

City of Powder Springs

Community Assessment Data Appendix



Comprehensive Plan Update 2005 - 2025



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Technical Appendix: Supporting Data and Information

Population: Current and Projected

Table 1 below shows a series of demographics for the City of Powder Springs and Cobb County. The 2000 Census reports the resident population of the City of Powder Springs as 12,481. This represents an 81% growth rate from 1990-2000. Like most of the Atlanta Region, the City of Powder Springs has grown at a very rapid rate, eclipsing the growth rates of Cobb County, the Atlanta MSA, and the state of Georgia over the past decade. As shown below, the growth rate for Cobb County in the same time frame was 35.7%. Potential reasons for the higher growth rate in Powder Springs than Cobb County include lower housing costs in the city, and a greater amount of built-in infrastructure capacity in the city than in most undeveloped areas of unincorporated Cobb County. Powder Springs' location in western Cobb County provides additional explanation for its consistently high rates of growth, as growth continues to expand outward in the Atlanta metropolitan region. Though Cobb County's growth rate is lower than Powder Springs, it is difficult to sustain high growth rates when the base population is very large. Unlike the county, Powder Springs' small base population has nearly tripled over the past two decades, leading to extremely high growth rates. Current population is estimated at 13,800.

Table 1: Population Growth Rates Powder Springs and Cobb County

Population Growth Rates, 1980 - 2000 City of Powder Springs, Cobb County						
Jurisdiction	1980	% Change 80-90	1990	% Change 90-00	2000	% Change 80-00
City of Powder Springs	3,381	103.9%	6,893	81.1%	12,481	269.2%
Cobb County	297,718	50.4%	447,745	35.7%	607,751	104.1%
ATL MSA	2,029,710	39.6%	2,833,511	45.1%	4,112,198	102.6%
State of Georgia	5,457,566	18.7%	6,478,216	26.4%	8,186,453	50.0%

Source: U.S. Census

It is anticipated that the city will continue growth due to the rapid growth rate in the region and as a result of new housing projects undertaken as part of the implementation of the 2002 Livable Centers Initiative Plan for the Town Center of Powder Springs. Projections provided by the Georgia Department of Community Affairs

(DCA) show the city growing by 9,100 persons between 2005 and 2025. This reflects a growth rate of 62%, greater than the 45% growth predicted for Cobb County over the same time period.

Table 2: Projected Population through 2025

Powder Springs: Population						
Category	2000	2005	2010	2015	2020	2025
Total population	12,481	14,756	17,031	19,306	21,581	23,856

Source: DCA Planbuilder

The projected population increase will have the greatest impacts on the city’s housing market. It is expected that there will be an increased demand for a variety of housing products in the city. These increased needs were identified and addressed in the 2002 Livable Centers Initiative study. The recommendations for meeting future needs as discussed in the LCI Study will be considered and incorporated into the housing policies included in the Community Agenda portion of the Comprehensive Plan. It is also anticipated that the increasing population will have substantial impacts on city services. The provision of future services will be addressed in detail in the Community Facilities section.

Age Distribution of Current and Future Population

The increased population of Powder Springs is changing the nature of the community’s overall age and diversity mix. The median age in Powder Springs grew between censuses from 29 years old to 32 (Table 3). At first, this trend can appear odd since the population segment adding the most residents (1,986 residents) was the 5 to 24 year old category. However, Powder Springs saw a dramatic 119% increase in the 45 to 64 year old population segment, which was only its *second* fastest growing population segment. Growth in the age category 65 years old and above led all population segments by growing at a rate of 135% (Table 4).

Together, the 45 – 64 and 65+ age categories added 1,577 residents to the community. In addition, their share of the Powder Springs’ population climbed from 18% in 1990 to 23% in 2000. The 5 to 24 year old segment’s percentage of population grew much more modestly over that time period, from 30% to 32%. This trend is in line with the country as a whole as the large baby boomer population ages. The state of Georgia and the United States both saw their greatest population increase within the 45 to 64 year old category. Powder

Springs' growth in the 45 to 64 year old category outpaced both the state and national average by a minimum of 70%, as shown in the two tables below:

Table 3: Median Age Growth: 1990-2000

	Powder Springs	Georgia	United States
1990 Median Age	29	31.4	32.9
2000 Median Age	32.0	33.4	35.3

Source: U.S. Census

Table 4: Age Segment Growth Breakdown: 1990-2000

Location	Age Range	1990 Census	2000 Census	Percentage Change
Powder Springs	0 - 4	689	1,000	45%
	5 - 24	2,067	4,053	96%
	25 - 44	2,873	4,607	60%
	45 - 64	930	2,036	119%
	65+	334	785	135%
Georgia	0 - 4	495,535	595,150	20%
	5 - 24	1,970,352	2,411,816	22%
	25 - 44	2,190,594	2,652,764	21%
	45 - 64	1,167,465	1,741,448	49%
	65+	654,270	785,275	20%
United States	0 - 4	18,354,443	19,175,798	4%
	5 - 24	71,987,755	80,261,468	11%
	25 - 44	80,754,835	85,040,251	5%
	45 - 64	46,371,009	61,952,636	34%
	65+	31,241,831	34,991,753	12%

Source: U.S. Census

Table 5 shows the historic and projected age distribution of the population of the City of Powder Springs. There are no large shifts in the age distribution of the city's population expected during the planning period. The age groups that currently make up the largest percentage of the population will continue to do so in 2025; those age groups include 5-13 year olds, 25-34 year olds, and 35-44 year olds.

Table 5: Powder Springs: Population by Age

Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
0 – 4 Years Old	237	463	689	845	1,000	1,191	1,382	1,572	1,763	1,954
5 – 13 Years Old	613	894	1,175	1,826	2,477	2,943	3,409	3,875	4,341	4,807
14 – 17 Years Old	329	310	290	519	747	852	956	1,061	1,165	1,270
18 – 20 Years Old	194	229	263	350	437	498	559	619	680	741
21 – 24 Years Old	170	255	339	366	392	448	503	559	614	670
25 – 34 Years Old	548	1,145	1,741	1,846	1,951	2,302	2,653	3,003	3,354	3,705
35 – 44 Years Old	528	830	1,132	1,894	2,656	3,188	3,720	4,252	4,784	5,316
45 – 54 Years Old	335	462	588	996	1,403	1,670	1,937	2,204	2,471	2,738
55 – 64 Years Old	225	284	342	488	633	735	837	939	1,041	1,143
65 and over	202	268	334	560	785	931	1,077	1,222	1,368	1,514
Total	3,381	5,140	6,893	9,690	12,481	14,758	17,033	19,306	21,581	23,858

Source: DCA Planbuilder

The existing and continued concentration of population in child and parent or “family” age cohorts presents a continued need for programs and services that support families. Additionally, as all populations are increasing between 48% and 68% between 2005 and 2025, there will be a need to continually evaluate how to best serve the growing population with regard to services and community facilities.

Race: Existing and Projected Future Conditions:

The historic racial distribution trends of Powder Springs and Cobb County show an increasing population across the board in all races. In Powder Springs, the black population is growing at a faster rate than the white population, leading to a shift from an overwhelming white majority in 1980 (93%) to a population that is more evenly distributed (58% white and 37% black) by 2000 (Tables 6 and 7). A similar trend occurred in Cobb

County during the same time frame, but the county black population has not grown as rapidly as that of Powder Springs.

Initial projections (Table 6) show that these trends will continue through 2025, with the City of Powder Springs black population growing steadily but not becoming the majority population before 2025, when a 43% black population is projected. The Asian population and individuals of other races not specifically categorized in the projections provided will increase in the city, but remain a distinct minority throughout the planning period.

This distribution based on steady growth of the white and black populations is also expected to continue in Cobb County, with the white population remaining the definite majority through 2025, when it is projected to be 64% of the County's population (Table 7). Also notable is the presence of a greater percentage of non-black minorities (Asian and other) in Cobb County than in the city of Powder Springs. Other minorities will represent 12% of the County's population, while other minorities are projected to be only 5% of the total population in Powder Springs.

The changing racial structure of the city may have implications for the types of goods and services desired and provided in the city's commercial districts and in general. There may be the potential for development of additional shops and services catering to the African-American community.

Table 6: Powder Springs Racial Composition

Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
White alone	92.75%	86.30%	83.16%	66.88%	57.89%	55.89%	54.42%	53.31%	52.43%	51.71%
Black or African American alone	6.68%	12.03%	14.65%	29.29%	37.38%	39.14%	40.43%	41.42%	42.19%	42.82%
American Indian and Alaska Native alone	0.12%	0.29%	0.36%	0.26%	0.20%	0.20%	0.21%	0.21%	0.21%	0.21%
Asian or Pacific Islander	0.33%	0.99%	1.31%	1.20%	1.14%	1.19%	1.22%	1.24%	1.27%	1.28%
Other race	0.12%	0.39%	0.52%	2.37%	3.39%	3.58%	3.72%	3.82%	3.90%	3.97%

Source: 2000 Census as reported by DCA, <http://www.georgiaplanning.com/dataviews/census2/dv0.asp?Jurisdiction=City&FIPS=1362524&Name=Powder%20Springs>

Table 7: Cobb County Racial Composition

Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
White alone	94.59%	90.36%	87.54%	78.82%	72.40%	69.99%	68.06%	66.50%	65.20%	64.10%
Black or African American alone	4.39%	7.67%	9.86%	15.01%	18.80%	20.36%	21.61%	22.63%	23.47%	24.18%
American Indian and Alaska Native alone	0.15%	0.19%	0.21%	0.24%	0.26%	0.27%	0.28%	0.29%	0.30%	0.30%
Asian or Pacific Islander	0.56%	1.29%	1.77%	2.54%	3.10%	3.38%	3.60%	3.78%	3.92%	4.05%
Other race	0.31%	0.49%	0.62%	3.40%	5.45%	6.00%	6.45%	6.81%	7.11%	7.37%

Source: 2000 Census as reported by DCA, <http://www.georgiaplanning.com/dataviews/census2/dv0.asp?Jurisdiction=City&FIPS=1362524&Name=Powder%20Springs>

Income and Poverty:

The poverty rate for Powder Springs grew dramatically over the course of the 1990's (Table 8). Powder Springs' poverty rate increased from 3.8% to 8.5%, an increase of 142%. Even with this stark increase, Powder Springs' poverty rate still remains a minimum of 3.9% below the state and national averages for the year 2000, as shown below:

Table 8: Poverty Rate Change: 1990-2000

	Powder Springs	Georgia	United States
1990 Poverty Rate	3.8%	11.5%	13.5%
2000 Poverty Rate	8.5%	13%	12.4
Percentage Change	142%	13%	-8%

Source: U.S. Census

Median household incomes remain above the region, state and national averages even though Powder Springs' poverty rate has risen. In 2000, Powder Springs' median household income exceeded the Atlanta MSA region by \$4,500 and Georgia's median household income by \$14,000 (Table 9). This gap is closing, however, as Powder Springs median household income exceeded the Georgia average by only 133% in 2000, compared to 186% in 1990. In addition, Powder Springs' median household income grew at essentially the same rate as the national average of 39.7%.

Table 9: Median Household Income: 1990-2000

	Powder Springs	Atlanta MSA	Georgia	United States
Median Household Income 1990	\$40,996	\$36,051	\$22,021	\$30,056
Median Household Income 2000	\$56,486	\$51,948	\$42,433	\$41,994
Percentage Change	39%	44%	93%	39.7%

Source: U.S. Census

Sources of household income allude to Powder Springs' residents being more active in the labor force than the Atlanta region and state. Income through earnings for Powder Springs' residents was nearly 5% higher than the Atlanta region, and almost 10% greater than Georgia. In addition, Powder Springs also recorded a lower percentage of social security income among the three, and a retirement income percentage 1.6% less than the state (Table 10).

Table 10: Comparison of Sources of Household Income: 1999

Sources of Household Income in 1999	Households in Powder Springs	Percentage of Powder Springs Households	Percentage of Atlanta MSA Households	Percentage of Georgia Households
With Earnings	3,381	93.5%	88.4%	83.8%
With Social Security Income	545	13.3%	17%	21.9%
With Supplemental Security Income	135	3.3%	3.1%	4.5%
With Public Assistance	58	1.4%	2.1%	2.9%
With Retirement income	525	12.8%	12.6%	14.4%

Source: U.S. Census

Per capita income is another measure of central tendency for income. While median income is used to eliminate extreme values, per capita income represents total income divided by population. Per capita income allows us to adjust for the effects of larger household sizes that may include children and residents not in the labor force. Thus, while the median household income in Powder Springs exceeded Metro Atlanta in 2000, the city's per capita income was substantially lower than the MSA. Per capita income in Powder Springs increased from \$14,986 in 1990 to \$19,776 in 2000. While this represents an increase of 32.8%, the city's per capita income actually decreased slightly after adjusting for inflation (-1.2%).

Table 9a: Per Capita Income: 1990-2000

Geography	Powder Springs	Cobb County	Metro Atlanta	Georgia
Per Capita Income in 1990	\$14,896.00	\$19,166.00	\$16,897.00	\$13,631.00
Per Capita Income in 2000	\$19,776.00	\$27,863.00	\$25,033.00	\$21,154.00
% Change	32.8%	45.4%	48.2%	55.2%

Source: U.S. Census

It is also important to assess the distribution of income throughout Powder Springs. Table 9b lists the proportion of Powder Springs residents that fell within various income brackets between 1990 and 2000. The proportion of residents falling within the highest income brackets increased substantially between 1990 and 2000. The proportion of households earning over \$75,000 or more per year increased from 5.8% of the total to 31.4%. While the city has added a significant number of high income households, the proportion of households in the lowest income brackets has not changed substantially. In a stable community, there is normally a decline in the proportion of households in the lowest brackets due to wage inflation. These households with stagnant income represent the increased levels of poverty in Powder Springs.

Table 9b: Income Distribution: 1990-2000

Category	1990	%	2000	%
Income less than \$5,000	24	1.0%	0	0.0%
Income \$5,000 - \$9,999	88	3.8%	147	3.6%
Income \$10,000 - \$14,999	70	3.0%	66	1.6%
Income \$15,000 - \$19,999	87	3.7%	150	3.7%
Income \$20,000 - \$29,999	368	15.7%	381	9.3%
Income \$30,000 - \$34,999	227	9.7%	202	4.9%
Income \$35,000 - \$39,999	239	10.2%	256	6.2%
Income \$40,000 - \$49,999	524	22.4%	492	12.0%
Income \$50,000 - \$59,999	299	12.8%	499	12.2%
Income \$60,000 - \$74,999	280	12.0%	664	16.2%
Income \$75,000 - \$99,999	80	3.4%	773	18.9%
Income \$100,000 or more	57	2.4%	469	11.4%
TOTAL Households	2,343	100.0%	4,099	100.0%

Income Trends indicate a mixed picture within the City of Powder Springs. Median household income and per capita income have both increased over the last decade. However, per capita income has not increased at the rate of inflation. This is partially due to the city's increase in average household size from 2.96 in 1990 to 3.06 in 2000. Furthermore, the city's income distribution has become more polarized, with more households in poverty and more households at the highest income brackets. DCA projections for future per capita income show a projected increase of per capita income from \$19,776 in 2000 to \$39,962 in 2030. (Table 9c) This represents an approximate doubling of per capita income between 2000 and 2030. In contrast, historic inflation rates have been over 400% over the three decades previous to the 2000 census.

Table 9c: Projected Per Capita Income: 2000-2030

Category	2000	2005	2010	2015	2020	2025	2030
Per Capita Income	19,776	23,140	26,505	29,869	33,233	36,597	39,962

Housing

Type & Mix

Tables 11 and 12 provide information on the current (2000) and the historic mix of housing types in Powder Springs, as well as the occupancy characteristics of the city's housing market. Table 11 shows that there has been steady growth in the number of single-family units, both detached and attached. Factors leading to this trend may include increased emphasis on homeownership over rental housing as a means of stabilizing community tax base, and the trends toward increasing housing unit size at the national, regional, and local levels in the recent past. These factors may have led to a decrease in the number of multi-family and mobile homes within the city in the past decade.

Concurrent with the shift of the city's housing stock away from multi-family properties, the percentage of renter households declined from 1990 to 2000. The percentage of renter-occupied units has decreased across all housing types, as shown in Table 12.

Powder Springs remains a community composed mostly of homeowners. The city's home ownership percentage of 87.4% in 2000 is nearly 20 percentage points higher than the state and national averages. Powder Springs' proximity to the major urban area of Atlanta understandably influences this pattern. It appears the increase in population has not altered the ability of Powder Springs to provide home ownership opportunities. Powder Springs home ownership growth rate between U.S. Censuses outpaced both the national and state average by at least 2%, as it climbed to 87.4% in 2000.

Table 11: Types of Housing Units in Powder Springs 1980 - 2000

Types of Housing, 1990 - 2000 City of Powder Springs			
Housing Units	1990	2000	% Change
Single-Family (detached)	2057	3717	80.7%
Single-Family (attached)	132	198	50.0%
Duplex	77	117	51.9%
Multi-Family (3 to 9 Units)	88	73	-17.0%
Multi-Family (10 to 19 Units)	0	0	0.0%
Multi-Family (20 to 49 Units)	0	0	0.0%
Multi-Family (50 or more Units)	0	0	0.0%
Mobile Home or Trailer	99	63	-36.4%
All Other	32	18	-43.8%
TOTAL Housing Units	2,485	4,186	68.5%

Source: U.S. Bureau of the Census (SF3)

Table 12: Types of Housing Units by Tenure, City of Powder Springs

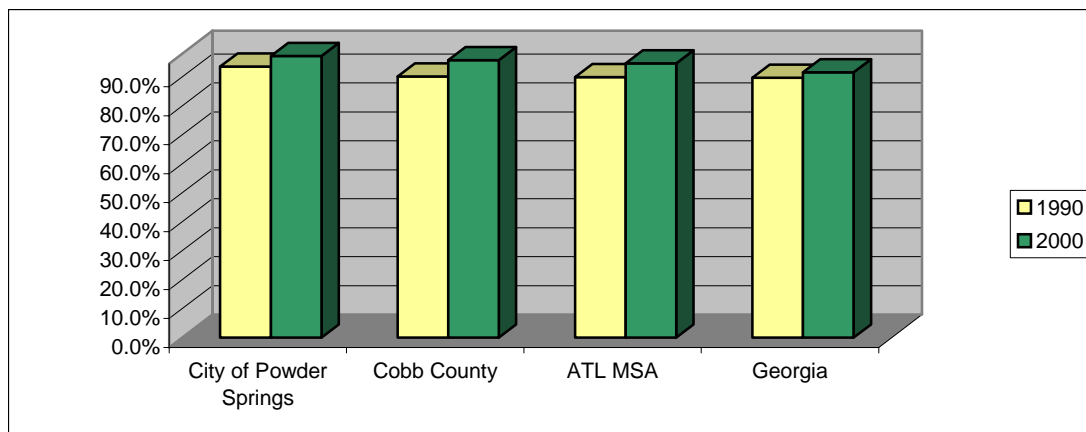
Type of Unit	1990		2000	
	Owner Occupied	Renter Occupied	Owner Occupied	Renter Occupied
One family, detached	74.0%	9.7%	82.1%	7.4%
One family, attached	1.7%	2.5%	2.6%	1.7%
Multiple family	1.2%	5.4%	0.8%	3.3%
Mobile Home or other	5.0%	0.6%	2.0%	0.0%
Total	81.9%	18.1%	87.5%	12.5%

Sources: U.S. Census 2000 SF3, Table H32 and U.S. Census 1990 SF3, Table H22

Despite a decrease in renter occupied housing in Powder Springs from 1990-2000, the housing occupancy and owner occupied tenure rates have been high in comparison to Cobb County, Metro Atlanta, and the State of Georgia. In 2000, Powder Springs' 87.5% owner-occupied rate eclipsed the rates of Cobb County (68.2%), Metro Atlanta (66.4%), and the State of Georgia (67.5%). Additionally, Powder Springs had the highest overall

occupancy rates in both 1990 and 2000, during which period there were increases in occupancy rates across the board as shown in Figure 1.

Figure 1: Housing Occupancy Characteristics 1990 – 2000



Source: U.S. Bureau of the Census (SF3)

Housing Cost

The median property value in Powder Springs increased 47% between 1990 and 2000 (Table 13). In comparison, median value property values increased 49% in Cobb County and 57% at the state level (Table 13). The correlation of an increase between Powder Springs and Cobb is expected; given that the city is located within Cobb County, which as a part of the Metropolitan Atlanta area tends to have higher rates of appreciation. A comparison of the difference in the median values shows that as of 2000, Powder Springs' median property value was 21% lower than Cobb County, but 3% higher than the state. Some causes of the differential may be the city's location, removed from the metropolitan area's major employment centers and lack of significant and direct transit connections to employment areas. The large difference between Powder Springs and Cobb County's housing prices may also be directly linked to the greater demand and smaller supply in Cobb versus more equal supply and demand in the city. In contrast to owner occupied housing values, the 2000 median rent in Powder Springs was 10% lower than the median rent in Cobb County, and 18% higher than the state median rent.

Table 13: Comparison of Housing Costs

Category	1990	2000
State of Georgia		
Median property value	\$ 70,700	\$ 111,200
Median rent	\$ 433	\$ 613
Cobb County		
Median property value	\$97,500	\$145,300
Median rent	\$575	\$806
Powder Springs		
Median property value	\$78,200	\$114,800
Median rent	\$679	\$722

Source: U.S. Bureau of the Census (SF3)

Age & Condition of Housing

As of 1990, almost half (47.8%) of the city's housing stock was built during the 1980's (Table 14). According to the 2000 Census, this percentage decreased from 1990 to 2000, as there were many new housing starts during that period. A comparison of data from 1990 and 2000 shows that there was a steady increase in new housing in the city, with 1742 units built between 1990 and March 2000, versus 1391 in the preceding decade (1980 through March 1990). The high level of construction in the 1980's and 1990's is linked to the high population growth experienced throughout the Atlanta MSA. Since 2000, there have been a total of 769 new housing starts in the City of Powder Springs. On average in the past five years there have been 154 new housing starts per year. As of the end of 2004, 51% of the total housing units in Powder Springs were constructed after 1990.

Table 14: Powder Springs Housing by Year Built 2000 & 1990

Total: 2000			Total: 1990		
Built 1999 to March 2000	154	3.7%	1989 to March 1990	232	9.3%
Built 1995 to 1998	651	15.6%	1985 to 1988	784	31.5%
Built 1990 to 1994	937	22.4%	1980 to 1984	404	16.3%
Built 1980 to 1989	1391	33.2%	1970 to 1979	355	14.3%
Built 1970 to 1979	492	11.8%	1960 to 1969	454	18.3%
Built 1960 to 1969	328	7.8%	1950 to 1959	75	3.0%
Built 1950 to 1959	96	2.3%	1940 to 1949	78	3.1%
Built 1940 to 1949	51	1.2%	1939 or earlier	103	4.1%
Built 1939 or earlier	86	2.1%			

Sources: U.S. Census Bureau Census 2000 SF3, Table H34 & U.S. Bureau of the Census 1990, SF3, Table H025

The number of housing units lacking complete plumbing and kitchen facilities is a typical measure for substandard housing conditions. In 1990, no housing units lacked plumbing facilities. At this time there were also no units lacking complete kitchen facilities. In 2000 all housing units continued to be served by both complete plumbing and kitchen facilities. As shown in Table 15, it is common for a small percentage of the housing units in Cobb County, the Atlanta MSA, and the State of Georgia to be lacking plumbing or kitchen facilities. The condition of housing in Powder Springs, based on these measures, is above average compared to neighboring areas.

Table 15: Condition of Housing in Powder Springs

Plumbing and Kitchen Facilities, 1990 - 2000; City, County, and State Comparisons				
Housing Unit Characteristic	City of Powder Springs	Cobb County	Atlanta MSA	Georgia
2000				
Percent Lacking Complete Plumbing Facilities	0.0%	0.3%	0.5%	0.9%
Percent Lacking Complete Kitchen Facilities	0.0%	0.3%	0.6%	1.0%
1990				
Percent Lacking Complete Plumbing Facilities	0.0%	0.2%	0.5%	1.1%
Percent Lacking Complete Kitchen Facilities	0.0%	0.2%	0.5%	0.9%

Source: US Census Bureau, 2000 sf3 Table H47, H50; 1990 sf3 Table H42, H64

Household Size

Table 16 shows that the City of Powder Springs had a larger average household size than the county, region, or state in 2000, taking into account both owner and renter occupied units. Owner occupied households in Powder Springs averaged 3.05 persons, while renter households averaged 3.13 persons per unit. The presence of large households in rental units is somewhat counter to expectations as it is typically assumed that families tend to reside in owner-occupied housing, as shown by larger owner households rather than renter populations in Cobb County, the Atlanta MSA, and the state of Georgia. However, the presence of families or larger households in rental units is not surprising when the city’s low per capita income is considered. While the median income is only slightly lower than that of the county, the per capita income in 1999 was lower than the county, the Atlanta MSA, and the state. Situations where household size is unusually large may be indicative of a lack of affordable housing for lower income residents of the city, which can lead to overcrowded housing units. Another factor influencing the larger households size is the high incidence of “family” households in the city. According to the 2000 Census, 85% of Powder Springs’ households in 2000 were “family” households, compared to 69% of Cobb households and 70% of households in the Atlanta Metropolitan Statistical Area.¹

Table 16: Average Household Size Comparison, 2000

Jurisdiction	Georgia	Atlanta MSA	Cobb County	Powder Springs
All Occupied Housing Units	2.65	2.68	2.64	3.06
Owner Occupied Housing Units	2.71	2.79	2.76	3.05
Renter Occupied Housing Units	2.51	2.48	2.39	3.13

U.S. Census Bureau Census 2000, SF1, Table H12

¹ The Census defines a family as “a group of two or more people who reside together and who are related by birth, marriage, or adoption.” Data source is U.S. Census Bureau Census 2000, SF3, Table P14

Overcrowding

Overcrowding is another factor used to determine the adequacy of housing conditions. The Census defines an over crowded housing unit as one having 1.01 or more persons per room, severely overcrowded persons is defined as 1.51 or more persons per room. In 2000, Powder Springs had a higher incidence of overcrowding than Cobb County or the state (Table 17). The rate of overcrowding in the city’s housing units is more comparable with the state and county rates for owner-occupied housing and higher than the county and state for renter occupied housing.

Table 17: Comparison of Overcrowded Housing Units by Tenure, 2000

Occupants Per Room	State of Georgia		Cobb County		City of Powder Springs	
	Owner Occupied Housing Units	Renter Occupied Housing Units	Owner Occupied Housing Units	Renter Occupied Housing Units	Owner Occupied Housing Units	Renter Occupied Housing Units
1.01 to 1.50 occupants per room (overcrowded)	1.72%	5.48%	1.02%	5.03%	2.89%	5.71%
1.51 or more occupants per room (severely overcrowded)	0.73%	4.29%	0.54%	4.69%	0.00%	8.86%

U.S. Census Bureau Census 2000 SF3 Table H20

Cost Burden

The Census defines “cost burdened” as paying more than 30% of income for housing and “severely cost burdened” as paying more than 50% of income for housing. Analyzing the incidents of cost burdening in a community helps to identify the need for affordable housing and other supportive programs for low-income households. Census data shows that owner-occupied households in Powder Springs paid slightly more of their income for housing than the average Cobb County or Atlanta region household in 1999 (Table 18). Renter occupied housing costs for Powder Springs are marginally higher than Cobb County, and lower than metro Atlanta.

Table 18: Comparison of Cost Burden by Tenure

Housing Costs as a Percentage of Household Income in 1999	Specified Owner-Occupied Housing Units	Specified Renter Occupied Housing Units
Powder Springs		
Less than 30% (not cost burdened)	71.75%	53.54%
30% to 49% (cost burdened)	20.92%	36.22%
50% or more (severely cost burdened)	7.33%	10.24%
Median selected monthly housing costs as a percentage of household income in 1999 --	20.1	24.7
Cobb County		
Less than 30% (not cost burdened)	71.62%	50.56%
30% to 49% (cost burdened)	21.62%	34.91%
50% or more (severely cost burdened)	6.76%	14.52%
Median selected monthly housing costs as a percentage of household income in 1999 --	18.7	24.5
Atlanta MSA		
Less than 30% (not cost burdened)	67.83%	47.35%
30% to 49% (cost burdened)	24.17%	36.65%
50% or more (severely cost burdened)	8.00%	15.99%
Median selected monthly housing costs as a percentage of household income in 1999 --	19.4%	25.2%

Census 2000, SF3, Tables H69, H70, H94 and H95

Socioeconomic Characteristics of Households with Housing Problems

To better understand the socioeconomic characteristics of households that experience housing issues, sampled individual records from the City of Powder Springs were investigated through the US Census Bureau’s Public Use Microdata Sample (PUMS) data. The American Community Survey surveyed individual households in order to provide a sample for a detailed comparison of the socioeconomic characteristics of households experiencing housing problems without overlap or double counting between categories. Housing problems are measured by overcrowding, cost burdened status, or lack of complete kitchen and plumbing facilities. Tables 19 - 27 provide detailed socioeconomic characteristics of the households in the City of Powder Springs.

As shown in Table 19, there are approximately 392 households with at least one housing problem in the City of Powder Springs. Three hundred forty-six of those households with housing problems (88%) are homeowners while the remaining 12% are renters.

Table 19: Household Income: Households with at least one housing problem, City of Powder Springs, 2000

Income Range	Owners	%	Renters	%	Total	%
Less Than \$5,000	18	5.2%	3	6.5%	21	5.4%
\$5,000 - \$9,999	27	7.8%	4	8.7%	31	7.9%
\$10,000 - \$14,999	33	9.5%	5	10.9%	38	9.7%
\$15,000 - \$19,999	22	6.4%	6	13.0%	28	7.1%
\$20,000 - \$24,999	39	11.3%	8	17.4%	47	12.0%
\$25,000 - \$34,999	95	27.5%	11	23.9%	106	27.0%
\$35,000 and Over	112	32.4%	9	19.6%	121	30.9%
TOTAL	346	100.0%	46	100.0%	392	100.0%

Source: US Census Bureau, PUMS data, 2000. Calculated by Georgia Tech Department of City and Regional Planning.

The households that most frequently experience housing problems of cost burden, overcrowding, or lack of facilities are generally those with low household income. Interestingly, 58% of households in Powder Springs that have housing problems earn an annual income greater than \$25,000. As shown in Table 19, approximately 40% of household owners in the City with housing problems earn an annual income less than \$25,000. Over half (56.5%) of household renters with housing problems, however, earn less than \$25,000 annually. This suggests that the households that are cost burdened, overcrowded, or lack facilities within Powder Springs are more evenly spread across income groups than is typical for cities and counties.

According to census data, there were no homes in the City that lacked plumbing and kitchen facilities in 2000. Almost 3% of owner occupied housing units and 5.7% of renter occupied units were overcrowded in 2000. The majority of housing problems in Powder Springs, therefore, are highly attributable to cost burdened households, which are defined as those paying more than 30% of household income for housing. Census data shows that

owner-occupied households in Powder Springs spent more of their income on housing than Cobb County or the Atlanta region. Given the increase in home ownership rates in the City between 1990 and 2000 (2%) and the possible mismatch between the cost of housing and the incomes of community residents, most of the housing problems in Powder Springs are probably a consequence of homeowners that are cost burdened by high mortgages.

Table 20 indicates that 72 of the 392 total households with housing problems (18%) receive either social security or public assistance income. Social security income is reported for 16.1% of the households with at least one problem. Social security assistance is indicative of the number of elderly residents and retirees with housing problems living in Powder Springs. Only 2.3% of the households experiencing housing problems receive public assistance income.

Table 20: Social Security and Public Assistance Income: Households with at least one housing problem, City of Powder Springs, 2000

Income Type	Owners	%	Renters	%	Total	%
Social Security Income	40	88.9%	23	85.2%	63	87.5%
Public Assistance Income	5	11.1%	4	14.8%	9	12.5%
TOTAL	45	100.0%	27	100.0%	72	100.0%

Source: US Census Bureau, PUMS data, 2000. Calculated by Georgia Tech Department of City and Regional Planning.

The employment status for persons 16 years old and over who have at least one housing problem is listed in Table 21. The majority of persons living in Powder Springs with at least one housing problem are employed (72.3%). This rate of employment is consistent with the City's overall employment rate of 70.4% in 2000. The number of persons not in the labor force among persons experiencing housing problems (24%) also mirrors the overall proportion of the City's population not in the labor force in 2000 (26.3%).

Table 21: Employment Status: Persons with at least one housing problem, City of Powder Springs, 2000

Employment Status	Owners	%	Renters	%	Total	%
Employed	231	73.8%	62	67.4%	293	72.3%
Unemployed	11	3.5%	3	3.3%	14	3.5%
Armed Forces	1	0.3%	0	0.0%	1	0.2%
Not In Labor Force	70	22.4%	27	29.3%	97	24.0%
TOTAL	313	100.0%	92	100.0%	405	100.0%

Source: US Census Bureau, PUMS data, 2000. Calculated by Georgia Tech Department of City and Regional Planning.

Table 22 lists the occupation of persons in households with at least one housing problem in the City. Of the 293 persons with identified occupations in Powder Springs, the largest employment category of persons with housing problems is in management and professional occupations (40.6%), followed by sales and office occupations (32.4%), services (11.3%), construction, extraction & maintenance (8.9%), and finally, production, transportation & materials moving occupations (6.8%).

Table 22: Occupation: Persons in Households with at least one housing problem, City of Powder Springs, 2000

Occupation	Owners	%	Renters	%	Total	%
Management & Professional	97	42.0%	22	35.5%	119	40.6%
Services	26	11.3%	7	11.3%	33	11.3%
Sales & Office	75	32.5%	20	32.3%	95	32.4%
Farming, Fishing, & Forestry	0	0.0%	0	0.0%	0	0.0%
Construction, Extraction & Maintenance	19	8.2%	7	11.3%	26	8.9%
Production, Transportation, & Materials Moving	14	6.1%	6	9.7%	20	6.8%
TOTAL	231	100.0%	62	100.0%	293	100.0%

Source: US Census Bureau, PUMS data, 2000. Calculated by Georgia Tech Department of City and Regional Planning.

Table 23 lists the number of households with at least one housing problem by type of household. Married couple families make up 65.1% of households experiencing housing problems, which is by far the largest category of households with housing problems. Females living alone are the next largest category with 11% of households with housing problems. The other household types with housing problems all make up less than 9% of the 392 total households. Approximately 8.4% of the total are made up of female householder families, followed by males living alone without family, which make up 6.9% of households with housing problems.

Table 23: Household Type: Households with at least one housing problem, City of Powder Springs, 2000

Household Type	Owners	%	Renters	%	Total	%
Married Couple Family	241	69.7%	14	30.4%	255	65.1%
Male Householder Family	7	2.0%	3	6.5%	10	2.6%
Female Householder Family	26	7.5%	7	15.2%	33	8.4%
Male Alone Nonfamily	20	5.8%	7	15.2%	27	6.9%
Male not Alone Nonfamily	11	3.2%	4	8.7%	15	3.8%
Female Alone Nonfamily	36	10.4%	7	15.2%	43	11.0%
Female not Alone Nonfamily	5	1.4%	4	8.7%	9	2.3%
TOTAL	346	100.0%	46	100.0%	392	100.0%

Source: US Census Bureau, PUMS data, 2000. Calculated by Georgia Tech Department of City and Regional Planning.

Table 24 lists the age of the householder for households experiencing at least one housing problem. The vast majority of households (82.4%) with a housing problem are headed by householders between the ages of 25 and 59. Fifteen percent of householders are over 59 years old and persons younger than 25 years old head only 2.6% of households.

Table 24: Age of Householder: Households with at least one housing problem, City of Powder Springs, 2000

Age of Householder	Owners	%	Renters	%	Total	%
24 and Under	3	0.9%	7	15.2%	10	2.6%
25 to 59	288	83.2%	35	76.1%	323	82.4%
59 and Over	55	15.9%	4	8.7%	59	15.1%
TOTAL	346	100.0%	46	100.0%	392	100.0%

Source: US Census Bureau, PUMS data, 2000. Calculated by Georgia Tech Department of City and Regional Planning.

Table 25 shows the size of the households with at least one housing problem. Most of the households (31.6%) that are experiencing housing problems are two-person households. One-person, 3-person, and 4-person households are tied for the second largest group of householders with housing problems. Each of these categories makes up nearly 18% of households with housing problems.

Table 25: Household Size: Households with at least one housing problem, City of Powder Springs, 2000

Household Size	Owners	%	Renters	%	Total	%
1 Person	56	16.2%	13	28.3%	69	17.6%
2 Persons	109	31.5%	15	32.6%	124	31.6%
3 Persons	62	17.9%	7	15.2%	69	17.6%
4 Persons	63	18.2%	6	13.0%	69	17.6%
5 Persons	35	10.1%	3	6.5%	38	9.7%
6 Persons	14	4.0%	1	2.2%	15	3.8%
Over 6 Persons	7	2.0%	1	2.2%	8	2.0%
TOTAL	346	100.0%	46	100.0%	392	100.0%

Source: US Census Bureau, PUMS data, 2000. Calculated by Georgia Tech Department of City and Regional Planning.

The ethnicity of the householder for households with at least one housing problem is listed in Table 26. The majority of householders in Powder Springs experiencing housing problems are White (67.3%). Black householders make up the second largest category with 23%, followed by Hispanics at 6.1% and other

ethnicities at 3.6%. The order of residents with household problems is consistent with the racial composition of the City's population, which was 58% White and 37% Black according to census data in the year 2000.

Table 26: Race: Households with at least one housing problem, City of Powder Springs, 2000

Race	Owners	%	Renters	%	Total	%
White	230	66.5%	34	73.9%	264	67.3%
Black	82	23.7%	8	17.4%	90	23.0%
Hispanic	22	6.4%	2	4.3%	24	6.1%
Other	12	3.5%	2	4.3%	14	3.6%
TOTAL	346	100.0%	46	100.0%	392	100.0%

Source: US Census Bureau, PUMS data, 2000. Calculated by Georgia Tech Department of City and Regional Planning.

Table 27 identifies the type of housing units households living with at least one of the aforementioned housing problems occupy in Powder Springs. Single-family detached housing units make up the vast majority of households experiencing housing problems, with 345 of the 392 households experiencing housing problems falling within this category (88%). This is consistent with the percentage of single-family detached housing units in the City, which made up nearly 90% of the housing unit types in 2000. Approximately 6.4% of households experiencing housing problems are single-family attached units, 3.3% are multi-family units, and 2.3% are mobile homes.

Table 27: Unit Type: Households with at least one housing problem, City of Powder Springs, 2000

Unit Type	Owners	%	Renters	%	Total	%
Single Family Detached	312	90.2%	33	71.7%	345	88.0%
Single Family Attached	22	6.4%	3	6.5%	25	6.4%
Multi Family Total	3	0.9%	10	21.7%	13	3.3%
2 Units	0	0.0%	1	2.2%	1	0.3%
3 or 4 Units	3	0.9%	3	6.5%	6	1.5%
5 to 9 Units	0	0.0%	6	13.0%	6	1.5%
10 to 19 Units	0	0.0%	0	0.0%	0	0.0%
20 to 49 Units	0	0.0%	0	0.0%	0	0.0%
50 or More Units	0	0.0%	0	0.0%	0	0.0%
Mobile Homes	9	2.6%	0	0.0%	9	2.3%
TOTAL	346	100.0%	46	100.0%	392	100.0%

Source: US Census Bureau, PUMS data, 2000. Calculated by Georgia Tech Department of City and Regional Planning.

Housing Affordability

It is important to assess the ability of those working and living within the city to afford the housing available, as housing affordability is one keystone of quality of life in a community and an important factor in attracting new businesses to the area.

There are a few basic methods for assessing the affordability of housing in a community. A method for determining the availability of affordable owner-occupied housing is to multiple the mean household income of the community (\$56,486 for Powder Springs) by 2.5, the multiplier typically used by lenders to determine the maximum amount they will provide for a housing loan. Using this method in Powder Springs provides a affordable home for the median income household in Powder Springs of \$141,215. The median cost for owner occupied units in Powder Springs is \$114,800. By this measure well over half of the city's owner-occupied

housing units are affordable to the city residents. However, it should be noted that the median asking price for for-sale housing units in Powder Springs in 2000 was higher at \$125,700.²

For renters, assessing affordability is a bit more cumbersome. It was established in a previous section that housing is affordable if it costs a household 30% or less of its median monthly income. In Powder Springs the median income for non-family households (which are typically considered the rental market) was \$41,399 in 1999, or \$3,450 a month.³ Using the 30% rule these households are not able to afford more than \$1035 a month for rent. Table 13 shows that the median monthly rent in Powder Springs was \$722 in 2000, thus it can be concluded that more than 50% of the city's non-family households renting housing units are able to find affordable housing.

In light of this analysis it can be concluded that housing in Powder Springs is generally affordable. Although a few key points should be noted. First, the city has experienced some growth in its poverty rate (see Table 8). Households with low incomes, especially those living at or below the poverty level, will find it hard to secure affordable housing despite the general affordability of units in the city. The market does not usually provide housing for this sector of a community, unless substantial incentives are offered.

The second point to consider when assessing the housing needs in Powder Spring is the affordability of housing in the city compared to the wages paid to those employed in the municipality. Employment data for the city show that retail, food and accommodation establishments (or service industries) provide the greatest source of employment in the city (Table 30). National data on occupations and wages show that the average hourly wage for service industry workers is \$10.65.⁴ This wage equates to a monthly income (assuming full-time employment) of \$1,278, which allows for an affordable rent of \$383 or an affordable mortgage amount of \$38,340. Both of these figures are well below the 2000 median rents and mortgages in the city, and housing prices have only risen since that time.

² U.S. Census Bureau, 2000 Census, SF3 Table H88, Median Price Asked for specified for-sale-only vacant housing units.

³ U.S. Census Bureau, 2000 Census, SF3 Table P80, Median Non-family Household Income in 1999 Dollars.

⁴ National Compensation Survey: Occupational Wages in the United States, July 2004. U.S. Department of Labor, U.S. Bureau of Labor Statistics. August 2005

In conclusion, it can be said that housing in Powder Springs is generally affordable for the current residents of the city. However, in the future the city may need to assess the provision of affordable housing units so as to provide support for the poorest households in the community as well as to maintain housing that is accessible to lower wage workers in the city. Additionally, the current employment concentrations in the city do not provide wages high enough to allow many workers to live where they work in Powder Springs. This jobs-housing mismatch can be addressed through a two pronged approach of working with developers to provide “workforce housing” as well as using economic development tools and programs to attract higher wage paying employers to the community.

Special Housing Needs

There is a significant portion of the population in Powder Springs with special needs. According to a report produced by the city based on 2000 Census data on special needs, there are 1,872 residents with some form of disability; representing 16% of the city’s population. The types of disabilities range from sensory, physical, mental, self-care and going outside the home to employment disabilities. There are currently twelve organizations that provide housing and other services for the disabled population in Powder Springs. Some of these include assisted living facilities, other care homes, and personal care or nursing services. The number of occupants in group homes located in Powder Springs at the time of the survey conducted by the city was 37 persons, but the total capacity in the facilities is 50 persons. This additional available capacity to serve the special needs population indicates that there is not a current problem with lack of facilities.

There are other groups with special needs, such as victims of domestic abuse, violence, those with substance abuse problems and people afflicted by chronic illnesses. The city currently has lists and information on service providers for all of these groups and makes this information readily available to its citizens. As Powder Springs grows, the provision of services and information for the special needs population should be monitored to ensure that the entire population continues to be adequately served.

Jobs Housing Balance

Jobs-housing balance refers to the match between housing costs and wages and employment options in a community. The planning area of workforce housing is based on addressing the ability of those working within

a community to live near their jobs; reducing commute times and roadway congestion and providing a higher quality of life for residents. Typically, a community must have a diverse housing stock with a variety of unit types available across all cost categories to adequately supply housing for the employees working within the community.

Employment estimates for Powder Springs (Table 30) show that there are approximately 1,168 jobs in the city. A general desirable jobs-housing ratio is considered 1.5 jobs for each housing unit. In 2000 the city reported having 2,485 housing units (Table 11), given this Powder Springs' ratio of jobs to housing is 0.47. This low ratio is not surprising due to the city's character as a bedroom community supported by other employment centers in the Atlanta region. Only 10.5% of the city's residents also work in Powder Springs. Due to the city's small size and the predominance of residential land use, it is not surprising that the focus of the area's economy is in the retail and service sectors. The prominence of retail jobs plays a role in the somewhat unbalanced relationship between jobs and housing in the city. Retail jobs are typically not high wage positions, so it is common that many of the workers cannot live in close proximity to their jobs or even within the city of Powder Springs due to a lack of housing options in their affordability range.

The issue of promoting jobs-housing balance and a live-work-play community concept will be revisited in the discussion of future land use in the Community Agenda. For higher wages jobs there is the opportunity for the development of additional office based, professional services establishments in the city. These offices could be located over retail establishments in the planned downtown commercial area/town center. The development of additional professional jobs will help with the jobs housing balance, allowing local residents who direct small firms or would be interested in starting their own business to locate in the city and reduce their daily commute.

Projections

The set of projections for housing units presented in Table 28 is based on a number of variables: including the number of units needed to house the projected population based on the historic ratio of population to housing units. These projections also take into consideration 1450 units of infill housing development anticipated by 2025 as part of the implementation of the city's 2002 LCI study. Increases in housing units due to the future annexation of residential areas adjacent to the city have not been considered.

Table 28: Housing Unit Projections 2000 - 2025

Historic Counts of Housing Units & Population					
Category	1980	1985	1990	1995	2000
Total population	3,381	5,137	6,893	9,687	12,481
Total Housing Units	1,106	1,796	2,485	3,336	4,186
Projected Housing Units					
Year	2005	2010	2015	2020	2025
Projected Population	14,758	17,033	19,306	21,581	23,858
Projected Housing Units	4,956	5,726	6,496	7,266	8,036
Net Increase in Housing Units	+770	+1,540	+2,310	+3,080	+3,850

Source: Robert & Company, based on Census 2000 information downloaded from DCA PlanBuilder 2/15/05

Economic Development

Economic Base

The greatest number of establishments in one industry located in the City of Powder Springs is in retail (Table 29). Powder Springs' retail segment corresponds to the Atlanta region and Georgia; the retail industry recorded the highest number of establishments for the region and state, respectively. Powder Springs had higher percentages than the Atlanta region and Georgia in two individual industries: administrative & support & waste management & remediation services; and, health care & social services.

Powder Springs trailed both the Atlanta region and Georgia in the percentage of establishments per industry in three categories: manufacturing; real estate and rental leasing; and professional, scientific, and technical assistance (Table 29). The greatest disparity between Powder Springs' industries and regional and state economies came in the professional, scientific, and technical assistance category. In that category, Powder Springs' professional, scientific, and technical assistance trailed the Atlanta region by 9% and Georgia's by 6%.

Table 29: Number of Establishments by Industry

Industry	Powder Springs		Atlanta MSA		Georgia	
	Number of Establishments	% of County Total	Number of Establishments	% of MSA Total	Number of Establishments	% of Georgia Total
Manufacturing	8	5%	4,394	6%	9,083	7%
Wholesale	12	7%	9,263	13%	13,978	11%
Retail	37	23%	14,631	20%	33,073	25%
Real Estate & Rental Leasing	5	3%	4,742	6%	7,794	6%
Professional, Scientific, & Technical Assistance	13	8%	12,807	17%	17,810	14%
Administrative & Support & Waste Management & Remediation Services	17	10%	5,221	7%	7,796	6%
Educational Services	4	2%	641	1%	920	1%
Health Care & Social Assistance	20	12%	7,456	10%	13,960	11%
Arts, Entertainment, & Recreation	4	2%	952	1%	1,653	1%
Accommodation & Food Services	18	11%	7,296	10%	13,829	11%
Other Services (Except Public Administration)	24	15%	6,401	9%	11,482	9%
Totals	162	100%	73,804	100%	131,378	100%

Source: U.S. Economic Census

The greatest numbers of employees per industry in Powder Springs were retail (458 employees) and accommodation and food services (352) (Table 30). Together, these two industries accounted for 69.3% of those employed in the city. The retail industry also ranked within the top two employers for both the Atlanta region and Georgia. However, for the Atlanta region administrative & support & waste management & remediation services produced the second highest amount of employees, with manufacturing having the highest percentage of employees for the state overall.

Table 30: Number of Employees per Industry

Industry	Powder Springs		Atlanta MSA		Georgia	
	Number of Employees	% of City Total	Number of Employees	% of MSA Total	Number of Employees	% of Georgia Total
Manufacturing	*	--	189,343	15.5%	533,830	25.2%
Wholesale	20-99	--	140,471	11.5%	191,087	9%
Retail	458	39.2%	221,587	18.2%	420,676	19.8%
Real Estate & Rental Leasing	6	0.5%	34,506	2.8%	47,669	2.2%
Professional, Scientific, & Technical Assistance	47	4%	113,482	9.3%	138,198	6.5%
Administrative & Support & Waste Management & Remediation Services	56	4.8%	210,194	17.2%	273,178	12.9%
Educational Services	5	0.4%	4,489	0.4%	5,755	0.3%
Health Care & Social Assistance	145	12.4%	88,125	7.2%	173,768	8.2%
Arts, Entertainment, & Recreation	0-19	--	16,349	1.3%	23,437	1.1%
Accommodation & Food Services	352	30.1%	158,518	13%	274,322	12.9%
Other Services (Except Public Administration)	99	8.5%	42,758	3.5%	69,422	3.3%
Totals	1,168	100%	1,219,822	100%	2,151,342	100%

Source: U.S. Census Economic Census

As Powder Springs' retail segment produced the greatest number of establishments and employees, it also produced the highest sales receipts among Powder Springs' industries. The Atlanta region and Georgia both saw their highest percentage of sales receipts derived in industries that had data withheld in Powder Springs: manufacturing and wholesale. For the region and state, however, retail did record the third highest percentage of sales receipts, Table 31.

Table 31: Comparison of Sales Receipts: 1997

Industry	Powder Springs		Atlanta MSA		Georgia	
	Sales	% of Powder Springs Total	Sales	% of MSA Total	Sales	% of Georgia Total
Manufacturing	*	--	\$49,691,816	18.2%	\$124,003,137	29.5%
Wholesale	*	--	\$138,768,436	50.9%	\$163,782,649	39%
Retail	\$53,539	60.9%	\$40,479,257	14.8%	\$72,212,484	17.2%
Real Estate & Rental Leasing	\$511	0.6%	\$5,451,949	2%	\$6,912,946	1.6%
Professional, Scientific, & Technical Assistance	\$4,104	4.7%	\$13,392,570	4.9%	\$15,266,425	3.6%
Administrative & Support & Waste Management & Remediation Services	\$4,364	5%	\$8,041,465	2.9%	\$9,839,387	2.3%
Educational Services	\$294	0.3%	\$313,756	0.1%	\$413,395	0.1%
Health Care & Social Assistance	\$5,991	6.8%	\$6,422,818	2.4%	\$12,065,068	2.9%
Arts, Entertainment, & Recreation	*		\$1,150,566	0.4%	\$1,533,747	0.4%
Accommodation & Food Services	\$9,718	11%	\$6,002,347	2.2%	\$9,689,927	2.3%
Other Services (Except Public Administration)	\$9,426	10.7%	\$2,981,890	1.1%	\$4,580,693	1.1%
Totals	\$87,947	100%	\$272,696,870	100%	\$420,299,858	100%

Source: U.S. Economic Census; * Data withheld to avoid identifying individual firms

Powder Springs established higher concentrations than the region, state or nation in three industrial employment categories: retail trade; accommodation & food services; and health care and social assistance. Powder Springs' top three employment classifications accounted for 81.7% of its employment. This combination was far greater than any combination among region, state, and national levels. For those three designations no three industries account for more than 56% of respective total employment. Powder Springs' accommodation & food services, its second highest classification, was higher than any region, state or national leading classification average by at least 8.6%.

While Powder Springs' concentration of retail, and accommodation and food services may provide a 'cluster' advantage over the region and state, these industries may not provide the best means for economic expansion. Though these industries do support the population lifestyle, their employment does not provide the

resident's income. As discussed in a following section, these fields do not support Powder Springs' higher than average median incomes (Table 9) or enable higher than average home values (Table 13).

Further, closer examination of Powder Springs' health care and social assistance dampens the potential for expansion in this field. Child care accounts for 58% of Powder Springs' health care and social assistance employment, Table 24. In Atlanta, child care accounts for 15% of health care employment, while it accounts for 12% of the state's overall health care employment. Powder Springs' high level (90.5%) of its labor force working outside the city impacts such a high child care concentration. Powder Springs will need to expand in more professional categories than currently clustered to cater to the talents of its home population.

Table 32: Concentration of Employment per Industry

Industry	U.S. %	Georgia %	Atlanta MSA %	Powder Springs %
Wholesale Trade	7.5%	8.2%	13.6%	D
Retail Trade	18.2%	18.0%	21.5%	39.2%
Real estate & rental & leasing	2.2%	2.0%	3.3%	0.5%
Professional, scientific & technical services	6.8%	5.9%	11.0%	4.0%
Admin, support, waste mgt, remediation services	9.6%	11.7%	20.4%	4.8%
Educational services	0.3%	0.2%	0.4%	0.4%
Health care and social assistance	8.1%	7.4%	8.6%	12.4%
Arts, entertainment & recreation	1.6%	1.0%	1.6%	*
Accommodation & food services	12.3%	11.8%	15.4%	30.1%
Other services (except public administration)	3.2%	3.0%	4.1%	8.5%

Source: U.S. Census, D= data withheld to avoid identifying individual firms

Resident Labor Force

While Powder Springs' population grew between the 1990 and 2000 U.S. Censuses, its labor force, as a percentage of population, decreased. In 1990, the percentage of population over the age of 16 entered the labor force at a 78.1% rate; by 2000, the percentage had fallen to 73.7%. The percentage of males in the labor force over this time period fell from 40.9% to 36.4%, while the percentage of females in the labor force remained at 37.3%, (Table 33).

Table 33: City of Powder Springs Labor Force Participation: 1990-2000

Category	1990		2000	
	Amount	Percentage of Population over 16	Amount	Percentage of Population over 16
Persons 16 years and over	4,908	--	9,044	--
In Labor Force	3,835	78.1%	6,662	73.7%
Civilian Labor Force	3,794	77.3%	6,619	73.2%
Civilian Employed	3,633	74%	6,370	70.4%
Civilian Unemployed	161	3.3%	249	2.8%
In Armed Forces	41	0.8%	43	0.5%
Not In Labor Force	1,073	21.9%	2,382	26.3%
Total Males	2,317	47.2%	4,051	44.8%
In Labor Force	2,005	40.9%	3,292	36.4%
Civilian Labor Force	1,964	40%	3,249	35.9%
Civilian Employed	1,886	38.4%	3,124	34.5%
Civilian Unemployed	78	1.6%	125	1.4%
In Armed Forces	41	0.8%	43	0.5%
Not In Labor Force	312	6.4%	759	8.4%
Total Females	2,591	52.8%	4,993	55.2%
In Labor Force	1,830	37.3%	3,370	37.3%
Civilian Labor Force	1,830	37.3%	3,370	37.3%
Civilian Employed	1,747	35.6%	3,246	35.9%
Civilian Unemployed	83	1.7%	124	1.4%
In Armed Forces	0	0	0	0%
Not In Labor Force	761	15.5%	1623	17.9%

Source: U.S. Census

Powder Springs' labor force percentage is higher than the region, state or national averages by at least 4%. Powder Springs' higher labor force percentage was driven by its female population. Powder Springs had a higher percentage of active females in its labor force than region, state or national averages; the female labor force participation is nearly 5% greater than the region average, and nearly 8% greater than the national average (Table 34).

In contrast, Powder Springs' male labor force participation is below the regional, state and national average. Powder Springs' high labor force percentage is foreshadowed such as a higher percentage of household income coming from earnings (Table 10), higher median incomes (Table 9), and longer commute times, (Table 38).

Table 34: Employment Status: 2000

	Powder Springs		Atlanta MSA	Georgia	US
<i>Persons 16 years and over</i>	9,044	100%	100%	100%	100%
In Labor Force	6,662	73.7%	70.6%	66.1%	63.9%
Civilian Labor Force	6,619	73.2%	70.4%	65%	63.4%
Civilian Employed	6,370	70.4%	66.9%	61.4%	59.7%
Civilian Unemployed	249	2.8%	3.5%	3.6%	3.7%
In Armed Forces	43	0.5%	0.2%	1.1%	0.5%
Not In Labor Force	2,382	26.3%	29.4%	33.9%	36.1%
Total Males	4,051	44.8%	48.7%	48.5%	48.3%
In Labor Force	3,292	36.4%	37.9%	35.5%	34.2%
Civilian Labor Force	3,249	35.9%	37.8%	34.5%	33.7%
Civilian Employed	3,124	34.5%	36%	32.8%	31.8%
Civilian Unemployed	125	1.4%	1.8%	1.7%	1.9%
In Armed Forces	43	0.5%	.02%	0.9%	0.5%
Not In Labor Force	759	8.4%	10.8%	13.1%	14.1%
Total Females	4,993	55.2%	51.3%	51.5%	51.7%
In Labor Force	3,370	37.3%	32.6%	30.6%	29.7%
Civilian Labor Force	3,370	37.3%	32.6%	30.5%	29.6%
Civilian Employed	3,246	35.9%	30.8%	28.6%	27.9%
Civilian Unemployed	124	1.4%	1.7%	1.8%	1.7%
In Armed Forces	0	0%	0%	0.1%	0.1%
Not In Labor Force	1623	17.9%	18.7%	20.8%	21.9%

Source: U.S. Census

Powder Springs' most recent unemployment rate of 2.8% remained consistent with its rate in the 2000 U.S. census. Unlike Powder Springs, the Atlanta MSA's unemployment rate over that span grew by 46% over the past five years from 3.5% to 5.1%. The Atlanta region's unemployment growth mirrored the state as a whole, which jumped 47% from 3.6% in 2000 to 5.3% in February of this year (Table 35).

Table 35: Unemployment Rate: 2000- 2005

	Powder Springs	Atlanta MSA	Georgia
2000 Census	2.8%	3.5%	3.6%
February 2005	2.8%	5.1%	5.3%

Source: Georgia Department of Labor

The composition of the Powder Springs' work force reflects the character of a bedroom community whose residents face long commute times. Sales and Office occupations are the leading sectors employing Powder Springs' residents and account for 35.5% of employment. Closely following are Management, Professional and Related Occupations at 33.9% of the labor force. The top three Powder Springs' work occupations are white collar activities, which comprise 82.2% of the total workforce. These three industries comprise 72.9% of Georgia's labor force and 75.2% of the national labor force (Table 36)

Table 36: Powder Springs Workforce Breakdown: 2000

Occupation	Powder Springs	Atlanta MSA	Georgia	United States
Sales and Office Occupations	35.5	28.7	26.8	26.7
Management, Professional, and Related Occupation	33.9	37.5	32.7	33.6
Service Occupations	12.8	12.1	13.4	14.9
Production, transportation, and material moving occupations	9.5	11.6	15.7	14.6
Construction, extraction, and maintenance occupations	8.3	10	10.8	9.4
Farming, Fishing and forestry occupations	0.0	0.2	0.6	0.7

Source: U.S. Census, Italics equals highest percentage

Commuting Patterns

The majority of City residents work in Cobb County. Powder Springs and Cobb County are the chief employment locations for 57% of Powder Springs' labor force. In contrast, 41% of Powder Springs' residents work outside Cobb County (Table 37).

Table 37: Place of Work: 1999

Place of Work	Amount	Percentage
Powder Springs	660	10.5%
Cobb County	2,976	47.3%
Outside Cobb County	2,582	41%
Outside Georgia	78	1.2%
Total	6,296	100%

Source: U.S. Census

The impact of Atlanta’s employment opportunities can be seen in Powder Springs’ mean travel time to work. Powder Springs’ residents spend an average of 37.5 minutes commuting to work, which is six minutes longer than the rest of the Atlanta region. Powder Springs’ resident’s commutes are even more daunting when compared to the state and national average. Powder Springs’ mean 37.5 minute commute is 10 minutes longer than the Georgia state average and 12 minutes longer than the United States average (Table 38).

Table 38: Mean Travel Time to Work: 2000

	Powder Springs	Atlanta MSA	Georgia	United States
Mean Travel Time to Work, minutes	37.5	31.2	27.7	25.5

Source: U.S. Census

Wages

The Georgia Department of Labor does not produce weekly wage information to the City level; such an examination must use Cobb County data. While Cobb County’s overall average weekly wage is in line with the Atlanta MSA’s average weekly wage, its various sectors differentiate substantially. While Cobb County’s overall weekly wage level is only \$7 less than the Atlanta MSA, Cobb County has a \$57 higher goods producing wage, a \$52 smaller service producing wage, and an \$87 smaller government wage. In comparison to the state averages, Cobb’s wages all exceed Georgia’s, except for the government wage which is equal (Table 39).

Table 39: Weekly Wages: 2003

	Cobb County	Atlanta MSA	Georgia
Overall	\$805	\$812	\$704
Goods Producing	\$928	\$871	\$735
Service Producing	\$757	\$809	\$702
Government	\$681	\$768	\$681

Source: Georgia Department of Labor

Economic Trends

Nearly 70% of employment in Powder Springs was in retail trade (458 jobs) and accommodation and food services (352) in 2000 (Table 30). However, these industries do not correspond to the talent of the Powder Springs labor force (Table 36). These industries will not produce an economic base for Powder Springs to record a higher median household income than the Atlanta MSA region (\$40,996 to \$36,051, 2000 U.S. Census). The retail, and accommodation and food service industry also do not provide earnings to support home values and median rents above the region average (\$114,800 to \$111,200, and \$722 to \$613 respectively).

To support higher home values with higher median household incomes, 90.5% of Powder Springs' labor force works outside the city (Table 37). This results in Powder Springs' residents longer than average commute time (37.5 minutes to 31.2 minutes, 2000 U.S. Census).

It is clear that the skill and education levels and wages paid to city residents exceed the requirements of jobs that currently exist in the city. Residents must leave Powder Springs to seek employment elsewhere, as most of these skilled and educated residents do not work in retail establishments closer to home. Hence, the opportunity to create higher wage jobs in Powder Springs is apparent, and a skilled labor force is already in place.

The LCI "Town Center Planning Study" prepared in 2003 recognized this opportunity. The study recommended two projects: the Town Center project, which is underway in the downtown area; and, the Lewis Road Business Park proposed in the southern portion of the city near U.S. 278. The study noted the business park was intended to provide "... locations for business and employment facilities" including capture of:

Office space: about 56,300 SF
Flex/service space: about 29,500 SF
Business distribution space: 350,600 SF
Total: about 437,000 SF

Soon after the study was completed, the city rezoned the Lewis Road area to permit business district activities. Favorable industry interest in developing the proposed Lewis Road Business Park, as well as favorable city economic and fiscal benefits, were documented and presented to the city. However, the City recently accepted a rezoning application from MDC Homes to build residential units in most of the business district.

This reversal represented a "missed opportunity" to balance the residential/retail nature of Powder Springs with more business uses, and failed to exploit the economic development incentives offered by the City of Powder Springs in 2002. Some of this business district land remains, and attempts will be made to market the remaining acreage for a much-reduced business district.

Economic Development Resources

The City of Powder Springs does not operate a formal Economic Development department or division. Rather, the City's Planning and Special Projects department coordinates functions predominately related to economic development.

The City has established a related authority to assist the City Council in its deliberations: the Downtown Development Authority. The Powder Springs Downtown Development Authority was created by local constitutional amendment in 1980. The General Assembly passed a resolution that proposed a constitutional amendment that, if passed, directly created the DDA. The 1983 Georgia Constitution automatically repealed all local constitutional amendments that created local development authorities, effective July 1, 1987. Cities could act to save their authorities by having a local law enacted that was known as a "continuation."

The continuation of the Powder Springs Downtown Development Authority was completed in 1987. The purpose of the DDA is the redevelopment of the downtown district, including renovation and rehabilitation of

existing buildings, structures and improvements and acquisition and construction of new buildings, structures and improvements all for any commercial, business, office, public or other use.

The DDA is comprised of 7 members, 4 of whom must be City residents, appointed by the mayor and council for a two-year term. A majority constitutes a quorum. A vacancy shall exist if a member is absent from 2 consecutive regular meetings, unless granted a leave of absence.

Also, in 2002 the city adopted an Economic Development Incentives Plan in an effort to spur increased non-residential development in the City.

The Economic Development Element of the City's Comprehensive Plan, adopted in 1996, identifies a variety of factors relating to employment in Powder Springs. It found that both population and employment in the area had been and were projected to continue to expand. In fact, while population was projected to grow 149% between 1990 and 2020, employment was projected to grow by 322% during the same period. The City adopted the 1996 Comprehensive Plan to guide both the types and locations of the development. Executive, administrative, managerial and professional jobs were growing as a percentage of employment and manufacturing jobs were decreasing. This trend was expected to continue. Service and Retail sectors contained the highest percentage of Cobb and Powder Springs workers, a trend that was also expected to continue. This plan was reached in consultation with the Development Authority of Powder Springs, the Powder Springs Downtown Development Authority, the Cobb County Chamber of Commerce and the Cobb County Office of Economic Development.

Cobb County offers a comprehensive package of incentives for specific developments in the unincorporated areas of the county. Only one other municipality in Cobb County offers incentives: Smyrna. By offering an economic development incentives package, the Powder Springs is competitive with Cobb County in offering incentives for new development, provides certain monetary advantages to desired developments, and proclaims publicly that it is development friendly and welcoming of quality proposals.

General Business Incentives may be offered in the following manner:

Tier I incentives which may be offered are:

- Business License Fees can be capped at \$1,000 per year for first three years.
- Building Permit Fees, which are based on \$4.00 per \$1,000 construction cost, can be capped at \$5,000.

At a minimum, a development proposed for Tier I General Business incentives must meet the following criteria:

- Be a business employing persons;
- Make a minimum capital investment of \$1.0 million;
- Add 10 full time jobs new to the City of Powder Springs; and
- Consent to enter into a contractual agreement that outlines incentives offered and a guideline for the recapture of reimbursement should the terms of the contract be violated by the recipient of the incentives.

Tier II incentives which may be offered are:

- No Site or Structural Review Fees.
- No Water System Development Fee.
- Financing of the Sewer System Development Fee over a three to five year period at below market interest rate.
- Business License Fees can be capped at \$1,000 per year for first three years.
- Building Permit Fees, which are based on \$4.00 per \$1,000 construction cost, can be capped at \$5,000.
- Development Authority Lease-Hold agreements, which can included project specific tax structure.

At a minimum, a development proposed for Tier II General Business incentives must meet the following criteria:

- Be a business employing persons;
- Add 25 full time jobs new to the City of Powder Springs;
- At least 35% of the new jobs must pay at least 200% of the Cobb County per capita income as determined by the most recent U.S. Census Bureau census or estimate;
- Make a minimum capital investment of \$2.5 million;
- Locate within a designated Business Incentive Zone; and
- Consent to enter into a contractual agreement that outlines incentives offered and a guideline for the recapture or reimbursement should the terms of the contract be violated by the recipient of the incentives.

Subject to the restrictions set forth below, areas for *Downtown Development Incentives* which may be offered to an applying development are:

- No Site or Structural Review Fees.
- No Water System Development Fee.
- Financing of the Sewer System Development Fee over a three to five year period at below market interest rate.
- Building Permit Fees, which are based on \$4.00 per \$1,000 construction cost, can be capped at \$2,500.
- Downtown Development Authority Lease-Hold agreements, which can include project specific tax structure.

At a minimum, a development proposed for Downtown Development Incentives must meet the following criteria:

- Make a capital investment of \$500,000 within the Downtown Development Authority Area;
- Have a proposal targeted for downtown development by the City of Powder Springs consistent with the Town Center Plan;
- The building be constructed in a complimentary style to the existing downtown as determined in design review with the Downtown Development Authority as approved by the City Council; and

- Consent to enter into a contractual agreement that outlines incentive offered to the business and a guideline for the recapture or reimbursement should the terms of the contract be violated by the recipient of the incentives.

For the purpose of qualification for certain economic development incentives described in this Plan, the City declared the Lewis Road Business Park Area a *Business Incentive Zone*. The Lewis Road Business Park Area lies to the south of downtown and is bounded roughly by the Norfolk-Southern rail line on the east; Oglesby Road on the south; and James Parkway, Brownsville Road and residential subdivisions on the west. The City noted that this area, previously known as the Southside Study Area, may represent the best site in Powder Springs for the development of a business park of any significance. Containing some 275 acres, the Area is relatively undeveloped, has good transportation access (including rail), in-place utilities and is adjacent to downtown. The City has plans to improve Lewis Road, including the construction of an overpass over the railroad.

Finally, the City recently engaged the Buxton Company of Fort Worth, Texas, to undertake an assessment of three sites within the City for retail recruitment efforts. The Buxton assessment looked at four “trade potential variables,” including household counts and household expenditure potential, within a defined retail trade area to make its determination. Buxton selected a site at U.S. 278 and Elbert Road as the best future retail location; although all three sites examined contained many of the key aspects of the trade area character.

The major categories of retailers and restaurants recommended included the following:

- restaurant/café
- casual family dining
- movie/video/entertainment store
- department/discount store
- footwear
- electronics
- bookstore

Unique Economic Activities

The city is currently pursuing a major infill development initiative called the Town Center project. This project arose in response to the Livable Centers Initiative (LCI) plan to improve downtown Powder Springs. The development is programmed to include a town house community, and mixed-use spaces such as residential units over retail similar to the Village Green development in nearby Smyrna, Georgia. The infill project will also include a municipal complex with a renovated city hall and police station. Additionally, the city is undertaking an aggressive schedule of infrastructure improvements, such as roadway improvements and the construction of new parking areas to support the development project.

The City will issue a Request for Proposals to advertise its interest in this project to the real estate development community. The City is willing to enter into a public-private venture and is preparing a redevelopment plan to enable it to aid in property acquisition efforts. Likewise, the City is willing to establish a Tax Allocation District (TAD) to provide a financial mechanism to support development funding.

In addition to the Town Center project there are a number of additional private sector infill efforts afoot in the city. These include:

Enclave of Powder Springs	80 units
Silverbrooke	231 units
Townhomes @ Park Place	48 units
Ashleigh Parc	66 units
Carrington	144 units
Forest Hill Manor	15 units
Village @ Seven Springs	21 units
Warren Farm	11 units

In addition, two publicly sponsored infill development efforts are also underway:

The George E. Ford Center: renovation of the former Powder Springs Elementary School, located on Atlanta Street, into a cultural arts center and later additional library space.

The Wild Horse Creek Community Center: renovation of the Ron Anderson Community Center located in the Macedonia and Hopkins Road area to better serve low and moderate income residents.

Natural and Cultural Resources

Water Supply Watersheds

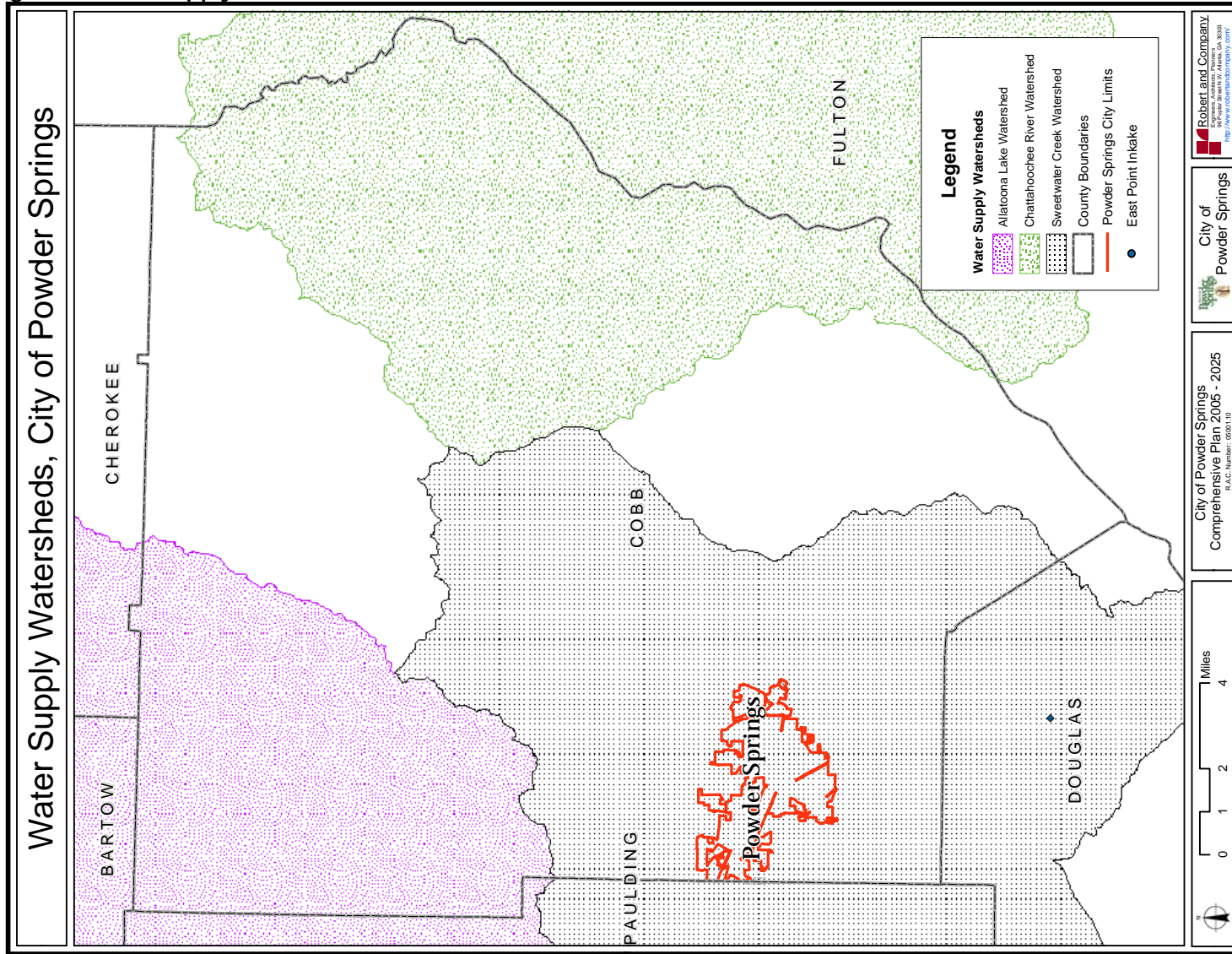
The Georgia Department of Natural Resources defines a water supply watershed as the area where rainfall runoff drains into a river, stream or reservoir used downstream as a source or public drinking water supply. By limiting the amount of pollution that gets into the water supply, local governments can reduce the costs of purification and help safeguard public health. The protection criteria for water supply watersheds vary depending on whether the watershed is large (>100 sq. miles) or small (< 100 sq. miles).

The City of Powder Springs lies within the Sweetwater Creek watershed, a large supply watershed (Figure 2). The city is within a seven-mile radius of the water supply intake for the City of East Point, and is therefore required by the Georgia Environmental Protection Division to adopt certain protections for the area as outlined in the Rules for Environmental Planning. The city adopted a stream buffer ordinance in March 2005. A review of this ordinance shows that it may need revision to sufficiently meet the EPD's minimum protection criteria for large water supply watersheds as outlined below:

The EPD requires that the stream corridors of the perennial tributaries of a water supply reservoir in a large water supply watershed shall be protected as follows:

- A buffer shall be maintained for a distance of 100 feet on both sides of the stream as measured from the stream banks. (The city's ordinance requires a total buffer of 75 feet).
- No impervious surface shall be constructed within a 150-foot setback area on both sides of the stream as measured from the stream banks. (The city's ordinance requires a total buffer of 75 feet).
- Septic tanks and septic tank drainfields are prohibited in the setback area. (The city's ordinance includes this prohibition but only for the 75 ft. area)
- New hazardous waste facilities located within the 7-mile radius of the intake shall perform their operations on impermeable surfaces having spill and leak collection systems as prescribed by the Department of Natural Resources. (The city's UDC currently does not have requirements meeting these specifications).

Figure 2: Water Supply Watersheds



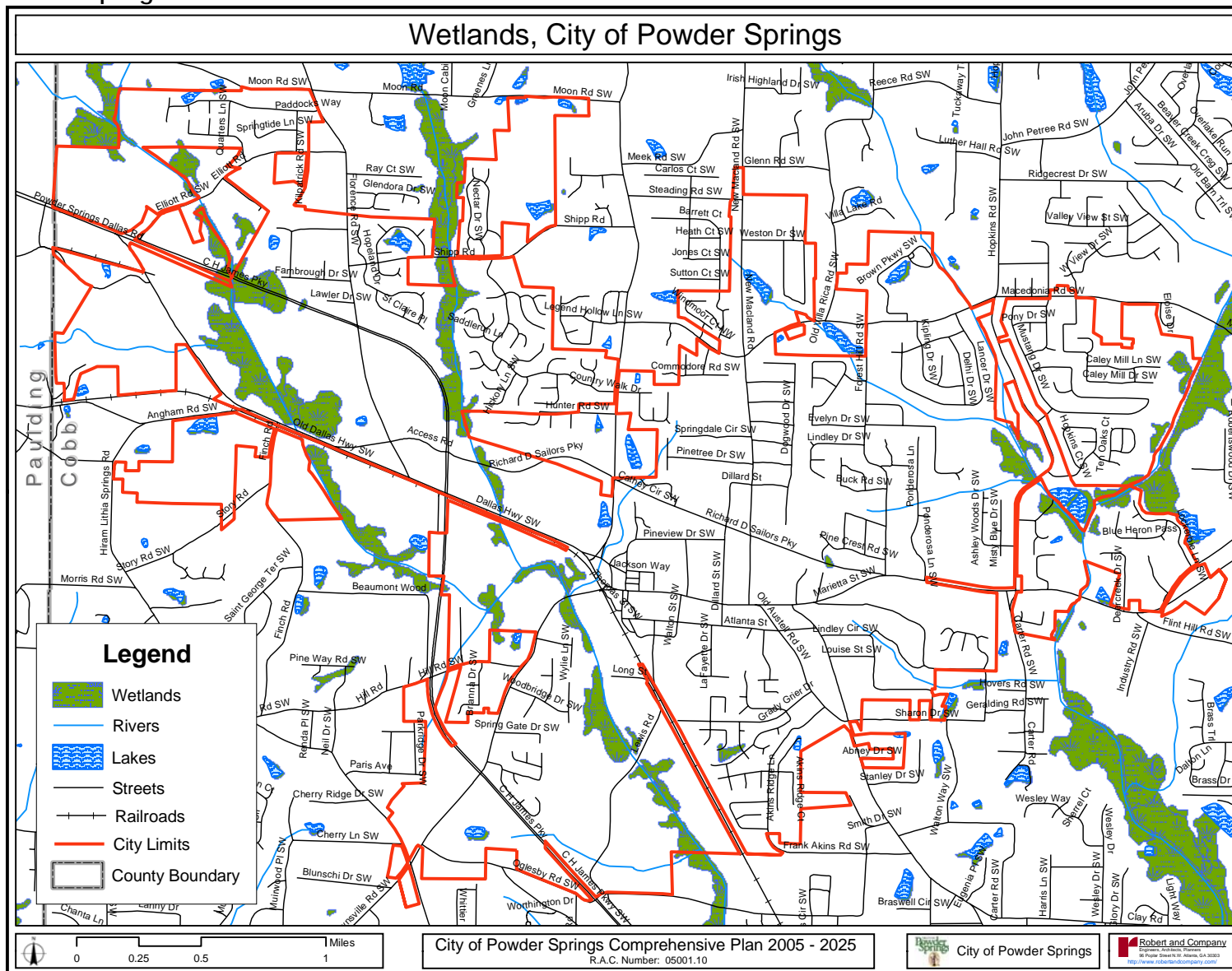
Wetlands

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. Wetlands provide many important benefits including: Flood Control - Wetlands act as natural sponges, they absorb and gradually release water from rain to groundwater and streams, Water Quality Improvement - Wetlands act as natural filters and remove sediment, nutrients and pollution from runoff, Groundwater Recharge - Water migrates downward through wetlands to maintain groundwater levels, and Recreation - Many recreational activities take place in and around wetlands - hunting, fishing, hiking, birding, and photography.

The DNR's Rules for Environmental Planning Criteria direct local governments to acknowledge the importance of wetlands for the public good in the land use planning process and to take the potential impacts to these environmentally sensitive areas into consideration when planning for future development. Figure 3 shows the extent of wetlands within the City of Powder Springs.

The city has adopted criteria for wetlands protection within its Unified Development Code. These regulations prohibit the alteration or degradation of protected wetlands and the establishment of hazardous waste facilities or sanitary landfills within wetlands. The regulations also allow for compatible developments such as recreation, wildlife management areas, and natural water quality treatment or purification within wetland areas as permitted by the applicable zoning district.

Figure 3: Powder Springs Wetlands



Groundwater Recharge Areas

There are no groundwater recharge areas in or adjacent to the city of Powder Springs.

Protected Mountains

There are no protected mountains in Powder Springs.

Protected River Corridors

There are no protected river corridors in Powder Springs.

Other Environmentally Sensitive Areas

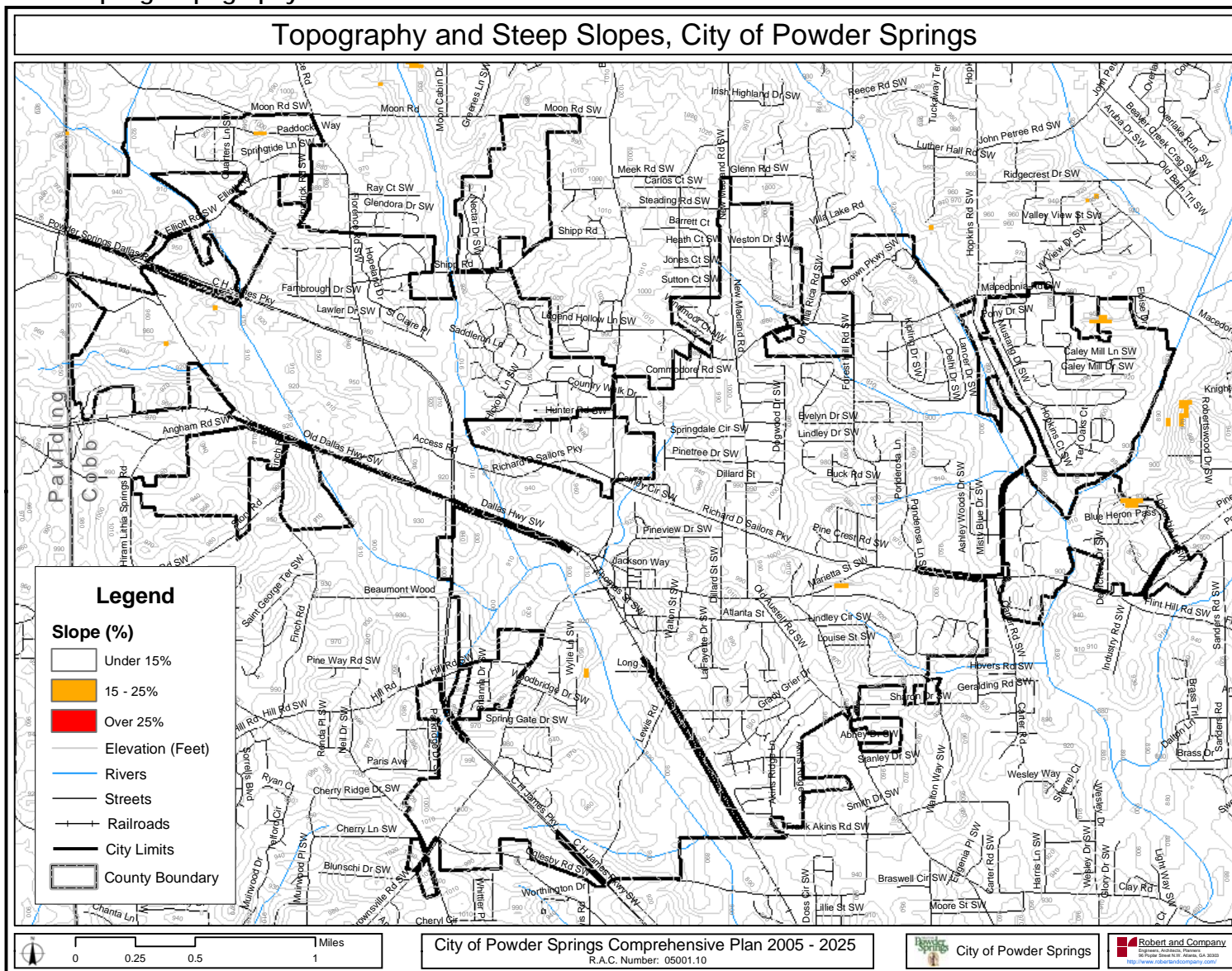
Public Water Supply Sources

Water for the City of Powder Springs is provided by the Cobb County – Marietta Water Authority (CCMWA). The water authority's water comes from one of three sources. Most of the water is drawn from the Chattahoochee River and Lake Allatoona; however, in recent years, a supplemental groundwater (well) source has been tapped during peak demand times.

Steep Slopes

Non-rocky terrain with a slope of more than 25% is considered to have a high risk for severe soil erosion. The topography of Powder Springs is generally rolling with slopes under 15% and a few isolated areas of slopes between 15% and 25% (Figure 4). From a land use standpoint, the topography of Powder Springs should not have a major impact on future development. However, the following should be considered in the location of land uses: Intensive uses such as commercial and industrial should be encouraged to development in areas with reasonable level and slopes not exceeding 5%. Residential development is best suited for lands with a slope of less than 12%. The city's current erosion control ordinance is sufficient to protect these sensitive areas.

Figure 4: Powder Springs Topography

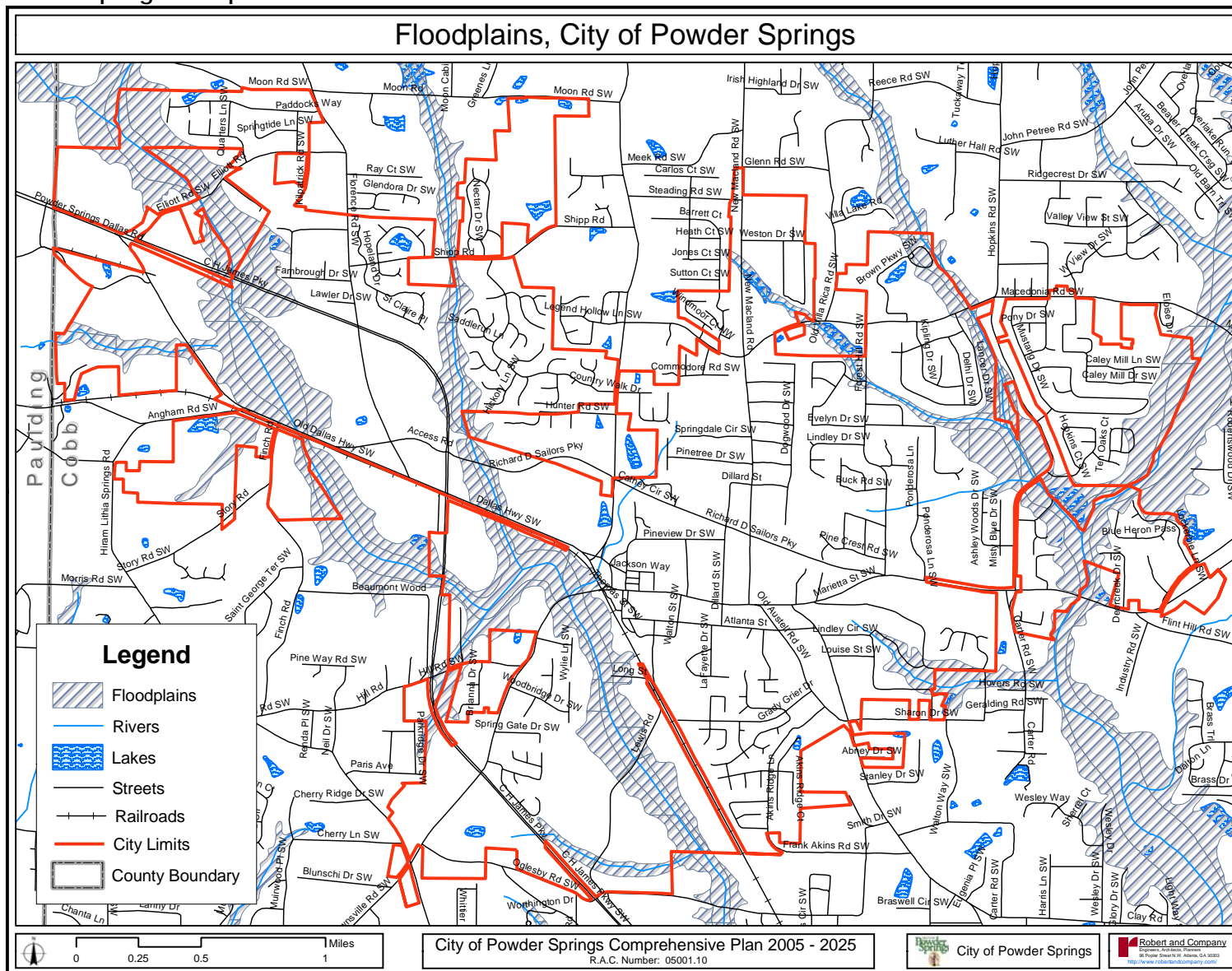


Flood Plains

Floodplains serve three major purposes (1) natural water storage and conveyance; (2) water quality maintenance; and (3) groundwater recharge. In its 1984 Flood Insurance Study (FIS), The Federal Emergency Management Agency (FEMA) has identified and mapped areas in Powder Springs that are prone to flooding, based on the 100-year, or base flood (Figure 5). The 100-year flood is the national standard on which the floodplain management and insurance requirements of the National Flood Insurance Program are based. Floodplains in Powder Springs are found primarily along Powder Springs Creek, Noses Creek, Mud Creek, and Olley Creek. Mud Creek is located on the northeastern edge of the city and flows south into Olley Creek, a tributary of Sweetwater Creek. Noses Creek is to the west of Mud Creek and also flows into Olley Creek. Powder Springs Creek is located in the western portion of Powder Springs and flows into Sweetwater creek south of the city.

Development within flood plains is restricted by City, State and Federal regulations for the purpose of protecting the environmental resource and the life and property of persons residing or making their living in the vicinity of these areas. Powder Springs has adopted Flood Damage Protection regulations. These regulations designate the city's Area of Special Flood Hazard, as the area of the flood plain subject to a 1% or greater chance of flood within a given year, and provide specific standards for improvements within these areas. The city's regulations specifically prohibit improvements of any type within floodways (the area defining the channel of a river or other watercourse). Improvements that adversely affect the ability of floodplains for flood storage capacity are prohibited within flood plain areas.

Figure 5: Powder Springs Floodplains

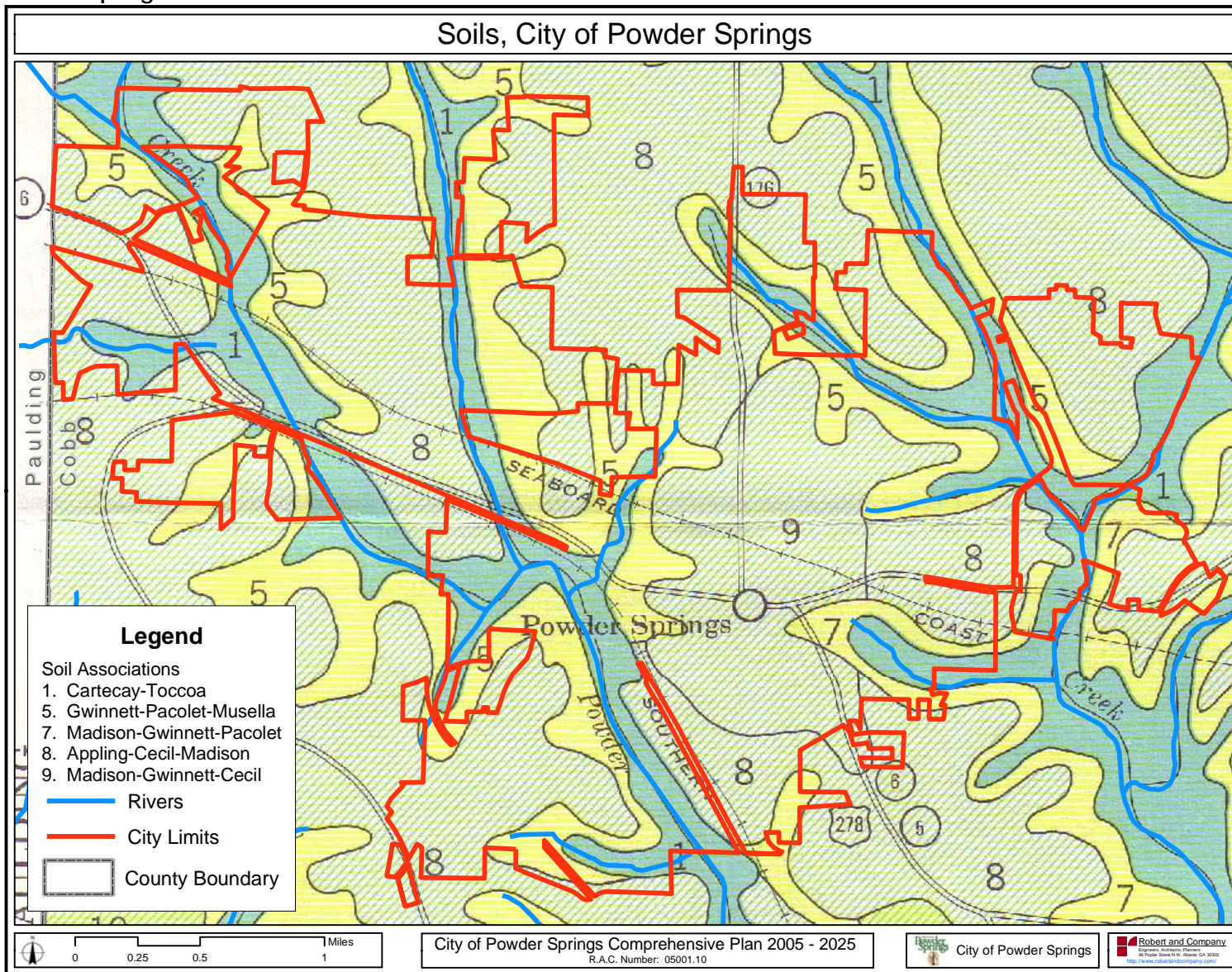


Soils

The general soils associations for the Powder Springs Area are shown in Figure 6. In floodplains in Powder Springs, Cartecay, Appling, Toccoa and Roanoke soils predominate. These soils lie in areas that are flooded at least once every twenty years. The City's ridges have Madison-Gwinnett-Cecil and Appling-Cecil-Madison association well drained soils with a clay subsoil. In hilly upland along the Noses and Powder Springs Creeks, flood plains are areas of Gwinnett-Pacolet-Musella associations.

Within the soils associations that are quite suitable for development are pockets of soils with severe limitations. One such example within Powder Springs is steeply sloping (15-25%) Gwinnett clay loam, which is susceptible to severe erosion if vegetation is disturbed. Pockets of other soils unsuitable for development such as Helena (high shrink/swell potential) and steep Musella, Madison and Pacolet soils occur. To protect these areas, the city has a Soil Erosion and Sedimentation Control regulations in place, which require measures be taken to minimize erosion and runoff.

Figure 6: Powder Springs Soils



Plant and Animal Habitats

The US Fish and Wildlife Service maintains listings of threatened and endangered species by county for the State of Georgia. This list was most recently updated in May 2004. While not specifically designated for individual cities within the county, it is assumed that these also exist in or around Powder Springs. There are currently eleven animals and twelve plants designated as being of special concern as shown in Tables 40 and 41.

Species are listed with their Federal, and where applicable, state status. Federal designations include Threatened Species: The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, and Endangered Species: The term "endangered species" means any species which is in danger of extinction throughout all or a significant portion of its range. There are four State designations; Endangered: A species which is in danger of extinction throughout all or part of its range, Threatened: A species which is likely to become an endangered species in the foreseeable future throughout all or part of its range, Rare: A species which may not be endangered or threatened but which should be protected because of its rarity and Unusual: A species which has special or unique features that entitle it to special consideration to ensure its continued survival. There are four animals and six plants listed.

Table 40: Threatened and Endangered Animals in Powder Springs

Species	Federal Status	State Status	Habitat	Threats
<i>Bird</i>				
Bald eagle <i>Haliaeetus leucocephalus</i>	T	E	Inland waterways and estuarine areas in Georgia.	Major factor in initial decline was lowered reproductive success following use of DDT. Current threats include habitat destruction, disturbance at the nest, illegal shooting, electrocution, impact injuries, and lead poisoning.
<i>Fish</i>				
Bluestripe shiner <i>Cyprinella callitaenia</i>	No Federal Status	T	Brownwater streams	
Cherokee darter <i>Etheostoma scotti</i>	T	T	Shallow water (0.1-0.5 m) in small to medium warm water creeks (1-15 m wide) with predominantly rocky bottoms. Usually found in sections with reduced current, typically runs above and below riffles and at ecotones of riffles and backwaters.	Habitat loss due to dam and reservoir construction, habitat degradation, and poor water quality
Highscale shiner <i>Notropis hypsilepis</i>	No Federal Status	T	Blackwater and brownwater streams	

Source: U.S. Fish and Wildlife Service T- Threatened E- Endangered

Table 41: Threatened and Endangered Plants in Powder Springs

Species	Federal Status	State Status	Habitat	Threats
Bay star-vine <i>Schisandra glabra</i>	No Federal Status	T	Twining on subcanopy and understory trees/shrubs in rich alluvial woods	
Georgia Aster <i>Aster georgianus</i>	Candidate Species	T	Post oak savannah/prairie communities. Most remaining populations survive adjacent to roads, utility rights of way, and other openings.	
Indian olive <i>Nestronia umbellula</i>	No Federal Status	T	Dry open upland forests of mixed hardwood and pine	
Michaux's sumac <i>Rhus michauxii</i>	E	E	Sandy or rocky open woods, usually on ridges with a disturbance history (periodic fire, prior agricultural use, maintained right-of-ways); the known population of this species in Cobb County has been extirpated (last seen in county in 1900)	Low reproductive capability (dioecious), low genetic variability associated with geographic isolation, hybridization with <i>R. copallina</i> and <i>R. glabra</i> , and habitat loss due to development
Open-ground whitlow-grass <i>Draba aprica</i>	No Federal Status	E	Shallow soils on granite outcrops, especially beneath eastern red cedar	
White fringeless orchid <i>Platanthera integrilabia</i>	Candidate Species	T	Red maple-blackgum swamps; also sandy damp stream margins; on seepy, rocky, thinly vegetated slopes. Also known as Monkey-face Orchid.	

Source: U.S. Fish and Wildlife Service: http://www.fws.gov/athens/endangered/counties_endangered.html T- Threatened E- Endangered

Prime Agricultural and Forest Land

Much of the native vegetation of southwest Cobb County has been cleared; in Powder Springs, large tracts historically were razed for agricultural activities. In more recent decades, these and other areas have been developed for urban and suburban uses. Often in the development process, native vegetation is replaced by foreign plants that do not thrive in the local environment. Preservation of foliage as a component of an aesthetically pleasing environment is important to Powder Springs. The city's Unified Development Code includes provisions for tree protection and conservation as well as landscaping requirements varied by the city's zoning districts. The City works closely with developers and builders on individual sites to encourage tree protection and preservation.

Prime agricultural and forestland are those areas where the soils and topography are most conducive to growth. The total acreage of that land in Cobb County has decreased rapidly as a result of urbanization. Much of the prime agricultural land, when classified by soil type, is in the Powder Springs area, although the tracts are typically too small to warrant protection. Altavista silt bam, Altavista Sandy Loam and Appling Sandy Loam are found along Noses Creek and Mud Creek east of downtown Powder Springs.

Scenic Areas

There are no scenic or sites within the City of Powder Springs.

Historic Resources

The Powder Springs Downtown Development Authority (DDA) was created in 1980. The primary purpose of this organization is the redevelopment of the city's downtown.

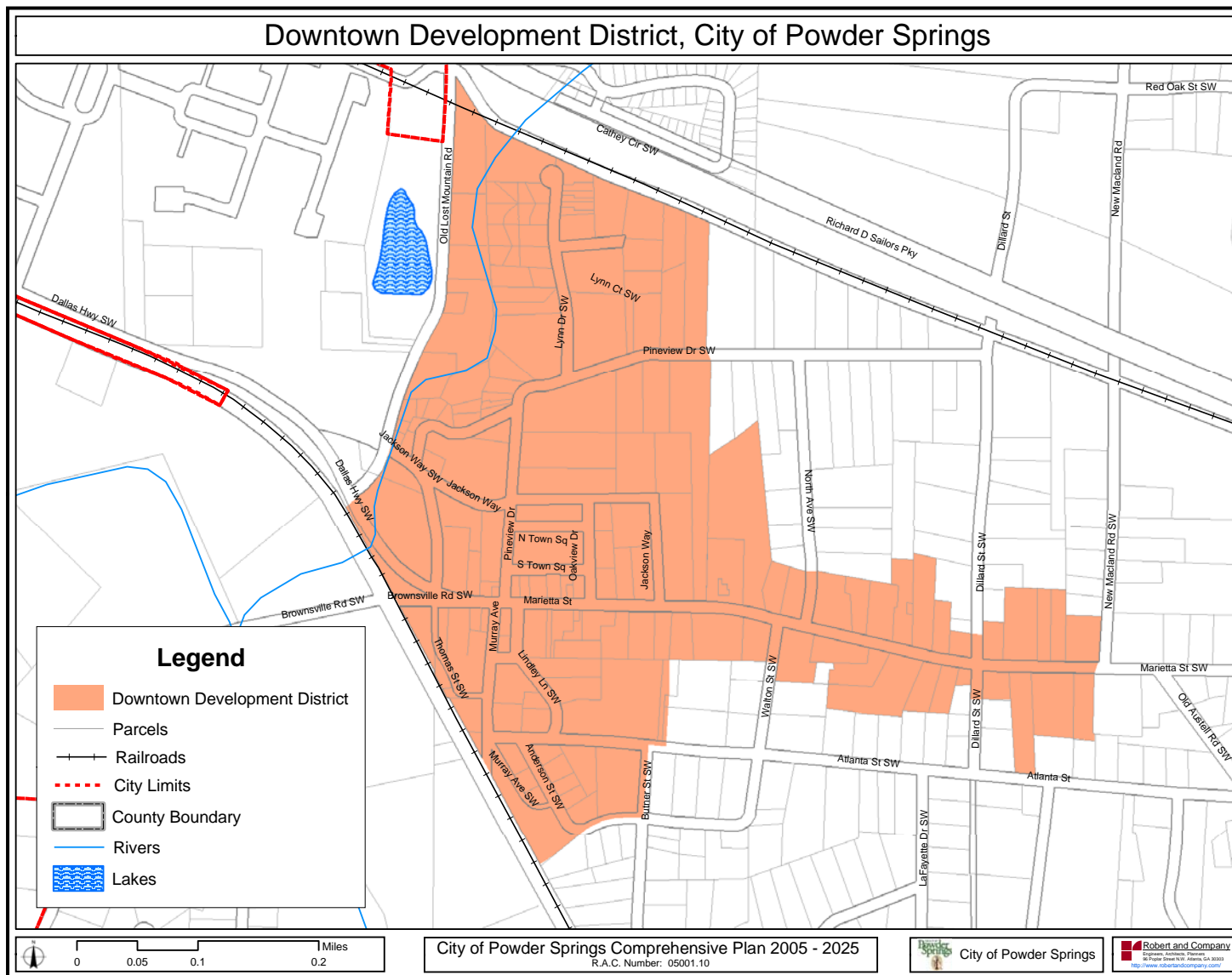
In 2001 the organization officially adopted the National Trust for Historic Preservation's Main Street Center's Four Point Approach for downtown revitalization. The four points are Organization, Promotion, Design and Economic Restructuring; additionally Powder Springs has elected to address Finance. Volunteer committees overseen by the DDA's members address these areas, with equal emphasis.

In 2002 the DDA's Design Committee produced a set of design guidelines for the downtown area. The purposes of the design guidelines are:

- ❑ To encourage the use of appropriate renovation and maintenance techniques on historic buildings in the downtown business district;
- ❑ To promote a scale and character for new development in the downtown business district that is compatible with the area's historic character;
- ❑ To encourage the rehabilitation and redevelopment of existing, traditional, structurally sound buildings, preserving the history and heritage for future generations; and
- ❑ To protect the investments of those who do rehabilitate existing historic buildings by ensuring that information and education on appropriate techniques is available to owners of surrounding properties;
- ❑ To establish and maintain a sense of place for residents of Powder Springs, old and new alike.

In 2004, the city strengthened its commitment to "preserving the heritage of the past while aggressively preparing for the future" by passing a resolution requiring all development and construction, including exterior renovation and additions with its Town Center district, an area synonymous with the boundaries of the DDA (Figure 7), to conform to the Historic Property Design Guidelines. The application of these guidelines is achieved through a process of issuance of Certificates of Appropriateness.

Figure 7: Downtown Development Authority District Boundaries



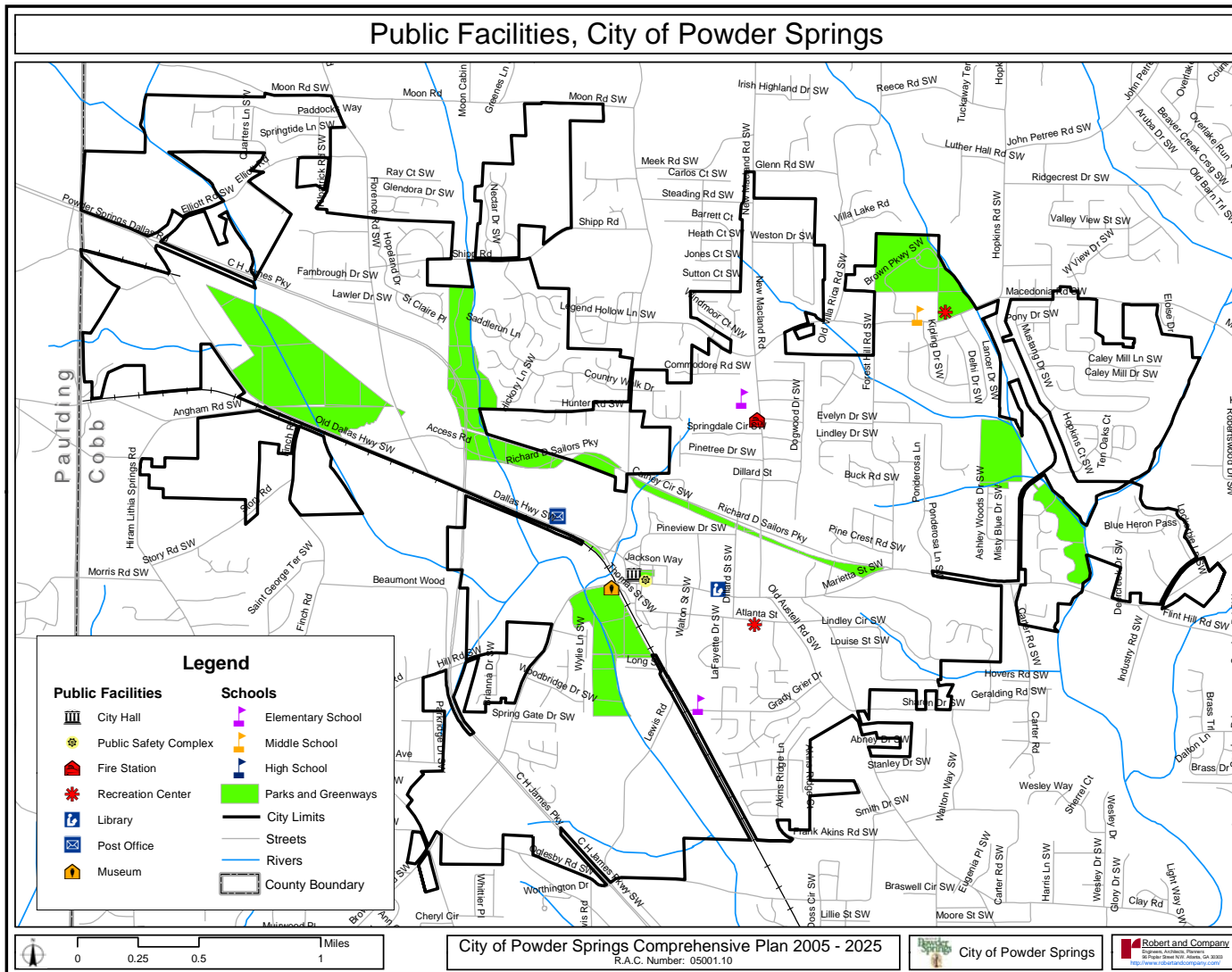
Other Significant Cultural Resources

The City is working to develop a city-wide trail system connecting neighborhoods, parks, commercial and employment centers, public facilities, the historic downtown area and the regional Silver Comet Trail. The Silver Comet Trail is a multi-use trail beginning near the intersection of Mt. Paran Road and Northside Parkway in Atlanta and running all the way to the Alabama border. This trail passes through the heart of Powder Springs providing an invaluable recreation resource to the city's citizens.

The Seven Springs Museum is located in Powder Springs Park in downtown and is operated by the Powder Springs Historical Society. The museum offers a glimpse into local history and affords visitors an opportunity to see one of the original seven springs just across the park.

Community Facilities

Figure 8: Major Public Facilities



Water Supply & Treatment

The City of Powder Springs provides drinking water services to residents of the Powder Springs service area. This service area includes most residents of the City and other areas around the City but not within the city limits (Figure 9).

The city purchases water from the Cobb-Marietta Water Authority (CCMWA), which supplies water to all of Cobb County. The authority maintains water intake and treatment facilities at Lake Allatoona (Wycoff WTP) and the Chattahoochee River (Quarles WTP). The current (2005) treatment capacity for the authority's Quarles WTP is 87 MGD and the treatment capacity of the Wycoff WTP is 72 MGD for a combined treatment capacity of 159 MGD. The authority's permitted capacity is the same as its treatment capacity. The (2001) demand for water from Cobb County (including Powder Springs) is 85 MGD and the current (2005) demand for water for Powder Springs is 1.25 MGD.

Future water demand projections for the city are not provided; "official" water demand projections are now provided by the Metropolitan North Georgia Water Planning District's district water supply plan, which for the Cobb Marietta Water Authority includes Powder Springs. This district plan projects an average day water demand of 174 MGD for CCMWA. To meet this demand the authority has a capital projects program in place that will increase capacity at the Wycoff WTP by 119 MGD by 2030 to meet demand.

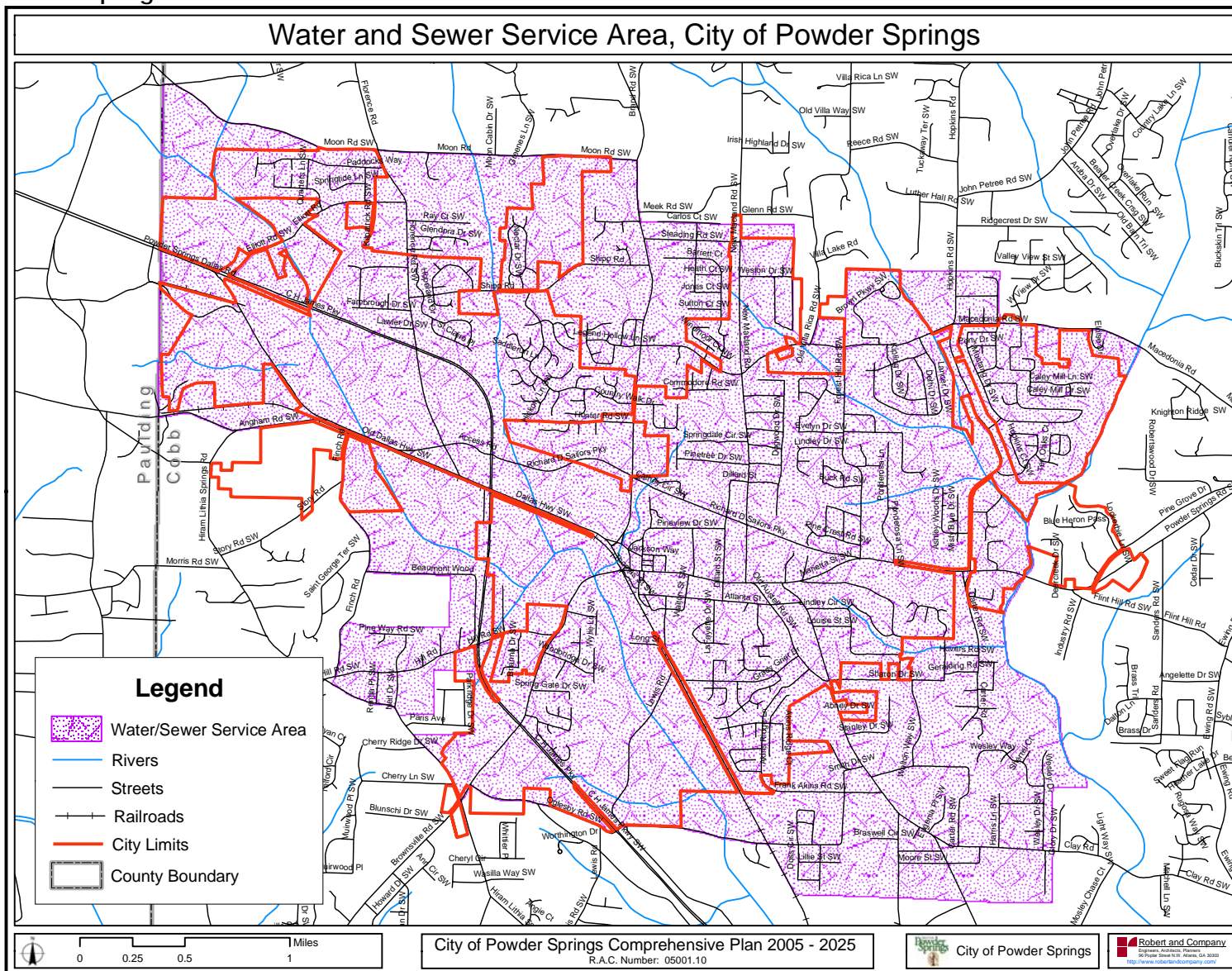
Powder Springs has a 50-year water supply contract with the CCMWA. The city's supply of treated water is adequate at this time and will remain so in the future as the CCMWA's contract do not place any maximum allowable purchase limits on its wholesale customers such as the City of Powder Springs.

As previously noted, the city maintains the water distribution system within its service area, including two pump stations. The system condition at this time is considered fair to good, varying by location. The water system consists of numerous primary 20" mains owned by Cobb-Marietta Water Authority. These are located throughout the city and connect to 12" mains that feed residential service lines, typically 6" to 8" in diameter. Commercial and Industrial areas are also fed by 12" water mains with 8" service lines installed with new development. The oldest portions of the system still utilize 2" lines on some areas. The city is working on creating a map of its water distribution lines, but that is not complete at this time.

The City plans to make improvement to its distribution system by upgrading waterlines along Brownsville, Dallas/Powder Springs and Lewis Roads. These expansions are considered adequate for serving the needs of Powder Spring residents. In order to accommodate the entire service area and provide improvements, the annual operating budget for the Water System is \$2,260,000. This does not include installation of new distribution lines in new developments. Developers must pay and install all new water distribution lines in new developments, including the acquisition of all necessary easements.

The City of Powder Springs does not have any water storage facilities; the Cobb-Marietta Water Authority provides storage for the entirety of Cobb County. Water service is available everywhere within the City Boundary Area of Powder Springs.

Figure 9: Powder Springs Water and Sewer Service Areas



Sewerage System and Wastewater Treatment

The City of Powder Springs provides sewer service to areas within its service area, encompassing the city and some areas outside the city limits. The sewer system within Powder Springs is gravity fed to trunk lines provided by Cobb County Water System. The system is in fair to good condition; the city experiences periodic system problems due to roots and grease buildup. The city maintains sewer lines within this area, however the wastewater collected via the city's system is discharged through Cobb County Water System's South Cobb Water Reclamation Facility (WRF) located on South Cobb Drive.

This facility serves the south Cobb area including a heavy commercial district with a capacity of 40MGD. The City of Powder Springs currently generates 1.25 MGD of sewage. There are no increases in the treatment of the capacity of the Cobb County Water System planned for the next 15 years, however the South Cobb WRF is anticipated to have a 25% increase in capacity by 2030. This is considered sufficient for meeting the needs of the residents of Powder Springs.

1.25 MGD per 4,745 households = 263.4 gallons per household per day
2025 household projection = 7,709 households = 2.0 MGD for treatment

This represents an increase of 60% over the city's current sewage production, but should be well within the planned capacity expansion of the South Cobb WRF by 2030. The situation should be monitored to ensure that increases in wastewater production in other communities and the County do not exceed the South Cobb WRF capacity before the expansion is complete.

The sewer tap fee for a new residential unit is \$2,925.00 and must be paid by the builder. Commercial and Industrial fees are based on a rate structure related to the amount of heated floor space. Residential wastewater service fees are as follows: \$9.29 for 0-2000 gallons, \$4.65 for each additional 1,000 gallons. Commercial and industrial service fees are the same for the initial 2,000 gallons, \$3.86 for 2,001 to 15,000 gallons, and \$4.25 for each 1,000 gallons over 15,000.

There are non-sewered locations within the city's water service boundary, but most are outside of the city limits. These are typically areas where the older residences were originally built with septic systems that are still in operation. As long as the existing septic tanks do not have any apparent problems, the city allows them to remain off of the system. Should a problem arise, the city would take action to connect a residence with a failing septic tank to the sewer system.

Stormwater

Stormwater run-off remains the nation's largest water quality problem. Stormwater is the primary reason approximately 40% of the rivers, lakes and estuaries surveyed are not clean enough to meet basic uses such as fishing and swimming. As stormwater moves across the land, it picks up and carries away natural and human-made pollutants, depositing them into lakes, rivers, wetlands. Non-point source water pollution results from a variety of human activities on the land. The primary source of stormwater runoff is impervious surfaces such as parking lots, roadways and buildings. Cities have a general responsibility for ensuring sufficient attention is given to stormwater impacts, particularly along public roads. Storm drainage facilities must be adequately constructed and maintained to protect property from flooding. Management techniques for runoff, such as storm drainage systems, are employed to prevent flooding and erosion and to protect the city's residents and businesses from the problems caused by excess stormwater.

The city of Powder Springs has a stormwater system that drains to Noses Creek and Powder Springs Creek, tributaries of Sweetwater Creek and ultimately to the Chattahoochee River.

Recent improvements to the stormwater system include the replacement of culvert pipes at Shipp Road with a pre-cast concrete culvert. There are no additional stormwater projects scheduled at this time. Mapping of the system is underway and is scheduled for completion in December 2005.

The City of Powder Springs adopted its original Stormwater Management Ordinance on June 12, 2003. This ordinance was established to protect stormwater quality. The Model Stormwater Management Ordinances, created by the Metropolitan North Water Planning District, were adopted by the City of Powder Springs on March 21, 2005. The Model Stormwater Management Ordinances include the following:

1. Post-development Stormwater Management for new development and redevelopment.
2. Floodplain Management/Flood Damage Prevention Ordinance
3. Conservation Subdivision/Open Space Development Ordinance
4. Illicit Discharge and Illegal Connection Ordinance
5. Litter Control Ordinance
6. Stream Buffer Protection Ordinance

In addition to local and regional controls for stormwater management, the National Stormwater Program was developed in response to the Federal Clean Water Act passed in 1992. This legislation developed the National Pollutant Discharge Elimination System (NPDES). The Georgia Environmental Protection Division (EPD) issues NPDES permits in the state. The City of Powder Springs was issued a permit in 1994. An updated stormwater management plan and a revised permit renewal application were prepared and submitted to the Georgia EPD in April 2005. As a provision of the EPD stormwater discharge permit, the city must maintain a stormwater management program. The components of the city's program are detailed here.

Education & Outreach

Recognizing that the most effective ways to protect our water quality is through pollution prevention, the City of Powder Springs has a variety of information and educational programs designed to encourage environmentally responsible behavior at home, school and work. The following are some of the programs and activities sponsored or promoted by the City of Powder Springs.

Adopt-A-Stream Program

The Adopt-A-Stream Program promotes stream cleanup by getting community members involved in the cleanup efforts. The program provides an opportunity for community members and groups to take ownership of their streams and keep the streams free from litter and other pollutants. In addition to cleanup activities, the

program promotes public awareness and understanding related to watershed management and non-point pollution control.

Following is a list of program elements that the City of Powder Springs would like to implement in their adopt-a stream program.

Stream Cleanup: For many of Georgia's waterways, a good trash cleanup is the first step towards creating a cleaner aquatic environment. A stream cleanup removes potential pollution sources in and around the stream.

Stream Survey: This will uncover potential pollution sources. By walking the waterways, we will be looking for things such as sewage overflow points, fish migration and channelized sections of the stream, among other possible problems. The data collected will also help the City in their efforts of improving water quality.

Tree Planting: Planting trees and shrubbery can help restore a healthy creek environment. Trees and shrubs along stream banks prevent erosion by slowing stormwater runoff. Trees provide food and cover for wildlife. When trees and shrubbery are replaced by impervious surfaces, water quality begins to decline.

Storm Drain Marker Program

The storm drain curb marker program was developed to educate the public about non-point source pollution. Volunteers apply a curb marker that reads, "NO DUMPING ... DRAINS TO CHATTAHOOCHEE" on catch basins and distribute door hangers shaped like fish to homes. The door hanger provides information about non-point source pollution and how the public can help.

To help fund the Adopt-A-Stream program, Storm Drain Curb Marker Program, and the Public Education and Information Program, the City would like to involve area businesses as partners of the programs. Corporate benefits include:

- Helps spread the message about stormwater and non-point source pollution.
- Helps heighten the awareness by reaching the masses.
- Partnerships with companies can help establish a learning environment where employees can benefit from environmentally friendly practices.

- Can help to be a “solution to water pollution”.
- Good public relations.
- Recognition in the community and in newspapers.
- An outlet for community involvement.
- Adds to corporate value and attract more investors (if a public company).

Illicit Discharge Detection & Elimination

Illicit discharges can include stored chemicals or grease left behind by abandoned businesses. Maintenance operations create wastes that are considered hazardous to humans and to the environment. Storm runoff from these areas can contain solvents and degreasing products; waste automotive fluids; oils and greases, acids and caustic waste are considered illicit discharges. Cleaning parking areas with running water will pick up fuel, oil, grease and lubricants that will contaminate the stormwater or overload pollution control device installed in the storm sewer system. Prevention of these types of discharges into the storm drain system will significantly reduce the concentration of pollutant to streams and lakes. The city encourages citizens to report spills and illegal discharges and allows for this to be anonymously through calling the Cobb County Fire Department.

Stormwater Management Regulations

The City monitors compliance with the Stormwater Ordinance through the random evaluations of businesses and has developed a database of existing businesses that may have a problem complying with the ordinance.

Water Quality Sampling and Monitoring

The City has a consultant who performs dry weather monitoring at seven locations throughout the city. No stream monitoring is required as there are no impaired streams at this time.

Annual Report

The above sections detailed some of the elements of the city’s stormwater management program. This program must be evaluated annually with a corresponding report submitted to the Georgia EPD that updates any changes to the system and any data collected since the previous report. Some of the basic information included in the annual report includes the number of structural stormwater controls in the city’s system, as well

as all maintenance performed on those structures. Additional information required in the report is related to water quality monitoring, construction site management and erosion control, pollution sources and public education, and solid waste and litter management. The most recent annual report was submitted to the Georgia EPD on June 15, 2004. The City is on track for submission of the next report in June 2005.

Solid Waste Facilities

The City of Powder Springs provides curbside garbage and yard waste pickup to residents in the city and some in nearby areas outside the city's boundaries. The solid waste service area is the same as the water service boundary area, as shown on Figure 12.

The City's sanitation service has 5083 customers as of April 2005. The average monthly tonnage of solid waste collected within Powder Springs is 450 tons. The City owns and operates 3 full service trucks and one standby truck to handle this load. On certain routes the City uses an automated truck with a mechanical arm to pick up and empty the garbage containers. This truck is operated by only one person instead of the three-man crew required for the rear-loader trucks and is therefore more cost effective.

All household garbage collected by the City is disposed of at the Cobb County Bio Mass Composting Facility located on County Services Drive. This plant recycles all the biodegradable waste of household garbage into compost, which equals approximately 70 percent of its volume. The city has a ten year contract with Cobb County for disposal services and is included in the County's Solid Waste Management Plan in terms of capacity of the county's landfill to accommodate the city's waste. The city has also recently updated its Solid Waste Work Program for the 2003 – 2007 period. This document includes provisions for reducing waste per capita.

Brush and other organic materials are disposed at the BLD Inert Landfill in Dallas, Georgia. There is no written contract with BLD Inert Landfill for the acceptance of these materials. The City of Powder Springs does not provide separate pickup of aluminum cans, newspaper, or other potentially recyclable materials. However, it encourages residents to remove aluminum and newspaper from their household garbage and dispose of them at recycling bins located at local elementary schools and fire stations. Voluntary recycling is also available at the Cobb County Solid Waste Facility.

Twice per year, in April and October, the City sponsors "Reside With Pride" Week. During these times residents can dispose of a wide variety of items not normally picked up on the curbside garbage and yard waste pickup program at no additional cost. Such items include old furniture, appliances, and other large or bulky items. Residents can also arrange for special pickup of large or unusual items such as appliances and tree limbs at an additional fee during the year through arrangements for special pickup, with the Public Works Department.

Public Safety

Fire, 9-1-1 & EMS

Fire protection and emergency medical services for the City of Powder Springs are provided by the Cobb County Fire Department. The station that provides primary service to the city is Cobb County Fire Station #23, located at 3470 New Macland Road in the city. One other station assists in providing fire protection to the city: Cobb County Fire Station #6 located at 5075 Hiram Lithia Springs Road. Station #23 on New Macland Road is home to the county's rescue unit serving southwest Cobb. Paramedics who receive training beyond the EMT training completed by all Cobb County fire fighters man this unit.

Emergency 911 dispatch services for the City of Powder Springs are provided by Cobb County 9-1-1. This is a centralized 911 dispatch center that operates 24 hours a day, 365 days a year to serve Cobb County. This service dispatches units for both the Cobb County Fire Department and the Powder Springs Police Department, allowing for the simultaneous deployment of law enforcement, fire, and emergency medical personal to serve Powder Springs residents. The Cobb County 9-1-1 subscribes to the A T & T Language line that can translate over 140 languages, and is normally accessed by using three-way calling to a 1-800 number. Additionally, all Cobb 9-1-1 personnel are TDD (Telecommunications Device for the Deaf) and TTY (Teletypewriter) certified for the deaf and hearing impaired as well as CPR and Emergency Medical Dispatch (EMD) certified, enabling them to give life saving instructions until help arrives. The provision of 9-1-1 dispatch services to the city by Cobb County commenced on November 9, 1999- prior to that time, the city operated its own dispatch service separate from the county.

Police

Police Headquarters is located in the Powder Springs Public Safety Building at 4483 Pineview Drive in downtown Powder Springs, across the street from City Hall. (See Figure 10)

The Police Department is open 24 hours a day, 365 days a year. The Powder Springs Police Department is a full service law enforcement department with 27 full time and 10 part time sworn officers working in three divisions: Uniform Patrol, Support Services and Criminal Investigation.

Uniform Patrol Division: This division has primary responsibility for the day-to-day safety of Powder Springs' citizens and visitors. These officers patrol the neighborhoods, businesses and streets of the City to detect and deter crime and enforce the law. The Patrol Division is made up of sixteen officers, five reserve officers and a Lieutenant who oversees the operation of the Division. The patrol officers work two shifts, 6AM-6PM and 6 PM-6AM. Support services work three shifts: from 6AM-2PM, 2PM-10PM, and 10PM-6AM.

Criminal Investigation Division: This division is dedicated to bringing criminals to justice. There are four investigators assigned to the unit. Each investigator handles a wide variety of complainants ranging from domestic violence to homicide. Investigators have a high level of expertise in many different fields and deploy a wide variety of techniques to assist in investigations.

In addition to the divisions described above the Powder Springs Police Department has two special units. The Special Operations Unit consists of a sergeant, a corporal, a patrolman and a K-9 Unit with two officers assigned primarily to traffic enforcement. These officers aggressively pursue traffic offenders and have contributed greatly to roadway safety in Powder Springs. The Special Operations Unit personnel have made numerous arrests and recovered thousand of dollars worth of illegal drugs. In addition, they assist the Patrol and Detective Divisions with special projects and responses to specific complaints of traffic related problems within the City of Powder Springs.

The officers of the Special Response (S.W.A.T) Team are trained for most tactical situations. They are available for serving high-risk arrest warrants and respond to situations such as persons barricaded or hostage situations. The unit has three paramedics, three sniper officers and a well-trained entry team. These specialized officers received their base training at Georgia Law Enforcement Academy in Forsyth and more advanced training in Toccoa, Georgia.

The Powder Springs Police Department has an average emergency response time of approximately 3.5 minutes. The City Police Department has a wide array of vehicles in its fleet; including 8 marked (black and white) patrol cars, 3 K-9 units, 8 unmarked patrol cars, 2 patrol motorcycles, 2 trail motorcycles, 1 trail patrol mule, 1 general purpose van, 1 SWAT van, and 1 armored personnel carrier. The patrol cars are typically retired at 90,000 to 100,000 miles.

The most recent trends in crime within Powder Springs have been related to gang activity, armed robberies, and burglaries. Additional staff (6 new officers) is being requested, along with a mobile command unit and a community outreach vehicle that would work with neighborhoods currently experiencing particular problems.

The city's police department receives additional support from the Cobb County police department on an as needed basis for SWAT, STEP, and assistance with major accidents and investigative assistance. The County P.D. will provide assistance or back-up on their own or when requested if they have a unit available at the time. Cobb County and its surrounding counties have a mutual aid policy as well.

The city does not maintain a jail, but has temporary holding facilities at the City Police Headquarters. Powder Springs has an agreement with the Cobb County Sheriff's Office for the provision of jail facilities.

Parks & Recreation

According to existing land use calculations, the City of Powder Springs contains of total of 243 acres of parks and recreation facilities.⁵ These are located throughout the city and its surroundings (Figure 13). In addition to local and county operate parks, residents of Powder Springs have very easy access to some notable state and national parks located in close proximity to the city. These park facilities are discussed below.

⁵ See Community Assessment, Figure 3: Existing Land Use, Powder Springs, GA Spring 2005

Powder Springs Park

Powder Springs Park contains 17.5 acres with ball fields, playgrounds, picnic areas, an outdoor swimming pool and a 7.5-acre passive recreation area with paved trails.

Wild Horse Creek Park

Wild Horse Creek Park is a 70-acre multi-use regional park with four lighted tennis courts, baseball and softball fields, football and soccer fields, a BMX track and a community center.

Tramore Park

A soccer facility located just to the west of Powder Springs with four full-size fields and several small fields for young children. The Southwest Cobb Youth Soccer League, the largest such league in the state, operates the soccer programs at the park.

Sweetwater Creek State Park

This state park is located approximately 11 miles south of Powder Springs, just off of I-20 in Douglas County. Sweetwater Creek Park offers picnicking, canoeing, fishing and hiking.

Kennesaw Mountain National Battlefield Park

This sprawling park is a 2,882-acre Civil War site managed by the National Park Service. It is located approximately 7 miles northeast of Powder Springs. On the grounds of the park are opportunities for hiking, picnicking, and educational adventures.

Figure 10: Parks and Recreation Facilities in Powder Springs

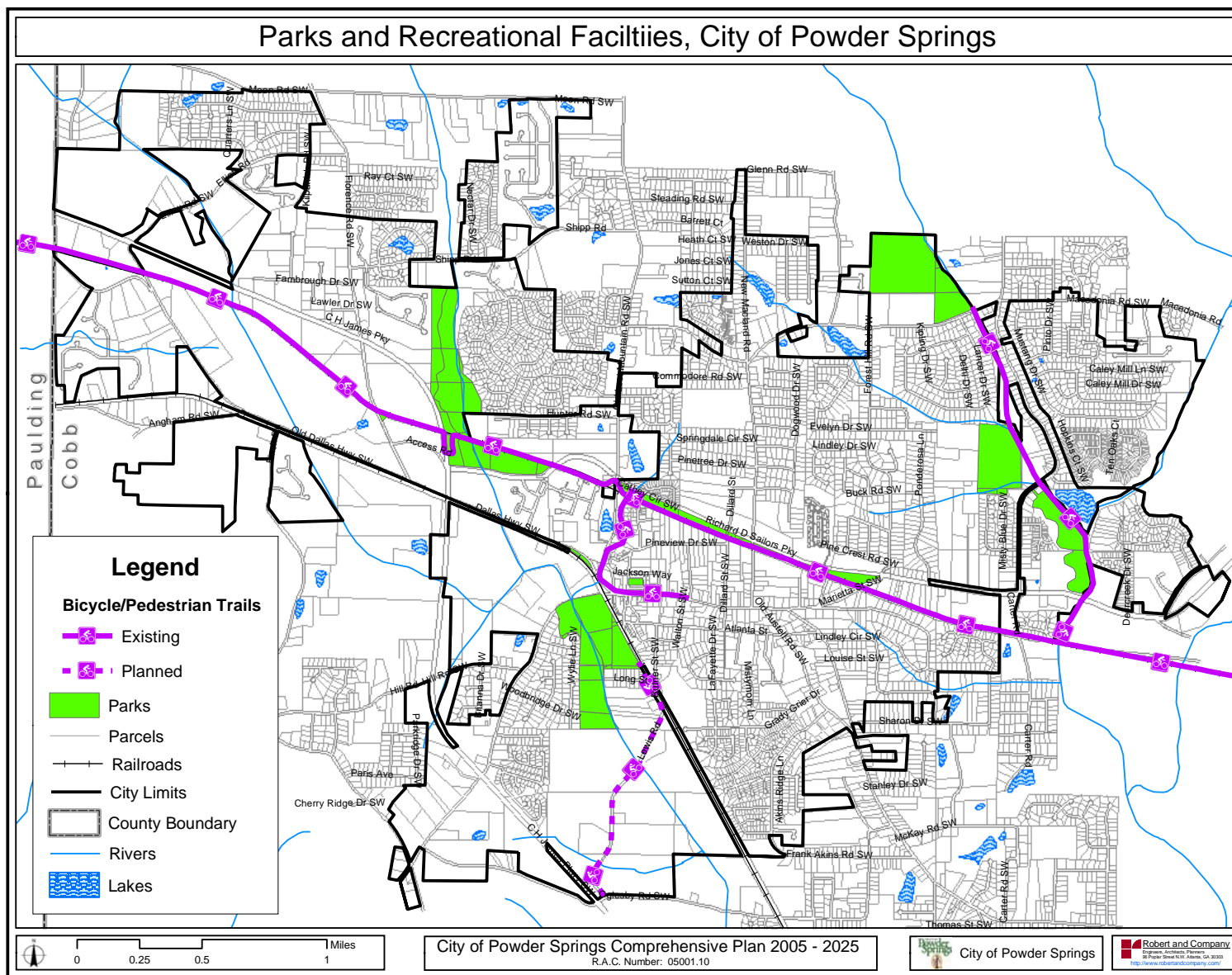


Figure 10 also shows the city-wide trail system that Powder Springs is building to connect neighborhoods, parks, commercial and employment centers, public facilities, the historic downtown area and the regional Silver Comet Trail. The following trails are some of the largest planned and completed within the city.

Wild Horse Trail: The 1.5 mile Wild Horse Trail begins at the Wild Horse Creek Park on Macedonia Road and continues along Wild Horse and Noses Creek to the point where it connects with the Silver Comet Trail at Carter Road. Along the path of the Wild Horse Trail is the largest red maple tree in Georgia (known as a "State Champion Tree"). The Trail also features a wetlands observation tower just south of Hopkins Road and a rest area near Powder Springs Road. Parking is available at the Wild Horse Creek Park with access on Lancer Drive and at Carter Road with access at the Silver Comet trestle bridge. Like the Silver Comet Trail, the Wild Horse Trail is designed to accommodate bicyclists, skaters and walkers, hikers, joggers and persons with disabilities. It does not have facilities for horses, however. The Trail is open from dawn to dusk except after rainstorms.

Lucille Greenway Trail: The first phase of the Lucille Greenway Trail opened for use October 2001. This 10-foot wide concrete facility is approximately three-quarters of a mile in length and is located west of the historic downtown along the western bank of the Lucille Creek. It begins at the Silver Comet Trail near CH James Parkway and follows the creek south to Powder Springs- Dallas Highway where it connects with an 8-foot path to connect to the town center at the intersection of Brownsville Road and Marietta Street. This connection was extended through the town center in 2004 when the Marietta Street Improvements were constructed and complete the downtown loop along Marietta and Dillard Streets to the Silver Comet Trail at the Dillard Street trailhead. A 10-foot, multi-use trail will extension from the intersection of the Silver Comet Trail pedestrian bridge & Lucille on the south end, to Shipp Road on the north end. Like the Wild Horse Trail to the east, the Lucille Trail functions as a recreation and transportation corridor. Residents are able to travel without a vehicle to numerous destinations, including Powder Springs and Wild Horse Creek Parks, historic downtown, the library, and employment and commercial centers. The trail is closed at night and patrolled by the Powder Springs Police Bicycle Unit.

Powder Springs Creek Trail is scheduled to begin construction in 2007 and should be completed in 2009. Once complete, it will extend from CH James Parkway north along Lewis Road into Powder Springs Park and eventually connect with the intersection of Dallas/Powder Springs Road, Brownsville Road, and Marietta Street to create a connected loop.

These parks and trails provide the City of Powder Springs with a variety of recreational resources. In addition, Cobb County has many more recreational opportunities that are accessible to Powder Springs residents. Cobb County's level of service for recreation is currently approximately 3.3 acres per 1000 people. This does not include national parks and recreation areas, which significantly increase the amount of open space and recreation areas available to the residents of Cobb County and its municipalities.

Proposed improvements to the city's recreation and parks resources include renovating two community centers and continuing to work towards a fully connected system of trails throughout the Powder Springs. Construction is planned for additions to the trail network within the next few years.

Intergovernmental Coordination

The boundaries for use of community facilities, transportation corridors, and the effects of land use often extend beyond the legal boundaries of a city or county government. The purpose of this section is to inventory the existing intergovernmental coordination mechanisms and processes between the city of Powder Springs and Cobb County, as well as between the city and other governmental entities and programs that have the potential to impact the successful implementation of the Community Agenda.

Adjacent Local Governments and the Service Delivery Strategy

Powder Springs is one of six municipalities within Cobb County. Cobb County provides many services to the residents of the City of Powder Springs, as they are also residents of the County. The Service Delivery Strategy (SDS) is designed to serve as the primary coordination mechanism between the city and county governments.

In 1997, the State of Georgia passed the Service Delivery Strategy Act (HB489). 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 (SDS) 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 SDS.

The Service Delivery Strategy for Cobb County was adopted in December 1999. The City of Powder Springs is a signatory of this document. The water and wastewater portions of the agreement were recently revised in 2004. The provision of services in the city is discussed in detail in the Community Facilities section. The Cobb County Service Delivery Strategy has been reviewed in the formulation of the Powder Springs Comprehensive Plan. As the Cobb Service Delivery Strategy is updated, the City of Powder Springs will continue to coordinate its planning efforts with regional service delivery agreements. The major intergovernmental agreements between Cobb County and Powder Springs are summarized here.

Animal Control

Cobb County provides animal control services to the City of Powder Springs. Animal Control is a division of the Department of Public Safety; currently staff totals 32 persons. Cobb County enforces State laws and local ordinances relating to Animal Control; it also has a 31,000 sq. ft. animal control facility that serves the entire county and its six municipalities.

EMS & 911

Cobb County and the City of Powder Springs have a formal Intergovernmental agreement that is used to implement the strategy for the provision of Emergency and 911 services. This agreement became effective in November 1999 and remains effective until November 2019. Prior to the establishment of the agreement, Powder Springs had its own system. Since the agreement was enacted, the Powder Springs system merged with the Cobb County system, which now handles all emergency management services and 911 service to the City of Powder Springs. The county handles all emergency and non-emergency calls for police, fire, and medical service on 20 incoming telephone lines.

Fire Protection

The intergovernmental agreement establishes Cobb County as the provider of fire services in the city of Powder Springs, which is a part of the county's Fire Service District. Service is funded by property taxes collected in the District.

Extension Service

Provided countywide by Cobb County.

Jails

Cobb County Correctional Institute incarcerates criminals convicted of misdemeanors and selected felonies in the Superior and state courts of Cobb County jurisdiction. The City of Powder Springs provides jail services to house persons arrested by the City Police and those sentenced to jail in Records Court. General fund revenues fund this service.

Library

The City of Powder Springs is the location of one branch library of the Cobb County Public Library System.

Police Services

Though Powder Springs provides this service within the city limits, there is an ongoing agreement between the County and all cities for informal mutual aid.

Public Health Services

The Board of Health for Cobb County provides services countywide. The services are provided through six health centers and an environmental health program. The health centers/clinics offer medical services, including primary care, immunizations, dental, and pharmacy services. The two centers closest to Powder Springs are located in Austell and just outside of Marietta on Powder Springs Road.

School Board

The Cobb County Board of Education oversees the Cobb County Public Schools, which serve the entire county and the majority of the municipalities, including Powder Springs.

Tax Assessor Services

The Board of Tax Assessors (BTA) is an autonomous board whose members are appointed by the County Commission. They ensure that all taxable property within Cobb County is assessed for taxes at its fair market value and that each taxpayer pays his proportionate share of taxes.

Tax Commissioners Services

Responsible for every phase of property tax collection including homestead exemption, preparation of the tax digest, billing, accounting, and disbursements.

Transit Services (CCT)

The Transit Division serves to develop, implement, and manage a comprehensive public transportation system that is safe, reliable, attractive, convenient, and affordable. Services include a program that encourages maximum use of the public transportation system, including fixed route and paratransit services.

Regional and State Entities

Atlanta Regional Commission

The Atlanta Regional Commission (ARC) serves as the regional development center for metropolitan Atlanta area including the City of Powder Springs. The ARC provides a variety of services to governments in its region, such as land use and transportation planning coordination, services for the elderly and workforce development. The ARC is responsible for serving the public interest of the state by promoting and implementing the comprehensive planning process among its ten county region and with involvement in local and regional planning related to land use, transportation, recreation, historic preservation, natural resources, and solid waste. The city is represented on the ARC's Board of Directors. The existing mechanisms of coordination between Powder Springs and the Atlanta Regional Commission are considered adequate and expected to remain constant through the planning period.

Metropolitan North Georgia Water Planning District

With a finite water resource and a population of nearly 4 million and growing, the need to carefully and cooperatively manage and protect Metropolitan Atlanta's rivers and streams has become a priority. The Metropolitan North Georgia Water Planning District was signed into law on April 5, 2001 (2001 S.B. 130) and is developing regional and watershed specific plans for stormwater management, wastewater management, and water supply and conservation in a 16 county area which encompasses Clayton, Bartow, Cherokee, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Forsyth, Gwinnett, Hall, Henry, Paulding, Rockdale and Walton Counties. Local governments within the District that do not substantially adopt the model ordinances will be ineligible for state grants or loans for stormwater related projects. This decision may be appealed to the District Board with a majority vote required to overturn. Those governments that do not implement plans that

apply to them would have their current permits for water withdrawal, wastewater capacity or NPDES stormwater permits frozen.

The city adopted the required watershed, wastewater, and water supply conservation measures in April 2005.

Georgia Department of Transportation

The Georgia Department of Transportation (GDOT) maintains and improves state and Federal highways in Cobb County and provides financial assistance for local road improvements. Powder Springs coordinates with Cobb County and is closely tied with GDOT through the county's Transportation Department. This coordination is expected to continue throughout the planning period.

Georgia Department of Natural Resources

The Georgia Department of Natural Resources (DNR) is available to provide assistance and guidance to the city in a number important areas including; water conservation, environmental protection, wildlife preservation, and historic preservation.

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. DCA provides a variety of technical assistance and grant funding opportunities to the city.

Private Entities

Cobb County Chamber of Commerce

A non-profit membership organization, the Cobb County Chamber of Commerce provides assistance to new businesses wishing to locate their establishments in the county. The agency's activities are focused in the areas of business recruitment and retention.

Georgia Power Company

Georgia Power is a utility company servicing customers throughout the State of Georgia. There is little coordination required between the city and Georgia Power except for issues related to electric utility hookups.

APPENDIX B – TRANSPORTATION

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DRAFT

Introduction

The City of Powder Springs, covering a land area of 6.3 square miles, has a diverse, multimodal transportation system. Located in the southwest corner of Cobb County, the city has major regional roadway facilities, a rail line, and transit system infrastructure. Richard Sailors Parkway provides east-west connections within the city, while US Highway 78 connects the city with Austell and Interstate 285 through Bankhead Highway. The city also has east-west railroad connectivity. Major trip attractors and generators in and around Powder Springs include the downtown (commercial, government and businesses), Silver Comet Trail entrance locations, Powder Springs Park and Wild Horse Creek Park. The following presents the existing conditions assessment of the transportation system in the City of Powder Springs.

1. Roadways

The roadway system provides the backbone of the transportation network. Powder Springs has 66.7 centerline miles of existing roadway network, with 12 roadway bridges. Classifying the roadway system by how each roadway functions allows for analysis and evaluation of the roadway's effectiveness within the system. Roadways are described by the county's functional classification system, which defines a roadway based on its accessibility and mobility. On one end of the spectrum are expressways/interstates, which provide the greatest mobility with controlled access. On the other end are local roads which provide the greatest accessibility and feed traffic into higher capacity roads. A description of the system's major functional classifications is presented below and is shown in Map 1.

- **Interstate Highways** – Interstates provide the greatest level of mobility, with access limited to interchanges. There are no interstate facilities within Powder Springs.
- **Arterials** – An arterial is a street or road whose primary function is to carry through traffic over relatively long distances between major areas of the county. The arterial system in the city comprises 12.6 miles, or 18.9 percent of the total roadway network. Specific major arterial facilities include C.H. James Parkway, Sailors Parkway, Marietta Street, Brownsville Road, and New Macland Road.
- **Major Collectors** – A major collector is defined as a street or road whose primary function is to carry through traffic over moderate distances between arterial streets and/or activity centers. The major collector system in Powder Springs comprises 2.5 miles (3.7 percent) of the total roadway network, including Florence Road, Old Lost Mountain Road, and Macedonia Road.
- **Minor Collectors** – A minor collector is a street or road whose primary function is to carry through traffic over minor distances from local streets and subdivisions to an activity center or higher classification street. The minor collector system in Powder Springs comprises 0.7 miles (1.0 percent) of the total roadway network. Shipp Road and Finch Road are examples of such roadways.
- **Local Streets** – Local streets feed the collector system from low volume residential and commercial areas. In Powder Springs, local streets comprise 50.9 miles (76.3 percent) of the total roadway network.

Roadway jurisdiction defines which entity owns and is responsible for maintenance. As depicted in Map 2, most of the roadways in Powder Springs are city streets.

Roadway Conditions

Data is maintained by the Georgia Department of Transportation (GDOT) on roadway and bridge condition. Roadway pavement condition is rated within the roadway characteristics (RC) file which contains a Pavement Condition Evaluation System (PACES) rating. Pavement is rated under the PACES system on a linear scoring system from 10 to 99. The rating ranges are summarized in Table 1. As Map 3 shows, a majority of the roadway system in Powder Springs is rated good or very good. Of the 45.8 centerline miles in Powder Springs for which pavement ratings are available, 7.6 percent are rated very good, 71.2 percent are rated good, and 20.4 percent are rated fair. Only 0.8 percent are rated poor.

Table 1 – PACES Rating

Rating	Definition	Score
Very Good	No maintenance necessary at present time.	81 to 99
Good	Rideability good, some minor repairs needed.	65 to 80
Fair	Considerable deterioration; needs major repairs or resurfacing in near future.	45 to 64
Poor	Badly deteriorated; needs leveling and resurfacing.	28 to 44
Very Poor	Critical condition; needs immediate attention.	11 to 27

Source: GDOT, Systems Inventory Data Collection, Coding, and Procedures Manual

Bridges

There are a total of twelve roadway bridges within the City of Powder Springs, which are provided in the table below.

Table 2 – Roadway Bridges within the City of Powder Springs

Roadway	Intersecting Feature
Powder Springs Road	Silver Comet Trail
SR 6 Business	Lucille Creek
US 278	SR 6 Business – Norfolk Southern Railroad
SR 6 Business	US 278
US 278	Powder Springs Creek
Old Lost Mountain Road	Hunter Branch
Hopkins Road	Wild Horse Creek
SR 6 Business	Powder Springs Creek
SR 176	Silver Comet Trail
Lewis Road	Powder Springs Creek
Sailors Parkway	Powder Springs Creek
Sailors Parkway	Silver Comet Trail

Source: GDOT

As shown in Table 2, seven of the twelve roadway bridges are stream crossings, two cross over roadways, while the remainder are crossings over the Silver Comet Trail.

Of the bridges listed above, only the Lewis Road bridge over Powder Springs Creek, which is programmed for replacement in 2007, is in need of repair.

Roadway Capacity

Available roadway network capacity is determined by functional classification, number of lanes, traffic controls and utilization. The number of lanes and traffic signal locations are shown in Map 4. As is shown, most of the streets have two lanes, but several large facilities also traverse the city, providing capacity for higher volumes of through traffic. Also shown in this map are the intelligent transportation system (ITS) enhancements that have been added to improve operations, including roadway corridors with fiber-optic infrastructure and real-time camera surveillance locations. Map 5 shows the range of existing (2004) Annual Average Daily Traffic (AADT) levels on the Powder Springs roadway network.

The level of system performance varies by type of transportation facility, geographic location, time of day, and other characteristics. Each roadway in the network has a theoretical capacity based on its functional classification and characteristics. When roadways are operating in free-flow conditions, capacity constraints are not apparent. However, as traffic volumes increase, available capacity is restricted and roadway congestion results. Federal regulations define traffic congestion as the level at which transportation system performance is no longer acceptable.

Capacity needs are identified using measures such as daily volume to capacity (v/c). The v/c ratio of a specific roadway is an indicator of the level of service (LOS) that can be expected on that roadway. A v/c ratio of less than 1.0 indicates that a road can handle additional volume and remain within capacity. A v/c ratio of 1.0 indicates that a road has reached its capacity, and additional traffic volume will result in a less than acceptable LOS. A v/c ratio of more than 1.0 indicates that a road's traffic volume exceeds its capacity to handle that traffic, resulting in an unacceptable LOS. The computation and analysis of roadway v/c allows system-wide analysis of the transportation network, providing an approximation of the LOS of roadways or corridors, based on information such as lane configuration, observed roadway speed, and traffic volumes.

V/C ratios are linked to LOS to provide an easier way to communicate roadway operations. LOS is a user-based assessment of conditions. Roadways are given a letter designation, with A representing the best operating conditions and F representing the worst. The 2000 *Highway Capacity Manual* provides the following LOS guidelines:

- LOS A, B and C indicate conditions where traffic can move relatively freely.
- LOS D describes vehicle speed beginning to decline slightly due to increasing flows. Speed and freedom of movement are severely restricted.
- LOS E describes conditions where traffic volumes are at or close to capacity, resulting in serious delays.
- LOS F describes breakdown in vehicular flow. This condition exists when the flow rate exceeds roadway capacity. LOS F describes traffic downstream from the bottleneck or breakdown.

Throughout the Cobb County Comprehensive Transportation Plan (CTP), the following LOS criteria are used to determine congestion levels on roadway segments.

- LOS A through C is equivalent to a v/c of 0.7 or less.
- LOS D is equivalent to a v/c of 0.701 to 0.85.
- LOS E is equivalent to a v/c of 0.851 to 1.00.
- LOS F is equivalent to a v/c greater than 1.00.

To determine which facilities in Powder Springs were congested, the Atlanta Regional Commission's (ARC's) region-wide travel demand model was used. Model results for the 2005 and 2010 networks were evaluated. It is important to note that the model network reflects the actual roadway network but, due to the nature of the model, the network is an abstraction of the actual system. Major roadways classified as collectors and arterials are included in the model network, but local roads are not.

Maps 6 and 7 illustrate 2005 and 2010 peak period congestion, respectively. As indicated by these maps, several major roadway facilities already operate at LOS F according to the model, including portions of Marietta Street, Austell-Powder Springs Road, and Brownsville Road.

As required by federal law and regulations, ARC has developed a Congestion Management System (CMS) for the Atlanta region. Within the CMS, roadways are identified for congestion monitoring, evaluation, and identification of improvements to alleviate congestion. Four roadways in Powder Springs are included in the CMS. Table 3 lists the CMS facilities and identifies the reason for inclusion in the CMS.

Table 3 – ARC Congestion Management System Facilities

Roadway	From/To	Reasons for Inclusion in the CMS
Powder Springs Road/ SR 360	Brownsville Road to Atlanta Rd.	Heavy Peak Period Volumes
Richard Sailors Parkway	Powder Springs Road to Old Lost Mountain Road	Heavy Peak Period Volumes
New Macland Road	Macland Road to Marietta Street	Heavy Peak Period Volumes
C.H. James Parkway	Douglas County Line to Paulding County Line	Heavy Peak Period Volumes

Source: Atlanta Regional Commission, Congestion Management System, 2004

Signalized Intersections

The City has eighteen signalized intersections either within or along its borders. All of the signals within the City are maintained by either the Cobb County Department of Transportation or Georgia Department of Transportation (GDOT). A list of these intersections along with the agency responsible for their maintenance is provided below. Signal locations are also presented in Map 4.

Signal improvements are being planned at the intersections of:

- C.H. James Parkway (SR 6) and Lewis Road/Oglesby Road; and
- Old Lost Mountain Road and Sailors Parkway.

Based on empirical observation and staff input, other operational improvements appear to be needed at the following intersections:

- Florence Road and C.H. James Parkway for traffic circulation;
- Florence Road and Dallas-Powder Springs Road; and
- Florence Road and Sailors Parkway.

Connectivity

Street connectivity is a measure that is critical to analyzing the possibility of re-routing traffic to relieve pressures on severely overburdened facilities. Street connectivity is a measure of the number of parallel facilities in an area that allow for multiple routing options. To determine street connectivity within the City, an inventory of streets with more than one end point was taken.

Powder Springs has good connectivity in the historic downtown area and even has good connectivity across the Silver Comet Trail that bisects the town. However, the recently annexed peripheral areas of town in all directions are cul-de-sac residential areas and have severe limitations in this regard. As a proportion of the street network, roughly 65% of the streets in Powder Springs do not offer connectivity. This lack is a contributing factor to high traffic volumes on the main corridors such as US 278, Powder Springs Road, and New Macland Road.

Roadway Safety

To evaluate roadway safety, vehicle crashes, including those between vehicles and pedestrians or bicyclists, were examined for the period of 2001 through 2004 using the GDOT crash database for roadway facilities within Powder Springs. Map 8 identifies the locations of vehicle-to-vehicle crashes over the four-year period. During this period, a total of 1056 crashes occurred, an average of 264 crashes per year. As is shown, high numbers of vehicle crashes occurred on New Macland Road, Austell-Powder Springs Road, Brownsville Road, and C.H. James Parkway (SR 6). For vehicular crashes, normalized crash rates were calculated for each facility based on its functional classification. City roadway crash rates were compared against the county-wide crash rate averages. To identify areas in need of additional investigation, locations were flagged when the crash rate at the location exceeded one standard deviation from the county-wide average. Map 9 shows potential locations for additional safety evaluation based on this assessment.

To evaluate the level of conflict between vehicles and pedestrians or bicyclists, locations of pedestrian and bicyclist crashes, injuries, and fatalities were identified. For the period of 2001 to 2004, 9 vehicular crashes involved a pedestrian or bicyclist, accounting for 0.9 percent of all crashes in the city. Of the 9 crashes, one involved a fatality and 8 involved an injury. Due to the very low number of incidents over the four-year period, normalized injury and fatality rates for bicyclists and pedestrians were not computed. The location of pedestrian/vehicle and bicycle/vehicle crashes, injuries, and fatalities is shown in Map 10.

2. Alternative Modes and Travel Characteristics

Transit

The Cobb Community Transit (CCT)/Georgia Regional Transportation Authority (GRTA) bus system provides links to the MARTA rapid-rail system by way of two express service routes, operating with 30-minute headways. Transit access to the City is provided at the Park-and-Ride lot located at Florence Road and the Silver Comet Trail. This location is temporary, as the permanent location for the transit lot is being planned for Florence Road and Dallas-Powder Springs Road. Map 11 depicts transit service routes in Powder Springs. Table 5 lists the transit services in Powder Springs by operator, type, and service parameters.

Table 4 – Existing Transit Service in the City of Powder Springs

System Operator	Service/Name	Description	Days/Hours of Service	Service Frequency
CCT/GRTA	470 - Hiram / Powder Springs Express	Express Service Connecting Hiram and Powder Springs to Downtown Atlanta; Peak Hours Only	Weekdays 5:20 am to 7:18 pm	30 minutes
CCT/GRTA	47 - Hiram / Powder Springs Reverse Commute	Reverse Commute Service Connecting Hiram and Powder Springs to Downtown Atlanta; Peak Hours Only	Weekdays 5:20 am to 7:18 pm	30 minutes

Source: Cobb Community Transit, Georgia Regional Transportation Authority

Pursuant to data from the CCT, the most recent (2006) ridership numbers for the routes in Powder Springs are as follows:

- Route 470 carries 10,812 unlinked passengers per month.
- Route 47 carries 78 unlinked passengers per month.

CCT conducted a Transit Development Plan (TDP) in 2005-2006 in which bus stop conditions were inventoried throughout the county. Although individual cities were not specifically examined, some general notes on bus stops and signage were listed these were:

- There are 724 bus stops
- 30 stops have no registered activity in the ride check and were not used for this analysis
- 114 stops have no sign posted but 111 of these are at shelter locations. Therefore, only 3 locations have no sign or shelter
- CCT plans to place shelters at all locations with over 25 daily boardings
- CCT plans to place benches at all locations with 10-25 daily boardings
- There are 348 shelters at stops
- 339 of the shelters have benches
- 208 of the shelters have lighting
- 343 of the shelters have trash receptacles
- 49 stop without shelters have trash receptacles

The TDP also conducted a survey to determine ridership characteristics of its passengers. As with the bus stop conditions inventory, the cities in Cobb were not individually examined but some general notes on ridership demographics were assembled and include the following:

- Most common home origins were Marietta, Atlanta, Smyrna, Kennesaw

- 18% of the weekday ridership and 15% of the Saturday ridership transfer from other systems to CCT
- On any given day 5% of the CCT riders are using transit for the first time
- The most common trip purpose is home to work (35% local, 50% Express)
- The second most common trip purpose is work to home (20% local 39% express)
- The majority of local riders ride 5 or more days per week (58%)
- The majority of Express riders ride 5 or more days per week (81%)
- The most common requests for new service were: Service to Lindbergh Station, from Cumberland Mall to the MARTA north line, along Terrill Mill Road, and along Powder Springs Road

There are several planned improvements for transit service on the edge of the Powder Springs area. They are:

- Increase weekday peak frequency, extend evening hours, and extend service to South Cobb Recreation Center on Route 30
- Eliminate H. E. Holmes leg and reroute Route 70 from Cumberland Transfer Center to Cobb General Hospital
- Reroute Route 70 from Cumberland Transfer Center to Cobb General Hospital and return to Marietta Transfer Center via Austell Road
- Reroute Route 70 from Cumberland Transfer Center to Cobb General Hospital and return to Marietta Transfer Center via Powder Springs Road
- Introduce complementary paratransit service wherever new routes are implemented

It should be noted that the TDP, from which the list of improvements above were generated, had not been formally adopted as of July 2006.

Pedestrian Facilities

Powder Springs's has a very good basic sidewalk network connecting many of the city's major thoroughfares and nodes of activity. The existing sidewalk network is shown in Map 12. Additional corridors where sidewalks are needed include; Brownsville Road from CH James Parkway to Marietta Street, Carter Road, Dallas-Powder Springs Road, Pinegrove Road, and Macedonia Road. There may also be a need for additional pedestrian facilities along Florence and Powder Springs Roads. The city does not have a formal sidewalk master plan; however its 1996 Community Enhancement Master Plan (CEMP) provided an outline of needs which the city has worked to meet in recent years. One of the most notable sidewalk projects the city has completed is the downtown streetscaping including Marietta Street, Austell-Powder Springs and Dallas-Powder Springs Roads, Jackson Way and Dillard Street. Additional streetscape improvements are planned for Atlanta and Walton, Dillard and Long Streets. As with many older cities, there are some portions of the city's existing sidewalk system in need of repair, these include sections along Grady Grier Road, which provides connectivity to a school property, Frank Aiken Road, Atlanta Street, Forest Hill (also providing school connectivity) and Hopkins Road. In addition to sidewalks, Powder Springs has developed a wide network of trails linking the city to local parks and the regional bike corridor, the Silver Comet Trail. Recent resident surveys indicate there is a high level of interest in providing additional pedestrian connections between residential neighborhoods and the Silver Comet Trail.

Based on a review of crash data collected by GDOT between 2001 and 2004, Powder Springs is relatively safe for pedestrians. The location of pedestrian/vehicle and bicycle/vehicle crashes,

injuries, and fatalities is shown in Map 10. During the 2001–2004 timeframe, there were 7 crashes involving pedestrians, one resulting in a fatality. With the exception of the crash at Brownsville Road and CH James Parkway, all of the crashes happened at non-signalized intersections, indicating a potential need for additional pedestrian signals. Another area identified as being need of pedestrian signalization is Marietta Street, in the city's historic downtown. Additionally, the timing of pedestrian signals along Sailors Parkway, which is frequently used as a connection to the Silver Comet Trail, is too limited. Current signals do not allow pedestrians adequate time to safely cross the wide roadway. This safety concern is exacerbated by the absence of refuge islands in the roadway. There is also a lack of safe pedestrian crossing along CH James Parkway, specifically at its intersections with Florence Road, Sailors Parkway, Hill Road, and Brownsville Road.

To the city's 2002 LCI Study included a number of programs for increasing pedestrian accessibility and connections to the local multi-use trail and greenway network. Many of the recommend projects are reflected in the list of project the city will be using recently approved special purpose local option sales tax (SPLOST) funds to accomplish; these projects are listed in the following table.

Table 5 – Future Pedestrian Enhancements in the City of Powder Springs

Project Type	Project Description	Project Location
SPLOST	Install Sidewalk and Streetscape	Atlanta Street
SPLOST	Install Sidewalk	Florence Road
SPLOST	Install Sidewalk	Frank Aiken Road
SPLOST	Install Sidewalk and Streetscape	Macedonia Road
SPLOST	Install Sidewalk	North Avenue
SPLOST	Install Sidewalk	Old Austell Road from Austell Powder Springs Road to Marietta Street
SPLOST	Install Sidewalk	Pineview/Oakview/Lynn/Cemetery
SPLOST	Fill in gaps in existing sidewalk coverage	Powder Springs Road from Pine Grove to Deer Creek
SPLOST	Install Sidewalk	Richard Sailors Parkway from Powder Springs Road to C.H. James Parkway
SPLOST	Install Sidewalk	Walton/Dillard/Long/Butner St

The city's zoning and development regulations are also supportive of pedestrian accessibility requiring new residential developments to provide sidewalks and industrial and commercial development to provide sidewalks on main connector roads.

Bicycle Travel

While the on-street facilities exist within the City, Powder Springs has developed its bicycle and pedestrian network around its primary multi-use facility, the Silver Comet Trail. The trail begins at the intersection of South Cobb Drive and the East-West Connector in Smyrna and runs all the way to the Alabama border. In addition to the Silver Comet Trail, there are spurs off the Silver Comet trail to various neighborhoods in Powder Springs including the Wild Horse Creek Trail in east Powder Springs, Lucile Creek Trail in the western sector of the town, and Powder Springs Creek Trail from the downtown to US 278. A Noses Creek Trail is proposed on the far northeastern edge of town. In addition, the planned improvements to Lewis Road will include on-street bike lanes and off-street multiuse trails. The City has also programmed bicycle facilities along Florence Road, Moon Road and Lucille Creek within its CEMP.

Bicycling is permitted on all major streets, but the suitability of bicycling within the city varies greatly. Both the ARC and Cobb County have assessed bicycle suitability of major roadways within Cobb County, assigning a numerical score to each segment ranging from 0 (for the most difficult conditions) to 4 (for the most favorable conditions). Bicycle suitability for Powder Springs is depicted in Map 13.

The bicycle suitability evaluation performed by ARC in 2003 indicated the following roads had the best conditions for bicycling in Powder Springs: Atlanta Street, Dillard Street and Grady Grier Drive. Roads identified as having "medium conditions" for bicycling include Old Austell Road and Mars Hill Road. The two roads identified as having difficult conditions for bicycling were Powder Springs Road and US Highway 278.

3. Parking

The inventory of public parking facilities in Powder Springs consists primarily of off-street surface lots along major roads and selected streets in the downtown area. Most public parking areas are located in commercial areas. There are public parking areas in the vicinity of Richard Sailors Parkway and New Macland Road. The off-street parking supply is depicted in Map 14.

4. Freight

The primary trucking route, and only federally-designated truck route, through Powder Springs is C.H. James Parkway (SR 6). The Surface Transportation Assistance Act (STAA) of 1982 was passed to allow large trucks to operate on Interstates and certain primary roadways, called collectively the National Network. The City of Powder Springs is served by two STAA routes: New Macland Road and Richard Sailors Parkway. Marietta Street serves the major commercial corridor through the City, while industrial land uses are minimal in Powder Springs. This area has railroad connection served by Norfolk Southern.

Major truck routes and industrial traffic generators are depicted in Map 15.

5. Seaports, Harbors, Air Terminals

There are no air terminals located within the City of Powder Springs. The nearest air terminals to the City of Powder Springs are: Hartsfield-Jackson International Airport in Atlanta, the major commercial carrier location in the region; Dobbins Naval Air Station near Marietta, a facility used exclusively for military purposes; and McCollum Field located near Kennesaw, the Cobb County airport. With a runway of 6,000 feet in length, McCollum Field has transitioned from a recreational airport to a business class airport in recent years and hosts nearly 350 takeoffs and landings each day. Approximately 400 aircraft are based at the airport and it supports a staff of 185 employees.

No seaports or harbors exist within the City of Powder Springs.

6. Current Studies and Projects

A number of transportation planning studies have recently been completed or are underway that will impact Powder Springs. The recently completed *ARC Mobility 2030* long range regional transportation plan, with its accompanying *Transportation Improvement Program (TIP)*,

identifies short range improvements for the Powder Springs area. TIP projects are shown in Map 16 and listed in Table 6. For the City of Powder Springs, the short-range TIP currently includes roadway operational upgrades along the Lewis Road corridor.

Table 6 – FY 2006-2011 Transportation Improvement Program Projects

ARC Project Number	GDOT PI Number	Project Name, Description and Location	Project Type	Sponsor	Jurisdiction	Length (miles)
CO-312	0004446	Lewis Road from US 278 to SR 6 Business	Roadway Operations and Bike/ Ped Facilities	City of Powder Springs	Cobb County	1.3

Source: Atlanta Regional Commission, FY 2006-2011 Transportation Improvement Program Project List

In addition to the Regional Transportation Plan (RTP), Cobb County voters recently approved a special purpose local option sales tax (SPLOST) that will fund a series of transportation projects around the county. The resulting Capital Improvement Projects (CIP) program is currently being implemented. Specific projects in the City of Powder Springs to be funded by the SPLOST are listed in Table 7.

Table 7 – SPLOST Projects

Project Type	Location	Description
Sidewalk	Atlanta Street	Install Sidewalk-Streetscape
Sidewalk	Florence Road	Install Sidewalk
Sidewalk / Roadway Operations	Frank Aiken Road	Install Sidewalk, curb, resurface
Sidewalk / Roadway Operations	Jackson Way from Old Lost Mountain Road to Powder Springs Dallas Road	Sidewalk, curb, and resurface
Sidewalk	Macedonia Road	Install Sidewalk-Streetscape
Shoulder	North Avenue	Sidewalk, curb, and resurface
Sidewalk / Roadway Operations	Old Austell Road from Austell Powder Springs Road to Marietta Street	Sidewalk, curb, and resurface
Sidewalk	Pineview/Oakview/Lynn/Cemetary	Install Sidewalk
Sidewalk	Powder Springs Road from Pine Grove to Deer Creek	Fill gap in sidewalk coverage
Sidewalk	Richard Sailors Parkway from Powder Springs Road to CH James Parkway	Sidewalk on south side of road
Sidewalk	Walton/Dillard/Long/Butner St	Install Sidewalk

Aside from RTP/TIP and SPLOST implementation processes, there are several other recent and ongoing planning efforts that affect the City of Powder Springs. The *City of Powder Springs Livable Centers Initiative* (LCI) project (2002) focused upon development of implementation programs that encourage complementary transportation, land use and urban design solutions.

The *Powder Springs LCI* has led to \$1,300,000 in funding for the implementation of recommended improvements. ARC will soon be initiating an 18-month corridor study along SR 6 in Fulton, Cobb, Douglas, and Paulding counties. This critical corridor serves many users, including commuter traffic from Paulding County and freight traffic associated with the CSX Austell Intermodal Rail Yard and Fulton Industrial Boulevard corridor. Finally, as part of the ongoing Cobb Comprehensive Transportation Plan, the Cobb-Paulding working group will work to address specific issues and synergy between the two counties and specific jurisdictions including Powder Springs.

7. Human - Transportation Interactions

The U.S. Census Bureau collects socioeconomic and other data that can be reviewed to help determine potential transportation needs as well as understand area travel patterns. Demographic characteristics illustrate the planning context in which the transportation system operates.

Powder Springs is one of six cities in Cobb County. The city had a 2000 population of 12,481, representing 2.1 percent of the county's population. The 2004 population estimate is 14,594, representing a growth rate of 16.9 percent since 2000. Population density is an important consideration in transportation planning, particularly when examining alternatives to the automobile. The greater the density, the better suited the area is to more intensive transit and bicycle/pedestrian infrastructure. Powder Springs has a similar population density (3.1 persons per acre) as the county as a whole (also 3.1 persons per acre), as well as a similar household density (1.0 households per acre) as the county (1.1 households per acre).

Selected demographic characteristics of Powder Springs are shown in Tables 8 and 9. These characteristics are presented because they help identify population groups that may have a greater tendency to use or need transit or non-motorized modes. As shown in Table 8, Powder Springs has a more diverse population than the county as a whole. Of those who consider themselves one race, 56.5 percent identified themselves as white, 29.5 percent as black or African American, 16.9 percent as Hispanic or Latino, 3.0 percent as Asian, and 8.4 percent as some other race.

Table 8 – Demographic Characteristics Comparison, Race and Ethnicity, 2000

Geographic Area	Population	Percent Identifying as One Race				Two or More Races	Percent Hispanic or Latino
		White	Black	Asian	Other Race		
Powder Springs	12,481	56.5%	29.5%	3.0%	8.4%	2.6%	16.9%
Cobb	607,751	72.3%	18.6%	3.0%	4.0%	2.1%	7.7%
10-County ARC Region	3,429,379	58.8%	32.1%	3.8%	3.5%	1.8%	7.3%
Georgia	8,186,453	65.1%	28.7%	2.1%	2.8%	1.4%	5.3%

Source: U.S. Census Bureau, 2000

As shown in Table 9, a greater proportion of persons in Powder Springs live below poverty (8.5 percent) than in the county as a whole; however, a lower proportion of households are lacking vehicles (3.0 percent) than found in the county, region or state. There are slightly fewer persons age 65 and older living in the city (6.3 percent), but the proportion of persons age 15 to 19 is greater in the city (8.5 percent) than is found in the county or region. Overall, the demographic

characteristics indicate a population that has a greater proportion of potential transit-supportive markets than is found in the county as a whole.

Table 9 – Demographic Characteristics Comparison, Income and Age, 2000

Geographic Area	Total		Percent			
	Population	Households	Persons below poverty	Persons Age 65+	Persons Age 15-19	Households without vehicles
Powder Springs	12,481	4,071	8.5%	6.3%	8.5%	3.0%
Cobb	607,751	227,487	6.5%	6.9%	6.5%	3.8%
10-County ARC Region	3,429,379	1,261,894	9.5%	7.3%	6.8%	7.7%
Georgia	8,186,453	3,006,369	13.0%	9.6%	7.3%	8.3%

Source: U.S. Census Bureau, 2000

A number of factors related to commuting patterns can be evaluated using Census data. The data indicates how people are getting to work, where they are working, and how long it takes to travel to employment on an average day. Table 10 shows how residents living in Powder Springs get to work, compared against the county, region and state. The data shows that over 81 percent of Powder Springs commuters rely on the single occupant vehicle to get to work. The percentage of commuters carpooling (12.8 percent) is similar to that typical in the county, region, or state. Very few persons commute to work using public transit in Powder Springs (0.5 percent) as compared to the county, region, or state. The proportion of persons walking to work within the city (1.0 percent) is also similar to that found in the county, region or state.

Table 10 – Manner of Commute Comparison, 2000

Geographic Area	Number of Workers Age 16 and Over	Percent of Commuters					
		Drive Alone	Carpool	Public Transit	Walk	Other	Work at Home
Powder Springs	6,296	81.4%	12.8%	0.5%	1.0%	1.6%	2.8%
Cobb	325,412	80.8%	12.0%	1.3%	1.0%	0.9%	4.1%
ARC 10-County Region	1,733,135	76.4%	13.5%	4.3%	1.3%	1.0%	3.6%
Georgia	3,832,803	77.5%	14.5%	2.3%	1.7%	1.1%	2.8%

Source: U.S. Census Bureau, 2000

Table 11 provides a comparison between Powder Springs and the county and state regarding where city residents work. The data gives some indication of travel patterns within the city. While a large majority (nearly 90 percent) of Powder Springs residents work outside the city, most (57.8 percent) work within Cobb County. This data indicates a jobs-to-housing imbalance for Powder Springs.

Table 11 – Location of Work, 2000

Geographic Area	Number of Workers Age 16 and Over	Work in City of Residence		Work in County of Residence	
		Number	Percent	Number	Percent
Powder Springs	6,296	660	10.5%	3,636	57.8%
Cobb	325,412	18,268	5.6%	179,750	55.2%
Georgia	3,832,803	717,187	18.7%	2,240,758	58.5%

Source: U.S. Census Bureau, 2000

The amount of time it takes for persons living in Powder Springs to commute to their jobs is shown in Table 12, compared to the county and state. In general, Powder Springs commuters have longer commutes than what is typical at the county and state levels. In particular, a far greater proportion of Powder Springs commuters require more than 30 minutes to commute to their jobs (66.7 percent) than county-wide (51.7 percent) or statewide (39.5 percent).

Table 12 – Travel Time to Work, 2000

Geographic Area	Number of Commuters Age 16 and Over	< 10 Minutes	10 to 19 Minutes	20 to 29 Minutes	30 to 44 Minutes	45 to 60 Minutes	> 60 Minutes
Powder Springs	6,119	5.0%	14.2%	14.2%	30.1%	18.6%	18.0%
Cobb	312,177	7.8%	21.5%	19.0%	27.2%	13.6%	10.9%
Georgia	3,723,817	11.5%	29.3%	19.6%	20.9%	9.3%	9.3%

Source: U.S. Census Bureau, 2000

8. Land Use - Transportation Interactions

The current land use pattern in Powder Springs is somewhat limiting of the viability of multi-modal transportation choices. Outside of the small (but growing) redevelopment area around the town center, most areas of the city have a typical, suburban style segregated land use. The residential character is typically low to medium density single-family lots, oriented to automobile transportation, lacking pedestrian connectivity and lacking orientation to the downtown, core of the city. The city has updated its zoning and development codes to encourage mixed-use development, but they have had project which were approved for rezoning with a planned mix of uses result in residential neighborhoods where the retail/office/commercial components are not developed.

Due to the low residential densities in the city, local transit services may not be feasible; however the city has experienced and anticipates continued development of attached/multifamily residential development. As this development comes to bear, the issues of local transit services should be revisited in the future. Although local transit is not present, there is a connection to the Cobb Community Transit (CCT)/Georgia Regional Transportation Authority (GRTA) transit system in Powder Springs. CCT/GRTA route 470, the Hiram/Powder Springs Express, provides commuters with a direct connection to Downtown Atlanta on weekdays. With the relocation of the Park-and-Ride lot to Florence Road and Dallas-Powder Springs Road, the development potential of these and any adjacent lots to create higher density

residential areas will increase the accessibility of Powder Springs to transit and help expand multi-modal transportation options in the city.

A key area where the land use transportation interaction should be monitored is along the C.H. James Parkway. Retail use is the predominant use, existing and predicted for areas along this major commuter route. Achieving a balance between the need to provide access to potential commercial properties and maintaining uninterrupted traffic flow on the corridor is a potential challenge for Powder Springs. A master plan specifically for the development of commercial properties and access management in the corridor may help identify ways of striking the proper balance and ensuring a safe, efficient, and viable corridor for all users.

The City of Powder Springs's current Future Land Use Map (February 2006) and 2002 LCI Study indicate the continued development and redevelopment of Powder Springs's core area. The Marietta Street corridor between the railroad tracks and Sailors Parkway will be the primary retail and office node within the city with infill residential development activity in the adjacent residential areas. As the population of the city and the greater southwestern Cobb County area grows the adjacent roadways (Sailors Parkway and C.H. James Parkway) will continue to increase in importance as commuter routes. As it moves forward, the city must continue to monitor the condition of these key roadways in order to maintain traffic flow and accessibility to regional routes such as I-20 and the East-West Connector.

9. Transportation Conclusions

The City of Powder Springs has the advantage of a completed LCI process to help guide the City's development and encourage a transition toward walkable, mixed-use development in the core of the community. A key objective for the City will be coordinating the transportation-related recommendations of the LCI study and other ongoing planning efforts with the transportation planning process at the county and regional level. This will include integrating the various sets of projects that have already identified through the RTP/TIP, SPLOST, and LCI processes into a unified and cohesive program that reflects clearly defined community goals. Another consideration is the need to carefully coordinate the transportation planning process in Powder Springs with that of neighboring communities, in particular the adjacent municipalities of Austell and Hiram.

10. Issues and Opportunities

Issues

- The City of Powder Springs understands the reliance to automobile oriented travel contributes to the region's air and water pollution problems.
- Current development trends appear to be facilitating the shifting of businesses away from town centers and activity centers towards strip retail developments along arterial road networks.
- The County and regional public transportation systems need to be expanded where they are both cost efficient and accessible to a larger residential population.
- Greater connectivity and operational effectiveness can be achieved by mixing travel modes with respect to pedestrian, bicycle, transit, and vehicular transportation options.
- Roadway designs should be contemplated in a Context Sensitive Design manner, where the roadway design factors the existing community conditions in the final design of the corridor. Context Sensitive Design is a program developed by the Federal Highway

Administration (FHWA) in an effort to ensure that new transportation facilities are being developed and implemented in a way that provides positive results for connectivity, capacity, and the aesthetics of the local area.

- There are areas of the City that should look at improvements related to the relationship between the location of existing transportation facilities and public transit service with the growing populations that are in need of transportation options to access local area jobs, services, goods, health care, and recreation opportunities.
- The City should continue to work with the Cobb County Department of Transportation to develop a comprehensive transportation system that takes into account the concern traffic congestion, regional transit service integration, regional/local parking demands, new roadway improvement initiatives, and alternative transportation modes.
- Increased regional traffic and peak period congestion are reducing the level of service on many of the City's arterial roadways and the neighboring Interstate system.
- Inter-parcel connections between individual development uses where compatible, should continue to be encouraged, if not strengthened, in new development scenarios.
- Many of our major arterial corridors are experiencing increased peak period vehicular congestion, unappealing commercial signage clutter, and a heightened level of sprawling development patterns with a general lack of inter-parcel access.
- High traffic volumes increase the safety risks for pedestrians crossing the City's major arterials, particularly C.H. James Parkway and Sailors Parkway.
- Large amounts of through traffic undermine the City's efforts to make Marietta Street more pedestrian-friendly and, thus, a more viable Town Center.

Opportunities

- Support opportunities and transportation alternatives which reduce the need of the private automobile to get to places, thereby reducing traffic congestion.
- Continue to coordinate with CCT and GRTA with the intent of transit service options that adequately serve the residents of Powder Springs – including those with special and/or paratransit needs.
- Maintain an effective balance between auto-dependent transportation initiatives and alternative modes of transportation (e.g. bicycle, pedestrian, transit, carpooling, etc).
- Continue to further the Town Center development initiatives as set forth in the City's Livable Communities Initiative in order to increase the viability of alternative modes of travel and the connectivity to the Silver Comet Trail.
- The benefits of the Silver Comet Trail can be realized by adding sidewalks and multi-use trails that would eventually establish an interconnected alternative transportation system by increasing the connectivity of the facility to various areas of the City.
- Streetscaping and other LCI initiatives along Marietta Street could serve as an effective measure to reduce both speeds and traffic volumes within downtown.
- Continued coordination with GDOT and the Cobb DOT to improve pedestrian visibility and signalization – and thereby reducing speeds - along the City's major arterials.
- Development patterns that blend uses incorporating housing, jobs, and recreation should be promoted for mixed-use opportunities in the future.

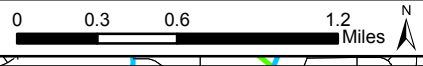
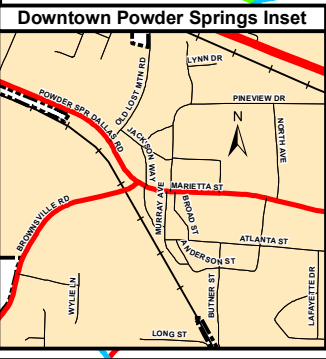
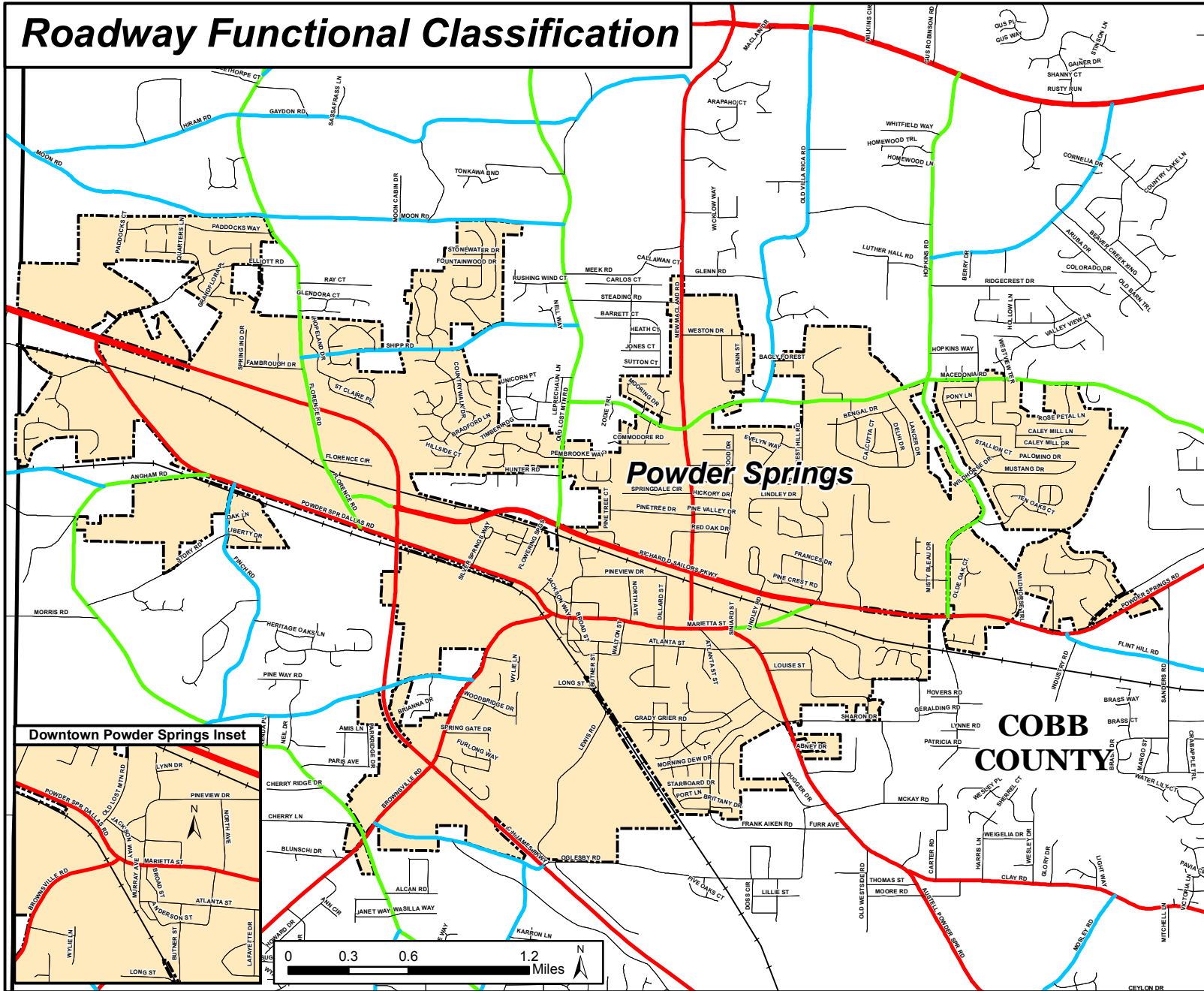
11. Quality Community Objective Assessment

Transportation Alternatives	
<p>Objective: Alternatives to transportation by automobile, including mass transit, bicycle, and pedestrian facilities should be made available in each community. Greater use of alternate transportation should be encouraged.</p>	
<p>Overview: Through recent planning efforts, Powder Springs is developing a greater understanding of the necessity of multi-modal transportation options. In support of this, many of the city's recent and planned transportation improvement projects are pedestrian-oriented. There are a number of connections to regional transit service in the city and many of the city's roadways are suitable for bicycle traffic.</p>	
Assessment	Comments
We have public transportation in our community.	Yes, CCT/GRTA provides transit service with connections to downtown Atlanta.
We require that new development connects with existing development through a street network, not a single entry/exit.	The city's regulations specify that cul-de-sacs are subject to the approval of the city and are only to be permitted when environmentally sensitive conditions require their use.
We have a good network of sidewalks to allow people to walk to a variety of destinations.	The city continues to work on projects and plans supporting the development of a good sidewalk network connecting most major activity centers and roadways in Powder Springs. One area where additional sidewalks could be beneficial is providing connections between the city's residential neighborhoods and the local greenway / multi-use trail system and the regional Silver Comet Trail.
We have a sidewalk ordinance in our community that requires all new development to provide user-friendly sidewalks.	Yes, the city requires sidewalks for all new development. Requirements vary based on roadway classification.
We require that newly built sidewalks connect to existing sidewalks whenever possible.	Yes.
We have a plan for bicycle routes through our community.	The City's 1996 CEMP provides an informal plan for the development of multi-use trails and connections to the regional Silver Comet Trail throughout the city.
We allow commercial and retail development to share parking areas whenever possible.	Yes, the city's regulations allow the required parking spaces for any number of separate uses to be combined in one lot; however the required space assigned to one use may not be assigned to another use at the same time. The exceptions to this rule are churches, theaters and assembly halls whose peak attendance will be at night or on Sundays; one half of the required spaces for these uses may be assigned to another use which will be closed at night and on Sundays.

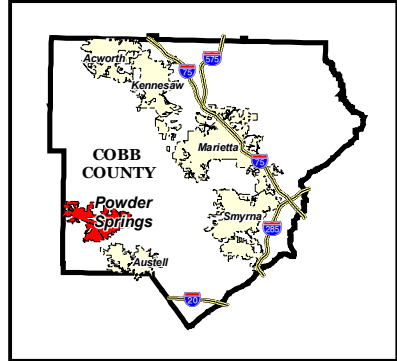


City of Powder Springs Comprehensive Plan - Transportation Element

Roadway Functional Classification



General Location



Map 1

Legend

Roadway Functional Classification (Defined by Cobb County DOT)

- Major Road
- Minor Road
- Arterial
- Other Roads / Outside Powder Springs

Other Layers

- Railroads
- City of Powder Springs Limits

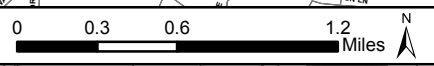
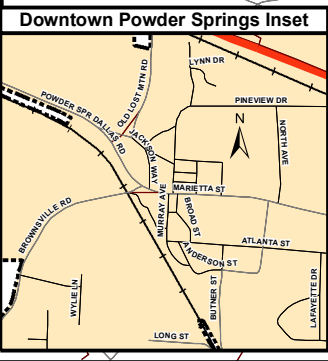
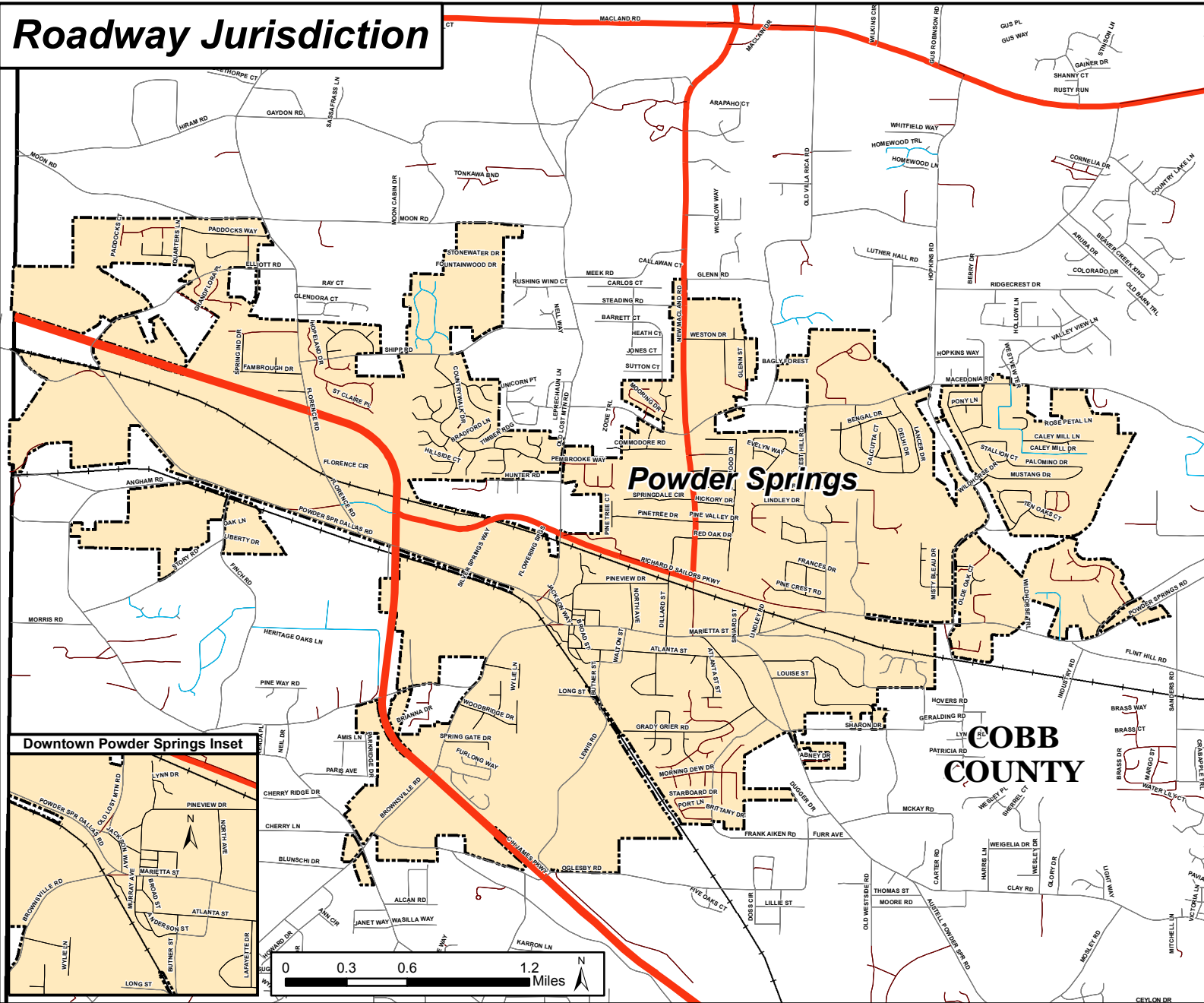
Source: Cobb DOT, City of Powder Springs, ESRI, and DWA, Inc.

This map is intended for planning purposes only.

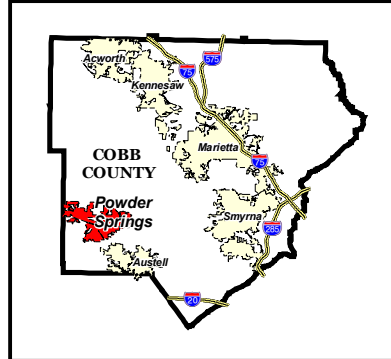


City of Powder Springs Comprehensive Plan - Transportation Element

Roadway Jurisdiction



General Location



Map 2

Legend

Roadway Jurisdiction (Defined by GDOT from GDOT RC File - 2004)

- State Routes
 - County Roads
 - City Streets
 - Ramp
 - Public Roads
 - - - No Data Available
- Other Layers**
- Railroads
 - City of Powder Springs Limits

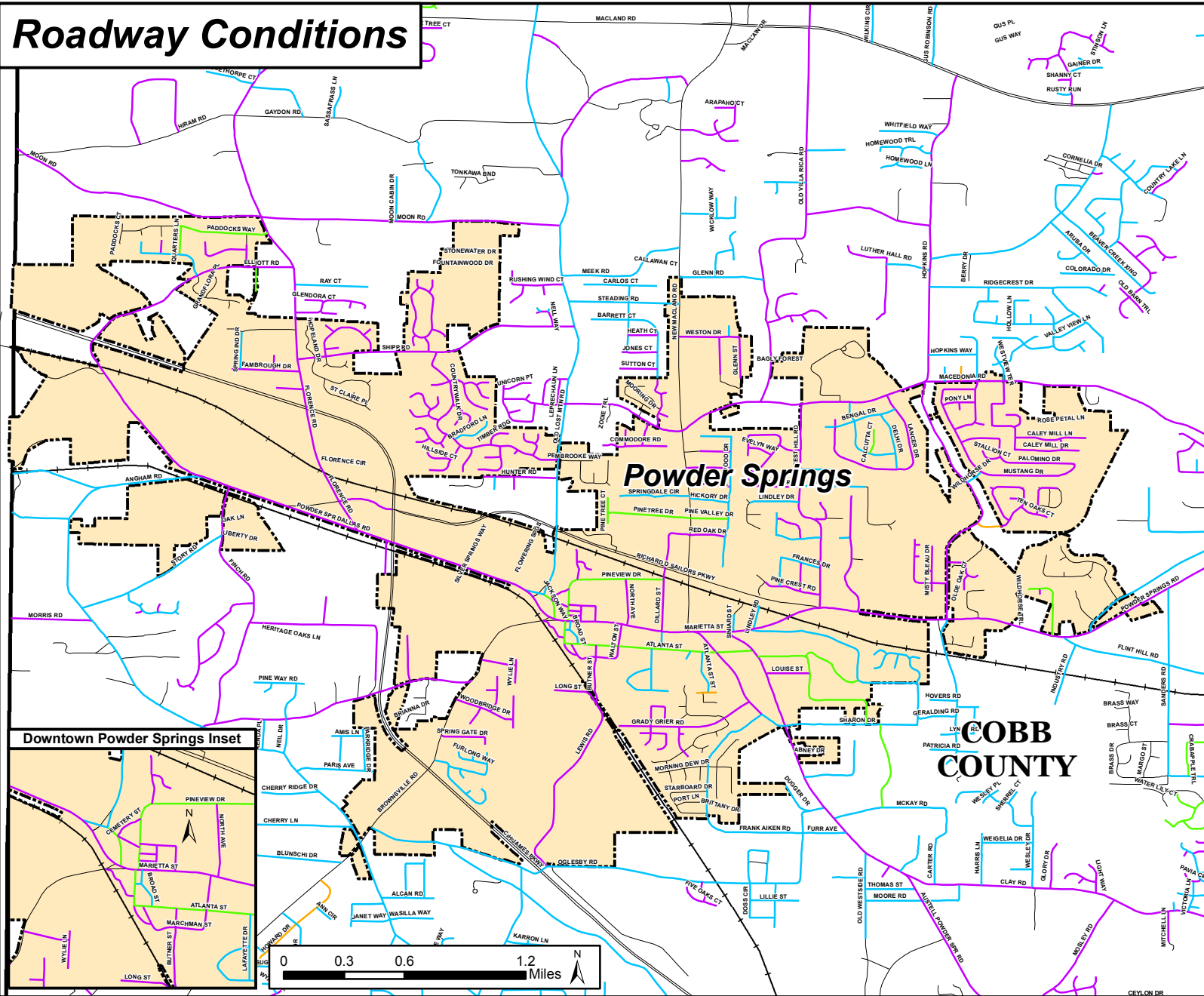
Source: GDOT RC File (2004), City of Powder Springs, ESRI, and DWA, Inc.

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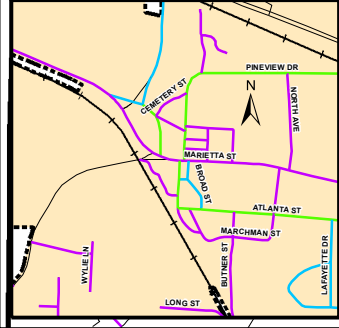


City of Powder Springs Comprehensive Plan - Transportation Element

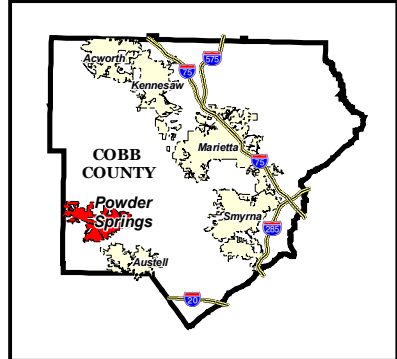
Roadway Conditions



Downtown Powder Springs Inset



General Location



Map 3

Legend

Roadway Conditions (Defined by GDOT from GDOT RC File - 2004 and PACES Rating)

- 81 - 99 (VERY GOOD)
- 65 - 80 (GOOD)
- 45 - 64 (FAIR)
- 28 - 44 (POOR)
- No Data Available

Other Layers

- Railroads
- City of Powder Springs Limits

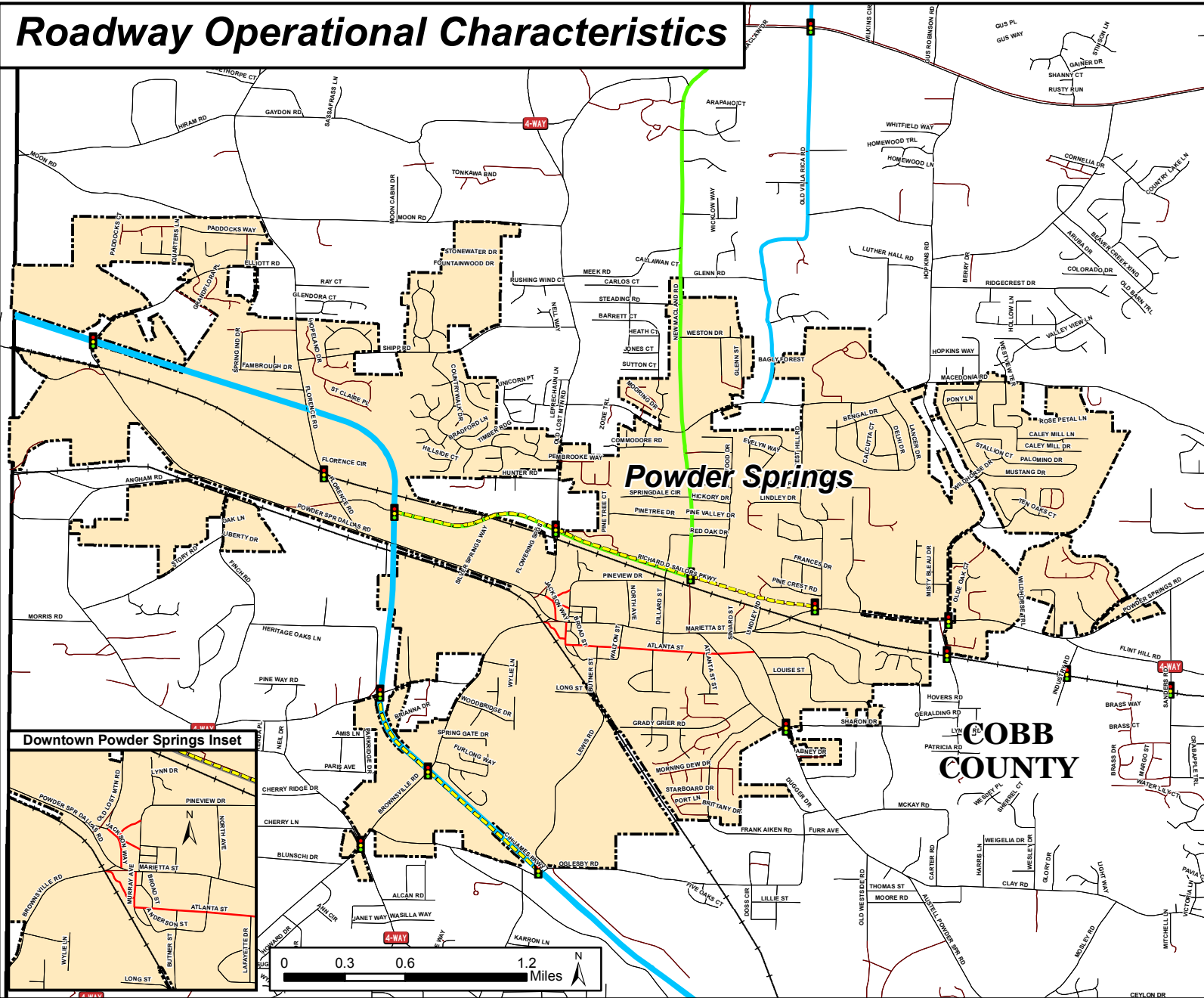
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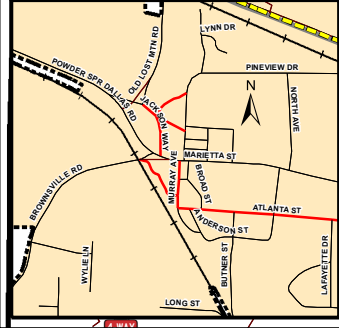


City of Powder Springs Comprehensive Plan - Transportation Element

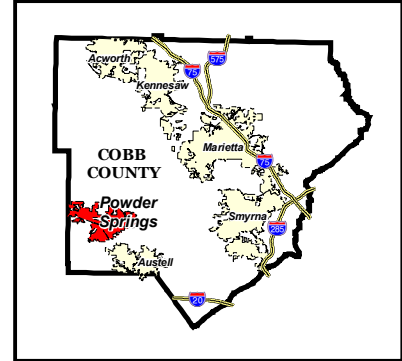
Roadway Operational Characteristics



Downtown Powder Springs Inset



General Location



Map 4

Legend

- Signals / ITS Facilities (Cobb DOT)**
 - Signalized Traffic Intersections
 - 4-Way Flash Signal
 - Fiber Optic Cable Locations
- Total Roadway Lanes (Defined by GDOT from GDOT RC File - 2004)**
 - 4 Lanes
 - 3 Lanes
 - 2 Lanes
 - 1 Lane
 - No Data Available
- Other Layers**
 - Railroads
 - City of Powder Springs Limits

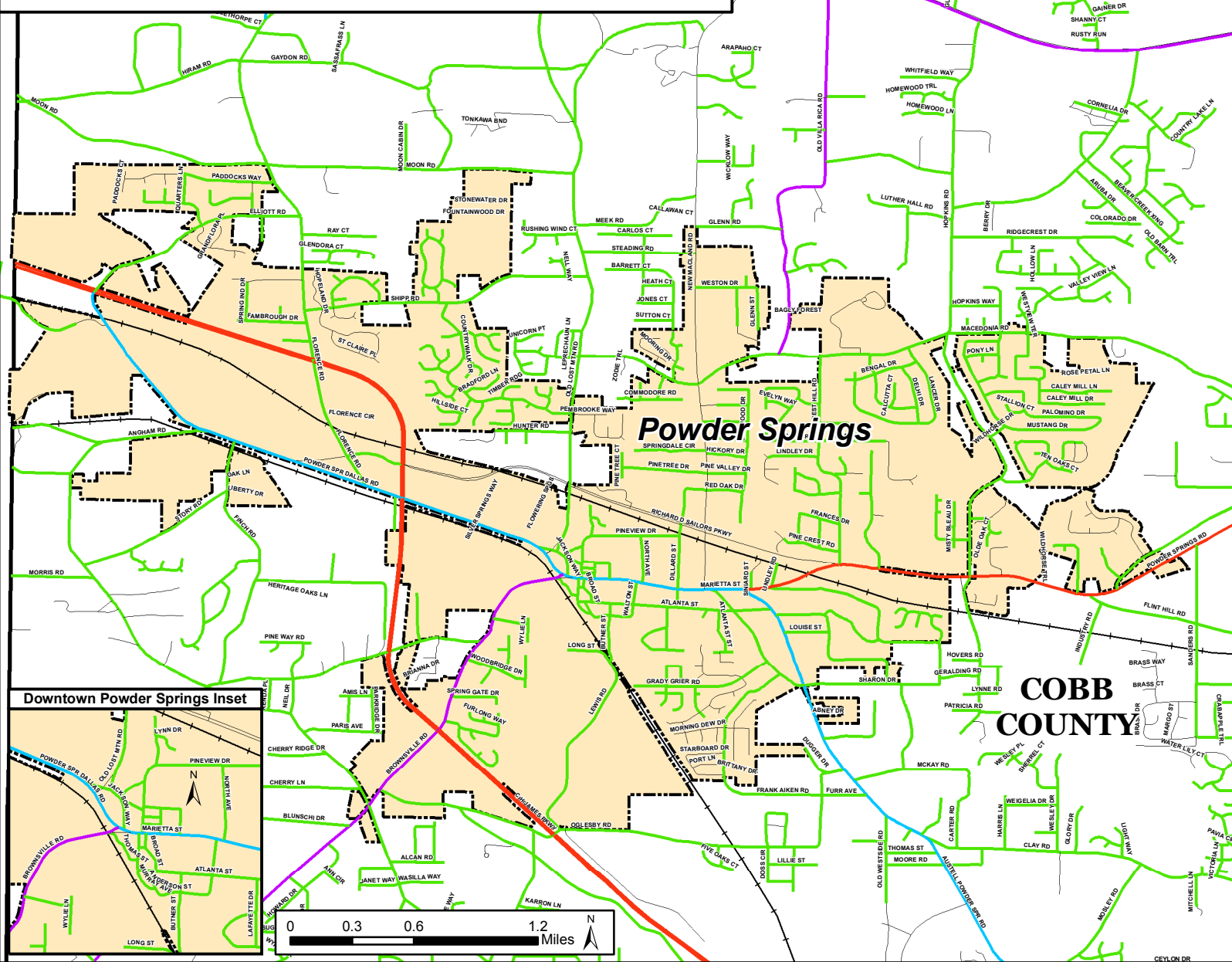
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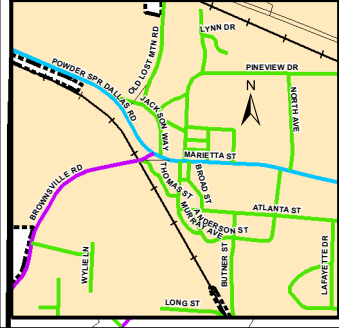


City of Powder Springs Comprehensive Plan - Transportation Element

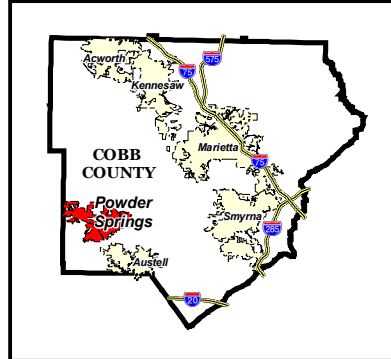
Annual Average Daily Traffic (AADT)



Downtown Powder Springs Inset



General Location



Map 5

Legend

Annual Average Daily Traffic (AADT) - (Defined by GDOT from GDOT RC File - 2004)

- 20,001 and Above
- 10,001 - 20,000
- 2,501 - 10,000
- 1,001 - 2,500
- 1,000 and Below

Other Layers

- Railroads
- City of Powder Springs Limits

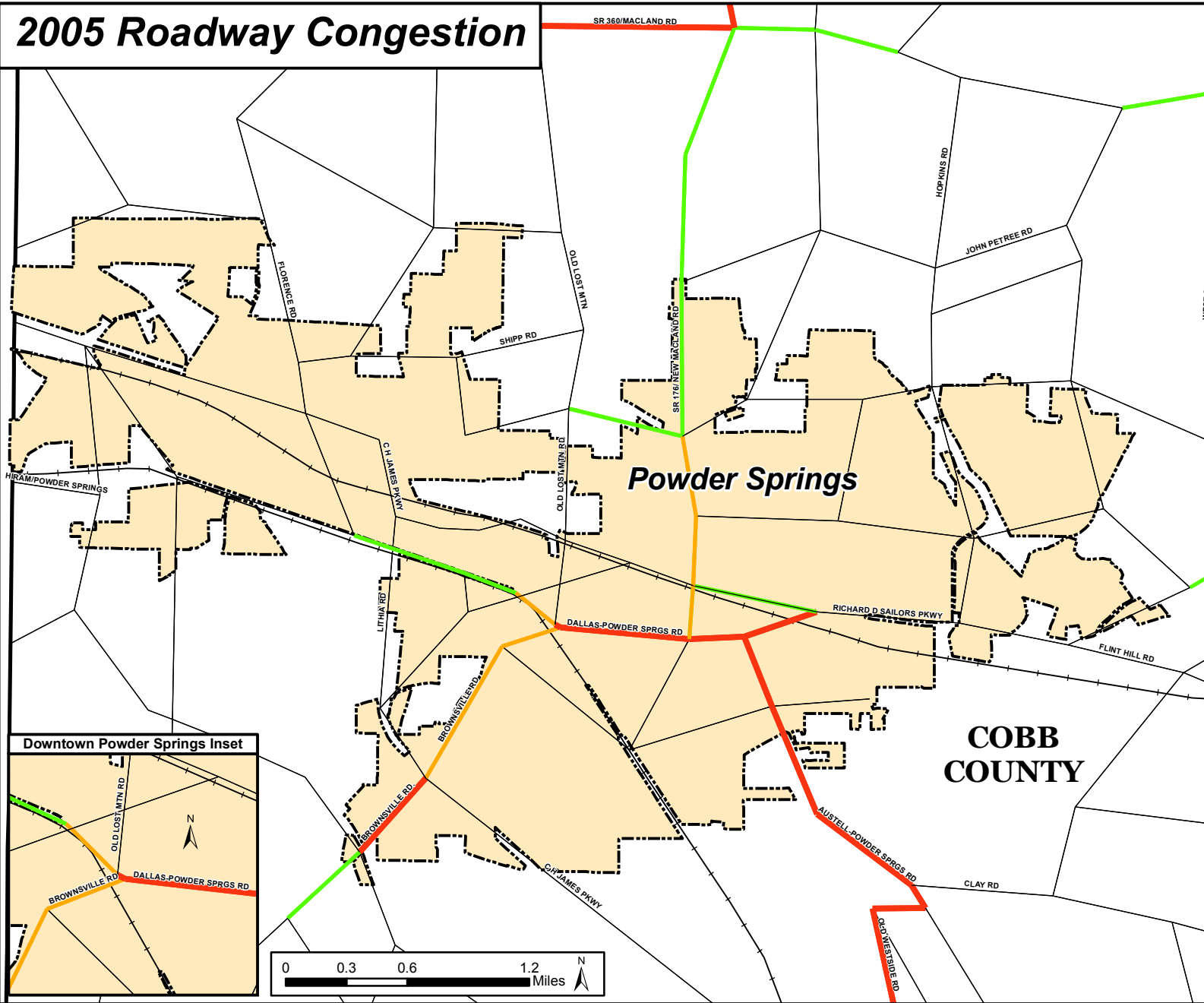
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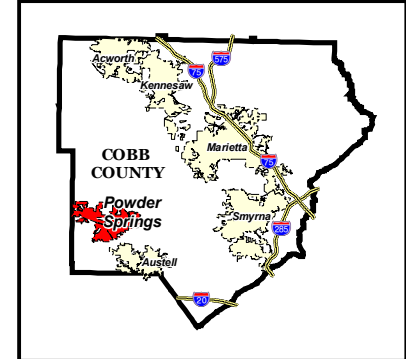


City of Powder Springs Comprehensive Plan - Transportation Element

2005 Roadway Congestion



General Location



Map 6

Legend

2005 Roadway Congestion (ARC 2005 Model)

- LOS F (V/C Ratio: > 1.0)
- LOS E (V/C Ratio: 0.851 - 1.0)
- LOS D (V/C Ratio 0.701 - 0.85)
- LOS A to C: (V/C Ratio <= 0.70)

Other Layers

- Railroads
- City of Powder Springs Limits

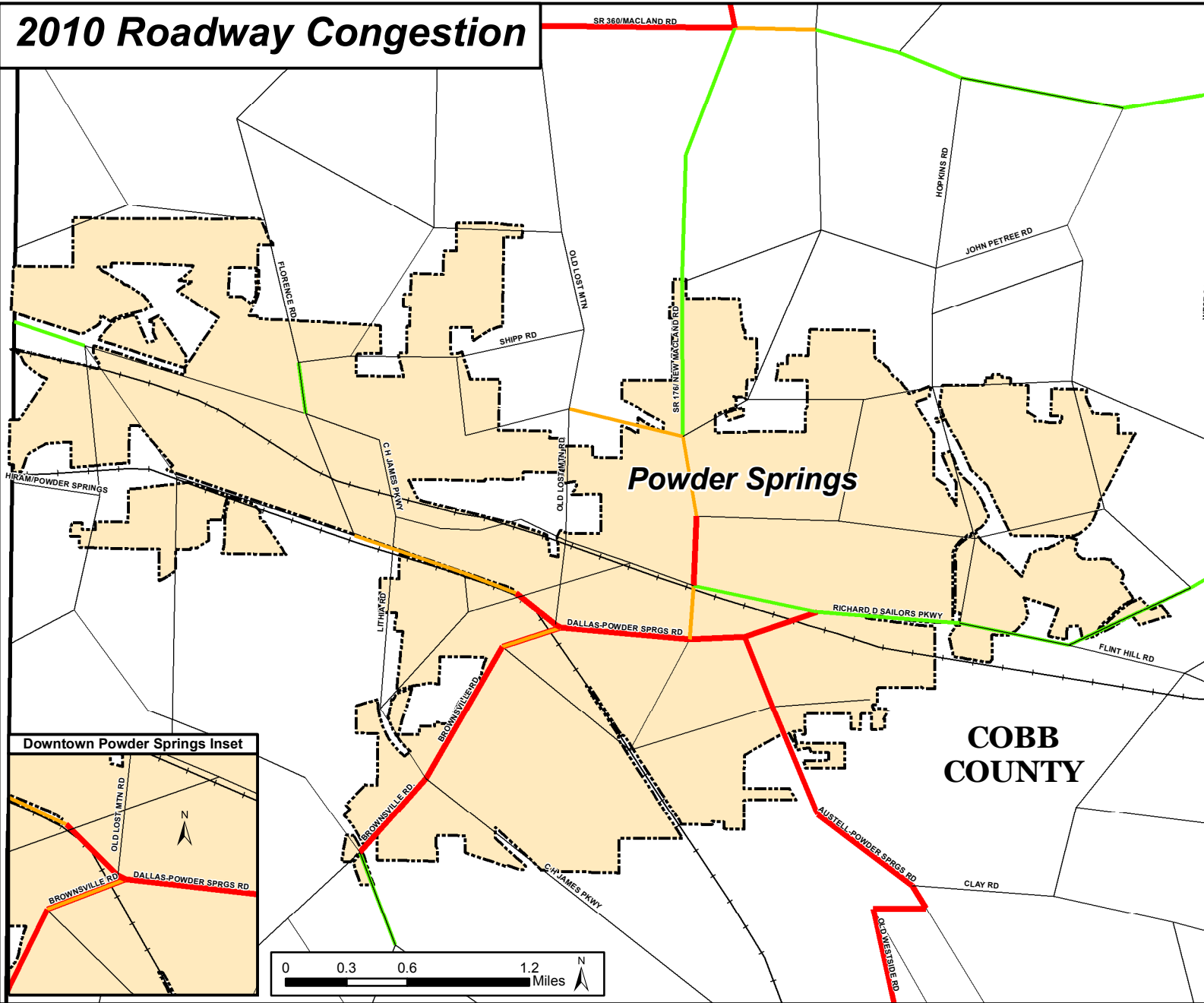
Source: ARC, City of Powder Springs, ESRI, and DWA, Inc.

This map is intended for planning purposes only.

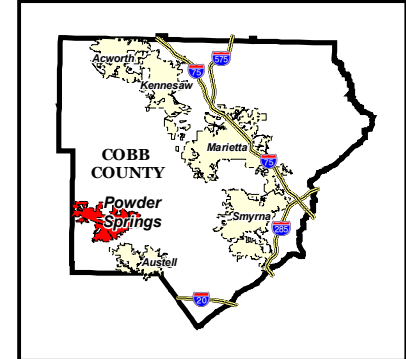


City of Powder Springs Comprehensive Plan - Transportation Element

2010 Roadway Congestion



General Location



Map 7

Legend

2005 Roadway Congestion (ARC 2010 Model)

- LOS F (V/C Ratio: > 1.0)
- LOS E (V/C Ratio: 0.851 - 1.0)
- LOS D (V/C Ratio 0.701 - 0.85)
- LOS A to C: (V/C Ratio <= 0.70)

Other Layers

- Railroads
- City of Powder Springs Limits

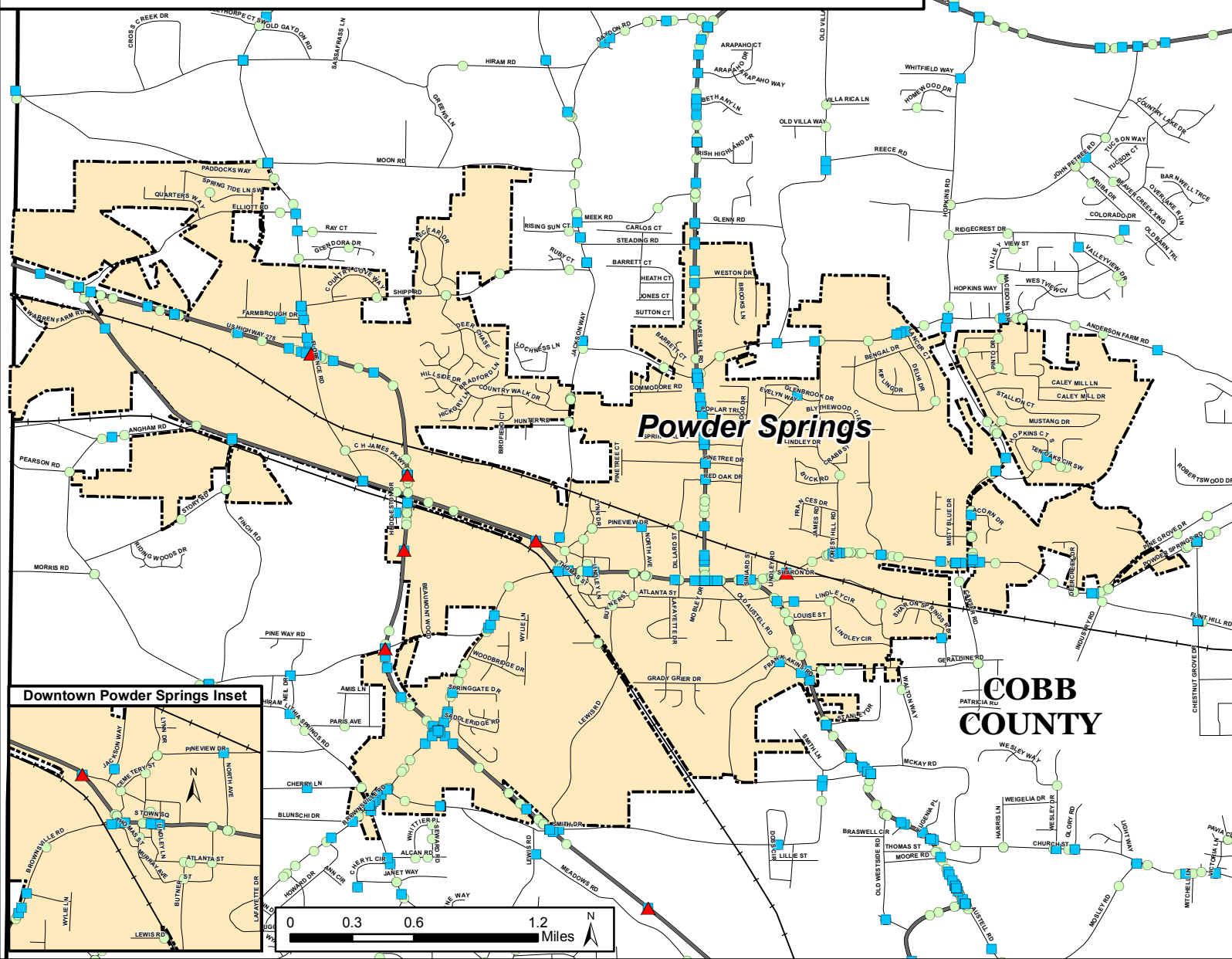
Source: ARC, City of Powder Springs, ESRI, and DWA, Inc.

This map is intended for planning purposes only.

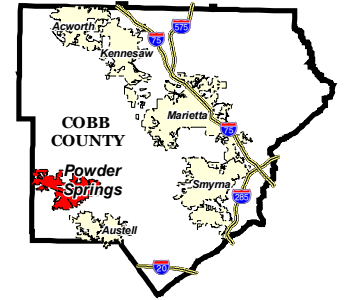


City of Powder Springs Comprehensive Plan - Transportation Element

Crashes Involving Vehicle-to-Vehicle (2001-2004)



General Location



Map 8

Legend

Crashes Involving Vehicle-to-Vehicle (GDOT Crash Database 2001-2004)

- ▲ Fatality Crash Location
- Injury Crash Location
- Non-Injury / Non-Fatality Crash Location

Road Network

- State Route / U.S. Highway
- Other Roads

Other Layers

- Railroads
- City of Powder Springs Limits

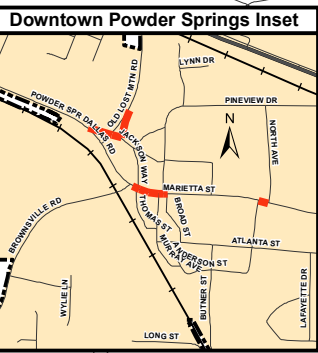
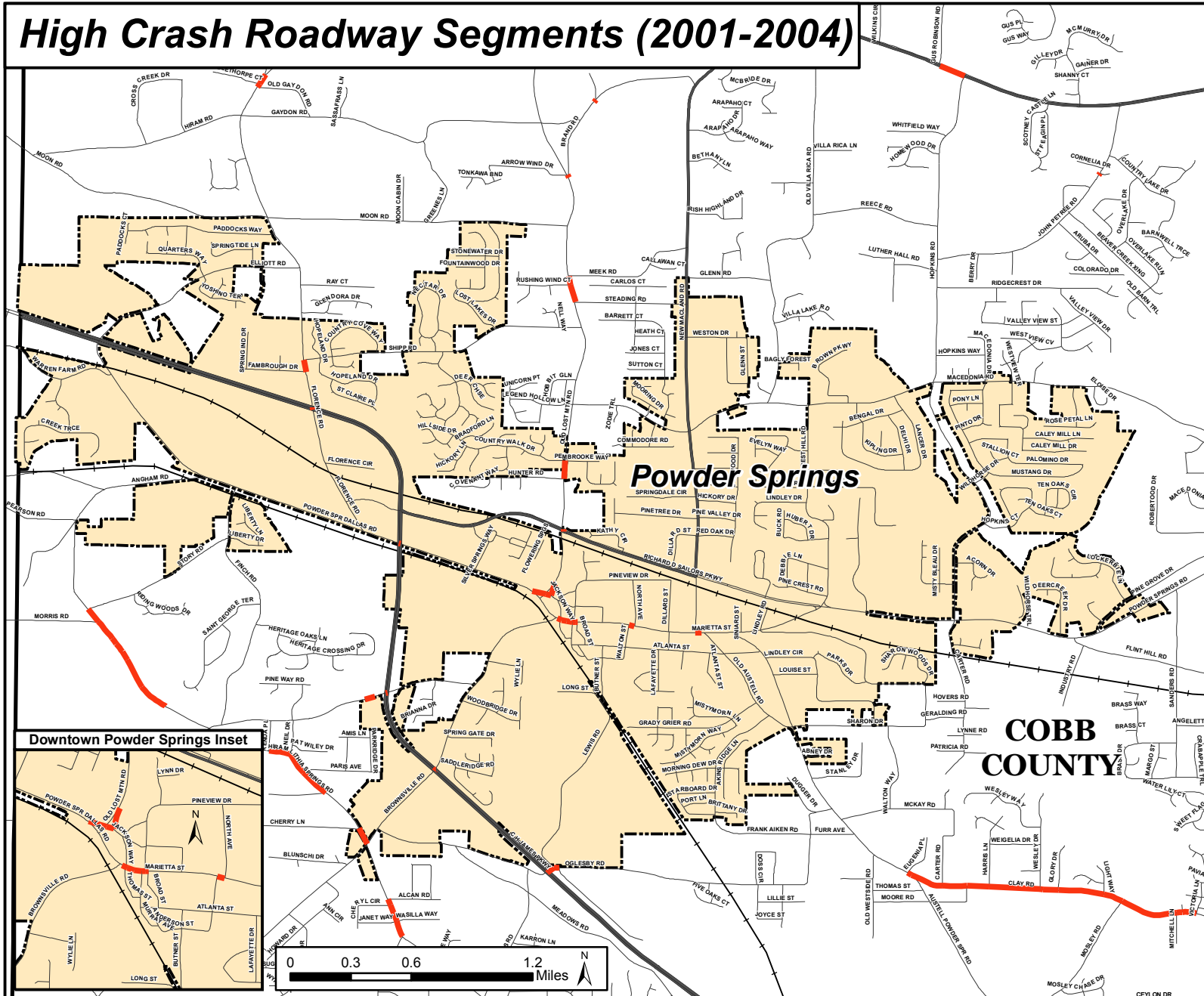
Source: GDOT Crash Database (2001-2004), GDOT RC File (2004), City of Powder Springs, ESRI, and DWA, Inc.

This map is intended for planning purposes only.

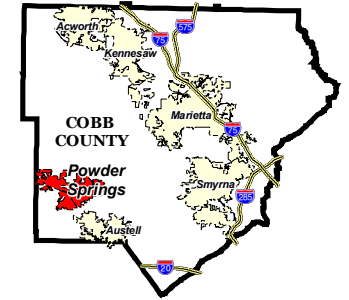


City of Powder Springs Comprehensive Plan - Transportation Element

High Crash Roadway Segments (2001-2004)



General Location



Map 9

Legend

GDOT High Crash Roadway Segments (2001-2004)*

High Crash Roadway Segments (2001-2004)

Road Network

State Route / U.S. Highway

Other Roads

Other Layers

Railroads

City of Powder Springs Limits

*Note: High Crash Roadway Segments (2001-2004) are calculated based upon the entire Cobb County Road Network in which the crash rate by functional classification exceeded the average.

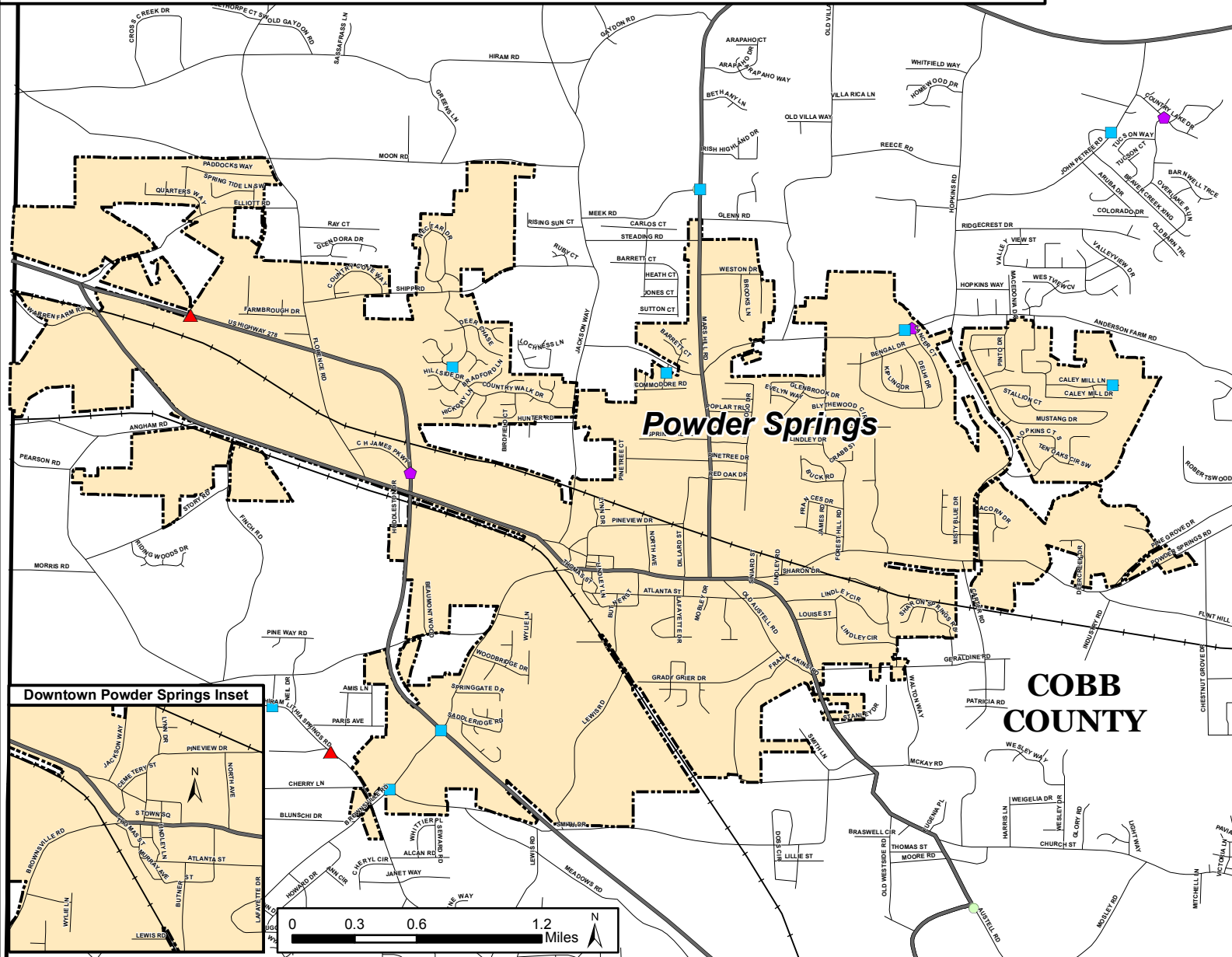
Source: GDOT Crash Database (2001-2004), GDOT RC File (2004), City of Powder Springs, ESRI, and DWA, Inc.

This map is intended for planning purposes only.

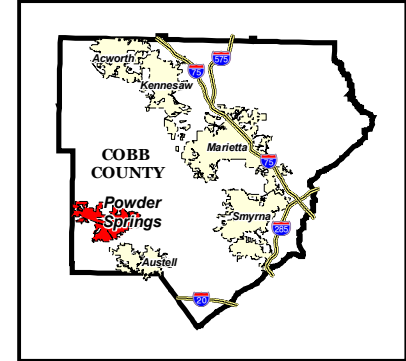


City of Powder Springs Comprehensive Plan - Transportation Element

Crashes Involving Bicycles/Pedestrians (2001-2004)



General Location



Map 10

Legend

Crashes Involving Pedestrians Only (GDOT Crash Database 2001-2004)

- ▲ Pedestrian Fatality Crash Location
- Pedestrian Injury Crash Location

Crashes Involving Bicycles Only (GDOT Crash Database 2001-2004)*

- ◆ Bicycle Injury Crash Location
- Bicycle Non-Injury / Non-Fatality Crash Location

Road Network

- State Route / U.S. Highway
- Other Roads

Other Layers

- Railroads
- ▭ City of Powder Springs Limits

*Note: There are no bicycle fatality crash locations in the immediate Powder Springs area from 2001-2004. There are no pedestrian crashes that did not at least result in an injury/fatality from 2001-2004.

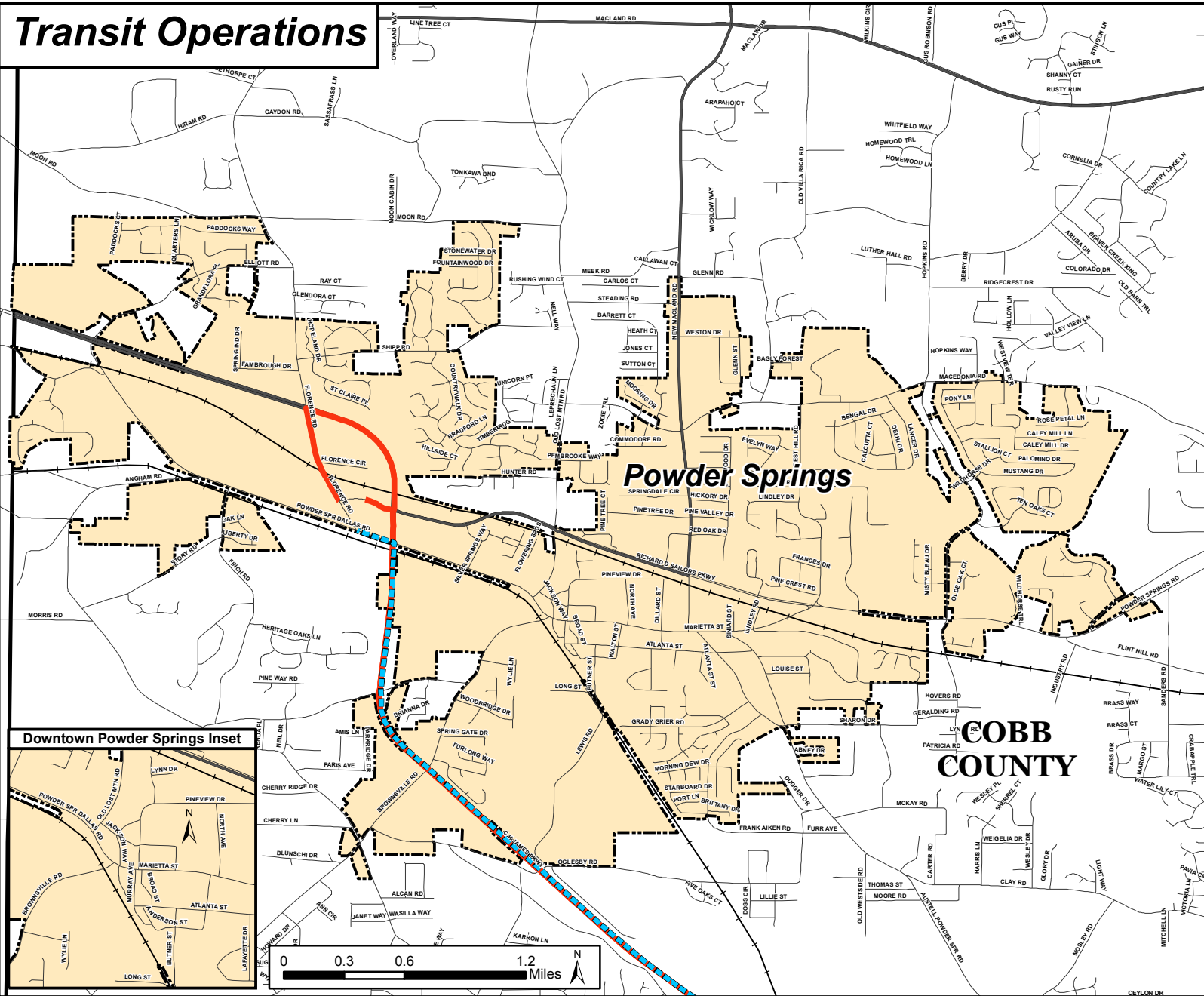
Source: GDOT Crash Database (2001-2004), GDOT RC File (2004), City of Powder Springs, ESRI, and DWA, Inc.

This map is intended for planning purposes only.

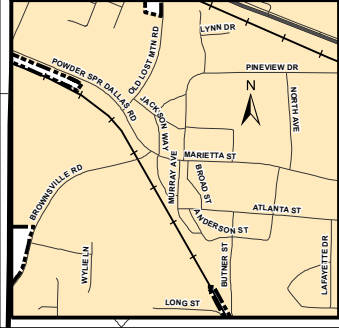


City of Powder Springs Comprehensive Plan - Transportation Element

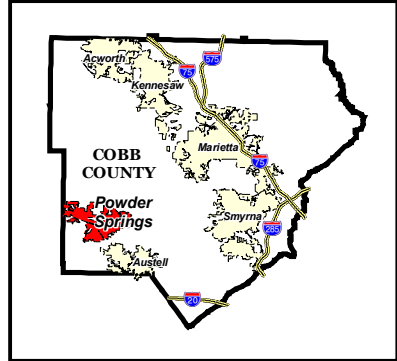
Transit Operations



Downtown Powder Springs Inset



General Location



Map 11

Legend

Transit Operations*

- CCT Bus Route
- GRTA XPress Bus Route

Road Network

- State Route / U.S. Highway
- Other Roads

Other Layers

- City of Powder Springs Limits

*Note: According to Cobb DOT, there are no CCT bus stop locations or Park-N-Ride facilities in the immediate Powder Springs area.

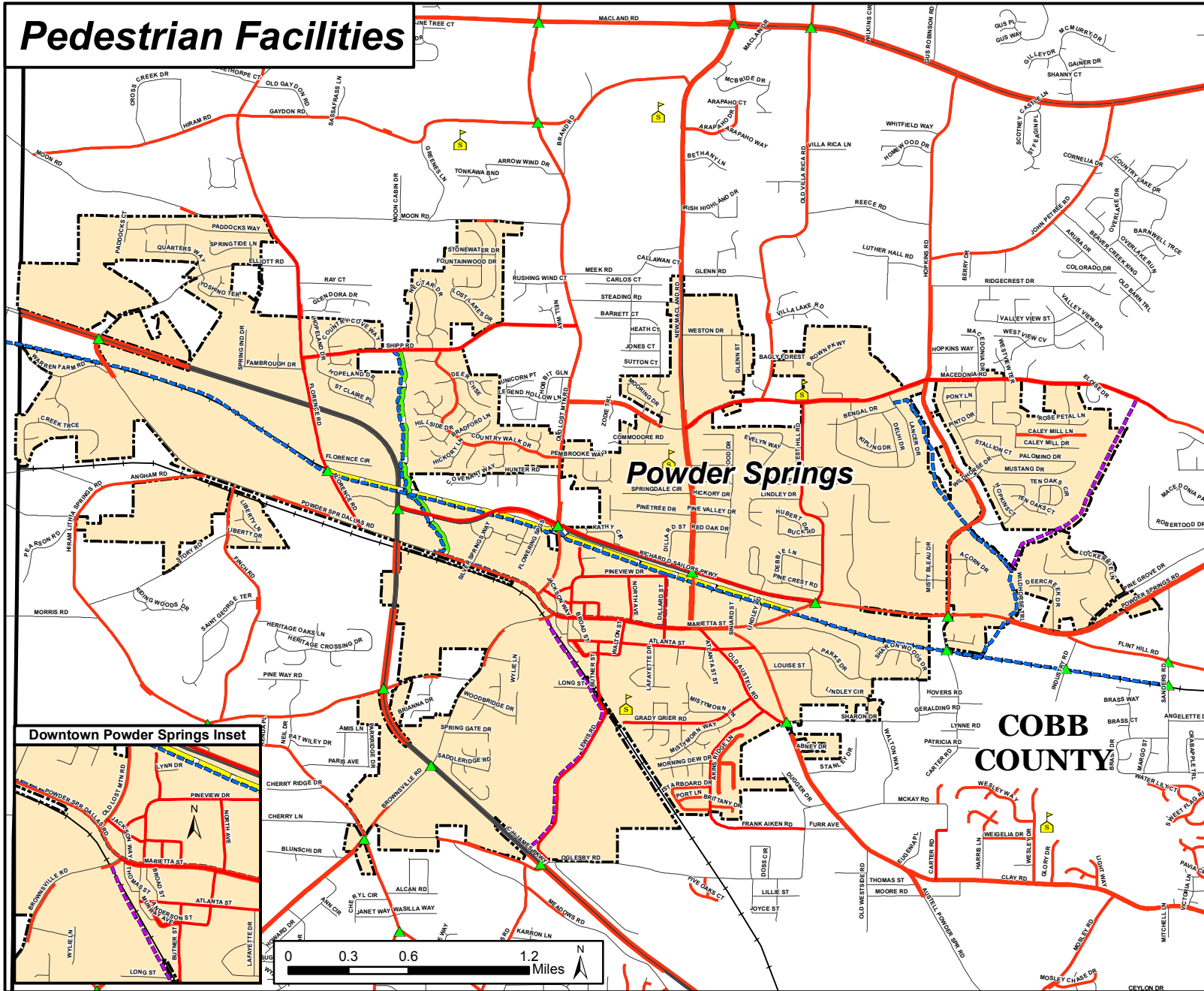
Source: City of Powder Springs, Cobb DOT, ESRI, and DNA, Inc.

This map is intended for planning purposes only.

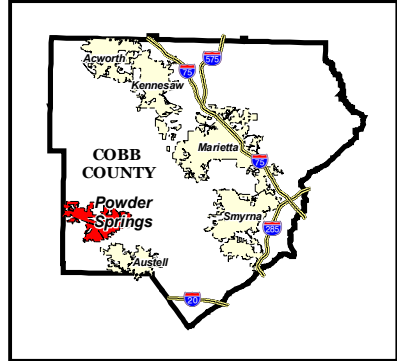


City of Powder Springs Comprehensive Plan - Transportation Element

Pedestrian Facilities



General Location



Map 12

Legend

Pedestrian Facilities

- Pedestrian Crosswalks (Signalized Intersection)
- Schools
- Existing Sidewalks
- Existing Trails
- Planned Trails
- Existing Greenways
- Planned Greenways

Road Network

- State Route / U.S. Highway
- Other Roads

Other Layers

- Railroads
- City of Powder Springs Limits

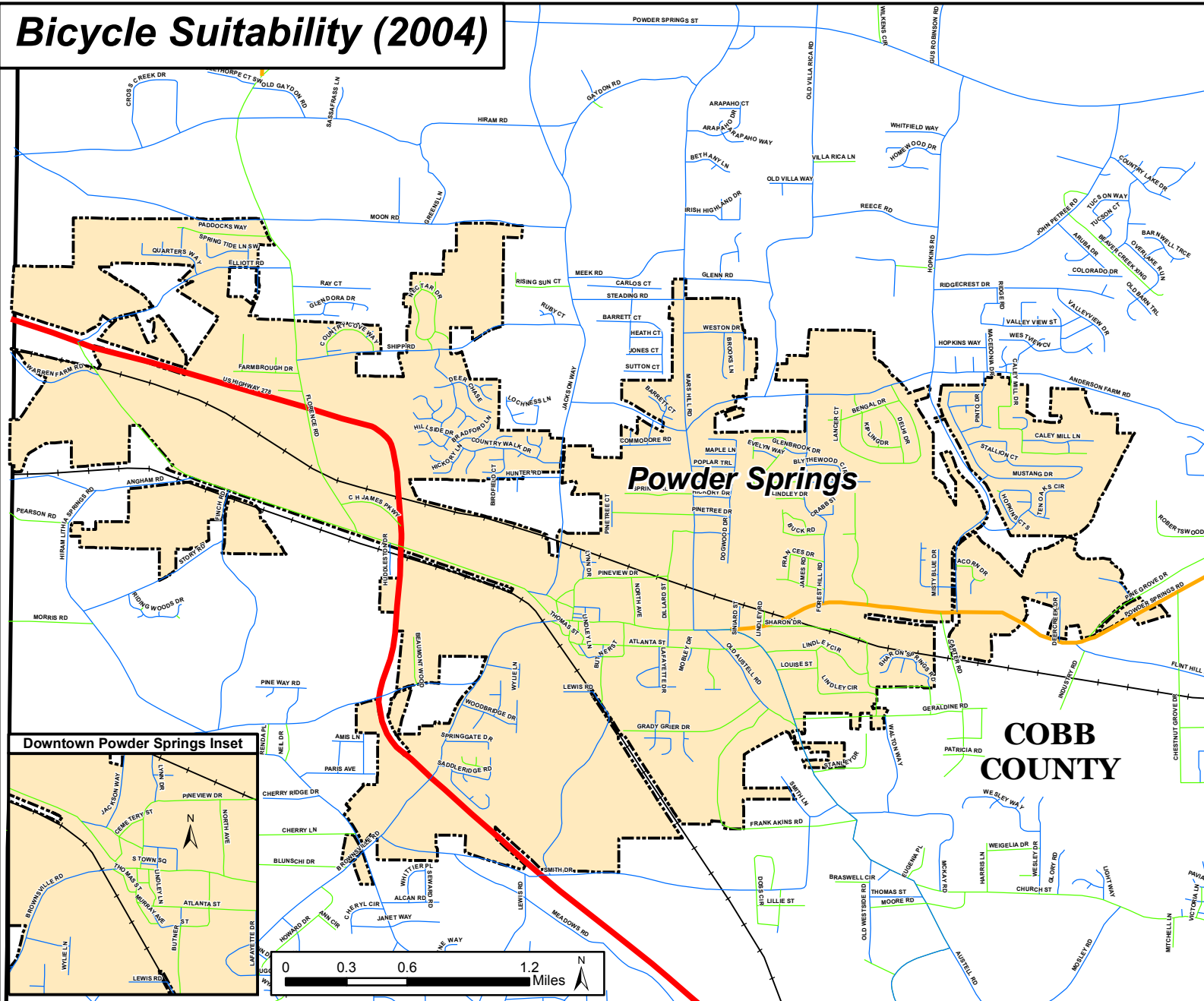
Source: Cobb DOT, City of Powder Springs, ESRI, GeoStats, and DWA, Inc.

This map is intended for planning purposes only.

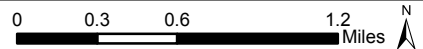
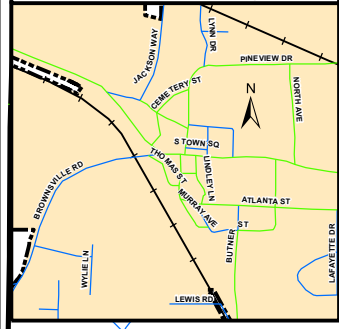


City of Powder Springs Comprehensive Plan - Transportation Element

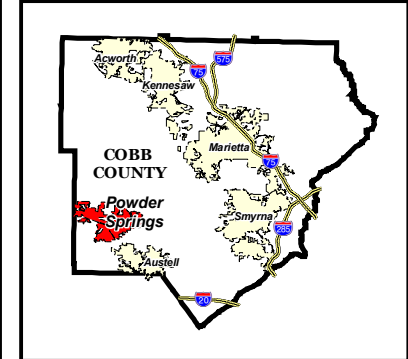
Bicycle Suitability (2004)



Downtown Powder Springs Inset



General Location



Map 13

Legend

Bicycle Suitability (2004)*

- 3.0 - 4.0 (Best Conditions For Bicycling)
- 2.0 - 2.9 (Medium Conditions For Bicycling)
- 1.1 - 1.9 (Difficult Conditions For Bicycling)
- 0.0 - 1.0 (Very Difficult Conditions For Bicycling)

Other Layers

- Railroads
- City of Powder Springs Limits

*Note: Bicycle Suitability scores are shown for only those roads that calculate a score.

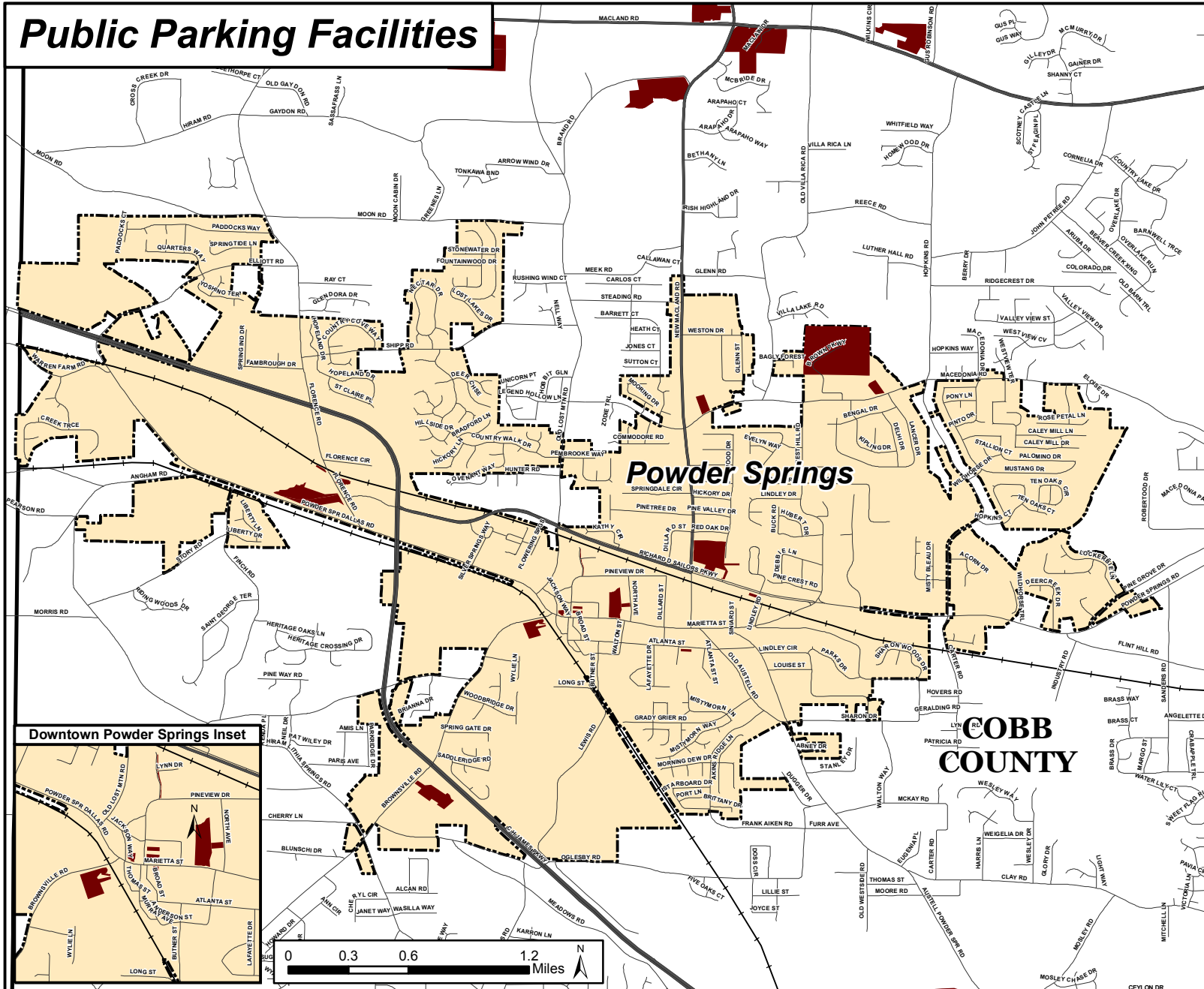
Source: ARC, GDOT RC File (2004), City of Powder Springs, ESRI, and DWA, Inc.

This map is intended for planning purposes only.

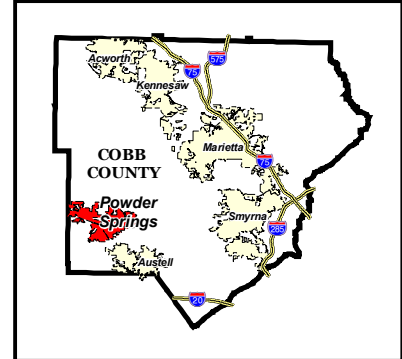


City of Powder Springs Comprehensive Plan - Transportation Element

Public Parking Facilities



General Location



Map 14

Legend

Public Parking Facilities

Public Parking

Road Network

State Route / U.S. Highway

Other Roads

Other Layers

Railroads

City of Powder Springs Limits

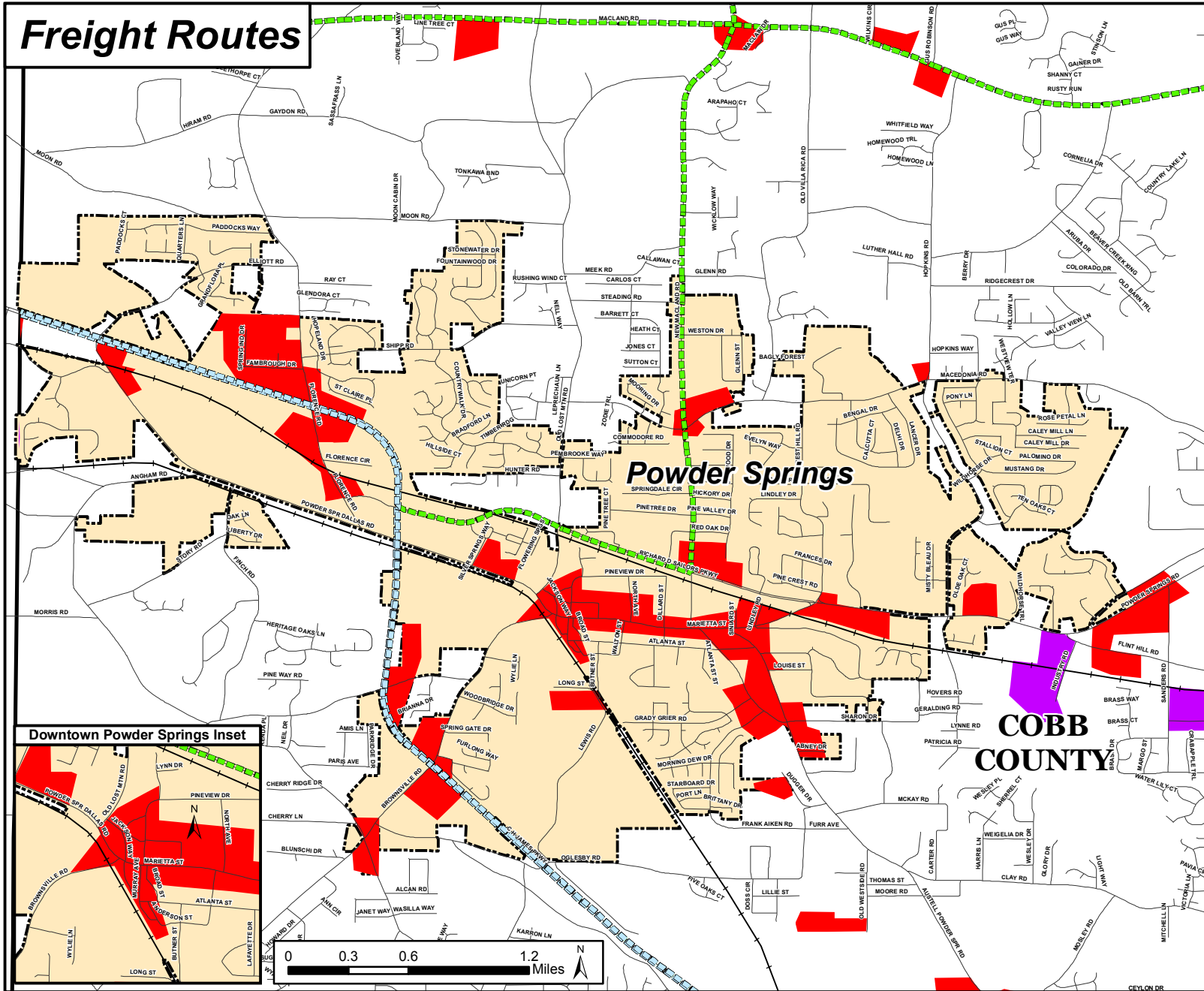
Source: City of Powder Springs, Cobb DOT, ESRI, GeoStats, and DWA, Inc.

This map is intended for planning purposes only.

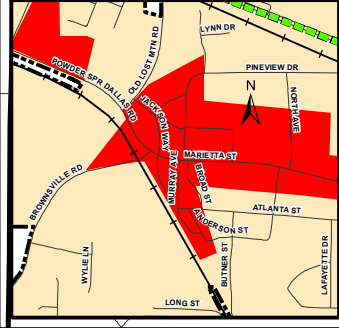


City of Powder Springs Comprehensive Plan - Transportation Element

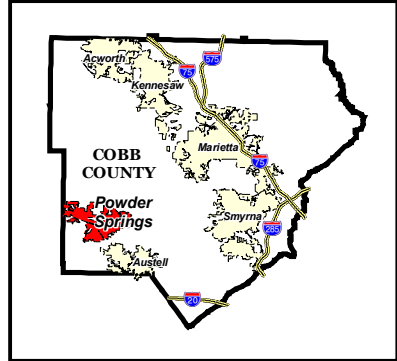
Freight Routes



Downtown Powder Springs Inset



General Location



Map 15

Legend

Truck Routes Designation (GDOT RC File - 2004)

- STAA Routes
- Federally Designated National Network Truck Routes

Commercial / Industrial Locations

- Commercial
- Industrial

Railroad Facilities

- Railroads

Road Network

- State Route / U.S. Highway
- Other Roads

Other Layers

- City of Powder Springs Limits

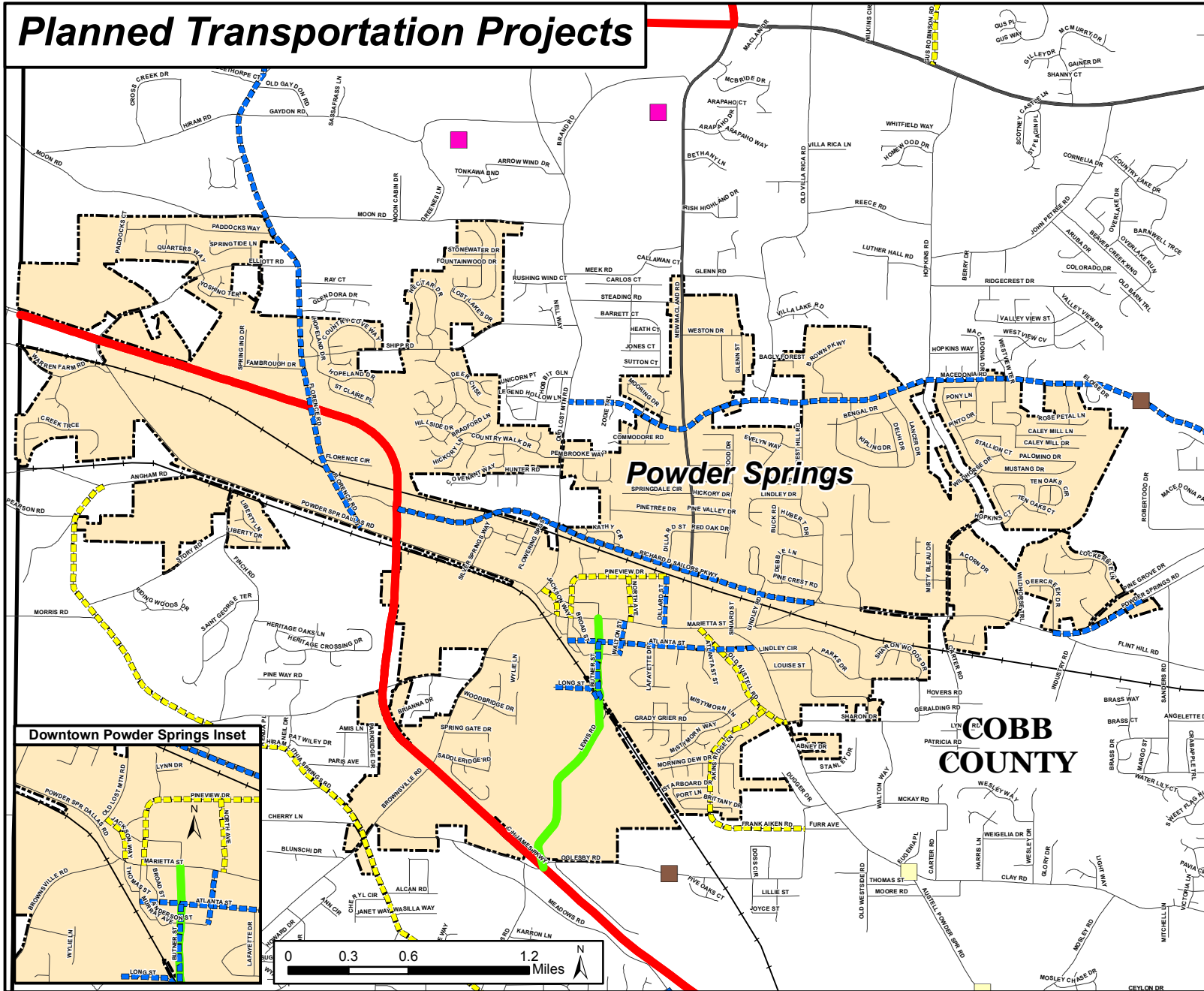
Source: ARC, Cobb DOT, GDOT RC File (2004), City of Powder Springs, ESRI, and DWA, Inc.

This map is intended for planning purposes only.



City of Powder Springs Comprehensive Plan - Transportation Element

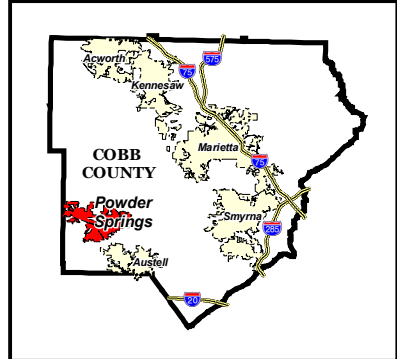
Planned Transportation Projects



Downtown Powder Springs Inset



General Location



Map 16

Legend

Cobb County SPLOST Projects

- Bridge Upgrade / Capacity
- Intersection Improvements
- School Improvements
- Shoulder Work Projects
- Sidewalk Projects

ARC 2030 RTP Projects

- Roadway Operations
- Roadway Capacity (Including Interchanges and Studies)

Road Network

- State Route / U.S. Highway
- Other Roads

Other Layers

- City of Powder Springs Limits

Source: ARC, Cobb DOT, City of Powder Springs, ESRI, and DWA, Inc.

This map is intended for planning purposes only.