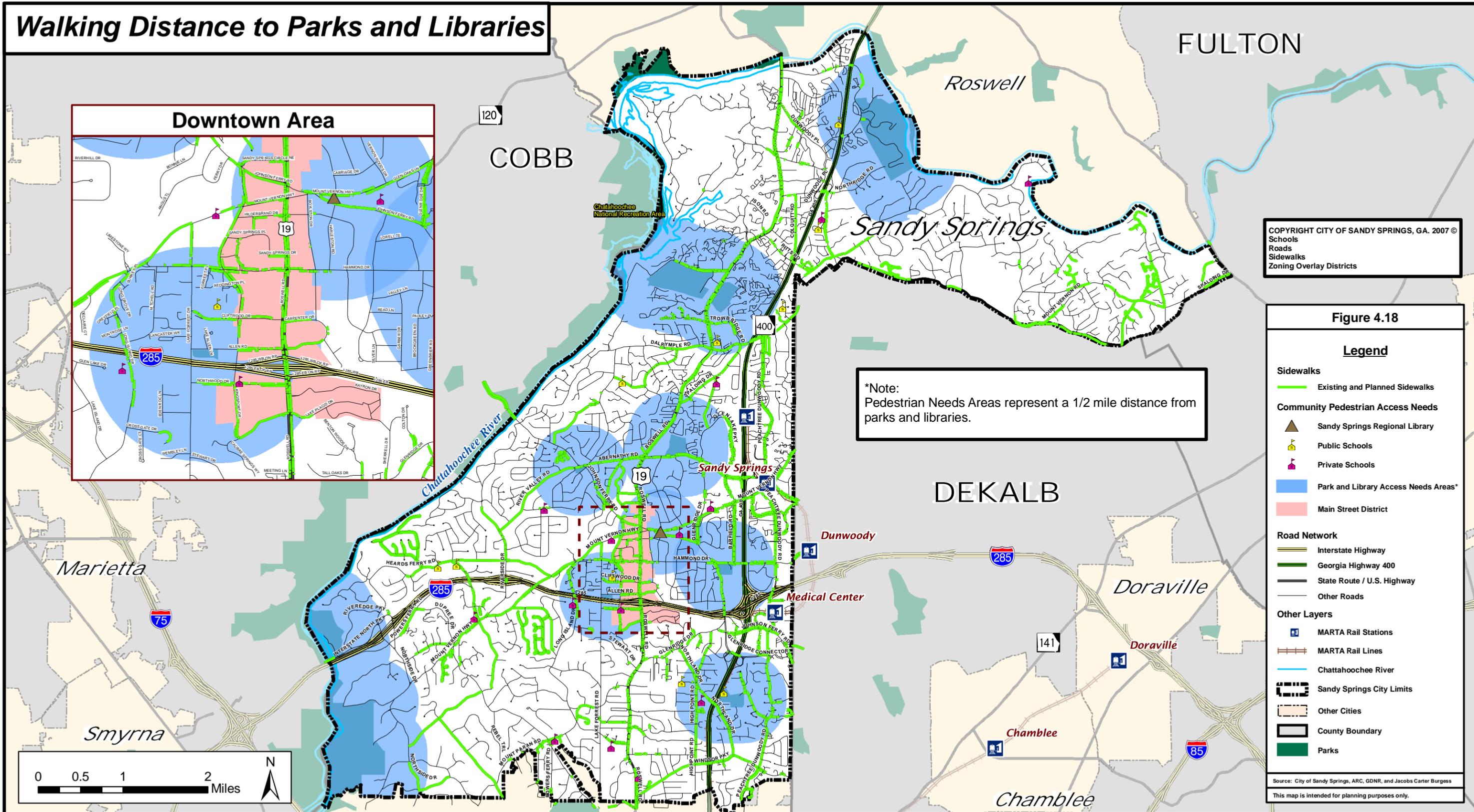
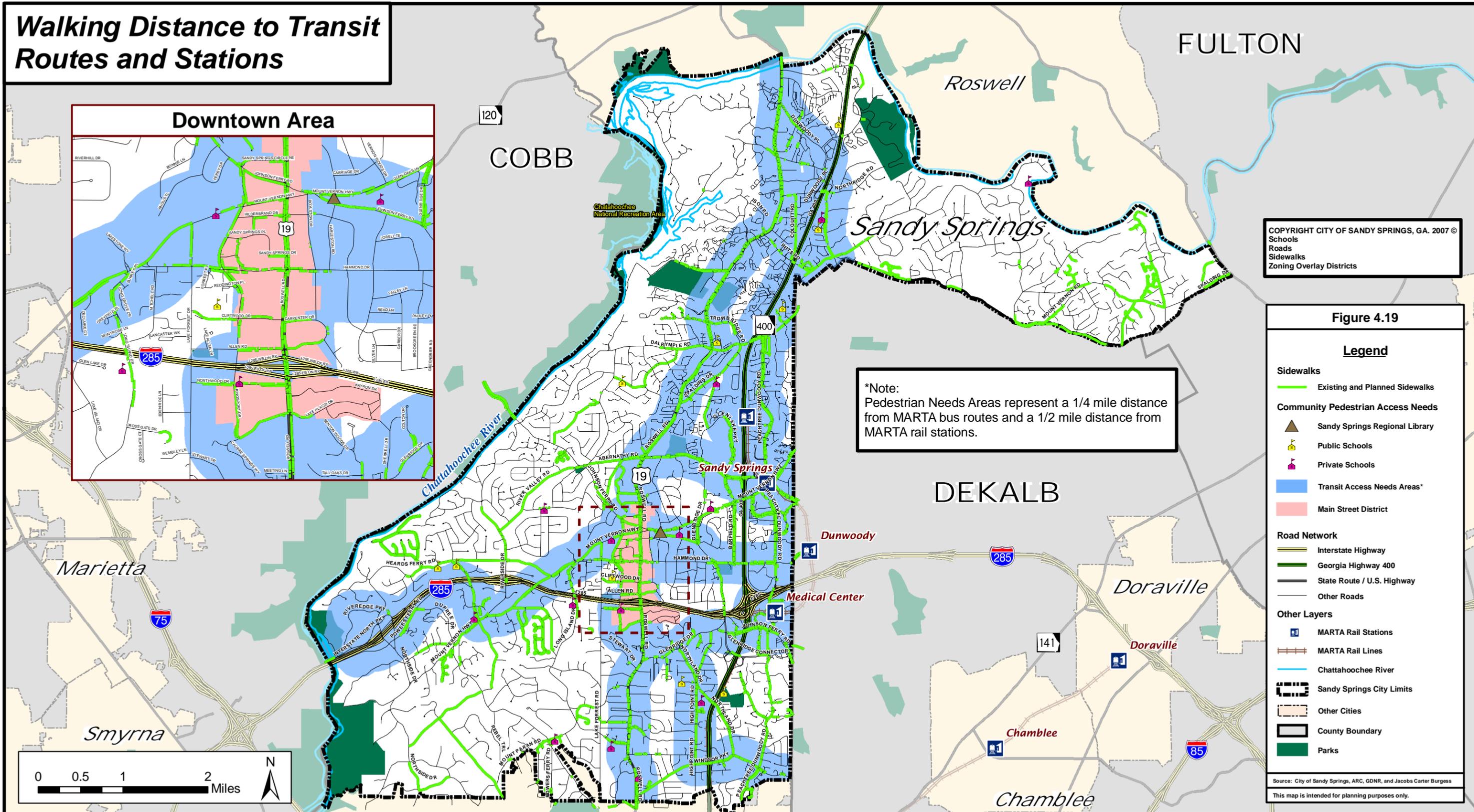


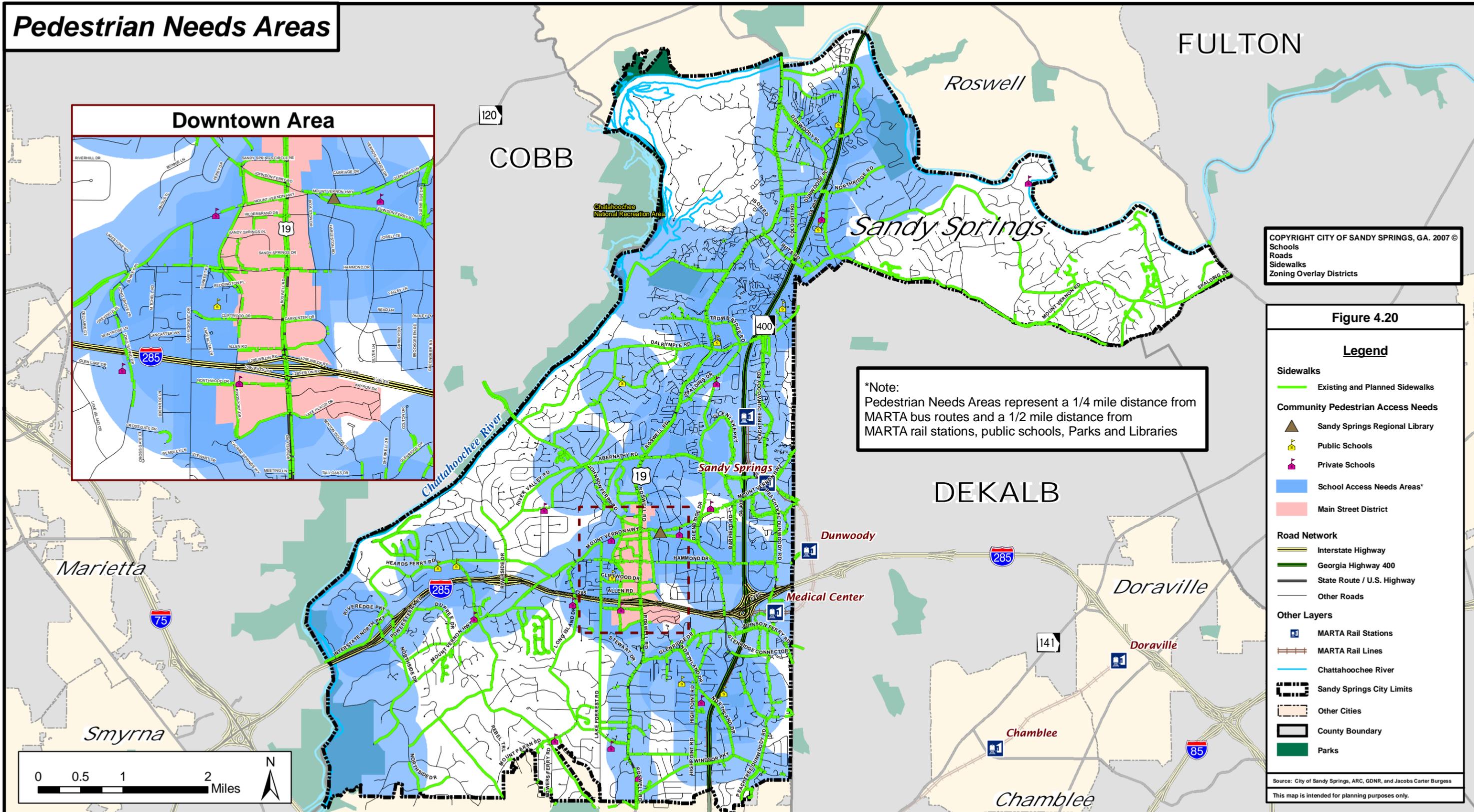
Walking Distance to Parks and Libraries



Walking Distance to Transit Routes and Stations



Pedestrian Needs Areas



COPYRIGHT CITY OF SANDY SPRINGS, GA. 2007 ©
Schools
Roads
Sidewalks
Zoning Overlay Districts

Figure 4.20

Legend

- Sidewalks**
 - Existing and Planned Sidewalks
- Community Pedestrian Access Needs**
 - ▲ Sandy Springs Regional Library
 - ▲ Public Schools
 - ▲ Private Schools
 - School Access Needs Areas*
 - Main Street District
- Road Network**
 - Interstate Highway
 - Georgia Highway 400
 - State Route / U.S. Highway
 - Other Roads
- Other Layers**
 - MARTA Rail Stations
 - MARTA Rail Lines
 - Chattahoochee River
 - Sandy Springs City Limits
 - Other Cities
 - County Boundary
 - Parks

Source: City of Sandy Springs, ARC, GDNR, and Jacobs Carter Burgess
This map is intended for planning purposes only.

Bicycle Needs Assessment

As the City of Sandy Springs continues to urbanize, additional bicycle facilities and networks will be needed to accommodate the increased demand created by general population growth and increasingly higher density land uses. There is a need to enhance the infrastructure to include safe, enjoyable bicycle facilities for transportation and recreation. Bicycle networks can be built from several types of bicycle facilities, both within and off existing roadway right-of-way.

AASHTO recognizes three classes of bicycle facilities that can be included in the bicycle network:

- **Bicycle Paths (Class I):** A bicycle facility separate from motorized vehicular traffic. A bicycle path may be located within a highway right-of-way or on an independent right-of-way. A bicycle path is not a sidewalk but may be designed to permit shared use with pedestrians.
- **Bicycle Lanes (Class II):** A lane designated for exclusive or preferential bicycle use through the application of pavement striping or markings and signage.
- **Bicycle Routes (Class III):** Roadways designated for bicycle use through the installation of directional and informational signage.

In addition, AASHTO recognizes three classes of cyclists based on their abilities and general acceptance for travel in mixed traffic.

- **Class A cyclists:** Experienced riders who do not mind traveling with traffic. These riders can travel at the mid to top range of cycling speed and often prefer on-street travel to multi-use paths)
- **Class B cyclists:** Occasional riders who are less secure about travel in mixed traffic. These riders typically travel near the middle range of cycling speed and typically prefer to travel along off-road trails or designated bike lanes.
- **Class C cyclists:** Novice riders who are not likely to ride in mixed traffic. These riders operate at speeds closer to that of pedestrians and typically prefer travel along facilitates that are completely separated from traffic.

Providing facilitates for these three classes of cyclists that recognize their varying travel patterns is a necessary challenge in developing a viable bicycle network in Sandy Springs.

Bicycle Suitability and Operations

The quantitative analysis was undertaken using the ARC bicycle suitability system. ARC’s system assesses the suitability of each roadway for accommodating bicycle travel based on information contained in GDOT’s RC file. The suitability rating is based on three factors: traffic volume, travel speeds, and functional class. Table 4.2 shows the numeric value for each of the factors.

Table 4.2: Numeric Values for Suitability Factors

Traffic Volume	Less than 2,500 vehicles per day per lane	4
	Between 2,500 and 5,000 vehicles per day per lane	2
	More than 5,000 vehicles per day per lane	0
Travel Speeds	Less than or equal to 30 mph	4
	Between 30 and 40 mph	2
	Greater than 40 mph	0
Functional Class	Local streets/collectors	4
	Minor arterials	2
	Other (major arterials and highways)	0

Once a determination has been made about which score to give a section of road from each factor, the sum of the three scores is divided by three. The section then receives a descriptive rating based on Table 4.3 below.

Table 4.3: Descriptive Category Based On Numeric Value

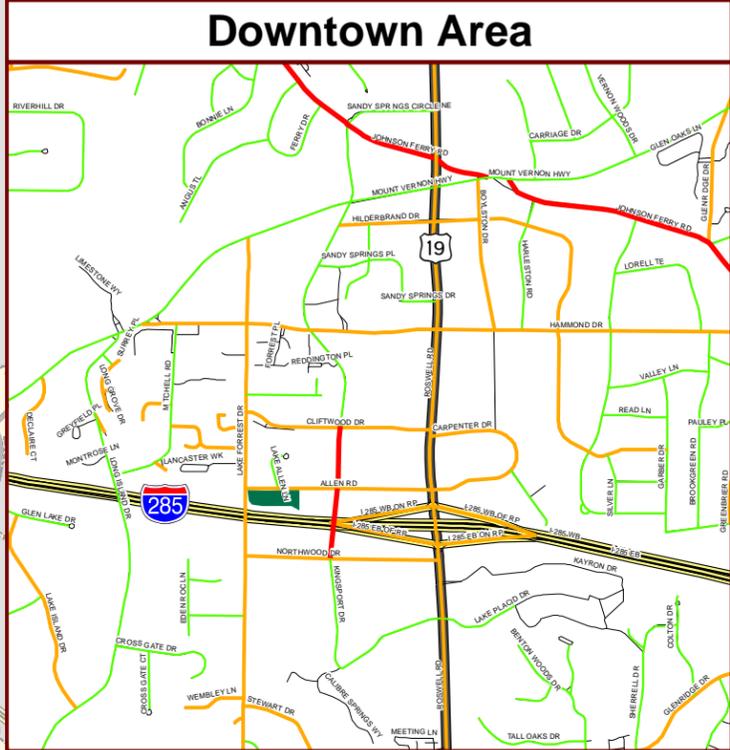
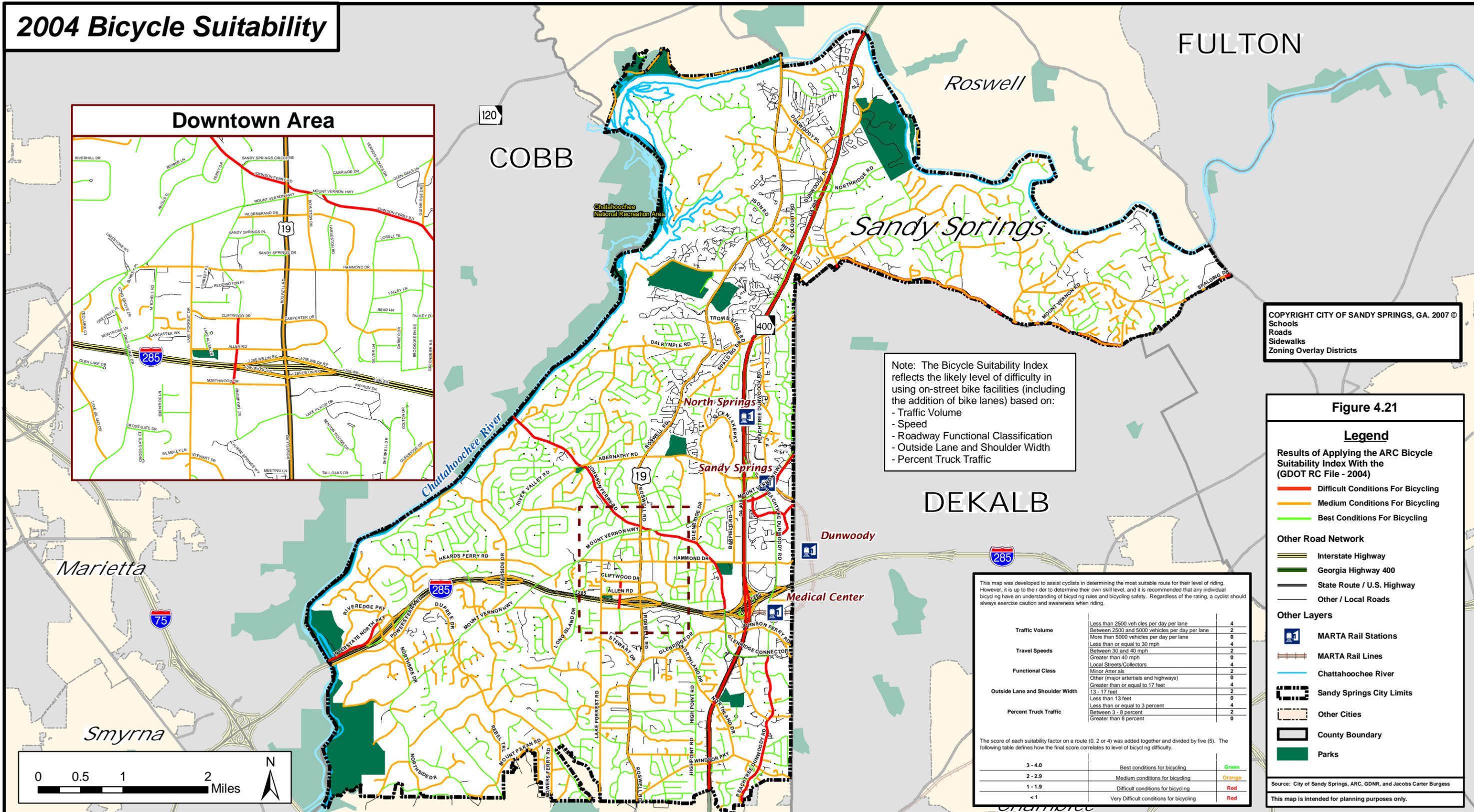
3-4.0	Best conditions for bicycling
2-2.9	Medium conditions for bicycling
1-1.9	Difficult conditions for bicycling
<1	Very difficult conditions for bicycling

The above procedure provides a standard, system-wide review of conditions related to potential on-street bicycle use. The following sections summarize citywide results.

Citywide and Corridor Results

On a citywide basis, over 41.6 percent of the city’s roadways have the best conditions for bicyclists, 54.4 percent have medium conditions, and 4 percent have difficult conditions. The functional classification makes a significant difference in the probability of a road being suitable for bicyclists. Nearly all roads classified as collector or local received a best or medium rating. Most roads classified as minor arterials were rated as medium with a few rated as best, and all of the principal arterials were classified as difficult, as seen in Table 4.4. Figure 4.21 shows bicycle suitability applied to corridors within the City of Sandy Springs.

2004 Bicycle Suitability



Note: The Bicycle Suitability Index reflects the likely level of difficulty in using on-street bike facilities (including the addition of bike lanes) based on:

- Traffic Volume
- Speed
- Roadway Functional Classification
- Outside Lane and Shoulder Width
- Percent Truck Traffic

COPYRIGHT CITY OF SANDY SPRINGS, GA. 2007 ©
 Schools
 Roads
 Sidewalks
 Zoning Overlay Districts

Figure 4.21

Legend

Results of Applying the ARC Bicycle Suitability Index With the (GDOT RC File - 2004)

- Red line: Difficult Conditions For Bicycling
- Orange line: Medium Conditions For Bicycling
- Green line: Best Conditions For Bicycling

Other Road Network

- Thick grey line: Interstate Highway
- Thin grey line: Georgia Highway 400
- Thin grey line: State Route / U.S. Highway
- Thin grey line: Other / Local Roads

Other Layers

- Blue square: MARTA Rail Stations
- Blue line: MARTA Rail Lines
- Blue line: Chattahoochee River
- Black dashed line: Sandy Springs City Limits
- Black dashed line: Other Cities
- Black dashed line: County Boundary
- Green area: Parks

Source: City of Sandy Springs, ARC, GDNr, and Jacobs Carter Burgess
 This map is intended for planning purposes only.

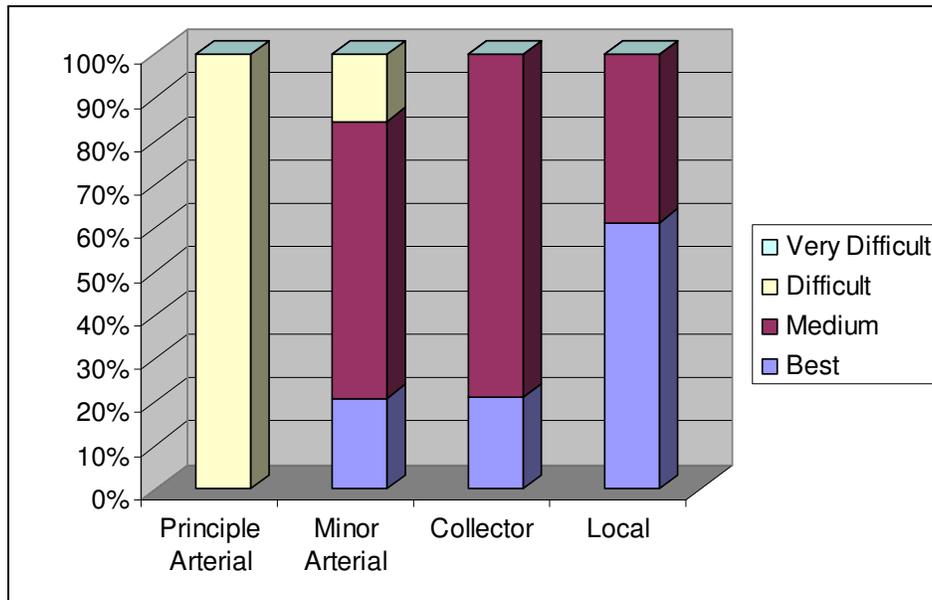
This map was developed to assist cyclists in determining the most suitable routes for their level of riding. However, it is up to the rider to determine their own skill level, and it is recommended that any individual bicycling have an understanding of bicycling rules and bicycling safety. Regardless of the rating, a cyclist should always exercise caution and awareness when riding.

Traffic Volume	Less than 2500 vehicles per day per lane	4
	Between 2500 and 5000 vehicles per day per lane	2
	More than 5000 vehicles per day per lane	0
Travel Speeds	Less than or equal to 30 mph	4
	Between 30 and 40 mph	2
	Greater than 40 mph	0
Functional Class	Local Streets/Collectors	4
	Minor Arterials	2
	Other (major arterials and highways)	0
Outside Lane and Shoulder Width	Greater than or equal to 17 feet	4
	13 - 17 feet	2
	Less than 13 feet	0
Percent Truck Traffic	Less than or equal to 3 percent	4
	Between 3 - 8 percent	2
	Greater than 8 percent	0

The score of each suitability factor on a route (0, 2 or 4) was added together and divided by five (5). The following table defines how the final score correlates to level of bicycling difficulty.

3 - 4.0	Best conditions for bicycling	Green
2 - 2.9	Medium conditions for bicycling	Orange
1 - 1.9	Difficult conditions for bicycling	Red
< 1	Very Difficult conditions for bicycling	Red

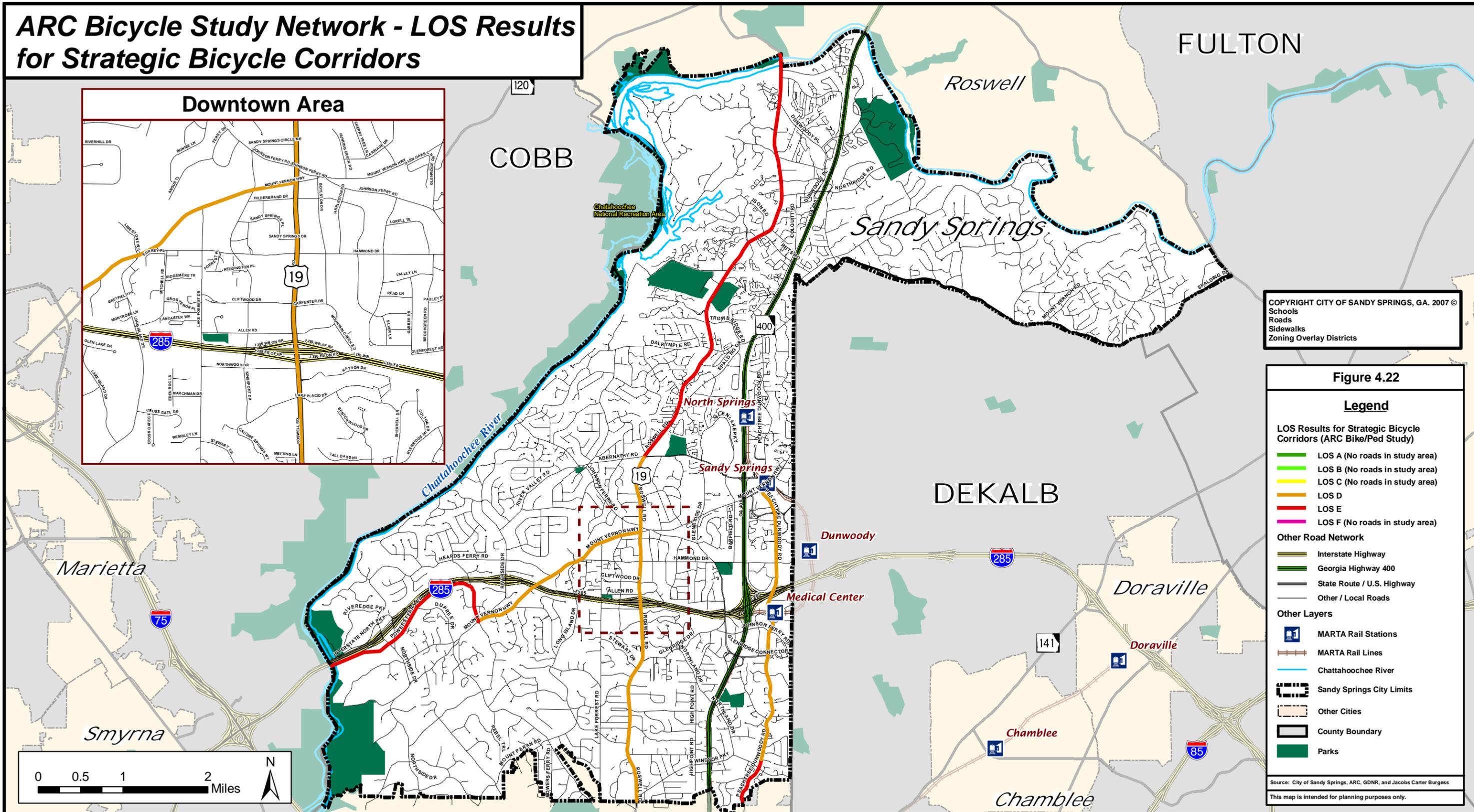
Table 4.4: Bicycle Suitability by Functional Classification



Preliminary Results of ARC Bike Plan

Another way to look at bicycle suitability is through a level of service criteria. ARC is currently applying this type of criteria to strategic bicycle corridors as a part of ARC’s Atlanta Regional Pedestrian and Bicycle Plan. Figure 4.22 shows the draft results of this initial assessment. As this figure shows, designated strategic bike corridors within Sandy Springs are located along heavily traveled roads, having medium to difficult suitability index. These corridors similarly show marginal to poor bicycle LOS using the ARC Bike Plan rating.

ARC Bicycle Study Network - LOS Results for Strategic Bicycle Corridors



Local Efforts for Determining Potential Bicycle Routes

The local cycling community in Sandy Springs has been proactive in determining bicycle routing opportunities. Their efforts have identified potential corridors for use in developing a bicycle network for longer distance travel, as well as local connectivity. Extensive efforts by active cyclists to examine local routes have yielded information on potential future on-street bike facilities. These efforts indicate the potential for defining bicycle corridor alternatives to use of the heavily traveled arterial road network.

Connectivity to Regional Routes and Local Destinations

Connection of bicycle routes to other regional routes and key destinations is important to a well developed and useable bicycle network. Important areas to be connected in Sandy Springs are shown in Figure 4.23. Existing bicycle facilities are present along the Chattahoochee River from near Morgan Falls to just east of SR 400. This is being extended east to East Roswell Park in Roswell and north along Old Alabama Road, crossing Holcomb Bridge Road to ultimately connect to the Alpharetta Greenway.

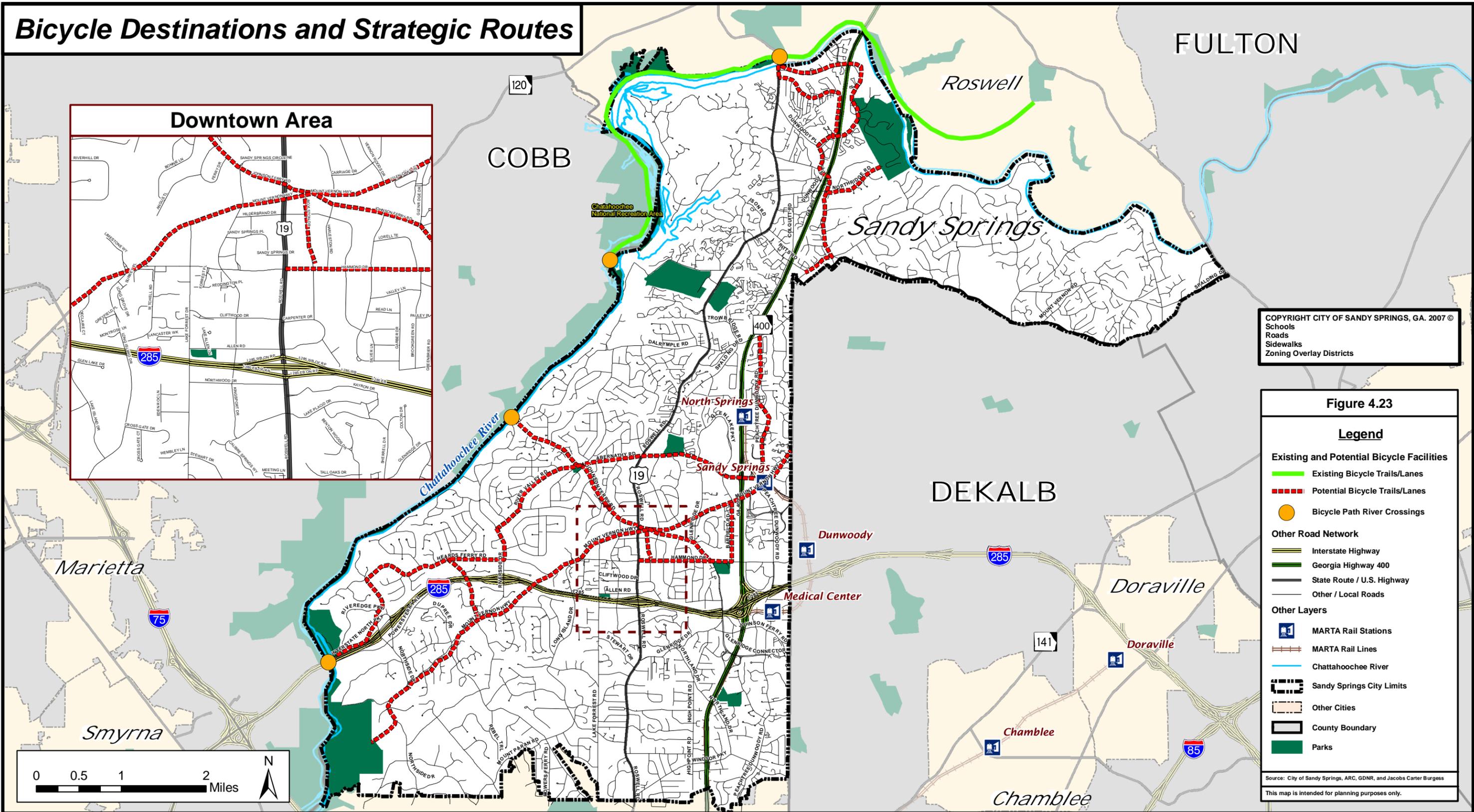
Local efforts to plan a trail network have indicated the potential for a bicycle facility running from the Morgan Falls area south along the river, then east along Johnson Ferry Road/Abernathy Road, and then northeast to the North Springs MARTA Station. A second potential east-west connection is along a power line easement and Pitts Road from Morgan Falls to Dunwoody Park in DeKalb County. A third connection would tie the Ford Island Park in Sandy Springs to the Regional Trail network and other Chattahoochee River resources located across the Chattahoochee River in the City of Roswell.

Summary of Identified Bicycle Needs

The assessment of bicycle travel and destinations has identified several needs as indicated below:

- Safe and efficient connection for bicycles, as well as pedestrians, between neighborhoods and community facilities, such as schools, libraries, and parks.
- Facilities to accommodate longer distance travel and connectivity to important recreational resources along the Chattahoochee River.
- Development of an off-road trail system to accommodate recreational use and park access for users not comfortable with travel in mixed traffic.
- Bike access to employment centers and MARTA for commuter use.
- Development of bike routes and facilities to make cycling a viable mode within walkable activity centers.
- Enhancing safety of bicycle travel through development of appropriate facilities and standardized intersection and trail crossing treatments.

Bicycle Destinations and Strategic Routes



Freight Needs Assessment

Freight movement within and through communities can have a large effect on travel in areas where trucking and industrial / warehouse access are key features. The primary freight movements are related to movement of trucks. Railroad and port access for freight movements do not contribute significantly to truck traffic within the city, other than their effect on overall truck traffic along major freeways.

Truck Movement through Sandy Springs

The I-285 and SR 400 corridors provide the primary means for movement of freight through Sandy Springs. Truck traffic destined for Sandy Springs uses the state and local route system for access to trucking destinations. Figure 4.24 shows truck routes and prohibitions within Sandy Springs. The roadways in Sandy Springs on which trucks are permitted include I-285, SR 400, Roswell Road, Johnson Ferry Road/Abernathy Road, and Northridge Road. Roadways that prohibit truck use are Riverside Drive/Dalrymple Road, Trowbridge Road, Spalding Drive, Ball Mill Road, Glenridge Drive between Spalding Drive and Glenridge Lake Parkway, Lake Forrest Road between Long Island Drive and Mount Paran Road, and Forest Hills Drive between Roswell Road and Highpoint Road.

Access to Regional Airports

Sandy Springs does not have an airport within the City limits. However, access to regional airports provides an important connection to this travel mode. Major access routes to the following airports are shown in Figure 4.25:

- Hartsfield Jackson Atlanta International Airport – Atlanta
- Peachtree DeKalb Airport – Chamblee
- Brown Field / Fulton County Airport – West of Atlanta

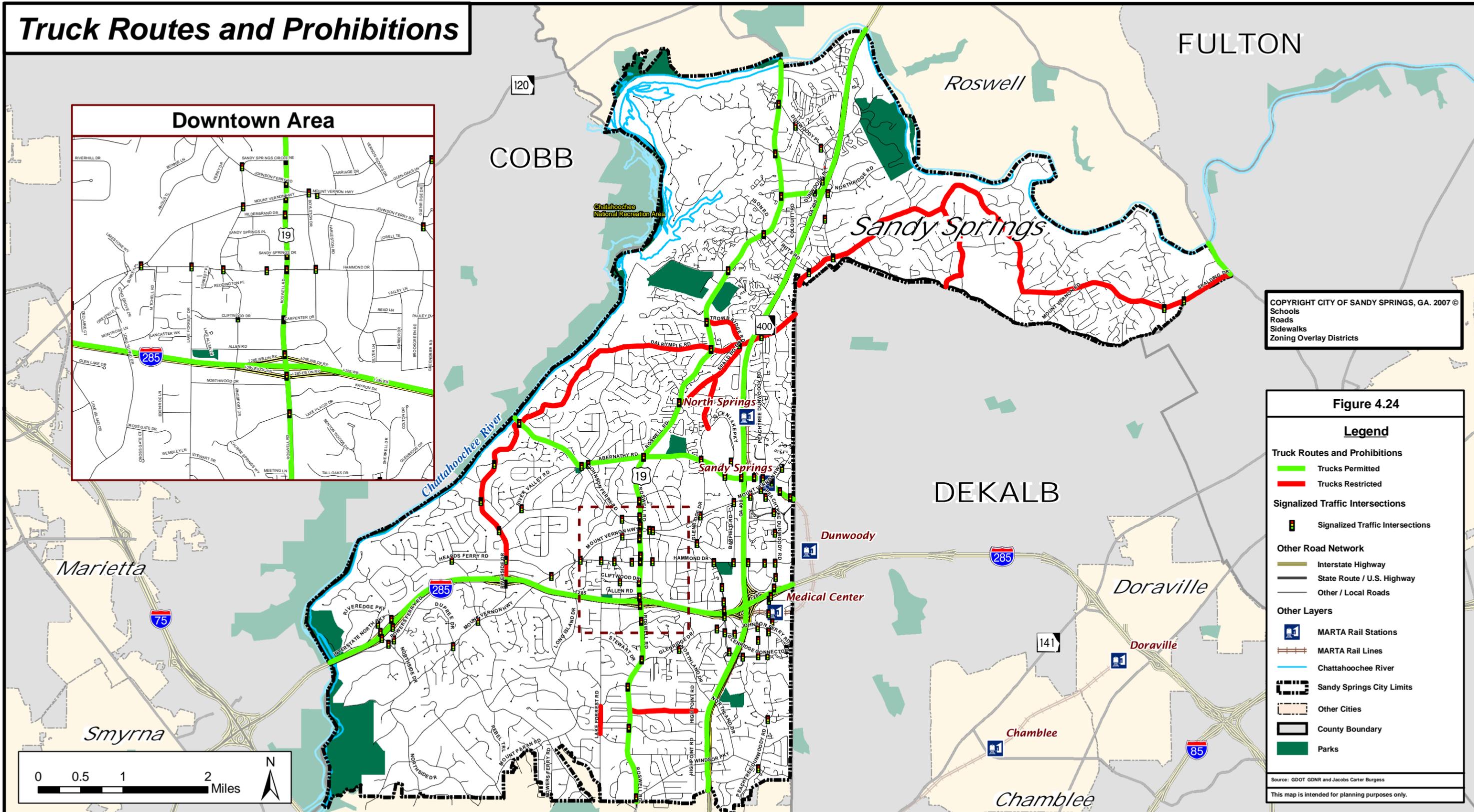
As this figure shows, the major freeways (I-285 and SR 400) provide primary access to regional airports.

Summary of Identified Freight Needs

Freight system needs focused on the need to ensure efficient movement of trucks through the city and to provide access to railroads, port facilities, and airports. The specific needs are defined below:

- Maintaining truck movement through Sandy Springs along I-285 and SR 400.
- Maintaining local truck routes and prohibitions to allow service to businesses without impacting local streets.
- Although no major rail or port terminals currently exist within the study area, access to such facilities would be accommodated primarily via I-285 and SR 400 and should be coordinated with regional and statewide efforts.

Truck Routes and Prohibitions



Airport Access Routes

