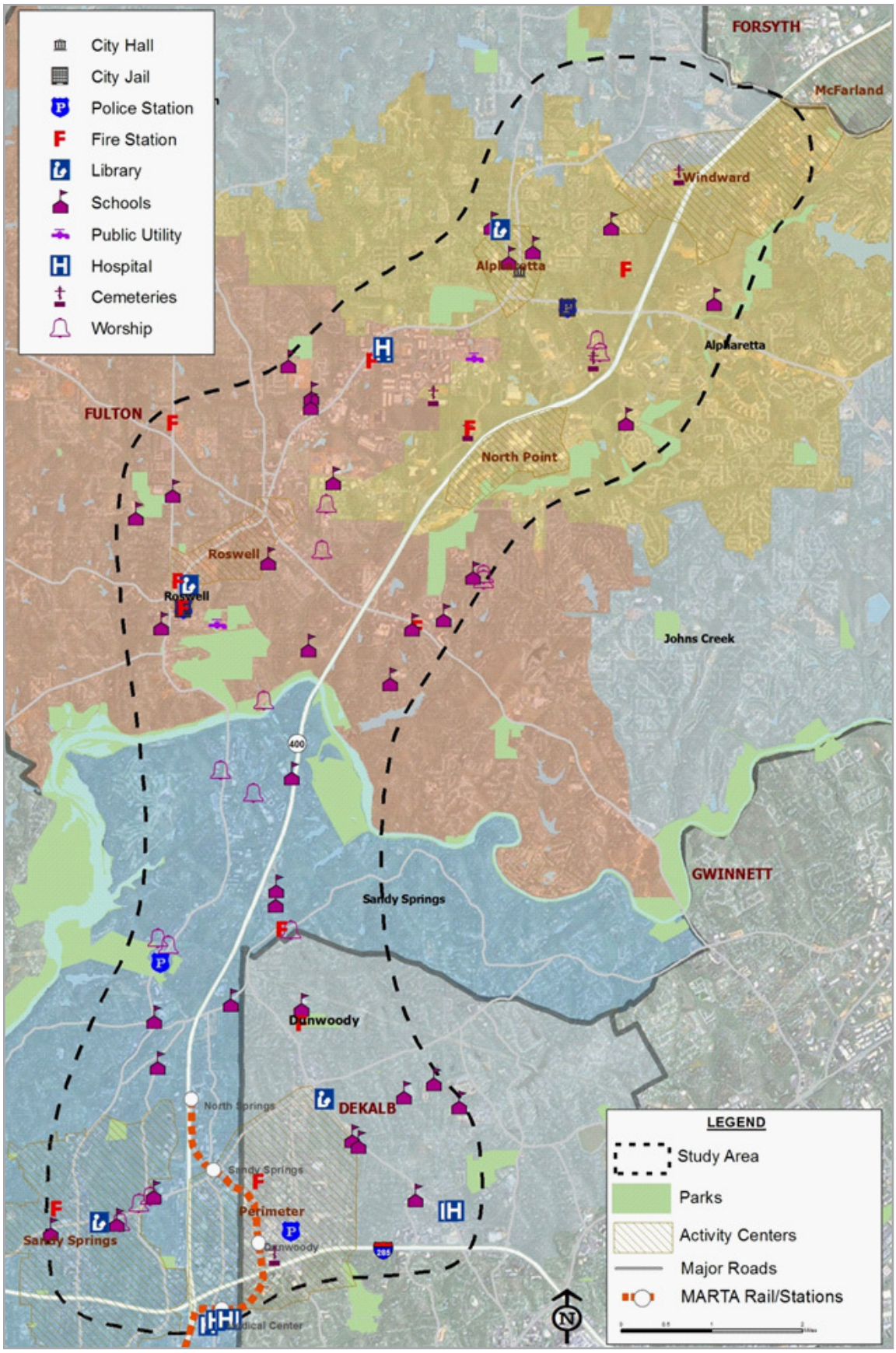
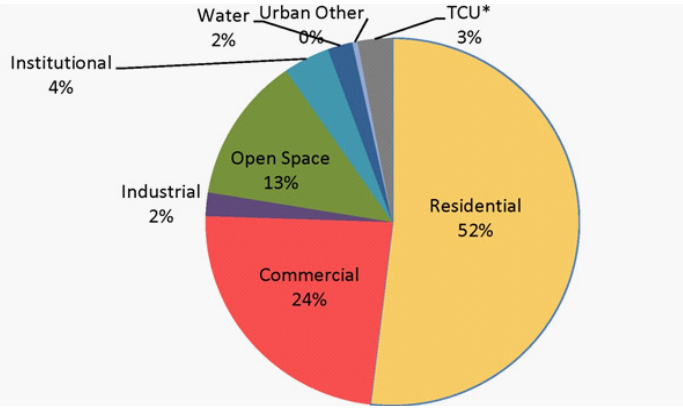


FIGURE 2-11: Community Facilities

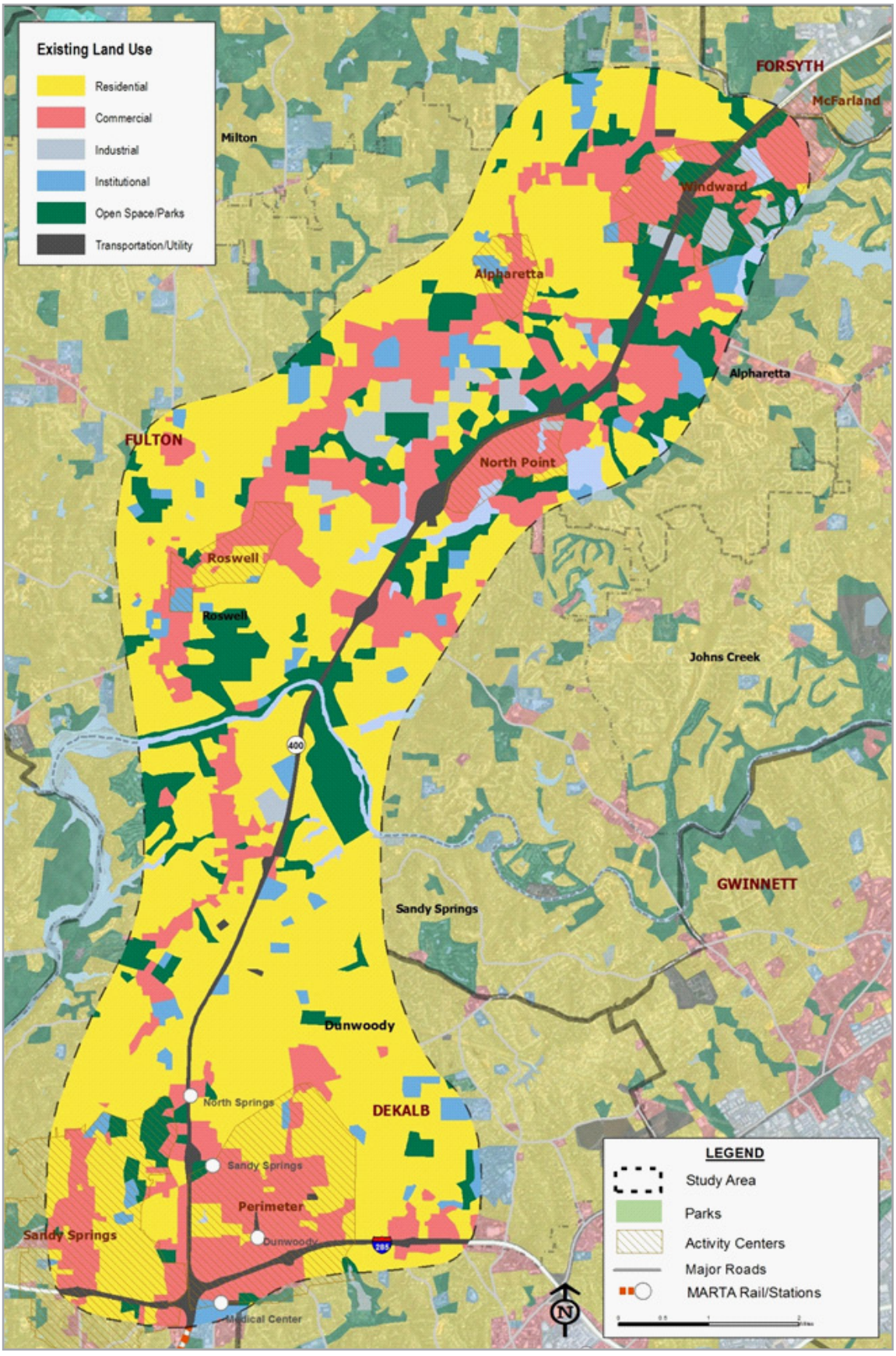
Source: Google Earth 2011 and ARC Community Facilities GIS Data 2009

FIGURE 2-12: Existing Land Uses in the Study Area



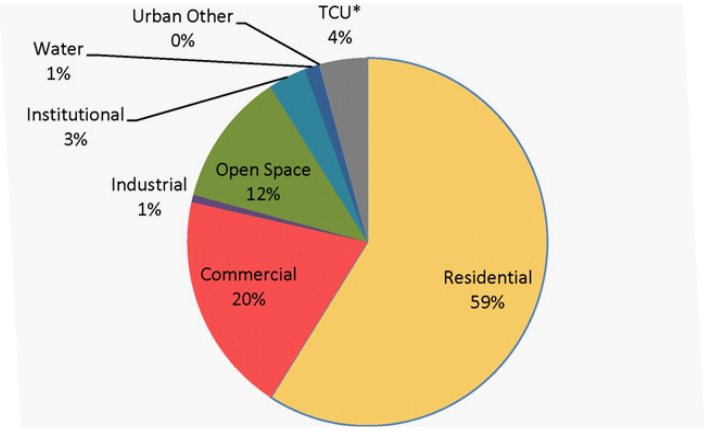
Source: : ARC LandPro 2009

FIGURE 2-13: Existing Land Uses



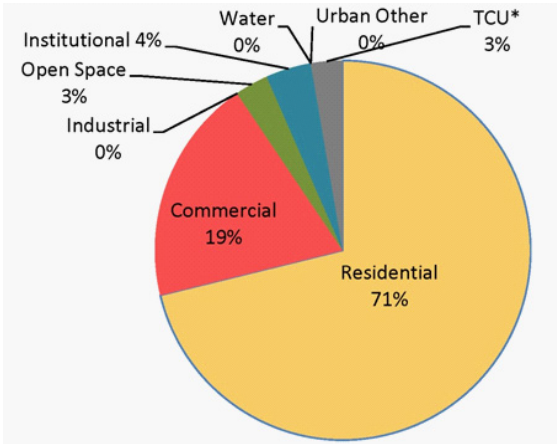
Source:
ARC 2009 Land Pro

FIGURE 2-14: Existing Land Uses in the Sandy Springs Portion of the Study Area*



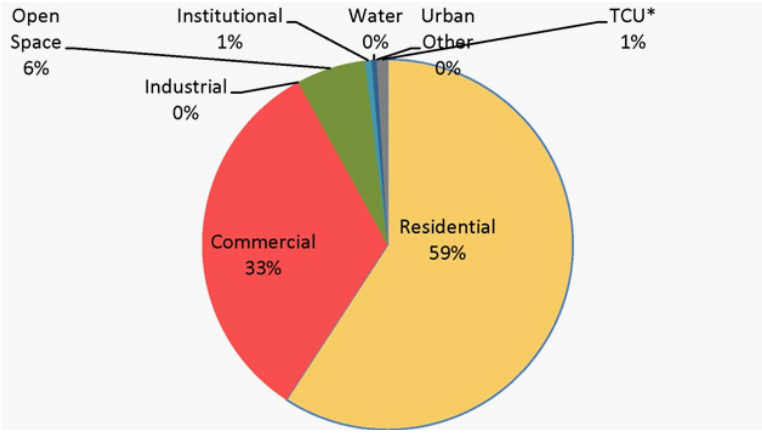
Source: : ARC LandPro 2009

FIGURE 2-15: Existing Land Uses in the Dunwoody Portion of the Study Area*



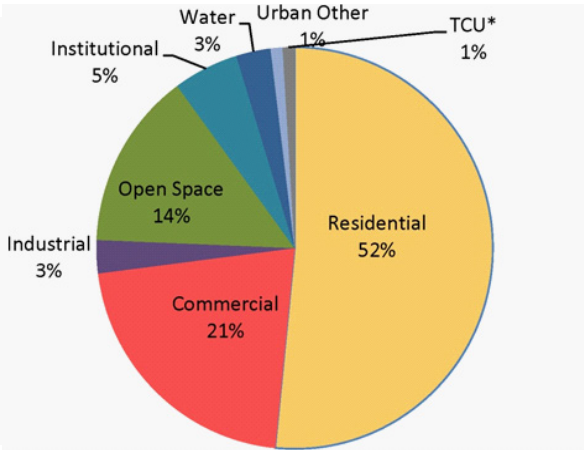
Source: : ARC LandPro 2009

FIGURE 2-16: Existing Land Uses in the Unincorporated Dekalb County Portion of the Study Area*



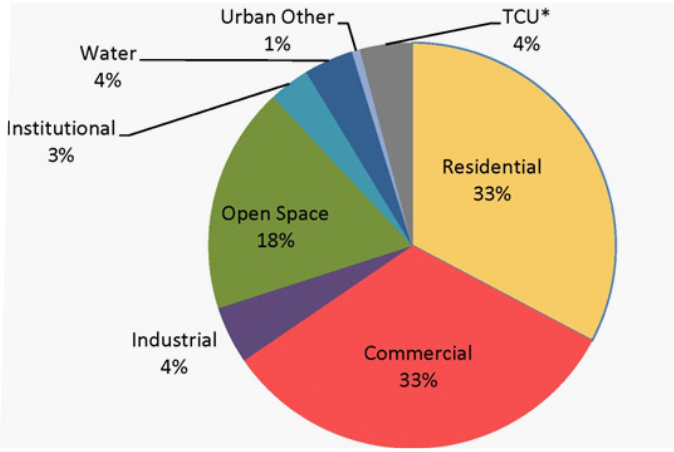
Source: : ARC LandPro 2009

FIGURE 2-17: Existing Land Uses in the Roswell Portion of the Study Area*



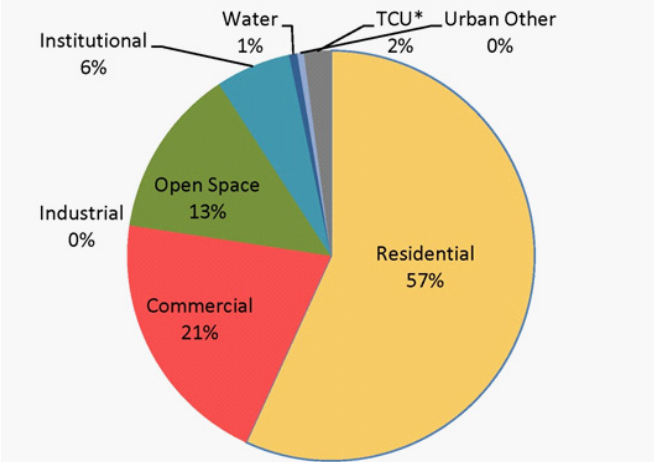
Source: : ARC LandPro 2009

FIGURE 2-18: Existing Land Uses in the Alpharetta Portion of the Study Area*



Source: : ARC LandPro 2009

FIGURE 2-19: Existing Land Uses in the Milton Portion of the Study Area*



Source: : ARC LandPro 2009

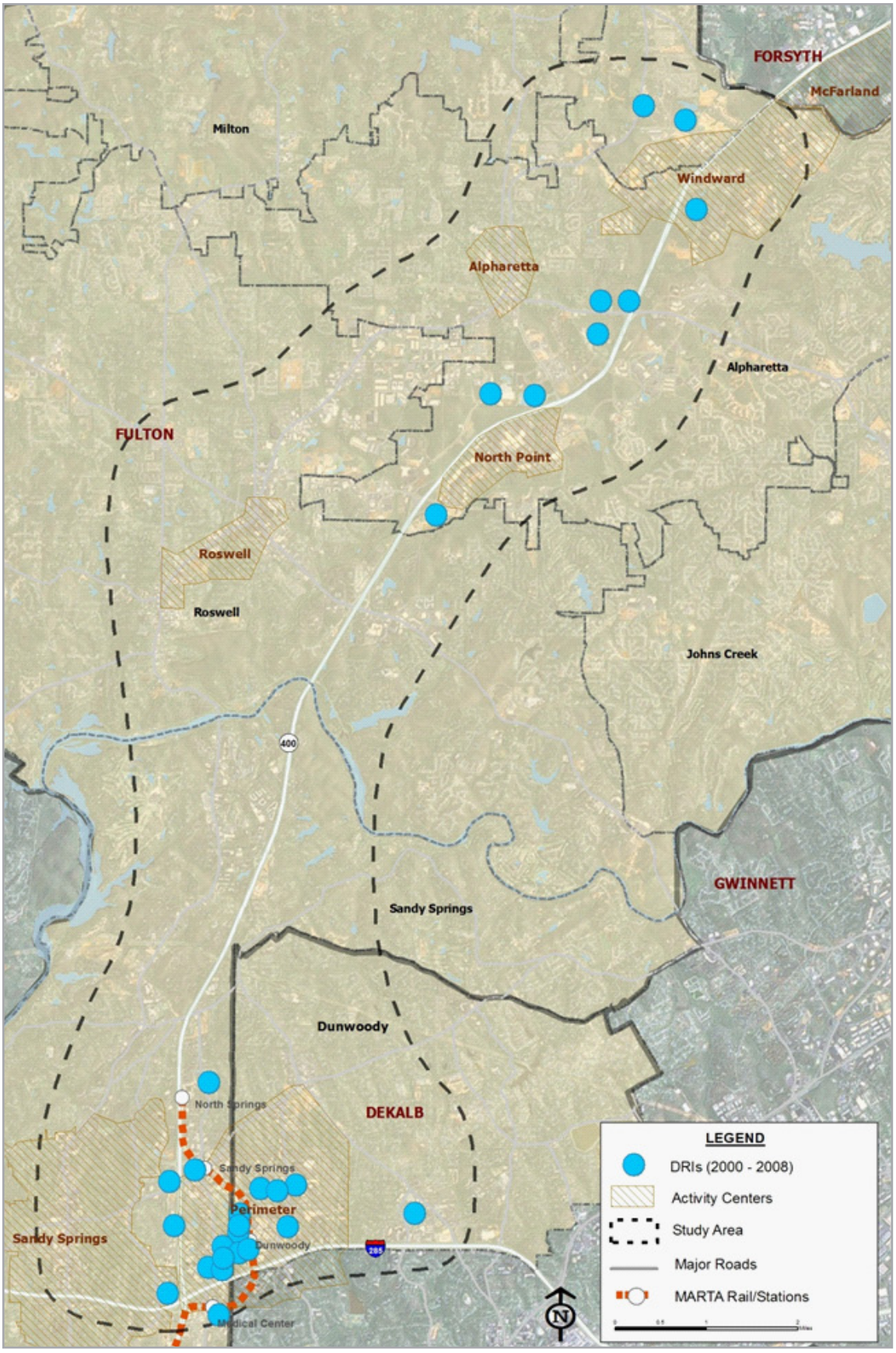
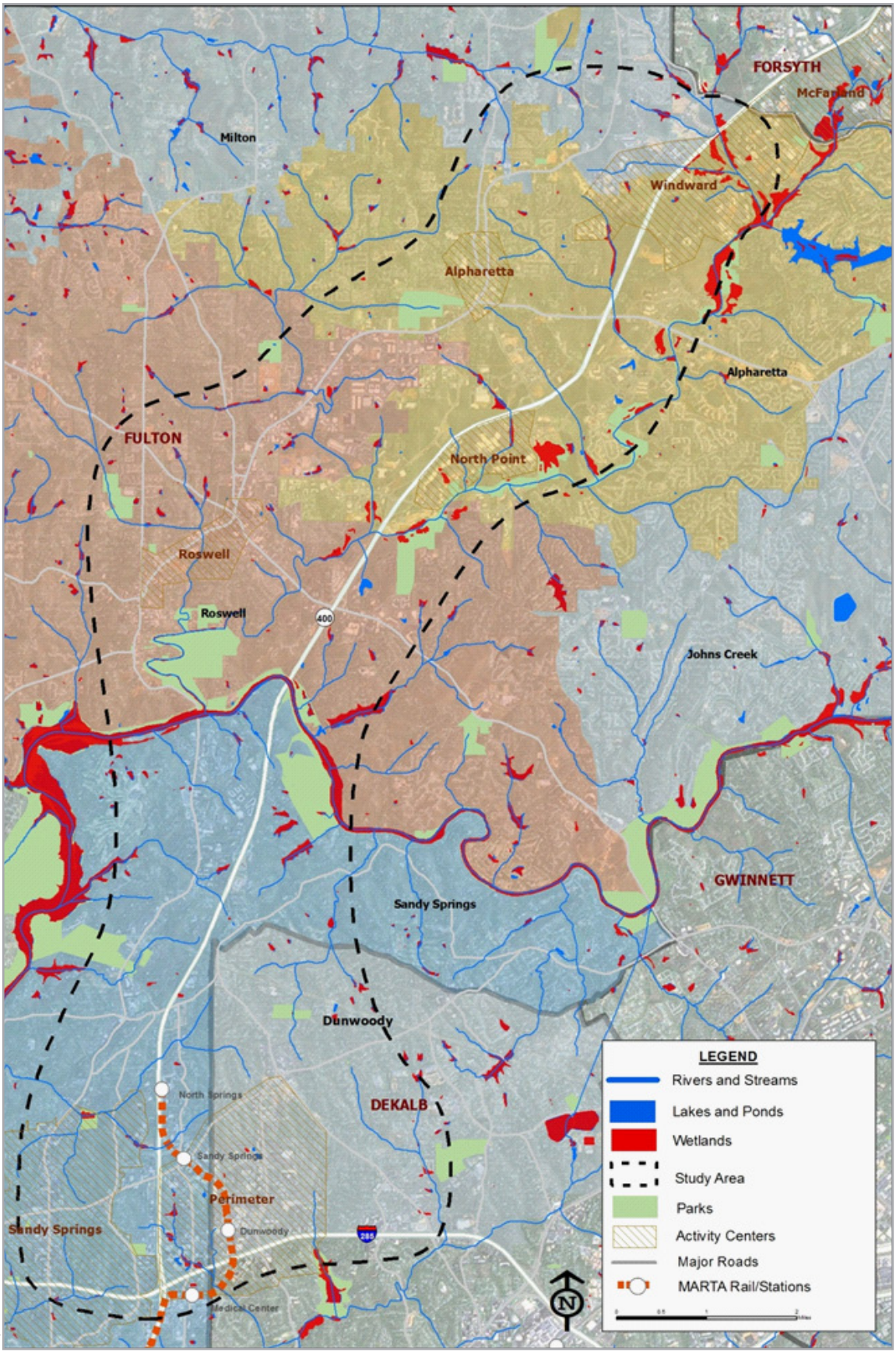


FIGURE 2-20: DRIs

Source: ARC 2009

FIGURE 3-1:
Water Bodies and Wetlands



Source:

Water Bodies: ARC, GDOT, 1999.
Wetlands: USFWS. 2004

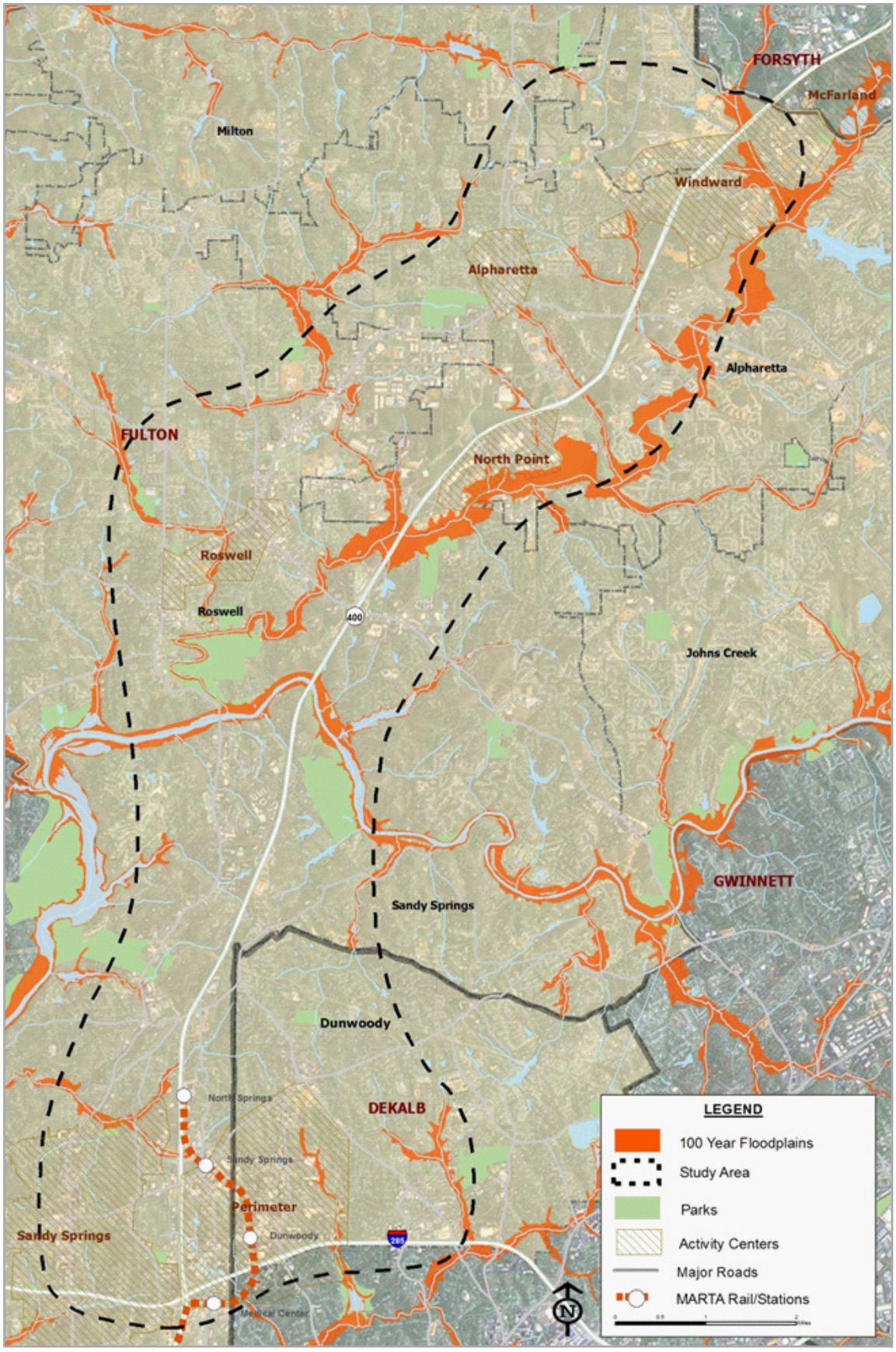
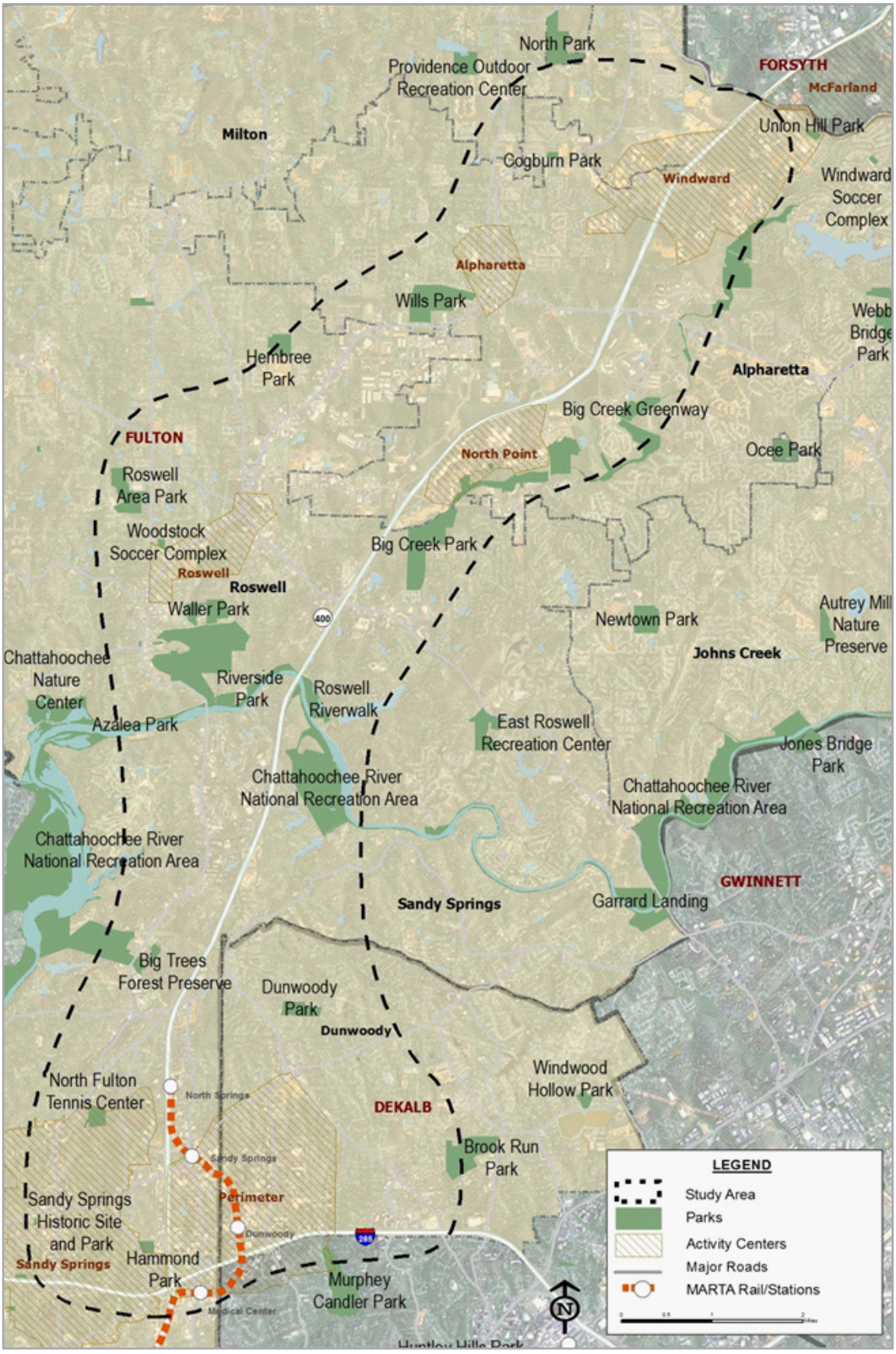


FIGURE 3-2: 100-Year Floodplains

Source:

Federal Emergency Management Agency, 1998

FIGURE 3-3:
Parks



Source:

ARC, 2006, and review of the jurisdiction websites of Sandy Springs, Dunwoody, Roswell, Alpharetta, Milton, and Forsyth County November 2011.

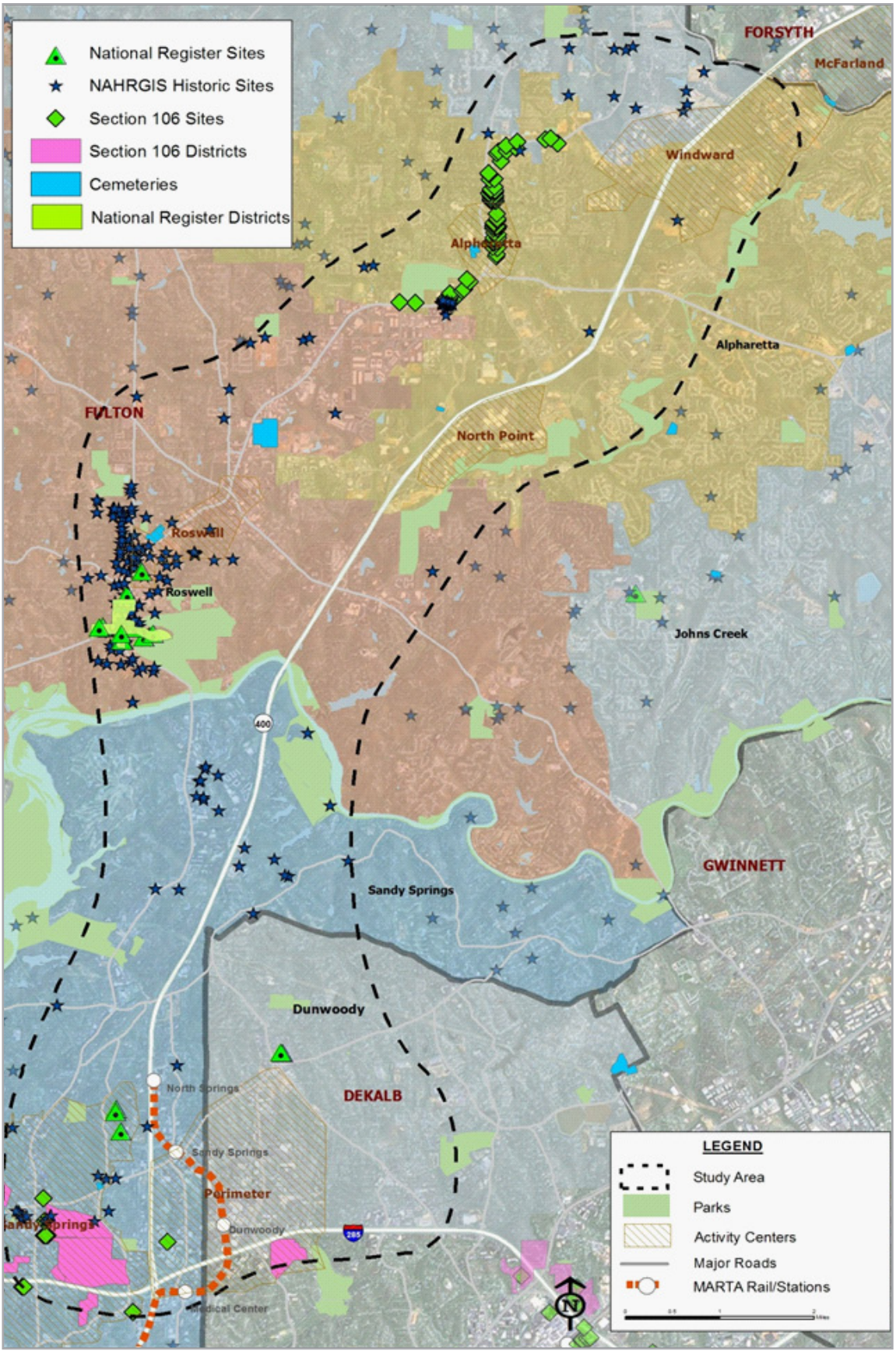


FIGURE 3-4: Historic and Cultural Resources

Source: NRHP 2008

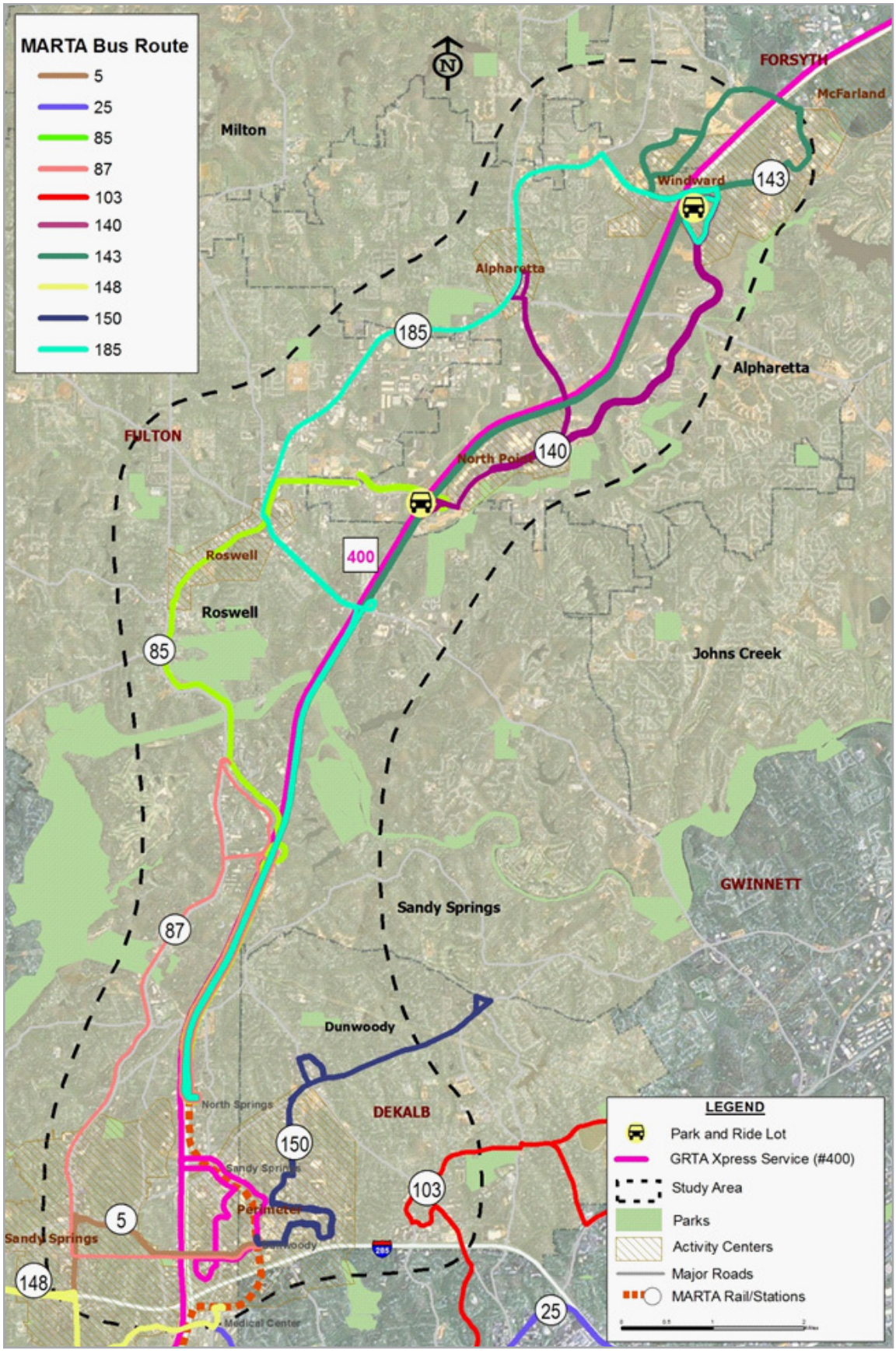


FIGURE 4-1: Existing Transit Service

Source:
: MARTA 2011, GRTA 2011

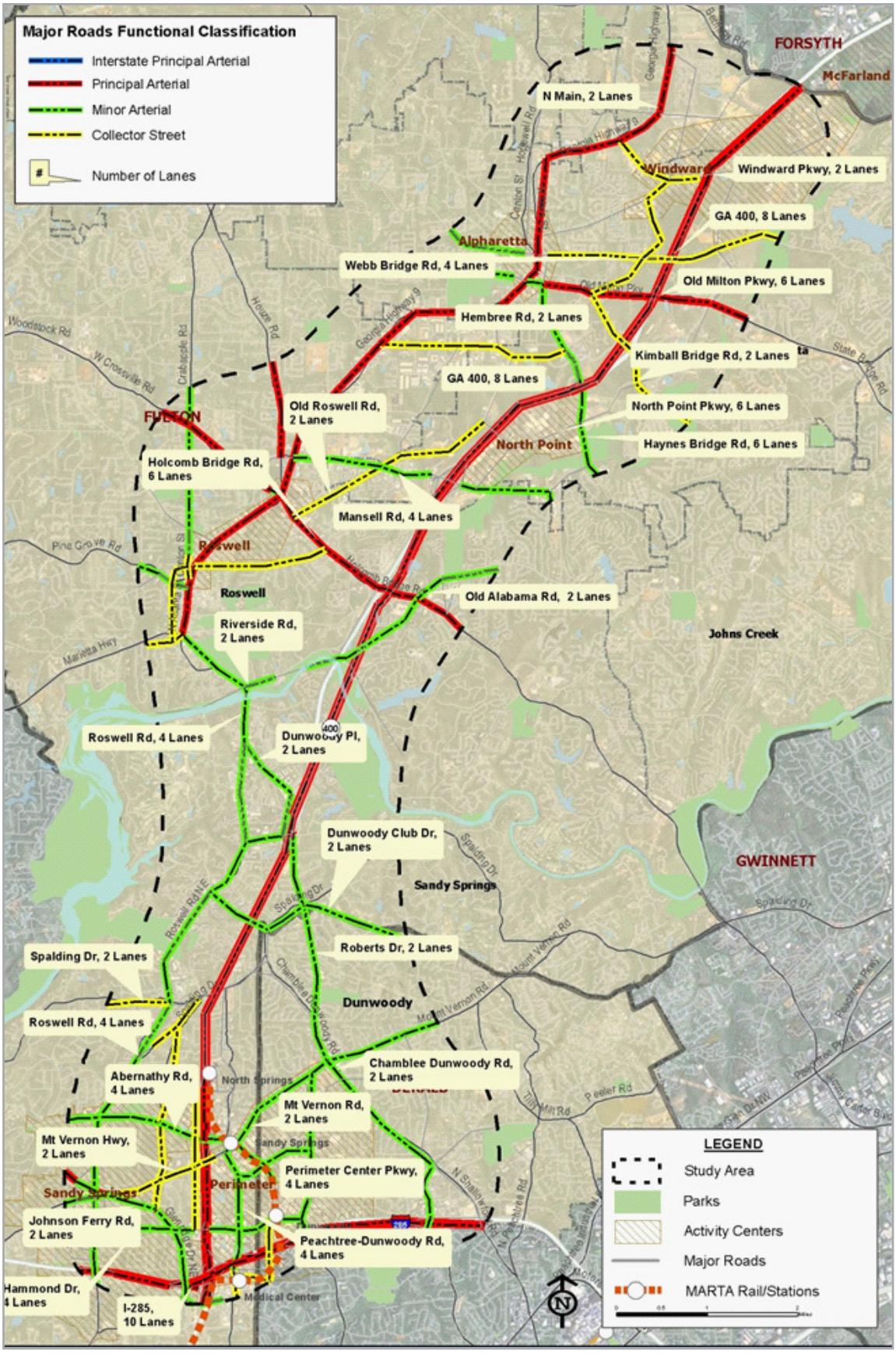
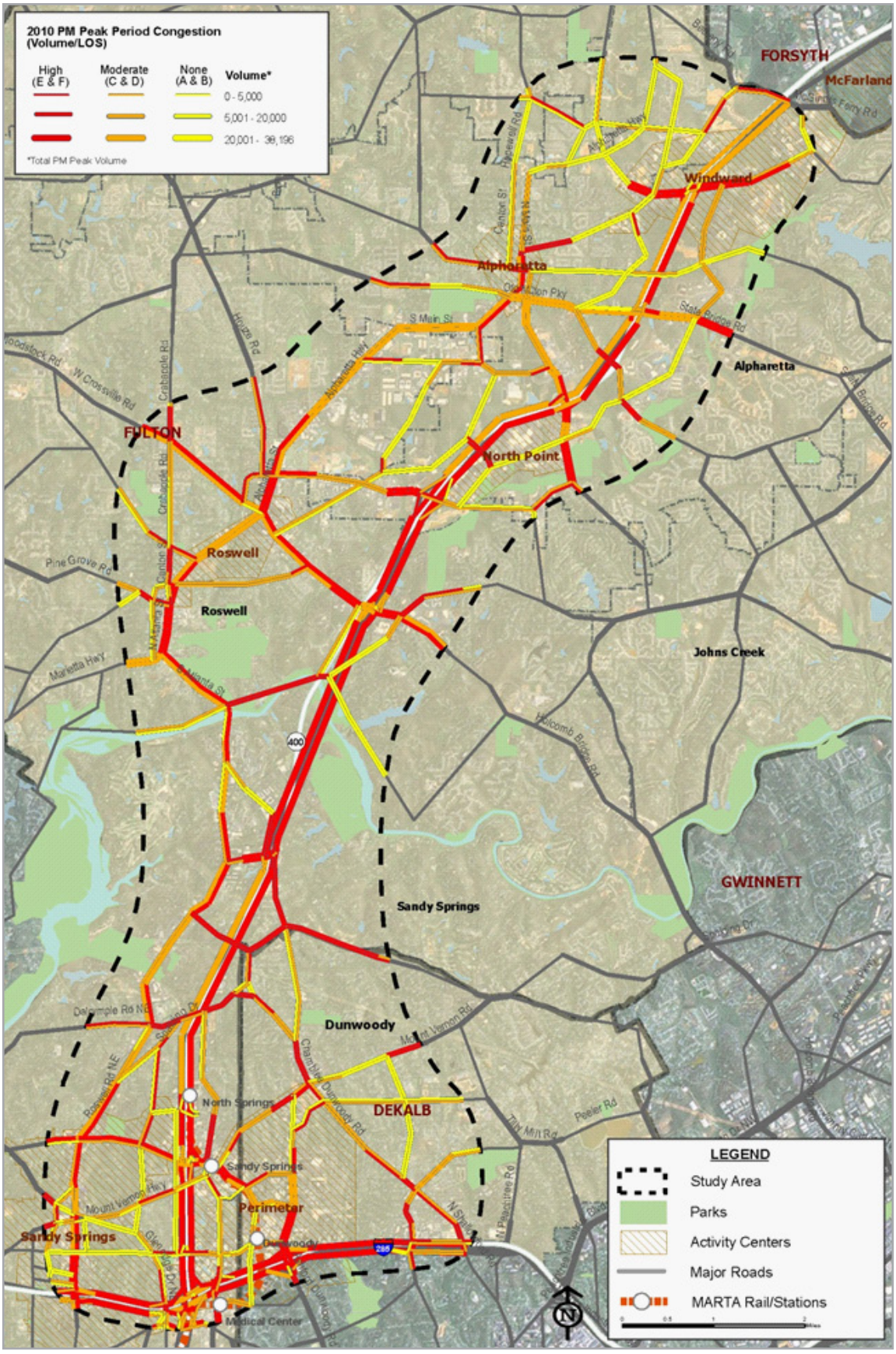


FIGURE 4-2: Roadway Functional Classification and Travel Lanes

Source: ARC 2011

FIGURE 4-3: 2010 Roadway Volumes and Congestion Levels (PM Peak Period)



Source:

ARC Regional Travel Demand Model 2011

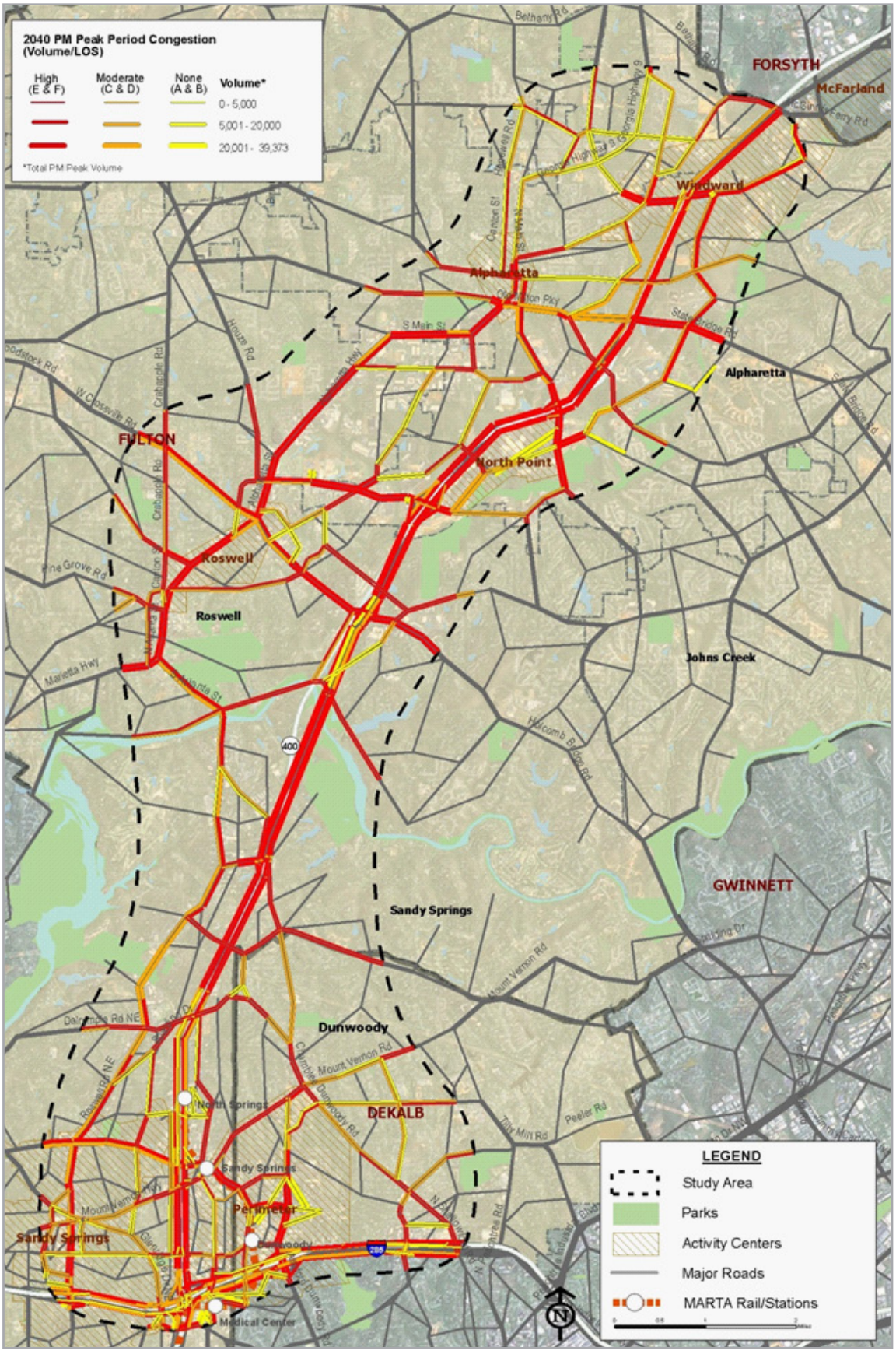


FIGURE 4-4: 2040 Roadway Volumes and Congestion Levels (PM Peak Period)

Source:

ARC Regional Travel Demand Model 2011

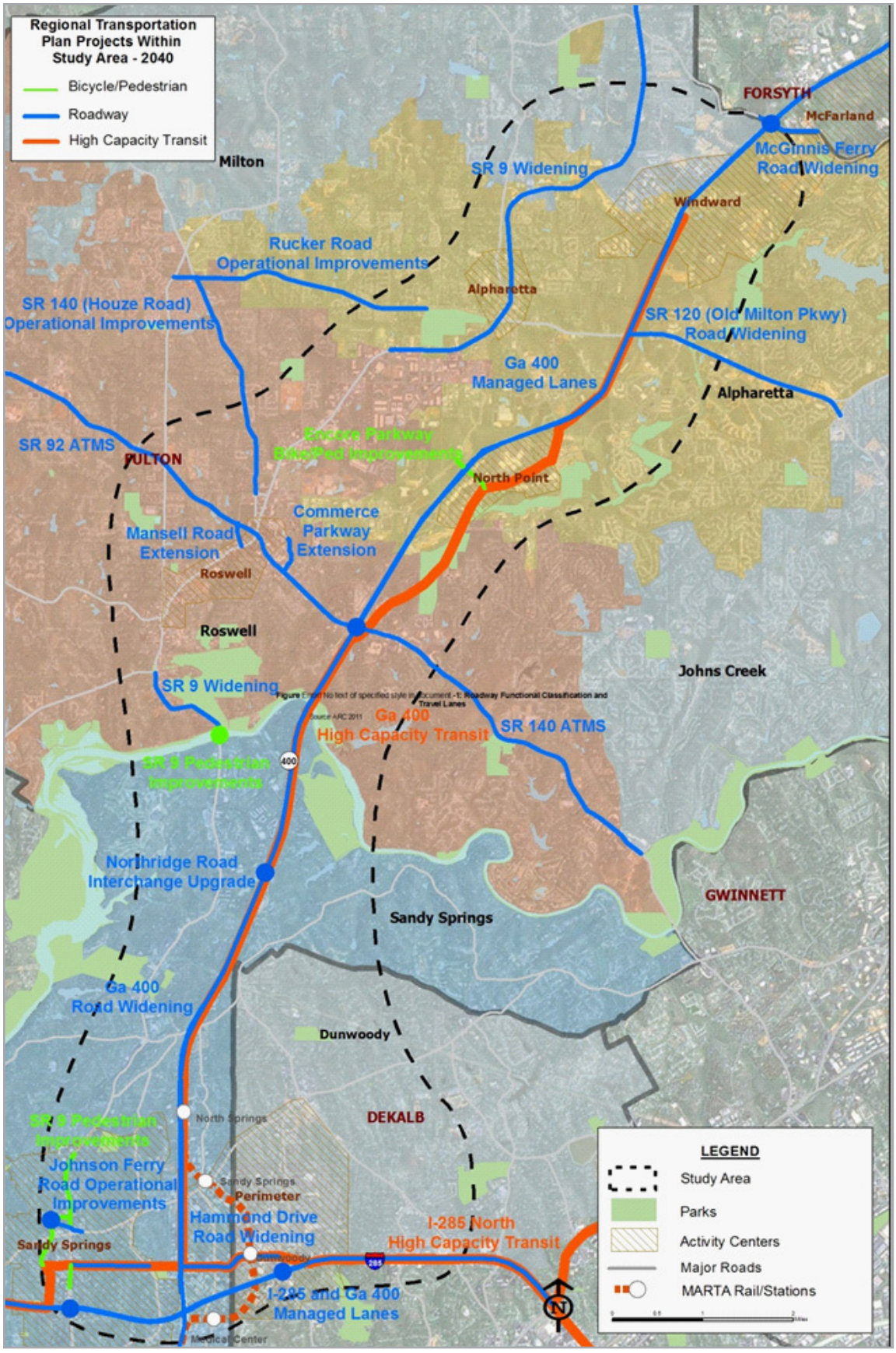


FIGURE 4-5: *Plan2040* RTP/ TIP Projects

Source: ARC 2011

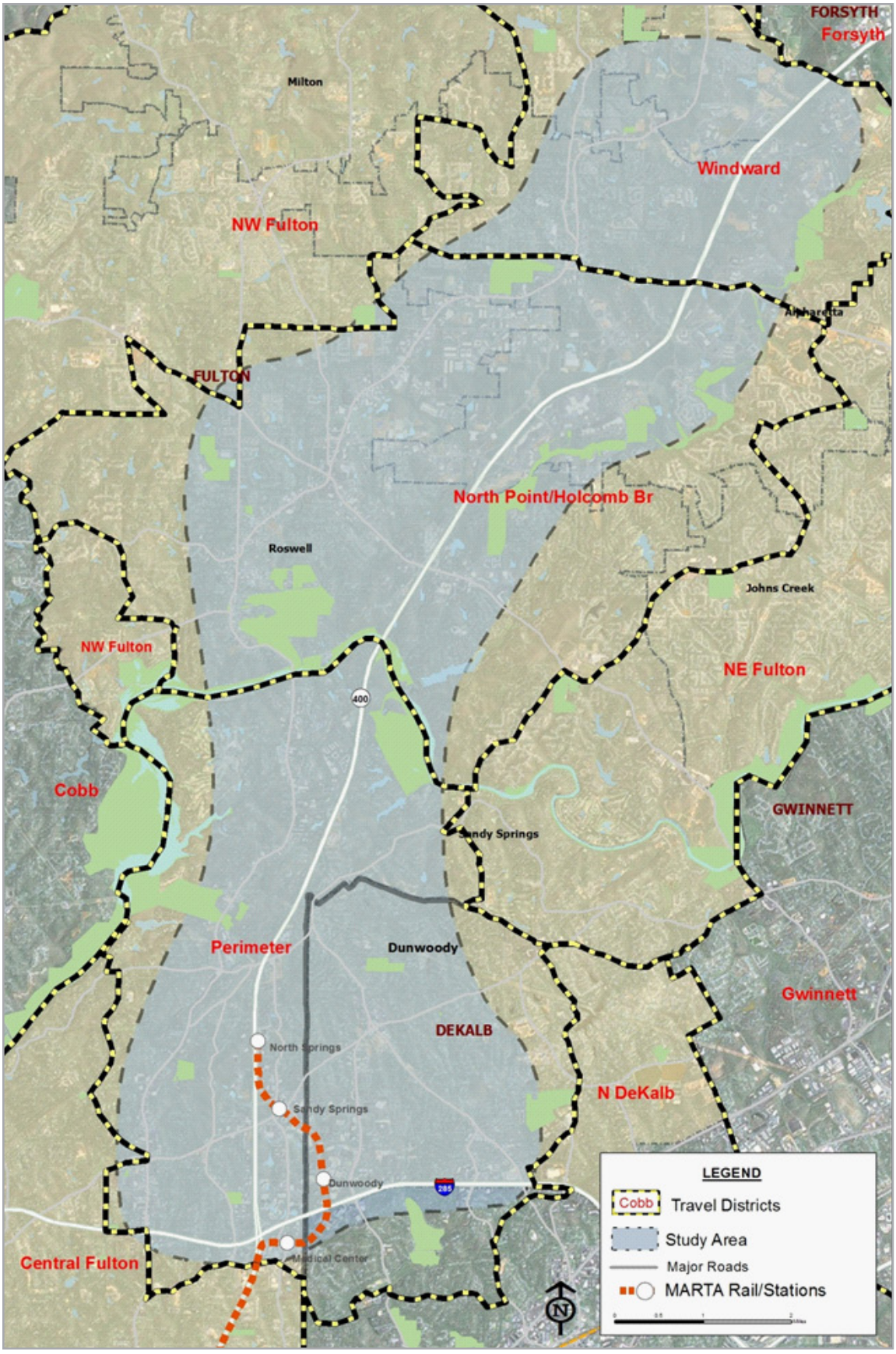
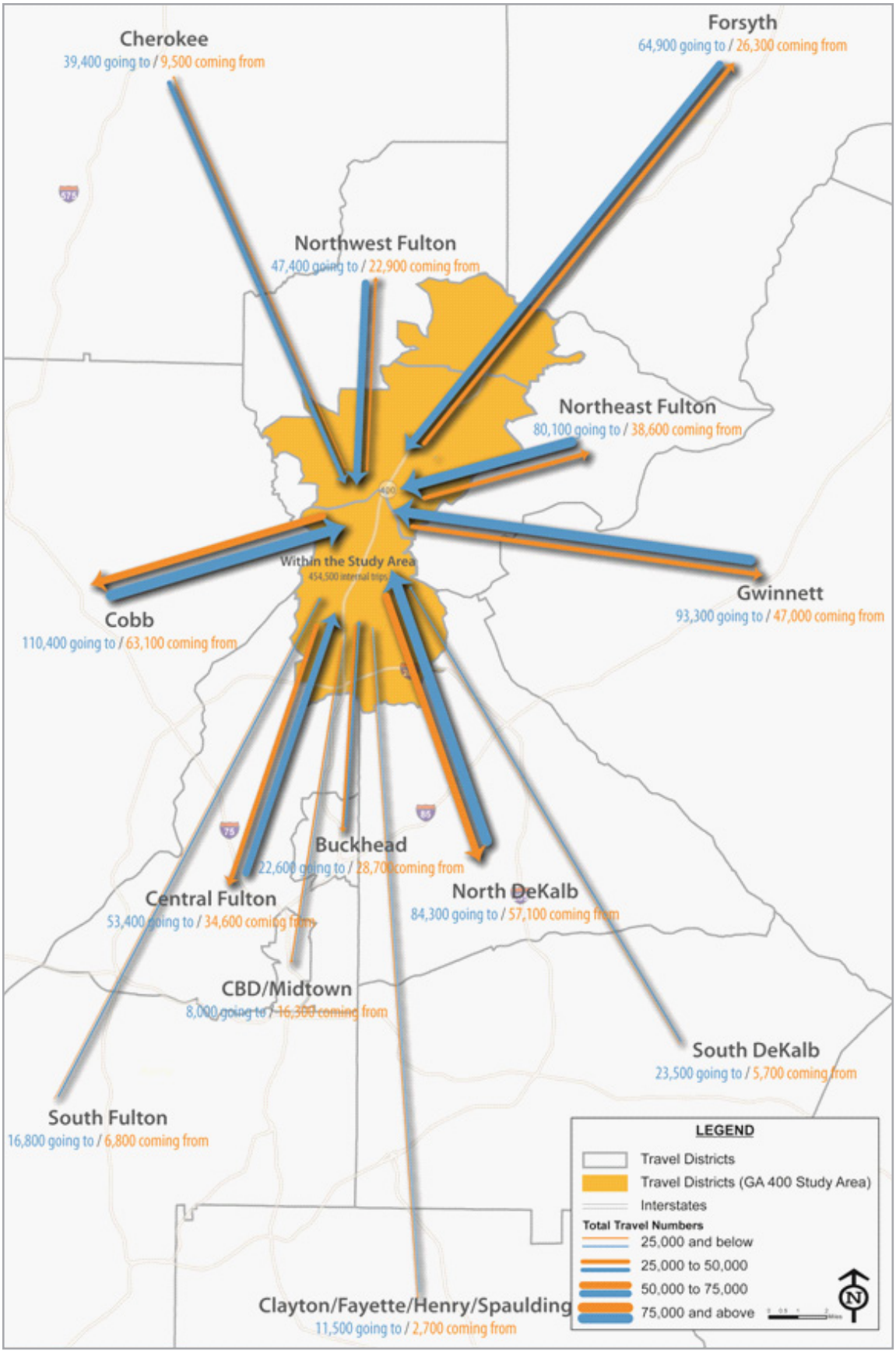


FIGURE 4-6: Study Area Travel Districts

Source:
ARC Travel Demand Model

FIGURE 4-7:
Year 2010
Travel Patterns



Source:
ARC Travel Demand Model

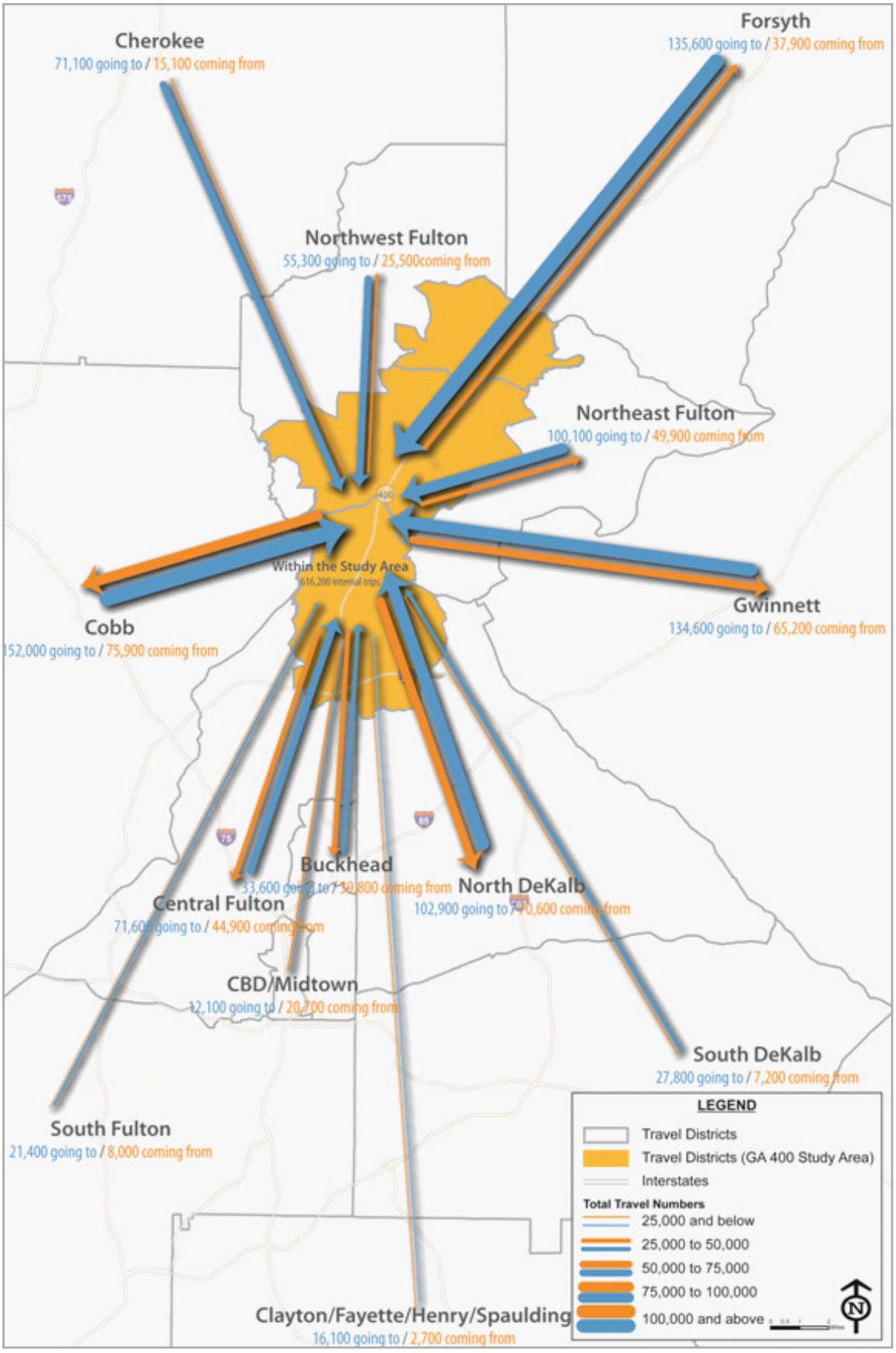
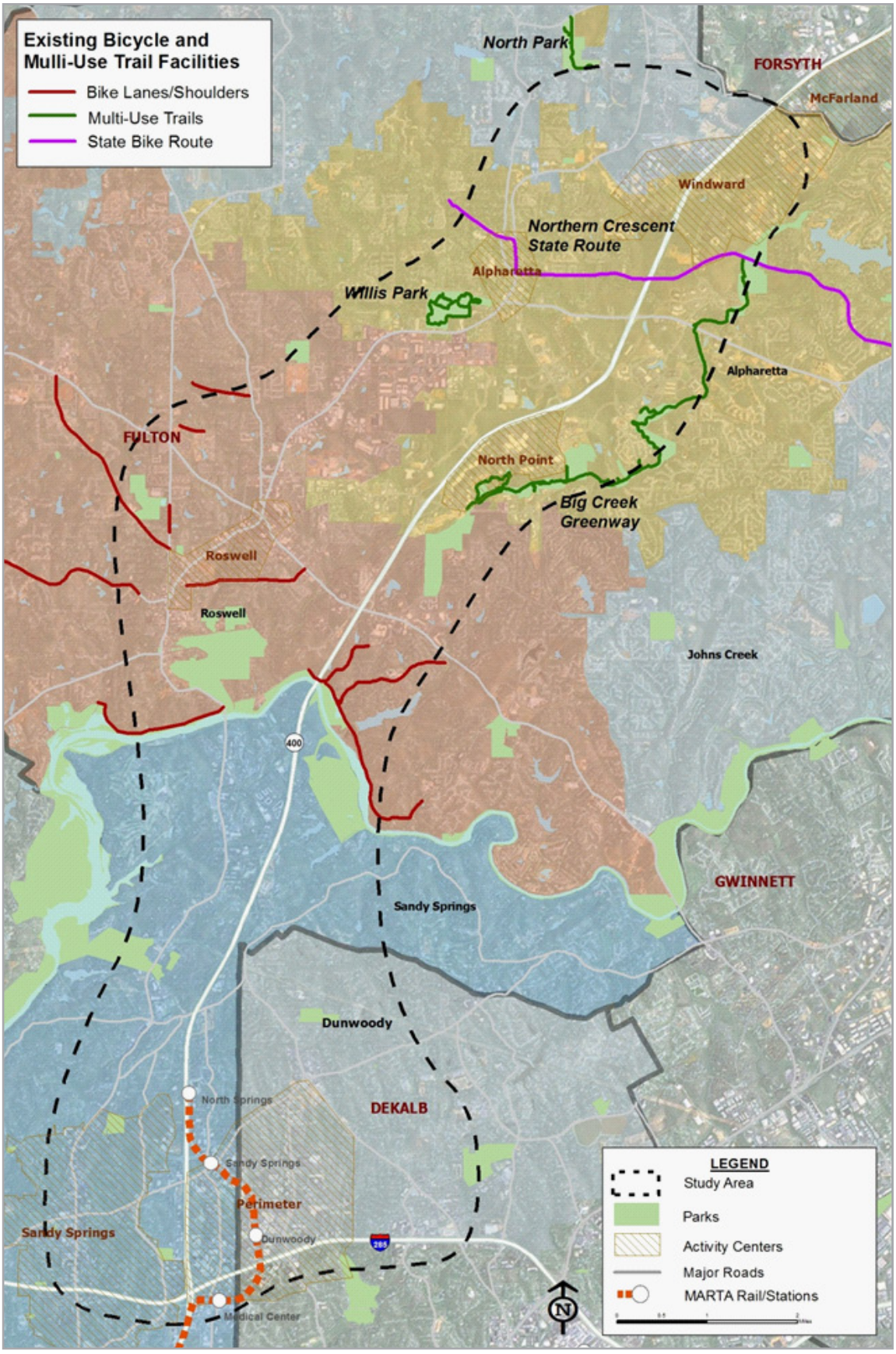


FIGURE 4-8: Year 2040 Travel Patterns

Source:
ARC Travel Demand Model

FIGURE 5-1: Existing Bicycle and Multi-Use Trail Network



Source:
ARC Bicycle Inventory 2008

List of Acronyms

A

AA	Alternatives Analysis
ARC	Atlanta Regional Commission

B

BRT	Bus Rapid Transit

C

CBD	Central Business District
CID	Community Improvement District
CTP	Comprehensive Transportation Plan

D

DCA	Department of Community Affairs
DRI	Development of Regional Impact

E

EPA	U.S. Environmental Protection Agency

F

FEMA	Federal Emergency Management Agency
FTA	Federal Transit Administration

G

GADNR	Georgia Department of Natural Resources
GDOT	Georgia Department of Transportation
GEPD	Georgia Environmental Protection Division
GIS	Geographic Information Systems
GRTA	Georgia Regional Transportation Authority

H

HBW	Home Based Work
HD	Historic District
HRT	Heavy Rail Transit

L

LCI	Livable Centers Initiative
LOS	Level of Service
LPA	Locally Preferred Alternative
LRT	Light Rail Transit

M

MARTA	Metropolitan Atlanta Rapid Transit Authority

N

NAHRGIS	Natural Archaeological Historical Resources Geographical Information System
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory

P

PCID	Perimeter CID

R

RTP	Regional Transportation Plan
ROW	Right-of-way

S

SLUP	Special Land Use Permits
SSTP	Statewide Strategic Transportation Plan
SR	State Route

T

TIA	Transportation Investment Act (of 2010)
TIP	Transportation Improvement Program
TOD	Transit-Oriented Development
TPB	Transit Planning Board

U

UGPM	Unified Growth Policy Map
USFWS	U.S. Fish & Wildlife Service

V

V/C	Volume-to-Capacity Ratio