6. LAND USE

6.0.0.0 LAND USE

6.1.0.0 Existing Land Use

6.1.1.1 Inventory

This section provides an inventory of existing land uses in unincorporated Fulton County. This inventory is presented in both map and textual form and includes a description and depiction of the type, acreage, net density of existing land uses. The written and map descriptions of existing land uses are based on the categories established by the *Minimum Standards and Procedures for Local Comprehensive Planning.* These are: Residential, Commercial, Industrial, Public-Institutional, Transportation-Communication-Utilities, Park-Recreation-Conservation, Agriculture, and Forestry.

The existing land uses were calculated using a variety of sources including Tax Assessors data, current zoning and use permits, aerial photographs and other Geographic Information System data layers. Existing land uses in unincorporated Fulton County and in each of the four planning areas is shown this section and the maps in Appendix B. Moreover, the existing land uses in each of the planning areas are described in further detail below.

Table 6-1: Existing Land Uses in Unincorporated Fulton County in 2005

Land Use	North Fulton		Sandy Springs		Southwest Fulton		South Fulton		Unincorporated Fulton County	
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Low Density Residential (<2 units/acre)	9,469	19.0%	7,048	28.4%	606	3.7%	11,194	11.1%	28,317	14.8%
Medium Density Residential (2-5 units/acre)	7,818	15.7%	4,201	16.9%	2,291	14.0%	4,869	4.8%	19,179	10.0%
High Density Residential (5+ units/acre)	1,207	2.4%	999	4.0%	19	0.1%	139	0.1%	2,364	1.2%
Office	467	0.9%	1,173	4.7%	47	0.3%	80	0.1%	1,767	0.9%
Retail	742	1.5%	715	2.9%	673	4.1%	818	0.8%	2,948	1.5%
Industrial	83	0.2%	17	0.1%	2,657	16.2%	1,181	1.2%	3,938	2.1%
Government	381	0.8%	57	0.2%	274	1.7%	314	0.3%	1,026	0.5%
Other Institutional	326	0.7%	292	1.2%	117	0.7%	710	0.7%	1,445	0.8%
School	429	0.9%	263	1.1%	34	0.2%	579	0.6%	1,305	0.7%
TCU	4,748	9.5%	3,797	15.3%	2,318	14.1%	8,373	8.3%	19,236	10.0%
Private Recreation	1,805	3.6%	401	1.6%	430	2.6%	74	0.1%	2,710	1.4%
Public Recreation	303	0.6%	678	2.7%	219	1.3%	1,253	1.2%	2,453	1.3%
Forest	12,757	25.6%	2,519	10.1%	2,922	17.8%	47,454	47.1%	65,652	34.2%
Agricultural - Vacant	4,674	9.4%	585	2.4%	1,589	9.7%	12,190	12.1%	19,038	9.9%
Floodplain	3,455	6.9%	1,336	5.4%	1,760	10.7%	9,100	9.0%	15,651	8.2%
Lake, Pond, Swamp	1,094	2.2%	735	3.0%	436	2.7%	2,173	2.2%	4,438	2.3%
No Data	22	0.0%	5	0.0%	13	0.1%	194	0.2%	234	0.1%
Total	49,780	100.0%	24,821	100.0%	16,405	100.0%	100,695	100.0%	191,701	100.0%

Source: Fulton County E&CD – GIS Section

North Fulton Planning Area

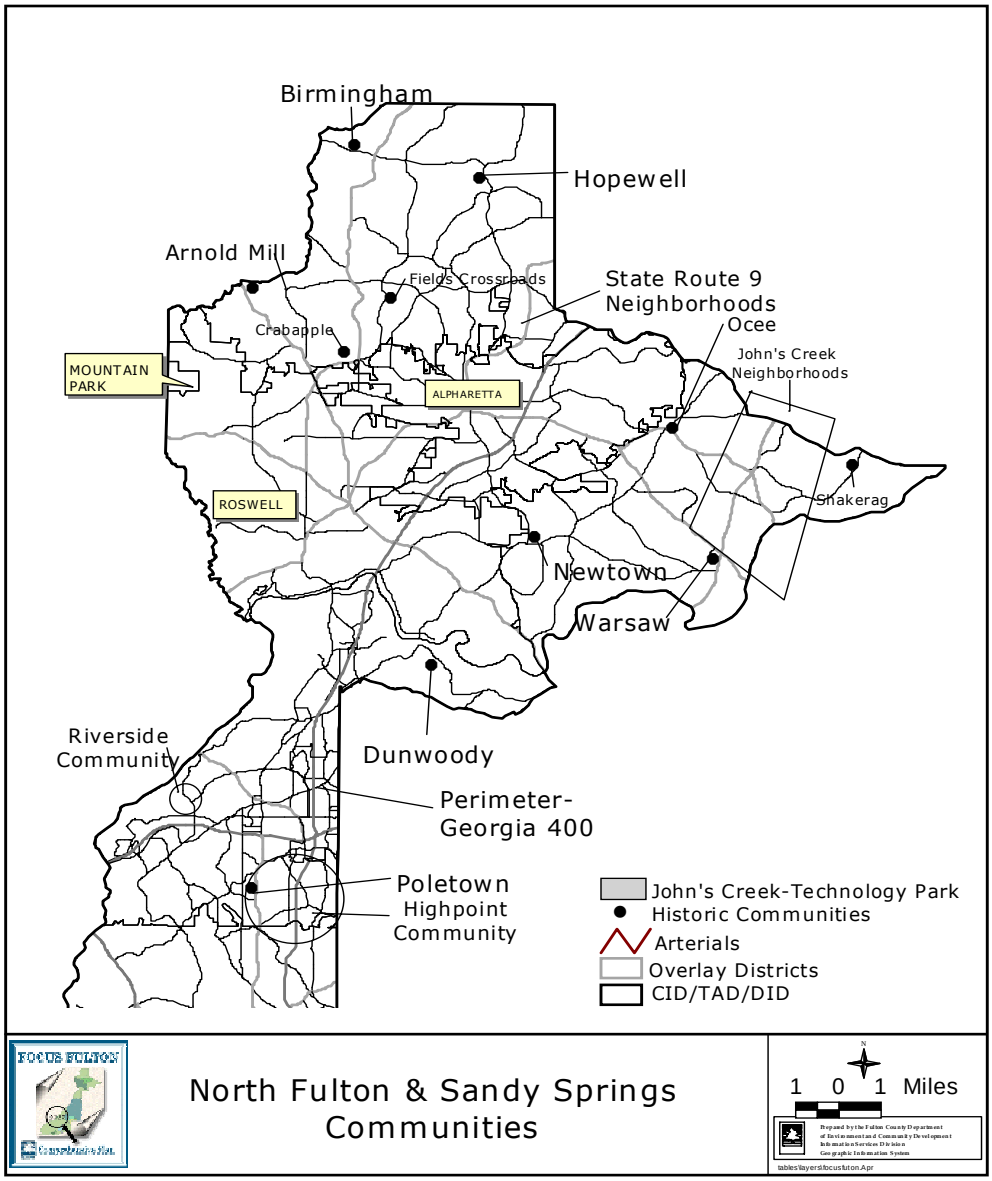
The North Fulton Planning Area consists of 79 square miles and as of 2005 has approximately 94,995 residents. North Fulton is composed of Northeast (NE) Fulton, which is the unincorporated area of Fulton County east of GA 400 and the cities of Alpharetta and Roswell, and Northwest (NW) Fulton, which is the portion of unincorporated Fulton County north of the Cities of Roswell and Alpharetta. Smaller communities are located in each. Map 6-1 shows the communities in Sandy Springs and in North Fulton.

The Northwest portion of North Fulton is an emerging area of development. Once an area with primarily rural agricultural land, it is now a mix of rural/agricultural uses, residential subdivisions, golf courses and small commercial nodes at Arnold Mill Road (SR 140), Crabapple Crossroads, Birmingham Crossroads. Regional employment corridors have formed along the Georgia 400 and State Route 9. The northeast portion of North Fulton is characterized by medium density residential areas in the east and central part and by retail/office corridors on State Bridge Road, Medlock Bridge Road, and Jones Bridge Road. Portions of the western part of the area, in the Shakerag Community, retain some of their rural character. Johns Creek Technology Park, the regional employment center, is located along Medlock Bridge Road and McGinnis Ferry Road.

Table 6-2 summarizes the existing land uses for North Fulton. This table provides the acres for the categories stated above as well as more detailed sub-categories

Table 6-2: Existing Land Use in the North Fulton Planning Area

Land Use Classification	Area in Acres	Percent of Total
Low-Density Residential (less than 2 units per acre)	9,469	19.0
Medium-Density Residential (2 to 5 units per acre)	7,818	15.7
High-Density Residential (more than 5 units per acre)	1,207	2.4
Office	467	0.9
Retail	742	1.5
Industrial	83	0.20
Government	381	0.8
Other Institutional	326	0.7
School	429	1.01
Communications/Utility/Transportation	4,748	9.5
Private Recreation	1,805	3.6
Public Recreation	303	0.6
Forest	12,747	25.6
Agricultural/Vacant	4,674	9.4
Water bodies & Flood Plain	4,549	9.1
Total	**49,779**	**100.00**



Map 6-1: North Fulton and Sandy Springs Communities

Residential: Residential land use, accommodating approximately 36,508 households in 2004, represents almost 37% of the land uses (18,494 acres). High density residential land uses occupied only 6.54% of residential land uses (2.4% of the total land area of North Fulton County). Medium density residential land uses occupied 39.5% of residentially used land (16% of the total land area of the North Fulton County area). Most of the medium density and high density residential land uses are located in Northeast Fulton. In Northwest Fulton, medium density and high density residential uses are located along the State Route 9 and Georgia 400 corridors. In Northeast Fulton, medium density residential is located along the city limits and along major corridors. Low density residential land uses occupy 54.2% of residential land uses (19% of the total land area of North Fulton County). Low residential land uses are located in Northwest Fulton and in Shakerag.

Commercial: Office and retail land uses occupy 2.4% of the North Fulton land area. Of this area, over a third of the commercial land use is office space (467 acres). The balance of the commercial land use is retail (742 acres).

In Northwest Fulton, a mix of both office and retail development is centered on the Route 9-Windward Parkway-Georgia 400 area. Deerfield, the main office park development, is located along Windward Parkway. Further north, retail developments have been built over the past 10 years at Windward Parkway and Route 9. Older developments are mixed in with more recent retail developments north on Route 9 toward the Forsyth County boundary and similarly south toward downtown Alpharetta.

In Northeast North Fulton, office and retail developments are centered on major roadways: State Bridge Road, Jones Bridge Road, Old Alabama Road, State Bridge Road and Medlock Bridge Road. Retail uses are located on State Bridge road southeast toward the intersection with Jones Bridge Road. Nodal retail development is located along Jones Bridge Road from the boundary with Alpharetta in the south and north toward Sargent Road near the Forsyth County boundary. Both office and retail development are located on Medlock Bridge from the intersection with Old Alabama Road in the south to McGinnis Ferry Road in Forsyth County in the north.

Industrial: Industrial land uses occupy 83 acres of land North Fulton.

Public/Institutional: As a whole, Public and Institutional comprise 2.2% of the North Fulton land uses. There are several subcategories of uses within the Public/Institutional category including: Government uses (381 acres), Schools (429 acres), and Other Institutional uses (326 acres). In North Fulton, there are 37 public or private schools (15 in northwest, 22 in northeast). County facilities in North Fulton include 5 fire stations (3 northwest, 2 northeast), 1 Fulton County Arts Council facility (northeast), 2 libraries (northeast), 1 human services facility (northwest), 11 parks (6 northeast, 5 northwest), and 2 police stations (northeast).

Transportation/Communication/Utilities: The Transportation/Communication/Utilities category represents 4,748 acres (9.5%). Most of this land is roads and the water and waster treatment facilities such as Cauley Creek and the Atlanta Fulton County Water Resources Commission (AFCWRC) Water Treatment Plant.

Park/Recreation/Conservation: Park, recreation and conservation uses occupy 4.2% (2,108 acres) of North Fulton land uses. Of this amount, 1,805 acres is used for private recreation, primarily golf

courses. The remaining amount, 303 acres, is primarily public park land, both County owned and federally owned land along the Chattahoochee.

Agriculture: Agriculture uses occupied 9.4% or 4,674 acres of North Fulton. This category includes vacant land (undeveloped, but cleared land) as well as agricultural land uses. North Fulton, and particularly NW Fulton, has numerous horse farms.

Forestry: Forestry occupied 25% or 12,757 acres of North Fulton. The forestry category represents forested land areas outside of public and private recreation areas, as well as forested areas outside of low and medium density residential areas. Much of the forestry land use acreages are found in places which are adjacent to low density residential development, especially in Northwest Fulton County.

Sandy Springs Planning Area

Table 6-3 summarizes the existing land uses for Sandy Springs. This table provides statistics for the categories in the Minimum Planning Standards as well as more detailed sub-categories

Table 6-3: Summary of Existing Land Use, Sandy Springs Planning Area

Land Use Classification	Area in Acres	Percent of Total
Low-Density Residential	7,048	28.4%
Medium-Density Residential	4,201	16.9%
High-Density Residential	999	4.0%
Office	1,173	4.7%
Retail	715	2.9%
Industrial	17	0.1%
Government	57	0.2%
Other Institutional	292	1.2%
School	263	1.1%
Transportation, Communications & Utilities	3,797	15.3%
Private Recreational	401	1.6%
Public Recreational	678	2.7%
Forest	2,519	10.1%
Water Resources & Flood plain	2,071	8.3%
Vacant	585	2.4%
Total	**24,822**	**100.0%**

Residential: Approximately 49.3% of the land in Sandy Springs is used for residential purposes. A total of 28.4% of all land is used for low density residential uses in the range of two units per acre or less. Medium density residential, ranging from 2 to 5 units per acre, account for 16.9% of land uses while high density residential uses, over five units per acre, comprise 4% of land uses. High density residential land uses extend along the Roswell Road corridor, Glenridge Drive south of I-

285, and in the Perimeter area along Peachtree-Dunwoody Road, between Georgia 400 and the DeKalb County line.

Commercial: Retail and office uses comprise 1,888 acres or 7.6% of the total land area. Most of the retail and office uses are in three main business areas. Roswell Road, from the northern limits of the City of Atlanta to the Chattahoochee River, is a corridor characterized by strip retail-commercial and office uses, built beginning in the 1950's. The largest business area is the Living-Working corridor located between Georgia 400 and the DeKalb County line from the Glenridge Connector north almost to Spalding Drive. Higher intensity office and retail uses are concentrated here. The third business area, comprised mainly of office uses, is located at the intersection of I-285 and Powers Ferry/Northside Drive.

Industrial: Industrial uses comprise 17 acres or less than one percent of total land uses. The Coca Cola Bottling Plant located on Northridge Drive is the only manufacturing plant in Sandy Springs. There are some other businesses with industrial land uses.

Public/Institutional: Community and institutional uses comprise 612 acres or 2.4% of land uses. These uses include public and private schools, churches and cemeteries, and public facilities, such as fire stations, police and government facilities, libraries, public health and mental health facilities, and hospitals. Schools, both public and private, take up 263 acres while 292 acres are devoted to places of worship and other institutional uses. Government uses take up 57 acres, or less than one percent of the total land area. Fulton County community facilities in Sandy Springs include the North Fulton Service Center, four fire stations, the Abernathy Arts Center, the Sandy Springs Regional Library, the Dorothy Benson Senior Center, the Sandy Springs Health Center and a developmental disability training facility.

Transportation, Communications and Utilities: Transportation, communications and utility land uses comprise 3,796 acres or 15.3% of the total land area. These acres include major utility stations transportation facilities and three MARTA Rapid Rail Stations. There are approximately 124 acres of land dedicated to utilities (electrical power generation, telephone switching station, electrical substations).

Park/Recreation/Conservation: Private recreation uses, mainly private golf courses, consist of 401 acres or 1.6% of the land uses. Public recreation uses cover 678 acres and approximately 2.7% of the total land uses. The largest areas for public recreation are three sections of the Chattahoochee River National Recreation Area. There are eight county parks in Sandy Springs. These are Abernathy Park, Allen Road Park, Big Trees Forest Preserve, Hammond Park, Morgan Falls, North Fulton Tennis Center, The Sandy Springs Historic Site and Ridgeview Park.

Agriculture: There are no agricultural uses in Sandy Springs. However, there are 585 acres identified as vacant.

Forestry: Forestry accounts for 2,519 acres or 10.1% of land uses in Sandy Springs. There are stands of wooded areas in large residential lots that contribute to the land designated as forestry.

Southwest Fulton

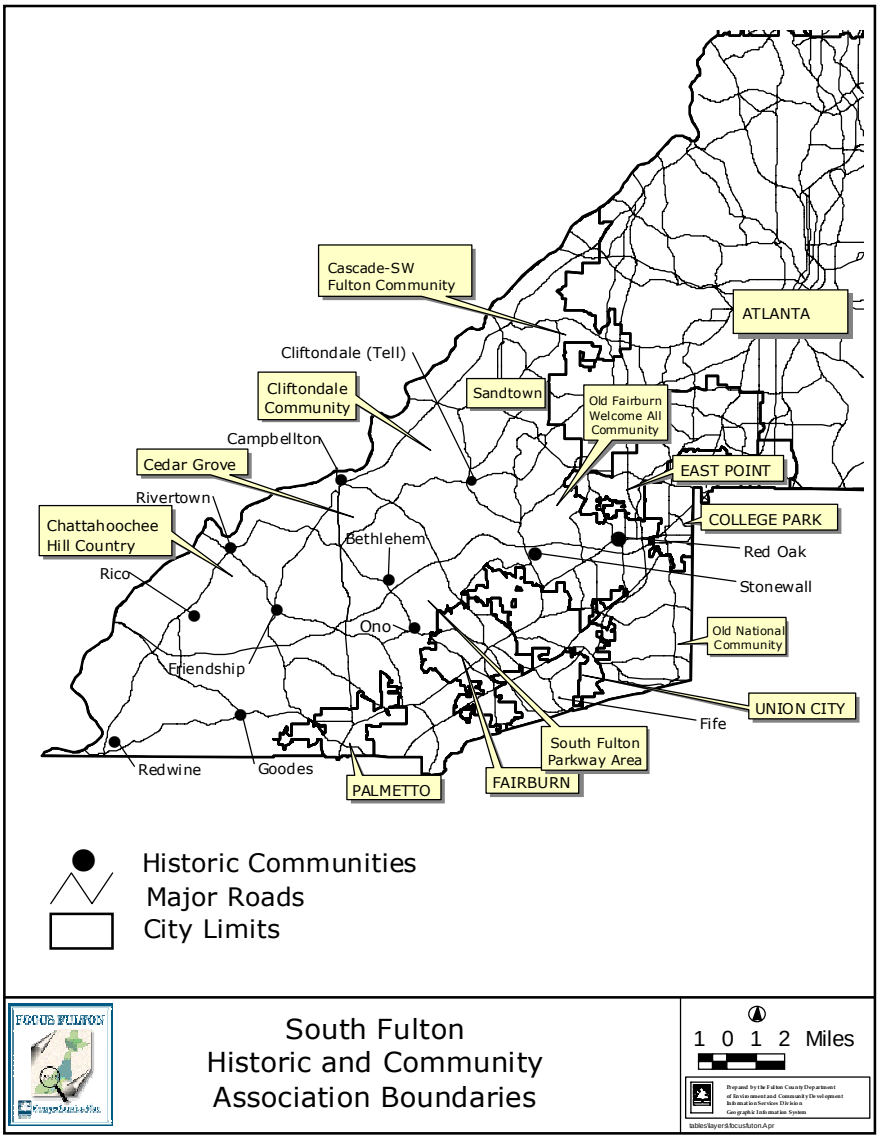
Table 6-4 summarizes the existing land uses for Southwest Fulton. Southwest Fulton can be categorized as a suburban community. However, the Fulton Industrial District comprises a large portion of the area. Map 6-2 shows the location of cities and unincorporated communities in South and Southwest Fulton.

Table 6-4: Summary of Existing Land Use for the Southwest Fulton Planning Area

Land Use Class	Area in Acres	Percent of Total
Low-Density Residential	606	3.7
Medium-Density Residential	2,291	14.0
High-Density Residential	19	0.1
Office	47	0.3
Retail	673	4.1
Industrial	2,657	16.2
Government	274	1.7
Other Institutional	117	0.97
School	34	0.2
Utility	2,318	14.1
Private Recreational	430	2.6
Public Recreational	219	1.3
Forest	2,922	17.8
Agricultural/Vacant	1,589	9.7
Water & Flood Plain	2,196	13.4
Total	**16,403**	**100.00**

Residential: Residential land uses comprise approximately 18% of all land uses. Southwest Fulton is primarily a medium density residential area. Medium density residential uses take up 14%, or 2,451 acres, of land. These areas are located between Fulton Industrial Boulevard and Campbellton Road, close to Interstate 285 and along Cascade road. Low density land uses comprise 3.7% of land uses or 606 acres. They are scattered throughout Southwest Fulton with a concentration to the south of Campbellton Road. High density (over 5 units per acre) comprises 19 acres or 0.1% of land. These areas can be found near interstate 285 and Fairburn Road and along Camp Creek Parkway.

Commercial: There are approximately 673 acres or 4.1% of commercial land uses in Southwest Fulton. Pockets of commercial land uses are located along Cascade Road, Fulton Industrial Boulevard at I-20 and at Campbellton Road. Commercial uses are largely comprised of neighborhood commercial and retail services supporting surrounding communities. Office uses comprise 47 acres or 0.3%. Office uses are located primarily along the Cascade Road commercial corridor and in areas adjoining the Fulton Industrial Business District.



Map 6-2: Southwest and South Fulton Planning Area and Communities

Industrial: Located mostly at its western boundary, the industrial land use has a strong presence in Southwest Fulton. The industrial land use totals approximately 2,657 acres or almost 16.2%. Fulton Industrial is home to warehouse and light manufacturing companies. Heavy industrial uses are located along Fulton Industrial Boulevard (FIB) where there is access to I-20, rail and Hartsfield-Jackson Airport. Business parks buffer the single family residential from the heavy industrial uses along FIB. This land use is intended for community and regionally-oriented retail and service activities which include a transition, or locations which complement a transition into a more intense activity area.

Public/Institutional: The Public/Institutional land uses total approximately 425 acres or approximately 3% of the land. This category includes schools, hospitals, places of worship, museums, and other similar uses or facilities. Public and institutional facilities located in Southwest Fulton are: Westlake High School; Sandtown Middle School; Randolph Elementary School; Camp Creek Middle School; Southwest Regional Library; two Fire Stations, the SW Fulton Arts Center and as well as several churches, day care centers and health centers.

Transportation/Communication/Utilities: Southwest Fulton has 2,318 acres or 14% designated in the existing Land Use Plan Map for Transportation, Communications and Utilities. These acres include major utility stations, Charlie Brown Airport, which lies directly north of Fulton Industrial District and I-20 and the transportation network.

Park/Recreation/Conservation: There are approximately 649 acres set aside for private green space (lakes and golf courses), public parks (both County and Federal), and conservation areas purchased through green space funds. Public Parks include Sandtown Park; Welcome All Park; Trammell Crow Park, Cliftondale Park, Red Oak Recreation Center, and the Boatrock Recreation Center.

Agriculture: Agricultural and vacant lands comprise 9.7% of the land in the planning area, approximately 1,589 acres. There is no active farmland in Southwest. Land designated as agricultural is used for either single family residential (one unit per acre), cemeteries.

Forestry: The Southwest planning area has 2,922 acres or 17.8% of forest land. These forested areas are located throughout the planning area. In many locations they serve as natural buffers between industrial uses (along Fulton Industrial Blvd) and adjoining single family neighborhoods. Several large forested areas also border the area's southern boundary. The abundance of these forested lands provide for a semi-rural character to many areas of Southwest Fulton.

South Fulton Planning Area

Table 6-5 summarizes the existing land uses for South Fulton.

Table 6-5: Summary of Existing Land Use for the South Fulton Planning Area

Land Use Class	Area in Acres	Percent of Total
Low-Density Residential	11,194	11.1%

Table 6-5: Summary of Existing Land Use for the South Fulton Planning Area

Land Use Class	Area in Acres	Percent of Total
Low-Density Residential	11,194	11.1
Medium-Density Residential	4,869	4.8
High-Density Residential	139	0.1
Office	80	0.1
Retail	818	0.8
Industrial	1,181	1.2
Government	314	0.3
Other Institutional	710	0.7
School	579	0.6
Utility	8,368	8.3
Private Recreational	74	0.1
Public Recreational	1,253	1.2
Forest	47,454	47.1
Agricultural/Vacant	12,190	15.72
Water and Flood Plain	11,273	11.2
Total	**100,695**	**100.00**

Residential: Approximately 16,202 acres are presently used for residential uses. The South Fulton planning area is characterized as low density residential. Approximately 11,194 acres or 69.4% of the residentially used acres are low-density residential (2 units per acre or less). Low density land uses are located between Camp Creek Parkway and the South Fulton Parkway, in the Cliftondale and Cedar Grove Communities.

Medium density residential development, categorized as 2 to 5 units per acre, represents 29.4% or 4,869 acres of all the residential uses currently developed. Medium density land uses are located on either side of Old National Highway and along portions of the South Fulton Parkway. High density residential development, categorized as 5 units per acre or greater, represents 1.09% or 139 acres of all the currently developed residential uses. These land uses are located along interstates 85 and 285 and the South Fulton Parkway.

Commercial: Approximately 80 acres of land are devoted to office and 818 acres to retail services, a combined total of 1%. There is a concentration of existing commercial/retail services and office along the Old National Highway Corridor. The next major retail/office development planned in South Fulton is located at the intersection of South Fulton Parkway and Highway 92.

Industrial: The industrial uses include manufacturing facilities, processing plants, factories, warehousing and wholesale trade facilities, and/or excavation uses. There are approximately 1,181 acres or 1.2% of industrial uses. A small portion of the Fulton Industrial Boulevard District is in South Fulton. Oakley Industrial Boulevard, Roosevelt Highway and the easterly section of the South Fulton Parkway also have high concentration of industrial uses.—

Public/Institutional: The public (government facilities & schools) and other institutional (libraries, hospitals, etc) uses make up approximately 1,603 acres of land or 1.6%. The Community Facilities Element section lists all of the public and institutional facilities.

Transportation/Communication/Utilities: Transportation, communication and utilities in the South Fulton planning area represent approximately 8,368 acres or 8.3% of land uses. South Fulton is highly accessible to major thoroughfares and interstates. CSX Transportation Incorporated has a transfer facility along Roosevelt Hwy. Moreover, Fulton County Public Works operates the Camp Creek and Little Bear Creek wastewater treatment facilities and 14 pump stations.

Park/Recreation/Conservation: South Fulton has approximately 1,327 acres of private and public recreational areas. Most of this land, 1,253 acres or 93% of all recreational areas, is owned, operated, and maintained by Fulton County. In addition Fulton County, through the State's Greenspace Program, purchased 241 acres of Greenspace in South Fulton.

Agriculture: Agriculture or vacant land uses equal to 12,190 acres or 12.1% of the land uses. The predominant use in this category is farming, including cultivation, cattle and horse farms.

Forestry: Forestry comprises 47,454 acres or 47.1% of land uses, the largest land use category. The predominant uses in this category are forests and some mineral extraction activities. The stands of forests are harvested for timber and cleared for grazing, cultivation or development. Most of the land used for agricultural and forestry is located west of Cascade Palmetto Highway in the 44,000 acre area known as the Chattahoochee Hill Country.

6.1.1.2 Assessment

Development Patterns

Fulton County adopted the *Zoning Resolution of Fulton County* in 1955. Through this resolution, unincorporated Fulton County was divided into zoning districts that regulate the type and location of land uses within each district. At that time, Fulton County assigned zoning district designations for all of the land within its jurisdiction that reflected the existing uses.

Development patterns are discussed in this section based on existing zoning. Table 6-6 depicts existing zoning districts in Fulton County by the time period they were zoned[1]. Table 6-7 shows the acres in each of the zoning district by planning area. Table 6-8 shows land use category and the corresponding zoning district that are used in Tables 6-6 and 6-7.

Growth and development in unincorporated Fulton County started to increase in the 1950s. As a result, most of the development can be characterized as suburban oriented. Currently, the county's development patterns are generally in accordance with the 2015 Land Use Map, the Fulton County Zoning Resolution and other development regulations.

[1] This analysis only addresses the dates of their classification. The County has no electronic record of rezoning activity by previous and current zoning classifications. Therefore, there is no way to document how many acres, for example, of agricultural zone land have been rezoned for more intense purposes.

The 2015 Comprehensive Plan policies and Land Use Map serve as a guide that indicates the most appropriate locations for residential, commercial, office and industrial uses as well as mixed-use development. In most cases, Fulton County's approved rezoning applications have been consistent with the Land Use Map. In some cases, Fulton County's land use designations reflect the underlying zoning categories.

Table 6-6 : Acres by Zoning District & Time Period in Unincorporated Fulton County

Zoning District	1960 and earlier	1961 to 1975	1976 to 1989	1990 to present	Total zoning by acres	
	Number	Number	Number	Number	Number	Percent
Low Density Residential					**30,254.7**	**17.4%**
SUB-A, R-1, R-2, R-2A	7,405.4	2,320.8	1,908.2	353.9		
CUP	586.9	1,697.7	3,407.9	12,573.9		
Total	7,992.3	4,018.5	5,316.1	12,927.8		
Percent	6.7%	33.3%	25%	47.2%		
Medium density Residential					**14,680.7**	**8.5%**
R-3 to R-5	6,258.0	1,928.1	5,792.8	4,381.2		
SUB-C	1,820.0	2.5	27.3%	0		
NUP	0.0	0.0	0.0	290.6		
Total	8,078.0	1,930.6	5,820.1	4,671.8		
Percent	6.8%	16.0%	27.4	17.1%		
Residential - Attached & Higher Density					**5,366.7**	**3.1%**
A	24.7	803.1	1,098.4	285.5		
A-L	1.6	0.0	97.3	212.8		
R-6	83.0	0.0	7.1	100.7		
TR	0.8	273.1	1,206.8	1,139.0		
A-1	32.7	0.1	0.0	0.0		
Total	142.8	1,076.3	2,409.6	1,738.0		
Percent	0.1%	8.9%	11.4%	6.3%		
Agriculture and Forestry					**107,772.6**	**62.1%**
AG-1	99,442.0	45.4	3,911.5	437.7		
Percent	83.8%	<1%	18.4%	1.6%		
Mixed Uses					**4,099.6**	**2.4%**
Apartments-Office (A-O)	5.5	0.0	163.6	0.0		
MIX	0.0	0.0	0.0	3,936.0		
Total	5.5	0.0	163.6	3,936		
Percent				14.37%		
Business					**5,238.8**	**3.0%**
C-1 & C-2	301.8	490.1	774.0	1,371.6		
O-I	10.9	158.3	973.6	1,158.5		
Total	312.7	648.4	1,747.6	2,530.1		
Percent	0.3%	5.4%	8.2%	9.2%		
Industrial					**10,050.4**	**5.8%**
M-1, M-1A, M-2	2,705.9	4,340.1	1,857.6	1,146.8		
Percent	2.3%	36.0%	8.8%	4.2%		
Total	**118,679.2**	**12,059.3**	**21,198.8**	**27,388.2**	**173,533.0**	**100.0%**

Source: Fulton County E&CD Staff

Table 6-7: Zoning by Acre in each Planning Area

	North Fulton		Sandy Springs		South Fulton		Southwest Fulton		Total	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
AG1	26,650	56.4%	1,509	7.0%	67,575	72.7%	1,014	7.1%	96,748	55.0%

Table 6-7: Zoning by Acre in each Planning Area

	North Fulton		Sandy Springs		South Fulton		Southwest Fulton		Total	
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
Residential Low Density										
R1	201	0.4%	2,318	10.8%	7	0.0%	35	0.2%	2,561	1.5%
R2	1,520	3.2%	4,014	18.6%	723	0.8%	2	0.0%	6,259	3.6%
R2A	413	0.9%	1,870	8.7%	400	0.4%	0	0.0%	2,683	1.5%
R3	1,075	2.3%	3,306	15.3%	1,919	2.1%	2,866	20.1%	9,166	5.2%
R3A	396	0.8%	422	2.0%	350	0.4%	179	1.3%	1,347	0.8%
R4	1,788	3.8%	296	1.4%	3,015	3.2%	363	2.5%	5,461	3.1%
R4A	2,772	5.9%	129	0.6%	613	0.7%	0	0.0%	3,515	2.0%
CUP	7,657	16.2%	2,220	10.3%	8,203	8.8%	1,398	9.8%	19,478	11.1%
SUBA	0	0.0%	0	0.0%	374	0.4%	1,007	7.0%	1,381	0.8%
SUBC	0	0.0%	0	0.0%	1,871	2.0%	0	0.0%	1,871	1.1%
Total	42,472	33.5%	16,084	67.7%	85,051	18.9%	6,865	40.9%	150,472	30.5%
Medium Density										
NUP	111	0.2%	137	0.6%	16	0.0%	16	0.1%	280	0.2%
R5	154	0.3%	56	0.3%	97	0.1%	513	3.6%	820	0.5%
R5A	170	0.4%	39	0.2%	292	0.3%	0	0.0%	501	0.3%
R6	20	0.0%	11	0.0%	73	0.1%	91	0.6%	194	0.1%
MHP	0	0.0%	0	0.0%	40	0.0%	0	0.0%	40	0.0%
Total	454	1.0%	242	1.1%	518	0.6%	619	4.3%	1,834	1.0%
High Density										
A	385	0.8%	1,340	6.2%	379	0.4%	185	1.3%	2,289	1.3%
A1	32	0.1%	165	0.8%	7	0.0%	62	0.4%	265	0.2%
AL	0	0.0%	376	1.7%	66	0.1%	20	0.1%	462	0.3%
TR	1,174	2.5%	517	2.4%	983	1.1%	179	1.3%	2,853	1.6%
Total	1,591	3.4%	2,397	11.1%	1,435	1.5%	446	3.1%	5,869	3.3%
Business										
AO	0	0.0%	164	0.8%	0	0.0%	0	0.0%	164	0.1%
C1	1,059	2.2%	809	3.8%	587	0.6%	178	1.2%	2,634	1.5%
C2	34	0.1%	198	0.9%	168	0.2%	146	1.0%	547	0.3%
MIX	418	0.9%	131	0.6%	40	0.0%	242	1.7%	831	0.5%
OI	655	1.4%	1,414	6.6%	191	0.2%	133	0.9%	2,393	1.4%
Total	2,167	4.6%	2,716	12.6%	986	1.1%	699	4.9%	6,568	3.7%
Industrial										
M1	57	0.1%	71	0.3%	1,865	2.0%	454	3.2%	2,448	1.4%
M1A	504	1.1%	0	0.0%	756	0.8%	2,194	15.4%	3,453	2.0%
M2	0	0.0%	29	0.1%	2,277	2.5%	3,012	21.1%	5,318	3.0%
Total	561	1.2%	100	0.5%	4,898	5.3%	5,660	39.6%	11,220	6.4%
TOTAL	47,245	100.0	21,540	100.0	92,888	100.0	14,290	100.0	175,962	100.0
Source: EC&D										

Table 6-8: Zoning District and Land Use Category

Zoning District	Description	Land Use Category
A	APARTMENTS	HIGH DENSITY Residential-Multi-family
A1	APARTMENTS	HIGH DENSITY Residential-Multi-family
AL	APARTMENTS	HIGH DENSITY Residential-Multi-family
AO	APARTMENT OR OFFICE	BUSINESS
AG1	AGRICULTURE, USE PERMIT, SINGLE FAMILY	LOW DENSITY Residential – Single Family

Table 6-8: Zoning District and Land Use Category		
Zoning District	**Description**	**Land Use Category**
C1	COMMERCIAL	BUSINESS
C2	COMMERCIAL	BUSINESS
CUP	COMMUNITY UNIT PLAN	LOW DENSITY Residential – Single Family
M1	INDUSTRIAL	INDUSTRIAL
M1A	INDUSTRIAL	INDUSTRIAL
M2	INDUSTRIAL	INDUSTRIAL
MIX	MIXED USE	BUSINESS
MHP	MOBILE HOME PARK	MEDIUM DENSITY Residential–Single Family
NUP	NEIGHBORHOOD UNIT PLAN	MEDIUM DENSITY Residential–Single Family
OI	OFFICE-INSTITUTIONAL	BUSINESS
R1	SINGLE FAMILY	LOW DENSITY Residential – Single Family
R2	SINGLE FAMILY	LOW DENSITY Residential – Single Family
R2A	SINGLE FAMILY	LOW DENSITY Residential – Single Family
R3	SINGLE FAMILY	LOW DENSITY Residential – Single Family
R3A	SINGLE FAMILY	LOW DENSITY Residential – Single Family
R4	SINGLE FAMILY	MEDIUM DENSITY Residential–Single Family
R4A	SINGLE FAMILY	MEDIUM DENSITY Residential–Single Family
R5	SINGLE FAMILY	MEDIUM DENSITY Residential–Single Family
R5A	SINGLE FAMILY	MEDIUM DENSITY Residential–Single Family
R6	SINGLE FAMILY	MEDIUM DENSITY Residential–Single Family
SUBA	SINGLE FAMILY	LOW DENSITY Residential – Single Family
SUBC	SINGLE FAMILY	LOW DENSITY Residential – Single Family
TR	TOWN HOME RESIDENTIAL	HIGH DENSITY Residential-Multi-family

Residentially Zoned Land: Single family residential development has been the largest factor in shaping the development patterns of Fulton County. Approximately 26% of land in unincorporated Fulton, about 45,000 acres, is zoned for low to medium density residential development. Of the 27,388 acres that were rezoned over the past 15 years, 47% has been rezoned to a low density residential zoning district. Residential developments have a suburban lay out and are characterized by curve-linear streets, multiple of cul-de-sac streets and limited entry points.

During the late 1980s to mid 1990s, residential development accelerated in North Fulton, particularly east of GA 400 and in Sandy Springs. Currently, about 34% of the land in North Fulton and 70% of the land in Sandy Springs is zoned for low to medium density residential uses.

Residential rezoning and development in South and Southwest Fulton has increased since the late 1990s. Currently, 45% of the land in Southwest Fulton and 19% of the land in South Fulton 27% of the land is rezoned for low to medium density residential. Because of the increase in development in South Fulton, county planners are implementing smart growth policies principles.

A total of 5,869 acres, 3.1%, are zoned for high density residential uses in unincorporated Fulton. Between 1990 and 2004, 6.3% of the land rezoned was rezoned to high density residential uses. Sandy Springs has the highest percentage of high density residential zoning, accounting for 11% of land. North Fulton and Southwest Fulton each have a little over 3%. South Fulton has the lowest with 1.5%.

Agricultural Zoned Land: Over 96,000 acres, or 55%, in unincorporated Fulton County are zoned for agricultural uses. This land use category and zoning district not only allows for agricultural uses such as farming, timbering, etc. but allows for residential uses at one unit per acre. South Fulton has the largest number of acres zoned for agricultural uses, 67,575 acres which accounts for 72% of land in this planning area. North Fulton follows with 26,650 acres, or 56%, of land zoned AG-1. Most of the agriculturally zoned land is in the portion of Northwest Fulton not served by sewer.

A land use category such as this has been attractive to developers and buyers who are looking for a house built on a large lot or for those who would like to live in a rural area. These large-lot developments have been built in areas not well served by infrastructure and they have contributed to the need for expansion of infrastructure systems, reliance on septic systems, and increased consumption of natural resources. To address these issues, large-lot developments could be limited to areas where protection of open space is required, therefore only allowing the construction of a house and placing the remaining portion of the parcel in conservation.

Commercial, Office and Industrial Development: Business uses, both commercial and office, and mixed use zonings account for 3.7% of zonings. Mixed use zonings have increased over the past 15 years. Commercial uses are mostly located on arterials and collectors and are developed in an auto oriented pattern. Industrial uses are 5.8% of zonings in unincorporated Fulton County.

In North Fulton, Medlock Bridge Road (SR141) is developed with institutional, office, commercial, and business park uses from its intersection with Old Alabama Road north to McGinness Ferry Road. On SR 141, John's Creek-Technology Park is a large campus style multi-use development which includes hotels, commercial, office and limited manufacturing uses. Large office and commercial developments are also located along SR 9 and Georgia 400. Commercial uses are also located at intersections of major roads such as Jones Bridge Road, Old Alabama, State Bridge, Abbotts Bridge, Arnold Mill Road and SR. 9. Commercial, office and industrial zonings account for 4.6% of zonings.

In Sandy Springs, the primary development pattern is linear along Roswell Road. Commercial, office and high density residential developments are built along both sides of Roswell Road. In addition, there are two regional activity nodes – the Perimeter area bordering Georgia 400 from the Glenridge Connector to north of Abernathy Road and the Powers Ferry area bordering I-285. Both have large amounts of office uses; the Perimeter area also has substantial commercial development. Commercial, office and industrial zonings account for 13% of zonings.

In Southwest Fulton, commercial and office developments are located along Cascade Road from I-285 to Fairburn Road. In South Fulton, Old National Highway, SR 279, is developed in a linear pattern with a mixture of businesses and residential uses. Commercial and office account for 4.9% of zonings in Southwest Fulton and 1.1% of zonings in South Fulton.

South and Southwest Fulton have several major industrial areas. The largest is the Fulton Industrial District, located along the Chattahoochee River from I-20 south to Campbellton Road. Industrial areas are also located in the Oakley Industrial District between the Cities of Fairburn and Palmetto, along Roosevelt Hwy and areas near South Fulton Parkway and I-285. These areas have access to major roads, railroads, interstate highways and Hartsfield-Jackson International Airport. Industrial zonings account for 39% of zonings in Southwest Fulton and 5.3% of zonings in South Fulton.

Strip Commercial Development: Since the 1960s, commercial/office centers have been developed throughout Fulton County. Many of these centers are located along state roads, easily accessed by the interstate system and in close proximity to residential uses. Many of these commercial developments in unincorporated Fulton County can be characterized as strip commercial developments. These centers were coined "strip centers" because the elevation of the structure(s) spans the length of the site and includes large areas dedicated to parking (they were not constructed to be pedestrian oriented). The typical commercial center is spread across several acres of land and includes an anchor store with several smaller stores. As development continues to move to greenfields, these strip commercial centers have followed. In several areas, older strip commercial centers have declined, particularly when the anchor has closed. This has resulted in large amounts of vacant spaces. These older commercial developments are located in Sandy Springs along Roswell Road and in South Fulton along Old National Hwy.

Strip commercial developments have their place in Fulton County. However, with respect to land use, there may be a better way to provide these uses without constructing potential future community eyesores. These types of spaces could be designed as flex spaces offering a variety of uses in one location, such as: housing, retail and office or they could be part of a mixed use development. Combining these uses reduces the impact on the County's infrastructure and natural resources.

"Leap-Frog" Development: "Leap-frog" development is common throughout Fulton County as well as the metro-Atlanta. This type of development pattern is not always consistent with the availability of infrastructure. In Northwest Fulton and some portions of South Fulton there is no sewer available. However, developments there are under construction and thriving even though there are other locations that already have access to sewer, water and the road network. Some reasons contributing to this pattern may be that land costs are cheaper or that there may not be a need to rezone to meet the desired results of the development. Because Georgia is a "property rights" state, there may always be "leap-frog" patterned developments in Fulton County.

"Large-lot" single family developments, "strip" commercial/office centers and "leap-frog" developments are development patterns that will always occur in Fulton County and other areas of metro-Atlanta. However, good land use policies can counteract the negative impacts of these patterns. For example, land use policies could support ideas such as: conservation subdivisions and mixed-use developments. Each of these, if used collectively, could promote higher densities in appropriate locations, protect existing natural resources and ensure that goods and services are delivered in an efficient and effective manner.

Provision of Infrastructure

The availability, capacity and lack of infrastructure are key factors in determining the shape, intensity and location of development. This section discusses transportation, water, sewer and stormwater infrastructure.

Transportation

North Fulton: In North Fulton, development was first concentrated along state roads. Downtown Roswell and Alpharetta are both located on State Route 9. Older communities in unincorporated Fulton County, such as Warsaw, are also centered on state highways. In the late 1980s and 1990s, construction of Georgia 400 and its extension south to I-85 increased access to North Fulton. This resulted in the construction of significant office space and of major commercial and retail centers along Georgia 400 interchanges. At the same time, construction of low density residential development accelerated.

Office and commercial activity is mostly linear along major thoroughfares, including Medlock Bridge Road, State Bridge Road and Jones Bridge Road. Holcomb Bridge and Old Alabama Roads have commercial activity primarily serving the surrounding neighborhoods. As a result of development, this area lost a significant amount of rural, agricultural and forestry acreage. The low density land uses and the lack of an interconnected street network, and a limited transportation network has increased congestion of the road network, and lowered the level of service by which these roads operate. To enhance the operation of the roads, many of the roads are programmed for widening, and/or improvements.

The lack of sewer services in Northwest Fulton has resulted in the construction of residential developments with a minimum of one acre lots. Due to this very low density development pattern, residents are heavily dependent on the automobile for shopping, school and work trips and have limited transportation alternatives. Moreover, residents from adjacent counties travel through this limited road network to reach GA 400 or employment centers along GA 400. These factors have led to congested roads.

Sandy Springs: Sandy Springs is the most urbanized and populated planning area in unincorporated Fulton County. Transportation infrastructure has shaped the development pattern in Sandy Springs. Roswell Road (State Route 9) was the first catalyst for commercial, office and residential developments. The construction of I-285 spurred major office and commercial developments along interchanges, particularly at Powers Ferry, Roswell Road and along the border with DeKalb County. The construction of Georgia 400 and the extension of the MARTA heavy rail line along led to the expansion of office, commercial and higher density residential uses in the Perimeter area and along the Georgia 400 interchanges.

Although Sandy Springs has high density developments, diversity of uses, transit service and highway infrastructure, there are limited transportation choices (e.g. such as providing more pedestrian/bicycle facilities, parcel interconnectivity, etc). The residential development and commercial/retail services in Sandy Springs, like those in North Fulton, developed largely in a suburban oriented pattern. This development pattern forces drivers into their cars for most trips. To address the transportation and development issues facing Sandy Springs, Fulton County adopted the Sandy Springs Revitalization Plan. To assist in its implementation, the Sandy Springs

Revitalization Inc. was formed. Sandy Springs Revitalization and Fulton County have partnered in efforts to promote redevelopment along Roswell Road to encourage pedestrian oriented development, to build a streetscape along Roswell Road and to develop a street grid.

Southwest Fulton: The transportation system has played an important role in the development pattern in Southwest Fulton. Proximity to the Hartsfield-Jackson Airport, rail lines, state roads and interstates I-285 and I-20 has supported industrial uses along Fulton Industrial Boulevard. Commercial development is concentrated along major corridors and intersections, including I-285 and Cascade Road, Fulton Industrial Boulevard (State Route 70) and Camp Creek Parkway (State Route 6), and the intersections of Campbellton Road (State Route 166) with Old Fairburn, Butner, Enon roads. Like Sandy Springs and North Fulton, an interconnected street network, improved transit services, among other improvements are needed in Southwest Fulton to facilitate mobility and to provide transportation options to the single occupancy vehicle. With the fast pace of development in Southwest Fulton, continued road maintenance/improvements, access management planning, and traffic controls, will be essential to help reduce congestion.

South Fulton: South Fulton has perhaps the most diverse land uses in unincorporated Fulton. It has older historic crossroads communities, new and established residential developments, newly developed commercial and office centers, areas in need of redevelopment, developing mixed-use villages, hamlet type developments, and rural areas with farming activities. All of the cities in South Fulton grew around the rail lines. The rail lines have also been a catalyst for industrial development particularly along Roosevelt Highway and more recently on Oakley Industrial Boulevard. Moreover, warehousing and airport related services have located in South Fulton due to proximity to Hartsfield-Jackson airport. Interstate I-85 and State Highways - especially Roosevelt Highway (State Route 29) and Old National Highway (State Route 279) spurred linear suburban type development. The construction of South Fulton Parkway, a developmental highway, increased the accessibility of South Fulton to the region's transportation system. Since its construction, development activity, industrial, residential and commercial, has dramatically increased along the Parkway.

South Fulton is a car-oriented community, largely due to the low-density of land uses and dispersed location of uses. However, recent land use designations which encourage mixed used and higher densities along major thoroughfares, particularly the South Fulton Parkway, promote compact pedestrian oriented development.

Since 1998, South Fulton has experienced unprecedented growth. Like North Fulton prior to its rapid population and employment growth, South Fulton has substantial amount of undeveloped land, which had been historically zoned for agricultural uses. Recent development has increased traffic volume on roads, which were not originally designed to accommodate such capacity. These once rural roads will have to be improved to adequately handle the existing and projected growth. New collector roads may have to be built to keep the transportation systems operating in a managed, efficient and safe manner. Moreover, access management tools, traffic studies, pedestrian/bicycle facilities, and public transit service must be evaluated to provide a series of transportation options for South Fulton.

Water Treatment Facilities

The degree of capacity in water and wastewater infrastructure is largely monitored by the permitted capacity (legal limit) levels of the plants. The Board of Commissioners may enforce moratoria when the rate of development threatens to exceed the permitted level of capacity.

Areas of rapid growth in Fulton County are tracked by monitoring water demand, sewer flows, the increase in number of new accounts added to the system, zonings, increases in population and households as well as population and household forecasts. The Georgia 400 corridor in North Fulton, located in the Big Creek Basin, and the Palmetto-Fairburn corridor in South Fulton County have been identified as two high growth areas. Growth in these areas was continuous over the five year period prior to the 2004 CIP and continues in 2005.

The current capacity and the capacity needs of water treatment facilities that serve unincorporated Fulton County are shown in Table 6-9. The Atlanta Fulton County Water Treatment Plant (AFCWTP) has a current capacity of 90 mgd which is equally divided between Fulton County and the City of Atlanta. The net capacity requirement for North Fulton to meet future needs is 27 to 42 mgd. Currently, the plant does not have sufficient capacity to meet the needs in 2020. In contrast, there appears to be a surplus of 8 to 14 mgd for the Sandy Springs area. South Fulton receives its water from the Hemphill and Chattahoochee plants, which have a total capacity of 201 mgd. The Public Works Department estimates and plans indicate that the South Fulton area can be supplied adequately by these plants through 2020. The issue in South Fulton is the limited water distribution system.

Table 6-9: Water Treatment Capacity

Service Area	Current Supply Capacity (mgd)	Water Demand Range: permit level at mgd	Net Supply Capacity Needs in 2020
North Fulton	45 (a)	87 to 72	-42 to -27
Sandy Springs	45	37 to 31	8 to 14
South Fulton	(b)	31 to 23	Adequate

a: Fulton County and Atlanta share at 45 mgd
b: The capacities of the Hemphill and Chattahoochee plants are 137 and 65 mgd, respectively (total of 202 mgd). The existing intake permit for the plants is 180 mgd.
Source: Fulton County Public Works

In order to meet future needs, the Public Works Department has prepared a two phase Capital Improvement Program. Phase I of the 2004 CIP for water infrastructure includes booster pump stations, general water system projects, water allocation, water mains, water storage, water treatment facility work, and program/construction management services. The plan will increase the capacity of the AFCWTP to 145 mgd. This should meet the forecasted demand for North Fulton. More information is available in the Community Facilities Element.

Increases in land use density would generally increase the strain on infrastructure for water and sewer facilities due to the required increase in sizes of interceptors and treatment facilities. While lower density development would reduce the strain on infrastructure, costs would increase for private developers who are responsible for new segments of the network. Areas without water service rely on wells for water supply and in general develop at a lower density.

According to a report in the Atlanta Journal and Constitution, a 2003 report by the Metropolitan North Georgia Water Planning District estimates that the 16 county Atlanta Region will have a shortfall of 284 millions gallons a day of water if water conservation and storage facilities are not put in place.

Wastewater Treatment

The Fulton County wastewater system currently serves a land area of more than 280 square miles. Six wastewater treatment facilities are currently permitted to treat a combined total average flow of approximately 45 million gallons per day. The extensive collection system consists of more than 1,600 miles of gravity sewer pipelines and 42 wastewater pump stations with associated force main pipelines. Long term plans are to decommission both Little Bear Creek and Little River plants.

Table 6-10 demonstrates wastewater flows projected for each service area. Current permitted treatment capacity or capacity under construction is also shown. The project net treatment capacity required for Big Creek, Johns Creek, and Little Creek ranges from 0.3 to 10.4 mgd while Camp Creek could have capacity of 3.6 to 9 mgd in 2020 depending on the rate of population growth.

Table 6-10: Water Pollution Control Plants 2020 Capacity

Service Area	Wastewater Treatment Capacity (mgd)	2020 Wastewater Projections (mgd)	Net Treatment Capacity (mgd)
Big Creek WRF	40	35.5 to 29.3	4.5 to 10.7
Johns Creek WPCP	15	17.2 to 14.2	-2.2 to 0.8
Little River WPCP	1.0	2.5 to 2.1	-1.6
Subtotal	**56.0**	**55.7 to 45.6**	**0.3 to 10.4**
Camp Creek WPCP	24.0	20.4 to 15.0	3.6 to 9
Source: Fulton County Public Works Department			

In order to meet current and future needs, the Public Works Department has prepared a two phase Capital Improvement Program. Phase I of the 2004 CIP for wastewater infrastructure includes general wastewater system projects, infiltration and inflow work, pump stations, relief sewers, wastewater allocation, water reclamation facilities, and program/construction management services.

During the 1990s, rapid development in North Fulton was not matched by additional water and wastewater infrastructure. Moratoriums were enacted in the Big Creek and Johns Creek basins. The 2004 CIP anticipates future growth areas based on the future land use plan and other studies, however if the County begins to approach the permitted levels for water treatment or wastewater treatment, the Department of Public Works would recommend additional moratoriums.

Availability of sewer affects the density of development. Areas without sewer service must rely on septic system. Fulton County Health Department regulations for residential septic require one acre of usable land. Northwest Fulton and the Chattahoochee Hill area of South Fulton are not served by sewer. However, the area east of Cascade Palmetto Road is expected to be served by sewer within 2005 and 2025.

Stormwater Facilities

Stormwater management facilities and programs have been implemented and planned for quality of life, health and safety needs, and regulatory standards in Fulton County. Existing land development patterns has resulted in substantial amounts of impervious surfaces, and have created a significant stormwater management challenge in most parts of the County. A threat to adequate future stormwater management is the lack of a dedicated capital improvement budget from the County. To address this challenge, the Public Works Department is working to create a stormwater utility and continue the County's collaboration with the U.S. Army Corps of Engineers. Future stormwater requirements may affect the development patterns and densities.

Redevelopment and Transitional Areas

Although much of the growth in Fulton County has occurred over the past 20 to 30 years, areas in need of redevelopment, and transitional areas undergoing shifts in predominant land uses are located throughout unincorporated Fulton County.

Residential, commercial, office and industrial development started to increase in Fulton County in the 1960s. These older commercial and industrial properties were developed to meet market conditions and development standards dictated during the 1960s, 1970s and 1980s. Buildings may lack the configuration, space and storage needs required by today's tenants; older site layouts may offer little street visibility and orientation. Location, the cost of redevelopment, dated materials, building design and configuration, site design and the lack of landscaping may not meet today's needs or expectations. Similarly, older homes may be too small and not have many of the sought after amenities and design. Moreover, lack of maintenance and investment in properties may limit the economic use of these industrial, commercial and residential facilities. Finally, changes in the surrounding land uses create pressure to redevelop property and leads to disinvestment of existing buildings.

Sandy Springs along Roswell Road and GA 400, Fulton Industrial Boulevard, Roosevelt Hwy, Old National Highway are all locations where redevelopment of residential, commercial and industrial uses have been taking place and should be encouraged to continue. Redevelopment of older properties presents many opportunities since the infrastructure is mostly in place and services such as public safety, fire stations, schools, libraries, are generally available.

Sandy Springs: Sandy Spring's growth as a residential community started in the 1950s with the construction of ranch style subdivisions followed by strip commercial centers along Roswell Road to serve this new residential community. Table 6-11 shows the zonings and the acreage of property zoned before 1979.

In response to the decline of commercial, office and residential properties along Roswell Road, Fulton County approved the Sandy Springs Revitalization Plan in 1992. Subsequently, the Sandy Springs Overlay District was adopted and a design review board created to ensure that new development and redevelopment along Roswell Road meet specified design standards. A demonstration streetscape project was built along a section of Roswell Road to improve the pedestrian environment. Moreover, a Livable Centers Initiative study, conducted in 2001, focused on creating a Sandy Springs main street and town center between Abernathy Road to the north, Glenridge Drive to the south and east and Sandy Springs Circle to the west. There has been some

re-development of properties within this area but there are still many opportunities for older commercial and office site to be redeveloped. With regards to residential uses, some of the older apartments have been converted to condominiums while others have been rehabilitated.

Table 6-11: Zonings Approved 1979 and Older
Sandy Springs Planning Area

Land Use	Zoning	Acres	Percent
Multi-Family	A-1, A	967.0	50.6%
Other	A-O	163.6	8.6%
Commercial	C-1, C-2	548.5	28.7%
Industrial	M-1, M-2	54.9	2.9%
Office	O-I	178.0	9.3%
Total		1,911.9	100.0%
Source: Calculated by E&CD			

The area between Roswell Road and GA 400 has experienced redevelopment pressures over the last two decades with the construction of Perimeter Mall, the extension of GA 400 and the opening of four MARTA stations. In the mid 1990s, this area was designated as Live Work in the Land Use Map to promote mixed use developments. Older ranch homes on large acreage and single family neighborhoods have been demolished and redeveloped with higher density residential uses as well as office and commercial uses.

South and Southwest Fulton: The rail lines along South Fulton and later the interstate highways served as the catalyst for industrial development. In the 1960s, proximity to interstate highway and location of rail lines spurred the construction of the Fulton Industrial Business District along the Chattahoochee River in Southwest Fulton. Industrial uses also extend along Roosevelt Highway and Oakley Industrial Boulevard. By 1970, 8,000 acres in South and Southwest Fulton were zoned industrial (See Table 6-12 and Map 6-3). These older zonings in South Fulton are concentrated in the Fulton Industrial District and along Roosevelt Highway and I-85 corridors.

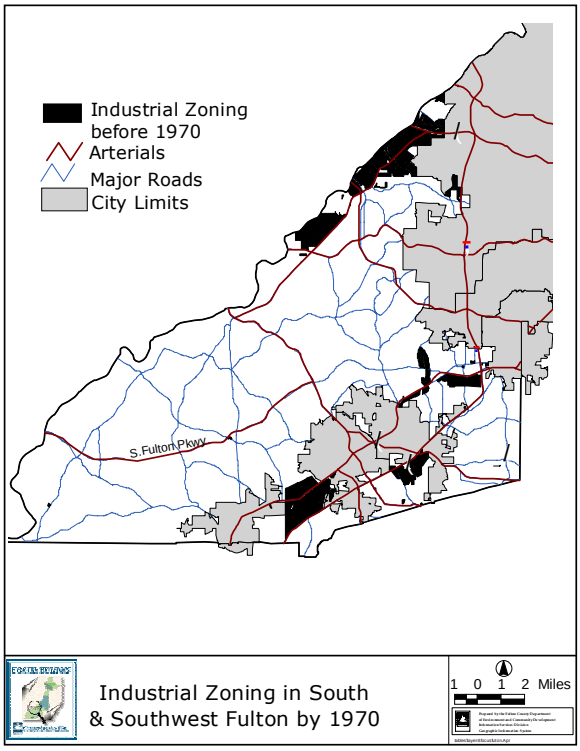
Table 6-12: Zonings Approved 1979 and Older
South and Southwest Fulton Planning Areas

Land Use	Zoning	Acres	Percent
Multi-Family	A, A-1	641.4	6.4%
Commercial	C1, C2	678.1	6.7%
Industrial	M1, M2, M1A	8,650.2	86.0%
Office	O-I	89.0	0.9%
Total		10,058.8	100.0%
Source: Calculated by E&CD			

Many of these older industrial buildings are experiencing decline due to the decrease in the manufacturing base of Fulton County, antiquated buildings, lack of maintenance, public safety issues along Fulton Industrial and competition from newer industrial parks in nearby counties and along the South Fulton Parkway.

Fulton County's Economic Development Department, in partnership with the Fulton Industrial Business Association, is working to promote and maintain the competitiveness of Fulton Industrial. With a 30% vacancy rate, there are many redevelopment opportunities in Fulton Industrial. Recently, new and more up to date buildings have been built on the southern end of Fulton Industrial Boulevard.

According to an industrial developer, construction of industrial uses on greenfields is more economical than redevelopment of older industrial buildings. In the developer's opinion, the cost of land has to double or triple in order to make redevelopment feasible.



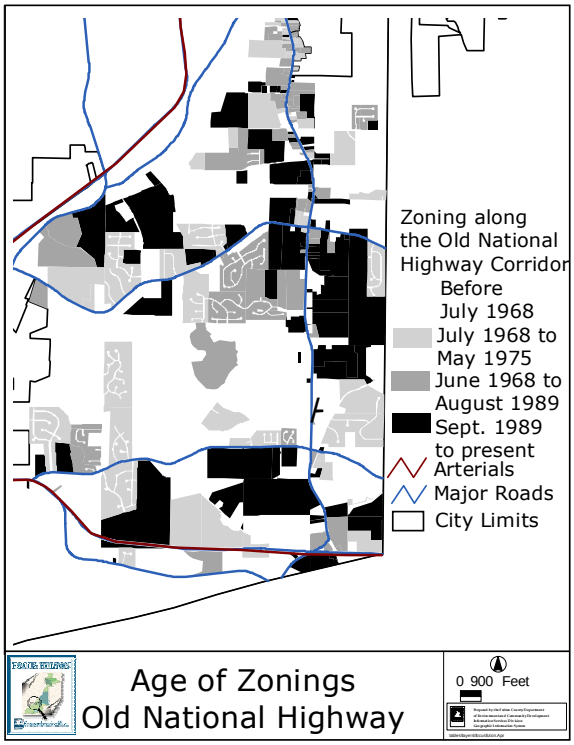
Map 6-3: Industrial Zoning in South and SW Fulton By 1970

The Old National Highway (SR 279) in South Fulton County is a corridor in transition. It begins at Sullivan Road in the City of College Park and extends south into Fayette County where it ends at State Route 85. Development along Old National is characteristic of typical of suburban corridors. Residential development, first scattered, began in the 1950s. During the 1960s and 1970s, residential subdivisions adjacent to Old National were constructed. Strip commercial and business development followed, providing services to commuters and nearby residents. Map 6-4 and Table 6-13 show the zoning districts and acres zoned prior to 1980.

Table 6-13: Old National Highway Corridor Zoning cases before 1980

Land Use / Age	# of Acres	Percent
Residential Before 1980	2,035	60.6%
Residential Since 1980	674.4	20%
Non-Residential Zoning Before 1980	116	3.4%
Non-Residential since 1980	533	16%
Total	3,358.4	100.00%
Source: E&CD		

The expansion of Hartsfield-Jackson airport, airport noise, the lack of maintenance and investment has led to the decline and underutilization of properties along Old National Highway. In the 1990s, several of the large commercial tenants closed. In response to this, Fulton County has undertaken several studies to promote the revitalization of Old National Hwy. During the 1990s, the Fulton County Board of Commissioners adopted the Old National Highway Overlay District which established design standards to improve the overall visual appearance of Old National Highway. Most recently, an ARC Livable Centers Initiative study was completed. It was designed to chart development strategies for the corridor and to promote mixed use development. Moreover, the Old National Merchants Business Association was established to involve businesses in improvement of older buildings and sites and to promote Old National Highway. The improved look of the corridor and increased interest in South Fulton has encouraged re-zoning activity and re-development along Old National Highway, bringing new businesses and new residential development.



Map 6-4: Old National Highway Zonings

Environmental Resources

Many scientists, including the authors of *Limits to Growth* (1972), *Beyond the Limits* (1992), and *Limits to Growth: The 30-Year Update* (2004), feel that current world policies have led to population levels which are unsustainable. The term "ecological footprint" is used to calculate the amount of land that would be required to provide the natural resources consumed by the world's population and to absorb their wastes. The World Wide Fund for Nature (WWF) tabulates the ecological footprint of more than 150 nations in its Living Planet Report. Measured are marine species, carbon dioxide generation, water withdrawal, cropland reduction, etc. These data indicate that since the late 1980s the earth's population has been using more of the planet's resource production each year than could be regenerated. Currently this data indicates that population and industrial production growth have overshot resources by 20%.

Fulton County has experienced a tremendous amount of growth and development during the past several decades. Land development pressures associated with population and economic growth are expected to continue throughout the present decade and through 2025. Acres of land have been converted from woodlands and agricultural land to residential subdivisions, commercial, office, institutional and industrial land uses. Many environmental challenges that the County is experiencing today are directly or indirectly related to land development occurring partially in response to the population and job growth.

Major environmental problems associated with rapid land development include the loss of trees and other vegetation, loss of wildlife habitat, reduced water quality, poor air quality, and creation of severe micro-climates (heat-islands caused by surfaces such as pavement that absorb sunlight and turn it into heat). Trees Atlanta estimates that 60% of Atlanta's natural tree cover has been removed over the last 20 years and according to NASA, Metro Atlanta is losing trees at the rate of 54 acres a day. This has resulted in the increase in the size of the urban heat island. Although Fulton County has one of the most comprehensive tree protection ordinances in the Atlanta Region, many trees, including specimen trees, are cut down during the development process. The loss of the tree canopy, clear cutting and the loss of specimen trees are some of the concerns expressed by Fulton County citizens during the Comprehensive planning process.

In addition, conversion of undeveloped land to impervious surfaces has increased storm water runoff, which directly impacts the quality and flow of Fulton County's streams. In fact, nonpoint source pollution (runoff from parking lots, city streets, roofs, and lawns) is now responsible for 75% of the pollution in 3,400 stream miles in Georgia that do not meet water quality standards (Georgia Conservancy, 1997).

Development patterns have had as much of an impact on the environment as the amount of development. Fulton County and the surrounding area began experiencing the most intense development at the height of dependency on the automobile for transportation. As a result, land uses in Fulton County are decentralized, low density and fragmented. Decentralized land development patterns are characterized by leap-frog development, large-lot residential subdivisions and separation of land uses. In short, low-density development patterns influence every facet of the environment, particularly transportation choices and air quality.

An increasing amount of natural resources, primarily land, is consumed to build roads and parking areas for automobiles which are an essential mode of transportation in the absence of compact development. It is estimated that a minimum of 0.18 acres of paved land for parking and roads is needed to accommodate each automobile in the United States (Earth Policy Institute, 2002). Another study contends that low density automobile-dependent development is the leading factor in the construction of impervious surfaces and accounts for over sixty percent of the total impervious surface coverage in suburban areas (Smart Growth America, American Rivers, Natural Resources Defense Council, 2002). As more acreage is paved with concrete and asphalt to accommodate roads and parking, less land will be available for agriculture, wetlands, forests, wildlife habitats and open space which are needed to maintain a healthy eco-system. Moreover, under the Clean Air Act, the US Environmental Protection Agency (EPA) designated 20 counties in metropolitan Atlanta, Fulton being one of them, as an ozone non-attainment area (8 hour standard). Ground level ozone is created by the presence of volatile organic compound and nitrogen oxides in the presence of sunlight. Automobile emissions are one of the main sources of nitrogen oxides in the Atlanta Region.

A 2000 study, conducted by the Brookings Institute, compared population growth with increases in urbanized land in the Atlanta Metropolitan Area and found that land development is outpacing population growth. From 1982 to 1997 population increased 46%, while land development increased 81%, as a percent of 1982 developed land, during the same period (Brookings Institute, 2001). This data confirms that development in the region is decentralized and is consuming more land than is warranted by the population growth.

It is anticipated that land development pressures in unincorporated Fulton County will continue for the next decade. Every land disturbing activity in Fulton County has an ecological impact. Minimizing the ecological impact of development and other human activities upon the land is critical and ultimately determines air and water quality, the availability of land for food production, recreation, wildlife habitats and the presence of undisturbed land to sustain natural cycles that support life. Fulton County has decreased the impact of certain land disturbing activities by adopting and implementing land protection policies, particularly for environmentally sensitive areas. In general, wetlands, steep slopes, floodplains, stream/river corridors such as the Chattahoochee River Corridor, groundwater recharge areas, watersheds and stands of specimen trees are considered ecologically significant and/or environmentally sensitive areas.

A recent inventory of ecologically sensitive areas has not been conducted. However, based on historic data, ecologically sensitive areas are not concentrated in any particular area, but are found throughout the County, especially along the Chattahoochee River Corridor, streams, floodplains and ridgelines. In an effort to protect the land that is ecologically significant, Fulton County has adopted specific land protection policies, programs and ordinances. Fulton County participated in the Governor's Greenspace program by adopting The Fulton County Greenspace Community Plan. The plan called for permanently protecting 20% of the land in all of Fulton County, with its main goal of protecting water quality. With State and local funding, Fulton County was able to purchase and permanently protect approximately 200 acres of land.

Given the County's existing development patterns, preserving and protecting the County's land will be challenging. The County recently completed a Conservation Subdivision ordinance, which encourages small-lot development in exchange for preserving significant areas of land for ecological and recreational purposes. The County worked with community members of the Chattahoochee Hill Country in South Fulton County to identify areas suitable for village and hamlet development. The village and hamlet development concept promotes more compact development and the preservation of open space thru the transfer of development rights. The proposed conservation subdivision ordinance, the transfer of development rights ordinance and village/hamlet development concepts are sound land use planning initiatives that have the potential to preserve and protect the County's natural resources. However, the magnitude of development occurring will require the County to strengthen existing land use regulations and devise additional land use control techniques. Most importantly, the County must put forth greater effort to more effectively coordinate environmental protection activities throughout the development process. For example, the County may want to consider the following land protection measures:

- Identify a few key ecologically sensitive and environmentally significant areas that the County intends to preserve or protect on the Comprehensive Land Use Plan Map. These areas will be designated as open space on the Land Use Map. Key properties should be included in the Capital Improvements Plan for acquisition, or be protected by restricting development using conservation easements, transfer of development rights and/or enforce stringent development standards;

- Restrict the amount of impervious surface coverage on land parcels and require more "soft" landscaping in areas designated as environmental sensitive areas, and/or develop a county-

wide stormwater fee structure that is determined by the amount of impervious surface on a piece of property;

- Adopt low impact development techniques for managing stormwater runoff and decrease reliance on the traditional curb and gutter stormwater management techniques in developing areas;

- Designate Live work areas on the land use map that have the potential to be linked by mass transportation and direct compact development and infrastructure improvements to these areas;

- Strengthen the existing zoning resolution, which mandates the separation of land uses and inadvertently increases reliance on automobiles, policies and programs to facilitate mixed use development;

- Support innovative land use techniques that allow compatible mixed land uses on a similar scale to exist side-by-side in a pedestrian oriented community environment.

- Encourage water conservation should with the construction of water reuse facilities.

Moving forward Fulton County can minimize the impact of development activities by implementing effective and comprehensive land use protection measures. Development guidelines and other land use development standards that are directly linked to Comprehensive Plan policies and the land use map could have a positive influence protection of environmental resources and on land development patterns. Environmental planning policies can be adopted that encourage compact development nodes that can be served by public transit and make walking and biking more common modes of transportation. In short, the adoption of environmental planning policies that support and require well-designed development would allow the County to maximize infrastructure investments, reduce automobile dependency, decrease impervious surface coverage and protect ecologically sensitive areas.

Infill Development

Infill development occurs in older urbanized and suburban areas that are mostly developed and where services and infrastructure exist. Infill developments are often small in scale and are usually located either on previously undeveloped parcels that may have development challenges or on under-utilized parcels that often have older homes or businesses. Infill development often occurs at a higher density and intensity than the buildings that were replaced and the surrounding development. Infill development allows more people to live, work and conduct business in an activity or town center by having a mix of uses and a more compact pattern of land use. Infill development often results in the construction of residential units in proximity of employment and commercial centers and in the construction of a diversity of housing types.

Infill development allows for the efficient use of existing infrastructure, leads to the reduction of commute distances and encourages all modes of transportation. Furthermore, redevelopment of activity centers and older suburban areas plays a role in the preservation of rural areas and environmentally sensitive areas. On the other hand, infill development often leads to loss of

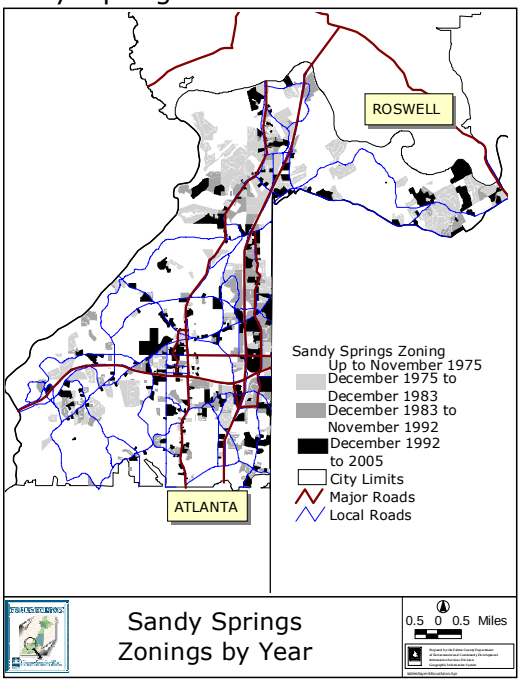
vegetation, new housing is at times out of scale in size and style with surrounding homes and the intensity of development places additional demands on existing infrastructure.

Older suburban oriented developments, particularly those experiencing strong development pressures, are areas where infill development is taking place in Fulton County and where the Land Use Plan encourages infill development. Infill development is taking place in Sandy Springs.

Table 6-15: Sandy Springs Planning Area

Zoning By Year	# of Acres	Percent of Total
Total Acres	21,559	100.0%
Before 1960	13,887	64.4%
1960 - 1979	3,081	14.3%
1980-1989	2,566	11.9%
1990-2004	2,025	9.4%
Calculated by E&CD Staff		

Table 6-15 and Map 6-5 show the decades when land was zoned or development took place in Sandy Springs. Over 60% of land in Sandy Springs was zoned and/or developed before 1960. Between the 1950s and 1970s, Sandy Springs became a suburban community to Atlanta. During this time period, Highways I-285 and Georgia 400 were built. In the 1980's, GA 400 was extended to the City of Atlanta and during the 1990's, four rapid transit stations were opened in and near Sandy Springs. During the 1980's a number of single family neighborhoods between Georgia 400 and DeKalb County, in the Perimeter Mall area, were re-developed for office and commercial activities which created jobs attracting workers throughout the region.



Map 6-5 Sandy Springs rezonings

From 1990 to 2004, 69.6% of all re-zonings in Sandy Springs involved parcels of land less than five acres. Of 342 approved re-zoning petitions, the median parcel size was 2.25 acres. Some parcels represent areas which had never before been developed; others represent "tear downs" and re-development. Most of the development between 1990 and 2004 was concentrated along I-285, GA 400 and Roswell Road, the area best served with the transportation infrastructure.

With three MARTA rapid rail stations; two major highways; diverse and numerous jobs; housing options ranging from apartments to condominiums and single family homes, Sandy Springs will continue its transition from a low density residential community to a major mixed use activity center.

Local Development Policies and Regulations

Fulton County policies and regulations affect land use patterns and development. The Comprehensive Plan policies provide guidance on development and the Land Use Plan Map suggests locations for development with recommended densities. The Land Use Map and policies are taken into consideration by the Board of Commissioners when they make zoning and infrastructure decisions. In addition, the Zoning Resolution, the Subdivision Regulations and other development regulations affect land use patterns and development. These development regulations and processes are detailed below.

Fulton County Zoning Resolution: Through this resolution, unincorporated Fulton County is divided into zoning districts that regulate the type and location of land uses within each district. Zoning designations are assigned to all of the land within Fulton County's jurisdiction. The zoning classification specifies the uses allowed on a parcel of land and includes development standards such as minimum lot size, setbacks, building height, landscaping, buffers and parking.

In order to change the current zoning designation, the property owner or his/her representative must take an affirmative action to do so. This action takes the form of filing a re-zoning application and public hearings before the Community Zoning Board (CZB) and the Board of Commissioners.

Land Development Regulations: Fulton County has many steps for developers and property owners that must be met before a certificate of occupancy is issued.

A. Land Disturbance Permits. Land Disturbance permits are required for land disturbing activity of 5,000 square feet or more.

B. Subdivision Regulations. Property owners may create new lots according to the standards established in the Fulton County Subdivision Regulations. Subdivisions have to be in compliance with all development regulations, including zoning and health regulations.

C. Building Permits. A building permit application is required for the construction of all structures. Building codes, fire codes and accessibility standards must be met.

3. Policies Applicable to various types, densities and intensities of land uses.

The Comprehensive Plan includes policies which provide guidance to the Board of Commissioners as they make decisions on re-zoning and use permit applications. In August 2002, the Board of Commissioners accepted policies called the Smart Growth Policies, which were prepared over an 18 month time period by a group of citizens, developers and organizations called the Fulton County Commission on Smart Growth & Citizen Participation. Policies were formulated for land use, environment, transportation, and development.

Conservation Subdivision Ordinance: A Conservation Subdivision Ordinance, a part of the subdivision regulations, was adopted in 2003 but only applies to South Fulton at this time. The conservation subdivision ordinance allows property owners to subdivide their property into smaller lots provided that a minimum of 40% of its total acreage is set aside as open space. The open space is designated on the conceptual plan and recorded on the final plat.

Transfer of Development Rights Ordinance: The transfer of development rights is a method for permanently conserving and protecting land by transferring the rights to develop from one property (sending area) to another (receiving area). This tool applies to the Chattahoochee Hill Country area of South Fulton and was adopted by the Board of Commissioners in April 2003.

Environmental Regulations: Numerous environmental regulations affect the development of land. These are detailed in the Natural and Cultural Resources Element.

Design Review Process: Fulton County's zoning resolution establishes a number of overlay districts which are intended in part to "protect and enhance local aesthetic and functional qualities and to stimulate businesses". These design review boards, whose members are appointed by the Board of Commissioners, provide review and comment to the Environment and Community Development Department Director prior to the issuance of a land disturbance, building or sign permit.

6.2.0.0 2025 Land Use

6.2.1.1. Inventory

The Land Use Map provides a framework for accommodating employment, service, retail, institutional and housing needs of Fulton County's existing and future population and businesses, while maintaining the community character of individual neighborhoods and planning areas of the County.

Land Use Categories

The land use map is composed of land use categories for all land uses. These land use categories are listed below.

Residential: Residential uses include all properties where the principal structures area designed for human habitation. Several residential categories, listed below, are shown on the Land Use Map. The categories show the recommended densities per acre.

One Unit or Less per acre – This category consists of scattered single family homes on one or more acres or residential subdivisions with lots of one or more acres. These residential uses may be on public water and sewer or may be on wells and septic systems.

One to Two Units per acre – This residential category consist of one to two single family homes per acre served by public sewer and water.

One to Three Units per acre – This residential category consist of one to three single family homes per acre served by public sewer and water.

Two to Three Units - This residential category consists of two to three single family homes per acre served by public sewer and water.

Three to Five Units - This residential category consists of three to five single family homes per acre served by public sewer and water.

Five to Eight Units - This residential category consists of five to eight residential units per acre. This could be single family homes, duplexes, townhomes and low density apartments that are served by public sewer and water.

Eight to Twelve Units - This residential category consists of eight to twelve units per acre. This could be single family homes, duplexes, townhomes and low to moderate density apartments that are served by public sewer and water.

Twelve to Twenty Units - This residential category consists of twelve to twenty units per acre. This could be townhomes and moderate to high density apartments that are served by public sewer and water.

More than Twenty Units per acre - This residential category consists of more than twenty units per acre. This could be moderate to high density apartments that are served by public sewer and water.

Commercial: Retail, services and offices area appropriate uses in this category.

Retail and Service – Retail, service and office uses area appropriate uses in this category. These uses may be located in a single building or as part of a shopping center.

Office – Office uses are appropriate for this category. The office uses may be in single office buildings as well as office parks.

Business Park: The Business Park land use allows two or more business uses, primarily office uses along with warehouses for storage and distribution. Limited assembly can be included. Access to rail and truck routes are important to some business park sites.

Industrial: This land use category allows for processing, refining, manufacturing, warehousing (including mini-warehouses), distribution, truck and rail terminals, industrial parks and related support services.

Agricultural, Forestry and Estate Residential: This land use category allows for farming, including grazing and cultivation, timber production and harvesting, estate residential comprised of single family homes at a density of one acre or more. These residential uses may be on public water or on wells and septic systems.

Public, Semi-Public and Institutional:

Community Facilities – This land use includes public uses such as community centers, government facilities such as senior centers, health center, fire and police stations, libraries, government centers, and schools, semi-public uses such as churches and cemeteries and institutional uses such as hospitals. The land use map designates the uses for the following: S- School, F – Fire station, L- Library, H- Health Center, SR – Senior Center, PP – Police Precinct, C - Church

Transportation and Utilities – This land use included transportation uses such as airports, MARTA stations and MARTA park and ride lots and utilities such as water treatment facilities, water storage tanks, pumping stations, wastewater treatment facilities and solid waste land fills.

Open Space: The open space category includes land that is mainly undeveloped, contains some recreational uses and some natural resources. It does not include land uses for buffers and landscaped strips. This is a new land use category developed as part of this plan.

Private Recreation – Privately owned recreational facilities such as golf courses and open space is included in this land use. Recreational amenities in subdivisions are not included.

Parks, Recreation & Conservation: This includes parks, open space and recreational facilities owned by Fulton County and other governments, such as the National Park Service.

Water Bodies: This includes lakes and streams.

100 year Floodplain: The 100 year flood plain, as determined by FIMA maps, is shown in this category. The 100 year flood plain should remain undeveloped. In some cases, the land in the 100 year flood plain can be used toward calculating allowed densities.

Live Work: The purpose of the Live Work land use district is to allow an appropriate and balanced mix of uses to create a live work environment at a scale and character that is compatible with its surrounding community. Live work areas will be activity centers where the community can live, work, shop, meet, and play. These areas should be compact, pedestrian-oriented, with a mix of uses and incorporate open space. This will result in the protection of environmental resources, accessible open space, a balance of all modes of transportation, housing choices and civic interaction.

A majority of the forecasted population and employment growth should occur in the areas designated as Live Work. Moreover, Fulton County's public facility and infrastructure investment should also be located in areas designated as Live Work.

Land Use: Live work land uses should have a compatible mix of office, commercial, services, institutional, civic and residential uses. These uses should be integrated both vertically and horizontally. The uses within the live work areas should be in proximity to each other in order to encourage walking and to increase mobility to those who do not drive especially the elderly and the young.

Within the Live work land use there should be transition of land uses, height and density. The Live work land use should also serve the adjacent community.

Some areas are designated Live Work in order to encourage the redevelopment of underutilized commercial, office and residential areas and to reshape sprawling commercial corridors into a more compact mixed use pedestrian-oriented environment.

Transportation: Live work areas should have an integrated transportation system. The transportation system should provide connectivity within the district and to and from the

surrounding community. The transportation system should incorporate automobile, transit when available, bicycle, pedestrian facilities.

The streets should form an interconnected transportation network. This street network will create options, improve access and mobility, shorten auto trips and reduce congestion. Interconnected networks of streets should be designed to promote walking, biking and transit usage, where present. The pedestrian and bicycle facilities should facilitate safe, attractive and convenient pedestrian and bicycle circulation and minimize conflicts between pedestrians and vehicles.

Open Space: A range of parks and open space, from village greens to active recreation and passive open space, should be distributed throughout the Live Work district. Open space should be centrally located and accessible for the enjoyment of residents and workers. Open space and parks could be used to define and connect neighborhoods and uses. Environmentally sensitive areas should be protected and their fragmentation should be avoided. At least 20% of a development should be set aside as open space.

Housing: Live work areas should have a diversity of housing types to meet the needs of the workforce and of County residents. In Live work areas located at employment centers, the housing should be affordable to those that work there.

Types of Live Work Areas

Three Live Work districts are identified in the Land Use Map. The intent of which is described below.

1. Live Work Neighborhood: This is a low density residential and mixed use land use intended to serve a single neighborhood or small group of adjacent neighborhoods.

2. Live Work Community: This is a medium density residential and mixed use land use along corridors and nodes intended to serve a group of adjacent neighborhoods.

3. Live Work Regional: This is a high density residential and mixed land uses along major transportation corridors and/or rail transit stations intended to serve larger areas and provide larger commercial uses with a significant employment concentration.

Descriptions of the designated Live Work areas throughout unincorporated Fulton County are included in Table 6-16.

Table 6-16: Live Work Types

Neighborhood Live Work	Community Live Work	Regional Live Work
Residential Density: Up to 5 units per acre	Residential Density: Up to 9 units per acre	Residential Density: +9 units per acre
Commercial/Office Density: up to 10,000 sf per acre	Commercial/Office Density: up to 15,000 sf per acre	Commercial/Office Density: no limits
Up to 30,000 sf limit per tenant space or use	Up to 50,000 sf limit per tenant space or use	Up to 125,000 sf limit per tenant space or use
2 story height limit	4 story height limit	Per zoning district regulations or use permit

Table 6-16: Live Work Types		
Neighborhood Live Work	**Community Live Work**	**Regional Live Work**
5% of total project area to be community gathering spaces	10% of total project area to be community gathering spaces	15% of total project area to be community gathering spaces

Live Work Policies

- 20% of the project shall be comprised of open space of which the community gathering spaces is a part.
- Projects that are 15 acres or less shall have two uses of which residential is one of the uses.
- Projects that are 15 acres or more shall have three uses of which residential is one of the uses.
- Mixed Use and/or Live work projects shall provide a balance of uses with a minimum of 20% of each of the uses on the site and or in the area.

Proposed 10 Acre Residential Land Use Designation

As Fulton County becomes increasingly developed, many rural parts of the county are experiencing the effects of suburban sprawl. In an effort to address community concerns about protecting open space, agricultural uses and rural character, E&CD proposed a new land use designation. The proposed designation limited one unit per 10 acres in some rural areas as a way of curbing the practice of one-acre residential development, a contributing factor of sprawl.

To gauge community interest in the proposed land use designation, E&CD distributed surveys to property owners with 10 or more contiguous acres in the unsewered portion of Northwest Fulton County and the Chattahoochee Hill Country (properties west of Cascade Palmetto Highway) in South Fulton. The results from the surveys are shown in Table 6-17.

Table 6-17: Proposed 10 Acre Minimum Land Use Survey		
Response	**North Fulton**	**South Fulton**
Yes	19	37
No	108	96
No Opinion	3	3
No Response	434	633

In North Fulton, while there were 19 citizens concerned with land conservation and protecting the rural character of their community, the majority of respondents (108) were against the 10 acre designation. Some reasons given by opponents were concerns of property devaluation, as well as the restrictions on property sales.

In South Fulton, 37 respondents were proponents of the new 10 acre minimum designation, almost twice as many as in North Fulton. Similar to North Fulton, property owners supporting the 10 acre minimum stated their interest in maintaining the rural character and agricultural uses. However, the majority of responses (96) were against the new land use designation. In South Fulton, many respondents who were opposed to the new designation cited their interest in wanting to leave land

to their families, property devaluation, as well as the concern that a 10 acre minimum would only be affordable to a select group of individuals.

A total of 6 respondents, in both North and South Fulton, had no opinion on the land use designation. These land owners would be agreeable to the majority interest of their surrounding community.

As a result of the survey, E&CD determined that there was no substantial community interest in a 10 acre land use designation to proceed with the proposed 2025 Land Use Map. E&CD will, however, continue to work with communities to identify strategies to protect open space, agricultural uses, and the character of rural areas.

6.2.1.2 Assessment

North Fulton

Projection of Future Land Use Needs

Table 6-18: Unincorporated North Fulton Land Use and Demographics

2004			**Change 2005-2025**	
Population	Residential Acres	Acres/person	Population	Potential acres needed
93,192	18,494	0.19	24,019	4,766
Households	Residential Acres	Acres/household	Households	
36,508	18,494	0.50	11,416	5,783
Employment	Employment Acres	Acres/job	Employment	
53,447	2,461	0.04	31,106	1,432
Source: Existing Land and E&CD forecasts				

Residential Population: North Fulton population is forecasted to grow by 24,019 residents and 11,416 households between 2005 and 2025 in 2025. If North Fulton develops in the same pattern as it has to date, the additional households and population would require between 4,766 and 5,783 acres. This is equal to about a third of the land identified as forest and agricultural in the existing land use inventory (Table 6-18).

Commercial and Industrial Uses: Based on the employment forecast, the number of jobs will increase by 31,106 between 2005 and 2025. Based on current development patterns, the forecasted employment may require almost 1,432 acres. The 2025 Land Use Plan shows areas designated for Live Work and non-residential land use where future commercial and industrial uses could be located.

Land Uses Other than Residential, Commercial, and Industrial: Currently approximately 1,217 acres are used for institutional uses, equal to 0.013 acres per person. An additional 313 acres may be needed for institutional uses. The land use map shows current institutional uses, this includes government facilities, public and private schools and churches larger than 5 acres.

Environmentally Sensitive Areas: The Chattahoochee River flows through the southern boundary of North Fulton and the Little River flows along the western boundary. The 100 year floodplains for

stream bodies are shown on the Land Use Plan Map and are protected by current stream buffer ordinances.

2025 Land Use Map

The 2025 Land Use Map for North Fulton is included with this plan. The acres and the percentage of land in each of the land use categories are shown in Table 6-19. The North Fulton 2025 Land Use Map indicates the location, densities and type of uses that are appropriate for each parcel in unincorporated North Fulton County.

Table 6-19: 2025 Land Use Map - North Fulton

Land Use Designation	Acres	Percent
Residential		
Residential 1 unit or less/acre	11,126	22.28
Residential, 1 to 2 units/acre	5,040	10.09
Residential, 2 to 3 units/acre	4,728	9.47
Residential, 3 to 5 units/acre	485	0.97
Residential, 5 to 8 units/acre	279	0.56
Residential, 8 to 12 units/acre	121	0.24
Commercial		
Retail & Service	514	1.03
Office	221	0.44
Live Work		
Live Work Neighborhood	1,137	2.28
Live Work Community	471	0.94
Business Park	741	1.48
Agricultural	12,575	25.18
Public, Semi-Public & Institutional		
Community Facilities	1,331	2.67
Transportation & Utilities	330	0.6
ROW	4,294	8.6
Open Space		
Parks, Recreation & Conservation	576	1.15
Private Recreation	1,978	3.96
100 Yr Flood Plain	3,961	7.93
Water	12	0.02
Total	49,935	100.00%

1. Growth Distribution: The number of households (low and high numbers) and the number of employment that can be accommodated in North Fulton if the area is developed following the land uses in the 2025 Land Use Map is shown in Table 6-20. According to these calculations, the number of forecasted households may be difficult to accommodate while there appears to be ample land use capacity for the forecasted employment.

Almost 5% of land uses are designated for Live Work, Office, Commercial or Business Park. The Live Work Land Use and associated policies promote a mix and integration of land uses, housing diversity, open space, transportation standards and developments that support pedestrian and transit uses. The Land Use Map directs new development to the Live Work designated areas. Medlock Bridge Road from Abbots Bridge to State Bridge Road and State Bridge Road for the Chattahoochee River to Medlock Bridge Road is designated as Community Live Work. The intersections of Jones Bridge Road with Old Alabama Road, State Bridge Road, and Abbots Bridge/Sargent Roads as well as Highway 9 between Webb Road and Bethany Road, and the Birmingham, Crabapple communities are designated as Neighborhood Live Work. Medlock Bridge Road, north of Abbots Bridge Road, is designated as Business Park and Highway 9/Windward Parkway south of Webb Road and east of Webb Road is designated as Commercial and Office. These areas can develop as employment centers.

Residential land uses comprise 45% all uses. Residential land uses of low, medium and high densities are located throughout NE Fulton. In NW Fulton, medium and high density land uses area located along Hwy 9 and Rucker Road. The rest of NW Fulton is designated as low density residential.

Table 6-20: North Fulton Population and Employment Forecasts in the 2025 Land Use Map

Land Use Classification	Acres	Household		Employment		Assumptions	
Residential		Low	High	Low	High		
Agricultural	12,575	6,288	12,575	0	0		
1 unit/acre or less	11,126	5,563	11,126	0	0	0.5-1 units/acre	
1 to 2 units	5,040	5,040	10,080	0	0	1-2 units/acre	
2 to 3 units	4,728	2,364	4,728	0	0	2-3 units/acre	
3 to 5 units	486	1,457	2,428	0	0	3-5 units/acre	
5 to 8 units	279	1,396	2,233	0	0	5-8 units/acre	
8 to 12 units	121	966	1,449	0	0	8-12 units/acre	
Business Park	741	0	0	21,181	21,181	10,000 sf/acre	1 job/350 sf
Community Facilities	1,331	0	0	0	0		
Live Work - Neighborhood	1,137	0	0	3,654	7,309		
Residential	379	379	1,895	0	0	1-5 units/acre	
Office	379	0	0	7,580	15,161	10,000 sf/acre	1 job/250-500 sf
Commercial	379	0	0	10,829	15,161	10,000 sf/acre	1 job/250-350 sf
Live Work - Community	471	0	0	0	0		
Residential	157	784	1,412	0	0		
Office	157	0	0	4,707	9,413	5-9 units/acre	
Commercial	157	0	0	6,724	9,413	15,000 sf/acre	1 job/250-500 sf
Office	221	0	0	7,374	8,849	15,000 sf/acre	1 job/250-350 sf
Retail	514	0	0	14,691	51,417	10,000-25,000 sf/a	1 job/350 sf
Total	40,378	24,237	47,927	76,740	137,905	10,000-50,000	1 job/500 sf
Minus 10% vacant Housing		21,813	43,134				
Govt jobs range from 2% to over 10%. Assume 5% low, 10% high to include other institutional uses also.							

2. Annexations: The City of Alpharetta and Roswell have been developing their annexations plans. Fulton County has encouraged the Cities of Alpharetta and Roswell to annex all of the unincorporated islands. The City of Roswell has expressed interest in annexing the land around Rucker Road. The creation of new incorporated areas could occur between now and 2025. State Representatives for North Fulton have study committees to introduce legislation in the State House that would create the City of Milton in the area north of Alpharetta and the City of Johns Creek in the area east of GA 400.

3. Infrastructure Improvements: The Community Facilities Element and the implementation strategies include information on the timing and sequencing of infrastructure and community facilities improvements. The Transportation Element includes a list and timing of programmed transportation projects. These improvements will support the proposed growth and growth patterns recommended in the Land Use Map. The collector distributor system along GA 400, widening on McGinnis Ferry Road and Old Alabama Road are some of the main transportation projects that will be completed. Expansion of the Atlanta Fulton County Water Treatment Plant and replacement of the Johns Creek Water Pollution Control Plant are two of the improvements planned.

4. Environmentally Sensitive Areas: The Natural and Cultural Resources Element identifies natural resources located in North Fulton. The Land Use Plan Map shows private recreational space, stream and water bodies, and 100 year floodplain as open space, this represents approximately 13% of the land uses. It is the intent of the Comprehensive Plan policies to maintain the integrity of undisturbed buffers and water courses in North Fulton.

5. Cultural Resources: Historic resources were documented in the North Fulton and Sandy Springs Historic Resources Survey. Details of this survey are included in the Natural and Cultural Resources Element. Many of the historic resources in North Fulton are dispersed and reflect the agricultural origins of the County. Over the past 20 to 30 years as development pressures increased, farms and large tracts were rezoned and subdivided to residential uses resulting in the loss of many of these historic resources. Historic resources are concentrated in crossroads communities. The plan recommends the creation of a Historic Preservation Plan and Ordinance. This can be used as a tool for the preservation of historic resources.

6. Traditional Development Areas: Several community plans have been adopted by the Board of Commissioners in North Fulton: the Warsaw Master Plan, adopted in 2001, the Crabapple Crossroads Plan, adopted in 2003, and the Birmingham Plan, adopted in 2004. In general, these plans call for mixed use and compact land uses, enhancement of the transportation network, pedestrian oriented development, open space and a range of housing options. The 2025 Land Use Map shows these areas as Live Work. Activity nodes at major intersections and along Medlock Bridge Road are also designated as Live Work. Plan policies call for mixed use developments in the Live Work land use.

7. Transitional Areas: Transitional areas are usually located around live work land uses and activity nodes. Generally, office land uses are adjacent to commercial land uses. Residential land uses are adjacent to office and sometimes commercial land uses. The residential land uses transition in densities from the high to low.

8. Rural, Agricultural and Forested lands: 25% of the acres are designated as Agricultural Forestry and Estate Residential. The area north of Batesville, Providence and Bethany Road is designated in

this category. This area has some farming, nurseries, landscape services, numerous horse farms and wooded parcels. Most of the land is zoned Agricultural which allows residential uses. Land in this area is being developed into residential subdivisions, many with golf course communities, at a density of at least one residential unit per acre. In 2001, it was calculated that almost 1/3 of the land in NW Fulton is developed in residential subdivisions. This trend is expected to continue in the future.

A portion of the area is served by public water however; none of it is served by public sewer. As a result, septic systems are required. The Fulton County regulations require one acre of usable land for the septic system serving one single family home. On gravel roads, three acre parcels are required. The lack of sewer and the reliance on septic systems may be of concern in the future if septic systems and the back up drain fields fail. Also septic systems that are not properly maintained may pollute groundwater and streams.

In an effort to preserve the area's rural character, E&CD staff worked with a steering committee to develop the plan entitled "Maintaining the Rural Character in NW Fulton County" in 2001. The plan includes goals, policies and strategies to preserve rural and agricultural uses. One of the strategies was to develop a large lot zoning category. As a result of this plan, in February 2005 a survey was sent to 564 property owners that own 10 acre plus parcels to determine the interest in developing a 10 acre residential land use category. Twenty-three percent responded to the survey. Of the responses received, 83% did not support the new land use category, 15% supported it and 2% did not have an opinion. As a result of the responses to this survey, E&CD staff decided not to create this new land use category.

The subdivision of parcels to one acre lot residential uses will result in the loss of the areas rural character as well as agricultural and forested uses. This plan recommends several strategies in the Implementation Element to preserve these uses.

Areas for Future Plans: Several areas in North Fulton will continue to experience growth and development. Transportation corridors, including Highway 9, Medlock Bridge Road, Arnold Mill Road, activity centers east of 400 and communities such as Shakerag could benefit from additional development guidance and policies that would result from area plans. Most of the development in North Fulton is relatively recent (within the last 20 years); as a result, areas for redevelopment have not been identified.

Sandy Springs

Projections of Future Land Use Needs

Table 6-21: Sandy Springs Land Use and Demographics

2005			Change 2005-2025	
Population	Residential Acres	Acres/person	Population	Potential acres needed
86,698	12,248	0.14	19,163	2,707
Households	Residential Acres	Acres/household	Households	
42,683	12,248	0.28	10,871	3,119
Employment	Employment Acres	Acres/job	Employment	
141,282	2,517	0.01	20,575	366
Source: Existing Land and E&CD forecasts				

Residential Population: Sandy Springs is expected to grow from an estimated population of 86,698 in 2005 to 105,861 residents in 2025. This represents an additional 19,163 people and a growth rate of 22.1% (see Population Element). The number of households is forecasted to increase by 10,871 from 42,683 to 53,554. If Sandy Springs develops in the same pattern as it has to date, the additional households would require between 2,707 and 3,119 acres (Table 6-21). This is more than the land currently designate as Forest in the existing land use inventory. Population, household and employment growth can be accommodated in several ways in Sandy Springs:

- Existing neighborhoods will turn over. Aging households in existing single family homes will move out and be replaced by younger households, some of whom might be starting families. Some of the homes may undergo renovations and expansion.

- Infill and redevelopment will continue to occur. There will be places where a number of smaller, older homes will be torn down and replaced with more homes than there were before. Undeveloped pockets of land which could be developed for the first time.

- Non-residential land uses that are under-utilized and have suffered from disinvestment can be part of a land assemblage for new development. Residential uses can be incorporated into these new developments, thus adding new housing to the planning area.

Commercial and Industrial Uses: It is difficult to identify acreage per employment type. Retail jobs are generally located in areas zoned for commercial purposes. The sectors of Finance, Insurance and Real Estate, and Services generally occupy office space but these occupations also take place in the field. Construction work varies and is not tied to a particular type of land use. The planning area has an abundance of land zoned and developed for office and commercial uses. The number of acres used for non-residential uses per job in Sandy Springs is 0.017 jobs per acre. To accommodate the additional jobs forecasted to be added by 2025 (20,575 jobs) may require an additional 366 acres. The absorption of existing vacant office square can also provide for the projected employment growth in the planning area (Tables 6-22 and 6-23).

Table 6-22: Sandy Springs Super District Employment Forecasts

Year	CONST	MFG	TCU	WHOL	RETAIL	FIRE	SERVICES	GOVT	TOTAL
2000	1,970	1,671	11,803	9,598	10,925	16,091	53,649	1,817	107,524
2010	1,830	2,300	11,340	10,164	11,335	14,949	59,514	2,046	113,478
2020	2,330	2,942	11,321	10,321	13,600	14,168	66,396	2,437	123,515
2030	2,702	3,526	11,223	9,572	15,565	13,516	70,639	2,928	129,671

Source: Atlanta Regional Commission

Table 6-23: Sandy Springs Office Square Footage [2]				
Area	**Total Built Square Feet**	**Vacant Square Feet**	**Percent Vacant**	**Total Est. Jobs at built out**
Roswell Road Corridor	2,095,890	395,001	18.9%	8,384
Perimeter/GA 400 Area	13,088,253	2,140,728	16.4%	52,353
Powers Ferry/I-285	2,830,234	288,306	8%	11,321
Northridge/GA 400	247,449	27,259	11%	990
Dunwoody	115,000	24,777	21.5%	460
Total	18,376,826	2,876,071	16%	73,508
Planned	2,247,500	0	0	8,990
Source: Dorey's Office Guide, Fourth Quarter 2004. Number of employees estimated by E&CD staff based on 250 square feet allotted per office worker. This number does not include all office locations, such as offices in single family homes zoned to allow such uses in existing residential structures.				

Land Uses Other than Residential, Commercial, and Industrial: Currently approximately 612 acres are used for institutional uses, equal to 0.008 acres per person. An additional 135 acres may be needed for institutional uses. According to the Recreation Master Plan, by 2015 there will be a 218 acre parks deficit in Sandy Springs. Acreage needed for public recreational and institutional uses are not shown on the land use map unless the land is owned by Fulton County, in the case of schools, the Fulton County Board of Education or the property has a use permit. Land for all future uses must come from land that is currently used for other purposes. For example, a new subdivision or a new school may have to find property owners willing to sell their property. There are older, homes on large size lots which can be assembled and redeveloped. This occurred during the 1980's when the business bought out entire neighborhoods along Georgia 400 to build their corporate campuses.

Environmentally Sensitive Areas: The Chattahoochee River flows through Sandy Springs separating its boundaries with Cobb County and the City of Roswell. The Metropolitan River Protection Act (MRPA) limits impervious surface within a 2,000 foot boundary on either side of the river to protect drinking water supplies. The 100 year floodplains for stream bodies are shown on the Land Use Plan Map and are protected by current stream buffer ordinances of 50 feet. There are steep slopes which need protection and a steep slope ordinance is under development.

2025 Land Use Map

The 2025 Land Use Map for Sandy Springs is included with this plan. The acres and the percentage of land in each of the land use categories are shown in Table 6-24. The Sandy Springs 2025 Land Use Map indicates the location, densities and type of uses that are appropriate for each parcel in Sandy Springs.

[2] Various industry sources suggest that, on average, there are 250 square feet of net leasable area set aside per office worker, 500 square feet of gross leasable area for retail employees, 300 square feet of net leasable area for industrial plants, and 750 square feet of gross leasable area per employee for warehouses. Source: Page 138, Burchel and Listokin, The Fiscal Impact Handbook, Center for Urban Policy Research, New Jersey, 1978.

Table 6-24: 2025 Land Use Map - Sandy Springs		
Land Use Designation	**Acres**	**Percent**
Residential		
One unit per acre or less	6,437	25.9
1-2 units per acre	4,959	20.0
2-3 units per acre	1,314	5.3
3-5 units per acre	354	1.4
5-8 units per acre	242	1.0
8-12 units per acre	711	2.9
12 – 20 units per acre	325	1.3
20+ units per acre	29	0.1
Commercial		
Retail Commercial	298	1.2
Office	302	1.2
Office, High Intensity	43	0.2
Live Work		
Live Work Neighborhood	562	2.3
Live Work Community	829	3.3
Live Work Regional	915	3.7
Industrial	20	0.1
Business Park	33	0.1
Public, Semi-Public & Institutional		
Right of Way	3,459	13.9
Transportation, Communications & Utilities (TCU)	42	0.2
Community Facilities	19	0.1
Open Space		
100 Year Floodplain	1,875	7.5
Parks and Recreation	882	3.5
Private Recreation	573	2.3
Water Bodies	628	2.5
Total	24,852	100.0
Source: Fulton County E&CD – GIS Section		

Growth Distribution: The number of households (low and high numbers) and the number of employment that can be accommodated in Sandy Springs if the area is developed following the land uses in the 2025 Land Use Map is shown in Table 6-25. According to these calculations, the number of forecasted households may be difficult to accommodate. The number of forecasted employment could be accommodated depending on how the type of employment and the square feet needed for each job.

Population and business growth is anticipated primarily along the Roswell Road and Georgia 400 Corridors. ARC and Fulton County forecast that the four census tracts (101.01, 101.09 101.10, and 102.07) along GA 400 and Roswell Road will have a 57.5% increase in population between 2000 and 2030 (out of a total of 15 census tracts in Sandy Springs). The remaining 11 census tracts are expected to each have less than ten percent increase in population.

Table 6-25: Sandy Springs Population and Employment Forecasts in the 2025 Land Use Map

Land Use Classification		Households		Employment		Assumptions	
	Acres	Low	High	Low	High		
Residential						Units/acre	Jobs/square feet
1 unit/acre or less	6,438	3,219	6,438	0	0	0.5-1 units/acre	
1 to 2 units	4,959	4,959	9,918	0	0	1-2 units/acre	
2 to 3 units	1,314	2,628	3,942	0	0	2-3 units/acre	
3 to 5 units	354	1,062	1,770	0	0	3-5 units/acre	
5 to 8 units	242	1,210	1,936	0	0	5-8 units/acre	
8 to 12 units	711	5,688	8,532	0	0	8-12 units/acre	
12 to 20 units	325	3,900	6,500	0	0	12-20 units/acre	
20 Units / Acre or More	29	580	1,450	0	0	20-50 units/acre	
Business Park	33	0	0	943	943	10,000 sf/acre	1 job/350 sf
Community Facilities	19	0	0	4,826	9,652		
Live Work - Neighborhood	562			0	0		
Residential	187	374	935	0	0	2-5 units/acre	
Office	187	0	0	5,343	7,480	10000 sf/acre	1 job/250-350 sf
Commercial	187	0	0	5,343	7,480	10000 sf/acre	1 job/250-350 sf
Live Work - Community	829			0	0		
Residential	276	1,380	5,520	0	0	5-20 units/acre	
Office	276	0	0	19,714	27,600	25,000 sf/acre	1 job/250-350 sf
Commercial	276	0	0	13,800	27,600	25,000 sf/acre	1 job/250-500 sf
Live Work - Regional	915			0	0		
Residential	305	6,100		0	0	20-50 units/acre	
Office	305	0	0	17,429	52,286	20,000-60,000 sf/a	1 job/350sf
Commercial	305	0	0	12,200	36,600	20,000-60000 sf/a	1 job/500 sf
Industrial	20	0	0	1,333	3,429	20,000-60,000 sf/a	1 job/300 sf
Office	302	0	0	8,629	21,571	10,000-25,000 sf/a	1 job/350 sf
Office, high intensity	43	0	0	1,229	3,071	10,000-25,000 sf/a	1 job/350 sf
Retail	298	0	0	5,960	29,800	10,000-50,000	1 job/500 sf
Total	19,699	31,100	46,941	96,749	227,512		
Minus 10% vacant Housing		27,990	42,247				
Government jobs range from 2% to over 10%. Assume 5% low, 10% high to include other institutional uses also							

2. Annexation: During the 2005 General Assembly, legislation was approved to allow Sandy Spring residents to vote on becoming a city. Sandy Springs residents approved the referendum on June

22, 2005. Sandy Springs will become a City in 2006 and the entire planning area will be incorporated.

3. Infrastructure Improvements: Intersection improvements, sidewalks and bicycle paths have been made and continue to be planned, designed and built. Infrastructure improvements planned within the next 20 years include:

- GRTA is planning the route of a Rapid Bus Route which is proposed to go through the Town Center area.
- The Perimeter Community Improvement District is involved with road, bicycle path and sidewalk improvements, encouraging car pooling, and implementing shuttle buses.
- A Street Grid study was completed in 2004 by Sandy Springs Revitalization, Inc. with the support of Fulton County. The study recommendations have been incorporated into the County's Comprehensive Transportation Plan.
- Some areas of Sandy Springs were developed before storm water regulations were established. Stormwater facilities need to be built and/or upgraded when parcels are redeveloped and when stormwater programs are implemented by Fulton County. The Sandy Springs community supports a storm water utility and other mechanisms to fund these improvements.
- The Georgia Department of Transportation has plans to build a collector-distributor system along the Georgia 400 corridor. Right-of-way acquisition in underway. This improvement will alleviate traffic on Georgia 400 and provide greater access within this regional activity center.
- A major intersection improvement project is planned by the State DOT at Roswell Road and I-285. Currently, traffic backs up. Improving movement at locations which are at a traffic standstill will improve air quality and, when the improvement is complete, will allow for re-development.

4. Environmental/Natural Resources: The Land Use Plan Map shows almost 16% of the land uses designated as private recreational space, stream and water bodies, and 100 year floodplain as open space. It is the intent of the Comprehensive Plan policies to maintain the integrity of undisturbed buffers and water courses in Sandy Springs. The Plan also encourages the reclamation of stream banks and piped streams to a more natural state. These efforts are needed to improve water quality and provide habitat for animals.

5. Cultural Resources: Sandy Springs has 161 historic sites identified by Fulton County. Their original uses were churches (7), a school (1), single family dwelling (142), multiple dwelling unit (1), accommodation (1), industrial (1), and transportation related (8). It is the intent of Fulton County to preserve these resources through the development of a Historic Preservation Ordinance. The Sandy Springs Historic Community Foundation is also interested in preserving Sandy Springs' history.

6. Traditional Development Areas: The following changes are proposed to implement community concerns and vision.

a. Traditional Development: A Transit Oriented Development (TOD) ordinance is recommended to be developed within ½ mile of the four MARTA Rapid Rail Stations. Furthermore, within the Perimeter Community Improvement District, residential uses are recommended for every five office and retail jobs created.

b. Live Work Land Use: Several live work land uses have been identified, primarily at major intersections of Roswell Road and within areas targeted for re-development and specific types of development along the Roswell Road corridor. The Georgia 400/Perimeter Community Improvement District is designated a regional live-work area. The Powers Ferry-I-285 area is also designated a live work area but at the community and neighborhood level.

c. Protection of Single family Neighborhoods: Additional protection of single family neighborhoods was discussed at community meetings at length. Transitional areas are places where single family abuts very different uses, intensities and heights. New policies have been developed to address problems and strategies proposed to address specific concerns.

7. Transitional Areas: There are many transitional areas in Sandy Springs. For the most part, a step down in land use and density is designated on the Land Use Map. In other areas, where transitions must be addressed on a case by case basis, one of Fulton County's strategies is to amend commercial standards in the Zoning Resolution to provide added protections. In the meantime, Fulton County includes conditions in re-zoning cases to protect single family neighborhoods when adjacent to higher density non-residential properties. There is a set of policies in the implementation section dealing with transitional land use policies.

8. Redevelopment: Most of Sandy Springs is already developed. There are many older apartment complexes and shopping centers which could be redeveloped to release needed land for new development close to areas already served by bus and rail lines; sewer and water services; libraries and public schools.

The community has expressed interest in the preparation of a Density Bonus Program to allow developers to build more square footage and residential units if they accomplish certain goals and provide certain amenities desired by the community. The following list includes actions which have been identified as qualifying for density bonuses and increases in height: (1) Creation of mixed use developments, (2) Provision of housing mix, (3) Installation of street grid segments, (4) Construction of sidewalks, bicycle and greenway paths above standards, (5) Restoration of piped streams, (6) Increased green space, (7) Provision and restoration of wider buffers to stream banks, (8) Reduction of surface parking, (9) Compliance with Main Street Architectural requirements outside the Main Street Zone, (10) Installation of sidewalks, street trees & pedestrian lights on internal roads, (11) Property assemblage, (12) Reduction of curb cuts on Roswell Road, (13) Connection of single family neighborhoods to nearby businesses through sidewalks & bicycle paths, and (14) Re-development of older properties (1980's and older) for mixed uses.

9. Agricultural/Forest Lands: The land use map doesn't show any agricultural and forest land use. There are wooded properties in Sandy Springs, largely on large acre residential tracts. These stands of trees could be cut as property is subdivided for smaller lot homes. To protect these

wooded parcels, the Sandy Springs community has asked that the conservation subdivision ordinance be considered for the Sandy Springs Planning Area.

10. Other Factors: One of the issues facing Sandy Springs is property ownership. Property, especially commercial property, is owned by many different individuals, corporations and estates located all over the world. These family estates and leasing companies are happy with the cash flow from their tenants and have no incentive to assemble and redevelop according to the community vision. Absentee owners and multiple owners of small parcels result in properties remaining unimproved. When small parcels are proposed for redevelopment, there are often problems meeting current development standards resulting in numerous variance requests. Creating incentives to assembly property are a major strategy of the Sandy Springs community to fulfill their vision.

Southwest Fulton

Projections of Future Land Use Needs

The 2025 land use map for Southwest Fulton County focuses on accommodating population and job growth over the next 20 years. The proposed map changes reflect the addition of new live work categories and a new open space category. The plan shows appropriate locations for future, residential, retail, office, commercial and industrial development and their densities where public facilities (such as road, sewer and water are adequate (either in place or where improvements are planned) (Table 6-26).

Table 6-26: Southwest Fulton Land Use and Demographics

2005			**Change 2005-2025**	
Population	Residential Acres	Acres/person	Population	Potential acres needed
12,851	4,761	0.37	8,690	3,219
Households	Residential Acres	Acres/household	Households	
5,539	4,761	0.89	5,255	5,517
Employment	Employment Acres	Acres/job	Employment	
21,132	3,835	0.18	4,442	806
Source: Existing Land and E&CD forecasts				

Residential Uses: Table 6-26 provides a summary of the population and land use changes from 2005 to 2025. Southwest Fulton will have a population increase of 8,690 persons by 2025. Corresponding to population growth, the area is expected to add 5,255 more households. The area is also expected to add 4,442 jobs by 2025. If populations grows in a similar pattern, between 3,219 and 5,517 acres will be needed to accommodate the forecasted population growth.

Commercial and Industrial Uses: Based of employment forecasts, an additional 806 acres will be used for employment purposes in Southwest. Southwest has an abundance of land used for industrial uses. The 2025 Land Use continues to show Fulton Industrial Boulevard as Industrial and Business Park. New businesses can be accommodated in vacant industrial buildings and industrially zoned land. Commercial uses can be located in the Live Work land use designations and those designated for commercial.

Land Uses Other than Residential, Commercial, and Industrial: Currently approximately 468 acres are used for institutional uses, equal to 0.036 acres per person. An additional 316 acres may be needed for institutional uses. This includes Charlie Brown Airport; therefore, the actual amount of land needed may be less. Acreage needed for public recreational and institutional uses are not shown on the land use map unless the land is owned by Fulton County, in the case of schools, the Fulton County Board of Education. Land for all future uses must come from land that is currently used for other purposes. The land use map shows current institutional uses, this includes government facilities, public and private schools and churches larger than 5 acres.

Environmental/Natural Resources: Many areas adjacent to major transportation corridors are located within the 100-year floodplain. Land uses were changed to reflect protection and a limit to development in these natural hazard areas. The 2025 land use plan designates 16% of land uses as one of the open space categories.

2025 Land Use Map

The 2025 Land Use Map for Southwest Fulton is included with this plan. The acres and the percentage of land in each of the land use categories are shown in Table 6-27. The Southwest Fulton 2025 Land Use Map indicates the location, densities and type of uses that are appropriate for each parcel in unincorporated Southwest Fulton County.

Table 6-27: 2025 Land Use Map - Southwest Fulton

Land Use Designation	Acres	Percent
Residential		
Residential 2 to 3 units/acre	5,972	35.6
Residential 3 to 5 units/acre	342	2.0
Residential 5 to 8 units/acre	48	0.3
Commercial		
Retail & Services	269	1.6
Office	39	0.2
Live Work		
Live Work – Community	750	4.5
Business Park	786	4.7
Industrial	3,860	23.0
Public, Semi-Public & Institutional		
Transportation & Utilities	428	2.5
Right-of-Way	1,476	8.8
Community Facilities	127	0.8
Open Space		
Flood plain - 100 Year	2,080	12.4
Parks, Recreation & Conservation	214	1.3
Water Bodies	398	2.4
Total	16,790	100.0

1. Growth Distribution: The number of households (low and high numbers) and the number of employment that can be accommodated in Southwest Fulton if the area is developed following the land uses in the 2025 Land Use Map is shown in Table 6-28. According to these calculations, the number of forecasted households and employment can be accommodated.

On the 2025 Land Use Map, the west side of Fulton Industrial Boulevard is shown as industrial from the City of Atlanta limits to the boundary of the planning area as well as the east side of the road until Camp Creek Parkway. South of Camp Creek, the land is designated as Business Park. Live Work land uses are shown a Cascade Road and I-285, along Camp Creek Parkway and at Campbellton Road and New Hope Road. The area between the City of Atlanta limits and Fulton Industrial is mainly designated for residential uses.

Table 6-28: Southwest Fulton Population and Employment Forecasts in the 2025 Land Use Map

Land Use Classification		Households		Employment		Assumptions	
	Acres	Low	High	Low	High	Square feet/acre	Jobs/Square feet
Residential							
2 to 3	5,972	11,944	17,916	0	0	2-3 units/acre	
3 to 5	342	1,026	1,710	0	0	3-5 units/acre	
5 to 8	48	240	384	0	0	5-8 units/acre	
Business Park	787	0	0	22,486	22,486	10,000 sf/acre	1 job/350 sf
Community Facilities	127	0	0	6,555	13,110		
Live Work - Community	750	0	0	0	0		
Residential	250	250	2,250	0	0	1-9 units/acre	
Commercial	250	0	0	7,500	15,000	15,000 sf/acre	1 job/250-500sf
Office	250	0	0	10,714	15,000	15,000 sf/acre	1 job/250-350 sf
Industrial	3,860	0	0	77,200	77,200	15,000 sf/acre	1 job/750 sf
Office	39	0	0	1,671	2,340	15,000 sf/acre	1 job/250-350 sf
Retail	269	0	0	11,529	16,140	15,000 sf/acre	1 job/250-350 sf
Total	12,944	13,460	22,260	137,655	161,276		
Minus 10% vacant Housing		12,114	20,034				
Govt jobs range from 2% to over 10%. Assume 5% low, 10% high to include other institutional uses also.							

2. Annexation: The City of Atlanta plans to annex several parcels along Kimberly Road in the Cascade community of Southwest. In addition, there is an island of vacant/agricultural land located in Southwest and surrounded by the City of Atlanta, which is likely to be annexed in the near future. Fulton County has encouraged the City of Atlanta to annex all unincorporated islands.

3. Infrastructure Improvements: The Community Facilities Element and the Implementation Element include information on the timing and sequencing of infrastructure and community

facilities improvements. The Transportation Element includes a list and timing of programmed transportation projects. These improvements will support the proposed growth and growth patterns recommended in the Land Use Map. Currently the only planned infrastructure improvement in Southwest is the sidewalk design along major roads in the Sandtown community. Sidewalks will be added on Boatrock, New Hope and Campbellton Roads.

4. Cultural and Historic Resources: Southwest's cultural and historic resources are scattered through out. They are mainly located along Cascade Road, Fairburn Road and Campbellton Road. Most of them are residential structures. Several family and church cemeteries are also located throughout Southwest Fulton.

5. Traditional Land use Patterns: The 2025 land use plan map incorporates two live work areas, and redefines two existing live work nodes. One new node, located at the intersection of Cascade and Fairburn Roads, is envisioned as a community live work node. This is a medium density residential and mixed use land use along corridors and nodes intended to serve a group of adjacent neighborhoods. Residential densities should not exceed 9 units per acre. A second live work corridor is proposed extending from Camp Creek and Butner Roads east towards the City of Atlanta, along Camp Creek Parkway. This designation is also community live work. Several land use patterns account for the designation of this corridor, particularly the current development trends in the adjacent cities of Atlanta and East Point. Both cities either have current mixed use projects underway or are in the process of developing mixed used projects along the corridor.

6. Transitional Areas: Southwest is characterized as a suburban community with a strong industrial presence. Fulton Industrial Boulevard (FIB), the County's largest industrial corridor, forms the planning area's eastern boundary and accounts for 16% of existing land use. As the planning area prepares for additional population and job growth, buffering single family residential uses from new and existing industrial areas is important. Several parcels south along FIB were changed to the business park land use designation to serve as transition areas between the heavier industrial uses allowed in the industrial corridor and the residential uses in the mostly single family residential areas. The land use next to the business park is designated as Residential at 3 to 5 units per acre in order to provide transition to the Residential at 2 to 3 units per acre.

7. Redevelopment Areas: The proposed land use plan includes policies targeted at redevelopment for the industrial corridor along FIB. Most other areas of Southwest are new and developing residential and commercial areas.

8. Agricultural/Forest Lands: Southwest is primarily a suburban area. Forestry and agricultural land account for 27% of the existing land area in Southwest. There is no active farming in the district. Most of the vacant land is shown on the land use plan as low to medium density residential and incorporated into live-work nodes and corridors.

9. Additional Community Plans: Since the adoption of the 2015 Comprehensive Plan, several community planning processes have been conducted in Southwest Fulton. In 2000, the Campbellton Road study was conducted. Two years later, in 2002 two additional planning studies were conducted: Blueprint Sandtown and the Sandtown LCI Study. The recommendations from each of these planning exercises helped inform the land use changes proposed in this comprehensive plan. In the future, community plans are recommended for Fulton Industrial Boulevard and Camp Creek Parkway.

South Fulton

Projection of Future Land Use Needs

South Fulton has the greatest amount of undeveloped land in the heart of the Atlanta Region. In addition it is in close proximity to downtown Atlanta, access to I-85, I-285 and Hartsfield-Jackson International Airport. Rolling hills, green landscapes, and tree lined roads are characteristics that capture the fundamental nature of South Fulton. In the last ten (10) years South Fulton has experienced unprecedented growth and development. In 2004, Fulton County led the Atlanta Metropolitan Statistical Area in residential building permits by issuing a sum of 16,921 permits. Sixty percent (60%) of the building permits were issued in South Fulton. The development boom occurring in South Fulton mirrors the development explosion that occurred in North Fulton twenty (20) years ago. Population projections for the next 25 years suggest an increase of 20,000 people or more in South Fulton.

Table 6-29: South Fulton Land Use and Demographics

2005			**Change 2005-2025**	
Population	Residential Acres	Acres/person	Population	Potential acres needed
52,439	16,202	0.3	55,050	17,008
Households	Residential Acres	Acres/household	Households	
16,955	16,202	0.95	17,395	16,622
Employment	Employment Acres	Acres/job	Employment	
20,949	3,682	0.17	16,282	2,861
Source: Existing Land and E&CD forecasts				

Residential Population: South Fulton is expected to grow from an estimated population of 52,439 in 2005 to 107,489 residents in 2025 (Table 6-29). The number of households is forecasted to increase by 17,395. If South Fulton develops in the same pattern as it has to date, the additional households would require between 16,622 and 17,008 acres. This is equals to about a 28% of the land currently designated as forest and agricultural in the existing land use survey.

Commercial and Industrial Uses: Based on the employment forecast, the workforce will increase by 16,282. Based on current development patterns, the forecasted workforce may require almost 2,861 acres. The 2025 Land Use Plan shows areas designated for Live Work and non-residential land use where future commercial and industrial uses could be located.

Land Uses Other than Residential, Commercial, and Industrial: Currently approximately 1,601 acres are used for institutional uses, equal to 0.03 acres per person. An additional 1,682 acres may be needed for institutional uses by 2025. The land use map shows current institutional uses, this includes government facilities, public and private schools and churches larger than 5 acres.

Environmentally Sensitive Areas: The Chattahoochee River flows through South Fulton. The 100 year floodplains for stream bodies are shown on the Land Use Plan Map and are protected by current stream buffer ordinances of 75 feet.

2025 Land Use Map

The 2025 Land Use Map for South Fulton is included with this plan. The acres and the percentage of land in each of the land use categories are shown in Table 6-30. The South Fulton 2025 Land Use Map indicates the location, densities and type of uses that are appropriate for each parcel in unincorporated South Fulton County.

Table 6-30: 2025 Land Use Map - South Fulton

Land Use Designation	Acres	Percent
Residential		
Residential, 1 unit or less	1,787	1.8%
Residential, 1 to 2 units/acre	17,726	17.6%
Residential 1 to 3 units/acre	3,900	3.9%
Residential, 2 to 3 units/acre	6,358	6.3%
Residential, 3 to 5 units/acre	3,994	4.0%
Residential 5 to 8 units/acre	255	0.3%
Residential, 8 to 12 units/acre	132	0.1%
Residential, 12 to 20 units/acre	130	0.1%
Commercial		
Retail & Services	318	0.3%
Office	97	0.1%
Live Work		
Live Work - Neighborhood	4,230	4.2%
Live Work- Community	1,370	1.4%
Live Work-Regional	1,677	1.7%
Business Park	2,217	2.2%
Industrial	3,645	3.6%
Agricultural	34,327	34.0%
Public, Semi-Public, Institutional		
Community Facilities	830	0.8%
ROW	6,684	6.6%
Transportation & Utilities	224	0.2%
Open Space		
Flood Plain - 100 Year	9,898	9.8%
Parks, Recreation, Conservation	1,249	1.2%
Water Bodies	399	
Total	100,824	100.0%

The objective of the South Fulton 2025 Land Use Map is to:

1. Encourage the preservation of the natural pristine environment;
2. Direct growth to areas with transportation infrastructure (e.g. Major Arterials, parkways);
3. Promote mixed used development and pedestrian oriented communities;
4. Strategically increase density in areas where growth is projected to be located;
5. Provide transitional zones that buffer higher density development from established low-density communities;

1 Growth Distribution: The number of households (low and high numbers) and the number of employment that can be accommodated in South Fulton if the area is developed following the land uses in the 2025 Land Use Map is shown in Table 6-31. According to these calculations, the number of forecasted households and employment can be accommodated.

Table 6-31: South Fulton Population and Employment Forecasts in the 2025 Land Use Map

	Acres	**Households**		**Employment**		**Assumptions**	
Residential		Low	High	Low	High	Square feet per acre	Job/square feet
1 or less	1,787	893	1,787	0	0	0.5 to 1 units/acre	
1 to 2	17,726	17,726	35,452	0	0	1-2 units/acre	
1 to 3	3,989	3,989	1,994	0	0	1-3 units/acre	
2 to 3	6,358	12,716	19,074	0	0	2-3 units/acre	
3 to 5	3,994	11,983	19,971	0	0	3-5 units/acre	
5 to 8	255	1,275	2,040	0	0	5-8 units/acre	
8 to 12	132	1,059	1,588	0	0	8-12 units/acre	
12 to 20	130	1,558	2,597	0	0	12-20 units/acre	
Agriculture	34,327	17,163	34,327	0	0	0.5 to 1 unit/acre	
Business Park	2,217	0	0	63	89	10,000 sf/acre	One job/250-350 sf
Industrial	3,645	0	0	49	49	10,000 sf/acre	One job/750 sf
Community Facilities	830	0	0	8,292	16,585		
LW-Neighborhood	4,230	0	0	0	0		
Residential	1,410	1,410	7,049	0	0	1-5 units/acre	
Commercial	1,410	0	0	28,198	56,395	10,000 sf/acre	1 job/250-500 sf
Office	1,410	0	0	40,282	56,395	10,000 sf/acre	1 job/250-350 sf
LW-Community	1,370	0	0	0	0		
Residential	457	457	4,109	0	0	1-9 units/acre	
Commercial	457	0	0	13,697	27,395	15,000 sf/acre	1 job/250-500 sf
Office	457	0	0	19,568	27,395	15,000 sf/acre	1 job/250-350 sf
LW-Regional	1,677	0	0	0	0		
Residential	559	5,031	11,180	0	0	9-20 units/acre	
Commercial	559	0	0	16,770	89,441	15001-40,000 sf/acre	1 job/500 sf
Office	559	0	0	23,957	89,441	15001-40,000 sf/acre	1 job/350 sf
Office	97	0	0	4,171	11,123	15001-40,00 sf/acre	1 job/350 sf
Retail	318	0	0	19,093	50,914	15001-40,000 sf/acre	1 job/250 sf

Table 6-31: South Fulton Population and Employment Forecasts in the 2025 Land Use Map

	Acres	Households		Employment		Assumptions	
Total	89,528	75,260	141,168	174,140	425,222		
Minus 10% as vacant housing units		67,734	127,052				
Government jobs range from 2% to over 10%. Assume 5% low, 10% high to include other institutional uses also.							

The Cedar Grove and Cliftondale Communities, located North of South Fulton Parkway and South of Camp Creek Parkway are projected to receive a net migration up to 10,000 people. The Chattahoochee Hill Country, which is 40,000 acres of undeveloped land West of Cascade Palmetto Highway, is projected to receive a population of 20,000 or more. The Chattahoochee Hill Country (CHC) plan is an unconventional development strategy with a preservation emphasis through the use of Transfer of Development Rights. The plan identifies three (3) mixed use villages at 640 acres per village, with a maximum density of 14-units per acre. In order to develop within the village, development rights must be purchased outside the village and preserved in perpetuity. The CHC plan encourages that development be concentrated in the villages, while prohibiting the traditional sprawl-like patterns in areas designated and zoned as Agricultural on the land use plan.

The 2025 Land Use Map is designed to distribute growth and accommodate development in an appropriate manner. These changes include:

1. Extending the Live Work land use designation west to Cascade Palmetto Highway (SR 154) from Stonewall Tell Road. Live Work promotes a diversity of housing options, a mix of non-residential uses, and alternative modes of transportation within the corridor.

2. Identifying three (3) Community Live Work nodes at major intersections along the South Fulton Parkway which allows a maximum of nine (9) residential units per acre. These nodes each have a ½-mile radius and are located at Stonewall Tell Road, Campbellton-Fairburn Road (SR 92), and Cascade Palmetto Highway (SR 154).

3. Providing a land use transition between the community live work nodes with a Neighborhood Live Work designation which has a maximum density of five residential (5) units per acre. Transitioning to a lower density between the major intersections limits the South Fulton Parkway from developing in a typical suburban strip-retail-like manner and keeps the higher density mixed use development at the intersections.

4. Classifying the Chattahoochee Hill Country Villages as Regional Live-Work Nodes which permit a maximum of fourteen (14) residential units per acre per village.

5. Establishing a transitional land use buffer adjacent to the South Fulton Parkway to serve as a buffer to the higher density on the north and south sides of the parkway from the lower density residential. This transitional buffer is a ½ mile band on the edge of the live-work corridor with a maximum density of three (3) residential units per acre.

2. Annexation: The municipalities in South Fulton have shared their preliminary plans for annexation; however, nothing to date as been formally submitted in a comprehensive manner

describing specific parcels. The following annexation plans have been discussed but are not definitive until an official annexation request is submitted to the county:

1. The City of East Point- Potential plans to annex parcels south to Roosevelt Highway nearest Campbell Drive.
2. The City of Fairburn – Potential annexation plans on Spence Road, Senoia Road, and the South Fulton Parkway.
3. Future annexation plans for the remainder of the South County municipalities have not been expressed to the county.

3. Infrastructure Improvements: Growth and development has a substantial impact on the county's infrastructure. Infrastructure must be in place and/or planned to prevent systems from exceeding their functional capacities. Mobility will be a critical issue for South Fulton as growth increases and development continues. An access management study is imperative for the South Fulton Parkway and its neighboring communities because it is a major east-west connector in South Fulton. The last segment of the South Fulton Parkway should be completed soon. Expansion (from 12 to 24 mgd) of the Camp Creek Water Pollution Control Plant was completed in June 2005 and it is expected to accommodate future growth. Limited water distribution network could be a challenge to meeting the needs for the forecasted population.

4. Environmental/Natural Resources: The 2025 Future Land Use Map is the most environmentally sensitive land use map to date. The 100 year flood plain accounts for almost 10% of the land uses. The objective is to show this environmentally sensitive area on the 2025 map to promote the protection of natural resources and to limit development in the flood plain areas.

5. Historic and Cultural Resources: A Historic Resources Survey of South Fulton was conducted from 1994 to 1997. A total of 403 sites were surveyed. The dates of construction ranged from early 1830's to 1940's. Most of the buildings (75%) were built after the 1900's. The majority of (80%) of the survey sites are in fair to good condition with a high level of integrity. Most of 65% are or may be eligible to the National Register of Historic Places. A third of the structures are considered to be threatened due to their deteriorated condition, use or change in land use. While many of these are rural resources and are scattered throughout South Fulton, some are concentrated at Crossroads Communities. The South Fulton Scenic Byways is located in the CHC area. This plan recommends developing a Historic Preservation Ordinance to protect, preserve and enhance the distinctive architectural and cultural heritage in Fulton County.

6. Traditional Development: The plan designated numerous areas designated as Live Work in the land use plan where traditional development patterns will be encouraged. These are the Live Work villages in the Chattahoochee Hill Country and along the South Fulton Parkway.

7. Transitional Areas: The 2025 plan also identifies specific segments along Roosevelt Highway as neighborhood Live Work and removes the existing retail/commercial land use designation. This is an older suburban community, where the retail and commercial development has declined over the last decade. The neighborhood Live Work will help redevelop and stimulate an economic synergy in the Red Oak Community to attract regional and national retail chains and a diverse housing mix.

8. Redevelopment Areas: The 2025 Land Use Plan promotes the infill and redevelopment of older urban corridors by designating the Old National Highway as neighborhood Live Work Corridor. The Live Work designation will provide the opportunity to bring buildings closer to the street, provide

pedestrian oriented developments which include a housing component and help reignite older existing commercial/retail uses. This designation is consistent with the recommendations for the Old National Livable Centers Initiative Study which recommended Transit Oriented Development along the corridor, specifically, in areas requiring redevelopment.

9. Agricultural/Forest Lands and Alternative Land Use Patterns: Agricultural and Forest land uses account for 35% of land uses. Efforts to preserve agricultural land are being made in the Chattahoochee Hill Country (CHC). The CHC plan is a sustainable land use plan that protects the ecological health and quality of life of approximately 40,000 acres in South Fulton. The Chattahoochee Hill Country has created innovative ways to manage growth and preserve the environment through new land use tools that allow of higher density mixed use developments while preserving greenspace. Within the Chattahoochee Hill Country three (3) types of sustainable development options are available- Villages, Hamlets, or Conservation Subdivisions. All of these development types cluster the houses and preserve greenspace but each works in a very different way.

The Village (MIX-CHC zoning classification) allows for a mix of uses for residents to live work and relax. The Village provides a designated 'center' of continuous activity for the residents and will include residential, office, retail, commercial and civic spaces. It is a minimum size of 500 acres in which the density is increased to 14 units per acre maximum. MIX-CHC zoning accommodates diverse development types, a more pedestrian-friendly pattern, and encourages a mix of age groups and income levels in the community. In order to preserve the surrounding landscape, a rural protection buffer will surround the entire village site. There are numerous benefits to this type of development including less development cost, lower services cost and less land consumption. *Transfer of Development Rights* is necessary to construct a village and preserve the surrounding landscape existing rural culture.

The Hamlet (CUP-CHC zoning classification) is intended to provide a mix of dwellings and local services to the community in a compact pattern that promotes land conservation. A hamlet is a minimum of 200 acres with an overall density of one unit per acre, but development is clustered on a maximum of forty (40%) percent of the land while sixty (60%) is preserved as greenspace. There are no designated areas for hamlets and can occur in any area within the Hill Country. They encourage a mix of development types and sizes and can include residential, office, retail and commercial uses.

The Fulton County Board of Commissioners adopted a conservation subdivision ordinance for South Fulton County on April 21, 2004. In contrast to the MIX-CHC and CUP-CHC zoning districts, the conservation subdivision is not permitted to have a mix of residential and commercial uses. However, this ordinance does allow a developer to cluster homes on smaller lots so that a minimum of forty (40%) percent of land is set aside as open space. A Conservation Subdivisions is permitted by right and does not require rezoning, unless the parcel(s) was zoned with conditions. The conservation subdivision is another voluntary option for development in the Chattahoochee Hill Country and south Fulton that will achieve greater land use other than the underlying AG-1 zoning.

10. Additional Community Plans: Since the last comprehensive plan update several community plans were developed in South Fulton. These plans include: the 2003 Cliftondale Community Master Plan, 2003 Cedar Grove Community Plan, 2003 Old National Highway Livable Centers Initiative Study, 2002 Chattahoochee Hill Country Livable Centers Initiative (LCI) Study, 2004

Chattahoochee Hill Country Supplemental LCI Study. Additional community plans are recommended for the South Fulton Parkway (access management plan), Roosevelt Highway and the Line Creek community.

Summary

Table 6-32 summarizes the number of households and employment forecasted for 2025 by planning area and for all of unincorporated Fulton County as well as the number of households (low and high numbers) and the number of employment that can be accommodated in unincorporated Fulton County if the area is developed following the land uses in the 2025 Land Use Map. According to these calculations, the number of forecasted households and employment can be accommodated in unincorporated Fulton County. However, in North Fulton and Sandy Springs, there may be difficulty in accommodating the forecasted households.

Table 6-32: 2025 Land Use Map and 2025 Population and Employment Forecasts

		North Fulton	Sandy Springs	Southwest Fulton	South Fulton	Fulton County Total
Households	Low	21,813	27,990	12,114	67,734	129,651
	High	43,134	42,247	20,034	127,052	232,467
2025 Projection		*47,925*	*53,554*	*10,794*	*34,350*	*146,622*
Employment	Low	76,740	96,749	137,655	174,140	485,284
	High	137,905	227,512	161,276	424,200	950,823
2025 Projection		*84,553*	*161,861*	*25,574*	*37,231*	*241,081*

7. INTERGOVERNMENTAL COORDINATION

7.0.0.0. INTERGOVERNMENTAL COORDINATION

Introduction

The Intergovernmental Coordination Element provides local governments an opportunity to inventory existing intergovernmental coordination mechanisms and processes with other local governments and governmental entities that can have profound impacts on the success of implementing the local government's comprehensive plan. The purpose of this element is to assess the adequacy and suitability of existing coordination mechanisms to serve the current and future needs of the community and articulate goals and formulate a strategy for effective implementation of community policies and objectives that, in many cases involve multiple governmental entities.

At the time of submission of the 2025 Comprehensive Plan, there are a number of governmental changes potentially facing Fulton County. During the 2005 session of the Georgia General Assembly, House Bills 36 and 37 were passed that allowed for the creation of the City of Sandy Springs. The Governor signed these bills on April 15, 2005 and the bills have been submitted to the United States Department of Justice by the Attorney General of Georgia for pre-clearance, as required by the 1965 Voting Rights Act. A referendum on the incorporation of Sandy Springs is scheduled for June 21, 2005. Were the referendum on incorporation to pass, the City of Sandy Springs would hold an election to select its first governing authority on November 8, 2005 who would take office on December 1, 2005.

Senate Resolution 376, which was passed by the State Senate on March 22, 2005, creates a study committee to examine the idea of creating two counties-Milton County and Atlanta County-from the existing Fulton County. The 5 member committee will meet during the legislative interim and make any reports of its findings by December 31, 2005.

In addition, there are two pieces of legislation that are pending action by the Georgia General Assembly during the second year of the 2005-2006 term that may also alter the governmental structures in Fulton County. House Bill 924 would create a charter for a City of Milton which would encompass the northwest portion of Fulton County. Senate Resolution 295 is a constitutional amendment that would divide the county into 2 counties and create a new governing authority for each county.

7.1.0.0. Existing Conditions

7.1.1.0 Adjacent Local Governments

Fulton County is the most populous county in Georgia and home to a diverse citizenry and a diverse geography. Fulton County ranges from highly populated dense cities to sparsely populated rural areas. Located in north central Georgia, Fulton County is bounded on the north by Forsyth and Cherokee Counties, on the west by Cobb, Douglas and Carroll Counties, on the south by Coweta and Fayette Counties and on the east by Clayton, and Gwinnett Counties. Fulton County contains 10 municipalities, including the capital city of Atlanta. Fulton County's 10 municipalities are Alpharetta, Atlanta, College Park, East Point, Fairburn, Hapeville, Mountain Park, Palmetto, Roswell, and Union City.

At the regional level, Fulton County lies in the center of the 10-county regional planning area including Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry and Rockdale counties. As a member of the Atlanta Regional Commission (ARC), the regional planning and intergovernmental coordination agency, Fulton County participates in the collective process of planning for future of the Atlanta metropolitan area. Fulton County's Board of Commissioner's chair and Mayors of two Fulton County municipalities serve on the ARC Board.

7.1.1.1 Inventory

This section will detail some of the many formal and informal coordination mechanisms that exist between Fulton County and local adjacent governments. The Fulton County Manager hosts meetings with the chief administrator of each city on an as needed basis. During the comprehensive planning process, the County Manager met with the chief administrators to discuss Fulton County's Service Delivery Strategy (SDS). The SDS is a State mandated intergovernmental agreement between all local governments within a county that provides a strategy for the future provision of local services that promotes effectiveness, cost efficiency, and funding equity. The SDS will be further described in Section 7.2.1.0 of this element.

At the department level, the Director of the Fulton County Department of Environment and Community Department hosts regular meetings with the planning department staff of the cities in Fulton County. During the comprehensive planning process, these meetings were held on a bi-monthly basis and focused on completing this element, coordination of land use maps and other comprehensive plan requirements. The Transportation Division of the Fulton County Department of Public Works meets quarterly with the cities and the Community Improvement Districts (CID's) to discuss any planning issues that they may have and to avoid duplication of projects, improvements that create bottlenecks and unnecessary gaps. Community Improvement Districts will be described in Section 7.1.3.1 of this element. Other Fulton County departments work cooperatively and meet with their respective local government counterparts for the purposes of coordination on an as needed basis.

In addition to regular meetings, adjacent County and City planning directors are notified of re-zoning applications and use permit applications located along jurisdictional boundaries. Fulton County staff also interacts with other cities and counties through the ARC and their review procedures. Fulton County staff participates in several standing ARC coordinating committees including the Land Use Coordinating Committee and the Transportation Coordinating Committee. In addition to committee meetings, Fulton County staff is able to coordinate planning with other local governments through ARC's regional review of comprehensive plans, Short Term Work Programs, Solid Waste Plans, and Developments of Regional Impact (DRI). Fulton County staff also participate in ARC sponsored conferences and forums.

7.1.1.2 Assessment

Fulton County has been very successful at establishing formal and informal mechanisms to insure coordination between itself and other local governments. In addition to the monthly zoning process, these standing coordination mechanisms have been important in the development of the comprehensive plan and the Service Delivery Strategy. In the future, Fulton County will work to continue to work and plan cooperatively with local governments.

7.1.2.0 School Boards

7.1.2.1 Inventory

Fulton County Board of Education

Fulton County has an ongoing relationship with the Fulton County Board of Education (BoE). The Fulton County BoE oversees Fulton County Public Schools (FCPS). FCPS serves the area of Fulton County outside the city limits of Atlanta, including the cities of Alpharetta, Roswell, and Mountain Park in the north, and College Park, East Point, Fairburn, Hapeville, Union City, Palmetto in the south and all of the unincorporated portions of Fulton County.

Through this relationship, Fulton County Environment and Community Development (E&CD) staff and FCPS staff work together to coordinate planning activities. First, E&CD and FCPS staff meet on a regular basis to discuss common areas of concerns including demographic data, impacts of pending developments and new school locations. Second, FCPS staff is notified and has the opportunity to comment on all re-zoning applications. Third, E&CD staff facilitates meetings with developers to discuss joint concerns and on some occasions to facilitate discussions about new school locations within developments. Also with regard to school construction, E&CD has a special team in development permitting to fast track school construction projects.

Atlanta Board of Education

The Atlanta Board of Education (BoE) establishes and approves the policies that govern the Atlanta Public School system. The Atlanta Public School System serves students within the city limits of Atlanta. Fulton County does not have a formal nor an informal coordination relationship with the Atlanta BoE.

7.1.2.2 Assessment

As a part of the planning process for this Comprehensive Plan update, FCPS staff presented information to the steering committee and participated in all meetings. In the future, Fulton County will continue to work cooperatively with the FCPS and coordinate on joint planning issues. Improvements should be made however relating to new school location. In some cases new schools have been located in areas with inadequate infrastructure causing challenges for both agencies.

7.1.3.0 Independent Special Districts

7.1.3.1. Inventory

Community Improvement Districts (CID)

A CID is a geographic area whose property owners establish a Board of Directors who vote to assess additional property tax dollars to accelerate transportation and infrastructure improvement

projects. CIDs are comprised of private properties usually zoned for non-residential uses. A CID is a private business organization, not a government entity.

A CID is created when a simple majority of the commercial property owners agree to establish the district. This simple majority must also represent at least 75% of the taxable value of the commercial property located within the proposed CID. The Tax Commissioner must certify that these requirements are satisfied and the County must approve legislation authorizing the CID.

The resolution establishing the CID includes a provision for a board of directors and the services to be provided. Specific joint planning or service agreements are entered into on a case by case basis. Fulton County has several Community Improvement Districts: the North Fulton CID, the South Fulton CID, the Perimeter CID, the Buckhead CID, the Midtown CID and the Downtown CID.

Staff from the Department of Public Works, Transportation Division and the Department of Environment and Community Development, are the primary liaisons with the CIDs in Fulton County outside the Atlanta City limits. Staff members coordinate directly with the CID Administrator and meet quarterly to discuss planning issues that they may have with the purpose of avoiding duplication of projects, improvements that create congestion and unnecessary gaps. In addition, the Tax Commissioner's office has an ongoing role to collect and transfer the taxes.

Atlanta Fulton County Water Resources Commission

The Atlanta Fulton County Water Resources Commission (AFCWRC) was established by the Board of Commissioner at a special call meeting in May 1986. The Commission oversees issues relating to a contract signed between the City of Atlanta and Fulton County for the provision of water to the residents of North Fulton County, including the North Fulton municipalities, and the majority of residents in Sandy Springs. More information about the services provided by the AFCWRC can be found in Community Facilities Element of this Plan.

The Commission consists of seven members; the Mayor of Atlanta, the President of the Atlanta City Council, one Atlanta City Council member as selected by the President of the City Council and approved by the Mayor, the Chair of the BoC, two commissioners from the BoC as selected by the BoC and finally a Chairperson elected by the Commission itself. The Fulton County Department of Public Works is the department with responsibility for coordinating with the AFCWRC.

7.1.3.2 Assessment

As the County continues to grow and the infrastructure demands increase, CID's will play a larger role in meeting infrastructure needs. As the County strives to meet the basic infrastructure needs of residents and businesses, CID's will provide much needed funds and allow business leaders and residents to complete projects in their distinct geographic districts. Fulton County will continue to support the work of the CID's and coordinate planning. Similarly as the County grows, the water needs will continue to grow. To best meet the needs of the residents, Fulton County will continue to coordinate with the Atlanta Fulton County Water Resources Commission.

7.1.4.0 Independent Development Authorities

7.1.4.1 Inventory

Fulton-Atlanta Land Bank Authority

The Fulton-Atlanta Land Bank Authority (LBA) was established pursuant to Georgia House Bill 1620, O.C.G.A Section 48-4-60. Local legislation creating the authority was adopted by the Fulton County Board of Commissioners on June 12, 1991 per item #91-FM-107. The Authority was created to acquire tax delinquent properties in unincorporated Fulton County and/or the City of Atlanta, inclusive of the portion of Atlanta in Dekalb County, for the purpose of restoring them for productive public use.

The Authority is operated by a four member Board. Two members are appointed by the Board of Commissioners and two by the Mayor of the City of Atlanta. The LBA works closely with the Tax Commissioner's office, which maintains a current inventory of the properties in tax arrears.

LBA's effort to restoring properties to the tax rolls enhance Fulton County's tax collection and helps improve communities by working with community-based redevelopment efforts and developers to take often blighted properties and restore them as productive properties. In addition, the LBA has worked with local greenspace efforts to turn tax delinquent properties into permanently protected greenspace.

Residential Care Facilities for the Elderly Authority of Fulton County

The Board of Commissioners established this Authority in a special meeting in December 1980 in order to insure the adequacy of residential care facilities for citizens of Fulton County. The Authority works with private non-profit organizations which construct residential care facilities. Seven directors are appointed to the Authority by the Board of Commissioners to six year staggered terms.

Development Authority of Fulton County

The Development Authority of Fulton County was established by Georgia law in 1973. The primary purpose of the Development Authority of Fulton County is to issue revenue bonds to help businesses finance relocations and expansions. The authority works to attract high quality development to the County while stimulating and diversifying economic development. The Authority serves the unincorporated area and all ten municipalities including the City of Atlanta. The Authority works closely with the Atlanta Development Authority, area chambers of commerce, and other local development organizations. Fulton County does not provide an appropriation for this authority, however staff assistance is provided by the Fulton County Economic Development Department.

Table 7-1 shows the economic impact the Authority has had in Fulton County in the recent past. Bond Inducements reflect total amounts authorized for bond issue by the Authority, while Bond Issues reflect the total amount of bonds actually issued.

Table 7-1: Development Authority Bond Inducements and Bond Issues

Year	Total Bond Inducements	Total Bond Issues
1999	$1,600,000,000	$249,246,000
2000	$3,346,800,000	$966,800,518
2001	$1,129,500,000	$779,175,827
2002	$564,200,000	$975,985,000
2003	$785,000,000	$553,260,000

Source: Development Authority of Fulton County Activity Report 1999 - 2003

Metropolitan Atlanta Rapid Transit Authority (MARTA)

The Metropolitan Atlanta Rapid Transit Authority (MARTA) Act was enacted by the General Assembly in 1965 and was subsequently approved in four counties and the City of Atlanta. MARTA is a public authority and includes the City of Atlanta and the counties of Fulton, DeKalb, Clayton and Gwinnett for the purposes of planning, constructing, financing and operating a public transportation system.

In 1968, Fulton and Dekalb county voters approved a referendum to levy a 1% sales tax for financing MARTA operations and construction. In 1972 with the purchase of the Atlanta Transit System, MARTA took control of the region's main bus system. In the 1970s, MARTA started planning, design, land acquisition and construction of a rapid rail system. MARTA also operates Para-transit service for persons with disabilities who are unable to ride the regular bus or rail system.

MARTA is an agency governed by a board of 18 members from City of Atlanta, Fulton County, DeKalb County, Gwinnett County, and Clayton County, as well as representatives from the State Properties Commission, the Georgia Building Authority, the Georgia Regional Transportation Authority, the Georgia Department of Revenue, and the Georgia Department of Transportation. There are three Fulton County representatives on the MARTA Board. Each representative is appointed to a four year term by the Fulton County Board of Commissioners.

The primary agreement between Fulton County and MARTA concerns its revenue source. MARTA sales tax revenue comes from a 1% sales tax levied in the City of Atlanta and the counties of Fulton and DeKalb. MARTA's two largest revenue sources (roughly 85% combined) are sales tax and fare revenue. Under the law authorizing the levy of the sales and use tax, MARTA is restricted as to its use of the tax proceeds. Sales tax provides 64% of revenue.

In terms of transportation planning, MARTA and Fulton County are formally linked by the Atlanta Regional Commission and its specific role as the "federally designated Metropolitan Planning Organization" (MP0). The MPO role is to coordinate local governments, agencies such as MARTA

and other parties in order "to plan a diverse system capable of moving people and goods efficiently and safely."

The MARTA Office of Government and Community Relations provides the Fulton County Board of Commissioners with quarterly briefings. The primary Department within Fulton County for coordination is the Public Works Department, Transportation Division which is done on an-as-needed basis.

South Fulton Municipal Regional Water and Sewer Authority

On April 19, 2000, the Governor of the State of Georgia signed into law HB 1421 to create the South Fulton Municipal Regional Water and Sewer Authority. Member cities include Fairburn, Palmetto and Union City. The Authority was created for the purpose of acquiring and developing adequate sources of water supply, including, but not limited to, the construction of reservoirs; the treatment of such water, and the transmission of such water within the Chattahoochee River Basin to member cities; and the treatment of waste water from the member cities. The Authority is overseen by a Board consisting of the Mayors of each member city, a representative of each member city as approved by their governing authority and one member as appointed by a majority vote of the members of the General Assembly whose legislative districts include all or any part of a member city.

Fulton County is not a member of this authority and no formal or informal coordination mechanisms exist.

7.1.4.2 Assessment

Fulton County has relationships with all of the authorities mentioned above, with the exception of the South Fulton Municipal Regional Water and Sewer Authority. Fulton County's successful implementation of the Comprehensive Plan is closely linked to the successful coordination with all of these independent development authorities as these authorities help Fulton County leverage its efforts. Partnering with the Land Bank Authority provides Fulton County with another tool to transform existing communities and promote the redevelopment of existing centers. Working with the Residential Care Facilities for the Elderly Authority of Fulton County, Fulton County can leverage efforts to insure adequate affordable housing for the aging population. Coordinating with MARTA will help meet the transportation goals of reducing traffic congestion and promoting transportation choices to residents, visitors and the workforce. Collaborating with the Development Authority of Fulton County helps the County spur economic development activities consistent with the Comprehensive Plan.

With regard to the South Fulton Municipal Water and Sewer Authority, establishing a relationship is crucial. As natural resources become more limited, the efficient provision of water to the citizens of Fulton County is crucial. Fulton County does not supply the water to unincorporated South Fulton and many residents are forced to rely on wells. The Authority has plans to construct a water supply reservoir in an unincorporated portion of south Fulton but this reservoir will only supply water to the member city residents. Furthermore, to serve their member cities, the Authority will be running lines through unincorporated Fulton and bypass residents that currently do not have water service. The water supply reservoir will further impact future development and land use planning in unincorporated south Fulton. The environmental regulations relating to a

water supply reservoir place strict development limits on areas upstream of the intake. Fulton County must meet these strict standards even though Fulton County does not participate or coordinate with the Authority.

7.1.5.0 Other Units of Local Government Providing Services

The following units of Fulton County government are overseen by elected officials, however each of the budgets are approved by the Board of Commissioners and their facilities are provided by the Board of Commissioners.

7.1.5.1 Inventory

Sheriff

The Sheriff is by state law, the Chief Law Enforcement Officer of Fulton County. This office is responsible for acting as a protector of the peace and protects the lives, health and property of all citizens of the county. The Sheriff has total administration and operational responsibilities for the Fulton County Jail, the principal detention facility of the county. Security is also provided to all courtrooms and judges as required by law.

The Sheriff's office serves writs, summons and subpoenas. It also places levies on and sells confiscated properties, collects fines imposed by the courts, and is the custodian of large sums of trust fund money assigned from Superior Court. The Sheriff or a designated deputy must approve all appearance bonds and some types of civil bonds.

The Sheriff is responsible for the safe transport of prisoners to penal institutions inside or outside the State of Georgia from the Fulton County jail, and for the transfer of mental patients to the Georgia Regional Hospital and Central State Hospital.

Tax Assessors

The Fulton County Board of Assessors was established by state law to appraise and assess all real and tangible business personal property on an annual basis. The five member Board of Assessors creates and maintains a fair and equitable tax digest. To maintain the accuracy and integrity of this property tax digest, the Board of Assessors conducts annual assessments. Appeals of these assessments are resolved by the Board of Assessors, by further appeal to the Board of Equalization, arbitration, or as the final step, appeal to the Superior Court.

Tax Commissioner

The Tax Commissioner is required by law and contract to collect current year and delinquent taxes on all real and personal property. Taxes to be collected are levied by the cities of Atlanta, Mountain Park, East Point, Fulton County, Atlanta Board of Education, Fulton County Board of Education and the State of Georgia. The Commissioner sells state motor vehicle license tags, collects the ad valorem tax on these vehicles, and processes motor vehicle title registrations and transfers. Motor vehicle taxes are collected for all municipalities in the county.

7.1.5.2 Assessment

Although these departments of Fulton County government are overseen by elected or appointed officials who are not under the direction of the Board of Commissioners, their roles in the successful implementation of the Comprehensive Plan is crucial. Fulton County works closely with these departments and will continue to plan cooperatively.

7.1.6.0 Utility Companies with Condemnation Powers

7.1.6.1 Inventory

The U.S. Code Title 16, Chapter 12, Federal Regulation and Development of Power, establishes the right of utility companies engaged in interstate commerce for the development of water power resources to use eminent domain to acquire land. Utilities (natural gas and electric generating companies) are also governed by the Federal Regulatory Commissions and state law.

The Georgia Codes, Title 32, 22 and Title 46-5-1, O.C.G.A., provide the procedures for the exercise of the power of eminent domain for the State and its political subdivisions, the Board of Regents, municipalities, as well as utility companies. Eminent Domain may be exercised in Georgia by persons or companies who may be engaged in construction or operation of pipelines for the transportation or distribution of natural or artificial gas; and by telephone and telegraph companies for its services; and private companies for waterworks with contracts for supplying water for public purposes.

Substitute condemnation theory may be applied for exchange of properties with utilities to meet the condemner's public purposes for providing utilities and other public purposes. For example, although MARTA does not have the power of eminent domain, it may call on local government to exercise such power where there is a public necessity.

Title 22-3-160 establishes procedures for companies using eminent domain to construct and expand electrical transmission lines of 115 kilovolts or greater for a length of a mile or more. These procedures apply to all uses of eminent domain for power companies beginning on or after June 1, 2004 and are as follows. First, at least one public meeting shall be held in each county where the proposed route is located. Notice of such meetings shall be posted in a newspaper of general circulation and shall include the date, time and location of the meeting; purpose of the meeting; and a description of the project including the proposed route and affected properties. Where eminent domain would be used to condemn land from more than fifty property owners, two or more meetings shall be held. Local governments have the right to participate in these meetings.

Chapter 62 of the Fulton County Code of Laws includes Article IV Rights-of-Way Utilization and Accommodation Ordinance which dictates the use of County rights-of-way by utilities for above and below ground lines and poles for the transmission of power and services. The following list is a compilation of most of the utilities which provide services in Fulton County: Georgia Power, Georgia EMC, Sawnee EMC, Cobb EMC, MEAG, Greystone Power, Atlanta Gas Light, Oglethorpe Power, Georgia Transmission Corp., Bell South, Colonial Pipeline, and Plantation Pipeline Company.

7.1.6.2 Assessment

The subject of Eminent Domain, as it relates to utility companies is quite complex, involving Federal and State Constitutions, Federal and State statutory procedures, and regulatory commissions. All such governing sources must be reviewed in planning and the providing of services for the public. Such regulations and statutes are constantly evolving through the legislative process not only affecting the geography and procedures, but budgeting considerations. Local governments also in their planning must be aware of cable within railroad rights of way and easements and must consider cell tower demands and requirements by the various communication companies[1]. Fulton County has a limited ability to control the use of eminent domain by utilities with condemnation powers.

7.2.0.0 Inter-related State Programs and Activities

7.2.1.0 Service Delivery Strategy

The Service Delivery Strategy Act was signed into law in 1997. The Act required each county and its municipalities to adopt a Service Delivery Strategy by July 1, 1999. The intent of the legislation was to require local governments to take a closer look at their delivery of services they provide in order to identify overlaps or gaps in service provision and develop a more rational approach to allocating delivery and funding of these services. The legislation also required local governments to look at their land use plans in order to minimize conflicts between county and city plans.

7.2.1.1 Inventory

On October 28, 1999, the Georgia Department of Community Affairs verified Fulton County's Service Delivery Strategy for Fulton County and its ten cities. The Strategy identified the service arrangements for 54 government services.

7.2.1.2 Assessment

The Service Delivery Strategy Act requires Fulton County and its local municipalities to review their service provision to insure the most efficient and coordinated provision of services. Fulton County is reviewing and revising, as necessary, the Strategy and it will be presented concurrently with this Plan.

7.2.2.0 Governor's Green Space Program

Signed into law in April 2000, the Georgia Community Greenspace Program was designed to help Georgia's urban and rapidly developing counties preserve at least 20% of their geographic area. Counties with approved Greenspace plans were then eligible for funds to acquire land.

[1] Bibliography: "Georgia Eminent Domain", by Daniel F. Hinkel, U.S. Constitution 5th Amendment, 1983 Georgia Constitution, Art. I, Sec. III, Par. III, Official Code of Georgia, sections cited above. Section prepared by Beryl H. Weiner, Associate Fulton County Attorney.

Municipalities were eligible for funds by participating cooperatively in the county's plan. On April 14th, 2005 the Georgia Community Greenspace Program was repealed when Governor Perdue signed into law the Georgia Land Conservation Act. The new program allows local cities and other agencies to participate in the program independent of the counties.

7.2.2.1 Inventory

Fulton County with the cooperative participation of all 10 municipalities drafted community greenspace plans in FY-01 and FY-03. This joint planning effort was managed by staff in the Fulton County Department of Environment and Community Development. As a result of the approval of these plans, Fulton County received a total of $2,972,235 for use in unincorporated Fulton County. Each Fulton County municipality also received funds based on a proportional population basis. With these funds, Fulton County was able to permanently protect 257 acres of land distributed throughout unincorporated Fulton County. This land, managed by the Fulton County Department of Parks and Recreation, will remain in its natural undeveloped state in perpetuity.

7.2.2.2 Assessment

The new Georgia Land Conservation Program has just gone into effect and its impact on land conservation has yet to be determined. The new program does not require local governments to coordinate their greenspace/conservation land planning. Natural areas and environmentally sensitive land, especially water resources do not fit neatly into jurisdictional bounds. Without the requirement of cooperative greenspace planning, local governments may no longer work together for the purposes of preserving and protecting land. Fulton County, however, is dedicated to promoting the continued protection of greenspace/conservation land and will continue to work with adjacent local governments to insure consistency along jurisdictional boundaries.

7.2.3.0 Coastal Management

Not Applicable

7.2.4.0 Appalachian Regional Commission

Not Applicable

7.2.5.0 Water Planning Districts

7.2.5.1 Inventory

In response to significant current and projected water demands, the Metropolitan North Georgia Water Planning District was established on April 5, 2001 (2001 S.B. 130). The general purposes of the District are to establish policy, create plans, and promote intergovernmental coordination for all water issues in the district; to facilitate multi-jurisdictional water related projects; and to enhance access to funding for water related projects among local governments in the district area. The District develops regional and watershed-specific plans for storm water management, waste-water treatment, water supply, water conservation, and the general protection of water quality. These plans will be implemented by local governments in a 16-county area.

In October 2002, the district adopted model ordinances to give local governments tools that effectively addressed storm water management issues. Local governments in the district are required to implement the model ordinance or similar ordinances that are as effective. Local governments must make significant progress on all these ordinances by May 2004 with the exception of the stream buffer ordinance which has a deadline of April 2005. The model ordinances are as follows:

- Post-Development Storm-water Management for New Development and Redevelopment,
- Floodplain Management/Flood Damage Preservation,
- Stream Buffer Protection,
- Conservation Subdivision/Open Space Development,
- Discharge and Illegal Connection, and
- Litter Control.

7.2.5.2 Assessment

Fulton County's review of the model ordinances found that with the exception of the conservation subdivision ordinance and the litter control ordinance, Fulton County's existing ordinances needed only minor amendments to make them as effective as the model ordinance. With regard to the conservation ordinance, Fulton County adopted an ordinance as an amendment to the Subdivision Regulations in April 2004. Fulton County's Litter Control Ordinance was more restrictive than the model ordinance and no changes were made. Amendments were drafted to the Stormwater Management Ordinance, the Floodplain Management Ordinance and the Stream Buffer Ordinance to make them as effective as the model ordinance. The Stream Buffer Ordinance was approved by the Board of Commissioners in May 2005. The requirement for Discharge and Illegal Connection were included in the amendments to the Stormwater Management Ordinance. These amendments are still in the public review stage.

7.2.6.0. Transportation for Non-Attainment Areas

Please refer to the Transportation Element

7.2.7.0 Other Organizations

7.2.7.1 Inventory

Georgia Regional Transportation Authority (GRTA)

Created in 1999 by the General Assembly under Title 50, Article 32, the Georgia Regional Transportation Authority's (GRTA) mission is to combat air pollution, traffic congestion and poorly planned development in the metropolitan Atlanta region. Most of GRTA's activities pertain to the transportation, land use and economic development elements of the plan.

GRTA's initial jurisdiction included the territory of every county which was designated by the United States Environmental Protection Agency (USEPA) in the Code of Federal Regulations as of December 31, 1998, as a county included in whole or in part within a non-attainment area under the Clean Air Act and which, through regulation, as a county having excess levels of ozone, carbon monoxide, or particulate matter. GRTA's territory also extends to counties designated by

the USEPA in the Code of Federal Regulations after December 31, 1998. Currently, there are thirteen counties in the metropolitan Atlanta area which are non-attainment jurisdictions for ozone levels. The counties include Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale.

GRTA's authority includes:

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

GRTA's legislation requires that it review Developments of Regional Impact (DRI) within its jurisdiction. Developments of Regional Impact (DRI's) are large-scale developments likely to have effects outside of the local government jurisdiction in which they are located. The Georgia Planning Act of 1989 authorizes the Department of Community Affairs (DCA) to establish procedures for intergovernmental review of these large-scale projects. These procedures are designed to improve communication between affected governments and to provide a means of assessing potential impacts of large-scale developments before conflicts relating to them arise.

GRTA's review operates concurrently with the review performed by the Regional Development Centers (RDC) required by DCA. Fulton County is required by State Law to participate in the review process for developments of regional impact. Fulton County amended the Zoning Resolution and adopted the State procedures and guidelines for the review.

The purpose of GRTA's review is to approve or disapprove the use of state and federal funds to create transportation services and access that may be required as a result of a DRI. The goals of the review are protecting and efficiently allocating limited state and federal resources, promoting compliance with regional transportation plans and air quality standards, and furthering GRTA's mission and goals.

The Fulton County Departments of Public Works (Transportation Planning) and Environment and Community Development (Planning Division) coordinate with GRTA on all projects within unincorporated Fulton County. This includes attending meetings, providing information, and any other assistance and information requested by GRTA.

Georgia Department of Transportation (GDOT)

The Georgia Department of Transportation (GDOT) plans, constructs, maintains and improves the State of Georgia's roads and bridges. In addition, GDOT provides planning and financial support for other modes of transportation, including mass transit and airports. GDOT also has two

agencies administratively attached to it, the State Road and Tollway Authority and the Georgia Rail Passenger Authority.

On all transportation projects with Federal funding, Fulton County has to comply with Federal Guidelines which require a contract between Fulton County and GDOT. These contracts take two forms, the Local Government Project Agreements (LGPA) which document the responsibilities of both parties for the project and second the Project Management Agreements (PMA) which are more detailed agreements for each phase of the project. The primary department within Fulton County for coordination is the Public Works Department, Transportation Division.

Georgia Department of Natural Resources (DNR)

In 1972, under the Executive Reorganization Act of 1972, Governor Jimmy Carter reorganized more than thirty state agencies to form the Department of Natural Resources (DNR). The mission of the Department of Natural Resources is to sustain, enhance, protect, and conserve Georgia's natural, historic, and cultural resources for present and future generations, while promoting the development of commerce and industry that use sound environmental practices.

DNR provides technical assistance in the areas of water conservation, environmental protection, wildlife preservation, parks and recreation and historic preservation. Georgia DNR coordinates with Fulton County Parks and Recreation Department and Fulton County Environment and Community Development Department. Fulton County staff coordinates with the Historic Preservation Division for compliance with Section 106 of the National Historic Preservation Act and for compliance with NEPA regulations.

Georgia Department of Human Resources (DHR)

Georgia Department of Human Resources (DHR) is responsible for the delivery of health and social services. The department is one of the largest agencies in state government and serves all Georgia citizens through regulatory inspection, direct service and financial assistance programs. The Fulton County department with primary coordination with Georgia DHR is the Fulton County Department of Health and Wellness.

Georgia Department of Community Affairs (DCA)

The Georgia Department of Community Affairs (DCA) was created in 1977, to serve as an advocate for local governments. DCA serves as the state's lead agency in housing finance and development; promulgates building codes to be adopted by local governments; provides comprehensive planning, technical and research assistance to local governments; and serves as the lead agency for the state's solid waste reduction efforts. DCA reviews all local comprehensive plans and solid waste plans for compliance with Georgia's minimum planning standards. The Fulton County departments with primary coordination with Georgia DCA are the Fulton County Department Environment and Community Development Department and the Public Works Department.

Atlanta Regional Commission

The Atlanta Regional Commission (ARC) is the regional planning and intergovernmental coordination agency for the 10-county area including Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry and Rockdale counties, as well as the City of Atlanta. ARC was created by the local governments in the Atlanta Region pursuant to legislation passed by the Georgia General Assembly. Georgia law stipulates a mandatory annual local funding formula. These funds from local governments are used to match federal and state funding dollars. The Atlanta Regional Commission (ARC) Board is composed of officials of political subdivisions and private citizens representing districts of approximately the same population within the 10-county, 63-city Atlanta Region. The Fulton County Chairman is a member of the ARC Board. Fulton County staff attend many of ARC the committees.

ARC performs regional planning and coordination in the areas of: aging services, community services, environmental planning, government services, job training, land use and public facilities planning, transportation planning, and data gathering and analysis.

7.2.7.2 Assessment

Fulton County will continue to work cooperatively with these other organizations to further implement Fulton County's Comprehensive Plan.

8. TRANSPORTATION

Section I - Existing Conditions

Section II – Assessment of Current and Future Needs

Section III – Transportation Requirement for Non-Attainment Area 8-41

8.0.0.0 Transportation Element

8.1.0.0 Transportation System Components

Introduction

Between 1980 and 2005, the 28 county Atlanta Metropolitan Statistical Area (MSA) grew by 2.6 million people from 2.3 million in 1980 to 4.9 million in 2005. Of this growth, 2.57 million or 97.9% were in the largely suburban area outside the City of Atlanta. Much of this rapid growth has been low density, dispersed and in areas with limited transportation options. Moreover, land uses are often separated from each other and are served by a transportation system with limited connectivity. This growth and development pattern assures traffic congestion and three of the nation's 24 worst highway bottlenecks are located in the region (No. 6 of the list is at the north end of the I-75 and I-85 downtown connector in Atlanta, No.10 is at the "spaghetti junction" of I-85 with I-285 Dekalb County, and No. 17 is the Northside junction of I-75 with I-285 in Cobb County). Regional issues have significant impacts on the transportation system in Fulton County. Fulton County is at the center of the Atlanta Region. It encompasses approximately 535 square miles and shares its boundary with 10 counties.

The purpose of the Transportation Element is to examine the existing inventory and conditions, assess the current and future needs, set the transportation vision and identify goals to achieve the vision, and explain how the county will address its non-attainment air quality status. Fulton County is part of the 13-county Atlanta region that has failed to meet air quality conformity requirements for the past 5 years. The air quality impacts all projects and programs in the County's Comprehensive Transportation Plan, and the region's Regional Transportation Plan. In 1997, the U.S. Environmental Protection Agency (EPA) set new National Ambient Air Quality Standards (NAAQS) for a form of air pollution known as "fine particles," or $PM_{2.5}$ – particulate matter less than 2.5 microns in diameter. Transportation options will become increasingly important over the next 25 years, as the traditional single occupancy vehicle patterns has direct impact on the region's air quality.

8.1.1.0 Streets, Roads and Highway

8.1.1.1 Inventory

Functional Classification

Unincorporated Fulton County has an extensive roadway system, connecting to all major freeways in the Atlanta region. This roadway system is comprised of freeways, arterials, and collectors. Roads are given functional classification to determine how a particular road is best utilized to maximize vehicular circulation and travel in the most effective manner, given its average daily trips and/or design capacity.

Principal arterials are at the top of the road network hierarchical system. Principal arterials generally carry long distance, through travel movement. They also provide access to important

traffic generators, such as major airports or regional shopping centers. Minor arterials are similar in function to principal arterials, except they carry trips of shorter distance and to lesser traffic generators. Collectors provide more access to property than do arterials. Collectors also funnel traffic from residential or rural areas to arterials. Local roads provide basic access between residential and commercial properties, connecting with higher order road systems. Whereas, residential streets; lightly traveled county roads are designated as local roads. Table 8-1 provides the functional classification criteria for each road type.

Table 8-1: Functional Classification Criteria

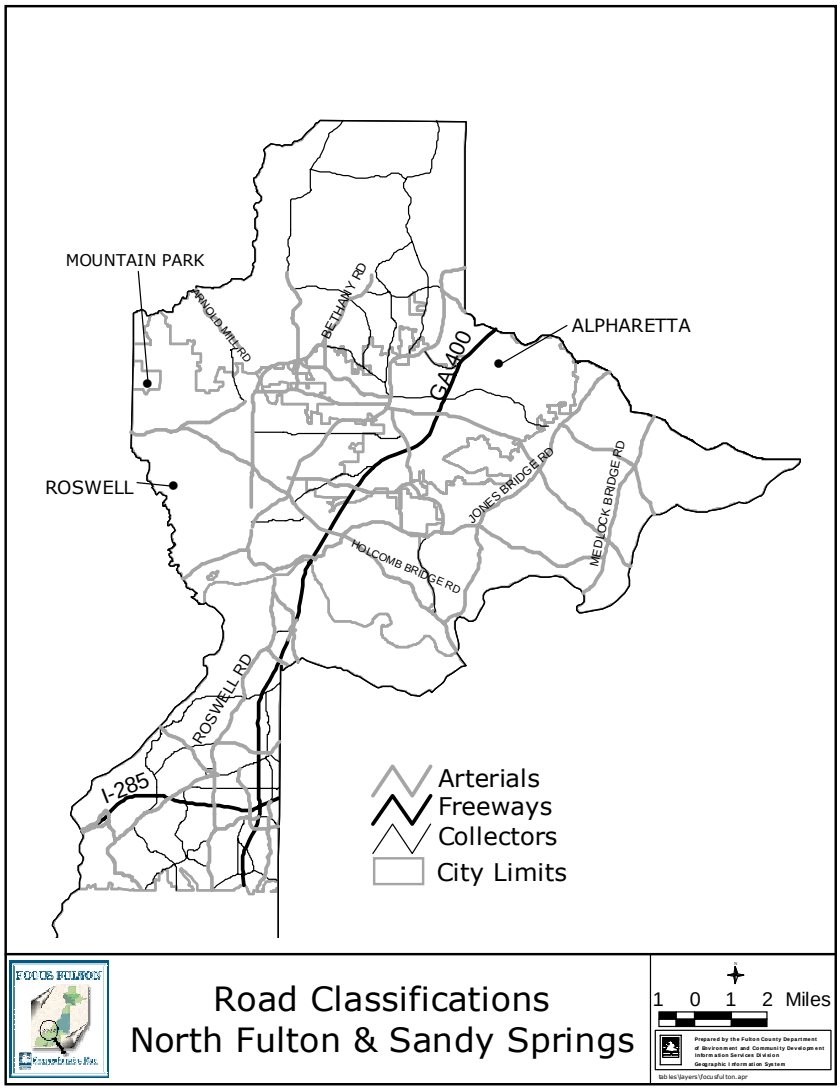
Criteria	Expressway	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local Road
Type of Trip Served	Serves inter and intra-regional, emphasis on through trips	Serves inter and intra-regional and through trips	Serves inter- and intra-regional trips; fewer through trips	Serves mostly intra-regional trips; inter-regional primarily near edges of region	Serves mainly local access functions, some intra and inter-municipal trips	Serves primarily local access functions, but due to connecting higher functioning roads, also provides mobility function
Travel Speeds	Highest level speeds	High travel speeds	Moderate to high travel speeds	Moderate travel speeds	Slow travel speeds	Very slow travel speeds
Mobility/ Access Orientation	Total mobility function	Primary mobility orientation, but provides some access	Priority on mobility, with moderate access component	Mix of mobility and access	Priority on access, with some mobility component.	Nearly total access function
Access Controls	Limited access, interchanges only	Controlled access	Some control of access	Some control of access	Minimal control of access	No access controls
Traffic Volumes	Highest volumes (25,000+ daily trips)	High traffic volumes (10,000 – 35,000 daily trips)	Moderate traffic volumes (5,000 – 15,000 daily trips)	Moderate to low traffic volumes (3,000 – 7,000 daily trips)	Low traffic volumes (1,000 – 4,000 daily trips)	Very low (less than 1,500 daily trips)

Source: Federal Highway Administration

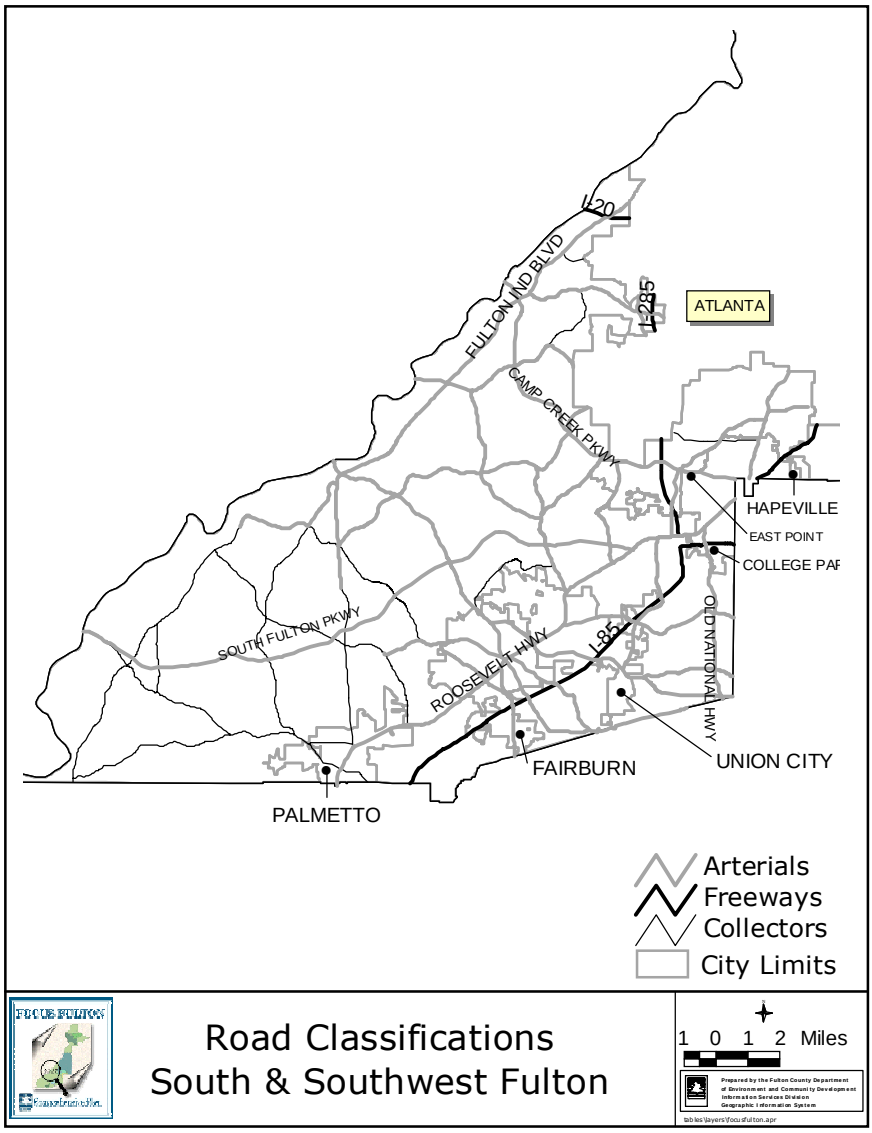
Freeways are designed as major interstates and limited access state highways, such as I-285, I-75, I-85, and GA 400. There are 430 lane miles of freeways in unincorporated Fulton County. There area approximately 686 lane miles of arterials in Unincorporated Fulton County. Collectors link the arterial system to the trip origins and destinations. There are 705 lane miles of collectors in unincorporated Fulton County.

Due to its elongated shape and unique community characteristics, unincorporated Fulton County is segmented into four geographic planning areas: North Fulton, Sandy Springs, Southwest Fulton and South Fulton. Each planning area developed in manner unique to its surroundings and akin

to the transportation network in place at the time growth occurred. Table 8-2 and Maps 8-1 and 8-2 show the functional classification by planning area. The functional road classification for all roads in each planning area is listed in Appendix H.



Map 8-1 North Fulton and Sandy Springs- Road Functional Classification



Map 8-2: South and Southwest Fulton Road Classification

Table 8-2: Fulton County Road Mileage and Ratio Measures in 2005

City or Fulton County Planning Area	Portion in Fulton and Portion in Other Counties	Population 2005	Total Acres 2000	Total Square Miles	Total Road Mileage	Interstate Highway Miles	Road Miles Per 1,000 People	Road Miles Per Square Mile
Incorporated Areas								
Alpharetta (1.)	All in Fulton County	38,484	13,517	21	256	0	6.7	12.1
City of Atlanta (2.)	Part in Fulton County	424,873	80,096	125	1,720	44	4.0	13.7
Part in DeKalb County		30,751	4,538	7	119	2	3.9	16.8
Total Atlanta		455,624	84,634	132	1,839	45	4.0	13.9
College Park (3.)	Part in Fulton County	19,862	4,464	7	107	5	5.4	15.3
Part in Clayton County		1,500	1,717	3	10	5	6.7	3.7
Total College Park		21,362	6,181	10	117	10	5.5	12.1
East Point (4.)	All in Fulton County	42,205	9,041	14	198	3	4.7	14.0
Fairburn (5.)	All in Fulton County	6,850	5,418	8	88	2	12.8	10.4
Hapeville (6.)	All in Fulton County	6,528	1,504	2	43	1	6.6	18.3
Mountain Park (7.)	Part in Fulton County	551	302	0	8	0	14.5	17.0
Part in Cherokee County		11	31	0	1	0	45.5	10.3
Total Mountain Park		562	333	1	8	0	14.2	15.4
Palmetto (8.)	Part in Fulton County	3,764	3,025	5	37	0	9.8	7.8
Part in Coweta County		400	323	1	5	0	11.3	8.9
Total Palmetto		4,164	3,348	5	42	0	10.0	7.9
Roswell (9.)	All in Fulton County	85,077	24,761	39	421	0	4.9	10.9
Union City (10.)	All in Fulton County	13,442	5,950	9	86	2	6.4	9.3
Planning Areas								
North		101,653	51,121	80	566	0	5.56	7.0
Sandy Springs		90,792	24,813	39	444	6	4.9	11.5
South		45,640	101,588	159	462	12	10.1	2.9
Southwest		14,869	16,494	26	181	3	12.2	7.0
Total Unincorporated Fulton		252,954	194,016	303	2,125	20	8.4	7.0
Total Cities in Fulton County		641,635	148,078	231	2,964	56	4.6	12.8
All of Fulton County		894,589	342,094	535	5,089	76	5.7	9.5
Georgia		9,079,254	32,271,869	50,425	119,827	1,245	13.2	2.4
United States		294,793,998	2,428,203,255	3,794,083	4,000,807	46,467	13.6	1.1

Source: Measurements by Carl Wyatt, GIS Supervisor, Public Works. State and U.S. figures 2004-2005 Statistical Abstract of the US & Ga Statistical Abstract. 2004-2005, Selig Center for Economic Growth, Terry College of Business, The University of Georgia.

North Fulton: The construction of Georgia 400 greatly increased access to the North Fulton planning area. This area lost a significant amount of rural, agricultural and forestry acreage to low-density residential uses, primarily large subdivisions. Office and commercial activity is located mostly along its linear roads (e.g. Medlock Bridge, State Bridge, Jones, Holcomb Bridge and Old Alabama Roads). The largest employment center is the Johns Creek business park.

Sandy Springs: Sandy Springs is the more urbanized and densely populated planning area in the county. There is a substantial amount of single family residential and multi-family/town residential development. Commercial uses are concentrated along Roswell Road, GA-400, and I-285. Sandy Springs has the most developed transit service with bus routes along all major arterials and three MARTA rail stations.

Southwest Fulton: Southwest Fulton has experienced tremendous growth in the last five years. This planning area consists of predominately of single family residential development. Commercial and industrial development in this planning area is concentrated along major corridors and intersections, including I-285 and Cascade, Fulton Industrial Boulevard, and Camp Creek Parkway.

South Fulton: South Fulton is perhaps the most diverse in the county, offering both new and established neighborhoods, newly developed commercial and office centers, and rural areas that are agricultural in nature. Its major corridors include: Old National Highway, Buffington Road, Roosevelt Highway, South Fulton Parkway, Cascade-Palmetto Highway, and Oakley Industrial Boulevard.

Number of Lanes

The process by which to determine the number of appropriate lanes on a road in a particular direction are based on a series of factors including existing functional road classification, the average daily trips on the road, the level of service, and congestion volumes. The maximum amount of lanes on a road in one direction in Fulton County is six. Based on the Atlanta Regional Commission's Transportation Model, there are 1,781 road segments with 1 lane per direction, 1,748 roads with 2 lanes per direction, 1,623 roads with 3 lanes per direction, 78 roads with 4 lanes per direction, and 91 roads with 5 or more lanes per direction. Below is a bulleted list of the roads with 2 or more lanes. Roads not listed have one lane per direction.

- 2 Lane Roadways (per direction)
  Abernathy Road, Barfield Rd, Camp Creek Parkway, Cascade Rd, Clifton Rd, Deerfield Pkwy, Dunwoody Pl, Fairburn Road, Flat Shoals Rd, Fulton Industrial Blvd, Glenridge Connector, Gordon Rd, Hammond Drive, Haynes Bridge Rd, Holcomb Bridge Rd, I-285, Johnson Ferry Road, Jonesboro Road, McGinnis Ferry Rd, Medlock Bridge Rd, Morrison Rd, Mt Vernon Rd, Northside Access Rd, Old National Highway, Peachtree Dunwoody Rd, Perimeter Center Pkwy, Pleasant Hill Rd, River Exchange Drive, River Valley Rd, Roosevelt Highway, Roswell Rod, Sandy Spring Circle, Senior Road, South Fulton Parkway, Spur 14, SR 120, SR 138, SR 138 Ext, SR 92, States Bridge Rd, Thorton Rd, Virginia Ave, and Welcome All Road.

- 3 Lane Roadways (per direction)
  Abernathy Road, Fulton Industrial Boulevard, GA-North, Glenridge Connector, I-20 E/W, I-285 E/W, Johns Ferry Road, and I-85.

- 4 Lane Roadways (per direction)
  I-285 and I-85.

- 5 Lane Roadways (per direction)
  I-285: North, South, East and West.

- 6 Lane Roadways (per direction)
  I-285: North, East and West.

Depending on the length of a particular road, and its average daily trips, the number of lanes can change at different segments along the same roadway to manage vehicle volumes.

Road Condition

The Public Works Department is presently working on developing visual distress study of streets, and road, which is to include an existing physical condition of these facilities and pavement. This project is under development. This study will be available later this year after the data collection process has been completed.

Accident Frequency Data

The Office of Traffic Safety and Design at the Georgia Department of Transportation (GDOT) maintains accident frequency data. The goal of the GDOT is to assist in the statewide reporting of accurate crash reports and maintain an effective traffic information system. There is a need to maintain a repository of timely and accurate data related to motor vehicle crashes, injuries, and fatalities. This information is vital to the planning and programmatic functioning of law enforcement agencies, governmental entities, including the Department of Transportation, highway safety advocates, and community coalitions. In October 2003, the Department of Motor Vehicles Safety completed reconstruction of crash data records and released five years of injury and death data.

Table 8-3: Fulton County Motor Vehicle Crashes, Fatalities, and Injuries

	1999	2000	2001	2002	2003	1996-2003
Crashes	50,601	51,326	50,890	48,570	49,068	399,367
Crash Injuries	19,117	18,423	18,235	16,703	16,701	151,472
Crash Fatalities	114	131	116	121	131	976

Source: Georgia Department of Transportation Office of Traffic Safety & Design

Between the years 1996-2003 there were 399,367 crashes in the county and approximately 40% resulted in injury (Table 8-3). Similarly, the Fulton County Public Safety Agency and the Public

Works Department collect data on accidents throughout the county. This information is tabulated on a regular basis.

Design Volume Capacity

The Design Volume Capacity represents the maximum number of vehicles that can pass a given point during a specified time period with reasonable expectancy under prevailing traffic and environmental conditions. Design volume for streets, roads, and highways is also defined as the maximum feasible throughput of the facility consistent with safe operation of the facility. Design volume capacity is measured for operational and performance facility analysis.

This information, at the line level, is contained within the Atlanta Regional Commission Travel Demand Model. A complete list of road segments, including number of lanes, capacity, and volume/capacity ratios are listed in Appendix C for reference.

Average Annual Daily Trip (ADT) Volumes

The average daily traffic (ADT) counts are used to measure the present demand for service on the streets and highways. These volumes are used to locate areas where new facilities or improvements to existing facilities are needed. The Georgia Department of Transportation provided the Annual Average Daily Trip (AADT) Volumes for 2003.

Average daily traffic trips are usually obtained through machine counts. These counts may be street counts (total volume without regard to direction) or directional counts. Directional counts are used for capacity analyses, planning improvements, and for obtaining accumulations within a cord. Counts are generally obtained through the use of mechanical traffic counters. There are 839 traffic counters in Fulton County located at junctures along corridors and intersections. There are approximately 357 traffic counters on state roads, 174 are traffic counters on county roads, and 308 traffic counters located on city roads.

Traffic counters are placed in a manner that allows traffic to proceed normally without significant lane changing or other maneuvers that might distort the count. The AADT gives the average number of cars that goes through a particular juncture at any given day or time. The complete 2003 Annual Average Daily Traffic AADT Table can be found in Appendix D. The Table 8-4 shows 20 roads segments with highest annual average daily traffic in or partially in unincorporated Fulton County. High traffic volumes mirror high population growth. Over half if the roads are in North Fulton, six in Sandy Springs, 4 in Southwest Fulton and none in South Fulton.

Table 8-4: Annual Average Daily Traffic (AADT) of the 20 County Roads with Highest Average Daily Trips

Traffic Counter No.	Road	Beginning Point	Ending Point	AADT	RATING
933	Mansell Road	ON FM SR-400 SB	FOE KILLER CK	47,340	1
875	State Bridge Road	MEDLOCK BRIDGE RD	ST GEORGEN COMMON	36,990	2
931	Mansell Road	OLD ROSWELL RD	ALPHARETTA HWY	32,350	3
5378	**Cascade Road**	**FAIRBURN RD**	**TO I-285 SB**	**32,230**	**4**
824	Haynes Bridge Road	DULUTH ST	FM SR 400 (SB)	30,380	5
823	Haynes Bridge Road	SR-400	ROCK MILL RD	28,280	6
935	Mansell Road	OLD ALABAMA CONN	FM SR 400 (NB)	24,100	7
864	*GA-400*	*ROBERTS DR*	*TURNER MCDONALD PKWY*	23,520	8
964	McGinnis Ferry Road	UNION HILL RD	WINDWARD PKWY	23,350	9
938	Old Roswell Road	HOLCOMB BRIDGE RD	ROCK MILL WAY	22,360	10
862	*Dunwoody Place*	*NORTHRIDGE RD*	*ROSWELL RD*	21,890	11
821	Haynes Bridge Road	TURNER RD	OLD ALABAMA RD	21,860	12
6004	Nesbit Ferry Road	OLD ALABAMA RD	OLD ALABAMA RD	21,100	13
6016	*Mount Vernon Highway*	*JOHNSON FERRY RD*	*SANDY SPGS PL*	20,850	14
966	McGinnis Ferry Road	PEACHTREE PKWY	CHATTAHOOCHEE RIVER	20,820	15
5376	**Cascade Road**	**DANFORTH RD**	**OLD CASCADE RD**	**20,590**	**16**
5639	*Peachtree Dunwoody Road*	*PEACHTREE RD*	*ROCKHAVEN CIR*	19,740	17
5646	*Johnson Ferry Road*	*OLD JOHNSON FERRY RD*	*TRIMBLE RD*	19,300	18
5386	**Cascade Road**	**BEECHER ST**	**GORDON ST**	**18,830**	**19**
861	*Roberts Drive*	*NORTHRIDGE RD*	*SPALDING DR*	*18,280*	*20*

Source: Georgia Department of Transportation
Roads are denoted by special font- North Fulton, *Sandy Springs,* **Southwest,** and South Fulton.

Programmed Improvements in the Atlanta Regional Commission FY 2005-10 Transportation Improvements Program (TIP).

The Atlanta Regional Commission is the federally designated Metropolitan Planning Organization (MPO) for the Atlanta Region. ARC works with local governments in the 10 county Atlanta Region and with state and regional agencies including the Georgia Department of Transportation, (GDOT), the Georgia Regional Transportation Authority (GRTA), the Metropolitan Atlanta Rapid Transit Authority (MARTA) and other regional transit providers to develop the region's transportation plan. The transportation plan addresses needs for improved air quality, public transit, bicycle and pedestrian, facilities, highways, passenger rail service, incident and congestion management and aviation services.

ARC is responsible for developing the Regional Transportation Plan (RTP), the Region's 20 year transportation plan. The includes a balanced mix of projects such as bridges, bicycle paths,

sidewalks, transit services, new and upgraded roadways, safety improvements, transportation demand management initiatives and emission reduction strategies. The RTP is updated at least every third year and must be fiscally constrained (approximate balance of revenues and expenses over the lifespan) and must also demonstrate conformity with applicable federal air quality standards. Mobility 2030 is ARC's recently completed transportation plan.

The TIP is a short range implementation program comprising the highest priority projects. The plan covers at a minimum the next three fiscal years, and it consists only of projects drawn from the RTP. Projects in the Atlanta Region's Transportation Improvement Program (TIP) have been allocated federal funds for use in the construction of the highest priority transportation projects in the near term of the Atlanta Regional Transportation Plan (RTP). Fulton County TIP Projects programmed before 2010 are listed by project name and the project type in Table 8-5. Programmed improvements in the State Transportation Improvement Program (STIP) are located in the Atlanta Regional Commission's RTP Regional Transportation Plan. The STIP list for North Fulton and South Fulton County are listed in the appendix G.

Table 8-5: Transportation Improvement Projects 2005-2010

Project Location	Intersecting Road
Roadway Operational Upgrades	
1. State Route 9	Roswell Road @Dunwoody Place (NF)
2. State Route 9	Roswell Road @Dunwoody Place (NF)
3. Jones Bridge Road	Douglas Road (NF)
4. Jones Bridge Road	Sargent (NF)
5. Webb Bridge	Park Bridge Parkway/Shirley Bridge Road (NF)
6. Mayfield Road	Providence Road (NF)
7. Bell Road	Roger's Bridge Road (NF)
8. Jones Bridge Road	Morton Road (NF)
9. Jones Bridge Road	Waters Road (NF)
10. Peachtree Dunwoody Road	Lake Hearn Drive (NF)
11. State Route 140	Arnold Mill Road (NF)
12. Bell Road	Rogers Circle Road (southern intersection) (NF)
13. Providence Road	Bethany Road (NF)
14. State Route 372 – Birmingham Highway	Providence Road/New Providence Road (NF)
15. Freemanville Road	Providence Road (NF)
16. Kimball Bridge Road	Waters Road (NF)
17. State Route 120 – Abbotts Bridge Road	Parsons Road (NF)
18. Jones Bridge Road	Buice Road (NF)
19. Johnson Ferry Road	Sandy Springs Circle (NF)
20. State Route 54 – Cascade Palmetto Hwy	Wilkerson Road (SF)
21. Oakley Industrial Boulevard	between Fayetteville Road and Jonesboro Road (SF)
22. State Route 154 – Cascade Palmetto Hwy	Cedar Grove Road/Ridge Road
Pedestrian Facility	
1. Hermi's Bridge	Chattahoochee River (Adjacent to West Paces Ferry Road) (NF)
2. State Route 372 – Birmingham hwy	Kensington Farms Drive (NF)
3. Mount Vernon Highway	Between Powers Ferry Road@ Lake Forrest Road (NF)
4. Riverside Drive	Between Heards Ferry Road and Old River Drive/Edgewater Drive (NF)
5. State Route 9 – Roswell Road	Between Atlanta City Limits and I-285 North (NF)

Table 8-5: Transportation Improvement Projects 2005-2010	
6. Hammond Drive	Between Glenridge Drive and Dekalb County Line (NF)
7. Windsor Parkway	Between State Route 9 – Roswell Road, and High Point Road (NF)
8. State Route 9 – Roswell Road Streetscape	Between Abernathy Road and 1900 North of Abernathy Road (NF)
9. Danforth Road Phase I	Between New Hope Road and Regency Center Drive (SF)
10. New Hope Road	Between Danforth Road and Cascade Road (SF)
Bicycle / Pedestrian Facility	
1. State Route 279 – Old National Highway	TOD Implementation Program between Flat Shoals Road and Sullivan Road (SF)
2. River Valley Road	between Riverside Drive and Johnson Ferry Road (NF)
Intermodal Terminal Strategies (ITS)	
1. State Route 9 ATMS	Between Abernathy Road and Forsyth County Line (Smart Corridor)
2. Perimeter Center Area (Fulton County)	Fiber Optic Signal Interconnection (other)
3. State Route 279 – Old National Highway ATMS	Between Jonesboro Road and I-285 South (SF)
Multi-Use Bike / Ped Facility	
1. John's Creek Greenway	Between Finley Road at SR 141 and Buice Road at Old Alabama Road (NF)
2. Buffington Road Segment I	Between Flat Shoals Road and Old Bill Cook Road
3. Buffington Road Segment II	Between Old Bill Cook Road and US 29 Roosevelt Highway
Bridge Upgrade	
1. Cochran Mill Road	Pea Creek (SF)
1. Cochran Mill Road	Little Pea Creek (SF)
Studies	
State Route 14 Spur (South Fulton Parkway)	access management plan from Douglas County line to I-285/85 interchange (SF)

8.1.1.2 Assessment

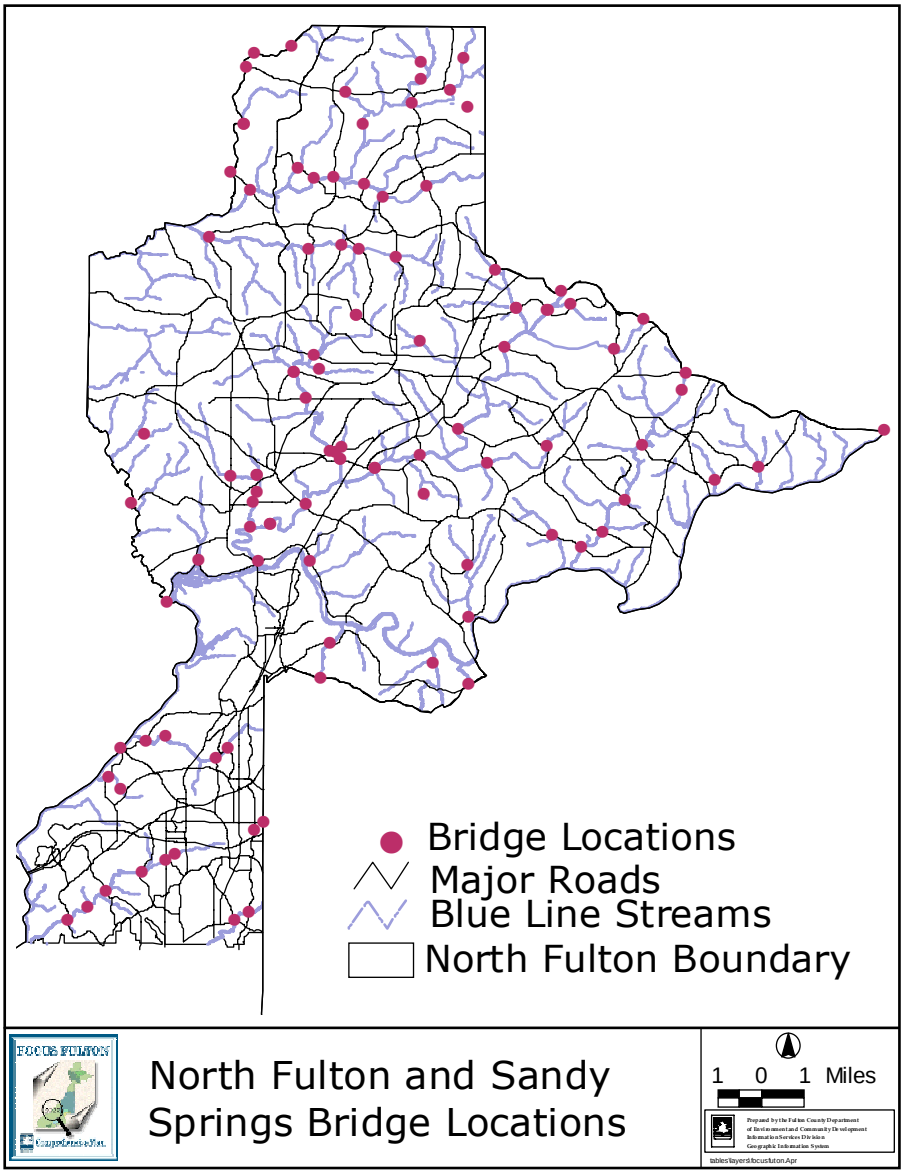
There are approximately 2,125 roads miles in unincorporated Fulton County. With Fulton County as the center of the Atlanta Region, there are regional transportation corridors that pass through Fulton County, and present transportation challenges. Major consideration must be given to traffic volumes experienced on major thoroughfares resulting in reduced travel speeds, longer commute trips, and increase congestion.

8.1.2.0 Existing Bridge Inventory and Condition

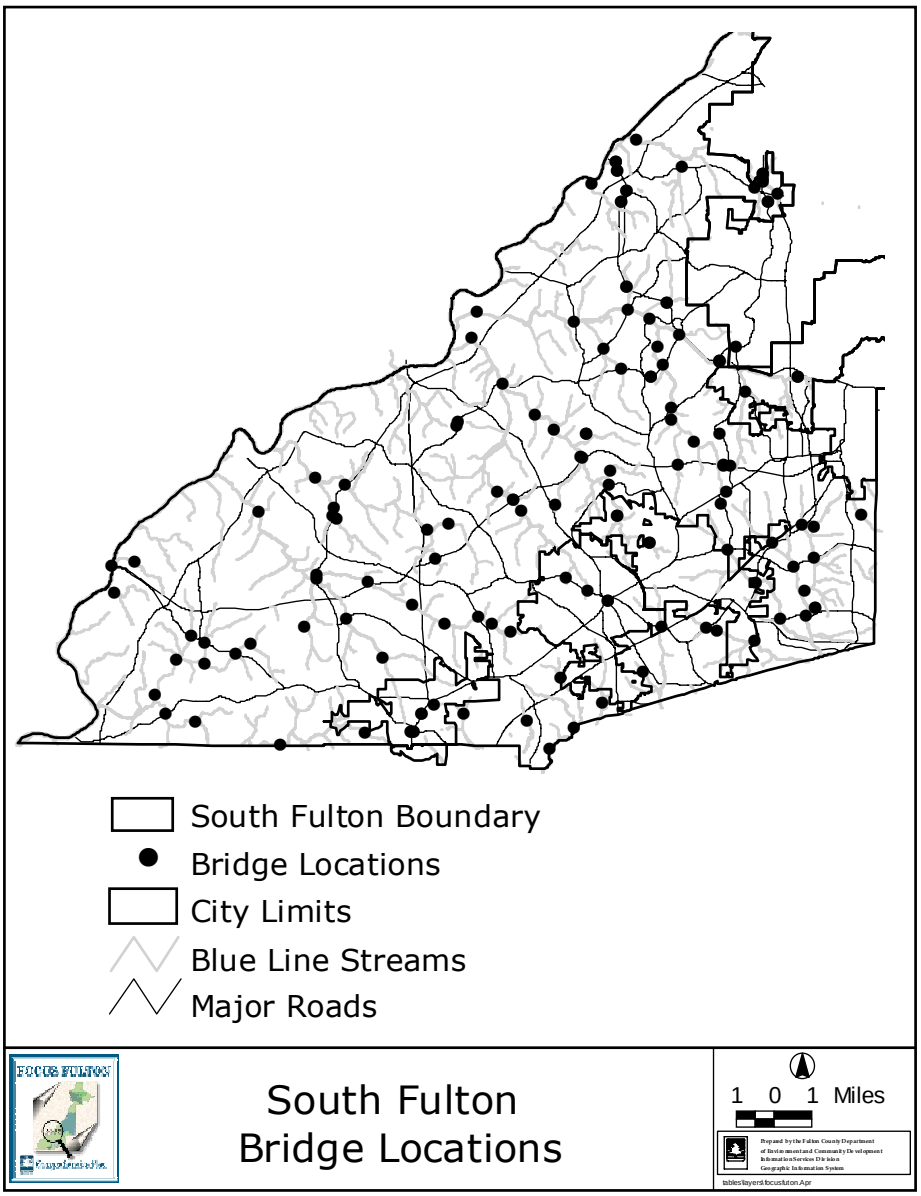
8.1.2.1 Inventory

There are 171 bridges in unincorporated Fulton County (Maps 8-3 and 8-4). A bridge's condition is evaluated by using a sufficiency rating. The sufficiency is determined in part by the bridge inspector who arrives at a rating based on a number of variables, which is then analyzed by a software system that generates a sufficiency rating for each bridge structure. The sufficiency rating ranges from zero (worst condition) to 100 (great condition). Bridges with a sufficiency rating of 50 or less are in need of replacement and bridges with a rating greater than 50 are in satisfactory condition. There are presently 40 bridges sufficiency rating less than 50. Table 8-6 shows the 15 bridges with the lowest sufficiency rating, as provided by the Department of Public Works. These bridges are in great need of repair and improvements. The complete bridge

inventory of the 171 bridges in unincorporated Fulton County is located in the Appendix E along with maps showing bridge locations.



Map 8-3: North Fulton and Sandy Springs Bridge Locations



Map 8-4: Southwest and South Fulton Bridge Locations

Table 8-6: Bridge Inventory - Fulton County Sufficiency Rating

Priority	Structural I.D.	Bridge Location	Projected Cos	Weight Limit	Sufficiency Rating	Comments & Issues
1	121-0340-0	Old Fairburn Road over Camp Creek	$1,632,736	3 Tons	2.00	Bridge replaced by GDOT - COMPLETED
2	121-5015-0	New Providence Rd. over Cooper Sandy Creek	$763,200		20.58	Timber piles should be replaced. County to apply for federal funds for replacement.
3	121-0451-0	Powers Ferry Rd. over Long Island Creek	$461,000		21.09	Timber Deck Replaced. COMPLETED
4	121-5046-0	Garretts Rd. over Chattahoochee River Tributary	$342,600	3 Tons	27.46	Under Design 2004 Budget - Construction schedule for 2005
5	121-0294-0	Bethasaida Rd. over Morning Creek Tributary	$670,200	8 Tons	16.17	Project Managed by GDOT. In CIP 5-10 TIP Construction Long Range
6	121-5201-0	Buffington Rd. over Morning Creek	$413,000	9 Tons	12.53	Timber piles show signs of decay and should be replaced. Schedule for replacement by GDOT March 2006
7	121-5081-0	Johnson Rd. over Line Creek	$506,400	9 Tons	21.90	Design & Right of Way underway. Schedule for construction May 05
8	121-5083-0	Johnson Rd. over Peeks Creek	$505,206	9 Tons	22.43	Under Construction August 2004. COMPLETION - Dec 05
9	121-0288-0	McGinnis Ferry Rd. over Johns Creek		10 Tons	4.00	Bridge Design underway by Forsyth County. GDOT to Let to Construction.
10	121-0345-0	Fairburn Rd. over CSX Railroad	$2,377,384	10 Tons	5.33	Under Construction. Let by GDOT
11	121-5152-0	Freemanville Rd. over Chicken Creek		10 Tons	24.28	COMPLETED by GDOT April 05.
12	121-0281-0	Bethany Rd. over Cooper Sandy Creek	$990,909	10 Tons	28.07	Timber piles show signs of decay and should be replaced. Project has been submitted for federal funding.
13	121-5054-0	Enon Rd. over Camp Creek	$775,523	10 Tons	32.43	Under Construction. Let by GDOT.
14	121-5019-0	Boles Rd. (Bell Rd) over Cauley Creek	$670,200	10 Tons	38.07	Bridge should be properly bolted. Bridge has been painted. Replacement funded- 2005 Budget
15	121-5041-0	Rico Tatum Rd. over Cedar Creek	$553,487	10 Tons	40.88	Under Design - 2004 Budget Construction Schedule for 05

Significance in Evacuation / Emergency

Bridges serve as a major evacuation routes in times of disaster. The Atlanta-Fulton County Emergency Management Agency (AFCEMA) is the central point of contact for a wide range of emergency management activities. Among those are the coordination of policies and procedures regarding the execution of all major emergency and disaster operations for the City of Atlanta and Fulton County. Through the Hazardous Materials Advisory Council, AFCEMA manages the implementation of the Emergency Planning and Community Right-to-Know Act of 1986 (SARA Title III). All evacuation routes are determined by the AFCEMA. An effective short-notice emergency evacuation of the city/county is not practical. However, if AFCEMA has several days of advance warning of a catastrophe, Atlanta could possibly be evacuated using all routes, including bridges or the inbound highway lanes (under police supervision and direction). Collateral (local) streets would also be used to help evacuate. During a county-wide evacuation, MARTA would be available to give free rides to safety. During neighborhood evacuations (for floods and other local emergencies) a special MARTA bus will transport residents to a nearby shelter using pre-determined evacuation routes.

8.1.2.2 Assessment

Bridges are an integral part of the transportation infrastructure. These structures serve as a strategic connection into the roadway network. The safe operation and structural stability of county bridges is critical to the safety of motorist, and the vehicular flow of traffic. Unsafe bridges impede traffic flow, speed, and restricts volume that could be generally supported by the prescribed design capacity if the bridge structure was not declining. With approximately 40 bridges with sufficiency rating less that 50, priority must be given to those bridges with the worst sufficiency ratings.

8.1.3.0 Signalization and Signage

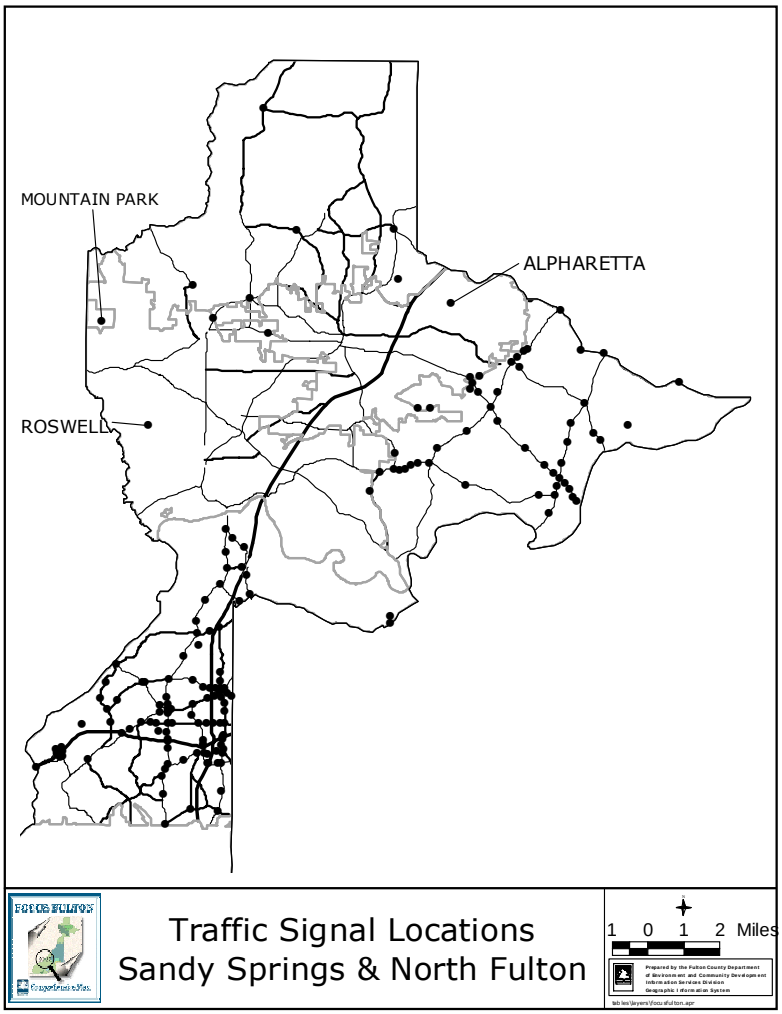
8.1.3.1 Inventory

The purpose of traffic control devises, as well as the principles for their uses, is to promote street and/or highway safety by providing for orderly movement of all road users on streets and highways. Traffic signals and other such traffic control devise notify road users of regulations and provide warning and guidance needed for safe, uniform, and efficient operation of all elements of the traffic stream.

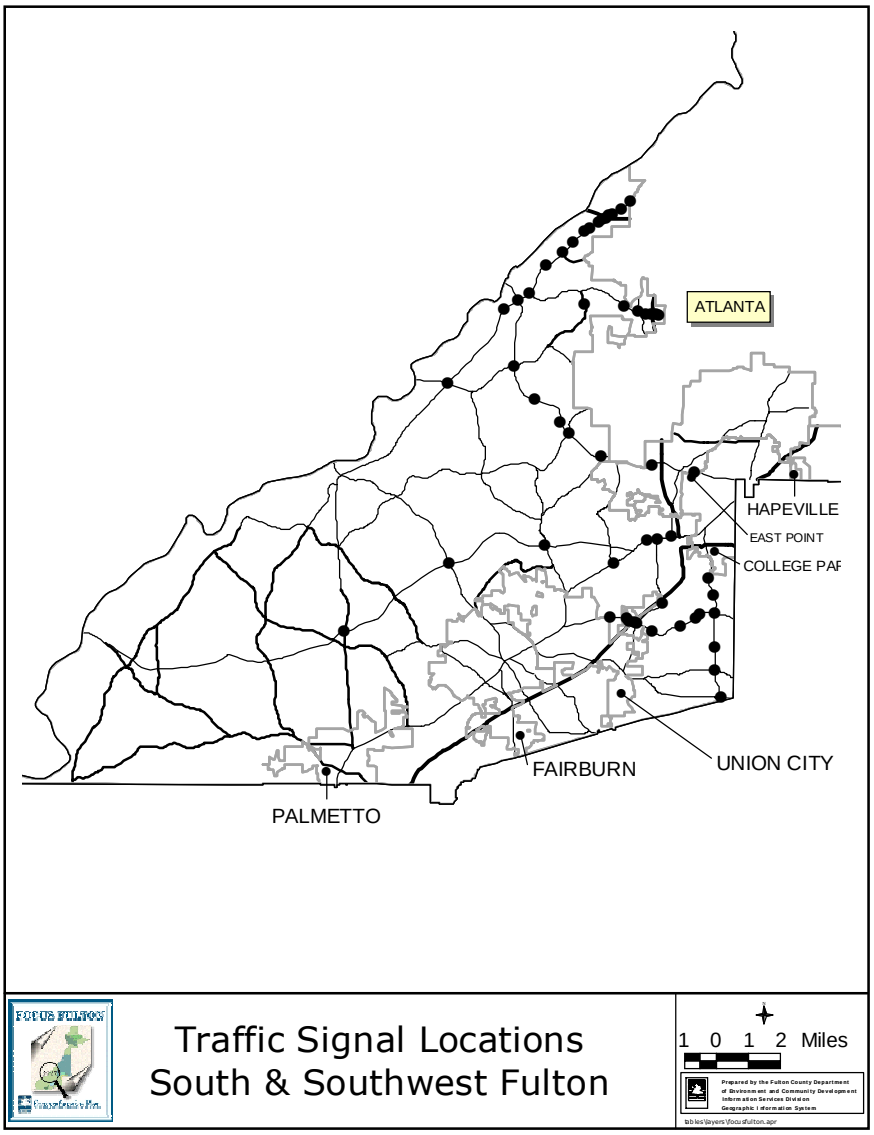
In unincorporated Fulton County, there are 395 traffic devices. This includes 231 signals and 175 flashing beacons devices. There are 66 signalized intersections in South Fulton and Southwest, and 167 signalized intersections in Sandy Springs and North Fulton. Currently, there is a backlog of 29 warranted signals.

In addition to signalization, the county is implementing an advanced transportation management system (ATMS). ATMS is the basic building block of intelligent transportation systems (ITS). It consists of detection, communications, and control. The ATMS integrates management of various roadway functions, including freeway ramp metering and arterial signal control. An ATMS collects, utilizes, and disseminates real-time data on congestion on arterial streets and expressways. It

also alerts transit operators of alternative routes. Dynamic traffic control systems respond to changing traffic conditions across different jurisdictions and types of roads by routing drivers around delays where possible. Rapid detection and response to traffic incidents are especially effective in reducing congestion on expressways. Table 8-7 shows the four (4) ATMS projects planned in unincorporated Fulton in the TIP and the RTP.



Map 8-5: North Fulton and Sandy Springs Signalized Intersections



Map 8-6: Southwest and South Fulton Signalized Intersections

Table 8-7: ATMS Planned for Unincorporated Fulton County			
Project Name	**Starting Point**	**Ending Point**	**TIP/RTP**
Roswell Road	Abernathy Road	Forsyth County Line	TIP
Old National Highway	Jonesboro Road	I-285 South	TIP
Hammond Drive	Mount Vernon Highway	Peachtree Dunwoody Rd	RTP
Peachtree Dunwoody Rd	Windsor Parkway	Glenridge Connector	RTP
Abernathy Road	Roswell Road	State Route 400	RTP
Source: Fulton County Department of Public Works			

Signage

Regulatory signs are used to inform road users of selected traffic laws or regulations and indicate the applicability of the legal requirements. Regulatory signs are installed at or near where the regulations apply. The signs clearly indicate the requirements imposed by regulations. Signs are designed and installed at a safe distance in order to provide adequate visibility, legibility and to meet compliance requirements. Examples of such signs include: Stop, Yield, Speed Limit, One-way, etc. Maintaining an inventory of all regulatory signs is an enormous undertaking. The county is proactive and strategic in the placement of regulatory signs in the proper location for safe and operative roadways. To date an inventory of all regulatory signs has not been developed.

8.1.3.2 Assessment

To determine where signage is warranted, the County's Public Works Department considers several factors. Common measures by which the performance of an intersection may be evaluated include: (1) delay, (2) stops, and (3) queue length. Each of these may be expressed as values which represent total or averages for the entire intersection, or for a particular approaches or movements within the intersection. Averages are often expressed on per-vehicle basis. Other measures which have been used to characterize the performance are throughput and total travel time. Delays represent the average stopped-time delay per vehicle. With approximately 29 signals presently backlogged, there are roadway facilities that are experiencing delays, stops, and queuing. They are subsequently effecting travel times, and the level of service. Additional resources must be identified to remedy backlogs, and improve the roadway operations.

8.1.4.0 Bicycle and Pedestrian Ways

8.1.4.1 Inventory

The Fulton County Comprehensive Transportation Plan (CTP) has a Bicycle and Pedestrian element. The Bicycle and Pedestrian element includes almost 150 project covering more than 450 miles of new sidewalks, bike lanes, and multi-use facilities to be implemented over the next twenty years. The Bicycle and Pedestrian element is an important component in meeting Fulton County's travel demands. A complete sidewalk and bike system is a key element in establishing a multi-modal transportation system that successfully supports public transportation, transportation options and other travel demand management strategies.

In addition to the bike & pedestrian plan, there a series of streetscape projects underway throughout unincorporated Fulton. These projects are along Crabapple Road in North Fulton, Roswell Road in Sandy Springs, and Old National Highway in South Fulton.

Sidewalks are required within new residential developments on both sides of the street in accordance with the Subdivision Regulation standards. Pedestrian pathways are required in mixed use developments (e.g. village nodes, live-work designations, etc) to promote pedestrian oriented communities. While both North and South Fulton have sections of existing sidewalks, some of these sidewalk sections are not well connected to destinations, goods and services.

Medlock Bridge Road is the only corridor in the county to currently have on-street bicycle lanes. Bike lanes are located on-road, are a four-foot wide striped lane that parallel the travels lanes. The bike lanes provide the routing and connectivity that is needed for experienced bicyclists to travel places in a timely manner while eliminating sidewalk conflicts with pedestrians.

This plan contains a set of policies and strategies that link the implementation of the projects to budgetary actions, urban design practices, land-use planning, zoning, road improvements, travel demand management, and subdivision ordinance activities.

Fulton County also participates in the Atlanta Regional Commission (ARC) Bike and Pedestrian Plan. The ARC is responsible for the development and implementation of a regional planning process that includes all modes of transportation. Over the last several years, the provision of bicycle and pedestrian facilities have become more prevalent and the need for additional facilities continues to be identified at the regional level.

Exercise and Hiking Trails

This information is available in the Parks and Recreations section of the Community Facilities Element of the Comprehensive Plan.

Greenways

As Fulton County continues to grow in population, the preservation of greenspace and greenways will become an important part of the natural environment. A greenway is a corridor of open space that may:

- protect natural resources, preserve scenic landscapes and historic resources, or
- offer opportunities for recreation or non-motorized transportation,
- connect existing protected areas and provide access to the outdoors, be located along a defining natural feature, such as a waterway, along a man-made corridor, including unused right-of-way, traditional trail routes or historic barge canals, or
- maybe greenspace along a highway or around a village.

Greenways differ in their location or function, but overall, they can benefit the public and the environment by preserving natural, cultural and scenic resources, protecting water resources, promoting stewardship of our rural and farmland legacy, enhancing natural beauty and quality of life in neighborhoods and communities, fostering public recreation, health and fitness, creating

educational opportunities, promoting sustainable development and sound land use and stimulating economic development opportunities.

There are three greenways in unincorporated Fulton that are in the program and design phase. These greenways are:

- The South Fulton Scenic Byway: It begins at Cochran Mill Park on the North and running south along Little Bear Creek to the City of Palmetto.
- John's Creek: It begins at McGinnis Ferry Road on the North running south along John's Creek to Old Alabama Road.
- Shakerag: It begins at McGinnis Ferry Road on the North running South along the abandoned segment of Rogers Bridge Road south to the Chattahoochee river.

8.1.4.2 Assessment

Providing a balance of modes of transportation is important in Fulton County. The county has taken a number of steps to ensure that future growth is pedestrian and bike oriented by:

- Requiring new developments to include sidewalks, per the subdivision regulations standards,
- Planning and implementing bike and pedestrian facilities.
- Developing live-work land use designations which encourage pedestrian travel in mixed use communities; and
- Planning sidewalk networks in older areas that are automobile oriented.

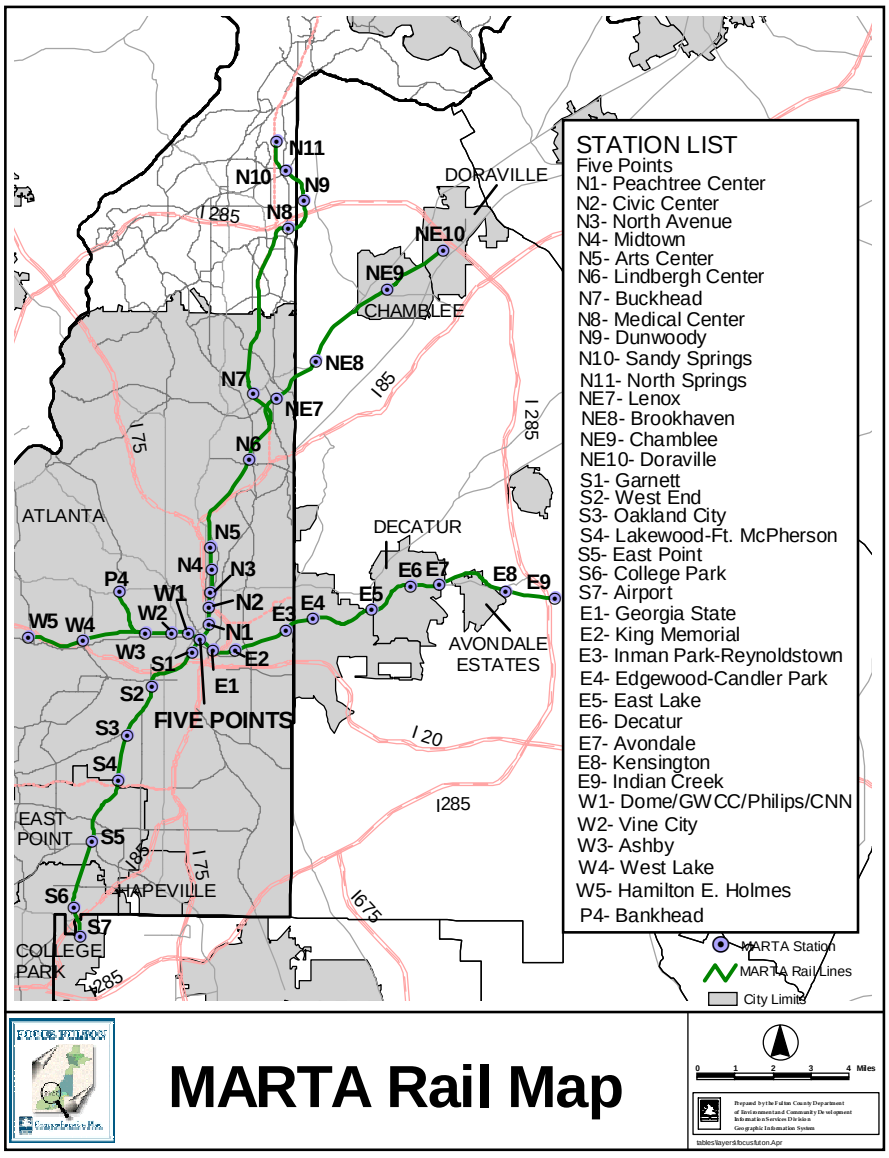
8.1.5.0 Public Transit, Railroads and Airports

Public Transit

MARTA –Fixed Route

The Metropolitan Atlanta Rapid Transit Agency (MARTA) operates 338 rail cars in 38 stations on 47.6 miles of track plus a bus system operating 575 buses on 125 bus routes generally fanning out from the rail system's stations. In total, MARTA transports nearly 500,000 passengers daily. MARTA has extensive bus and rail services within Fulton County. MARTA operates through an established agreement with the County. Public transportation planning within Fulton County is primarily the responsibility of MARTA, which has a continuous process of plan development and implementation.

Of the 47.6 miles of rail in the MARTA system, 31.6 miles are in Fulton. Fulton County has 29 of the 38 MARTA rail stations, 22 in the City of Atlanta, one (1) in the City of College Park and East Point, three (3) in the Sandy Springs area of unincorporated Fulton (Map 8-7). Table 8-8 outlines current transit characteristics in Fulton County. Transit Passenger miles are calculated by multiplying the number of transit passengers by the length of the transit route.



Map 8-7: MARTA Rail Map

Table 8-8: Transit Characteristics in 2000 in Unincorporated Fulton County					
	North Fulton	Sandy Springs	Southwest Fulton	South Fulton	Total
Route Miles-(County Roads)	2.4	136	28.9	41.1	208.4
Route Miles-(Heavy-Rail)		7.5			7.5
Daily Transit Boarding	110	27,000	2,600	2,600	32,310
Transit Passenger Miles	86	41,000	4,000	3,700	48,786
Source: Comprehensive Transportation Plan					

MARTA Paratransit System

In addition to fixed route system, MARTA also offers Paratransit services. MARTA Paratransit services are a shared ride, advanced reservation form of public transportation that complements MARTA's fixed route service. Paratransit services are equivalent to fixed route services. They are designed for, and restricted to, eligible individuals whose disabilities absolutely prevent them from using fixed route services. Paratransit services operate within the MARTA service area. Specially equipped lift vehicles are capable of transporting up to three wheelchairs and up to nine (9) ambulatory customers. The service operates to and from facilities on a curb-to-curb basis, or as a feeder service to the fixed route system.

Lastly, Fulton County also offers the Fulton County Express. This is a non-emergency transportation service for senior citizens. Citizens that qualify are transported to and from county senior facilities and to doctor appointments.

Railroads

Georgia has almost 5,000 miles of railroad track. The GDOT Rail Program strives to preserve and enhance the state's rail system for safe and efficient freight use and future passenger operations. Maintaining rail access gives the state's agricultural and industrial shippers a needed transportation choice and is vital for continued economic development. The majority of the rail lines in Fulton County are in the cities, particularly the City of Atlanta. A rail network that runs adjacent to the Fulton Industrial Boulevard District. Another rail system runs through South Fulton parallel to I-85. This segment of the freight rail line connects to LaGrange and Montgomery, Alabama. In South Fulton, CX operates an intermodal facility. CSX Corporation is the parent company of a number of subsidiaries that provide freight transportation service across America and around the world. CSX Transportation operates the largest rail network in the eastern United States.

Recently, the Atlanta Regional Commission started including rail and freight in its transportation planning process. They have initiated a Regional Freight and Goods Mobility Plan that will include railroads.

Airports

The Fulton County-Brownfield Airport, located at Fulton Industrial Boulevard and MLK Jr. Drive, provides air traffic control service 24 hours a day, seven days a week. The airport is a public facility serving any aircraft from Georgia, the United States, or international locations. The airport serves as a "primarily reliever" airport to Hartsfield-Jackson International Airport. Many of the airport hangars are corporate owned. Plans for runway and taxiway pavement maintenance, as well as an updated aviation fuel system by Georgia DOT are underway.

The South Fulton Airport, located at Roosevelt Highway and Wilkerson Mill Road, is a privately owned airport. It is not designated as a reliever of general aviation traffic for the Hartsfield-Atlanta International Airport and as such receives no federal transportation funding.

8.2.0.0 Assessment of Current and Future Needs

"Can you imagine an Atlanta region of 6 million people? During the next 25 years, we'll grow by another 2.3 million people. Our vibrant economy, great climate, superior transportation systems and our unsurpassed quality of life assure that the stunning growth of the last few decades will continue." C. Crandle Bray

This quote from former Atlanta Regional Commission Chairman is definitely a foreshadowing of what is to come. As the county in the heart of the Atlanta Region and the MSA, Fulton County is forecasted to accommodate its share of the projected growth within the region. Regional development patterns have a tremendous impact on transportation systems. The way the region develops dictates how people are likely to travel and what transportation strategies are most feasible. Likewise the level of fiscal investment into the transportation system strongly influences development patterns.

Fulton County is expected to grow from 877,272 in 2004 people to approximately 1,221,054 in 2025, a 28.15% increase in population (Table 8-9). Fulton County has approximately 36% of the jobs and 25% of the population of the region. Residential building permits are steadily on the rise. Fulton County (the cities and county government) issued the highest number housing permits in the Atlanta Region in 2004 with 16,921 permits. This level of permitting activity indicates that Fulton continues to be the premiere place to live, work, and play.

Table 8-9: 1960-2025 Historical Trends vs. Population Forecast

Year	Population	% Increase
1960	556,326	n/a
1970	607,592	8.43%
1980	589,904	-0.02%
1990	648,951	9.09%
2000	816,006	20.4%
2025*	1,221,054	28.15%

Source: US Census and EC&D forecasts

Rapid and dispersed growth, limited transportation options, limited funding for transportation improvements, limited transit network, separated land use & low density development, road network with limited connectivity, dispersed location of employment centers, and lengthy planning and implementation process for transportation facilities are all factors that have impacted mobility in the county and region. ARC recently completed Mobility 2030, the long range regional transportation plan. The aspirations plan identified $74 billion dollars of needed transportation improvements over the next 20 years. However, $52 billion will be available. The plan allocates funding for freeway and cross regional system, managed/HOV system, regional transit system, smart corridors system and bicycle and pedestrian system. The plan also recommends change in land use development patterns, additional revenues for transportation projects and a long term funding source for transit.

To address land use and transportation challenges facing the Atlanta Region, the Metro Atlanta Chamber of Commerce convened the Quality Growth Task Force in 2003. The Task Force modeled a land use scenario that included an increase in density and mix of land uses in activity centers and transportation corridors, increase in opportunities for redevelopment and infill development, more compact development pattern and mixed use land uses and more housing in centers. The results were then compared to Mobility 2030. With the changes in land development patterns, the model showed that commute times decreased from 30 minutes to 27 minutes, commute distances decreased from 12.5 miles to 11.0 miles and vehicle hours traveled dropped from 66 minutes to 58.5 minutes.

The May 2005 "2005 Urban Mobility Report" by the Texas Transportation Institute analyses data on the performance of some elements of the transportation system in 85 urban areas. The report shows that the current pace of transportation improvement is not keeping pace with the growth in travel demands in most major urban areas. In other words, urban areas are not adding enough capacity, improving operations or managing demand well enough to keep congestion from growing larger. In 2003, the Atlanta Region ranked eleventh in the nation in the annual hours of delay per traveler. The annual hours of delay increased by 14 hours over the last 10 years, from 53 hours in 1994 to 67 hours in 2004. Over the same time period, the daily vehicle miles of travel increased by 19% while the roadway system increased by 12%. The study recommends increasing the capacity of the transportation system (freeways, streets, transit), increasing the efficiency of the transportation system, managing the demand of the transportation system (tolls and pricing incentives, use of carpools and transit), changing the development pattern, and setting realistic expectations for congestion.

As the county continues to experience growth, mobility will be the critical element in determining how effectively more residents, jobs, and business will be accommodated. Mobility problems have increased at a relatively consistent rate over the past 20 years. Congestion occurs on more of the roadways, affecting daily travel times and trips, and greatly impacting weekly commuting patterns. It is with this information, that an assessment of the current and future needs must be performed, in order to determine how the transportation system will fair over the next 20 years in conjunction with the anticipated growth. In this section there will be assessment of the following areas:

A. Existing Transportation System Levels of Service;
B. Existing Public Transit Facilities;

C. Availability and adequacy of Transportation facilities and services to the serve existing and future land uses;
D. Projected Overall Transportation System Levels of Service and System Needs; and
E. Means of Optimizing Utilization of Existing Streets, Roads, and Highways.

A. Existing Transportation System Levels of Service

A level of service is a letter designation that describes a range of operating conditions on a particular type of facility (road). The level of service concept is a qualitative measure describing operational conditions within a traffic stream, and their perception by motorist and/or passengers. There are six levels of service, which are defined for capacity analysis. They are given letter designations A through F, with LOS A representing the best range of operating conditions and LOS F the worst. Table 8-10 describes the general characteristics of each category.

Table 8-10: Atlanta Regional Commission Level of Service Thresholds

LOS	General Characteristics	V/C Ratio	Average Daily Volume by Second
A	Free flow traffic with individual users virtually unaffected by the presence of others in the traffic steam;	.00-.55	<10
B	Stable traffic flow with a high degree of freedom to select speed and operating conditions but with some influence from others;	.00.55	10-20
C	Restricted flow which remains stable but with significant interactions with other in the traffic stream. The general level of comfort and convenience declines noticeably at this level;	.55-.77	20-35
D	High-density flow in which speed and freedom to maneuver are severely restricted and comfort, and convenience have decline even through flow remains stable	.77-.93	.35-55
E	At capacity; unstable flow at or near capacity levels with poor levels of convenience and comfort, very little, if any, freedom to maneuver	.93-1.00	55-80
F	Forced traffic flow in which the amount of traffic approaching a point exceeds the amount that can be served. LOS "F" is characterized by stop and go waves, poor travel times, low comfort and convenience and increased accident exposure.	<1.00	>80

As shown above, the LOS is derived from the v/c) ratio, which is the volume to capacity sufficiency rating. A v/c ratio greater than 1.00, results when a forecast demand exceeds the operating capacity of the roadway segment. It clearly indicates insufficient capacity and the need for improvement. A v/c ratio of 0.90 indicates that the roadway could only withstand an increase of 10% capacity in demand before the operating capacity is exceeded. In general, LOS A describes a free-flowing condition in which individual vehicles of the traffic stream are not

influenced by the presence of other vehicles. LOS F generally describes breakdown operations (except signalized intersections) which occur when flow arriving at a point is greater than the facility's capacity to discharge flow. At such point, stacking develops and LOS F exists within the road, causing the breakdown. Speed, travel time, density are delay are just a few variables that have direct impact a roads level of service.

In Fulton County there are approximately 1,781 road segments. Table 8-11 shows the number road segments with a LOS of D, E, or F.

Table 8-11 : Level of Service on Fulton County Road Segments

D (.77-.93)	E (.93-1.00)	F (<1.00)
166	61	379

The complete table of all the road name segments and their actual level of service is listed in Appendix "F" for roads with D, E, and F LOS. The average LOS was taken from each road segment on major roads throughout the county, and that information is listed in the table 8-12. The table shows that most of the congested roads are in North Fulton and Sandy Springs.

Table 8-12: The Average V/C Ratio and the LOS on Major Road by Planning Area

North Fulton	Sandy Springs	Southwest	South Fulton
Medlock Bridge Rd (1.09)=F	Powers Ferry Rd (.55)=B	Cascade Rd (.55)=B	Roosevelt Highway (.21)=B
State Bridge Rd (1.07)=F	Abernathy Rd (.90)=D	Fulton Industrial Blvd (.50)=A	Old National Highway (.54)=B
Jones Bridge Rd (.81)=D	Roswell Rd (.83)=D	Camp Creek Pkwy (.60)=C	South Fulton Pkwy (.19)=A
Holcomb Bridge Rd (1.24)=F	GA-400 (.93)=D	Campbellton Rd (.33)=B	Cascade-Palmetto Hwy (.13)=A
Old Alabama Rd (1.10)=F			Campbellton-Fairburn Rd (.36)=A
GA 400 North (1.12)=F			
Source: Atlanta Regional Commission Transportation Model			

Similarly, intersections identified as having poor levels of service (LOS D, E, or F) are also listed within the Atlanta Regional Commission's Congested Management System Network (CMN) and will be considered when determining congestion mitigation concepts that address emerging problems. The CMN identifies all of the roadway facilities in the region that are currently or forecasted to experience considerable levels of congestion. Some of these facilities are also considered to be regionally significant by virtue of their importance to regional mobility. Mitigating congestion on these facilities is a priority for the Atlanta Region. ARC has forecasted which facilities would be the most congested by the year 2030. This list takes into

consideration the forecasted 2030 population and assumes that no new transportation projects are implemented (worst case/no-build scenario). Table 8-13 and table 8-14 list the congested roadways as defined by the ARC in Fulton County, including its municipalities. Roads listed on the Congested Management List are deemed as priority for the region and are listed in the Regional Transportation Plan.

Table 8-13: Congested Roadways as Defined in the Congestion Management System – in South Fulton County

Congested Facility	From	To	Problem / Causes
Buffington Rd.	Jonesboro Rd.	Old Bill Cook Rd.	Heavy Peak Period Volumes, Heavy Truck Volumes
Butner Rd.	Stonewall Tell Rd.	W. Stubbs Rd.	Heavy Peak Period Volumes
Camp Creek Pkwy	I-285 West	Hershel Rd.	Heavy Peak Period Volumes, Heavy Truck Volumes
Campbellton Rd.	Fulton Line	New Hope Rd.	Heavy Peak Period Volumes
Campbellton-Fairburn Rd.	Butner Rd.	Koweta Rd	Heavy Peak Period Volumes
Cascade Rd.	Fulton Industrial Blvd.	Danforth Rd.	Heavy Peak Period Volumes, Poor Signal Timing
Cascade-Palmetto Hwy.	Cedar Grove	Campbellton Rd.	Heavy Peak Period Volumes
Central Ave.	Bachelor St.	I-75 South	Heavy Peak Period Volumes
Cleveland Ave.	City of Atlanta	Paint St.	Heavy Peak Period Volumes
Cochran Mill Rd.	Cedar Grove Rd.	Cascade-Palmetto	Heavy Peak Period Volumes
Douglasville-Fairburn Rd.	Butner Rd.	Douglas County Line	Heavy Peak Period Volumes
Flat Shoals Rd.	Buffington Rd.	Dunbritan Ln.	Heavy Peak Period Volumes, Heavy Truck Volumes
Fulton Industrial Blvd.	I-20 West	Cascade-Palmetto Hwy.	Heavy Peak Period Volumes, Heavy Truck Volumes
Harrison Rd.	Central Ave.	Virginia Ave.	Heavy Peak Period Volumes
I-285 South	Clayton County Line	Dekalb County Line	Heavy Peak Period Volumes
I-75 South	I-85 South	I-285 South	Heavy Peak Period Volumes
I-85 South	I-75/I-85	I-285 South	Heavy Peak Period Volumes
I-85 South	I-285 South	Coweta County Line	Heavy Peak Period Volumes
Jonesboro Rd.	Bethsaida Rd.	I-85 South	Heavy Peak Period Volumes
Lakewood Fwy.	I-85 South	I-285 South	Heavy Peak Period Volumes
Metropolitan Pkwy.	City of Atlanta	Marina St.	Heavy Peak Period Volumes
MLK Jr. Dr.	City of Atlanta	Cobb County Line	Heavy Peak Period Volumes
Oakley Ind Blvd.	Jonesboro Rd.	Fayetteville Rd.	Heavy Peak Period Volumes
Old National Hwy.	Herschel Rd.	Flat Shoals Rd.	Heavy Peak Period Volumes
Rivertown Rd.	Roosevelt Pkwy/US 29	Cedar Grove Rd.	Heavy Peak Period Volumes
Roosevelt Hwy.	Rivertown Rd	Hershel Rd.	Heavy Peak Period Volumes
Roosevelt Pkwy.	SR 14 Spur	Old National Hwy.	Heavy Peak Period Volumes
Senoia Rd.	Fayette County Line	I-85 South	Heavy Peak Period Volumes
SR 14 Spur	Roosevelt Pkwy./ US 29	I-85/285 Connector	Heavy Peak Period Volumes
SR 29	Driftwood Rd.	Coweta County Line	Heavy Peak Period Volumes
Stonewall Tell Rd.	Jones Rd.	Campbellton Rd.	Heavy Peak Period Volumes
Virginia Ave.	I-85 South	Main St.	Heavy Peak Period Volumes
Washington Rd.	Stone Rd.	Camp Creek Pkwy.	Heavy Peak Period Volumes
Welcome All Rd.	Fulton County Line	Jailette Rd.	Heavy Peak Period Volumes

Source: Atlanta Regional Commission. Roads in incorporated cities are included in this table.

Table 8-14: Congested Roadways as Defined in the Congestion Management System – in North Fulton and Sandy Springs

Congested Facility	From	To	Problem / Causes
Abbots Bridge Rd/ SR 120	Jones Bridge Rd	Gwinnett County Line	Heavy Peak
Abernathy Road	Peachtree-Dunwoody Rd	Johnson Ferry Rd	Heavy Peak
Alpharetta Hwy/Cumming Hwy	Mid-Broadwell Road	W. Windward Pkwy	Heavy Peak, no turn lanes
Arnold Mill Rd	Rucker Rd.	Cherokee County	Poor intersection geometrics
Barnwell Rd.	Holcomb Bridge Rd.	Old Alabama Rd.	Heavy Peak
Birmingham Hwy	Nix Rd.	Crabapple Rd.	Heavy Peak
Canton St./Crabapple Rd.	Alpharetta St.	Birmingham Hwy	Heavy Peak
Crossville Rd.	Woodstock Rd.	Alpharetta St.	Heavy Peak
Duluth St./State Bridge Rd	Buice Rd	Main Street (Alpharetta)	Heavy Peak
Glenridge Drive	Johnson Ferry Rd	I-285 North	Heavy Peak
Glenridge Connector	I-285	Peachtree Dunwoody Rd	Heavy Peak
Hammond Rd.	Glenridge Conn.	Peachtree Dunwoody Rd	Heavy Peak, no turn lanes
Hardscrabble Rd.	Crabapple Rd.	Woodstock Rd.	Heavy Peak
Haynes Bridge Rd.	Old Alabama Rd.	SR 400	Heavy Peak, no turn lanes
Holcomb Bridge Rd.	Gwinnett County Line	Alpharetta St.	Heavy Peak
Hopewell Rd.	Cogburn Rd.	SR 9	Heavy Peak
I-285 West	I-20 West	Chattahoochee River (Cobb)	Heavy Peak
I-285 North	Chattahoochee River (Cobb)	Dekalb Co. Line	Heavy Peak
Johnson Ferry Rd	Glenridge Dr.	Dekalb Co. Line	Heavy Peak
Johnson Ferry Rd	Roswell Rd.	Cobb Co. Line	Heavy Peak
Jones Bridge Rd.	Old Alabama Rd.	Douglas Rd.	Heavy Peak, no turn lanes
Kimball Bridge Rd.	SR 120	Jones Bridge Rd.	Heavy Peak
Marietta Hwy	Atlanta St.	Cobb Co. Line	Heavy Peak
McGinnis Ferry Rd.	Gwinnett County Line	Jones Bridge Rd.	Heavy Peak
Medlock Bridge Rd.	Forsyth County Line	Old Alabama Rd.	Heavy Peak
Mt. Vernon Hwy	Dekalb Co. Line	N. Powers Ferry Rd.	Heavy Peak
Northridge Rd.	GA 400	Roswell Rd	Heavy Peak
Old Alabama Rd.	GA 400	Spruill Rd	No turn lanes, poor intersection geometrics
Old Roswell Rd.	Holcomb Bridge Rd.	Mansell Rd.	Heavy Peak
Peachtree-Dunwoody Rd	City of Atlanta	Spalding Dr.	Heavy Peak
Perimeter Pkwy West	GA 400	Mt. Vernon Hwy	Heavy Peak
Powers Ferry Rd.	Northside Dr.	Cobb Co. Line	Heavy Peak
Riverdale Valley Rd.	Johnson Ferry Rd.	Roswell Rd.	Heavy Peak
Riverside Dr.	Dalrymple Rd.	Mt. Vernon Hwy	Heavy Peak
Riverside Rd.	Roswell Rd.	GA 400	Heavy Peak
Roberts Dr.	Dekalb Co. Line	Northridge Rd.	Heavy Peak
Roswell Rd.	SR 120	Dalrymple Rd.	Heavy turn volumes, too many driveways
Spalding Dr.	Gwinnett County Line	Jett Ferry Rd	Heavy Peak
SR 120	Jones Bridge Rd	Gwinnett County Line	Heavy Peak
SR 120	Alpharetta St.	Mid Broadwell Rd	Heavy Peak
SR 140/Houze Rd.	Rucker Rd.	Mansell Rd.	Heavy Peak
SR 372/Birmingham Hwy	Crabapple Rd.	Wood Rd.	Heavy Peak period volumes
GA 400	I-285 North	Forsyth County Line	Heavy Peak period volumes

Table 8-14: Congested Roadways as Defined in the Congestion Management System – in North Fulton and Sandy Springs			
Congested Facility	**From**	**To**	**Problem / Causes**
SR 9	Forsyth County Line	Hembree Rd	Heavy Peak
State Bridge Rd.	Gwinnett County Line	Kimball Bridge Rd.	Heavy Peak
Woodstock Rd/Crossville Hwy	Alpharetta St.	Cobb County Line	Heavy Peak
Source: Atlanta Regional Commission. Roads in incorporated cities are included in this table.			

Average Daily Vehicle Trips

The Average daily traffic (ADT) is an average 24-hour traffic volume at a given location for some period of time, but less than a year. Traffic volume is defined as the number of vehicles that pass a point on a road or a given lane or direction of a road, during a specified time interval daily volumes are frequently used as the basis for road planning and general observation of trends. Traffic volume projections are often based upon measured daily volumes. These measured daily volumes are categorized by vehicle trips in the AM-(Morning), MIDDAY, PM-(Afternoon between 4pm-7pm), NT-(Night After 7pm), and Total Vehicle trips from the entire day, Morning (AM) and Afternoon (PM). The optimal measure to use to capture the highest number of vehicle trips on a road during a specified period of time is the "PM" average daily vehicle trip.

PM is the time frame between 4pm and 7pm, at this time, streets, roads, and highways are most congested. The average daily vehicular trips performance measure has direct impact on a road's level of service, and its ability to function at it optimal capacity. The Average Daily Vehicular Trips for unincorporated roads Fulton County is in Appendix D.

Existing Modal Split and Vehicle Occupancy Rates

Fulton County like many counties in the Atlanta Region, experience problems of traffic congestion and air pollution, which peaks during normal commuting hours. To a great degree these problems stem from access to and the convenience created by individual use of automobiles. Low density development and separated land use patterns exacerbate these problems. This requires people to drive longer distances for housing jobs, shopping and services. The Clean Air Campaign, ARC's Commute Connections and Transportation Management Associations encourage commuters and the region's drivers to switch from the dominant single-occupant vehicles, especially for their work commute, to other modes of transportation such as carpooling, mass transit, bicycles and walking. To the extent the people make such a switch, the problems of traffic congestion and air pollution can be lessened. Less traffic congestion and air pollution can result in a healthier environment and population. Less traffic may also reduce public infrastructure costs[1]. The Journey-to-Work Survey, conducted by the United States Census, indicates the travel mode of the workforce. Table 8-16 shows the most utilized modes of transportation of the Fulton County workforce.

[1] The 2000 Journey to Work in the Atlanta Region by Amy Helling and Robert Holbrook

TABLE 8-16: Journey to Work Modal Split for Fulton County in 2000		
Mode	**Number**	**Percent**
Car, Truck, or Van –drove alone	273,964	74%
Car, Truck, or Van –carpooled	40,601	11%
Public transportation (including taxicab)	28,130	7%
Pedestrian	6,968	2%
Other Means	3,552	1%
Work at home	17,050	5%
Mean travel time to work (minutes)	25.0	
Total Workers 16 Years and over	**370,265**	
Source: US Census 2003		

Approximately 74% of the 370,265 workforce drives alone in a private vehicle as the primary mode of commuting to work. Approximately 11% carpooled, 7% utilized public transit and less than 2% walked or used the bicycle. People drive alone for a number of reasons including work schedule, personal preference, convenience, proximity to destinations, lack of access to pubic transit or rail options, and dependable transportation.

These numbers demonstrate that more must be done to provide alternatives to the single occupancy vehicle. If not, congestion will impact the overall quality of life in Fulton, and the competitiveness of the region will diminish. The need for funding transportation improvements will continue to rise at unprecedented rates, as the roadways operate at capacity.

In addition to mode preference, the survey examined those travelers that choose to ride with companions in a 2-person, 3-person, or a four-or-more person car pool. Table 8-17 illustrates the number of travelers that carpool versus the number of travelers that drive alone. In 2000, 86% of Fulton County drivers commuted by single occupancy private vehicles while approximately 13.9% carpooled.

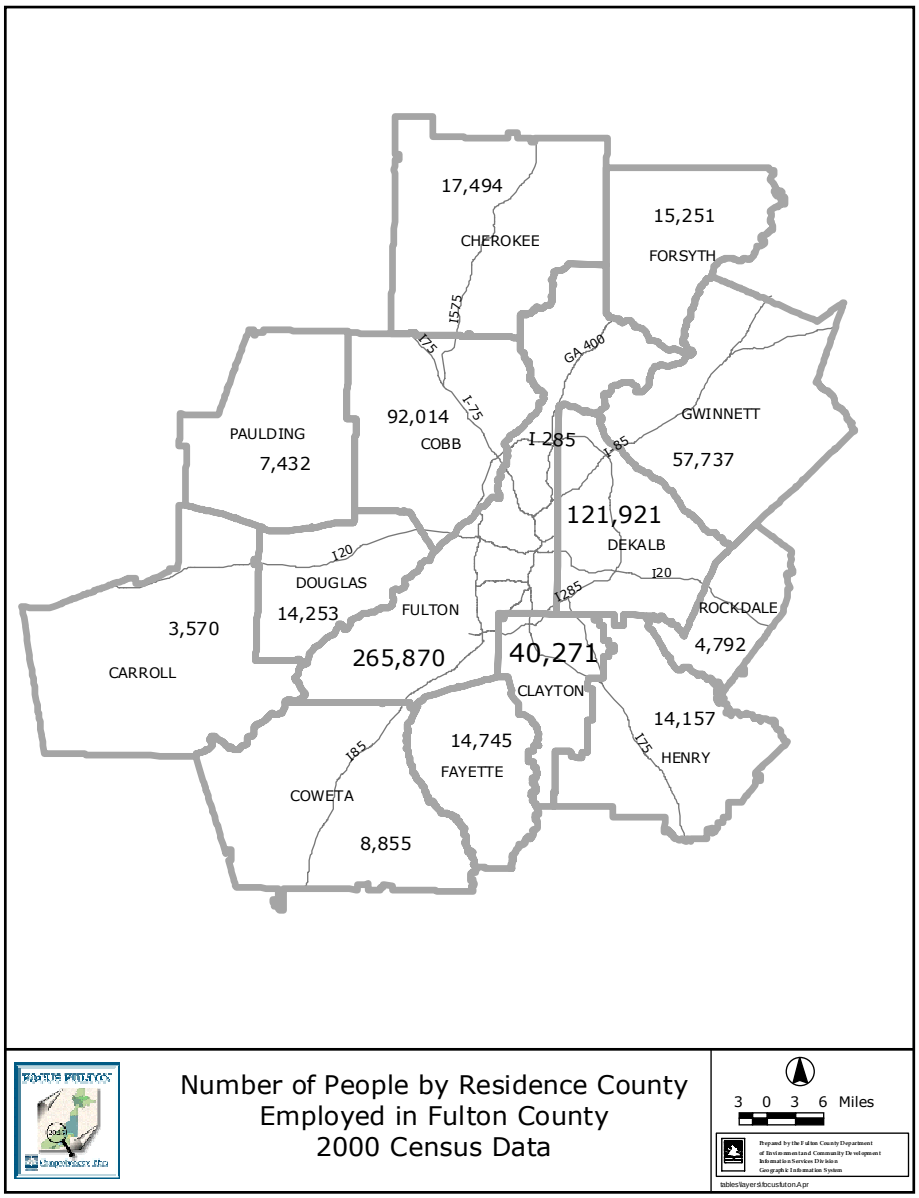
Table 8-17: Number and percentage community trips in private vehicles in 2000	
Trips	**Fulton Workforce**
Commute trips by private car, truck, or van	**319,968**
%	100%
Drove alone	275,363
% Drove alone	86.1%
2 Persons	32,0269
Percent 2 Persons	10.0%
3 Persons	6,794
% 3 Persons	2.1%
4 Persons	3,392
% 4 Persons	1.1%
5 or 6 Persons	1,514
% 5 or 6 Persons	0.5%
7 or more	876
% 7 or more	0.3%
Carpooled	44,605
% Carpooled	13.9%
Source: US Census 2000	

In 2000, of the 385,442 Fulton County residents in the work force, 69% worked in Fulton County, 10.7% worked in Dekalb County and 20.3% worked in surrounding counties (Table 8-18). Of the 717,865 people working in Fulton County, 37% live in Fulton County, 17% live in Dekalb County, 13% live in Cobb County and 27% live in other surrounding counties (Table 8-19). Many of the region's main employment centers are located in Fulton County. As a result, the majority of those that work in Fulton County don't live in the County. This raises the issue, whether non-Fulton County residents employed in the county should be assessed special commute tax or charged to contribute towards transportation improvement projects. Map 8-8 illustrates the counties that commuters are driving from to work in Fulton County.

Table 8-18: Counties Where Fulton County Residents Worked in the 2000

Work Place County	Number	Percent
Fulton Co. GA	265,870	69.0%
DeKalb Co. GA	41,232	10.7%
Cobb Co. GA	24,991	6.5%
Gwinnett Co. GA	21,211	5.5%
Clayton Co. GA	9,722	2.5%
Forsyth Co. GA	5,626	1.5%
Fayette Co. GA	1,633	0.4%
Douglas Co. GA	1,192	0.3%
Cherokee Co. GA	1,129	0.3%
Bartow Co. GA	990	0.3%
Henry Co. GA	954	0.2%
Coweta Co. GA	950	0.2%
Carroll Co. GA	705	0.2%
Other Places	9,237	2.4%
Total	385,442	100.0%

Source: US Census Bureau, Atlanta Regional Commission.



Map 8-8: County of Residence of Fulton County Workforce

Table 8-19: County of Residence of Persons Working in Fulton County, 2000		
	Employees	
County	Number	% of Total
Fulton	265,870	37%
Dekalb	121,921	17%
Cobb	92,014	13%
Gwinnett	57,737	8%
Clayton	40,271	6%
Cherokee	17,494	2%
Forsyth	15,251	2%
Fayette	14,745	2%
Douglas	14,253	2%
Henry	14,157	2%
Coweta	8,855	1%
Paulding	7,432	1%
Rockdale	4,792	1%
Other	43,073	6%
Total	**717,865**	**100%**
Source: US Census Bureau		

Table 8-20 shows an average commute time of 29 minutes for Fulton County residents in the workforce. While commute times increased by 16% from 1990 to 2000, Fulton County residents have one of the shortest commutes. Commute times, increase in vehicle miles traveled and longer peak hours are probably impacted by the volume generated by commuters from neighboring counties. While other counties have been able to adopt a Special Options Sales Tax (SPLOST) tax to invest in transportation projects, Fulton County has invested its sales tax in public transit.

Table 8-20: Average Minutes of Travel Time per Commuting Trip in 1990 and 2000 by County of Residence				
County	1990 Average Commute Trip (Minutes)	2000 Average Commute Trip (Minutes)	Change in Average Commute Trip (minutes)	% Change in Average Commute Trip 1990-2000
Cherokee	31.4	34.4	+3.0	%9.6
Clayton	24.0	29.8	+5.8	%24.2
Cobb	26.9	31.3	+4.4	%16.4
Dekalb	25.4	31.7	+6.3	%24.8
Douglas	27.9	32.3	+4.4	%15.8
Fayette	26.8	30.6	+3.8	%14.2
Fulton	24.9	29.1	+4.2	%16.9
Gwinnett	26.2	32.2	+6.0	%22.9
Henry	27.9	32.7	+4.8	%17.2
Rockdale	26.9	29.5	+2.6	%9.7
ARC Region	26.9	31.1	+5.1	%19.6
Source: US Census 2000				

B. Availability and adequacy of Transportation Facilities and Services

The ARC Transportation Model can determine the availability and adequacy of transportation and services to serve existing and future land uses by the volume/capacity ratio and the level of service outputs. In order to have the capacity needed to support future population growth, transportation improvements must be made and funding must be made available to make the necessary transportation improvements. The major corridors in North Fulton and Sandy Springs have a level of service of D or worse at the present time (Table 8-14). Additional growth without concurrent road improvements in the major corridors throughout unincorporated Fulton will only compound the road challenges presently experienced. In conjunction with the future road needs, Tables 8-21A-D for North Fulton, Sandy Springs, Southwest Fulton, and South Fulton illustrate the amount of land that will be needed approximately to accommodate future population growth.

Table 8-21a: Unincorporated North Fulton Land Use and Demographics

2005			Change 2005-2025	
Population	Residential Acres	Acres/person	Population	Potential acres needed
93,192	18,494	0.19	24,019	4,766
Households	Residential Acres	Acres/household	Households	
36,508	18,494	0.50	11,416	5,783
Employment	Employment Acres	Acres/job	Employment	
53,447	2,461	0.04	31,106	1,432
Source: Existing Land and E&CD forecasts				

Table 8-21b: Sandy Springs Land Use and Demographics

2005			Change 2005-2025	
Population	Residential Acres	Acres/person	Population	Potential acres needed
86,698	12,248	0.14	19,163	2,707
Households	Residential Acres	Acres/household	Households	
42,683	12,248	0.28	10,871	3,119
Employment	Employment Acres	Acres/job	Employment	
141,282	2,517	0.01	20,575	366
Source: Existing Land and E&CD forecasts				

Table 6-21c: Southwest Fulton Land Use and Demographics

2005			Change 2005-2025	
Population	Residential Acres	Acres/person	Population	Potential acres needed
12,851	4,761	0.37	8,690	3,219
Households	Residential Acres	Acres/household	Households	
5,539	4,761	0.89	5,255	5,517
Employment	Employment Acres	Acres/job	Employment	
21,132	3,835	0.18	4,442	806
Source: Existing Land and E&CD forecasts				

Table 8-21d: South Fulton Land Use and Demographics				
2005			**Change 2005-2025**	
Population	Residential Acres	Acres/person	Population	Potential acres needed
52,439	16,202	0.3	55,050	17,008
Households	Residential Acres	Acres/household	Households	
16,955	16,202	0.95	17,395	16,622
Employment	Employment Acres	Acres/job	Employment	
20,949	3,682	0.17	16,282	2,861
Source: Existing Land and E&CD forecasts				

C. Means of optimizing utilization of existing streets, roads, and highways

Transportation Demand Management

Transportation Demand Management (TDM) is a key strategy in the ARC's long-range Regional Transportation Plan (RTP). TDM measures are used to increase transportation system efficiency, reduce traffic congestion and improve air quality at the regional level. Transportation Demand Management (TDM) is the collective term for strategies and techniques that can be used to increase the efficiency of the transportation system. These strategies and techniques generally include: ride-sharing programs, flexible work hours, telecommuting, shuttle services, and parking management. TDM strategies work to provide alternatives to the single-occupancy automobiles by reducing local peak hour volumes. Fulton County Government offers the following to its employees to help reduce the burden on the transportation system:

- Reduced priced MARTA Rail/Bus Cards to encourage the utilization of public transit. Most of the cities within Fulton County are served either by MARTA Bus routes and/or Rail Stations with park and ride lots;

- Flexible work hours, and telecommuting options for specific job functions, in order to help reduce the number of vehicles on the road during peak travel times;

- Shared parking for those employees that must drive into work, the county has partnered with the Atlanta Braves organization, to utilize their existing parking area as parking management strategy to reduce the need for more impervious surface.

TDM is a regional strategy that can not be solely addressed by any one county, but by the collective efforts of all the counties in the Atlanta Region Area. Below is a list of Transportation Demand Management strategies planned in the Fiscal Year 2005-2010 Transportation Improvement Program (TIP) Project list.

- Metro Atlanta Ultra Low Sulfur Diesel
- School Bus Retrofit Program
- Truck Stop Electrification Program
- Framework Partners-TDM Employer Services & Incentives
- Framework Partners-TDM Advertising and Public Relations

- Framework Partners-TDM Regional Ridesharing
- Framework Partners-Measurement and Needs Assessment

These efforts in conjunction with regional efforts, influence the amount and demand for transportation alternatives to the single-occupancy automobile and alter local peak hour travel demand. Fulton County has a number of Transportation Management Associations (TMA) which promote transportation options in areas of the county with large employment concentrations. The TMA's include:

a. Buckhead Transportation Management Association (BATMA): BATMA is a partnership of private businesses, public agencies and residential and civic associations within the Buckhead Community. Since its inception in 1997, BATMA's mission has been to work cooperatively to improve mobility, accessibility and air quality in the Buckhead community. BATMA offers a variety of transportation services that provide relief for commuters, residents and visitors traveling in and around Buckhead.

b. Downtown TMA (Central Atlanta Progress): The Downtown Atlanta TMA is a program of Central Atlanta Progress, Inc. (CAP), a private not-for-profit organization that represents the interests of businesses and Downtown organizations. The TMA was created to provide services to Downtown employers that will encourage and support the use of alternative transportation and to advocate for Downtown Atlanta's transportation needs. The TMA focuses on reducing traffic congestion, facilitating mobility in the area, addressing parking demand and improving the region's air quality. Several programs are offered, including: ride-matching assistance, Guaranteed Ride Home, a discounted transit program for all transit providers connecting to Downtown, bike and pedestrian seminars, and alternative work arrangement consultation. The Downtown Atlanta TMA also serves as facilitator for cooperative planning and coordination among private and public sector employers and service providers.

c. Hartsfield Area TMA (HATMA): HATMA provides transportation services to member employees in the Hartsfield Atlanta International Airport area. HATMA is particularly focused on increasing accessibility and mobility, reducing congestion, improving air quality, and promoting economic development. In order to achieve this goal HATMA offers many incentives and discounts to commuters and businesses using alternative methods of transportation.

d. Midtown Transportation Solutions: Midtown Transportation Solutions (MTS), a project of Midtown Alliance, was created to address traffic issues, promote transportation alternatives, advocate for pedestrian improvements and focus attention on the regional effort to improve air quality.

e. The Perimeter Transportation Coalition (PTC): PTC is a community-sponsored nonprofit organization dedicated to helping businesses work together to improve access and mobility throughout Atlanta's Central Perimeter area. The PTC offers commuting alternatives to employers and employees while working to improve the transportation infrastructure

around the Central Perimeter. The PTC is a resource for the business community to find better ways to move people around the Central Perimeter.

f. Commute Connections: Commute Connections, a program of the Atlanta Regional Commission, provides a regional ride matching service.

Growth Trends and Travel Patterns

Over the past several decades, unincorporated Fulton County has developed in a suburban development pattern. This development pattern is characterized by segregated land uses, low density, and the lack of an adequate transportation network. All of these factors have resulted in heavily dependent automobiles communities. The lack of policies and coordination between transportation, development and growth, has impaired air quality, diminished natural resources, reduced available greenspace, and has congested roadways.

In early 2000, Fulton County introduced new development polices aimed at promoting sustainable development and smart growth. One of the goals is to connect land use and transportation in order to efficiently utilize land resources. In recent years, Fulton County has established new policies in concert with the Atlanta Regional Commission's Regional Development Plan (RDP). The RDP are policies intended to: guide future regional growth through land use decision process as they relate to transportation, environmental and other public investment decisions; and shape growth appropriately and protect existing stable areas of the region. Table 8-22 summarizes the fourteen policies outlined in the RDP.

Table 8-22: 2003 Regional Development Policies

Policy 1	Provide development strategies and infrastructure investments to accommodate forecast population and employment growth more efficiently.
Policy 2	Guide an increased share of new development to the Central Business District, transportation corridors, activity centers and town centers.
Policy 3	Increase opportunities for mixed-use development, infill and redevelopment
Policy 4	Increase transportation choices and transit-oriented development (TOD).
Policy 5	Provide a variety of housing choices throughout the region to ensure housing for individuals and families of diverse incomes and age groups.
Policy 6	Preserve and enhance existing residential neighborhoods
Policy 7	Advance sustainable development
Policy 8	Protect environmentally sensitive areas.
Policy 9	Create a regional network of greenspace that connects across jurisdictional boundaries.
Policy 10	Preserve existing rural character.
Policy 11	Preserve historic resources.
Policy 12	Inform and involve the public in planning at regional, local and neighborhood levels.
Policy 13	Coordinate local policies and regulations to support the RDP
Policy 14	Support growth management at the state level
Source: Atlanta Regional Commission	

In addition to the regional policies, Fulton County adopted a Smart Growth Plan and Strategies in 2002. These strategies provides for: the efficient use of land and public infrastructure; future planned population growth; multiple housing and transportation options; protection of the

environment, and creation of communities that incorporate a mix of uses for a diverse population. The Implementation Element of this Comprehensive Plan has goals, policies, and strategies that direct growth and travel patterns. These goals, policies, and strategies detail the county's plans for encouraging and accommodating future mixed-use developments, transit-oriented developments (TOD's), and other such developments that promote alternative transportation modes.

One of the major policy tools that will be used to facilitate the change in development pattern that provides opportunities for transportation options is the Live Work land use category The purpose of the Live Work land use category is to allow an appropriate and balanced mix of uses to create a live work environment at a scale and character that is compatible with its surrounding community. Live Work areas will be activity centers where the community can live, work, shop, meet, and play. These areas should be compact, pedestrian-oriented, mixed-use and incorporate open space. This will result in the protection of environmental resources, accessible open space, a balance of all modes of transportation, housing choices and civic interaction.

A substantial segment of the forecasted population will be directed from a Land Use perspective, to those areas designated as Live Work. Moreover, Fulton County's public facility and infrastructure investment should also be located in areas designated as Live Work. The 2025 Land Use Maps for North, Sandy Springs, Southwest and South Fulton illustrate the new live work areas. They are generally located on major thoroughfares, along transit stateions or near interstate highways to support the densities generated from these activity centers. There are three types of live work designations that will be used depending on the development patterns, growth trends and/or existing/planned transportation infrastructure in the area. They are described below.

1. Live Work Neighborhood: This is a low density residential and mixed use land use intended to serve a single neighborhood or small group of adjacent neighborhoods. Residential densities should not exceed 5 units per acre.

2. Live Work Community: This is a medium density residential and mixed use land use along corridors and nodes intended to serve a group of adjacent neighborhoods. Residential densities should not exceed 9 units per acre.

3. Live Work Regional: This is a high density residential and mixed land uses along major transportation corridors and/or heavy rail transit stations intended to serve larger areas and provide larger commercial uses with a significant employment concentration. Residential densities can exceed 9 units per acre.

Furthermore, Transit-Oriented Development and compact pedestrian oriented development is promoted in Fulton County through the Atlanta Regional Commission Livable Centers Initiative (LCI) Study Grants. Unincorporated Fulton County has been awarded grant monies for Sandy Springs, Sandtown, Old National Highway, and the Chattahoochee Hill Country. The focus of the LCI program is to encourage increased residential development, mixed uses and connectivity in activity and town centers. Development adjacent to public transit or in close proximity is important component of mixed used development in the county.

The 2025 land use policies identify the areas around the three (3) transit stations in Sandy Springs as areas that area appropriate for Transit Oriented Development (TOD). A development company was selected to develop mixed use development at MARTA's 11-acre property near the Sandy Springs Station, at Georgia 400 and Barfield Road. The project will include a 570,000 square foot office building, a 400 room hotel and 150 condominiums. There is also a TOD planned for Fulton Industrial Boulevard at Interstate 20.

Redevelopment and infill development efforts along the Old National Highway will be planned and developed to encourage MARTA ridership by bus, and/or rail at the College Park Station. The Chattahoochee Hill Country and Sandtown LCI's, while they are presently not located in areas that provide access to MARTA, explored the utilization of express bus systems, and/or shuttles to public transit, as an interim strategy until future stations are planned in these areas.

Existing and Projected Intermodal Deficiencies & Intermodal Terminals and Connections.

Public transit intermodal systems (e.g. connections, terminals, park-n-ride lots) are planned and projected by MARTA. Presently there are no plans for new rail lines in unincorporated Fulton County. High Occupancy Vehicles lanes are projected and planned by Georgia Department of Transportation for the interstate system. Fulton County however, would like to see more plans for HOV lanes on GA-400 and Interstate 285. This would help promote mobility and provide options to motorist that would carpool if HOV lanes were provided.

High Occupancy Vehicle (HOV) Lanes

In September 2001, the Georgia Department of Transportation (GDOT) initiated an 18-month project to develop a High-Occupancy Vehicle (HOV) Strategic implementation Plan for the Atlanta Region. The purpose of the plan was to provide GDOT and its regional planning partners with a strategy for building HOV lanes now and in the future. Phase I, the first six months of the study, consisted of a detailed analysis of HOV corridors identified in the Atlanta Regional Commission's (ARC) 2025 Regional Transportation Plan. Phase II, the final phase of the study, evaluated feasible improvements to the existing lanes and potential extensions of the HOV System beyond the 2025 RTP to the 21 county non-attainment areas under the Clean Air Act. The Georgia Department of Transportation's Report HOV Strategic Implementation Plan for the Atlanta Region details the HOV project prioritization.

Park and Ride Lots

There are more than 33,600 parking spaces in park-and-ride lots in the Atlanta region in 2004. The Georgia Department of Transportation (GDOT) operates 18 park-and-ride lots in all the counties in the Atlanta Region with the exception of Cobb and Fayette. In 2004, there were a total 4,862 parking spaces in GDOT operated lots. MARTA operates 27 park-and-ride lots with more than 25,500 spaces at rapid rail stations and nine park-and-ride lots with more than 3,000 at MARTA bus stops in Fulton and Dekalb counties.

There are currently eight park and ride lots in Fulton County, most are operated by MARTA. Park and ride lots provide service for express buses, carpooling, and vanpooling and rail service. As the transit system is expanded, demand for park and ride lots will increase. The following park and ride lot locations are in Fulton County:

- I-85 at Flat Shoals Road
- Campbellton at Fairburn
- GA 400 at Abernathy Road
- GA 400 at Mansell Road
- Medical Center MARTA Station
- Dunwoody MARTA Station
- Sandy Springs MARTA Station
- North Springs MARTA Station

The Atlanta Region Transportation Planning Fact Book for 2004 stated that Fulton County averaged a total of 1,445 park-and-ride lot spaces, but only experienced an 8% usage of the lot spaces.

Transportation Requirements for Non-Attainment Areas

Local governments located within a nationally designated ambient air quality standards non-attainment area must include three elements in their comprehensive plan: a map of the area designated as a non-attainment area for ozone, carbon monoxide, and/or particulate matter, a discussion of the severity of any violations contributed by transportation-related sources that are contributing to air quality non-attainment, and identification of measures, activities, programs, regulations, etc., the local government will implement consistent with the state implementation plan for air quality. The non-attainment area for the region is shown in Map 8-9.

Ozone

One-hour Ozone National Ambient Air Quality Standard (NAAQS)

In 1990, the Atlanta metropolitan area was one of 91 areas in the United States designated as non-attainment under the one-hour ozone standard. Currently 13 counties in the Atlanta area, are designated as non-attainment under the one-hour ozone standard. The 13 counties consist of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale.

Eight-hour Ozone NAAQS

The Clean Air Act requires that the NAAQS be reviewed every five years to determine if they need to be updated. In 1997, the ozone NAAQS was revised to reflect improved understanding of the health impacts of this pollutant. As a result, the eight-hour ozone standard was established. The eight-hour ozone standard is based on extensive research indicating ozone is more harmful when a person is exposed over a longer period of time, even if the ozone concentration is lower.

In April 2004, 20 counties within the Atlanta metropolitan area were designated as non-attainment under the eight-hour ozone standard, with an effective date of June 15, 2004. A transportation conformity demonstration is required one year from the effective date of

designation, by June 15, 2005. The counties within the Atlanta eight-hour ozone non-attainment area are Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, Rockdale, Hall, Barrow, Walton, Newton, Spalding, Carroll, and Bartow. This is the one-hour ozone standard plus seven additional "ring counties".

The USEPA does not intend for there to be two standards in place at the same time. For this reason, the less stringent one-hour ozone standard will be revoked one year after the effective date of designation under the new standard, i.e., the one-hour ozone standard will be revoked in full on June 15, 2005.

PM2.5

In 1997 when the standards for ozone were reviewed, the particulate standards were also reviewed. A new PM2.5 standard (or fine particulate matter) was established to reflect the latest research which revealed that smaller particles can more easily penetrate into the lungs and the bloodstream.

On January 5 2005, the USEPA designated 20 whole counties and 2 partial counties as non-attainment for fine particulates in the Atlanta metropolitan area with an effective date of April 5, 2005. The 20 whole counties are Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, Rockdale, Hall, Barrow, Walton, Newton, Spalding, Carroll, and Bartow. The 2 partial counties are Henry and Putnam.

The Ozone Non-Attainment Boundary Designation Process

Ground-level ozone is a regional problem that requires regional controls on both non-point (mobile) and point (commercial and industrial) sources that contribute to the ozone problem. In addition, ground level ozone (and/or the precursors to ground level ozone) can be transported over a significant geographical area, making non-attainment boundary determinations difficult, especially for a county by county determination. In recognition of the difficulty in designating an area as attainment or non-attainment, the Environmental Protection Agency identified 11 factors that should be considered by States when making recommendations of attainment or non-attainment in the presence of an ozone monitor that records a ground-level ozone presence above or exceeding the NAAQS. These factors are as follows:

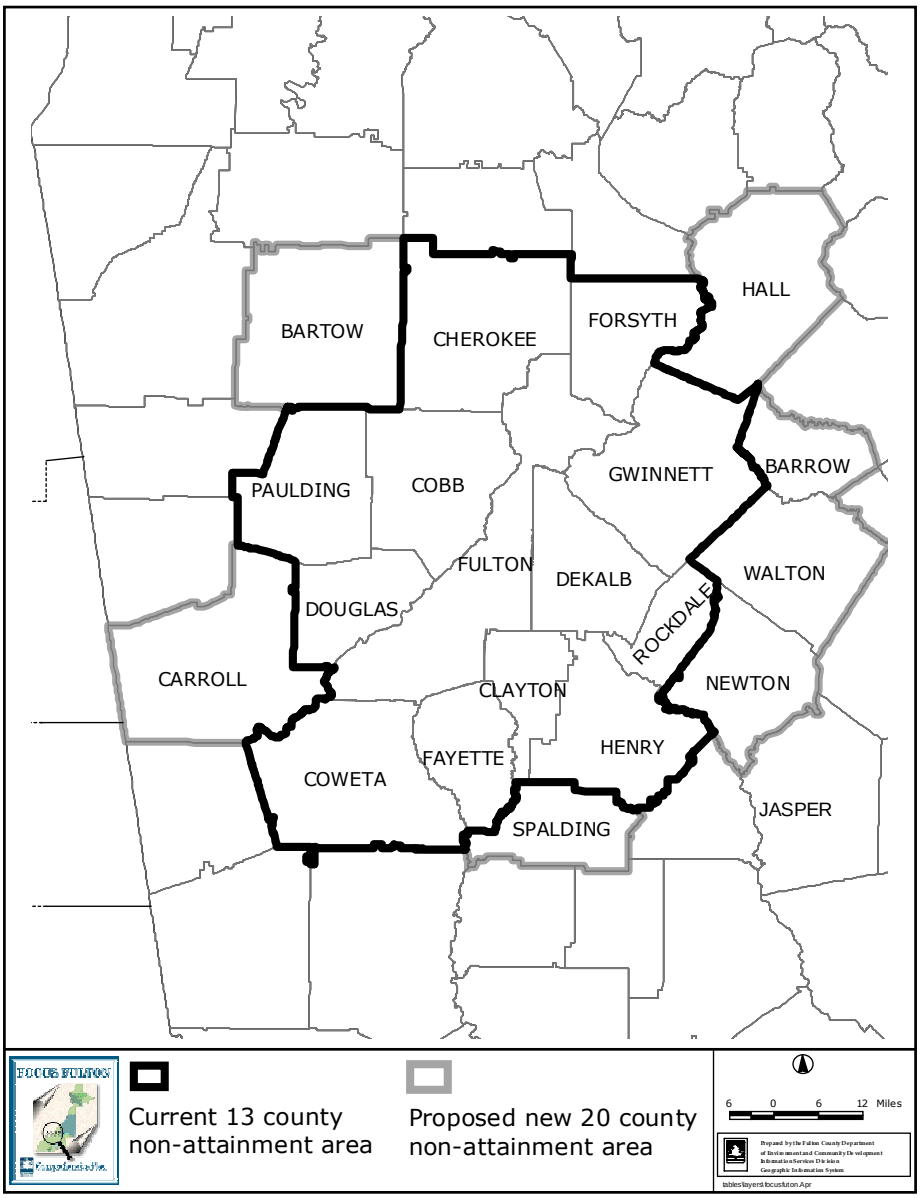
- Location of emission sources
    - Large point or industrial sources such as power plants and chemical plants.
    - State Environmental Divisions will have information on the types and amounts of pollutants released by individual firms.
    - Can also consider mobile sources such as high residential density or vehicle ownership.
- Emissions and air quality in adjacent areas, including adjacent cities or metro areas
    - For example, Macon and Athens would take into account the potential transport of ozone from Atlanta.
- Monitoring data representing the ozone concentrations in local areas as well as larger areas

  - State Environmental Divisions do have ozone monitors in various locations throughout the States. However, monitors are expensive to purchase, as well as to maintain, so it is not practical or feasible to have a monitor in every county.
  - If a monitor records a violation of an ozone standard, then that county is designated as non-attainment for that standard.
- Traffic and commuting patterns
  - Large commutes into an ozone non-attainment area may be enough to qualify a county as non-attainment (due to the contribution level through increased vehicle emissions).
- Population Density
  - Higher population densities are an indication of a more urbanized area, which would indicate a higher likelihood of producing ground-level ozone.
- Expected growth
  - Forecasted population densities as well as forecasted industrial growth
- Meteorology
  - Wind patterns and proximity to ocean
- Geography and/or Topography
  - Mountain and valley regions
- Level of control existing for emission sources
  - Some States have the ability to implement pollution control measures independent of Federal requirements.
- Regional emission reductions
  - For example: lowering the speed limit (with adequate enforcement), selling low sulfur diesel sooner than required, etc.
  - Ozone modeling indications
- Jurisdictional boundaries
  - Jurisdictional boundaries are an important consideration due to the degree of interaction and cooperation among areas; a regional problem requires a coordinated regional solution. While this alone would not impact whether a county is in attainment or non-attainment based on contributions to the ozone problem, it is at least an important consideration when looking at regional controls and implementation.

Although the above discussion is specifically focused on ozone, the guidelines issued by EPA for PM2.5 non-attainment boundary determinations are very similar. In short, most of the factors or considerations listed remain the same. Public health effects for fine particulates are similar to those of ozone.

Consistency with State Implementation Plan

The Clean Air Act requires that every state meet health-based National Ambient Air Quality Standards (NAAQS). If one or more of the NAAQS are not met, the State Environmental Protection Division must develop a State Implementation Plan (SIP) that defines a plan to attain the air quality standard by a particular year. The SIP provides measures, activities, programs, and regulations used by a state to reduce air pollution. Local governments in non-attainment areas are required to describe the actions each is taking to promote better air quality such as programs like a clean air campaign, automobile emissions testing or measures used to encourage efficient land use to reduce pollution.



Map 8-9: Non-Attainment Boundaries for the Atlanta Region