TECHNICAL APPENDIX

COMMUNITY ASSESSMENT, COMPREHENSIVE PLAN

CITY OF CUMMING, GEORGIA

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CHAPTER 1
POPULATION

This chapter is devoted to an inventory and analysis of past and present population and household characteristics. An understanding of population growth and general population characteristics is an important first step in completing a comprehensive plan. Analyzing where the people are, in what amounts and composition, and at what rates they are expected to increase in number helps to determine the location and need for public facilities, capital improvements, housing, and employment opportunities.

HISTORIC POPULATION TRENDS

The city gained only about 300 persons each decade during the 1930s, 1940s, and 1950s. During the 1960s, Cumming gained 470 persons, but then the city witnessed a population growth of only 63 persons in the 1970s. Population growth during the 1980s was more significant, when the city added 769 persons. The city had 4,220 residents in 2000, an increase of 1,392 persons during the 1990s. A substantial portion of the population increase during the 1990s was attributed primarily to the annexation of already-developed single-family subdivisions.

The American Community Survey, a web-accessible publication of the U.S. Census Bureau, provides estimates for the 2005-2009 5-year period for cities and counties in the nation, much the same as the decennial Census. These estimates are subject to sampling variability and have a wide margin of error, however, to the point that they are not always reconcilable with past trends and the limited data available now from the 2010 Census. Furthermore, the estimates provided by the American Community Survey are less helpful because they are for a range of years (i.e., from 2005 to 2009), and could therefore be considered applicable to 2005, 2009, or any year in between.

The American Community Survey (Table B01003) indicates the city's population as of 2005-2009 was 5,778 with a margin of error of +/- 22 persons. Annual estimates provided by the U.S. Census Bureau for the year 2007 indicate the Cumming's population was 5,842 in 2007. The 2010 total population count from the 2010 Decennial Census is now available and is more accurate since it is based on a 100 percent count of the population rather than a sample or estimate.

Cumming's population grew to 5,430 persons in 2010 according to the decennial census, an increase of 1,210 residents. This total population of 5,430 in 2010 is considerably lower than the annual estimates for 2007 by the U.S. Census Bureau and the 2005-09 estimates from the American Community Survey. As a share of total population in the county, the city's population has decreased during past decades from 7.5 percent in 1980, to 6.4 percent in 1990, to 4.3 percent in 2000, to 3.0 percent in 2010, due to extensive residential subdivision development in unincorporated Forsyth County.

Cumming's 2004 comprehensive plan projected the 2010 population of the city to be 5,608. Note that the total population per the 2010 Census is slightly less than that projected in 2004. The majority of Cumming's population increase during the 2000s is attributed to housing construction in just three developments. During that time period, Cumming added about 190 townhouses in one project off Castleberry Road, 20 single-family detached homes north of Kelly Mill Road, and 160 units in a townhouse project off Veterans Memorial Parkway at Atlanta Road

(SR 9). These three developments constituted virtually all of the total population gain during the time period.

Table 1.1
Historic Population Trends, 1990-2010
City of Cumming and Forsyth County

Jurisdiction	1990	%	2000	%	2010	%
City of Cumming	2,828	6.4%	4,220	4.3%	5,430	3.0%
Unincorporated County	41,255	93.6%	94,187	95.7%	170,081	97.0%
Total Forsyth County	44,083	100%	98,407	100%	175,511	100%

Source: U.S. Department of Commerce, Bureau of the Census. 1990, and 2000 Census. U.S. Bureau of Census, 2010 Census Redistricting Data (PL 94-171) (first release of 2010 Census), April 2011.

Table 1.2 shows the percentage change in population between decennial censuses for the city, county, and state. The state of Georgia's population grew by more than 1.5 million people, from 8,186,453 in the year 2000 to 9,687,653 in 2010, a growth rate of 18.3 percent. The city's decennial growth rate from 2000 to 2010 (28.7 percent) slowed when compared with 1990-2000, due to fewer annexations of residential land, but that decennial growth rate still exceeded that of the state. Cumming's decennial growth rate, however, was significantly less than the growth rate experienced by Forsyth County as a whole.

Table 1.2
Percent Change of Population, 1990-2000 and 2000-2010
City, County, and State

Jurisdiction	Percent Change, 1990-2000	Percent Change, 2000-2010
City of Cumming	49.2%	28.7%
Forsyth County	123.2%	78.4%
State of Georgia	26.4%	18.3%

Source: U.S. Department of Commerce, Bureau of the Census. 1990 and 2000 Census; Census 2010 Redistricting Data (PL 94-171 data) released April 2011.

HOUSEHOLD AND GROUP QUARTERS POPULATION TRENDS

The vast majority of this population gain during the 1990s was due to an increase in the household population (1,242 persons added from 1990 to 2000). The city witnessed a population gain from 1990 to 2000 in part due to nursing and personal care homes being developed in the city. The group quarters population as of 2000 consisted of 133 persons in correctional institutions, 262 persons in nursing homes, and 27 persons in other non-institutional group quarters (2000 Census, SF1).

Table 1.3 provides population figures by household population and group quarters population in 1990, 2000, and 2010. Decennial counts released in June 2011 indicate that Cumming had 4,869 people living in households in 2010 (89.7 percent of the population) (see Table 1.3). The group quarters population increased slightly as a percentage of the total population in Cumming from 2000 to 2010.

Table 1.3
Historic Household and Group Quarters Populations, 1990-2010
City of Cumming

Type of Population	1990 Census	%	2000 Census	%	2010 Census	%
Household Population	2,557	90.4%	3,799	90.0%	4,869	89.7%
Group Quarters Population	271	9.6%	421	10.0%	561	10.3%
Total Population	2,828	100%	4,220	100%	5,430	100%

Source: U.S. Department of Commerce, Bureau of the Census, Census 1990, 2000, and 2010.

The number of households is important in part because it reflects the needs for housing units. The city added 454 households during the 1990s. According to the 2010 Census (PL 94-171 data), Cumming had a total of 1,893 households in 2010, an addition of 466 households in the 2000s (see Table 1.4).

Table 1.4
Households by Type of Household, 1990-2010
City of Cumming

Households By Type	1990 Census	%	2000 Census	%	2010 Census	%
Family Households	686	70.5%	961	67.3%	1,081	57.1%
Nonfamily Households	287	29.5%	466	32.7%	812	42.9%
Total Households	973	100%	1,427	100%	1,893	100%

Source: U.S. Department of Commerce, Bureau of the Census. Census 1990, 2000, and 2010.

The number of "family" households increased by 275 between 1990 and 2000, but as a percentage of total households declined slightly during the 1990s. Nonfamily households accounted for about one-third of the total households in the city as of the year 2000. Family households decreased as a percentage share of total households from 2000 to 2010, but family households still constitute a majority.

Average household size is important because coupled with residential building permit data, one can estimate household population. In 1970, the average number of persons per household in the city was 3.18 persons, less than that of the county (3.29 persons) and state (3.25 persons). The city's average household size in 1980, at 2.85 persons per unit, was nearly identical to that of the state (2.84 persons). Average household size dropped to 2.62 persons per unit in 1990 and then increased slightly to 2.66 persons per unit in 2000. The average household size is was 2.57 in Cumming in 2010 (see Table 2.5).

Table 1.5
Average Household Size, 1970-2010
City of Cumming
(Persons per Household)

Average Household Size	1970 Census	1980 Census	1990 Census	2000 Census	2010 Census
Persons Per Household	3.18	2.85	2.62	2.66	2.57

Source: U.S. Department of Commerce, Bureau of the Census. 1970, 1980, 1990, 2000, and 2010 Decennial Censuses.

FUTURE RESIDENTIAL GROWTH TRENDS

Population increases, whether short-term or long-term, will depend on at least six factors: (1) natural increase (births minus deaths); (2) net in-migration as a result of increases in the number of housing units; (3) expansion of the city limits (annexation); (4) increases, if any, in household sizes; (5) additions to the group quarters population (including major additions to institutional or group quarters populations); and (6) the land availability and capacity, as well as zoning for future residential development.

It is difficult to predict population increases that might occur due to annexation. Generally, the city has not annexed much additional residential land during the past decade, but adding one major subdivision can substantially influence the city's total population. Annexation is an unknown and unpredictable variable that can throw off the best efforts at projecting population. Some of the future population may be attributed to annexation of residential lands into the city, though no firm assumptions are made in that regard. In fact, Cumming has not shown a propensity to annex residentially developed lands during the past decade, and its immediate plans for annexation do not include hardly any dwelling units.

Average household size has declined significantly during the last several decades nationally. The average housing size has generally stabilized in recent years, however, or at least the rate of decline in average household size has been reduced substantially from earlier decades. While the historic trend has been toward decreases in household size, in the past decade some places have actually witnessed increases in average household size. It is worth noting that, due to changing demographic trends such as an increase in the Hispanic population, some housing units and neighborhoods may encounter increases in the number of occupants per dwelling.

Except through annexation, the city's future population is ultimately limited by land availability and the zoning restrictions for housing densities. The overall capacity for future residential growth can be approximated by looking generally at vacant residential land and zoned densities. In 2009, the city's planning consultant updated the existing land use inventory, and a new 2030 future land use plan was adopted. A comparison of acreages between 2009 and 2030 reveals that significant vacant land exists for future residential growth in Cumming. In particular, some 120 acres of agricultural land will convert to residential development. In addition, it is possible the city, according to its future land use plan for the year 2030, will witness some significant residential development in conjunction with mixed use developments. Furthermore, the city's regulations allow for high-density housing in the central business district. All told, it is estimated that Cumming has land capacity via the future land use plan and zoning to add approximately 1,200 additional dwelling units in the city during the planning horizon.

POPULATION, HOUSEHOLD, AND HOUSING UNIT PROJECTIONS

Table 1.6 provides population, household, and housing unit projections to 2030 for the City of Cumming. The housing unit projection is lower than that provided in the 2009 Partial Plan Update by some 800 units. It is possible that Cumming could add a higher number of housing units during the twenty-year planning horizon than that projected in Table 1.6, especially if people seeking residence in Forsyth County opt for locations closer to institutions and services than those locations further away in unincorporated Forsyth County.

Table 1.6
Population, Household, and Housing Unit Projections, 2010-2030
City of Cumming

Projection	2010	2015	2020	2025	2030
Total Housing Units	2,037	2,237	2,557	2,897	3,237
5-Year Increase Housing Units	--	+200	+320	+340	+340
Total Households	1,893	2,078	2,376	2,691	3,007
5-Year Increase Households	--	+185	+297	+316	+316
Household Population	4,869	5,465	6,249	7,077	7,908
5-Year Increase Household Population	--	+475	+925	+1,047	+1,170
Group Quarters Population	561	629	719	814	909
5-Year Increase Group Quarters Pop.	--	+68	+90	+95	+95
Total Population	5,430	6,094	6,968	7,891	8,817
5-Year Increase Total Population	--	+664	+874	+923	+926

Source: Jerry Weitz & Associates, Inc. Revised June 2011.

The projections of housing units assume that the housing unit increases will be more modest through 2015 but more significant after 2015. These projections also assume that the overall housing unit vacancy rate of 7.07 percent and the average household size (2.57 persons) for occupied units (from the 2010 Census) will remain the same throughout the planning horizon. It is assumed that the group quarters population will maintain a consistent share of 11.5 percent of the city's household population during the next twenty years (equating to 10.3 percent of the total population as in 2010).

This means that Cumming will reach a population of more than 8,800 persons and more than 3,000 households by 2030. Note that the projections of households provided in Table 1.6 above divide the total population projections into household and group quarters populations.

AGE DISTRIBUTION

Age is the single most important dimension of the population. There can be vast differences in the needs of children versus the elderly. Age has a relationship to the labor force – workers include the population ages 16 years and over through retirement age and sometimes beyond. Age has important relationships to housing and can help predict likely first-time homebuyers, renters, owners of second homes, etc. Age can also affect the political situation: for instance, in cities where there are large percentages of seniors, they sometimes vote down bond referendums for schools. The relationship of the age of population to the needs for community facilities and services is also very important. For instance, a high elderly population often

translates into a need for health care and personal care homes. On the other hand, a town with many children signals a need for schools, day care centers, and playgrounds.

Table 1.7 shows the city's population by five-year age cohort in 1990, 2000, and 2010.

Table 1.7
Historic Population by Age Cohort, 1990-2010
City of Cumming

Age Group	1990 Census	%	2000 Census	%	2010 Census	%
0-4	185	6.5%	291	6.9%	408	7.5%
5-9	169	6.0%	269	6.4%	344	6.3%
10-14	155	5.5%	239	5.7%	277	5.1%
15-19	199	7.0%	289	6.8%	312	5.7%
20-24	263	9.3%	331	7.8%	430	7.9%
25-29	267	9.5%	367	8.7%	447	8.2%
30-34	197	7.0%	355	8.4%	402	7.4%
35-39	143	5.0%	310	7.3%	384	7.1%
40-44	200	7.0%	307	7.3%	388	7.1%
45-49	141	5.0%	212	5.0%	312	5.7%
50-54	129	4.5%	204	4.8%	276	5.1%
55-59	115	4.1%	142	3.4%	212	3.9%
60-64	113	4.0%	142	3.4%	225	4.2%
65-69	112	4.0%	135	3.2%	201	3.7%
70-74	126	4.5%	132	3.1%	182	3.4%
75-79	98	3.5%	147	3.5%	171	3.1%
80-84	97	3.4%	148	3.5%	177	3.3%
85+	119	4.2%	200	4.7%	282	5.3%
TOTAL	2,828	100%	4,220	100%	5,430	100%

Sources: U.S. Census Bureau, 1990, 2000 and 2010 Census.

The 2010 population by age figures in Table 1.7 suggest the school-age population is holding relatively steady overall compared with prior decades. This signals a significant number of elementary school students. In looking at the proportions in Table 1.7 for the year 2010, they appear to mean that Cumming has a strong resident labor force and is retaining many of its young adults. Hence, Cumming has not faced a problem that rural places experience – an outflow of young adults. The 20-24 age group is most likely to be the cohort of workers filling the relatively low-wage retail and service jobs which have increased considerably in city in the past decade.

Age cohorts comprising the 25 to 44 age group represent the prime working-age population. This demographic group includes first time home buyers, as well as, households that are upgrading housing for the first or second time. This demographic group has not changed in dramatically in terms of absolute numbers in the city (1,339 in 2000 to 1,621 in 2010).

The 45 to 64 age group is the older segment of the labor force. In percentage terms, that age group comprised a larger share (18.9 percent in 2010) of total population as in 2000 (17.6 percent).

The 65-years-and-older age group is commonly referred to as the "elderly" and the "retirement age" population. Most of the people in this age group are no longer in the work force. The estimates of population by age group in Table 1.7 reveal that the retirement age population (65+ years) increased within the city from 762 persons in 2000 to 1,013 persons in 2010. In terms of percentage of the total population, the share of seniors (65+ years) was 19.5 percent in 1990, 18.1 percent in 2000, and 18.7 percent in 2010 in the city.

While some elderly households may have more disposable income than ever before in their lifetimes, many elderly households will have limited incomes because they are no longer earning wages and salaries. Persons who own residences in this age group are likely to eventually seek alternative housing, because they may own large homes that provide more living space than needed, they have little desire to upkeep residential grounds and structures, they experience a need for closer societal relationships with others as family relationships devolve, and because they are more likely than other age groups to need assisted care or medical attention. Because of differences in life expectancy between men and women, a very high proportion of older persons is and will be women. The differences in life expectancy also contribute to the number of elderly women living alone, many of whom are likely to have inadequate income.[1]

HISPANIC ORIGIN AND RACIAL COMPOSITION

Hispanic origin is not a race, and thus it is noted separately in Census statistics. Cumming's Hispanic and Latino population has increased substantially 1990 (see Table 1.8), like virtually all other communities in metropolitan Atlanta. Hispanics and Latinos comprised only 5 percent of the city's population in 1990. By 2000, that percentage was 18 percent. Almost 1,000 more Hispanics or Latinos live in Cumming as of 2010 compared to a decade ago. Presently (as of 2010), nearly one-third (31.4 percent) of Cumming's population was Hispanic or Latino. That is a striking finding and may have important implications such as the need to provide services with Spanish language translations. It is not certain at all whether this trend of an increasing Hispanic or Latino population will continue throughout the planning horizon in Cumming. The downturn in the economy (especially the homebuilding industry) from 2007 to 2010 may have stabilized Hispanic and Latino population growth in the city, or even resulted in some decrease from prior levels.

Table 1.8
Hispanic or Latino Population, 1990-2010
City of Cumming

Origin	1990	%	2000	%	2010	%
Not Hispanic	2,685	95.0%	3,603	82.0%	3,723	68.6%
Hispanic or Latino (of any race)	143	5.0%	791	18.0%	1,707	31.4%
Total Population	2,828	100%	4,394	100%	5,430	100%

Source: U.S. Census Bureau. 2000 Census. Summary File 3 Sample Data. 1990 Census, Summary Population and Housing Characteristics. 2010 Census, Redistricting (PL 94-171) data (April 2011).

[1] Howe, Deborah A., Nancy J. Chapman, and Sharon A. Baggett. 1994. *Planning for an Aging Society.* Planning Advisory Service Report Number 451. Chicago: American Planning Association.

The racial composition of Cumming's population is shown in Table 1.9.

Table 1.9
Racial Composition of the Population, 1990-2010
City of Cumming

Race	1990	%	2000	%	2010	%
White	2,691	95.2%	3,825	87.1%	4,157	76.6%
Black or African American	5	0.2%	137	3.1%	158	2.9%
American Indian & Alaska Native	15	0.5%	88	2.0%	28	0.5%
Asian	1	--	15	0.3%	77	1.4%
Other race	116	4.1%	226	5.1%	919	16.9%
Two or more races	N/A	--	103	2.4%	91	1.7%
Total	2,828	100%	4,394	100%	5,430	100%

Source: U.S. Census Bureau. 1990 Census, Summary Population and Housing Characteristics. 2000 Census, Summary File 3 Sample Data. 2010 Census, Redistricting (PL 94-171) data.

The city's population was very homogeneous in 1990 with 95.2 percent of the total being White. Cumming's population diversified to some extent during the 1990s but has become much more diverse as of 2010.Though their numbers remain small, the population of Asians in Cumming witnessed a fivefold increase from 2000 to 2010. Most striking is the number of persons of "other race," which have grown from 226 in 2000 to 919 in 2010. This is a substantial increase, and it represents a significant addition to the population diversity in the city, in addition to Whites, Blacks or African Americans, and Asians. As to trends, there is likely to be even greater diversity in the city's population as it continues to increase during the planning horizon.

Minimum planning standards require a comparison of the local government with the ethnic and racial composition of neighboring communities. Table 1.10 provides a comparison of Cumming's population as of 2010 with Forsyth County and other nearby communities. It compares jurisdictions in terms of both absolute numbers and percent share of total population in the jurisdiction.

Table 1.10
Comparison of Hispanic and Race Composition of the Population, 2010
Cumming and Selected Jurisdictions

Jurisdiction	Total Population	No. of Hispanic or Latino	% Hispanic or Latino	No. of Blacks or African Americans	% Blacks or African Americans	No. of Asians	% Asian
Alpharetta	57,571	4,892	8.5%	6,099	10.6%	7,678	13.3%
Buford	12,225	3,122	25.5%	1,637	13.4%	347	2.8%
Canton	22,958	5,156	22.5%	1,991	8.7%	298	1.3%
Cumming	5,430	1,707	31.4%	158	2.9%	77	1.4%
Dawsonville	2,536	119	4.7%	43	1.7%	14	0.6%
Johns Creek	76,728	4,000	5.2%	6,925	9.0%	17,892	23.3%
Gainesville	33,804	14,058	41.6%	4,948	14.6%	1,070	3.2%

Source: U.S. Census Bureau. 2010 Census, Redistricting (PL 94-171) data.

The total Hispanic or Latino population in Cumming as of 2010 was considerably less than all surrounding comparison cities except Dawsonville. However, as a percentage of total population in 2010, Cumming's Hispanic or Latino population was the most sizable (31.4 percent) of those shown in Table 1.10, except for Gainesville (41.6 percent), which for some time now has been considered a city with a significant Hispanic or Latino population. The high percentages of total population comprised of Hispanics or Latinos in both Cumming and Gainesville may be attributed to those two cities' connections with the poultry industry, within which the labor force is disproportionately comprised of Hispanic and Latino populations.

In relation to the comparison cities, Cumming has a smaller percentage of Blacks or African Americans (2.9 percent) except Dawsonville (1.7 percent). With regard to Asians, of all cities included in Table 1.10, Johns Creek led the way with almost one fourth (23.3 percent) of its population comprised of Asians. Again, Cumming had the lowest percentage of Asians except for Dawsonville.

With regard to future trends, it is anticipated that the City of Cumming will maintain a substantial share of its total population as Hispanic or Latino, and that percentage could perhaps continue to increase during the planning horizon. Another interesting question for the future is whether the concentration of Asians in nearby Johns Creek and Alpharetta, will grow into south Forsyth County and Cumming in the coming decades.

EDUCATION

Table 1.11 provides educational attainment data from the 1990 and 2000 Censuses as well as 2005-2009 estimates from the American Community Survey.

Table 1.11
Educational Attainment, 1990, 2000, and 2005-09
Persons 25 Years and Over
City of Cumming

Educational Attainment	1990 Census	%	2000 Census	%	2005-2009 (Est.)	%
Less than 9th grade	329	19.7%	564	19.3%	477	13.4%
9th to 12th grade (No Diploma)	359	21.5%	467	16.0%	565	15.9%
High School Graduate (Includes Equivalency)	492	29.5%	755	25.8%	1,034	29.1%
Some College (No Degree)	235	14.1%	578	19.8%	758	21.3%
Associate Degree	57	3.4%	69	2.4%	124	3.5%
Bachelor's Degree	141	8.5%	387	13.3%	485	13.6%
Graduate or Professional Degree	53	3.3%	100	3.4%	113	3.2%
Total Adult Population 25 Years and Over	1,667	100%	2,920	100%	3,556	100%

Source: U.S. Bureau of the Census. Downloaded from PlanBuilder, DCA, March 3, 2003. (2004 Comprehensive Plan). American Community Survey, 2005-2009 5-Year Estimates, Table B15002.

During the 1990s, 1,253 persons were added to the city's adult population. What is significant is the increase in the number of persons who do not have a high school diploma. That number

rose by 343 persons during the 1990s in the city, meaning that 27 percent of the new residents added to the city's population from 1990 to 2000 did not have a high school diploma. As of 2000, 1,031 of the city's adult residents (more than one-third of the city's adult population) did not have a high school diploma in 2000. At the upper end of the educational attainment spectrum, the number of persons with bachelor's, graduate, or professional degrees residing in the city increased by 293 persons during the 1990s. The estimates of educational attainment of the population in the 2005-2009 time period are relatively the same as for 2000, although some modest improvement is inherent in the data.

Based on an analysis of educational attainment data in the 2004 comprehensive plan, it was suggested that Cumming's population could benefit from additional adult education programs. Educational attainment is most crucial in terms of the labor force and job market; however, for jobs like the poultry industry, education is less important.

INCOME

According to census sample data, the per capita income in 1999 for city residents was $16,445. The city's per capita income in 1999 was well below the county's per capita income ($29,114) and that of the state of Georgia ($21,154). The discrepancy in per capita income is attributed to the fact that there are fewer new households moving into the city than into the unincorporated portions of Forsyth County (which has seen its incomes rise remarkably in recent years). As of 2005-2009, Cumming's per capita income was estimated to be $23,743, while it was $36,098 in Forsyth County and $25,098 for the State of Georgia as a whole (American Community Survey, 2005-09 5-Year Estimates, Table B19301).

When looking at median household and median family incomes the findings are the same (see Table 1.12). City median family and household incomes were significantly below the county and state medians in 1999. As of the 2005-2009 estimates period, the gap in incomes between the city and Forsyth County populations as a whole (more than 90 percent unincorporated) has widened considerably. The estimates reveal that median household income of Forsyth County is nearly double that of the city.

Table 1.12
Comparison of Median Household Income in 1999 and 2005-09
City, County, and State

Income	1999 (2000 Census)			2005-2009 (Estimates)		
	City of Cumming	Forsyth County	State of Georgia	City of Cumming	Forsyth County	State of Georgia
Median Family	$47,270	$74,000	$49,280	$57,125	$95,955	$58,842
Median Household	$38,237	$68,890	$42,433	$44,313	$88,040	$49,466

Source: U.S. Census Bureau, 2000 Census, SF 3 Sample Data; American Community Survey, 5-Year Estimates, 2005-2009, Table B19013.

Household income varies with age. Household incomes increase steadily until ages 45-54 (upward mobility), then they usually begin to decline in retirement years. The highest earnings are achieved by married couples with two wage earners. Income increases with increases in education (i.e., there is a positive relationship between these two variables).

The household income data shown in Table 1.13 also indicate a significant difference between incomes of Forsyth County households as a whole and the incomes of households living in Cumming, in 1999 and 2005-2009. For Forsyth County as a whole, approximately one-quarter of all households had incomes of more than $100,000 in 1999. Only about 11 percent of Cumming's households had comparable incomes in 1999.

Looking at the lower income groupings, more than one-quarter (27.3 percent) of the city's households had incomes less than $20,000 in 1999. This compares with only 10.5 percent of Forsyth County's households with incomes of less than $20,000. As of the 2005-2009 estimates reporting period, the share of households with incomes below $20,000 was reduced to 23.2 percent in the city and to 7.5 percent for Forsyth County as a whole. The figures in Table 1.13 show a widening disparity in incomes between the city and county as a whole. More than two-thirds (68.5 percent) of the households in Forsyth County as a whole in the 2005-2009 estimates reporting period had incomes of $60,000 or more; in Cumming for the same period the corresponding figure was 39.2 percent Hence, the city has a disproportionate number of lower-income households when compared with the county as a whole, and the (unincorporated portion of the) county has a disproportionate number of the higher-income households.

Table 1.13
Number of Households by Income Grouping, 1999 and 2005-2009
Forsyth County and City of Cumming

Income Grouping in 1999	1999 (2000 Census)				2005-2009 (Estimates)			
	Forsyth County		City of Cumming		Forsyth County		City of Cumming	
	House-holds	% Total House-holds	House-holds	% Total House-holds	House-holds	% Total House-holds	House-holds	% Total House-holds
Less than $10,000	1,494	4.3%	231	15.8%	1,722	3.2%	178	7.9%
$10,000 to $14,999	997	2.9%	104	7.1%	1,095	2.0%	137	6.1%
$15,000 to $19,999	1,127	3.3%	65	4.4%	1,236	2.3%	206	9.2%
$20,000 to $24,999	1,164	3.4%	130	8.9%	962	1.8%	78	3.5%
$25,000 to $29,999	1,328	3.8%	79	5.4%	1,528	2.8%	185	8.3%
$30,000 to $34,999	1,347	3.9%	89	6.1%	1,420	2.6%	158	7.0%
$35,000 to $39,999	1,359	3.9%	63	4.3%	1,676	3.0%	65	2.9%
$40,000 to $44,999	1,486	4.3%	45	3.1%	1,929	3.6%	120	5.3%
$45,000 to $49,999	1,440	4.2%	92	6.3%	2,031	3.7%	137	6.1%
$50,000 to $59,999	2,958	8.5%	118	8.0%	3,507	6.5%	102	4.5%
$60,000 to $74,999	4,396	12.7%	140	9.5%	5,486	10.1%	332	14.8%
$75,000 to $99,999	6,081	17.6%	165	11.2%	9,020	16.7%	294	13.1%
$100,000 to $124,999	3,676	10.6%	72	4.9%	7,564	14.0%	89	4.1%
$125,000 to $149,999	2,148	6.2%	59	4.0%	4,688	8.7%	34	1.5%
$150,000 to $199,999	1,962	5.7%	9	0.6%	5,744	10.6%	94	4.2%
$200,000 or more	1,640	4.7%	6	0.4%	4,553	8.4%	34	1.5%
Total Households	34,603	100%	1,467	100%	54,161	100%	2,243	100%

Source: U.S. Census Bureau, 2000 Census, SF 3 Sample Data. American Community Survey, 5-Year Estimates, 2005-2009, Table B19001.

Some of the discrepancy can be attributed to the residential building boom in unincorporated Forsyth County. With plentiful undeveloped land, residential subdivisions with high amenities (including golf courses) have been built in the unincorporated areas, attracting high-income families and households. The city has considerable land left for residential development, but it also has a disproportionate number of renter households (who tend to have lower incomes), and the city has public housing units that account to some degree for the comparably lower.

household incomes.

Table 1.14 provides poverty status in 1999 by age group for Forsyth County and the City of Cumming. With a total population of 98,407 in 2000, Forsyth County had approximately 5.5 percent of its total population living below the poverty line in 1999. With 4,220 residents in 2000, Cumming had 16.5 percent of its total residents with 1999 incomes below poverty level. The city had approximately 13 percent of the county's residents with incomes below poverty level in 1999, yet the city had only 4 percent of the county's total population.

POVERTY STATUS

In 2005-2009, Cumming had an estimated 284 households (12.7 percent of all households) with incomes below poverty level. Thus, expressed as a percentage, some modest improvement in poverty levels has occurred within the city (American Community Survey, 2005-2009 5-Year Estimates, Table B17017).

Table 1.14
Persons Below Poverty Level by Age Group In 1999
Forsyth County and City of Cumming

Age Group	Forsyth County		City of Cumming	
	Persons	%	Persons	%
Under 5 years	509	9.5%	77	11.1%
5 years	119	2.2%	0	0%
6 to 11 years	450	8.4%	24	3.5%
12 to 17 years	512	9.5%	49	7.0%
18 to 64 years	3103	57.6%	378	54.3%
65 to 74 years	278	5.2%	55	7.9%
75 years and over	411	7.6%	133	19.1%
Total persons with income in 1999 below poverty level	5,382	100%	696	100%

Source: U.S. Census Bureau, 2000 Census, SF 3 Sample Data.

The higher percentage of poverty-stricken residents in Cumming than in Forsyth County can be explained in part by at least three factors. First, as already noted, more new residential development is occurring in unincorporated areas of the county. Second, the fact that the city has public housing, while the county does not, contributes to the discrepancy. Third, the city is home to some nursing care facilities, which tends to explain the higher number and percentage of elderly persons (65 years and older) below poverty level in Cumming than in Forsyth County as a whole as of 1999. As to the future, the household income discrepancy between the city and county as a whole may be reduced some as more higher-end housing is constructed in the city.

CHAPTER 2
HOUSING

The housing element (this chapter) provides the city with an inventory of the existing housing stock, an assessment of its adequacy and suitability for serving current and future population and economic development needs, a determination of future housing needs, a set of goals to guide long range needs, and a strategy for the adequate provision of housing for all sectors of the population. The results of this chapter are considered in the development of needs and goals and an associated implementation strategy that set forth programs for housing development or assistance to be undertaken during the planning horizon.

HOUSING TYPES AND MIX

Table 2.1 shows housing types in Cumming in 1990 and 2000 from the Decennial Censuses. Single-family, detached housing has remained the predominant housing type in Cumming. The notable increase (231 units) in the number of single-family, detached homes between 1990 and 2000 was due mostly to annexation of one large subdivision. There were 240 multiple-family units added during the 1990s, which further diversified the city's housing stock. Single-family attached homes increased slightly during the 1990s. The number of mobile homes in the city declined during the 1990s, and many of the mobile homes remaining are located in one manufactured home park in the city.

Table 2.1
Types of Housing Units, 1990-2010
City of Cumming

Type of Unit	Units 1990 (Census)	%	Units 2000 (Census)	%	Units 2010 (Est.)	%
One family, detached	715	69.3%	946	62.2%	1,098	53.9%
One family, attached	18	1.8%	54	3.5%	424	20.8%
Multiple family	245	23.8%	485	31.9%	485	23.8%
Mobile Home	53	5.1%	37	2.4%	30	1.5%
Total Housing Units	1,031	100%	1,522	100	2,037	100%

Sources: U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census. 1990 Census of Population and Housing. Summary Population and Housing Characteristics, Georgia. Issued August 1991. 2000 figures from 2000 Census, Summary File 3 sample data, Table H30. Units in Structure. 2010 estimates by Jerry Weitz & Associates, Inc.

As a part of this research, the estimates of housing types for the 2005-2009 reporting period from the American Community Survey were consulted (Table B25024). The 2005-2009 are not considered accurate locally, since for example the city still contains some mobile (manufactured) homes and the estimate shows zero. Also, the number of multiple-family residential units reflects extensive additions to the multi-family housing stock, and the city's multi-family housing count is not nearly as high as indicated in the 2005-2009 estimates reporting period. Presenting those data would therefore provide an inaccurate portrayal of the current housing mix in Cumming. Furthermore, those estimates indicate a total of 2,378 units, whereas the 2010 housing unit count was 2,037. There is simply too much error in the estimates to cite them, so the consultant has estimated the 2010 housing mix.

We know from the 2010 Decennial Census (Redistricting Data) that Cumming has 2,037 housing units. We also know from the 2000 Decennial Census Count that Cumming's housing stock increased by 515 dwelling units. As to housing construction trends, we know from the 2009 Partial Plan Update that from 2003 to 2007, new housing construction was limited mostly to three developments. During that time period or shortly thereafter, Cumming added about 190 townhouses in one project off Castleberry Road, 20 single-family detached homes north of Kelly Mill Road, and 160 units in a townhouse project off Veterans Memorial Parkway at Atlanta Road (SR 9). Those three developments constituted 370 of the 515 new unit increase from 2000 to 2010.

From Table 2.1, the most significant trend is the increase in townhouses in the city. This is considered a positive sign in terms of the diversity of housing types, since the percentage of total housing stock in attached, single-family units was increased from 3.5 percent in 2000 to almost 21 percent in 2010. One can conclude based on figures in Table 2.1 that the city has a diverse housing stock.

It is also apparent that Cumming's share of single-family dwellings as percentage of total housing stock has been declining during the past two decades. There are still some significant opportunities to develop single-family detached dwelling units in the city, and the future land use plan encourages new and more diverse housing arrangements such as traditional neighborhood developments. Such new housing developments as encouraged in the future land use plan will provide for additional diversity. However, past trends suggest that Cumming needs an infusion of new detached, single-family housing within the city limits, and it should not expect to maintain a majority of single-family detached homes in its housing stock through annexation. The city should therefore consider setting minimum percentages of detached, single-family dwellings for its planned unit development and traditional neighborhood development future land use categories in order to ensure that single-family dwelling stock does not get out of balance with the attached and multi-family housing stocks.

OCCUPANCY AND VACANCY TRENDS

Local planning requirements of the state require data on the proportion of units that are owner-occupied and renter occupied, plus vacancy rates for owners and renter units. These requirements are satisfied with data in Table 2.2.

Table 2.2
Occupancy and Vacancy of Housing Units, 1990-2010
City of Cumming

Status	1990 Units	%	2000 Units	%	2010 Units	%
Occupied	973	94.4%	1,480	97.2%	1,893	92.9%
Vacant	58	5.6%	42	2.8%	144	7.1%
Total Units	1,031	100%	1,522	100%	2,037	100%

Source: U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census. 1990 Census of Population and Housing. Summary Social, Economic, and Housing Characteristics, Georgia. Table 7. Issued May 1992. 2010 Census Redistricting Data (PL 94-171) (first release of 2010 Census), April 2011.

Per the prior comprehensive plan, Cumming's housing stock had substantially lower vacancy rates than the county or state as a whole in 1990. The homeowner vacancy rate in 1990 in Cumming was 2.2 percent, and the rental unit vacancy rate in Cumming in 1990 was 6.5 percent. City vacancy rates for both homeowner-occupied and renter-occupied housing units in 1990 were considerably lower than those for Forsyth County, which were in turn lower than those of the State of Georgia as a whole. The city figures represented as of 1990 a tight housing market, with comparatively few opportunities to move from residence to residence in the city.

Cumming had lower rates than the county census division, county, and state in 2000. With a low vacancy rate in the city (2.8 percent in 2000), mobility among households within the city is constrained. Of the 42 vacant housing units existing in the city in 2000, 14 were for rent, 14 were for sale, and 14 were characterized as "other" vacant (Census 2000, SF 3, Table H8).

The 2010 housing vacancy rate was 7.1 percent in 2010. That represents a significant percentage increase from 2000 (see Table 2.2). Because of the housing crash in 2008 and 2009, and mortgage crisis which created huge numbers of home foreclosures, it is not surprising that Cumming's vacancy rate increased from 2000 to 2010. As of 2010, Cumming's total housing stock still had a limited number (144) of vacant units, a significant increase nonetheless from 2000 when only 42 housing units were vacant. The vacancy rate in 2010 is not a negative sign, as it seems to represent that Cumming's households were not hit hard by the foreclosure crisis in the past few years.

It is too early to describe how the vacant housing units in 2010 are divided among renters and homeowners, and divided among the various housing types. The city should watch for the release of detailed 2010 Census data regarding housing occupancy and vacancy, expected sometime in 2012 at the earliest, then determine the distribution of vacant units among the housing types in the city.

In 1990, Cumming's housing stock was almost evenly distributed between owner-occupied and renter-occupied housing units (households) (see Table 2.3). That distribution in 1990 was more even than in Georgia as a whole. To the contrary, the vast majority of housing units in Forsyth County in 1990 were owner-occupied units (2004 Comprehensive Plan).

Table 2.3
Owner and Renter Occupied Housing Units, 1990-2010
City of Cumming

Occupancy of Units	1990 Units (Census)	%	2000 Units (Census)	%	2010 Units (Census)	%
Owner	500	51.4%	705	47.6%	866	45.7%
Renter	473	48.6%	775	52.4%	1,027	54.3%
Total Occupied	973	100%	1,480	100%	1,893	100%

Source: U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census. 1990 Census of Population and Housing. Summary Social, Economic, and Housing Characteristics, Georgia, Tables 7, 9 and 11. Issued May 1992. Census 2000, SF 3 (sample data), Table H7. Census 2010.

A majority of households in Cumming in 2000 were renter-occupied. Cumming's renter-occupied households increased by 302 during the decade, from 473 in 1990 to 775 in the year

2000. Owner-occupied housing increased by 205, from 500 units in 1990 to 705 owner-occupied units in 2000 (2004 Comprehensive Plan).

Cumming's majority renter-occupancy figures contrast starkly with those of the Cumming Census County Division, Forsyth County, and the state as a whole, all of which had substantial majorities of owner-occupied units in 2000. Cumming had about 19 percent of the Forsyth County's renter-occupied housing units in 2000. Yet, the city only had approximately 4% of the total households in the county in 2000. This means that Cumming's housing stock is disproportionately renter-occupied when compared with its surrounding area (division) and the county as of 2000 (2004 Comprehensive Plan).

There are four reasons that help explain Cumming's majority (higher percentage) of renter-occupied housing units and households. First, Cumming has some public housing which consists entirely of rental units, and there is no public housing outside the city. Second, Cumming's housing stock is disproportionately older, and because older housing stock is less likely to meet current consumer demands, they are more likely to be rented. Third, Cumming has sanitary sewer and has historically allowed higher density than the county, while Forsyth County has sought to limit rental housing opportunities through density restrictions. Fourth, the volume of new owner-occupied housing construction has been phenomenal in unincorporated Forsyth County, while additions to the city's owner-occupied housing stock have been modest and have occurred primarily through annexation (2004 Comprehensive Plan).

The past trend of having a high percentage of renter-occupied housing units has continued into 2010. As of 2010, the proportions of housing stock has shifted to a solid majority of housing units that are renter occupied (54.3 percent). As noted previously, the majority of new housing stock added since 2000 was townhouses, which tend to be majority owner-occupied at first but then convert to rental.

One can argue that Cumming does not need an infusion of new detached, single-family dwellings. Cumming is the only municipality in the county, and there is an abundance of detached, single-family dwellings throughout the county's unincorporated areas. One could also suggest that Cumming is not and does not want to be a bedroom community, but rather, a place of commerce, government, and industry.

Yet, after two decades of limited growth in the number of detached, single-family houses, it is time to draw attention to concerns that the city's land use mix may become out of proportion from what is considered a balanced suburban community. There is still a dichotomy and contrast between unincorporated Forsyth County and the City of Cumming in terms of rental and homeowner occupancy rates and shares of multi-family dwelling units. The city should begin to consider specific measures that will prevent it from continuing to have a disproportionate share of the county's low-income rental developments.

To some extent with the addition of sanitary sewer to more parts of unincorporated Forsyth County during the 2000s, the opportunities for higher density residential developments have increased during the 2000s. However, the Forsyth County Board of Commissioners has historically been slow to allow for higher density residential developments, and such policy clearly favors homeownership.

Indeed, there are many virtues of homeownership. Having a majority renter-occupied housing stock is another reason for Cumming to promote more detached, single-family housing, which tends to be predominantly but not exclusively owner occupied.

Table 2.4 shows housing unit occupancies (persons per unit or average household size). In 1990, the city had a smaller owner-occupied average household size than did Forsyth County or the state of Georgia as a whole. For renter-occupied units in 1990, Cumming's figure was higher than the corresponding figure for the State of Georgia as a whole but similar to that of Forsyth County. One would expect that owner-occupied units are more likely to consist of "families" and therefore have larger sizes (persons per unit) than renter-occupied units. However, that did not hold true for 1990 in the city – the renter-occupied housing units had a larger average household size than owner-occupied units in Cumming in 1990 (Comprehensive Plan 2004).

Table 2.4
Average Household Size by Tenure, 1990-2010
City of Cumming

Occupancy	1990 Census Avg. Household Size (Persons per Unit)	2000 Census Avg. Household Size (Persons per Unit)	2010 Census Avg. Household Size (Persons per Unit)
Persons Per Unit, Owner-Occupied Housing Units	2.55	2.62	2.43
Persons Per Unit, Renter-Occupied Housing Units	2.70	2.70	2.69
All Occupied Housing Units	n/a	2.66	2.57

Source: U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census. 1990 Census of Population and Housing. Summary Social, Economic, and Housing Characteristics, Georgia. Tables 9 and 11. Issued May 1992. Census 2000, SF 1, Table H12. Census 2010.

Note that in the year 2000 (Table 2.4), owner-occupied housing units had higher average household sizes for the State of Georgia and Forsyth County than for renter-occupied housing units. Significantly, Cumming's renter-occupied housing units had larger average household sizes than owner-occupied housing units in 2000. This finding is counter to expectations in that owner-occupied housing units tend to have more families, and the average family size in the city as of 2000 was 3.11 persons per family, quite similar to that of the county (3.12) and Georgia (3.14) in 2000 (Census 2000, SF 1, Table P33, Average Family Size). This may mean a general trend toward "doubling up," or more than a usual number of non-related individuals living together in some of the city's renter-occupied households (2004 Comprehensive Plan). From Table 2.4, it is apparent that household size decreased some more from 2000 to 2010 and the owner-occupied household size also declined significantly. Renter-occupied housing units held steady in terms of average household size from 2000 to 2010.

Table 2.5 (from the 2004 Comprehensive Plan) tends to show, for the year 2000, that there were more renter-occupied households than owner-occupied households with 7 or more persons in the household. As of 2000, nearly two-thirds (62.3 percent) of the renter-occupied housing units were occupied by one- and two-person households.

Table 2.5
Tenure by Number of Persons per Household, 2000
City of Cumming
(Number of Occupied Housing Units)

Number of Persons in Unit (household)	Owner Occupied		Renter Occupied	
	Units	%	Units	%
1 person	100	14.2%	311	40.1%
2 persons	297	42.1%	172	22.2%
3 persons	106	15.0%	123	15.9%
4 persons	124	17.6%	40	5.2%
5 persons	40	5.7%	78	10.1%
6 persons	19	2.7%	15	1.9%
7 or more	19	2.7%	36	4.6%
Total Units	705	100%	775	100%

Source: U.S. Census Bureau, Census 2000, SF 3. Table H17.

AGE OF HOUSING

Table 2.6 provides age ranges for housing units constructed as of 2000. Note that 2010 data are not yet available. In 2000, Cumming had a total of 215 housing units (14% of total housing units) that were at that time at least 50 years old. That is a larger percentage than the CCD, county, or state in 2000. The fact that Cumming had a higher percentage of older (built 1939 and earlier) homes in 2000 is not surprising, because Cumming is the only incorporated place and the county's original urban settlement.

Table 2.6
Age of Housing Units, 2000
City, Census County Division, County, and State
(Housing Units by Range of Years Structure Was Built)

Year Structure Built	City of Cumming	%	Cumming CCD	%	Forsyth County	%	Georgia %
Built 1999 to March 2000	19	1.2%	1,510	7.7%	3,223	8.8%	3.9%
Built 1995 to 1998	485	31.9%	5,809	29.5%	12,995	35.6%	12.6%
Built 1990 to 1994	143	9.4%	3,852	19.5%	6,224	17.1%	11.3%
Built 1980 to 1989	252	16.6%	4,152	21.0%	6,601	18.1%	22.0%
Built 1970 to 1979	248	16.3%	2,313	11.7%	3,679	10.1%	18.6%
Built 1960 to 1969	160	10.5%	1,074	5.5%	1,784	4.9%	12.7%
Built 1950 to 1959	144	9.5%	603	3.1%	1,144	3.1%	8.6%
Built 1940 to 1949	15	0.9%	160	0.8%	310	0.8%	4.4%
Built 1939 or earlier	56	3.7%	251	1.2%	545	1.5%	5.9%
Total	1,522	100%	19,724	100%	36,505	100%	100%
Median Year Structure Built	1985		1992		1996		1980

Source: U.S. Census Bureau. Census 2000. SF 3 (sample data). Table H34 and H35.

We note that the American Community Survey 2005-2009 Estimates (Table B25034, Year Structure Built) provide some additional insights regarding the division of housing units by age category. Recalling that these statistics are estimates with a high margin of error, they are still worth investigating but they have not been presented in table form here. Those data show that 561 housing units in Cumming were built since 2000. That estimate and others in Table B25034 do not appear accurate for 2009, since the 2010 statistics show that Cumming's housing stock increased by 515 housing units from 2000 to 2010. Those 2005-2009 estimates also suggest that 18.8 percent of Cumming's housing stock was 50 or more years old.

CONDITION OF HOUSING

Two typical measures of substandard housing conditions are the number of housing units lacking complete plumbing facilities and the number of units lacking complete kitchen facilities. In 1980, there were 35 housing units, or 4.7% of the total, which had less than one complete bathroom, and there were 19 units (2.5%) with no complete kitchen facilities. All housing units in 1980 were connected to city water supply, but less than one-half (43.5%) of the housing units were connected to the public sanitary sewer system (2004 Comprehensive Plan).

As of 1990, the housing stock in the City of Cumming was in very good condition based on consideration of these same characteristics. When compared with the state, Cumming's housing stock as of 1990 was in about as good or better condition than the housing stock in the state as a whole. Nearly all housing units in the city were connected to the public water system in 1990. To the contrary, less than half of Forsyth County's housing units were connected to a public water system or private company in 1990. This was not surprising in that the county had not developed a countywide water system at that time. Less than half of the city's housing units were connected to the public sewer system in 1990, which means that the city has a number of low-density residential subdivisions which are served by on-site sewage management systems (i.e., septic tanks) (2004 Comprehensive Plan).

As of the year 2000, according to census sample data (SF 3 Table H47), 100 percent of the housing units in Cumming had complete plumbing facilities; there were 38 within the CCD and 55 countywide that were lacking complete plumbing facilities in 2000. Housing conditions were therefore not considered to be a significant issue in the city (2004 Comprehensive Plan).

Detailed housing statistics for 2010 are not yet available from the 2010 Census. However, the American Community Survey 2005-2009 Estimates indicate that Cumming had zero housing units lacking complete plumbing facilities (Table B25048) and zero housing units lacking complete kitchen facilities (Table B25051). This reinforces the earlier conclusion that housing condition is not an issue in Cumming.

OVERCROWDED HOUSING UNITS

Overcrowding is another important measure of inadequate housing conditions. An overcrowded housing unit is one that has 1.01 or more persons per room. Severe overcrowding is considered to occur when units reach 1.51 or more occupants per room. In 1990 in Cumming, there were 4.4 percent of the total dwelling units which were overcrowded (2004 Comprehensive Plan).

As of the year 2000, the city's housing stock included 111 housing units that were considered overcrowded or severely overcrowded (Table 2.7). This means that 7.5 percent of the city's occupied housing units were overcrowded in 2000. Overcrowding was therefore identified as a significant issue in the prior comprehensive plan. There were 36 owner-occupied housing units that were overcrowded (1.01 to 1.5 occupants per room) in 2000, and there were no owner-occupied housing units that were considered to be severely overcrowded (more than 1.5 occupants per room) (Census SF 3, Table H20). Hence, overcrowding has been an issue primarily with renter-occupied housing units. The city should pass and enforce a housing occupancy code that limits overcrowding and severe overcrowding.

Table 2.7
Overcrowded Housing Units by Tenure, 2000
City of Cumming

Occupants Per Room	Owner Occupied		Renter Occupied	
	Units	%	Units	%
1.01 to 1.50 occupants per room (overcrowded)	36	100	38	50.7
1.51 or more occupants per room (severely overcrowded)	0	--	37	49.3
Total overcrowded or severely overcrowded	36	100	75	100

Source: U.S. Census Bureau, Census 2000, SF 3, Table H21.

Statistics for overcrowding are not available except for those report for the year 2000 in Table 2.7.

VALUE AND COST OF HOUSING

Minimum planning standards require that local governments evaluate the cost of housing in the community, both for owners and renters, in terms of affordability for residents and workers in the community. This is accomplished with a review and analysis of data showing the selling prices or values of owner-occupied housing units and median monthly rents for renter occupied units.

As of 1990, both Cumming's and Forsyth County's owner-occupied housing stock had a higher median value than the housing stock of the state as a whole. That was not surprising, given that the city and county were at that time already located within metropolitan Atlanta which had higher housing costs and values than the state. Forsyth County's overall owner-occupied housing values were higher than the city's in 1990, which is not surprising either because of the greater homebuilding occurring in unincorporated areas during the 1980s. The majority of the city's housing stock in 1990 had a value in the range of $50,000 to $99,999.

As of 2000, comparisons are generally the same as for 1990 (see Table 2.8). Both city and Forsyth County median values are much higher than the state median. Forsyth County's median value for owner-occupied housing is higher than the city's median value. Cumming did not have any houses with values of $300,000 or more according to the census sample statistics. These findings underscore the point that Cumming had (in 2000) affordable owner-occupied housing when considered in the context of the county and Atlanta metropolitan area.

Table 2.8
Value of Specified Owner-Occupied Housing Units in 2000
City, County, and State

Range of Value ($)	City of Cumming		Forsyth County		Georgia
	Units	%	Units	%	%
Less than $50,000	0	--	227	0.9%	9.5%
$50,000 to $99,999	143	21.4%	2,209	8.4%	34.2%
$100,000 to $149,999	187	28.0%	6,092	23.2%	25.8%
$150,000 to $199,999	288	43.2%	6,529	24.8%	13.3%
$200,000 to $299,999	49	7.4%	7,076	26.9%	10.2%
$300,000 or more	0	--	4,154	15.8%	7.0%
Total	667	100%	26,287	100%	100%
Median (all owner occupied units) ($)	$149,100		$177,900		$100,600

Source: U.S. Census Bureau, 2000 Census, SF 3, Table H74 and Table H85.

In much the same format as Table 2.8, Table 2.9 shows estimates of value for owner-occupied housing units for Cumming, Forsyth County and the State (percentage only shown) for the 2005-2009 reporting period.

Table 2.9
Value of Specified Owner-Occupied Housing Units, 2005-09 Estimates
City, County, and State

Range of Value ($)	City of Cumming		Forsyth County		Georgia
	Units	%	Units	%	%
Less than $50,000	58	5.2%	743	1.6%	8.7%
$50,000 to $99,999	33	2.9%	1,211	2.6%	15.6%
$100,000 to $149,999	183	16.3%	3,232	6.9%	21.0%
$150,000 to $199,999	364	32.4%	7,268	15.6%	19.4%
$200,000 to $299,999	425	37.8%	13,842	29.6%	17.4%
$300,000 or more	61	5.4%	20,450	43.7%	17.9%
Total	1,124	100%	46,746	100%	100%

Source: U.S. Census Bureau. American Community Survey 2005-2009 5-Year Estimates, Table B25075.

The figures in Table 2.9 are very revealing. Almost three-quarters (73.3 percent) of Forsyth County's owner-occupied housing stock as a whole was valued at $200,000 or more according to the 2005-2009 estimates. Cumming's proportion of occupied homes valued at $200,000 or more was 43.2 percent. Even more revealing is the discrepancy between owner-occupied housing valued at $300,000 or more. In Cumming, only 5.4 percent of the total owner-occupied housing stock was valued at $300,000 or more, while in the county as a whole, 43.7 percent of the total owner-occupied housing stock was valued at $300,000 or more (Table 2.9).

Stated differently, Cumming has a disproportionately large share (56.8 percent, or a majority) of its owner-occupied housing stock with values below $200,000 as of the 2005-2009 estimates, whereas the share for Forsyth County as a whole is only about one-quarter (26.7 percent) of its owner-occupied housing stock in value ranges below $200,000. Again, this shows huge discrepancies in housing value between Cumming and unincorporated Forsyth County.

The year-2000 statistics and the 2005-2009 estimates show just how affordable Cumming's owner-occupied housing stock was in comparison with the county as a whole. On the positive side, clearly Cumming is doing its share and vastly exceeding its obligation to provide affordable housing in Forsyth County. However, the figures in Table 2.9 also show that Forsyth County is relying disproportionately on the city to provide for the bulk of the county's affordable housing needs.

So long as Cumming has no supply or a very limited supply of higher end housing (e.g., $300,000 or more in value), the city's housing stock will remain limited in terms of ability to attract upper income families and households. This underscores the need, again, for the city to promote a greater amount of detached, single-family dwellings, since homes with values more $300,000 tend to be predominantly if not exclusively detached, single-family homes. These figures also suggest that the county needs to play a much stronger role in providing owner-occupied housing at lower values if it is to assume its fair share of meeting demands in the county for affordable housing.

The values of renter-occupied housing units in Cumming were lower overall than those of Forsyth County in 1990. The majority of renter-occupied units in 1990 in both Cumming and Forsyth County were within the $250 to $499 value category. Median values (monthly rents) were higher in Cumming and Forsyth County than for Georgia's rental housing stock. That finding was not surprising, given that the city and county are in metropolitan Atlanta which had (and continues to have) higher housing costs than for the state as a whole (2004 Comprehensive Plan).

As of the year 2000, the median gross rent for renter-occupied housing units in Cumming was lower than the state median and substantially lower than the median for Forsyth County's renter-occupied housing stock (Table 2.10). The fact that Cumming's rental housing stock had (in 2000) a lower median value than that of the rental units in the state overall was contrary to expectations, because Cumming is in the metropolitan Atlanta area which has had higher housing rents than Georgia as a whole.

Table 2.10
Gross Rent, Specified Renter-Occupied Housing Units, 2000
City, County, and State

Gross Rent ($)	City of Cumming		Forsyth County		Georgia
	Units	%	Units	%	%
Less than $250	93	12.5%	174	4.9%	9.3%
$250 to $499	185	24.9%	651	18.4%	25.5%
$500 to $749	290	39.0%	1,233	34.9%	33.2%
$750 to $999	132	17.8%	855	24.1%	22.1%
$1000 or more	43	5.8%	625	17.7%	9.9%
Total Units With Cash Rent	743	100%	3,538	100%	100%
Median Gross Rent ($)	$602	--	$683		$612

Source: U.S. Census Bureau, 2000 Census, SF 3, Table H62 and Table H63.

The American Community Survey, 2005-2009 5-Year Estimates, provides some more insight with regard to median gross rent (Table B25064) and contract rent (Table B25058). The median gross rent for renter-occupied housing units in the 2005-2009 reporting period was $787 for

Georgia, $859 for Cumming, and $1,039 for Forsyth County. The median contract rent for renter-occupied housing units in the 2005-2009 reporting period was $622 for Georgia, $750 for Cumming, and $839 for Forsyth County as a whole. The higher rents in Forsyth County when compared to Cumming are explained in part by the fact that the unincorporated area of the county has very limited supplies of apartments and other pure-rental communities.

Under the title "jobs-housing balance," local planning requirements suggest that housing costs need to be compared to wages and household incomes of the resident and nonresident workforce to determine whether sufficient affordable housing is available within the community to allow those who work in the community to also live in the community. In comparing available figures, we conclude that Cumming has a housing stock that is quite supportive of all lower and moderate income residents and workers who might choose to live in the city. If there is any discrepancy between housing availability and housing affordability for workers and residents, it is the upper-income spectrum of the housing market that is lacking in Cumming.

COST BURDEN AND SEVERE COST BURDEN OF OWNERS

Minimum planning standards require local governments to evaluate the needs of households that are cost-burdened (paying 30% or more of net income on total housing costs) and severely cost-burdened (paying 50% or more of net income on total housing costs).

Table 2.11 shows that in Cumming in 1999, there were 59 cost-burdened, owner-occupied households and 39 severely cost-burdened, owner-occupied households.

Table 2.11
Monthly Owner Costs as a Percentage of Household Income in 1999
City of Cumming
(Specified Owner-Occupied Housing Units)

Monthly Owner Costs as a Percentage of Household Income in 1999	Specified Owner-Occupied Housing Units	% of Units
Less than 30 percent (not cost burdened)	569	85.3%
30 to 49 percent (cost burdened)	59	8.9%
50 percent or more (severely cost burdened)	39	5.8%
Total Specified Owner-Occupied Housing Units	667	100%
Median Monthly Owner Cost as a Percentage of Household Income in 1999	17.9	--

Source: U.S. Census Bureau, 2000 Census, SF 3, Table H94 and H95.

COST BURDEN AND SEVERE COST BURDEN OF RENTERS

The cost burden data in Table 2.12 indicate that a sizable number (305, or 41.7%) of the renter-occupied households were cost burdened or severely cost burdened in 1999. The high percentage of cost-burdened and severely cost-burdened households in the city in 1999 was explained in part by the city's provision of public housing units to cost-burdened households. Two thirds of the cost-burdened and severely cost-burdened households reside in multiple family dwellings (2004 Comprehensive Plan).

Table 2.12
Gross Rent as a Percentage of Household Income in 1999
City of Cumming
(Specified Renter-Occupied Housing Units)

Gross Rent as a Percentage of Household Income in 1999	Specified Renter-Occupied Housing Units	% of Units Computed
Less than 30 percent (not cost burdened)	426	58.3%
30 to 49 percent (cost burdened)	149	20.4%
50 percent or more (severely cost burdened)	156	21.3%
Units not computed	44	--
Total Specified Renter-Occupied Housing Units	775	731
Median Gross Rent as a Percentage of Household Income in 1999	--	27.1%

Source: U.S. Census Bureau, 2000 Census, SF 3, Table H69 and Table H70.

Table 2.13 provides more recent estimates of cost burdened renter households within the 2005-2009 time period in Cumming. Almost 4 of 10 renter households in Cumming are likely to be cost-burdened with respect to housing costs.

Table 2.13
2005-2009 5-Year Estimate of Cost-Burdened
Renter Occupied Households
City of Cumming

Gross Rent as a Percentage of Household Income in 2005-2009 5-Year Reporting Period	Specified Renter-Occupied Housing Units	% of Units Computed
Cost burdened renter-occupied households (30 percent or more)	440	39.3%
Total Specified Renter-Occupied Housing Units	1,119	100%

Source: U.S. Census Bureau. American Community Survey. 2005-2009 American Community Survey 5-Year Estimates, Table B25074.

QUALITATIVE HOUSING NEEDS ASSESSMENT

Forsyth County's housing stock as a whole caters to families in mostly owner-occupied, detached single-family units. Cumming's housing stock, which is comparatively older, smaller, more affordable, more renter occupied, and includes public housing, disproportionately serves the more needy populations and households in the county. Generally, public housing continues to be in high demand, but few federal resources (e.g., subsidized rents through vouchers) remain available for any sort of expansion of public housing assistance. Housing in Cumming provides affordability for a significant number of households and accommodates housing needs after considering commuting patterns and average wages of jobs in the area.

Cumming also has nursing homes which serve an increasingly elderly county population. In addition to some expansion of nursing homes and personal care homes, the city might anticipate the need for senior citizen retirement communities; Cumming is an appropriate location for senior communities because of the access to services including sanitary sewer,

hospital in close proximity, etc. Homeless populations are largely served by private religious and other private service organizations. The city's zoning ordinance is permissive with regard to the siting of homes for persons with developmental disabilities. Hence, the city's zoning regulations accommodate special housing needs.

CHAPTER 3
LABOR FORCE AND ECONOMY

This chapter includes an investigation of the city's economic base, labor force, and general economic trends. The intent of this chapter is to provide the background data to determine economic development strategies in the city's comprehensive planning process.

LABOR FORCE

Cumming is located in Forsyth County which is a part of the Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area (MSA). Cumming and Forsyth County are economically tied to the Lake Lanier basin and hence the adjacent Gainesville MSA is also important. The Atlanta-Sandy Springs-Marietta MSA had a labor force of 2.7 million in 2008 but has since declined in number. The labor force in Gainesville's MSA consists only of Hall County and has also declined from 2008 to 2011. Unemployment soared for both metropolitan labor forces between 2008 and 2011, as shown in Table 3.1. Nationally, the unemployment rate as of March 2011 was 8.8 percent (not seasonally adjusted). The unemployment rate for the Atlanta MSA was significantly higher than that of the nation as a whole in March 2011, while Gainesville MSA's unemployment rate was lower than the nation's in March 2011 (Georgia Department of Labor, Workforce Information and Analysis, 2011).

Table 3.1
Annual Average Civilian Labor Force and Unemployment, Selected Years
Persons 16 Years and Older
Atlanta and Gainesville Metropolitan Statistical Areas

	Atlanta-Sandy Springs-Marietta MSA			Gainesville MSA		
	2003	2008	March 2011	2003	2008	March 2011
Labor Force	2,456,021	2,746,408	2,648,713	79,267	92,616	89,103
Employed	2,337,883	2,577,453	2,389,120	76,126	87,658	81,727
Unemployed	118,138	168,955	259,593	3,141	4,958	7,576
Unemployment Rate	4.8%	6.2%	9.8%	4.0%	5.4%	8.5%

Source: Georgia Department of Labor, Workforce Information and Analysis. Accessed 2009 and 2011.

Table 3.2 provides labor force participation data for the City of Cumming during the last two decades. A majority of the city's residents ages 16 years and over were in the labor force in 1990, 2000 and for the 2005-2009 estimates reporting period. Labor force participation has increased significantly over time, expressed as a percentage of total persons 16 years and over in the labor force.

Table 3.2
Labor Force Participation, 1990, 2000, and 2005-2009 Estimates
Persons 16 Years and Over
City of Cumming

Labor Force Status	1990		2000		2005-09 5 Year Estimates	
	Persons 16 Years and Over	% Total 16 Years and Over	Persons 16 Years and Over	% Total 16 Years and Over	Persons 16 Years and Over	% Total 16 Years and Over
In Labor Force	1,265	56.4%	1,991	54.7%	2,801	61.8%
Not in Labor Force	978	43.6%	1,648	45.3%	1,730	38.2
Total 16+ Years	2,243	100%	3,639	100%	4,531	100%

Source: U.S. Census Bureau. 1990 Census of Population and Housing, Summary Social, Economic, and Housing Characteristics, Issued May 1992; Census 2000, Summary File 3, Table P43. American Community Survey, 2005-2009 5-Year Estimates, Table B23001.

EMPLOYMENT STATUS

Table 3.3 provides employment status 1990, 2000, and the 2005-2009 estimates reporting period. Unemployment was extremely low for Cumming's working residents in 2000. The 2005-09 5-Year estimates reveal that unemployment of Cumming's residents has increased but not dramatically. If these estimates reflect the great recession of 2008 and 2009, one would have to say that Cumming's residents have fared better in terms of employment than other parts of metropolitan Atlanta, where unemployment rose above 10 percent for the region during the great recession. To some extent, it would not be surprising that Cumming's residents have fared better with regard to employment opportunities in recent years, since the city is the only incorporated place in Forsyth County and remains the economic powerhouse of the county in terms of job concentration.

Table 3.3
Employment Status of the Labor Force, 1990, 2000, and 2005-2009 Estimates
City of Cumming

Labor Force Status	1990	%	2000	%	2005-2009 5-Year Estimate	%
Employed	1,172	92.6%	1,948	97.8%	2,665	95.1%
Unemployed	93	7.4%	43	2.2%	136	4.9%
Total 16+ Years	1,265	100%	1,991	100%	2,801	100%

Source: U.S. Census Bureau. 1990 Census of Population and Housing, Summary Social, Economic, and Housing Characteristics, Issued May 1992; U.S. Census Bureau. Census 2000. Summary File 3, Table P43. American Community Survey, 2005-2009 5-Year Estimates, Table B23001.

COMMUTING PATTERNS

Table 3.4 shows counties where those working in Forsyth County resided in 1990. More than two-thirds of those with jobs in Forsyth County lived in Forsyth County in 1990. Leading the list of other county sources of labor for Forsyth County's businesses in 1990 were Dawson County

residents (6.1 percent) and Hall County residents (4.4 percent). The county's employment base also drew its workers from several other counties, including Cobb, Fulton, Gwinnett, and Lumpkin.

Table 3.4
Employment in Forsyth County
By County of Residence, 1990 and 2000

County of Residence	1990		2000	
	Number of Persons Working in Forsyth County	% of Total Persons Working In Forsyth County	Number of Persons Working in Forsyth County	% of Total Persons Working In Forsyth County
Cherokee County, GA	n/a	n/a	1,961	4.6%
Cobb County, GA	227	1.7%	1,529	3.6% .
Dawson County, GA	794	6.1%	1,628	3.8%
Forsyth County, GA	9,031	69.2%	21,039	49.5%
Fulton County, GA	439	3.4%	5,626	13.2%
Gwinnett County, GA	504	3.9%	3,977	9.4%
Hall County, GA	580	4.4%	1,577	3.7%
Lumpkin County, GA	208	1.6%	734	1.7%
Other Counties	615	4.7%	4,438	10.5%
Total Working	13,050	100%	42,509	100%

Source: Georgia Department of Labor. 1999. Forsyth County, Georgia, Area Labor Profile (1990 data). U.S. Census Bureau. Residence County to Workplace County Flows for Georgia Sorted by Workplace State and County. 2003. (2000 data).

The data in Table 3.4 show that 42,509 persons worked in Forsyth County in 2000. Nearly half (49.5 percent) of those persons employed in Forsyth County also lived in Forsyth County. Forsyth County employers drew half its labor force from inside Forsyth County and half from outside the county. Forsyth County drew 13.2 percent of its labor from Fulton County and 9.4 percent from Gwinnett County in 2000.

Table 3.5 shows where residents of Forsyth County worked in 1990 and 2000. Only about 40 percent of Forsyth County's working residents were employed within Forsyth County in 1990. After Forsyth County, Fulton County had the largest employment of Forsyth County's working residents in 1990. DeKalb County and Gwinnett County were also significant employment locations for Forsyth County's working residents in 1990.

Forsyth County had a working labor force (employed residents) of 51,224 in the year 2000, and 41 percent of Forsyth County's working labor force had jobs in Forsyth County. Hence, a significant majority of Forsyth County's working residents were employed outside Forsyth County in 2000. Destinations for employment outside Forsyth County in 2000 were primarily Fulton County (29.8 percent) and Gwinnett County (11.0 percent).

Table 3.5
Employment of Forsyth County Residents
By County of Work, 1990 and 2000

County of Work	1990		2000	
	Number of Forsyth County Residents Working	% of Total County Residents Working	Number of Forsyth County Residents Working	% of Total County Residents Working
Cobb County, GA	828	3.6%	1,790	3.5%
DeKalb County, GA	2,306	10.1%	3,067	6.0%
Forsyth County, GA	9,031	39.6%	21,039	41.0%
Fulton County, GA	5,971	26.2%	15,251	29.8%
Gwinnett County, GA	2,758	12.1%	5,663	11.0%
Hall County, GA	914	4.0%	1,263	2.5%
Other Counties	1,017	4.5%	3,151	6.2%
Total Working	22,825	100%	51,224	100%

Source: Georgia Department of Labor. 1999. Forsyth County, Georgia, Area Labor Profile (1990 data). U.S. Census Bureau. Residence County to Workplace County Flows for Georgia Sorted by Workplace State and County. 2003. (2000 data).

Table 3.6 provides data showing where the city's working residents were employed in 1990 and 2000 and for the 2005-2009 5-year reporting period.

Table 3.6
Employment of City of Cumming Residents
By Place of Work, 1990, 2000 and 2005-2009 Estimates

Place of Work	1990		2000		2005-2009 Est.	
	Number of Residents Working	% of Total	Number of Residents Working	% of Total	Number of Residents Working	% of Total
Worked in place of residence (Cumming)	376	32.3%	655	34.0%	867	33.0%
Worked in Forsyth County, not in Cumming	246	21.2%	540	28.0%	898	34.1%
Worked Outside County of Residence (Forsyth)	541	46.5%	708	36.7%	849	32.3%
Worked Outside Georgia	0	--	25	1.3%	16	0.6%
Total	1,163	100%	1,928	100%	2,630	100%

Source: U.S. Census Bureau, 1990 Census Lookup, and 2000 Census. Summary File 3. Tables P26, P27, and P28. American Community Survey, 2005-2009 5-Year Estimates, Tables B08007 and B08008.

Approximately one-third of Cumming's working residents were employed inside the city, a proportion which has remained consistent over time. Table 3.5 shows that the number of Cumming residents working in Forsyth County but outside the city has increased significantly both in absolute terms and in percent share. That is not surprising, as in 1990 Forsyth County

had relatively limited employment opportunities outside Cumming but now has a more significant economic base outside the city.

Although the absolute numbers of Cumming residents working outside of Forsyth County increased (as did its population generally) from 1990 to 2005-09, the percentage of the city's residents working outside Forsyth County has declined significantly over time. That is a positive sign, as it means the city's working residents are finding employment opportunities closer to home.

EMPLOYMENT BY OCCUPATION

Tables 3.7 and 3.8 show the occupations of the City of Cumming's civilian labor force who worked in 1990 and 2000, respectively. These tables also provide percentage distributions for state and U.S. employment by occupation for purposes of comparison. The 1990 and 2000 figures are not comparable, however, because of changes in the occupational categories between the two decennial censuses.

Table 3.7
Employment By Occupation
Employed Civilian Population 16 Years and Over
City of Cumming, 1990

Occupation	City of Cumming	%	GA %	U.S. %
Managerial and professional specialty	270	23.0	24.6	26.4
Technical, sales and administrative support	424	36.2	31.9	31.7
Service	40	3.4	12.0	13.2
Farming, fishing, and forestry	40	3.4	2.2	2.5
Precision production, craft, and repair	179	15.3	11.9	11.3
Operators, fabricators, and laborers	219	18.7	17.4	14.9
Total	1,172	100	100	100

Source: U.S. Census Bureau, 1990 Census Lookup.

In 1990, Cumming had higher percentages of people employed in technical, sales, and administrative support positions, farming, precision production, and operator occupations than the state or nation as a whole. Cumming residents were underrepresented in service occupations in 1990.

There was not much variation between the distribution of occupations in the state and nation in 2000. Approximately one-third of occupations in the state and nation were managerial, professional, and related occupations as of 2000. Cumming had a significantly higher percentage of people working in service occupations in 2000 than the state or nation, and the city also had comparatively more people working in the construction, extraction, and maintenance trades. Cumming had a slightly smaller percentage of production, transportation, and material moving occupations than did Georgia or the U.S. as a whole.

Table 3.8
Employment By Occupation By Sex
Employed Civilian Population 16 Years and Over
City of Cumming, 2000

Occupation	City of Cumming				GA	U.S.
	Male	Female	Total	%	%	%
Managerial professional, and related	250	283	533	27.4%	32.7%	33.6%
Service	215	251	466	23.9%	13.4%	14.9%
Sales and office	213	210	423	21.7%	26.8%	26.7%
Farming, fishing, and forestry	27	0	27	1.4%	0.6%	0.7%
Construction, extraction, and maintenance	223	11	234	12.0%	10.8%	9.5%
Production, transportation, and material moving	231	34	265	13.6%	15.7%	14.6%
Total	1,159	789	1,948	100%	100%	100%

Source: U.S. Census Bureau, 2000 Census. Summary File 3. Table P50.

EMPLOYMENT BY INDUSTRY

Tables 3.9 and 3.10 show the industries within which the City of Cumming's civilian labor force worked in 1990 and 2000, respectively. These tables also provide percentage distributions for state and U.S. employment by industry for purposes of comparison. Not surprisingly, the state and national economies are quite similar with regard to distribution of employment among the various occupations, for both 1990 and 2000.

Table 3.9
Employment By Industry
Employed Civilian Population 16 Years and Over
Residents of the City of Cumming, 1990

Industry	City of Cumming	%	GA %	U.S. %
Agriculture, forestry, and fisheries	54	4.6	2.4	2.7
Mining	0	--	0.3	0.6
Construction	103	8.8	6.9	6.2
Manufacturing	385	32.9	19.0	17.7
Transportation, communications, and other public utilities	92	7.8	8.5	7.1
Wholesale trade	36	3.1	5.0	4.4
Retail trade	159	13.6	16.5	16.8
Finance, insurance, and real estate	123	10.5	6.5	6.9
Services	196	16.7	29.5	32.7
Public administration	24	2.0	5.4	4.9
Total	1,172	100	100	100

Source: U.S. Census Bureau, 1990 Census Lookup.

As indicated in Table 3.9, Cumming's residents were disproportionately employed in manufacturing industries (almost one-third of the city's labor force) in 1990. Cumming had higher percentages of persons employed in mining, construction, and finance, insurance, and real estate industries than the state or nation in 1990. The percentage employed in service industries was only about half of the state and national percentages in 1990.

For the 2000 census, of some interest are the differences between males and females in terms of the types of industries in which they are likely to be employed. Males dominated employment in waste management, and professional and scientific services, while females clearly dominated the educational, health, and social services industries.

Table 3.10
Employment By Industry By Sex
Employed Civilian Population 16 Years and Over
Residents of the City of Cumming, 2000

Industry	City of Cumming				GA	U.S.
	Male	Female	Total	%	%	%
Agriculture, forestry, fishing and hunting, and mining	34	0	34	1.7%	-	1%
Construction	245	6	251	12.9%	8%	7%
Manufacturing	189	43	232	11.9%	15%	14%
Wholesale trade	15	20	35	1.8%	4%	4%
Retail trade	122	88	210	10.8%	12%	12%
Transportation and warehousing and utilities	65	33	98	5.0%	6%	5%
Information	45	42	87	4.5%	4%	3%
Finance, insurance, real estate and rental and leasing	66	69	135	6.9%	7%	7%
Professional, scientific, management, administrative, and waste management services	147	7	154	7.9%	9%	9%
Educational, health and social services	8	265	273	14.0%	18%	20%
Arts, entertainment, recreation, accommodation and food services	146	129	275	14.1%	7%	8%
Other services (except public administration)	54	64	118	6.1%	5%	5%
Public administration	23	23	46	2.4%	5%	5%
Total	1,159	789	1,948	100%	100%	100%

Source: U.S. Census Bureau, 2000 Census. Summary File 3. Table P50.

Residents of Cumming had an employment distribution by industry in 2000 that was relatively similar to those of the state and nation, with a few exceptions. Cumming's residents were disproportionately employed in the food services, accommodation, recreation, entertainment, and arts industries, with 14.1 percent of total jobs in that category (the largest). That is not surprising given the large number of restaurants in the city. A higher percentage of Cumming's

residents in 2000 were employed in the construction industry than for the state or nation as a whole.

Cumming's working population was not as reliant in 2000 on educational, health, and social services employment as the state or the nation. This finding is somewhat surprising, given the number of public schools, the hospital, and other health facilities in the city. It is also somewhat surprising that the city's share of workers employed in manufacturing is less than the state and nation as a whole, especially because of the significant industrial base (manufacturers) in the city.

EMPLOYMENT AND ECONOMIC BASE

In 1992, Cumming was home to 15.4 percent of all retail establishments, 24.4 percent of all wholesale establishments, and 15.7 percent of all service establishments in Forsyth County. The 1997 data do not account for recent growth in these industries as big box retailers and restaurants have been built in recent years east of Ga. 400 north of SR 20 in the city limits. With regard to sales, Cumming was home to 15.5 percent of all retail sales, 10.5 percent of wholesale receipts, and 24.7 percent of receipts by service firms in Forsyth County in 1992.

Even though it is a relatively small city in terms of size in relation to the county land area, the City of Cumming has substantial percentages of the county's economic base. Cumming is the health care and social assistance center for Forsyth County, with almost two-thirds of the county's health care and social assistance establishments and nearly three-quarters of the annual payroll in health care and social assistance industries in 1997. Cumming is also home to a majority of the accommodations and foodservices establishments in the county (53 percent of annual payroll in that industry category in 1997. Cumming also had more than 40 percent of the retail trade establishments and annual retail payroll in Forsyth County in 1997.

In 1997, the economic base of Cumming encompassed generally at least one-third of total establishments in the county in every category except wholesale trade and arts, entertainment, and recreation. In 1997 the City of Cumming accounted for a majority of county employment in health care and social assistance (64.2%), retail trade (55.6%), and accommodations and foodservices (54.2%). Cumming also accounted for more than 40 percent of all jobs in Forsyth County in manufacturing (43.4%), real estate and rental and leasing (42.3%), and approximately one-third (33.7%) of administrative, support, waste management, and remediation services in 1997. In total, Cumming accounted for 42% of the county's jobs as reported in the 1997 Economic Census.

The Economic Census data do not include government employment. The City of Cumming is home to the vast majority of government employment, since it houses all city employees, most county employees (administrative building, jail, library), several of the schools, and many if not most of other state and federal employees. Hence, counting government employment, the city accounted for more than 42 percent of all jobs in the city in 1997.

Table 3.11 provides employment data for the City of Cumming's economic base.

Table 3.11
Employment by Industry
City of Cumming 1997-2007 and Forsyth County, 2002-2007

Industry	1997 City	2002 City	2002 County	2007 County	2007 City
Manufacturing (31-33)	1,882	2,374	6,712	8,127	2,604
Wholesale trade (42)	739	354	3,364	n/a	574
Retail trade (44-45)	1,948	2,672	5,185	7,952	2,547
Real estate & rental & leasing (53)	88	152	469	829	203
Professional, scientific, & technical (54)	210	346	2,342	4,197	653
Admin. & support & waste mgmt & remediation services (56)	1,369	966	5,853	7,055	744
Educational services (61)	n/a	56	98	213	892
Health care & social assistance (62)	716	958	1,792	4,193	n/a
Arts, entertainment, & recreation (71)	47	54	428	n/a	231
Accommodations & foodservices (72)	826	1,915	2,376	3,904	1,010
Other services (except public admin.) (81)	162	244	902	1,618	268

Source: U.S. Census Bureau. 1997 Economic Census; 2002 Economic Census, release date 1/1/02; 2007 Economic Census, release date 1/21/2011. 2007 Economic Census. www.factfinder.census.gov

This section provides a summary assessment of the economic base in Cumming.

Manufacturing

Manufacturing has increased in the city and county from 1997 to 2007, despite national trends for decline in manufacturing employment. The bulk of the manufacturing jobs inside the city limits of Cumming are animal slaughtering and processing establishments (especially Tyson's poultry processing plant), which collectively employed 1,977 in 2002 (breakdown in 2007 withheld due to disclosure limitations). Light industrial campuses in southern Forsyth County, near the McFarland Road/Ga. 400 interchange, have become a major industrial location in the county, due in part to its proximity to Fulton County and convenient access to Ga. 400. Nonetheless, Cumming's light industrial base remains significant and is likely to remain strong throughout the planning horizon. Hence, manufacturing will remain an important component of the city's economic base in future years.

Retail Trade and Accommodation and Foodservices

Cumming, as the only municipality and most densely developed economic base in the county, has remained the center of trade for the county for decades. Cumming's location adjacent to Lake Lanier also makes it a jumping off point for recreational activities along the lake, including sightseeing, boating, fishing, and camping. Tourism dollars are often spent on retail goods, lodging, and above all, food. Cumming had more than half the employment in retail trade industries in 1997 and 2002. During the 2000s, retail trade establishment grew quickly in several unincorporated portions of the county; by 2007; a slight majority of retail trade employment was located outside Cumming in the unincorporated areas of Forsyth County. Thus, while still of major significance, Cumming no longer has a majority of the retail trade employment in the county. Nonetheless the city will still remain a major retail center for the county.

Cumming had more than half the employment in accommodations and foodservices industries in the county in 1997 and 2002. As of 2007, however, jobs in this sector in the city comprised only 28 percent of the county's total. Hence, even more than with retail trade, restaurants and lodging facilities have dispersed into the unincorporated portions of the county such that Cumming is no longer the location of the bulk of employment in the accommodations and foodservices industries.

Professional and Administrative

Professional, scientific, and technical services has historically been a small share of total employment within the city limits. However, the number of jobs in this industry sector increased by 88 percent in the city from 2002 to 2007. Almost 2,000 jobs were added in this industry in Forsyth County from 2002 to 2007.

Administrative and support, and waste management and remediation services (NAICS code 56) has seen remarkable growth in terms of employment in the last decade in Forsyth County. Interestingly, jobs within the city in this industry declined from 2002 to 2007 but grew by more than 1,000 positions in the county as a whole.

Health Care and Social Services

Health care and social assistance is a major economic sector in Cumming and Forsyth County. In 1997, Cumming had the lion's share of health and social service employment in the county. Employment in these industries more than doubled in the county from 2002 to 2007. In 2002, more than half of the county's jobs in this industry group were located in Cumming. With the county's only hospital and the substantial growth in health care needs arising from an aging population, Cumming has remained the health care center for all of Forsyth County, even though the percent share of total health care and social services employment captured by the city cannot be determined from the data in Table 3.10. Cumming is also home to several nursing homes which have residents that rely increasingly on health care and social services available in the city.

Government

Cumming, as the only incorporated place in Forsyth County, serves as the government center for Forsyth County. Most of the administrative positions in Forsyth County are located in the downtown or nearby in the city. Hence, government represents a major economic activity in the city. Municipal and county employment, as well as state and federal government, will continue to provide important economic benefits to the city.

COMPARISON OF EMPLOYMENT BY INDUSTRY

Industry employment comparisons are made between the nation, state, and county in Table 3.12. Figures for cities are not published. Therefore, Forsyth County is used as the basis of comparison. Forsyth County is more reliant on construction, manufacturing and wholesale trade employment than the state and nation as a whole. The county also has a higher percentage of total industry mix comprised of professional, scientific, and technical services than does the state or nation as a whole.

Table 3.12
Comparison of Private Industry and Government Employment
County, State, and Nation
(percentages of total employment)

Industry	United States 2007	Georgia 2007	Forsyth County 2009
Construction	5.6%	5.4%	8.4%
Manufacturing	10.2%	10.6%	14.6%
Wholesale trade	4.4%	5.4%	8.5%
Retail trade	11.5%	11.7%	11.5%
Transportation and warehousing	3.2%	4.0%	1.5%
Information	2.2%	2.8%	1.1%
Finance and insurance	4.4%	4.0%	2.4%
Real estate and rental and leasing	1.6%	1.6%	0.9%
Professional, scientific and technical services	5.6%	5.4%	7.3%
Management of companies and enterprises	1.4%	1.3%	n/a
Educational services	1.7%	1.4%	1.0%
Health care and social assistance	11.1%	9.2%	9.4%
Arts, entertainment and recreation	1.4%	1.0%	1.2%
Accommodation and food services	8.4%	8.7%	8.0%
Government	15.8%	16.5%	12.2%
Other and Not Classified	11.5%	11.0%	12.0%
Total Shown	100%	100%	100%

Source: U.S. Census Bureau, State and Metropolitan Area Data Book: 2010, and Georgia Department of Labor, Area Labor Profile, Forsyth County.

On the other hand, Forsyth County's economic base is less reliant on government than the state or nation as a whole, and the county's economy is underrepresented in the finance and insurance, information, and transportation and warehousing industries when compared with the state and nation as a whole. Forsyth County has percentage mixes of employment that are similar to the nation and state in retail trade, arts, entertainment, and recreation, and accommodation and food services. All in all, this comparison of the county's employment by industry mix with the state and nation reveals generally that the county has a higher reliance on blue collar jobs, but as the economy further develops, especially given the high incomes in the county, the percentages of white collar jobs such as information will increase.

EMPLOYMENT PROJECTIONS

No projections of employment in the City of Cumming are available from external sources.

Table 3.13 provides employment forecasts for the City of Cumming from 2010 to 2030. These are labeled as "forecasts" rather than "projections" because of the lack of significant data on which to make reliable projections. These figures should therefore be used with some caution.

Table 3.13
Employment Forecasts, 2010-2030
City of Cumming
(Employees)

Industry	2010	2015	2020	2025	2030
Construction	700	820	850	850	900
Manufacturing	2,350	2,500	2,500	2,500	2,500
Transportation & Public Utilities	850	925	950	975	1,000
Wholesale trade	600	575	575	575	575
Retail trade	2,800	3,600	4,000	4,200	4,350
Finance, Insurance, Real Estate	600	650	750	850	1,000
Health and Social Services	1,500	1,750	2,500	2,850	3,100
Professional and Other Services	1,500	1,800	2,000	2,150	2,300
Administrative and Support	700	700	850	1,000	1,100
Arts, Entertainment, Recreation	200	230	260	290	320
Accommodation/Foodservices	900	975	1,050	1,200	1,300
Government	2,500	2,700	2,900	3,150	3,200
Other	235	300	350	380	410
TOTAL	15,435	17,525	19,535	20,970	22,055

Source: Jerry Weitz & Associates, Inc. 2011.

JOBS-HOUSING BALANCE

Cumming has an unusually high jobs-to-housing units ratio when compared with most communities, but it is easily explained. Cumming is the only incorporated place in Forsyth County and, as the preceding discussion has indicated, the principal center of economic activity in the county. In terms of land use Cumming has always been weighted more heavily in favor of nonresidential land uses. As explained in Chapter 2 of this technical addendum, relatively little growth has occurred in the city's housing units because there is not a great deal of land (or demand) for new single-family residential housing in the city given extensive residential suburbanization of unincorporated Forsyth County. Hence, if one looks just at the city limits, the jobs-to housing unit ratio (see Table 3.14) appears to be way out of balance in favor of jobs. Considering the extensive suburban residential areas surrounding Cumming in unincorporated Forsyth County, the high number of jobs concentrated in the city is appropriate. Jobs will continue to increase significantly inside the city limits given extensive vacant and zoned nonresidential development opportunities in Cumming. Housing will begin to increase more significantly later in the twenty-year planning horizon, lowering the jobs-to-housing units ratio in the city. Nonetheless, there will be about 7 jobs for every housing unit in the city throughout most of the planning horizon, as indicated in Table 3.14.

Table 3.14
Jobs-Housing Balance, 2010-2030
City of Cumming

	2010	2015	2020	2025	2030
Jobs	15,435	17,525	19,535	20,970	22,055
Housing Units	2,037	2,237	2,557	2,897	3,237
Jobs to Housing Unit Ratio	7.6 : 1	7.8 : 1	7.6 : 1	7.2 : 1	6.8 : 1

WAGES AND EARNINGS

Table 3.15 compares annual average wages per job in 2005, 2006, and 2007 for the Atlanta and Gainesville Metropolitan Statistical Areas and the State. Average pay per job has been significantly higher in the Atlanta metro region than in the Gainesville metro area or the state as a whole.

Table 3.15
Annual Average Wages per Job, 2005-2007
Selected Geographies
($ Dollars)

Geographic Area	2005	2006	2007
Atlanta-Sandy Springs-Marietta, GA, MSA	$44,423	$45,781	$47,715
Gainesville, GA, MSA	$35,053	$36,100	$36,710
State of Georgia	$38,653	$39,975	$41,574

Source: Bureau of Economic Analysis, Regional Economic Information System, April 2009.

Table 3.16
Comparison of Average Annual Pay by Industry
County, State, and Nation

Industry	United States 2007	Georgia 2007	Forsyth County 2009
Construction	$46,784	$43,520	$49,036
Manufacturing	$53,489	$45,498	$49,140
Wholesale trade	$60,719	$63,641	$71,552
Retail trade	$26,124	$25,542	$25,272
Transportation and warehousing	$42,615	$51,843	$40,404
Information	$69,140	$73,590	$54,600
Finance and insurance	$84,952	$69,205	$52,832
Real estate and rental and leasing	$43,449	$47,235	$39,884
Professional, scientific and technical services	$72,033	$67,387	$62,192
Management of companies and enterprises	$95,519	$88,384	n/a
Educational services	$39,485	$42,692	$21,840
Health care and social assistance	$40,686	$41,100	$38,012
Arts, entertainment and recreation	$30,909	$29,633	$18,044
Accommodation and food services	$16,353	$15,385	$14,040
Government	$50,521	$45,093	$40,144
Average, All Industries	$44,362	$42,701	$49,036

Source: U.S. Census Bureau, State and Metropolitan Area Data Book: 2010, and Georgia Department of Labor, Area Labor Profile, Forsyth County. Note: For the county, average weekly pay is reported in the original source but is transformed into annual pay for purposes of comparison.

Table 3.16 compares annual average wages between the county, state and nation. Annual average wages are higher nationally than the state for most industries, including: construction; manufacturing; retail trade; finance and insurance; professional, scientific and technical services; management of companies and enterprises; arts, entertainment and recreation;

accommodation and food services; and government. Annual average wages are higher in Georgia than in the nation as a whole for the following industries: wholesale trade; transportation and warehousing; real estate and rental and leasing; and health care and social assistance. Employers in Forsyth County in 2009 paid higher annual average wages than the state and nation in the following industries: construction, manufacturing, and wholesale trade. Pay in all other industries was comparably lower in Forsyth County than the state and nation as a whole.

SOURCES OF INCOME

The 2000 census provides data on the sources of income for the city's households. Table 3.17 shows sources of income in 1999 for households in the City of Cumming. Columns containing percentages allow for a comparison with households in Georgia by types of income. As of 1999, Cumming's households were, in comparison with the state's households, substantially more reliant on social security as an income source, slightly more reliant on Supplemental Security Income (SSI). This is another indicator of the city's increasingly elderly population and lower income households. A smaller percentage of households in Cumming have wage or salary income, self-employment income, and interest, dividends, or net rental income.

Table 3.17
Sources of Household Income, 1999
City of Cumming and State of Georgia

Source of Household Income in 1999	Number of Households, City of Cumming	Percentage of Total Households, City of Cumming	Percentage of Total Households, Georgia
With earnings	1,134	77.3%	83.8%
With wage or salary income	1,099	74.9%	81.3%
With self-employment income	128	8.7%	10.9%
Interest, dividends, or net rental income	399	27.2%	28.8%
Social security income	468	31.9%	21.9%
Supplemental Security Income (SSI)	102	7.0%	4.5%
Public assistance income	12	0.8%	2.9%
Retirement income	240	16.4%	14.4%
Total households	1,467	--	--

Source: U.S. Census Bureau, 2000 Census. Summary File 3, Tables P58, P59, P60, P61, P62, P63, P64, and P65.

In 1999, Forsyth County's median household income was $68,890, which ranked second among all counties in the state. Fayette County ranked first among counties in the state, with a median household income of $71,227. Hence, Forsyth County's median household income is well above the state's median of $42,433. These figures show the transformation of Forsyth County's households in terms of increasingly disposable income, which brings economic growth. For Forsyth County households with earnings, the median income is $81,518 (Table 3.18). It is not surprising that Forsyth County's mean incomes by type of income are higher than the state as a whole, because metropolitan counties tend to have higher means than the state as a whole.

Table 3.18
Mean Income by Households By Type of Income, 1999
Forsyth County and Georgia

Type of Income-Households With:	Forsyth County Mean Income	Georgia Mean Income
Earnings	$81,518	$56,625
Social Security Income	$11,315	$10,445
Supplemental Security Income	$6,216	$5,889
Public Assistance Income	$2,920	$2,261
Retirement Income	$18,602	$17,957

Source: Boatright, Susan R. and Douglas C. Bachtel, eds. October 2002. The 2002 Georgia County Guide (21st ed.), p. 30. Athens, GA: College of Agricultural and Environmental Sciences and College of Family and Consumer Sciences, University of Georgia.

ECONOMIC DEVELOPMENT RESOURCES

Promotion and Services

The primary institutional resource in the city for economic development is the Cumming-Forsyth County Chamber of Commerce. The Chamber works toward improving the business climate of the area and provides a broad range of services and programs.

Industrial Park Space

There are some two-dozen industrial parks in Forsyth County (all private), which provide substantial opportunities for future light industrial and manufacturing operations. These include Bluegrass (600 acres at McFarland Road and Ga. 400), Johns Creek (1800 acres, part in southern Forsyth County), Grassland (308 acres), Highland Ridge (90 acres on SR 9), and Steeplechase (77 acres), among others. Sanitary sewer availability is currently a limitation for a few industrial parks; the county has been addressing that deficiency with the extension of new sanitary sewer lines serving a significant portion of non-residential development in the southern end of the county.

Infrastructure and Amenities

Forsyth County's location adjacent to Lake Lanier and proximity to the North Georgia Mountains serves as an attractor to industry and economic development. Over 30 golf courses exist in the immediate area and contribute to a good environment for business executives. The city and county are a reasonable distance from Hartsfield International Airport. Fiber Optics is available in the top business/industrial parks. Effective tax rates in Forsyth County are considerably lower than more developed, surrounding counties.

Education and Training

Lanier Technical Institute, with campuses in Hall County (Oakwood) and off Majors Road in Forsyth County, heads the list of training resources for technological advancement. It works actively with area industries and provides customized training programs. The Forsyth campus

provides a "Service Industry Academy" which provides customer service operations training. The Economic Development Division of the Institute provides a variety of training services.

There are also a number of colleges with technical and business programs, including but not limited to, DeVry (Alpharetta), Reinhardt College (Cherokee County), Brenau University (Hall County), and numerous colleges in Fulton County (Georgia Department of Labor).

Availability of Labor

The Georgia Department of Labor, in its Area Labor Profiles, publishes the types of programs of recent graduates. Data for the Forsyth County area include Atlanta Tech College (Fulton County), Gwinnett Tech College (Gwinnett County), and Lanier Tech (Hall County). Since the Area Labor Profile is periodically updated, the most recent information on Technical Institute graduates is not provided here.

Major Employers

The five largest employers in Forsyth County according to the Georgia Department of Labor's Area Labor Profile for Forsyth County in 2009 are Koch Foods of Cumming LLC, Northside Forsyth Hospital, Scientific Games Products, Inc., The Kroger Company, and Tyson Poultry Inc.

Table 3.19 provides a list of manufacturers in the Cumming area of Forsyth County, including employment. An online business directory is also available via the web page of the Cumming-Forsyth County Chamber of Commerce.

Table 3.19
Manufacturers in the Cumming Area, 2011

Company Name	Address	City	State	ZIP Code	Employees	Primary NAICS	Primary NAICS Description
A P Dataweigh Systems	2730 Northgate Ct	Cumming	GA	30041	00007	33399703	Scale & Balance Except Laboratory Manufacturing
Accurate Label Designs Inc	246 Castleberry Industrial Dr	Cumming	GA	30040	00010	32311916	Other Commercial Printing
Ad-Pak Systems Co	3545 North Pkwy	Cumming	GA	30040	00005	33994201	Lead Pencil & Art Good Manufacturing
Air Products Co	2827 Brookwood Rd	Cumming	GA	30041	00004	42383090	Industrial Machinery Merchant Whls
Alexander Graphix	2255 Callaway Ct	Cumming	GA	30041	00003	54143006	Graphic Design Svcs
Alexander Print & Graphics	2620 Gentry Walk Ct	Cumming	GA	30041	00006	32311908	Other Commercial Printing
Alford Media Svc	7760 Mill Cove Rd	Cumming	GA	30041	00006	51119906	All Other Publishers
All Points Interactive Media	568 Peachtree Pkwy	Cumming	GA	30041	00013	51119906	All Other Publishers
Alpha Office Products	201 Kelly Mill Rd	Cumming	GA	30040	00008	54189006	Other Svcs Related To Advertising
Amazon Premium Products	3585 North Pkwy	Cumming	GA	30040	00004	32561203	Polish & Other Sanitation Good Manufacturing
American Boa Inc	1420 Redi Rd	Cumming	GA	30040	00200	33231205	Fabricated Structural Metal Manufacturing
American Dehydrated Foods Inc	5000 Leland Dr	Cumming	GA	30041	00019	31111903	Other Animal Food Manufacturing
American Printing	2310 Pendley Rd	Cumming	GA	30041	00003	32311009	Commercial Lithographic Printing
American Proteins Inc	4705 Leland Dr	Cumming	GA	30041	00120	31161302	Rendering & Meat Byproduct Processing
Ampro Products Inc	6590 Bannister Rd	Cumming	GA	30028	00005	31111903	Other Animal Food Manufacturing
Anderson Lumber Co	3477 Atlanta Hwy	Cumming	GA	30040	00003	44419044	Other Building Material Dealers
Artisan Millworks		Cumming	GA	30028	00008	32191806	Other Millwork Including Flooring
Atlanta Nail & Tool Svc	1340 Oak Industrial Ln # 300	Cumming	GA	30041	00002	42351026	Metal Merchant Whls
Atlanta Stone Creations Inc	3345 Hutchinson Rd # B	Cumming	GA	30040	00003	42332024	Masonry Material Merchant Whls
Automationdirect.Com	3505 Hutchinson Rd	Cumming	GA	30040	00015	33399901	Misc General Purpose Machinery Manufacturing
B & B Awards & Engraving	541 Lake Center Pkwy	Cumming	GA	30040	00003	45399855	Store Retailers Not Specified Elsewhere
Banner Rama Signs	5140 Chattahoochee Industrial Park	Cumming	GA	30041	00002	33995008	Sign Manufacturing
Barbara Mischiara	6718 Frix Rd	Cumming	GA	30028	00001	32199205	Prefabricated Wood Building Manufacturing
Beasley Report	208 Pine Crest Dr	Cumming	GA	30040	00002	51119908	All Other Publishers
Beaudry Engraving & Graphic	611 Veterans Memorial Blvd	Cumming	GA	30040	00001	33281211	Metal Coating & Non-Precious Engraving

Company Name	Address	City	State	ZIP Code	Employees	Primary NAICS	Primary NAICS Description
Best Buys Graphic Equipment	4830 N Point Way	Cumming	GA	30041	00002	33331504	Photographic & Photocopying Equip Manufacturing
BIZ-Ewomen.Com	2420 Flat Stone Dr	Cumming	GA	30041	00001	51114001	Directory & Mailing List Publishers
Bolton's Truck Parts Inc	2620 Dahlonega Hwy	Cumming	GA	30040	00005	42312065	New Motor Vehicle Parts Merchant Whls
Brandywine Printing Inc	5249 Shiloh Rd	Cumming	GA	30040	00005	32311009	Commercial Lithographic Printing
Btb Industries Inc	3115 Dartmouth Pl	Cumming	GA	30041	00011	33999936	All Other Misc Manufacturing
Burruss Cabinets	2405 Dahlonega Hwy	Cumming	GA	30040	00004	33711003	Wood Kitchen Cabinet & Countertop Manufacturing
C W Matthews	1475 Ronald Reagan Blvd	Cumming	GA	30041	00004	32412101	Asphalt Paving Mixture & Block Manufacturing
Charles E Caine Sanitation	4790 Heards Cir	Cumming	GA	30041	00002	32561210	Polish & Other Sanitation Good Manufacturing
Charles Wolfe & Assoc	2660 Friendship School Rd	Cumming	GA	30028	00004	33999936	All Other Misc Manufacturing
Chem Solutions	6425 White Oak Dr	Cumming	GA	30040	00002	32521105	Plastics Material & Resin Manufacturing
City Plumbing & Electric Supl	6030 Georgia Highway 400	Cumming	GA	30028	00012	42372027	Plumbing Equip Merchant Whls
City Print	4840 N Point Way	Cumming	GA	30041	00003	32311009	Commercial Lithographic Printing
Coal Mountain Timber Inc	3855 Browns Bridge Rd	Cumming	GA	30041	00003	11331003	Logging
Colad Group Inc	2515 Creek Tree Ln	Cumming	GA	30041	00001	32222101	Coated & Laminated Packaging Materials Mfg
Collins & Assoc	3615 Hutchinson Rd # 104	Cumming	GA	30040	00003	51119908	All Other Publishers
Coml Construction Magazine	425 Tribble Gap Rd # 103	Cumming	GA	30040	00011	51112003	Periodical Publishers
Container Automation Systems	4380 N Industrial Dr	Cumming	GA	30041	00010	33399304	Packaging Machinery Manufacturing
Control Concepts Inc	3550 North Pkwy # 100	Cumming	GA	30040	00050	33451202	Automatic Environmental Control Manufacturing
Control Logic Inc	4635 Church Rd # 400	Cumming	GA	30028	00003	33531301	Switchgear & Switchboard Apparatus Manufacturing
Cosmo Prof	655 Atlanta Rd	Cumming	GA	30040	00004	42512013	Wholesale Trade Agents & Brokers
Country Boy Trailers	1550 Atlanta Hwy	Cumming	GA	30040	00011	44122916	All Other Motor Vehicle Dealers
Creative Influence Corp	769 Peachtree Pkwy # 1	Cumming	GA	30041	00003	54189008	Other Svcs Related To Advertising
Creative Shirts Screening	5925 Hendrix Rd	Cumming	GA	30040	00001	32311301	Commercial Screen Printing
Crystal Marble Co	5975 Steeplechase Blvd	Cumming	GA	30040	00040	32799106	Cut Stone & Stone Prod Manufacturing
Cumming Printing	305 Canton Rd	Cumming	GA	30040	00002	32311009	Commercial Lithographic Printing
Cumming Sign Co	611 Veterans Memorial Blvd	Cumming	GA	30040	00005	33995008	Sign Manufacturing

Company Name	Address	City	State	ZIP Code	Employees	Primary NAICS	Primary NAICS Description
DAC Industries Inc	6220 Saddlebridge Ct	Cumming	GA	30040	00005	33999936	All Other Misc Manufacturing
Dacindustries Inc	6030 Bethelview Rd	Cumming	GA	30040	00001	33999936	All Other Misc Manufacturing
Danbury Plastics	239 Castleberry Industrial Dr	Cumming	GA	30040	00004	32611305	Non-Packaging Plastics Film & Sheet Manufacturing
Daves's Tool & Die	110 Industrial Park Dr	Cumming	GA	30040	00008	33351413	Special Tool Die Jig & Fixture Manufacturing
Davinor Inc	5460 Piney Grove Dr	Cumming	GA	30040	00001	33451503	Electricity & Signal Testing Instruments
Dependable Tube Bending LLC	5320 Lake Pointe Center Dr # D	Cumming	GA	30041	00006	33299607	Fabricated Pipe & Pipe Fitting Manufacturing
Designs Galore	4935 Brighton Lake Dr	Cumming	GA	30040	00001	31412101	Curtain & Drapery Mills
Diversified Powder Coating	5705 Bethelview Rd	Cumming	GA	30040	00002	33281219	Metal Coating & Non-Precious Engraving
Drapery Workroom	6160 Parkway North Dr # F	Cumming	GA	30040	00002	31324902	Other Knit Fabric & Lace Mills
Duke Electric Co	3111 Glen Wallace Dr	Cumming	GA	30040	00012	23821007	Electrical Contractors
Durham & Taylor Supply Co	3996 Canton Hwy	Cumming	GA	30040	00010	33151107	Iron Foundries
Duron Paints & Wallcoverings	655 Atlanta Rd # 608	Cumming	GA	30040	00004	44412003	Paint & Wallpaper Stores
Eiqnetworks	4235 Stackstone Dr	Cumming	GA	30041	00001	51119911	All Other Publishers
Endure Medical Inc	1455 Ventura Dr	Cumming	GA	30040	00010	33911203	Surgical & Medical Instrument Manufacturing
Equus	3365 Hutchinson Rd	Cumming	GA	30040	00012	33411901	Other Computer Peripheral Equip Manufacturing
Extreme Flight RC LTD	3600 North Pkwy # 101	Cumming	GA	30040	00002	33993208	Game Toy & Children's Vehicle Manufacturing
FASTSIGNS	907 Buford Rd # 700	Cumming	GA	30041	00004	33995008	Sign Manufacturing
Featurock Industries Inc	1240 Oak Industrial Ln	Cumming	GA	30041	00005	33999936	All Other Misc Manufacturing
Filters For You	4710 Mccoy Cir	Cumming	GA	30040	00006	33399907	Misc General Purpose Machinery Manufacturing
Five Oaks Fence Inc	2685 Business Dr	Cumming	GA	30028	00005	42339013	Other Construction Material Merchant Whls
Five Star Architectural Millwk	4890 Hammond Industrial Dr	Cumming	GA	30041	00008	32191806	Other Millwork Including Flooring
Fletcher Press		Cumming	GA	30028	00003	32311009	Commercial Lithographic Printing
Foil Factory	3425 Hutchinson Rd	Cumming	GA	30040	00005	33999936	All Other Misc Manufacturing
Forsyth County News	302 Veterans Memorial Blvd	Cumming	GA	30040	00035	51111003	Newspaper Publishers
Forsyth Machine Works Inc	5056 Hyde Rd	Cumming	GA	30040	00002	33271002	Machine Shops
Forte Data Systems	1595 Peachtree Pkwy # 204-343	Cumming	GA	30041	00005	51119911	All Other Publishers
Frederick Group	4570 Dennington Trce	Cumming	GA	30028	00001	51119911	All Other Publishers

Company Name	Address	City	State	ZIP Code	Employees	Primary NAICS	Primary NAICS Description
Freedom Motors Of Cumming	594 Veterans Memorial Blvd	Cumming	GA	30040	00006	33661207	Boat Building
G W Moulding Distributors	1479 Ventura Dr # F	Cumming	GA	30040	00013	42331031	Lumber & Wood Merchant Whls
GAF-Elk Materials Corp	4250 Madison Dr	Cumming	GA	30040	00018	32412202	Asphalt Shingle & Coating Materials Manufacturing
GMB Enterprises	210 Industrial Park Dr	Cumming	GA	30040	00050	32619910	All Other Plastics Prod Manufacturing
Goldsmith	655 Atlanta Rd # 501	Cumming	GA	30040	00001	44831012	Jewelry Stores
Graphic Edge	7721 Majors Rd # 100	Cumming	GA	30041	00012	32311009	Commercial Lithographic Printing
Graychem Co	8220 Stonebrook Ct	Cumming	GA	30040	00001	32599805	Other Misc Chemical Prod Manufacturing
Great Fish Co	5955 Parkway North Blvd	Cumming	GA	30040	00005	42446002	Fish & Seafood Merchant Whls
Gunnco Pump & Control Inc	515 Industrial Way	Cumming	GA	30040	00006	33391102	Pump & Pumping Equip Manufacturing
Guthrie Signs & Graphics Inc	2354 Pendley Rd # D	Cumming	GA	30041	00005	33995008	Sign Manufacturing
Happy Hunting & Fishing	4490 Meadow Trl	Cumming	GA	30028	00001	51113003	Book Publishers
Harben Inc	2010 Ronald Reagan Blvd	Cumming	GA	30041	00014	33391101	Pump & Pumping Equip Manufacturing
Harris Printing Svc	2540 Misty Hollow Ln	Cumming	GA	30040	00002	32311009	Commercial Lithographic Printing
Healthcare Building Ideas	425 Tribble Gap Rd	Cumming	GA	30040	00008	51119908	All Other Publishers
Healthfield Respiratory Svc	2080 Ronald Reagan Blvd # 600	Cumming	GA	30041	00004	42345015	Medical Equip Merchant Whls
Heritage Gifting LLC	125 Enterprise Dr # E	Cumming	GA	30040	00004	32721503	Glass Prod Manufacturing Made Of Purchased Glass
Honeywell	8925 Alysbury Way	Cumming	GA	30041	00032	33451103	Search Detection & Navigation Instruments
Hoover Precision Products Inc	2200 Pendley Rd	Cumming	GA	30041	00450	33231210	Fabricated Structural Metal Manufacturing
Insert Molding Solutions Inc	4325 Settingdown Cir	Cumming	GA	30028	00004	32619910	All Other Plastics Prod Manufacturing
International Gourmet Products	6030 Bethelview Rd # 203	Cumming	GA	30040	00006	31199906	All Other Misc Food Manufacturing
Iron Ideas	1370 Weber Industrial Dr # 300	Cumming	GA	30041	00006	33261805	Other Fabricated Wire Prod Manufacturing
J & L Dock Supplies	5070 Elrod Cir	Cumming	GA	30041	00002	33392301	Overhead Cranes Hoists & Monorail Systems
Jenkins Relay & Control	6415 Georgia Highway 400	Cumming	GA	30028	00005	33531407	Relay & Industrial Control Manufacturing
Kelly Mill Shutters	130 Anglin Dr	Cumming	GA	30040	00005	33232111	Metal Window & Door Manufacturing
Keystone Millworks Inc	3780 Post Rd	Cumming	GA	30040	00030	32191806	Other Millwork Including Flooring
Koch Foods Inc	221 Meadow Dr	Cumming	GA	30040	00800	31161501	Poultry Processing
KOPY KAT Inc	5320 Lake Pointe Center Dr	Cumming	GA	30041	00003	32311009	Commercial Lithographic Printing

Company Name	Address	City	State	ZIP Code	Employees	Primary NAICS	Primary NAICS Description
Lakeview Publishing	210 Dahlonega St	Cumming	GA	30040	00003	32311009	Commercial Lithographic Printing
Lang Signs	7108 Castleberry Rd	Cumming	GA	30040	00022	33995008	Sign Manufacturing
Lanier Chemical Co	5700 Keith Bridge Rd	Cumming	GA	30041	00002	32599805	Other Misc Chemical Prod Manufacturing
Lanier Metal Products	3010 Keith Bridge Rd	Cumming	GA	30041	00004	33232204	Sheet Metal Work Manufacturing
Lanier Signs	3240 Keith Bridge Rd	Cumming	GA	30041	00001	33995008	Sign Manufacturing
Larry's Machine Svc Inc	4420 N Industrial Dr	Cumming	GA	30041	00004	33271002	Machine Shops
Lift Easy Sales LLC	6320 Heardsville Rd	Cumming	GA	30028	00002	33392102	Elevator & Moving Stairway Manufacturing
Lothar Walther Precision Tool	3425 Hutchinson Rd	Cumming	GA	30040	00004	33299405	Small Arms Manufacturing
MAK Wire LLC	643 Canton Rd	Cumming	GA	30040	00002	42351039	Metal Merchant Whls
Mapshots	5995 Parkway North Blvd # C	Cumming	GA	30040	00003	44312007	Computer & Software Stores
Mark Heard Fuel Co	2710 Dahlonega Hwy	Cumming	GA	30040	00012	42472005	Other Petroleum Merchant Whls
Market Source	204 Industrial Park Dr	Cumming	GA	30040	00001	32311009	Commercial Lithographic Printing
Mc Allister Retail Svc Inc	120 Anglin Dr	Cumming	GA	30040	00010	33341401	Heating Equip Except Warm Air Furnaces
Mc Cullough Mfg Inc	1685 Redi Rd	Cumming	GA	30040	00008	33271002	Machine Shops
Media Imaging Inc	3482 Keith Bridge Rd	Cumming	GA	30041	00004	33995008	Sign Manufacturing
Metro Fire Protection Inc	243 Castleberry Industrial Dr	Cumming	GA	30040	00015	33399929	Misc General Purpose Machinery Manufacturing
Metso Mineral Industries	8040 Garden Oak Ct	Cumming	GA	30041	00004	33999936	All Other Misc Manufacturing
Micro Metrics Co	4450 Ansley Ln	Cumming	GA	30040	00001	32191801	Other Millwork Including Flooring
Motesart Sign & Print	4250 Keith Bridge Rd	Cumming	GA	30041	00002	33995008	Sign Manufacturing
MTS Systems Corp	1064 Windermere Xing	Cumming	GA	30041	00001	33451924	Other Measuring & Controlling Device Manufacturing
Myles Industries Inc	1461 Ventura Dr	Cumming	GA	30040	00013	42383076	Industrial Machinery Merchant Whls
North Atlanta Printing Inc	237 Castleberry Rd	Cumming	GA	30040	00003	32311009	Commercial Lithographic Printing
North Georgia Reprographics	430 Tolbert St	Cumming	GA	30040	00002	32311009	Commercial Lithographic Printing
North Side Foods Corp	3660 North Pkwy	Cumming	GA	30040	00093	31161102	Animal Except Poultry Slaughtering
O'Reilly Auto Parts	306 Canton Rd	Cumming	GA	30040	00007	44131011	Automotive Parts & Accessories Stores
Octogen Pharmacal Co	2750 Cambridge Hills Rd	Cumming	GA	30041	00004	42421014	Druggists Goods Merchant Whls
Office Max	1300 Market Place Blvd	Cumming	GA	30041	00021	45321007	Office Supplies & Stationery Stores
Osram Sylvania Inc	6065 Overlook Park Dr	Cumming	GA	30040	00004	33511001	Electric Lamp Bulb & Part Manufacturing
Outlaw Disc Brakes	1465 Ventura Dr	Cumming	GA	30040	00002	33634002	Motor Vehicle Brake System Manufacturing

Company Name	Address	City	State	ZIP Code	Employees	Primary NAICS	Primary NAICS Description
Panduit Corp	1819 Atlanta Hwy	Cumming	GA	30040	00179	33911203	Surgical & Medical Instrument Manufacturing
Penton Media	5530 Castlebrooke Glen Ct	Cumming	GA	30040	00001	51112006	Periodical Publishers
Plastic Supply Co	2515 Ivy St W	Cumming	GA	30041	00005	42383067	Industrial Machinery Merchant Whls
Points North Magazine	568 Peachtree Pkwy # 116	Cumming	GA	30041	00011	51112006	Periodical Publishers
Precision Millwork Inc	910 Dahlonega Hwy	Cumming	GA	30040	00080	32191806	Other Millwork Including Flooring
Premier Woodworks	4352 Canton Hwy	Cumming	GA	30040	00006	33712211	Non-Upholstered Wood Household Furniture Mfg
Printing Connection	220 Atlanta Rd	Cumming	GA	30040	00003	32311009	Commercial Lithographic Printing
Pro-Label Inc	4840 Hammond Industrial Dr	Cumming	GA	30041	00015	32311916	Other Commercial Printing
Professional Cryogenic	5166 Performance Dr	Cumming	GA	30040	00005	33281219	Metal Coating & Non-Precious Engraving
Prographics Screen Printing	4350 Taylors Wood Dr	Cumming	GA	30028	00002	54143006	Graphic Design Svcs
R T Marine & Construction	5110 Mark John Way	Cumming	GA	30040	00001	81149004	Other Household Goods Repair & Maintenance
Rapid Refill Ink	1595 Peachtree Pkwy # 200	Cumming	GA	30041	00006	42383073	Industrial Machinery Merchant Whls
Real Estate Media Group	1385 Seneca Ave	Cumming	GA	30041	00006	51119906	All Other Publishers
Redd Mc Donald Mfg Inc	6320 Georgia Highway 400	Cumming	GA	30028	00006	33999936	All Other Misc Manufacturing
Rexon Associates Inc	5745 Cascade Trl	Cumming	GA	30040	00003	33341204	Industrial & Commercial Fan & Blower Manufacturing
Rick's Custom Printing	5285 Lake Pointe Center Dr # C	Cumming	GA	30041	00003	32311009	Commercial Lithographic Printing
Satellite Industries	7010 Derby Trl	Cumming	GA	30040	00005	33999936	All Other Misc Manufacturing
Secure-A-Seal	5650 Riley Rd	Cumming	GA	30028	00008	32739002	Other Concrete Prod Manufacturing
Sepco Corp	566 Peachtree Pkwy # 122	Cumming	GA	30041	00003	33291907	Other Metal Valve & Pipe Fitting Manufacturing
Sherwin-Williams	2370 Atlanta Hwy	Cumming	GA	30040	00005	44412003	Paint & Wallpaper Stores
SIGNARAMA	5890 Bethelview Rd	Cumming	GA	30040	00003	33995008	Sign Manufacturing
Signs & Awnings Over Georgia	26 Tri County Plz	Cumming	GA	30040	00004	33995008	Sign Manufacturing
Signs & Stuff Too	4481 Shiloh Rd	Cumming	GA	30040	00001	33995009	Sign Manufacturing
Simple Signs	1705 Habersham Marina Rd	Cumming	GA	30041	00001	33995008	Sign Manufacturing
Southeastern Polymer Machinery	2515 Ivy St W	Cumming	GA	30041	00009	42383067	Industrial Machinery Merchant Whls
Southern Fastening	736 Peachtree Pkwy	Cumming	GA	30041	00002	42383006	Industrial Machinery Merchant Whls
Southern Signs & Graphics	3335 Hutchinson Rd # A	Cumming	GA	30040	00001	33995008	Sign Manufacturing
Super Trucks & Cars	4660 Browns Bridge Rd # B	Cumming	GA	30041	00003	44131013	Automotive Parts & Accessories Stores

Company Name	Address	City	State	ZIP Code	Employees	Primary NAICS	Primary NAICS Description
Surface Conversion Tchnlgs	6160 Wellington Ct	Cumming	GA	30040	00018	33911203	Surgical & Medical Instrument Manufacturing
Swedish Backcare System Inc	4055 Pointe Vecchio Cir	Cumming	GA	30040	00001	33999936	All Other Misc Manufacturing
Telcom Marketing Group Inc	1380 Weber Industrial Dr	Cumming	GA	30041	00004	33421004	Telephone Apparatus Manufacturing
Threads Up Inc	4710 Mccoy Cir	Cumming	GA	30040	00002	54149001	Other Specialized Design Svcs
Total Automotive Inc	4815 Canton Hwy	Cumming	GA	30040	00002	33639904	All Other Motor Vehicle Parts Manufacturing
Total Printing Systems	2680 Hermitage Dr	Cumming	GA	30041	00003	32311009	Commercial Lithographic Printing
Total-Tex Industries	2170 Old Atlanta Rd	Cumming	GA	30041	00003	32311301	Commercial Screen Printing
Tree Lounge	8630 Wallace Tatum Rd	Cumming	GA	30028	00012	33999926	All Other Misc Manufacturing
Tri Med Co Inc	1370 Weber Industrial Dr #100b	Cumming	GA	30041	00006	33911201	Surgical & Medical Instrument Manufacturing
Trident Industries	102 Colony Park Dr # 700	Cumming	GA	30040	00003	33699907	All Other Transportation Equip Manufacturing
Trox USA Inc	4305 Settingdown Cir	Cumming	GA	30028	00025	33999936	All Other Misc Manufacturing
True Friends Garden Tools Inc	2660 Friendship School Rd	Cumming	GA	30028	00002	33311201	Lawn & Garden Equip Manufacturing
Turnkey Technology	6030 Bethelview Rd # 304	Cumming	GA	30040	00005	51119911	All Other Publishers
Tyson Foods Inc	340 W Maple St	Cumming	GA	30040	01200	31161501	Poultry Processing
Universal Controls Inc	209 Industrial Park Dr # D	Cumming	GA	30040	00003	33451202	Automatic Environmental Control Manufacturing
Voight Abernathy Sales Corp	4635 Church Rd	Cumming	GA	30028	00002	42383076	Industrial Machinery Merchant Whls
Walker & Assoc Inc	5310 Mashburn Dr	Cumming	GA	30041	00005	32799104	Cut Stone & Stone Prod Manufacturing
Warp 3D Model Printing	3940 Ineal Dr	Cumming	GA	30028	00001	32311009	Commercial Lithographic Printing
Wheelco Slitting	3815 Evans Rd	Cumming	GA	30040	00002	32611305	Non-Packaging Plastics Film & Sheet Manufacturing
Wilco Printing	220 Atlanta Rd	Cumming	GA	30040	00003	32311009	Commercial Lithographic Printing
Window Vision	1845 Bernice Dr	Cumming	GA	30041	00002	31324902	Other Knit Fabric & Lace Mills
World Touch Gaming Inc	1420 Oak Industrial Ln	Cumming	GA	30041	00018	33993205	Game Toy & Children's Vehicle Manufacturing
Xtreme Fence XFM Inc	4455 Alicia Ln	Cumming	GA	30028	00020	33261805	Other Fabricated Wire Prod Manufacturing

Source: ReferenceUSA Database, accessed June 2011.

CHAPTER 4
NATURAL AND CULTURAL RESOURCES

This chapter is devoted to an inventory and analysis of the natural and cultural resources located in the City of Cumming.

GEOLOGY AND MINERAL RESOURCES

The predominant geology in the City of Cumming is fine- to medium-grained Biotite Gneiss. Relatively thin bands of Aluminous Schist (garnet and/or kyanite mica schist containing varying amounts of graphite) and Feldspathic Quartzite run northeast-southwest in the general vicinity of Georgia 400. Concentrations of gold mines and prospects are known to exist just northeast of the city limits near Lake Lanier. The only other significant mineral known to exist within the city is a relatively thin band of Quartzite (less than one mile wide) which runs in a northeast-southwest direction between the city's central business district and Lake Lanier. Quartzite is a compact granular rock composed of quartz and derived from sandstone. For a map of geology, see Geologic Map of Forsyth and North Fulton Counties (Joseph G. Murray. Georgia Department of Natural Resources, Earth and Water Division, 1973).

PHYSIOGRAPHY AND TOPOGRAPHY

The City of Cumming lies within the Piedmont Physiographic Province, the Southern Piedmont Section, Upland Georgia Subsection. More specifically, the city is located with two districts. The northwestern portion of Cumming, as well as most of the western half of Forsyth County, is located within the Central Uplands District. The northeastern and central portions of this district are a series of low, linear ridges, 1300-1500 feet above sea level, and separated by valleys 150-200 feet below the ridge crests. Elevations decrease to 1100 feet in the southwest part of the district.

The east and southeast portions of Forsyth County and the southeastern portion of Cumming are located within the Gainesville Ridges District. This district contains a series of northeast-trending, low, linear, parallel ridges separated by narrow valleys. These ridges vary in elevation from 1500-1600 feet in the northeast and decrease gradually to 700 feet in the southwest. Relief varies from 100-200 feet in the northeast to 70-100 feet in the southwest.

Regarding topography, Sawnee Mountain, which is located just northwest of the city, is the highest point in the general vicinity (approximately 1,960 feet). The highest elevation in Cumming lies along Bald Ridge paralleling Georgia 400 on the west. There is a difference in elevation of at least 100 feet between the top of Bald Ridge and Georgia 400. Most of the land in the city lies within the 1160 and 1200 foot contours, although east of Lake Alice lands approach the normal elevation of Lake Lanier (1070 feet).

The topography within the city places some limitations on development. Slopes of more than 20 percent do occur where land descends steeply to Kelley Mill Creek, Sawnee Creek, and between Pilgrim Mill Road and Georgia 400 (Bald Ridge). Significantly sloping lands have remained mostly undeveloped in the city. Soil erosion and sedimentation control measures should be adequate to ensure environmental protection.

SOILS

Cumming has a broad range of at least 40 different soil types. These soils are listed by the soil symbol as well as the soil name in Table 4.1, along with the limitations of development. In addition, the slope ranges for these soils are provided in Table 4.2. The soils that are listed as good (G) for septic tanks or building foundations are those that have characteristics of good drainage, good slope and/or a good degree of profile development (as defined by the Natural Resources Conservation Service, formerly Soil Conservation Service) as well as having similar characteristics with other good soils. The soils that are listed as not suitable (NS) are those that are not recommended for construction of buildings or septic tanks due to their uncertain stability for a foundation and poor drainage.

The soils that are considered to be not suitable for septic tanks or building foundations are also indicated in Table 4.1. These soils are most often found near creeks and rivers as well as in flood plain areas. A large stretch of these poor soils exists on the west side of the city.

Table 4.1
Limitations of Soils on Development
Cumming, Georgia

Symbol	Name	Septic Tank/ Drainfield Suitability	Building Foundation Suitability
Ab	Alluvial land, moderately well drained	NS	NS
AdB2	Appling sandy clay loam, eroded very gently sloping phase	G	G
AeB	Appling sandy loam, very gently sloping phase **	G	G
CaB3	Cecil clay loam, severely eroded very gently sloping phase	G*	G*
CaC3	Cecil clay loam, severely eroded gently sloping phase	G*	G*
CaD3	Cecil clay loam, severely eroded sloping phase	G*	G*
CaE3	Cecil clay loam, severely eroded moderately steep phase	G*	G*
CaF3	Cecil clay loam, severely eroded steep phase	NS*	NS*
CbE	Cecil fine sandy loam, moderately steep phase	NS*	NS*
CbE2	Cecil fine sandy loam, eroded moderately steep phase	NS*	NS*
CcB	Cecil sandy loam, very gently sloping phase **	G	G
CcB2	Cecil sandy loam, eroded very gently sloping phase **	G*	G*
CcC	Cecil sandy loam, gently sloping phase	G*	G*
CcC2	Cecil sandy loam, eroded gently sloping phase	G*	G*
CcD	Cecil sandy loam, sloping phase **	G*	G*
CcD2	Cecil sandy loam, eroded sloping phase	G*	G*
Ce	Congaree fine sandy loam **	NS*	NS*
EaB2	Edgement stony sandy loam, eroded very gently sloping phase	G*	G*
EaC	Edgement stony sandy loam, gently sloping phase	G*	G*
EaE	Edgement stony sandy loam, moderately steep slope	G	G

Symbol	Name	Septic Tank/ Drainfield Suitability	Building Foundation Suitability
Ga	Gullied land, acid materials	G	G
HaB2	Habersham stony fine sandy loam, eroded very gently sloping phase	G*	G*
HaD	Habersham stony fine sandy loam, sloping phase	G*	G*
HaE3	Habersham stony fine sandy loam, severely eroded moderately steep phase	G*	G*
LaB3	Lloyd clay loam, severely eroded very gently sloping phase	G*	G*
LaC3	Lloyd clay loam, severely eroded gently sloping phase	G*	G*
LaD3	Lloyd clay loam, severely eroded sloping phase	G*	G*
LbB2	Lloyd loam, eroded very gently sloping phase	G*	G*
LbC2	Lloyd loam, eroded gently sloping	G*	G*
LcF	Louisa fine sandy loam, steep phase	G*	G*
LeE	Louisburg sandy loam, moderately steep phase	G*	G*
MaB3	Madison fine sandy clay loam, severely eroded very gently sloping phase	G*	G*
MaC3	Madison fine sandy clay loam, severely eroded sloping phase	G*	G*
MaD3	Madison fine sandy clay loam, severely eroded sloping phase	G*	G*
MaE3	Madison fine sandy clay loam, severely eroded sloping phase	G*	G*
MbB2	Madison fine sandy loam, eroded very gently sloping phase **	G*	G*
MbC2	Madison fine sandy loam, eroded gently sloping phase	G	G
MbD2	Madison fine sandy loam, eroded sloping phase	G*	G*
MbE	Madison fine sandy loam, moderately steep phase	G*	G*
MbE2	Madison fine sandy loam, eroded moderately steep phase	G*	G*
Sa	Seneca fine sandy loam	NS	NS
Sb	Severely gullied land	G*	G*
Sc	Starr loam **	NS	NS
WcB	Worsham sandy loam, very gently sloping phase	NS*	NS*

Source: U.S. Department of Agriculture, Soil Conservation Service, 1960. Soil Survey, Forsyth County, Georgia.

Notes:
- G - Good conditions exist
- NS - Not suitable
- * Data were not available. Conclusions made are based on slope, soil characteristics such as drainage and degree of profile development and similarities with other non-suitable soils.
- ** Prime farmland soils according to United States Soil Conservation Service.

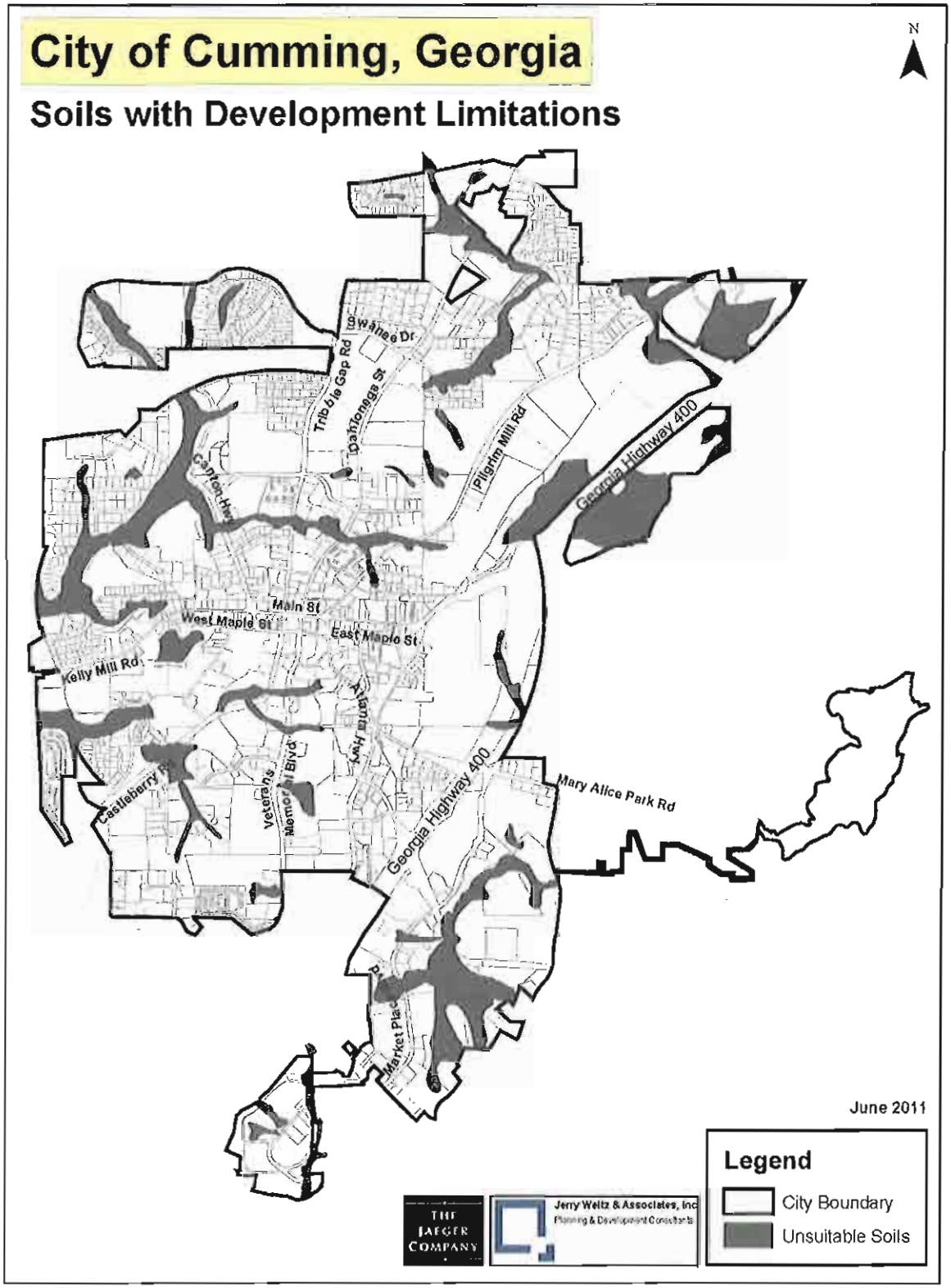

City of Cumming, Georgia
Soils with Development Limitations
N
Shawnee Dr
Tribble Gap Rd
Dahlonega St
Pilgrim Mill Rd
Georgia Highway 400
Main St
West Maple St
East Maple St
Kelly Mill Rd
Atlanta Hwy
Veterans Memorial Blvd
Castleberry Rd
Mary Alice Park Rd
Market Place
June 2011
Legend
City Boundary
Unsuitable Soils
THE JAEGER COMPANY
Jerry Weitz & Associates, Inc
Planning & Development Consultants

Table 4.2
Slope Range of Soils, Cumming, Georgia

Symbol	Name	Slope Range (Percent)
Ab	Alluvial land, moderately well drained	0-2
AdB2	Appling sandy clay loam, eroded very gently sloping phase	7-10
AeB	Appling sandy loam, very gently sloping phase **	2-7
CaB3	Cecil clay loam, severely eroded very gently sloping phase	2-7
CaC3	Cecil clay loam, severely eroded gently sloping phase	7-10
CaD3	Cecil clay loam, severely eroded sloping phase	7-14
CaE3	Cecil clay loam, severely eroded moderately steep phase	14-25
CaF3	Cecil clay loam, severely eroded steep phase	25+
CbE	Cecil fine sandy loam, moderately steep phase	20-30
CbE2	Cecil fine sandy loam, eroded moderately steep phase	20-30
CcB	Cecil sandy loam, very gently sloping phase **	2-7
CcB2	Cecil sandy loam, eroded very gently sloping phase **	2-7
CcC	Cecil sandy loam, gently sloping phase	7-10
CcC2	Cecil sandy loam, eroded gently sloping phase	7-10
CcD	Cecil sandy loam, sloping phase **	10-15
CcD2	Cecil sandy loam, eroded sloping phase	10-15
Ce	Congaree fine sandy loam **	0-2
EaB2	Edgement stony sandy loam, eroded very gently sloping phase	2-6
EaC	Edgement stony sandy loam, gently sloping phase	6-10
EaE	Edgement stony sandy loam, moderately steep slope	10-15
Ga	Gullied land, acid materials	--
HaB2	Habersham stony fine sandy loam, eroded very gently sloping phase	2-6
HaD	Habersham stony fine sandy loam, sloping phase	6-10
HaE3	Habersham stony fine sandy loam, severely eroded moderately steep phase	15+
LaB3	Lloyd clay loam, severely eroded very gently sloping phase	2-7
LaC3	Lloyd clay loam, severely eroded gently sloping phase	7-10
LaD3	Lloyd clay loam, severely eroded sloping phase	10-14
LbB2	Lloyd loam, eroded very gently sloping phase	2-6
LbC2	Lloyd loam, eroded gently sloping	6-10
LcF	Louisa fine sandy loam, steep phase	25+
LeE	Louisburg sandy loam, moderately steep phase	14-25
MaB3	Madison fine sandy clay loam, severely eroded very gently sloping phase	2-7
MaC3	Madison fine sandy clay loam, severely eroded sloping phase	7-10
MaD3	Madison fine sandy clay loam, severely eroded sloping phase	10-14
MaE3	Madison fine sandy clay loam, severely eroded sloping phase	14-25
MbB2	Madison fine sandy loam, eroded very gently sloping phase **	2-7
MbC2	Madison fine sandy loam, eroded gently sloping phase	7-10
MbD2	Madison fine sandy loam, eroded sloping phase	10-14
MbE	Madison fine sandy loam, moderately steep phase	14-25
MbE2	Madison fine sandy loam, eroded moderately steep phase	14-25
Sa	Seneca fine sandy loam	0-2
Sb	Severely gullied land	--
Sc	Starr loam **	0-2
WcB	Worsham sandy loam, very gently sloping phase	2-7

Source: Soil survey Forsyth County, Georgia U.S. Department of Agriculture, Soil Conservation Service, 1960.
** - Prime Farmland Soils.

The soils that are most prevalent in the city limits are considered good and have slopes less than 15 percent. Predominant soil types are:

- Cecil clay loam, severely eroded sloping phase.
- Cecil sandy loam, eroded very gently sloping phase.
- Cecil sandy loam, eroded gently sloping phase.

Due to the existence of public water and sanitary sewer service in the city, as well as the relatively minor limitations on development, no specific policies for soils protection are required other than flood plain regulations.

PRIME AGRICULTURAL AND FOREST LANDS

Tables 4.1 and 4.2 indicate those soils within the city that are considered prime farmland soils. However, agriculture is no longer a central activity in Cumming and is not expected to continue given additional urban development contemplated within the city. For this reason, no specific measures to protect prime agricultural or forest lands are included in the plan.

PLANT AND ANIMAL HABITATS

No known plant and animal habitats of rare, endangered, or protected species exist within the City of Cumming. No protected, rare or endangered species of wildlife have been recorded within Forsyth County. The Red-cockaded Woodpecker is an endangered species that has a present geographic distribution including all of the state of Georgia, but the nearest recordings of the red cockaded woodpecker are in Clarke and Floyd Counties and its preferred habitat probably does not exist in the city.

The Peregrine falcon (also known as "duck hawk" and "great-footed hawk"), which has a "threatened" federal status and "endangered" state status, has been recorded in an area as close as Fulton County. However, its preferred habitat (cliffs overlooking water and skyscrapers) does not exist in the city. The Southern Bald Eagle has an endangered status by the State and Federal Government and has been recorded in nearby Hall County. The Southern Bald Eagle requires wetland areas and undisturbed lakeshore areas, which might possibly be found adjacent to Lake Lanier. The Eastern Brown Pelican, which has a state status of "endangered," has been sited in Fulton County but prefers ocean sounds for habitat.

Table 4.3 provides a listing of the three species of protected plants that have been recorded in Forsyth County. While none of these plants is verified to exist in the city, careful consideration should be given to protect any of these three plant species, upon development in areas identified as "preferred habitat" in Table 4.3.

Table 4.3
Protected Plants Recorded
in Forsyth County

Scientific Name	Common Name	Classification	Preferred Habitat
Cypripedium acaule	Moccasin Flower, Pink Ladyslipper	Unusual/of Special Concern (State)	Acid solids of pinelands, upland woods with pines, edges of rhododendron thickets, and mountain bogs
Cypripedium calceolus	Golden Slipper, Yellow Ladyslipper	Unusual/ of Special Concern (State)	Rich, moist hardwood coves and forests
Echinacea laevigata	Smooth Purple Coneflower	Threatened (State)	Meadows and open woodlands on basic circumneutral soils, often with red cedar

Sources: Atlanta Regional Commission. 1990. Atlanta Region Airport Systems Plan Update: Air Carrier Component/Phase II. Working Paper 2-Inventory. Georgia Department of Natural Resources. 1977. Georgia Protected Plants.

SCENIC VIEWS AND SITES

The City of Cumming does not generally contain any outstanding scenic views and sites worthy of protection. However, significant views of Sawnee Mountain are at least worthy of note here. Furthermore, Bald Ridge is highly visible from Georgia 400.

NATIONAL AND STATE PARKS AND RECREATION AREAS

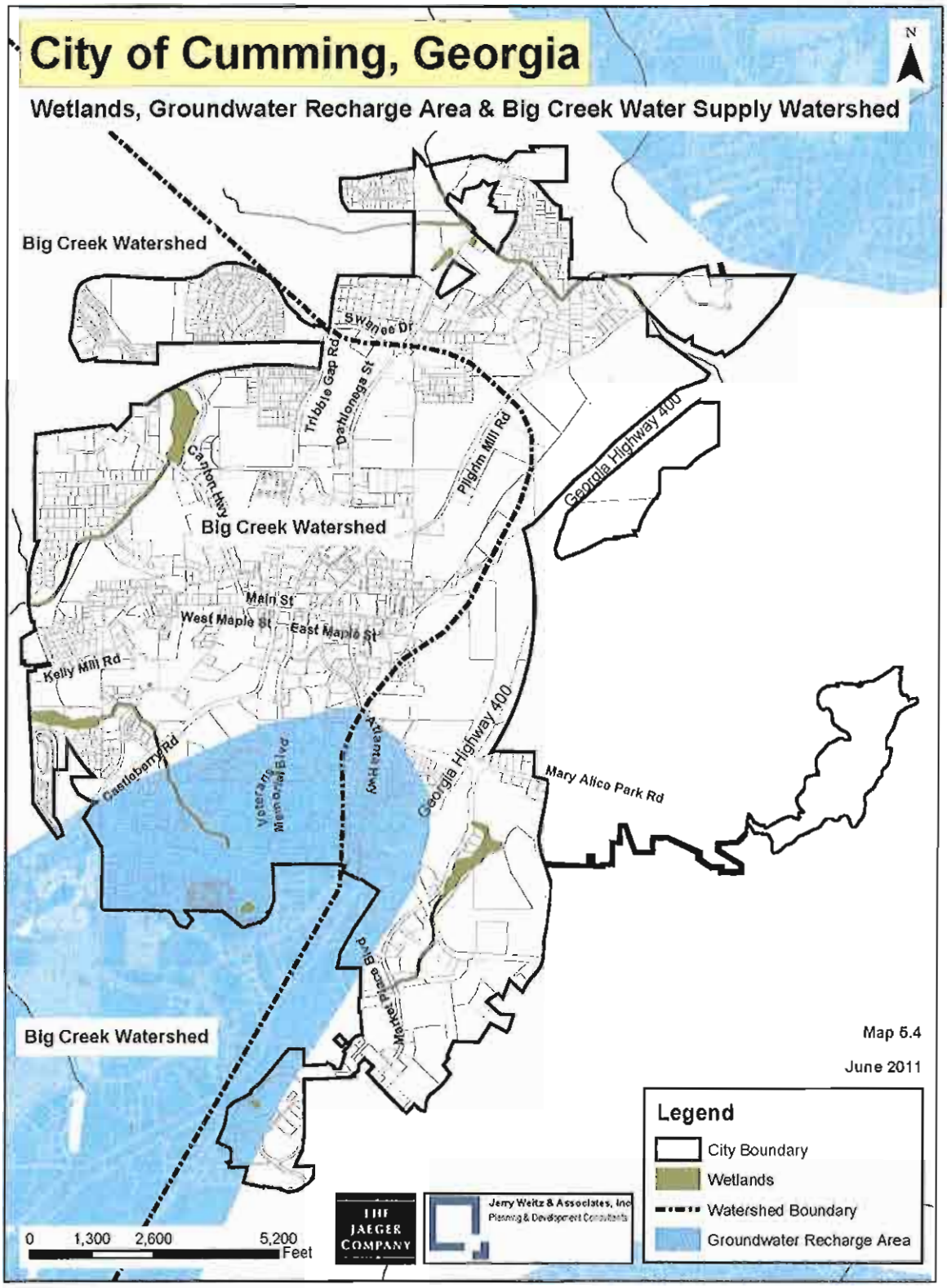
Except for Mary Alice Park, there are no state or national parks, sites, forest, or management areas located within the City of Cumming. The United States Army Corps of Engineers owns and operates numerous small parks and access points along Lake Lanier in Forsyth County outside the City of Cumming.

WATERSHEDS

The City of Cumming and its water and sewer service area include the headwaters of Big Creek, Thalley Creek (Etowah Basin), tributaries of the Chattahoochee River, and several tributaries to Lake Lanier. The Big Creek watershed includes 8,610 acres in the service area. The Thalley Creek watershed contains 7,420 acres of the service area, and the Lake Lanier Watershed is 10,120 acres. Additionally, 3,470 acres of the service area drain to the Chattahoochee River, specifically Daves Creek (Source: Forsyth and Hall Counties Watershed Assessment and Management).

BIG CREEK WATER SUPPLY WATERSHED

A water supply watershed is an area where rainfall runoff drains into a river, stream, or reservoir used as a source of public drinking water supply (Georgia Department of Community Affairs, n.d.). The Georgia Department of Natural Resources promulgated criteria for water supply watersheds (Rules of Georgia DNR 391-3-16-.01) in 1990 in an effort to avoid the contamination of water sources to a point where they cannot be treated to meet drinking water standards.


City of Cumming, Georgia
Wetlands, Groundwater Recharge Area & Big Creek Water Supply Watershed
N
Big Creek Watershed
Swanee Dr
Tribble Gap Rd
Dahlonega St
Pilgrim Mill Rd
Georgia Highway 400
Canton Hwy
Big Creek Watershed
Main St
West Maple St
East Maple St
Kelly Mill Rd
Castleberry Rd
Veterans Memorial Blvd
Atlanta Hwy
Georgia Highway 400
Mary Alice Park Rd
Market Place Blvd
Big Creek Watershed
Map 5.4
June 2011
Legend
City Boundary
Wetlands
Watershed Boundary
Groundwater Recharge Area
0 1,300 2,600 5,200 Feet
THE JAEGER COMPANY
Jerry Weitz & Associates, Inc
Planning & Development Consultants

The City of Roswell withdraws water for its drinking water supply from Big Creek. The Big Creek watershed comprises slightly less than 100 (96.4) square miles. The Big Creek Drainage area is therefore a "small watershed". Roswell's water supply intake is located more than seven (7) miles downstream of the Forsyth County line. Therefore, the following "Part V" criteria apply within the Big Creek watershed:

1. A buffer shall be maintained for a distance of fifty (50) feet on both sides of the stream (all streams within the Big Creek watershed) as measured from the stream banks.

2. No impervious surface shall be constructed within a seventy-five (75) foot setback area on both sides of the streams as measured from the stream banks.

3. Septic tanks and septic tank drainfields are prohibited in the setback areas of 2) above.

In addition to Big Creek itself, these buffer and setback requirements apply to a number of perennial stream tributaries to Big Creek, but only the Kelly Mill Branch and its eastern perennial tributary are located within the city limits of Cumming.

In addition to these buffer and impervious surface requirements, new sanitary landfills are allowed only if they have synthetic lines and leachate collection systems. The following criteria are applicable at all locations in the Big Creek watershed:

1. New hazardous waste treatment or disposal facilities are prohibited.

2. The impervious surface area, including all public and private structures, utilities or facilities, of the entire water supply watershed, should be limited to twenty-five (25%) percent, or existing use, whichever is greater.

3. New facilities which handle hazardous materials of the types and amounts determined by the Georgia Department of Natural Resources, shall perform their operations on impermeable surfaces having spill and leak collection systems as prescribed by the Department of Natural Resources.

Most of the city is included within the Big Creek Watershed (see map). The remainder of the city lies within the Lake Lanier water supply watershed, which is exempted from specific water supply watershed protection criteria. The city has adopted regulations in 2003 implementing the water supply watershed protection standards as part of its zoning ordinance.

GROUNDWATER RECHARGE AREAS

State planning standards require that the city's comprehensive plan include groundwater recharge areas as defined and provided for in the Rules for Environmental Planning Criteria (also known as the "Part Five" standards). The state's environmental planning criteria define a "recharge area" as a portion of the earth's surface where water infiltrates into the ground to replenish an aquifer. "Significant recharge areas" are also defined in the rules based on outcrop area, lithology, soil type and thickness, slope, density of lithologic contacts, geologic structure, the presence of karst, and potentiometric surfaces. In the Piedmont, the significant recharge areas are those with thick soils and slopes of less than eight percent.

The Georgia Department of Natural Resources (DNR) has produced a map titled "Hydrologic Atlas 18," that shows significant groundwater recharge areas in the state. The atlas maps each

area according to its pollution susceptibility potential. According to this official state source, Forsyth County has a number of areas containing thick soils which are considered as potentially significant groundwater recharge areas. Those areas so identified and which are located within the city limits are shown on an accompanying map. Such areas lie east of Georgia 400 between Buford Dam Road and Mary Alice Park Road. "Part V" environmental planning criteria require the following (generalized) standards for the protection of significant groundwater recharge areas.

Within any significant groundwater recharge area:

1. Sanitary landfills should not be permitted. If permitted, the Georgia Department of Natural Resources (DNR) will not issue permits for sanitary landfills not having synthetic liners and leachate collection systems.

2. Land disposal of hazardous waste should be prohibited, and DNR shall not issue any permits for said use. Any treatment, storage or disposal of hazardous waste should take place only on an impermeable pad having a spill and leak collection system.

3. To prevent oil from polluting groundwater, new above-ground storage tanks for chemicals or petroleum for non-agricultural uses should only be permitted if secondary containment for 110 percent of the tank's volume (or the largest tank in a cluster of tanks) is provided, as presently required by rules of the U.S. Environmental Protection Agency.

4. New agricultural waste impoundment sites should be discouraged. Clay liners should be installed as approved by the U.S. Soil Conservation Service (now Natural Resources Conservation Service) if an agricultural waste impoundment site is located in a significant groundwater recharge area.

5. New dwellings, including mobile/manufactured homes, if served by septic tank/drain field systems, must be located on a lot size of from 110% to 150% of the size of the minimum lot area required by the zoning district in which it is located, depending upon the pollution susceptibility of the area in question. Existing lots of record are exempted.

6. Permanent stormwater infiltration basins should be discouraged and should not be constructed in an area with high pollution susceptibility.

7. Wastewater treatment basins should have liners if constructed in an area of high pollution susceptibility, and wastewater spray irrigation systems in high pollution susceptibility areas should only be permitted subject to approval by DNR.

The applicability of these standards to the City of Cumming is minimal, These standards are implemented with regulations contained in the city's zoning ordinance, adopted in 2003.

WETLANDS

Wetlands are areas that are flooded or saturated by surface or groundwater often and long enough to grow vegetation adapted for life in water-saturated soil. A wetland does not have to be flooded or saturated for more very long during the year in order to develop the vegetation and soil characteristics that qualify it as a wetland (Georgia Department of Community Affairs.

n.d. Environmental Planning Criteria: A Workshop for Local Governments). Wetlands generally include swamps, marshes, bogs, and similar areas.

Local governments are required by the environmental planning criteria to acknowledge the importance of wetlands for the public good in the land use planning process. Wetlands are also required to be appropriately identified and mapped in local land use plans (Ga. DNR Rule 391-3-16-.03).

Wetlands serve many functions and have a number of values. In their natural condition, wetlands temporarily store flood waters, thereby preventing flood damage. Wetlands can also protect lands from erosion b, reducing the velocity of water currents. Many wetlands also are areas of groundwater discharge and recharge, and some wetlands may provide sufficient quantities of water for public use. A variety of natural products are provided in wetlands, including timber, fish and wildlife. Wetlands also have important environmental quality values such as improving water quality by intercepting stormwater runoff, preventing eutrophication of natural waters, and by supporting delicate aquatic ecosystems (nutrient retention and renewal), food chain support, migratory waterfowl usage, etc.

The United States Fish and Wildlife Service has completed its inventory of wetlands in Forsyth County. These wetland areas are mapped herein. Areas shown as wetlands in Cumming include flood plains along Kelley Mill Branch and its eastern perennial tributary, Lake Alice, and a few other small isolated areas. The wetland types contained within the city are of the Palustrine class (forested, scrub/shrub, unconsolidated bottom subclasses), according to the National Wetlands Inventory of the U.S. Fish and Wildlife Service. Wetlands should be protected from damage by urban land uses.

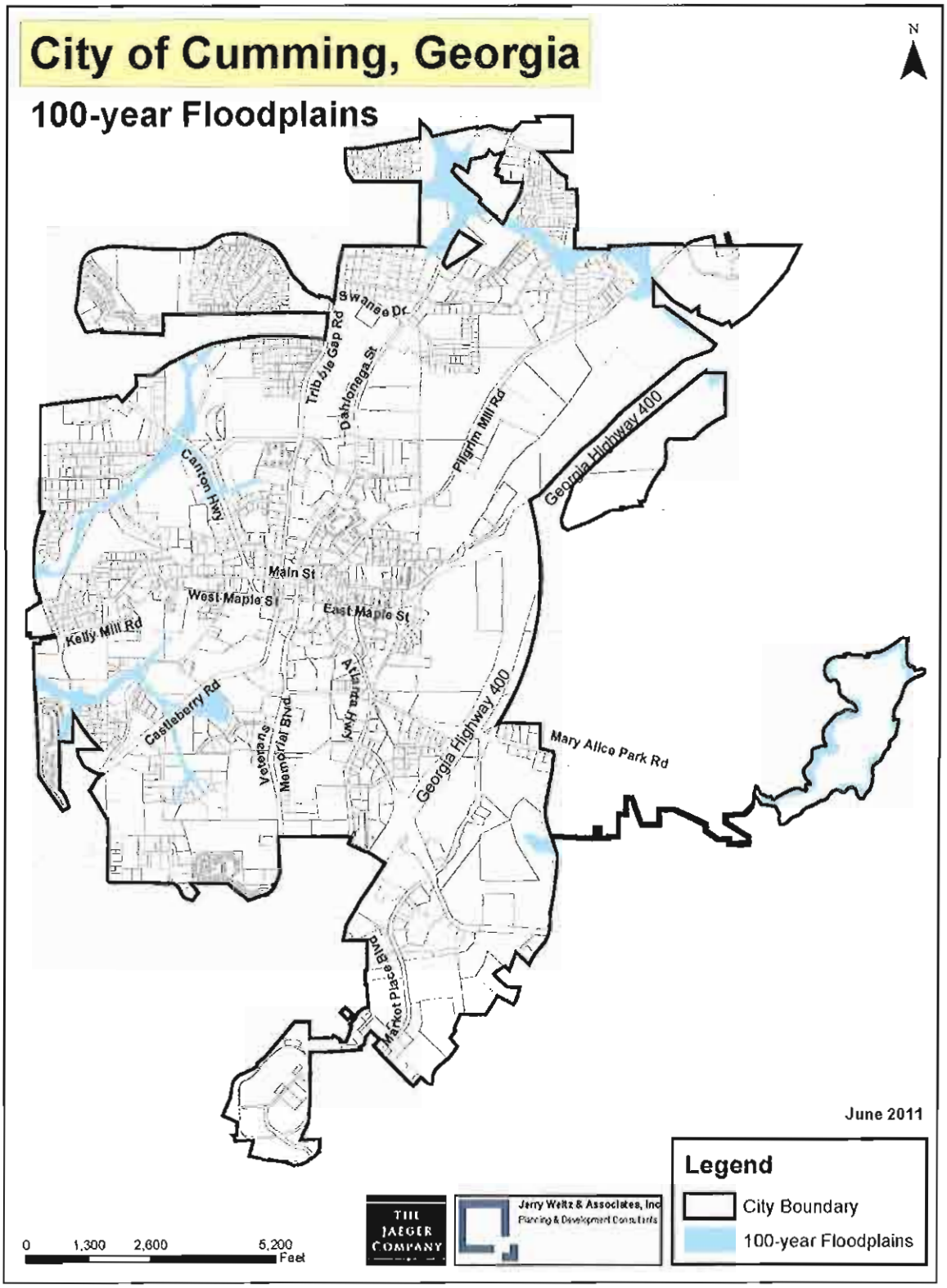
The city's zoning ordinance provides for the review and mitigation of wetlands. It allows for the withholding of land use approval and building permits in areas designated as wetlands until a jurisdictional wetland determination is completed.

FLOOD PLAINS

Flood plains in the City of Cumming are mapped. These areas are regulated by the city's flood plain management ordinance, and such protection is considered adequate.

WATER QUALITY AND WATERSHED MANAGEMENT

Once the Environmental Planning Criteria were adopted in 1990, Georgia continued to identify threats to water quality and to consider programs to improve public water quality, following the national-level focus on water quality issues. Throughout the 1990s, the United States Environmental Protection Agency developed more stringent programs to address stormwater management, total maximum daily load (TMDL) standards for pollutants, and source water protection. Georgia followed suit, developing state programs that are at least as stringent as the national standards. The Georgia Environmental Protection Division now requires all local governments to address local water quality issues through the following: TMDL studies, stormwater management permitting, and watershed assessment and watershed management planning.


City of Cumming, Georgia
100-year Floodplains
N
Swanee Dr
Tribble Gap Rd
Dahlonega St
Pilgrim Mill Rd
Georgia Highway 400
Canton Hwy
Main St
West Maple St
East Maple St
Kelly Mill Rd
Castleberry Rd
Veterans Memorial Blvd
Atlanta Hwy
Georgia Highway 400
Mary Alice Park Rd
Market Place Blvd
June 2011
Legend
City Boundary
100-year Floodplains
THE JAEGER COMPANY
Jerry Weitz & Associates, Inc
Planning & Development Consultants
0 1,300 2,600 5,200
Feet

Forsyth County prepared a Community Watershed Assessment and Watershed Management Plan (2000). The watershed assessment portion of the document presented water quality information about each watershed in the county. The assessment for the Big Creek watershed, within which much of the city lies, found the overall aquatic integrity substantially degraded, due to the presence of increased nutrients, sedimentation, copper, and general degradation of aquatic habitat. In addition, fecal coliform present in Big Creek exceeds state standards. The assessment found that changes in land use contributed to habitat degradation, and water quality degradation was a direct result of urban runoff and point source discharges.

HISTORIC AND CULTURAL RESOURCES

Forsyth County History

Forsyth County was created by legislative act on December 3, 1832, and was named for the Honorable John Forsyth, who was a noted Georgia lawyer, diplomat and statesman. During his life, John Forsyth served as Attorney General and Governor of Georgia, United States Congressman and Senator, and Secretary of State under Presidents Andrew Jackson and Martin Van Buren. The county was formed from part of the land ceded by the Cherokee Indians in 1832. When gold was discovered in the Southern Blue Ridge Mountains, more white settlers moved into the area. Under the Lottery Plan, held in the Capital of Milledgeville, each settler into the area was assigned a 40-acre tract of land within the county.

Cumming, the only incorporated city in the county, is the original county seat of Forsyth. Cumming and was named for William Cumming. He was a noted lawyer, editor, and army officer in the war of 1812. The name was chosen by the original 100 inhabitants of the city.

Early Settlement Pattern and City History

Cumming was "laid out" or surveyed about 1833. The city was incorporated in 1834. Cumming at its founding consisted of two 40-acre Land Lots. At the center of town was the public square. From the square, the land ran ¼ mile north-south and ½ mile east-west. There were a total of 176 lots – 128 bordered the square in eight city blocks of 16 lots, 72 feet by 72 feet in dimensions. The remaining 48 lots were estate lots of approximately one acre. The city's original design remains relatively unchanged today, but none of the earliest homes, hotels, or stores survive (Malone and Deviney 1996). Cumming resembles other "county seat" communities existing in Georgia which follow a "courthouse plan," such as Sandersville, Cleveland, and Blairsville. The settlement pattern was relatively sparse at the founding of the municipality. Many of the earliest structures were simple and/or crude dwellings that were replaced as residents prospered, or they simply did not survive the passage of time.

In the early years, Cumming relied economically upon agriculture and forest products. In the 1800s, tobacco was grown in the region, but by the 1900s cotton began to dominate. With the decline of demand for cotton during the Great Depression, the economy around Cumming shifted to livestock. In the 1940s and 1950s, the poultry industry was introduced into the area. Poultry and textiles are the county's oldest industries, and poultry still contributes to the county's economic base. Buford Dam was completed and Lake Sidney Lanier was created in 1957.

Historic Resources Survey

Historic properties surveys identify individual buildings and districts for possible listing in the National Register or Georgia Register of Historic Places. They are also used to support local

designations of historic buildings and districts, expedite environmental review by governmental agencies, aid preservation and land-use planning, and promote research of state history and architecture. Also, surveys can increase awareness of (and interest in) a community's historic buildings and sites.

Historic resources surveys provide information on buildings, structures, objects, and sites which are 50 years old or older and which possess historical, architectural, or cultural significance. They do not provide a thorough documentation of each resource. A comprehensive survey of Cumming's historic resources was undertaken by the Department of Natural Resources in 1975, and the historic and natural resources element of the 2015 General Plan relied on that 1975 survey supplemented by windshield survey. An updated survey was completed in the mid-1990s (Malone, Connie, and Claudia Deviney. 1996. Forsyth County, Georgia Historic Resources Survey Report). It reveals historic resources and more detailed information about the properties and the architecture of historic structures.

The 1996 survey found 47 historic properties within the city limits of Cumming. In the survey report, those resources located in Cumming are designated "CO" and with numbers 1 through 47. Many of the inventoried resources no longer exist. The physical conditions of remaining structures in the survey were rated as "excellent" (recently restored or rehabilitated); "good" (structurally and cosmetically sound; in need only of routine maintenance); "fair" (structurally sound but in need of cosmetic repair and routine maintenance); "poor" (in need of structural as well as cosmetic repair and routine maintenance, and "ruin" (deteriorated beyond restoration/rehabilitation). Based on the 2015 plan, the Historic Resources Survey Report recommended a historic district for Kelly Mill Road, which was the only intact historical neighborhood in the city of Cumming (see later discussion). The historic resources surveying process included a public participation component. Given the existence of this 1996 survey and the continued loss of historic resources, no further survey or documentation of resources is considered necessary.

Residential Resources

The majority of the historic residential construction in Cumming consists of frame structures of simple design. There are few houses of high style design or influence. Some of the residences, especially along Pirkle Ferry Road, exhibit Victorian-era detailing or massing. These Folk Victorian homes along with Bungalows and Tudor Revival homes are representative of the older residences within Cumming. Older dwellings were constructed from the turn of the century to the 1940s.

Commercial Resources

Although Cumming has a historic downtown commercial area, there are no outstanding examples of historic commercial architecture, and relatively few commercial resources remain. Some of the older commercial structures in the downtown were destroyed to make room for the County's administration building and parking deck. For those commercial structures remaining in the central business district, some of the storefronts have been altered but on some structures the brickwork remains intact.

One of the few outstanding elements in the downtown area is the raised sidewalks with hexagonal pavers. This feature, once seen in abundance throughout Georgia, is disappearing from many downtowns and should be preserved as an important part of Cumming's

streetscape, adding texture and variety to downtown (2015 General Plan). The city's downtown streetscape project continued this historic tradition with the installation of hexagonal pavers.

Industrial Resources

There are no known industrial resources of historic or cultural significance in the city limits.

Institutional Resources

Cumming developed around the courthouse property (public square) located in the center of downtown Cumming. A log house became the first county courthouse in 1833. By 1839 a frame structure was built in place of the house. A sturdier brick courthouse was built in 1854. That building was torn down in 1905 to build another brick courthouse which was erected in 1906, which was destroyed by arsonist's fire in 1973. The current courthouse was completed in 1978. The courthouse property is important in terms of government) history.

Transportation Resources

The Cherokee Federal Road, which ran east to west, was the white man's first road across northwest Georgia. It was built as a result of the Treaties of Tellico in 1805 and served as an artery to west Tennessee and northern Alabama. The Federal Road became an important postal route, with the earliest post offices in northwest Georgia located along its path. Segments of the old federal Road survive today in the Coal Mountain area of northern Forsyth County (Malone and Deviney 1996). In the 1830s ferries (to cross the Chattahoochee River) were in operation, and ferry roads converged at the current intersection of SR 9 and SR 141 (south of the city) and connected with the Federal Road.

Cumming was located along the ridge between the Indian Sawnee Settlement at Sawnee Mountain and the headwater of Bald Ridge Creek. Because of its location, Cumming became an important trade center for herdsman. The ridge on which the city was located provided an ideal trail for moving livestock.

Rural Resources

As of 1992, there were a few agricultural buildings left within the city limits of Cumming. There are areas of open land with agricultural outbuildings still existing in the city. However, any remaining agricultural buildings in the city limits appear to be too few, or too threatened by development, to be worthy of preservation. No rural resources were noted in the 1996 survey.

Archaeological Resources

Prior to White settlement, Forsyth County was part of a vast territory which belonged to the Cherokee Indians. Cherokees were either relocated voluntarily or removed from Georgia by 1838 in what is commonly referred to as "The Trail of Tears." However, two Cherokee chiefs refused to leave – Chief Sawnee and Chief Settendown (Malone and Deviney 1996).

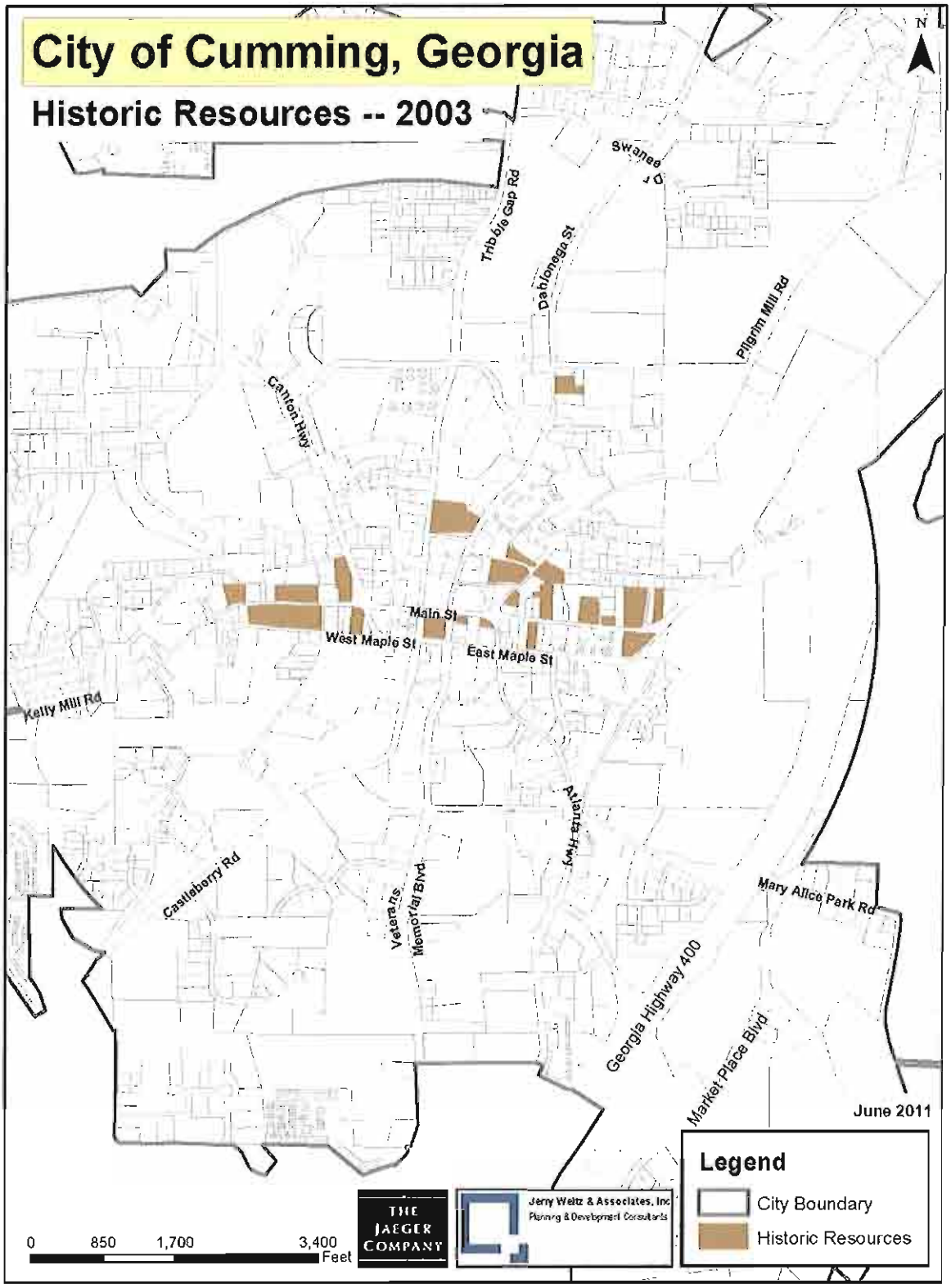
The Georgia Archaeological Site File (GASF) is the official repository for information about known archaeological sites of all periods in the state of Georgia. There is no record at this time of any archaeological sites within the city limits of Cumming (2015 General Plan). It is important, however, to recognize and protect any potential archaeological sites, or those that

may be discovered in the future as an important part of the city's historic or pre-historic cultural resources. These resources may be lost if not recognized and protected.

Consideration of Historic Districts

Historic districts contain a number of historic structures which relate to one another historically and architecturally. The Kelly Mill Road area in Cumming was previously identified in the 2015 General Plan and the Historic Resources Survey as having the greatest potential to be designated as an historic district. However, it has never been designated as such.

Kelly Mill Road is an early 20th century neighborhood located close to downtown. The neighborhood has evolved, however, from a residential area into a commercial and office use extension of downtown. The Kelly Mill Road area has been included within the boundaries of the city's central business district. Given the redevelopment potential for mixed-use development in this area, establishing an historic district is counter to future development objectives of the city.


City of Cumming, Georgia
Historic Resources -- 2003
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Tribble Gap Rd
Dahlonega St
Pilgrim Mill Rd
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Kelly Mill Rd
Castleberry Rd
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Georgia Highway 400
Market Place Blvd
June 2011
Legend
City Boundary
Historic Resources
0 850 1,700 3,400 Feet
THE JAEGER COMPANY
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CHAPTER 5
COMMUNITY FACILITIES AND SERVICES

This chapter provides technical details of community facilities and services provided to residents, businesses, institutions, and industries located in the City of Cumming.

WATER SYSTEM

Potable water is a vital community service. With any growing community, the need for water will continue to increase. Municipal water is best thought of as an integrated system of production, treatment, storage, and distribution. Even the smallest public water systems are complicated and expensive operations. Thus, there are many aspects of the water system that are included in the facility analysis.

History

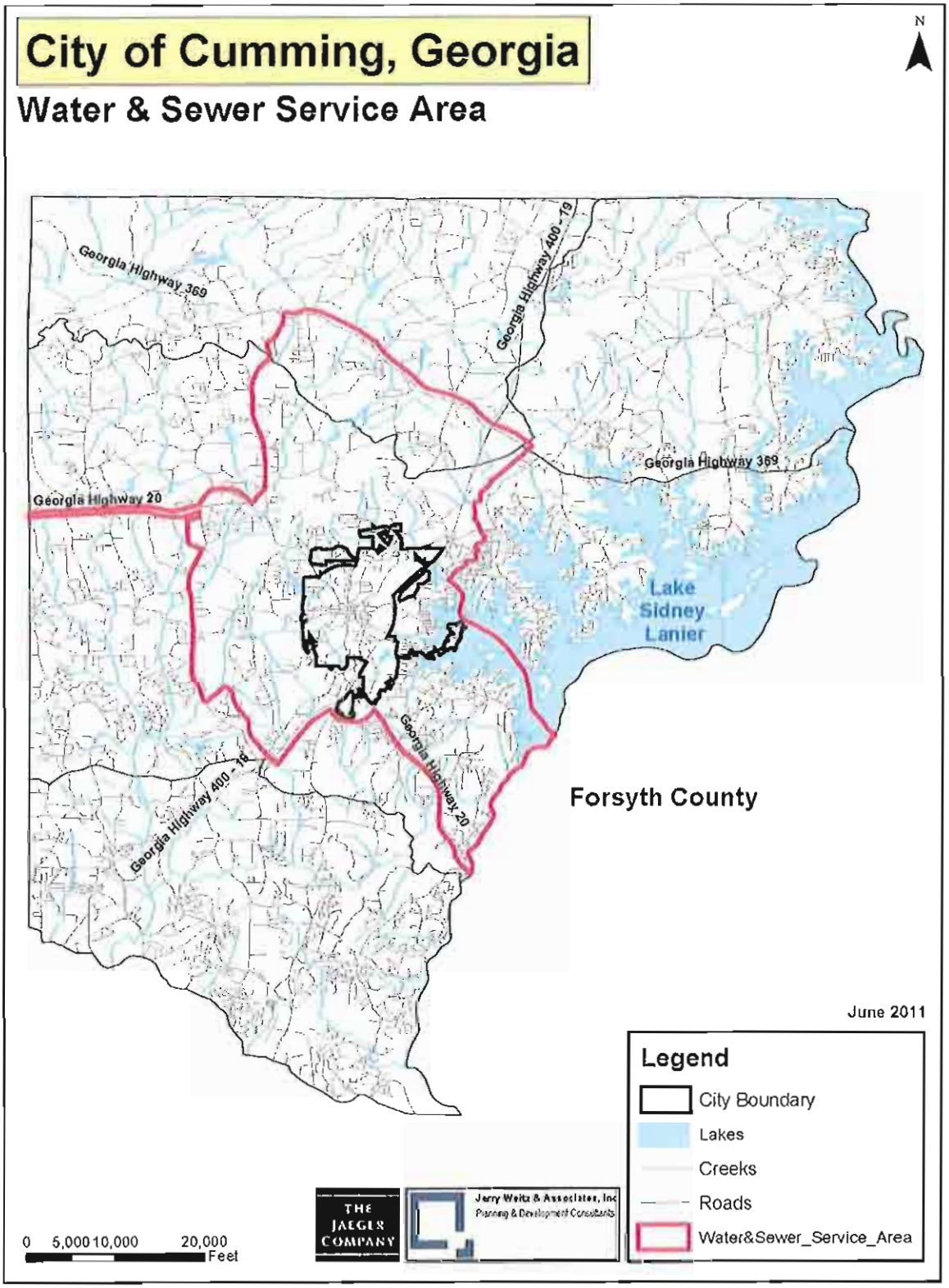
The City's first water treatment plant was constructed in 1949, where raw water was taken from Sawnee Creek adjacent to the plant site. The first treatment plant had a capacity of 144,000 gallons per day. The capacity was doubled in 1955 to 288,000 gallons per day, and doubled again in 1959 to 576,000 gallons per day. The treatment plant capacity was increased to a total of 1,382,400 gallons per day in 1969, with a change in raw water source from Sawnee Creek to Baldridge Creek at a 2.5 mile distance from the plant. In addition to plant capacity expansion, the plant was enlarged to include the following functions: chemical feeding and mixing; coagulation basin; settling basin; two rapid sand filters; a 50,000 gallon clearwell; an additional wash water pump; and a 500,000 gallon ground storage tank on Sawnee Gap.

In 1979 the plant was expanded to a capacity of 3.2 million gallons per day, and the water source was switched to an intake facility on Lake Lanier. This plant expansion included a laboratory and office, chlorination and fluoridation rooms, chemical feed room, chemical storage room, raw water meter and pre-chemical application structure, flash mixer and flow distribution structure, two coagulation basins, two settling basins, four rapid sand filters, an additional wash water pump, settled solids pumping station, post chemical application and mixing structure, a settled solids lagoon, and a 500,000 gallon elevated storage tank at the location of the Baldridge ground storage tanks. The City's withdrawal permit was increased to 5.0 million gallons per day in 1985.

Additional improvements were made in 1988 which included conversion of the 1979 filters to high rate filtration, installation of instrumentation to monitor treated water quality and filter turbidity, addition of a one million gallon prestressed clearwell, and construction of an additional 16-inch raw water line from Lake Lanier to the treatment plant, thus expanding plant capacity to 7.3 million gallons per day.

Service Area

In 1987 the City of Cumming and Forsyth County entered into a formal agreement which defines the service areas of each water system. The service area is shown on a colored map. The agreement also establishes the guidelines for the City to supply water to Forsyth County on a wholesale basis. This Wholesale Water User's Agreement expires very soon, in 2012, and negotiations to update that agreement are ongoing. Presently, the City sells treated water to Forsyth County.


City of Cumming, Georgia
Water & Sewer Service Area
N
Georgia Highway 369
Georgia Highway 400 - 19
Georgia Highway 369
Georgia Highway 20
Lake Sidney Lanier
Georgia Highway 20
Georgia Highway 400 - 19
Forsyth County
June 2011
Legend
City Boundary
Lakes
Creeks
Roads
Water&Sewer_Service_Area
THE JAEGER COMPANY
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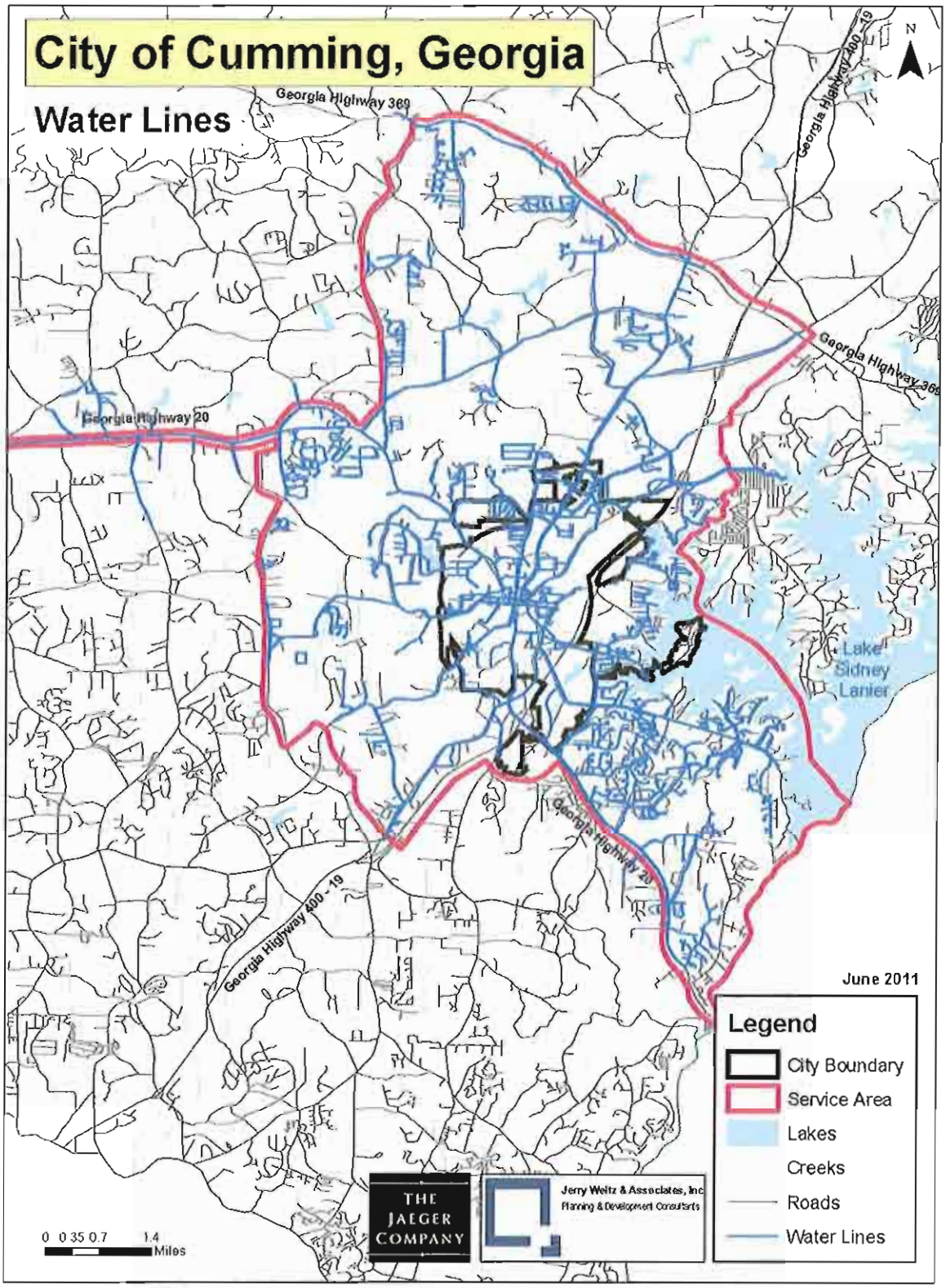
City of Cumming, Georgia
Water Lines
Georgia Highway 369
Georgia Highway 400 - 19
Georgia Highway 20
Georgia Highway 369
Lake Sidney Lanier
Georgia Highway 400 - 19
Georgia Highway 20
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June 2011
Legend
City Boundary
Service Area
Lakes
Creeks
Roads
Water Lines
THE JAEGER COMPANY
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Planning & Development Consultants
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Miles

The City also sells 10 million gallons of raw water daily for use at the Forsyth County treatment plant, which was brought online in 1999. For this purpose, the City and Forsyth County entered into a Raw Water Agreement for the sale to Forsyth County of raw water withdrawn from the City's Lake Lanier intake facilities. The Raw Water Agreement incorporates a sales and operating cost agreement, and has an open-ended contract period for the length of the agreement to sell raw water to the County. The City has the withdrawal capability to provide up to 12 million gallons per day of raw water to Forsyth County.

System

The water system is guided by a set of standard specifications and details, which have been adopted by the City as part of a more comprehensive set of construction standards and specifications. Such standards provide uniformity of construction, materials, and equipment. The system consists of an intake facility on Lake Lanier, a water treatment plant, and pipeline distribution facilities, supplemented by booster stations, and water tower or tank storage facilities.

Water Intake and Treatment

The City's permit for raw water allows the withdrawal of 34 million gallons per day from Lake Lanier. Of that, 18 million gallons are treated at the City's treatment plant, of which some is sold to Forsyth County, and another portion is sold to Forsyth County and treated at the county's Water Treatment Facility located on Antioch Road.

In 2012, the agreement with Forsyth County for the sale of treated water either expires or will be renegotiated. If it expires, the City will regain the potential to use 4-5 million gallon per day, which will likely result in a surplus of capacity, even with anticipated growth. It is possible, however, that the County may elect to extend the agreement. In that event, it is possible that the 12 to 14 million gallons of water the City reserves for its use may not be sufficient on peak water use days to serve the needs of the projected population, and expansions to the capacity of the plant may be warranted.

Raw water from Lake Lanier is withdrawn from the lake by the city's high service vertical turbine pumps. The pumps force the water through an approximately 5-mile-long raw water main to the city's Potable Water Production Facility (PWPF) located on Dahlonega Highway in the north part of the city. Upon arrival to the PWPF, alum and polymer are added to the raw water to cause the finely divided mud particles to clump together and thus become heavier so that these particles will settle to the bottom of a settling basin. The water is then filtered and disinfected with chlorine to make the water biologically safe. Lime is added to the water to adjust the pH, a corrosion inhibitor is added to make the water non-corrosive, and fluoride is added to help prevent dental cavities (City of Cumming 2003 Water Quality Report).

The water treatment plant capacity was expanded in 1993 to accommodate 18 million gallons per day. Since 1993, the City has added a 2 million gallon clear well to the storage system; a solids handling facility with 2 sludge thickeners and a sludge press, a new chemical feeding building; a new influent Parshall flume and metering station, new pre- and post-flash mixers, new sedimentation basins, new filters, new piping, and a new SCADA system.

The city constructed a state-of-the-art Settled Solids Dewatering Facility with a price tag of approximately $4.3 million in 2001. Residual solids are generated when the mud, silt, clay, and organics from Lake Lanier are mixed with aluminum sulfate (alum) and polymer, allowed, to

coagulate together, and eventually settle to the bottom of the treatment basins at the PWPF The solids are collected and pumped to the Sludge Thickener Tanks and eventually to the Sludge Press Building where a plate-and-frame press is used to squeeze up to 48 percent of the water out of the solids. Once the solids have been dewatered, they are released into a truck and hauled to a sanitary landfill. The state-of-the-art facility replaced the antiquated waste lagoons, located across Dahlonega Highway from the PWPF (City of Cumming 2003 Water Quality Report).

The Federal Safe Drinking Water Act of 1974, as amended, establishes strict water quality standards. Compliance with the standards developed under this law is mandatory. Many water sources require additional, expensive treatment in order to achieve these new standards. Even after full treatment, including filtration, water is disinfected to ensure the destruction of pathogenic organisms. Bacteriological, physical, and chemical tests are required to be performed on water samples collected regularly from the source, during treatment, and from the distribution system. In addition, water systems should meet other standards with regard to water color, turbidity, odor, and taste. The City monitors these other water quality standards and is responsive to citizen complaints with regard to water quality.

Distribution and Storage System Design

The water distribution system consists of a 30-inch and two 16-inch raw water pipelines from the intake facility to the treatment plant on Dahlonega Street. Water mains radiate from the water treatment plant along major roadways. The majority of main water lines within the service area consist of 12-inch to 24-inch pipes. The largest 24-inch water main is located in the vicinity of the central downtown area, with 18-inch lines along portions of Castleberry Road and Veterans Memorial Drive. The remainder of water mains are typically 12-inches in diameter. Currently, 8, 6, 4 and 2-inch distribution lines connect from the main lines to service residential and commercial areas. There are 4 water booster stations designed to serve approximately 30 homes each.

The water system includes other appurtenances in addition to water mains, including a variety of valves. Gate valves are used to regulate the flow in pipes and are located at many places in the system. Other types of valves in the water system may include air-relief, blow-off, and drain values, as well as check valves, pressure-relief valves, air inlet valves and pressure-regulating valves. Thrust blocks, water meters, and fire hydrants are also components of the water distribution system (Colley 1986).

Water storage is needed to provide extra volumes of water to fight fires and feed portions of the distribution system during repairs to mains, pumps, and transmission pipes. Water storage in Cumming consists of 5 water tanks with a total storage capacity of 6.1 million gallons. All of the tanks are located at the same topographical elevation. Two of the tanks, located at the water treatment plant, have capacities of 1 million and 2 million gallons, respectively. The South Ridge elevated tank has a capacity of 1.5 million gallons, the Sawnee Mountain elevated tank has a storage capacity of 1.1 million gallons, and the State Barn elevated tank has a capacity of 0.5 million gallons. Water storage capacity is presently sufficient to accommodate the current needs of the service area.

Flow

A major factor in determining pipe sizes and water pressure is provision for fire protection (see discussion of fire hydrants in the Fire Services section). Building, life safety, and fire codes

generally establish recommendations for minimum water flows. The Forsyth County Fire Department recommends that, for purposes of firefighting, flows of 1,500 gallons per minute are needed in commercial areas and at least 1,000 gallons per minute be available in residential areas. It is the City's goal to replace the 2-inch and 4-inch lines with minimum 8-inch lines in the future to ensure better service, particularly in meeting fire flow and minimum pressure standards.

Pressure

The optimum range for water system pressure is between 40 and 60 pounds per square inch (psi). A minimum pressure of 20 psi is needed during fires, and water flow may not be sufficient for firefighting purposes without potential damage to the pipes when water pressure falls below 20 psi. Too much pressure can cause leakage and failure of older hot water heaters, so the City strives to maintain a maximum main pressure not to exceed 100 psi.

Loss and Interruptions

The City should consider the preparation of contingency plans for dealing with major water line breaks, loss of water sources during drought, and other possible damages to the water system such as flooding. Emergency funds may be available from federal and state agencies under certain conditions.

Source Water Assessment Program

During 2003, the city prepared a watershed study known as a Source Water Assessment Program (SWAP). This program was organized by the Georgia Mountains Regional Development Center (now Regional Commission) and funded by the Georgia Environmental Protection Division (EPD). The SWAP assessed the watershed that drains into Lake Lanier, just above the point where the city withdraws raw lake water for treatment. The SWAP pinpointed several potential contamination sources. The overall point source susceptibility for the Cumming Water System Intake was determined to be "low." The SWAP program will continue for many years and will enable the city to maintain an accurate data base of potential pollution sources (City of Cumming, 2003 Water Quality Report).

Forecasting Future Water Needs

To meet future needs for water, estimates of future consumption are needed. Through prior planning efforts, the city has estimated future water needs and sought and obtained water withdrawal permits that address projected demands.

Many factors influence the amount of water used, including the price, leaks in the system, implementation of conservation measures, density of residential development per acre, the sizes and types of commercial and industrial establishments, and potential changes to water service area boundaries and rezoning (particularly from agricultural or open space to urban uses).

Domestic water use can vary between 40 and 120 gallons per person per day. Average per capita per day consumption of water for all uses (residential, commercial, institutional, industrial) generally is in the range of 170 to 300 gallons per capita per day. Water use can be much higher than these averages, and there are substantial variations in water use from community to community. For planning purposes, the City uses a level of service of 250 gallons per day per

unit for residential uses, or a general 200 gallon per day average per acre to take into account all types of land uses within the City. The size of distribution pipelines connecting from the water mains directly to commercial and industrial uses are typically calculated on a square footage and type of use basis.

The City's current 18 million gallon water treatment plant should be sufficient to serve the needs of the community within the service area through 2025. The only potential for a shortfall in treated water could occur if the County determines it necessary to continue to purchase an average of 4.5 million gallons of water per day from the City after the 2012 agreement expires.

SANITARY SEWER SYSTEM

Overview

Sanitary sewer systems are indispensable to maintaining community health. The City must be able to manage water-borne waste by operating, maintaining, expanding, and replacing components of the wastewater system to ensure uninterrupted collection, transport, processing, and treatment. Collection and treatment of sewage is one of the most critical elements in the development of any site. A key challenge for the wastewater system is to convey all sanitary wastewater flows to the treatment plant without bypassing flows into receiving waters and without causing waste backups that store sanitary sewage on private properties. The City has prepared and maintained a Sewer Master Plan which forecasts the anticipated wastewater generation and demand for new or upgraded sanitary sewer facilities.

History

The City of Cumming has been providing wastewater treatment services since 1963 when an oxidation pond facility on the west side of Castleberry Road was constructed with a capacity of 150,000 gallons per day. The plant was upgraded to 250,000 gallons per day in 1976. In 1986, the plant was converted to an activated sludge plant with a capacity of 700,000 gallons per day. The Wastewater Treatment Facility located on Castleberry Road was closed following completion of the new wastewater treatment plant and is now a part of the City's Fairgrounds. In 1992, the Bethelview Road Advanced Water Reclamation Facility (AWRF) was made operational.

System Design

The City's sewer system consists of a combination of gravity-flow sewer pipes which connect to the existing public sewer system, a pumped system with forced mains (pressure systems), with pumping stations located at either the upper or lower end of the force main (as the terrain dictates, or existing sanitary sewer outfalls are too high for the design of a gravity-flow system), and a treatment plant. The sewage flow is transmitted to the Advanced Water Reclamation Facility (AWRF). The AWRF currently has an ultimate capacity of 3.0 million gallons per day, with an average flow of 1.2 million gallons per day. The facility is planned for expansion up to an 8 million gallon per day capacity, entailing the construction of a new 5 million gallon capacity per day facility and upgrade of the existing facility to meet all recent federal standards and requirements, including retrofitting of the basins with an automated sludge collection system, and a microfiltration or other virus removal system, depending on new disinfectant by-product rules.

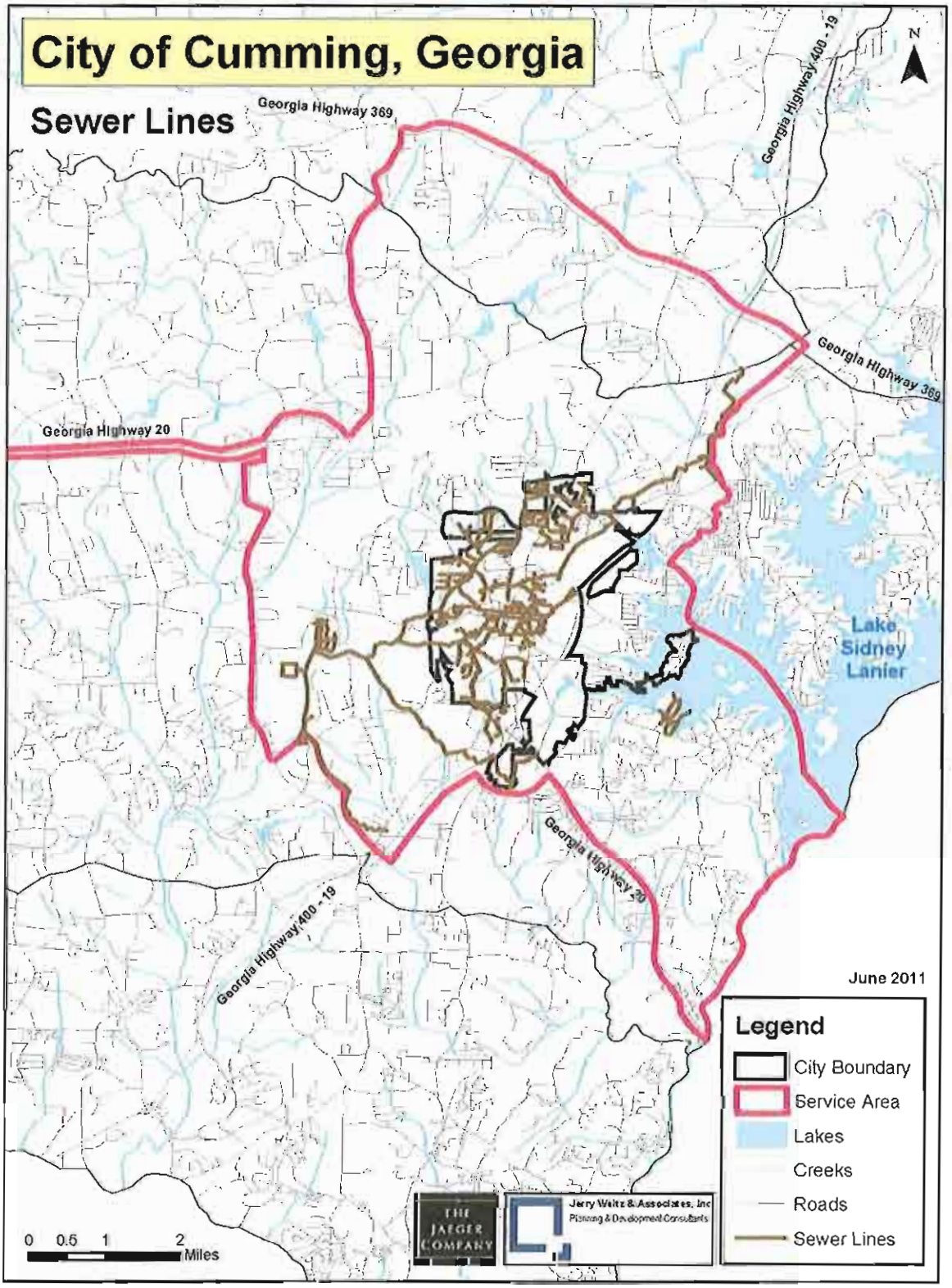
Trunk lines surrounding the AWRF are 24 to 30-inches in diameter. Existing older sewer gravity lines in the service area are 8, 10 and 12 inches. The Master Plan requires that new and proposed sewer gravity lines be a minimum 14, 16, 18 and 24 inch pipelines. Existing older force main lines are 6 and 8-inches. Proposed new force mains are required to be either 16 or 20-inch pipes. Existing lines will be upgraded over time to meet the new standards established by the Master Plan. The existing sanitary sewer system utilizes 12 pump stations. The Master Plan proposes an additional 17 pump stations to be operational by 2025.

Sewage flow rates vary during the day. Due to such fluctuations, the sewer pipe sizes are not designed for the average flow, but rather, peak flows. The peak flow is the highest instantaneous rate of flow occurring during the day. Peaking factors should be applied by a civil engineer in considering flow requirements. Maintenance of the sanitary sewer main network requires manholes installed at regular intervals and at potential trouble spots. Manholes are typically provided where sewer mains connect and where there is a change of direction in the main.

The City has obtained all relevant permits under the National Pollutant Discharge Elimination System administered by the U.S. Environmental Protection Agency for wastewater systems that discharge into receiving waters. Permits require collection of samples, laboratory analyses, reporting, and periodic inspections to assure compliance with regulatory requirements. In anticipation of expansion of the wastewater treatment facility to 8 million gallons per day, the City pulled Permit No.GA0046019 for discharge of 8 million gallons per day into Big Creek. In May 2002, the City obtained a permit from the Georgia EPD to expand the capacity of the AWRF to 8 million gallons per day. The new plant expansion should was completed in 2006. It is anticipated that this expanded facility should be sufficient to handle wastewater generation through the year 2025.

Service Area

The current sanitary service area for the City's wastewater treatment plant extends well into the unincorporated Forsyth County area, with boundaries which were jointly delineated in the 1980s by the City and County (see map). The service area includes all of the corporate limits of the City of Cumming, and 46.5 square miles of unincorporated Forsyth County. Since mid 1992 when the City abandoned its plant in the downtown area and constructed a larger plant on the western boundary of the city's service area, the City has been expanding its sewered area. Since 1987, the City's sewered area has more than doubled. Today, most of the corporate limits are now served by sanitary sewer. It is the City's goal to provide sewerage facilities to a minimum of 80 percent of their Service Area by 2021. As of 2001, 13 percent of the 53-square mile service area was sewered. The Service Area is divided into numerous drainage basin subareas based on topography, flow, streams, and other factors. The service area includes areas from which wastewater can flow to the AWRF by gravity, as well as portions of the City and surrounding service area which requires wastewater treatment service because of its density and rate of development. Service to the northeast side requires lift stations (force mains) to transmit the wastewater to the AWFR. Portions of the City's Water and Sewer Service Area are not yet sewered. In areas where sanitary sewer is not available, septic tanks may be allowed for individual residences or for buildings with small amounts of sewage, although this is not typical. Soil tests for percolation are required, and the approval of septic tanks must meet minimum sizes and drain field sizes as required by the County Health Department. The City generally does not extend sewer lines to developments except in cases where multiple developers would benefit from major trunk lines.


City of Cumming, Georgia
Sewer Lines
Georgia Highway 369
Georgia Highway 400 - 19
Georgia Highway 20
Lake Sidney Lanier
N
June 2011
Legend
City Boundary
Service Area
Lakes
Creeks
Roads
Sewer Lines
0 0.5 1 2 Miles
THE JAEGER COMPANY
Jerry Weitz & Associates, Inc
Planning & Development Consultants

STORM DRAINAGE SYSTEM AND WATERSHED MANAGEMENT

Storm water management is concerned with channeling runoff in a safe, controlled manner to protect land areas from erosion and flooding. Like sanitary sewer systems, stormwater drainage systems are gravity-flow, but where more outfalls are available and alternatives other than connecting to the existing network can be used (Colley 1986). The city has a general responsibility for ensuring that sufficient attention is given to storm water impacts, particularly along city roads. Storm drainage facilities must be designed to protect people and property from storm water inundation. Designing storm drainage systems requires engineering expertise and a keen understanding of hydrology, hydraulics, and drainage law.

The city's stormwater collection system discharges into Kelley Mill Branch, Daves Creek, Sawnee Creek, Sawmill Branch, Big Creek, and tributaries to Lake Lanier. As a part of the MS4 program, Cumming has completed an inventory of its stormwater collection system.

The city has adopted a variety of best management practices (BMPs) for watershed management. It provides annual public education and outreach on stormwater impacts, using the city's annual Consumer Confidence Report and other means. The city has also trained its own staff in "good housekeeping" practices for maintenance yards, storage areas, and vehicle wash facilities. That program has helped prevent debris and pollutants from municipal operations from flowing into state waters. Another best management practice implemented has been a storm drain stenciling program to raise awareness among commercial and industrial water and sewer customers. An ordinance prohibiting illicit discharges has been adopted, and a post-construction stormwater management (watershed protection) ordinance covering new development and redevelopment has also been adopted and implemented. The city initiated a program of walking streams to detect illicit connections and discharges. The city's stormwater permit requires the submittal to EPD of an annual report which indicates the status of compliance with permit conditions, an evaluation of the effectiveness of BMPs, progress toward achieving measurable goals, results of water quality monitoring data, and summary of stormwater activities planned for the next reporting period with implementation schedules.

FIRE PROTECTION, RESCUE, AND EMERGENCY MEDICAL SERVICES

Fire protection for the City of Cumming is provided by the Forsyth County Fire Department. The City entered into a Fire Services Delivery Agreement with Forsyth County in 1984 to provide fire and emergency medical services within the City limits. This contract remains in operation with no specified termination date.

The Forsyth County Fire Department operates all fire stations in the county. In addition to fire suppression activities, the Fire Department operates fire education programs. Fire Station #1 is the only station located within the city limits of Cumming. The fire station is located at 212 Veteran's Memorial Highway. In 2003, the voters of Forsyth County approved SPLOST funds for the reconstruction for Fire Station #1, at a cost not to exceed $1,570,000.

In the event of a structure fire within city limits, two other fire companies respond along with Station 1 on the initial alarm: Station 15 located at 1525 Buford Highway, with 3 personnel on board and a 1,250 gallon per minute pumper truck; and Station 4 located at 3805 Canton Highway, with 3 personnel on board and a 1,250 gallon per minute pumper truck. Should a second alarm be sounded, two additional engine companies with a like number of personnel respond.

All calls made to the Forsyth County E-911 Center are recorded. Radio transmissions to public safety departments (Fire, Sheriff, EMS) are done so utilizing separate radio frequencies from the same facility. All communications equipment meets the specifications of the Insurance Services Organization. A $12,000,000 upgrade to the communications system utilizing Special Local Option Sales Tax (SPLOST) funds was completed by 2006, which brought the technology of "E-911 Trunking" into effect.

Insurance Services Organization (ISO) rates communities according to the adequacy of the water system and other factors, such as the size and type of buildings in a community, the presence or absence of fire alarm systems, the way calls are received and handled, whether fire fighters are paid or volunteer, the size of water mains and capacity, and how long it takes to respond to a call. ISO ratings are based on a scale from one to ten, with a one being the best and ten being no fire protection.

The Fire Department utilizes a target water flow standard of 1,500 gallons per minute for firefighting in commercial structures, although between 2,000 and 2,500 gallons per minute is considered optimum. For firefighting a residential fire, a minimum fire flow target of 1,000 gallons per minute is established, although up to 1,500 gallons per minute is considered optimum. A minimum 20 psi (pressure per square inch) is required to achieve the water flow targets. Where water pressure is lower than, or near the minimum 20 psi, the operation of water pumper truck equipment can elevate water pressure sufficiently to make up the volume of pressure up to a 1,500 gallon per minute water flow. However, there is risk of pipeline damage when the psi is lower than 20.

Fire hydrants are placed for purposes of fire protection, and they also provide a means of flushing segments of the water lines. As part of new water line extensions, the Fire Department recommends hydrants be installed every 1000 feet in residential areas and a minimum of 500 feet in commercial/industrial areas. For commercial/industrial uses, a hydrant must be located so that the furthest remote portion of the structure is no more than 500 feet (in terms of lineal roadway footage for the pumper truck to reach the structure from the hydrant). If this standard is met, most residential structures would be within 500 feet of a hydrant along the street frontage, and commercial/industrial structures within 250 feet, or less.

Special or target hazards within the city limits are those which regularly utilize hazardous materials, chlorine and ammonia being the most hazardous to life. Primary examples include Tyson's Foods and the City of Cumming Water Treatment Plant.

The Forsyth County Fire department operates a fully certified HazMat team, equipped with state of the art equipment and gear, which is qualified to manage the scene of a hazardous materials situation. The team is also available to respond, when requested, in other jurisdictions. Also available to deal with special emergency functions is the Forsyth County Emergency Management Agency, which has heavy rescue equipment, including water rescue gear.

All emergency medical ambulance services for Forsyth County are provided by Rural/Metro Ambulance Company. Emergency medical services are operated from six locations, including Fire Station 1.

POLICE PROTECTION

The City of Cumming's police department is located in the old City Hall (now Police Headquarters) on Veterans Memorial Boulevard. Current facilities are adequate for level of staffing and no expansions or relocations are anticipated.

Communications equipment currently meets the requirements of the State of Georgia Law Enforcement Certification Program. Upgrades to the system will be required over time to maintain the current system's consistency with required standards and maintain a more state-of-the-art communications system.

The City jail is also located in the old City Hall, with capacity for 8 prisoners. Holding capacity meets State standards, and additional cells are not warranted at this time. The Police Department continues to conduct its drug education program, established in 1984, for public schools and civic organizations.

PARKS, RECREATION, AND OPEN SPACE

There are two parks comprising approximately 66.3 acres (City Park, Dobbs Creek) under the City's Parks and Recreation Department; in addition the city has the new Aquatics Center property (part of a large evolving institutional complex) which opened for operations in Summer 2011. A wide range of programs are offered to the public through the City Parks and Recreation Department. In addition, the Parks and Recreation Department actively coordinates with the Forsyth County School System for recreation use of gymnasiums for basketball, playgrounds, ball fields, and similar recreation or sports facilities. Following is a summary of existing park facilities:

- **City Park**: City Park contains two ballfields; two lighted tennis courts, a swimming pool, a picnic pavilion with 8 tables and restrooms, an outdoor lot with 5 basketball goals; outdoor playground equipment; an enclosed pavilion for day camps or other indoor facilities; and parking on an approximate 10 acre site. The swimming pool at this park has been closed and will be discontinued given pools at the new Aquatics Center. An extension of the park included an additional ballfield; a picnic pavilion area; and restrooms, for a total park size of 24 acres. The church facility that was on this portion of the site has been converted to the administration office.

- **Dobbs Creek Recreation Area:** The Dobbs Creek recreation area consists of 2 separate areas with a total of approximately 17.5 acres located adjacent to, and on either side of the now closed treatment plant on Castleberry Road. The Dobbs Creek Ballfield portion provides 4 ball fields, a concession stand, restrooms, and parking. Completed in 2002, the Dobbs Creek Recreation Center on the other side of the old treatment plant facility is comprised of a 40,000 square foot building with 6 basketball courts and a gymnastics facility on a 24.8 acre site.

Supplementing the city park and recreation facilities are parks and recreation facilities in the Forsyth County Parks and Recreation system. A Parks and Recreation Service Delivery Agreement was signed in 1998 between the City and Cumming and Forsyth County to ensure that the facilities provided and maintained by the two jurisdictions complement rather than conflict in their delivery of service. Forsyth County parks available for use by county residents

include: Bennett Park; Coal Mountain Park; Midway Park; Sharon Springs Park; Pooles Mill Park; Mary Alice Park, and Sawnee Mountain Park (2003 Comprehensive Plan).

As well, the portion of Lake Lanier within Forsyth County boundaries provides approximately 14,000 acres of water area and 500 acres of easements. Within this area, the U.S. Corps of Engineers has maintained substantial acreage designated as recreation sites for camping and day use park activities. In addition to the Corps' recreation facilities, 3 private marinas are located within the county. Most Lake Lanier recreational opportunities are provided to the public for a nominal fee. Camping, fishing and outdoor recreational activities are less than one hour north of the city within the Chattahoochee National Forest. In addition, a private swim and tennis center serves the residents of the subdivision along Pinelake Road, there are 2 small private swim/tennis centers within other residential subdivisions, and an 8 to 10-acre parcel of private open space adjacent to a residential subdivision, which further serves the needs of a limited segment of the city's residents.

Previously identified improvements (2004 comprehensive plan) included a number of facilities and improvements include:

- A new playground was programmed for construction at City Park between 2005 and 2007. *(status)*

- Additional lighting of Dobbs Creek ballfields to extend hours of operation and expand the capacity for number of games. *(status)*

- An indoor/outdoor aquatic facility to be used for year-round swimming, lessons and classes, and local swim team competitions. The indoor/outdoor aquatic facility has been completed and opened for use summer 2011.

- Annexation of between more than 100 acres of property in the vicinity of Lake Lanier, and construction of a conference center and amphitheater. This property has been annexed by the city.

Using a ratio of approximately 6.5 acres per 1,000 population, which correlates to the acreage ratio recently used by Forsyth County in the preparation of its Parks and Recreation Master Plan, the city's existing park land acreage appears more than sufficient to meet the present demand. The city's existing general park land acreage is more than sufficient to meet the current park land need, and it will be sufficient to meet demands generated by the resident population beyond 2025 (2004 comprehensive plan). Furthermore, the annexation of more than 100 acres of land in the vicinity of Lake Lanier substantially enhances the city's inventory of parks facilities. Private open space tracts also contribute toward a well-supplied community, in that they provide an alternative resource for a portion of the community and may relieve usage of public facilities.

FAIRGROUNDS AND CULTURAL FACILITIES

The fairgrounds were opened in 1995 on the site originally used as the wastewater aeration treatment pond on Castleberry Road. The pond was filled and remediated per State requirements and subsequently recycled as the Fairgrounds. Prior to the opening of the fairgrounds, a carnival was held annually at the site where the County Sheriff's station and jail is now located. The vision of the Mayor and City Council for the fairgrounds is the depiction of the

rural, agrarian lifestyle that was the foundation of county existence through the establishment of a "heritage village." (2004 comprehensive plan)

The fairground site is 18 acres, plus 21 additional acres, of which 11.7 acres is used for parking and 10 acres is used for the employees of the fair to camp and park their vehicles (2004 Comprehensive Plan). The facilities on the fairgrounds consist of the Heritage Village buildings (sawmill, blacksmith, cider hut, post office, sorghum mill, and doctor's office); the big red barn, which is used for housing fair and rodeo livestock and horses, arts and crafts shows, and petting zoo); concession stands and restrooms; and a covered arena for concerts, the rodeo, high school graduations, and other uses. The covered facility is approximately 180 wide by 240 feet in length, with a 100-foot wide floor, and it has permanent bleachers to seat 3,051 persons in addition to floor seating for a total capacity of 6,000 seats, or 10,000 standing occupants.

The County fair operates for 11 days in October, which coincides with the harvest season and the actual functioning of the facilities at the heritage village. The heritage village may also operate during special events other than the fair.

A number of improvements were planned for the fairgrounds to expand its parking capacity and the activities offered. Funding is generally from the city, SPLOST, and special grants. Per a previous SPLOST, the Department requested 20 additional acres of land for parking facilities to be procured by 2005. A Cherokee Indian Heritage Village was made operational. A Civil War heritage area was planned for operation on or before the 2008 fair (2004 Comprehensive Plan).

Other improvements planned (as indicated in the 2004 Comprehensive Plan) included:

- Construction of additional bathrooms and concession facilities;
- Acquisition of movable picnic tables;
- An extension of the arena under the shed roof at the back for use as a stage;
- Paving and lighting of parking lots (including a portion of the lots to be used for a park and ride facility); and
- Construction of a bathroom facility by the campground area; and infrastructure improvements.

Current and planned facilities should be adequate to serve the anticipated visitors to the fairgrounds, although additional parking beyond the 20 acres currently requested may be needed. Aside from the Heritage Village and covered arena at the fairgrounds, supplemented by planned improvements for a Cherokee Indian Heritage Village, and a Civil War Heritage Village at the fairgrounds, there are no cultural facilities in the City. The city proposes to work with a private developer and the county to provide an outdoor amphitheatre at Mary Alice Park. A $1,000,000 grant was recently requested from the Lake Lanier Islands Authority – Governor's Committee to build a sea wall at the park site, and the city intends to provide matching funds to a developer for construction of an amphitheatre structure (2004 Comprehensive Plan).

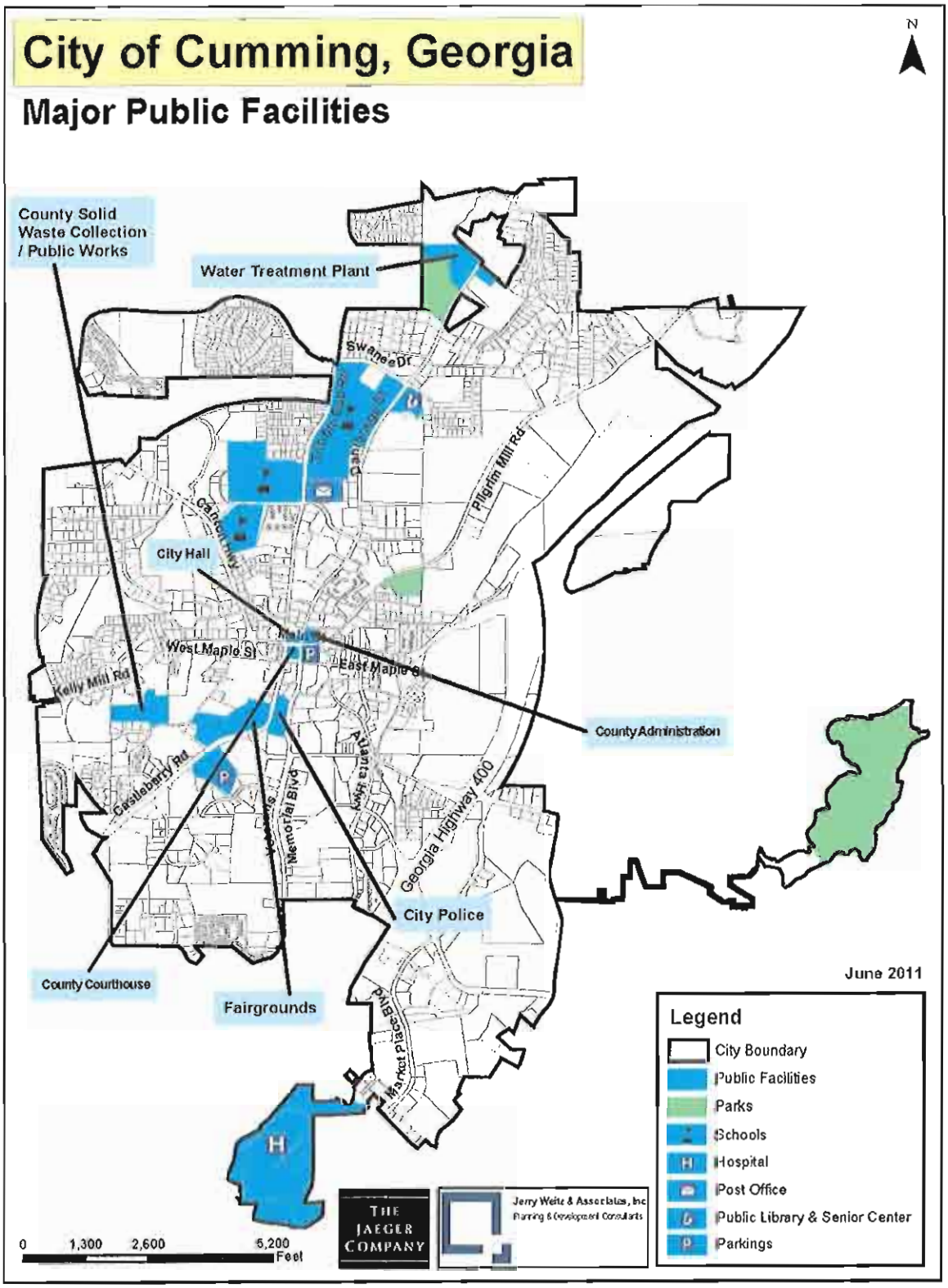
EDUCATIONAL FACILITIES

Forsyth County School District operates the public school system serving the county (including Cumming). School facilities within the Forsyth County School District existing and planned as of 2004 are presented in the following table. School sites within the city are shown on a public facilities map in this chapter.

Table 5.1
Forsyth County School District
Facility Inventory (2004 Comprehensive Plan)

School Name	Address	Square Footage	Enrollment 2004-2005	Capacity
ELEMENTARY SCHOOLS				
Big Creek	1994 Peachtree Pkwy	98,235	1,017	887
Chattahoochee	2800 Holtzclaw Rd	109,535	807	862
Chestatee Elem.	6945 Keith Bridge Rd	142,854	1,101	1,062
Coal Mountain	3455 Coal Mountain Dr.	71,292	713	762
Cumming*	540 Dahlonega St.	139,182	1,092	1,112
Daves Creek	3470 Trammel Rd.	107,389	1,089	1,062
Mashburn*	3777 Samples Rd.	67,601	817	737
Matt	7455 Wallace Tatum Rd.	139,182	1,012	1,112
Midway	4805 Highway 9	68,402	735	637
Sawnee K-2	1616 Canton Highway	71,587	470	612
Sawnee 3-5	1616 Canton Highway	88,147	438	812
Settles Bridge	600 James Burgess Rd	107,662	955	1,037
Sharon Elem.	1670 James Burgess	147,649	1,187	1,112
Vickery Creek	6280 Post Rd.	105,562	862	1,037
Future Elem. # 4	Majors Road	N/A	N/A	1,112
Future Elem. # 5	Not Yet Determined	N/A	N/A	1,112
Future Elem. # 6	6190 Dahlonega	N/A	N/A	1,112
Future Elem. # 7	Not Yet Determined	N/A	N/A	1.112
Future Elem. #8	Not Yet Determined	N/A	N/A	1.112
MIDDLE SCHOOLS				
Liberty	7465 Wallace Tatum Rd.	134,620	848	1,037
North Forsyth	3645 Coal Mountain Dr.	130,596	1,004	1,012
Otwell*	605 Tribble Gap	134,620	1,011	1,037
Riverwatch	610 James Burgess	134,620	788	1,037
South Forsyth	2865 Old Atlanta Rd.	130,596	823	1,012
Vickery Creek	6240 Post Rd	134,451	949	1,012
Future Middle # 3	Littlemill Road	N/A	N/A	1,037
Future Middle # 4	Majors Road	N/A	N/A	1,037
Future Middle # 5	Not Yet Determined	N/A	N/A	1,037
HIGH SCHOOLS				
Forsyth Central*	520 Tribble Gap	278,214	1,837	2,012
North Forsyth	3655 Coal Mountain Dr	212,073	1,759	1,612
Piedmont Learning Center	1130 Dahlonega Hwy	25,660	54	N/A
South Forsyth	585 Peachtree Pkwy.	267,422	2,293	1,962
Future West Forsyth High	Not Yet Determined	N/A	N/A	2,012
Future South Relief High	Not Yet Determined	N/A	N/A	2,012

Source: Forsyth County Board of Education Facilities Planning Division
* Denotes school serving the City of Cumming students


City of Cumming, Georgia
Major Public Facilities
N
County Solid Waste Collection / Public Works
Water Treatment Plant
City Hall
County Administration
City Police
County Courthouse
Fairgrounds
Swanee Dr
Pilgrim Mill Rd
Canton Hwy
West Maple St
East Maple St
Kelly Mill Rd
Castleberry Rd
Memorial Blvd
Atlanta Hwy
Georgia Highway 400
Market Place Blvd
June 2011
Legend
City Boundary
Public Facilities
Parks
Schools
Hospital
Post Office
Public Library & Senior Center
Parkings
0 1,300 2,600 5,200 Feet
THE JAEGER COMPANY
Jerry Weitz & Associates, Inc
Planning & Development Consultants

LIBRARY SERVICES

The library services needs for the incorporated area of the City of Cumming are served by the Forsyth County Public Library, which previously was part of the greater Lake Lanier Regional Library System which served Dawson, Forsyth, and Gwinnett Counties. Forsyth County Public Library became an independent library system on July 1, 1996.

There are currently 2 library facilities in Forsyth County, totaling 45,500 square feet. The Cumming Library/Forsyth County Public Library Headquarters was opened to the public on July 21, 1992. This facility primarily serves the library services needs of the residents of the City of Cumming (2004 Comprehensive Plan). Forsyth County Public Library has previously used a standard of 0.5 square feet per capita population and 2 volumes per capita in determining present and future needs. However, the Forsyth County Development Impact Fee Program assigned a standard of 0.388 square feet per capita, based on an existing 45,500 square feet of library facilities to serve a population of 117,139. The Forsyth County Public Library had a number of proposed new facilities and improvements planned to meet the forecasted needs and mitigate the shortfalls in meeting their established level of service standards. An 8,600 square foot expansion to the existing Forsyth County Public Library building in the City of Cumming was planned in 2004 (2004 Comprehensive Plan).

GENERAL GOVERNMENT SERVICES

The City of Cumming's buildings and grounds include (2004 Comprehensive Plan):

- City Hall at 100 Main Street on the north side of the downtown square;
- Police Station at 301 Veterans Memorial Boulevard (former City Hall and Fire Station);
- City Shop building adjacent to City Hall;
- Fairgrounds on the former site of the Castleberry Road Water Treatment facilities;
- City Park and ballfields off Pilgrim Mill Road;
- Dobbs Creek ballfields and recreation facility;
- A water intake facility on Lake Lanier;
- Water treatment facility/chemical building/dewatering facility in the northern part of the City west of Route 9 on Dahlonega Highway;
- 5 water towers;
- Bethelview Road Advanced Water Reclamation Facility (AWRF)
- Cemetery located northeast of the Police Station (maintained by City Publics Works crew);
- Site in western portion of City along Social Circle and Talbert Streets containing public housing units.

In addition to that inventory, Cumming also owns the large evolving institutional complex (some 77 acres) including the new Aquatics Center and state driver's license facility (including commercial road testing track). In the future, this institutional complex is planned to include buildings and offices of North Georgia College and State University. An outdoor amphitheatre is planned at Mary Alice Park.

Municipal Court

The City has an appointed municipal judge who tries violations of municipal ordinances, misdemeanors, and traffic offenses. Court activities have been conducted in the courtroom in the Police Department (2004 comprehensive plan).

Planning and Development

The Planning and Development Division was established in 1990. Previously, planning and development-related functions were provided by the Forsyth County Department of Planning and Zoning. Until 2002, comprehensive planning, mapping, and community development services were contracted out to the Georgia Mountains Regional Development Center (now Regional Commission). The Department of Planning and Zoning is located in City Hall, and it occupies one-half of the lower floor level.

Administration and General Government

The administration and general government functions are located in City Hall. Administrative personnel include a City Administrator, Assistant Administrator, City Clerk, and many others. As the city does not currently collect property taxes, (and has not done so since 1987), nor special assessments, these functions are not provided through city government. Should a special assessment function be instituted, the city may have the option of contracting with the County Tax Assessor and Commissioner for collection.

HEALTH, HOSPITALS AND HUMAN RESOURCES

The Forsyth County Health Department is located in an office building off Canton Highway (SR 20). The department serves the entire county by providing specialized outpatient health care, including immunizations and child health physicals and related services including the Women, Infants and Children (WIC) program and family planning. Forsyth County's inpatient facility is the Northside Hospital branch. The County also operates a Department of Family and Children Services, which is located in a building off of Canton Highway in Cumming.

SOLID WASTE MANAGEMENT

The city's first comprehensive solid waste management plan, prepared in accordance with Rules of the Georgia Department of Community Affairs, Chapter 110-4-3, Minimum Planning Standards and Procedures for Solid Waste Management, was adopted as a part of the 2004 Comprehensive Plan. There are no operational sanitary landfills or disposal facilities in the city limits of Cumming. Much of the city's waste is transported to the Eagle Point Landfill in northwest Forsyth County; that site had a footprint of 165 acres as of about 2004 and the total site area is 750 acres. Capacity of that landfill was estimated to be 30 years (2004 Comprehensive Plan).

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CHAPTER 6
TRANSPORTATION

MODES OF TRAVEL AND COMMUTING

Forsyth County is not served by a public transit system, and as a result, its residents are almost totally dependent on automobiles for mobility. This dependence on vehicle travel, and has led to steady increases in vehicle miles traveled. As noted in the labor force and economy chapter of this technical appendix, approximately one-half (21,000) of the jobs in Forsyth County in 2000 were filled by workers residing in Forsyth County. Workers who resided in Fulton County made up a significant percentage (13.2 percent) of the persons working in Forsyth County in 2000; hence north-south travel between the two counties (primarily on Ga. 400 and SR 9) has remained a significant work commute route. There has also been a significant commuting in from Gwinnett County residents (as of 2000), who use primarily SR 20 and SR 141 to get to jobs in Forsyth County (and thus are partially responsible for congested conditions along those state routes).

If one looks at the reverse pattern—where Forsyth County's working residents are employed—there are similar travel patterns (see the labor force and economy chapter of this technical appendix). While 41 percent of Forsyth County's working residents were employed within Forsyth County itself in 2000, a large percentage (29.8 percent) commuted to Fulton County. That commute pattern contributed to the congestion between Forsyth County and Fulton County, and it made for congested conditions on Ga. 400 and SR 9 generally in both directions during a.m. and p.m. peak periods. Similarly, the reliance of some of Forsyth County's working residents on job opportunities in Gwinnett County (11 percent) contributed to the congestion along SR 20 and SR 141.

Not surprisingly, 9 of every 10 working residents of both Forsyth County and the City of Cumming traveled by vehicle to work in 2000. Significantly, the city's resident workers have been much more likely than county working residents as a whole to carpool to work. It is significant that one in five of the city's working residents in 2000 carpooled. That higher percentage also suggests that the provision of suitable carpooling parking lots would maintain and perhaps increase the percent of work trips by carpooling vehicle in the future. Bicycles are not used for work commutes, and work commuting by public transportation is negligible.

Travel time to work is a function of distance traveled and the levels of congestion. A worker may have to travel only a few miles, but if in congested conditions, travel time can still be higher than average. The average commute time was generally about 30 minutes in 2000 in metropolitan Atlanta. Nearly one-half (49.2 percent) of Forsyth County's working residents had average or higher than average commute times in 2000, and more than one-quarter of them traveled 45 minutes or more to work in 2000. In stark contrast, two-thirds (66.6 percent) of Cumming's working residents had less than average travel times to work (including those who worked at home) in 2000.

LAND USE AND TRANSPORTATION INTERACTION

The high reliance on vehicle use for mobility is to a large extent the result of the separation of land uses. Single-family subdivisions are located in the county in areas distant from employment centers, leading to a reliance on vehicles and increases in vehicle miles traveled, as noted above. Similarly, housing is not often located within or in convenient walking distance

to employment centers, thus requiring vehicle use when public transit is not available. Working at home (i.e., home occupations) reduces vehicle travel. The opportunity to walk to destinations also reduces vehicle use. The density and pattern of land use has a major bearing on the modes and distances of travel. As noted in the travel time data above, the concentrated pattern in the City of Cumming, and a more balanced mix of houses and jobs, results in lower travel times to work. Forsyth County, with its more dispersed land use pattern, less mixing, and less balanced land uses, has correspondingly longer travel times to work.

METROPOLITAN TRANSPORTATION PLANNING

The Atlanta Regional Commission (ARC) serves as the metropolitan planning organization for the metropolitan Atlanta region, which includes Forsyth County and the City of Cumming. Road improvements are programmed in ARC's Regional Transportation Plan (RTP). ARC adopts an air-quality-conforming Regional Transportation Plan (RTP) every three years and a conforming three-year Transportation Improvement Program (TIP) annually. For air-quality modeling purposes, three additional counties are included in ARC's planning efforts - Coweta, Paulding and Forsyth Counties.

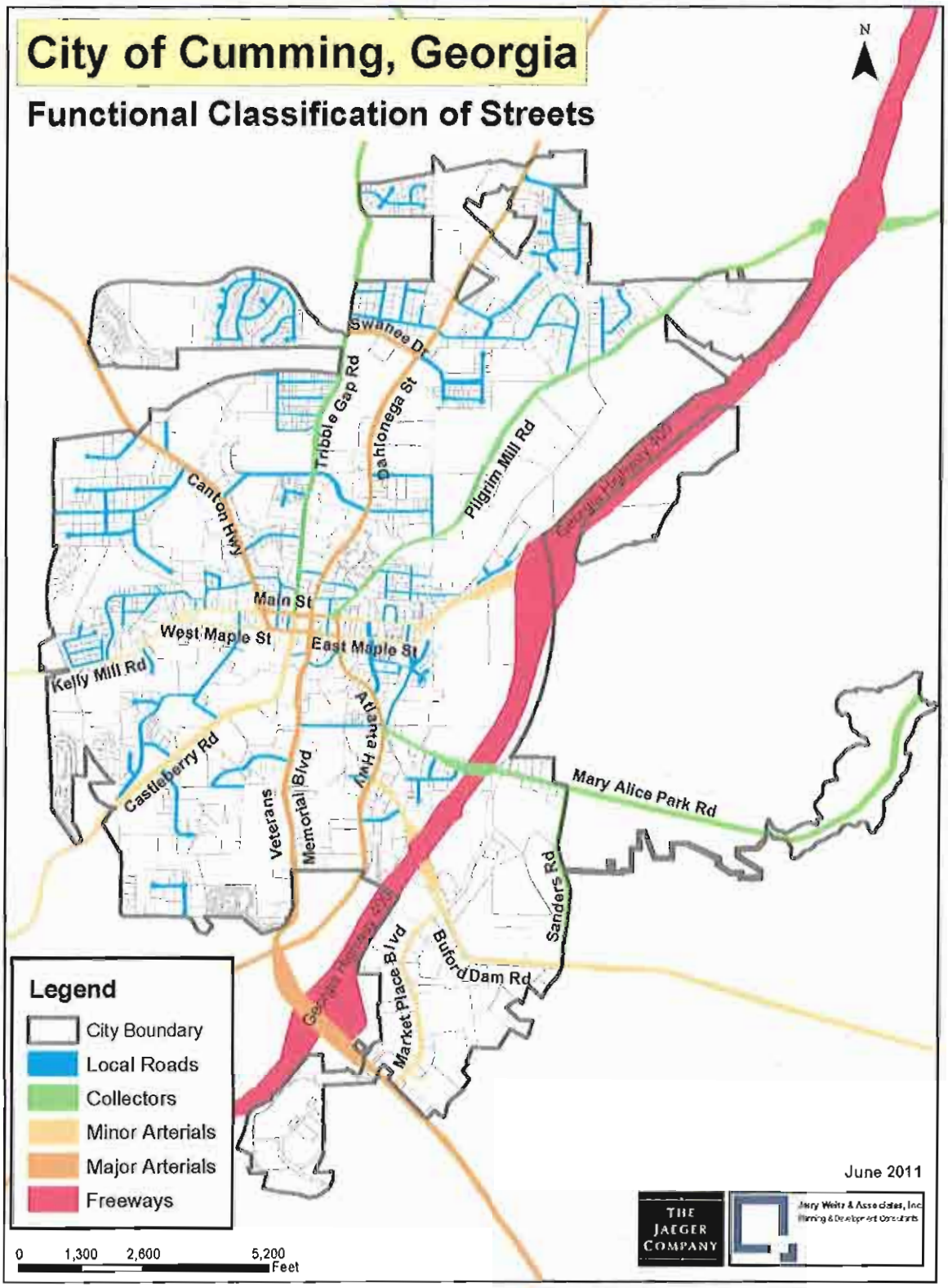
All of Forsyth County is within the nationally designated ambient air quality standards non-attainment area of metropolitan Atlanta. Therefore, compliance of Forsyth County's transportation plans with the Federal Clean Air Act is required. Severity of violations are discussed and addressed on a regional basis in the state implementation plan for air quality attainment. Measures that the city will implement to comply with the state implementation plan include encouraging transportation demand management, provision of an extensive sidewalk system, and certain efforts to promote public transit.

HIGHWAYS AND STREETS

The overriding objectives of the road system are to prevent injuries and deaths, reduce damage to motor vehicles and other property, and enhance the economic strength and social qualities of community life (Bailey et al. 1986). Other important objectives to be served by the road system, in addition to safety, are to provide accessibility to destinations, comfort, convenience, and low air and noise pollution levels. Furthermore, the system should take into account the levels of service needed for persons without access to cars, particularly the elderly and handicapped (Hatry et al. 1992).

Functional Classification

A road's function is an important parameter in planning improvements to the roadway network. Appropriate design features and right-of-way needs are related to a road's particular function. The comprehensive planning process gives the city an opportunity to review the functional design of its roads, the amount of access to and the level-of-service on specific thoroughfares. The functional classifications are based on Forsyth County's Major Transportation Plan. The functional classification data, along with levels of service estimates, are the best available information in terms of the design volume capacity of major roads.


City of Cumming, Georgia
Functional Classification of Streets
N
Swanee Dr
Tribble Gap Rd
Dahlonega St
Pilgrim Mill Rd
Canton Hwy
Main St
West Maple St
East Maple St
Kelly Mill Rd
Castleberry Rd
Veterans Memorial Blvd
Atlanta Hwy
Mary Alice Park Rd
Sanders Rd
Market Place Blvd
Buford Dam Rd
Legend
City Boundary
Local Roads
Collectors
Minor Arterials
Major Arterials
Freeways
0 1,300 2,600 5,200
Feet
June 2011
THE JAEGER COMPANY
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Freeways

Freeways are limited access, multi-lane, divided roadways, permitting high-speed traffic. This type of highway includes interstate highways and other expressways serving high volumes of high-speed auto and truck traffic. The major purpose of these facilities it to provide mobility between metropolitan areas, regions or states, and they are generally not designed to provide access to private property. A considerable amount of traffic on these facilities consists of through-traffic. These highways generally have a minimum of four lanes, with some freeways being much wider, especially in major metro areas. Typical rights-of-ways range from 200-400 feet, with medians or barrier walls to separate directional traffic.

The only freeway facility directly serving Cumming is State Route 400. Georgia 400 is both a Federal (U.S. 19) and state route. No interstate highway passes through the city.

Table 6.1
Major Road Inventory by Functional Classification, Number of Lanes, and Jurisdiction, City of Cumming

Name of Road or Highway	Descriptions (From/To)	Functional Classification	No. of Lanes	Jurisdiction
SR 400 (US 19)	Throughout the city	Freeway	4	Fed. & State
Atlanta Hwy. (SR 9/SR 20)	South city limit to Main St.	Major Arterial	2 w/LTL	State (1)
Canton Hwy. (SR 20)	Maple St. to northwest city limit	Major Arterial	4 w/LTL	State
Dahlonega Hwy. (SR 9)	Main St. to north city limit	Major Arterial	2	State
Main St. (SR 9/SR 20)	Pilgrim Mill Rd to Canton Hwy. (SR 20)	Major Arterial	2	Local
Maple St.	Atlanta Hwy. to Canton Hwy. (SR 20)	Major Arterial	2	Local
Sawnee Dr. (SR 306)	Dahlonega Hwy. (SR 9) to Tribble Gap Rd.	Major Arterial	2	State
Veterans Memorial Blvd.	South city limit to Rest Haven St.	Major Arterial	4 w/LTL	Local (2)
Veterans Memorial Blvd.	Rest Haven St. to Main St.	Major Arterial	4	Local (3)
Bald Ridge Marina Rd.	Pirkle Ferry Rd. to SR 400	Minor Arterial	4	Local
Buford Dam Rd.	Sanders Rd. to Atlanta Hwy. (SR 9/SR 20)	Minor Arterial	2	Local
Castleberry Rd.	Southwest city limit to Industrial Dr.	Minor Arterial	4	Local
Castleberry Rd.	Industrial Dr. to Maple St.	Minor Arterial	4 w/LTL	Local
Kelly Mill Rd.	West city limit to Canton Hwy. (SR 20)	Minor Arterial	2	Local
Market Place Blvd.	Buford Hwy. (SR 20) to Buford Dam Rd	Minor Arterial	4 w/LTL	Local
Pirkle Ferry Rd.	Bald Ridge Marina Rd. to Pilgrim Mill Rd.	Minor Arterial	2	Local
Maple St.	Bald Ridge Marina Rd. to Atlanta Hwy.	Minor Arterial	2	Local
Mary Alice Park Rd	Sanders Rd. to Atlanta Hwy.	Collector	3	Local
Pilgrim Mill Rd.	Main St. to northeast city limit	Collector	3	Local
Tribble Gap Rd.	Main St. to Sawnee Dr. (SR 306)	Collector	4	Local
Sanders Rd.	Buford Dam Rd. to Mary Alice Park Rd.	Collector	2	Local

(1) This transportation element acknowledges and recommends that Atlanta Highway will eventually be discontinued as a state route and will be shifted to local jurisdiction during the planning horizon.
(2) This transportation element acknowledges and recommends that Veterans Memorial Boulevard will eventually be shifted over to the state route system. SR 20 and SR 9 would be re-routed from Atlanta Highway to this route, thereby shifting jurisdiction during the planning horizon.

Source: Compiled by Jerry Weitz & Associates, Inc. based on Forsyth County Major Transportation Plan.

Major Arterials

The principal function of arterial roads is to move through-traffic, although they also provide some access to and from cross streets and driveways to private property. They are subdivided into major and minor arterials. This subsection focuses on major arterials.

Major arterials serve major activity centers of a metropolitan or urban area and are typically the highest traffic volume corridors. These highways usually carry a high proportion of trips with origins and destinations within the region as well as a considerable amount of through trips. This type of roadway is intended to provide mobility within major metropolitan areas or cities and may provide some access to private property. Controlled access facilities can in some cases be included within this classification. Major arterials typically have 100 to 200 feet right-of-way, four or more lanes, and may have a median to improve operational characteristics of the roadway.

Major arterials in the city include Atlanta Road (SR 9 and SR 20 south of the downtown), Canton Highway (SR 20 northwest of the city's downtown), Buford Highway (SR 20 east of SR 400), Dahlonega Hwy (SR 9 north of the downtown), Main Street and part of Maple Street (one-way pairs in the downtown), Sawnee Drive (SR 306), and Veterans Memorial Boulevard. Minor arterials include Castleberry Road, Bald Ridge Marina Road, Buford Dam Road, Market Place Boulevard, and Kelly Mill Road.

Atlanta Highway (SR 9/SR 20)

Atlanta Highway is a two-lane major arterial with a center turn lane. It is lined with strip commercial development. Although Atlanta Highway is a state route, its function as a major arterial has been impaired by turning movements. Because of existing commercial development close to the roadway, it is not considered feasible to widen this road without severely impacting businesses along the corridor. Atlanta Highway is planned to be discontinued as a state route (SR 9 and SR 20) and the highway routes moved to Veterans Memorial Boulevard.

Canton Highway (SR 20)

Canton Highway is a four-lane major arterial with a center turn lane. It handles substantial east west traffic flow northwest of the central business district. With the completion of improvements on Sawnee Drive (SR 306), a considerable amount of traffic was diverted from Canton Highway.

Dahlonega Street (SR 9)

Dahlonega Street is a two-lane major arterial running from the central business district north, and generally paralleling SR 400. An increase in roadway capacity will be required for this road. However, the extension of SR 306, diverted some of the through-traffic from Dahlonega Street.

Main Street

This one-way, two-lane major arterial serves east to west traffic flow in the central business district. Main Street includes SR 20 along its entire route and SR 9 from Pilgrim Mill Road to Dahlonega Highway (SR 9). Main Street is coupled with another one-way major arterial, East/West Maple Street.

East/West Maple Street

This one-way, two-lane major arterial serves west to east traffic flow in the central business district. Between Canton Highway (SR 20) and Atlanta Highway (SR 9), Maple Street includes SR 20. West Maple Street is a local road extending west of Canton Highway (SR 20), and East Maple Street is a local road east of Atlanta Highway (SR 9).

Sawnee Drive (SR 306)

Sawnee Drive is a two-lane major arterial that runs along the northern portion of the city. The Georgia Department of Transportation has extended Sawnee Drive from Canton Highway (SR 20) to Dahlonega Highway (SR 9) as a part of its long-range plan. It was designed as a four-lane roadway with a 44-foot median to provide better east-west cross-county movement and divert traffic from the city.

Veterans Memorial Boulevard

This is a four-lane major arterial with a center left turn lane. Veterans Memorial Boulevard runs in between other two arterials, Atlanta Highway (SR 9/SR 20) and Castleberry Road. The road provides access to industrial properties, and it is a future commercial development corridor.

Minor Arterials

Streets and highways that interconnect with and complement the principal (major) arterials are classified as minor arterials. These roads serve trips of moderate length and put more emphasis on land access than the principal (major) arterial system. All arterials not classified as major are included in the minor category. Minor arterials typically have 80 to 120 foot rights-of-ways, with wider intersections with turning lanes. Minor arterials can have up to five lanes.

Bald Ridge Marina Road

This is a divided, four-lane that connects the downtown with State Route 400. It becomes Pirkle Ferry Road (westbound) and East Maple Street (eastbound).

Buford Dam Road

This road is a two-lane road that intersects Atlanta Highway (SR 9/SR 20) and serves as the main access to recreation areas such as Lanier Golf Club and the waterfront parks along Lake Sidney Lanier.

Castleberry Road

Castleberry Road is a four-lane road with a center turn lane. It provides an alternative means of access to Atlanta Highway (SR 9/SR 20) south of the city and will thus continue to increase in traffic volumes as Atlanta Highway becomes more congested. Increased residential development along this corridor will require Castleberry Road to be improved in the future outside the city limits (it is adequate inside the city limits).

Kelly Mill Road

This is a two-lane road that leads into the city from western Forsyth County. It connects with Main Street at Canton Highway (SR 20). Due to the extreme horizontal and vertical curves, Kelly Mill Road is currently an operationally substandard road. Increased residential development along this corridor will require Kelly Mill Road to be substantially improved in the future.

Market Place Boulevard

Market Place Boulevard is a four-lane minor arterial with a center turn lane. It connects Buford Highway (SR 20 east of SR 400) with Buford Dam Road and points north. It serves extensive commercial development.

Pirkle Ferry Road

Pirkle Ferry Road runs between Pilgrim Mill Road and Bald Ridge Marina Road. It is a one-way, two-lane minor arterial east of the central business district that connects to Main Street (SR 9/SR 20) westbound. It provides for east-west flow between the central business district and SR 400. It is fronted mostly by office developments.

East Maple Street

East Maple Street runs between Veterans Memorial Boulevard and Bald Ridge Drive. It is a one-way, two-lane minor arterial providing eastbound flow east of the central business district. It connects with Maple Street on the west and Bald Ridge Marina Road on the east. It is fronted mostly by office developments.

Collectors

Roads classified as collectors in the city are Mary Alice Park Road, Pilgrim Mill Road, Tribble Gap Road, and Sanders Road. The primary purposes of collector streets are to collect traffic on adjacent residential, commercial and industrial properties and carry it to the arterial road system. Some collector streets serve through-traffic along with the traffic that is accessing a destination nearby. Collectors typically have rights-of-way of 60 to 100 feet with two to four undivided lanes.

Collectors can be divided into two subgroups: major collectors and minor collectors, but the division between minor and major collector roads is sometimes slight. Collector streets intersect more frequently with cross streets and driveways than arterial roads. Average travel speeds for collectors in urban areas are typically in the 25 to 35 miles per hour range. Collectors are usually two-lane facilities. They sometimes include a two-way center turn lane or even a four-lane cross-section because of dense driveway spacing or intensely developed property along their routes.

Mary Alice Park Road

This three lane collector links Mary Alice Park and Atlanta Highway (SR 9/SR 20), and it overpasses SR 400.

Pilgrim Mill Road

This three-lane collector joins SR 400 and the central business district, but in a much longer route than Bald Ridge Marina Road and the Pirkle Ferry Road/ East Maple Street route into downtown. Although it provides access to SR 400, Pilgrim Mill Road currently serves mainly residential development. However, much of the land along Pilgrim Mill Road is currently undeveloped but designated in the future for significant development. Pilgrim Mill Road was widened to three lanes to meet the increasing traffic flows.

Tribble Gap Road

Originally a two-lane collector, Tribble Gap Road serves primarily school traffic in addition to some relief to traffic flows along Dahlonega Highway (SR 9).

Sanders Road

This two-lane collector, which forms a city limit boundary on the east, connects Mary Alice Park Road with Buford Dam Road. Sanders Road is currently fronted by residential development outside the city but with vacant, non-residentially designed property inside the boundary of the city.

Local Roads

All roads that are not arterials or collectors are classified as local roads. Local roads are those streets that provide direct access to properties, both residential and commercial/industrial. These are two-lane facilities that may permit parking on one or both sides, and they are characterized by frequent driveway cuts and slow speeds. It is desirable to have a 50-foot right-of-way in residential areas and a 60-foot right-of-way in commercial and industrial areas.

Accidents and Safety Hazards

Traffic accident statistics were available from the City of Cumming Police Department. The 2004 Comprehensive Plan noted there has been a steady increase in the number of traffic accidents occurring in the city in recent years. Traffic accidents can happen for many reasons, but those related to the physical upkeep of roads include the street surface condition (e.g., pothole, severe bump, etc.), traffic controls being absent or not visible, and view obstructions. Data available on traffic accidents indicate that they most frequently occur during the hours of 8:00 a.m. to 4:00 p.m. Problem areas are discussed below.

Atlanta Road/SR 9/SR 20 at Buford Dam Road

This intersection has historically been the most frequent accident location responded to by the Police Department. It is signalized and contains heavy left turn movements southbound to eastbound (left turn onto Buford Dam Road from Atlanta Road going southbound). The accident problems at this location are due to level-of-service failure of southbound SR 9/SR20 left turning movements (i.e., persons making the left on red). The Georgia Department of Transportation works with local governments to improve intersection operations along state routes, and to the extent that operational signal improvements can help alleviate a dangerous situation, the city should pursue them with DOT. There is also a convenience store at this location which has a curb cut right at the intersection and which probably contributes to possible traffic safety problems. The 2004 comprehensive plan called for consolidating or relocating curb

cuts along Atlanta Highway for enhanced traffic safety and function. The city has also discussed with DOT improvements to intersections along Atlanta Road which, when implemented, will help alleviate traffic safety problems along this route.

Canton Highway (SR 20) and Kelly Mill Road

This intersection appeared frequently in the 2002 traffic accident data. Much of the problem in the past had to do with alignment of the intersection alignment of Kelly Mill Road with SR 20, and as a result that intersection was realigned and improved in 2003.

Other Intersections and Corridors

Buford Dam Road at Market Place Boulevard is a location that has historically appeared with frequency in the Police Department's accident log. The installation of a traffic signal at this location recently resulted in a substantial decrease in accidents at this location. Market Place Boulevard at Buford Highway (SR 20) (the opposite end) is also an area with multiple entries in the accident log. This is a highly congested intersection just east of Georgia 400, and Market Place Boulevard is the entranceway to the regional shopping area (including superstores). Oakland Street at Pirkle Ferry Road is a local intersection which merits further analysis for possible ways to decrease accident potential in the future.

In summary, road and signal improvements have been and will continue to be made that address traffic safety problems. Other accident locations such as Buford Dam Road and SR 9/ SR 20/ Atlanta Road will be addressed in a proposed corridor study unless operational intersection and signalization improvements improve the situation prior to that study.

Level of Service (LOS)

Described

Level-of-service (LOS) is most frequently indicated by letter grades "A" through "F", which are assigned to each link in accordance with its computed volume-to-capacity ratio. They can also be assigned to describe intersections. These grades are similar to those that students get on their report cards. At one extreme, LOS "A" signifies that motorists travel with little or no delay and have room to maneuver as they approach an intersection at the downstream end of a segment. At the other extreme, LOS "E" denotes that the volume of traffic is approaching the capacity threshold. LOS "E" is characterized by low average speeds, delay at intersections and little room to maneuver. Below LOS "E" is LOS "F". LOS "F" conditions occur when more traffic attempts to pass through an intersection or section of road than the intersection or segment is designed to accommodate. These points or short sections are referred to as "bottlenecks." LOS "F" conditions are characterized by long delays between intersections, low/average speeds, and little room to maneuver. Table 6.2 shows that levels-of-service are defined in terms of their corresponding volume-to-capacity ratios and average speeds for urban arterial roads.

Table 6.2
Levels-of-Service for Urban Arterials

Level-of-Service	Volume-to-Capacity	Avg. Travel Speed (mph)
A	< 0.50	> = 35
B	0.50 – 0.60	> = 28
C	0.60 – 0.75	> = 22
D	0.75 – 0.90	> = 17
E	0.90 – 1.00	> = 13
F	> = 1.00	< 13

Another method of determining LOS is to use generalizations based on traffic volumes. Table 6.3 provides the traffic volumes by functional classification which help to determine the existing and future LOS of roads in the city. The latter is easier to use because it does not require the calculation of segment-specific volume/capacity ratios.

Table 6.3
Generalized Levels of Service Based on Traffic Volumes

Road Classification and Lanes	Level-of-Service (LOS) Average Daily Trips by Letter Grade				
	A	B	C	D	E
Local, 2-lane undivided	--	--	4,800	10,900	11,900
Local, 4-lane divided	--	--	11,600	23,800	25,400
Collector, 2-lane undivided	--	--	8,600	14,600	16,000
Collector, 4 lane divided	--	--	19,800	31,700	33,900
Minor arterial, 2-lane undivided	--	--	9,900	14,900	16,200
Minor arterial, 4-lane divided	--	--	22,900	32,500	34,300
Minor arterial, 6-lane divided	--	--	35,500	48,900	51,700
Major arterial, 2-lane undivided	--	10,800	15,600	16,600	16,600
Major arterial, 4-lane divided	--	23,500	33,200	35,000	35,000
Major arterial, 6-lane divided	--	35,800	49,900	52,500	52,500
Freeway, 4 lanes	20,900	32,800	49,200	62,600	74,500
Freeway, 6 lanes	32,100	50,400	75,600	96,200	114,500

Source: Level of Service Handbook, Florida Department of Transportation. 1998. As reported in Forsyth County Bicycle Transportation and Pedestrian Walkways 2025 Plan, p. 51.

LOS Standards

Volume/capacity ratios can be calculated on the basis of AADT and road capacities. However, such a calculation provides an indicator of how the road is functioning overall throughout the day, as opposed to certain peak periods. Peak period traffic counts are generally not available for major road segments in Cumming. Hence, level-of-service can be determined by a qualitative assessment of average travel speeds and observations about congestion and delays.

Unless more specifically noted, the city desires to maintain an overall LOS of the major transportation system (freeways, arterials, and collectors) of "D" or better. Certain road segments in the city exceed that standard, while others are currently below (operating within)

the LOS standard. Local roads, unless specifically noted otherwise. are proposed to operate at an LOS "C" or better. Individual LOS standards are shown in Table 6.4. These LOS standards apply for the worst peak hour of traffic.

Table 6.4
Projected LOS for Major Roads, 2025
(Worst Peak Hour Conditions)
City of Cumming

Major Road	Existing LOS 2003	Projected LOS 2025	Includes Improvements?	LOS Standard
SR 400	D	F	No	F
Atlanta Hwy. (SR 9/SR 20)	D	E	No	E
Canton Hwy. (SR 20)	C	E	No	E
Buford Hwy. (SR 20)	E	F	Yes	F
Dahlonega Hwy. (SR 9)	C	D	Yes	D
Main St. (SR 20/SR 9)	E	F	No	F
W. Maple St. (SR 20)	D	E	No	E
Sawnee Dr. (SR 306)	C	D	Yes	D
Veterans Memorial Blvd.	A	D	No	D
Bald Ridge Marina Rd.	B	D	No	D
Buford Dam Rd.	C	D	Yes	D
Kelly Mill Rd.	A	C	Yes	C
Pirkle Ferry Rd.	C	D	No	D
E. Maple Street	B	D	No	D
Pilgrim Mill Rd.	B	D	Yes	D
Castleberry Rd.	A	D	No	D
Mary Alice Park Rd.	B	D	Yes	D
Market Place Blvd.	C	E	No	E
Sanders Rd.	B	D	No	D

Source: Jerry Weitz & Associates, Inc. 2003.

Network Deficiencies

Much evidence already exists about traffic patterns, bottlenecks, congestion problems, and other traffic conditions in the city. Most of the capital improvements needed to remedy future transportation congestion problems have already been identified and constructed or programmed.

Congested Arterials

SR 400 has already become congested but improvements are not currently included in the Atlanta Regional Commission's Regional Transportation Plan. Cumming is well served by arterials and collectors at the present time, and most arterial roads leading into and out of the city have substantial road capacity, including Castleberry Road, Veterans Memorial Boulevard, Dahlonega Highway, and Bald Ridge Marina Road (which becomes the one way pair of Pirkle Ferry Road and East Maple Street). Canton Highway (SR 20) and Atlanta Highway (SR 9/SR 20) are congested corridors, and Buford Dam Road is an increasingly congested alternative

arterial to Buford Highway (SR 20). Congestion is worst around the courthouse square, where several major and minor arterials converge in the downtown.

Collector Relief

Cumming's major transportation system also contains a number of important collectors with capacity that will help distribute and relieve traffic congestion on arterials. These collectors include Tribble Gap Road, Pilgrim Mill Road, and Mary Alice Park Road. Tribble Gap Road is impacted already to some extent by school traffic but has been widened to accommodate projected demands. The city has addressed collector congestion by three-laning Mary Alice Park Road and Pilgrim Mill Road; however, there is a part of Pilgrim Mill Road north of the city, linking Cumming to that interchange with Georgia 400 that has not been widened (but need to be widened by Forsyth County).

Local Road Network Improvements

The addition of a local road network in the downtown central business district, as development and redevelopment occur, will help disperse traffic in the downtown. In addition, certain local road extensions were called for in the 2004 comprehensive plan to add east-west route options within and near downtown, and to help further relieve congested conditions on roads surrounding the county courthouse (Main Street, Maple Street, etc.).

Improvement of Intersections along Atlanta Highway

Two intersections along Atlanta Highway (SR 9/SR20) pose some dangerous conditions for traffic. The first area that requires improvement is the five-way intersection of Atlanta Highway and Bald Ridge Road, Mary Alice Park Road, and Meadow Drive. This intersection has been slated for complete redesign and improvement. The second problem area is the intersection of Allen Street and Atlanta Highway. The city expects the Georgia Department of Transportation to participate in the design and funding of improvements that will correct poor geometrics at these intersections, in exchange for the city's agreement to allow its substantial investment in Veterans Memorial Boulevard to be used as the designated route for SR 9 and SR 20. Specific intersection improvement plans will need to include sidewalk improvements.

Surface Conditions

Beyond the basic safety condition of the roadway, the city should also provide street surfaces on which drivers are comfortable. Street "rideability" (surface condition) can be rated using trained observers or by mechanical roughness-measuring devices. For instance, the visual rating scale provided in Table 6.5 could be applied from an automobile:

Table 6.5
Rating Scale for Street Rideability

Condition	Description
1	Smooth
2	Slightly bumpy
3	Considerably bumpy
4	Severe jolt or potential safety hazard

Source: Hatry et al. 1992.

Pavement Maintenance and Resurfacing

The maintenance of local roads is often ignored or underfunded by many local governments. Maintenance costs of the road system tend to mount, and the problem increases when local officials defer maintenance for "just one more year." The city needs to know when to carry out road maintenance and rehabilitation projects to upkeep the local road system. If improvements are not conducted in a timely manner when needed, the quality of local roads decreases and the costs to repair or rehabilitate them increases. For instance, it costs more to rehabilitate if the city delays until a street is in very poor condition (Bailey et al. 1986). Also, the cost escalates three, four, or five times higher the longer the delay. For these reasons, a pavement maintenance system is desirable; such systems are available to most local government agencies at reasonable cost.

Surface treatment, crack filling, and pothole filling are a routine part of a pavement management program. Surface treatment consists of a thin coating of asphalt with stone chip rolled in; this treatment will give a five-year life under moderate traffic conditions. Crack filling is needed to prevent water from entering the base and weakening the street; proper crack filling requires a "sufficient depth of a compressible, expandable asphalt-based material that adheres thoroughly to the sides of the crack (Bailey et al. 1986). The city's pavement maintenance program should also include correction of any soft spot locations (weak base) and the routine filling of potholes.

Bridges

The city does not have ownership of and responsibilities for any bridges, although some culverts exist. Bridges will wear out just as buildings and streets do. Like pavement maintenance, bridge maintenance has been neglected in communities across the country. Bridges are complex structures that always require evaluation by a specialist. Bridge structural engineers can temporarily close any bridge if it poses a public safety hazard. Bridges are regulated by federal and state requirements and guidelines. Bridges are subject to fatigue brought on by constant loading, as well as other factors that will limit the life of the bridge. The American Association of State Highway and Transportation Officials (AASHTO) recommends that bridges be inspected once every two years (Bailey et al. 1986). Due to expenses, bridge work on a public road is almost always funded mostly by federal and state, rather than local sources. None of the roads on which bridges exist is known to be designated as an evacuation route.

Street Lighting

The city needs knowledge about where the greatest street-lighting needs are before it can improve the street lighting system. Total annual cost of operation is an important consideration in determining whether to provide night time visibility via street lighting. The necessary visibility will vary according to the classification of roadway. Street lights should be required to conform to construction standards and specifications for light levels, glare reduction, uniformity, and color.

Signal Warrants and Traffic Control

Inventory

The city is officially responsible for the signals at Buford Dam Road and Market Place Boulevard and along Market Place Boulevard. The city owns and operates these traffic signals. In the past, the city has inventoried signal conditions for traffic signals managed by the city in reports

by R. J. Haynie and Associates, Inc. Those reports provide details of the intersection layout, data on which timing is based, and conditions diagrams. Existing traffic signals include those along SR 9 and SR 20. These other traffic signals at intersections with State Routes are owned and managed by the Georgia Department of Transportation (GDOT).

Assessment

The city has reviewed the needs for signalization on exclusively local streets and has determined that existing traffic control is currently adequate to meet level of service standards. However, through its traffic signal management program, the city will continue to periodically reassess the functioning of the city's traffic signals and adjust timing mechanisms where warranted.

On state routes, the city has identified deficiencies with regard to traffic signalization in the downtown central business district. Specifically, signals along SR 20 (where east and west movements are split just west of the county courthouse) lack left turn signals. The intersections are not wide enough to accommodate left turn lanes, and per prior discussions the city has had with the Georgia Department of Transportation, the state is unwilling to retrofit those signals to provide left turn movements for fear that left-turn signalization will reduce the capacity of the state routes and exacerbate congestion.

Traffic controls are generally required to conform to the *Manual of Uniform Traffic Control Devices for Streets and Highways*. Any additional traffic signals that may be necessary during the planning horizon (which would be determined by a signal warrant) are most likely to be at the intersection of state routes and local roads, thereby becoming GDOT's responsibility. Additional warrants will be pursued as individual needs arise. One area that is likely going to need traffic signalization is the intersection of Aquatic Drive and Pilgrim Mill Road.

Roadway Signage

Signs are erected in accordance with the *Georgia Manual on Uniform Traffic Control Devices for Streets and Highways*. Requirements for signage depend on whether they are erected on conventional roads, expressways, or freeways. The Georgia Department of Transportation is responsible for signage in the rights-of-ways of state routes. The location and composition of city's signage meet applicable specifications.

Major Roadway Improvements

Major road improvements, such as any improvements to Georgia 400, are programmed or planned as part of the Regional Transportation Plan for the Atlanta Region. Those roadway improvements focus on highway routes.

State Route 9 (Atlanta Highway, and including SR 20 along this road segment) contains many curb cuts serving commercial businesses. It is a congested route and does not have much potential for widening without severely impacting businesses along the route. The city has completed Veterans Memorial Boulevard, from SR 20 to the downtown, which provides a direct alternative with greater capacity than Atlanta Highway. Moving SR 9 and SR 20 to Veterans Memorial is needed to optimize the utilization of existing street capacity. In exchange for the city's investments to the improvement of Veterans Memorial Boulevard to five lanes and moving SR 9/SR 20 to Veterans Memorial, the city has negotiated with the Georgia Department of Transportation to improve certain intersections on SR 9/SR 120 along the Atlanta Highway

portion. The movement of SR 9 and SR 20 to Veterans Memorial Boulevard would also shorten distances along SR 20 and provide a straight route for SR 9 as well.

Local Road Network Improvements

This section identifies and discusses improvements to the local road system.

New and Extended Streets

Buford Dam Road should be extended as a four-lane urban section between Atlanta Highway (SR 9/SR 20) and Veterans Memorial Boulevard. This is another project that will be likely be funded with the SPLOST. Buford Dam Road when extended will connect two arterial roads and distribute traffic south of the city. The extension of Buford Dam Road is even more important considering the recommendation that SR 9/SR 20 be relocated from Atlanta Highway to Veterans Memorial Boulevard. Upon redesignating the state route, traffic could then miss one block of the downtown by entering at the county courthouse square rather than one block east at Pilgrim Mill Road. Hence, this should also help improve the flow of traffic in the downtown.

The extension of Mountain View Drive east from Tribble Gap Road to Dahlonega Highway would provide an alternative route from Dahlonega Highway (SR 9) to Canton Highway (SR 20) instead of through the downtown. This would provide an alternative for traffic flow from SR 9 to SR 20; instead of going through downtown, south-to-west traffic can bypass the downtown on this completed route. Although Mountain View Drive is currently residential and institutional in land use character, it forms the northern portion of the city's expanded central business district, and improved traffic flow will become more important as downtown development extends into this area.

Ridgecrest Road if extended east from Camilla Street to Pilgrim Mill Road, would complete an east-west local road that could bring traffic from Pilgrim Mill Road all the way to Canton Highway (SR 20) via Elm Street, instead of through the downtown central business district. Due to the low-density residential development along Ridgecrest Avenue, however, the road extension should be narrow and with the installation of traffic calming measures. Traffic calming improvements are also needed along Ridgecrest Avenue between Dahlonega Highway (SR 9) and Camilla Street.

The frontage road north of Bald Ridge Marina Road just west of SR 400 is proposed to be extended to serve future commercial and office east of Bald Ridge. This road would be constructed and funded by developers at the time of development. This road should generally parallel SR 400 and if topographical conditions will permit, it should connect with Pilgrim Mill Road in one or more places.

Grid System in CBD

To ensure that the city's downtown central business will have adequate road capacity, pedestrian friendliness, good connectivity, and improved streetscapes, the 2004 comprehensive plan proposed short local streets that will divide the central business district into development blocks and extend the small block pattern found in the center of downtown (e.g., courthouse square). These roads should be constructed and funded by developers at the time of significant development or redevelopment. However, the city should participate in the design of these roads, and the installation of streetscape improvements. Cost-sharing arrangements for each development project should be negotiated, with the city offering certain funds from its capital

improvement program. The roads must be relatively narrow to avoid extensive right-of-way dedication, but they should be sufficient for wide sidewalks and street trees. Buildings allowed per development along these streets should have little if any setback from these additional streets.

Extension of Local Roads Outside the CBD

As properties are developed for residential uses along both sides of Pilgrim Mill Road, it is preferred that a grid pattern or modified grid pattern be extended and connected with existing residential streets.

PARKING FACILITIES

Over the years, on-street parking has been virtually eliminated from the city's central business district. The city does not own or operate any parking facilities, except for the lot at the intersection of Castleberry Road and West Maple Street. It is used free of charge. Capacity of the lot is less than 100 spaces, and no restrictions are placed on the duration (long-term or short-term) parking.

This parking lot, along with abutting property that once housed the city's Planning and Zoning Office (until it moved into the new city hall), is considered to be a prime location for a municipal parking deck which could serve an expanded array of county government administrative facilities, as well as (possibly) commercial uses in the central business district.

SIDEWALKS

Overview

It is very important to promote non-motorized transportation, especially pedestrian travel. Pedestrian-friendly sidewalks are a key to creating livable communities that offer choices other than automobile use. Accessibility and connectivity among important generators and destinations by non-motorized modes of transportation is an integral strategy of any transportation plan.

A complete sidewalk system is a key element in establishing a multi-modal transportation system that supports successful public transportation and other travel demand management strategies. The pedestrian system is therefore an important component needed to make Cumming the type of community it envisions itself being in the future. This is especially true in the downtown central business district, where many streetscape/sidewalk improvement projects have already been completed.

Historically undervalued, sidewalks are now considered a necessity by most transportation planning agencies. For instance, both the Georgia Department of Transportation (GDOT) and the Federal Highway Administration (FHWA) have established policies addressing sidewalks and bicycle ways. GDOT, according to its mission statement, is committed to a safe, efficient and sustainable transportation system for all users. Similarly FHWA specifies that bicycling and walking facilities will be incorporated into all transportation projects unless exceptional circumstances exist. Hence, these agencies and others have come to recognize that promoting non-motorized transportation provides an environmentally friendly and sustainable means of mobility.

The impact of the sidewalk system on performance of the street and highway system is currently minimal, however. The impact of downtown sidewalk improvements on the streetscapes and as an alternative for individuals to make some types of trips by foot is very positive. In context with the rest of the transportation system, the expanded sidewalk system will not in the near future materially change peak period conditions that exist on the city's road system. This should change, as the concept for mixed uses in the downtown evolves into reality. In combination with urban design changes that occur with redevelopment, parking strategies, and the introduction of transit service during the planning horizon, the sidewalk system will become a key component of the city's strategies needed to reduce auto travel.

Inventory

The map of the existing sidewalk network shows the existing (red) sidewalks in the city. The city has an extensive sidewalk system, and it provides potential to link family-oriented neighborhoods with shopping destinations and public places such as schools and parks. There are more and better sidewalks for pedestrian travel in Cumming in comparison with early decades. The city has supported improvement of its sidewalk system, especially in the downtown central business district.

Table 6.6 (from the 2004 comprehensive plan) lists each sidewalk segment on the collector and arterial road system and in the downtown. Local roads, some of which are served by sidewalk along one side of the street only, are excluded.

Table 6.6
Inventory of Sidewalks
Arterial and Collector Road System
City of Cumming

Name of Arterial or Collector Road	Road Segment (From/To)	Sidewalk on North or East Side	Sidewalk on South or West Side
Atlanta Hwy. (SR 9/SR 20)	City limit to Rest Haven	No	No
Atlanta Hwy. (SR 9/SR 20)	Rest Haven to Main St.	Yes	Yes
Bald Ridge Marina Rd.	Denson Dr. to SR 400	No	No
Buford Dam Rd.	Atlanta Hwy. to city limit	No	No
Buford Hwy. (SR 20)	City limits near Market Pl. Blvd.	No	No
Castleberry Rd.	City limits to W. Maple St.	Yes	Yes
Canton Hwy. (SR 20)	W. Maple St. to Kelly Mill Rd.	Yes (part)	Yes (part)
Canton Hwy. (SR 20)	Kelly Mill Rd. to Samaritan Dr./ Woodland Pl.	Yes	Yes
Canton Hwy. (SR 20)	Samaritan Dr. to Elm St.	Yes	No
Canton Hwy. (SR 20)	Elm St. to city limit (N. Conners Pkwy.)	No	No
Dahlonega Hwy. (SR 9)	Main St. to Ingram Ave.	Yes	Yes
Dahlonega Hwy. (SR 9)	Church St./Ingram Ave. to Sawnee Dr.	No	Yes
Dahlonega Hwy. (SR 9)	Sawnee Dr. to Dobbs Creek area	No	Yes
Dahlonega Hwy. (SR 9)	Dobbs Creek area to Pilgrim Rd.	No	No
Kelly Mill Rd.	Canton Hwy. to W. Maple St.	Yes	Yes
Kelly Mill Rd.	W. Maple St. to city limit	Yes	No
Main St. (SR 20/SR 9)	Atlanta Hwy. to Canton Hwy.	Yes	Yes
E. Maple St.	Veterans Memorial Blvd. to Atlanta Hwy.	Yes	No
E. Maple St.	Atlanta Hwy. to Allen St.	Yes	No
W. Maple St.	Castleberry Rd. to Kelly Mill Rd.	No	Yes (part)
Market Pl. Blvd.	Buford Hwy. to Buford Dam Rd.	No	Yes
Mary Alice Park Rd.	Atlanta Hwy. to Sanders Rd.	No	Yes
Pilgrim Mill Rd.	Pirkle Ferry Rd. to Oakwood Dr.	Yes	No
Pilgrim Mill Rd.	Oakwood Dr. to Parkside Walk	Yes	No

Pilgrim Mill Rd.	Parkside Walk to city limit	Yes	No
Pirkle Ferry Rd.	Pilgrim Mill Rd. to Oakland St.	Yes	Yes
Pirkle Ferry Rd.	Oakland St. to Denson Dr.	Yes	No
Sanders Rd.	Buford Dam Rd. to Mary Alice Park Rd.	No	No
Sawnee Dr. (SR 306)	Canton Hwy. to Adair Blvd.	No	No
Sawnee Dr. (SR 306)	Adair Blvd. to Tribble Gap Rd.	No	Yes
Sawnee Dr. (SR 306)	Tribble Gap Rd. to Dahlonega Hwy.	No	Yes
Veterans Memorial Blvd.	City limit to Main St.	Yes	Yes

Note: Excludes local street network (but see map). Source: Jerry Weitz & Associates, June 2003. Field Survey.

Downtown Central Business District

The map of sidewalks shows existing sidewalks in the City of Cumming. Sidewalks in the downtown are, in general, well paved and with 1-foot square brick pavers. The width of the sidewalks in the downtown ranges from about 4 feet to 14 feet. Most of the sidewalks around City Hall and the Forsyth County Administration Building have widths of 6 or 8 feet. Sidewalks in the downtown area need improved connectivity with origins and destinations outside the central business district, if they are to invite more pedestrians. Also, in some cases, sidewalks in the downtown are not located on both sides of the streets. In addition, the City has almost no shade trees between the sidewalks and streets in the downtown area, which could provide pedestrians a sense of safety and comfort from the adjacent traffic.

Outside the Downtown Central Business District

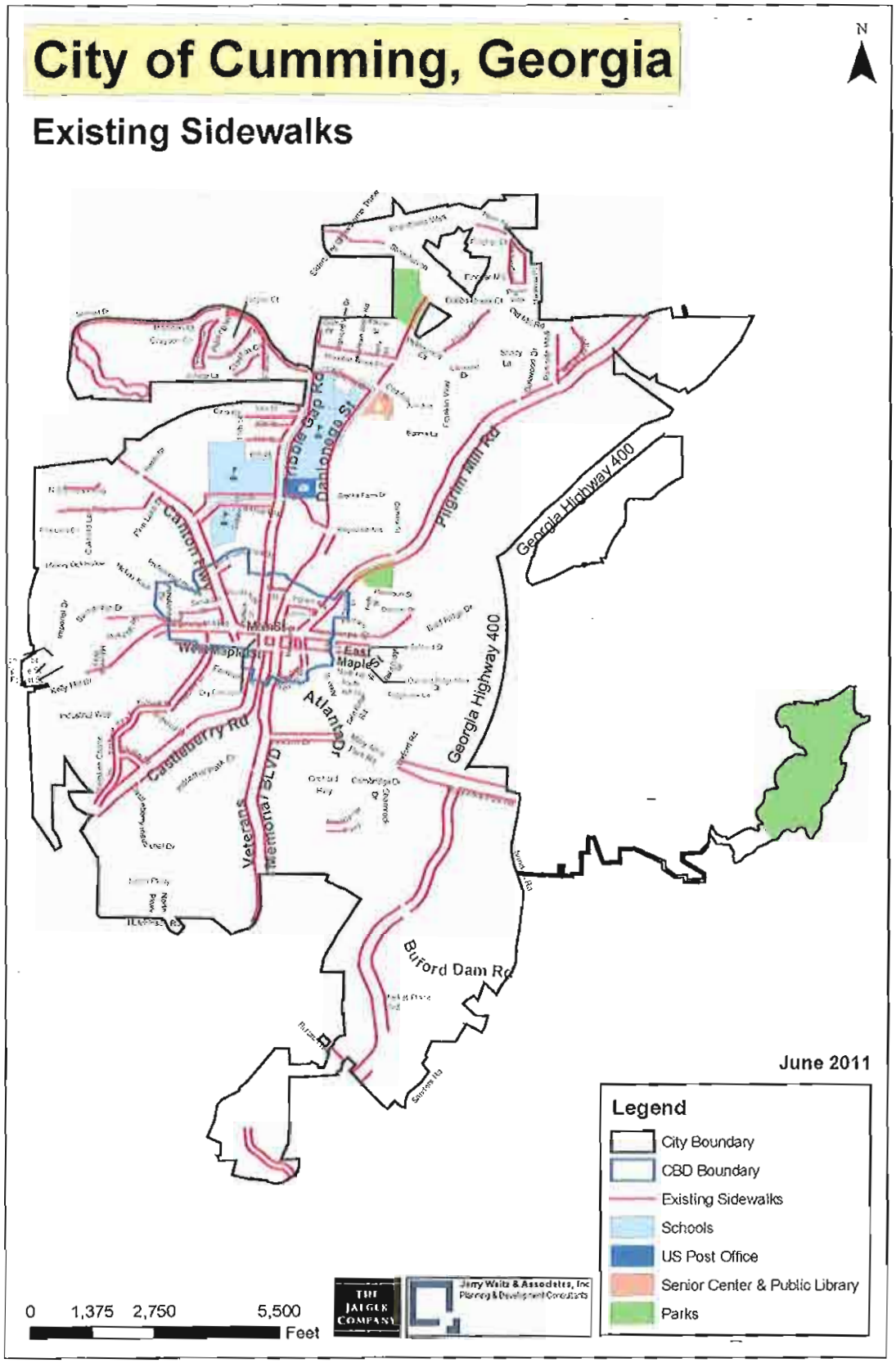
Sidewalks outside the downtown area are typically on one side of the road only. They are typically 4 feet in width with green space separation (often in anticipation of future road widenings). The width of green space buffers between streets and sidewalks range from at least 4 feet to over 20 feet. Figure 10.2 demonstrates a typical sidewalk in the outside downtown in the city. Sidewalks in the outskirts of town need improved connectivity and shade trees to increase pedestrian friendliness.

Standards for Sidewalks

Curb Ramps

Curb (wheelchair) ramps provide access between the sidewalk and roadway for people using wheelchairs, strollers, walkers, crutches, handcarts, bicycles, and also for pedestrians with mobility impairments who have trouble stepping up and down high curbs. Curb ramps must be installed at all intersections as mandated by federal legislation. Wheelchair ramps must have a slope of 1:10 and must be designed in accordance with the ADA guidelines. All newly constructed and altered roadway projections must include curb ramps.

In addition, existing facilities without cub ramps should be upgraded where deficient. While curb ramps are needed for use on all types of streets, priority locations are in downtown areas and on streets near schools, parks, medical facilities, shopping areas, and near residences with people who use wheelchairs. The cost is approximately $800 to $1,500 per curb ramp (new or retrofitted) (see *DOT Pedestrian Facility Users Guide – Providing Safety and Mobility*, Publication No. FHWA-RD-01-102, March 2002).


City of Cumming, Georgia
Existing Sidewalks
N
Georgia Highway 400
Pilgrim Mill Rd
Canton Hwy
Maple St
East Maple St
Atlanta Dr
Castleberry Rd
Veterans Memorial BLVD
Buford Dam Rd
June 2011
Legend
City Boundary
CBD Boundary
Existing Sidewalks
Schools
US Post Office
Senior Center & Public Library
Parks
0 1,375 2,750 5,500
Feet
THE JAEGER COMPANY
Jerry Weitz & Associates, Inc
Planning & Development Consultants

Grade Separation in CBD at SR 20

Grade-separated pedestrian crossings are installed when it is necessary to physically separate the crossing of a heavy volume of pedestrians from a roadway with heavy motor vehicle traffic. Grade separation is also used at some railroad crossings and water crossings. The effectiveness of grade-separated crossings depends on their perceived ease of accessibility by pedestrians. An overpass or underpass will not necessarily be used simply because it improves safety.

Because of the high cost of grade-separated facilities, they should be incorporated into the early stages of new developments that are intended to generate substantial volumes of pedestrians. State and local agencies consider grade-separated crossings to be most beneficial in areas of moderate to high pedestrian demand, large numbers of young children (particularly near schools) who must regularly cross a high speed or high-volume roadway, and where there is an extreme hazard for pedestrians (for example, wide streets with high speed traffic and poor sight distance).

Canton Highway at Kelly Mill Road is an area that may eventually necessitate a grade-separated pedestrian crossing. This is noted because SR 20 provides an imposing barrier between the central business district and the area proposed for CBD expansion, west of Canton Highway along Kelly Mill Road. Alternatively, if the city constructs a parking deck at the corner of Castleberry Road and Maple Street (SR 20), then a pedestrian bridge to the Courthouse Square might be substituted, and improvements installed for safe pedestrian passage across Canton Highway (SR 20) at Kelly Mill Road.

BICYCLE TRANSPORTATION

Inventory

The city does not have any designated bike paths or routes. As noted earlier in this chapter, bicycling is not a mode of travel for commuters in the city.

Planned Improvements

There is not a significant constituency in the city that would like to see bike lanes added to the city's major thoroughfares. However, if positioned along certain of the city's major collector and arterial streets, bike lanes could provide the routing and connectivity that is needed for experienced bicyclists to travel places in a timely manner while eliminating sidewalk conflicts with pedestrians.

Kelly Mill Road Shared Roadway

The Forsyth County *Bicycle Transportation and Pedestrian Walkways 2025 Plan* recommends that a shared roadway bicycle facility be provided from the Cherokee County border to the city limits along Kelly Mill Road, for a distance of 35,200 feet and a cost of $35,200 (mostly for signage). Hence, the plan proposes to continue that shared roadway improvement into the downtown of the city along Kelly Mill Road. Such an improvement, however, must take into account the current geometric deficiencies of Kelly Mill Road which will require improvement.

Connection to Sawnee Mountain Greenway

Bicycle routes could also provide routing for longer distance recreational trips. Forsyth County's *Bicycle Transportation and Pedestrian Walkways 2025 Plan* indicates that a Sawnee Mountain Greenway consisting of a 45,000 linear foot, 10-12 foot wide shared-use path is planned in the long term between Sawnee Mountain and Poole's Mill Park (northwestern unincorporated Forsyth County), at a cost of $9,000,000.

The city's proximity to Sawnee Mountain, much of which has been acquired by Forsyth County as greenspace, presents an opportunity to have a bicycle route within a greenway that connects parts of the city to the proposed Sawnee Mountain Greenway. Currently, a route for such a greenway has not been determined. However, it is possible that private greenspace could be used for the greenway as well as the Canton Highway right-of-way to the downtown central business district, which could then connect to the Kelly Mill shared roadway. Alternatively, local road improvements planned as a part of an extended grid network of streets north of the city could include a bike lane or bike path which could then connect via other routes to the Sawnee Mountain greenway.

Multi-use Path East of Georgia 400

Similarly, the county plan designates a multi-use path of 8-10 feet in width from McGinnis Ferry Road to Buford Highway (SR 20) along SR 400. Hence, the city should plan to facilitate the extension of this long-term proposed multi-use path further north into the city limits. It is likely that Market Place Boulevard and its extension would be a logical right-of-way within which to extend this proposed multi-use path.

Standards for Bicycle Facilities

A bicycle lane is a portion of the roadway that has been designed by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. Bicycle lanes, if provided, should be a minimum of four feet in width on collector and local streets and a minimum of five feet on arterial streets. A bicycle path is a bikeway physically separated from motor vehicle traffic by an open space or barrier and within the highway or road right-of-way or within an independent right-of-way. The minimum width for a bicycle path should be ten feet. Bicycle facilities should follow the *AASHTO Guide for the Development of Bicycle Facilities*.

OFF-ROAD PEDESTRIAN TRAILS AND GREENWAYS

The cross-sectional widths of multi-use paths are usually twice that of a typical sidewalk. Multi-use paths are designed to accommodate both bicyclists and pedestrians. A multi-use trail is a path that does not permit motorized vehicles (except for publicly authorized emergency and service vehicles) and which may be used multiple non-motorized uses, including bicyclists, pedestrians, wheelchair users, joggers, pet owners, roller bladders, skateboarders, etc.). Another type of path is a trail, which consists of a natural, packed-earth surface to co-exist alongside a lake, stream, or other amenity with minimal intrusion.

PUBLIC TRANSPORTATION

Inventory

There is no formal public transportation system serving the City of Cumming. However, changes during the planning horizon suggest that public transportation will begin to play a significant role in meeting future transportation needs.

Major Public Transit Trip Generators

An extensive amount of land in the city is undeveloped but is planned for office, commercial, and light industrial uses. With the anticipated concentration of employment, the city will become a compact employment center that can probably support some limited bus transit service by the midpoint of the planning horizon (2020). In addition to the downtown central business district, which will under go intensification supportive of public transit, other major employment areas will emerge in the form of new planned shopping centers, office parks, and mid-rise office campuses. The employment and patronage at these facilities will stimulate greater needs for public transit.

Public Transit Needs

Cumming is home to an increasing number of nursing home and elderly care home residents. These residents are limited in the mobility options, and many or most do not own automobiles. They often rely on relatives and friends for mobility. It is important that nursing homes and elderly retirement developments be constructed within reasonable walking distance of basic services and retail goods. Furthermore, such residents need some form of public transit to get to the hospital, other medical facilities, and drug stores. Cumming's population also contains some lower income households, including the occupants of public housing, which may also have limited automobile use and increasing needs for some form of public transit.

Future Provision of Transit

Past studies have analyzed mode and alignment alternatives for the extension of MARTA's rail system northward to Roswell and Alpharetta (up to Windward Parkway) in the Georgia 400 Corridor. The extension of MARTA rail is not guaranteed, since the alignment has not been set and funds have not been secured. However, it is possible that MARTA rail may eventually extend up to Windward Parkway in Alpharetta, just south of the Forsyth County line.

Prospects for Future Transit Use

Due to the socioeconomic background and preferences of most of Forsyth County's commuters, it is not anticipated that there will be a significant shift from auto travel to public transit once served, either by park-and-ride lots with connections to MARTA rail stations, or by a bus system. Most of Forsyth County's commuters are from middle to high-income households. They are, generally, extremely sensitive to time considerations. Recognizing that any bus transit must travel routes of the primary road system in mixed traffic with other motorists during peak periods, the time traveling on a bus will be longer than in one's personal vehicle. The trip time disadvantages of traveling by bus will be an obstacle to using public transit for Forsyth County's and Cumming's commuters. However, dedicated lanes for bus transit, if they can

overcome this trip time disadvantage, may spur more city and county residents to use bus transit once provided.

OTHER TRANSPORTATION MODES

Rail and Water Transportation

There are no railroads or port (water-related) transportation facilities in Cumming.

Air Transportation

Forsyth County does not have any public general aviation airports. Mathis Field, located in the southern part of Forsyth County, is privately owned but open to the public. Mathis Field has a 1,550-foot long, 20-foot wide, asphalt runway. According to the State of Georgia Airport System Plan, Georgia Mountains Area, Technical Volume, a new airport is recommended to be built (in Forsyth County) to accommodate the rather substantial forecast aeronautical demand in the county due to its proximity to Atlanta. A proposed single-runway airport with a parallel taxiway would provide, for planning purposes, a practical annual capacity of 194,000 operations and practical hourly capacities of 99 VFR and 53 IFR operations, according to the airport system plan.

TRANSPORTATION ISSUES AND SOLUTIONS

Traffic Calming

Traffic calming is concerned with reducing vehicle speeds, vehicle noise, visual impacts, and sometimes through traffic volumes. Techniques consist of a series of raised speed humps, raised tables, or other devices along with appropriate traffic control signage to slow speeding and/or discourage cut-through traffic. Traffic calming techniques use various means to influence the behavior of motorists: physical, psychological, visual, social, and legal (regulatory and enforcement). Although traffic management and calming techniques are often used in areas other than residential neighborhoods, most programs are focused in residential areas, where traffic problems are more prevalent and have the most influence on the day-to-day livability of the community (see GDOT, *Statewide Bicycle and Pedestrian Initiative – Pedestrian Facilities Design Guide*, Updated July 25th 2003).

Currently, there are no traffic calming measures employed in the city. The Ridgecrest Avenue Extension, as proposed in the 2004 comprehensive plan, would provide potential for through-traffic to traverse a low-density residential neighborhood. Hence, the existing and proposed section of Ridgecrest is a prime candidate for traffic calming measures. In addition, the proposed grid network of local roads within the expanded central business district could accommodate traffic calming techniques as appropriate, since these streets are intended to be pedestrian friendly, with traffic movement being a secondary consideration.

Travel Demand Management

Travel demand management is an organizational program that focuses on strategies to reduce automobile travel during peak periods of the day. Some of the initiatives have immediate effects while others take time to work. Usually, no single strategy by itself has the potential to materially influence traffic conditions on the road system. However, if multiple TDM strategies are pursued, a meaningful reduction in motor vehicle traffic during peak periods is possible.

Effective strategies used elsewhere include: implementing staggered work hours at employment centers; shuttle services to link regional transit lines with major employers; providing incentives for urban design features that will support pedestrian and transit travel, marketing transit services and reduced/subsidized fare programs; zoning that permits multi-use developments in specified areas; ridesharing; and parking management.

Automated Transportation Management System

An automated transportation management center can provide state-of-the-art capabilities for monitoring traffic and managing signalization throughout the road system. There are other possible applications that include: enforcement of driving laws and making public transportation work better. Cumming and Forsyth County could consider joint construction of a central transportation management system center.

Community Improvement Districts

In other parts of metropolitan Atlanta, such as around Perimeter Mall (DeKalb and Fulton Counties) and at Cumberland-Galleria (Cobb County), Community Improvement (CID) Districts have been established to design and fund transportation improvements. CIDs tax their members to support transportation infrastructure improvements and to provide transportation and other programs. In the future, the city may consider the feasibility of establishing a CID to help fund projects that will alleviate congestion and add aesthetic treatments (e.g., streetscapes) to one or more areas in the city. The downtown central business district and the Market Place Boulevard area are two possibilities where CIDs might be appropriate during the planning horizon.

Corridor Planning

The Atlanta Highway corridor is a prime candidate for a corridor improvement plan focused on consolidating curb cuts to make access safer, and to provide visual relief to the highway commercial clutter along the roadside. The corridor plan should be completed in conjunction with or at least informed by the proposed intersection improvements along Atlanta Highway proposed in this plan.

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CHAPTER 7
INTERGOVERNMENTAL COORDINATION

More and more, effective planning efforts for community facilities, environmental protection, transportation, and land use are increasingly beyond the abilities of single jurisdictions. This chapter provides an inventory of existing intergovernmental coordination mechanisms and processes with other local governments and governmental entities. It seeks to identify specific issues, problems, and needs that would benefit from improved or additional intergovernmental coordination. This chapter also assesses the suitability of existing coordination mechanisms to serve current and future needs of the city, as well as goals, policies, and objectives involving more than one governmental entity.

LOCAL GOVERNMENTAL ENTITIES

This section describes the governmental entities with which the city must effectively coordinate activities, programs, and services.

Forsyth County Government

Forsyth County is the only adjacent local government. There are many aspects of coordination required, especially with regard to the delivery of services. Forsyth County provides several services to the city's residents, as they are also residents of the county. The city has a number of memoranda of agreement and other agreements with Forsyth County.

Forsyth County Board of Education

The Forsyth County School System serves the residents of Cumming. Coordination efforts are required in the areas of siting new schools, educational programs, and the joint use of certain facilities. There is active coordination between the city's Parks and Recreation Department and the Forsyth County School System for recreation use of the school's gymnasiums, playgrounds, ball fields, and similar recreation or sports facilities by city residents. Plans of the School Board for new facilities are summarized in this comprehensive plan (see community facilities and services element), and coordination mechanisms now in place are considered to be adequate.

Forsyth County Water and Sewer Authority

This special district is an entity of Forsyth County. The authority serves all that unincorporated area of Forsyth County outside the City of Cumming's service area.

City of Cumming Housing Authority

The Housing Authority is an entity created by a cooperation agreement adopted by the city in 1958. It was amended in 1962. The authority manages the city's public housing units. Periodic coordination may be needed with regard to public housing services.

REGIONAL ENTITIES

Metropolitan North Georgia Water Planning District

This district was established by the Georgia General Assembly in 2001 via Senate Bill 130 to address the pressing need for comprehensive water resources management in metropolitan north Georgia. The main purpose of the district is to promote intergovernmental coordination for all water issues, to facilitate inter-jurisdictional water-related projects, and to enhance access to funding for water-related projects among local governments.

The district's jurisdiction encompasses 16 counties including Forsyth. It is required by state law to prepare three long-term plans: a long-term wastewater management plan; a water supply and water conservation management plan, and a district-wide watershed management plan. Each of these three regional plans have been prepared and were released June 2003.

Georgia Mountains Regional Commission

The Georgia Mountains Regional Commission (formerly Georgia Mountains Regional Development Center) provides a variety of services to the city. It also has responsibility for the implementation of regional plans and the review of local plans. The city is represented on the board of directors of the center. Coordination of regional and local plans will continue throughout the planning horizon.

Atlanta Regional Commission

The U.S. Environmental Protection Agency has designated a thirteen-county area around Atlanta as a non-attainment jurisdiction for ozone. Ozone is created by a photochemical reaction of a mixture of organic compounds and nitrogen oxides (created by fuel combustion) and is a major air pollutant in the lower atmosphere. The city will need to cooperate with any regional air quality plan mandated by the U.S. Environmental Protection Agency and transportation plan prepared by the Atlanta Regional Commission and the Georgia Regional Transportation Authority.

Though Cumming is not within its jurisdiction, the Atlanta Regional Commission plays an important role with regard to meeting transportation requirements for nationally designated ambient air quality standards non-attainment areas. This requirement is addressed in the transportation element of this comprehensive plan.

STATE ENTITIES

Georgia Regional Transportation Authority

The Georgia Regional Transportation Authority was created in 1999 by the Georgia General Assembly via the Georgia Regional Transportation Authority Act (Senate Bill 57) at the urging of Governor Roy Barnes. The authority has jurisdiction over any county that is designated by the U.S. Environmental Protection Agency as a nonattainment area under the U.S. Clean Air Act amendments of 1990. Currently, the authority has jurisdiction over thirteen counties in the metropolitan Atlanta Area, including Forsyth County.

The authority has many broad powers, including development of a regional transportation plan and control over public transportation systems. The authority has powers to restrict access to roadways within its jurisdiction. Failure of the city to cooperate with the authority could result in the loss of all state grants except those related to physical and mental health, education, or police protection.

The Georgia Regional Transportation Act also creates special districts in each of Georgia's 159 counties, and these are deemed activated when the authority obtains jurisdiction over the county through the nonattainment designation. Hence, there exists a special district for Forsyth County, and the special district has authority to levy taxes, fees, and assessments to pay for the cost of providing services and constructing facilities to further the authority's mission.

Georgia Department of Transportation

The Georgia Department of Transportation (GDOT) maintains and improves the state highways in the city and helps pay for local road improvements. Close coordination with GDOT is required. The city expects to work cooperatively with GDOT throughout the planning horizon.

Georgia Department of Natural Resources

The Georgia Department of Natural Resources (DNR) has so many important functions that interrelate with this comprehensive plan that they are too many to even summarize here. However, most of the daily, weekly, or monthly interaction required is with the Environmental Protection Division (EPD) of DNR.

Georgia Department of Community Affairs

The Georgia Department of Community Affairs (DCA) has overall management responsibilities for the state's coordinated planning program and reviews plans for compliance with minimum planning standards. Several other important programs are operated by DCA as well, such as housing and building codes. A variety of technical assistance and grant funding opportunities are available through DCA, including solid waste management, the local development fund, and administration of the state's Community Development Block Grant (CDBG) program.

FEDERAL ENTITIES

U.S. Army Corps of Engineers

The Corps of Engineers has responsibility for the management of Lake Lanier. Because the city is close to and fronts on the lake, it is required to interact and coordinate with the Corps. The city also obtains its raw water from Lake Lanier. The city annexed some Corps property (Mary Alice Park) which required the Corps' permission and consent. Continued cooperation with the Corps is expected throughout the planning horizon.

Appalachian Regional Commission

Cumming is within the jurisdiction of the Appalachian Regional Commission. This multi-state federal agency was created in 1965 for the purpose of creating opportunities for self-sustaining economic development and improve the quality of life of north Georgia residents served by the program. The commission is a potential source of state and federal resources to assist the city with various programs.

PRIVATE ENTITIES

Cumming-Forsyth County Chamber of Commerce

The city-county Chamber provides economic development services to both local governments. Both the city and county budget annually for these services, and both have been satisfied with this arrangement.

Rural/Metro Ambulance Company

This company has an agreement with Forsyth County to serve all of the county's residents (including Cumming) with emergency medical services.

Sawnee Electric Membership Corporation (EMC)

Sawnee EMC is a member-owned electric energy provider to an area covering seven north Georgia counties including Forsyth County. Little coordination is needed with the EMC, with the possible exception of ensuring that electricity service is withheld or discontinued for building and uses that are unlawful according to the city's land use regulations.

Georgia Power Company

Georgia Power is an investor-owned, tax-paying utility that serves customers in 57,000 of the state's 59,000 square miles. It provides service in all but six of Georgia's 159 counties. Like the Sawnee EMC, little coordination is required except for issues with electric utility hookups (2004 Comprehensive Plan).

Insurance Services Organization (ISO)

This entity periodically evaluates fire protection services for purposes of issuing fire insurance.

SERVICE DELIVERY STRATEGY

In 1997, the state passed the Service Delivery Strategy Act (HB 489). This law mandates the cooperation of local governments with regard to service delivery issues. Each county was required to initiate development of a service delivery strategy between July 1, 1997, and January 1, 1998. Service delivery strategies must include an identification of services provided by various entities, assignment of responsibility for provision of services and the location of service areas, a description of funding sources, and an identification of contracts, ordinances, and other measures necessary to implement the service delivery strategy.

The Service Delivery Strategy Manual for the City of Cumming and Forsyth County was adopted May 4, 1998, and submitted for compliance review February 10, 1999. Future changes to the service delivery strategy require an official update and submittal with appropriate forms to the Georgia Department of Community Affairs.

The Service Delivery Strategies Act of 1997 requires that the city's Service Delivery Strategy (with Forsyth County) be updated, if necessary, as a part of the city's comprehensive plan update. The city has a number of intergovernmental agreements with Forsyth County, which

are made a part of the Service Delivery Strategy. The major agreements are also referenced in the community facilities and services element but are summarized here:

Wholesale Water User's Agreement

The Wholesale Water User's Agreement was adopted May 1987 and amended in January 1997. The agreement is good for a period of 25 years and will expire in 2012. It is currently being renegotiated.

Fire Services Contract

This agreement, adopted in 1984, sets forth the responsibility of Forsyth County to provide fire protection and related services to residents and businesses of the city. Enforcement authority with regard to State Minimum Fire Safety Standards was transferred from the Georgia Safety Fire Commissioner to the city, then from the city to the county, per municipal resolution dated March 17, 1998.

Emergency Services Inter-Local Agreement

As a part of the service delivery strategy, the city and county agreed that the Emergency Management Agency will be funded by and serve both the city and county.

Park and Recreation Service Delivery Agreement

This agreement was signed in 1998 between the City and Cumming and Forsyth County to ensure that the facilities provided and maintained by the two jurisdictions compliment rather than conflict in their delivery of service.

Additional agreements with Forsyth County may be needed during the planning horizon.

Summary of Dispute Resolution Process

The city and county adopted an agreement on May 4, 1998, titled "Comprehensive Plan Pertaining to Service Delivery Strategy for Land Use Compatibility and Provisions for Dispute Resolution between Cumming and Forsyth County." The process applies to lands which serve as boundaries between the two local governments. That process may have changed pursuant to amendments to applicable state law.

Water and Sewer Extensions and Improvements

Forsyth County and Cumming coordinate services with regard to raw water intake (see community facilities and services element). The Bethelview Advanced Water Reclamation Facility (AWRF) is located in the unincorporated portion of the county. A water and sewer service area for the city, including unincorporated lands, has been formally established, with boundaries first being jointly delineated by the city and county in the 1980s.

LAND USE

The Service Delivery Strategy Act of 1997 mandates that land use plans of different local governments be revised to avoid conflicts.

Compatibility of Land Use Plans

The Service Delivery Strategy Act (1997) requires that local governments amend their land use plans to eliminate conflicts and ensure compatibility with adjacent land use plans. The intent of these provisions is to protect citizens near borders of local government jurisdictions from land use conflicts. Planning staffs of Cumming and Forsyth County have met to discuss future land use plans and found that no significant conflicts exist.

Developments of Regional Impact

This process was created by the Georgia Planning Act of 1989 and rules adopted by the Georgia Department of Community Affairs. It provides for regional and local government review of projects that meet certain thresholds for size (e.g., number of dwelling units). This process provides an opportunity for local governments to communicate and coordinate with regard to land use policy and improvements to community facilities and services. The Georgia Mountains Regional Commission administers this process when an application is received from the developer. Any large-scale development in the city meeting the thresholds of the state administrative rules would be required to be analyzed for regional impacts. Given the extensive development capacity of the city's undeveloped land, applications for developments of regional impact are likely during the planning horizon (2004 Comprehensive Plan)

Land Use and Siting Facilities of Countywide Significance

The city does not have any particular concerns about the siting of public and private facilities, since they are regulated by the city's zoning ordinance. Furthermore, the land use dispute resolution process has been instituted to address any city concerns about the siting of facilities in or next to the city limits. Since local governments lack regulatory authority over electric utilities, they cannot be addressed by the city's land use policies.

ANNEXATION

The Service Delivery Strategy Act requires that local governments establish processes to resolve land use classification disputes when a county objects to a municipal annexation within its jurisdiction.

Cities are strongly encouraged in their comprehensive plans to plan land uses for areas that are or may be reasonably expected to become a part of the municipal limits during the next ten years. There are unincorporated "pockets" in the northern section of the city which may be annexed. There is also some sentiment that the city should annex the remaining residential areas along Eleventh, Twelfth, and Thirteenth Streets, due to some confusion in past years about certain properties in this neighborhood and whether they are in the city limits or not. The city is in the process (summer 2011) of annexing unincorporated pockets and also the commercially developed area surrounding SR 9 and SR 20 just west of the Georgia 400/SR 20 interchange.