



# North Fulton County Transportation Resource Implementation Program (TRIP)

*Existing Conditions Report*



ATLANTA REGIONAL COMMISSION



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## TABLE OF CONTENTS

Executive Summary ..... vii

1.0 Introduction & Purpose ..... 1

    1.1 North Fulton County Background ..... 1

    1.2 Report Goals and Structure ..... 3

    1.3 Study Area..... 5

2.0 Public Involvement..... 8

    2.1 Committee Structure ..... 8

    2.2 Community Client Managers ..... 9

    2.3 Public Opinion Survey..... 9

    2.4 Public Meetings..... 9

3.0 Data Collection..... 11

    3.1 Data Sources ..... 11

    3.2 Existing Studies and Planned Projects ..... 13

    3.3 Field Inventory ..... 13

4.0 Regional Context..... 15

    4.1 Regional Transportation Network..... 15

    4.2 Municipalities..... 15

        4.2.1 Historical Context ..... 15

        4.2.2 Programs and Policies ..... 18

        4.2.3 Alpharetta ..... 18

        4.2.4 Johns Creek..... 20

        4.2.5 Milton..... 20

        4.2.6 Roswell ..... 21

        4.2.7 Sandy Springs..... 21

    4.3 Transportation Demand Management (TDM) ..... 22

    4.4 Redevelopment Initiatives ..... 22

        4.4.1 Tax Allocation Districts ..... 22

        4.4.2 Livable Centers Initiatives ..... 23

        4.4.3 Developments of Regional Impact..... 26

    4.5 Land Use and Development Characteristics ..... 26

        4.5.1 General Context and Development Patterns ..... 26

        4.5.2 Atlanta Region Unified Growth Policy Map..... 29

        4.5.3 Existing Land Use ..... 32

        4.5.4 Existing Zoning..... 36

        4.5.5 Future Land Use..... 36



4.5.6	Schools, Parks / Open Space, and Civic Infrastructure .....	39
4.6	Socioeconomic Profile .....	41
4.6.1	Population .....	41
4.6.2	Age Distribution.....	42
4.6.3	Racial Composition .....	44
4.6.4	Educational Attainment .....	45
4.6.5	Income .....	45
4.6.6	Employment .....	50
4.6.7	Households.....	53
4.6.8	Housing .....	53
4.6.9	Key Socioeconomic Findings.....	54
4.7	Preliminary Market Overview.....	55
4.7.1	Residential Market.....	55
4.7.2	Retail Market.....	57
4.7.3	Office Market.....	59
4.7.4	Industrial Market .....	60
5.0	Transportation Inventory .....	63
5.1	Roadway Characteristics.....	63
5.1.1	Functional Classification.....	63
5.1.2	Number of Lanes.....	66
5.1.3	Bridge Inventory .....	68
5.1.4	Posted Speed .....	70
5.1.5	Traffic Control Systems .....	72
5.1.6	Medians.....	72
5.2	Roadway Operations .....	76
5.2.1	Roadway Volumes .....	76
5.2.2	Travel Patterns and Trip Characteristics .....	76
5.2.3	Roadway Level-of-Service .....	79
5.3	Bicycle Operations.....	82
5.3.1	Existing On-Road Bicycle Infrastructure.....	82
5.3.2	Bicycle Level-of-Service.....	86
5.4	Pedestrian Operations.....	90
5.4.1	Existing On-Road Pedestrian Infrastructure.....	90
5.4.2	Pedestrian Level-of-Service.....	92
5.5	Existing Greenways and Trails.....	96
5.6	Transit.....	98





5.6.1 Agencies ..... 98

5.6.2 Existing Service Characteristics..... 100

5.6.3 Recently Completed Transit Planning Studies..... 107

6.0 Safety (Crash History)..... 116

7.0 Freight, Intermodal, and Airport Operations..... 120

    7.1 Trucks ..... 120

    7.2 Rail..... 120

    7.3 Intermodal and Airport Operations..... 120

8.0 Programmed Projects..... 122

    8.1 Stimulus Projects..... 122

    8.2 Regional Projects..... 122

    8.3 Local Projects ..... 125

9.0 Transportation Funding..... 131

10.0 Environmental Conditions..... 132

    10.1 Methodology..... 132

    10.2 Environmental Justice Areas..... 132

    10.3 Water Resources ..... 134

        10.3.1 Watershed..... 134

        10.3.2 Stream Corridors..... 134

        10.3.3 Wetlands ..... 134

    10.4 Threatened and Endangered Species ..... 136

    10.5 Land Resources ..... 138

        10.5.1 Parks..... 138

        10.5.2 Historic Resources ..... 138

    10.6 Air Quality..... 138

11.0 Next Steps ..... 140

**LIST OF FIGURES**

Figure 1-1: Study Area ..... 6

Figure 1-2: Study Area Roadway Network..... 7

Figure 4-1: Local Context ..... 16

Figure 4-2: Municipal Boundaries ..... 19

Figure 4-3: Livable Centers Initiatives ..... 25

Figure 4-4: Developments of Regional Impact..... 27

Figure 4-5: Unified Growth Policy Map ..... 30

Figure 4-6: Existing Land Use Map ..... 33



Figure 4-7: Future Land Use Map ..... 37

Figure 4-8: Undeveloped & Redevelopment Sites ..... 38

Figure 4-9: Community Facilities ..... 40

Figure 4-10: Age Distribution ..... 42

Figure 4-11: Age Distribution Change Trends ..... 43

Figure 4-12: Change In Racial Composition ..... 44

Figure 4-13: Per Capita Income Trends ..... 46

Figure 4-14: Average Household Income Trends ..... 47

Figure 4-15: Household Income Trends ..... 49

Figure 4-16: Employment Sectors ..... 51

Figure 4-17: Employment Sector Comparison ..... 52

Figure 5-1: Access Versus Mobility ..... 63

Figure 5-2: Functional Classification ..... 65

Figure 5-3: Number of Lanes ..... 67

Figure 5-4: Bridge Locations ..... 69

Figure 5-5: Posted Speeds ..... 71

Figures 5-6A and 5-6B: Traffic Control Systems ..... 73

Figure 5-7: Medians ..... 75

Figures 5-8A and 5-8B: Annual Average Daily Traffic ..... 77

Figure 5-9: Existing Vehicular Level-of-Service ..... 81

Figure 5-10: Bicycle Facilities ..... 84

Figure 5-11: Distance Weighted Averages for Areawide Bicycle Level-of-Service ..... 87

Figure 5-12: Distribution of Study Network Miles by Bicycle Level-of-Service ..... 88

Figure 5-13: Bicycle Level-of-Service ..... 89

Figure 5-14: Distribution of Sidewalk Coverage ..... 90

Figure 5-15: Pedestrian Facilities ..... 91

Figure 5-16: Distance Weighted Averages for Areawide Pedestrian Level-of-Service ..... 93

Figure 5-17: Distribution of Study Network Miles by Pedestrian Level-of-Service ..... 94

Figure 5-18: Pedestrian Level-of-Service ..... 95

Figure 5-19: Existing Greenways & Trails ..... 97

Figure 5-20: Existing Transit Routes ..... 101

Figure 5-21: North Line TOD Study - TOD Cluster Areas ..... 113

Figure 5-22: North Point TOD Concept ..... 115



Figures 6-1A and 6-1B: Crash History ..... 117

Figure 7-1: Proposed Priority Freight Highway Network..... 121

Figure 8-1: Programmed Projects ..... 130

Figure 10-1: Income Less Than \$35,000 Per Household..... 133

Figure 10-2: Streams and Wetlands ..... 135

Figure 10-3: Protected Species ..... 137

Figure 10-4: Historic Resources..... 139

**LIST OF TABLES**

Table 1-1: Goals and Objectives ..... 4

Table 3-1: Data Collection Sources ..... 12

Table 3-2: Referenced Plans and Studies..... 14

Table 4-1: Existing Land Use..... 26

Table 4-2: Existing Residential Land Use..... 28

Table 4-3: Community Facilities ..... 39

Table 4-4: Current Population..... 41

Table 4-5: Age Distribution ..... 43

Table 4-6: Educational Attainment Levels ..... 45

Table 4-7: Per Capita Income ..... 46

Table 4-8: Average Household Income..... 48

Table 4-9: Household Income Distribution ..... 50

Table 4-10: Daytime Population..... 50

Table 4-11: Household Change Trends ..... 53

Table 5-1: Bridge Inventory..... 70

Table 5-2: Roadway Segments with Designated Bike Lanes ..... 83

Table 5-3: Roadway Segments with Paved Shoulders..... 85

Table 5-4: Designated Bike Lanes at Intersections ..... 85

Table 5-5: Bicycle Level-of-Service Score Stratification ..... 86

Table 5-6: Pedestrian Level-of-Service Score Stratification ..... 92

Table 5-7: MARTA Bus Route Characteristics..... 102

Table 5-8: MARTA Heavy Rail Station Characteristics ..... 105

Table 5-9: Concept 3 Projects in North Fulton County ..... 109



Table 6-1: Intersections With Number of Crashes > 150 (Years 2006-2008)..... 119

Table 8-1: *Envision6* Programmed Projects ..... 123

Table 8-2: Alpharetta Transportation Projects ..... 125

Table 8-3: Johns Creek Transportation Projects..... 126

Table 8-4: Milton Transportation Projects Being Considered..... 127

Table 8-5: Roswell Transportation Projects ..... 128

Table 8-6: Sandy Springs Transportation Projects..... 129

Table 10-1: Protected Species..... 136

**LIST OF APPENDICES**

- A – Public Opinion Survey Summary
- B – Land Use and Transportation Programs and Policies by Jurisdiction
- C – *Envision6* Regional Development Types Matrix
- D – Zoning Maps by Jurisdiction
- E – Bridges in North Fulton County
- F – Labor Shed and Commute Shed Maps by Jurisdiction
- G – Bicycle and Pedestrian Level-of-Service Model Descriptions
- H – *Envision6* (Long Range) Projects in North Fulton





## EXECUTIVE SUMMARY

The Atlanta Regional Commission (ARC) is working cooperatively with the local jurisdictions in North Fulton County to develop their Comprehensive Transportation Plan (CTP), called Transportation Resource Implementation Program (TRIP). The study area includes all municipalities north of the City of Atlanta within Fulton County, which includes the Cities of Alpharetta, Johns Creek, Milton, Mountain Park, Roswell, and Sandy Springs. An area three to five miles outside of this boundary is also included in the study area to promote the coordination of long-range transportation planning efforts.

### Program Goals and Objectives

This program will assist local governments within the North Fulton subarea by clearly defining jurisdiction-wide goals, needs, and priorities to update their individual transportation plans which can then be used as input into the regional transportation planning process. While ARC typically completes needs assessments and transportation plans focusing on regional needs and solutions, a successful local transportation plan and program is also critical. These identified priorities will form the basis of future funding requests submitted to ARC and GDOT during Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) update cycles.

Transportation plans resulting from the CTP Program will help to support the local comprehensive plans of the municipalities within the planning area. The CTP will address connections between land use and transportation, giving explicit consideration to the ability of recommendations to support local and regional land use plans. Land use linkages and access management will be examined and considered in CTP recommendations.

Finally, the CTP will focus on protecting North Fulton's current assets and preparing a financially feasible program. Attention will be given to the coordination of planning opportunities among the municipalities within the subarea with regards to Intelligent Transportation Systems (ITS), access management policies, public and private transit services, and demand management strategies.

### Existing Conditions Content

The CTP includes three phases: Existing Conditions, Needs Assessment, and Recommendations. Each phase will be concluded with a formal report that documents a summary of findings. The Existing Conditions Report is the first phase of the project, which sets baseline conditions for the development of the Needs Assessment phase, and ultimately, Recommendations phase.

The Existing Conditions Report includes an extensive inventory of current conditions and community features. The inventory consists of a review of the transportation network and its operating conditions including existing conditions and recent historical trends, particularly targeting problem areas and corridors. A significant amount of effort was undertaken to collect



existing data to the maximum extent possible. Finding the data necessary to compile this report involved drawing from many different resources including the wealth of information available from the municipalities in North Fulton County, supplemented by data from the Atlanta Regional Commission (ARC), the Georgia Department of Transportation (GDOT), the Metropolitan Atlanta Rapid Transit Authority (MARTA), the Georgia Regional Transportation Authority (GRTA), aerials, and field surveys. A summary of the areas inventoried follows:

- Redevelopment Initiatives and Large Development Sites
  - Tax Allocation Districts (TAD)
  - Livable Centers Initiatives (LCI)
  - Developments of Regional Impact (DRI)
- Land Use and Development Characteristics
  - Development Patterns
  - ARC's Unified Growth Policy Map
  - Existing Land Use
  - Existing Zoning
  - Future Land Use
  - Schools, Parks/Open Space, and Civic Infrastructure
- Socioeconomic and Demographic Characteristics
  - Population
  - Age Distribution
  - Racial Composition
  - Educational Attainment
  - Income
  - Employment
  - Households and Housing
- Market Overview
  - Residential Market
  - Retail Market
  - Office Market
  - Industrial Market
- Transportation Inventory
  - Roadway Characteristics (Functional Classification, Number of Lanes, Bridge Inventory, Posted Speed, Traffic Control Systems, Access Management)
  - Roadway Operations (Roadway Volumes, Travel Patterns and Trip Characteristics, Roadway Level-of-Service)
  - Pedestrian and Bicycle (Existing Infrastructure, Existing Use, Level-of-Service, ARC's Potential Walking Demand Measure)
  - Transit (Agencies, Existing Service, Ridership)
- Safety
- Freight
- Planned Projects (Local, Regional, Federal/Stimulus)
- Environmental Conditions



## Existing Conditions Results Summary

In order to guide development of the North Fulton CTP, a public opinion survey was developed and administered to the general public. Through the use of the survey, 1,000 North Fulton County residents were interviewed to explore usage of, attitudes toward, and perceptions of transportation options in their area. The survey questions were designed to solicit information about the general quality of existing transportation infrastructure and services as well as the priorities for future improvements. The survey also included questions incorporating the Atlanta Region 2040 focus areas. A summary of major survey findings follows:

North Fulton County residents appear to hold strong opinions regarding transportation in their area. Several possible transportation improvements were tested—including repairing the roads, developing more public transit options, making it safer and easier to walk in the area, and others—and each of them was viewed as being at least a “very high” priority by a majority of residents. Most residents also feel a need for more sidewalks and bicycle lanes in their community, and indicate that they would walk or ride a bike more often if roads were more pedestrian- or bike-friendly or if their destinations were closer to their home. Finally, though most North Fulton County residents do not ride public transit and don’t rate it favorably on several criteria, a majority believe that it would be useful to most people in their area given certain enhancements and even want improvements made to the public transportation system that make it easier for them to reach destinations in the area.

For the Existing Conditions phase, the survey results are being used to gauge how the technical assessment of existing conditions measures against the public understanding and perception of current conditions.

Characteristics of North Fulton County in the form of major findings from the inventory of existing conditions follow:

### Redevelopment Initiatives and Large Redevelopment Sites

Redevelopment initiatives across the region have begun in order to encourage redevelopment in more mature places. Tax Allocation Districts have been explored (although currently on hold) and seven of ARC’s Livable Centers Initiative (LCI) areas have been designated to aid in this redevelopment. Developments of Regional Impact (DRI) plans also pepper the region, indicating that the private sector development community sees value in new and redeveloped properties in North Fulton County.

### Land Use and Development Characteristics

The existing land use indicates that more than half (65.7%) of the land use within the study area is residential. 6.59% of the study area is categorized as commercial, which is mostly concentrated along the GA-400 and SR 9 corridors. Most of the office space (included in the commercial land use category) is concentrated at Windward Parkway in Alpharetta, Technology Park in Johns Creek, and



Perimeter Community Improvement Districts (PCIDs) in Sandy Springs. With six Livable Centers Initiative (LCI) studies already carried out within the study area, the municipalities have demonstrated the importance of more pedestrian-friendly and less auto-oriented types of development in certain locations. The LCIs have also encourage mixed-use land use as well as the importance of establishing a balance between housing and employment.

Future land use maps indicate that the North Fulton County cities have planned to continue to concentrate their commercial and office uses along and in between the GA-400 and SR 9 corridors. Most of the Developments of Regional Impact (DRI) are distributed along the GA-400 corridor, mainly concentrated at Perimeter CIDs, Windward Parkway, and Perimeter Mall.

ARC's Unified Growth Policy Map identifies and encourages growth in three regional centers: North Point Mall, Windward Parkway, and Perimeter Center. The Unified Growth Policy Map also shows seven town centers within the study area: Johns Creek, Milton, Alpharetta, Roswell, Atlanta Road, Roswell Road, and Sandy Springs. A portion of Roswell Road is identified as an Urban Redevelopment Corridor, while GA-400 is identified as a Mega Corridor.

As discussed, the study area consists of six municipalities. Most services, such as schools, public works, and public safety are operated internal to each of the municipalities. Several sharing arrangements have been established between the municipalities, such as: A public safety training facility shared between Roswell and Alpharetta, and 911 dispatch service between Johns Creek and Sandy Springs. Other sharing arrangements are in the negotiation phase.

## Zoning

As to be expected, zoning along major corridors and municipality boundaries is generally determined locally within each municipality. Some areas consist of disconnected zoning along these boundaries and along corridors which travel through multiple municipalities.

## Socioeconomic and Demographic Characteristics

North Fulton County accounts for 6% of the Atlanta MSA's overall population and has experienced moderate growth over the last decade. The Cities of Sandy Springs and Roswell have the largest populations, accounting for 51% of the study area's population, although the Cities of Milton and Alpharetta had the largest growth rate in the study area from 2000-2009. The recent and projected population growth rates for North Fulton are below the Atlanta MSA, which has experienced phenomenal growth, but still greater than the national rate of growth.

Household numbers are changing at approximately the same rate as population. Sandy Springs has the study area's largest number of households at 30%, while Mountain Park contains less than ½% of the study area's households. Household size is 2.68, which is slightly above the national average of 2.59 and below the Atlanta MSA of 2.73. Single-person households comprise 23.6% of the housing, which is slightly lower than the national figure, but comparable to the Atlanta MSA figure.





The median age of North Fulton residents is 35.7, which is only slightly lower than the national average of 37.6. Johns Creek has the youngest median age, while Mountain Park has the oldest. From 2000-2009, the largest growth rate group was ages 55-64. There are expected declines in the age groups between 25 and 44 years of age, while the largest growth is expected in the age groupings over 60 years of age.

The North Fulton study area consists of 72% Caucasians, 10% Hispanics, and 8% African-Americans/Asian and 10% other. From 2000-2009, the percentage of Caucasians fell, while the percentage of Asians grew the most, followed by Hispanics, then others.

Educational attainment in North Fulton County is well above the national average. Only 5.5% of the population has less than a high school education, compared to the Atlanta MSA average of 16.6% and the national average of 19.4%. The highest educational attainment levels are found in Johns Creek and Sandy Springs, with Mountain Park having the lowest attainment levels.

Both per capita income (\$48,968 per year) and average household income (\$131,327 per year) are remarkably higher than the Atlanta MSA and national averages, and are expected to continue to be. Per capita income is over \$20,000 above the Atlanta MSA and national income levels. These income levels have grown 18.4% since 2000, which is below the national growth level, but above the Atlanta MSA growth level. The City of Milton has the highest per capita income, while Mountain Park has the lowest. Well over half of North Fulton's households earn greater than \$100,000 annually. The needs of those households with incomes below \$35,000 will be given special consideration as part of this Program.

The jobs-to-housing ratio in North Fulton County is 0.83, which means there are more residents in North Fulton than jobs. However, this is a strong jobs-to-housing ratio, particularly in metro Atlanta, where many areas have less than half the jobs than they do residents. North Fulton's strong role in the metro economy is easy to see when comparing its proportion of the Atlanta MSA's population (6%) versus its employment (10%). Sandy Springs has the largest employment base, while Mountain Park has the lowest. North Fulton's largest business sectors are Services, Retail Trade, and Finance, Insurance, and Real Estate. Separators of the study area are its high number of jobs in Finance, Insurance, and Real Estate and its lack of Manufacturing jobs in comparison to the Atlanta MSA.

## Market Overview

The residential, retail, office, and industrial markets have responded to the economic downturn in much the same way as the rest of the nation. A summary of recent activity follows:

### *Residential*

- 22% decline in total housing units sold between 2007 and 2008.
- Resales decreased by 12% and new home sales fell by 45% between 2007 and 2008.



- Median sales prices declined by six percent from 2007 to 2008, to \$268,870. Median resale (\$343,510) price declined by seven percent and new home sale (\$257,630) price decreased by six percent in this same time period.

The decreases in North Fulton's home sales activity are similar to those seen in Fulton County. North Fulton's median sales prices are well above those seen for all of Fulton County. Further, the declines in sales prices in North Fulton are not nearly as dramatic as those experienced in Fulton County as a whole.

### *GA-400 Retail Market Cluster*

- Accounts for approximately 10.6% of the metro Atlanta retail market.
- Vacancy rate is above the metro average, at 12.2%.
- Average rent per square foot is above the metro average, at \$17.18.
- Year-to-date net absorption is negative, at -724,000 square feet.
- Average rental rates have been steadily declining since first quarter of 2009.
- Vacancy rates have been slowly creeping up since first quarter of 2007, with significant increases since first quarter of 2009.
- Peak for retail construction seems to have been during 2007, when approximately five million square feet was constructed over the course of that year.

### *North Fulton Office Market*

- Accounts for approximately 12.9% of the metro Atlanta office market.
- Vacancy rate is slightly above the metro average, at 17.2%.
- Average rent per square foot is below the metro average, at \$18.10.
- Year-to-date net absorption is negative, at -530,550 square feet.
- Rental rates have been making a slow but steady increase since first quarter of 2006.
- Vacancy rates in the North Fulton office market cluster have been increasing since fourth quarter of 2006, with steady and notable increases since fourth quarter of 2008.
- Peak for office construction in this market cluster seems to have been between third quarter 2007 and second quarter 2008, when approximately five million square feet was constructed.

### *North Central Atlanta Industrial Market Cluster*

- Accounts for approximately 4.6% of the metro Atlanta industrial market.
- Vacancy rate is slightly above the metro average, at 13.8%.
- Average rent per square foot is well above the metro average, at \$6.58.
- Year-to-date net absorption is negative, at -283,400 square feet.
- Rental rates fluctuated over the course of 2006 and 2007, to arrive at a peak in the third quarter of 2007. Since the end of 2007, average rental rates have been declining, with a significant drop since the second quarter of 2009 in particular.
- Vacancy rates had fluctuations in both 2006 and 2007, and have been steadily rising since second quarter 2008.



## Transportation Inventory

The transportation inventory included an assessment of existing roadway characteristics, roadway operations, pedestrian and bicycle facilities, and transit. A brief description of major findings follows:

### Roadway Characteristics

The study area consists of two major corridors, GA-400 and I-285. Other principal arterials that carry the majority of traffic within North Fulton include SR 9, SR 120, SR 92, SR 140, State Bridge Road, Johnson Ferry Road, and Abernathy Road. Most of these roadways are located within the middle and southern portions of North Fulton County. Other than these primary roadways, most roads within the study area are undivided two-lane roadways, many of which carry extraordinary volumes of traffic. The study area generally consists of dendritic-type<sup>1</sup> roadway patterns with few areas (other than downtown city centers) with a well defined grid network. The area lacks adequate connections in several areas, specifically along the Chattahoochee River which runs approximately 34 miles through the study area with only nine connections (two of which are freeway overpasses). This equates to an average of 3.8 miles between each connection.

19 bridges within North Fulton County have sufficiency rates less than 50. Bridges with a sufficiency rating of 50 or below qualify for federal replacement funds.

The large volumes of traffic within the North Fulton study area require that traffic control systems and access management measures be deployed. There are approximately 405 traffic signals along the roadways studied as part of this program. Many of these signals are located along GDOT roadways, where GDOT owns and has installed while the local municipality maintains. Only one roundabout currently exists within the study roadway network. While most study roadways do not contain medians, the major arterials generally consist of landscaped medians.

### Roadway Operations

As anticipated, Annual Average Daily Traffic Volumes (AADT) are highest along I-285 and GA-400, each carrying over 150,000 vehicles per day. Due to the minimal routes in which travelers can choose, traffic volumes are very high (generally between 15,000 and 30,000) along each of the roadways that access both I-285 and GA-400. These high traffic volumes create congested traffic conditions during the morning and afternoon peak periods along both the freeway system and along most of the arterials and collectors within North Fulton County.

A review of census data and a labor shed analysis determined that travel patterns within the North Fulton area are not what some may expect. As provided in the Existing Conditions Report, many

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<sup>1</sup> Dendritic refers to a roadway network which branches out to smaller and smaller roadways eventually ending in loops or cul-de-sacs. Dendritic tends to describe suburban development patterns.



individuals living in the North Fulton area also work in the North Fulton area, contrary to the belief that most travel to the central business district of Atlanta.

## Pedestrian and Bicycle Facilities

The bicycle and pedestrian study network consists of 339 centerline miles of roadways, comprised of arterial and collector roadways. Only 10.4 miles of the study network feature designated bike lanes on both sides of the road. Up to 2.3 miles of roadway with wider shoulders are also provided within the study area. In addition to these facilities, the City of Roswell has installed experimental facilities, such as a “bike box” and Shared Lane Markings (Sharrows) at the intersection of Riverside Road and Dogwood Road.

Seventeen percent of the network miles surveyed have full sidewalk coverage along both sides of the roadway, while 21% have complete coverage on one side. Twenty-one percent of the network miles have partial coverage of 50% or greater, while 14 percent of miles of roadway have partial coverage of less than 50%. Twenty-eight percent of the roadways surveyed essentially have no sidewalks at all. Of all the sidewalks surveyed, the average buffer separating sidewalks from the roadway is 2.2 feet wide, leaving pedestrians to walk very close to busy arterial and collector roads. Alongside those roadways without sidewalks or shoulders, it is not uncommon for the roadsides to fall quickly into ditches, leaving little room for those who might choose to walk alongside them anyway, and no recovery space or room to step off or pull off the roadway for those who choose to walk or ride a bike in the narrow roadway. Taken all together, these characteristics describe an environment which can be very stressful for those who attempt to walk or ride a bicycle along North Fulton County’s roadways, limiting the viability of these modes to be experienced as real transportation options in the area.

## Transit

The North Fulton area is served by the Metropolitan Atlanta Rapid Transit Authority (MARTA) and the Georgia Regional Transportation Authority (GRTA). MARTA provides both heavy rail and bus service to the study area; however heavy rail serves only the southern portion of the study area (Sandy Springs). MARTA bus serves most of Sandy Springs, but mainly serves the GA-400 corridor in middle and northern portions of Fulton County. Paratransit service is provided within a  $\frac{3}{4}$  mile radius of any bus route or heavy rail station. GRTA provides regional commuter bus service that travels through most of the study area, with stops at only Johns Creek and Sandy Springs.

## Safety

Vehicular crashes within the North Fulton study area are more heavily concentrated along State Routes, particularly SR 9. From 2006-2008, there were approximately 14,430 crashes, 3,556 injuries, and 12 fatalities at the study intersections. This equates to approximately four crashes per injury and 1,202 crashes per fatality.





## Freight

The only freight movements within the study area are via truck. There are no ports, airports or railroads within the study area. There are relatively few manufacturing and industrial uses within the study area, and these are somewhat dispersed. There are, of course, many truck deliveries taking place to commercial, institutional and business uses throughout the North Fulton study area. As a result, truck freight movements are not concentrated in any particular area, but occur throughout the area. While all state routes and most major local roadways are used by trucks, the only three officially designated truck routes in the study area include I-285, GA-400, and a portion of SR 9 in Alpharetta. However, the Atlanta Regional Freight Mobility Plan identifies an Atlanta Regional Priority Freight Highway Network which includes SR 92 and SR 120 in addition to GA-400 and I-285.

## Planned Projects

A substantial number of transportation projects are planned in North Fulton County. At the regional level, 46 projects of all types that fall within North Fulton are in the *Envision6* Regional Transportation Plan (RTP). Nine projects in North Fulton are funded under the American Recovery and Reinvestment Act (ARRA). Additionally, the cities of Alpharetta, Johns Creek, Milton, Roswell, and Sandy Springs have all planned projects that include intersection improvements, streetscapes, and bicycle and pedestrian facilities.

## Environmental Conditions

The environmental inventory was divided into four major categories: jurisdictional waters, threatened and endangered species, hazardous materials, and cultural resources. Environmental elements that will play an important part of this program are the presence of the Chattahoochee River stream corridor (which divides the northern and southern sections of the study area) and other cultural resources and endangered species. Details of these environmental inventory features are included in the Existing Conditions Report.

## Transportation Funding

Current primary funding in the state of Georgia consists of Federal, State, and Local sources. Georgia receives \$3-4 billion each year from the following sources:

- \$1.1-1.3 billion from the Federal Highway Administration
- \$1 billion in state sources (mostly gas tax)
- \$750 million from bonds

An important fact worth noting is that Georgia has the second lowest gas tax in the country. While the national average state gas tax is 27.2 cents per gallon, Georgia's gas tax currently sits at 13 cents per gallon.



The ARC's *Envision6* currently averages \$1.1-1.7 billion of the total \$3-4 billion state budget per year. Projects located within North Fulton County account for 5 percent of the total Atlanta Metropolitan Planning Organization (MPO)<sup>2</sup>. For comparison, in 2008 North Fulton County represented 5.7 percent of the region's population and 6.9 percent of the region's employment.

Planned investments in *Envision6* total approximately \$1 billion in North Fulton County through year 2030. If this planned investment is realized, the area will average \$46 million per year of investments in North Fulton County (this does not include ongoing MARTA service costs).

North Fulton County faces a funding challenge. With the existing one percent MARTA sales tax for all of Fulton and DeKalb Counties, this makes it very difficult for any portion of Fulton County to seek additional taxation for local transportation investments.

Current transportation funding sources for North Fulton County should be reevaluated in efforts to identify more efficient and direct methods of funding for this unique area. Through the use of SPLOSTs, its neighbors, Cobb County and Gwinnett County have realized approximately \$137 million and \$150 million per year, respectively, mostly for transportation enhancements. Without an additional local revenue source or reallocation of MARTA sales tax funds, North Fulton County will likely not keep pace with its neighbors.

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<sup>2</sup>Includes both GDOT and local projects specific to North Fulton; not inclusive of regional projects that extend beyond North Fulton; does not include MARTA expenditures for maintenance and operations of service in North Fulton.



## 1.0 INTRODUCTION & PURPOSE

The Atlanta Regional Commission (ARC), as one of its program goals, supports the update of local transportation plans that are used as input into the regional transportation planning process. A key outcome of the program is to identify and reconfirm community visions and priorities. Coordination with the regional transportation planning process and regional development plan policies supports consistency with plans that meet regional goals as well as develops project investments that are eligible for federal dollars. Roadway, transit, bicycle, pedestrian, safety and operational improvements, demand management, freight movement, environmental, and market analyses are critical study components.

The North Fulton Comprehensive Transportation Plan is a particularly unique opportunity in regional planning. The regional subarea's role as a key economic contributor highlights the importance of ensuring that the transportation network offers connectivity to, from, and within the area. Along with key common characteristics as a key employment center, the area also is made up of Alpharetta, Johns Creek, Milton, Mountain Park, Roswell and Sandy Springs – municipalities both distinctive and unique.

The purpose of this Existing Conditions Report is to provide the foundation and framework for multimodal, multijurisdictional infrastructure and policy recommendations across Alpharetta, Johns Creek, Milton, Sandy Springs, Roswell and Mountain Park. Existing conditions have been documented and analyzed as part of this report. Later, a Needs Assessment phase will identify low cost, easily implemented operational improvements as well as needs and potential major investments. Finally, the Recommendations phase will identify a list of projects and policies that will be based upon the technical analysis associated with this plan and vetted against the vision, goals, and objectives criteria identified during this phase. The resulting document, TRIP (Transportation Resources Implementation Program), will guide the accomplishment of this effort.

### 1.1 North Fulton County Background<sup>3,4,5</sup>

Most of the area now identified as North Fulton County was originally part of the Cherokee Nation. In 1830, the State of Georgia took over the Cherokee lands and divided them into ten separate counties. On December 18, 1857, an area north of the Chattahoochee River to be called Milton County was carved from portions of Cherokee, Forsyth, and Cobb counties. This allowed for a more accessible county seat. In 1858, the City of Alpharetta was incorporated from a Methodist settlement called New Prospect Campground and was designated as the county seat. Alpharetta

<sup>3</sup> Greater North Fulton. Chamber of Commerce. [The Guide of Greater North Fulton](#), 2008-09 ed. St. Simons Island, GA: Great Southern Publishers, Inc.

<sup>4</sup> <http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-1265>

<sup>5</sup> <http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-2335>



was bordered by the town of Roswell, which sat two miles from the Chattahoochee River. Milton County grew as portions of DeKalb and Gwinnett counties were added in 1859.

Milton County's economy thrived as a large producer of cotton supplemented by other agriculture. Several area farmers produced well-known varieties of cotton which were sold at high prices to Roswell Manufacturing Company. Many of the still recognizable early communities within Milton County include Birmingham, Crabapple, Hopewell, Newton, Ocee, and Warsaw. To serve its booming economy, many trails became roads which served as thoroughfares between adjacent counties and cities as far as the north Georgia mountains and the City of Atlanta.

Milton County's success as a well-known cotton provider was brought to an end by boll weevil infestations during the 1910s and 1920s and the Great Depression during the 1930s. These events left Milton County very poor, with almost no paved roads, underfunded schools, and high taxes. On January 1, 1932, Milton County (pop. 6,730) was one of only two Georgia counties to ever be eliminated and was annexed by Fulton County through an act of the state legislature. This annexation lowered taxes and provided access to better schools and medical facilities. In May 1932, the Roswell Militia District seceded from Cobb County and also merged with Fulton County.

North Fulton County is sometimes referred to today as the "golden corridor." The once cotton-producing area is now known for its economic vitality and high-end living, brought on by the success of the cities of Alpharetta, Mountain Park, and Roswell. Sandy Springs was incorporated in 2005, followed by Johns Creek and Milton (which were incorporated in 2006), bringing the list of cities within North Fulton County to six. North Fulton County is now entirely incorporated by these six cities.

Area character varies greatly across the differing municipalities. Sandy Springs, located at the juncture of Georgia State Route 400 and I-285, is home to four of the Atlanta area's largest hospitals and large corporations such as UPS, Cox Communications, Mirant, and Newell Rubbermaid. This city is the only North Fulton County city never to be a part of Milton County, as it sits to the south and east of the Chattahoochee River.

The cities of Alpharetta, Johns Creek, and Roswell boast robust commercial nodes with strong suburban residential communities. These areas are known for their quality of educational and medical facilities as well as their accommodation to family activities such as shopping, dining, and recreation.

The City of Milton is one of the County's newest cities. The residents of Milton pride themselves on their high-end living and rural character, while still approximate to commercial areas to the south. The City is peppered with farms and caters to the equestrian enthusiast.

The quaint City of Mountain Park lies just to the southwest of Milton. Mountain Park is a very unique tight-knit community with only 500 residents. The City is an officially designated wildlife refuge and citizens are committed to preservation of the natural environment.





This collection of cities, each with its different character, sits at the center of the booming Atlanta metropolitan region. The area is poised to continue to experience dramatic growth via its accessibility to Georgia State Route 400 and Interstates 75, 85, and 285, which travel through the region. Additionally, recreation along the Chattahoochee River and in the nearby North Georgia Mountains will continue to draw the interest of residents and visitors.

## 1.2 Report Goals and Structure

The vision for the North Fulton Comprehensive Transportation Plan (CTP) was developed based on the input of government officials from each of the six municipalities<sup>6</sup> in North Fulton County, adjacent county stakeholders, and other local stakeholders, and validated through extensive public outreach. It was determined that the framework of the project should be rooted in the vision statement defined at the start of the project:

The North Fulton Comprehensive Transportation Plan's vision is to develop a functional, reliable and implementable transportation system that...

- Supports economic vitality, environmental responsibility, innovation, and quality of life
- Is designed to achieve safety, connectivity, accessibility, and mobility for users of all modes and support lifelong communities enabling independence as citizens age
- Works cooperatively with the area's infrastructure and jurisdictional land use policies
- Is developed cooperatively with respect for the preservation of individual jurisdiction's community character

Following the establishment of the plan's vision, a list of goals and objectives was developed to guide the long-range transportation planning process. The goals and objectives attempt to balance the vision expressed by the ARC board and committees, each government entity, citizens, and key community stakeholders. The following goals and objectives are aimed at supporting the successful implementation of the vision statement.

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<sup>6</sup> The six municipalities in North Fulton County are Alpharetta, Johns Creek, Milton, Mountain Park, Roswell, and Sandy Springs.



**Table 1-1: Goals and Objectives**

Goal	Objectives
Develop a functional, reliable, and implementable transportation system	<ul style="list-style-type: none"> <li>Responsibly account for future growth</li> <li>Ensure improvements are properly designed and maintained</li> <li>Identify improvements that can be realized given funding constraints</li> <li>Identify funding sources and their respective eligibility requirements and application processes</li> </ul>
Support economic vitality, environmental responsibility, innovation, and quality of life	<ul style="list-style-type: none"> <li>Improve transportation facilities that support centers of economic development</li> <li>Identify and improve existing transportation barriers to economic vitality</li> <li>Identify and protect important environmental resources</li> <li>Improve facilities and accessibility for all modes to reduce personal vehicle transportation demand</li> <li>Develop ways to address roadway congestion by using strategies to improve mobility and provide alternatives</li> <li>Consider all users across various geographic areas and demographic sectors equitably</li> <li>Provide alternative transportation modes, particularly for the non-driving population</li> </ul>
Achieve safety, connectivity, accessibility, and mobility for users of all modes and support lifelong communities enabling independence as citizens age	<ul style="list-style-type: none"> <li>Leverage public input and technical analysis to identify safety improvements and concerns for motorists, pedestrians, and cyclists</li> <li>Increase public awareness of existing safety issues</li> <li>Consider improving access to transit services in appropriate areas as determined by local municipalities</li> <li>Improve facilities for transit riders, pedestrians, and cyclists to encourage use of alternative modes</li> <li>Leverage existing transit infrastructure, such as existing bus routes and heavy rail stations, by targeting these areas for mixed use or transit oriented developments where supported by local comprehensive plans</li> <li>Increase intermodal connectivity</li> <li>Ensure that the transportation plan considers multi-modal uses for all roadway projects</li> </ul>
Work cooperatively with area's infrastructure and jurisdictional land use policies	<ul style="list-style-type: none"> <li>Incorporate alternative transportation modes into future infrastructure design</li> <li>Ensure the transportation plan is consistent with current and planned local land use</li> <li>Identify and preserve right of way for future transportation infrastructure expansion needs</li> <li>Use growth models to predict where future demand will necessitate infrastructure improvements</li> <li>Consider multimodal and transit-oriented design and the development of proposed transportation infrastructure in relation to land use policies and market development opportunities identified through the study</li> </ul>
Develop the CTP cooperatively with respect for the preservation of individual jurisdiction's community character	<ul style="list-style-type: none"> <li>Ensure strong public participation</li> <li>Include representatives from each community in the planning process</li> <li>Define characteristics that identify each community and encourage policies that preserve them</li> <li>Preserve historical, archaeological, and other cultural resources</li> <li>Develop strategies for managing commuter traffic from surrounding areas to reduce impacts on local communities</li> </ul>



This report, the *Existing Conditions Report*, is the first of a series of three reports associated with each phase of the North Fulton CTP. The second phase of the project will consist of a *Needs Assessment Report*, which will establish a link between existing and future transportation operational deficiencies and will begin to determine specific needs. The final phase of the project will be the *Recommendations Report*, which will provide a final list of prioritized transportation enhancement recommendations. Each of these documents will incorporate the ongoing technical analyses and community involvement efforts.

## 1.3 Study Area

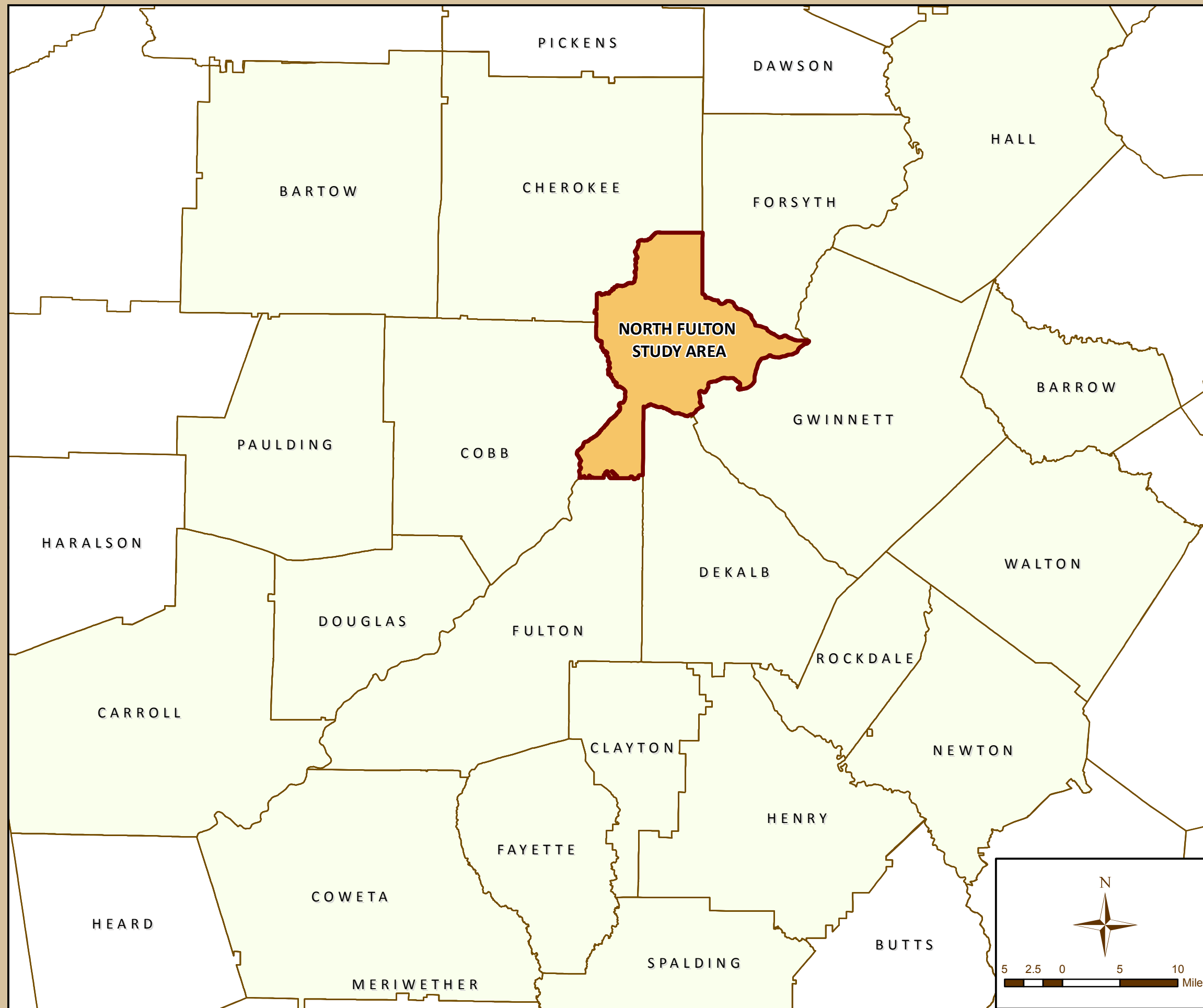
The study area for this project consists of a minimum of all collector, minor arterial, principal arterial, freeway, and interstate roadways, as classified by the Georgia Department of Transportation, within Fulton County north of the City of Atlanta. Figure 1-1 shows North Fulton County in relation to the ARC 20-county region. Several additional local roadways were also included within the study area because of their importance to the local and regional transportation system. These roadways include Cox Road, Hamby Road, Mountain Park Road, Northpoint Parkway, Windward Parkway, Deerfield Parkway, Westside Parkway, Woodstock Road, and portions of Mansell Road. Figure 1-2 shows the roadways included in the study area.

Five jurisdictions are specifically included in the study area. These include the Cities of Alpharetta, Johns Creek, Milton, Roswell, and Sandy Springs. The City of Mountain Park is also included in portions of the document.

Additionally, this report includes a market analysis which provides comparative statistics and demographics for two areas: North Fulton<sup>7</sup> and Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area (MSA)<sup>8</sup>.

<sup>7</sup> North Fulton – Defined as the cities of Alpharetta, Johns Creek, Milton, Mountain Park, Roswell, and Sandy Springs.

<sup>8</sup> Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area (MSA) – Made up of 28 counties: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton.







**North Fulton County**  
**Transportation Resource**  
**Implementation Program**




**Reference Location**

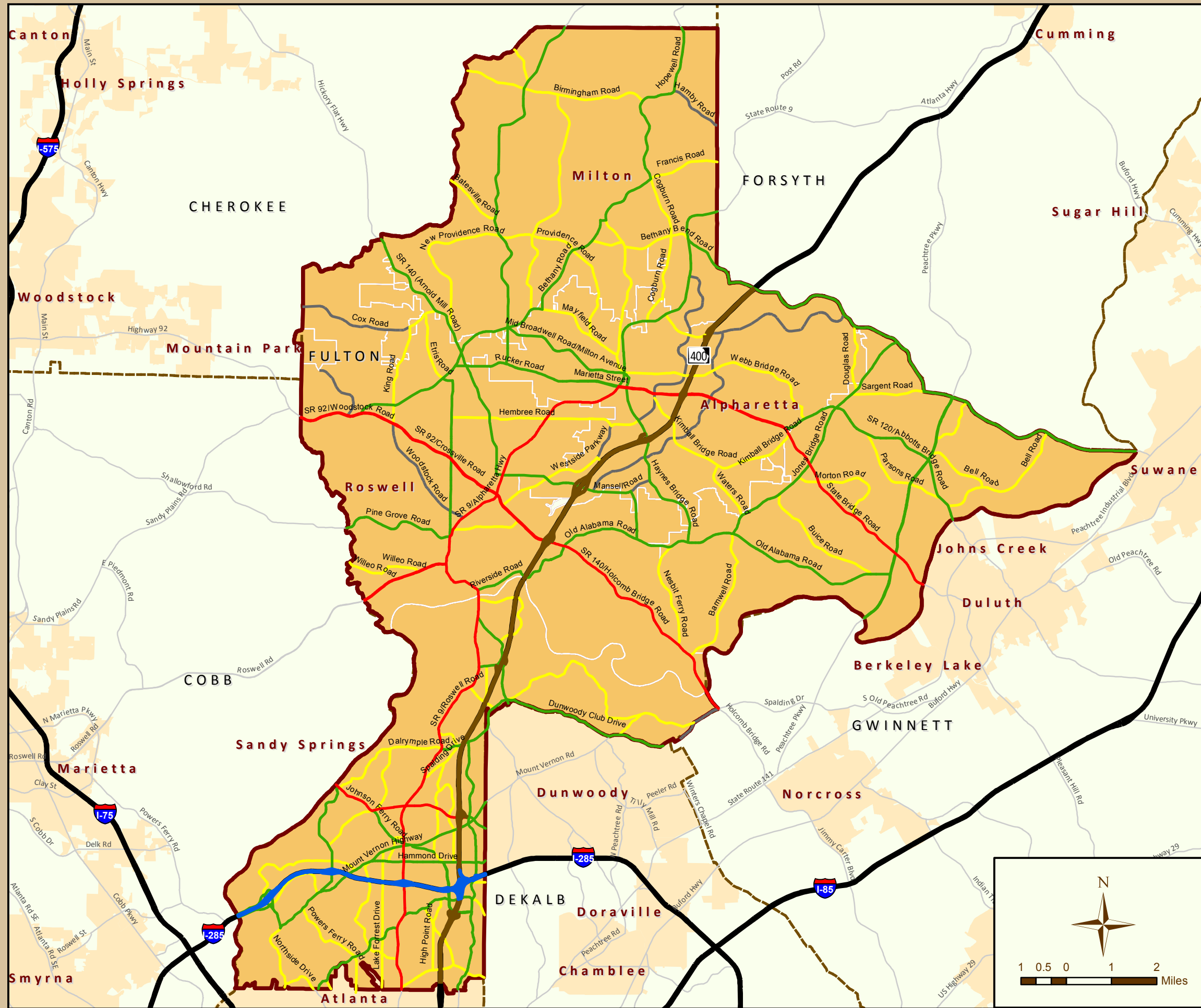


**Legend**

-  North Fulton Study Area
-  ARC 20-County Region
-  Other Counties

Source: Atlanta Regional Commission

**Figure 1-1**  
**Study Area**




**North Fulton County  
Transportation Resource  
Implementation Program**




**Reference Location**

**ARC  
20-County  
Region**

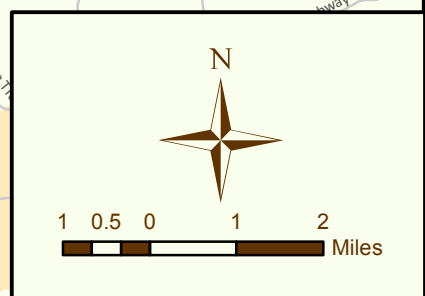


**Legend**

Interstate	Other Major Roads
Freeway	Expressways
Principal Arterial	Study Area
Minor Arterial	Counties
Collector	Other Cities
Local	

Source: GDOT, ARC GIS Data

**Figure 1-2  
Study Area Roadway Network**







## 2.0 PUBLIC INVOLVEMENT

To ensure that the North Fulton CTP considers issues important to residents of North Fulton County, several public involvement efforts and project management strategies are being deployed to gather valuable community feedback. A unique approach is being taken to work with staff at each of the local municipalities through the use of Community Client Managers, a public opinion survey, and through other innovative techniques.

### 2.1 Committee Structure

It has been critical from the beginning of this study to identify several groups that would serve as advisors to the work of the consultant team and act as the voice for the larger North Fulton County stakeholder and citizen population. The groups consist of municipality staff, elected officials, and other local leaders. Three specific groups were identified:

#### **Project Management Team**

This group consists of Atlanta Regional Commission project manager and the Consultant Team Project Manager, as well as transportation planning and engineering staff from the cities of Alpharetta, Johns Creek, Milton, Roswell, and Sandy Springs.

#### **Policy Committee**

This group consists of the mayors from the cities of Alpharetta, Johns Creek, Milton, Mountain Park, Roswell, and Sandy Springs.

#### **Stakeholder Committee**

The membership of the Stakeholder Committee includes 21 representatives appointed by the cities as follows: Alpharetta (3), Johns Creek (4), Milton (2), Roswell (5), Sandy Springs (6), and Mountain Park (1). Although these representatives may represent other interests as well, their primary function is to act in an advisory capacity on transportation matters by reviewing findings and recommendations throughout the project. An additional ten members were also appointed from the North Fulton Community Improvement District (1), Perimeter Community Improvement Districts (1), Georgia Department of Transportation Central Office of Planning (1), Georgia Department of Transportation District Office of Pre-Construction (1), the Georgia Regional Transportation Authority (1), the Metropolitan Atlanta Regional Transit Authority (1), North Fulton Chamber of Commerce (1), Johns Creek Chamber of Commerce (1), Sandy Springs Chamber of Commerce (1), and the Chattahoochee Riverkeeper (1) for a total of 33 members.

These groups will support the public outreach efforts and will participate in the meetings as described in the Public Meetings section of this report.





## 2.2 Community Client Managers

The Community Client Managers are senior professionals that support the Consultant Team Project Manager by focusing on the unique concerns, comments, and ideas of each municipality throughout the life of the project. The Community Client Managers are deeply familiar with the point of view of their assigned community and represent that view on the project team. They serve as representatives for their assigned community at public meetings, to policy committee members and to the other elected and appointed officials.

## 2.3 Public Opinion Survey

To guide the development of this Program a public opinion survey was developed and administered to the general public. Through the use of the survey, 1,000 North Fulton County residents were interviewed regarding the usage of, attitudes toward, and perceptions of transportation options in their area. The survey questions were designed to solicit information about the general quality of existing transportation infrastructure and services as well as the priorities for future improvements. The survey also included questions incorporating the Atlanta Region 2040 focus areas.

Residential phone numbers within the six cities comprising North Fulton County (Alpharetta, Johns Creek, Milton, Mountain Park, Roswell, and Sandy Springs) were sampled to obtain telephone survey data during September and October 2009. The results were weighted and are demographically and geographically representative of the North Fulton County area. The margin of sampling error for the region-wide results is +/- 3.1%. While each city was represented proportionately based on population, the survey is based on analysis of region-wide data rather than individual city data.

For this report, the survey results are being used to gauge how the technical assessment of existing conditions measures against the public understanding and perception of current conditions. The Needs Assessment (phase 2) of the North Fulton CTP project will compare the technical analysis needs results with the public perception of needs. Finally, the Recommendations (phase 3) of the project will compare the recommendations with the desires of improvements as indicated from the public.

A report of the survey results are provided in Appendix A.

## 2.4 Public Meetings

Four types of meetings will be held over the life of the project: Project Management Team/Stakeholder Committee meetings, Policy Committee meetings, public meetings, and small group/focus meetings with additional outreach activities as described below:

- Seven joint meetings of the Project Management Team and Stakeholder Committee.



- Four quarterly meetings of the Policy Committee (the initial kickoff was held as a joint PC/PMT/SC meeting).
- Two rounds of public meetings will be held in Alpharetta, Johns Creek, Milton, Roswell, and Sandy Springs (for a total of ten), with presentations to Mountain Park as requested.
  - The first round will include the presentation of the draft Needs Assessment with hands on charrette-style meetings tailored uniquely to each jurisdiction.
  - The second round will include presentation of the draft Recommendations Report.
- Up to three stakeholder/small group meetings will be held with the Project Management Team to facilitate more intensive participation of focused interests.



## 3.0 DATA COLLECTION

The purpose of this report is to provide a foundation for existing conditions on which the Needs Assessment and Recommendations phases will hinge. Specific data collected include land use and development initiatives, socioeconomic and demographic characteristics, market conditions, roadway characteristics and geometry, roadway operations and features, pedestrian and bicycle facilities, transit operations, crash history, freight, travel patterns, planned and programmed projects, and environmental conditions. The data collected as part of this phase is summarized in this report through the use of maps developed with geographic information systems (GIS) software and through the use of tables and charts developed with spreadsheet analysis programs.

### 3.1 Data Sources

A significant amount of effort was undertaken to collect existing data. Finding the data necessary to compile this report involved drawing from many different resources including information available from the municipalities in North Fulton County, the ARC, the Georgia Department of Transportation (GDOT), the Metropolitan Atlanta Rapid Transit Authority (MARTA), the Georgia Regional Transportation Authority (GRTA), aeriels, and field reviews.

Table 3-1 summarizes the data collected along with the relevant sources.



**Table 3-1: Data Collection Sources**

Category	Data	Source
Plans and Studies	See <i>Existing Studies and Planned Projects</i> Section	Various
Livable Centers Initiative	Livable Centers Initiative Project Data	Atlanta Regional Commission (ARC)
Developments of Regional Impact (DRI)	Development of Regional Impact Project Data	Georgia Regional Transportation Authority (GRTA)
Land Use Data	Existing Land Use	ARC Landpro 2008
	Community Facilities	ARC
Zoning	Existing Zoning	Local Jurisdictions
Socioeconomic Profile	Population, Income, Employment	US Census Bureau, Claritas, Market + Main, Inc., US Bureau of Labor Statistics
Market Analysis	Market and Demographic Data	Market + Main
Transportation Inventory	Functional Classification	GDOT
	Roadway Laneage	Field Survey, Aerials
	Bridge Inventory	GDOT
	Posted Speed	Field Survey
	Traffic Control	Field Survey, Aerials
	Medians	Field Survey, Aerials
	Pedestrian/Bicycle Facilities	Field Survey, Aerials
	Transit Routes and Facilities	MARTA, GRTA, CCT, GCT
	Greenways and Trails	Local Jurisdictions
	Annual Average Daily Traffic	Traffic Count Data
Travel Patterns	On The Map Graphics	US Census Bureau
Crash Data	Crash Data	University of Alabama CARE, GDOT
Freight	Truck Routes	GDOT
Regional Transportation Plan	See <i>Existing Studies and Planned Projects</i> Section	Atlanta Regional Commission
Environmental Conditions	Wetlands, Streams, and Lakes	KHA, ARC, EPA
	Cultural Resources	Natural Archaeological and Historic Resources GIS
	Protected Species	US Fish and Wildlife
Model Information	Travel Demand Data	ARC Travel Demand Model, U.S. Census Bureau



## 3.2 Existing Studies and Planned Projects

A thorough review of available previous studies and plans for areas across North Fulton County was conducted as part of the data collection process. Studies and plans reviewed include Municipal Comprehensive Plans and Comprehensive Transportation Plans; Livable Centers Initiatives Studies; Tax Allocation District Applications; Revitalization, Redevelopment, and Master Plans; Corridor Studies, and other various studies. These studies were specifically used in this report to identify key policies and aid in preparation of inventorying existing conditions. These studies will be used in future phases of this project to identify needs within North Fulton as well as reference existing recommendations for the area.

Table 3-2 on the following page summarizes the studies reviewed as part of this project.

## 3.3 Field Inventory

Where information was not available from existing sources, field surveys and review of aerial photography was used to complete missing information. Field surveys, or “windshield surveys,” were used to collect missing information and to verify data collected using the sources discussed in the *Data Sources* section of this report. All roadways within the North Fulton CTP study network were driven and data verified during the week of November 2, 2009.



**Table 3-2: Referenced Plans and Studies**

**Alpharetta**

- Comprehensive Plan 2025 (January 2008)
- Downtown Master Plan (May 2003)
- North Point Activity Center LCI (April 2008)
- Downtown Circulation Study, LCI Supplemental (March 2008)

**Johns Creek**

- Comprehensive Plan 2030 (2008)
- Transportation Master Plan (included in Comp Plan)
- Green Plan (included in Comp Plan)
- Medlock Bridge Road Corridor LCI Application (November 2006)

**Milton**

- Comprehensive Plan 2028 (2008) – Not yet adopted
- Transportation Plan (in progress)
- Milton Trail Plan (May 2007)
- Crabapple Crossroads Community Plan (2003)

**Roswell**

- Comprehensive Plan 2025 (November 2005)
- Midtown Roswell LCI Study (January 2003)
- South Atlanta Street LCI Study (April 2008)
- Transportation Master Plan 2006 (December 2006)
- Economic Analysis and Redevelopment Strategy for Midtown Roswell (February 2007)
- Holcomb Bridge Road East Revitalization Plan (2005)
- Mimosa Boulevard Connectivity Study (December 2006)
- Roswell Redevelopment Strategy (January 2003)

**Sandy Springs**

- Comprehensive Plan 2030 (November 2007)
- Roswell Road Corridor LCI Study (June 2008)
- Capital Paving Program FY 2010 (July 2009)
- Sidewalk Program (April 2006)
- Transportation Master Plan (August 2008)
- Perimeter LCI (January 2002)
- Perimeter LCI 2005 Update (2005)
- Livable Sandy Springs Plan LCI (June 2001)
- Sandy Springs MARTA Station Area Plan, LCI Supplemental (December 2003)

**Other Studies**

- ARC's Regional Transportation Plan (RTP) (December 2007)
- MARTA North Line Corridor TOD Surveys (October 2006)
- ARC's Atlanta Region Bicycle Transportation and Pedestrian Walkways Plan (September 2006)
- Investing in Tomorrow's Transportation Today (IT3) (November 2008)
- Draft Perimeter Area Multi-Modal Transportation Plan (September 2009)
- North Fulton Blueprint (2008)
- Fulton County Comprehensive Transportation Plan (October 1999)
- GRTA Regional On-Board Express Bus Survey (2008)





## 4.0 REGIONAL CONTEXT

North Fulton County borders Cherokee County and Forsyth County along its northern edge, Cherokee County and Cobb County to the west, Forsyth County and Gwinnett County to the east and DeKalb County and City of Atlanta to the south.

### 4.1 Regional Transportation Network

Four major transportation corridors frame the study area. Two of these corridors, I-285 and GA-400, travel through the study area and two others, I-85 and I-75, travel to the east and west of the study area. The I-285/GA-400 interchange lies within the limits of the study area. Figure 4-1 shows the study area's context within the regional transportation network.

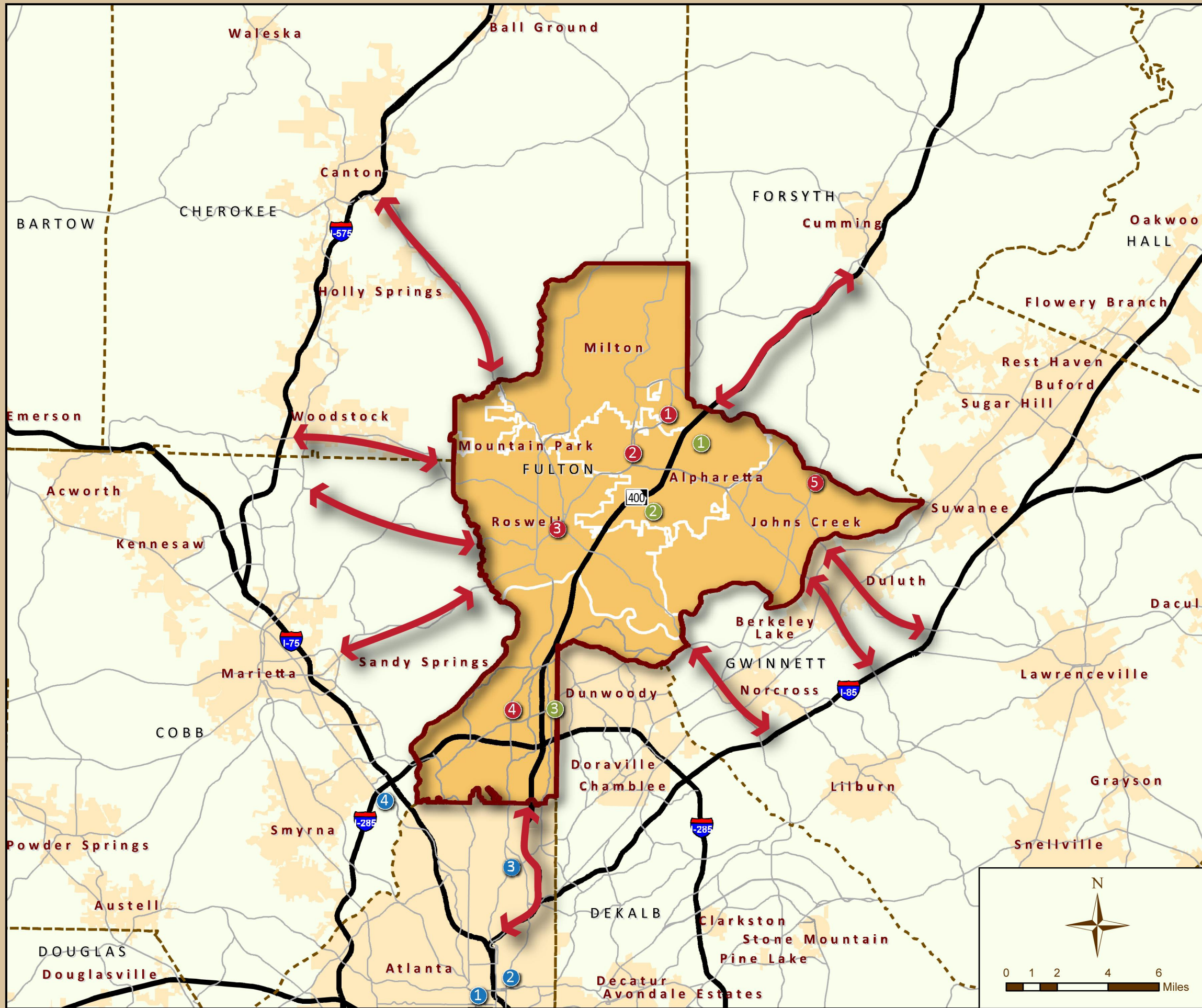
Although communities in North Fulton have deep roots, the recent story of rapid development in the area is linked to GA-400, which extends from the City of Atlanta north to Dahlonega in Lumpkin County. The first section of the highway opened at the beginning of the 1970s, and additional sections opened through 1981. The final section (that made the southern link from I-285 to Atlanta) opened in 1993 (and continues to serve) as a toll facility.

### 4.2 Municipalities

#### 4.2.1 Historical Context

Three of the study area cities – Sandy Springs, Johns Creek and Milton – incorporated within the past four years, as a result of the intense growth period of the 1980s and 1990s. As office development moved north within the metropolitan region, suburban trends intensified, increasing land values and causing pressures for greater housing and mixed-use densities. The desire for greater control over land use decisions motivated much of the movement toward incorporation. All three of these cities have begun or have completed comprehensive planning efforts. As the official policy documents of the cities, comprehensive plans serve as the primary data source for information provided below, unless otherwise indicated.

Roswell and Alpharetta have a longer history of municipal administration; both cities developed strong planning, zoning and design practices, creating high standards for new development. Both cities enjoy a distinct downtown with historic character. Alpharetta contains a diverse set of land-uses, including a healthy mix of office and residential to help maintain economic stability. The City of Mountain Park also has a long history, but with very limited municipal administration due to its size.




**North Fulton County  
Transportation Resource  
Implementation Program**




ATLANTA REGIONAL COMMISSION  
Kimley-Horn and Associates, Inc.

**Reference Location**

**ARC  
20-County  
Region**



**Legend**

- # North Fulton Cities Activity Center**
  1. Milton
  2. Alpharetta
  3. Roswell
  4. Sandy Springs
  5. Johns Creek
- # Major North Fulton Destinations**
  1. Windward Pkwy Office Development
  2. North Point Mall
  3. Perimeter Mall
- # Major Destinations Outside North Fulton**
  1. Downtown Atlanta
  2. Midtown
  3. Buckhead
  4. Cumberland Mall Area

— Major Roads      - - - Counties  
 — Expressways      Other Cities  
 Study Area

Source: ARC GIS Data

**Figure 4-1  
Local Context**





**Alpharetta** was legally chartered on December 11th, 1858. The City began as a community of merchants and small-scale farmers, which insulated the City from much of the hardships generated during the Reconstruction Era. Like much of the northern metropolitan area, Alpharetta experienced explosive growth during the 1980's and 1990's. The City's comprehensive plan indicates that by 2000, Alpharetta's population had grown to more than ten times its 1980 population of 3,128; the most recent estimate is 51,243 (2007).

**Johns Creek** became a city on December 1, 2006 following two years of local organizing to incorporate the City. Located east of Alpharetta, the City of Johns Creek is made up of the four original farming communities of Warsaw, Shakerag, Newtown, and Ocee. The Chattahoochee River forms the boundary of the City with Gwinnett County to the southeast. The creek was named after John Rogers, who lived and farmed land north of the Chattahoochee in the early 1800s. The John Rogers home, built in 1803, is still standing today in Johns Creek on Bell Road and has been restored by its current owners. Like its sister cities, Johns Creek grew rapidly and lost much of its rural character during the suburbanization in the 1990s. The City estimates its population at approximately 70,050 people (2009).

The City of **Milton** was formally incorporated on March 9, 2006. Much of the development in Milton is very recent and, according to its comprehensive planning documents, is associated with the widening of roads (such as Holcomb Bridge Road) and the extension of GA-400. The City enjoys rolling topography and scenic roadway corridors, with large-lot residential comprising the greatest percentage of land use. The City is also home to a large equestrian community. Current estimates suggest a population of approximately 24,000 (2007).

The City of **Mountain Park** was incorporated in July of 1927. The City began as a retreat for Atlanta's elite and featured summer cottages. The cottages often had names such as "The Buzzard's Roost" or "The Owl's Nest." Recently, current residents have continued the tradition of naming their homes. The City contains Lake Garret, the original lake, and Lake Cherful. In the mid 1970s, the Mountain Park Village Green was enlarged using reclaimed land from Lake Garret which had become shallow. Mountain Park is officially designated as a wildlife refuge. The 2000 census estimates that approximately 506 people live in Mountain Park. The City continues to have very limited government and only consists of residentially zoned land.

**Roswell** began as a planned community and manufacturing village before the Civil War. The signing of the charter in 1912 officially established the City of Roswell. This charter was revamped in 1950 to formalize and strengthen the role of local government. Roswell's land use remained primarily agricultural and residential during the 1950s and 1960s. However, marked change began to occur by the beginning of the 1970s. Roswell's population grew from approximately 5,000 to 25,000 from 1970 to 1983. Population growth brought about land use changes that provided for more single-family subdivisions and expanded the City's multi-family housing options, providing the "rooftops" necessary for greater retail development. Growth through the 1990s brought the current population estimate to 87,657 (2007).



The **Sandy Springs** area was largely characterized by rural farms from the 1820s until the 1940s. The Chattahoochee River contributed to early development of Sandy Springs, a provider of ferry transport. Goods ferried to the area supported industry, and the subsequent pattern of estate-style residential land use along its banks. The opening of Perimeter Center – dubbed an “Edge City” – in the 1970s, along with the construction of GA-400 created new growth pressures. Today, the Metropolitan Atlanta Rapid Transit Authority (MARTA) operates three heavy rail stations within Sandy Springs. The City incorporated on December 1, 2005. The comprehensive plan estimates that the population in the Sandy Springs area has doubled since 1980, and that approximately 92,980 people live in the City (2007).

The North Fulton CTP study area will also consider an area three to five miles outside the boundary of these six municipalities. Figure 4-2 illustrates the municipal boundaries within the study area.

## 4.2.2 Programs and Policies

Key programs and policies for local municipalities related to land use, new destinations (parks and facilities) and transportation are summarized in Appendix B. A brief summary of desired major programs and policies by jurisdiction is provided below. Information and data in this section is consolidated from official policy, as documented in local Comprehensive Plans, Comprehensive Transportation Plans, Greenway Plans, and Redevelopment Plans as discussed in the *Data Collection* section of this report.

## 4.2.3 Alpharetta

### *Land Use and Economic Development*

- Accommodate future growth
- Create compact urban walkable areas with a mix of uses, served by adequate parking
- Limit vehicular trips
- Utilize existing infrastructure
- Increase green/open space and public services (e.g. extension of the Big Creek Greenway and a new library)
- Provide varied housing types
- Preserve character of distinct residential areas
- Increase housing densities and mix of uses closer to downtown
- Preserve housing stock at 2/3 single-family, 1/3 multi-family

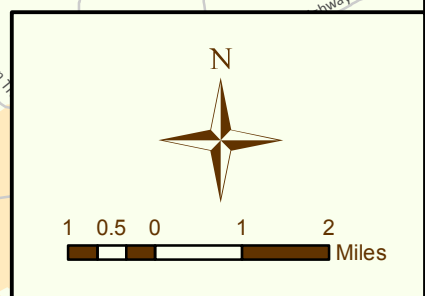
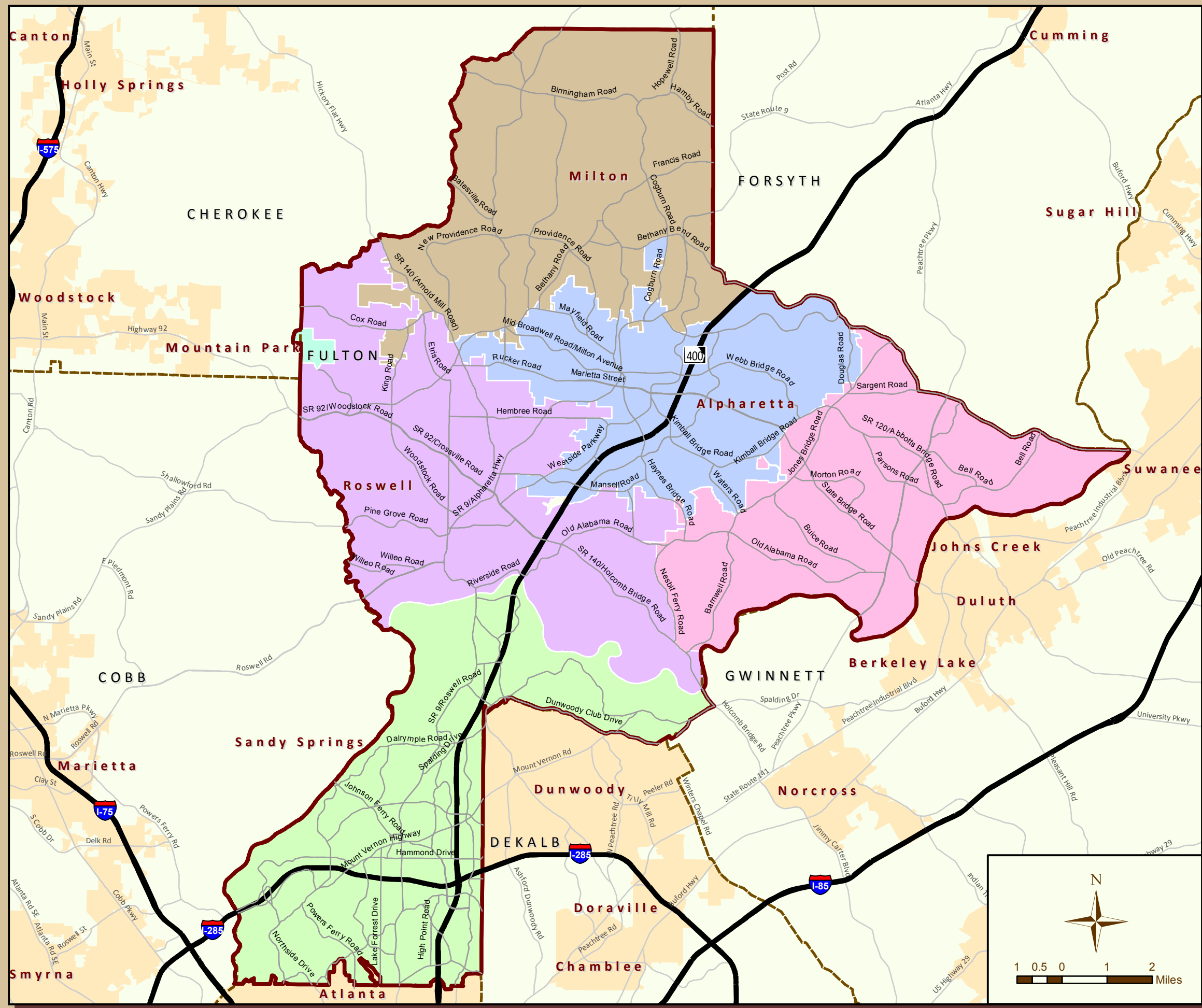
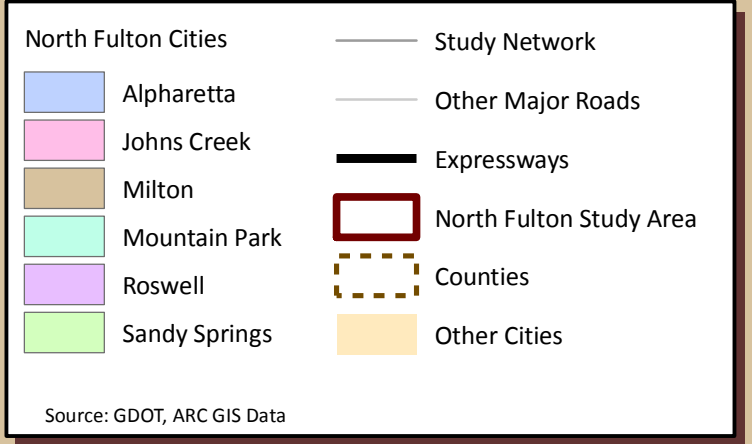
### *Transportation*

- Support heavy rail service, express bus, and HOV lanes along GA-400 corridor
- Enhance local transit service through a future transit circulator system
- Consider formation of Transportation Management Association along GA-400 and/or the Windward/Northpoint area
- Increase sidewalk and bicycle systems

**Reference Location**



**Legend**



**Figure 4-2  
Municipal Boundaries**



## 4.2.4 Johns Creek

### *Land Use and Economic Development*

- Preserve some existing undeveloped land for City park space
- Preserve character of existing residential neighborhoods
- Identify location for a town center, city center, or City Hall
- Encourage mixed-use development
- Increase density to preserve green space
- Construct grade separated pedestrian crossings in heavily traveled areas
- Further development of the Johns Creek Greenway

### *Transportation*

- Implement a multi-use trail and other extensions along Medlock Bridge Road, Bell Road, and Rogers Bridge Road
- Support express transit routes (investigate park and ride lots along the Medlock Bridge Corridor)
- Implement access management strategies along State Bridge Road
- Preserve residential neighborhoods
- Preserve two-lane roadways where possible
- Provide bicycle and pedestrian connections from McGinnis Ferry Road to planned Chattahoochee recreational facilities
- Support Safe Routes to School program and other pedestrian programs
- Maximize green/open space
- Achieve a complete and interconnected bicycle and pedestrian network throughout the City
- Provide sidewalks on all collector and arterial roads within ½ mile of schools, libraries, and parks
- Establish gateways to create a “sense of place”
- Support Bus Rapid Transit (BRT) along State Bridge Road from Alpharetta to Duluth

## 4.2.5 Milton

### *Land Use and Economic Development*

- Increase employment opportunities
- Create a balanced and network of commercial activity centers
- Encourage mixed-use development where appropriate
- Preserve the existing residential and rural character of Milton

### *Transportation*

- Consider transit, bicycle, and pedestrian facilities when planning transportation improvements
- Create gateways to define a “sense of place”
- Establish a comprehensive trail system through the Milton Trail Plan





- Preserve historical resources in key areas

## 4.2.6 Roswell

### *Land Use and Economic Development*

- Redevelop along Holcomb Bridge Road east of GA-400
- Create gateways to create a “sense of place”
- Provide a mix of uses and pedestrian-oriented development
- Increase density in appropriate areas
- Maintain detached residential housing versus attached to a ratio of 65:35
- Preserve single-family residential neighborhoods
- Increase senior housing

### *Transportation*

- Reduce congestion around Roswell Town Center mall area
- Major road widening projects are not favored
- Plan new street networks (grid network) in conjunction with private redevelopment
- Improve bicycle and pedestrian facilities
- Encourage nodal development
- Extend MARTA’s heavy rail service north to Windward Parkway

## 4.2.7 Sandy Springs

### *Land Use and Economic Development*

- Accommodate future growth
- Limit manufacturing uses
- Focus new development activity to redevelopment and revitalization of sites
- Focus on creating a “sense of place” in downtown
- Increase densities where appropriate
- Protect the character of existing residential neighborhoods
- Provide pedestrian amenities through developing transit-oriented developments
- Provide variable housing options
- Create more senior housing

### *Transportation*

- Encourage more shared parking arrangements and reduce surface parking
- Encourage mixed-use development
- Provide an enhanced street grid and increase coverage of sidewalks, bicycle, and greenway paths
- Increase access management
- Reduce vehicular congestion



- Support additional transit and premium service along key corridors and regional heavy rail transit north along GA-400 corridor
- Explore signal pre-emption or queue jumping technology
- Construct traffic calming measures
- Focus mixed-use development and transit-oriented development around existing MARTA heavy rail stations
- Support the Safe Routes to School program
- Encourage use of alternative modes of travel

### 4.3 Transportation Demand Management (TDM)

It is important to note that there are several TDM strategies being utilized in the region aimed at reducing traffic congestion. Transportation Management Authorities (TMAs) in North Fulton as well as other organizations such as the Clean Air Campaign and RideSmart have created special programs which encourage a reduction in use of single occupancy vehicles. These programs include targeted incentives for commuters and employers, assistance with telecommuting, rideshare programs (SchoolPool, VanPool, and CarPool), issuing of smog alerts, Guaranteed Ride Home programs, and easy access to information on local transit. The organizations also promote commuter education through working with schools and the general public. These programs have experienced some noteworthy success in their goals. The Clean Air Campaign alone has had over 70,000 commuters participate in their Commuter Rewards incentive program.

### 4.4 Redevelopment Initiatives

While much of North Fulton County consists of relatively new construction, several areas are inhabited with older buildings and centers that have been abandoned for newer ones. Redevelopment initiatives across the region have been initiated in order to attract development to these more mature places. Tax Allocation Districts have been explored and ARC's Livable Centers Initiative (LCI) areas have been designated to aid in this gentrification. Developments of Regional Impact (DRI) plans are also planned throughout the region, indicating that the private sector development community sees value in North Fulton County.

#### 4.4.1 Tax Allocation Districts

Tax Allocation Districts, or TADs, are districts that collect tax revenue from anticipated growth from increased property values within the designated district to finance new infrastructure projects in hopes of attracting private-sector investment. The metropolitan Atlanta region has seen the creation of eleven TADs in the past five years. Several TADs have been proposed for cities within North Fulton County; however, controversy over the use of funds diverted from educational spending and concerns with being able to generate the tax revenue needed have put several plans for TADs in North Fulton County on hold indefinitely.



#### 4.4.2 Livable Centers Initiatives

Within the North Fulton study area, seven previous Livable Centers Initiative (LCI) studies have been completed. Another three have been applied for or are updates to original LCI studies. The Livable Centers Initiative, a program of the Atlanta Regional Commission, encourages local jurisdictions to plan and implement strategies that link transportation improvements with land use policies to create sustainable, livable communities. LCI grant recipients prepare plans for the enhancement of existing centers and corridors that take advantage of the infrastructure and private investments committed in these communities. The LCI program aims to achieve balanced regional development, a reduction in vehicle miles traveled and improved air quality.

The ten previous LCI studies, applications, and updates in North Fulton County include:

- Alpharetta Downtown Circulation Study
- North Point Activity Center LCI
- Livable Sandy Springs
- Sandy Springs MARTA Station Area Plan, LCI Supplemental<sup>9</sup>
- Roswell Road Corridor LCI Study
- Midtown Roswell Development Plan
- Roswell Town Center/Atlanta Street Corridor Study (South Atlanta Street LCI)
- Medlock Bridge Road Corridor LCI<sup>10</sup>
- Perimeter Focus: Envisioning a New Atlanta Center
- Perimeter Focus: Envisioning a New Atlanta Center Update 2005<sup>11</sup>

The **Alpharetta Downtown Circulation Study** seeks opportunities to balance the demand for automobile mobility with a pedestrian-friendly downtown. Key recommendations included re-designation of SR 9 off of Main Street, implementing a road diet on Main Street, and an extension of Haynes Bridge Road to Main Street.

The **North Point Activity Center LCI** identifies the need to revise zoning to better allow mixed-use development, and identifies land use policies to result in distinct character areas of development. Key transportation recommendations included creation of a boulevard along Encore Parkway, the addition of local streets to improve network connectivity, and trail connections to the Big Creek Greenway.

The **North Fulton Blueprint** creates a land use and transportation master plan for the North Fulton Community Improvement District (CID) area, but also builds upon many of the concepts first identified in the North Point Activity Center LCI. In addition to land use and development

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<sup>9</sup> This study is an update to the Livable Sandy Springs Plan.

<sup>10</sup> This application was not approved as an LCI.

<sup>11</sup> This study is an update to the Perimeter Focus: Envisioning a New Atlanta Center Plan.



strategies, the Blueprint identifies many transportation recommendations including intersection improvements, roadway upgrades, and several new roads to support future development.

**Livable Sandy Springs** addresses a very wide range of land use, development, and transportation issues. This study wrestles with traffic congestion, sidewalks, urban design, and community development issues. A long list of specific recommendations includes road and intersection improvements, new street connections, sidewalk projects, multi-use trails, land use policies, and overlay zoning.

The **Sandy Springs MARTA Station Area Plan, LCI Supplemental study** addresses the development potential around the existing Sandy Springs MARTA station. This study identifies opportunities to better connect that station to both existing and future uses, and presents a template for how that station could be better integrated into the surrounding area and community.

The **Roswell Road Corridor LCI Study** focuses on traffic congestion, safety, access, and conflicts between vehicles and pedestrians along Roswell Road in Sandy Springs. The study makes a long list of recommended improvements to sidewalks, streets, intersections, traffic control, and zoning changes related to access management.

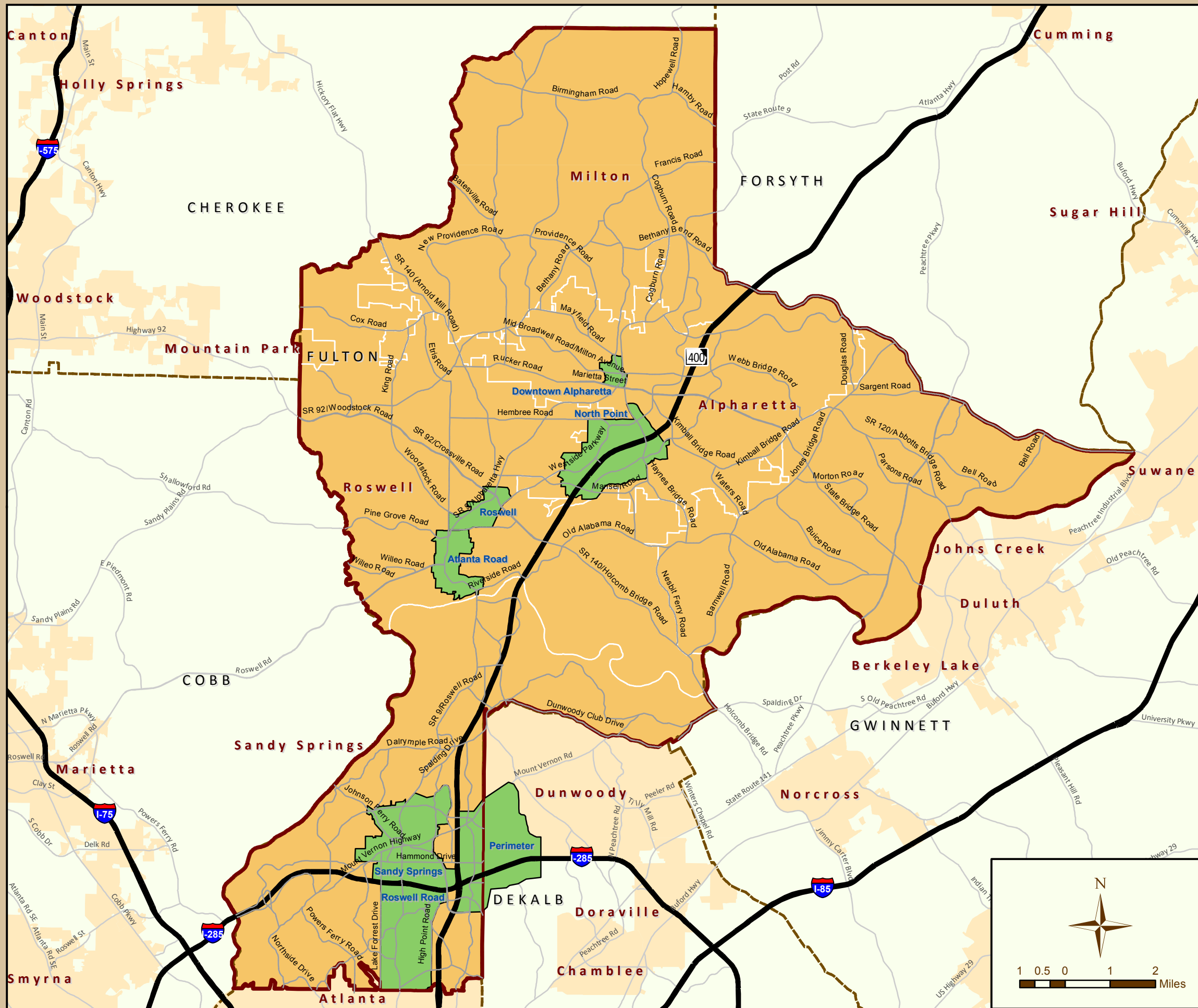
The **Midtown Roswell Development Plan** identifies traffic issues primarily on Alpharetta Street, a need for local street connections, and traffic signal and pedestrian improvements. The study does not identify significant ongoing development activity, but highlights areas where zoning would permit additional development. A thorough socio-economic and market analysis is also provided.

Also in Roswell, the **Roswell Town Center/Atlanta Street Corridor Study** (South Atlanta Street LCI) study addresses SR 9 from the Chattahoochee River north to historic Roswell. This busy commuter corridor currently has a reversible lane and is physically constrained by historic resources, development, and steep slopes. Although it is a busy commuter route, the study notes very little ongoing development in the immediate area. Several specific sidewalk, path, and intersection improvements are recommended.

The City of John Creek has applied to the LCI program to complete the **Medlock Bridge Road Corridor LCI study**. The application does include some notable conditions and needs in the area. Specifically, the Medlock Bridge Road corridor is a heavily used commuter route and experiences significant peak hour delays.

The original **Perimeter Focus: Envisioning a New Atlanta Center LCI** study describes existing traffic congestion and recommends a long list of intersection, roadway, and freeway improvements. The study also recommends sidewalk improvements and bicycle facilities. The Plan identifies undeveloped or underdeveloped areas and indicates areas recommended for high density mixed uses, transit villages, and transitional zoning areas. This plan was updated in 2005 with more refined recommendations for sidewalk and bicycle facility projects, an updated inventory of development activity, and updated socioeconomic and market statistics.

Figure 4-3 illustrates the location of existing LCIs within North Fulton County.




**North Fulton County  
Transportation Resource  
Implementation Program**











**Reference Location**

**ARC  
20-County  
Region**



**Legend**

-  Study Network
-  Other Major Roads
-  Expressways
-  LCI Areas in North Fulton
-  North Fulton Study Area
-  Counties
-  Other Cities

Source: ARC GIS Data

**Figure 4-3  
Livable Centers Initiatives**





**4.4.3 Developments of Regional Impact**

A Development of Regional Impact (DRI) is a proposed development that exceeds size and/or density thresholds provided by the Georgia Department of Community Affairs. While it is typical for proposed developments of any size and/or density to be reviewed by the local government, DRIs are considered to have regional significance. Therefore, DRI developments are also reviewed by the appropriate Regional Development Center and possibly by GRTA. The Regional Development Center for Fulton County is ARC, and Fulton County is located within the GRTA region.

It is important to note that neither ARC nor GRTA “approves” or “denies” a proposed development that is a DRI. ARC reviews the development and provides a finding of “in the best interest of the state” or “not in the best interest of the state.” GRTA reviews the development and attaches conditions that must be satisfied upon full build-out of the development. The local jurisdiction is responsible for ensuring these conditions are satisfied, or GRTA can withhold state and federal funding for infrastructure projects located within that local jurisdiction.

Figure 4-4 depicts the locations of DRIs within North Fulton County and adjacent areas that are approved, but pending construction.

**4.5 Land Use and Development Characteristics**

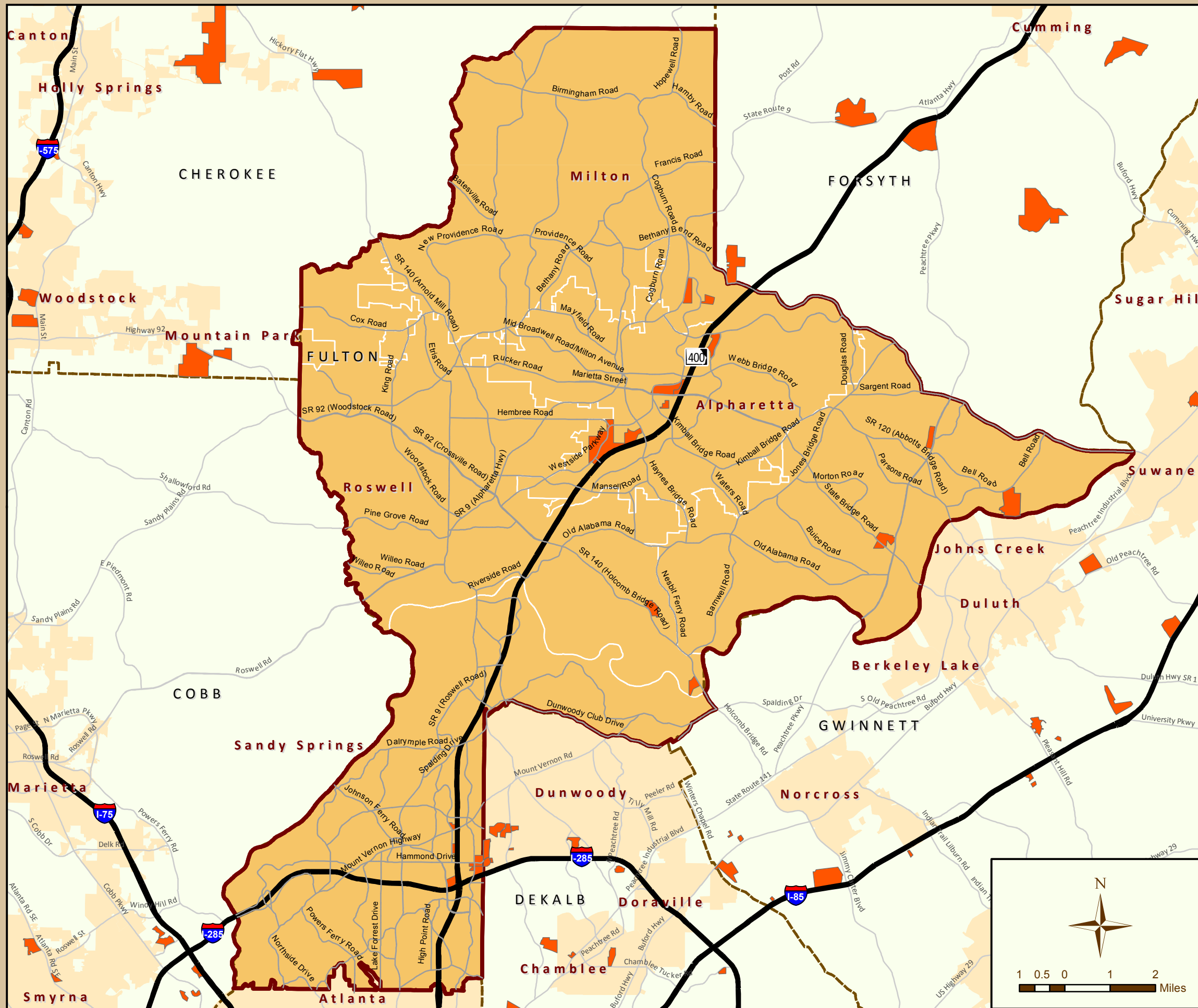
**4.5.1 General Context and Development Patterns**

As illustrated in Table 4-1, the existing land use data suggests that more than half (65.7%) of the land use within the study area is residential. Table 4-2 shows that, of the residential land use, about 84% is medium density residential. The medium density residential is characterized by 0.5 to 4 units per acre.

<b>Table 4-1: Existing Land Use</b>		
	<b>Acres</b>	<b>Percentage</b>
Residential	13,3248.64	65.70%
Commercial, Urban Other, and Industrial	13,368.38	6.59%
Agriculture, Forest, Parks, Cemetery and Golf Courses	2,7863.42	13.74%
Other	2,8330.32	13.97%
<b>Total</b>	<b>20,2810.75</b>	<b>100.00%</b>

Source: Atlanta Regional Commission Landpro Data 2008





**North Fulton County  
Transportation Resource  
Implementation Program**

**ARC**  
ATLANTA REGIONAL COMMISSION

**Kimley-Horn  
and Associates, Inc.**

**Reference Location**

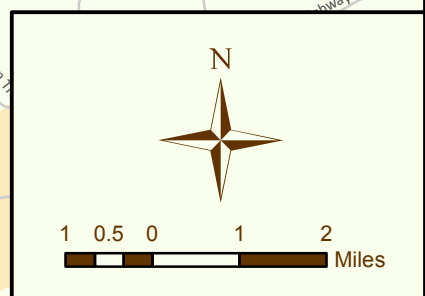
**ARC  
20-County  
Region**

**Legend**

- Study Network
- Other Major Roads
- Expressways
- Developments of Regional Impact
- North Fulton Study Area
- Counties
- Other Cities

Source: GRTA GIS Data, ARC GIS Data

**Figure 4-4  
Developments of Regional Impact**





**Table 4-2: Existing Residential Land Use**

	<b>Acres</b>	<b>Percentage</b>
High density residential	737.64	0.55%
Medium density residential	11,1609.12	83.76%
Low density residential	1,4723.65	11.05%
Multi-family residential	6,146.55	4.61%
Mobile	31.67	0.02%
<b>Total</b>	<b>13,3248.64</b>	<b>100.00%</b>

Source: Atlanta Regional Commission Landpro Data 2008

About 6.59% of the study area is categorized as commercial in the existing land use map. Most of the commercial uses are concentrated along the GA-400 and SR 9 corridor (local names change as follows: Roswell Road, Atlanta Street, Alpharetta Street and Main Street), which connects the activity centers of Sandy Springs, Roswell, Alpharetta and Milton. The commercial use category of the existing land use also includes office use. Most of the office developments are concentrated at Windward Parkway in Alpharetta, Technology Park in Johns Creek, and Perimeter Community Improvement Districts (PCIDs) in Sandy Springs. The office developments at Windward Parkway and Technology Park are land intensive with large provisions of surface parking. The developments, however, show use of high quality architectural materials and heavily landscaped areas.

Office and commercial development within the PCIDs (Sandy Springs) exhibits pedestrian-oriented, less land intensive development due to high rise and smaller footprint buildings and the provision of parking decks. The district has been developed with a mission to create efficient transportation services, with an emphasis on access, mobility, diversification, and modernization. With three Livable Centers Initiative (LCI) studies already carried out within the city limits, City of Sandy Springs now provides more pedestrian-friendly and less auto-oriented types of development options. The City also promotes live-work options along its major activity corridors like Roswell Road and I-285. Such environments can be created at neighborhood, community, and regional scale depending upon the surrounding context. The City of Roswell concentrates its commercial and higher density residential along the SR 9 corridor (Atlanta Street-Alpharetta Street) and Holcomb Bridge Road – Crossville Road corridor. The City maintains the remainder of its area as residential.

The City of Milton concentrates its commercial activities along its southern boundary close to GA-400 and SR 9. The remainder of the area in Milton showcases rural character with land uses like agricultural, woodland, and equestrian. The City plans to preserve this rural character in the future, as well, by creating character areas like Equestrian Estates, Agricultural Area, Scenic Corridor, Golf Course Community and Conservation Area and Greenspace<sup>12</sup>. While preserving the rural character,

<sup>12</sup> According to the draft Comprehensive Plan.



the City also shows initiative in creating less auto-dependent communities with a “living-working” land use category for neighborhood, community, and regional scale. Similar trends of creating such living-working developments can be seen in the future land use of Johns Creek as well.

Future land use designations indicate that the North Fulton County cities have planned to concentrate their commercial and office uses along and in between the GA-400 and SR 9 (Roswell Road-Atlanta Street-Alpharetta Street-Main Street) corridors. Most of the Developments of Regional Impact (DRI) are distributed along the GA-400 corridor, mainly concentrated at PCIDs, Windward Parkway, and Perimeter Mall.

## 4.5.2 Atlanta Region Unified Growth Policy Map

The Atlanta Regional Commission (ARC) adopted the Unified Growth Policy Map in December 2008 as a part of a year-long public involvement and scenario development process called *Envision6*. Along with the Unified Growth Policy Map, ARC approved the Regional Development Plan (RDP), a Place Type and Development Matrix and Regional Strategic Transportation System (RSTS) for metro Atlanta.

The Unified Growth Policy Map was created as a tool to understand existing growth patterns and to guide future growth patterns. The map is used as a guide for several planning activities like Regional Transportation Plan project evaluation, Comprehensive Transportation Plans, Transit Planning Board project evaluation, DRI reviews, LCI study area determination and Comprehensive Plan reviews. The map is provided in Figure 4-5. The locations and infrastructure outlined are delineated in the *Envision6* Regional Development Types Matrix which is provided in Appendix C.

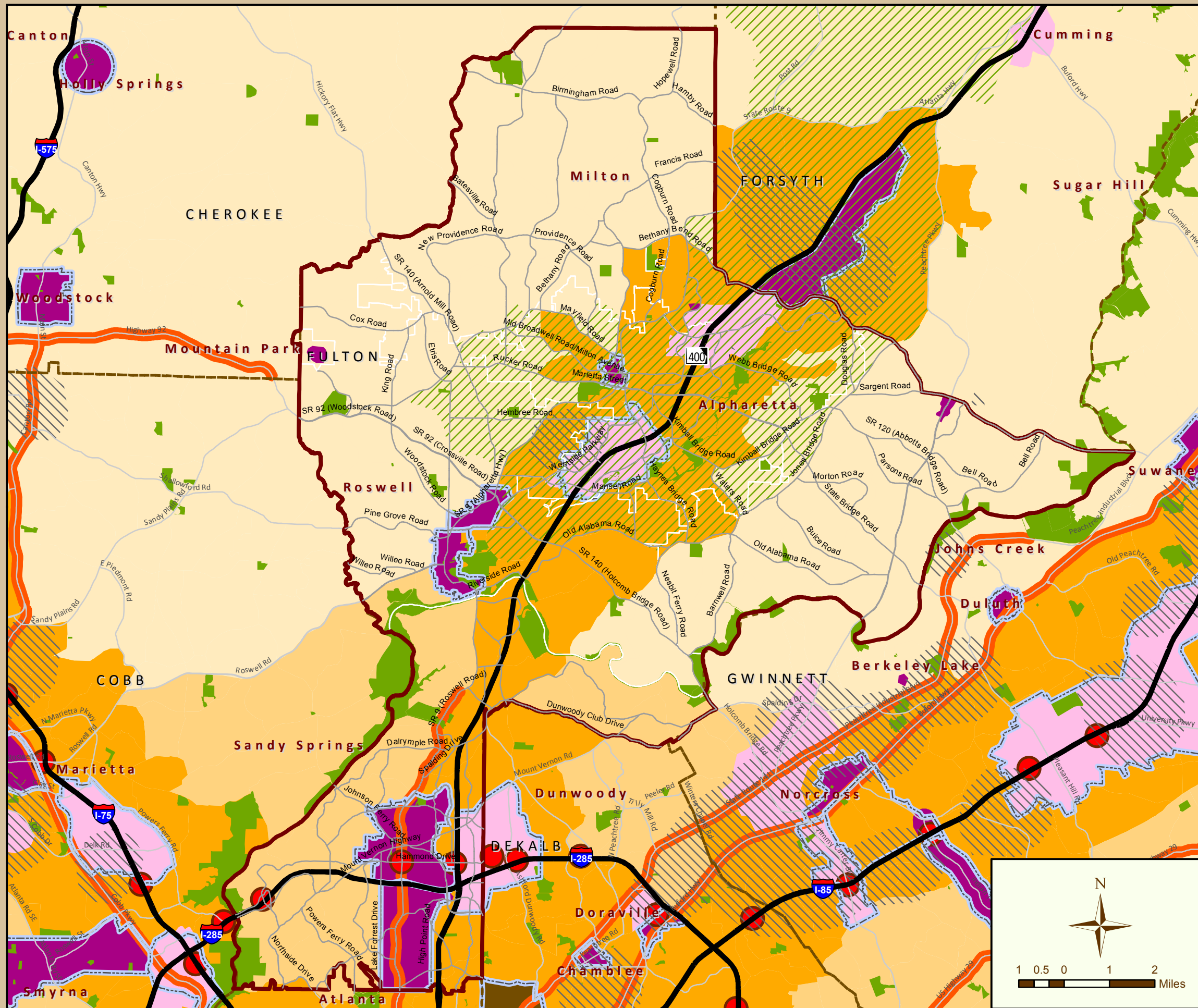
The ARC Unified Growth Policy Map shows three regional centers in the North Fulton CTP Study area. These centers are North Point Mall, Windward Parkway, and part of Perimeter Center<sup>13</sup>.

The study area has eight Town Centers<sup>14</sup>: Johns Creek (along Medlock Bridge Road at the Forsyth County line), Milton (Deerfield Parkway north of Windward Parkway), Alpharetta downtown, Roswell (Holcomb Bridge Road (SR 140) at Alpharetta Street (SR 9)), Atlanta Road (Atlanta Street (SR 9) at Marietta Highway (SR 120)), Roswell Road (near I-285), Sandy Springs (Roswell Road (SR 9) north of I-285), and Mountain Park.

<sup>13</sup> Regional Centers are areas of intense retail, office and residential uses.


<sup>14</sup> Town Centers are low-intensity centers with a mixture of residential and commercial land uses that serve a local area.

























**North Fulton County**  
 Transportation Resource  
 Implementation Program  
 ATLANTA REGIONAL COMMISSION  
 Kimley-Horn and Associates, Inc.

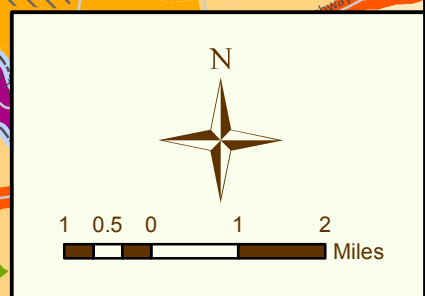
**Reference Location**


  
**ARC 20-County Region**

**Legend**

 Freight areas	 Mega Corridors
 Environmental Areas	 Urban Neighborhoods
 Steams and Rivers	 Suburban Neighborhoods
 LCI Areas 2000-2008	 Rural Areas
 Future Transit Stops	 Study Network
 Regional parks	 Other Major Roads
 Urban Redevelopment Corridor	 Expressways
 Regional Center	 North Fulton Boundary
 Town Center	 Counties
 Station Community	

Source: ARC GIS Data



**Figure 4-5**  
**Unified Growth Policy Map**



The Roswell Road corridor starting at the northern boundary of the City of Sandy Springs to Pitts Road is identified as an Urban Redevelopment Corridor<sup>15</sup>.

The area along the GA-400 corridor is identified as a Mega Corridor<sup>16</sup>. The North Fulton area has most of its activity centers and corridors in and around the Mega Corridor. The rest of the region in the study area is identified as Suburban Neighborhoods that will be developed at a suburban scale with appropriate commercial and low intensity mixed-use developments to serve the local area.

The Unified Growth Policy Map indicates that the City of Sandy Springs will have additional MARTA stations within its boundary in the future.

The following are the policies associated with the Atlanta Regional Commission's Unified Growth Policy Map.

### *Developed Area Policies*

- Promote sustainable economic growth in all areas of the region
- Encourage development within principal transportation corridors, the Central Business District, activity centers and town centers
- Increase opportunities for mixed-use development, transit-oriented development, infill and redevelopment
- At strategic regional locations, plan and retain industrial freight land uses
- Design transportation infrastructure to protect the context of adjoining development and provide a sense of place appropriate for our communities
- Promote the reclamation of brownfield development sites

### *Housing and Neighborhood Policies*

- Protect the character and integrity of existing neighborhoods, while also meeting the needs of communities
- Encourage a variety of home styles, densities and price ranges in locations that are accessible to jobs and services to ensure housing for individuals and families of all income and age groups
- Promote new communities that feature greenspace and neighborhood parks, pedestrian scale, support transportation options, and provide an appropriate mix of uses and housing types
- Promote sustainable and energy efficient development

### *Open Space & Preservation Policies*

- Protect environmentally-sensitive areas including wetlands, floodplains, small water supply watersheds, rivers and stream corridors
- Increase the amount, quality, connectivity and accessibility of greenspace
- Provide strategies to preserve and enhance historic resources

<sup>15</sup> Urban Redevelopment Corridors are corridors that have potential to be redeveloped into an activity corridor.

<sup>16</sup> Mega Corridors are the most intensely developed radial corridors in the region.



- Through regional infrastructure planning, discourage growth in undeveloped areas of the region

### *Coordination Policies*

- Assist local governments to adopt growth management strategies that make more efficient use of existing infrastructure
- Inform and involve the public in planning at regional, local and neighborhood levels
- Encourage the development of state and regional growth management policies

### **4.5.3 Existing Land Use**

The Existing Land Use map was created with the 2008 Landpro<sup>17</sup> data that ARC generates, as illustrated in Figure 4-6. The definition of each land use classification used in the Figure follows:

**Low Density Single Family Residential** – Areas that have generally been developed for single family residential use, usually with a significant mix of forested or agricultural landcover. These areas often occur on the periphery of urban expansion and are generally characterized by houses on 2 to 5 acre lots. Some examples of this category include rural housing, estates, and linear residential developments along transportation routes.

**Medium Density Single Family Residential** – Areas that have been developed predominantly for single family residential use, with or without a significant mix of forested or agricultural landcover. These areas usually occur in urban or suburban zones and are generally characterized by houses on 1/4 to 2 acre lots. This category accounts for the majority of residential land use in the Region and includes a wide variety of neighborhood types.

**High Density Residential** – Areas that have been developed predominantly for concentrated single family residential use. These areas occur almost exclusively in urban neighborhoods with streets on a grid network, and are characterized by houses on lots smaller than 1/4 acre, but may also include mixed residential areas with duplexes and small apartment buildings.

**Multifamily Residential** – Residential areas comprised predominantly of apartment, condominium and townhouse complexes where net density generally exceeds eight units per acre. Typical apartment buildings are relatively easy to identify, but some high rise structures may be interpreted as, or combined with, office buildings, though many of these dwellings were identified and delineated in Downtown and Midtown Atlanta for the first time with the 2003 update. Likewise, some smaller apartments and townhouses may be interpreted as, or combined with, medium- or high-density single family residential. Housing on military bases, campuses, resorts, agricultural properties and construction work sites is not included in this or other residential categories.

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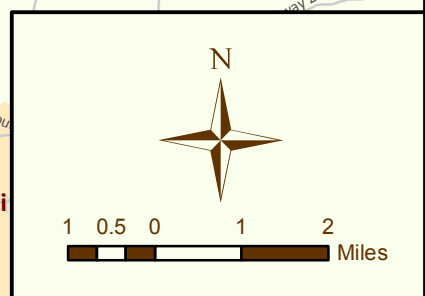
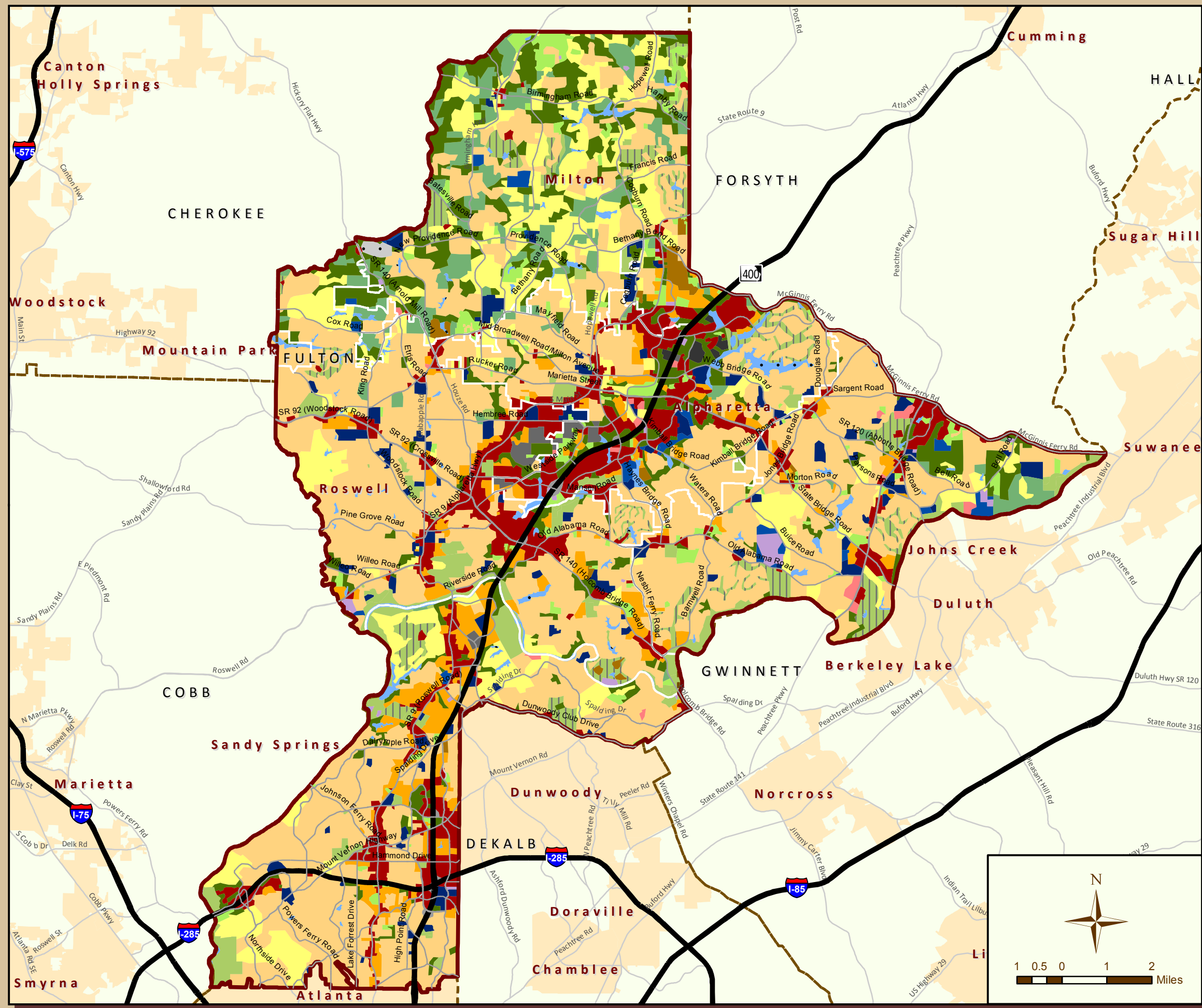
<sup>17</sup> Source: Metadata from Atlanta Regional Commission's 2008 Landpro GIS dataset.



**Reference Location**



**Legend**



**Figure 4-6  
Existing Land Use**





**Commercial and Services** – Areas used predominantly for the sale of products and services, including urban central business districts, shopping centers in suburban and outlying areas, commercial strip developments, junk yards and resorts. The main buildings, secondary structures and areas supporting the basic use are all included: office buildings, warehouses, driveways, sheds, parking lots, landscaped areas, waste disposal areas, etc. Commercial areas may include some non-commercial uses too small to be separated out. Central Business Districts commonly include some institutions such as churches and schools, and commercial strip developments may include some residential units.

**Intensive Institutional** – The built-up portions of institutional land holdings, including all buildings, grounds and parking lots that compose educational, religious, health, correctional and military facilities. Institutions occupying small areas (for example, many churches and some elementary and secondary schools) may be included in other categories, principally residential or commercial.

**Extensive Institutional** – Public or private land holdings devoted to educational, religious, health, correctional or military land use. This category is one of only two that is used exclusively for land use classifications, the other being Park Lands. As the Metropolitan Planning Organization (MPO) for Atlanta, ARC is required to produce long range population and employment forecasts which are used in transportation modeling. The land use categories of Extensive Institutional and Park Lands are important to ARC's long range forecasts since large tracts of land controlled by governments and institutions are more likely to be withheld from residential, commercial, or industrial development. Unlike Intensive Institutional which is visible on, and delineated from, the digital aerial photography, Extensive Institutional can only be identified and mapped from collateral data sources. The primary source of this information comes from the GIS Coordinators for each of the 13 counties and the City of Atlanta who reviewed the previous designations and provided updated information and additional GIS or CAD data. Various secondary sources include hardcopy, digital and internet maps and files. It is important to note that the built-up land cover portion of these various tracts of land are generally identified as Intensive Institutional. The Extensive Institutional land use areas identify the full extent of these tracts which are both built-up and non-built-up, and whose undeveloped area is at least 25 acres in size.

**Transportation, Communication and Utilities** – Also referred to as "TCU," this category encompasses various land use types associated with transportation, communication, and utilities. Much of the automotive transportation is accounted for in other categories, particularly highways and their right-of-ways, which are either absorbed into the context of a more dominant landcover (e.g. residential or commercial), or are covered completely within the Limited Access Highways category described following. Other types of transportation include service and terminal facilities, railways (including MARTA) and their stations, parking lots, roundhouses, repair and switching yards, as well as overland track and spur connections. Airport facilities may include runways, terminals, service buildings, navigation aids, fuel storage, parking lots, and intervening land. Similar to streets and highways, communication and utility networks generally fall below the



minimum mapping standards, thus are not separated out of the context of the larger land use with which they are associated. When practical, areas involved in the processing, treatment and transportation of water, gas, oil, and electricity, such as pumping stations and electric substations have been delineated. Likewise, areas used for airwave communications, such as radio, radar, or television may be mapped in this category.

**Cemeteries** – Public and private lands devoted to burial grounds, including primary and secondary buildings and associated infrastructure. Because of their unique photo "signature," many small cemeteries can be identified from the digital imagery at a scale of 1:14,000; many others, however, may be combined with residential, commercial, forest, or agriculture landcover. Forest areas and ponds are often included in this category, but may also be identified separately depending on their size.

**Parks and Active Recreation Areas** – Identified from aerial photography, including baseball and other sports fields, tennis courts, swimming pools, camp grounds, parking lots, structures, drives, and trails. Forest areas and ponds are often included, but may also be identified separately depending on their size.

**Park Lands** – Local, state, or federal land holdings devoted to preservation, conservation or recreation, as identified from secondary sources. This category is one of only two that is used exclusively for land use classifications, the other being Extensive Institutional. As the Metropolitan Planning Organization (MPO) for Atlanta, ARC is required to produce long range population and employment forecasts which are used in transportation modeling. The land use categories of Park Lands and Extensive Institutional are important to ARC's long range forecasts since large tracts of land controlled by governments and institutions are more likely to be withheld from residential, commercial, or industrial development. Unlike Parks which are visible on, and delineated from, the digital aerial photography, Park Lands can only be identified and mapped from collateral data sources. The primary source of this information comes from the GIS Coordinators for each of the 13 counties and the City of Atlanta who reviewed the previous designations and provided updated information and additional GIS or CAD data. Various secondary sources include hardcopy, digital and internet maps and files. Please note, the built-up landcover portion of these various tracts of land are generally identified as Parks. The Park Land land use areas identify the full extent of these tracts which are both built-up and non-built-up, and whose undeveloped area is at least 25 acres in size.

**Forest** – All forested areas of coniferous and/or deciduous trees. Although the 5 acre minimum mapping standard generally applies with the identification of these areas in an urban context, for cartographic reasons it is not used in a rural context to separate out forest within larger agricultural delineations. Instead, these vast areas of mixed landcover are generalized with a minimum mapping unit of 25 acres.

**Reservoirs, Lakes, and Ponds** – Man-made impoundments, often referred to as "lakes" or "ponds," which are persistently covered with water. It is important to note that as there are no known



naturally occurring lakes in the Region, the previous class called Lakes has been dropped from the classification system. For larger reservoirs, the water control structures themselves are often classified in Other Urban.

**Transitional Areas** – Recently cleared or altered land in transition from one land use activity, either built-up or non-built-up, to another unknown or undeterminable land use.

#### 4.5.4 Existing Zoning

Each city has its own set of zoning districts and associated zoning map. Zoning designations typically follow the roadway network within the North Fulton study area. Commercial, office, and some industrial zoning designations generally exist along heavily travel roadways. Among the roadways within North Fulton County with more dense commercial and office designations are interchanges along GA-400 and I-285, as well as the roadways of SR 9, SR 140, Mansell Road, Westside Parkway, North Point Parkway, SR 120, Windward Parkway, State Bridge Road, and SR 141. A significant cluster of commercial and office zoning designations also resides within the Perimeter area of Sandy Springs. Single family housing and agricultural designations make the balance of the study area, mainly located in areas further from GA-400, I-285, and major transportation corridors.

Zoning maps for each of the jurisdictions within North Fulton County are provided in Appendix D.

#### 4.5.5 Future Land Use

Figure 4-7 consolidates the set of Future Land Use Maps made available to ARC from each of the cities' respective Comprehensive Plans. The City of Milton is currently preparing its first Community Agenda, thus data is not yet available. Note also that the current boundary for the City of Alpharetta exceeds the area for which Future Land Use categories had been adopted by the most current Comprehensive Plan. This report assumes that annexations that occurred after the adoption of the Future Land Use map account for the gaps in data.

Figure 4-8 maps the results of a 2007 Georgia Tech study<sup>18</sup> that identified undeveloped properties and properties "underutilized" and thus, likely to redevelop sooner than other properties. The study analyzed properties fair market value against their assessed value according to tax assessor data to indicate if they are underutilized.

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<sup>18</sup> Center for Geographic Information Systems, Georgia Institute of Technology. Data generated for the report "Metropolitan Atlanta Land Supply Study" (2006), commissioned by the Atlanta Neighborhood Development Partnership (ANDP).





# North Fulton County Transportation Resource Implementation Program



## Reference Location

ARC  
20-County  
Region



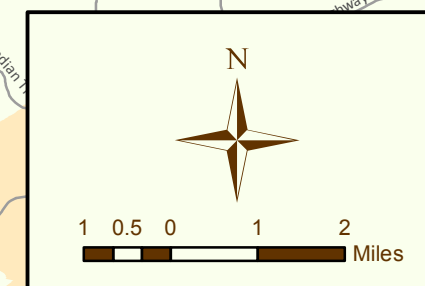
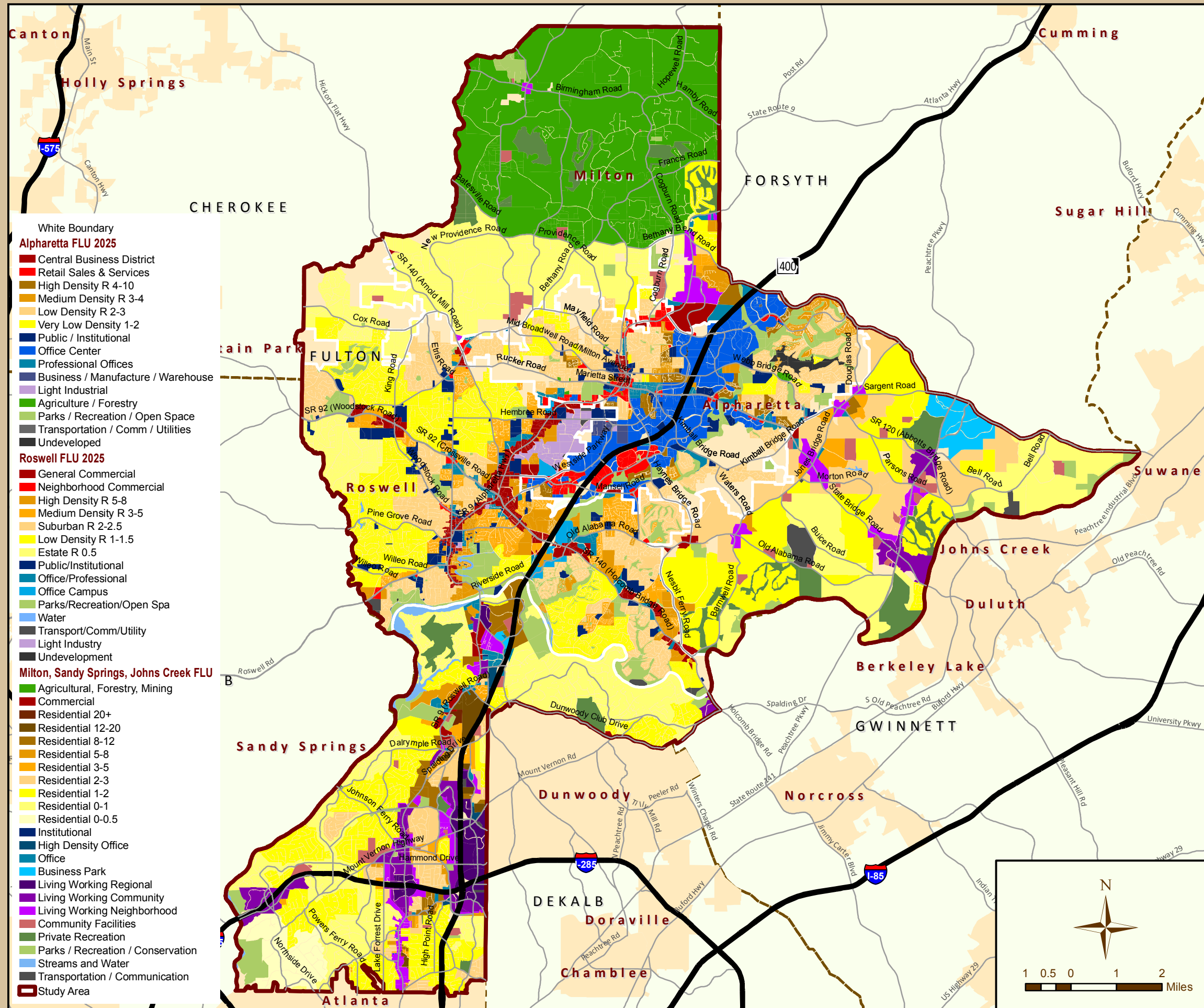
## Legend

Each city has distinct land use categories.  
See left border for legend

- Study Network
- Expressways
- Other Major Roads
- Other Cities
- Counties
- Study Area

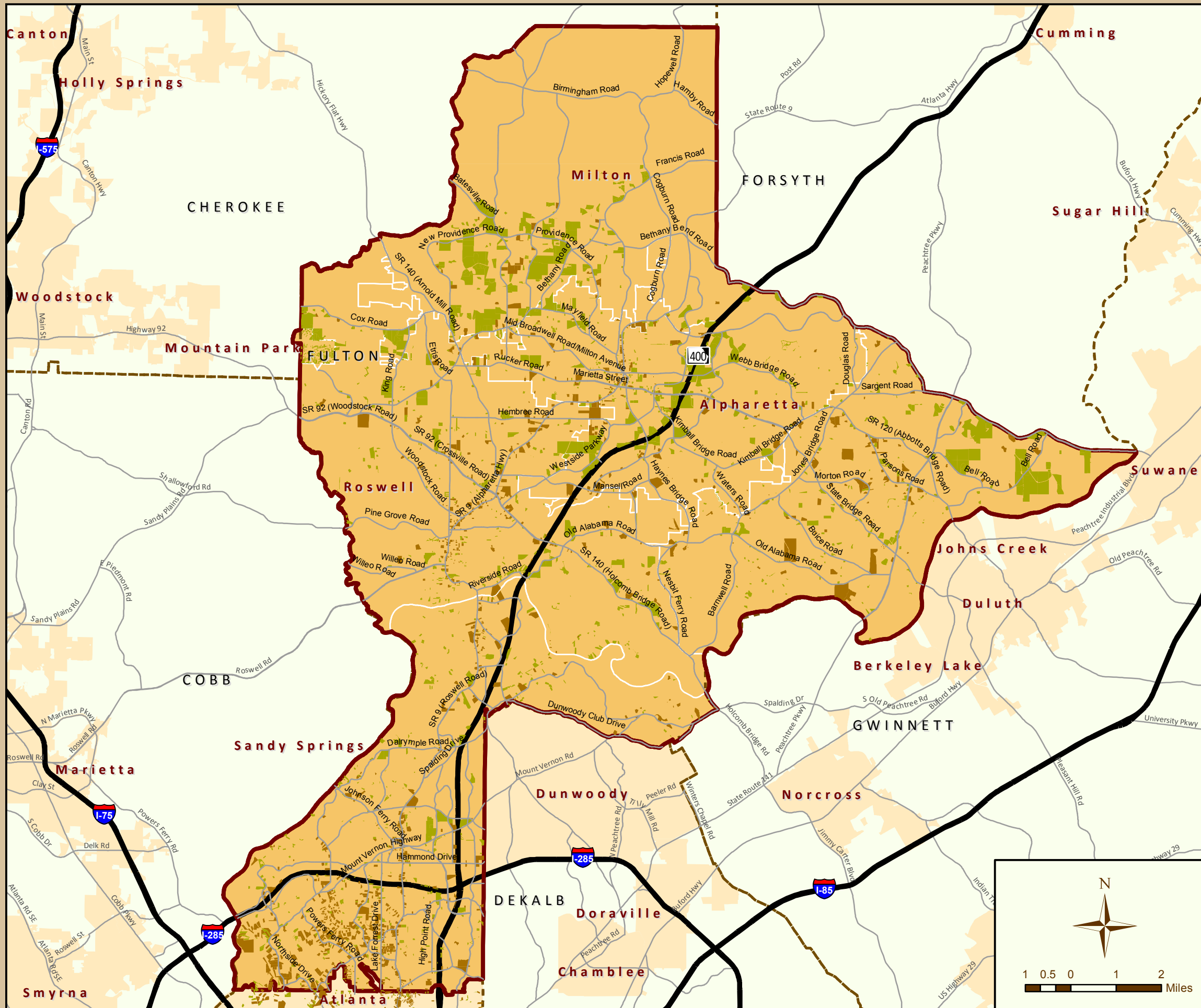
Source:  
ARC Shapefiles Collected from City Comprehensive Plans

Note:  
1. Milton preliminary FLU (City preparing to adopt Partial Update)




### Figure 4-7 Future Land Use Map














**North Fulton County**  
 Transportation Resource  
 Implementation Program  
 ATLANTA REGIONAL COMMISSION  


**Reference Location**

**ARC**  
**20-County**  
**Region**


**Legend**

-  Undeveloped Land
-  Redevelopment Land (Undervalued Parcels)
-  Study Network
-  Expressways
-  Other Major Roads
-  Counties
-  North Fulton Study Area
-  Other Cities

Source: ARC GIS Data (GA Tech 2007 Study); many of these sites may have been developed or changed status since the completion of this study

**Figure 4-8**  
**Undeveloped and Redevelopment**  
**Sites (2007)**



**4.5.6 Schools, Parks / Open Space, and Civic Infrastructure**

Figure 4-9 and Table 4-3 identify community facilities<sup>19</sup> within the study area.

Because of the proximity of the six municipalities within North Fulton County, some civic facility and service arrangements are in place. A few sharing arrangements among the governments in the study area include:

- Roswell and Alpharetta share a public safety training facility, called Roswell-Alpharetta Public Safety Training Center (RAPSTC).
- Johns Creek and Sandy Springs partner on their 911 dispatch service, called “ChattCom”
- Johns Creek is also in discussion with the Fulton County School Board to prepare a shared use agreement for gyms.
- Potential for resource sharing exists regarding recycling; Roswell has its own recycling facilities, but Johns Creek, for example, relies on private providers to identify local recycling centers.

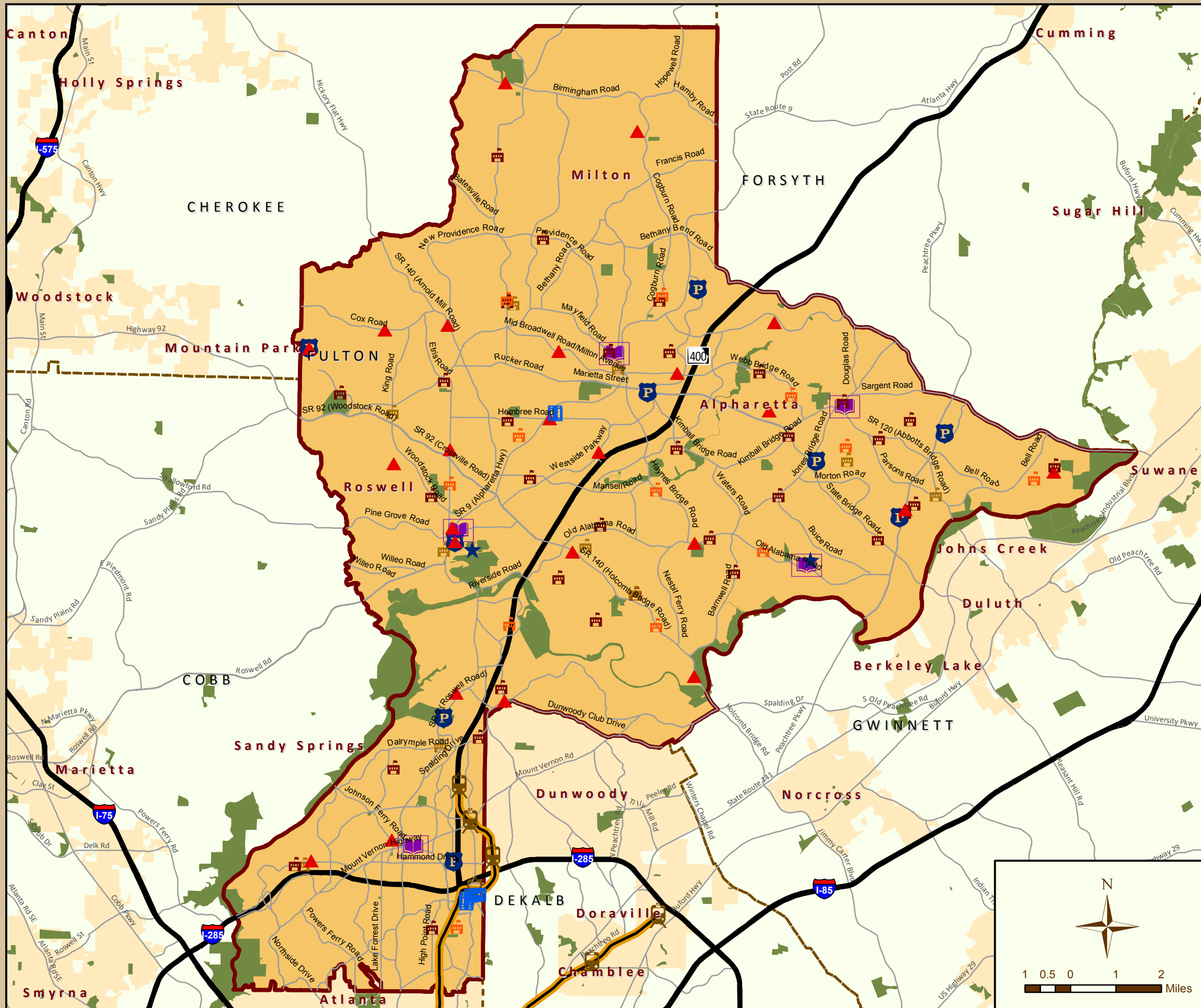
**Table 4-3: Community Facilities**

Facility	Number
Private School	35
Elementary School	29
Fire Station	24
Middle School	10
High School	8
Hospital	8
Police Station	7
Library	5
City Hall	3
Water System	2
Waste Water Treatment System	2
Solid Waste Recycling Center	2

Source: ARC Community Facilities GIS Data (Method: Select by location to find out facilities within the North Fulton Study area boundary)

<sup>19</sup> The Figure was prepared using community facilities data created by ARC in 2003. Facilities like Police and Fire Stations are added to the map referring to the comprehensive plans of the respective cities.


























North Fulton County  
Transportation Resource  
Implementation Program

### Reference Location



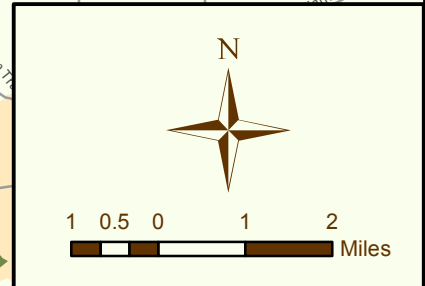
ARC  
20-County  
Region

### Legend

	Elementary School		MARTA Rail Line
	Middle School		Study Network
	High School		Expressways
	Two-Year College		Regional parks
	Hospital		Other Major Roads
	Library		North Fulton Study Area
	Police Station		Counties
	Water System		Other Cities
	Fire Station		
	MARTA Stations		

Source: Atlanta Regional Commission

**Figure 4-9**  
**Community Facilities**





## 4.6 Socioeconomic Profile

Information for the North Fulton area<sup>20</sup> as a whole and the six individual municipalities, with comparisons to the Atlanta MSA,<sup>21</sup> and the United States are presented to benchmark the relative performance of the study area.

### 4.6.1 Population

The population of North Fulton is estimated at 329,440, as shown in Table 4-4. North Fulton County as a whole had a growth rate between 2000 and 2009 that was just over half the Atlanta MSA’s rate of growth, and approximately twice the national average. While North Fulton is expected to continue to grow between 2009 and 2014, the rate of growth is just over half of what it was during the last nine years. North Fulton accounts for 6.0% of the Atlanta MSA’s population and 32.0% of the population of Fulton County.

Within North Fulton, the population distribution varies among the more established and new municipalities. Both Sandy Springs (26%) and Roswell (25%) account for approximately one-quarter of North Fulton’s population. Johns Creek is close in proportionate size, with 21%. Alpharetta constitutes 17% of North Fulton’s population and Milton comprises 10%. Mountain Park contains less than one-half percent of North Fulton’s total population.

**Table 4-4: Current Population**

	Alpharetta	Johns Creek	Milton	Mountain Park	Roswell	Sandy Springs	North Fulton Total
2000	34,854	61,937	17,223	506	79,334	85,792	279,646
<b>2009 (Est.)</b>	<b>55,560</b>	<b>70,360</b>	<b>32,930</b>	<b>530</b>	<b>83,630</b>	<b>86,430</b>	<b>329,440</b>
2014 (Proj.)	63,290	79,820	40,910	610	89,660	87,800	362,090
Pop. Change							
2000-2009	59.4%	13.6%	91.2%	4.7%	5.4%	0.7%	17.8%
2009-2014	13.9%	13.4%	24.2%	15.1%	7.2%	1.6%	9.9%

Source: US Census Bureau, Claritas, Market + Main, Inc.

Note: 2009 ARC Small-Area Estimates not available at time of draft production.

The cities of Milton and Alpharetta had the largest growth rate over the last nine years. The City of Sandy Springs had the smallest growth rate during the same timeframe, primarily because it is

<sup>20</sup> North Fulton is defined here as the cities of: Alpharetta, Johns Creek, Milton, Mountain Park, Roswell, and Sandy Springs.

<sup>21</sup> The Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area (MSA) is made up of 28 counties: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton.

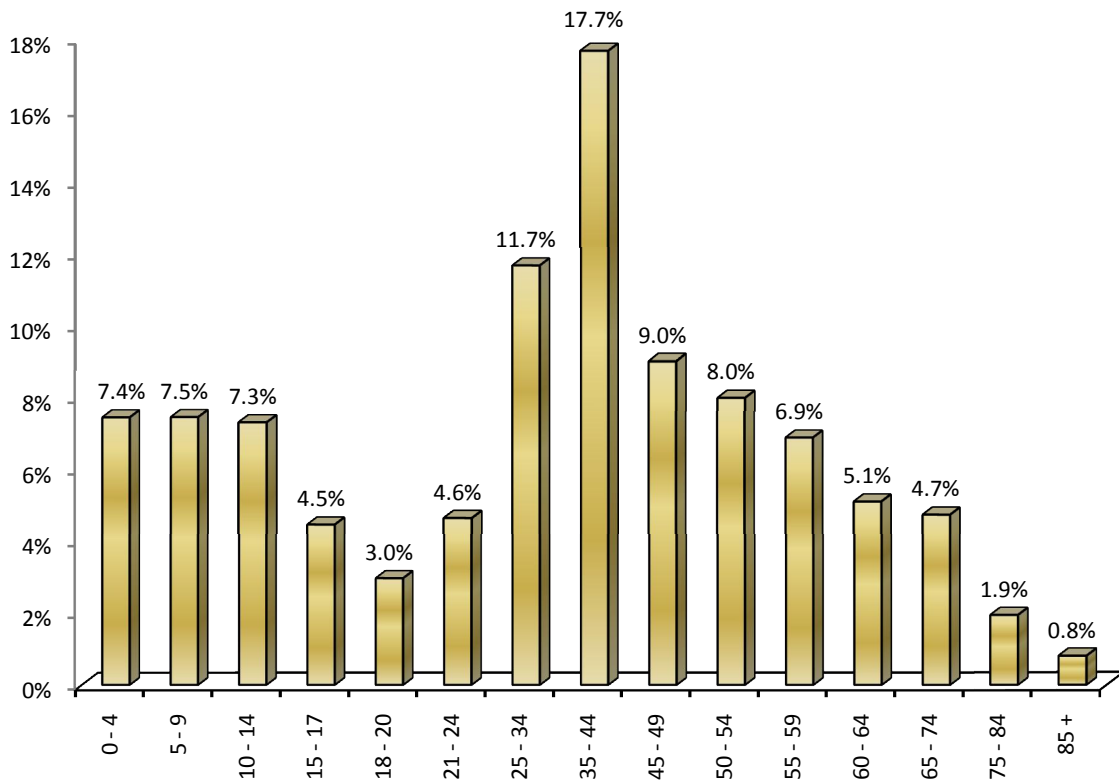


largely built-out. Projections for the next five years have the City of Milton expecting the largest population increase, but current policies may not support this kind of growth. The cities of Alpharetta, Johns Creek, Milton, and Mountain Park all exceed the projected growth rates of both the Atlanta MSA (13.0%) and the nation (5.1%). The City of Roswell does exceed the nation's expected growth for the next five years, but is below the Atlanta MSA's.

**4.6.2 Age Distribution**

The median age of North Fulton residents (35.7) is slightly above the Atlanta MSA (35.1) and below the nation (37.6). Figure 4-10 depicts age distribution in North Fulton. Almost 40% of North Fulton's population is between 25 and 50 years of age. This represents a vital component of any community, as this is the primary workforce population.

**Figure 4-10: Age Distribution**



Source: US Census Bureau, Claritas

The municipalities, in order from youngest to oldest in terms of median age, are: Johns Creek, Alpharetta, Milton, Roswell, Sandy Springs, and Mountain Park. As shown in Table 4-5, the City of Johns Creek has the largest population aged under 18 years; with Alpharetta, Johns Creek, and Milton all higher than both the Atlanta MSA and national averages. The City of Sandy Springs has the largest population aged between 25 and 35 years; with Sandy Springs as the only municipality



higher than the MSA or national averages. The City of Mountain Park has the largest population aged over 65 years, but all municipalities are below the MSA and national averages.

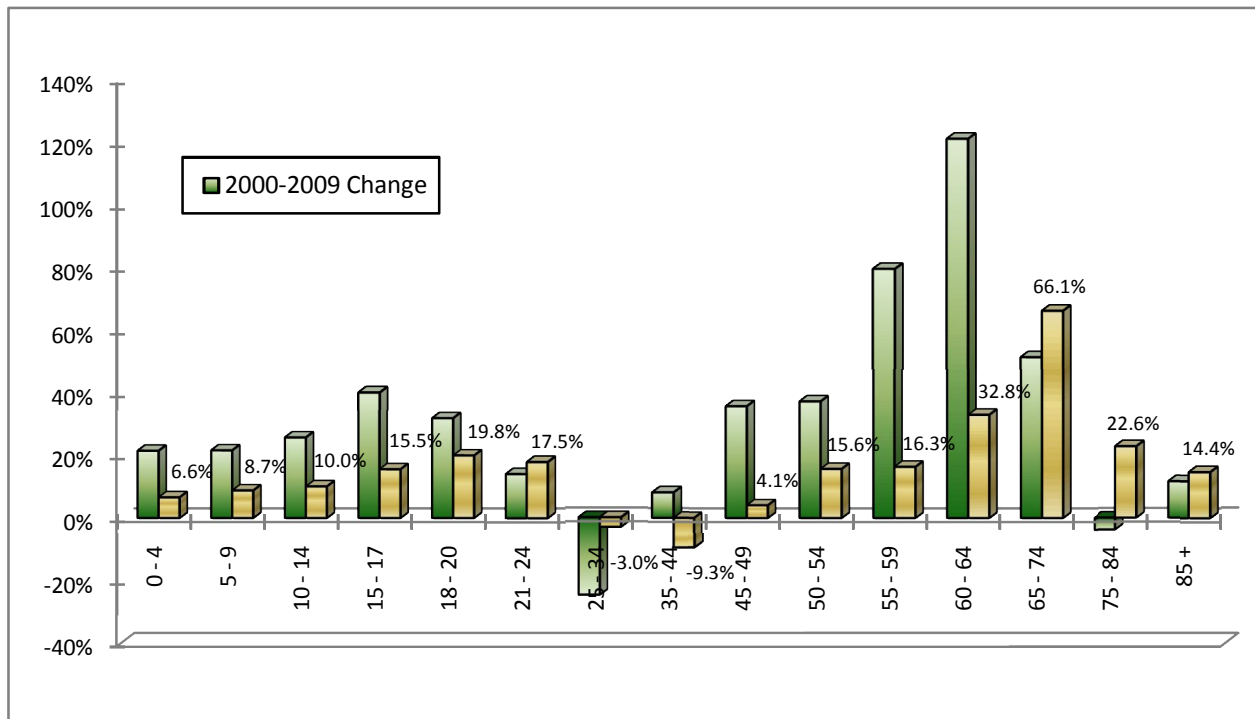
**Table 4-5: Age Distribution**

	<b>Alpharetta</b>	<b>Johns Creek</b>	<b>Milton</b>	<b>Mountain Park</b>	<b>Roswell</b>	<b>Sandy Springs</b>	<b>North Fulton Total</b>
Under 18	28.7%	32.5%	29.9%	19.8%	24.9%	19.7%	26.7%
Between 25-35	10.7%	6.6%	7.8%	6.6%	11.7%	19.3%	11.7%
Over 65	6.7%	5.2%	7.4%	10.5%	8.4%	9.7%	7.4%

Source: US Census Bureau, Claritas

Over the last nine years, the highest growth of an age bracket for North Fulton was in the 55 to 64 years of age groupings. There were small losses in the 25 to 34 and 75 to 84 age groupings during the same timeframe. Over the next five years, the most notable increase is expected in the 65 to 74 years of age grouping, as seen in Figure 4-11. Much of the growth in North Fulton is expected in the groups over 60 years of age. Growth is projected in all age categories over the next five years except 25 to 34 and 35 to 44 years of age. While these losses are not in significant numbers, they are concerning as these are prime workforce and family ages.

**Figure 4-11: Age Distribution Change Trends**



Source: US Census Bureau, Claritas

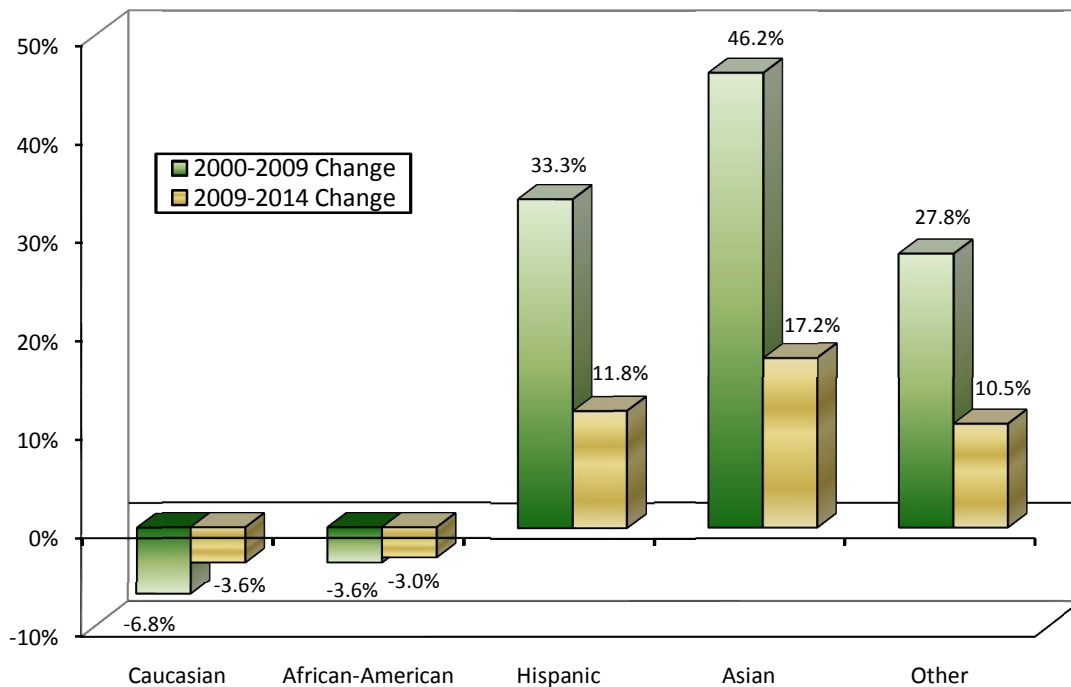


**4.6.3 Racial Composition**

North Fulton is primarily Caucasian (72%). Hispanics comprise 10% and African-Americans and Asians make up 8% of the total population. 10% of the remainder of the population is identified as other. There has been significant growth in the minority populations in North Fulton over the last decade. Interestingly, there has actually been loss in both the Caucasian and African-American populations over the last nine years, and this trend is expected to continue in the next five years.

The largest population changes in North Fulton have been in the minority groups over the last nine years, which is similar to population changes being seen across the nation. As illustrated in Figure 4-12, Asians grew the most, followed by Hispanics and then Others, which includes American Indians, Native Alaskans, Native Hawaiians and other Pacific Islanders, and those classifying themselves as more than one race. Over the next five years, growth is expected in all minority populations, though not at the same rates as the last decade.

**Figure 4-12: Change In Racial Composition**



Source: US Census Bureau, Claritas

Each of the individual municipalities is majority Caucasian, ranging from 74% in Johns Creek and Sandy Springs to 94% in Mountain Park. The greatest concentration of African-American population is in Sandy Springs (12%). This is the only city in North Fulton with a double-digit concentration of African-Americans. Johns Creek has the highest proportion of Asian population, at 16%; again, this is the only city in North Fulton with double-digit concentration of Asians in North Fulton. The greatest concentration of Hispanic population is seen equally in Roswell and Sandy





Springs, with each reporting 15%; no other city in North Fulton has a double-digit concentration of Hispanics.

**4.6.4 Educational Attainment**

North Fulton’s educational attainment levels are very high, performing better than the Atlanta MSA and nation. The proportion of the population that has less than a high school education is very small, at 5.5%, in comparison to the MSA (16.6%) and nation (19.4%). The proportion of high school graduates appears low (11.7%), but only because there are so many college graduates (58.3%) in North Fulton; the Atlanta MSA has between 25% and 30% in each of these categories.

Table 4-6 provides a summary of North Fulton’s educational attainment levels. Approximately two percent of North Fulton’s residents have less than a ninth grade education. About three percent of North Fulton’s population have a ninth to twelfth grade education, but did not graduate. For post-secondary educational attainment, approximately 18% of the population has some college education, but no degree. Six percent of residents have an associate’s degree. About 39% have a bachelor’s degree and approximately 19% have a graduate or professional degree.

**Table 4-6: Educational Attainment Levels**

	<b>Alpharetta</b>	<b>Johns Creek</b>	<b>Milton</b>	<b>Mountain Park</b>	<b>Roswell</b>	<b>Sandy Springs</b>	<b>North Fulton Total</b>
Less than High School	5.0%	2.2%	5.7%	8.5%	7.2%	6.2%	5.5%
High School Graduates	12.4%	9.5%	12.4%	24.9%	13.3%	11.0%	11.7%
College Graduates	56.3%	66.4%	54.7%	33.4%	52.6%	60.1%	58.3%

Source: US Census Bureau, Claritas

When considering the municipalities individually, the highest educational attainment levels are found in Johns Creek and Sandy Springs; both cities have more than 60% college graduates (approximately double the Atlanta MSA and national averages). Mountain Park has the lowest proportion of college graduates in North Fulton, but this proportion is still above the Atlanta MSA and national averages. Mountain Park also has the highest proportion of residents with less than a high school education in North Fulton, but this percentage is still well under the Atlanta MSA and national averages.

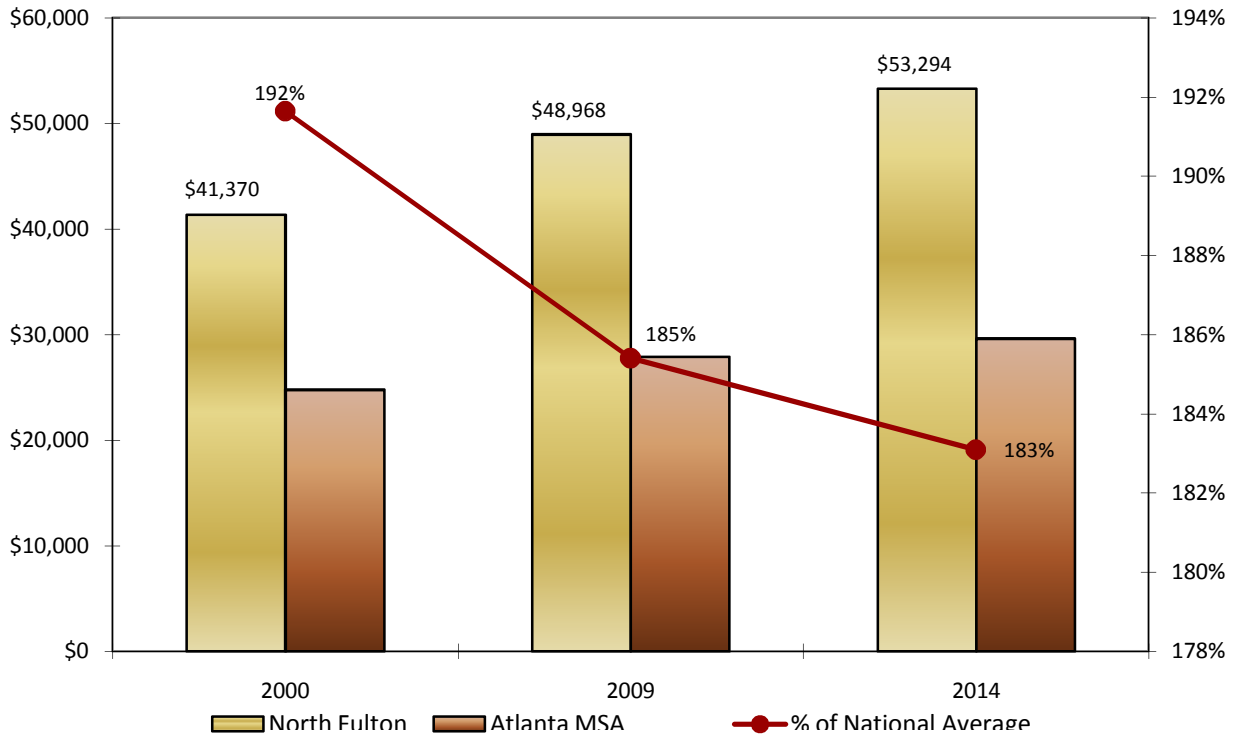
**4.6.5 Income**

As a measure of wealth generation, per capita income is one of the most informative economic indicators about the relative economic position of communities. The per capita income (PCI) in North Fulton is very high in comparison to the Atlanta MSA and national averages, as demonstrated in Figure 4-13. North Fulton’s PCI is over \$20,000 higher than both the MSA and national per capita incomes. North Fulton’s per capita income has grown 18.4% since 2000; which is below the national growth rate, but above the MSA’s rate of growth. Over the course of the next five years, North Fulton’s per capita income is still projected to be well above both the MSA and national averages, though the relative share is expected to decline slightly.





Figure 4-13: Per Capita Income Trends



Source: US Census Bureau, Claritas, Market + Main, Inc.

Characteristics of the individual municipalities’ 2007 per capita incomes are shown in Table 4-7. Every city in North Fulton reports a per capita income higher than both the Atlanta MSA (\$27,898) and the nation (\$26,410). The ranking of individual municipalities, from highest to lowest per capita income, is: Milton, Sandy Springs, Johns Creek, Alpharetta, Roswell, and Mountain Park. Only Mountain Park had an increase (36.6%) in their per capita income greater than the national average (22.3%) since 2000. While there were increases in per capita income in all the North Fulton cities between 2000 and 2009, the increases were not as significant since they were starting with above average per capita incomes.

Table 4-7: Per Capita Income

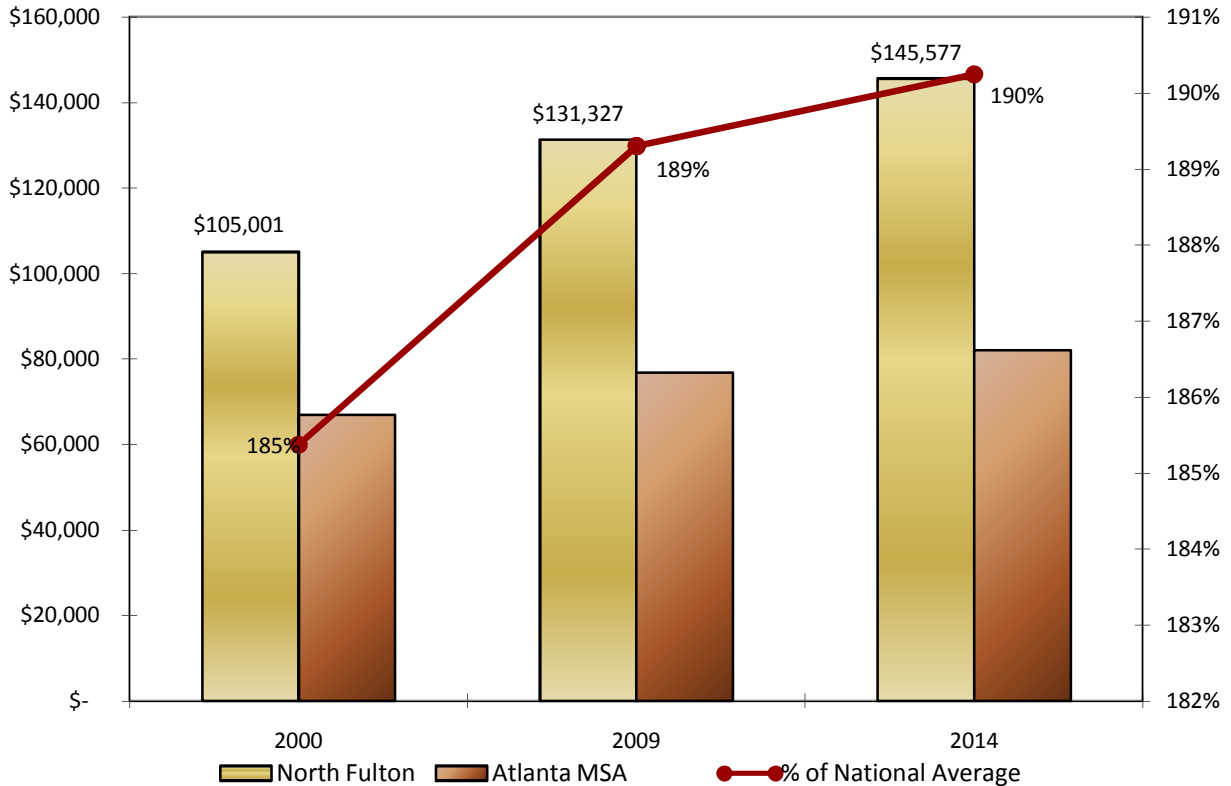
	Alpharetta	Johns Creek	Milton	Mountain Park	Roswell	Sandy Springs	North Fulton Total
2009 Per Capita Income	\$47,748	\$51,668	\$54,821	\$40,026	\$43,703	\$52,386	\$48,968
Change in PCI since 2000	21.9%	16.5%	19.9%	36.6%	20.6%	14.6%	18.4%
% of National Average	180.8%	195.6%	207.6%	151.6%	165.5%	198.4%	185.4%

Source: US Census Bureau, Claritas, Market + Main, Inc.



Furthermore, North Fulton’s average household income is also the highest, in comparison to the Atlanta MSA and nation, as illustrated in Figure 4-14. The difference is about \$62,000 in comparison to the nation and about \$54,000 in comparison to the MSA. North Fulton’s average household income has grown 25.1% since 2000; which is above both the Atlanta MSA and national growth rates. Over the course of the next five years, North Fulton’s average household income is projected to be well above both the MSA and national averages.

**Figure 4-14: Average Household Income Trends**



Source: US Census Bureau, Claritas, Market + Main, Inc.

There are some differences in average household incomes by individual municipality, as seen in Table 4-8. Like per capita income, every city in North Fulton reports an average household income higher than both the Atlanta MSA (\$76,784) and the nation (\$69,376). The ranking of individual municipalities does differ from the PCI order; from highest to lowest average household income is: Johns Creek, Milton, Alpharetta, Roswell, Sandy Springs, and Mountain Park. The only city with an average household income below \$100,000 is Mountain Park.



**Table 4-8: Average Household Income**

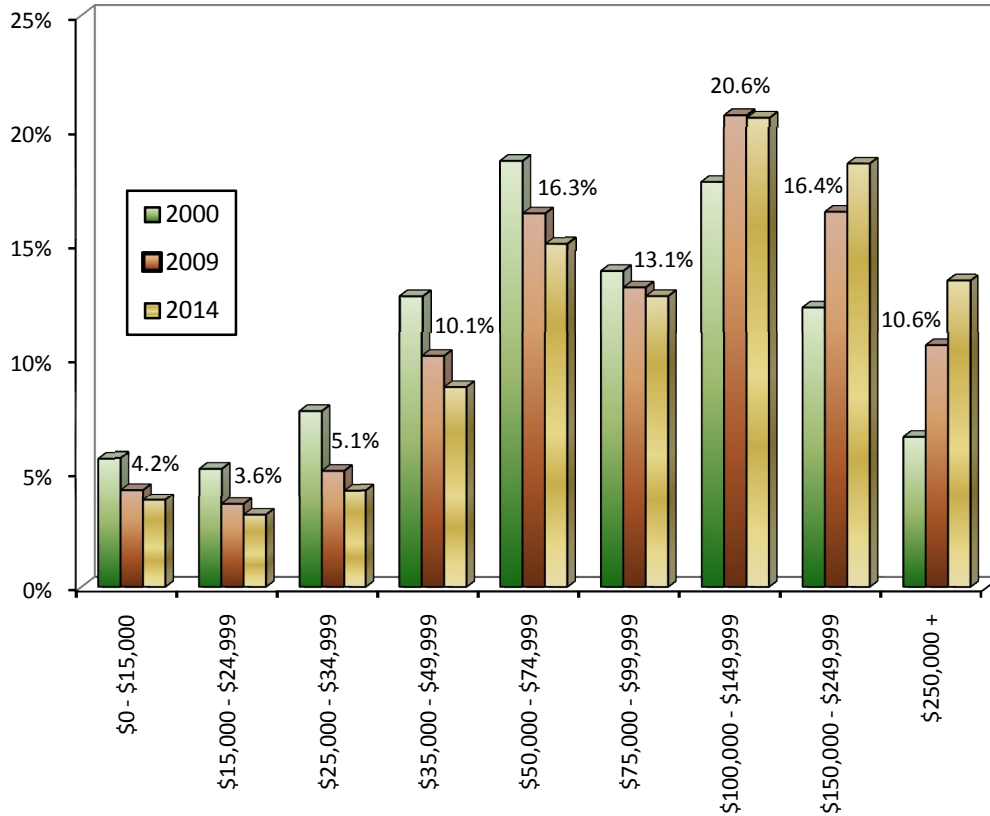
	<b>Alpharetta</b>	<b>Johns Creek</b>	<b>Milton</b>	<b>Mountain Park</b>	<b>Roswell</b>	<b>Sandy Springs</b>	<b>North Fulton Total</b>
2009 Average HH Income	\$124,385	\$164,422	\$153,372	\$93,724	\$118,525	\$117,802	\$131,327
Change in Avg HH \$ since 2000	25.2%	22.8%	24.1%	37.8%	25.8%	18.8%	25.1%
% of National Average	179.3%	237.0%	221.1%	135.1%	170.1%	169.8%	189.3%

Source: US Census Bureau, Claritas, Market + Main, Inc.

Figure 4-15 shows that almost half of North Fulton’s households earn above \$100,000, which is more than double both the Atlanta MSA (22.5%) and national (19.3%) proportion. Approximately eight percent of North Fulton’s households earn less than \$25,000 annually; this is just under half of the MSA proportion and one-third of the national proportion.



Figure 4-15: Household Income Trends



Source: US Census Bureau, Claritas

As is clearly demonstrated in Table 4-9, there is a high concentration in each municipality in households earning more than \$100,000. In the Cities of Johns Creek and Milton, more than half of the households earn above \$100,000, while in the cities of Sandy Springs and Mountain Park, that proportion is closer to one-third. The proportion of households earning more than \$100,000 is 23% for the Atlanta MSA and 19% for the nation. At the other end of the income spectrum, Sandy Springs is the only city that has more than 10% of its households earning less than \$25,000. The proportion of households earning less than \$25,000 is 17% for the Atlanta MSA and 23% for the nation.



**Table 4-9: Household Income Distribution**

	Alpharetta	Johns Creek	Milton	Mountain Park	Roswell	Sandy Springs	North Fulton Total
Less than \$15,000	4.3%	2.3%	3.1%	3.5%	4.1%	6.1%	4.2%
\$15,000-\$24,999	3.6%	1.5%	2.2%	4.9%	3.6%	5.7%	3.6%
\$25,000-\$34,999	5.2%	2.1%	3.9%	8.8%	6.2%	6.8%	5.1%
\$35,000-\$49,999	9.9%	4.6%	7.4%	15.1%	11.3%	14.2%	10.1%
\$50,000-\$74,999	18.3%	11.6%	12.3%	19.4%	17.6%	19.3%	16.3%
\$75,000-\$99,999	13.5%	12.7%	12.7%	18.3%	13.7%	12.3%	13.1%
Over \$100,000	45.2%	65.4%	58.4%	29.9%	43.5%	35.6%	47.6%

Source: US Census Bureau, Claritas

**4.6.6 Employment**

The total daytime population, or employees, for North Fulton is about 273,160. This represents 10.1% of the total employment base in the Atlanta MSA. In terms of biggest employment base, the individual municipalities rank in the following order: Sandy Springs, Alpharetta, Roswell, Johns Creek, Milton, and Mountain Park, as shown in the following table.

There are approximately 19,775 businesses in North Fulton, demonstrating its role in the regional economy as a significant contributor, as detailed in Table 4-10. North Fulton constitutes nine percent of the Atlanta MSA’s total businesses. The cities with the largest number of businesses, in rank order, are: Sandy Springs, Roswell, Alpharetta, Johns Creek, Milton, and Mountain Park.

**Table 4-10: Daytime Population**

	Alpharetta	Johns Creek	Milton	Mountain Park	Roswell	Sandy Springs	North Fulton Total
Employees	70,280	30,790	16,410	70	54,520	101,090	273,160
Businesses	4,260	2,180	1,230	15	5,290	6,800	19,775
Businesses w/ 20+ Employees	620	200	100	1	485	815	2,220

Source: US Bureau of Labor Statistics, Claritas

The order of largest employment base and largest number of businesses for the individual municipalities are almost identical, with Alpharetta and Roswell swapping places between second and third largest. The number of medium to large businesses follows the same proportions in each city as total businesses. What is immediately obvious when reviewing the data is that the bulk of

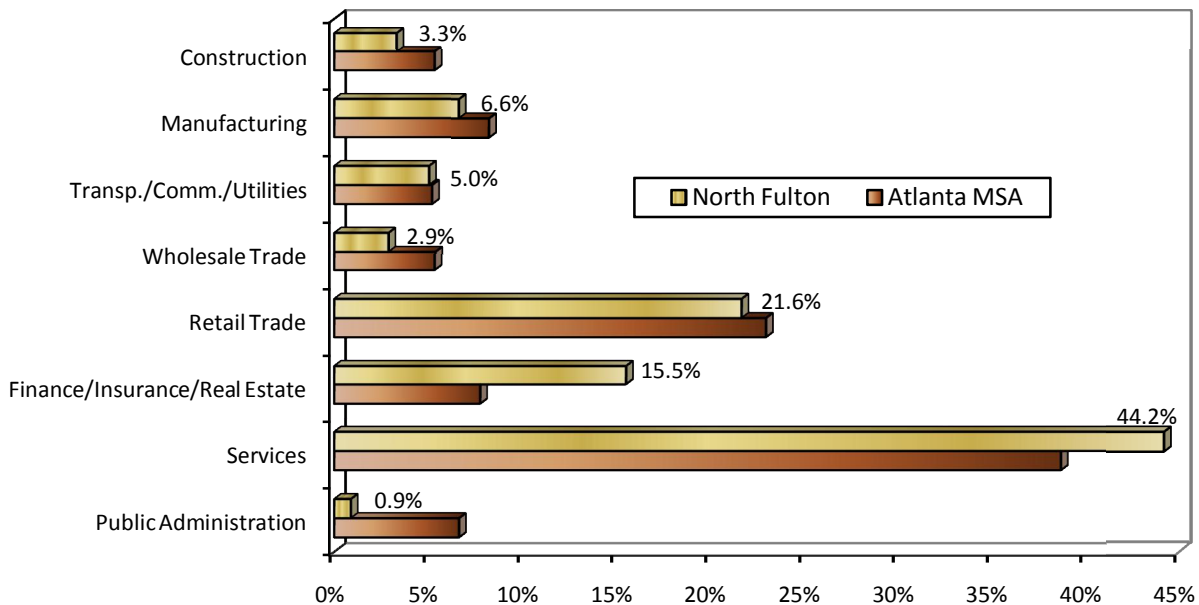




employment in North Fulton is constituted by small businesses, with 89% of businesses reporting fewer than 20 employees total.

In terms of sector employment, North Fulton’s largest employment sectors are Services, Retail Trade, and Finance, Insurance, and Real Estate (FIRE) as shown in Figure 4-16. In comparison, the top three industry sectors, in terms of employment, for the Atlanta MSA are Services, Retail Trade, and Manufacturing. The Finance, Insurance, and Real Estate (FIRE) sector is much larger in North Fulton than in the MSA. In North Fulton, the FIRE sector accounts for about 16%, approximately twice the MSA’s proportion. Other notable differences between North Fulton and the Atlanta MSA are in the Construction, Wholesale Trade, and Public Administration sectors; with North Fulton’s Construction and Wholesale Trade proportions at about half the MSA’s and North Fulton’s Public Administration proportion at just a fraction of the MSA’s.

**Figure 4-16: Employment Sectors**



Source: US Bureau of Economic Analysis, Claritas

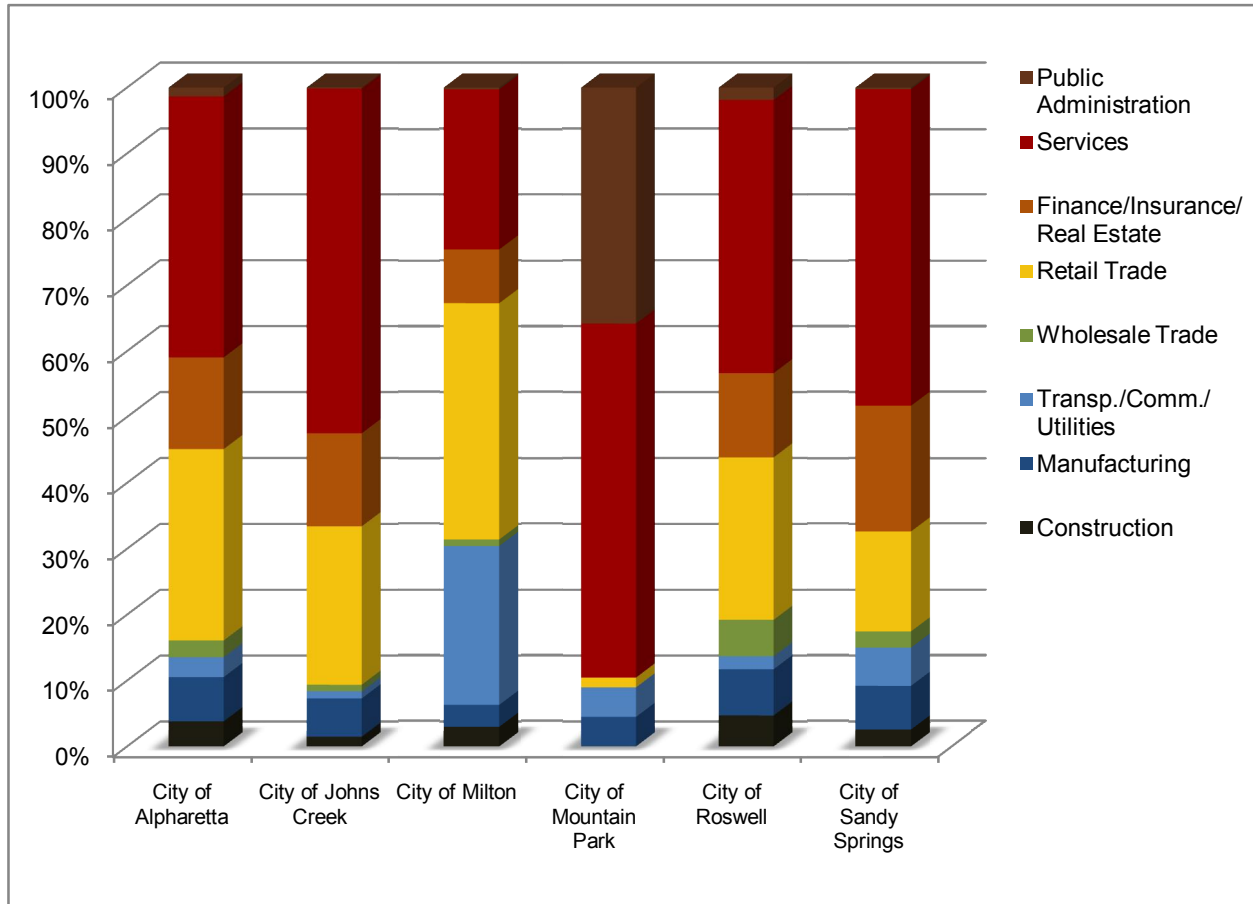
Within North Fulton, there are significant differences in employment composition between individual municipalities, as shown in Figure 4-17. Following are the listings of the three largest employment sectors for each city:

- City of Alpharetta: Services (39%), Retail Trade (29%), Finance, Insurance, and Real Estate (14%)
- City of Johns Creek: Services (52%), Retail Trade (24%), Finance, Insurance, and Real Estate (14%)
- City of Milton: Retail Trade (35%), Services (24%), Transportation, Communications, and Utilities (23%)



- City of Mountain Park: Services (51%), Public Administration (34%) (only two sectors listed because all other sectors are less than five percent each)
- City of Roswell: Services (41%), Retail Trade (24%), Finance, Insurance, and Real Estate (13%)
- City of Sandy Springs: Services (48%), Finance, Insurance, and Real Estate (19%), Retail Trade (15%)

**Figure 4-17: Employment Sector Comparison**



Source: US Bureau of Economic Analysis, Claritas

Services and Retail Trade are strong employment sectors in each municipality, which does mirror the Atlanta MSA and national trends. The significant presence of the Finance, Insurance, and Real Estate sector is an unusual characteristic of North Fulton. The proportions seen in the individual cities are above the average proportions for the Atlanta MSA and the nation. It is worth specifically noting that the concentrations in Mountain Park seem immense by percent, because there is such a small base of employment (in terms of absolute numbers). This is obviously a unique circumstance.



**4.6.7 Households**

As would be expected, the household change trends, highlighted in Table 4-11, are similar to the findings for the population change trends. North Fulton increased both its population and households by approximately 18% between 2000 and 2009. North Fulton is expected to grow its households by eight percent over the next five years; just below its population growth rate of approximately 10%. This projected rate is below the Atlanta MSA (12.5%) but above the nation (5.2%).

**Table 4-11: Household Change Trends**

	<b>Alpharetta</b>	<b>Johns Creek</b>	<b>Milton</b>	<b>Mountain Park</b>	<b>Roswell</b>	<b>Sandy Springs</b>	<b>North Fulton Total</b>
2000	13,843	20,444	6,059	232	30,304	39,220	110,102
<b>2009 (Est.)</b>	<b>23,020</b>	<b>23,560</b>	<b>12,900</b>	<b>240</b>	<b>31,370</b>	<b>39,030</b>	<b>130,120</b>
2014 (Proj.)	25,860	26,270	15,890	270	33,240	39,240	140,770
<b>Pop. Change</b>							
2000-2009	66.3%	15.2%	112.9%	3.4%	3.5%	-0.5%	18.2%
2009-2014	12.3%	11.5%	23.2%	12.5%	6.0%	0.5%	8.2%

Source: US Census Bureau, Claritas, Market + Main, Inc.

Note: 2009 ARC Small-Area Estimates not available at time of draft production.

Within North Fulton, the household distribution varies among the established and new municipalities, but slightly differently than the population distribution. Sandy Springs (30%) accounts for almost one-third of North Fulton’s households. Roswell (24%) comprises close to one-quarter of North Fulton’s households. Johns Creek and Alpharetta are both close in proportionate size, with 18% of North Fulton’s households. Milton comprises 10% of North Fulton’s households. Mountain Park contains less than one-half percent of North Fulton’s total households.

**4.6.8 Housing**

Household size in North Fulton (2.68) is slightly above the national average (2.59) and below the Atlanta MSA average (2.73). There are fewer single-person households in North Fulton (23.6%) in comparison to the national average (26.1%), but slightly more in comparison to the MSA average (22.4%). This is worth noting, as many times it can be an indicator of the young professional population. The average household size and proportion of single-family households indicate that North Fulton is comprised primarily of families. North Fulton is on par with the Atlanta MSA and national averages for owner-occupied housing units, with 67% owner-occupied housing units and 33% renter-occupied housing units.



## 4.6.9 Key Socioeconomic Findings

When considering North Fulton as a whole, it has experienced moderate growth over the last decade, and this type of growth is expected to continue. The recent and projected population and household growth rates for North Fulton are below the Atlanta MSA,<sup>22</sup> which has experienced phenomenal growth, but still greater than the national rate of growth.

North Fulton is about average compared to the MSA and national averages when making the relative comparisons for age structure. However, there are expected declines in the age groups between 25 and 44 years of age, while the biggest growth is expected in the age groupings over 60 years of age.

North Fulton's income levels are incredibly high. Both per capita income and average household income are remarkably higher than the Atlanta MSA and national averages, and are expected to continue to be so. Household income levels are also well above the MSA and national averages. Well over half of North Fulton's households earn above \$100,000 annually.

The educational attainment levels are very high in North Fulton. North Fulton has a much smaller than average proportion with less than high school education and a relatively low proportion of high school graduates. These statistics are easily explained by the incredibly high attainment levels of college degrees, at over twice the national average.

Even though North Fulton has more residents than jobs, it is a significant employment center in metro Atlanta. The jobs-to-housing ratio is 0.83, which means there are more residents in North Fulton than employees. However, this is a strong jobs-to-housing ratio, particularly in metro Atlanta, where many areas have less than half the jobs than they do residents. North Fulton's strong role in the metro economy is easy to see when comparing its proportion of the Atlanta MSA's population (6%) versus its employment (10%).

There is an above average concentration of the Finance, Insurance and Real Estate industry in North Fulton. Services and Retail Trade are also strong employment sectors, which does mirror the Atlanta MSA economic composition.

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<sup>22</sup> The Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area (MSA) is made up of 28 counties: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton.



## 4.7 Preliminary Market Overview

### 4.7.1 Residential Market

#### Metro Overview

The current national recession began with the housing sector. While the overheated markets of the West coast, the Northeast, and Florida were the first to feel the effects of the downturn, the market meltdown has now reached every region of the nation. Like the rest of the country, housing sales and values in metro Atlanta have seen historic lows, following a period of historic gains over the past decade. Across the metro area, a major housing crash has occurred. While the number of closings are down substantially, records are being set for expired and withdrawn sales listings, and the number of days on the market is the highest since 1998, some recent statistics are showing early, minor indications of the decline taking a turn for the better.

One key indicator many experts follow is Standard & Poor's Case-Shiller home price index. Atlanta home prices increased from June to July 2009 by 2.3% and then increased again between July and August 2009, by one percent. Home prices are still 10.6% lower year-over-year for August, but these small increases could be an early signal that the market has hit bottom. At a minimum, the relative rate of decline seems to be showing improvement. The first-time homebuyer credit is being cited as boosting sales; however there is some speculation that demand might decline after the extension into April 2010. A noted economist said, "Our view is that home prices will drop another five percent from current level, and will hit bottom in 2010."<sup>23</sup>

While metro Atlanta was not considered to be one of the residential markets with the most dramatic run-up in prices, it has, nevertheless, been greatly impacted by the current downturn. Because the metro area had been growing rapidly for years, the residential construction industry was a large part of the local economy. As demand for housing softened, the industry was not able to pull back quickly enough on providing new supply. The result has been a glut of unsold new homes across the metro area.

According to the National Association of Realtors, the median sales price for an existing single-family home in the Atlanta MSA was \$149,500 for 2008. This figure represents a decline of 13% over the 2007 median sales price of \$172,000. For the nation as a whole, the decline was 9.5%. Over the course of 2009, the median sales price has dropped to \$121,400, a 19% decrease.

The historically low interest rates and creative financing offers of the past several years converted many renters into first-time homebuyers. As the for-sale housing market hits all-time lows, the mortgage industry reorganizes, and the economy stagnates, more renters are emerging (both by choice and by necessity), creating a higher demand for rental housing.

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<sup>23</sup> Source: "Case-Shiller: ATL home prices rise again." Atlanta Business Chronicle, October 27, 2009.



Yet, the rental apartment market in metro Atlanta is also struggling. Multi-Housing News cites the following statistics: “At the end of 2008, average occupancy in all garden apartments in the 11-county market area was 88.6%, down 250 basis points from 91.1% at the end of 2007. During 2008, construction started on 5,922 units, down from 11,321 units started during 2007. The fundamentals of the apartment market will very likely not start a positive turn before late 2010 or mid-2011.”<sup>24</sup>

## Submarket Characteristics<sup>25</sup>

### Fulton County

While there are significant differences between the southern and northern portions of Fulton County, it is still valuable to review the county as a whole. Considering both sales activity and pricing together for Fulton County, resale prices have declined more, but the number of sales have decreased less. New home sale prices decreased slightly, but the actual number of sales decreased markedly. Neither is a completely positive scenario.

Between 2007 and 2008, there was a decline of about 20% in the number of housing units sold in Fulton County (similar to activity levels seen in 2003); the boom in sales activity for Fulton County seems to have been concentrated in 2005 and 2006. The split between new home sales and existing home resales has historically been weighted towards existing home resales, with about 60% to 65% of the market share in Fulton County. However, in 2008, the resale activity accounted for approximately 75% of the market activity for Fulton County. Between 2007 and 2008, there was a seven percent decrease in resale activity, while new home sale activity fell by 45%.

The median home sales price in Fulton County in 2008 was \$176,910; this is a 19% decrease from 2007 and is the lowest in the past five years. The resale prices of existing homes have been hit harder than the new home sale prices. Resale prices declined by 26% between 2007 and 2008, while new sale prices decreased by two percent. The highs in resale prices were between 2003 and 2005, whereas new home sale price highs were in 2007 and 2008.

### North Fulton

There were 20,570 housing units sold in 2008 in the North Fulton residential market.<sup>26</sup> There was a 22% decline in total housing units sold between 2007 and 2008 in North Fulton. Resales decreased by 12% and new home sales fell by 45% during this timeframe. Of total sales activity, new home sales constituted approximately 22% of the market activity.

<sup>24</sup> Source: “Q&A with Dale Henson: Fundamentals of Apartment Market Will Likely Start Positive Turn by Late 2010 or Mid-2011.” Multi-Housing News, March 12, 2009.

<sup>25</sup> Source: SmartNumbers.

<sup>26</sup> North Fulton is constituted by nine zip codes for purposes of understanding residential market activity. The following zip codes are included: 30004, 30005, 30009, 30022, 30075, 30076, 30097, 30328, and 30350. The residential market area does not follow the exact municipal boundaries of the six cities included in this study.





In terms of sales pricing, North Fulton's median sales prices declined by six percent from 2007 to 2008, to \$268,870. Median resale (\$343,510) price declined by seven percent and new home sale (\$257,630) price decreased by six percent in this same time period.

The decreases in North Fulton's home sales activity are similar to those seen in Fulton County. North Fulton's median sales prices are well above those seen for all of Fulton County. Further, the declines in sales prices in North Fulton are not nearly as dramatic as those experienced in Fulton County as a whole.

## 4.7.2 Retail Market

### Metro Overview

Just as the rest of the nation, metro Atlanta's retail market is suffering under pressure from the current recession. Since much of the performance of the retail market is heavily dependent on consumer confidence and the economy as a whole, it is not surprising that retail forecasts for the foreseeable future are very discouraging. There are certainly many reasons that industry experts are expecting consumer spending and retail leasing activity to continue to be depressed, such as foreclosures, high debt levels, and job losses, among others.

Obviously, the retail market's success is directly related to the ability and willingness of the consumer to spend. During a recession, the reduction in wages through job losses has a direct negative impact on the consumer's ability to make purchases. Also, the loss of wealth caused by decreasing home and retirement portfolio values will often cause those who still have expendable income to cut back on unnecessary purchases out of fear of future losses. The current recession also has negative elements that are somewhat unique when compared to other economic downturns, namely the tightening of credit. This affects sales directly, because many consumers have had their available consumer credit lines decreased by financial institutions. Additionally, many retailers rely on the credit markets for short term loans to pay for merchandise and long-term loans to open new stores.

Perhaps of most impact on the retail market from this recession is what experts are terming as a "reset," meaning a recalibration of personal, corporate, and civic values. Part of this "reset" includes an increase in the personal savings rate and also a rethinking of the meaning of the value in the goods and services we consume. This "reset" will likely have long-term consequences for retailers, developers, investors, and consumers that will remain long after the recession comes to an end, according to Grubb & Ellis.

Looking at the metro area as a whole, the Atlanta retail market currently consists of 15,920 buildings with approximately 298.1 million square feet of space. The total retail space in metro Atlanta can be divided into five categories: General Retail (35.8%); Mall (8.8%); Power Center (7.9%); Shopping Centers (46.2%); and Specialty Centers (1.4%). There is a total of 32.0 million square feet of retail space vacant in the market (a vacancy rate of 10.7%). Rental rates are being



quoted at an average of \$15.17 per square foot. During the first three quarters of 2009, there was a total of 3.3 million square feet of retail space delivered. However, there is a year-to-date negative net absorption of -2.3 million square feet. There was approximately 610,000 square feet still under construction at the end of the quarter.

## Submarket Characteristics<sup>27</sup>

North Fulton is primarily located within the GA-400 retail market cluster, which includes the Cumming/Forsyth County, Dawson County, and Roswell/Alpharetta submarkets. The GA-400 retail market cluster accounts for approximately 10.6% of the metro Atlanta retail market, with a total of 1,554 shopping centers comprising approximately 31.7 million square feet of retail space. The vacancy rate (12.2%) is above the metro average. The average rent per square foot is above the metro average, at \$17.18. Approximately 167,800 square feet have been delivered in this market cluster this year, with another 14,250 square feet under construction currently, according to CoStar. However, the year-to-date net absorption is negative for the GA-400 retail market cluster, at -724,000 square feet.

In the GA-400 retail market cluster, rental rates had been making a steady increase since second quarter of 2006, but the peak in average rental rates was seen in fourth quarter of 2008. Average rental rates have been steadily declining since first quarter of this year. Vacancy rates in the GA-400 retail market cluster had been slowly creeping up since first quarter of 2007, with significant increases since first quarter of this year. The peak for retail construction in this market cluster seems to have been during 2007, when approximately five million square feet was constructed over the course of that year.

In terms of individual submarkets, North Fulton, as defined in this study, is located within the Roswell/Alpharetta retail submarket. Since Sandy Springs is included in the definition for this study, it means that Sandy Springs/North Central is also a relevant retail submarket to review.

The Roswell/Alpharetta retail submarket has a total of 1,043 shopping centers, reflecting approximately 21.2 million square feet of retail space. The vacancy rate is 12.9%, which is above the metro average. The average rental rate is above the metro average, at \$17.14 per square foot. Approximately 17,350 square feet have been delivered in this submarket this year, with no retail space under construction currently, according to CoStar. The year-to-date net absorption is negative for the Roswell/Alpharetta retail submarket, at -693,350 square feet.

The Sandy Springs/North Central retail submarket has a total of 493 shopping centers, reflecting approximately 11.1 million square feet of retail space. The vacancy rate is 10.5%, which is on par with the metro average. The average rental rate is above the metro average, at \$18.30 per square foot. Approximately 176,200 square feet have been delivered in this submarket this year, with no

<sup>27</sup> Source: *The Retail Report: Atlanta Retail Market*, CoStar Group, Third Quarter 2009.



retail space under construction currently, according to CoStar. The year-to-date net absorption is negative for the Sandy Springs/North Central retail submarket, at -183,500 square feet.

### 4.7.3 Office Market

#### Metro Overview

Metro Atlanta's office market is directly dependent on job growth, and the metro area has lost more than 170,000 jobs since the start of the recession. The result has been a difficult office market with declining rental rates, rising vacancies, and short-term renewals and extensions instead of long-term leases. Job losses have continued throughout 2009, which is leading to a further deterioration in the office sector. Between vacancies and subleases, nearly one-quarter of the total office space inventory in metro Atlanta is available. Further, the office space occupancy growth is now expected to lag the larger economic recovery, with prolonged elevated vacancy levels through the first half of 2010, according to Grubb & Ellis.

Despite early and small signs of improvement in the economy, office space has yet to see positive momentum return to the marketplace. Companies continue to "play defense" by downsizing and consolidating operations. However, once national economic conditions improve, Atlanta's strong population growth and history of job creation should lead to a rebound in the office market. Until this happens, though, office tenants in metro Atlanta will maintain leverage in dealings with landlords, according to Grubb & Ellis.

The metro Atlanta office market has 11,426 buildings, comprising approximately 271.1 million square feet. The total office space in metro Atlanta can be classified into three categories: Class A (40.3%), Class B (43.3%), and Class C (16.4%). There is a total of 45.2 million square feet of office space vacant in the market, with the vacancy rate currently sitting at 16.7%. Rental rates are being quoted at an average of \$19.21 per square foot. During the first three quarters of 2009, there was a total of 2.7 million square feet of office space delivered. However, there is a year-to-date negative net absorption of -2.3 million square feet.

#### Submarket Characteristics<sup>28</sup>

North Fulton is primarily located within the North Fulton office market cluster, which includes the Dawson County and North Fulton/Forsyth County submarkets. The North Fulton office market cluster accounts for approximately 12.9% of the metro Atlanta office market, with a total of 1,621 buildings reflecting approximately 34.9 million square feet of office space. The vacancy rate (17.2%) is slightly above the metro average. The average rent per square foot is below the metro average, at \$18.10. Approximately 181,200 square feet have been delivered in this market cluster this year, with another 29,500 square feet under construction currently, according to CoStar.

<sup>28</sup> Source: *The Office Report: Atlanta Office Market*, CoStar Group, Third Quarter 2009.



However, the year-to-date net absorption is negative for the North Fulton office market cluster, at -530,550 square feet.

In the North Fulton office market cluster, rental rates have been making a slow but steady increase since first quarter of 2006. The peak in average rental rates was seen in the third quarter of 2008; since then, slight declines have been reported each quarter, with a decrease totaling approximately \$0.80 over the last year. Vacancy rates in the North Fulton office market cluster have been increasing since fourth quarter of 2006, with steady and notable increases since fourth quarter of 2008. The peak for office construction in this market cluster seems to have been between third quarter 2007 and second quarter 2008, when approximately five million square feet was constructed.

In terms of individual submarkets, North Fulton, as defined in this study, is located within the North Fulton/Forsyth County office submarket. Since Sandy Springs is included in the definition for this study, it means that Central Perimeter is also a relevant office submarket to review as well.

The North Fulton/Forsyth County office submarket has 1,599 buildings, comprising about 34.6 million square feet. The vacancy rate is 17.3%, which is slightly above the metro average. The average rental rate (\$18.09 per square foot) is slightly below the metro average. Approximately 181,200 square feet have been delivered in this submarket this year, with another 29,500 square feet under construction currently, according to CoStar. However, the year-to-date net absorption is negative for the North Fulton/Forsyth County office submarket, at -542,400 square feet.

The Central Perimeter office submarket has 702 buildings, comprising about 32.8 million square feet. The vacancy rate is 18.4%, which is above the metro average. The average rental rate (\$20.53 per square foot) is above the metro average. No office space has been delivered this year, nor is any office space under construction currently in this submarket, according to CoStar. The year-to-date net absorption is negative for the Central Perimeter office submarket, at -529,850 square feet.

#### 4.7.4 Industrial Market

##### Metro Overview

As is well-known, Atlanta has many characteristics that have made it the southeastern hub for transportation, distribution and logistics, such as interstate highways, heavy rail lines, and the world's busiest airport. However, industrial space demand in metro Atlanta has historically been driven by retail, logistics and global trade activity, which means industrial space has been doubly hit here by the ailing retail conditions and reduced imports. Demand has dropped substantially for distribution and warehouse space because industries are reducing inventory and consolidating facilities, due in large part to the housing and construction related manufacturing and supply companies located in the metro area, according to Grubb & Ellis.

Many companies are opting out of short-term and month-to-month leases, and there is a significant amount of available sublease space in the metro Atlanta market. Because of the difficulty obtaining



financing, new construction activity on industrial space has all but stopped. However, “signs of life” are starting to show as manufacturing output turned positive, signaling growth for the first time in nineteen months. The metro area has the infrastructure and a competitive cost structure that will allow its industrial market to begin to grow and attract new operations once economic conditions improve, according to Grubb & Ellis.

The metro Atlanta industrial market has 12,796 buildings and approximately 612.2 million square feet of space. There is a total of 77.9 million square feet of industrial space vacant in the market (with the vacancy rate of 12.7%). The total industrial space in metro Atlanta can be split into two dominant sub-types: Flex<sup>29</sup> (9.7%) and Warehouse (90.3%).<sup>30</sup> Rental rates are being quoted at an average of \$4.21 per square foot. During the first three quarters of 2009, there was a total of 1.8 million square feet of industrial space delivered. However, the year-to-date negative net absorption of -4.4 million square feet; this means that the 1.8 million square feet delivered this year came onto a market with immense vacancies already and increased the total vacancy.

### Submarket Characteristics<sup>31</sup>

North Fulton is primarily located within the North Central Atlanta industrial market cluster, which includes the Central Perimeter, Dawson County and North Fulton/Forsyth County submarkets. The North Central Atlanta industrial market cluster accounts for approximately 4.6% of the metro Atlanta industrial market, with a total of 991 buildings, reflecting approximately 28.2 million square feet of industrial space. The vacancy rate is (13.8%) slightly above the metro average. The average rent per square foot (\$6.58) is well above the metro average. Approximately 42,950 square feet have been delivered in this market cluster this year, with no industrial space under construction currently, according to CoStar. However, the year-to-date net absorption is negative for the North Central Atlanta industrial market cluster, at -283,400 square feet.

In the North Central Atlanta industrial market cluster, rental rates fluctuated over the course of 2006 and 2007, to arrive at a peak in the third quarter of 2007. Since the end of 2007, average rental rates have been declining, with a significant drop since the second quarter of 2009 in particular. Vacancy rates in the North Central Atlanta industrial market cluster had fluctuations in both 2006 and 2007, and have been steadily rising since second quarter 2008. There was notable industrial construction in this market cluster during 2006 and again in 2008, but not significant in terms of the greater metro market.

<sup>29</sup> Flex space can be considered a hybrid office/industrial building. CoStar defines flex space as: “A type of building designed to be versatile, which may be used in combination with office (corporate headquarters), research and development, quasi-retail sales, and including but not limited to industrial, warehouse, and distribution uses.”

<sup>30</sup> Source: *The Industrial Report: Atlanta Industrial Market*, CoStar Group, Third Quarter 2009.

<sup>31</sup> Source: *The Industrial Report: Atlanta Industrial Market*, CoStar Group, Third Quarter 2009.



In terms of individual submarkets, North Fulton, as defined in this study, is located within the North Fulton/Forsyth County industrial submarket. Since Sandy Springs is included in the definition for this study, it means that Central Perimeter is also a relevant industrial submarket to review as well.

The North Fulton/Forsyth County industrial submarket has 941 buildings, comprising about 27.0 million square feet. The vacancy rate is 14.1%, which is above the metro average. The average rental rate (\$6.56 per square foot) is above the metro average. Approximately 42,950 square feet have been delivered in this submarket this year, with no industrial space under construction currently, according to CoStar. However, the year-to-date net absorption is negative for the North Fulton/Forsyth County industrial submarket, at -297,200 square feet.

The Central Perimeter industrial submarket has 37 buildings, comprising about 982,900 square feet. The vacancy rate is 6.9%, which is well below the metro average. The average rental rate is well above the metro average, at \$8.29 per square foot. No industrial space has been delivered this year, nor is any industrial space under construction currently in this submarket, according to CoStar. The year-to-date net absorption for the Central Perimeter industrial submarket is 9,400 square feet.





## 5.0 TRANSPORTATION INVENTORY

Roadway characteristics, roadway operations, pedestrian and bicycle facilities and operation, and transit facilities and service within the North Fulton County road system were identified as part of the transportation inventory process.

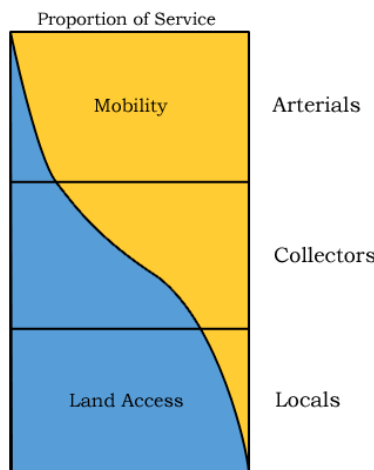
### 5.1 Roadway Characteristics

#### 5.1.1 Functional Classification

The classification of streets into several “functional” categories aids in communication about the transportation system among policy makers, planners, engineers, and citizens. The functional classification system groups streets according to the land use served and provides a general designation of the type of traffic each street is intended to serve. The roadway functional classification system primarily defines the street in terms of roadway design and character, as well as operational features for the movement of vehicles.

Two major considerations for distinguishing arterials from neighborhood streets are access and mobility. The primary function of local or neighborhood streets is to provide a high level of access. These streets are intended to serve localized areas or neighborhoods (i.e. low speeds, low volumes, shorter distances), including local commercial and mixed-use land uses and are not intended for use by large volumes of through traffic. The primary function of arterials is to provide a high level of mobility. Limiting access points (e.g. at-grade intersections and driveways) on arterials enhances mobility. Conversely, increased mobility at high speeds can restrict access by pedestrians and bicyclists. The arterial is designed with the intent to carry more traffic than is generated within its corridor (i.e. higher speeds, higher volumes, longer distances). Figure 5-1 shows the relationship between a roadway’s access versus mobility.

Figure 5-1: Access Versus Mobility





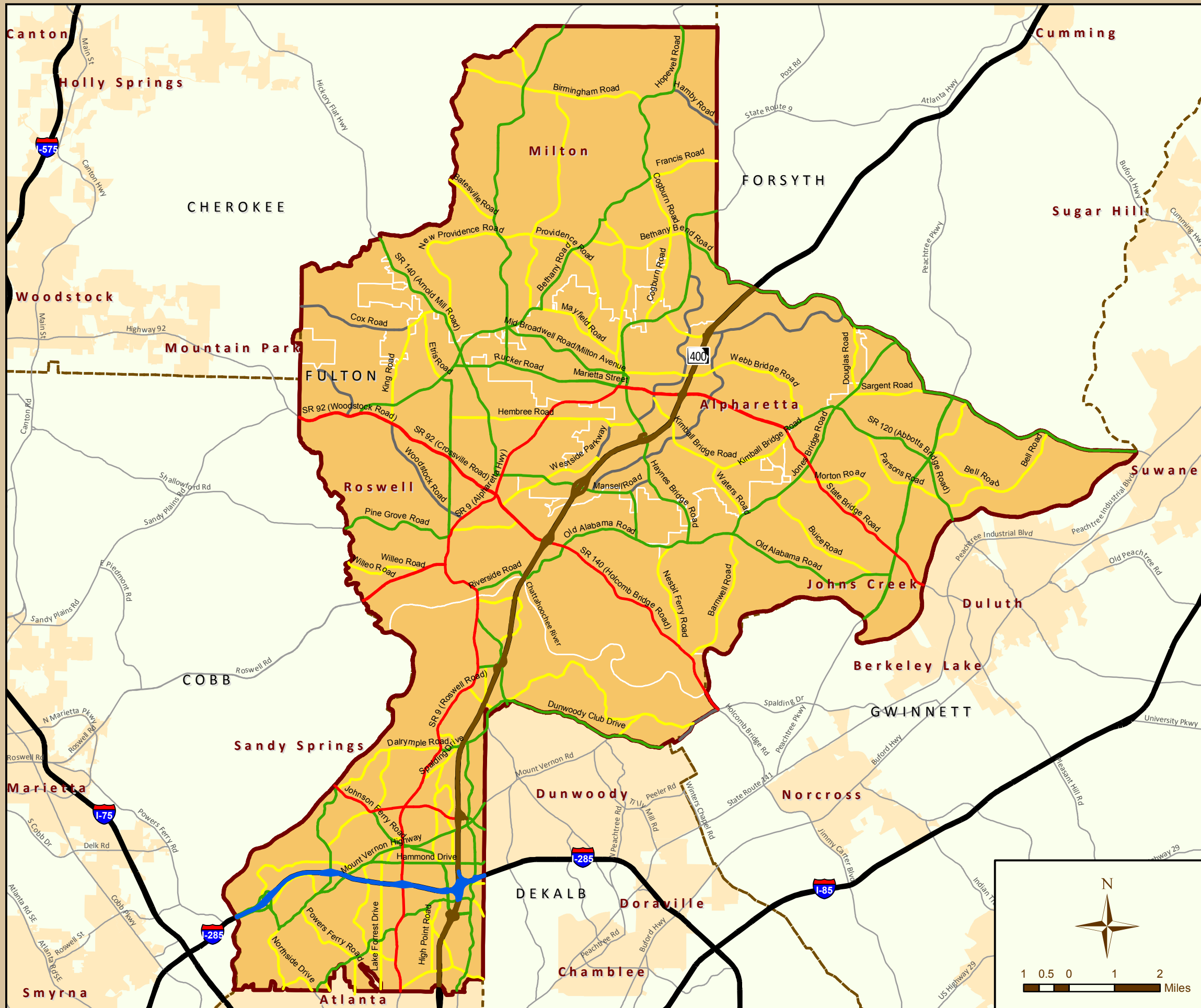
The existing public street network in North Fulton County is divided into Interstates, Freeways, Principal Arterials, Minor Arterials, Collectors, and Local roadways.

Figure 5-2 illustrates the functional classifications for the roadways considered within the study network of the North Fulton CTP. Due to the large extent of the geographical area this plan considers, there are many other local roadways within North Fulton County that are not specifically addressed in this study.

**Interstates and freeways** provide the most mobility and least access (since access is only available at grade-separated interchanges). These facilities typically serve longer distance travel and support regional mobility. The Georgia Department of Transportation funds improvements and maintenance along these facilities. I-285 is the only interstate located within North Fulton County, and GA-400 is the only freeway located within North Fulton County.

**Principal arterials** serve medium to longer distance travel and typically connect minor arterials and collector streets to interstates and freeways. These facilities should have tightly controlled access and few, if any, individual site driveways. Generally, roadway improvements and maintenance on principal arterials are funded by local governments or the Georgia Department of Transportation. Principal arterials within North Fulton County include Roswell Road/Alpharetta Highway (SR 9), Marietta Highway (SR 120), Old Milton Parkway (SR 120), Woodstock Road/Crossville Road (SR 92), Holcomb Bridge Road (SR 140), State Bridge Road, Johnson Ferry Road, and Abernathy Road.


**Minor arterials** primarily serve a mobility function but often have more closely spaced intersections, more individual site driveways, and generally lower posted speeds compared to principal arterials. The minor arterial network is primarily intended to serve travel within the local area. These roadways connect to other minor arterials, to principal arterials, and to collector streets. Minor arterials provide a higher level of access to adjacent land uses than principal arterials and typically have lower traffic volumes. For the most part, minor arterials are maintained by the local government, but the cost of improvement may be the responsibility of the Georgia Department of Transportation or the local government. In general, most minor arterials have four-lane or six-lane cross sections with left-turn lanes at intersections and major driveways. Minor arterials within North Fulton County include McGinnis Ferry Road, Old Alabama Road, Peachtree-Dunwoody Road, Mount Vernon Highway, Houze Road/Arnold Mill Road (SR 140), Birmingham Highway (SR 372), Medlock Bridge Road (SR 141), Jones Bridge Road, Mansell Road, Abbotts Bridge Road, and Haynes Bridge Road.




**North Fulton County**  
 Transportation Resource  
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**Reference Location**


  
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**Region**

**Legend**

Study Network	Other Major Roads
GDOT Functional Classification	Expressways
Local	Counties
Collector	North Fulton Study Area
Minor Arterial	Other Cities
Principal Arterial	
Freeway	
Interstate	

Source: Georgia Department of Transportation

**Figure 5-2**  
**Functional Classification**



**Collectors** typically provide less overall mobility, operate at lower speeds, have more frequent and greater access flexibility with adjacent land uses, and serve shorter distance travel than arterials. Collectors provide critical connections in the roadway network by bridging the gap between arterials and local roadways. Thus, the majority of collector streets connect with one another, with local streets, and with non-freeway arterials. The primary purpose of the collector street system is to collect traffic from neighborhoods and distribute to the system of principal and minor arterials throughout an area. In general, most collector streets have two-lane or four-lane cross sections and often have exclusive left-turn lanes at intersections with major and minor arterials and less frequently at intersections with other collector streets and driveways. Collector streets are rarely constructed and funded by the Georgia Department of Transportation. Responsibility for collector streets is usually that of the local government and the development community for funding, design, construction, and maintenance. Collector streets within North Fulton County include Academy Street/Webb Bridge Road, Windsor Parkway, Lake Forrest Drive, Dalrymple Road, Freemanville Road, Cogburn Road, and Providence Road.

**Local** facilities provide the most access and the least amount of mobility. These facilities typically connect to one another or to other collector streets, and provide a high level of access to adjacent land uses and frequent driveways. Local roadways typically serve short distances and have low posted speed limits. Most roadways within North Fulton County are classified as locals, including North Point Parkway and Windward Parkway (east of State Route 400). Only a few roadways classified as local were included in this plan's study network. Those included were selected because they serve a more regional purpose than a typically local roadway.

## 5.1.2 Number of Lanes

The primary characteristic used to determine a road's capacity is the number of travel lanes in each direction. The majority of roads in North Fulton County are two-lane (one lane in each direction). Additional travel lanes exist on roads that are designed to accommodate higher traffic volumes.

Figure 5-3 illustrates the number of lanes (or roadway capacity) for the North Fulton County roadway study network.

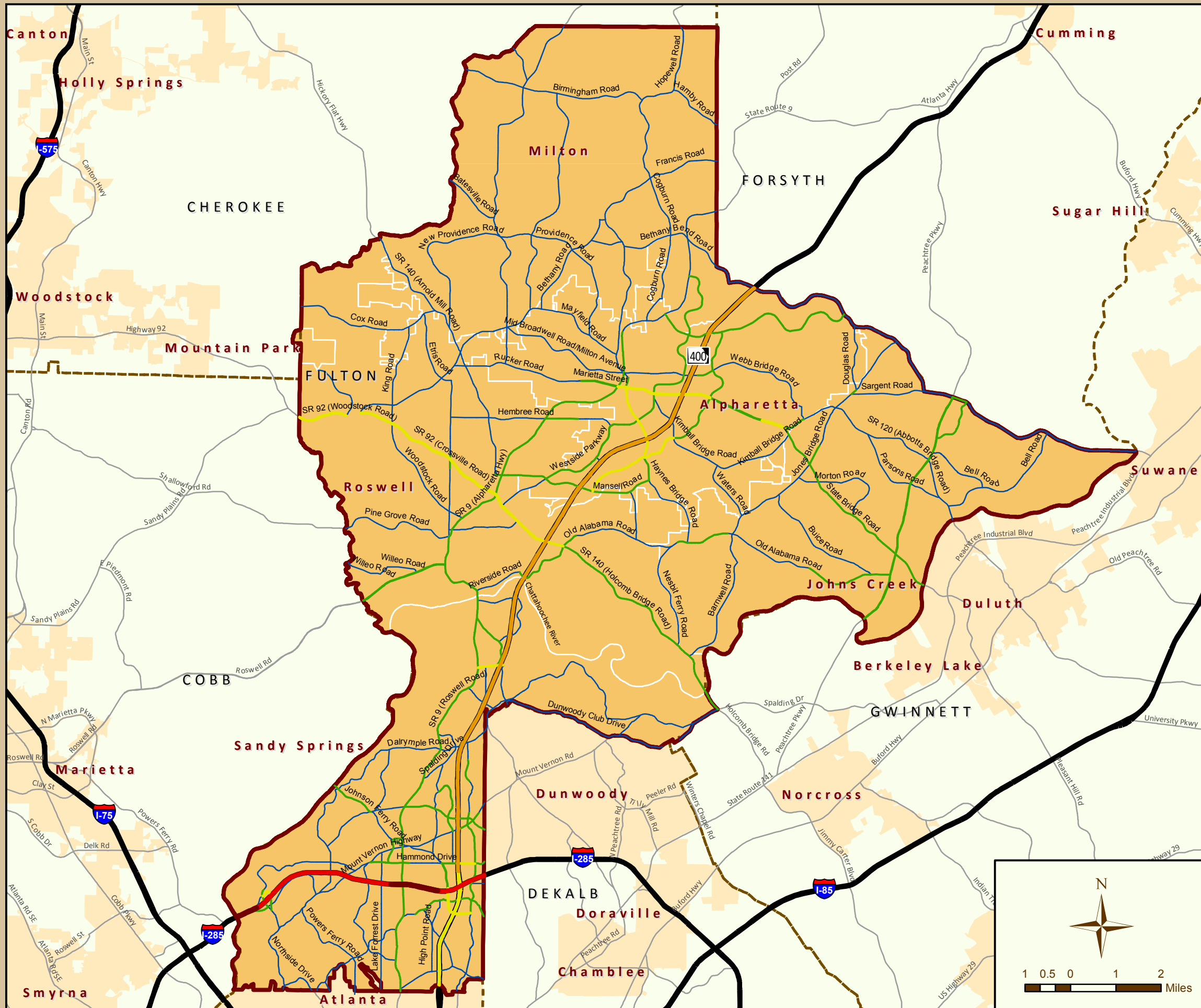
Roads in North Fulton County included in the study network that generally contain more than six lanes (more than three lanes in each direction) include:

- Eight lanes – GA-400, north of I-285
- Ten lanes – I-285, from Northside Drive to Roswell Road and east of Glenridge Connector
- Twelve lanes – I-285, west of Northside Drive and from Roswell Road to Glenridge Connector

Roads that generally contain six lanes (three lanes in each direction) include:

- GA-400, south of I-285
- Woodstock Road/Crossville Road (SR 92)
- Holcomb Bridge Road (SR 140), west of State Route 400










**North Fulton County  
Transportation Resource  
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**ARC  
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**Legend**

Study Network	— Other Major Roads
Number of Lanes	— Expressways
1 - 2	 North Fulton Study Area
3 - 4	 Counties
5 - 6	 Other Cities
8	
10	
12	

Source: Kimley-Horn and Associates, Inc.

**Figure 5-3  
Number of Lanes**





- Old Milton Parkway (SR 120), west of State Route 400
- North Point Parkway, south of Kimball Bridge Road
- Haynes Bridge Road, north of North Point Parkway
- Glenridge Connector

Roads that generally contain four lanes (two lanes in each direction) include:

- Roswell Road/Atlanta Street/Alpharetta Highway (SR 9) from Windsor Parkway to Mayfield Road
- Marietta Highway (SR 120) from Cobb County to Atlanta Street (SR 9)
- Old Milton Parkway (SR 120), east of GA-400
- Holcomb Bridge Road (SR 140), east of GA-400
- Medlock Bridge Road (SR 141)
- State Bridge Road
- Mansell Road
- Windsor Parkway
- Deerfield Parkway
- Westside Parkway
- North Point Parkway, north of Kimball Bridge Road

All remaining roads within North Fulton County mostly have two lanes (one lane in each direction).

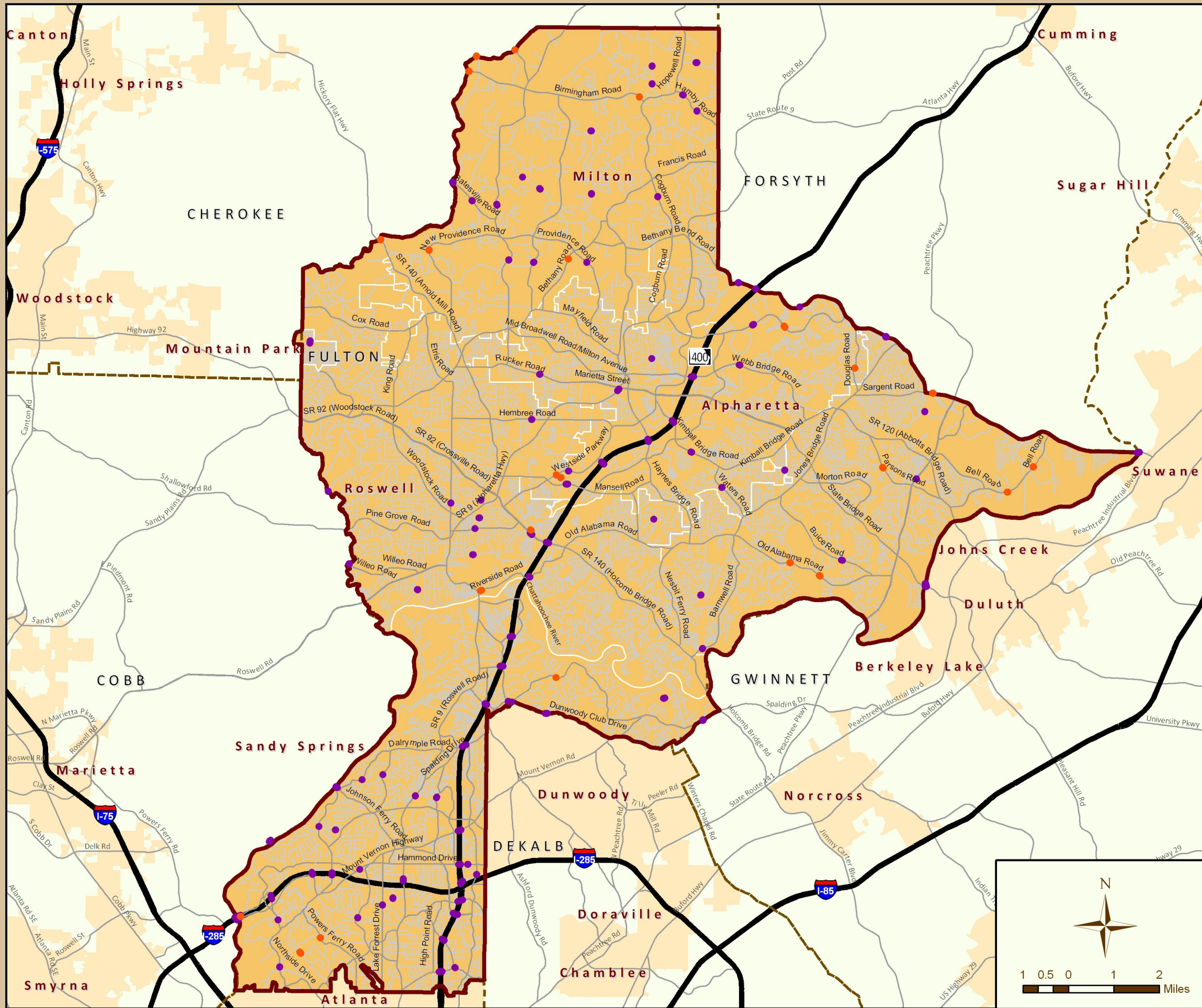
### 5.1.3 Bridge Inventory

Appendix E provides a table that shows a complete listing of bridges in North Fulton County as currently identified by GDOT<sup>32</sup>. The bridges inspected by GDOT are checked for sufficiency every two years as required by the Federal Highway Administration. These reviews produce a sufficiency rating<sup>33</sup> for each bridge inspected. The locations of these bridges are shown in Figure 5-4, which identifies locations by sufficiency rating. Table 5-1 summarizes the bridges in North Fulton County with bridge sufficiency ratings of below 50.0. Bridges with a sufficiency rating of 50.0 or below qualify for federal replacement funds. It should also be noted that bridges with a sufficiency rating of 80.0 or below qualify for federal rehabilitation funding.

<sup>32</sup> There may be other bridges in North Fulton County that are not large enough to warrant inspection by GDOT or are not covered in their inventory.

<sup>33</sup> Per FHWA's *Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges*, a bridge's sufficiency rating calculates four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service.






North Fulton County  
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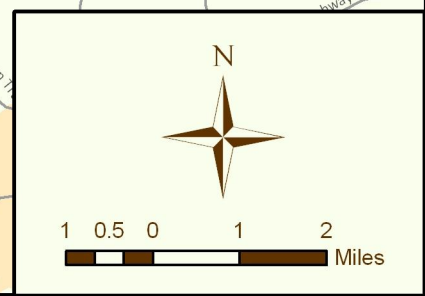


**Legend**

Bridge Sufficiency Rating	Local Roadways
Less than 50	Counties
50 and above	North Fulton Study Area
Expressways	Other Cities
Other Major Roads	

Source: Georgia Department of Transportation

**Figure 5-4**  
**Bridge Locations**







**Table 5-1: Bridge Inventory**

Bridge ID	Feature Type	Road Name	Feature	Year Const	Year Recon	2007 ADT	GDOT Suffic. R'ting
121-5015-0	Over Stream	New Providence Road	Cooper Sandy Creek	1962	--	003610	18.71
121-5019-0	Over Stream	Bell Road	Cauley Creek	1960	1989	006800	26.84
121-0304-0	Over Stream	Riverside Road	Big Creek	1958	--	012920	27.27
121-0281-0	Over Stream	Bethany Road	Cooper Sandy Creek	1951	--	003230	27.70
121-5022-0	Over Stream	Parsons Road	Johns Creek	1964	--	006800	29.57
121-5017-0	Over Stream	Douglas Road	Caney Creek	1955	1962	006800	29.60
121-0629-0	Over Stream	Windward Pkwy (EBL)	Big Creek	1986	--	032850	30.27
121-0630-0	Over Stream	Windward Pkwy (WBL)	Big Creek	1986	--	032850	30.27
121-5027-0	Over Stream	Rockmill Way	Foe Killer Creek	1964	--	000320	34.65
121-5003-0	Over Stream	Birmingham Road	Chicken Creek Trib.	1961	1994	006800	36.95
121-0291-0	Over Stream	Old Alabama Road	Johns Creek Trib.	1956	1962	017510	40.13
121-5176-0	Over Stream	Jett Road	Long Island Creek	1946	--	002460	40.54
121-5151-0	Over Stream	Birmingham Road	Little River	1968	--	006800	40.83
121-5133-0	Over Stream	Old Holcomb Bridge Rd	Big Creek	1941	--	001900	41.83
121-0305-0	Over Stream	Old Roswell Road	Foe Killer Creek	1951	--	006800	42.89
121-0292-0	Over Stream	Old Alabama Rd	Johns Creek	1956	--	017510	43.94
121-0451-0	Over Stream	Powers Ferry Road	Long Island Creek	1993	2004	005930	46.63
121-5106-0	Over Stream	New Bullpen Road	Little River	1939	--	008230	48.98
121-5030-0	Over Stream	Spalding Drive	Ball Mill Creek	1929	--	001900	49.76
121-5002-0	Over Stream	Clarity Road	Little River	1954	--	001900	27.78
057-0029-0	Over Stream	Arnold Mill Road	Little River	1952	--	014370	39.45
067-0109-0	Over Stream	I-285	Chattahoochee River	1962	1994	184080	40.99
121-0288-0	Over Stream	McGinnis Ferry Road	Johns Creek	1962	--	000500	39.00
121-5020-0	Over Stream	Bell Road	Chattahoochee River Tributary	1958	--	006800	47.57

Source: Georgia Department of Transportation

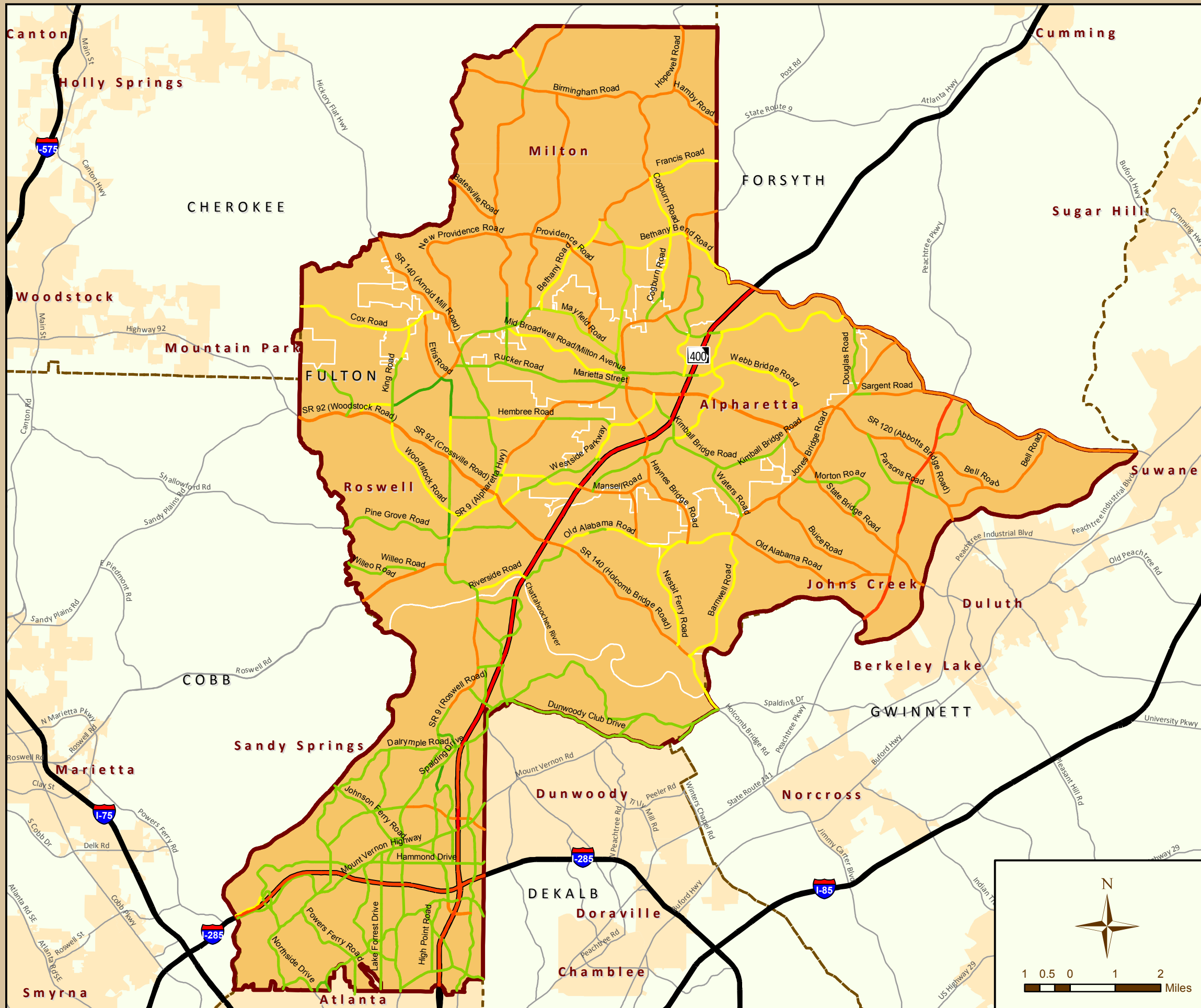
Note: *Year Const* = Year that bridge was constructed

Note: *Year Recon* = Year that bridge was reconstructed (if applicable)

GDOT periodically updates each county in Georgia on the status of the bridges in each respective county. These updates are published in the form of a letter addressed to the county commission, which informs the county of posting limits and any recommended repairs for each bridge. The most recently published letter is dated May 18, 2009, and is provided in Appendix E.

### 5.1.4 Posted Speed

Posted speed limits were collected along each of the roadways within the North Fulton CTP study network. Typical posted speed limits fluctuate in 5-mph increments between 25 mph and 45 mph. Exceptions include along Medlock Bridge Road/SR 141 (45/55 mph), I-285 (55 mph), and GA-400 (55/65 mph). A road's posted speed limit typically falls within a range, defined by its functional classification. Figure 5-5 illustrates the posted speed limits for roadways within the study network.



**North Fulton County  
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Implementation Program**

**ARC**  
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Kimley-Horn  
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**Reference Location**

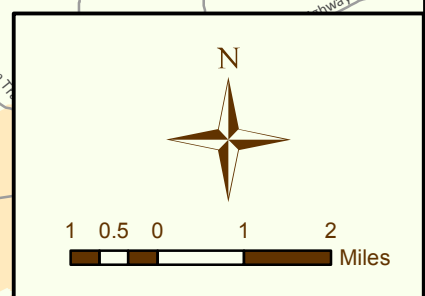
**ARC  
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Region**

**Legend**

Study Network	— Other Major Roads
Posted Speed Limits	— Expressways
25	North Fulton Study Area
30	Counties
35	Other Cities
35/45	
40	
40/45	
45	
55	
65	

Source: Kimley-Horn and Associates, Inc.

**Figure 5-5  
Posted Speeds**





## 5.1.5 Traffic Control Systems

There are approximately 405 signalized intersections<sup>34</sup> within the study area<sup>35</sup>. Signal density increases near city centers that include a principal arterial intersecting with another principal arterial or a minor arterial (such as Sandy Springs, Roswell, and Alpharetta). Traffic signals located along city/county roads are maintained by the local jurisdiction. Traffic signals located along a state route are typically owned by GDOT but maintained by the local jurisdiction. Most unsignalized intersections are controlled by a STOP sign on the side street or on all approaches; however, a few of these unsignalized intersections also provide traffic control via a signalized flashing beacon (yellow and/or red). There is a modern roundabout present at the Glenridge Drive/Mabry Road intersection. At a modern roundabout intersection, vehicles entering the intersection must yield to vehicles operating in the intersection. Figures 5-6A and 5-6B illustrate the locations of traffic signals, and roundabouts for the North Fulton County roadway network.

## 5.1.6 Medians

The majority of roads in North Fulton County are two-lane roads with no median. Other roads contain medians that consist of a center two-way left-turn lane, raised concrete, landscaping, or a striped median (pavement that is not intended for travel). Both I-285 and GA-400 have concrete medians separating the directional flow of traffic. Beyond freeways, medians are commonly used as a tool for access management to control left-turn movements. Medians can also be used as pedestrian refuges for pedestrians crossing multi-lane roads. Excluding the freeways, landscaped medians are the most common type of median used, followed by center two-way left-turn lanes. Figure 5-7 illustrates the median locations by type for the North Fulton CTP roadway network.

For the purpose of this report, driveways are considered to be any private street or drive that connects a building or private destination to a public roadway. In general, driveways include residential driveways, private streets, and entrances to commercial developments. Driveway connections directly impact roadway function because they create friction and slow the passing of vehicles through a system. Driveways can also be a safety concern for cyclists and pedestrians. Driveway densities along a roadway are subjective and should be considered during the implementation of this transportation plan.

<sup>34</sup> Fire Station signals are not typically considered when coordinating a signal system and operate on rest most of any given day; therefore, they are not included in the list of signals.

<sup>35</sup> This includes only the signals located along roadways considered in study network. Signals located along local roadways not considered as part of the study network were not inventoried.






**North Fulton County  
Transportation Resource  
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**Reference Location**

**ARC  
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Region**



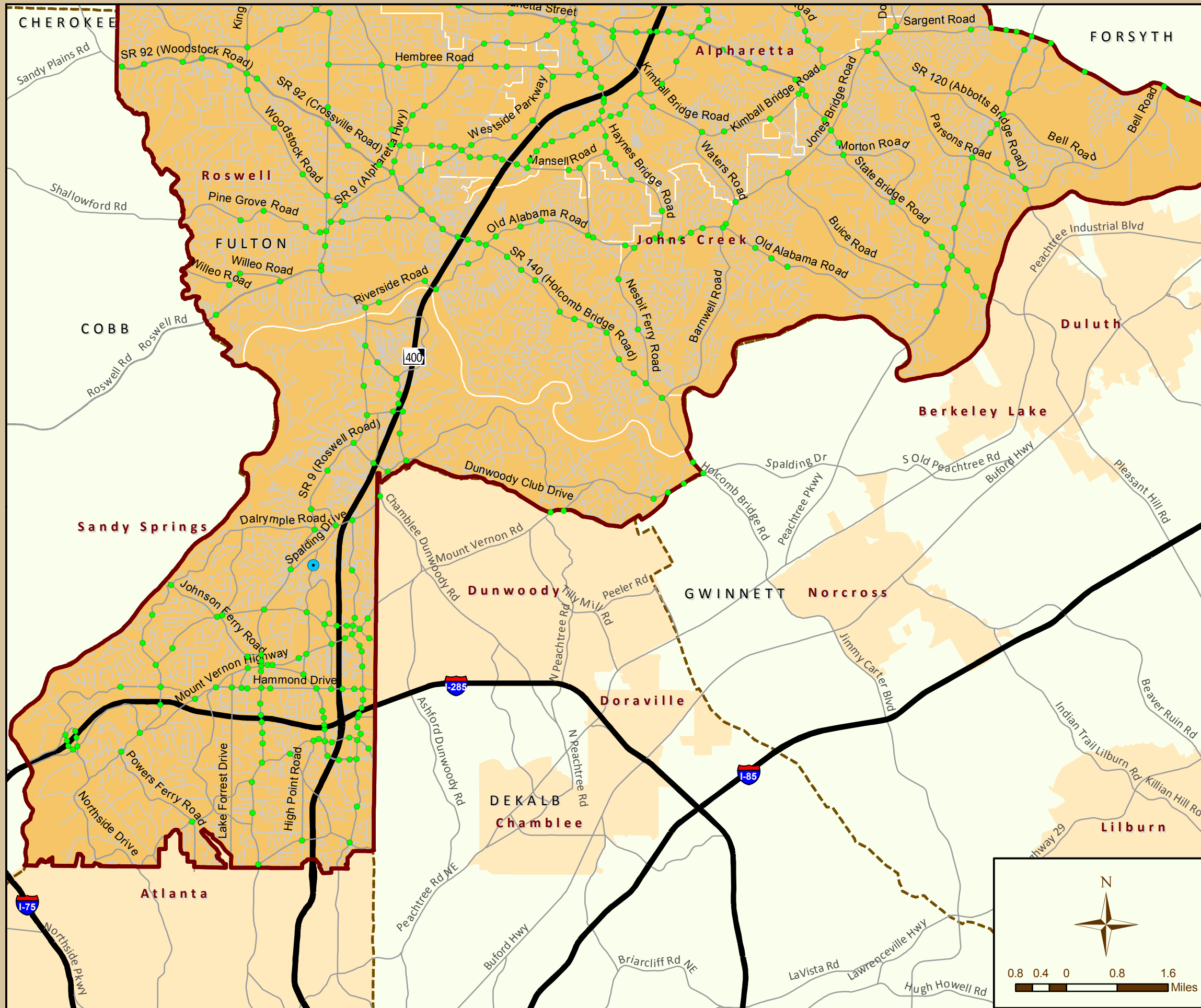
**Legend**

- Signals
- Roundabout
- Study Network
- Local Roadways
- Other Major Roads
- Expressways
- North Fulton Study Area
- Counties
- Other Cities

Source: Kimley-Horn and Associates, Inc.

**Figure 5-6A  
Traffic Control Systems**






**North Fulton County  
Transportation Resource  
Implementation Program**




**Reference Location**

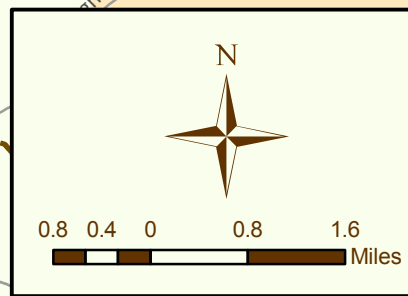
**ARC  
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Region**



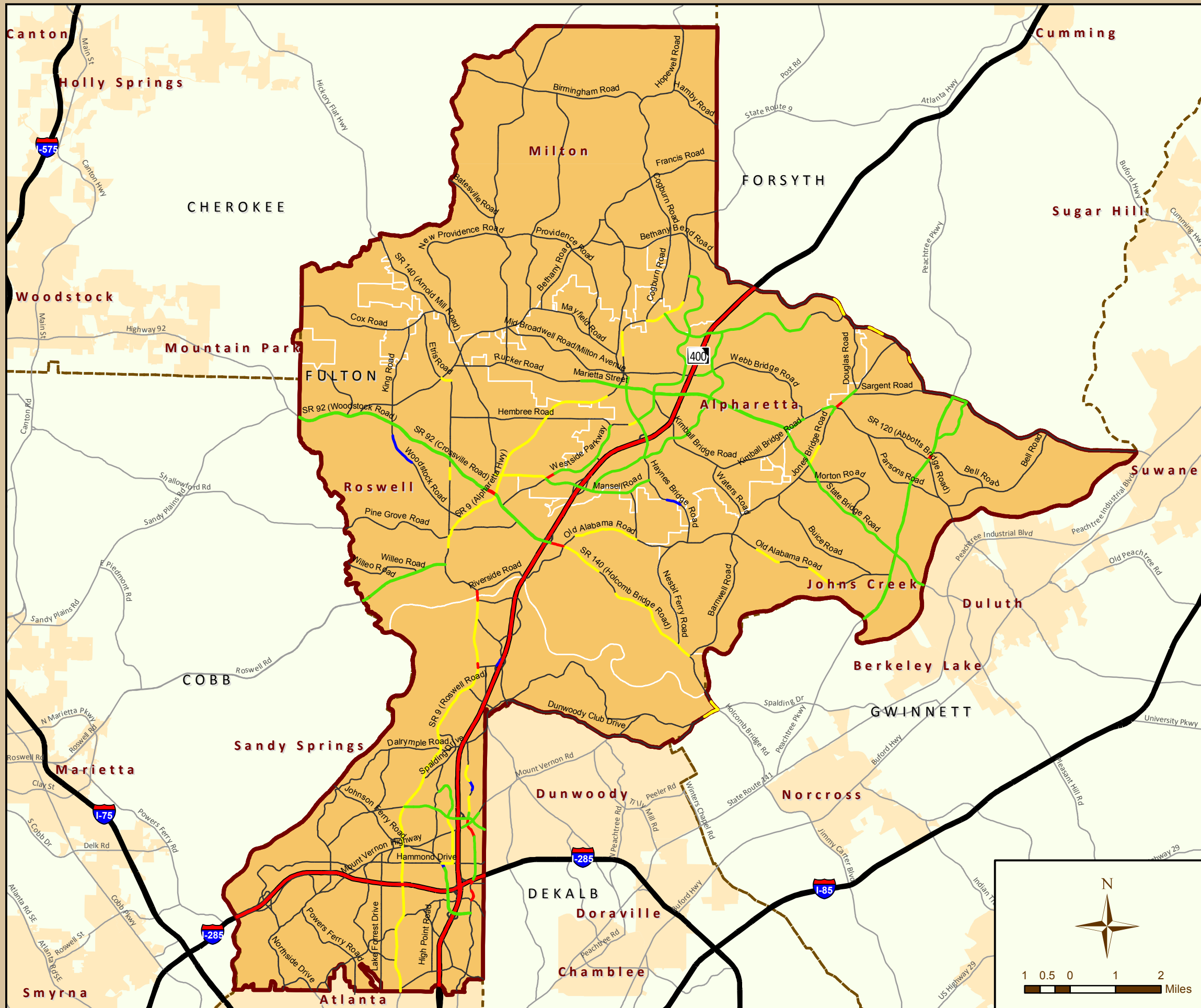
**Legend**

- Signals
- Roundabout
- Study Network
- Local Roadways
- Other Major Roads
- Expressways
- North Fulton Study Area
- Counties
- Other Cities

Source: Kimley-Horn and Associates, Inc.



**Figure 5-6B  
Traffic Control Systems**



**North Fulton County  
Transportation Resource  
Implementation Program**

**ARC**  
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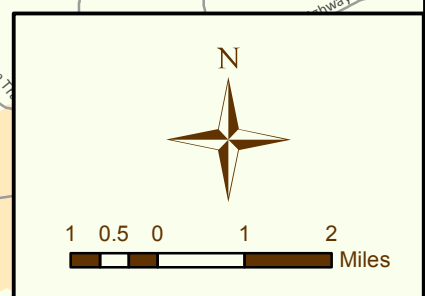
**Reference Location**

**ARC  
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Region**

**Legend**

<p>Median Type</p> <ul style="list-style-type: none"> <li><span style="color: green;">—</span> Landscaped</li> <li><span style="color: red;">—</span> Raised Concrete</li> <li><span style="color: yellow;">—</span> Two-Way Left-Turn Lane</li> <li><span style="color: blue;">—</span> Striped</li> <li><span style="color: black;">—</span> None</li> </ul>	<ul style="list-style-type: none"> <li><span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span> Other Major Roads</li> <li><span style="border-bottom: 3px solid black; width: 20px; display: inline-block;"></span> Expressways</li> <li><span style="border: 2px solid orange; width: 20px; height: 10px; display: inline-block;"></span> North Fulton Study Area</li> <li><span style="border: 1px dashed orange; width: 20px; height: 10px; display: inline-block;"></span> Counties</li> <li><span style="background-color: #f4a460; width: 20px; height: 10px; display: inline-block;"></span> Other Cities</li> </ul>
--	---

Source: Kimley-Horn and Associates, Inc.



**Figure 5-7  
Medians**





## 5.2 Roadway Operations

### 5.2.1 Roadway Volumes

Average annual daily traffic (AADT) volumes for 2008 were obtained from the Georgia Department of Transportation. Figures 5-8A and 5-8B illustrate the 2008 AADT on major roadways within the study network.

### 5.2.2 Travel Patterns and Trip Characteristics

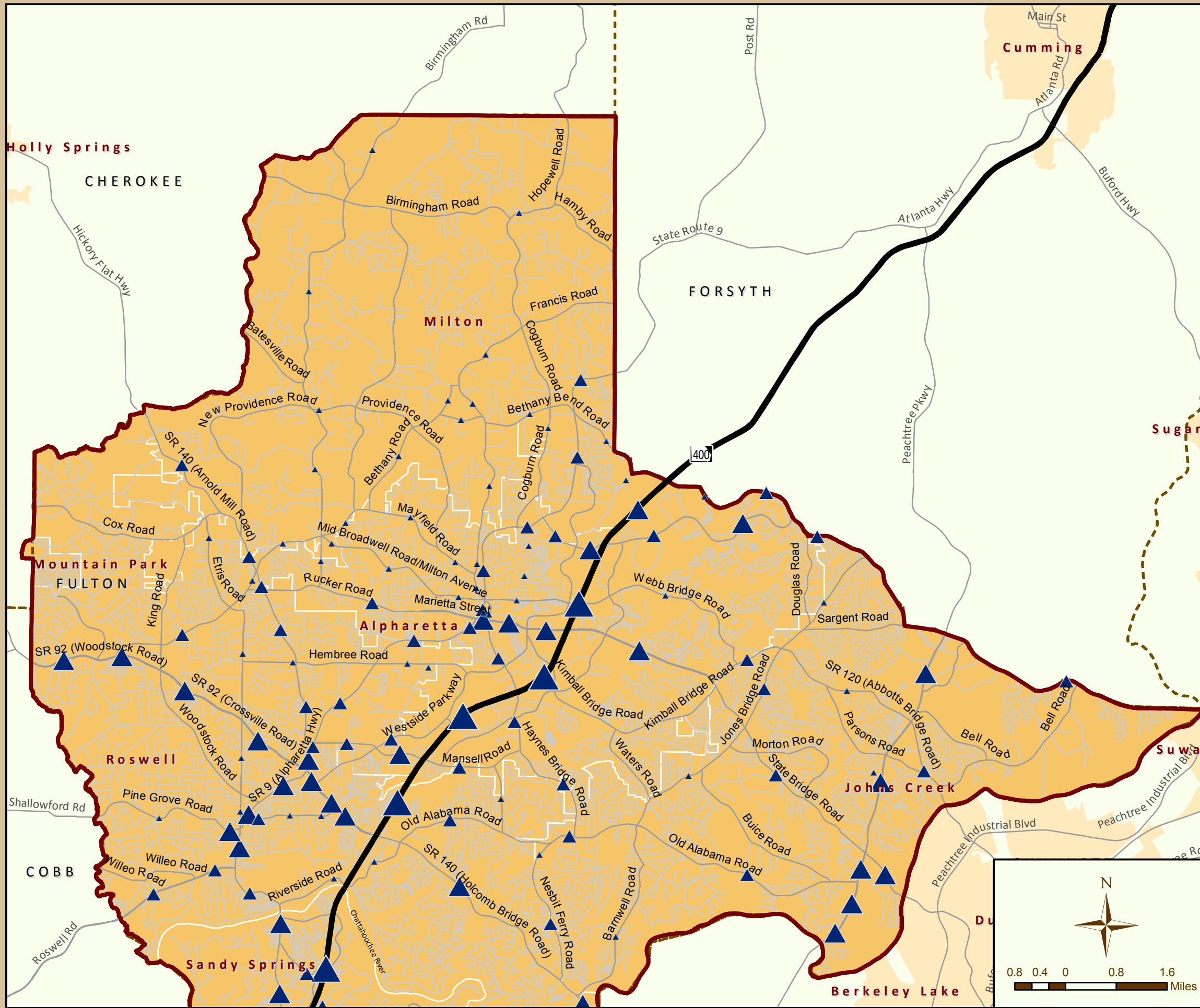
The US Census Bureau, in conjunction with the Local Employment Dynamics (LED) partnership of various states, have developed an online interactive mapping program to display relationships between the home and employment locations of workers. Two types of analyses were conducted for the North Fulton area: Labor shed analysis and commute shed analysis.

The labor shed analysis projects travel patterns for commuters who work in North Fulton County; the commute shed analysis projects travel patterns for commuters who live in North Fulton County. Additionally, the labor shed and commute shed analyses were also performed for the six municipalities located within North Fulton County: Alpharetta, Johns Creek, Milton, Mountain Park, Roswell, and Sandy Springs. Zip code boundaries were used to approximate city boundaries since three of the cities did not exist in 2000.

#### Labor Shed Analysis<sup>36</sup>

Labor shed estimates for those working within North Fulton County indicate that the area draws residents from all over the Atlanta MSA, although few people commute much further than south of Hartsfield-Jackson Atlanta International Airport and north of north Forsyth County. The Cities of Alpharetta, Milton, Mountain Park, and Roswell's labor shed estimates mimic those of all of North Fulton County. John's Creek workers tend to originate closer to Johns Creek and along the I-85 corridor. Sandy Springs workers tend to be concentrated closer to the City of Sandy Springs and further south than North Fulton County as a whole.

<sup>36</sup> The home locations of workers working in a given location.



**North Fulton County  
Transportation Resource  
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**Reference Location**

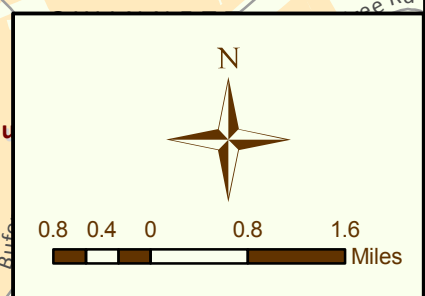
**ARC  
20-County  
Region**

**Legend**

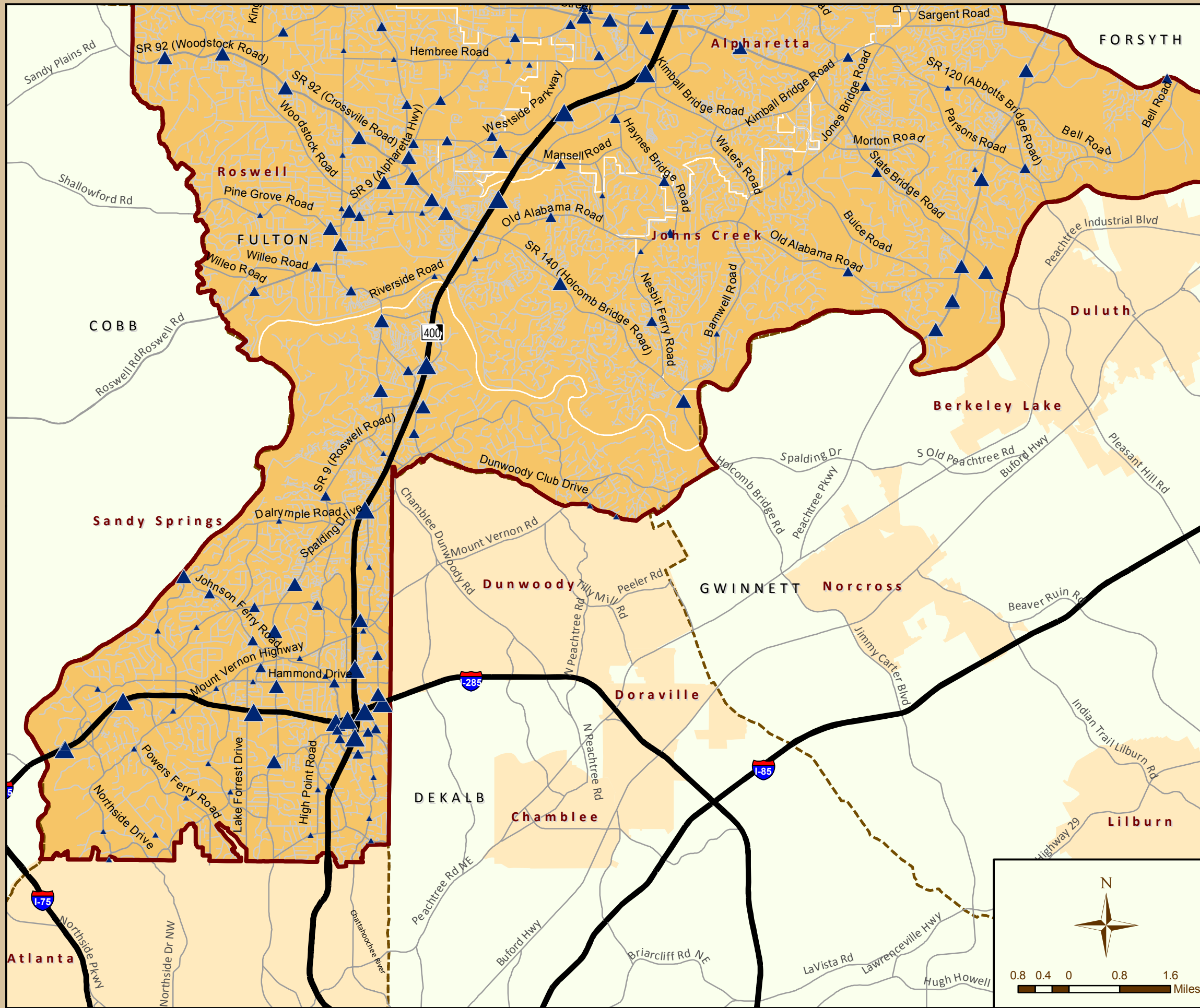
Roadway Volumes (VPD)	Study Network
▲ 100 - 15,000	Local Roads
▲ 15,001 - 30,000	Other Major Roads
▲ 30,001 - 75,000	Expressways
▲ > 75,000	North Fulton Study Area
VPD= Vehicles Per Day	Counties
	Other Cities

Source: Georgia Department of Transportation

**Figure 5-8A  
Annual Average Daily Traffic**








**North Fulton County  
Transportation Resource  
Implementation Program**




**Reference Location**

**ARC  
20-County  
Region**

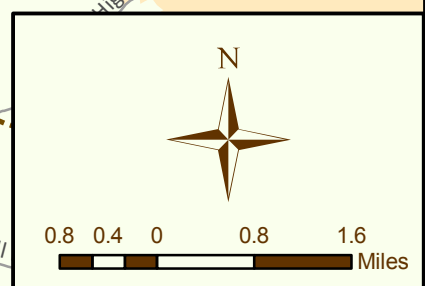


**Legend**

<ul style="list-style-type: none"> <li>▲ 100 - 15,000</li> <li>▲ 15,001 - 30,000</li> <li>▲ 30,001 - 75,000</li> <li>▲ &gt; 75,000</li> </ul> <p>VPD= Vehicles Per Day</p>	<ul style="list-style-type: none"> <li>— Study Network</li> <li>— Local Roads</li> <li>— Other Major Roads</li> <li>— Expressways</li> <li>■ North Fulton Study Area</li> <li>■ Counties</li> <li>■ Other Cities</li> </ul>
--	---

Source: Georgia Department of Transportation

**Figure 5-8B  
Annual Average Daily Traffic**





## Commute Shed analysis<sup>37</sup>

Commute shed estimates for those living in North Fulton County indicate that the majority of North Fulton County residents work in one of the following employment centers:

- Alpharetta/Roswell
- Buckhead
- Cumberland area
- Downtown/Midtown Atlanta
- Perimeter Center

The employment centers of Buckhead, Downtown/Midtown Atlanta, and Perimeter Center attract the largest employment of North Fulton County residents.

Commute patterns for residents of each individual city within North Fulton County mimic the overall North Fulton County commute shed patterns. Sandy Springs does have a noticeably larger percentage of residents working in the Buckhead, Downtown/Midtown Atlanta, and Perimeter Center areas, with less residents commuting to Roswell and Alpharetta.

Illustrations of commute patterns for all of North Fulton County and for each municipality within the study area are provided in Appendix F.

### 5.2.3 Roadway Level-of-Service

The Highway Capacity Manual states that Level-of-Service (LOS) is a measure of operating conditions experienced by motorists. The LOS is an indication of delay and is measured on a grading scale from “A” to “F” – “A” represents the best conditions and “F” represents the worst conditions. LOS A typically occurs on roadways with free-flowing conditions and little delay, while LOS F typically occurs on roadways with high congestion and heavy delay (approaching gridlock). LOS D is generally considered acceptable because the roadway is busy, yet traffic is still flowing at a reasonable speed. LOS E is typically when a roadway is operating at capacity.

The Atlanta Regional Commission’s 2010 travel demand model was used to determine the baseline condition of roadway operation throughout North Fulton County. The initial model run serves as a basis for comparison for all model runs that will occur in the Needs Assessment portion of the project. The model was first compared with roadway inventory data that was collected in the field to ensure the accuracy of North Fulton study area roadways within the model. A number of edits were made to the model based on this comparison to the field inventory including the following:

- Revision of the location of roadway endpoints
  - Edits were made to Bethany Road, Providence Road, and Mayfield Road in Milton
- Addition of roadways within North Fulton that are relevant to the subarea analysis

<sup>37</sup> The work locations of workers living in a given location.



- The majority of roadways added are roadways in existence today
- The final portion of Westside Parkway (which is not built currently) was added to the model as it is considered to be a committed project with funding and will be constructed in the next few years pending market improvement
- Splitting of three TAZ's based on area-weighted analysis
  - TAZs 232 (232 and 1572), 235 (235 and 1630), and 281 (281 and 1570)
- Editing of characteristics on a number of roadways
- Laneage changes
- Speed limits
- Facility Type / Functional Classification

The first three groups of edits, as well as laneage changes, were completed prior to the first model run. The daily volume outputs from the model were then compared with the 2008 AADTs from the GDOT count stations in order to calibrate the model. Additional edits were made to the facility types and speed limits on a number of the roadways, and the model was run again. This iterative process was conducted a number of times resulting in the 2010 Existing + Committed model. Where considerable differences still existed between the model volumes and the 2008 AADTs, post-model analysis changes were made to the roadway links to more closely reflect current conditions. These edits will be applied to all other model runs throughout the process to establish consistency between analyses.

Figure 5-9 shows the existing daily LOS along the roadways within the study network in North Fulton. Roadways that are considered to be operating at a poor LOS (LOS E or LOS F) are shown in orange or red, respectively. It is important to note that the LOS depicted on this map represent volume to capacity ratio along a link only. If the daily volume on the roadway exceeds the capacity ( $V/C > 1.0$ ), the link is considered to be an LOS F. While also a contributing factor to congestion levels, delay associated with poorly operating intersections is not represented in this analysis. It is possible, therefore, for a road or corridor to operate at a lower LOS than shown in the map if the intersections along the corridor do not work efficiently.

The segments of I-285 and GA-400 that are within North Fulton County operate at LOS F. Other roadways have poor daily LOS within North Fulton as well, including the following:

- SR 140 from the northern Fulton County line to Mansell Road (Milton and Roswell)
- Hardscrabble Road/Crabapple Road from SR 92 to Birmingham Highway (Roswell and Milton)
- SR 9 from the northern Fulton County line to Academy Street (Milton and Alpharetta)
- Windward Parkway from SR 9 to Windward Concourse (Alpharetta)
- McGinnis Ferry Road from Morris Road to the eastern Fulton County line (Milton, Alpharetta, and Johns Creek)
- Rucker Road from Arnold Mill Road to SR 9 (Alpharetta)
- SR 120 from GA-400 to Jones Bridge Road (Alpharetta and Johns Creek)









- Hembree Road from Crabapple Road to Westside Parkway (Roswell)
- Kimball Bridge Road/Waters Road from North Point Parkway to Jones Bridge Road (Alpharetta)
- Jones Bridge Road from Sargent Road to SR 140 (Johns Creek)
- Mansell Road from SR 9 to GA-400 (Roswell and Alpharetta)
- SR 140 from GA-400 to the southern Fulton County line (Roswell)
- Old Alabama Road from SR 140 to Haynes Bridge Road (Roswell and Johns Creek)
- SR 141 from the northern Fulton County line to the southern Fulton County line (Johns Creek)
- Dunwoody Club Drive from Roberts Drive to Mount Vernon Road (Sandy Springs)
- SR 9 from Glenridge Drive to Johnson Ferry Road (Sandy Springs)

A number of the poorly operating roadways are north-south facilities; however, even more are east-west facilities. Many of the north-south facilities have regional connectivity, linking North Fulton to other surrounding counties like Cherokee, Forsyth, and Gwinnett. Fewer regional facilities exist in the east-west direction, which results in more overburdened roadways crossing North Fulton in that direction. The stress placed on the east-west facilities may also be attributed to the lack of roadways crossing the Chattahoochee River between Sandy Springs and the remainder of North Fulton County. This lack of north-south connectivity in this specific area funnels traffic onto GA-400, dispersing outbound travel to the connecting east-west facilities throughout North Fulton.

## 5.3 Bicycle Operations

### 5.3.1 Existing On-Road Bicycle Infrastructure

For the Cities and their residents to understand the progress of this plan as it is implemented, it is important to have a clear understanding of the conditions for bicycling as they existed at the time the plan was developed. Any attempt to describe such conditions needs to be done in a manner that allows for continual monitoring, so that improvements recommended by the plan can be observed as they take effect. Subsequently, measurable progress towards the plan's objectives can be reported to elected officials and taxpayers alike. This section of the plan reports on conditions for bicycling observed on the study network segments in October 2009.

The bicycle study network consists of 319 centerline miles of roadways, comprised of arterial and collector roadways. The study network roadways do not typically feature shoulders or bike lanes which represent separate space in the roadway cross section which bicyclists can claim as their own operating space; only 8.5 miles of the study network feature designated bike lanes compliant with the minimum recommendations of the AASHTO *Guide for the Development of Bicycle Facilities*<sup>38</sup> on both sides of the road, while another 5.0 miles of roadway feature paved shoulders three feet

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<sup>38</sup> Designated bike lanes adjacent to curbs should have a minimum of 5 feet clear to the face of curb from the bike lane stripe, maintaining a minimum three feet of rideable surface (i.e. not the gutter pan), bike lanes in open-shouldered cross section should be at least 4four feet wide.



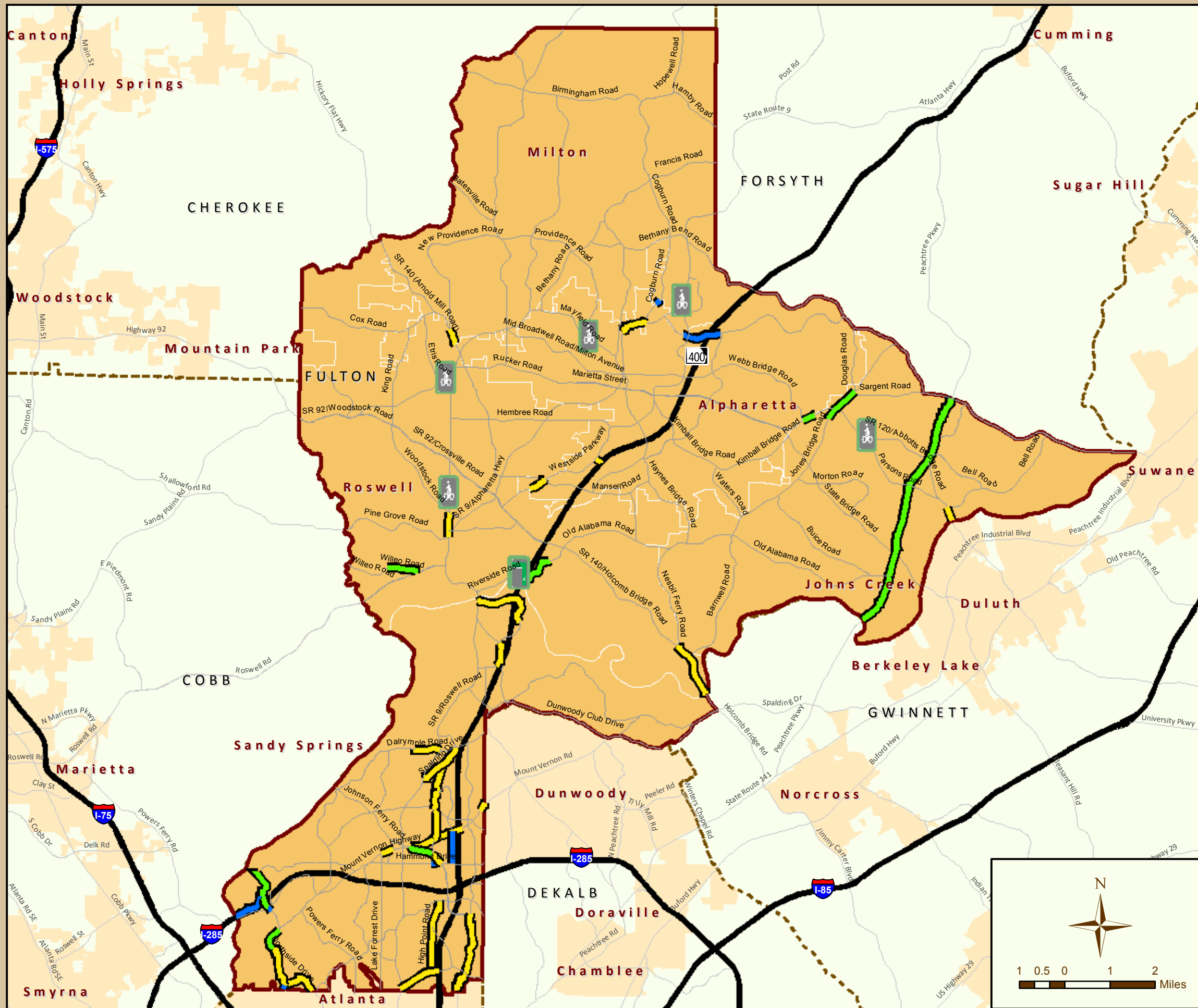
wide or greater. There are five other instances of designated bike lanes at specific intersections, but these do not represent the typical condition for the study network consideration. These bike lanes and shoulders are listed in Tables 5-2 through 5-4. There are approximately 16.7 miles of roadway with outside lanes wider than 13 feet; on the remaining miles of network with no shoulder or bike lane, the average width of between the edge of pavement and the stripe demarcating the outside lane is 11.6 feet, which is significantly less than the 14 feet recommended in the AASHTO *Guide for the Development of Bicycle Facilities* for a shared wide curb lane. In addition to these facilities, some experimental facilities have been installed in Roswell: a “bike box” on Riverside Road’s westbound approach to its intersection with Dogwood Road; and Shared Lane Markings on the westbound departure from the same intersection. Existing bicycle facilities are mapped in Figure 5-10.

**Table 5-2: Roadway Segments with Designated Bike Lanes**

City	Roadway	From	To	Length
Alpharetta	Windward Parkway West	Shopping Center Driveway West of GA-400	North Point Parkway	0.84 miles
Johns Creek	Jones Bridge Road	Weather Vane Drive	Douglas Road	0.85 miles
Johns Creek	Medlock Bridge Road	Chattahoochee River	Old Alabama Road	1.17 miles
Johns Creek	Medlock Bridge Road	Old Alabama Road	State Bridge Road	0.47 miles
Johns Creek	Medlock Bridge Road	State Bridge Road	McGinnis Ferry Road	3.74 miles
Roswell	Old Alabama Road	Riverside Road	Market Boulevard	0.72 miles
Roswell	Willeo Road	Coleman Road	Marietta Highway	0.68 miles

Source: Sprinkle Consulting

Note: Compliant with minimum recommended dimensions per AASHTO



**North Fulton County  
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Implementation Program**

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**Kimley-Horn  
and Associates, Inc.**

**Reference Location**

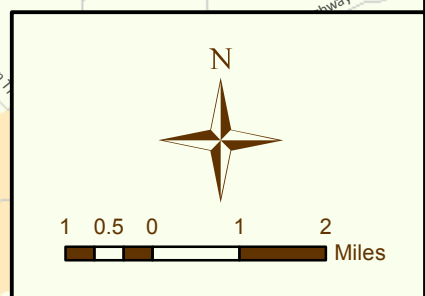
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Region**

**Legend**

Other Facilities (points)	Counties
Type	Other Cities
Bike Lane at Intersection	
"Bike Box"	
Shared Lane Markings	
Bike Facilities (segments)	
Study Network	
Marked Bike Lane > 3 ft	
Shoulder > 3 ft	
Outside Lane >13 ft	
Other Major Roads	
Expressways	
North Fulton Study Area	

Source: Sprinkle Consulting

**Figure 5-10  
Bicycle Facilities**





**Table 5-3: Roadway Segments with Paved Shoulders**

City	Roadway	From	To	Length
Alpharetta	Kimball Bridge Road	Bridgeway Christian Academy	Jones Bridge	0.30 miles
Roswell	Riverside Road	Dogwood Road	Old Alabama Road	0.23 miles
Sandy Springs	Barfield Road	Hammond Drive	Mt. Vernon Highway	0.71 miles
Sandy Springs	Garmon Road	Northside Drive	City Limit	0.08 miles
Sandy Springs	Hammond Drive	Lorell Terrace	Greenbrier Drive	0.13 miles
Sandy Springs	Interstate North Parkway	City Limit	Northside Drive	0.76 miles
Sandy Springs	Northside Dr NW	Mt. Paran Rd	Garmon Rd	0.79 miles
Sandy Springs	Northside Dr NW	Garmon Rd	Indian Trail NW	0.89 miles
Sandy Springs	Northside Dr NW	Indian Trail NW	S Mount Vernon Hwy	0.54 miles
Sandy Springs	Northside Dr NW	S Mount Vernon Hwy	New Northside Dr NW	0.47 miles
Sandy Springs	Northside Dr NW	New Northside Dr NW	Powers Ferry Rd NW	0.10 miles

Source: Sprinkle Consulting

Note: Paved shoulders of 3 feet wide or greater

**Table 5-4: Designated Bike Lanes at Intersections**

City	Roadway	At Intersection With	Direction
Alpharetta	Mayfield Road	Providence Road	Both
Johns Creek	Abbotts Bridge Road	Parsons Road	Both
Milton	GA SR 9	Webb Road	Southbound
Roswell	Crabapple Road	Dogwood Road	Southbound
Roswell	Hardscrabble Road	Hammond Drive	Northbound

Source: Sprinkle Consulting

Alongside those roadways without sidewalks or shoulders, it is not uncommon for the roadsides to fall quickly into ditches, no recovery space or room to pull off the roadway for those who choose to ride a bike in the narrow roadway. Taken all together, these characteristics describe an environment which can be very stressful for those who attempt to ride a bicycle along North Fulton County’s roadways, limiting the viability of this mode to be experienced as a real transportation option in the area.





**5.3.2 Bicycle Level-of-Service**

The method of evaluation is a statistical tool that assigns “grades” to roadway segments, using a pseudo-academic scale (A-F), based on how well each of those roadway segments accommodate the needs of bicyclists. This method, the Bicycle Level-of-Service model, has been used by counties and cities across the nation as well as regional, state and federal agencies, to evaluate in excess of 200,000 miles of roadway. This method has recently been adopted by the national Highway Capacity and Quality of Service Committee as its official measures of pedestrian and bicycle accommodation in the upcoming edition of the *Highway Capacity Manual*. This method was the same method used by the Atlanta Regional Commission in its 2007 *Bicycle Transportation and Pedestrian Walkways Plan*, which includes results of this method in its prioritization of member agency requests for funding assistance.

The Bicycle Level-of-Service model is described in detail in Appendix G of this plan. This section of the plan discusses its results for the study network as well as the general conditions that contributed to those results. The findings of the section of the plan are descriptive; they make no attempt to determine an appropriate level of accommodation or facility treatments on a given roadway. These issues will be addressed in later phases of the plan. The stratification of Bicycle Level-of-Service scores into letter grades is shown in Table 5-5.

Various types of data were used for input into the models. Data included roadway geometric characteristics, such as widths of lanes, roadways, gutters, buffers and sidewalks, as well as observed roadway characteristics including lane counts, configuration (undivided, divided, or use of a two-way left turn lane) posted speed limit, roadside profile, pavement condition, and cross-section type (curbed or open shoulder). Traffic volume and heavy vehicle percentage data were also included.

The study network totaled approximately 319 centerline miles. The average mile of North Fulton County roadway has a Bicycle Level-of-Service score of 3.94, equal to a grade of “D”.

**Table 5-5: Bicycle Level-of-Service Score Stratification**

Level-of-Service (LOS)	LOS Score
A	< 1.50
B	1.51—2.50
C	2.51—3.50
D	3.51—4.50
E	4.51—5.50
F	> 5.50

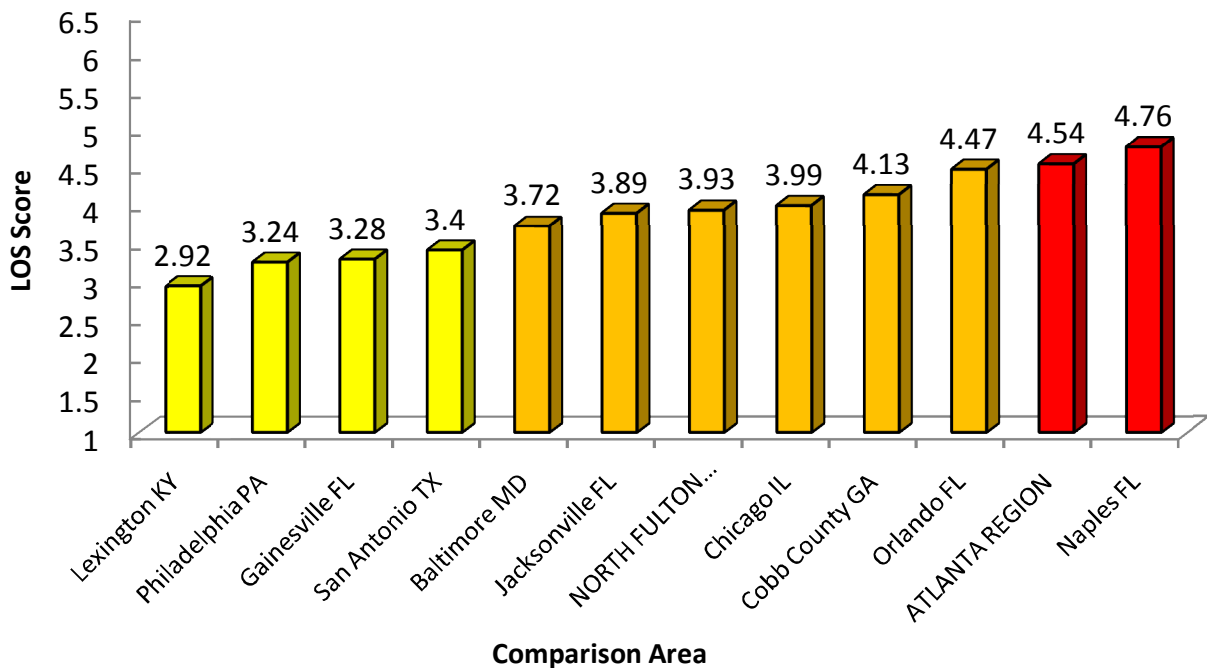
While every community has different expectations regarding accommodations for bicycling as a general observation the results of the analysis describe a challenging situation for bicycling along a



typical North Fulton County road. The results are not unusual for urbanized areas in the United States, however. Evaluations of roadway networks have been performed in metropolitan areas around the country, many yielding similar results. The full data and results of all the segments of the study network are provided in Appendix G.

A sample of the results for bicycling conditions, including the results for North Fulton County, is shown in Figure 5-11. Communities whose networks earned a Bicycle Level-of-Service grade of “C” include Lexington, KY (1999), Philadelphia PA (1996), Gainesville FL (2000), and San Antonio, TX (2000). Communities whose networks scored a grade of “D,” include Baltimore, MD (1998), Jacksonville, FL (2004), Chicago, IL (2001), and Orlando FL, (2001). The study network for the entire Atlanta region (comprised of roadways from the Atlanta Regional Commission’s Regionally Strategic Transportation System) scored a grade of “E” in 2006, as did the roadways of Collier County, FL (Naples metropolitan area) in 2004.

**Figure 5-11: Distance Weighted Averages for Areawide Bicycle Level-of-Service**

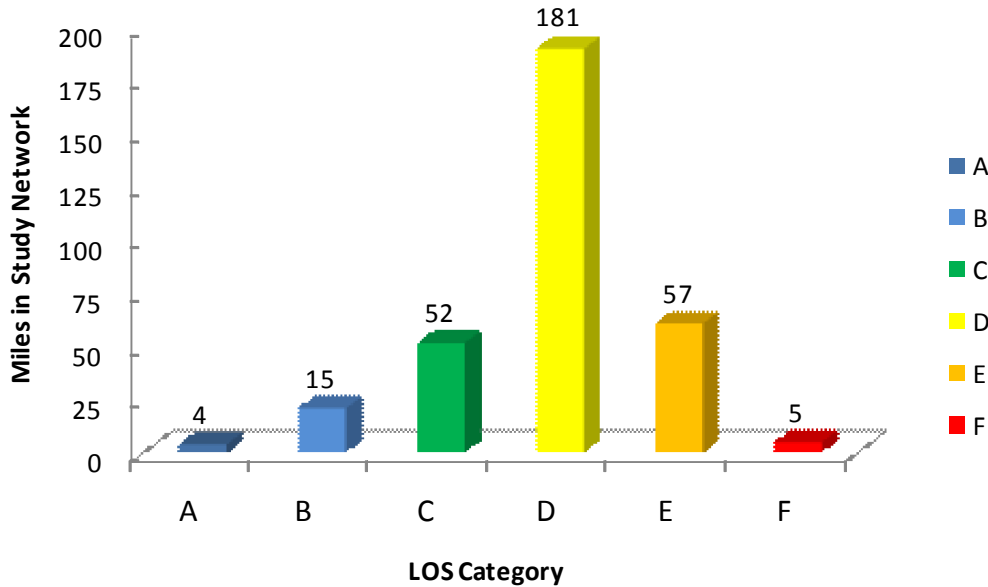


Source: Sprinkle Consulting archives

As might be inferred from the distance weighted averages reported in the previous tables, the distribution of mileage also reflects challenging conditions bicycling, with “D” being the grade for the greatest number of bicycle miles. The distribution of mileage for bicycling is shown in Figure 5-12.

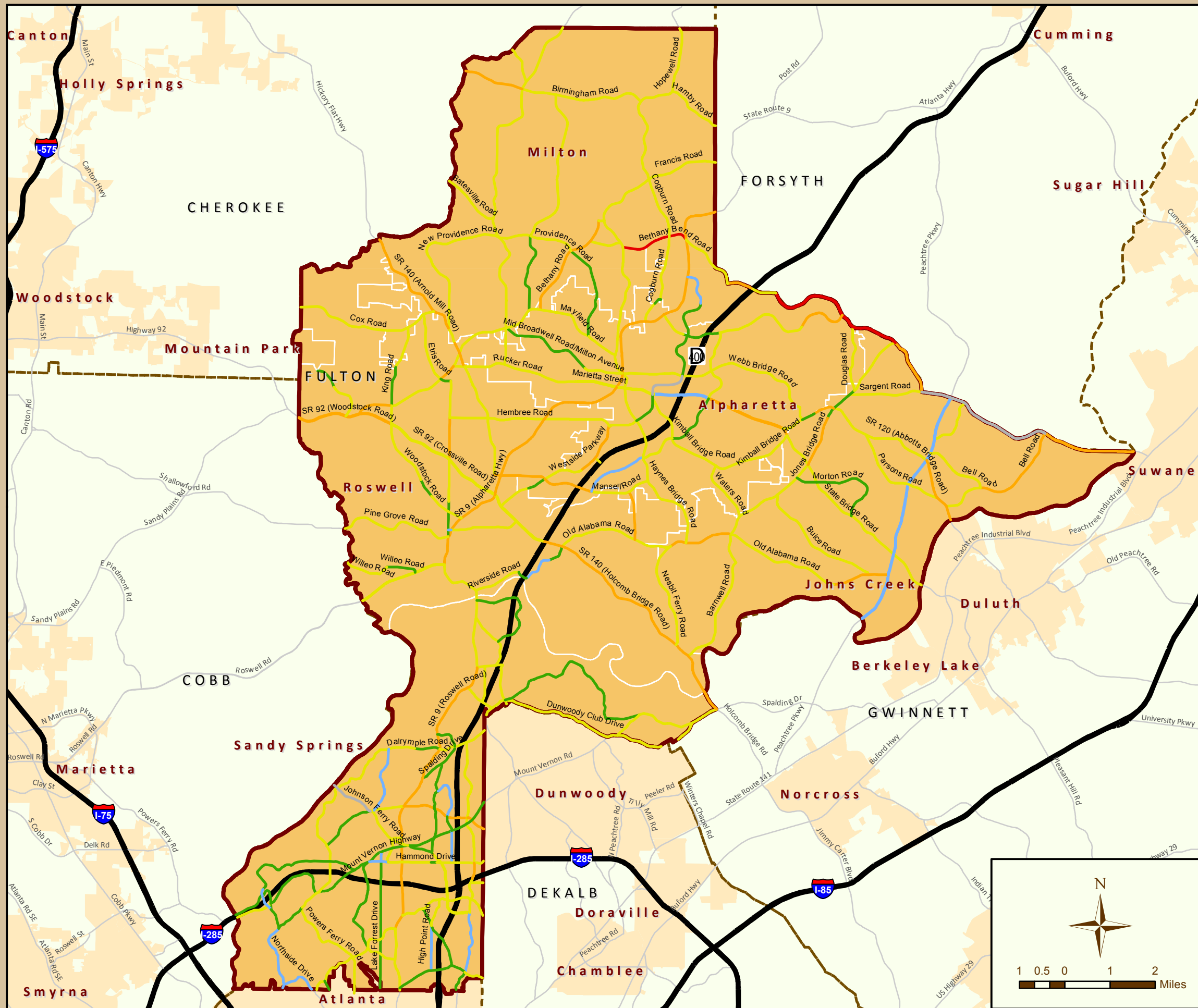


Figure 5-12: Distribution of Study Network Miles by Bicycle Level-of-Service







Several general observations may be made about factors that contribute to the challenging character of bicycling conditions along North Fulton County’s roadways. It is important to note, however, that the Bicycle Level of Service model considers a complicated interplay of contributing factors as they model a bicyclist’s perception of comfort and safety on a given roadway. No one factor is likely responsible for a segment’s result, and later phases of the North Fulton CTP will make recommendations about how to counteract the existing conditions to improve accommodation where needed. Certain factors can be identified as contributing to the overall environment to provide some context beyond the numbers. Traffic volumes on arterial and collector roadways are very high in many locations. Of the 319 centerline miles surveyed, 201 reported volumes in excess of 10,000 vehicles per day, a volume that can be translated into an experience for a bicyclist of being passed by a car approximately every seven seconds during the peak hour.

Figure 5-13 shows the existing bicycle Levels-of-Service along the roadways within the study network in North Fulton. Roadways that are considered to be operating at a poor LOS (LOS E or LOS F) are shown in orange or red, respectively.




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**Reference Location**  


**Legend**  
 Bicycle Level-of-Service  
 — A/B (blue)  
 — C (green)  
 — D (yellow)  
 — E (orange)  
 — F (red)  
 — Under Construction (grey)  
 — Other Major Roads (light grey)  
 — Expressways (black)  
 North Fulton Study Area  
 Counties  
 Other Cities  
 Source: Sprinkle Consulting

**Figure 5-13**  
**Bicycle Level-of-Service**





## 5.4 Pedestrian Operations

### 5.4.1 Existing On-Road Pedestrian Infrastructure

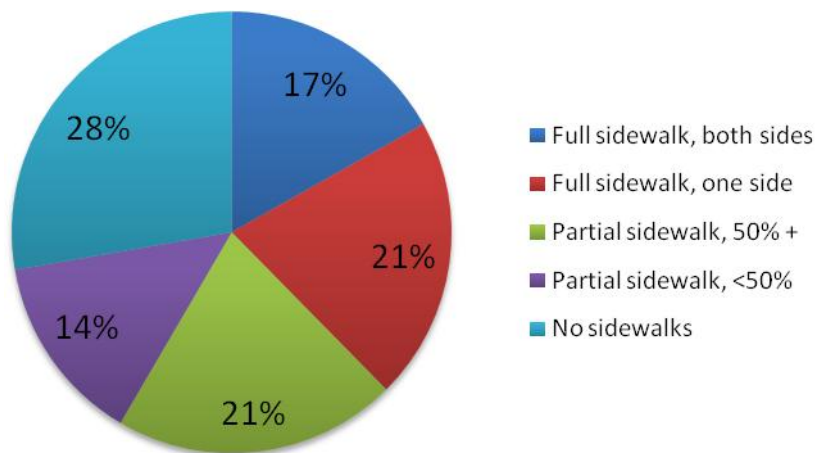
Much like the previous section, this section of the plan reports on conditions for walking observed on the study network segments in October 2009.

The pedestrian study network consists of 319 centerline miles of roadways, comprised of arterial and collector roadways.

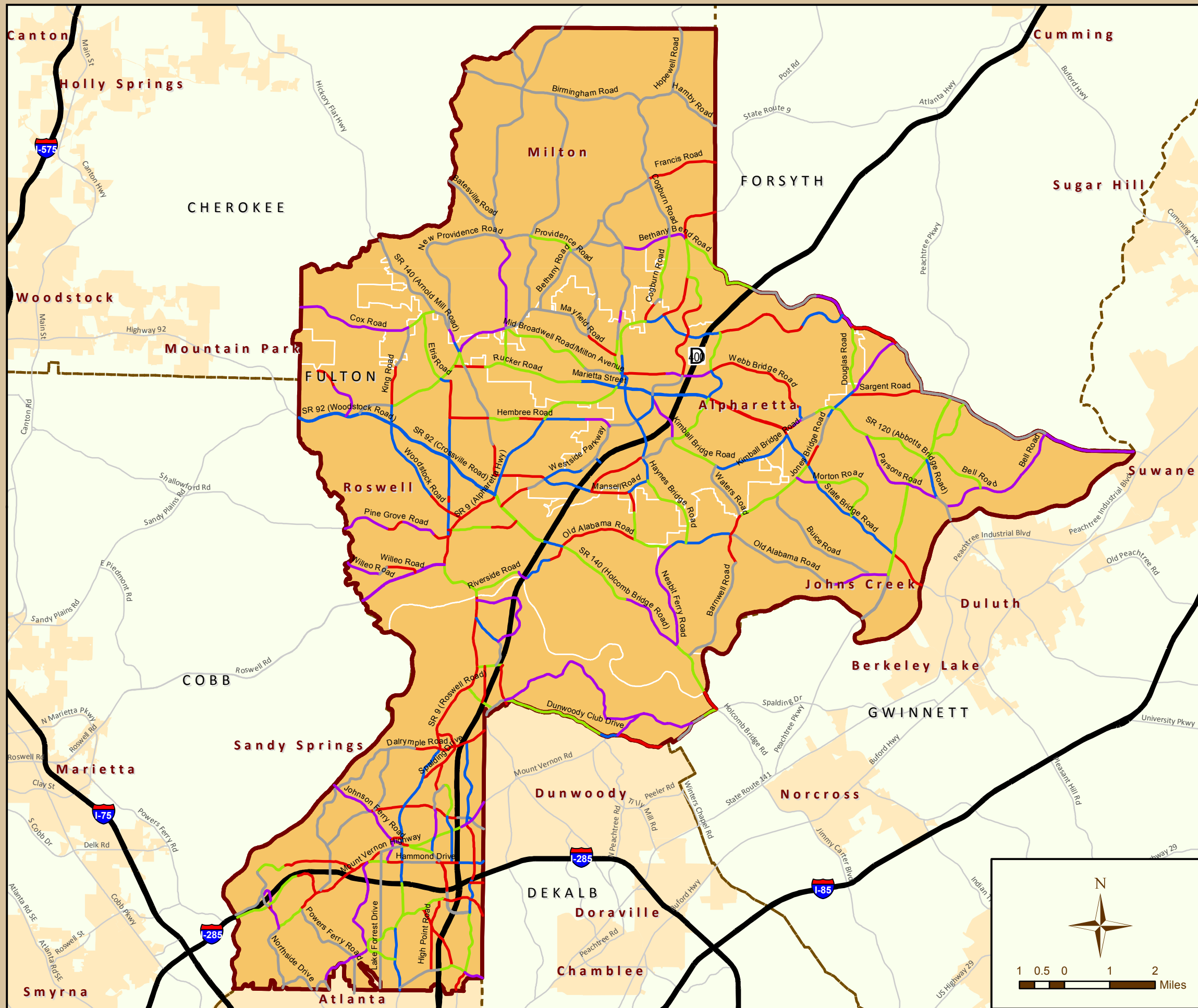
Seventeen percent of the network miles surveyed have full sidewalk coverage along both sides of the roadway, while 21 percent have complete coverage on one side. Twenty-one percent of the network miles have partial coverage of 50 percent or greater, while 14 percent of miles have partial coverage of less than 50 percent. Twenty-eight percent of the roadways surveyed essentially have no sidewalks at all. Of all the sidewalks surveyed the average buffer separating sidewalks from the roadway is 2.2 feet wide, leaving pedestrians to walk very close to busy arterial and collector roads.

The pedestrian facilities are mapped in Figure 5-15 and the distribution of these facilities is shown in Figure 5-14.

Figure 5-14: Distribution of Sidewalk Coverage




As discussed in regard to bicycle facilities in the previous section, alongside those roadways without sidewalks or shoulders, it is not uncommon for the roadsides to fall quickly into ditches, leaving little room for those who might choose to walk alongside them, and no room to step off the roadway for those who choose to walk in the narrow roadway. These characteristics describe an environment which can be very stressful for those who attempt to walk along North Fulton County's roadways, limiting the viability of this mode to be experienced as real transportation option in the area.




**North Fulton County**  
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**Reference Location**

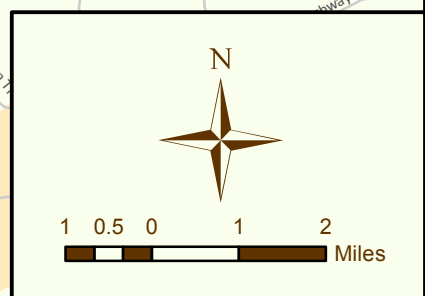

  
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**Region**

**Legend**

**Sidewalk Coverage**  
— Full Coverage Both Sides  
— Full Coverage One Side  
— 50% or Greater  
— Less Than 50%  
— No Sidewalks  
— Other Major Roads  
— Expressways  
 North Fulton Study Area  
 Counties  
 Other Cities

Source: Sprinkle Consulting

**Figure 5-15**  
**Pedestrian Facilities**





**5.4.2 Pedestrian Level-of-Service**

The same method of evaluation as used for bicycle Level-of-Service is also used for determining pedestrian Level-of-Service. It should be noted that the ARC Plan did not include a full pedestrian conditions analysis for its study network, but rather a sampling of typical corridors. None of the selected corridors were within the study area of the North Fulton CTP.

The Pedestrian Level of Service model is described in detail in Appendix G of this plan. The stratification of Pedestrian Level-of-Service scores into letter grades is shown in Table 5-6.

The data obtained for analysis of bicycle Level-of-Service were also used as input for the Pedestrian Level-of-Service model.

The study network totaled approximately 319 centerline miles. The average mile of North Fulton County roadway has a Pedestrian Level-of-Service Score of 3.83, equal to a grade of “D.”

**Table 5-6: Pedestrian Level-of-Service Score Stratification**

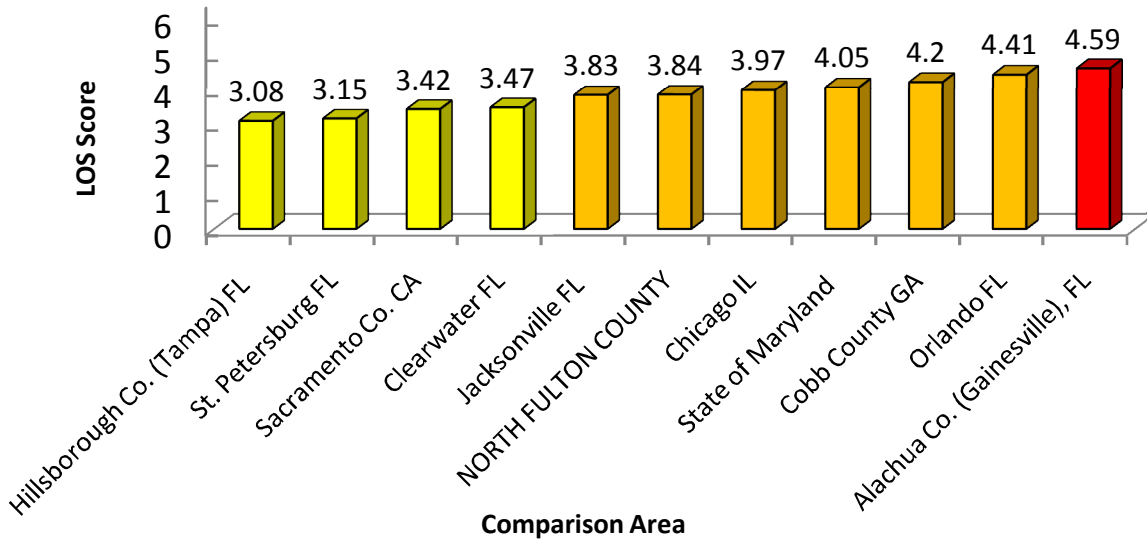
Level-of-Service (LOS)	LOS Score
A	< 1.50
B	1.51—2.50
C	2.51—3.50
D	3.51—4.50
E	4.51—5.50
F	> 5.50

While every community has different expectations regarding accommodations for walking, as a general observation these results describe a challenging situation for walking along a typical North Fulton County road. This is not an unusual result for urbanized areas in the United States, however. Similar evaluations of roadway networks have been performed in metropolitan areas around the country. A 2008 study of walking conditions in neighboring Cobb County found a distance weighted average of 4.20, which describes a more stressful environment for pedestrians, but is still stratified to be Pedestrian Level-of-Service “D.” The full data and results of all the segments of the study network are shown in Appendix G.

A comparison of North Fulton County’s Pedestrian Level-of-Service results with other study areas is shown in Figure 5-16.



**Figure 5-16: Distance Weighted Averages for Areawide Pedestrian Level-of-Service**



Source: Sprinkle Consulting archives

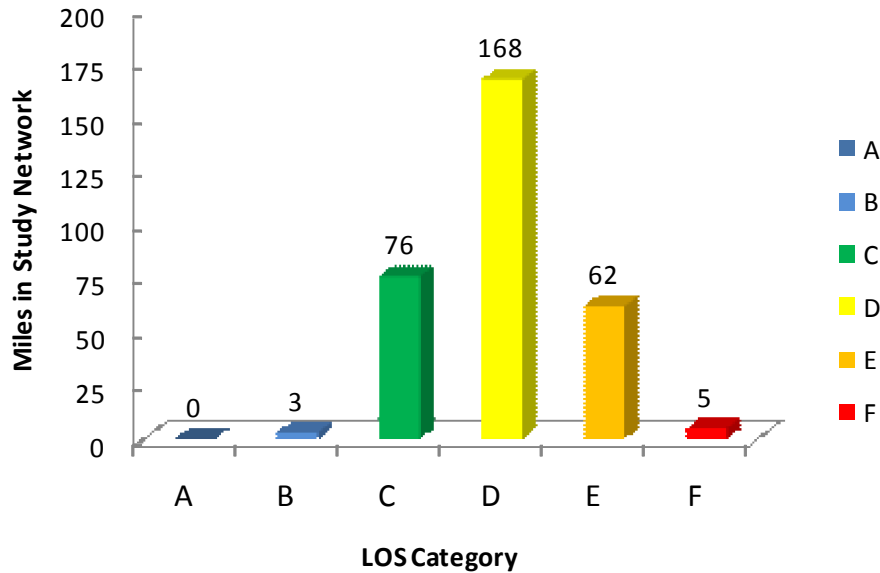
As might be inferred from the distance weighted averages reported in the previous table, the distribution of mileage also reflects challenging conditions for walking, with “D” being the grade for the greatest number of pedestrian miles. The distribution of mileage for walking is shown in Figure 5-17<sup>39</sup>.

<sup>39</sup> The results depicted in Figure 5-17 represent the worse directional result for all segments. There were segments which scored a grade of “A” on the Pedestrian Level of Service, for example, but this result was achieved on only one side of the road, so the worse side is what is represented in this summary distribution. The distance-weighted average reported above is calculated using both directional results. Also, the mileage of the distribution tables add up to 314.5 miles of roadway surveyed were under construction at the time of data collection, and so results were not calculated for them..



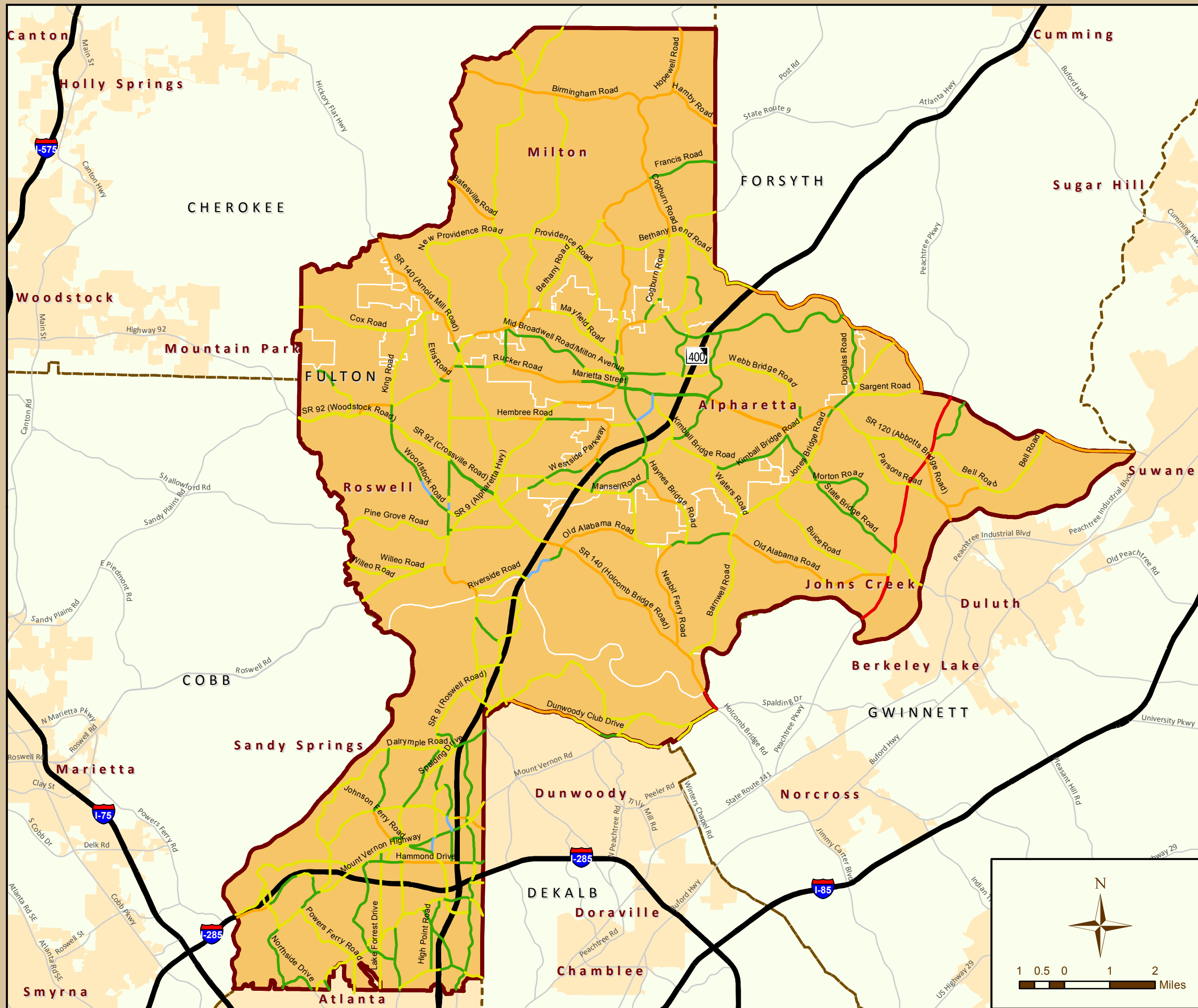


Figure 5-17: Distribution of Study Network Miles by Pedestrian Level-of-Service



Some general observations may be made about factors that contribute to the challenging character of walking conditions along North Fulton County’s roadways. It is important to note, however, that the Pedestrian Level-of-Service model considers a complicated interplay of contributing factors as it models a pedestrian’s perception of comfort and safety on a given roadway. No one factor is likely responsible for a segment’s result, and later phases of the North Fulton CTP will make recommendations about how to counteract the existing conditions to improve accommodation where needed. Certain factors can be identified as contributing to the overall environment to provide some context beyond the numbers. Traffic volumes on arterial and collector roadways are very high in many locations. Of the 319 centerline miles surveyed, 201 reported volumes in excess of 10,000 vehicles per day, a volume that can be translated into an experience for a pedestrian of being passed by a car approximately every seven seconds during the peak hour. Additionally, the amount of sidewalk coverage is limited in many locations, with over 40 percent of the network mileage having less than 50 percent coverage. Finally, where sidewalks are present, they are typically very close to the road, with the average buffer being just 2.2 feet wide. Each of these factors can induce stress in a pedestrian by themselves, it is not surprising that in aggregate they contribute to a high-stress environment.


Figure 5-18 shows the existing pedestrian Levels-of-Service along the roadways within the study network in North Fulton. Roadways that are considered to be operating at a poor LOS (LOS E or LOS F) are shown in orange or red, respectively.




**North Fulton County**  
 Transportation Resource  
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**Reference Location**


  
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**Region**

**Legend**

Pedestrian Level-of-Service

- A/ B
- C
- D
- E
- F
- Under Construction
- Other Major Roads
- Expressways
- North Fulton Study Area
- Counties
- Other Cities

Source: Sprinkle Consulting

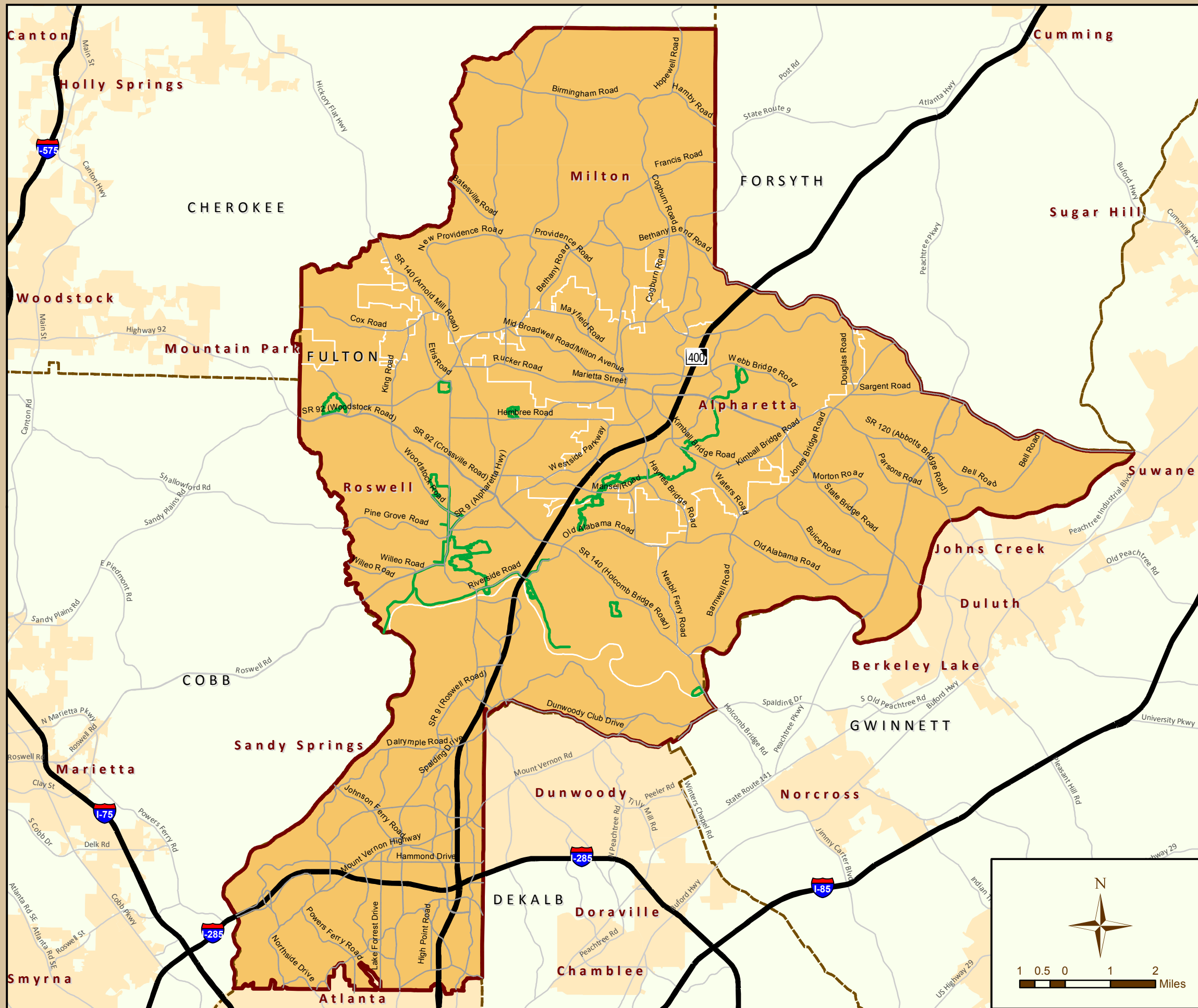
**Figure 5-18**  
**Pedestrian Level-of-Service**



## 5.5 Existing Greenways and Trails

Several greenways and trail systems exist within the North Fulton area. These greenways typically include an asphalt or concrete path (generally up to ten feet wide) used for multiple modes, such as bicycling, walking, etc. These greenways are also generally separated from roadways by a large distance, but in some cases travel near and cross roadways. The cities of Alpharetta and Roswell have the most robust trail systems today, with Alpharetta's Big Creek Greenway and Roswell's network of interconnected trails. Figure 5-19 shows North Fulton's existing greenways and trail systems.

Alpharetta, Johns Creek, Milton, and Roswell have plans that expand their greenways and trail systems. Alpharetta plans the extension of the Big Creek Greenway from its current terminus at Webb Bridge Road to eventually connect to Forsyth County's greenway system. Both Johns Creek and Milton have created ambitious plans for comprehensive greenway networks. Roswell also continues to expand upon its system.





**North Fulton County**  
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**Reference Location**

ARC  
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**Legend**

-  Existing Greenway
-  Study Network
-  Expressways
-  Other Major Roads
-  Counties
-  North Fulton Study Area
-  Other Cities

Source: ARC GIS Data

**Figure 5-19**  
**Existing Greenways & Trails**





## 5.6 Transit

This section provides a summary of existing transit conditions within the North Fulton CTP study area. The summary identifies the agencies that currently provide transit services, summarizes the transit services provided within each community, and presents existing ridership estimates. Additionally, recently completed transit planning studies related to the region's transit vision, express bus ridership characteristics and transit oriented development are summarized.

### 5.6.1 Agencies

Two regional transit agencies provide service to the North Fulton County communities. Local bus, heavy rail, and paratransit services are provided by the Metropolitan Atlanta Rapid Transit Authority (MARTA), while the Georgia Regional Transportation Authority (GRTA) provides regional commuter bus service.

#### Metropolitan Atlanta Rapid Transit Authority (MARTA)

MARTA was originally proposed as a rapid transit agency for the five largest metropolitan Atlanta counties: DeKalb, Fulton, Clayton, Gwinnett, and Cobb Counties. Upon its formation by an act of the Georgia General Assembly in 1965, four of the five metropolitan area counties (Clayton, DeKalb, Fulton, and Gwinnett) and the City of Atlanta passed a referendum authorizing participation in the system. Gwinnett County and Clayton County originally joined MARTA along with Fulton County, DeKalb County, and the City of Atlanta in the mid-1960s. That original 1960s vote set the board and MARTA was jointly funded by these four counties until 1972<sup>40</sup>. In 1971, when the sales tax referendum was held to change the funding mechanism, the sales tax was not approved in Gwinnett County and Clayton County. As a result, the MARTA service area was reduced to serve only Fulton and DeKalb Counties.

Today, MARTA is the ninth largest transit system in the United States and has provided combined bus, heavy rail, and paratransit service to Fulton and DeKalb Counties and the City of Atlanta for 30 years. MARTA is a critical transportation asset to North Fulton County and the Atlanta region, serving as the backbone of a growing regional transit network operating 130 bus routes and 38 heavy rail stations on nearly 48 miles of track and provides transportation for over 500,000 passenger boardings each weekday. MARTA's paratransit service, MARTA Mobility, is for persons with disabilities that are unable to negotiate the MARTA fixed route system for some or all of their travel. MARTA maintains a fleet size of 175 Lift Vans and 15 Sedans to provide this service during the same hours and days as the regular bus and heavy rail service within  $\frac{3}{4}$  of mile of existing routes.

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<sup>40</sup> Based on the State enabling legislation, Cobb County was also eligible to join but decided not to.



For fiscal year 2007, MARTA's annual passenger miles were 754.7 million with annual trips of 147.5 million. This total reflects 69.5 million bus trips, 77.7 million heavy rail trips and 0.4 million paratransit trips.

The governance of MARTA is vested in a Board of Directors (the "Board") composed of 18 members. Three members are appointed by Fulton County, five members by DeKalb County, four members by the City of Atlanta, and one member by each of Clayton and Gwinnett Counties. In addition, the Commissioner of the State Department of Transportation (GDOT), the Commissioner of the State Department of Revenue, the Executive Director of the State Properties Commission, and the Executive Director of the GRTA serve as ex officio members of the Board. The administration of MARTA is directed by the General Manager/CEO who is appointed by the Board.

### **Georgia Regional Transportation Authority (GRTA)**

In response to the 13-county Atlanta metro area's designation as a non-attainment area under the Clean Air Act, the Georgia General Assembly created GRTA in 1999. GRTA has been charged by the legislature to improve the region's air quality, traffic congestion, and land development planning in order to ensure that metropolitan Atlanta can sustain its economic growth, while maintaining the excellent quality of life that has made the area attractive to businesses and workers.

A 15-member Board of Directors manages GRTA with all members appointed by the Governor for five-year terms. The GRTA Board also serves as the Governor's Development Council, and in that capacity is responsible for assuring that local governments meet state requirements for land use planning. Specific GRTA roles include:

- Assisting the Governor's office to develop transportation policies
- Partnering with state and regional agencies to prioritize transportation plans and programs and cooperatively establishing investment priorities and resource allocations to accomplish GRTA's mission
- Measuring effectiveness in improving air quality, mobility, accessibility and land use practices, and reducing congestion
- Encouraging land use practices that promote efficient use of transportation investments;
- Developing transit plans cooperatively with jurisdictions in its service area
- Coordinating transit services to provide seamless and accessible connections within its service area
- Implementing transit services through a combination of entities including local transit authorities, cities, counties and private operators

GRTA can issue \$1 billion in revenue bonds and \$1 billion in general obligation bonds, the latter of which must be approved by the General Assembly. It can assist local governments in financing mass transit or other projects to alleviate air pollution, which includes the region's vanpool program and the Xpress regional commuter bus. GRTA's Xpress service provides 27 express commuter bus routes within the nine county region and is operated jointly by Cobb County Transit



(CCT), Gwinnett County Transit (GCT), and GRTA. Three Xpress routes provide service within the North Fulton CTP study area and are described in the next section.

For fiscal year 2007, GRTA's annual passenger miles were 28.8 million with annual trips of 1.4 million. This total reflects 1.2 million bus trips, and 0.2 million vanpool trips.

## 5.6.2 Existing Service Characteristics

Figure 5-20 shows the existing bus and heavy rail services provided within the North Fulton County study area. MARTA provides the majority of transit services to the North Fulton County communities while GRTA provides regional commuter bus service that travels through, but extends beyond the service area. Additionally, MARTA has two park and ride facilities located within the study area. Residents can access three routes at the Windward Park and Ride (Routes 140, 143, and 185) and two routes at the Mansell Park and Ride (Routes 85 and 140). There are 502 spaces at the Windward Park and Ride lot and 418 spaces at the Mansell Park and Ride lot. Finally, Cobb County Transit (CCT) Route 65 does have a route that provides access to the Dunwoody Station in Sandy Springs; however, this route operates closed door<sup>41</sup> through Sandy Springs between the Johnson Ferry Bridge and the Dunwoody Station. The following sections provide a summary of the characteristics for the different transit services provided in the study area.

### Local Bus Routes

Table 5-7 summarizes characteristics of the twelve MARTA bus routes that provide service to the North Fulton County cities<sup>42</sup>. Within the study area, the bus route structure is designed to provide access to the MARTA heavy rail stations in Sandy Springs. At the heavy rail stations, passengers can transfer to the heavy rail service and other bus routes to travel to Atlanta and other regional destinations. As shown by the cells not shaded in the table, outside of access to Sandy Springs, only four routes (85, 140, 143, and 185) provide access between Alpharetta, Roswell, and/or Milton. Additionally, there is currently no MARTA bus service provided in Johns Creek.














<sup>41</sup> Having no stops.

<sup>42</sup> Data represents the period from April 2009 to August 2009.

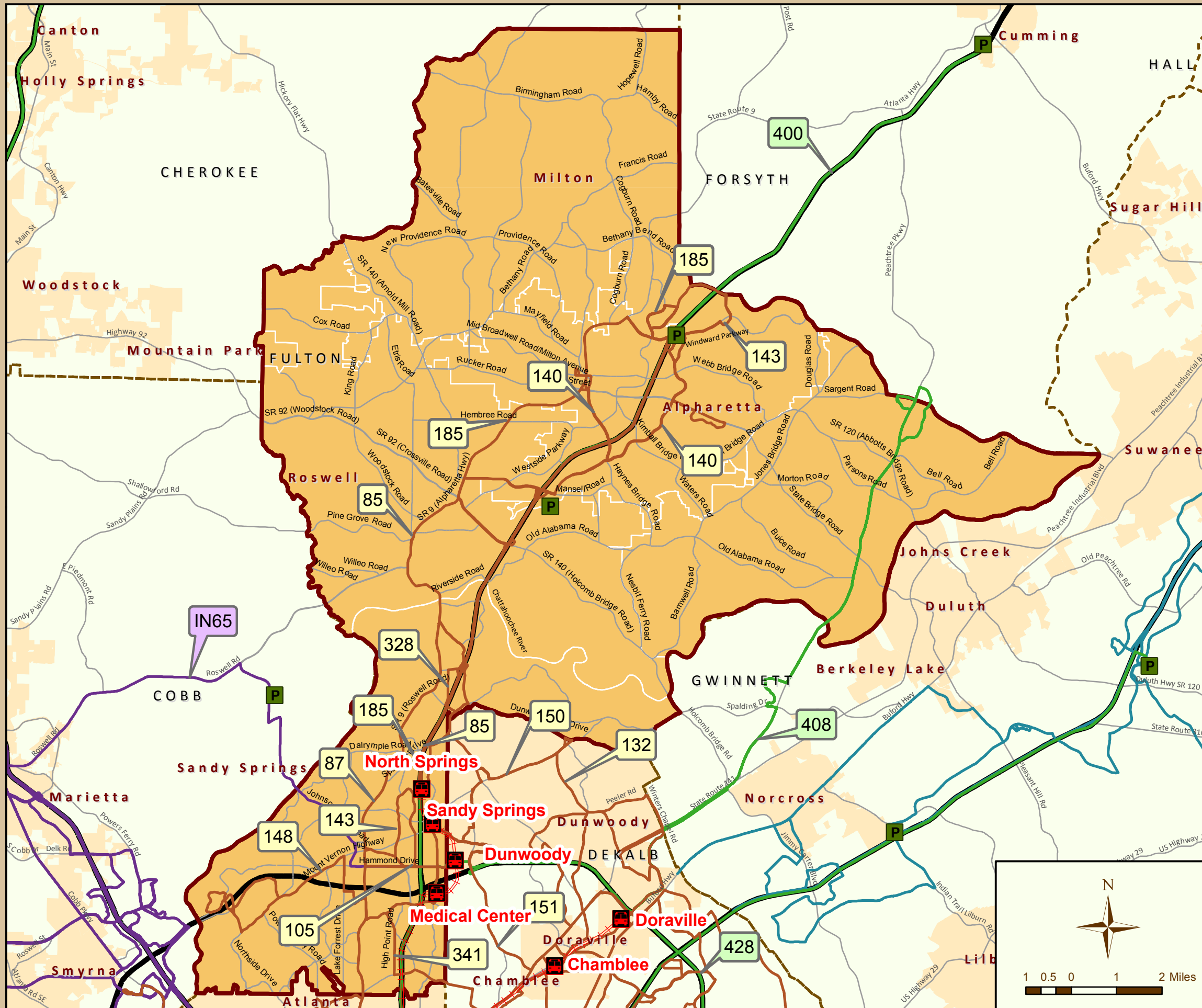
**Reference Location**



**Legend**

-  Park N Ride Facilities
-  MARTA Heavy Rail Stations
-  MARTA Heavy Rail Line
- Bus Routes (Route Numbers Indicated on Map)**
-  MARTA
-  CCT
-  GRTA
-  GCT
-  Study Network
-  Other Major Roads
-  Expressways
-  North Fulton Study Area
-  Counties
-  Other Cities

Source: Atlanta Regional Commission



**Figure 5-20  
Existing Transit Routes**





Table 5-7: MARTA Bus Route Characteristics

Route	Weekday/Weekend Frequency	Daily Total Ons/Offs	Alpharetta Ons/Offs	Roswell Ons/Offs	Milton Ons/Offs	Sandy Springs Ons/Offs	Johns Creek Ons/Offs
5	15 min / 30 min	4,820/4,793				1,970/1,999	
85	30 min / 40 min	1,524/1,546	127/202	483/491		914/853	
87	20 min / 40 min	3,439/3,452				2,745/2,854	
105	30 min / NA	215/209				96/101	
132	20 min / 60 min	1,074/1,081				106/125	
140	15 min / 40 min	1,842/1,825	950/1,013			892/812	
143	20 min (peak only) / NA	819/835	382/339		55/56	382/440	
148	45 min (peak only) / NA	287/289				287/289	
150	40 min / 60 min	206/184				206/184	
185	30 min / 40 min	1,695/1,687	329/400	677/712	92/50	597/525	
328	30 min / NA min	103/119				103/119	
341	60 min / NA min	172/179				101/105	

Source: MARTA, November 2009.

Note: Shaded cells indicate service on the route is not provided to that city.

The following provides a brief description the MARTA bus routes within the study area:

**Route 5-Piedmont Road/Sandy Springs:** provides weekday and weekend service between the Dunwoody Station in Sandy Springs and the Lindbergh Station which is located south of the study area in the Buckhead community of Atlanta. Service is provided every 15 minutes on weekdays and every 30 minutes on weekends. This route provides access to Perimeter Mall, Sandy Springs and Roswell Road Shopping Centers, as well as to Piedmont Center and Lindbergh Plaza.

**Route 85-Roswell/Mansell Road:** provides weekday and weekend service between the Mansell Park and Ride in Alpharetta and the North Springs Station in Sandy Springs. The route also provides access to destinations within Roswell including the Municipal Complex. Weekday service is every 30 minutes and weekend service is every 40 minutes.

**Route 87-Roswell Road/Morgan Falls:** provides weekday and weekend service within Sandy Springs between North Springs Station and the Dunwoody Station. Service is provided every 20 minutes on weekdays and every 40 minutes on weekends along Dunwoody Place, Roswell Road, and Hammond Drive. This route provides access to the Fulton County North Complex, Jamestown Office Park, and Sandy Springs Shopping Center.



**Route 105-Barfield Road/Glenridge Drive:** provides weekday service every 30 minutes within Sandy Springs between the Dunwoody Station and the UPS facility. Service is provided along Hammond Drive, Glenridge Drive, and Barfield Road.

**Route 132-Tilly Mill Road:** provides 20-minute service on weekdays and hourly service between the Chamblee Station (Yellow Line) which is located south of the study area and Sandy Springs. Service in Sandy Springs is provided along North Peachtree Road, Tilly Mill Road, Mount Vernon Road, and Dunwoody Club Drive. Key destinations along this alignment include Chestnut Elementary School, Peachtree Middle School, Georgia Perimeter College, and the Orchard Park Shopping Center. Additionally, during the weekdays a route branch provides access to the North Springs Station and Dunwoody Village every 40 minutes.

**Route 140-North Point/Mansell Park and Ride:** provides weekday and weekend service between the Mansell Park and Ride in Alpharetta and the North Springs Station in Sandy Springs. Key destinations include North Point Mall, GSU north campus, and the Windward Park and Ride. Weekday service is every 15 minutes and weekend service is every 40 minutes.

**Route 143-Windward Park and Ride:** provides service from the Windward Parkway corridor and Windward Park and Ride in Alpharetta to the North Springs Station in Sandy Springs via GA-400. Service is only provided on weekdays with a frequency of 20 minutes. During the weekday AM and PM peaks, a route branch is provided to Milton along Deerfield Parkway, Webb Road, and Morris Road.

**Route 148-Medical Center/Powers Ferry:** provides peak period weekday service within Sandy Springs connecting the Sandy Springs Station, Medical Center Station, and the Riveredge Parkway/Northside Drive commercial area. Service is provided every 45 minutes.

**Route 150-Perimeter Center/Dunwoody Center:** provides weekday and weekend service within Sandy Springs between the Sandy Springs Station and Dunwoody Club Drive primarily along Perimeter Center West, Ashford Dunwoody Road, and Mount Vernon Road. Service is provided every 40 minutes on weekdays and every hour on the weekends. This route provides access to Perimeter Mall and Dunwoody Village Shopping Center.

**Route 185-Alpharetta/Holcomb Bridge Road:** provides service between the Windward Park and Ride in Alpharetta and the North Springs Station in Sandy Springs. The route provides weekday and weekend service (every 30 minutes and 40 minutes, respectively) between Alpharetta and the northern portion of Roswell along SR 9/SR 120. Key destinations include Alpharetta City Hall and North Fulton Regional Hospital. A route branch provides service to Milton along Deerfield Parkway, Webb Road, and Morris Road. Service on the route branch is every 60 minutes on weekdays and every 80 minutes on weekends.

**Route 328-Spalding/Northridge:** provides weekday service every 30 minutes within Sandy Springs between the North Springs Station and the Northridge Road/Roberts Drive area. The route



provides access to the Northridge Shopping Center and the University of Phoenix Campus. Service is provided using smaller buses.

**Route 341-Winsor Parkway/Lynwood Park:** provides weekday service between the Medical Center Station in Sandy Springs and the Brookhaven Station (Yellow Line) located south of the study area. Service is provided every hour and provides access to St. Joseph Hospital, Childrens Healthcare at Scottish Rite, Highpoint Elementary, and Oglethorpe University. Service is provided using smaller buses.

## Heavy Rail

MARTA heavy rail service is provided to the study area through three Red Line (North-South) stations (Medical Center, Sandy Springs, and North Springs) located within the City of Sandy Springs. The Dunwoody station is located between the Medical Center and Sandy Springs stations and lies just outside of Sandy Springs (City of Dunwoody, DeKalb County). These stations represent the northern reach of MARTA's heavy rail system. The Red Line provides a one-seat ride from Sandy Springs to Buckhead, downtown Atlanta, and the Atlanta airport. Additionally the Red Line provides connections to the northeast heavy rail service via the Yellow Line (Northeast-South) at the Lindbergh Station, and a connection to east-west heavy rail service via the Green (East-West) and Blue (East-West) Lines at the Five Points Station. Red Line service is provided every 15 minutes on weekdays and every 20 minutes on weekends.

Table 5-8 summarizes the existing characteristics of service at the four heavy rail stations including daily ridership for FY 2009, bus routes that connect to each station, total available parking spaces, and long term parking rates<sup>43</sup>.

## Bus and Heavy Rail Fares

The following summarizes the fare options available to residents and visitors using MARTA's bus and heavy rail services. Passengers beginning their transit trip on MARTA must use a Breeze Card to board the train or bus. The Breeze card also allows passengers a free transfer to the Xpress Routes and the other transit service providers in the region.

- One-way cash fare: \$2.00
- 10 trip pass: \$20.00
- 20 trip pass: \$34.00
- 7 day pass (unlimited trips): \$15.00
- 30 day pass (unlimited trips): \$60.00
- Multiday (1 to 4 days) visitors pass: \$8.00 to \$13.00

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<sup>43</sup> Long term parking rates go into effect after 24 hours.



Additionally, MARTA offers discounted fares to university students and staff; students in grades K through 12; senior, disabled, and Medicare recipients; and some large corporations.

**Table 5-8: MARTA Heavy Rail Station Characteristics**

Station	Daily Station Entries (Weekday/Saturday/Sunday)	Connecting Bus Routes	Parking Spaces	Long- Term
North Springs Station	6,611 / 3,271 / 2,489	85 Roswell / Mansell Road 87 Roswell Rd./Morgan Falls 132 Tilly Mill Road 140 North Point/Mansell Park and Ride 143 Windward Park and Ride 185 Alpharetta/Holcomb Bridge Road 328 Spalding/Northridge 400 North Springs Stand-by	2,325	\$8/day
Sandy Springs Station	2,897 / 1,126 / 746	148 Medical Center/Powers Ferry 150 Perimeter Center/Dunwoody Village 151 Perimeter Center/Chamblee	1,170	\$5/day
Dunwoody Station	3,828 / 2,374 / 1,529	5 Piedmont Road/Sandy Springs 87 Roswell Road/Morgan Falls 105 Barfield Road/Glenridge Drive	1,048	\$5/day
Medical Center Station	1,978 / 527 / 432	148 Medical Center./Powers Ferry 341 Windsor Parkway /Lynwood Park	200	N/A

Source: MARTA, November 2009

**MARTA Mobility**

MARTA provides American with Disabilities Act (ADA) complementary paratransit service to eligible persons with mobility impairments who are unable to board, ride or disembark from an accessible vehicle operated on MARTA's regular bus or heavy rail services. Service is provided with special lift-equipped vans on a curb-to-curb, shared ride basis. Paratransit passengers must meet certain eligibility requirement and be certified by staff to use MARTA Mobility services.

MARTA Mobility is an advanced reservation service and same day service requests cannot be accommodated. Paratransit service is offered on the same days and hours as the regular bus and heavy rail service. Service is restricted to the ADA designated service area within Fulton and DeKalb Counties along a ¾ of a mile corridor located on each side of all fixed bus routes and in ¾ of a mile radius of each station. Generally, service hours are from 5:00 AM to 12:30 AM, seven days a week including holidays. However, when a fixed route in a particular area operates on a more





limited basis, MARTA Mobility operates a comparable schedule. The one-way fare is \$3.60 per person. Eligible individuals requiring a Personal Care Attendant that has been authorized by a medical professional are allowed to travel with the disabled patron at no cost.

## **GRTA Xpress Bus Service**

Three Xpress routes provide service within the North Fulton CTP study area: Route 400-Cumming to North Springs/Atlanta; Route 408-Doraville to Johns Creek; and Route 428-Panola Road to Perimeter Center. However, each route only provides access to one community. Route 408 provides service to Johns Creek and Routes 400 and 428 provide service to Sandy Springs. Xpress route characteristics are provided below:

**Xpress Route 400-Cumming to North Springs/Atlanta:** provides four AM and PM peak trips between the Cumming Park and Ride lot in Forsyth County to the North Springs MARTA heavy rail station in Sandy Springs and two AM and PM peak trips between the Cumming Park and Ride lot and Downtown Atlanta. Reverse commute service from North Springs to Cumming in the morning and from Cumming to North Springs in the afternoon is also available. For FY 2009, total average daily ridership on Route 400 was 180 trips.

**Xpress Route 408-Doraville to Johns Creek:** provides weekday peak period service (five morning and five afternoon trips) from the Doraville MARTA station north along SR 141 (Peachtree Industrial Boulevard, Peachtree Parkway, and Medlock Bridge Road), providing access to the Park and Ride lot at Christ the King church, and continuing to Emory Johns Creek Hospital in Johns Creek. For FY 2009, total average daily ridership on Route 408 was 239 trips.

**Xpress Route 428-Panola Road to Perimeter Center:** provides weekday peak period service (five morning and five afternoon trips) between the Panola Road Park and Ride Lot south of the study area to the Dunwoody and Medical Center Stations within Sandy Springs. Additionally, there are two reverse commute routes between Medical Center Station and the Panola Road Park and Ride in the morning and one from the Panola Road Park and Ride to the Medical Center Station in the afternoon. For the June 2008 to January 2009 period, total average daily ridership on Route 428 was 250 trips (note: operation of the Route 428 was transferred to Gwinnett County Transit (GCT) in February 2009. GCT does not collect daily ridership data).

The following summarizes the fare options available to residents and visitors using GRTA's Xpress routes:

- One-way cash fare: \$3.00
- Round trip fare (return trip valid same day as purchased): \$5.00
- 20-Ride pass (good for 20 one-way rides, no time limit): \$45.00
- 40-Ride pass: \$85.00
- 31-day pass (Good for unlimited rides for 31 calendar days after the first use): \$80.00



GRTA also offers reduced fares for off-peak (if available) and reverse commute trips:

- One-way cash fare: \$1.50
- Round trip fare: \$2.50
- 31-day pass (Good for unlimited rides for 31 calendar days after the first use): \$40.00

Passengers that begin their trip on Xpress are able to transfer for free to MARTA heavy rail and bus services. If the passenger does not have a MARTA Breeze card they may request a free transfer pass when boarding the Xpress Bus.

### 5.6.3 Recently Completed Transit Planning Studies

The following summarizes three recently completed transit planning studies that have a direct connection to the North Fulton County Area. The three studies include: Transit Planning Board's Concept 3: Creating and Realizing The Regional Transit Vision; GRTA's Regional On-Board Express Bus Survey Travel Market Analysis Report; and MARTA's North Line Transit Oriented Development Study.

#### **Concept 3: Creating and Realizing the Regional Transit Vision (January 2009)**

Concept 3 is the Atlanta Region's adopted long range transit vision and is result of a multi-year planning effort by the Transit Planning Board (TPB). In December 2005 and January 2006, the governing boards of the Atlanta Regional Commission (ARC), GRTA, and MARTA approved a joint resolution to establish the TPB as a transit planning body for the Atlanta Region. The goal of TPB's work plan was to create a partnership among the region's transit providers that would lead to the establishment and maintenance of a seamless, integrated transit network for the Atlanta region. Specifically, TPB was charged with:

- Developing a regional transit plan (Concept 3) which includes a comprehensive financial plan;
- Working to improve regional service coordination, including integrating fares, marketing and customer information;
- Measuring system performance; and
- Advocating for increased federal funding for regional transit.

The TPB included representatives from the three major member agencies (ARC, GRTA, and MARTA), local governments, gubernatorial appointees and the Georgia Department of Transportation (GDOT). TPB Board members includes the Mayor of the City of Atlanta, the DeKalb County Chief Executive Officer, the County Commission Chairs of Cherokee, Clayton, Cobb, Douglas, Fayette, Fulton, Gwinnett, Henry, Rockdale, and Spalding Counties, the Board Chairs of GDOT, GRTA and MARTA, the General Manager of MARTA, and three Gubernatorial Appointees

Projects identified in Concept 3 were developed based on a combination of technical analysis and guiding principles. The technical analysis reflected use of ARC's regional travel demand model to match transit modes and capacities to projected corridor demands. Based on the travel demand



model results, Concept 3 includes a multimodal mix of MARTA heavy rail extensions; light rail (LRT), streetcar, and, commuter rail lines; freeway and arterial bus rapid transit (BRT) lines; express and intercity regional bus service and expanded local and activity center service. Combined with the technical analysis, the guiding principles included:

- Projects will be realistic and implementable;
- The program of projects will constitute a region-wide program that essentially includes “something for everyone”;
- The full system will be completed and in operation by the end of 2030;
- A new funding stream will allow construction planning to commence on January 1, 2011;
- The projects in the region’s current Transportation Improvement Plan (TIP) are consistent with Concept 3 and remain as programmed; and
- Regional funding and governance are inadequate to implement the long-range transit vision from ARC’s adopted Regional Transportation Plan (RTP).

Table 5-9 summarizes those Concept 3 projects that would provide service within the North Fulton County Study Area. As shown in the table, three additional regional services are planned for the study area:

- **High Capacity Regional Rail:** Concept 3 identified three corridors to extend existing MARTA service, including the North Line rail extension to Windward Parkway. These three projects are in corridors that were identified in need of high-capacity transit services because of intensive volumes of regional travel. All three projects expand high-capacity radial transit service to and from the Downtown and Midtown travel markets. The North Line extension also provides expanded high-capacity transit service to the Windward/North Point, Perimeter and Buckhead activity centers.
- **Arterial Bus Rapid Transit (BRT):** Arterial rapid transit projects are proposed as a means to provide medium capacity transit service to key regional arterial corridors. These projects are proposed in identified non-radial arterial corridors (such as SR 120) and along radial arterial corridors (such as Buford Highway). The intent of these projects is to provide frequent transit service (e.g., 15-minute frequencies or better) with limited stops, enhanced passenger amenities, and low cost capital improvements that will improve the reliability of transit travel times, including partial signal preemption, queue jumper lanes, bus-only lanes where feasible. The determination of specific arterial rapid transit projects for the regional transit plan requires further analysis of travel demand forecasts and costs. Concept 3 identified representative projects including two that would service the North Fulton County area.
- **Suburban Bus Service:** These routes would provide suburb-to-suburb bus service with limited stops. Service levels will be tailored to demand, but is likely to be 30- to 60-minute frequencies. Minimal or no capital improvements are proposed. Further study is required to determine an appropriate route structure for a regional suburban bus network. For Concept 3, a series of representative routes were identified including two that would service the North Fulton County area.



**Table 5-9: Concept 3 Projects in North Fulton County**

<b>Mode</b>	<b>Line</b>	<b>North Fulton County Cities Served</b>
High Capacity Regional Rail	MARTA North Line Extension to Windward Parkway	Sandy Springs/Roswell/Alpharetta/Milton
Arterial BRT	SR 120 from Marietta to Lawrenceville Piedmont Road/Roswell Road from Lindbergh to Alpharetta	Roswell/Alpharetta/Milton Sandy Springs/Roswell/Alpharetta
Suburban Bus	Acworth / Norcross Waleska / Canton / Norcross	Roswell/Mountain Park Roswell/Mountain Park/Milton

Following completion of the Concept 3 Report, regional transit planning efforts continued as the Transit Improvement Board. Beginning in January 2010, this organization will be renamed to the Regional Transit Committee (RTC), will become a board level committee of the ARC, and will now be a formal part of the federal transportation planning process.

**Regional On-Board Express Bus Survey Travel Market Analysis Report (2008)**

In 2008, GRTA conducted a regional on-board express bus survey and obtained travel market information (characteristics, trip purpose, travel behavior, and geographic makeup) based on responses from over 3,000 morning peak-period riders on 29 *Xpress*, Cobb Community Transit (CCT), and Gwinnett County Transit (GCT) express bus routes. Additionally, the result of the information collected was compared to the output of ARC’s travel demand model for several key measures including trip purpose and how passengers access the express bus routes. The following are key findings from the survey report.

- Regional express bus services attract riders from as far away as Columbus, Macon, Hartwell, and even Alabama with approximately 15 percent of regional express bus riders originating from outside the 12 *Xpress* member counties.
- Express bus service reduces the number of cars on heavily traveled corridors during the peak period. The majority of express riders (70 percent) indicated that they would drive to their destination if express commuter bus service was not provided and the majority of riders (84 percent) also drive alone to access the bus service. Additionally, morning peak period passengers travel an average of 30 miles from their origins to their destinations. In contrast, the average distance the passengers drive to the park-and-ride lots is approximately 7.4 miles, with 80 percent of passengers driving fewer than 10 miles.
- The top 10 destinations for express bus passengers are all within midtown and downtown, with over 30 percent of passengers surveyed traveling to these top 10 destinations. Destinations with the largest share of express bus passengers were: the Summit building located at 401 West Peachtree Street (6.7 percent) and the Sam Nunn Federal Center at 61 Forsyth Street (6.5





percent). The largest destinations outside of downtown and midtown were the Medical Center, Buckhead, and Lindbergh MARTA rail stations, with approximately 4 percent of express bus passengers destined for one of these centers.

- The majority of express bus passengers have a one seat ride to the destination bus stop and then walk (an average of two blocks) to their final destination. Approximately 13 percent of express passengers require one transfer, 5 percent required two transfers, and less than 1 percent required three or more transfers. The majority of these transfers were from the express bus to MARTA bus or rail service. However, transfers from MARTA to express bus and transfers from express bus service to other regional transit operators was also observed. Approximately 15.5 percent of express bus passengers surveyed transfer to MARTA and about 16.2 percent of passengers use MARTA for some part of their trip. Ten percent of the passengers transferred from express bus to rail service, 3 percent transferred from express bus to local bus, and 3 percent required transfers from express bus to MARTA rail to local MARTA bus route.
- The survey results also indentified a number of inconsistencies with the ARC travel demand model.
  - Results indicated that 96 percent of surveyed express passengers indicated they were going from home to work, while the model indicates only 63 percent of express bus riders make home to work trips.
  - Results found that fewer households with a small number of cars and more households with many cars and high income use express bus than the model projects.
  - Only two percent of surveyed riders walked from their trip origin to gain to access the express bus, however the model indicates 16 percent of express bus riders would walk to transit.
  - Based on the type of transit pass purchased, level of employer subsidy, and ride frequency, the average out-of-pocket cost per trip was about \$1.48 for *Xpress* and GCT passengers and \$1.94 for GCT passengers (2008 dollars). This is slightly higher than the fare specified in the travel demand model.
- In some cases the survey results and the travel demand model were very close. The model and the survey both indicate the average express passenger drives about 6.5 miles to get to bus service.

Key recommendations resulting from the survey primarily involve enhancing ARC's travel demand model and include the following:

- The percent of express bus trips that are home to work may need to be increased.
- The percent of express bus trips that are made by the higher socioeconomic strata may need to be increased.
- The percentage of express bus riders that walk to access transit is less than the model currently shows, which could be addressed either by adjusting the park and ride lot walk accessibility or reducing the percent of trips originating within model walking distance of transit.



- Further work could address the dynamics of the choice competition between the passengers who drive to the express bus park and ride and drive to the rail park and ride as it relates to the lowest cost path choice for trips surveyed on express buses.
- The distance allowed for a passenger to drive to express bus park and ride lot for a select number of lots might need to be increased to better reflect the observed behavior from the survey results.
- It will be important to keep the fare structure assumptions in the model consistent with present-year pricing.

## North Line Transit Oriented Development Study (December 2006)

During MARTA's 2004 Alternatives Analysis for the extension of the North Line, ridership projections based on the ARC's regional travel demand model, and a transit suitability analysis suggested that the study area was not very transit supportive due to a combination of high incomes, low residential and employment densities. As a result of this analysis, the decision was made to redirect future planning activities in the corridor and instead undertake a land use and market analysis study to assess the potential for transit oriented development (TOD) and encourage new development patterns along the GA 400 corridor to support future MARTA expansion in North Fulton County.

The resultant North Line Transit Oriented Development Study examined seven cluster areas (referred to as TOD clusters) considered to have a strong potential to develop as regional draws with the focus on density, diversity, and design of future land uses at these locations. These TOD clusters are concentrated along the North Line corridor within the Cities of Sandy Springs, Roswell, Alpharetta, and Milton.

The North Line TOD Study provided an opportunity to examine transit expansion feasibility in the GA 400 corridor with the potential implementation of new development patterns. The study was coordinated with and modeled after the ARC's Livable Centers Initiative (LCI) program, under MARTA sponsorship, to enhance the potential for acceptance as a future LCI community under ARC's program.

As shown in Figure 5-21, the seven TOD cluster areas, from south to north, included:

- **Northridge** - located around the interchange of GA 400 and Northridge Road.
- **Holcomb Bridge** - located around 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** - located around the interchange of GA 400 and Old Milton Parkway.
- **Windward South** - located to the south and east of the interchange of GA 400 and Windward Parkway.
- **Windward North** - located to the west and north of the interchange of GA 400 and Windward Parkway.



- **McGinnis Ferry** - located at the Fulton County/Forsyth County line, where McGinnis Ferry Road crosses GA 400.

The study was guided by a comprehensive development strategy that supported ARC's regional program goals for the development of the most suitable emerging regional center:

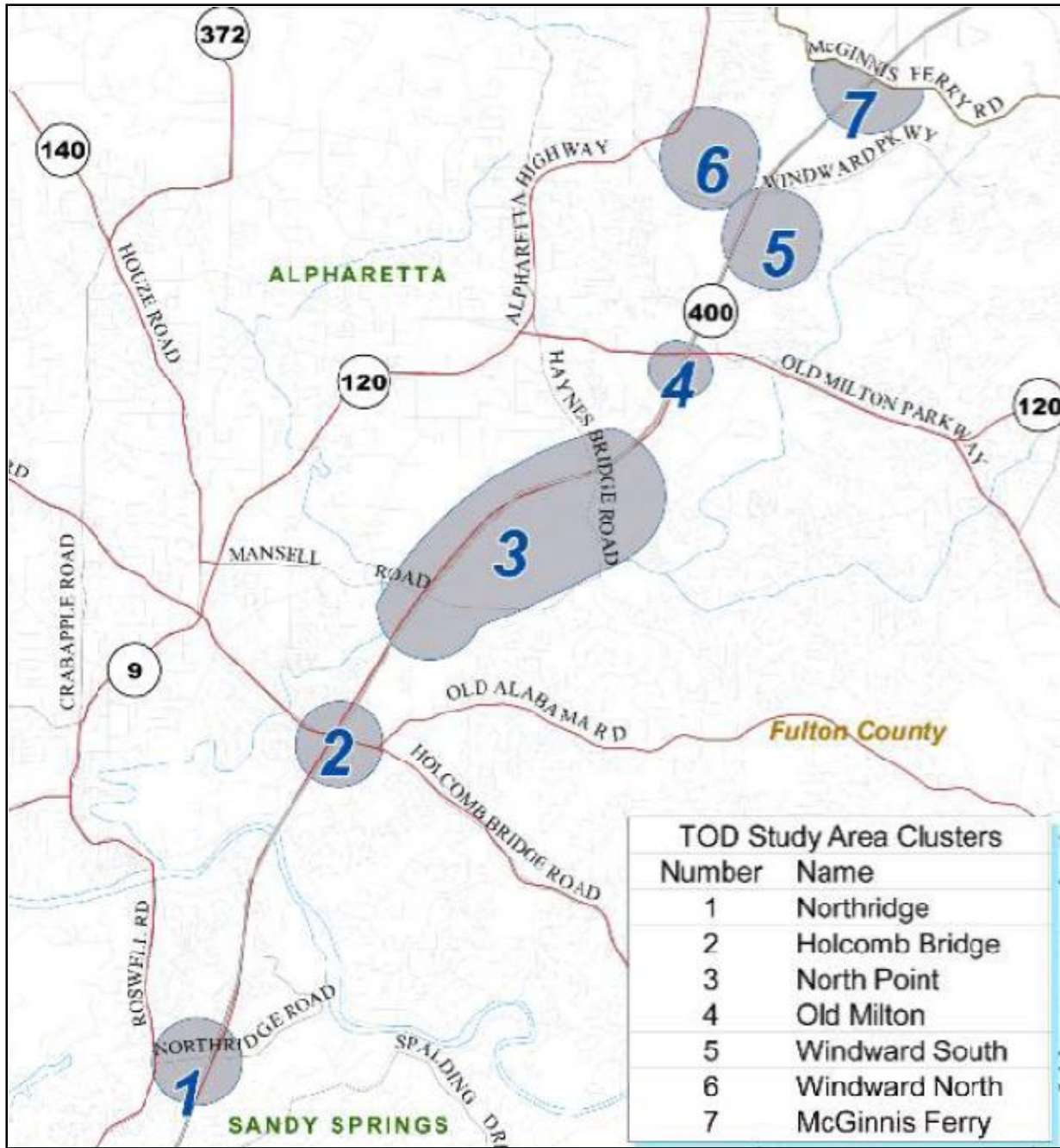
- Encourage diversity of residential neighborhoods, employment, shopping, and recreation choices at the activity/town center level.
- Give housing a strong focus to create mixed-income neighborhoods and support the concept of aging in place.
- Encourage development that offers access to a range of travel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

The North Line TOD Study was conducted in three phases. In Phase 1, the seven clusters were evaluated based on demographics, land use, zoning, and transportation to determine the most suitable sites for TOD. The purpose of this phase was to narrow the number of clusters to a maximum of four.

In Phase 2, the four most suitable clusters for a potential TOD were further evaluated to identify the most suitable site for a future TOD prototype in the GA 400 corridor. This evaluation included a more detailed analysis of population and employment characteristics, market trends, market potential, including planned and proposed developments/improvements, as well as existing zoning and potential future land use. Based on these analyses, the North Point area at Center Bridge Road and GA 400 was identified as the location with the greatest relevant development potential, based on technical analysis and stakeholder input.



Figure 5-21: North Line TOD Study - TOD Cluster Areas



Source: MARTA North Line TOD Study, December 2006





In Phase 3, the study team developed an implementation framework for the North Point area based on market analysis and accepted planning and design practices for successful transit oriented development. The major feature of the concept plan was the redevelopment of the northern third of the Mansell Crossing Shopping Center and the area between Center Bridge Road and North Point Mall into a high density, mixed use TOD urban cluster that would adjoin the planned MARTA station. As shown in Figure 5-22, key elements of this TOD urban cluster concept include:

- Mixed use developments on the blocks in the urban cluster that would include commercial uses and restaurants on the ground level and high density residential uses on the upper levels. Emphasis should be placed on maximizing residential uses in the core area of the TOD cluster in order to create a viable and vibrant 24-hour community.
- A mixed use facility along the west side of GA 400 that would include commercial uses on the ground level and parking on the upper levels to support the uses in the urban cluster, as well as to provide park and ride spaces for the MARTA station.
- A central plaza/public open space, in the middle of the urban cluster, that would serve as a focal feature for the TODs.
- In-fill developments, north of Center Bridge Road, which would replace existing large parking lots with higher density, mixed use developments, that would also include a mixed use parking structure to replace the lost parking and provide parking for the new developments.
- A building and walkway link to North Point Mall. The area west of GA 400 would be developed in a similar fashion as the east side, with the highest density, mixed use developments located closest to the bridgehead. The uses shown in the northwest quadrant reflect the then proposed Cousins Westside Development plan which included higher density, mixed use developments close to the bridge, as well as higher density residential, senior housing, and a number of public and semi-public uses, such as the proposed university education center, a performing arts center, and a community center.

Finally a key component of the TOD concept plan was the recommendation to improve pedestrian and bicyclist access across GA 400. Two options were proposed to improve this connection: 1) add a separate pedestrian/bicyclist bridge; or 2) widen and improve the walkway on the existing roadway bridge. In addition, the plan recommends a comprehensive pedestrian/bicyclist path system that would connect the MARTA station to existing and proposed developments around the station.



Figure 5-22: North Point TOD Concept



Source: MARTA North Line TOD Study, December 2006



## 6.0 SAFETY (CRASH HISTORY)

A thorough examination of crash history and traffic patterns can predict key locations where improvements in traffic safety will be beneficial to motorists and the community. The dollar cost to a community that is caused by a vehicular-related crash includes medical care, emergency services, victim work loss, employer cost, traffic delay, property damage, and a quality of life reduction attributed to longer travel times. Crash data was collected from the Georgia Department of Transportation for years 2006-2008.

Figures 6-1A and 6-1B show the number of vehicle crashes at intersections within the North Fulton CTP study network<sup>44</sup>. In general, the number of crashes at intersections along a given roadway corresponds with the road's functional classification and traffic volume. By observing the map, one can see that crashes appear to be more heavily concentrated along State Routes, particularly SR 9. From 2006-2008, there were approximately 14,430 crashes, 3,556 injuries, and 12 fatalities at the study intersections<sup>45</sup>. Additional crashes occurred within North Fulton County, but 14,430 is an approximate summary of crashes occurring at the study intersections. Table 6-1 shows the intersections that experienced over 150 crashes for years 2006-2008. Eleven of these 20 intersections are located at intersections along SR 9; many of them intersecting with arterial roadways that provide east-west connectivity to GA-400 and adjacent counties.

<sup>44</sup> This includes only the crashes that occurred at intersections of roads included in the study network. Crashes that occurred that weren't associated with these intersections, and those that occurred along local roadways not considered in the study network were not inventoried.

<sup>45</sup> This equates to approximately 0.25 injuries per crash and 0.0008 fatalities per crash.






**North Fulton County  
Transportation Resource  
Implementation Program**






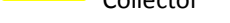



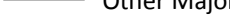




**Reference Location**

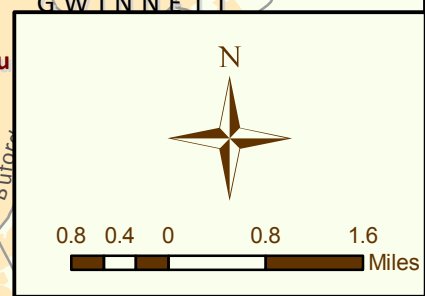
**ARC  
20-County  
Region**



**Legend**

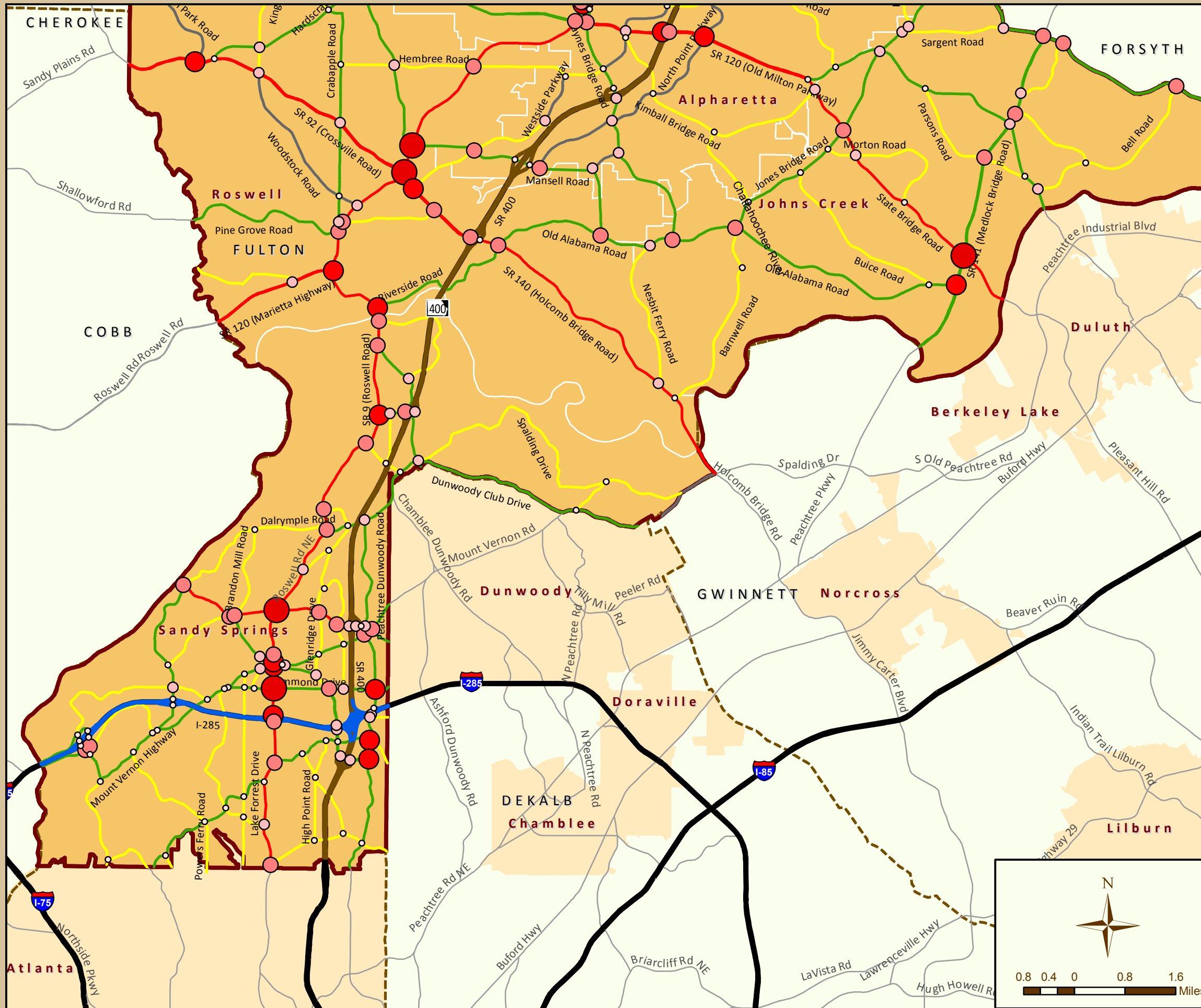
<b>Crashes Per Intersection</b>	<b>Study Network</b>
○ 0 - 35	<b>Functional Classification</b>
○ 36 - 80	 Interstate
○ 81 - 150	 Freeway
● 151 - 300	 Principal Arterial
● 301 - 575	 Minor Arterial
 North Fulton Study Area	 Collector
 Counties	 Local
 Other Cities	 Other Major Roads
	 Expressways

Source: Georgia Department of Transportation



**Figure 6-1A  
Crash History**






**North Fulton County  
Transportation Resource  
Implementation Program**











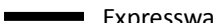



**Reference Location**

**ARC  
20-County  
Region**

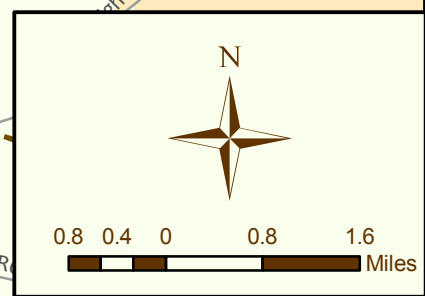


**Legend**

<b>Total Crashes Per Intersection</b>	<b>Study Network</b>
○ 0 - 35	<b>Functional Classification</b>
○ 36 - 80	 Interstate
○ 81 - 150	 Freeway
○ 151 - 300	 Principal Arterial
○ 301 - 575	 Minor Arterial
 North Fulton Study Area	 Collector
 Counties	 Local
 Other Cities	 Other Major Roads
	 Expressways

Source: Georgia Department of Transportation

**Figure 6-1B  
Crash History**





**Table 6-1: Intersections With Number of Crashes > 150 (Years 2006-2008)**

Intersection	Number of Crashes	Number of Injuries	Number of Fatalities
Alpharetta Highway (SR 9) at Holcomb Bridge Road (SR 140)	573	193	1
Medlock Bridge Road (SR 141) at State Bridge Road	516	123	0
Alpharetta Highway (SR 9) at Mansell Road	514	117	0
Roswell Road (SR 9) at Abernathy Road	365	112	0
Roswell Road (SR 9) at Hammond Drive	307	57	0
Roswell Road (SR 9) at Mt Vernon Highway	238	46	0
Peachtree Dunwoody Road at Johnson Ferry Road	235	53	0
Roswell Road (SR 9) at Northridge Drive	220	48	0
Woodstock Road (SR 92) at Old Mountain Park	218	48	0
Roswell Road (SR 9) at I-285 Westbound Ramp	212	43	0
Roswell Road (SR 9) at Johnson Ferry Road	193	26	0
Peachtree Dunwoody Road at Glenridge Connector	192	41	1
Holcomb Bridge Road (SR 140) at Old Roswell Road	189	61	0
Medlock Bridge Road (SR 141) at Old Alabama Road	180	27	0
Old Milton Parkway (SR 120) at North Point Parkway	179	41	0
Roswell Road (SR 9) at Marietta Highway (SR 120)	179	45	0
Old Milton Parkway (SR 120) at Georgia 400 Southbound Ramp	172	41	0
Hammond Drive at Peachtree Dunwoody Road	172	53	0
Roswell Road (SR 9) at Riverside Drive	157	31	1
Roswell Road (SR 9) at Jones	154	47	0

Source: GDOT, University of Alabama CARE



## 7.0 FREIGHT, INTERMODAL, AND AIRPORT OPERATIONS

The majority of freight travel in the Atlanta region occurs outside the North Fulton CTP study area. In fact, the freight traffic is predominantly local in nature; however, there are some scattered light industrial/manufacturing uses and several key area distribution centers including seven Consumer Retail centers and one Industrial center. These centers tend to be located in town centers and/or along GA-400.

As examples, Hanjin Shipping, UPS, and Federal Express have trucking operations in the North Fulton area. From here, they serve destinations all over the north metro area. Light industrial, manufacturing, and wholesale businesses also rely on deliveries via truck, but are somewhat dispersed throughout the area. The most notable concentration of users of truck freight includes businesses in Roswell and Alpharetta in areas along Hembree Road and Old Roswell Road.

### 7.1 Trucks

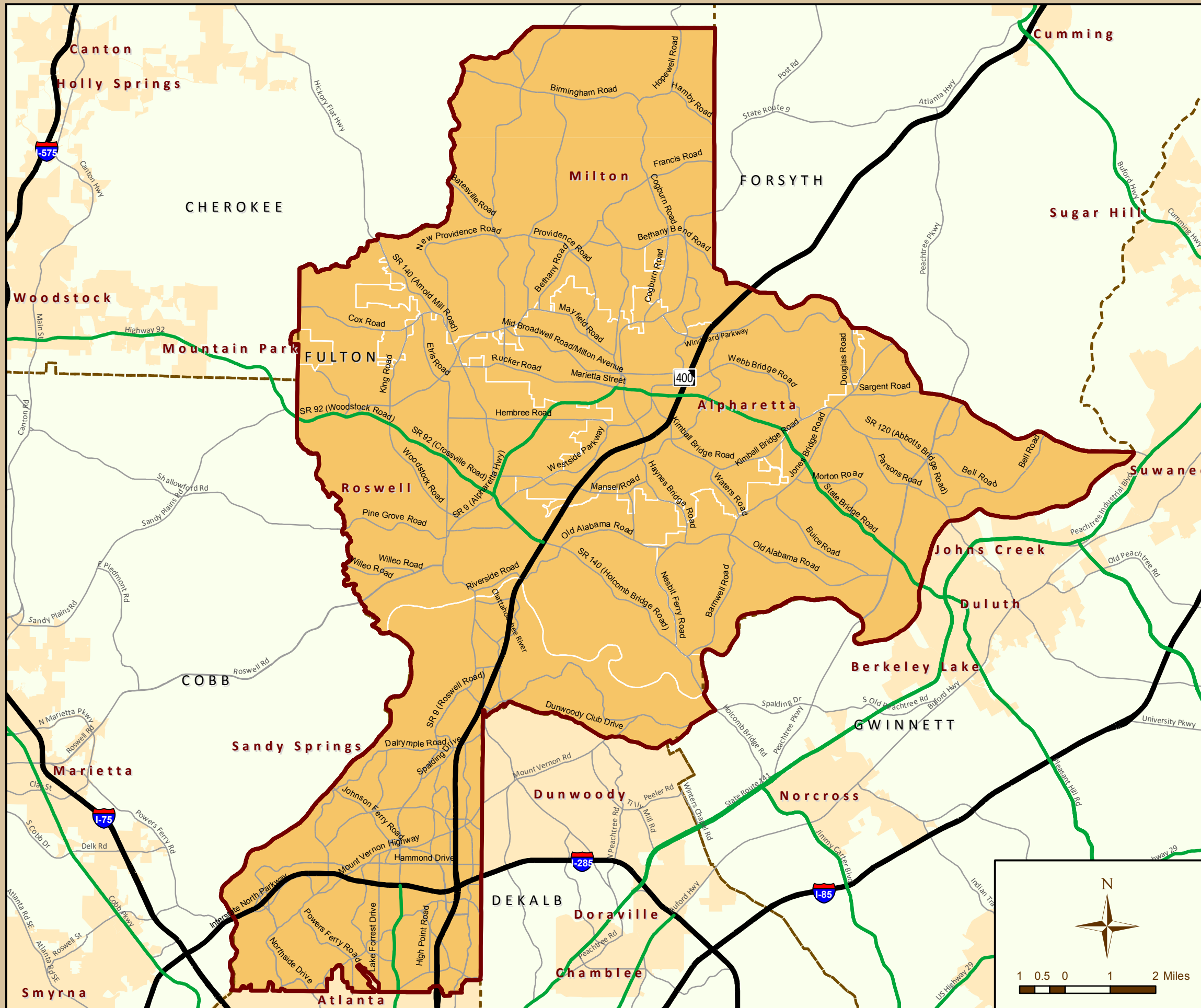
There are three officially designated truck routes in the study area, which include I-285, GA-400, and a portion of SR 9 in Alpharetta; however, the Atlanta Regional Freight Mobility Plan identifies an Atlanta Regional Priority Freight Highway Network. This network includes SR 92 and SR 120, in addition to GA-400 and I-285. Figure 7-1 shows the proposed Atlanta regional priority freight highway network.

### 7.2 Rail

The Atlanta region is served by two primary Class I railroads, CSX Transportation and Norfolk Southern, and three smaller rail lines: Georgia Northeastern, Fulton County Railway, and Georgia DOT owned rail lines. None of these railroads traverse the North Fulton CTP study area.

### 7.3 Intermodal and Airport Operations


The North Fulton CTP study area does not include any intermodal or airport facilities.











**North Fulton County**  
 Transportation Resource  
 Implementation Program

 ATLANTA REGIONAL COMMISSION  
 Kimley-Horn and Associates, Inc.

**Reference Location**

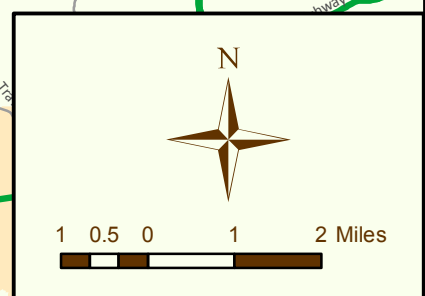
**ARC 20-County Region**  


**Legend**

-  Priority Freight Highway Network
-  Study Network
-  Other Major Roads
-  Expressways
-  North Fulton Study Area
-  Counties
-  Other Cities

Source: Atlanta Regional Commission

**Figure 7-1**  
**Proposed Priority**  
**Freight Highway Network**







## 8.0 PROGRAMMED PROJECTS

### 8.1 Stimulus Projects

There are a total of nine American Recovery and Reinvestment Act (ARRA) projects in the North Fulton area. Project types include roadway maintenance and operations, operational upgrades, multi-use bicycle/pedestrian facilities, and pedestrian facilities. No transit projects or major roadway capacity projects are included in the ARRA projects. A list of the ARRA projects is provided at the end of Table 8-1.

### 8.2 Regional Projects

The *Envision6* Regional Transportation Plan (RTP) includes 46 projects that are specific to the North Fulton area<sup>46</sup>. Bicycle/pedestrian, roadway, and transit project types are represented. The only major transit project is bus rapid transit (BRT) along I-285 from Cumberland/Galleria to the Central Perimeter. While several east/west roadway improvements are included in the RTP, most are planned to open in 2020 or later. The exception is the GA-400 flexible shoulder lanes, which will add peak period capacity along GA-400 from Spalding Drive to McFarland Road. Table 8-1 provides a list of the programmed *Envision6* projects in North Fulton. A listing of planned *Envision6* projects is provided in Appendix H.

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<sup>46</sup> This number does not include those projects of regional scale that are not solely specific to North Fulton. This list was generated using a GIS shapefile obtained from ARC.



**Table 8-1: Envision6 Programmed Projects**

ARC ID	Funding Total	Completion Date	Project Group	Project Type	Project Description	From	To
FN-199	\$5,142,648	2011	Roadway	ITS-Smart Corridor	SR 9 ATMS	Abernathy Road	Forsyth County Line
FN-204	\$500,000	2013	Roadway	ITS-Smart Corridor	SR 92 (Crossville Road/Woodstock Road) ATMS	Cobb County Line	SR 9 (Alpharetta Highway)
FN-203	\$950,000	2011	Roadway	ITS-Smart Corridor	SR 140 (Holcomb Bridge Road) ATMS	SR 9 (Alpharetta Highway)	Barnwell Road
FN-173A	\$ -	2009	Roadway	General Purpose Roadway Capacity	Westside Parkway: Segment 2 - Rock Mill Road/Old Roswell Road (Widen 2 to 4 lanes)	1,000 Feet South of Mansell Road	Rock Mill Road at Sanctuary Park
FN-173B	\$ -	2009	Roadway	General Purpose Roadway Capacity	Westside Parkway: Segment 2 - Rock Mill Road/Old Roswell Road (Widen 2 to 4 lanes)	1,000 Feet South of Foe Killer Creek	1,000 Feet North of Foe Killer Creek
FN-201	\$1,150,000	2011	Roadway	ITS-Other	Windward Parkway Traffic Signal Interconnections	SR 9 (Alpharetta Road)	McGinnis Ferry Road
FN-202	\$1,070,000	2011	Roadway	ITS-Other	North Point Parkway Traffic Signal Interconnections	Mansell Road	Windward Parkway
FN-107	\$11,180,000	2020	Roadway	General Purpose Roadway Capacity	Kimball Bridge Road (Widen 2 to 4 lanes)	North Point Parkway	State Bridge Rd/Old Milton Pkwy
FN-AR-BP076A	\$ -	2009	Bike/Ped	Multi-Use Bike/Ped Facility	Johns Creek Greenway: Segment 2	Finley Road at SR 141	Old Alabama Road
FN-AR-BP076B	\$2,300,000	2014	Bike/Ped	Multi-Use Bike/Ped Facility	Johns Creek Greenway: Segment 2	Old Alabama Road	Vista Bluff Drive
FN-233A	\$48,684,000	2020	Roadway	General Purpose Roadway Capacity	McGinnis Ferry Road: Segment 1 (Widen 2 to 4 lanes)	Union Hill Road	Sargent Road
AR-936	\$5,200,000	2011	Roadway	General Purpose Roadway Capacity	GA-400 Flexible Shoulder Lanes (Upgrade Shoulders for Through Travel in Peak Periods)	Spalding Drive	McFarland Road

*(Table continued on following page)*

# EXISTING CONDITIONS REPORT



(Continued from previous page)

AR-H-400	\$277,509,000	2020	Roadway	Managed Lanes (Auto/Bus)	GA-400 HOV Lanes (4 Managed Lanes)	I-285	McFarland Road
FN-AR-204	\$ -		Bike/Ped	Pedestrian Facility	Hammond Drive/Sandy Springs Circle Pedestrian Improvements		
<i>ARRA Projects</i>							
FN-AR-144	\$2,217,600	2011	Bike/Ped	Pedestrian Facility	Peachtree-Dunwoody Road Pedestrian Improvements	I-285	Abernathy Road
FN-250	\$3,987,000	2012	Roadway	Operational Upgrades	Mount Vernon Hwy and Peachtree Dunwoody Rd Inters. Improvements		
FN-246	\$572,350	2010	Roadway	Maintenance/Operations	SR 9 (Atlanta Street) Repaving	Chattahoochee River	SR 120 (Marietta Highway)
FN-247	\$3,216,748	2010	Roadway	Maintenance/Operations	SR 9 (Roswell Road) Repaving	Abernathy Road	Chattahoochee River
FN-215	\$1,422,750	2010	Roadway	Operational Upgrades	Kimball Bridge Road	Waters Road	
FN-177	\$1,332,029	2010	Bike/Ped	Pedestrian Facility	SR 140 (Holcomb Bridge Road)	Old Holcomb Bridge Road	GA-400
FN-249	\$165,000	2012	Bike/Ped	Multi-Use Bike/Ped Facility	Johns Creek Greenway - Segment 1, Part 2		
FN-243	\$427,922	2011	Roadway	Operations	Pine Grove Road and Magnolia Street Signal Upgrades	Waterford Way, Lake Charles Drive, Coleman Road,	Mimosa Boulevard
FN-165	\$ -	2011	Bridge	Upgrade	Kimball Bridge Road	Big Creek	
FN-244	\$ -	2010	Roadway	Operations	Old Alabama Road Traffic Signal Upgrades	At 8 locations	
FN-254	\$336,039	2011	Roadway	Operations	SR 140 (Holcomb Bridge Rd)/Barnwell Rd Intersection Improvements		
FN-AR-204	\$2,032,958	2011	Bike/Ped	Pedestrian Facility	Hammond Drive/Sandy Springs Circle Pedestrian Improvements		

Source: Atlanta Regional Commission



**8.3 Local Projects**

Every jurisdiction in North Fulton has locally planned and programmed projects in addition to the previously discussed stimulus and regional projects. The following sections provide an overview of local projects and are organized by jurisdiction. As the available data varied by jurisdiction, some tables have more information than others.

**Alpharetta**

Alpharetta has 14 locally planned and programmed projects divided into short-, intermediate-, and long-term implementation time frames. Both highway capacity and local transit projects are represented. Table 8-2 provides a listing of the Alpharetta Projects:

**Table 8-2: Alpharetta Transportation Projects**

<b>Timeframe</b>	<b>Type</b>	<b>Description</b>	<b>From</b>	<b>To</b>
Intermediate	Highway	Westside Pkwy	Old Milton Pkwy	Windward Pkwy
Long Term	Highway	Webb Bridge Rd	GA-400	Kimball Bridge Rd
Short Term	Highway	Webb Bridge Rd	Red Oak Ln	GA-400
Long Term	Highway	Alpharetta Rd	Canton St	Windward Pkwy
Long Term	Highway	Haynes Bridge Rd	Mansell Rd	County Line
Intermediate	Highway	Mansell Rd	Old Roswell Rd	GA-400
Short Term	Highway	Future Westside Parkway	Mansell Rd	Old Milton Pkwy
Short Term	Highway	Norcross St	Marietta St	Thompson St
Intermediate	Transit	Maxwell Rd/Main St	Upper Hembree Rd	Northpoint Center East
Intermediate	Transit	Hardscrabble Rd/Houze Rd/Hembree Rd	County Line	City Limit
Intermediate	Transit	GA400	City Limit	Windward Pkwy
Intermediate	Transit	North Point Center East	Northpoint Circle	Upper Hembree Rd
Intermediate	Transit	North Point Cntr E/North Point Pky/State Bridge Rd	Northpoint Circle	County Line
Intermediate	Transit	Morris Rd	Nothpoint Pkwy	Northpoint Pkwy

Source: City of Alpharetta Comprehensive Plan





## Johns Creek

Johns Creek Roadway capacity and intersection improvement projects make up the planned and programmed projects in the City of Johns Creek. Table 8-3 provides a listing of the local projects planned or programmed in Johns Creek.

**Table 8-3: Johns Creek Transportation Projects**

<b>Cost</b>	<b>Type</b>	<b>Description</b>
\$46,184,000	Road Capacity	McGinnis Segment 1 (Union Hill Rd to Sargent Rd)
\$ -	Road Capacity	Old Alabama Segment 3 (Buice Rd to Medlock)
\$38,921,000	Road Capacity	Old Alabama Segment 1 (Holcomb to Jones Bridge)
\$42,031,000	Road Capacity	Old Alabama Segment 2 (Jones Bridge to Medlock)
\$54,896,200	Road Capacity	SR 120 (State Bridge to Gwinnett Line)
\$12,949,800	Road Capacity	Haynes Bridge (Mansell to Old Alabama)
\$23,518,320	Road Capacity	Jones Bridge Segment 1 (Old Alabama to SR120)
\$9,940,600	Road Capacity	State Bridge (SR120 to Peachtree Industrial)
\$7,500,000	Road Capacity	Jones Bridge Segment 2 (SR120 to McGinnis Ferry)
\$1,170,000	Intersection Improvement	Jones Bridge @ Waters Rd
\$1,200,000	Intersection Improvement	Jones Bridge @ Buice Rd
\$1,050,000	Intersection Improvement	Jones Bridge @ Morton Rd
\$2,370,000	Intersection Improvement	Rogers Bridge Rd @ Bell Rd
\$1,851,000	Intersection Improvement	Bell Rd @ Rogers Cir
\$1,000,000	Intersection Improvement	Bell Rd @ Boles Rd

Source: City of Johns Creek



## Milton

Milton is currently working on a Comprehensive Transportation Plan. The local projects are divided into corridor and intersection improvements. Table 8-4 provides a listing of projects that are preliminarily recommended.

**Table 8-4: Milton Transportation Projects Being Considered**

Name	Type
Alpharetta Hwy (SR 9) / Cumming Hwy	Roadway
Arnold Mill Rd (SR 140) / Houze Rd / Hickory Flat Hwy	Roadway
Rucker Rd / Old Milton Pkwy	Roadway
Holbrook Campground Rd / Hopewell Rd / Hamby Rd	Roadway
School Dr	Roadway
Morris Rd	Roadway
Birmingham Rd @ Freemanville Rd	Intersection
Hopewell Rd / Cogburn Rd @ Francis Rd	Intersection
Freemanville Rd @ Providence Rd	Intersection
Bethany Rd @ Providence Rd	Intersection
Birmingham Hwy (SR 372) @ Birmingham Rd / Hickory Flat Rd	Intersection
Hopewell Rd @ Redd Rd	Intersection
Birmingham Rd @ Hopewell Rd	Intersection
Strickland Rd @ Bethany Bend	Intersection
Bethany Bend @ Morris Rd / McGinnis Ferry Rd	Intersection
Webb Rd @ Morris Rd	Intersection
Morris Rd @ Deerfield Pkwy	Intersection
Hopewell Rd @ Bethany Bend	Intersection
Hopewell Rd @ Bethany Way	Intersection
Bethany Oaks Pointe @ Hopewell Rd	Intersection
Bethany Rd @ Cogburn Rd	Intersection
Cogburn Rd @ Bethany Bend	Intersection
Batesville Rd @ Taylor Rd	Intersection
Arnold Mill Rd (SR 140) @ Green Road	Intersection
Alpharetta Hwy (SR 9) @ Keyingham Way	Intersection
Alpharetta Hwy (SR 9) @ Bethany Bend	Intersection
Hopewell Rd @ Hamby Rd	Intersection
Arnold Mill Rd (SR 140) @ Ranchette Rd	Intersection
Crabapple Rd / Mayfield Rd @ Birmingham Hwy (SR 372) / Broadwell Rd (Crabapple Crossroads)	Intersection
Alpharetta Hwy (SR 9) @ Webb Rd	Intersection
Birmingham Hwy (SR 372) @ New Providence Rd	Intersection
Arnold Mill Rd (SR 140) @ New Providence Rd	Intersection
Alpharetta Hwy (SR 9) @ Deerfield Pkwy	Intersection
Arnold Mill Rd (SR 140) @ Cox Rd	Intersection

Source: City of Milton Comprehensive Transportation Plan



## Roswell

Roswell currently has a total of 33 projects that are locally planned and programmed. Project types include maintenance, streetscapes, intersection improvements, signal upgrades, ATMS, sidewalks, multi-use trails, bridges, and highway capacity projects. No transit projects are planned or programmed. Table 8-5 provides a listing of the Roswell projects.

**Table 8-5: Roswell Transportation Projects**

<b>Name</b>	<b>Type</b>
Norcross Street Drainage Improvements	Maintenance
Pine Grove Road Drainage Improvements	Maintenance
Oak Street Streetscape	Streetscape
Midtown Streetscape (SR 9)	Streetscape
SR 140/Holcomb Bridge Road	Intersection Improvement
Grimes Bridge Road/Norcross Street/Warsaw Road Roundabout	Intersection Improvement
Oxbo Road Relocation and Elm Street Extension	Intersection Improvement
Hardscrabble Road @ East Chaffin Road	Intersection Improvement
Hardscrabble Road @ West Chaffin Road	Intersection Improvement
Crabapple Road @ Rucker Road	Intersection Improvement
Old Alabama Road @ Roxburgh Drive	Intersection Improvement
Old Alabama Road @ Old Alabama Road Connector	Intersection Improvement
Pine Grove Road	Signal Upgrade
Old Alabama Road	Signal Upgrade
SR 92 (Crossville / Woodstock Road) ATMS	ATMS
SR 140 (Holcomb Bridge Road) ATMS	ATMS
SR 9 ATMS	ATMS
Crabapple Road Sidewalk	Sidewalk
Warsaw Road Sidewalk	Sidewalk
Fouts Road Sidewalk	Sidewalk
Holcomb Bridge Middle School Sidewalk	Sidewalk
Holcomb Bridge Sidewalk	Sidewalk
Hembree Road Bridge Replacement	Bridge
Grimes Bridge Bridge Replacement	Bridge
Mansell Extension	Capacity
Sun Valley Drive Extension	Capacity
Mansell Place Extension	Capacity
Swaybranch Extension	Capacity
South Atlanta Corridor Improvements	Capacity
Big Creek Bridge	Capacity

Source: City of Roswell



**Sandy Springs**

Sandy Springs has 32 locally planned and programmed transportation projects. Project types included in the Sandy Springs plan are advanced traffic management systems (ATMS), interchange improvements, recreational trails, road widening, sidewalks, and streetscapes. Table 8-6 provides a listing of the Sandy Springs Projects. Figure 8-1 provides a graphical representation of all of the transportation infrastructure projects within North Fulton County<sup>47</sup>.

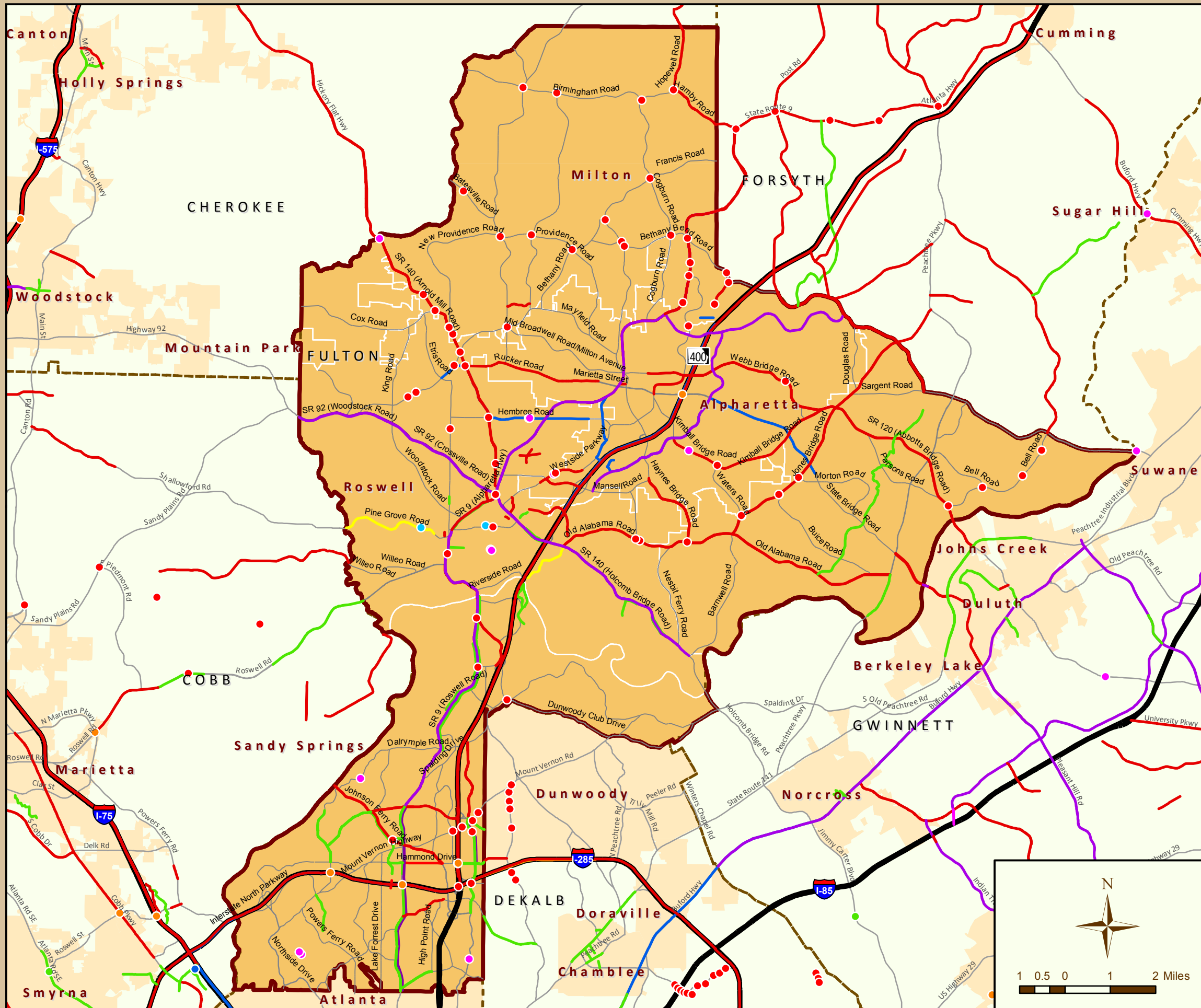
**Table 8-6: Sandy Springs Transportation Projects**

<b>Project ID</b>	<b>Project Type</b>	<b>Project Name &amp; Description</b>
T-0013	ATMS	Roswell Road ATMS (Abernathy to Chattahoochee River)
PCID	ATMS	Peachtree Dunwoody Road ATMS
T-0023	Concept Design	I-285 Tunnel - Sandy Springs Circle Underpass
T-0024	Concept Design	Hammond Widening (Roswell Road to Glenridge)
T-0011	Concept Design	Johnson Ferry - Glenridge - (Earmark)
T-0025	Concept Design	Dunwoody Place Improvements (Roswell Road to Northridge)
T-0026	Concept Design	Peachtree Dunwoody Road Improvements (Spalding to Abernathy)
T-0031	Interchange Improvements	I-285 Bridge Re-striping
n/a	Land Acquisition	Greenway - Abernathy Road Section
T-0002	Land Acquisition	Greenway - Abernathy Road Section
n/a	LCI Study South	LCI Study South
T-0030	LCI Study South	LCI Study South
T-0002	Park Design	Greenway - Abernathy Road Section
T-0029	Recreational Trail Construction	Island Ford Trail Extension
T-0001	Road Widening	Abernathy Road Widening
T-0025	Road Widening	Dunwoody Place Improvements (Roswell Road to Northridge)
T-0026	Road Widening	Peachtree Dunwoody Road Improvements (Spalding to Abernathy)
T-0007	Sidewalk and Traffic Calming	Mt Vernon Parkway Sidewalk and Traffic Calming (SSRI)
T-0005	Sidewalks	River Valley Road Sidewalks (SSRI)
T-0017	Sidewalks	Riverside Drive Sidewalks (Old Riverside to Heards Ferry)
T-0020	Sidewalks	Windsor Parkway Sidewalks (Roswell to High Point)
T-0032	Sidewalks	CDBG Sidewalk
PCID	Sidewalks	Hammond Drive Sidewalks
T-0008	Streetscape	Roswell Road Streetscape (Cliftwood to Hammond) (SSRI)
T-0012	Streetscape	Roswell Road Streetscape (Johnson Ferry to Abernathy)
T-0014	Streetscape	Sandy Springs Circle Pedestrian Enhancement (Phase II)
T-0015	Streetscape	Sandy Springs Circle Pedestrian Enhancement (Phase III)
T-0006	Streetscape	Sandy Springs Circle and Hammond Drive Pedestrian Enhancement Phase I (SSRI)
T-0009	Streetscape	Roswell Rd and Johnson Ferry Pedestrian Link
PCID	Streetscape	Peachtree Dunwoody Road: I285 to Abernathy Road (Streetscape)
PCID	Streetscape	Perimeter Center West Streetscapes and Intersection Improvements
PCID	Streetscape	Peachtree Dunwoody Medical Center Streetscapes
T-0019	Streetscape	Roswell Road Streetscape (I-285 to Atlanta City Limits)

Source: City of Sandy Springs

<sup>47</sup> Some projects listed in the previous tables may not be shown graphically due to recent programming (e.g. ARRA or local projects recently added to a work program).






**North Fulton County  
Transportation Resource  
Implementation Program**




ATLANTA REGIONAL COMMISSION      Kimley-Horn and Associates, Inc.

**Reference Location**

**ARC  
20-County  
Region**

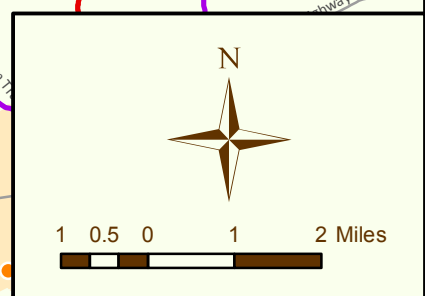


**Legend**

● Roadway Project	— Roadway Project
● Transit Facilities	— Transit Project
● Bridge Project	— Bridge Project
● Bike / Ped Project	— Bike / Ped Project
● ITS / ATMS Project	— ITS / ATMS Project
● Interchange Project	— Interchange Project
● Maintenance Project	— Signal Project
— Study Network	■ North Fulton Study Area
— Other Major Roads	⋯ Counties
— Expressways	■ Other Cities

Source: Atlanta Regional Commission, City of Alpharetta, City of Johns Creek, City of Milton, City of Roswell, City of Sandy Springs

**Figure 8-1  
Programmed Projects**





## 9.0 TRANSPORTATION FUNDING

Current primary funding in the state of Georgia consist of the following three sources:

- Federal – most is formula based to GDOT and transit agencies
- State – primarily from the state gas tax
- Local – includes county general funds (from taxes), Special Purpose Local Option Sales Taxes (SPLOST), and impact fees.

More Specifically, Georgia receives \$3-4 billion each year from the following sources<sup>48</sup>:

- \$1.1-1.3 billion from the Federal Highway Administration
- \$1 billion in state sources (mostly gas tax)
- \$750 million from bonds

An important fact worth noting is that Georgia has the second lowest gas tax in the country. While the national average state gas tax is 27.2 cents per gallon, Georgia's gas tax currently sits at 13 cents per gallon.

The ARC Regional Transportation Plan (RTP)<sup>49</sup>, otherwise known as *Envision6*, currently averages \$1.1-1.7 billion of the total \$3-4 billion state budget per year. Programmed transportation investments were identified in *Envision6* and it was determined that North Fulton County projects account for a total of 5 percent of the total Atlanta MPO transportation programmed investment projects. For comparison, in 2008 North Fulton County represented 5.7 percent of the region's population and 6.9 percent of the region's employment.

Planned investments<sup>50</sup> in *Envision6* total approximately \$1 billion in North Fulton County through year 2030. If this planned investment is realized, the area will average \$46 million per year of investments in North Fulton County (this does not include ongoing MARTA service costs).

North Fulton County faces a funding challenge. With the existing one percent MARTA sales tax for all of Fulton and DeKalb Counties, this makes it very difficult for any portion of Fulton County to seek additional taxation for local transportation investments.

Current transportation funding sources for North Fulton County should be reevaluated in efforts to identify more efficient and direct methods of funding for this unique area. Through the use of SPLOSTs, its neighbors, Cobb County and Gwinnett County have realized approximately \$137 million and \$150 million per year, respectively, mostly for transportation enhancements. Without an additional revenue source or reallocating and reprogramming existing funding, North Fulton County will likely not keep pace with its neighbors.

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<sup>48</sup> This does not include the many local revenue sources such as the Fulton and DeKalb County MARTA sales tax which averages \$340 million per year. Other local SPLOSTs are also not accounted for in this number.

<sup>49</sup> The Regional Transportation Plan consists of programmed projects residing within the Transportation Improvement Plan. The projects have been allocated funding for implementation.

<sup>50</sup> Planned projects in the Regional Transportation Plan include projects that are planned but not yet funded.



## 10.0 ENVIRONMENTAL CONDITIONS

An important aspect of North Fulton is its dedication to its natural resources; therefore, there is a great sensitivity given to the footprint that North Fulton puts on its local environment. This section provides an inventory of the natural and environmentally sensitive areas in the North Fulton area. This inventory then may be used to consider the issues, opportunities, and problems associated with the interaction of these resources with future transportation projects.

### 10.1 Methodology

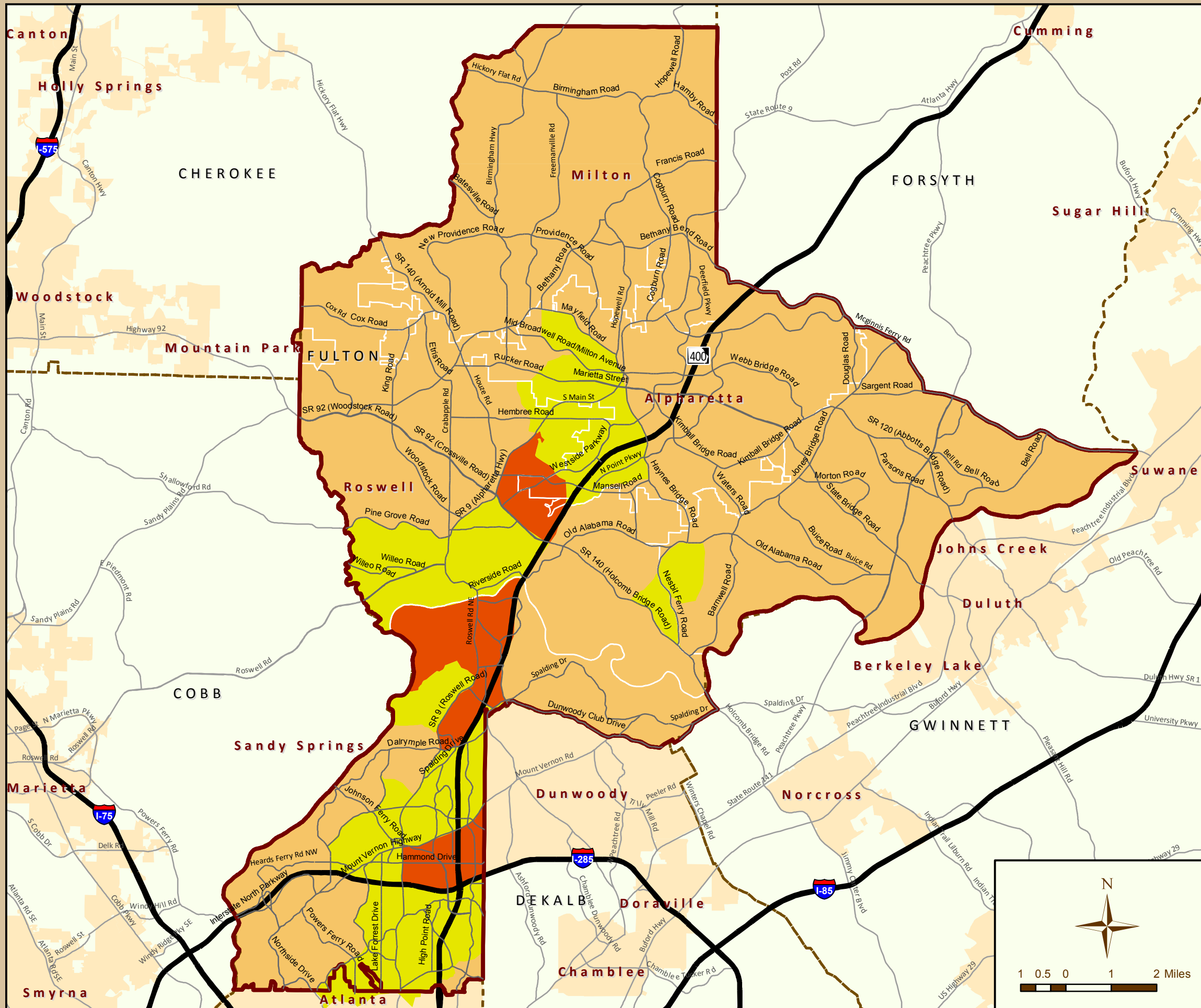
The environmental inventory was divided into five major categories: environmental justice areas, jurisdictional waters, threatened and endangered species, hazardous materials, and cultural resources. Data used as a basis for this environmental inventory was collected from a variety of sources, including ARC, Natural Archaeological and Historic Resources GIS (NAHRGIS), Georgia Department of Natural Resources, and the US Fish and Wildlife Department.

### 10.2 Environmental Justice Areas

The executive order on Environmental Justice enacted in 1994 made environmental justice part of the mission of every federal agency. The United States Environmental Protection Agency (USEPA) defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work." In the case of North Fulton, equity is afforded to every citizen, independent of income for the implementation of this transportation plan. Due to the local tendency for minorities to exist in a higher income levels than perhaps other parts of the country, environmental justice was not based on race for the purposes of this study.

As shown in Figure 10-1, the highest density of low income households, considered to be earning less than \$35,000 per year, exists along GA-400 in the central and southern parts of the North Fulton CTP study area. Equity shall be provided to residents in these areas, as well as to the residents of areas where a lower density of low-income homes exist for the implementation of this transportation plan.






**North Fulton County  
Transportation Resource  
Implementation Program**




ATLANTA REGIONAL COMMISSION      Kimley-Horn and Associates, Inc.

**Reference Location**

**ARC  
20-County  
Region**

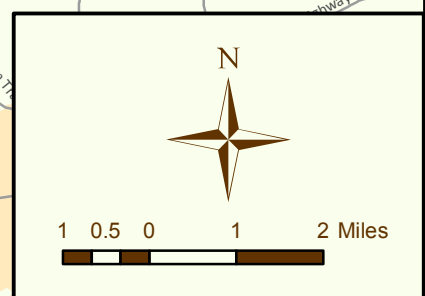


**Legend**

Households with Income < \$35,000	Study Network
20% - 30%	Other Major Roads
30% - 40%	Expressways
North Fulton Study Area	
Counties	
Other Cities	

Source: US Census

**Figure 10-1  
Income < \$35,000 / Household**







## 10.3 Water Resources

Watersheds, stream corridors, and wetlands comprise the vital water resources of North Fulton County. They provide for a variety of ecological values and functions, including wildlife habitat, flood control, water quality preservation, drinking water supply, fisheries, and recreation.

### 10.3.1 Watershed

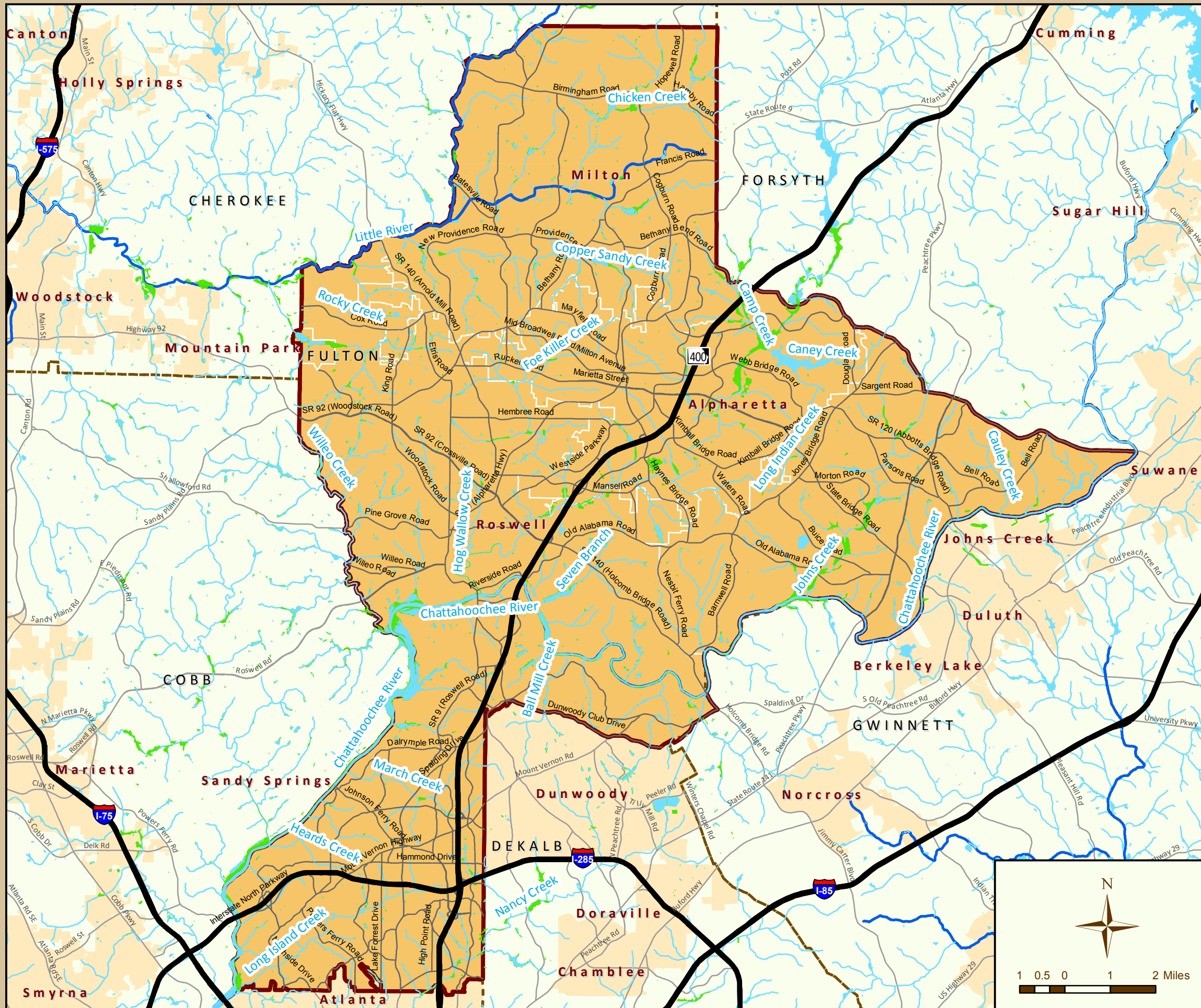
Watersheds are areas that share a common water drainage pattern. Two major watersheds exist in the North Fulton area. The Upper Chattahoochee watershed encompasses the largest area of North Fulton, while the Etowah watershed consists of northwest portions of the cities of Milton and Roswell, as well as all of Mountain Park. Smaller watersheds, such as the Big Creek watershed exist in the North Fulton area as well. A buffer must be maintained between any roadway and a stream in order to maintain the water quality within the watershed.

### 10.3.2 Stream Corridors

GIS documents streams identified by the U.S. Army Corps of Engineers as blue line streams. Blue line streams are regulated by the State of Georgia and would require additional verification, study, and permitting if impacts are anticipated. Many blue line streams exist in the North Fulton area, although many of them are considered first order and second order streams. Two major rivers exist in the area: Little River and the Chattahoochee River. The largest is the Chattahoochee River, and both are shown in Figure 10-2. The larger rivers must be considered when planning transportation projects. These rivers can have a major effect on traffic patterns in the area because of limited crossings. For example, much of the traffic associated with SR 9 in the Roswell area can be attributed to the fact that it is one of the only major arterials over the river in the area, forcing vehicles to one point to cross over the water corridor. Additionally, stream buffers must be maintained according to Corps of Engineers, State of Georgia, and local ordinances.

### 10.3.3 Wetlands


Wetlands are among the most productive ecosystems in the world, playing an integral part in the ecology of the watershed, and contributing to atmospheric maintenance; therefore, it is important to protect these delicate resources. A wetland is defined as land where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. The locations of wetlands are indicated in Figure 10-2. Wetlands are regulated resources and permits from the U.S. Army Corps of Engineers and the State of Georgia are required with potential impacts.








**North Fulton County  
Transportation Resource  
Implementation Program**  



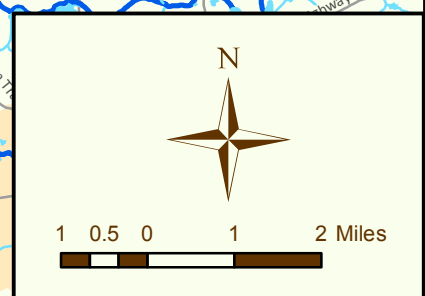
**Reference Location**


**ARC  
20-County  
Region**

**Legend**

-  Study Network
-  Lakes and Ponds
-  Wetlands
- Rivers and Streams**
-  Major
-  Minor
-  Other Major Roads
-  Expressways
-  North Fulton Study Area
-  Counties
-  Other Cities

Source: Atlanta Regional Commission



**Figure 10-2  
Streams and Wetlands**



**10.4 Threatened and Endangered Species**

Threatened and endangered species have been identified in the North Fulton area and are indicated in Figure 10-3. Similar to streams and wetlands, buffers may be required around specified habitats of these protected species. The protected plant and animal species that exist in North Fulton are listed in Table 10-1. Transportation projects can have a direct or indirect effect on these species. Direct impacts may be a result of construction activities destroying habitats, while indirect impacts may be caused by the division of a habitat area.

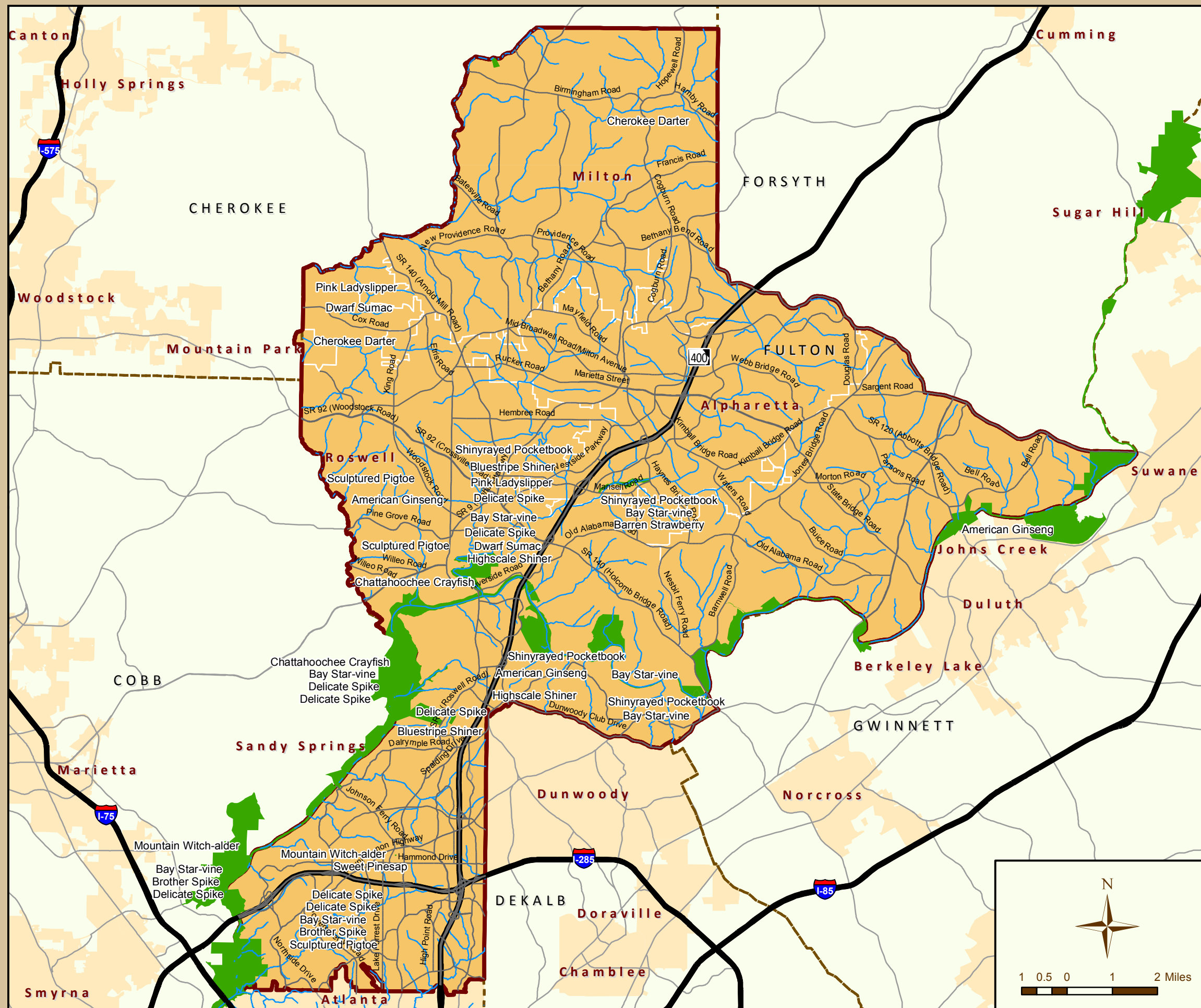
**Table 10-1: Protected Species**

<b>Kingdom</b>	<b>Group</b>	<b>Species Name</b>	<b>Common Name</b>
Animal	Crustacean	Cambarus howardi	Chattahoochee Crayfish
Community	Natural Community	Cave	Cave
Animal	Fish	Cyprinella callitaenia	Bluestripe Shiner
Plant	Monocot	Cypripedium acaule	Pink Ladyslipper
Animal	Mollusk	Elliptio arcata	Delicate Spike
Animal	Mollusk	Elliptio fraterna	Brother Spike
Animal	Fish	Etheostoma scotti	Cherokee Darter
Plant	Dicot	Fothergilla major	Mountain Witch-alder
Animal	Mollusk	Hamiota subangulata	Shinyrayed Pocketbook
Plant	Monocot	Melanthium latifolium	Broadleaf Bunchflower
Plant	Dicot	Monotropsis odorata	Sweet Pinesap
Plant	Dicot	Nestronia umbellula	Indian Olive
Animal	Fish	Notropis hypsilepis	Highscale Shiner
Plant	Dicot	Panax quinquefolius	American Ginseng
Animal	Reptile	Pituophis melanoleucus	Northern Pine Snake
Animal	Mollusk	Quincuncina infucata	Sculptured Pigtoe
Plant	Dicot	Rhus michauxii	Dwarf Sumac
Plant	Dicot	Schisandra glabra	Bay Star-vine
Plant	Dicot	Waldsteinia lobata	Barren Strawberry

Source: US Fish and Wildlife

A conservation area is a tract of land that has been awarded protected status in order to ensure that natural features, such as protected species, are safeguarded. Designated conservation areas have been identified in North Fulton as shown in Figure 10-3.







**North Fulton County**  
 Transportation Resource  
 Implementation Program








 ATLANTA REGIONAL COMMISSION
 

**Reference Location**



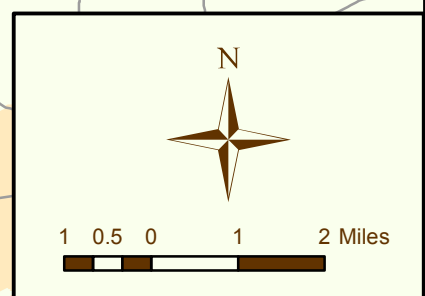
**ARC 20-County Region**

**Legend**

-  Rivers and Streams
-  Conservation Lands
- Labeled* Threatened and Endangered Species
-  Study Network
-  Other Major Roads
-  Expressways
-  North Fulton Study Area
-  Counties
-  Other Cities

Source: US Fish and Wildlife

**Figure 10-3**  
**Protected Species**







## 10.5 Land Resources

Perhaps no other resource in North Fulton is as valued as its beautiful parks and the preservation of its historic resources. Care must be taken when planning future roadways not to disturb these land resources.

### 10.5.1 Parks

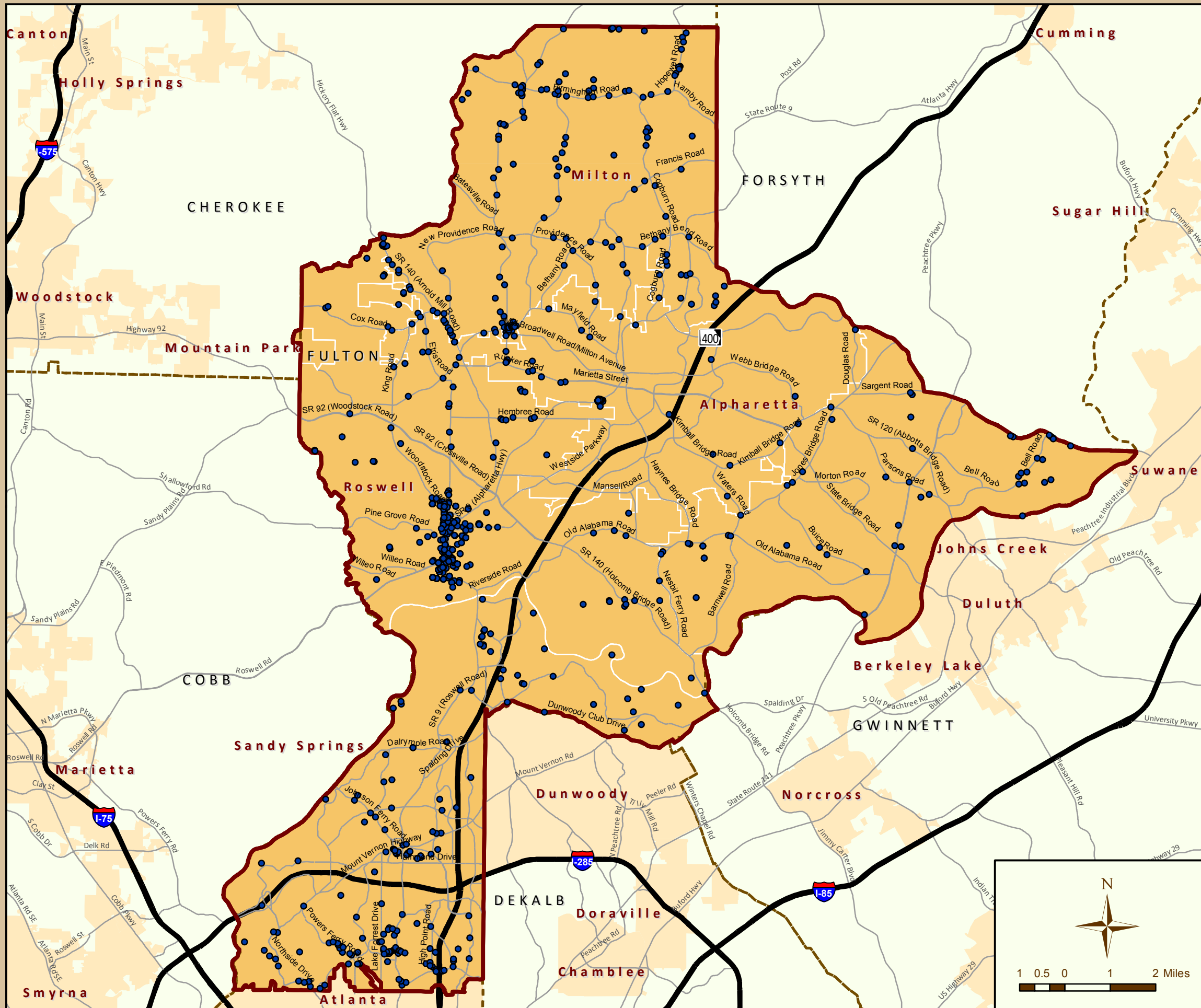
Approximately 47 parks are located in the North Fulton area, many of them owned and managed by local governments. The Chattahoochee River National Recreation, which is owned and managed by the National Park Service, is the largest park in North Fulton County.

### 10.5.2 Historic Resources

There are approximately 846 historic resources located in North Fulton County. The majority of these resources are clustered around downtown Roswell within the study area as shown in Figure 10-4. Additionally, many structures located along Arnold Mill Road in Milton have been designated as historic. Structures that have been deemed as historic must be protected and preserved when planning future roadways. Responsible long range planning will take into account all historic resources when being developed.

## 10.6 Air Quality

Air pollution in North Fulton can have detrimental effects on the health of its citizens, water quality, visibility, wildlife, and vegetation. Mobile sources are the most significant contributors to air pollution, contributing to an increase in Carbon Monoxide (CO), Hydrocarbons (HC), Nitrogen Oxides (NO<sub>x</sub>), and Particulate Matter (PM 2.5). HC and NO<sub>x</sub> form in the atmosphere to create Ozone (O<sub>3</sub>). Air quality is extremely important in the North Fulton area due to its designation by the EPA as a non-attainment area for O<sub>3</sub> and PM 2. In United States environmental law, a non-attainment area is an area considered to have air quality worse than the National Ambient Air Quality Standards (NAAQS) as defined in the Clean Air Act. Non attainment areas must develop and implement a plan to meet the standard, or risk losing transportation federal financial assistance. In order to reduce these air toxins, it is essential that North Fulton promotes wiser, healthier, more efficient transportation methods by supporting alternative transportation methods, reducing delay at intersections, and reducing urban sprawl.




**North Fulton County  
Transportation Resource  
Implementation Program**


**ARC**  
ATLANTA REGIONAL COMMISSION



Kimley-Horn  
and Associates, Inc.

**Reference Location**

**ARC  
20-County  
Region**

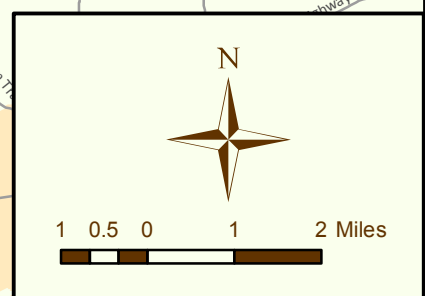


**Legend**

- Historic Resource Locations
- Study Network
- Other Major Roads
- Expressways
- North Fulton Study Area
- Counties
- Other Cities

Source: NAHRGIS

**Figure 10-4  
Historic Resources**





## 11.0 NEXT STEPS

This Existing Conditions Report provides information regarding the operation and efficiency of the existing transportation infrastructure and services. The next phase of the North Fulton CTP is the Needs Assessment phase. In the Needs Assessment phase, the Atlanta Regional Commission's travel demand model, population forecasts, and employment forecasts will be the primary tools used for analyses to determine future transportation needs. A number of model scenarios will be included that will provide combinations of the 2030 ARC land use plan. The findings from the Needs Assessment phase will then be documented in the form of a Needs Assessment Report, which will include a detailed report, maps, and Measures-of-Effectiveness (MOE's).

The final step of the North Fulton CTP is the Recommendations phase. Specific projects will be recommended from the Needs Assessment phase and rigorously vetted through the Project Management Team, Stakeholder Committee, Policy Committee, and general public. A prioritized list of recommendations will be documented in a Recommendations Report, which will include a detailed report, maps, and project specifics.