

REGIONAL REVIEW NOTIFICATION

Atlanta Regional Commission • 40 Courtland Street NE, Atlanta, Georgia 30303 • ph: 404.463.3100 • fax:404.463.3105 • www.atlantaregional.com

DATE: 6/29/2005 **ARC REVIEW CODE**: P506291

TO: Mayor Arthur Letchas

ATTN TO: Diana Wheeler, Director of Community Development

FROM: Charles Krautler, Director

NOTE: This is digital signature. Original on file.

The Atlanta Regional Commission (ARC) has received the following proposal and is initiating a regional review to seek comments from potentially impacted jurisdictions and agencies. The ARC requests your comments regarding related to the proposal not addressed by the Commission's regional plans and policies.

Name of Proposal: City of Alpharetta Comprehensive Plan 2025

Review Type: Local Comprehensive Plan

Description: Draft comprehensive plan for the City of Alpharetta

Submitting Local Government: City of Alpharetta

Action Under Consideration: Approval

Date Opened: 6/29/2005

Deadline for Comments: 7/13/2005

Earliest the Regional Review can be Completed: 8/29/2005

THE FOLLOWING LOCAL GOVERNMENTS AND AGENCIES ARE RECEIVING NOTICE OF THIS REVIEW:

ARC LAND USE PLANNING
ARC DATA RESEARCH
GEORGIA DEPARTMENT OF NATURAL RESOURCES
FULTON COUNTY
CITY OF ATLANTA
COBB COUNTY
GEORGIA CONSERVANCY

ARC Transportation Planning
ARC Aging Division
GEORGIA DEPARTMENT OF TRANSPORTATION
FULTON COUNTY SCHOOLS
CHEROKEE COUNTY
DEKALB COUNTY

ARC ENVIRONMENTAL PLANNING
GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS
GEORGIA REGIONAL TRANSPORTATION AUTHORITY
CITY OF ROSWELL
GWINNETT COUNTY
FORSYTH COUNTY

Attached is information concerning this review.

If you have any questions regarding this review, Please call Mike Alexander, Review Coordinator, at (404) 463-3302. If the ARC staff does not receive comments from you by 7/13/2005, we will assume that your agency has no additional comments and we will close the review. Comments by email are strongly encouraged.

The ARC review website is located at: http://www.atlantaregional.com/qualitygrowth/reviews.html .



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NOTICE OF LOCAL PLAN SUBMITTAL AND HEARING/COMMENT OPPORTUNITY

Submitting Local Government:	City of Alpharetta	Date Received:	6/29/2005
Local Contact:	Diana Wheeler, Director of Community Development City of Alpharetta	Public Hearing Date and Time:	7/13/2005 9:00am
Phone:	678-297-6003	E-Mail:	dwheeler@alpharetta.ga.us
Fax:	678-297-6001	Website:	www.alpharetta.ga.us
Street	Two South Main Street	City State, Zip:	Alpharetta, Georgia30004
	Department of Commu		Review Required
Review Title:	City of Alpharetta Comprehe	nsive Plan 202	ר ביינו לי
Description			
Description	Draft comprehensive plan for Document can be viewed on	r the City of Al the ARC websi com/qualitygr	pharetta ite at: owth/compplanreviews.html
The submitt	Document can be viewed on http://www.atlantaregional.click on the Regional Reviewed documents are available	r the City of Al the ARC websi com/qualitygr Notice for the for review a	lpharetta ite at: cowth/compplanreviews.html c City of Alpharetta.
The submitt	Document can be viewed on http://www.atlantaregional.click on the Regional Reviewed documents are available Regional Development Center	r the City of Al the ARC websi com/qualitygr Notice for the for review a	lpharetta ite at: cowth/compplanreviews.html c City of Alpharetta.
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Reviewing R Atlanta Region 40 Courtland	Document can be viewed on http://www.atlantaregional.click on the Regional Reviewed documents are available Regional Development Center	r the City of Al the ARC websi com/qualitygr Notice for the for review a	lpharetta ite at: cowth/compplanreviews.html c City of Alpharetta.
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MAYOR

Arthur Letchas

COUNCIL

D.C. Aiken Douglas J. DeRito Debbie Gibson R.J. Kurey Jim Matoney Jim Paine

CITY ADMINISTRATOR

Robert Regus

City Hall Two South Main Street Alpharetta, Georgia 30004

678 / 297-6000 678 / 297-6001 Fax

www.alpharetta.ga.us

24-Hour Information

678 / 297-6015





TO WHOM IT MAY CONCERN:

This is to certify that the attached is a true and correct copy of "A Resolution Of The City Council Of Alpharetta For The Transmittal Of The Comprehensive Land Use Plan 2025 To The Atlanta Regional Commission" adopted by city council at the meeting on June 20, 2005.

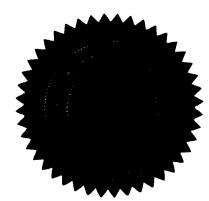
Certified this 22nd day of June, 2005.

Sue Rainwater

City Clerk

City of Alpharetta, Georgia

6-22-2005



Alpharetta

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF ALPHARETTA FOR THE TRANSMITTAL OF THE COMPREHENSIVE LAND USE PLAN 2025 TO THE ATLANTA REGIONAL COMMISSION

WHEREAS, the Georgia Planning Act encourages local governments to keep their comprehensive plans current in order for the plans to be used for policy guidance and as management tools for daily decisions, and

WHEREAS, the update of the Comprehensive Land Use Plan 2025 was prepared in accordance with the Minimum Planning Standards and Procedures for Local Comprehensive Planning established by the Georgia Planning Act of 1989, and a Public Hearing was held on June 20, 2005 at 7:30 pm at City Hall,

And WHEREAS, such updates are required to extend status to the City of Alpharetta as a Qualified Local Government,

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Alpharetta hereby transmits the Comprehensive Land Use Plan 2025 to the Atlanta Regional Commission for their review and comments as per the Georgia Planning Act of 1989.

SO RESOLVED this day of

CITY OF Alpharetta

By:

Arthur Letchas, Mayor

COUNCIL MEMBERS

Attest: City Clerk

1. Introduction

The Alpharetta Comprehensive Plan is a long-range plan for guiding development in the city for the next twenty years. The overall goal of the plan is to accommodate development in a timely, orderly, and efficient arrangement of land uses and public facilities and services that meet the needs of the present and future residents and businesses of Alpharetta. In addition, the plan encompasses neighboring areas outside of the city limits that may be considered for annexation.

The City has been on the forefront of planning for over two decades. The original Comprehensive Plan for the city was revised in 1973, and subsequently given a major update in 1989 following a period of extraordinary growth in land area and development activity. That update was supplemented with an Addendum in 1992 that brought the 1990 census data into the plan and included items then required to meet Georgia's new Comprehensive Plan guidelines. Another major update was completed in 1995 and in 2000 extending the planning horizon to 2020, consolidating various portions of past plan publications and separate functional plans into a single text, and adding a number of items needed to meet the State guidelines.

This update has been undertaken for several reasons. During the last 6 years the city has once again experienced explosive growth, and therefore population and employment projections are greater than projected in the 2000 plan.

This plan update has been prepared within the context of an overall vision for the city that emerged during plan development. This vision guides the goals and strategies created under each of the plan elements, as well as overall implementation of the plan's recommendations. This Comprehensive Plan is the City's vision and intent to provide guidance for the city's future growth. Nothing contained in this Plan is meant to provide any vested property right or any other right. The vision is simply stated as:

Our Vision is to advance Alpharetta as a Signature City by ...

- Offering the highest quality of environment for our residents and businesses,
- A strong sense of community including a safe and secure environment, and
- Providing a business climate that attracts the top echelon companies.

■ The Planning Process

Georgia's Minimum Planning Standards and Procedures require that all local government Comprehensive Plans follow a specific planning process in their development. This process consists of the following three steps, as described by the Georgia Department of Community Affairs. The results of these steps are interwoven into the plan elements that follow.

Step 1: Inventory of Existing Conditions

In order to plan for the future, a community must know about its existing conditions. This step answers the questions "what do we have as a community?" and "What is good or bad about our community?" Once completed, this step provides a picture of the existing conditions within a community.

Step 2: Assessment of Current and Future Needs

Based upon the inventory and assessment, existing community needs are identified and goals for future growth and development are prepared. These goals provide guidance for the community and the framework from which detailed policies and recommendations are developed. This step of the planning process answers the question "where do we want to go?"

Step 3: Community Goals and Implementation Program

This step combines all of the plan's recommendations and describes how they will be implemented. This step answers the question "How are we going to get there?" The Minimum Planning Standards and Procedures also require that a Short-Term Work Program be prepared as part of the Implementation Strategy. The Short-Term Work Program is a listing of specific actions that a local government anticipates taking over the next five years to implement its plan. The Implementation Strategy and its Short-Term Work Program is to ensure that the plan will become a working tool which will be used to guide decision-making rather than being just another unused report on the shelf.

■ Plan Elements

The basic planning process is applied to each of the planning elements required in the State's Minimum Planning Standards and Procedures. The following briefly describes the elements of Alpharetta's Comprehensive Plan—2025.

Population

This element provides the foundation for the plan. In order to plan for the future, the city must have a general idea of approximately how many people to plan for. The Minimum Planning Standards and Procedures require that all local plans contain an analysis of historical population, estimated population and projected population. Only Step 1, Inventory and Assessment, of the planning process is applied to the Population element.

Economic Development

This element provides an inventory and assessment of the city's economic base and its labor force. An analysis of the past trends of a the city's economic base and its labor force, as well as an analysis of regional comparisons in these areas, will provide insight into the city's economic health. An understanding of the city's economy is necessary in order to develop goals and strategies for the city's future economic development.

Natural and Historic Resources

This element provides an inventory and assessment of the city's natural features (topography, wetlands, prime agricultural and forest land, plant and animal habitats, etc.) and historic resources (historic homes,

landmark buildings, etc.). Goals, objectives, and polices are developed to address the impact that future population growth and its related development could have on these resources, as well as what role they could play in economic development.

Community Facilities

This element provides an inventory and assessment of the various services that are provided by the City, Fulton County or others. Existing needs are identified. The impact of future population growth on public services such as police protection, water and sewer service, schools, and garbage disposal is addressed. Goals and strategies are developed to address the future provision of community facilities.

Transportation Network

Although roads, transit, sidewalks and bikeways are technically "community facilities," their importance is recognized as a separate element of the plan. Existing needs are assessed and the improvements needed to serve future growth are identified, leading to goals and strategies for future system expansion.

Housing

This element provides an inventory and assessment of the city's housing. The inventory includes the age, type, condition, and location of housing units within the city. Based upon population projections, a rough estimate of the number of additional housing units needed to house the city's future population can be made. Goals and strategies are developed to address existing needs and the future provision of housing in the community.

Land Use

This element provides an inventory and assessment of how land is used in the city. The estimated acreage of each land use type is calculated and projections are made of the amount of land required for each land use type. Goals and strategies are developed to address existing land use problems and to address how the city's land should be used in future years.

Annexation Plan

Though not an element required by the State, it is important for the City to plan ahead with regard to areas of potential annexation. This element provides priorities for annexation of areas that would increase the effectiveness of delivering services such as public safety, and includes areas where land development would play a significant role in the realization of the City's vision.

2. Population Element

■ Introduction

This chapter provides basic information about Alpharetta's residents, including trends over the past several decades, the population's characteristics as of 2000, and forecasts of the future. When combined with development opportunities and constraints contained in the Historic and Natural Resources Chapter, this Chapter provides a basis for the Community Facilities, Housing and Land Use Chapter of the Comprehensive Plan. Future population and household data, along with future employment forecasts contained in the Economic Development Chapter, help determine demand for housing and employment opportunities, infrastructure improvements, and land development patterns that are consistent with the goals and policies established in the other Chapters of the plan.

Located 28 miles north of downtown Atlanta, for the past decade the City of Alpharetta has been one of the fastest-growing cities in the fastest-growing area of the Atlanta Region—the northern arc. Growth in the northern portion of the Region will continue to outpace the Region as a whole, and Alpharetta will share in this continued pace of development, but at a relatively slower pace as more growth in the Region shifts to the rural northern counties. The demography of this growth in terms of population and household characteristics is discussed below.

Population and Household Trends

Since 1980, Alpharetta has experienced explosive growth. The city's population increase to 1990 exceeded *four times* the 1980 population, adding some 10,000 residents. During the decade of the 1990s, the pace of growth dropped to about 2.7 times the 1990 population, but another 22,000 people became city

Table 2-1
Population and Household Trends Alpharetta

-	1980	1985	1990	1995	2000
Total Population	3,128	8,065	13,002	19,073	34,854
Number of Households	1,101	3,183	5,265	7,743	13,911
Household Size	2.84	2.53	2.47	2.46	2.50

Source: U.S. Bureau of the Census, 1980, 1990 & 2000. Intervening years interpolated by COOPER-ROSS sv. Household sizes reflect total population.

residents (more than twice the number during the 1980s). At the same time, the number of households increased at an even greater rate of growth reflecting the population increase combined with smaller household sizes. Table 2-1 shows the past trends to 1995, and the increase between the 1995 estimated population and household counts to the actual population and household counts for 2000. Population and housing growth to 2000 has continued the high rate of increase estab-

lished during the 1980s, but at a slightly lower pace. This same period of the 1990s has seen an increase in average household size to that last observed in the mid-80s.

■ Population and Household Forecasts

The basic resource data for the population and household forecasts has been provided by the Alpharetta Community Development Department, which took as its point of departure the Atlanta Regional Commission's Mobility 2030 Plan. Refinements have been made to the Mobility 2030 figures, which are shown on

Table 2-2 Population And Ho	ouseholo	d Foreca	asts							
	2000	2005	2010	2015	2020	2025	2030			
Total Population	34,854	39,021	42,360	46,623	50,552	52,370	54,164			
Number of Households	13,911	15,568	17,286	19,154	20,943	21,688	22,424			
Household Size	2.51	2.51	2.45	2.43	2.41	2.42	2.42			
Source: City of Alpharetta	Source: City of Alpharetta									
Forecasts based on 2000 - 20	30 marginal in	creases.								

Table 2-2. The full methodology used to prepare the population and household forecasts for Alpharetta is located in Appendix A. As noted, a gradual slowing in population growth is expected, reflecting both a regional shift further north and, more importantly, less land left for development in the city. The forecast anticipates an additional 7,600 residents by 2015, with 5,700 new residents added between 2015 and

Alpharetta							
	2005	2006	2007	2008	2009	2010	2011
Total Population	34,854	39,518	40,423	41,521	41,941	42,360	43,479
Number of Households	13,911	15,794	16,292	16,905	17,096	17,286	17,724
Household Size	2.51	2.50	2.48	2.46	2.45	2.45	2.45

In addition to forecasts for the next twenty years, Table 2-3 has been prepared to estimate population increases for each year over the coming five-year period. Since 1997, on average, building permitting has been on the decrease. This trend is expected to reverse briefly during a period from 2005 through 2011, as

discussed more thoroughly in Appendix A.

■ Comparison in Rates of Growth

Alpharetta has far outpaced Fulton County as a whole, as well as the State of Georgia, in its rate of growth in every five-year increment since 1970. Alpharetta experienced an enormous rate of growth in the early 1980s, reflecting both actual increases in population and voluntary annexation of surrounding areas.

Table 2-4
Comparative Rates Of Population Growth

Alpharetta, Fulton County, and Georgia

	Alpha	aretta	Ful	lton	Georgia	
	Number	% Change	Number	% Change	Number	% Change
1980	3,128		589,904		5,457,566	
1985	8,065	157.83%	619,428	5.00%	5,967,891	9.35%
1990	13,002	61.22%	648,951	4.76%	6,478,216	8.55%
1995	19,073	46.69%	732,479	12.87%	7,332,335	13.18%
2000	34,854	82.74%	816,006	11.40%	8,186,453	11.64%
2005	39,021	11.95%	872,532	6.92%	8,868,675	8.33%
2010	42,360	8.55%	929,057	6.47%	9,550,897	7.69%
2015	46,623	10.06%	985,583	6.08%	10,233,118	7.14%
2020	50,552	8.42%	1,042,108	5.73%	10,915,340	6.77%
2025	52,370	3.59%	1,098,634	5.42%	11,597,562	6.25%

Source: Georgia Department of Community Affairs, US Census Bureau, City of Alpharetta

In order to compare the future rate of growth in Alpharetta to its neighboring jurisdictions, forecasts for the other jurisdictions were obtained from the Georgia Department of Community Affairs Plan Builder. Alpharetta is located in the middle of the high growth area that comprises the northern arc of the Atlanta Region—North Fulton County, Cobb, Cherokee, Forsyth and Gwinnett. Table 2-5 shows the forecast population growth in the northern counties, the Region's central counties (Fulton and DeKalb), and the counties to the south.

Population Growth Alpharetta And The Atlanta Region							
Alpharetta Aliu Tile Atlanta Negion							
					Per	cent Chang	ge
	1990	2000	2010	2020	1990 - 2000	2000 - 2010	2010 - 2020
Cherokee	90,204	141,903	187,005	232,107	57.3%	31.7%	24.1%
Cobb	447,745	607,751	762,768	917,784	35.7%	25.5%	20.3%
Forsyth	44,083	98,407	133,632	168,856	123.2%	35.7%	26.3%
Gwinnett	352,910	588,448	799,221	1,009,993	66.7%	35.8%	26.3%
Subtotal - North Counties	934,942	1,436,509	1,882,626	2,328,740	53.6%	31.0%	23.6%
DeKalb	546,147	665,865	757,286	848,706	21.9%	13.7%	12.0%
Fulton	648,776	816,006	929,057	1,042,108	25.8%	13.8%	12.6%
Subtotal - Central Counties	1,194,923	1,481,871	1,686,343	1,890,814	24.0%	13.7%	12.1%
Clayton	181,436	236,517	279,597	322,677	30.4%	18.2%	15.4%
Douglas	71,120	92,174	110,975	129,775	29.6%	20.3%	16.9%
Fayette	62,415	91,263	122,373	153,483	46.2%	34.0%	25.4%
Henry	58,741	119,341	160,857	202,373	103.2%	34.7%	25.8%
Rockdale	54,091	70,111	86,793	103,475	29.6%	23.7%	19.2%
Subtotal - South Counties	427,803	609,406	760,595	911,783	42.5%	24.8%	19.8%
Atlanta "Dagion"	2 557 669	2 527 706	4 220 564	E 404 207	27.00/	22.70/	10 F0
Atlanta "Region"	2,557,668	3,527,786	4,329,564	5,131,337	37.9%	22.7%	18.5%
City of Alpharetta	13,002	34,854	42,360	50,552	168.1%	21.5%	19.3%

by COOPER-ROSS sv.

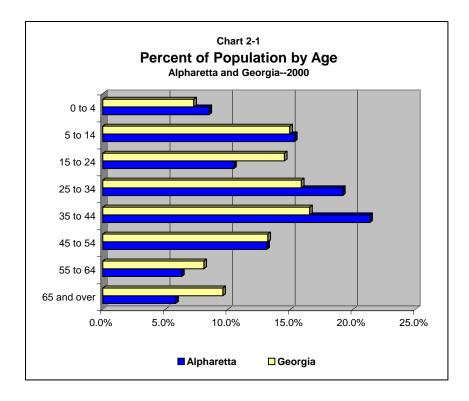
Although the development and growth outlook are positive for Alpharetta, growth is expected to increase at a slower rate than was experienced during the 1980-2000 boom years. Reflecting this growth trend, Alpharetta's population will continue to grow during the 10-year period from 2000 to 2010 at a higher rate than both Fulton County but slightly below that of the region. These same trends are expected to continue through 2020.

■ Age Distribution

Age distribution trends for the years 1980 to 2000 show that the age cohorts of 0 to 24 and 25 to 44 have contained the majority of residents of Alpharetta. In 1980 the population under 45 was 73.2%; in 2000 it had grown slightly to 74.8%. From 1980 to 2000 a proportional decrease has been seen in the 0 to 24 cohort from 39.4% of the population to 32.3%. Over the same time period, increases are seen in the 25 to 44 age cohort from 33.8% in 1980 to 40.5% in 2000. While the elderly increased in number by more than 8-fold between 1980 and 2000, the proportion of the population above 65 has steadily decreased by almost two percentage points. These figures reflect the massive in-migration of families during the 1980s and 1990s.

A comparison to the age distribution for the State of Georgia in 2000 helps illustrate the unique population characteristics of Alpharetta. The chart shows the percentage of the population in Alpharetta and the

State by age category (from Table 2-6). Alpharetta clearly has a higher proportion of pre-school children than the State overall, and a higher proportion of adults in the "traditional family" ages—25 to 44. On the other hand, young adults (15 to 24) are proportionally underrepresented in Alpharetta compared to the State, as are the elderly.



Population By Aç	je. i oreca	313				
	2000	2005	2010	2015	2020	2025
0 - 4 Years Old	2,959	3,377	3,796	4,052	4,309	4,46
5 - 13 Years Old	5,337	6,080	6,823	7,278	7,734	8,01
14 - 17 Years Old	1,131	1,271	1,411	1,496	1,582	1,63
18 - 20 Years Old	907	1,027	1,146	1,219	1,293	1,33
21 - 24 Years Old	1,608	1,828	2,048	2,183	2,318	2,40
25 - 34 Years Old	6,679	7,611	8,543	9,115	9,686	10,03
35 - 44 Years Old	7,436	8,505	9,574	10,229	10,884	11,28
45 - 54 Years Old	4,567	5,214	5,861	6,258	6,655	6,89
55 - 64 Years Old	2,197	2,495	2,793	2,976	3,159	3,27
65 Years And Over	2,033	2,308	2,583	2,751	2,919	3,02
Total	34,854	39,716	44,578	47,557	50,539	52,36
	2000	2005	2010	2015	2020	2025
0 - 4 Years Old	8.5%	8.5%	8.5%	8.5%	8.5%	8.5
5 - 13 Years Old	15.3%	15.3%	15.3%	15.3%	15.3%	15.3
14 - 17 Years Old	3.2%	3.2%	3.2%	3.1%	3.1%	3.1
18 - 20 Years Old	2.6%	2.6%	2.6%	2.6%	2.6%	2.6
21 - 24 Years Old	4.6%	4.6%	4.6%	4.6%	4.6%	4.6
25 - 34 Years Old	19.2%	19.2%	19.2%	19.2%	19.2%	19.2
35 - 44 Years Old	21.3%	21.4%	21.5%	21.5%	21.5%	21.6
45 - 54 Years Old	13.1%	13.1%	13.1%	13.2%	13.2%	13.2
55 - 64 Years Old	6.3%	6.3%	6.3%	6.3%	6.3%	6.2
65 Years And Over	5.8%	5.8%	5.8%	5.8%	5.8%	5.8

Age distribution projections, shown on Table 2-7, indicate the natural aging of the population over the coming 20 years with slight decreases in the lower age cohorts and slight increases in the older cohorts. Although Alpharetta's population under the age of 45 will continue to dominate, the projections show that in 2025 this age group will comprise 74.81% of the population, as opposed to 77% of the population currently. The age cohort of 45 to 64 is projected to remain stable at 19.4% of the population, and the over 65 cohort is projected to decrease slightly to 5.7% of the population by the year 2025 from 5.8 percent in 2005.

Within individual categories, however, the projections suggest a continuing proportional increase in school-aged children (5 to 14), while Alpharetta's population continues to move into middle age (35 to 54). Some of the city's families will stay and grow older, their children themselves moving into adulthood and moving away from home, while other families will defer having children until later in life. Excellent school facilities, both public and private, however, will continue to attract families with children.

The number of elementary/middle school aged children is expected to almost double over the coming twenty years. At the other end of the spectrum, Alpha-

retta is not viewed as a "retirement community," although a greater number of older residents are expected to call Alpharetta home in the future. This is due in part to the city addressing the need for spe-

cific housing types that suit the elderly population, such as assisted living faculties, ranch condos and townhouses. In addition, many older people are attracted and will continue to be attracted to the city in order to relocate close to their grandchildren and other family members.

■ Racial Composition

Racial composition trends in Alpharetta suggest a clear proportional decrease in the White population between the years 1980 and 2000 from 99% to 85%, and clear increases in the Black and "other" racial categories. In 1980, the city was still virtually all White. During the 1980s, while total population mushroomed to four times the 1980 population, the Black or African American population grew by an eight-fold increase, doubling its proportion of the population from 1.3% to 2.6%. Simultaneously, people of other races grew proportionally from none at all in 1980 to 2.2% of the population in 1990. The racial categories were modified somewhat for the 2000 Census, allowing people to select either a single racial category (such as "White" or "Black," etc.) or a combination of two or more racial categories to more accurately reflect their heritage. This has contributed somewhat to growth in the "other" category shown on Table 2-8, although the majority of growth in this category has been due to increases in the population classified as "Asian." In 2000, the Asian population had grown to 5.7% of the city, consisting primarily of people of Asian Indian descent, followed by Chinese.

	1980	1990	2000	
Number				
White	3,087	12,380	29,593	
Black	41	332	2,369	
Other*	-	290	2,892	
Total Population	3,128	13,002	34,854	
Hispanic**	14	259	1,927	
Percent				
White	98.70%	95.20%	84.91%	
Black	1.30%	2.60%	6.80%	
Other*	0.00%	2.20%	8.30%	
Total Population	100.00%	100.00%	100.00%	
Hispanic**	0.40% 2.00%		5.53%	

There are no racial concentrations in Alpharetta. People of all races and ethnic backgrounds are fully integrated into the Alpharetta community. In the future, the non-white population is expected to increase in pace with the general rate of growth in the city.

is not available for 1985 and 1995

■ Educational Attainment

The City of Alpharetta has a highly educated work force that made dramatic increases between 1990 and 2000. In 1990, 71% of the adult population had some college education and 37% of the population were college graduates, as compared to 2000 when 19% of the adult population had some college education and 63% were college graduates. This shift is demonstrative of the major movement into the city during the 1990s of affluent families. Numerically, the actual number of adults with less than a high school education increased by 66%; however, as a percentage of the adult population the cohort decreased from 7.5% in 1990 to 4.8% in 2000. The number of college graduates increased by more than 345% during the same period.

Table 2-9

Highest Educational Level Completed

Alpharetta

	1980	1990	2000
Elementary School	254	192	298
High School (1 - 3 Years)	456	460	788
High School Graduate	555	1,881	2,775
College (1 - 3 Years)	318	2,943	4,432
College Graduate	310	3,208	14,298
Total	1,893	8,684	22,591

Source: Georgia Department of Community; Information reflects population age 25-years and over.

Alpharetta's working age population is better educated than in surrounding counties. In terms of the proportion of college graduates in 2000, Alpharetta ranked number one when compared with all of the surrounding counties and the State. Considering the proportion of adults with at least some college education, Alpharetta also ranked number one at 71% compared to Fulton overall (56%), Cherokee (45%), Cobb (63%), Forsyth (37%), and Gwinnett (61%), as well as the State of Georgia (41%).

Educational attainment indicators such as drop out rate and standard achievement test

Table 2-10

Comparison Of Educational Attainment

Alpharetta, Surrounding Counties and State of Georgia

<u>1990</u>	Alpharetta	Fulton County	Cherokee County	Cobb County	Forsyth County	Gwinnett County	Georgia
Elementary School	2.20%	7.90%	10.30%	4.80%	13.20%	4.50%	12.00%
High School (1 - 3 Years)	5.30%	14.30%	14.50%	9.40%	19.20%	8.80%	17.10%
High School Graduate	21.70%	22.30%	30.60%	24.30%	30.70%	25.70%	29.60%
Some College (No Degree)	33.90%	23.90%	26.20%	28.50%	21.40%	31.40%	22.00%
College Graduate	36.90%	31.60%	18.40%	33.00%	15.60%	29.60%	19.30%
2000 Elementary School High School (1 - 3 Years) High School Graduate Some College (No Degree) College Graduate	1.32% 3.49% 12.28% 19.62% 63.29%	5.10% 10.87% 19.37% 18.52% 46.14%	5.73% 9.75% 27.36% 23.63% 33.52%	3.78% 7.31% 20.75% 22.44% 45.72%	5.48% 8.70% 23.47% 21.77% 40.59%	4.42% 8.04% 22.01% 24.02% 41.51%	7.54% 13.86% 28.71% 20.40% 29.50%

Source: US Census Bureau; Information reflects population age 25-years and over.

scores are not available for Alpharetta residents specifically (Alpharetta is part of the Fulton County Board of Education System). For the latest full school year reported (2003 - 2004), the Fulton County system as a whole compared extremely well to the State as a whole. The Fulton County system had a lower dropout rate, higher high school completion rate, and average SAT scores well above the State average.

The Fulton County system also compares very well with school systems in surrounding counties. The Fulton County statistics are on a par with or exceed the school systems in Cherokee, Cobb, Forsyth and Gwinnett Counties. Comparable data is available for educational attainment indicators for Milton High School. Compared to the Fulton County system overall, Milton High is well above average on every indicator. Compared also to surrounding county systems, Milton High generally outshines every other county.

NOTE: Alpharetta High School statistics not available.

Table 2-11

Educational Attainment Indicators

Alpharetta, Surrounding Counties and State of Georgia

	Milton High	Fulton County	Cherokee County	Cobb County	Forsyth County	Gwinnett County	Georgia
Enrollment	2,630	71,508	29,416	100,999	21,907	128,386	1,486,125
Retained Students	2.6%	3.6%	4.7%	0.6%	2.4%	3.2%	3.9%
Graduation Rate	90.0%	72.9%	74.8%	77.4%	78.0%	71.9%	65.4%
Average SAT Score	1,106	1,056	1,031	1,039	1,028	1,037	981

Source: Georgia Department of Education; Figures represent the 2003 - 2004 school year.

■ Income

The economic well being of families and households rose steadily for the residents of Alpharetta between 1980 and 2000. With a highly educated work force and a migration of middle and upper income families, in 1990 and 2000 the residents of Alpharetta were generally more prosperous than the State as a whole. Table 2-12 shows both per capita income and average household income for those years where data is available.

Between 1990 and 2000, average household incomes in Alpharetta had risen by more than 93%, while per capita incomes had grown by 92%. By 2000, Alpharetta's average household income was 1.2 times that of Georgia's and per capita income had grown to more than 1.8 times that of the State.

In comparing income distribution for households, in 2000 over 67% of Alpharetta's

Table 2-12 Household Income Alpharetta And Georgia			
	1980	1990	2000
Alpharetta Average Household Income Per Capita Income	\$ 23,379 \$ 8,294	. ,	
Fulton Median Household Income Per Capita Income	<i>N/A</i> \$ 7,536	+,	\$ 74,933 \$ 30,003
Georgia Average Household Income Per Capita Income	\$ 25,190 \$ 10,728		1 1
Source: US Census Bureau			

households earned \$50,000 or more as compared to less than 50% of the households in Fulton County as a whole and in the State of Georgia. Over 30% of Alpharetta's households had incomes over \$100,000, compared to 21% in Fulton County and 12% in the State of Georgia. At the lower end of the scale, only 3.7% of the households in Alpharetta had incomes less than \$10,000 in 2000. The lower income figures for the

overall the State 11.2% 10.1%, tively.

Table 2-13
Income Distribution For Households - 2000

Alpharetta, Fulton County, and State of Georgia

Fulton Alpharetta Georgia County Number Percent Percent Percent 513 3.7% Less Than \$10.000 11.2% 10.1% \$10,000 to \$14,999 233 1.7% 5.3% 5.9% \$15,000 to \$24,999 750 5.5% 10.9% 12.3% Subtotal 1,496 10.9% 27.4% 28.3% 7.9% \$25,000 to \$34,999 1,089 11.0% 12.6% \$35,000 to \$49,999 1,870 13.6% 13.6% 16.7% Subtotal 2,959 29.3% 21.5% 24.6% 19.7% \$50,000 to \$74,999 2,675 19.5% 16.5% \$75,000 to \$99,999 1,965 14.3% 10.0% 10.4% Subtotal 4.640 33.8% 26.5% 30.1% \$100,000 to \$149,999 2,305 16.8% 10.7% 7.8% \$150,000 to \$199,999 1,072 7.8% 4.3% 2.2% \$200,000 And More 1,233 9.0% 6.5% 2.4% Subtotal 4,610 33.6% 21.5% 12.4%

and for were and respec-

Source: US Census Bureau

■ Assessment — Population

Overall, Alpharetta's citizens are considerably more affluent than those in most other parts of the State, reflecting the huge movement of middle and upper income families to the city since 1980. This growth has had a major impact on the city in a very short period of time. The following summarizes the findings regarding the city's present and future population.

- Alpharetta's population quadrupled between 1980 and 1990, almost tripling again by 2000, and is forecast to add another 13,500 by the year 2025.
- Although the development and growth outlook are positive for Alpharetta, growth is expected to increase at a slower rate than was experienced during the 1980-2000 boom years.
- The number of households will grow at a higher rate than the population, reflecting a continually decreasing average household size. By the year 2025, the ratio of occupied dwellings to population will be greater than in 1990.
- For the past 20 years, roughly three-quarters of the city's population consistently have been in the under-45 age group. However, over that period, the proportion of young adults (14 to 25) has decreased from almost 15% of the population to only 10.5%, while the age group between 25 and 44 has grown from 34% to 40.5%. These trends reflect the major influx of families with children, characteristic of highly affluent families with ten to twenty-five years of employment experience, coupled with a trend toward maturing families that moved to Alpharetta and have stayed as their children grow up and move away from home.
- While forecasts reflect a maturing population overall, with a proportional shift toward the 35 to 54 age group, families with children will continue to be attracted to Alpharetta. Over the coming 20 years, the number of children under 17 will increase by more than 3,300.
- Non-white families are also being attracted to Alpharetta, increasing their proportion of the population during the 1990s from 5% to 15%. Non-white families are fully integrated into the community, and are expected to continue to be drawn to the city's many neighborhoods.
- The educational attainment of the population and household income data further attest to the high level of affluence among the city's families that moved in between 1980 and 2000.

Over the next twenty years, Alpharetta will continue to experience a high rate of growth as a part of the fastest growing area in the Atlanta Region—Cherokee, Cobb, Forsyth and Gwinnett Counties. Alpharetta's stature as an affluent community will continue to attract upper-middle and upper income families, while its continuing economic growth will attract upper and middle management families that want to be close to work. Pressure will continue on the school system to accommodate almost 60% more children as today, while citizen demands on parks, roads, water, fire, police and other community facilities will nearly double.

3. Economic Development Element

■ Introduction

This chapter provides an inventory and assessment of Alpharetta's economic base, labor force characteristics, and local opportunities and resources for economic development. This data provides a basis for economic needs and goals for the city that, in combination with information from other chapters of this Comprehensive Plan, lead to strategies for the economic well-being of Alpharetta.

Several factors will contribute to Alpharetta's positive growth outlook. The North Fulton population is highly educated, providing skilled workers for high tech companies. Major infrastructure improvements have been made or are planned to the water, sewer, and transportation systems. An extensive fiber optic system has a strong appeal for high-tech companies and computer operations. Alpharetta has a favorable national image as a technology community conveniently located near a major city and international airport. Corporate relocations and in-migration are projected to continue due to quality business parks, an existing core group of Fortune 500 companies, unspoiled setting, a high quality of life including an award wining park system and an abundance of executive housing and amenities.

■ Economic Development Action Plan

A council of local business and government leaders created the City of Alpharetta's first Economic Development Action Plan in 1996. Through a series of monthly meetings the council developed a plan comprised of two main goals covering five objectives. The goals and objectives of the plan are as follows:

- Economic Self-Sufficiency
 - Small Business Development and Expansion;
 - Business and Job Creation;
 - Business Recruitment and Retention
 - Downtown Enhancement
- High Quality Business Environment
 - Image and Value Creation

The council's stated mission was to Advance Alpharetta as a signature city by providing a pro-business climate that attracts and retains quality jobs and businesses, which contribute towards the City's objectives of obtaining economic self-sufficiency while improving the quality of life for City residents within the parameters of the City's Comprehensive Plan."

Since the implementation of that plan, Alpharetta has enjoyed unprecedented growth and prosperity, which has led to a change in the economic development challenges the community now faces. The question now is not one of how to attract business to Alpharetta, but how to encourage growth and sustainability of the existing businesses while continuing to attract quality new business investment as the rapid growth trends begin to level.

Meeting the continuing goal of providing a quality lifestyle within an affordable tax base structure requires significant business investment in the community. The key is to be proactive and steadfastly work towards a shared community vision for Alpharetta.

In November of 2000, the city undertook an initiative to update the Strategic Plan for Enhanced Economic Development Operations to update and expand upon the original Action Plan. The new plan, completed in early 2002, focuses on economic sustainability through expansion and diversification of the local economic base and enhancement of key quality of life and community issues.

■ Setting—The Region

During the early 1990s, the Atlanta Region experienced a period of slow growth mirroring the national recession as compared to the tremendous boom period from 1983 to 1988 when employment grew by over 400,000 jobs and 500,000 new residents.

By the mid 1990s the Atlanta Region was once again experiencing strong growth in both population and employment, particularly in the northern sector. During the past 20 years population and employment growth has extended outward from the center of the region, particularly to the north. Since 1980, nearly three-fourths of the region's population growth and more than 80 percent of its employment growth has occurred north of I-20.

Looking to the future, a large share of the region's employment growth is forecast to occur in the "northern arc," the area formed by North Fulton, Cobb, Cherokee and Forsyth County.

Several factors contribute to the Atlanta Region's continued growth. The region has an excellent transportation system of roads, and public transportation allowing convenient travel within the region, providing a central distribution location, and access to a diversity of housing choices. The extension of GA 400 directly to the Central Atlanta area has opened faster channels to the Buckhead and Midtown business districts. Most importantly, Atlanta's Hartsfield – Jackson International Airport remains one of the busiest air hubs in the world, making the region a front door to the global economy. The region has a very positive housing market, leading the nation in permits and starts over the last ten years. The Atlanta Region remains a top choice in corporate relocations and in-migration. In fact, ARC projects that in-migration will account for almost half of the region's increase between 1990 and 2020.

The Atlanta Regional Commission forecasts that growth will continue to be strong in the region, although at a slower rate than the past decade. The Services and Retail Trade sectors will account for more than one-half of the region's job growth. The Services industry will claim one of every three new jobs created between 2000 and 2025 and Retail Trade employment will nearly double to be the region's second fastest growing industry between 2000 and 2025. Strong growth is also forecast in the Wholesale Trade and the Transportation, Communications and Utilities (TCU) sectors, both major users of office space and business centers.

Because of its status as an "executive community" in the northern arc, and its proximity to other key employment areas, Alpharetta has become one of the leading employment hubs in Metro Atlanta. Alpharetta is located 14 miles north of Atlanta's central business district and 28 expressway-miles from Hartsfield International Airport. While Alpharetta's business future is closely allied with that of the Metro area, growth in the mid to late 1990s has evolved the city into a destination in itself, a community that has numerous live, work and play opportunities.

■ Setting—The Alpharetta Area

Incorporated as a trading post in 1858, the City commemorates its heroes with colorful parades, festivals and living-history events at the historic log cabin and at the new Alpharetta Welcome Center, located in historic downtown. The name "Alpharetta," is derived from the Greek for "first town."

Despite its phenomenal growth, Alpharetta holds firmly to its small-town character. The city has retained its traditional values and has carefully planned its evolution into a national and international headquarters for many large corporations and a myriad of smaller scale businesses.

When Georgia 400 opened the area to development in 1965, development rolled northward past Sandy Springs and swept into the beautiful equestrian countryside surrounding Alpharetta. During the 1990s Alpharetta was named one of the first "edge cities" in the United States. It was recognized that Alpharetta was becoming a self-contained place where people could live, work and play within the City limits.

There are many reasons attributable to Alpharetta's growth:

Residential Growth: From 1980 to 2004, the total number of households increased over 1,300% from 1,101 to 14,993, accounting for 17% of the total number of housing units in North Fulton. The Median house value in Alpharetta in 1999 was \$119,269, approximately 30% higher than the Atlanta Region's median of \$91,600, with 62.3% of Alpharetta's housing valued at \$100,000 or more. By 2004, the median house value had climbed to \$226,300, with more than 94% of the city's housing units occupied. In addition approximately 60% of the City's households consist of married couples, with nearly 1/3 of that number having children living at home.

Buying Power: During the last 2 decades, Alpharetta has seen the immigration of highly affluent families that are of traditional family age. The City's median household income increased from \$44,335 in 1990 to \$71,207 according to the 2000 Census. This compares to North Fulton's median household income of \$73,462. In 1999 the City's average household income was estimated at \$117,263.

In the City of Alpharetta, 71% of all households have an income of at least \$50,000, and only 2.9% of families are categorized as being in poverty status, based on the 2000 Census. The tremendous growth in retail services reflects the higher than average buying power of this market.

Alpharetta's residential population falls mainly into four key descriptive segments:

Boomburbs:

The newest addition to the suburbs, these communities are home to younger families with a busy, upscale lifestyle. Median home value is \$275,000 (and growing), and most households have two workers and two vehicles. Growth is characteristic of the communities and these families.

These affluent families, who recently moved to their homes, focus their attention on upgrades, furnishing and landscaping. *Boomburbs* residents spend on family, leisure and other activities, too. They are one of the top markets for sport utility vehicles. They participate in golf, tennis and swimming and own an array of electronic equipment

Enterprising Professionals:

This market is home to young, highly educated working professionals. Single or recently married, they prefer newer neighborhoods with townhomes or apartments. Typically found in cities, these residents would rather rent than own. Median household income is almost \$65,000.

Their lifestyle reflects their youth, mobility and growing consumer clout. To keep in touch, *Enterprising Professionals* rely on cell phones, PDAs and PCs. They use the internet to search for a job or a place to live, track their investments, or shop. *Enterprising Professionals* travel for business and pleasure. They practice yoga, take aerobics classes and jog to stay fit.

Suburban Splendor:

These successful suburbanites are the epitome of upward mobility, just a couple of rungs below the top and situated recently in growing neighborhoods of affluent homes with a median home value of more than \$377,000. Most are two-income families with children. The household population is younger (median age of 40 years), well educated and well employed.

Suburban Splendor homes feature the latest amenities and home design. Residents are more likely to hire home services than to undertake do-it-yourself projects.

They place importance on family time and travel. They purchase timesaving gadgets and equipment. *Suburban Splendor* residents are proactive in financial planning, actively investing and owning life insurance policies.

Top Rung:

Top Rung residents are the wealthiest consumer market, representing less than 1% of all U.S. households. Their median household income tops \$170,000, three-and-one-half times the national median. Their median home value is approximately \$1 million.

These residents are in their peak earning years, 45 - 64, primarily in family households with no children or older children. Their median age is 4e years.

With the purchasing power to indulge any choice, *Top Rung* residents are the best market for the purchase or lease of luxury or imported cars. They travel in style, both domestically and overseas, for business and pleasure. They set aside time in their busy lifestyles for exercise and community activities.

Work Force: Alpharetta has attracted a highly educated workforce with typically 10 to 25 years of work experience, and upper and middle managers that want to work close to home. Approximately 19,700 people comprise Alpharetta's resident civilian labor force, according to the 2000 Census, which also indicated that only 2.5 percent of that group was categorized as unemployed. The majority of the resident

labor force, almost 55 percent, is employed in management, professional, and related occupations. Within Alpharetta's labor draw area, however, the unemployment rate rises to 4.6 percent indicating a ready supply of more than 100,000 potential employees for Alpharetta businesses.

Alpharetta has some of the area's best schools. The Fulton County Public School System was recently rated "One of the Top 100 School Districts in Places You Can Afford" by Money Magazine. The percentage of persons 25 years of age and older without a high school diploma was 7.51% in 1999. The percentage of persons 25 years of age and older with some college was 71% in 1999.

Quality of Life: Alpharetta is consistently ranked as one of the top cities in the U.S. for business and family life. Excellent schools, executive housing, shopping and access to jobs combined with plenty of green space, recreation and cultural opportunities and a small town feel all contribute to an excellent overall quality of life.

Employment forecasts by the Atlanta Regional Commission indicate particularly strong business growth concentrated in the areas north of Atlanta. In terms of number of employees, the census tract that includes Alpharetta's east side and GA 400 corridor is forecast to be the second highest in growth, exceeded only by the Town Center area in Cobb County. The west side of Alpharetta places fourth in employment growth region-wide, while the portion of North Fulton east of Alpharetta from Jones Bridge Road to the Chattahoochee River places tenth

Since 1980, Alpharetta has gone through a metamorphosis from a small town to a booming employment and residential location, experiencing a phenomenal population increase between 1980 and 1995. Currently it is estimated that a little over 100,000 people work in Alpharetta, thereby developing the city into a major destination and employment center. The majority of workers are employed in technical, administrative and managerial professions. By 1995 economic opportunities had expanded so much that more people worked in the city than lived there. Since 1980, Alpharetta's population has increased to 37,611 residents. By the year 2025, the number of residents is expected to increase to 52,370, with an employment base of over 129,000.

The completion of the Georgia 400 leg south to the City of Atlanta has provided Alpharetta with rapid, convenient access to Atlanta employment centers and an expanded labor draw area. Located about midway between I-285 to the south and the proposed Outer Loop to the north, Alpharetta is well positioned for accessibility to employees, clients and shoppers alike. Convenient access, large mixed-use planned development areas and a central location in the fastest-growing area the Atlanta Region will continue to fuel Alpharetta's growth to the year 2025.

■ Economic Base Inventory

Much of the following analysis uses the term "economic sector." The federal government classifies local industries and businesses into the following nine major "sectors":

\mathbf{O}	Agriculture, forestry, fishing & mining;
O	Construction;
O	Manufacturing;
O	Transportation, Communications, Utilities (TCU)
O	Wholesale Trade;
0	Retail Trade;

- O Finance, Insurance, and Real Estate (FIRE);
- O Services; and
- O Public Administration (government).

As of 2000 2,673 businesses were located in the City of Alpharetta. Of these businesses, the largest sectors of the city economy are services, retail, technology and wholesale trade.

Major employers include: ADP, Lucent Technologies, AT&T, Equifax, HBOC, Aetna US Healthcare, Travelers Insurance, GE Capital TMS, Met Life, Hewlett Packard, Ryder Transportation Systems, Siemens Energy and Automation, UPS Integrated Logistics, Radiant Systems, ChoicePoint and Cingular Wireless.

■ Employment by Sector

Alpharetta's economy is generally based on a dominant office sector specializing in technology companies, and the strong emergence of commercial retail and service businesses to support the affluent residential population. At present, the industries of agribusiness and mining do not play significant roles in the economic base.

Employment refers to the number of people employed by local businesses and industries, sole proprietors and those that are self-employed. This includes people living in surrounding areas coming into the city to work, but does not include residents of the city who commute to jobs outside of the city limits. The data does not determine if a worker is also a resident of the City. Table 3-1 "Employment Trends and Forecasts" examines employment opportunities and trends within the City from 1990 to 2000 and projections to 2025. Since A full description of the methodology used can be found in Appendix A.

Table E-1 Employment Trends And Forecasts Alpharetta								
Alpharetta								
	1990	1997	2000	2005	2010	2015	2020	2025
Construction	1,223	2,065	2,426	2,102	1,777	1,453	1,128	804
Manufacturing	2,670	2,279	2,111	2,111	2,382	2,652	2,389	2,396
TCU	1,784	2,570	2,907	3,402	3,896	4,390	4,908	5,409
Wholesale	2,090	5,776	7,356	7,843	8,330	8,817	10,880	12,074
Retail Trade	1,921	6,233	7,609	11,648	15,661	19,925	22,734	26,229
Services*	5,070	59,570	76,524	72,698	75,674	77,648	80,290	82,765
Government	457	1,126	1,413	1,815	2,217	2,619	3,021	3,423
Total Employees	15,215	79,619	100,346	101,619	109,937	117,504	125,351	133,099

^{*} All services; including Agriculture, Forestry, Fishing and Mining Services; Finance, Insurance, and Real Estate.

Source: US Bureau of Transportation Statistics, US Census Bureau. Forecasts based on 2000 - 2025 marginal increases.

Alpharetta has seen a tremendous rate of growth in employment over the last decade. In 1990 it is estimated that the city had a little over 15,215 employees. Predominate sectors were manufacturing, whole-

sale and services. By January 2005, employment had ballooned to over 100,346 persons. The distribution of employment opportunities also changed; manufacturing and wholesale trade accounted for a much smaller overall percentage of employment opportunities as service and retail trade became the two predominate sectors within the economy. The majority of office employment is included within the service sector. Employment projections to 2025 show employment growth continuing in the future, but at a much slower pace. It is expected that the city will see an increase of 29,170 employees over this 20-year period for a total of 129,516 employees in the year 2025. The dominance of retail trade and services sectors will continue into the future. Due to the overwhelming service sector capture of the market, TCU, manufacturing and wholesale trade will capture a smaller percentage of the market, although they will increase numerically.

Like much of Metro Atlanta and the country, Alpharetta felt the effects of the economic downturn that began in the third quarter of 2001. The telecommunications sector, which is a key employer in the city, was especially hard hit and responded with downsizing and consolidations that directly impacted the local economy. Early in the economic cycle this resulted in job losses; however, as telecommunications forms moved from downsizing into consolidation mode, many companies elected to bring their unified operations to Alpharetta. Combined with the emergence of new employment sectors such as life sciences and growth within software and financial clusters, this trend stabilized Alpharetta's employment base.

Many reasons exist to explain the phenomenal growth of the 1990s and the attraction of the city to employers during the economic trials of the past four years. An excellent transportation system, a positive housing market and continued consumer confidence continued to attract business investment and keep local cash registers ringing. The availability of affordable land, natural beauty, executive housing and amenities has made Alpharetta an attractive community for executives and professionals. The city's attention to land use issues, recreational opportunities, the availability of infrastructure and protection of the natural environment have attributed to Alpharetta's reputation as a prime business headquarters location.

The decade of the 1990s saw the opening of Northpoint Mall and numerous large campus style office complexes. As part of the Atlanta metro area, Alpharetta enjoys big-city sophistication and amenities—symphony, theater, opera and ballet companies, museums and galleries and fine restaurants, while at the same time enjoying a "small town" atmosphere. Technology companies, professional services and retail trade are attracted to the city because of the affluent market that exists.

As noted above, employment growth is expected to continue in the city, but at a much slower pace. It is expected that between 2005 and 2025 the city will attract 29,170 new jobs, or an increase of 29.07%. The slowing down of economic growth in the city can be explained by several factors. First, historic economic trends indicate that a period of relatively slow but stable economic growth typically follows extended boom periods. Mirroring the national economy, Alpharetta and Metro Atlanta will see positive economic growth; however, it will be significantly slower than that of the 1990s, with annual job growth averaging about 2%. Second, master planned developments are close to completion within the city. The availability of appropriately zoned and planned commercial land will in itself limit the supply of future employment opportunities. Lastly, many of the telecommunications sector jobs lost during the economic downturn are unlikely to return to the area as companies rethink corporate strategies, take advantage of improved technologies and increased productivity, and streamline their workforces in responses to mergers and acquisitions. While area economic development strategies are working to grow new technology segments in response to these shifts, companies in the new sectors tend to have fewer employees, albeit at much higher wage scales, than the telecommunications cluster. In addition, as interest rates trend upward from their recent all-time lows consumers will have less disposable income, resulting in slower retail trade growth.

In comparing employment in Alpharetta to statewide percentages, in 2000, the city followed state trends for employment distribution among the transportation, manufacturing, wholesale trade and retail trade sectors. In addition, the city had notably above average concentrations in the services, communications and utilities (TCU) and wholesale trade sectors. Both the city and State showed services as the top sector.

Within Alpharetta, employment within offices is primarily categorized as part of the service sector. Both the State and city see these trends continuing into 2025 with services and retail becoming the top two sectors. Within the city, wholesale trade is the third largest sector, while manufacturing continues to be third within in the state. Most notably, the construction, manufacturing and TCU sectors within Alpharetta fell to below 3% as services claimed over 75% of sector employment.

Table E-2
Employment By Percent Of Sector
Alpharetta

	1990	1997	2000	2005	2010	2015	2020	2025
Construction	8.04%	2.59%	2.42%	2.07%	1.62%	1.24%	0.09%	0.06%
Manufacturing	17.55%	2.86%	2.10%	2.08%	2.17%	2.26%	1.91%	1.80%
TCU	11.73%	3.23%	2.90%	3.35%	3.54%	3.74%	3.92%	4.06%
Wholesale	13.74%	7.25%	7.33%	7.72%	7.58%	7.50%	8.68%	9.07%
Retail Trade	12.63%	7.83%	7.58%	11.46%	14.25%	16.96%	18.14%	19.71%
Services*	33.32%	74.82%	76.26%	71.54%	68.83%	66.08%	64.05%	62.18%
Government	3.00%	1.41%	1.41%	1.79%	2.02%	2.23%	2.41%	2.57%

^{*} All services; including Agriculture, Forestry, Fishing and Mining Services; Finance, Insurance, and Real Estate.

Source: City of Alpharetta

Forecasts based on 2000 - 2025 marginal increases.

Both current state and city trends are expected to continue to the year 2025. Service and retail trade will continue to dominate both the state and the city employment sectors, while wholesale trade in the city and manufacturing in the state will continue to be the 3rd strongest sectors, respectfully. Construction, manufacturing and TCU are expected to continue to take smaller and smaller portions of employment opportunities within the city.

■ Sector Earnings

Earnings represent the total of wages, salaries, and other earned income paid to persons working for the businesses or industries in a given geographic area. City specific data is not available, so county data was used. 2000 census wage data is not available, so the latest figures of weekly wages for the county were derived from the Georgia Department of Labor. Unfortunately only an average weekly wage is available from the state for comparison.

Table E-3									
Average Week	rage Weekly Wage by Sector1990-1999								
Fulton County and G	eorgia								
				Total Earnin	nas				
	1980		1985	Total Ealilli	1990		199	99	
Industry	Fulton	Georgia	Fulton	Georgia	Fulton	Georgia	Fulton	Georgia	
All Sectors							\$833	\$622	
Agriculture, Forestry, and Fishing	\$164	\$179	\$245	\$225	\$342	\$276	\$498	n/a	
Mining	n/a	\$323	\$386	\$462	\$405	\$589	\$936	n/a	
Construction	\$318	\$264	\$411	\$386	\$513	\$434	\$780	n/a	
Manufacturing	\$329	\$261	\$466	\$366	\$594	\$449	\$1,001	n/a	
TCU	\$437	\$372	\$573	\$517	\$644	\$603	\$1,072	n/a	
Wholesale Trade	\$381	\$337	\$531	\$473	\$691	\$603	\$1,138	n/a	
Retail Trade	\$193	\$164	\$257	\$208	\$287	\$236	\$381	n/a	
FIRE	\$320	\$274	\$511	\$423	\$679	\$543	\$1,183	n/a	
Services	\$233	\$214	\$342	\$310	\$489	\$414	\$769	n/a	
Public Administration	\$319	\$287	\$444	\$374	\$545	\$457	\$762	n/a	
	1990: Georgi	a Dept. of Lab			•	•		•	

Fulton County as a whole compares favorably with the state in every economic sector except mining (which has no importance to Alpharetta). Overall, wages in Fulton County in 1990 were 24% higher than in Georgia as a whole. In 1990 two of Fulton County's top employment sectors, TCU and wholesale trade were also among the best paid. Average weekly wages were higher in the county, \$342 as compared to the state, \$276. In 1999 wages continued to be higher in the county, \$833 as compared to the state, \$622. As was shown in table E-1, the primary sectors within the city of Alpharetta tend to be some of the most highly paid. Executive positions and high tech industry will continue to grow within the city supplying high paying jobs to residents. The 1997 Economic Census records a total annual payroll of \$1,894,828,000 within the City.

■ Sources of Personal Income

The sources of personal income are indicators of how a community receives its income. The State of Georgia Department of Community Affairs, with the assistance of Woods & Pool Economics, Inc., has developed categories and numbers for the analysis of sources of personal income. These five categories of personal income include the following:

- Wage and Salary Total income earned as compensation for working or rendering services;
- Other Labor Income Total employer contributions to private pension or worker's compensation funds;
- Proprietor's Income Proprietor's Income measured total profits earned from partnerships and sole proprietorships;

• Dividends, Investment, Rent and Interest Payments and Interest Income - Total income

Table E-4									
Sources of Personal	Income	by Type	1990-2	000					
Fulton County and the State o	f Georgia								
		1990			1995			2000	
	Fulton		Casumia	Fulton		Casumia	Fulton		Cassais
	Fullon	Alpharetta	Georgia	Fullon	Alpharetta	Georgia	Fullon	Alpharetta	Georgia
Wage and Salary	69.0%	66.0%	60.1%	60.4%	46.6%	58.7%	67.5%	70.7%	58.0%
Other Labor	6.7%	6.4%	6.0%	6.3%	4.9%	6.3%	7.5%	7.2%	6.1%
Proprietor's Income	5.0%	4.8%	6.6%	4.6%	3.5%	6.9%	5.4%	5.2%	6.6%
Dividends, Investment, Rent &									
Interest Payments			14.5%			13.3%			14.3%
·	13.3%	15.7%		10.9%	7.1%		13.2%	10.8%	
Transfer Payments	6.1%	7.1%	12.5%	6.3%	4.1%	14.5%	7.4%	6.1%	14.8%
Percentage from wages	80.6%	77.2%	72.7%	71.2%	55.0%	71.9%	80.4%	83.1%	70.7%
Source: Georgia Department of	Community Af	fairs, Data for F	Planning, W	oods & Pools E	conomics, Inc.	, 1999, Alpa	ahretta: Wages	, Other Labor a	ınd

from investments and rental property; and

• **Transfer Payments** – Total income from payments by the government under many different programs that include Social Security, unemployment insurance, food stamps, veterans benefits, and countless others.

Table E-4 presents income estimates for the City of Alpharetta and Fulton County. Since no data is available for the city, the estimates are based on the ratios of employment and population between the city and the county. Since employment data for the city is not available for years prior to 1990, estimates cannot

Table E-5									
Sources of Perso	onal Incor	ne by Typ	e2005	-2020					
Fulton County, Alphare	tta and State	of Georgia							
		2005			2010			2015	
	Fulton	Alpharetta	Georgia	Fulton	Alpharetta	Georgia	Fulton	Alpharetta	Georgia
	Fullon	Аірпагеца	Georgia	FUILOII	Аірпагеца	Georgia	FUILOTI	Аірпагеца	Georgia
Wage and Salary	66.5%	70.3%	56.9%	65.4%	69.9%	55.6%	64.1%	53.8%	54.1%
Other Labor	6.7%	9.1%	5.9%	6.5%	6.9%	5.7%	6.3%	5.3%	5.5%
Proprietor's Income	4.8%	6.5%	6.4%	4.7%	5.0%	6.2%	4.2%	3.8%	5.9%
Dividends, Investment, Rent & Interest									
Payments	14.2%	15.5%	15.3%	15.3%	11.9%	16.4%	13.6%	9.1%	17.6%
Transfer Payments	7.8%	8.3%	15.3%	8.2%	6.3%	15.9%	7.3%	4.9%	16.7%
Percentage from wages	78.0%	85.9%	69.2%	76.5%	81.8%	67.5%	74.6%	63.0%	65.5%
Source:	Georgia Departi	ment of Comm	unity Affairs, I	Data for Plannir	ng, Woods & Po	ols Economic	s, Inc., 1999		
Total Income	30441399	1478715		34159631	1931000		38264886	2506151	
	Source: Georgi	a Department o	of Community	/ Affairs, Data f	or Planning, Wo	ods & Pools I	Economics, Inc	., 1999	

be made for those years.

Based on this methodology, 77% of income in 1990 was attributable to payments for labor, whether wages and salaries, other labor payments, or income to sole proprietors. This figure was lower than Fulton County's 80.6% of wages. Comparing Alpharetta to the state, the city clearly receives a larger proportion in wages and salaries, and this proportion is forecast to grow over the next twenty years while the proportion statewide falls. In 2000 Alpharetta was higher in wage collections (83.1%) than both the county (80.4%) and the state (70.7%) In addition, while Alpharetta's percentages were rising, both the county and state were falling.

■ Major Development Trends and Unique Economic Opportunities

In 1990 Alpharetta began a growth and development boom that carried through the end of the millennium. In spite of a moratorium on sewer taps in the area and local downsizing of high tech companies, the promise of continued prosperity will continue. The number of new commercial construction projects in 2000 showed an increase of over 89% from last year. At the end of the third quarter of 2001, over 100 new commercial building permits and 606 new business licenses have been issued. Based on the valuation of the building permits alone, business interests have invested in excess of \$145 million in the community since January 1, 2001.

Alpharetta's popularity with the private sector is obvious, especially along the North Point Parkway and Windward Parkway corridors. Much of the development within the city has been built to master planning standards that include a variety of uses, housing choices and aesthetic controls. The Windward Development, which includes 3,400 acres of commercial development, corporate offices, and upscale residential has won 70 awards of excellence for planning. Alpharetta is a location of choice for headquarters and office projects and competes with the Buckhead Area in both the quality of office space and lease rates being paid.

In 1998 over \$360 million in new private investment was initiated including 560 new single-family homes and approximately 2 million square feet of office space. In addition, over 50 projects were completed during the course of the year. These projects added an estimated 3 million square feet of commercial space to the City. Key notable business development trends within the City include the emergence of the life sciences sector, strong growth in businesses designing software and security systems, and the rising appeal of Alpharetta's Historic Downtown Area as a business location.

Retail Trade and Services

Since the opening of North Point Mall in 1993, Alpharetta has been a popular location for mid-to-high-end retailers. The area's strong population growth, especially among highly educated, affluent professionals, continues to fuel that attraction today.

The following include major development announcements that have been made since the last quarter of 1995, many of which have already been constructed.

Hotels. The GA 400 corridor and the Alpharetta submarket is one of the strongest economy and corporate hotel locations. There are currently 23 hotels containing 2,352 rooms in the City of Alpharetta. Preliminary market studies show the same occupancy rates for hotel on Mansell and Haynes Bridge Roads.

Retail Expansion. Alpharetta's four neighborhood level shopping centers include the following: Ingles Shopping Center lies along Highway 9 on the north side of town and has approximately 56,337 square

feet of retail space. Alpharetta Square Shopping Center is located on the south side of town along Highway 9 and has approximately 93,100 square feet of retail space. The third shopping center is Alpharetta Crossing, which lays in the southwest quadrant of the intersection of Old Milton Parkway and Haynes Bridge Road, and has approximately 100,624 square feet of retail space. The newest addition is the shopping center at Crabapple and Arnold Mill Roads on the west side, which was annexed into the city. A fifth shopping center was built across Old Milton Parkway from Alpharetta Crossing. This center is anchored by a Publix grocery store.

North Point Mall, a 1.5 million square foot regional mall anchors the North Point Retail District, which runs along North Point Parkway between Mansell and Haynes Bridge Roads. The mall offers four anchor tenants and some of the most desired brands in retailing; including Coach, Williams-Sonoma, Pottery Barn and Banana Republic. Two movie theatre complexes and an ice and roller-skating facility provide entertainment options near the mall, while a variety of dining options, from marquis names like Cheese-cake Factory to standard family fair, entice residents and visitors to the district.

Freestanding retailers, new shopping centers and absorption and expansion of existing centers were announced between the fourth quarter 1999 and third quarter 2001. The recent openings of centers such as North Point Village and Windward Promenade have added in excess of 100,000 square feet of retail space to the market in that period.

A key strength of the local economy is Alpharetta's prosperous and diverse small business community. Making up 85% of the Greater North Fulton Chamber of Commerce's membership base, most new jobs are created from this sector.

Office. Alpharetta is developing a large portion of its economy in the office and high technology sectors. Such major corporations as Microsoft, Equifax, ADP, Ryder Systems, and Cingular Wireless have chosen to locate in the Alpharetta area. Many of the master planned areas east of GA 400 and much of the land west of GA 400 are anticipating future business development in these areas. Build-to-suits and expansion in the established office parks of Windward, Preston Ridge and Royal 400 account for much of the office activity in the Alpharetta area during the past decade. Master planned developments continue to build out. During the first half of 2004, known new lease activity to larger office projects accounted for approximately 430,000 square feet being absorbed from the active market. This excludes new office lease under 25,000 square feet and non-reported activity. Downsizing has resulted in a relatively large volume of sublease space being placed on the active market, with 643,000 square feet currently on the market.

As of March 1, 2005 approximately 3.2 million square feet of available office product was in recorded inventory. During the last five years several major built-to-suit and spec projects were developed. These included

- WorldCom: North Point Parkway @ Kimball Bridge (233,640 sf);
- Choice Point Expansion: Alderman Drive @ Windward Parkway (254,000 sf);
- Cingular Wireless: Windward Parkway (368,000 sf);
- The Falls at Sanctuary Park: Westside Parkway @ Sanctuary Parkway (287,000 sf);
- Georgia 400 Center Building 4: Westside Parkway @ Haynes Bridge Road (152,500 sf);
- Parkview Four at Opus Woods: North Point Parkway (310,135 sf);

In 2004 several large leases were made to well-known companies; including AIG, GE Consumer Finance, Microsoft, and Enhancement Services Corporation. The continued expansion of existing companies like ADP, Cingular Wireless, Hewlett Packard, and UPS also reflected the strength of the local economy.

By the end of the year 2004, the North Fulton sub-market contained more than 14 million square feet of office space. Vacancy rates were running near 30% at mid-year but had fallen to roughly 26% by year-end.

Construction

After the phenomenal growth of 1990s, residential growth has followed a marginal decline through 2004, which ended with 306 residential permits issued on projects valued at just under \$40 million. One reason for the decline in residential construction is a dwindling supply of available land for residential development. Alpharetta's residential population grew by 8% between 2001 and 2004, showing that there is no shortage of people who would like to live in Alpharetta: however there is a limit to the amount of residential property available and to the population density that will preserve the quality of life. Over the next 20 years the construction industry will take a smaller percentage of overall employment due to the slowing in population growth in the city.

Manufacturing and Wholesale Trade

Manufacturing and Wholesale Trade play a small role in the economy of Alpharetta. The location of industrial development is primarily located off Hembree and Mansell Roads. In the last 5 years there has been no major new activity is these sectors.

■ Unique Economic Activities

Alpharetta has become the shopping and employment center for its sector of the region, with a particular emphasis on a higher-income clientele. North Point Mall and its nearby supporting commercial facilities, serves a north-south sector focused on GA 400, with its market draw area extending between Town Center in Cobb County to the west, Gwinnett Place Mall to the east, and Perimeter Center to the south. At the same time, the city is experiencing strong growth in corporate and executive offices, sometimes associated with manufacturing or distribution functions. The GA 400 corridor has become one of the "hottest" markets for corporate offices, appealing to the higher echelon administrative and executive functions and to companies seeking a high profile location. The business center market (front office activities coupled with storage, transfer or distribution space) is also strong in the city, and expected to remain so.

Downtown Enhancement

Alpharetta is fortunate to have a traditional downtown shopping district and Main Street. The City has been aggressively marketing and enhancing the overall appearance and make-up of this traditional shopping street since 1993. Programs to enhance the downtown include:

- Encouraging the development of the traditional downtown shopping district, restaurant, entertainment and cultural destination point;
- Developing special events and ongoing activities in the downtown area;
- Providing the necessary infrastructure such as utilities, parking, streetscape, and pedestrian amenities;
- Enhancing the appearance and identifying the boundaries of downtown through the use of distinctive elements such as light poles, flags, flower baskets, planters, signage and landscaping;

- Providing financial incentives and design services to encourage private property enhancement;
- Development of special Historic Downtown Incentive Zoning policies

Communications Network

As part of the Bellsouth telecommunications system, Alpharetta is part of the largest fiber-linked network in the United States. With over 3,300 square miles of toll-free calling coverage, Atlanta's telecommunications infrastructure is the largest electronic highway in the county.

Master Planned Developments

The majority of growth within the city over the last two decades has been within master planned zoning districts. For example, Windward, a 3,400-acre master planned community has continued to develop since its original zoning approval in the mid 1980s. Residential commercial, and hi-tech businesses have flocked to this area due to the community's appeal of living, working and playing in the same area. Development in this area has been aided by proper infrastructure of fiber optic cable, sewer, water, fire protection, etc. Attention to detail and amenities have aided Alpharetta in attracting both quality residential and commercial developments. The city continues to implement regulations intending to attract high quality companies, while at the same time protecting the quality of life that is sought after in Alpharetta.

Labor Force Parti Alpharetta, Georgia, And Nation	-	90 Ana 200	JU			
		1990			2000	
	Alpharetta	Georgia	U.S.A.	Alpharetta	Georgia	U.S.A.
Total In Labor Force	77.4%	67.9%	65.3%	76.5%	66.1%	63.9%
Civilian Labor Force	77.2%	66.4%	64.4%	76.5%	65.0%	63.4%
Employed	75.2%	62.6%	60.3%	74.0%	61.4%	59.7%
Unemployed	2.0%	3.8%	4.1%	2.5%	3.6%	3.79
Military Labor Force	2.0%	1.5%	0.9%	0.0%	1.1%	0.5%
Males In Labor Force	86.7%	76.6%	74.4%	87.0%	73.1%	70.7%
Females In Labor Force	69.2%	59.9%	56.8%	66.7%	59.4%	57.5%

■ Labor Force Analysis

Table E-6 shows the percentages of total employment by occupation classifications for 1990 and 2000 in Alpharetta, the State of Georgia and the Nation. 2000 Census data is the latest data available. The analysis looks at the occupations of the residents of the county, regardless of where they worked in the region.

The city's labor force is notably "white collar." According to the 2000 Census, 54.6% of Alpharetta's employed population aged 16 years and older worked in management, professional and related occupations with another 27.6% categorized as being in sales and office occupations. These figures reflect a dramatic change from 1980, when less than 30% of the labor force fell into the executive or professional categories, but over 25% were "blue collar" workers. This change underscores the major movement of households with higher paying jobs into Alpharetta during the decade of the 1990s.

If Alpharetta's businesses have to rely solely on the City's labor pool to operate, there is the probability of a labor shortage. While many people who work in the City live outside of Alpharetta, businesses should not have to be so dependent on outside workers. As traffic congestion and commuting time increases access to employment opportunities may become a problem for business in the future. It is important to address continued availability of quality housing within the area, and increased transportation options for production workers and laborers, including public transportation.

Education

There are 5 elementary schools, 2 middle schools and two high schools in the public school system within the city, as well as a number of private facilities. The public schools serving Alpharetta consistently win awards and recognition for the high quality of education they provide: Milton High School was named among the top 13 in the state of Georgia and was recently named a state School of Excellence. The elementary and middle schools are similarly noteworthy, boasting high test scores and academic achievement: two were recently named Merit Pay schools by the state, helping Fulton County achieve more winners than any other district in the state.

The city of Alpharetta has a highly educated work force. According to the 2000 Census 82.9% of the adult population had some college and 57.1% held bachelors or graduate degrees. Alpharetta's working age population is better educated than in surrounding counties.

Residents also have access to higher education and training opportunities close to home at the Alpharetta campuses of Georgia State University, DeVry University, Georgia Perimeter College and Reinhardt College. In addition there are numerous colleges and universities in the Metro Atlanta area, including the world famous Georgia Institute of Technology.

Labor Force Participation

"Labor Force participation 1990 and 2000" presents data on the employment status of the labor force in Alpharetta and compares it to the state and the nation. The tables also reflect the major changes that occurred in the city during the explosive growth of the 1990s. These trends have continued to 2000

In 2000, 76.5% of the city's population over 16 was working or seeking employment. In 1980, this figure was only 65%. The percentage of males in the civilian labor force in 1980 was 79%, which grew to 87% in 2000.

The change in the percentage of females 16 or older who were working or seeking employment in 1980 and 2000 is particularly dramatic—increasing from 52% to 66.7%, respectively. Comparisons to the state

and the U.S. are equally enlightening. In 1980, the participation of males and females 16 and older in Alpharetta's labor force was roughly equivalent to state and nation averages. By

2000, however, while state and national labor force participation rates were about two-thirds for Georgia and the U.S., Alpharetta's was over 76%. Only 13% of the males were not in the labor force, and females had fallen from 48% to 33%, representing a 17-percentage point drop on labor force non-participation. During the same period, state and U.S. non-participation dropped only 7.6 and 6.9 percentage points, respectively. Thus, participation in the labor force of females 16 and older in Alpharetta has grown considerably both in proportion (from 52% to 69%) and in relation to increases in society in general.

Applying the 2000 labor force characteristics to 2010, it is expected that the percentage of the total labor force will continue to increase. This is expected for several reasons. First, in the 2000 Census education and income statistics present a highly educated and affluent population. Housing production and quality of life will continue to attract middle and upper management employees to the city. Second, in 2000 there was a high proportion of the age cohort of "traditional family age," 25 to 44 who would be entering the labor force. This trend is expected to continue to 2025 as the population continues to grow and age. These figures suggest several concurrent trends—the continuing trend in America away from the one wage-earner family, and the increasing proportion of families with fewer children in the city. The figures also suggest a larger proportion of two-income households, where a high proportion of the wives work either full or part time, and a larger proportion of single person households attracted to the city's apartment market (which was virtually nonexistent in 1980). It is anticipated that the city residents in 2025 will include a labor force of over 129,000.

Unemployment

Employment data is not available for the City of Alpharetta for any years other than 1990 and 2000, when the rate was 2.6% and 2.0% respectively, according to the U.S. census. This rate was considerably lower than in any surrounding jurisdiction, the state or the country as a whole. Considering the types of households that have long occupied Alpharetta, and the high participation rates in the labor force discussed

Table E-9								
Commuting Patterns								
Employed Residents of Fulton County								
	19	990						
Place of Work	Number	% Total						
A lab avatta	4.540	20.20/						
Alpharetta Atlanta	1,546	20.2%						
	1,000	13.1%						
Remainder of Fulton	2,357	30.8%						
Remainder of Dekalb	1,190	15.5%						
Cherokee	53	7.0%						
Clayton	85	1.1%						
Marietta	92	1.2%						
Remainder of Cobb	364	4.8%						
Douglas	7	0.1%						
Fayette	10	0.1%						
Forsyth	108	1.4%						
Gwinnett	617	8.1%						
Outside of Atlanta MSA	187	2.4%						
Unknown	41	0.5%						

Source: U.S. Bureau of the Census, 1990

above, it is estimated that the city has always enjoyed a low unemployment rate relative to all other jurisdictions, and that generally the rate has fallen since 1980 as more affluent households migrated to Alpharetta with wage earners in executive and professional occupations.

Commuting Patterns

In 1990, Alpharetta had a resident labor force of almost 7,900 and an employment base of over 15,215. However, in that year, only 1,546 workers who lived in the city actually worked there. Data on commuting patterns for 1990, the last year for which such data is available, presented on Table E-9, indicate that 98% of

the city's employed residents commuted outside of the city to work. Conversely, almost 8,000 of the city's employees, or 84%, commuted into the city every day to work. By 2000, Alpharetta's resident labor

force had grown to 19,696 and its employment base had swelled to over 100,000. While commuting data is not currently available for that year, it is expected that trends from the 1990s would be largely consistent with patterns of today.

The mode of transportation to work is not surprising for a suburban city. According to the 2000 Census nearly 92% of the city's employed residents commuted to work by car—a few (8.3%) in carpools—while about 1.5% took public transit. In 1990 transit was virtually nonexistent in Alpharetta, which is far beyond MARTA's rail lines and served by only a few bus routes. During the 1990s, However, the bus routes were expanded to include service to the full length of North Point Parkway, along Windward Parkway, Highway 9, and portions of Old Milton Parkway. Additionally, a new park and ride lot was opened on Windward Parkway in early 2001 with long—term plans for conversion to a rail station. In spite of concerted efforts by the City and the private

Table E-10		
Commuting Patterns		
Alpharetta and Fulton County		
	19	90
	Number	% Total
Fulton County		
Residents working inside county	221,309	70.2%
Residents working outside county	94,057	29.8%
Alpharetta		
Residents working inside city	1,546	20.2%
Residents working outside city	6,070	79.3%
Drive Alone	14,763	82.7%
Carpool	817	10.7%
Work at Home	224	2.9%
Motorcycle, Walk, Other	155	2.0%
Public Transit	84	1.1%
Unkown	41	5.0%
Source: U.S. Bureau of the Census		

sector, however, MARTA eliminated service to portions of Old Milton Parkway and Windward Parkway in late 2001, due to budget constraints. The City continues its efforts to expand public transit options within the City, however, and worked hard to have lands reserved near North Point Mall for location of a future MARTA station.

Of the 80% of the city's workers who commute outside of the city, Table E-10 showed where they were going in 1990, again the last year for which such data is available. The largest percentages work in Fulton County outside of Alpharetta presumably primarily in Roswell and Sandy Springs. The next largest group (only 15%) drives to DeKalb County to work, while 13% commute into the City of Atlanta. In 1990, almost two-thirds of the city's workers either worked in the city or worked in Roswell, Sandy Springs or DeKalb County outside of Atlanta (such as the Perimeter Center area). GA 400 is the basic transportation facility serving these areas from Alpharetta.

Employment in the city has grown considerably since 1990 to over 100,000, and commuting pattern data is not available. Many of the new jobs created since that time, however, have been in the Retail Trade sector, principally in sales and services occupations. Considering the higher than average proportion of white collar workers living in the city, the low unemployment rate, the limited supply of lower age individuals who could be attracted to the labor force, and the high participation rate for females that already exists, it is estimated that the disparity in resident workers to local employment has increased considerably. While these commuting patterns create increased pressures on transportation facilities, the disparity is a surfeit of riches for Alpharetta residents, since total jobs currently outnumber current population. If the labor force participation rate remains the same, in 2025 Alpharetta's 38,696 residents in the labor force will be matched to an employment base of 129,516 or more than 3.34 jobs for every working resident in the city. As traffic congestion increases in the region and internal circulation is improved, it is anticipated that a much higher percentage of residents will work in the city than now. A major goal of the city is to increase live, work and play opportunities by providing the necessary housing opportunities and infra-

structure. As Alpharetta moves closer to this goal, it is anticipated that a much higher percentage of the residential population will actually work within the city.

■ Local Economic Development Resources

Development Agencies

Effective economic development programs are a group effort, involving not only local government staff but also the cooperation of and resources available from other potential partners that have programs underway at various levels.

City of Alpharetta Office of Economic Development

The City of Alpharetta maintains an office of Economic Development staffed by a professional Economic Development Coordinator. The office is an integral part of the city's Department of Community Development. The office maintains a database of available buildings and sites, tracks business financing programs and assists entrepreneurs in starting businesses in the city. Additionally, it is the center of economic development planning and marketing and is responsible for assisting and building relationships with existing businesses and industries.

Alpharetta Development Authority

In 1995 the Economic Development Council (EDC) was formed to develop an economic development action plan. The E DC was disbanded following the completion of this study in 1996. In February 1981 the Alpharetta City Council adopted a resolution creating the Alpharetta Development Authority. The body was activated in 1997 and has since held the primary role of financing targeted development projects through the issuance of revenue bonds.

North Fulton Chamber of Commerce

The Chamber has an aggressive economic development program and offers an excellent resource to the City for coordinating activities. The Chamber is a designated agency for the State's Red Carpet Tour, which brings major national and international companies interested in the Atlanta area to North Fulton. The Chamber works closely with the Alpharetta Economic Development Department in coordinating with the Georgia Power Company and the Metro Atlanta Chamber, as well as with State Industry, Tourism and Trade, and can act as a go-between to these agencies on behalf of the City.

Metro Atlanta Chamber of Commerce

The Metro Atlanta Chamber is involved in a wide range of economic development and regional improvement programs, some of which have particular significance for Alpharetta. The Metro Atlanta Chamber's overall goal is regional in scope and addresses the attraction, creation and retention of business in metro Atlanta, which includes particular attention to the maintenance and provision of the physical infrastructure needed to support and expand the business base. The Metro Atlanta Chamber provides a coordinated program of business promotion at the national and international level, promoting the entire metro area, including Alpharetta. The Chamber's promotional activities emphasize the biomedical fields,

telecommunications and software, all of which are important parts of Alpharetta's current and future employment base.

The Metro Atlanta Chamber is an important link in the network of local economic development partners who attract and nurture prospective businesses and business expansion in the metro area. Once a contact is made, a business potentially interested in an Alpharetta location is referred to the City of Alpharetta for direct assistance. Thus, the Metro Atlanta Chamber is a first-line contact for prospects that may be attracted to the city through their normal metro promotion activities.

Fulton County Economic Development Office

The Fulton County Department of Planning and Economic Development maintains a variety of economic development programs and initiatives that have application throughout the county. The County's staff coordinates closely with the Metro Atlanta Chamber of Commerce, attends marketing shows and outreach events on behalf of the County, and orients its programs to regional initiatives such as biotechnology, communications and high-technology industry attraction.

■ Resources—Programs and Tools

North Fulton Chamber of Commerce Workforce Development

Recognizing that the future of any community is directly related to the education and skills of its workforce, the North Fulton Chamber of Commerce has set up several programs to assist in workforce development, including:

- Workforce Development—acts as a liaison/facility to secondary education facilities on issues
 regarding training and works towards improving community awareness of job opportunities
 and getting business involved with schools through programming.
- WIN—improves academic achievement and teaches important skills while promoting a strong work ethic though in-school mentoring.
- Career Direction—exposes students to workforce experiences and promotes classroom learning become more relevant to the real world.
- Educator Internship Program
- Scholarships—provide several sponsored scholarships to qualified seniors. These include DeVry/GNFCC,

Quick Start

The Quick Start Training Program provides high quality, tailored training at no cost to area business. Both manufacturing training and service training are available to manufacturing operations, warehouse and distribution centers, national and international corporate headquarters, information technologies and customer service operations. The program includes a training needs analysis, a detailed training program, high quality training and expert training staff.

Georgia Center for Advanced Telecommunications Technology (GCATT)

GCATT is an initiative of real virtual clusters of excellence in advanced telecommunications. GCATT supports development of the latest technologies and applications in communications, computing and content processing. Formed in 1991, GCATT is a program of the Georgia Research Alliance, a public/private partnership fostering technology-based economic development across the state. Although GCATT is based at Georgia Tech, it supports research programs in advanced telecommunications at the Georgia Research Alliance's six research universities.

The GCATT partnership of industry, government and universities works together in a three-pronged strategy of Technology, Policy and Commercialization for high-tech economic development in Georgia. There are approximately 20 different research centers that fall under the GCATT umbrella. The research programs of the centers are funded by the industry and government through grants, industry consortia and directed research projects. GCATT staff provides support by promoting collaboration across the various research centers, leveraging the knowledge and resources that already exists.

Yamacraw

Yamacraw is an economic development initiative to make Georgia a world leader in the design of broad-band communications systems, devices and chips—thus creating in Georgia both high-paying design jobs and support and supply-chain jobs. Yamacraw research is grouped in three targeted areas of broadband technology: Embedded Software, Broadband Access Devices and System Prototyping. At its core, Yamacraw is made up of 200-300 world-class researchers who take the best of technologies one step further by integrating them to patent a new generation of compatible infrastructure products.

Georgia Power Company, Economic Development Division

Georgia Power is the oldest economic developer in Georgia, and has an Economic Development Division whose primary role is to attract businesses to the state. The Economic Development Division of Georgia Power has two sections, a domestic section and an international section. Each section is responsible for marketing Georgia as a positive place to do business. There are 130 local offices statewide with a primary concern of job development. Although Georgia Power has offices throughout the state, it does not provide any specialized programs for any particular city or county. Georgia Power's primary local contact for economic development issues are generally with the Chamber's of Commerce. Alternative points of contact are with the various levels of government in Georgia Power's service area. Georgia Power has in the past-formed different alliances with other organizations and agencies for the purpose of attracting businesses to an area.

Georgia Department of Economic Development

The Georgia Department of Economic Development (GDECD) is a state funded agency mandated to serve as agent for all the cities and counties in the state of Georgia. GDECD's primary purpose is to assist potential businesses considering locating in the state of Georgia in identifying an optimal location for their operational needs. The Georgia Department of Economic Development also assist the movie industry in locating appropriate movie sets throughout the state of Georgia. The identification of international markets for the export of Georgia goods and services is another duty of GDECD.

Because GDECD is a statewide agency, there are no specific programs or projects tailored to the needs of Alpharetta. In the event that a potential business client is interested in the Alpharetta area, GDECD policy

is to work with both the Chamber of Commerce and the local governmental entity. GDECD has a working relationship with the utility companies, rail systems, banks, universities, and other agencies with resources to facilitate economic development. GDECD maintains a substantial computer based inventory of commercial and industrial sites throughout Georgia.

Georgia Electric Membership Corporation

Georgia Electric Membership Corporation maintains a robust economic development program that works in concert with the local communities, the Georgia Department of Industry, Trade & Tourism and other statewide economic development programs to bring industry into Georgia. Over the past 20 years, these efforts have resulted in numerous commercial and industrial firms locating or expanding in the state. Georgia Electric Membership Corporation is a founding member of the Georgia Allies, a public-private economic development partnership of ten private companies with statewide economic development interests and the Georgia Department of Economic Development. The Georgia Center for Site Selection was established to help businesses, both large and small, establish or expand operations in Georgia. Information on how to find the most appropriate community in Georgia, and information regarding available industrial buildings and sites to statistical information on communities across Georgia is provide free of charge.

Downtown Alpharetta Partners Program

Downtown Partners is a joint effort of the City of Alpharetta, with participating banks to collectively contribute resources in order to improve the downtown business climate. A low interest loan program and grant program is available for building improvements in the historic downtown district.

Georgia. Business Expansion Support Act

In 1994, the State passed legislation for tax credits against state income taxes to encourage economic development in Georgia. Some of the programs are targeted to specific industry groups manufacturing, warehousing and distribution, processing, telecommunications, tourism, or research and development, but does not include retail business).

Job tax credits and investment tax credits are available to the targeted industry groups at different levels, depending on the relative need of the area for economic development. Some credits are available to specific industry groups, while others apply to all employers. Overall, Fulton County and its cities are categorized as "Tier 3" communities within the plan and qualifying companies are eligible for associated credits. The following is a summary of the various provisions of the Act as they relate to Alpharetta:

Job Tax Credit. Applies to business or headquarters of a business engaged in manufacturing, warehousing and distribution, processing, tourism, and research and development industries. Does not include retail businesses.

In Alpharetta, companies creating fifteen or more new jobs may receive a \$1,500tax credit. Wages for the new jobs must be at least ten percent (10%) above the average wage of the county

Investment Tax Credit. Allows a corporation or person, which has operated an existing manufacturing or telecommunications support facility in the state for the previous three years to obtain a credit against income tax liability.

Such companies expanding in Alpharetta that invest a minimum of \$50,000 qualify for a 1% credit. That credit increases to 3% for recycling, pollution control and defense conversion activities. Taxpayers qualifying for the investment tax credit may choose an optional investment tax credit with the following threshold criteria. In Tier 3 a minimum investment of \$20 million would qualify for a 6% tax credit. A taxpayer must choose either the regular or optional investment tax credit. Once this election is made, it is irrevocable.

Retraining Tax Credit. Any employer in Alpharetta that provides retraining for employees to use new equipment, new technology, or new operating systems is eligible for a tax credit worth up to 50% of the direct cost of retaining full-time employees up to \$500 per employee per approved retaining program per year

Child Care Credit. Any employer in Alpharetta that provides or sponsors childcare for employees is eligible for a tax credit of up to 75% of the direct cost of operation to the employer. In addition, employers who purchase qualified childcare property will receive a credit totaling one hundred percent of the cost of such property. The credit is claimed at the rate of 10% per year for 10 years. These two childcare credits can be combined.

Research and Development Tax Credit. A tax credit is allowed for research expenses for research conducted within Georgia for any business or headquarters or any business engaged in manufacturing, warehousing and distribution, processing, telecommunications, tourism, or research and development industries. The credit is 10% of the additional research expense over the "base amount" provided that the business enterprise for the same taxable year claims and is allowed a research credit under Section 41 of the Internal Revenue Code of 1986.

Small Business Growth Companies Tax Credit. A tax credit is granted for any business or headquarters of any business engaged in manufacturing, warehousing and distribution, processing, telecommunications, tourism, or research and development industries having a state net taxable income which is 20% or more above that of the preceding year if its net taxable income in each of the two preceding years was also 20% more.

Ports Activity Job and Investment Tax Credits. Businesses or the headquarters that increase their port traffic tonnage through Georgia ports by more than 10% over their 1997 base year reported traffic, or by more than 10% over 75 net tons, 5 containers, or 10 20-foot equivalent units (TEUs) during the previous 12-month period are qualified for increased job tax credits or investment tax credits. In Alpharetta companies can receive an additional \$500 per job or 5% investment tax credit or 10% optional investment tax credit.

Companies that create 400 or more new jobs, invest \$20 million or more in new and expanded facilities and increase their port traffic by more than 20% above their base year port traffic may take both job credits and investment tax credits.

Headquarters Tax Credit. Companies establishing their headquarters or relocating their headquarters within Alpharetta must pay at least 110% of the average wage of the county, invest a minimum of \$1 million dollars and create 100 new jobs may take a credit equal to \$2,500 annually per full-time job or \$5,000 if the average wage of the new full-time job is 200% above the average wage of the county.

Sales Tax Exemptions: Several sales tax exemptions are available within the City:

- Manufacturing Machinery and Computers;
- Primary Materials Handling; and
- Electricity

Community Improvement Districts

The Georgia Constitution provides for a special kind of tax district called a Community Improvement District (CID). This type of district can be created only upon the petition of the property owners themselves, and is managed by a board that includes representatives of the property owners and the City. Under a CID, only nonresidential property is subject to the special tax, and the funds must be used only for certain public facilities, such as roads and water and sewer utilities. The funds can be used for both capital and operating expenditures, and the special nature of the Act allows the basis of taxation to be the development density or impact of a property as well as its assessed value. The Act also allows debt financing without referendum since a majority of the property owners (who must own at least 75% of the properties by value) must request the CID designation. A plus for the City is that debts of a CID are not debts of the government and do not affect the City's debt limit, while the CID can enjoy a lower interest rate due to its quasi-governmental structure.

A CID for Alpharetta was recently developed that is centered on the Georgia 400 Corridor. The focus of the CID is infrastructure, primarily sewer and roads. CIDs can be useful in encouraging a single major development by assisting in financing at an interest rate lower than on the open commercial market, and can be useful in developed nonresidential centers where additional services or facilities beyond those provided by the City are desired.

Special Tax Programs

There are two special tax programs in place in other jurisdictions that are not available in Alpharetta. Either of these programs could have some limited application to specific economic development needs in the city, such as encouraging investment in the central business district. State legislation would be needed to enact either of the following:

Urban Enterprise Zone. Under an Urban Enterprise Zone, specific areas are delineated where deteriorating physical or market conditions have resulted in little or no investment in property improvements or development. Within an Urban Enterprise Zone, if a property owner renovates or develops a site, the City's property taxes can be frozen at the pre-improvement level for a specified time period, then rising in annual steps to full value taxation at the end of the period. This approach is useful in encouraging investment that would otherwise not occur, and in eventually increasing the tax base where taxes would otherwise continue to fall through depreciation.

Urban Enterprise Zones can be set up for commercial, industrial or housing investment, but should be used only where development would not otherwise occur.

Tax Increment Financing. This approach allows property taxes to rise as sites are developed or improved, but directs all or some of the increase over and above the pre-improvement tax level into public facilities that have been built to support the area's revitalization. In effect, the government takes the risk through provision of public improvements up front, and then pays itself back through the higher tax collection increment while assuring that the pre-improvement tax collections continue to go into the general fund. Once the improvements are paid for, all of the taxes will go into the general fund. This approach can be very useful in a carefully controlled revitalization effort for a deteriorating area, where future renovations and development can be reasonably anticipated but are dependent on a general improvement to the area.

Development Impact Fees

Alpharetta was the first community in the state to adopt impact fees after enactment of the Georgia Development Impact Fee Act in 1988. The fees have produced considerable income that can be seen today in improved roads, fire services, and parks and recreation facilities. Fair and reasonable development impact fees can be a useful tool in encouraging economic development when the development community recognizes that adequate public facilities are important to attracting buyers and tenants to their developments. This maintains the long-range health of the community and therefore the continued ability of development to be a profitable enterprise.

■ Assessment—Economic Development

Over the last two decades Alpharetta has seen drastic changes and explosive growth both in its residential population and its employment opportunities. Currently it is estimated that more than 100,000 people work in the city, primarily in the services and retail sectors. These sectors have grown as a response to Alpharetta's location, amenities, positive executive housing market, available land, potential buying power of the residential population and high quality of life. Employment growth is expected to continue over the next 20 years, but at a much slower rate as the national economy slows down and available land for new development becomes tighter. Several issues have emerged during this economic development analysis:

- Services and retail sales are the primary sectors in the Alpharetta market, encompassing over 77% of the total employment market. The services sector includes the majority of employment activity that is done within an office building.
- Manufacturing, Technology and Warehousing will continue to increase numerically over the next 20 years, but will encompass less than 10% of the entire employment market due to the overwhelming growth of the service and retail sectors.
- The city must assure that there is adequately zoned land with appropriate infrastructure to service the expected growth in employment within the city. Industrially zoned land (manufacturing and wholesaling activities will require less land than in the past.
- The local economy is heavily dependent- on technology industries and while to a lesser degree
 than in the past the telecomm sector. Recent events in the national economy saw many companies within this sector downsize operations. The city should look at ways to further diversify
 the local economy to continue to reduce its heavy reliance on this sector.
- Retail sales will continue to grow in response to the higher than average incomes in the Alpharetta area. Appropriate land and infrastructure should be provided to meet this need.
- Traffic issues are identified as a major threat to the continued viability of the business market. Mobility options other than the automobile must be pursued, such as pedestrian access, local bus circulation, express buses, park and ride lots, and eventually the extension of the MARTA rail line to support existing and proposed additional employment within the city.
- The city has invested substantially in the redevelopment of historic downtown Alpharetta. Due to these efforts the downtown area has become a destination for area residents for shopping, recreating and eating. The historic character of this area has been emphasized through several festivals and events. The city will continue to promote this area as a live, work, play center

through continued development incentives and appropriate land use and transportation coordination.

Moving forward, the City will have an increased focus on business retention and creating an entrepreneurial climate that promotes the growth and development of companies seeded in Alpharetta while also continuing to fuel the in-migration of leading corporations. The combination of increased competition for private sector investments, traffic congestion, and a reduced supply of undeveloped land will require the City to become more creative and more aggressive with its economic development efforts.

4. Natural and Historic Resources Element

■ Introduction

An important element of land use planning is an assessment of how natural resources are utilized, managed and preserved in a responsible way during the land use process. This chapter provides an inventory and assessment of natural, scenic and historic resources found in Alpharetta. These resources include: public water sources; water supply watersheds; groundwater recharge areas; wetlands; protected rivers; floodplains; soils; steep slopes; prime agricultural and forest lands; plant and animal habitats; major parks, recreation and conservation areas; and scenic views and sites. As Alpharetta continues to develop, the City strives to find a balance between retaining areas of natural significance for animal and plant habitats and allowing growth through land development. This chapter outlines areas that are sensitive and important natural resources that the City should work to protect during the next 20 years.

The City of Alpharetta has always had a proactive stance towards growth management and the protection of valuable resources. The Engineering and Public Works Department, along with other city departments, has developed a wide range of programs, requirements and ordinances to address the many environmental needs of Alpharetta. In addition, the Department embodies the philosophy that educating the general public and developers with regard to environmental issues will bring about increased awareness of the importance of maintaining a proper balance between people and their environment. In 2001, the City implemented Ordinances consistent with the Department of Natural Resources (DNR) Environmental Protection Division (EPD) Rules for Environmental Planning Criteria. This included passing the Small Water Supply Watershed, Wetlands and Groundwater Recharge Ordinances.

■ Public Water Supply Sources

The City of Alpharetta does not have a drinking water intake within the City limits. However, the City does have areas of significant groundwater recharge and is located within a small water supply watershed. Ordinances were passed in 2001 that meet the DNR Rules for Environmental Planning Criteria for the protection of groundwater recharge areas and small water supply watersheds.

■ Water Supply Watersheds

A water supply watershed is the area of land upstream of a public drinking water intake. DNR criteria protect water supplies by establishing buffer zones around streams and by specifying allowable impervious surface densities within such watersheds. Since large drainage basins are less vulnerable to contamination by land development than small basins, more stringent watershed protection criteria are applied to water supply watersheds less than 100 square miles in size.

Almost all of Alpharetta is located in the Big Creek watershed, a recognized small water supply watershed of just under 100 square miles that serves as a tributary for the City of Roswell's water intake and also the Chattahoochee River, the primary source of water for the Atlanta region. Foe Killer Creek is a tributary to the Big Creek watershed. Since the Big Creek water supply watershed area constitutes a small

water supply watershed, certain minimum criteria must be met to insure clean and safe drinking water for the service area of this basin. The minimum criteria for small watersheds are:

- 100-foot undisturbed buffers and 150-foot impervious setbacks required from the banks of all perennial streams within a seven-mile upstream radius of the water supply intake. Septic tanks and their drain fields are not allowed in the 150-foot setback.
- Beyond the seven miles, perennial streams must maintain a 50-foot undisturbed buffer and 75-foot impervious surface setback from both banks. Septic tanks and their drain fields are not allowed in the setback areas.
- New sanitary landfills are subject to special regulations.
- New hazardous waste treatment and disposal facilities are prohibited.
- The overall impervious surface area of the basin is limited to 25 percent of the basin area, or the existing amount, if greater.
- New hazardous materials handling facilities must use spill and leak collection systems.

Section 3.3.12 Water Supply Watershed Protection of the City of Alpharetta Unified Development Code contains protection criteria, which meets these requirements for the Big Creek small water supply watershed.

■ Groundwater Recharge Areas

An aquifer is any stratum or zone of rock beneath the surface of the earth capable of containing or producing water from a well. Recharge areas are portions of the earth's surface where water infiltrates the ground to replenish an aquifer. In order to avoid toxic and hazardous waste contamination to drinking water supplies, groundwater recharge areas must be protected. While recharge takes place throughout practically all of Georgia's land area, the rate or amount of recharge reaching underground aquifers varies from place to place depending on geologic conditions.

According to data provided by the Georgia Department of Natural Resources on the Ground-Water Pollution Susceptibility Map of Georgia, Hydrologic Atlas 20, several areas in Alpharetta have potentially significant groundwater recharge areas, and are therefore, vulnerable to ground water contamination. The Ground Water Pollution Susceptibility Map identifies areas in Alpharetta that are considered "most significant ground water recharge areas." The susceptibility rating in the majority of Alpharetta is "lower susceptibility." The soils in North Fulton County tend to be well drained, enabling water to percolate into the ground; however, most of the rock types have low permeability, supplying only small amounts of water to wells suitable for household use. The Chattahoochee River Basin in underlain by bedrock, and ground water is contained within the crystalline rock aquifer. The crystalline rocks contain little primary porosity; instead, most ground water is stored in the porous saprolite and transmitted to wells in the bedrock via fractures. Currently, the crystalline rock aquifers are used primarily for private water supplies and livestock watering.

Both the state and federal government regulate groundwater recharge areas. Requirements from the Environmental Protection Division (EPD) include restrictions and regulations on sanitary landfills, land disposal of hazardous wastes, spray irrigation of wastewater and wastewater treatment basins.

Overall requirements of significant recharge areas, as defined and delineated by the DNR Rules for Environmental Planning Criteria, are as follows:

- New sanitary landfills, if permitted by DNR and the zoning district, shall have synthetic liners and leachate collection systems.
- New hazardous waste treatment or disposal facilities are prohibited.
- Any new facility that involves the treatment, storage or disposal of hazardous waste, if permitted by DNR and the zoning district, shall perform such operations on an impermeable surface having a spill and leak collection system.
- Any new facility that handles hazardous materials of the types listed in Section 312 of the Resource Conservation and Recovery Act of 1976 (excluding underground storage tanks) in amounts of 10,000 pounds or more on any one day shall perform their operations on impermeable surfaces having spill and leak collection systems as prescribed by DNR.
- No construction may proceed on a building to be served by a septic tank unless the Fulton County Health Department approves the proposed septic tank installation as in compliance with the DNR Part 5 Criteria.
- Permanent storm water infiltration basins shall not be constructed in areas having high pollution susceptibility.
- A new above-ground chemical or petroleum storage tank must have secondary containment of 110% of the volume of the tank or 110% of the volume of the largest tank in a cluster of tanks. This requirement does not apply to:
 - Any tank having a maximum capacity of less than 660 gallons; and,
 - Any tank used for agricultural purposes, provided it complies with all Federal requirements.

Some requirements for ground water recharge areas vary according to the susceptibility of the recharge area. The water recharge area in Alpharetta is classified as having "lower" susceptibility to pollution; therefore, the following restrictions apply:

- New agricultural waste impoundment sites larger than 50 acre-feet must be lined.
- Any new home served by septic tank/drain field system must be approved by the County Health
 Department and must have a lot that is at least 110% of the subdivision minimum lot size required by Table MT-1 of the Department of Human Resources Manual for On-site Sewage
 Management Systems.
- Any new manufactured home park served by a septic tank/drain field system must be approved
 by the county Health Department and must have a lot or space that is at least 110% of the subdivision minimum lot or space size required by Table MT-2 of the Department of Human Resources Manual for On-Site Sewage Management Systems.

In Section 3.3.13 of the Unified Development Code, the City has adopted a Groundwater Recharge Area Protection Ordinance that meets the above DNR Rules for Environmental Planning Criteria.

■ Wetlands

Wetlands serve as important fish and wildlife habitats and breeding ground, and are an integral factor in food chain production. Numerous plant and animal species have adapted to the special conditions of freshwater wetlands and cannot survive elsewhere. Wetlands generally include swamps, marshes, bogs and similar areas. In Alpharetta, wetlands are adjacent to Big Creek and its tributaries throughout the City.

Wetlands are an important natural resource that recharge ground water; store floodwater by releasing water slowly; filter pollutants, especially polluted storm water run-off, from ground and surface waters; provide habitat for plants and animals; and provide recreation opportunities. These qualities are extremely important in light of rapid development occurring in Alpharetta. Alpharetta has significant areas of delineated wetlands within its boundaries that must be protected and has put into place several programs and policies to ensure protection of wetlands. The Soil Erosion and Sedimentation Control Ordinance (UDC Section 3.1.1), the Stormwater Management Ordinance (UDC Section 3.3) and the adopted Metro Rivers Protection Act provide for protection of stream areas that typically include wetlands. In addition to these measures, as part of its land disturbance permitting procedure, the City requires proof of compliance with the U.S. Army Corps of Engineers permitting procedure, Section 404 of the Clean Water Act, or verification that the project will not have any impact on wetlands. This procedure assures the City that valuable wetlands will not be lost to development.

In order to provide additional criteria for the protection of wetlands in Alpharetta and to ensure compliance of existing policies, the City has adopted the DNR's minimum "Criteria for Wetlands Protection" (391-3-15.03). In 2001, Section 3.3.7 *Wetlands* of the UDC was approved by City Council. This ordinance specifically implemented measures consistent with the DNR Rules for Environmental Planning Criteria. A Wetlands Protection District was established in addition to specific wetlands protection and permitting criteria. Land uses that are deemed acceptable within wetland and flood prone areas include: (1) Timber production and harvesting, (2) Wildlife and fisheries management, (3) Wastewater treatment, (4) Camping, hiking, hunting and fishing recreation activities, (5) Natural water quality treatment and purification, (6) Other uses permitted under Section 404 of the Clean Water Act. In addition, as outlined elsewhere in this chapter, the city is working towards developing a greenway system to further protect sensitive areas.

■ Protected Mountains

There are no mountains that fall within the Department of Natural Resources "protected mountains" criteria in the City of Alpharetta.

■ Protected Rivers

The majority of the City of Alpharetta lies within the Big Creek basin, which is a tributary to the Chattahoochee River. The City has adopted the Metropolitan River Protection Act's Chattahoochee River Tributary Protection Ordinance. For approximately 45 miles downstream of Lake Lanier, the Chattahoochee River is classified trout water because of the cold hypolimnetic discharge from the Buford Dam. Approximately 350,000 catchable and fingerling trout are stocked annually by the Georgia Department of Natural Resources, supporting a major trout fishery that provides a unique recreational opportunity for metropolitan Atlanta area. Most of this river section is considered part of the Chattahoochee River National Recreation Area, and the National Park Service owns scattered tracts of land adjoining the river. These areas serve as public access points for recreational use of the river. This section is considered a secondary trout stream. This ordinance establishes a 50 foot undisturbed buffer along all perennial streams in the drainage basins of all tributaries of the Chattahoochee River that enter the Chattahoochee downstream from Buford Dam and upstream from Peachtree Creek.

The city has adopted more stringent requirements than the Metropolitan River Protection Act. Section 3.3.6 *Stream Buffer Protection* of the UDC requires a 100-foot undisturbed buffer and 150-foot impervi-

ous setback on perennial streams and a 50-foot undisturbed buffer and 75-foot impervious setback on non-perennial streams.

■ Coastal Resources

There are no coastal resources located in the City of Alpharetta.

■ Flood Plains

The Flood Insurance Program of the Federal Emergency Management Agency (FEMA) has delineated the 100-year floodplain of streams within the City of Alpharetta on its Flood Insurance Rate Maps. The City requires new residential structures to be at least three (3) feet above the 100-year base flood elevation defined by FEMA. In 2004, the City updated the Floodplain Management Ordinance (UDC Section 3.4), which sets guidelines and standards for development in and adjacent to the flood plain. The Floodplain Management Ordinance meets FEMA floodplain management standards and the requirements set forth in the Metropolitan North Georgia Water Planning District's Model Floodplain Management/Flood Damage Prevention Ordinance. This Ordinance regulates new development based on the Regulatory Flood which is defined as the flood having a one percent chance of being equaled or exceeded in any given year assuming the drainage basin is fully developed as shown on the current land use map. This may be equal to or higher than the FEMA Base Flood. The City will be mapping the regulatory floodplain in 2005.

Currently, much of the flood plain of Big Creek and its major tributaries has been designated as open space and is being incorporated into the City's greenway system.

Climate

Alpharetta has a four-season climate where summers average 78 degrees and winters are short and mild. Average temperature in the winter is 51 to 56 degrees, and 73 to 82 degrees in the summer. Average rainfall is 48 to 50 inches per year. Alpharetta's elevation results in moderate temperatures throughout the year and protection from the extremes of heat and humidity often associated with other Southern cities.

Topography

Alpharetta is located within the foothills of the Southern Appalachians in north-central Georgia. Topography in the Piedmont Region consists of gently sloping, rolling hills. The average elevation is 1,050 above sea level. There are some steep slopes surrounding Big Creek in the Congaree-Chewacla-Wickham soil association. Development in this area is regulated by the floodplain ordinance. The topography in Alpharetta poses few development constraints; however, during the land development process, the City of Alpharetta requires the notation of steep slopes on all site plans.

Protected Mountains

There are no mountains that fall within the Department of Natural Resources "protected mountains" criteria in Alpharetta.

■ Soil Types

According to the U.S. Department of Agriculture's Natural Resource Conservation Service Fulton County, "Georgia Soil Survey Report, 1958," there are three main soil associations in Alpharetta: the Appling-Cecil and Lloyd-Cecil-Madison located throughout the City and the Congaree-Chewacla-Wickham association predominately located around Big Creek.

There are no development constraints associated with soils in the Appling-Cecil and Lloyd Cecil-Madison soil associations, although there are potential development restrictions within the Congaree-Chewacla-Wickham Association due to drainage quality, slope and floodplain restrictions. For development proposals seeking permits, the City requires site-specific soil studies to be submitted as a part of the site erosion and sedimentation control plan.

Appling-Cecil: These soils are located predominately in the northern portion of the Alpharetta vicinity. These soils are well drained and occur on rolling and hilly uplands primarily used for pastureland. There are no development restrictions associated with this soil type.

Lloyd-Cecil-Madison: These soils are well drained and occur on rolling and hilly uplands. There are no development restrictions associated with this soil type.

Congaree-Chewacla-Wickham: These soils are predominantly along Big Creek. The slope is usually level although the banks along the Big Creek are quite steep in some areas. Drainage is generally good, although in some areas is poor due to sediment and vegetation along stream channels. As noted above, this soil association does present some development restraints. Much of the area associated with this soil type is protected within stream buffers or floodplain.

■ Steep Slopes

Alpharetta is located within the foothills of the Southern Appalachians in north-central Georgia. Topography in the Piedmont Region consists of gently sloping, rolling hills. The average elevation is 1,050 above sea level. There are some steep slopes surrounding Big Creek in the Congaree-Chewacla-Wickham soil association. The Floodplain Management Ordinance regulates development in this area. The topography in Alpharetta poses few development constraints; however, during the land development process, the City of Alpharetta requires the notation of steep slopes on site plans.

■ Prime Agricultural and Forest Land

Prime Agricultural Land

Very little area within Alpharetta is in agricultural use today. Scattered gardens, limited crop fields and a few pastures are all that remain of the City's agricultural past. Horse farms, however, dot the western portion of the City and become more common to the northwest. These farms are generally small and oriented to the boarding of horses for pleasure and personal enjoyment. In terms of prime agricultural land, Alpharetta's location on the fringes of a major urban community indicates that the small amount of remaining acreage that is zoned for agricultural use may eventually be converted to some other form of development.

Forested Land

Native forests in the Piedmont Province were dominantly deciduous hardwoods and mixed strands of pine and hardwood. Cotton production in the Piedmont Province left the land relatively infertile and almost devoid of topsoil. The secondary forests that cover most of the area today replaced abandoned agricultural lands. Much of the undeveloped land in Alpharetta is currently forested. Private sector interests have master planned the majority of this land for future mixed-use developments.

All development in Alpharetta must conform to tree protection requirements as indicated in the tree protection and parking regulations of the Alpharetta Unified Development Code (UDC). The ordinance requires replacement of 20 units per acre for new or infill development and 200 square feet of area per newly planted tree in parking lot islands. The regulations establish maximum tree removal criteria as well as replanting criteria for new development and existing development. The city's tree protection ordinance is very strict in protecting specimen trees. The definition of a specimen tree is a 24" Diameter Breast Height (DBH) overstory tree, 30" DBH pine tree and 8" DBH understory tree. The critical root zone of a specimen tree is defined as 1.3 feet radius per inch DBH. Specimen trees are protected through an alternate design requirement whereby developers are required to redesign a site if specimen trees can realistically be saved. If specimen trees are saved through alternate design extra tree unit credits are given as an incentive. If a specimen tree is removed, three times the unit credit is assessed on top of all other site requirements.

The Alpharetta Unified Development Code also specifies densities, building coverage, setback and buffer requirements that, in effect, mandate vegetated areas in the various established zoning districts. Conformance to the DNR regulations for protection of wetlands, ground water recharge areas and aquifers and water supply watersheds, together with the currently adopted tree protection policies and procedures, should adequately control development and preserve as much forested land as possible.

Plant and Animal Habitats

North Fulton County is home to several species of plants and animals that are classified as endangered, threatened, or rare. State and Federal legislation relating to endangered plants and animals include the Endangered Species Act of 1973, the State Wildflower Preservation Act of 1973, and the Endangered Wildlife Act of 1973.

As an element of community sustainability, the City of Alpharetta is a strong advocate for the appreciation and use of native plant materials that have increased chances of survival and thriving without dependency on constant watering and fertilization. Understanding the complete vegetation dynamic is vital to a successful community and the quality balance of life as well as to the sustainment of natural resources: air, soil, water and wildlife.

The following list contains plant and animal species native to North Fulton County and, in general, to this part of Georgia which are classified as protected by the State of Georgia and/or the Federal Government. Classifications are as follows T-Threatened, E-Endangered, R-rare. Designations with an "S" are specifically identified at the state level.

Plants		Animals	
Type	Habitats	Туре	Habitats

Piedmont bar- ren strawberry (SR)	Rocky acedic woods along streams with mountain laurel; rarely in drier upland oak- hickory-pine	Gulf moccasin- shell mussel (E,SE)	Medium streams to large rivers with slight to moderate current over sand and gravel substrates; may be associated with muddy sand substrates around tree roots
Bar star-vine (SPS)	Twining on subcanopy and un- derstory trees/shrubs in rich alluvial woods	Red-cockaded woodpecker (E)	Nest in mature pine with low understory vegetation; forage in pine and pine hardwood stands
		Bald Eagle (SPS)	Inland waterways and estuarine areas in Georgia
		Bachman's spar- row (SR)	Abandoned fields with scattered shrubs, pines, or oaks
		Appalachian Bewick's Wren (SR)	Dense undergrowth, overgrown fields, thickets, and brush in open or semi-open habitat; feed pri- marily on insects
		Bluestripe shiner (ST)	Brownwater Streams
		Peregrine falcon	Anatum nests on cliffs, high hills, or tall buildings

Properties using federal funds, applying for federal permits or State public agencies using federal funds must survey their properties for endangered species and prepare plans to reduce or avoid impact. In addition, during both the master plan process and the land disturbance-permitting process the City requires identification of any plant or animal habitats. As part of the city's Tree Protection Ordinance, developments must retain certain existing mature trees and replant additional trees. Native vegetation is suggested to provide habitats for indigenous birds and animals.

The city of Alpharetta is proposing to build a new Environmental Education Passive Park on 40 acres situated along Big Creek at Kimball Bridge Road. This project will include more than 32 acres of wetlands, floodplain, meadow and upland forest. Visitors will be able to stroll through specialty areas, view exhibits, attend classes, conduct research or volunteer to help with various duties. This area will link with the Alpharetta Greenways Trail System, and will further the goal of protecting native plants and habitats.

■ Prime Agricultural and Forested Lands

Prime Agricultural Land

Very little area within Alpharetta is in agricultural use today. Scattered gardens, limited crop fields and pasturage are all that remain of the City's agricultural past. Horse farms, however, dot the western portion

of the City and become more common to the northwest. These farms are generally small and oriented to the boarding of horses for pleasure and personal enjoyment. In terms of prime agricultural land, Alpharetta's location on the fringes of a major urban community indicates that the small amount of remaining acreage that is zoned for agricultural use may eventually be converted to some other form of development.

Forested Land

Native forests in the Piedmont Province were dominantly deciduous hardwoods and mixed strands of pine and hardwood. Cotton production in the Piedmont Province left the land relatively infertile and almost devoid of topsoil. The secondary forests that cover most of the area today replaced abandoned agricultural lands. Much of the undeveloped land in Alpharetta is currently forested. Private sector interests have master planned the majority of this land for future mixed-use developments.

All other development in Alpharetta must conform to minimal requirements for tree protection as indicated in the tree and parking regulations of the Alpharetta Unified Development Code. The city's tree ordinance is very strict in protecting specimen trees. The ordinance requires 20 units per acre for new or infill development. Recently the definition of a specimen tree was amended from 32" to 24" in caliper. The ordinance requires 200 square feet of open space per tree. The regulations establish maximum tree removal criteria as well as replanting criteria for new development and existing development. The Alpharetta Unified Development Code also specifies densities, building coverage, setback and buffer requirements that, in effect, mandate vegetated areas in the various established zoning districts. Conformance to the DNR regulations for protection of wetlands, ground water recharge areas and aquifers and water supply watersheds, together with the currently adopted tree protection policies and procedures, should adequately control development and preserve as much forested land as possible.

A key initiative to call attention to the importance of trees is The Gate Keeper Program where citizens nominate a tree for its age, height, girth or uniqueness. Gate Keeper status is conveyed at a Council Meeting, scheduled during the year after Georgia Arbor Day in February. This program has furthered the city's goal of keeping the city "green."

■ Major Parks, Recreation Areas and Conservation Areas

Descriptions and plans for park, recreation facilities, greenways and opens space are included in the Community Facilities Chapter of this plan. As part of several districts outlined in the Unified Development Code, the city requires the dedication of open space for conservation. The City of Alpharetta Stormwater Management Ordinance gives water quality credits to builders and developers that provide permanent conservation easements or green space areas in Alpharetta.

Greenways Plan

The Greenway Conceptual Master Plan outlines the development of several open space areas connected throughout the City to provide access to recreational areas from all sections of the City; this is particularly true along both Big Creek and Foe Killer Creek. Currently a 45-acre River Corridor facility at Mansell and Haynes Bridge Road along Big Creek has been dedicated to the City. Upon completion, the City's urban greenway will have a network of trails and environmental educational opportunities along a 1000-4000 foot wide corridor extending approximately ten miles through the City along the banks of the Big Creek connecting residential and commercial areas.

■ Governor's Greenspace Program

The City of Alpharetta's long-term goal is to set aside 20% of its land mass as permanently protected greenspace. There are 13,434 acres within the City; 20% open space would require that 2,687 acres be set aside. The county currently has 767.54 acres designated as permanently protected Greenspace. Several types of property will be utilized to achieve this goal, including: 100 year floodplain (11%); passive parks (1%); Redevelopment, Annexations, and Donations (7%); and GA 400 Buffer (1%). In 2000 the City submitted a Greenspace Program Plan to the state for acceptance. The City of Alpharetta was allocated \$179,318 from the Governor's Greenspace Fund for the first year, which was based on the City's percent of total population in Fulton County.

Obtaining additional greenspace in the City can be accomplished in several ways. First, additional greenspace can be obtained through further annexation of residential/agricultural property north of the city and redevelopment of existing industrial property, where appropriate. Second, permanent protection may be provided through the use of conservation easements and/or land use trust.

Presently, the city owns 427.54 acres of existing floodplain within the City of Alpharetta's Greenway System; of the total 427.54 acres, 416.12 acres are fee simple ownership and 11.42 are under conservation easements but are not protected in perpetuity. The City of Alpharetta has 151 acres in passive parkland and 189 acres in the GA 400 buffer. Existing conditions are as follows:

Ownership	Acres	Usage
City of Alpharetta	416.12	Greenway
City of Alpharetta	11.42	Greenway (conservation easement)
City of Alpharetta	30	Wills Park—Passive land
City of Alpharetta	77	North Park—Passive land
City of Alpharetta	.5	Citizen Square—Passive land
City of Alpharetta	43	Webb Bridge Park—Passive land
Various private owners	189	GA 400 Buffer
Total	767.54	

The City owns 40 acres of land in Forsyth County resulting from a gift from a developer that is protected in perpetuity and must remain an educational preserve.

Strategy

Greenways Plan

The greenways plan delineates areas along Big Creek and its tributaries that will be utilized as passive open space. Land is acquired through donations, condemnations, and purchases. Protection will be provided in the future through conservation easements, land trusts, etc.

Development Ordinances and Regulations

Open Space Requirement--There is an open space requirement within several zoning districts. Developments within master plan districts require 15% open space. Presently no permanent protection is required; however, it will be considered in the future.

Buffer Requirements—The city of Alpharetta has one of the most comprehensive stream buffer requirements in the state. The current ordinances require a 150-foot impervious setback on perennial streams and 75-foot impervious setback on non-perennial streams. Additionally, the city prohibits filling of the 100-foot floodplain.

GA 400 Tree Protection Buffer—This is a 120 foot buffer running adjacent and on each side of GA 400 throughout the city limits. The ordinance requires the buffer to be undisturbed, which means that no grading activity or tree removal is allowed within the buffer. Presently this land is owned by private owners and is not permanently protected according to administrative rules.

The City of Alpharetta will continue to fund the greenway system, as well as large regional parks to accommodate the need of its citizens for open space recreation. Additionally, the city will continue to use the authority of its zoning ordinance to require open space allotments in master planned districts and require buffers along GA 400.

Barriers to Achieving Greenspace Goal

There are several barriers to achieving greenspace goals, including the following:

- Lack of available land—large tracts of land are scarce due to aggressive development and high real estate values;
- Lack of sufficient funds for acquisition;
- Efforts to preserve greenspace directly conflict with rights of property owners for reasonable economic use.

There are several mitigation steps that the City can follow:

- The City of Alpharetta will consider the annexation of additional lands in the less developed areas of the city. These areas provide an additional 16,415 acres of land.
- Other methods of ownership need to be considered, such as donations, conservation easements, etc.
- Other funding sources such as grants, bonds and donations will be investigated.
- Tax incentives would need to be considered to provide help induce landowners to relinquish development rights. Development rights transfers and property tax abatements would be two important incentives to discuss.

- Continue to encourage conservation easements through water quality credits.
- Request a revision of the administrative rules regarding the "permanent protection" definition.

Scenic Views and Sites

The City of Alpharetta is interested in protecting the appearance of several areas within its corporate limits that contribute to Alpharetta's character as a unique and aesthetically pleasing community.

The GA 400 corridor is of specific importance to the future of Alpharetta. This corridor serves as a view corridor for traffic traveling through Alpharetta via GA 400 and creates a first impression for visitors. A tree protection zone enhances this major arterial 120 feet wide along both sides of GA 400 that is required to remain virtually undisturbed. Alpharetta has incorporated this tree protection zone into its zoning ordinance and intends to continue to enforce this regulation in the future. The interchanges with GA 400 are also considered important view corridors that need to be protected.

The Big Creek Greenway currently provides over six (6) miles of continuous trails that provide views of Big Creek, wetlands, forests and wildlife. This Greenway is an important part of the character of Alpharetta and will be expanded in the future.

■ Air Quality

Air quality has a direct and far reaching impact on public health and well-being. Young children, the elderly, and people with asthma and other respiratory ailments are especially vulnerable to polluted air conditions.

Air quality is affected by a number of factors including dust, pollen, temperature, and humidity, smoke and chemical emissions. Natural sources of air pollution, such as weather conditions and seasonal changes (pollen) are difficult to control. However, the greatest amount of polluting emissions released into the atmosphere comes from man-made sources.

Ground level ozone is the most serious threat to ambient air quality in Fulton County. Ground level ozone is the principal component of smog, which is a major irritant to the mucous membranes and causes burning and irritation of the eyes, nose and throat. As much as half of the ground level ozone found in urban areas can be traced to mobile sources of air pollution, such as automobiles, trucks and buses.

Another important air pollutant is carbon monoxide (CO), an odorless and colorless gas that in high enough concentrations can cause brain damage. Approximately 90% of carbon monoxide emissions in the atmosphere come from motor vehicle exhaust.

Fulton County is one of the 13 counties that together comprise the Atlanta area's urban air quality basin. Overall air quality in this 13 county area is measured and compared against the National Ambient Air Quality Standards. The Atlanta area is considered to be a "non-attainment area" for air quality. This non-attainment status directly affects the region's ability to expand roadway capacity. Due to federal regulations, the current non-attainment designation directly impacts the county's road improvement program and its ability to add additional travel capacity to regionally significant roads.

The Atlanta Regional Commission (ARC) is attempting to develop solutions to the area's air quality problems that can be implemented at local and regional levels. These include efforts aimed at reducing the

number of vehicle miles traveled, reduction in the number of vehicle trips, and exploring new technologies that would reduce the severity of mobile sources of air pollution, such as electric and natural gas powered vehicles.

The City of Alpharetta is working toward improving air quality through coordination and integration of land use and transportation, the encouragement of mixed use and pedestrian friendly facilities, and building of the necessary infrastructure for alternative modes of transportation.

■ Water Resources

The Alpharetta area is characterized by rolling hills, heavy forest cover in undisturbed areas, and several streams and creeks. Jones Bridge Road, Alpharetta Highway/Main Street, and Crabapple Road/Mayfield Road generally follow the ridgelines that define the city's drainage basins. Most of the city drains into two stream systems, the largest being Big Creek that flows down from Forsyth County east of Georgia 400, where Camp Creek and Caney Creek at Lake Windward, and Long Indian Creek farther south near Haynes Bridge Road join it. The other major basin, Foe Killer Creek, drains the west side of the City up to Crabapple and Mayfield Roads. Foe Killer Creek joins Big Creek at the southern end of the City at GA 400, where they flow into Roswell and the Chattahoochee River. The area generally north and west of the City drains into Cooper Sandy Creek, which flows west into the Little River and Lake Altoona as part of the Etowah River basin. In Alpharetta, drinking water comes predominately from the Chattahoochee River fed by the many streams and tributaries in the Big Creek Watershed. The watershed streams and other bodies of water, such as lakes and ponds, are suffering from illegal dumping, chemical runoff from farms and lawns, petroleum runoff from roads and parking lots, sediment from construction sites, sewage from failing or overloaded septic systems and broken sewer lines, toxic discharges from spills and deliberate releases and other problems including airborne pollutants. Alpharetta is part of the Chattahoochee River Basin, which originates in the southeast corner of White County, Georgia within the Blue Bridge Mountains, and flows southwesterly, and flows through the Atlanta metropolitan area, until reaching the Alabama border at West Point, Troup County, Georgia. From this point south, the Chattahoochee forms the border between Georgia and Alabama, and terminates in Lake Seminole, at the Georgia-Florida border for a total distance of about 434 miles. The Chattahoochee River Basin or watershed constitutes all land areas draining into the river, occupies a total of 8,770 square miles. Water resources within the Chattahoochee River Basin are affected by runoff from all parts of the basin.

The City of Alpharetta is charged with being a good steward of water resources within its municipal borders. To aid the protection of water resources and to protect the public, the city operates a laboratory and conducts tests on source water samples that are collected every week. The samples are taken from lakes, streams, ponds, storm drain outfalls and other drainage pipes. Additional information is taken from recorded observations of land use changes and other physical characteristics that are impacted by the actions of man and nature. Data are used to identify problems such as erosion and sewer spills as well as to make local policy recommendations. Data is kept in the ES office and analyzed for problems in stream as well as for quality assurance/quality control purposes.

As part of the requirements of the Georgia Department of Community Affairs' Minimum Planning Standards, communities must comply with minimum standards established by the Department of Natural Resources with respect to land and water resources. Commonly known as "Part 5 Minimum Environmental Standards," these statewide standards were developed by DNR pursuant to Code Section 12-2-8 and address three basic concerns:

Aquifers and groundwater recharge areas;

- Water supply watersheds; and
- Wetlands.

To comply with the Part 5 Standards for each category of resource, communities must:

- Identify and inventory any occurrences of these resources within the community's jurisdiction;
- Determine whether the community has appropriate protective regulations that are at least as stringent as those imposed by DNR; and
- Determine whether additional regulations are needed to meet or exceed the minimum standards imposed by DNR.

The city is in compliance with the DNR's "Part 5" requirements. Following is a description of resources within the community in addition to an outline of programs the city has developed to address water resource issues. The city has also developed appropriate regulations that meet the requirements outlined in the "Part 5 Minimum Environmental Standards" and has incorporated these requirements into its recently developed Unified Development Code.

Aquifers and Groundwater Recharge Areas

Recharge areas are portions of the earth's surface where water infiltrates the ground to replenish an aquifer, which is any stratum or zone of rock beneath the surface of the earth capable of containing or producing water from a well. In order to avoid toxic and hazardous waste contamination to drinking water supplies, groundwater recharge areas must be protected. While recharge takes place throughout practically all of Georgia's land area, the rate or amount of recharge reaching underground aquifers varies from place to place depending on geologic conditions.

According to data provided by the Georgia Department of Natural Resources on the Ground-Water Pollution Susceptibility Map of Georgia, Hydrologic Atlas 20, several areas in Alpharetta have potentially significant groundwater recharge areas, and therefore, vulnerable to ground water contamination. The Ground Water Pollution Susceptibility Map identifies areas in Alpharetta that are considered "most significant ground water recharge areas." The susceptibility rating in the majority of Alpharetta is "lower susceptibility." The soils in North Fulton County tend to be well drained, enabling water to percolate into the ground; however, most of the rock types have low permeability, supplying only small amounts of water to wells suitable for household use. The Chattahoochee River Basin in underlain by bedrock, and ground water is contained within the crystalline rock aquifer. The crystalline rocks contain little primary porosity; rather, most ground water is stored in the porous saprolite and transmitted to wells in the bedrock via fractures. Currently, the crystalline rock aquifers are used primarily for private water supplies and livestock watering.

Both the state and federal government regulate groundwater recharge areas. Requirements from the Environmental Protection Division, (EPD), include restrictions and regulations on sanitary landfills, land disposal of hazardous wastes, spray irrigation of wastewater and wastewater treatment basins.

As part of the Unified Development Code, the City has adopted a Groundwater Recharge Area Protection Ordinance that meets DNR Part 5 Minimum Requirements. This Ordinance establishes a groundwater recharge area district, determines pollution susceptibility, and establishes permit development review, site plan requirements and enforcement policies. The objectives of the ordinance are:

 Protect groundwater quality by restricting land uses that generate, use or store dangerous pollutants in recharge areas;

- Protect groundwater quality by limited density of development; and
- Protect groundwater quality by ensuring that any development that occurs within the recharge area shall have no adverse effect on groundwater quality.

Overall requirements of significant recharge areas, as defined and delineated by DNR, are as follows:

- New hazardous waste treatment or disposal facilities are prohibited.
- New sanitary landfills, if permitted by DNR and the zoning district, shall have synthetic liners and leachate collection systems.
- Any new facility that involves the treatment, storage or disposal of hazardous waste, if permitted by DNR and the zoning district, shall perform such operations on an impermeable surface having a spill and leak collection system.
- Any new facility that handles hazardous materials of the types listed in Section 312 of the Resource Conservation and Recovery Act of 1976 (excluding underground storage tanks) in amounts of 10,000 pounds or more on any one day shall perform their operations on impermeable surfaces having spill and leak collection systems as prescribed by DNR.
- A new above-ground chemical or petroleum storage tank must have secondary containment of 110% of the volume of the tank or 110% of the volume of the largest tank in a cluster of tanks. This requirement does not apply to:
 - Any tank having a maximum capacity of less than 660 gallons; and,
 - Any tank used for agricultural purposes, provided it complies with all Federal requirements.

Requirements for ground water recharge areas vary according to the susceptibility of the recharge area. The water recharge area in Alpharetta is classified as having "lower" susceptibility to pollution; the following applies:

- New agricultural waste impoundment sites larger than 50 acre-feet must be lined.
- Any new home served by septic tank/drain field system must be approved by the County Health
 Department and must have a lot that is at least 110% of the minimum lot size required by Table
 MT-1 of the Department of Human Resource's Manual for On-site Sewage Management Systems
- Any new manufactured home park served by a septic tank/drain field system must be approved
 by the county Health Department and must have a lot or space that is at least 110% of the
 minimum lot or space size required by Table MT-2 of the Department of Human Resource's
 Manual for On-Site Sewage Management Systems.

In addition to an Ordinance for Groundwater Recharge areas, the City has taken, and is in the process of taking, several additional steps to protect ground water:

- Review proposed capital improvements, zoning districts and comprehensive plan in order to minimize impact on critical recharge areas. Critical areas have been identified on the city's Future Land Use Plan Map.
- Identify critical recharge areas for purchase or protection as part of the County's Greenspace Plan.

Water Supply Watersheds

A water supply watershed is the area of land upstream of a public drinking water intake. DNR criteria protect water supplies by establishing buffer zones around streams and by specifying allowable impervious surface densities within such watersheds (these criteria do not apply to watersheds not used for public drinking water supply). Since large drainage basins are less vulnerable to contamination by land development than small basins, more stringent watershed protection criteria are applied to water supply watersheds less than 100 square miles in size.

Almost all of Alpharetta east of downtown is located in the Big Creek watershed, a recognized water supply watershed of just under 100 square miles that serves as a tributary for the City of Roswell's water intake and also the Chattahoochee River, the primary source of water for the Atlanta region. Foe Killer Creek is a tributary to the Big Creek watershed. Since the Big Creek water supply watershed area constitutes a small water supply watershed, certain minimum criteria must be met to insure clean and safe drinking water for the service area of this basin. The minimum criteria for small watersheds are:

- 100 foot undisturbed buffers and 150 foot impervious surface setbacks required on the banks of all perennial streams within a seven mile upstream radius of the water supply intake. Septic tanks and their drain fields are not allowed in the 150-foot setback.
- Beyond the seven miles, perennial streams must maintain a 100-foot average vegetative buffer and 150-foot impervious surface setback on both banks. Septic tanks and their drain fields are not allowed in the setback areas.
- Hazardous waste treatment and disposal facilities are prohibited.
- Sanitary landfills and hazardous waste handling facilities are subject to special regulations.
- The overall impervious surface area of the basin is limited to 25 percent of the basin area, or the existing amount, if greater.
- In all locations in small watersheds, new hazardous materials handling facilities must use spill and leak collection systems.

The City of Alpharetta currently has several programs and policies to help eliminate pollution sources affecting the Big Creek water supply watershed. As an element of the land disturbance permitting process, the City has adopted a Soil Erosion and Sedimentation Control Ordinance requiring that key project personnel attend a three-hour class in order to get the permit. This class provides information on how sediment can be retained on site through the use of physical and vegetative best management practices such as silt fencing, sediment basins, riprap, and other erosion and sedimentation control measures.

All of the above policies and programs indicate the City of Alpharetta's desire to protect this valuable resource from pollution. The City also recognizes the need to implement further programs and polices and views the DNR's minimum "Criteria for Protection of Water Supply Watersheds" as an instrument to obtain this extra measure of protection. Therefore, the City has adopted these minimum criteria for the portion of the Big Creek water supply watershed that lies within the city limits of Alpharetta.

Wetlands

Wetlands serve as important fish and wildlife habitats and breeding ground, and are an integral factor in food chain production. Numerous plant and animal species have adapted to the special conditions of freshwater wetlands and cannot survive elsewhere. Wetlands serve as storage areas for flood protec-

tion/control, erosion control, water quality maintenance, and groundwater recharge and supply and recreation opportunities. Wetlands generally include swamps, marshes, bogs and similar areas. In Alpharetta, wetlands are adjacent to the tributaries and main flows of Big Creek that run throughout the City.

Wetlands are threatened by a number of human and natural actions. Some of these are direct human threats such as drainage of the wetlands for land reclamation, construction of dikes, dams and levees which alter wetlands, and discharge of toxic materials such as oils, pesticides or other pollutants which destroy plants and wildlife within the wetlands. Other human threats are indirect such as sediment diversion by dams and channels, and subsidence due to extraction of groundwater, oil and other minerals. Finally, some other threats are natural such as storms, droughts, and destruction by animals. In a partnership with a private company, Alpharetta has established the Alpharetta Wetlands Mitigation Bank with the main thrust to restore the functionality of wetlands along the main flows of Big Creek.

Wetlands are an important natural resource that recharge ground water; store floodwater by releasing water slowly; filter pollutants, especially polluted storm water run-off, from ground and surface waters; provide habitat for plants and animals; and provide recreation opportunities. These qualities are extremely important in light of rapid development occurring in Alpharetta. Alpharetta has significant areas of delineated wetlands within its boundaries that must be protected and has put into place several programs and policies to ensure protection of wetlands. The Soil Erosion and Sedimentation Control Ordinance and the adopted Metro Rivers Protection Act, provide for protection of perennial stream areas that typically include wetlands. In addition to these measures, as part of its land disturbance permitting procedure, the City requires proof of compliance with the U.S. Army Corps of Engineer's permitting procedure, Section 404 of the Clean Water Act, or verification that the project will not have any impact on wetlands. This procedure assures the City that valuable wetlands will not be lost to development. In order to provide additional criteria for the protection of wetlands in Alpharetta and to ensure compliance of existing policies, the City has adopted the DNR's minimum "Criteria for Wetlands Protection" (391-3-15.03).

Utilizing the Georgia Planning Act of 1990 criteria for wetlands protection, land uses that are deemed acceptable within wetland and flood prone areas include: (1) Timber production and harvesting, (2) Wildlife and fisheries management, (3) Wastewater treatment, (4) Camping, hiking, hunting and fishing recreation activities, (5) Natural water quality treatment and purification, (6) Other uses permitted under Section 404 of the Clean Water Act. In addition, as outlined elsewhere in this chapter, the city is working towards developing a greenway system to further protect sensitive areas.

Rivers & Streams

Metropolitan River Protection Act

The City has adopted the Metropolitan River Protection Act's Chattahoochee River Tributary Protection Ordinance. For approximately 45 miles downstream of Lake Lanier, the Chattahoochee River is again classified trout water because of the cold hypolimnetic discharge from the Buford Dam. Approximately 350,999 catchable and fingerling trout are stocked annually by the GA DNR, supporting a major trout fishery that provides a unique recreational opportunity for metropolitan Atlanta area. Most of this river section is considered part of the Chattahoochee River National Recreation Area, and the National Park Service owns scattered tracts of land adjoining the river. These areas serve as public access points for recreational use of the river. This section is considered a secondary trout stream.

This ordinance establishes a 50 foot undisturbed buffer along all perennial streams in the drainage basins of all tributaries of the Chattahoochee River that enter the Chattahoochee downstream from

Buford Dam and upstream from Peachtree Creek. The city has adopted more stringent requirements than the state. The city requires a 100-foot average stream buffer and a 75-foot buffer on intermittent streams. The Environmental Protection Division's NPDES project is designed to allow the City to control pollution levels in storm drainage within the Big Creek basin.

Flood Plains

The Flood Insurance Program of the Federal Emergency Management Agency (FEMA) has delineated the 100-year flood boundary of creeks within the City of Alpharetta on its Flood Boundary and Floodway Maps. Much of this area is contained in the flood plain areas, and is usable to some extent for non-intensive uses such as agriculture, recreation, etc.

The City has adopted a flood prevention ordinance, which sets guidelines and standards for development in the flood plain. Even though FEMA rules do not require it, the City has a policy of prohibiting filling in the 100-year flood plain.

Currently, much of the flood plain has been designated as open space and is being incorporated into the City's greenway system. Due to changing patterns and developmental impact on Big Creek over the last several years, several flood plain areas have are not identified on FEMA maps. To address this issue, the City needs to conduct additional technical and hydrological studies. Storm Water Management Program

Federal Clean Water Act revisions in 1987 resulted in recognizing municipal storm water pipes and outfalls as sources of pollution to be regulated in the same manner as industrial wastes. The U.S. Environmental Protection Agency (EPA) adopted regulations in 1990 controlling storm water pipes. The Georgia Environmental Protection Division (EPD) designated the City of Atlanta and Fulton, Cobb, Gwinnett and Clayton Counties as one government for purposes of filing an application for a stormwater discharge permit under the federal guidelines. The Atlanta Regional Commission (ARC) established a regional Storm Water Management Task Force to eliminate duplication and address inter-jurisdictional problems/issues.

As a part of this process, each municipality was given the option of filing a separate application. To ensure local accountability, Alpharetta chose this option; EPA approved its NPDES permit. Alpharetta has chosen a more restrictive policy regarding buffers than that required by EPA. The Stormwater Management Ordinance has one of the more comprehensive stream buffer requirements in the state. The ordinance also requires water quality treatment, specifically that the first one-half inch of run-off must be related to meet water quality standards. The City is committed to continuing to monitor storm water runoff and require strict compliance to its requirements.

Coastal Resources

There are no coastal resources located in Alpharetta.

■ Scenic Views and Sites

The City of Alpharetta is interested in protecting the appearance of several areas within its corporate limits that contribute to Alpharetta's character as a unique and aesthetically pleasing community.

■ Historic Resources

Every year in the 1800's farmers and merchants from South Carolina and North Georgia met in Cumming, Georgia on their way to Atlanta to trade. They formed a caravan of covered wagons. At the corners of Main Street and Union Hill Road in Alpharetta they stopped and spent the night. They often set up tents and as the years went by the acquired land and built log houses. A tiny village named New Prospect Camp Ground was formed. This village, made up of tents, a log school, and arbor became a trading post where Indians and white settlers traded. The surrounding countryside provided excellent farming land, especially for cotton. On December 11, 1857 the town was chartered and became the county seat of Milton County. The town was renamed Alpharetta from the Greek words "alpha" meaning first and "retta" meaning town. The corporate limits of the township of Alpharetta extended over and embraced one-half miles in all directions from the newly built Wooden County Court House

In 1856 Dr. Oliver Skelton built a small brick Greek revival home on the highest point in Milton County. The house has been restored and stands today at 61 Roswell Street. It is believed to be the oldest house in Alpharetta. During the 1870s the "academy" was built and opened for students. Room and board was offered. Academy Street earned its name form this institution. Many years later a public school was erected on this site and served all students until Milton High School was opened in 1921. Little remains of Alpharetta's rugged, nineteenth-century history. Only a few structures, such as the Skelton Teasly and Sim Manning houses, predate the 1910 fire that destroyed much of the City's business district. Development of the downtown area proceeded at a modest pace until after 1931, when Milton County's merger with Fulton County brought improved services, including the area's first paved roads. The "main street" character of the downtown area reached maturity during the 1930s and 1940s, when the town served as a crossroads catering to salesmen and other travelers as well as residents of the surrounding area.

In 1950 the community continued to be a cotton and farming community. Cotton was brought into Alpharetta for ginning, sale, and warehousing. Three gins were located in Alpharetta. Farmers also began raising chicken and cattle. In the 1970s, continued expansion of Atlanta northward made Alpharetta a popular residential area. The 1980s economic boom and proliferation of office complexes changed the skyline and overall character of Alpharetta to a major business and residential area. The North Fulton Regional Hospital was built in 1983. During the decade of the 1990s Alpharetta's population mushroomed to over 30,000 residents, and includes 21 square miles.

The downtown area has lost many of the landmarks that defined its pre-World War II character. Fifty-one per cent of the buildings surveyed for a Main Street application in 1989, were constructed after 1960. Many of these newer structures, which include freestanding fast-food restaurants and ranch-style residences, do not perpetuate the character of the earlier storefronts and bungalows. Of the potentially historic properties that remain, some commercial storefronts appear to have been encased recently in brick veneer, while some early residences have been altered for conversion to commercial use. An inventory of historic resource structures has been prepared with the help of the Alpharetta Historical Society.

Historic Resources Survey

Inventory of identified historic resources include:

- Sim Manning House
- The Mansell House and Gardens, 1835 Old Milton Parkway
- Skelton-Teasley House

- Milton (1921) Log Cabin?
- Seventh Day Adventist Church and School on Canton and Church Street.

Historic Resource Circa Ext. material Form/Style Vulnerability/encroachment

Waters building 1860Block w/brick, tarUrban blocknone
Oliver bldg.1860Brick over brick, tarUrban blocknone
Cotton House1870Brick, tarUrban blocknone
Old Milton Co. Bank?Brick, tarUrban blocknone
Oliver/Jones Groc.?Brick, tarUrban blocknone
Poole/Martin/Alpha Soda?GAenglish bond, brickUrban blocknone
Buren/Weatherford Feed &seed?GAenglish bond, brickUrban blocknone
Manning Store1850Brick stuccoedGreek revivalnone
Manning Clothing/Post office1915BrickUrban blockrenovated
Teasley Barnett1920GAenglish bond, brickQueen Anne Storenone
Milton Log Cabin1921LogsLog cabinnone
Skelton Teasley House1864BrickGreek revivalnone
Seventh Day Adventist Church?Wood cladrenovated

Downtown

As a result of these conditions, the few downtown resources that appear old enough and were preserved enough to be considered historic are not consolidated into a cohesive district unified by any common time frame, physical appearance, and so forth. Instead, these resources are scattered or in small clusters along the arteries that converge on downtown. These resources are valuable assets that could best convey Alpharetta's historic, "small town roots" if restored to their original pre-World War II character. The remaining properties reflect a more suburban era of development and present a number of challenges to comprehensive, sensitive treatment of the downtown area.

Similarly, no archaeological resources have been identified within the city limits. Though its historic resources are limited, Alpharetta can capitalize upon its small-town history and character by continued application of its urban design standards in the central business district. Alpharetta is developing a strategy to build upon the historic downtown as a tourist attraction. Historic Downtown Alpharetta Square, at the intersection of Milton and Main Streets, features antique, gift, flower shops and dining. Several events are held every year to promote the historic character and small town charm of the area, including:

- Harp Singing, which has been held in Alpharetta for the past 129 consecutive years. The singers sing the notes and then the words.
- Old Soldiers Day has been held each year for the past 46 years on the first Saturday in August.
 Many marching units come from all over the state to participate. A memorial service is held to honor those that paid the supreme sacrifice.
- Special promotional festivals, such as "Historic Downtown Alpharetta Sidewalk Sale and Trade Day," "Historic Downtown Alpharetta Antique Festival" and Taste of Alpharetta.

If further research identifies that any district or building within the City of Alpharetta is eligible for the National Register of Historic Places, the City will take appropriate action to protect the structure or structures.

Northwest Area

Although no formal "rural" resources have been identified, Alpharetta has earmarked the northwest sector of the city to remain as low-density residential. This area is the center of equestrian activity in the area, and is dotted by many small horse farms. The city's goal is retain the horse farm character of this area through the Residential Estate zoning district. Sewer is not available in this area, nor is it planned in the future. The preservation of the low density life style offered in this area benefits the City because it contributes to the open space and air quality objectives.

Organizations

Several organizations promote the unique and historic character of Alpharetta, including:

- Awesome Alpharetta Welcome Center—Alpharetta Convention and Visitors Bureau at 20 North Main Street;
- The Greater North Fulton Chamber of Commerce; and
- Alpharetta Historic Society.

Summary and Needs Assessment

Assessment of Current and Future needs:

The vulnerability and encroachment of the above historic resources is based on population and economic development projections. While there are no immediate concerns regarding the vulnerability of these structures, it is imperative that continued care and attention be maintained to preserve the historic character and structural virility of these resources. Present land use goals and objectives are in keeping with maintaining the character of the properties. The structures should continue to be monitored for physical deterioration. However, due to the continued growth and redevelopment interest, the structures are being studied for historically sensitive renovations on an on-going basis by the development community. The City's Design Review Board reviews such renovations and requires such to maintain the proper sensitivities. This board is important for this process and should be maintained for their continued aid. Additionally, the City of Alpharetta participates financially in a grant program called "Downtown Partners", which seeks to provide financial incentives for the preservation of the structures.

Alpharetta has an abundance of natural resources that warrant attention because of their sensitive nature and valuable contribution to the community. The city has taken several specific steps for the protection of water resources and conservation of the natural environment and sensitive area. Responsibility for the protection of the natural environment is regulated under several agencies and regulations: through city departments, including Environmental Services, Public Works and Engineering and Community Development; through regulations such as the Tree Protection Ordinance, Soil Erosion Ordinance, Flood Pro-

tection Ordinance, the Unified Development Code, site plan/engineering review, land disturbance and building permits and construction permits; through the Georgia DNR—Water resource and soil erosion regulations and inspections; and through the US EPA/Corps of Engineers—wetland (404) permits. Alpharetta is unique in several ways. First, land use and development has been primarily master planned into appropriate locations that contain the appropriate infrastructure, while naturally sensitive areas are preserved. Second, the city has recently adopted a Unified Development Code that address in detail several environmental issues, such as tree protection, soil erosion, flood protection, steams and buffers and storm water. The city's regulations tend to be more stringent than state requirements. Third, the city has an entire department set aside for continuous educational opportunities for its citizens. In addition to classes and information regarding city ordinances, the city has gone the additional step in developing a natural education center and program to promote environmental awareness and a love of nature among the citizens, and especially among school children.

Land Use

Much of the growth and development within the city is within master planned zoning districts that take advantage of existing and planned infrastructure such as fiber optic cable, sewer, fire protection and transportation facilities, while being sensitive to natural resources important to the city. Greater development intensity is encouraged closer to downtown and along major roadways. Environmentally sensitive areas have been protected by the dedication of open space and the dedication of large tracts for public use. Many open space nodes dedicated from master planned developments are connected by a linear greenway system along Big Creek. This greenway system has been utilized for recreational and transportation purposes by citizens of the community and connect residential areas to commercial and office nodes.

In order to protect critical areas, the location of public capital improvements, such as sewer line extensions, roads, fire, and police is directed away from these sensitive areas. Where sewer is not available, the land is being utilized for large-lot residential development, such as the rural "horse country" in the northwest. The city is also looking at an additional zoning district to protect the major water recharge area located in the Crabapple vicinity.

Forested land and agriculture land has been identified on the future land use map, although the likelihood that these land uses will continue into the future is small due to limited available land and development pressure within the city. It is anticipated that these land use uses may eventually be converted to some other form of development. GA 400 is considered a scenic corridor and is protected by a 120 foot undisturbed tree buffer.

Regulations

Land development and natural resources protection regulations are very strong within the city, with several requirements above the state recommended minimums. The recently developed Unified Development Code incorporated various city ordinances into an easy to understand and easy to use format to assist the development community in understanding the breath of the city's restrictions and requirements. Due to the anticipated growth of the City, the City will continue to enforce current regulations with regards to floodplains, wetlands, drinking water supply watershed, groundwater recharge areas, rivers and streams and trees, and to develop additional regulations and requirements as necessary in the future. The City has outlined the DNR's "Part 5" Environmental Planning Criteria within this chapter of the Comprehensive Plan, in addition to incorporating requirements into the Unified Development Code.

Recently the definition of a specimen tree was amended from 32" to 24" in caliper. Strict adherence to these guidelines reduces the heat island effect and helps to reduce impervious surfaces. Several developments have been denied permits to protect existing large trees on the site.

The City is currently studying or developing additional regulations to provide natural resource protection:

- Study purchasing sensitive lands outright through the county or a non-profit organization. These lands could be used in the public interest for such purposes as wildlife refuges, parks, recreation areas, etc. Offer development incentives for projects that contribute to recharge area protection by setting aside critical recharge areas (as passive parks/recreation areas, for instance), using large lot sizes.
- Identify any and all uses during the development process that are located within special districts that may endanger valuable water resources, such as hazardous waste handling facilities, new stormwater infiltration basins. The districts are: wetlands, drinking water supply watershed within 7-mile radius, and groundwater recharge areas. Ban uses that would harm water resources.
- The city is researching the possibility of limiting impervious surface or ground area coverage.

The City will continue to control development location and practices so that unsuitable soils are not built on, erosion is minimized, wetlands are not disturbed and floodplains are avoided. The City currently enforces responsible development practices through land disturbance and building permits, inspection and review process. This process adequately mitigates negative development practices and will remain intact in the future.

Education

In addition to direct protection of the natural environment, the city will continue to educate its citizens about local threatened or endangered species and environmental impacts through the existing educational programs and the City web page. Several volunteer opportunities exist for the citizens of Alpharetta, including:

- Adopt A Mile/Adopt A Spot- The longest running and most successful volunteer program operated by the city. It requires an individual or groups to agree to clean up a mile of roadway or a spot at least 4 times a year. A sign is erected to recognize the volunteer efforts.
- **Project Ripple-** Trains volunteers to assist in important water monitoring. Staff and volunteer monitoring has provided the ability to find problems early and resolve them more quickly.
- **Annual May Telephone Book Recycling**—Old phone books are collected in a drop-off trailer near City Hall for the whole month of May for recycling.
- Annual TRIB TROT—Volunteers a clean up areas near streams or storm drains on the fourth Saturday in October to prevent pollution in the waterways. This program works in conjunction with the annual Georgia River Cleanup.
- **GREEN SCHOOL Program** Establishes environmental education as a tool in all disciplines and combines indoor instruction with outdoor activities. The program has more than 38,000 students, K through 12.

Historic Preservation

Unfortunately very little of original downtown Alpharetta exists today. The city has been very focused on the historic character of its existing downtown. Many resources have been invested to increase the livability and viability of this historic central business district, including streetscapes, historic remodeling, façade improvements, road improvements and pedestrian connections. The City of Alpharetta, through the aid of local community banks has instituted a low interest loan program to assist property owners in improving their properties. The Design Review Board reviews projects for aesthetic and architectural control. Several organizations promote the unique and historic character and history of the city including the Awesome Alpharetta Welcome Center, the Greater North Fulton Chamber of Commerce, the Alpharetta Historic Society and the Downtown Merchants through many special events and festivals, such as the Sacred Harp Singing, Old Soldiers Day, and Taste of Alpharetta

Cultural Resources

Where applicable, the following historic, archeological and culturally significant resources have been inventoried:

1. Residential Resources

The city has numerous significant residential districts and neighborhoods. Although few have historical significance, several have significance due to their architectural and aesthetic impact upon the city. The Windward community provides affluent executive housing, some located adjacent to golf course and lake amenities. Additionally, many smaller developments throughout the Alpharetta community provide the same type of housing for utilization by city residents. Mixed-use developments, such as Palisades and Cousins Westside, are integrating urban executive housing with the convenience of office, retail and restaurants as a valuable amenity.

Vulnerability and encroachment- The only vulnerability to this residential resources is functional obsolescence in the older housing districts. Building code issues should be addressed as they arise to mitigate any long term impact on structures.

B. Commercial Resources

The city maintains several commercial districts. The Central Business District (CBD) is an historic district that continues to see infill development and renovation of older structures. They city's goals and objectives indicate protection of this valuable resource. Additionally, the city is considering a public/private partnership to developan additional seven acres within the CBD. The preliminary plans have indicated around 50,000 square feet of additional retail business. Additinoally, the North Point Mall area is a large commercial resource that generates economic growth. With over 2 million square feet of retial dvelopment, this area continues to be an attractive commercial resource for city residents.

Vulnerability and Encroachment - The CBD may have vulnerability due of the age of the structures. However, building codes personnel have been attentive and proactive in the handling of building violation issues. There appears to be few, if any, vulnerabilities and encroachments for other important commercial resources.

C. Industrial Resources

The city has few areas that would be considered industrial resources. The area along North Fulton Industrial Boulevard has been utilized for industrial uses.

Vulnerability and Encroachment - None exist.

D. Institutional Resources Within the city limits, two high schools and one elementary school exist. One of the high schools recently opened and the other has preliminary plan to become a magnet school. In the downtown area, three churches exist within walking distance to the town center.

Vulnerability and Encroachment - None exist.

E. Transportation Resources

See Section 8.0.0 Transportation System Components

F. Rural Resources

There are no significant rural resources within the present city limits.

Education

In order to change public behavior and to improve the overall protection, conservation and sustainment of natural resources, education is a critical tool. In the 1990's ES opened the Environmental Education Center. This center is open 5 days a week and operates as a community service providing information on environmental topics. The Department provides the public with knowledge so that informed actions can be taken. Several programs promoting environmental education include:

- A public library with hundreds of resources that can be checked out;
- GREEEN SCHOOL—The program combines grade level classroom activities, master planned outdoor learning centers and community service projects for a well-rounded environmental experience for students, parents and school staff. The GREEN SCHOOL program has been the recipient of a state education award and has received thousands of dollars in private donations.

- Earth-Wise Summer Survivor Series—a series of summer camps for children in grades kindergarten through six revolving around environmental education;
- Basics of Spill Management—outlining the laws and procedures for the management and mitigation of harmful materials spills;
- Fundamentals of Erosion and Sedimentation Control—workshop series intended to provide information about regulations, as well as an explanation of local government accountability to the state for what is done on a job site.
- A series of "Special Public Programs" on timely topics such as, "The changing land-scape...issues for wildlife and people," and "Going for the Gold... A Grant Writing Workshop."
- Operation Greensave. Before a property begins development, the Department contacts developers in order to conduct an assessment of native plants on the property and to relocate these plants to campuses and learning centers. This program provides safe habitats for native plants and an educational opportunity for students in Alpharetta.
- Project Ripple was developed as a water resource education and citizen-monitoring program to monitor water quality within streams and creeks.
- Waste Generation Analysis is unique in the country and requires projects to examine waste generation before a permit is issued. In order to receive a permit, the plan must have certain computations related to the waste that will be generated by the project and must be designed to accommodate the approved waste management strategies. As the process evolves, education about waste reduction practices surfaces and is carried forth after the project is operational through required waste reports. As part of the plan review, each project is required to install drain markers carrying a message to prevent contaminants and pollutants from going down the drain.
- The Environmental Services Department also functions as a "one-stop" problem-reporting clearinghouse for anyone perceiving a problem involving or affecting water resources. The Department is proposing a new Environmental Education Center in the Big Creek Watershed. This center would provide an array of education programs that would take advantage of the natural environs of the watershed.

■ The Natural Environment of the City

Climate

Alpharetta has a four-season climate where summers average 78 degrees and winters are short and mild. Average temperature in the winter is 51 to 56 degrees, and 73 to 82 degrees in the summer. Average rainfall is 48 to 50 inches per year. Alpharetta's elevation results in moderate temperatures throughout the year and protection from the extremes of heat and humidity often associated with other Southern cities.

5. Community Facilities and Services Element

■ Introduction

Community facilities within the city were evaluated as a part of the development of the city's comprehensive plan preparation. This element of the Comprehensive Plan evaluates and anticipates the need for facilities in coordination with future land uses so that facilities will be available to serve existing and future population and development. The primary services included in the Community Facilities and Services Element are transportation; general government; water supply and treatment; sewage system and wastewater treatment; solid waste management; public safety (police and fire); public health facilities and services; recreation and open space; educational facilities; and libraries and other cultural facilities.

Much of the development within the city over the last two decades has occurred within master planned districts. These developments have been planned to include a mix of land uses that take advantage of planned infrastructure including fiber optic cable, sewer, water, fire protection, etc. This policy of coordinated land use and infrastructure planning has assured residents and businesses within the city that appropriate infrastructure is planned to meet current and future needs. Alpharetta's goal for community facilities is to provide for an arrangement of public and semipublic facilities and services that meet the needs of Alpharetta citizens and enhance the quality of life. The location of these facilities is illustrated on the Community Facilities Map.

■ Transportation Network

See Section 8.0.0.0 for the complete transportation inventory and assessment.

■ General Government

The City of Alpharetta's main administration functions are located in the City Hall at the corner of Academy Street and Main Street. This approximately 10,000 square-foot building houses the purchasing, utilities, human resources, MIS and general administrative functions of the city. The City staff currently numbers 369 full and 19 part time employees.

As a decentralized government, most of the facilities are strategically located in different geographical areas throughout the City. For instance, the Public Works and Engineering staff, a total of 58 employees, operate from a facility located on Hembree Road. Although the departments are not related, the Parks and Recreation Department, with 51 employees, and Court Services Department, with 8 employees, operate out of the Municipal Complex, a renovated and revitalized church, located in the western region of the City in the historical Crabapple community contiguous to unique antique shops. The Community Development Department, which employs 20 employees, provides the planning, zoning, building inspections and economic development expertise and services, and is located in a shopping center just south of City Hall. The Finance department leases a separate office space on Haynes Bridge Road. The Finance department has 23 employees.

The City of Alpharetta also provides public safety services to include Police and Fire. As of November 2000, the police department staff occupied the new police headquarters off Old Milton Parkway one mile

west of State Route 400. The Police Department has 108 employees. The old police headquarters, located adjacent to the new building, has been renovated to expand the communications center/911 division and the detention facility. The Fire Department includes five separate station houses and a headquarters facility staffed by both full time employees and volunteers. A Mayor and six Council Members govern the City.

Current facilities within City Hall and other outlying offices have limited office space and are rapidly approaching full capacity. As the population and economic base continue to grow, there will be increased demand on the city government for staffing and office space. It is estimated that over the next ten years the City will add 50 to 60 new employees, largely in the public safety and services areas. The city has conducted a needs assessment of current and future space requirements for municipal services in order to address additional facility needs. This assessment has identified the opportunity to consolidate city facilities with a municipal complex anchored by the existing City Hall building. The city has acquired land adjacent to City Hall for future potential expansion and the City is currently planning a new City Hall complex, which will contain the existing city hall personnel as well as the Community Development and Finance Departments. In addition the City has plans for 2 new fire stations on existing city properties, which would serve the east and west sides of town.

■ Water Supply and Treatment

Water availability is one of the most important factors in planning current and potential land use. Water service availability is primarily governed by the permitted withdrawal rate from the Chattahoochee River as allowed by the Environmental Protection Division of the Georgia Department of Natural Resources. Secondary factors that affect service availability include the reservoir impoundment volume, water treatment capacity and the hydraulic capacity of the distribution system.

Alpharetta's water is provided by the Fulton County Department of Public Works from the North Area Water Treatment Plant. The City owns and operates a portion of the water lines west of GA 400, and Fulton County owns and operates the water lines east of GA 400. The City of Alpharetta is under contract with Fulton County to turn over all remaining city water supply facilities by June 30, 2005 at the latest. An extensive infrastructure network of 6-to 12-inch diameter water lines is currently in place and adequately serves the average and peak daily needs of Alpharetta residents and businesses. However, deficiencies have been identified in the system hydraulic capacity to meet sufficient water flows for fire fighting needs.

With the completion of a loop-type main system, Fulton County estimates that the water supply from North Area Water Treatment Plant should be adequate through the year 2050 for areas north of the Chattahoochee River. In addition, the construction of several large water mains in the north Alpharetta and Johns Creek areas should meet current and projected demand for potable water. There are also plans to add to the three existing tower storage structures to insure proper pressure during the day.

Using the Fulton County consumption rates of 92 gallons per day (gpd) per resident, 210 gpd per industrial employee and 32 gpd for other employees, in the year 2020 Alpharetta's 48,333 residents will need

■ 5-2

¹Water and Sewer Connection Fees, Fulton County, Georgia, 1994.

4.4 million gallons per day, and its 129,000 employees will consume 4.6 million gallons per day, for a total of 9.0 million gallons per day.

It is expected that new development will continue to extend water distribution lines where necessary. It is the goal of the City to design new water lines to meet both present and future demands, and to upgrade waterlines to 8" or greater in areas of intense commercial or higher density residential. The City will continue to coordinate development activities with Fulton County to insure adequate water capacities are planned to meet future demands, and to enforce water conservation measures in all new development in the City.

■ Sewerage System and Wastewater Treatment

Like water availability, wastewater service affects the growth rate and size of an area. Wastewater treatment is a regional issue affected by topography resulting in the need for cooperation between governmental jurisdictions. In North Fulton County, the Big Creek Water Reclamation Plant provides wastewater treatment to the City of Alpharetta. The Big Creek Water Reclamation Plant has a current capacity of 24 mgd and a life expectancy of 30 years. In addition, a diversion system is currently utilized to transfer wastewater from Big Creek to Johns Creek plant for treatment. The Johns Creek plant has a treatment capacity of 7 mgd. Alpharetta has an agreement with Fulton County to provide sewer capacity as needed.

An adequate infrastructure of sewer lines serves the existing development in Alpharetta. Fulton County currently provides service or has the potential to serve, approximately three-quarters of the land area of Alpharetta. The remaining one-quarter, which lies north of a ridge line extending across the northwest portion of Alpharetta, has no service at this time and relies on individual septic tanks for waste water disposal. This area is zoned for single-family, low-density residential development. The future land use plan identifies this area as low density rural; there are no plans to extend sewer lines to this area in the future Due to restrictions imposed by Little River Creek, Fulton County has adopted a policy of prohibiting sewer extension into this area.

Fulton County has entered into a contract with Cauley Creek Water Reclamation LLC to treat 5 mgd in the Johns Creek Basin by land application.

Fulton County estimates sewage generation in the Big Creek Basin at 100 gallons per day per resident, 230 gpd per industrial employee and 60 gpd for other employees. ²Total demand at the plant is projected to reach 27 mgd in the year 2010, Breaking out the City of Alpharetta, in the year 2020 Alpharetta's 48,333 residents will generate 4.8 million gallons per day, and its employment of 129,000 will generate 7.6 million gallons per day for a total of 12.4 million gallons per day. Maximum wastewater flow and pollutant loadings are currently being established by the Georgia Natural Resources Department's Environmental Protection Division (EPD) for the Chattahoochee River below the Big Creek Wastewater Reclamation Facility. According to EPD, the maximum amount of wastewater that can be safely discharged into the Chattahoochee River is 358 mgd. Currently, jurisdictions have been permitted for 302 mgd of wastewater discharge. Total sewer plant expansions, if approved, would increase wastewater flows to approximately 361 mgd within the next ten years; therefore, the EPD is investigating several alternative options for wastewater treatment in the future, including enhanced treatment, implementing better stormwater management techniques and encouraging water conservation.

²Water and Sewer Connection Fees, Fulton County, Georgia, 1994. Figures include wastewater return plus inflow and infiltration

While the current infrastructure of sewer lines in Alpharetta is adequate to serve the area, new infrastructure will be extended to accommodate new development as necessary. It is the policy of the City that new sewer lines be designed to meet both present and future service demands and that lines should be sited to accommodate growth at the time of installation.

■ Solid Waste Management

In 1992 the City completed its solid waste plan. The Plan's goal was to reduce the solid waste stream by 25%. Cooperation and dedication to this goal has been excellent. Since the plan was completed, the City has met or exceeded this goal each year. This goal has been achieved through a variety of recycling programs for both businesses and residents and an extensive education program and marketing plan.

The City of Alpharetta has no solid waste disposal system of its own and contracts out this service to Waste Management Services of Atlanta. In addition to solid waste pickup, Waste Management Services administers a very successful curbside recycling program. This once weekly pickup for newspaper, glass, plastic and magazines has been extremely successful. Each household in Alpharetta is disposing of ten to thirteen pounds of recycleables per week; this poundage is greater than national averages. Other recycling programs in Alpharetta include school site programs, office paper and telephone book pick up. Solid wastes are disposed of in the Liveoak Landfill. Currently there are no restrictions associated with this landfill.

The City recently opened commercial solid waste disposal to allow several companies to participate. To ensure quality, the city requires a permit for carriers to operate within Alpharetta. Although business recycling is not mandatory, the City meets with businesses to discuss ways to reduce solid waste flow in conjunction with established recycling plans. A private transfer station has recently been constructed within the city's industrial district.

The City provides three types of waste pickup: mulch, chipper and large items. A mulch pickup includes leaves, grass clippings, pine straw, etc. The mulch is taken to Greencycle in Morgan Falls. The chipper pick-up is for any items too large for a regular truck, such as tree limbs, etc. After the items are chipped, they are offered back to the homeowner or any other resident within Alpharetta such as schools, or brought to Greencycle. The third pickup, "large items" are disposed at the Chadwick Road Landfill.

Alpharetta plans to continue its education programs and marketing to further reduce the solid waste stream.

■ Public Safety

Police

The goal of the Alpharetta Police Department is to maintain the quality of life in the City of Alpharetta by providing a safe and secure environment, and to meet community standards of high visibility through a service philosophy termed "community oriented policing". Although Alpharetta continues to have a low crime rate, the increasing growth combined with a large daytime transient population will present administrative and staffing challenges in the future.

The Alpharetta Police Department currently employs 71 sworn police officers and 34 non-sworn personnel. The Department is located at 2565 Old Milton Parkway in Alpharetta. The department is charged with delivering a full service law enforcement service to the community and currently provides a Deten-

tion Center and Emergency 911 Center. Using Alpharetta's current 2000 population of 34,854, and to provide the highest level of public safety protection, the Department staffs roughly 2 officers for every 1,000 residents. The City does however have a sizable non-residential population and therefore the current supply of officers is not overly generous.

The Department has adopted the mission of "providing excellence in service through meaningful community partnerships." Crime prevention and community policing share a common purpose—making the public safer and making communities healthier. Community policing in Alpharetta provides knowledge and information to citizens about preventing specific kinds of crime, mobilizes them for prevention efforts, and develops physical and social environments inhospitable to crime. Additionally, the Department will undergo a re-certification assessment in 2001 by the State of Georgia Law Enforcement Certification Program and a re-accreditation assessment in 2002 by the Commission on Accreditation for Law Enforcement Agencies.

Space deficiencies identified in the previous *City of Alpharetta Comprehensive Plan* are being alleviated with the construction of a new police administration facility and remodeling of the Detention Center and Emergency 911 Communications Center. Upon completion, the Detention Center capacity is estimated to be 48 beds. In addition, the completion of the Communications Center will strengthen service through the addition of personnel dedicated to call-taking, dispatching, and providing emergency medical assistance using state-of-the-art technology. Both the Detention Center and Communication Center are staffed 24 hours a day, 7 days a week.

By the year 2020 Alpharetta's population is projected to increase to 48,333 residents. To meet the current level of service of 2.04 sworn officers per 1,000 residents, the City will have to strengthen its police force in many areas. The Department has identified that additional officers would be added to the patrol division, investigations division, a DUI task force, a special bike or mounted patrol, a training division, special services division, detention division, and communications division. The Department will continue to place its current emphasis on community policing and high visibility. The agency prides itself on providing a professional law enforcement service, but also realizes that concurrent with this service is problem solving and community involvement.

Fire

The City of Alpharetta Department of Fire and Emergency Services is a proactive, customer oriented emergency services provider. The Department's objective is to provide the best possible fire and emergency medical services. The Department's goal is to maximize the savings of life, minimize the loss of property and avoid loss whenever possible through prevention and education.

Prior to 1987, the Alpharetta Fire Department was considered a volunteer department. As population grew and the City became increasingly cosmopolitan, the need to add full-time personnel became apparent; the department became a combination paid/volunteer service. This move to a paid fire company, along with the addition of new stations and equipment decreased the City's Insurance Service Organization (ISO) fire protection rating from 6 in 1983 to 3 in 1995. The reduced ISO fire protection rating amounts to millions of dollars in insurance premium savings to the residents and businesses of Alpharetta.

Currently, the Fire Department employees full-time and 4 part-time employees, and utilizes 14 volunteers and 26 Community Emergency Response Team members. Because of population and development increases, the Alpharetta Fire Department added four stations in six years. The service delivery system includes five fire stations located at Webb Bridge Road (#1), Market Place (#2), Westside Drive (#3), Park

Ridge (#4), and Mid Broadwell Road (#5). Also adjacent to Station #1 is an Administrative Office Building that consists of Alpharetta's Fire Prevention, Public Education and Administrative offices.

The Department's rolling inventory consists of five engines, three ladder trucks, one-reserve engines, one rescue unit, one air and light truck, and a HazMat trailer. The condition of the current equipment is good with the majority of it being less than ten years old. Each fire station serves an area of less than six square miles and is sited to meet a four-minute response time.

Each fire station is equipped with the Emergency Warning System. This system is comprised of 19 sirens strategically located throughout the City.

The Department of Fire and Emergency Services has branched out into several technical fields to provide a wider range of service to the public:

- Hazardous Materials: Awareness and limited operations level service is provided to identify and
 contain the release of hazardous materials. The primary function of the department is to stabilize a scene until arrangements can be made to stop, remove, or limit environmental damage by
 hazardous byproducts.
- Emergency Operations Center/Emergency Warning System Sirens: Fire personnel formulate the
 emergency operations plan, State and Federal planning, and weather monitoring. The City
 maintains a 19-site network of radio-controlled tornado warning sirens to alert the public of impending tornatic weather.
- Fire Prevention, Code Enforcement, Fire Inspections, and Public Education: These functions are maintained by the Fire Prevention Department. Code enforcement includes all fire safety aspects associated with the construction of a new commercial or multi-family building. Remodeling and other new construction projects are monitored for fire safety compliance through this function. Fire inspection maintains close contact with the owners and occupants of existing structures to ensure the safety of the general public through annual inspections. Public education targets a reduction in fire loss through preventative education. Grade school education and adult presentations are made to prevent injuries and property loss from fire.

The long-range objective of the Alpharetta Fire Department is to improve its current level of service and improve the City's ISO rating to a 2 rating. At the present time fire capacity and station locations meet current demands. Station 5 is currently in the design phase as a replacement station. Station 6 is in the design phase as a new station located on Kimball Bridge Road and serving the newly annexed eastern area of the city. Station 6 will require 12 new employees. As annexations occur in the future, the city will increase its fire service facilities accordingly, including the addition of Station 7 with an estimated 13 employees. Fire service areas are based on time to respond; as the City becomes more urban and thus more densely populated; new service areas may have to be established in order to meet the City's four-minute response time standard.

■ Public Health Facilities and Services

The City of Alpharetta Department of Fire and Emergency Services maintain a very proactive emergency medical services (EMS) system. All engine companies are equipped with advanced cardiac life support supplies and tools to render emergency pre-hospital life support. Other first-line equipment that maintains basic cardiac life support includes semi-automatic defibrillators. The Fire Department manages and coordinates the service delivery of emergency medical transport services as provided by the County approved

third party vendor. Performance standards and level of care standards are maintained and evaluated on a monthly basis by the Department.

Countywide, the Fulton County Health Department administers an array of health services through its three divisions: physical health, mental health, and environmental health. Programs include prevention, detection and control of disease, health education, environmental health services, mental health, and vital records. The County has a Health Department Branch located next to City Hall on Academy Street, which sufficiently meets the public health needs of the City. The Health Department has identified several programs that they would like to expand in the future to better serve City residents. These services include immunizations, Early Periodic Screening and Development Testing, Well Child Check-up, dental services, material and family planning and WIC. The Department also wants to develop and implement a program to support local physicians who accept new Medicaid assignments.

Several private physicians and medical centers provide health care to area residents. During the last several years several private health care facilities have been built, including Kaiser Pemanente and ThereTX. North Fulton Regional Hospital, located just outside the Alpharetta City limits serves Alpharetta's major hospital needs. North Fulton Regional is a 167-bed facility. In addition, a 400-bed Northside Hospital annex has recently been built. Currently private health care facilities are adequate within the city and surrounding area, but as the population continues to increase it will be necessary for hospital providers and other private health care providers to expand services.

■ Recreation and Open Space

Recreation and open space are top priorities to the residents of the city. In November 2001 the city received "Agency of the Year" award from the Georgia Recreation and Parks Association. The City of Alpharetta's Recreation Department administrative offices are located in a 1,300 square-foot renovated house on Marietta Street. Existing parks include Wills Park on Wills Road, North Park on Cogburn Road, Webb Bridge Park on Webb Bridge Road, Old Milton Square in the downtown business district, Eagle Gym and Alpharetta Pool Complex and open space/greenway trails located along Big Creek. The existing park inventory includes three citywide parks containing a total of 296 acres, two community parks containing a total of 4 acres, a neighborhood park containing .5 acres and open space/greenway areas containing 427 acres. The city has acquired additional parkland on Cogburn Road and has begun planning a passive park for this location.

Alpharetta benefits from a number of recreational facilities in the immediate area. City residents have access to several parks in north Fulton County: Bell Memorial Park, Birmingham Park, New Town Park, Providence Out-door Recreation Center, Ocee Park, Chattahoochee River Park, Chattahoochee Nature Center and Autrey Mill Park. Although not counted towards public park and recreational needs, private parks complement the overall park system and help to satisfy the recreational needs of the citizens. There are many private parks and recreation facilities located in Alpharetta such as the YMCA, the American Legion facility, the First Baptist Church, the Golf Club of Georgia and single and multi-family recreational facilities.

Alpharetta provides parkland through the following facilities:

Wills Park is located in the heart of Alpharetta. This approximately 120-acre park provides recreational facilities to the residents of Alpharetta as well as the surrounding north Fulton County area. The park provides such activities as swimming, an equestrian center, community-built playground, frisbee-golf, tennis, basketball and softball and two 2 indoor recreation facilities that include gymnasiums, gymnastics, volleyball, dance and aerobics programs. The park also contains 10 baseball fields, two basketball courts,

and three picnic shelters. The equestrian center contains two open riding rings, one covered arena, 300 horse stalls, a judge's administrative building, RV hook-ups and parking areas. Planned improvements will focus on enhanced landscaped and natural areas, updated support facilities, six tennis courts, parking expansion, elimination of pedestrian and vehicular circulation conflicts.

Alpharetta North Park on Cogburn Road was developed in 1988 under special legislation by the Georgia General Assembly for the noncontiguous 97 acres owned and annexed by the city. This facility includes two soccer-football fields, eight softball fields, a playground, a picnic shelter, 7 tennis courts, nature trails, a lake and the City's senior citizens activity and arts centers. The overall master plan provides for both active and passive type recreation facilities to include a community center, two gyms, two volleyball courts, and a passive area to include a small outside theater.

Eagle Gym provides two gyms with classroom space that accommodates a variety of indoor activities and programs. Planned improvements include landscape enhancement.

Webb Bridge Park is the city's newest park opened in 1998. The park contains the Webb Zone community build playground, soft surface trail system, small pond, and picnic shelter. The park also includes athletic facilities including four baseball diamonds, three soccer fields and four tennis courts. Development plans include increased picnic facilities and the planning of the 25 acres most recently purchased and an indoor recreation facility.

Alpharetta Pool Complex includes an Olympic size swimming pool, bathhouse, concession building, picnic area, parking and administrative offices. Planned improvements include pool renovation, land-scaping and parking.

Other Park Facilities. Old Milton Square is a small neighborhood park offering residents and area businesses a passive recreational area. In addition, there are seven school sites located within Alpharetta that provide limited public recreational opportunities. Alpharetta Recreation and Parks Department currently has a contractual agreement to use facilities at Milton High School and Haynes Bridge Middle School. Although school sites are not totally available for public use, they do assist in satisfying needs for informal neighborhood activities.

Open Space and Greenways. The Greenway Conceptual Master Plan outlines the development of several open space areas connected throughout the City to provide access to recreational areas from all sections of the City; this is particularly true along both Big Creek and Foe Killer Creek. Currently a 427-acre River Corridor facility from Mansell Road north to Webb Bridge Road along Big Creek has been dedicated to the City. Upon completion, the City's urban greenway will have a network of trails and environmental educational opportunities extending approximately six miles through the City along the banks of the Big Creek connecting residential and commercial areas. Several public and private parks are located along the linear park providing access points and nodes in which the users can intermingle active and passive recreational activities along the trail system. Amenities include jogging and bicycle paths, picnic areas, environmental education, and other recreation amenities. Funding has come from a combination of public and private sources.

Future Needs

To determine parkland standards, several factors were considered, including existing levels of service, National Recreation Parks Association (NRPA) standards, and existing levels of services for cities of similar size. The City has set as its park lands standards 9.5 acres of total parkland per 1000 residents (6 acres per 1,000 for active space). However, with a projected population of 48,333 by the year 2020, an additional 60 acres of active space will need to be acquired by 2020 to maintain the current level of ser-

vice. Alpharetta residents continue to express a strong desire for passive recreational areas offering areas for recreation such as small playgrounds, picnic areas and hiking/biking rails. Future acreage required does not include the Greenway system, or the Governor's Greenspace Program. A full description of the Governor's Greenspace Program is included in the Natural and Historic Resources Chapter.

Several methods have been developed for acquiring open space within the city. In addition to directly purchasing parkland for public use the city has been successful at encouraging recreation facilities within private developments. Current subdivision and zoning regulations dictate that 20% of the site be set aside for open space areas. In addition, developers are encouraged to build recreational facilities in their developments through impact fee credit incentives. Developments such as Windward and Park Bridge have set aside areas on their master plans to be used as open space and recreational areas. These private facilities contribute substantially to reducing the burden to the City of providing recreation facilities citywide.

In 1992 the City approved a Parks and Recreational Facilities Impact Fee Ordinance. Funds collected as the Parks and Recreational Facilities Impact Fee are used for system improvements to meet the needs of future City residents.

The Parks and Recreation Master Plan approved in 1998 calls for purchase of two additional citywide parks by the year 2008. Parks would be purchased and developed with one on each side of GA 400. Each park would provide a combination of active and passive elements.

■ Educational Facilities

The Fulton County Board of Education provides a network of elementary, middle and high schools to the residents of Alpharetta and nearby areas. Fulton County operates five elementary schools (Alpharetta, Lake Windward, Manning Oak, Creekview, and New Prospect); two middle schools (Haynes Bridge, and Webb Bridge); and one high school (Milton) within the City of Alpharetta. A new high school was recently completed on North Point Parkway within the city limits. Currently, three out of nine schools in Alpharetta are over capacity. Alpharetta is part of an award winning school system. Milton High School was named among the top 13 in the State of Georgia and was recently named a state School of Excellence. The elementary and middle schools are similarly noteworthy, boasting high test scores and academic achievement: two were recently named Merit Pay Schools by the state, helping Fulton County achieve more winners than any other district in the state.

Attendance figures indicate a need for immediate relief, particularly in the high school. A new high school is under construction on Birmingham Highway and is scheduled to open in September 2005. Conceivably, elementary and middle schools running over capacity could be relieved by a redistribution of students among the schools. The Fulton County Board Of Education is currently addressing classroom shortages by using mobile units and has researched and contracted for purchase additional sites for school facilities. The average number of students (pre-kindergarten through twelfth grade) per teacher can also be used as an indicator of trouble spots. The system-wide average (among the nine schools that serve Alpharetta) is about 16 students per teacher. This is comparable to the average among the middle schools, and just above the average among the elementary schools (15 students per teacher). The two high schools average about 18 students per teacher. This small range of averages—from 15 to 18 students per teacher—shows a consistency of classroom size within the set of schools serving the City. No schools appear to be over-burdened with large class sizes while other schools enjoy smaller class sizes.

Several private primary schools are located in Alpharetta. In addition residents have access to higher education and training opportunities at the Alpharetta campuses of DeVry Institute of Technology, Reinhardt College and Georgia State University.

The City will continue to communicate with the Fulton County Board of Education concerning future growth areas, and will continue efforts to make the city attractive for private school development.

Insert new table below

Public School Facilities			
Alpharetta Area			
	2000	2005	(Over) or Under
School Name	Enrollment	Enrollment	Capacity
Alpharetta Elementary	971	1016	(216)
Alpharetta High School*	New school	Not available	
"Birmingham Hwy" High School		Under construction	
Creekview Elementary	New school	910	
Crabapple Crossing Elementary*	и	885	
Fulton Science Academy*	и	258	
Haynes Bridge Middle School	1001	899	201
Lake Windward Elementary	894	813	47
Manning Oak Elementary	958	783	217
Milton High School	2348	2630	(687)
New Prospect Elementary	1200	1027	173
Northwestern Middle School	New school	1087	
Webb Bridge Middle School	1779	1186	593
_			
Source: Georgia Department of Education	n	L	

■ Libraries and Other Cultural Facilities

Library facilities are operated by the Atlanta-Fulton County Public Library System. The Atlanta-Fulton County Library System serves the citizens of Fulton County and the City of Atlanta (including the portion of the city in DeKalb County). The system has 34 libraries. As of April, 2004, there were 362,542 registered library cardholders, with a collection over 2,177,267 items for adults and children, including books, magazines and other periodicals, CDs, DVDs, and videocassettes. Two branch offices serve North Fulton County. The Alpharetta/Louis E. Jones and Gertrude C. Jones Branch Library is a 10,000 square-foot facility located within the Alpharetta city limits at Mayfield and Canton Streets. This branch has some 62,000 volumes of materials, and has one of the highest circulations in the system with an annual circulation of 225,293 items. The Roswell Branch of the Fulton County library system, located at Norcross Street and Forest Avenue, has 20,000 square feet and 120,000 volumes, and has the highest circulation in the system of 430,191 items. These facilities provide educational enhancement through various methods including books, periodicals, audio and videocassettes, computers, educational programs, children's programming, films and lectures. In April 2004, the Library System instituted Sirsi's Unicorn, a state-of-the-art library automation system including iBistro, a virtual portal to resources in AFPL and throughout the

world on the Internet. The Library System's electronic reference service provides on-line access to the catalog of the System's entire materials collection as well as the Internet, periodicals, an electronic encyclopedia, and the collection catalogs of major libraries located throughout the United States.

A third branch, known as the Spruill Oaks Library, is located east of Georgia 400, at Old Alabama and Spruill roads. This new branch is a 25,000 square foot regional facility; however, it is not conveniently located to Alpharetta. There is a significant need for enhanced library facilities and services within Alpharetta. This need can be addressed in several ways including the expansion or relocation of the existing library on Mayfield Road.

The new Ocee/ Dr Robert Fulton Regional library has recently opened on Abbots Bridge Road outside of the city limits. This library is convenient to the Windward community and will help to serve the northeastern sector of the city.

As the development of Alpharetta increases, the need for cultural arts facilities has increased accordingly. The North Fulton Centre for the Arts (NFCA) is a privately led initiative between the cities of Roswell, Alpharetta and Fulton County; and was created to serve this need. Their plans include the construction of a 70 million dollar regional performing and visual arts complex to be located along Westside Parkway in Alpharetta. This complex will contain a 2,000-seat multi-use performance hall, a 300-seat black box theater, visual art galleries, educational space and an outdoor performance venue. The NFCA has acquired a 27- acre site within a park-like setting as part of a 220-acre master planned community and is in the process of designing the phase 1 amphitheater complex. The City also has twenty-four movie screens in the North Point Mall area.

■ Stormwater Management Facilities

The City of Alpharetta does not currently operate a stormwater utility. The city has funded a Phase 1 GPS Inventory of all existing stormwater systems located within the city rights of way, including but not limited to; roadway drainage systems, catch basins, curbs and gutters, ditches, manmade channels and storm drains.

The city does maintain an inventory of 300 private stormwater outfall locations that discharge into waters of the State. A random audit of these outfalls is performed by the city on a yearly basis. In addition the city Engineering Department inspects and maintains 30 stormwater structures located on city properties, on a yearly basis. These audits are performed in accordance with the current Atlanta Regional Commission protocol.

■ Assessment of Needs

In a very real sense, community facilities are the physical embodiment of a jurisdiction's delivery of services strategy. It is at public facilities—city hall, fire and police stations, parks, etcetera—that the residents of the city can see the quality and quantity of service being provided. It is the goal of the City of Alpharetta to maintain, if not improve, the level of service in each of the areas that the City provides services. For services provided to city residents, but not owned or operated by the City, Alpharetta is committed to ongoing cooperation with those service providers to maintain or improve the service being provided.

- In the area of general government services, the City will soon require more office space for clerical and administrative functions. The City has acquired additional property and is in the design process with a development partner to create a new city hall complex as part of the central downtown revitalization plan. One of the goals of this plan is to promote the traditional Alpharetta downtown center including additional office, retail and residential development.
- In the areas of water supply, water treatment, and sewerage, the city will continue to coordinate and cooperate with Fulton County. The City has contracted with Fulton County to manage all of the city water services.
- In terms of public safety, the City intends to improve its current level of service. For police, this means maintaining the current staffing level ratio; for fire services, this means new station construction to maintain response times. The City will continue to work to attract medical services for the area.
- In the area of parks and recreation, a level of service based on acreage per 1,000 residents has been adopted. This serves as a guideline for future parkland acquisition.
- The Fulton County School Board operates local schools; the City will continue to coordinate local land use decisions with new school location choices.
- The Atlanta/Fulton County Public Library System operates libraries; the City will seek to coordinate local land use decisions and future library locations. The City will also work with the library board to increase library space and circulation materials to address the growing needs of Alpharetta residents.
- The North Fulton Centre for the Arts has acquired property within the City of Alpharetta and is proceeding with plans to build a regional performing and visual arts complex. Phase 1 of this project is in the design phase.

6. Intergovernmental Coordination

■ Existing Conditions

Adjacent Local Governments

An inventory of contiguous and neighboring governmental jurisdictions identifies the following:

- City of Roswell
- City of Duluth
- Cherokee County
- Fulton County
- Gwinnett County

The above listed cities and counties abut the City of Alpharetta and are considered to be partners for local and regional development issues and concerns. The City of Alpharetta has partnered, both fiscally and through public policy, with these entities for service delivery to include public safety, animal control, fire services, economic development, recreational services, transportation initiatives, and annexation and jurisdiction responsibilities for roads, intersections, and properties that partially lie in one of the other city or hat are currently unincorporated.

School Boards

The Fulton County Board of education serves the area of Fulton County outside the city limits of Atlanta, including the cities of Alpharetta, Roswell, and Mountain Park in the north, and College Park, East Point, Fairburn, Hapeville, Union City, Palmetto, and unincorporated portions of Fulton County in the south.

Independent Special Districts

The North Fulton Community Improvement District is a self-taxing district that uses additional property taxes to help accelerate transportation and infrastructure improvement projects. CIDs are leading the charge to implement vital transportation enhancements coupled with land use and zoning strategies that will enhance mobility and improve access to the North Fulton activity centers.

Independent Development Authorities

The City of Alpharetta Development Authority is not an independent authority. The City of Alpharetta does from time-to-time partner with the Fulton County Development Authority, which is an independent authority, on specific projects.

Other Units of Local Government Providing Services

The Alpharetta Convention and Visitors Bureau (ACVB) is another unit of local government that provides services within the City of Alpharetta. The ACVB was established to market the City of Alpharetta to visitors. It is funded by a hotel occupancy tax. This occupancy tax is divided up as follows: 43.33% of taxes collected are provided to the ACVB for operations and 56.67% are provided to the City of Alpharetta's General Fund. The funds that are derived from the revenue generated by these visitors are reinvested into the community. The Mayor, one Council Member, the City Administrator, and the Commu-

nity Development Director hold permanent seats on the board of directors. The Finance Director for the City projects revenues and presents these figures to the Mayor and Council for their approval during the budget process.

Utility Companies with Condemnation Powers

Three utility companies with condemnation powers are identified as operating within the City of Alpharetta:

- Georgia Power Company
- Sawnee Electric Membership Cooperative
- Atlanta Gas Light

Under the Official Code of Georgia Annotated Title 46 Chapter 3 Section 201(9) public utilities have the power to acquire, own, hold, use, exercise, and, to the extent permitted by law, sell, mortgage, pledge, hypothecate, and in any manner dispose of franchises, rights, privileges, licenses, rights of way, and easements necessary, useful, or appropriate. Any such electric membership corporation shall have the right to acquire rights of way, easements, and all interests in realty necessary and appropriate to effectuate the purposes of such electric membership corporation by condemnation under the same procedure and terms as provided by Title 22 and any other law of this state which provides a method or procedure for the condemnation of property for public purposes by all persons or corporations having the privilege of exercising the right of eminent domain.

■ Interrelated State Programs and Activities

Service Delivery Strategy

The 1997 Georgia General Assembly enacted the Local Government Services Delivery Strategy Act (HB 489). The intent of the Act is: a) to provide a flexible framework for local governments and authorities to agree on a plan for delivering services efficiently, effectively and responsively; b) to minimize any duplication and competition among local governments and authorities providing local services and, c) to provide a method to resolve disputes among service providers regarding service delivery, funding equity and land use.

The City of Alpharetta is coordinating with Fulton County to update and implement a county-wide Service Delivery Strategy.

Governor's Greenspace Program

This program is no longer active.

Coastal Management

The City of Alpharetta does not engage in this activity, as it is not a coastal city.

Appalachian Regional Commission

The City of Alpharetta falls within the jurisdiction of the Atlanta Regional Commission and is not directly impacted by the Appalachian Regional Commission.

Water Planning Districts

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 has developed regional and watershed specific plans for stormwater management, wastewater management and water supply and conservation in a 16-county area - *Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Forsyth, Gwinnett, Hall, Henry, Paulding, Rockdale* and *Walton*.

Transportation for Non-Attainment Areas

The City of Alpharetta is not listed as a non-attainment area.

7. Land Use Element

■ Introduction

Land, and the uses to which it is put, constitute the base scale on which all other aspects of development are founded. Land use and development patterns establish the foundation for the Comprehensive Plan. Consequently, the principal objective of the Land Use Element is to determine the most suitable and efficient use of the land and the pattern in which these uses will occur.

The integration of existing development patterns, growth trends and the analysis of land development capacity (the ability of the land resource to support development) form the basis for preparing the Future Land Use Plan. This Chapter also determines future patterns of growth, based on community needs and desires, and presents strategies for land use that strike a balance between effective and efficient delivery of public services, protection and preservation of valuable natural and historic resources, and respect for individual property rights. In addition to the city as a whole, particular attention is directed to the traditional downtown area and special considerations for its support and revitalization.

■ Development Patterns Today

A survey of existing land use was conducted to establish the type, spatial distribution and intensity of development within the city. A comprehensive survey of existing land use required a field inventory of each parcel of property within Alpharetta. Data collected as a result of the survey was classified by primary use and transferred to a map depicting existing land uses.

New development in Alpharetta is largely concentrated in two areas, the North Point and Windward Development Zones. The North Point Area is the center of the city's retail growth, anchored by North Point Mall. Windward is an award-winning multi-use development centered on Georgia's largest privately owned, manmade lake and is home to many of the technology companies for which Alpharetta has gained the national spotlight. The two development zones are linked by the city's greenway project, a source of pride for the community.

Through careful planning and by insisting that current and future development follow the Comprehensive Plan, Alpharetta has grown into a well-balanced community that continues to attract business and residential development.

For planning purposes, land uses are identified under the following categories and grouped by major category in accordance with State DCA guidelines. Several categories are further broken down for a more thorough understanding of development trends and patterns in the city. These categories are shown on the Existing Land Use Map.

Residential

Single-family residences consisting of individual houses, either attached or detached usually on separate lots, and often developed in subdivisions, as well as multi-family uses. There are three designations of single-family dwellings within the City. Multi-family residential contains two or more dwelling units, such as apartments.

Residential development played a significant role in Alpharetta during the decade of the 90's. There are three significant concentrations of residential development within the city: north and west of State Route

9, east of State Route 9 toward Georgia 400, and east of Georgia 400 between McGinnis Ferry Road on the north and State Bridge Road on the south (centered around Lake Windward). These areas consist primarily of newer subdivisions characterized by large homes on classically suburban lots with cul-de-sac streets.

Single-Family Attached and Multi-Family concentrations can be seen on Mid-Broadwell Road at Foe Killer Creek, east of downtown along Academy Street and Webb Bridge Road, at the far southwestern end of the city along Old Roswell Road, and east of GA 400 in the Preston Ridge and Park Bridge multi-use developments on Old Milton Parkway.

- Large Lot Single Family Detached. This category includes individual homes on lots of three to five acres in size and larger. The homes are often in a "rural" setting, and the properties may include horse barns and riding areas or other types of personal (as opposed to commercial) agricultural uses. Minimum lot size is 3 acres or more.
- **Single-Family Detached** covers all other single-family home sites, many of which are located within organized subdivisions, and are more "suburban" in character than the Large Lot category.
- **Single-Family Attached** includes all forms of attached housing (i.e., no dwellings located above others), such as duplexes and townhouses.
- **Multi-Family/Apartments** includes all multi-family residential buildings in which some dwellings are located above others, such as garden apartments.

Commercial

Commercial developments predominately occupied by establishments that offer goods or merchandise for sale, or rent, and other commercial uses that do not operate in "office" settings. Such uses include stores, shopping centers, hotels, restaurants, gasoline stations, automobile body shops; physical fitness centers, markets, hotels and building supply centers. These uses may be located as a single use in one building or grouped together in a shopping center. The City also has a "mixed-use" district for their CBD that allows residential along with nonresidential uses.

Retail Sales and Services, Hotel. Retail commercial development within the City of Alpharetta consists of both sales and service uses. These uses occur on individual lots or within shopping centers. Retail commercial development is apparent along most of the State Route 9 corridor, with an emphasis in the downtown area and strip development extending south to the City of Roswell and continuing along Upper Hembree Road to Harry's Market, and extending to the north, culminating in a shopping center at Cogburn Road. Alpharetta has 6 neighborhood shopping centers: Ingles, Alpharetta Square, Alpharetta Crossing, the Publix Shopping Center, Ingles at the Silos and Kroger at the Silos. Major commercial areas are also well established at the city's western extreme on Crabapple at Houze Road, at the intersection of Hwy 9 and Windward Parkway, and most prominently the North Point Mall area along GA 400 between Mansell Road and Haynes Bridge Road. This latter area dwarfs all others, containing over 3 million square feet of retail space in a regional mall, three power centers and assorted individual stores. In addition to continued expansion in this area, other recent commercial developments have occurred in shopping centers, often organized around a grocery store, as opposed to individual lots. Alpharetta's commercial/retail land uses are primarily concentrated in shopping center type development.

Hotel development is one of the strongest submarkets of the commercial/retail market. There are currently 23 hotels containing 2,352 rooms concentrated mainly along Mansell and Haynes Bridge Roads.

Offices

This category encompasses uses that are employment based, such as administrative operations and corporate offices, as well as traditional "office" uses such as doctor's offices, insurance and real estate brokers, and businesses that offer their services away from the site.

Office commercial development in the city ranges from major corporate office buildings to small professional offices. A number of large office buildings are located on the east side of GA 400 in the several major office parks such as Windward, Royal 400, Preston Ridge and Brookside, and in the Mansell Road/Old Roswell Road area. Smaller office buildings, some in converted residential structures, are located along SR 9 north and south of downtown, often serving as a transitional use to residential areas. Master planned developments continue to build out, and during the past 5 years considerable additions have been made to the multi-tenant office market.

Industrial

This category is for land dedicated to manufacturing facilities, processing plants, factories, ware-housing and wholesale trade facilities, mining or mineral extraction activities, or other similar uses. Alpharetta has a limited range of such uses.

Industrial development is reflected in two categories. Business center uses are located in the Mansell Road/Old Roswell Road area, Westside Drive at Windward Parkway, and within the Windward Business Center. More intense manufacturing/warehousing/wholesaling operations are located in the old industrial district off Hembree Road and Maxwell Road at the city limits, along Morrison Parkway (the Honda Plant), and at Union Hill and Westside Drive. Some nonconforming industrial uses are also found in the city—such as a rock quarry at the southern city limits on the east side of GA 400, and a cabinet manufacturer across from Milton High School on Milton Avenue. There has been little new activity during the last 5 years.

Business Centers are light industrial developments that are characterized by office and administrative operations in the front and storage space in the rear, usually served with loading docks, where merchandise is stored for distribution, repair assembly or otherwise handled in transit to the user.

Manufacturing/Warehousing/Wholesale covers the range of uses where goods or merchandise is fabricated, assembled or processed for distribution elsewhere; truck terminal operations for goods in transit; and wholesaling operations.

Transportation Communication Utilities

This category includes such uses as power generation plants, railroad facilities, transmission towers, public transit stations, telephone switching stations streets and highways.

Uses classified as "TCU" are almost exclusively streets and highways. Other uses within this category are within the light industrial district category.

Public Institutional

State, federal or local government uses, and quasi-public institutions. Governmental uses include City Hall, fire stations, libraries, post offices and public schools (but not parks). Institutional uses include churches, cemeteries and other private non-profit uses.

Public and institutional uses are typically not concentrated in specific locales. The majority of public and institutional land uses in Alpharetta are located on scattered sites within the original corporate limits, including City Hall, the Community Center and the Senior Center. Facilities that are publicly owned, but

would be classified more accurately in another land use category, are not included in this category. For example, publicly owned parks and/or recreational facilities are placed in the Park/Recreation/Conservation category, and general office buildings containing government offices are placed in the Offices category.

Parks Recreation Conservation

Defined: Land dedicated to active or passive recreational uses. These lands may be either publicly or privately owned and may include playgrounds, public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers, etc.

The three major parks in the City of Alpharetta are Wills Park, Webb Bridge Park, and Alpharetta North Park. Wills Park, located in the heart of Alpharetta contains approximately 100-acres of passive and active recreation activities, including an equestrian center. Alpharetta North Park on Cogburn Road contains 57 acres of passive and active recreation. Other recreation facilities within Alpharetta are the Eagle Gym, Alpharetta Pool Complex, and Old Milton Square in downtown. Webb Bridge Park, located near Abbotts Bridge Road, includes ball fields, a playground and a jogging path.

The City has also developed the Alpharetta Greenway along both Big Creek and Foe Killer Creek. This urban greenway is a network of trails and environmental educational opportunities along a 1,000 to 4,000 foot wide corridor extending approximately ten miles through the City along the banks of the Big Creek connecting residential and commercial areas.

Alpharetta Recreation and Parks Department currently has a contractual agreement to use facilities at Milton High School and Haynes Bridge Middle School. There are also several subdivision recreation centers located within the corporate limits for use by subdivision residents.

Agriculture Forestry

Land being actively farmed, including crop cultivation or livestock operations, or set aside for commercial timber or pulpwood harvesting as an agricultural pursuit.

There are currently no lands that are actively being farmed and used for commercial agriculture. There are several small horse farms and personal large estates in the northern half of the City. These properties are often in a "rural" setting and the properties may include horse barns and riding areas or other types of personal (as opposed to commercial) agricultural uses. These properties are therefore classified Residential, since that is the primary use of those properties.

Undeveloped

Land not developed or not being used for a specific purpose, and lands where development has been abandoned or where deteriorated, vacant buildings are located. This category includes woodlands or pastureland (not in agricultural crop, livestock or commercial timber production), undeveloped portions of residential subdivisions and industrial parks, water bodies (lakes, rivers, etc.), and locations of structures that have been vacant for some time.

As is further indicated by the Existing Land Use Map, a small portion of the land within the city limits is either undeveloped or underdeveloped. The underdeveloped designation is for large tracts with only one or two residences or where a small portion of the tract is being utilized.

■ Existing Land Use Inventory

By 1990, Alpharetta had grown to a city of 12,160 acres, and further annexations have increased the city's size to 13,049 acres in 1995, and almost 15, 300 acres in 2000.

The Current Land Use by Acreages shows the amount of land being used under the various land use categories in the city. Of the total acres, over 91% of the land within the current city limits is currently developed with residences or businesses (exclusive of streets), public schools and other facilities, churches,

Current Land Use by Acreage		
City of Alpharetta		
Current Land Use	Acres	% Land Use
Residential		
Single Family Detached Residential	8,035.2	52.6%
Single Family Attached Residential	131.9	0.9%
Multi-Family / Apartments	672.3	4.4%
	8,839.5	57.9%
Commercial / Office / Industrial		
Retail Sales and Services / Hotels	760.5	5.0%
Office	2,167.4	14.2%
Manufacturing / Warehousing / Wholesale	287.8	1.9%
Other		
Parks / Recreation / Conservation	1,182.0	7.7%
Public / Institutional	602.6	3.9%
Transportation / Communication / Utilities	57.9	0.4%
Undeveloped	1,365.4	8.9%
		0.0%
Tota	15,263.1	100.0%

cemeteries or parks. Of the developed acreage, the clear majority is residential, and of the residential acreage, the overwhelming majority, is single-family detached houses. The second largest land use category is office, while undeveloped land accounts for less than 9% of the total acreage in Alpharetta.

■ Influences on Future Development

Historic Patterns of Growth

The City of Alpharetta can trace its history back to the early days of north Georgia settlement. Incorporated in December of 1858, Alpharetta was the county seat and first official town of Milton County. Milton County had been formed one year earlier from portions of Cherokee, Cobb, and Forsyth Counties in an area that was once part of the Cherokee Indian Nation. Early white settlers came to the region in response to the discovery of gold in north Georgia in 1828 and the state land lottery of 1832, establishing trading posts and small farms. The rich agricultural potential of the area was soon realized, and a scatter-

ing of informally organized farming communities developed. By the 1850s, a Methodist campground was in operation at the junction of present-day Main Street and Cumming Road. Known as New Prospect Campground, this outpost became the basis for the town of Alpharetta.

Unlike Georgia towns that flourished because of a rail line or river, Alpharetta owed much of its early prosperity to cotton farming. By the time of the 1860 Census for Milton County, agricultural activity was so dominant that 403 of the county's 564 families were involved in farming. The agricultural economy shaped the development of downtown Alpharetta, whose character remained more rural and "small town" than urban. Milton County's first courthouse was a modest, wood-frame building that burned in 1867 and was replaced by a brick building. The town's first schoolhouse consisted of a log cabin on Main Street that was replaced in 1871 by the Male and Female Academy. Cotton gins and warehouses were essential businesses at the turn of the century, along with blacksmith shops, general stores, livery stables, and hotels. Few vestiges remain of this rugged but prosperous era of Alpharetta's history, in large part due to a 1910 fire that destroyed much of the town's business district.

Despite agricultural innovations after the turn of the century, Milton County's dependence on cotton ultimately spelled economic disaster. Problems of poor crop yields and boll weevil infestations were compounded by plunging crop prices at the onset of the Depression. Both the Alpharetta Bank and the Milton County Bank closed in 1931, and the county itself was nearly bankrupt. In 1932, Milton County merged with Fulton County in an effort to improve conditions, particularly with regard to its schools and roads. The area received its first paved roads in 1933, when Alpharetta's main street—then Canton and Roswell Streets—was paved all the way to Atlanta. Subsequently, Main Street, which once curved around into what is now Cumming Street, was paved and rerouted to become Highway 9.

Along with the economic recovery programs of the Roosevelt administration, Alpharetta's position in this improved transportation network was probably key to the town's survival during the 1930s and 1940s. The town's character during this period would have been that of a "small town" crossroads, featuring hotels, boarding houses, service institutions, and small stores catering to salesmen and other travelers as well as residents of the surrounding rural area. The central business district's distinctive "main street" character may have reached maturity during this period, and buildings from this period or before would be old enough to be considered historic under the 50-year rule common to historic districts and preservation ordinances. A 1950s aerial photograph of Main Street at the Academy Street/Milton Avenue intersection confirms a compass clustering of one- and two-story storefronts situated at the street's edge and shaded by deep awnings. However, many landmarks that contributed to the town's appearance during the 1920s, 1930s, and 1940s have since been lost to demolition and new construction. For example, the Milton County Courthouse was demolished in 1955 and hotels such as the Alpharetta Hotel are long gone as well.

Improved economic conditions and changing land use patterns in the decades since World War II have reshaped the character of the downtown area as well as the surrounding countryside. The appearance of the central business district has continued to change in an ongoing process of demolition, new construction, and remodeling, while the once-rural character of outlying areas is being rapidly redefined by large-scale new development. While no comprehensive historic survey exists for properties in the downtown area, visual inspection confirms that the area contains an assortment of commercial and residential buildings whose appearance and apparent construction dates vary widely. These buildings range from the Cotton House—a former cotton warehouse probably built around the turn of the century—to ranch-style houses of the 1950s and 1960s and fast-food restaurants of the past few years. A survey of a select area of the central business district conducted for the city's application to the Georgia Main Street Program in June 1989, estimated the age of buildings within the study area as follows: pre-1900, none; 1900-1920, 8%; 1920-1940,11%; 1940-1960, 30%; and post-1960, 51%. Some noteworthy older buildings lie outside of the central business district altogether, such as the Sim Manning house, built on Cumming Street in 1895. However, with the majority of its buildings dating from after 1960, the present appearance of the

downtown area has been shaped as much by modern styles and forms as by the streetscapes of its historic periods.

Land Use and Infrastructure Patterns

The physical development of Alpharetta strongly reflects the availability of infrastructure, primarily roads, water and sanitary sewer. Historically, the city developed as a crossroads community with a clearly identifiable downtown. Suburbanization of Atlanta in the 1950s and 1960s brought highway improvements, and growth followed. Initially, the city grew outward from the downtown center as new subdivisions were developed, and commercial uses spread along SR 9 (then US 19) as the highway became more traveled. Through the 1970s, the city limits remained essentially a circle focused on downtown.

Georgia 400 was built through the area in the early 1970s, but initially only connected I-285 (opened in the mid-1960s) with vacant hinterland to the north. Earlier, Fulton County had opened the Big Creek Water Pollution Control Plant and began an aggressive program of extending sewer service throughout the basin, adding the Johns Creek basin to the system with a second plant in the Horseshoe Bend development. Lastly, the restrictions on water supply north of the Chattahoochee were resolved in the 1980s through construction of the Atlanta/Fulton County Water Plant and reservoir. The northern movement of growth that had expanded Sandy Springs from a suburban crossroads to a major population center in the 1960s-70s exploded into North Fulton County in the 1980s.

The 1980s was the decade of the large, multi-use development, fueled by financing availability and tax advantages never seen before. During that decade, both Alpharetta and Roswell expanded their borders, incorporating large planned developments in the early stages of their design and construction. Windward, Preston Ridge, Royal 400, and the North Point Business Center brought the city's limits east of GA 400, while sewer availability in Foe Killer Creek (a Big Creek tributary) encouraged development and annexation on the west side of town.

The vast majority of the city today is served by public sanitary sewer and water. Almost by definition, the extension of these utilities (particularly sewer) generated the development activity that fueled annexation. The unincorporated area east and south of the city is also well served, and has been under intensive development along the same lines as in Alpharetta. Portions of the unincorporated area to the immediate northwest of the city are also within gravity flow of the Big Creek plant (via Foe Killer Creek) and to the north between SR 9 and GA 400 (via Big Creek). Properties northwest of Providence and Mayfield Roads are not served by sewer, and therefore are developed at rural densities.

Capacity was reached at both the Big Creek and the John's Creek Treatment facilities and a sewer moratorium was issued in March 2001 by Fulton County. The moratorium restricted the issuance of new sewer permits or additions to existing sewer permits in the Big Creek Basin. Most of the area farther to the north and west of the city, however, lies in another drainage basin (Cooper Sandy Creek) that cannot be sewered without pumping stations to transfer the effluent back into the Big Creek Basin, or through use of other extraordinary measures. A small Water Pollution Control Plant is located in the basin on the Little River. Because of flow restrictions in the river (which flows to the Etowah), the plant is at capacity and transferring up to 200,000 gallons per day to land application. As will be discussed below, this area is an important water recharge area where intense development should be avoided. In fact, the implementation strategy restricts the expansion of sewer into this area at all even though Fulton County has made expansion of the Little River Plant a priority.

Due to Alpharetta's growth in both its residential and non-residential populations, traffic congestion has become a problem within the city. In 2001, the City contracted with a transportation-engineering firm to develop a comprehensive transportation plan. A guiding principle of this plan was to restrict infrastructure improvements in the city that primarily benefit persons outside of the city, or facilitate additional flow-through traffic on city streets. Thus, the plan focuses on improvements that directly effect the in-

ternal circulation of the city. This plan deals with multi-modal solutions to the City's existing traffic patterns, such as internal circulation solutions, sidewalks, bike paths and greenway linkages, and an expanded public transit system inside the city, over a 20-year period organized in short, medium and long range time frames. Transportation improvements are essential for continued quality of life for the city's residents and for the health of economic development within the city.

As a major employment center with an abundance of executive amenities and housing, Alpharetta will continue to reap the benefits of improved access and its position within the greater Atlanta Metropolitan area and prestigious North Fulton.

Areas of Transitional Land Use

The vast majority of Alpharetta is so relatively new, and the city was able to apply modern land use planning concepts to so much of the development before it occurred, that areas of blight and transitional land use are very limited. Where they occur is in the older parts of town.

Some of the oldest residential areas surrounded downtown, along Roswell and Canton Streets, and Marietta, Thompson and Brooke Streets. Residences on the west side of downtown have experienced pressures for reuse as businesses or multi-family housing. On the east side of downtown, the improvement and extension of Haynes Bridge Road created redevelopment activity that put commercial pressure on the older neighborhood to the east (Thompson Street) and also generated a new shopping center on downtown's immediate south side. The City is actively marketing its historic downtown for mixed uses, and envisions a center where people can live and work and be entertained. The Downtown Development Plan, discussed later in this chapter, encompasses these transitional areas.

Other areas experiencing transitional land use pressures tend to be composed of older single-family homes that have come face to face with incompatible development or other changes to their residential environment. One such area is the homes along the north side of Upper Hembree Road across from the Harry's Market location and the offices next door in Roswell. Some of the homes have been redeveloped as office type uses as a land use transition to the neighborhoods to the north; other houses are expected to follow suit.

Another area is composed of the homes along SR 9 running north of downtown. Higher traffic volumes and ensuing road improvements have made the properties undesirable for residential purposes, but excellent opportunities for adaptive reuse as offices. By keeping the uses low intensity both in use (offices) and density, the traffic capacity of SR 9 can be preserved while offering a reasonable reuse of the properties. Further reuse of the remaining residences is expected, and eventual assembly and redevelopment for new office construction is encouraged.

Incompatible Land Use Relationships

As noted above, Alpharetta has been able to avoid incompatible land use relationships in the vast majority of the city because planning was able to precede development to a large extent. Important planning concepts that Alpharetta instituted early include substantial buffers between incompatible land uses, transitions in land use intensity between incompatible land use districts, and planned developments requiring detailed master plans. The latter includes Community Unit Plans such as Windward and Park Bridge, as well as office parks such as Royal 400, and planned shopping centers such as North Point Mall and the surrounding properties. Other areas where encroachment of incompatible land uses has created transitional conditions have been included in the Downtown Development Plan area or planned for controlled transition through rezoning in anticipation of preferred use patterns.

Market Forces and Development Policies

The market forces affecting land use development in Alpharetta are fully discussed in the Economic Development Element. Alpharetta's policies in the past have been to direct growth that the market generates into appropriate locations that will strengthen the city's quality of life as an exceptional place to live, work and do business. Some uses are not considered appropriate for the quality of Signature City that has been desired—most notably heavy industry that generates air or water pollution—but the market has not presented demands for most of the undesirable land use types. To a great extent, Alpharetta is a product of its own success, driven by a highly inter-related market for up-scale north side housing, and high tech industry and remote corporate operations seeking a professional and executive employment base.

Environmentally Sensitive Areas

As discussed more fully in the Natural and Historic Resources Chapter of this Comprehensive Plan, Alpharetta does not contain a wealth of historic resources. However, major strides to highlight what the city does have are being taken through the Downtown Development Plan, which encompasses most of the older portions of the original city, and through other actions included in this Plan.

A major goal of the city is to protect the natural environment of the city and the areas that contribute to its unique character by ensuring a balance between the natural and the built environment. Alpharetta has long had in place effective flood plain restrictions, and has enforced erosion control regulations for many years. Grading and site plans are required even on individual houses to assure, among other things, that sedimentation is not given the opportunity to compromise water quality. Alpharetta also has more restrictive buffer standards for streams and rivers within the city, in addition to its proactive greenway, the GA 400 Buffer and other related Greenspace projects.

The most critical environmentally sensitive area affected by this Comprehensive Plan lies, basically, outside of the city but is important to its future growth. The area to the north and west is a portion of a large water recharge area where intense development is discouraged. The City's plans for this area are to protect this rural area from urban development and incompatible land uses and call for actions to encourage the preservation of the "horse county" atmosphere of the area, the exclusion of sewerage extensions into the area, and the maintenance of very low residential development densities of .33 units per acre or less.

Infill Development Patterns

The State Department of Community Affairs requires, in their guidelines, an "evaluation of the options of encouraging infill development in areas where infrastructure and services are available versus expanding infrastructure and services into new areas." For Alpharetta, these are not mutually exclusive options. As seen on the Future Land Use by Acreage Table, the city is expected to be substantially built out by the year 2020 and, in fact, will have to annex additional land to accommodate all of the development forecast. Thus, all infill areas where infrastructure is available will have been developed by that time, as well as new areas to which infrastructure had to be extended or its capacity expanded.

That is not to say that inefficiencies are bound to occur. Alpharetta is a well-planned community where infrastructure requirements and development demands have been kept in reasonable balance. By and large, development over the next twenty years will be served by the basic network of infrastructure already in place, although capacity expansions will be required. Other areas into which Alpharetta may expand in the future are either: 1) well served by infrastructure now (to the southeast), or 2) not supported for infrastructure expansion in the future (to the northwest).

To encourage compact and compatible development within infill areas, this plan encourages creative urban design solutions, and a mix of residential and nonresidential types to accommodate projected growth.

Land Resources for Future Development

The last influence on future development is the availability of land to accommodate future growth. Appendix A of this Plan presents the population and employment forecasts for the city in detail, and their relationship to land absorption. To accommodate projected residential and employment growth using today's development assumptions, the city will need 1,728 acres for residential development and 1,430 acres for nonresidential development, or a total of 3,158 acres. Given the sustained growth projections in the North Fulton area over the next twenty years, the growth and development that can be anticipated within Alpharetta is more a function of its capacity to accept growth and the quality expected than a paucity of market demand.

The Future Land Use by Acreage Table shows the number of acres by land use category that are expected

Future Land Use by Acreage		
City of Alpharetta		
Future Land Use	Acres	% Land Use
Residential		
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Low Density Residential	8,252.4	54.1%
Medium Density Residential	200.5	1.3%
High Density Residential	689.7	4.5%
	9,142.6	59.9%
Commercial / Office / Industrial		
Retail Sales and Services / Hotels	961.3	6.3%
Office	2,973.3	19.5%
Manufacturing / Warehousing / Wholesale	313.2	2.1%
Other		
Parks / Recreation / Conservation	1,212.2	7.9%
Public / Institutional	602.6	3.9%
Transportation / Communication / Utilities	57.9	0.4%
Undeveloped	0.0	0.0%
		0.0%
Total	15,263.1	100.0%

to be developed by 2025. The land categories reflect the predominant land use character of expected development. It is expected that the City of Alpharetta will be completely built out by the year2025. Of the developed acreage, residential uses will absorb 303.1 acres and remain the clear majority, at 59.9% of all development within the city. Of the residential acreage, the majority will continue to be land set aside for single-family detached houses, although the percentage of medium and high density residential will continue to increase especially near downtown and around transportation corridors.

Non-residential development, exclusive of parks and recreation uses, will absorb 1,032 acres, with offices absorbing the greatest number of acres, 805.9. Office use will continue to be the predominate non-residential use in the city, capturing almost 48% of all non-residential uses, which is 19.5% of the total land use.

Outlook For Development

The City of Alpharetta can look to the future with optimism, but as in the past, should be proactive in guiding development. The Future Land Use Plan map places the majority of commercial and industrial uses adjacent to the Georgia 400 corridor, within planned developments. Several factors have combined to encourage the planning and zoning of these uses along Georgia 400 in the past. A major factor is the corridor's traffic noise and air pollution, which are not as conducive to the quality residential lifestyle Alpharetta is striving to provide. A second major factor is the volume of traffic that office, retail and industrial uses generate, particularly at peak hours. One of the polices of this plan is to minimize office and commercial traffic in residential neighborhoods. By locating these types of developments adjacent to Georgia 400, the traffic generated by these uses will tend to flow directly onto Georgia 400 rather than seek alternative routes through residential neighborhoods. Ultimately, however higher density residential may be located within proximity of transportation corridors in order to mitigate traffic congestion especially if public transit is a component.

The Future Land Use Plan map focuses predominantly on residential development in the northwest quadrant of the city and between State Bridge Road on the south and McGinnis Ferry Road on the north, beyond the commercial development along the GA 400 corridor. Alpharetta anticipates that the rapid commercial development of the past twenty years will plateau and that the city will mature from a bedroom residential community to an economic center of significant proportion. However, the city does not want to lose the "small town" and equestrian influence that is such a significant part of Alpharetta. If the city continues to expand to the north and west, the Residential Estate designation will protect large tracts and horse farms so that those uses can continue even though such parcels may have been annexed into the city. Preservation of equestrian land will further enhance the city's attempt to provide recreational open space for its residents. Further, the city sees its future in office park and office-institutional development rather than for industrial uses, so additional lands beyond those currently zoned for light industrial are not designated for industrial use. There is room for new development within the industrial designation; since this area is adjacent to land classified as industrial by the city of Roswell; it ensures compatible development in both communities.

Development opportunities outweigh constraints by a comfortable margin. However, rapid growth in neighboring counties has strained the infrastructure within the Alpharetta City limits. The current development trend in Fulton County will encourage future development in Alpharetta over the 20-year planning period. The following summarizes opportunities for future development within Alpharetta and identifies potential constraints or concerns.

Opportunities

Opportunities for future development in the City of Alpharetta include the following:

- Alpharetta is located in the "northern arc" of the Atlanta Metropolitan area. More than 80% of the area's growth is projected to be to the north in the GA 400 corridor;
- Continued and sustained growth in the area will maintain a healthy market demand for new development—a "buyer's" market in which Alpharetta can afford to be selective.
- Alpharetta enjoys the amenities of the metropolitan area, while at the same time enjoying a "small town" feel. Public attitudes about "neighborhood" and "community" have notably shifted in the Metro area in recent years, with new purchasers looking for more traditional settings in which to raise their children and to put down more permanent roots.
- There exist few occurrences of incompatible land uses or blighted areas in the city.

- Past and planned road improvements create an unusually high level of accessibility within Alpharetta.
- Schools within the Alpharetta area continue to report higher than average test scores at all grade levels.

Constraints

Some important constraints that will mold and direct growth include the following:

- Undeveloped land is limited within the city limits. To accommodate projected growth, the City will have to annex additional property;
- Through traffic (from beyond the city limits) will continue to increase.
- Development trend of smaller residential lots tends to undermine the desire for character preservation in the semi-rural equestrian area of the City.

■ Development Assumptions

By the latter portion of the twenty-year planning period, Alpharetta will run out of developable land, both residentially and commercially zoned, while demand for new land will remain.

With approximately 1,467.3 acres of developable land in various land use categories, Alpharetta will not be able to accommodate projected growth using current development assumptions. As described more fully in Appendix A, residential will require almost 1,728 acres to meet projected demand. Since the market will be constrained by the availability of land, housing prices can be expected to remain high.

Non-residential land uses will also consume all the currently available land without satisfying estimated demand. Utilizing current employment projections, Retail uses will require an additional 1,110 acres, office use will require 101 acres and industrial/warehousing will require 219 acres for a total acreage of 1,430. However, absorption of existing office square footage has slowed the current rate of office development.

The following assumptions were incorporated into formulation of the Alpharetta Land Use Plan:

- North Fulton County will continue to be among the fastest growing areas in the Atlanta Metropolitan Area.
- The regional economy will remain viable and growth in the technology sectors of the Fulton County economy will continue to prosper.
- The GA 400 corridor will continue to be the focal point for commercial and technology expansion within the County.

To potentially accommodate growth, innovative strategies, such as transit oriented and traditional neighborhood development concepts are included in the Short Term Work Program of the Implementation Chapter. Designating the downtown area as a mixed-use center will accommodate higher density residential, while protecting the integrity of single-family neighborhoods. An improved internal circulation system is proposed to accommodate residential and employee movement within the city.

■ Future Land Use

The intent of the Land Use Element is to identify the most desirable pattern of land use in Alpharetta. This pattern is represented on the Future Land Use Plan map, which indicates areas appropriate to the

various land use categories. These use categories are defined in this Section. The plan map is a representation of the Comprehensive Plan's goals and polices and, to a great extent, reflects current development patterns and trends, as well as current zoning approvals. The map designations indicate the predominant type of land use in the general areas identified. Guiding concepts for future land use in Alpharetta include:

- Ensure that future land use and development decisions are consistent with long range planning goals and policies and that such decisions promote social and economic well-being.
- Implement a land use plan that articulates a physical policy for a compact urban area and assures the availability of infrastructure concurrent with development;
- Encourage and promote clean, high tech industrial development that strengthens the economic base of the community and minimizes air and water pollution.
- Promote development that is pedestrian-oriented, community centered and minimizes vehicular trips.

Future Land Use Plan Map

The Future Land Use Plan map was developed to illustrate the most desirable pattern of land use in Alpharetta. The Future Land Use Plan map was developed taking into consideration the land use patterns illustrated on the Existing Land Use 2000 and Zoning maps, approved Master Plans for CUPs and other developments, topographic characteristics, the availability of infrastructure, and needs demonstrated by residential and employment forecasts. The needs and goals for each of the other chapters within the Comprehensive Plan were also used in development of the Future Land Use Plan map.

Interpretation

The plan is developed with the concept that the Future Land Use Plan map and the text are to be used as an integrated whole, with the map being a graphic representation of the text.

Interpretation of the Future Land Use Plan map is a process, which rests on the goals and policies expressed in the text. The land use designations on the map, both in terms of overall definition and intensity of land use types, require that policies and intent statements regulating the development and location of each land use type be evaluated and applied in the process of plan implementation.

Plan implementation is carried out through the application of regulations such as the Unified Development Code and through projects and programs outlined in the STWP. It is administered by the City Council with input from the Planning Commission and planning staff. The procedure, once the plan is adopted, will involve checks for plan and ordinance consistency as part of the review for issuance of subdivision approvals and development and building permits.

If a specific land use or development project is proposed for an area but is not consistent with the designated use or density on the Future Land Use Plan map, it cannot be approved. The initial contact for plan interpretation begins with the Alpharetta Department of Community Development. It is at this point that the proposal is evaluated for its conformity and compliance with the Comprehensive Plan and other standards and regulations such as zoning and other functional plans. In the event a use or development proposal is inconsistent with the Future Land Use Plan map or Comprehensive Plan policies, an applicant may file for a Comprehensive Plan Amendment in accordance with the amendment procedures contained in Appendix B, *Procedures for Amending the Alpharetta Area Comprehensive Land Use Plan*.

Future Land Use Categories

The Future Land Use map is a representation of the plan's goals and policies and indicates where various types of land uses are permitted. The plan map designations indicate predominant types of land uses, which are described below.

The following Table presents the land use categories shown on the Future Land Use Plan map, and indicates those zoning districts that are most commonly compatible with the use designation. In addition, designations are shown as most commonly used in Community Unit Plan (CUP) zoning. Specific requirements of the Unified Development Code and conditions of approval for specific properties and Master Plan approvals control in all cases.

Land Use Categories			
Alpharetta Future La Land Use Category	Uses Included	Compatible Zoning Districts	CUP Pod Designations
Residential		225022005	
Residential Estate	Personal agricultural uses such as farms and gardens, and single-family detached houses on lots that are 3 acres and greater in size.	AG, R	N/A
Very Low Density	Single-family detached house on lots of 1 acre or 22,000 square feet (with development densities limited to a maximum of 1 to 2 dwellings per acre, as appropriate to the surrounding area).	R, R-22	N/A
Low Density	Single-family detached houses on lots of 15,000 or 12,000 square feet (with maximum development densities limited to a maximum of 2 to 3 dwellings per acre, as appropriate to the surrounding area).	R-15, R-12	Low density residential
Medium Density	Single-family detached houses on minimum 10,000 square foot lots, and attached dwellings developed at maximum density of 4 units per acre.	R-10, R-4A	Medium den- sity residen- tial
High Density	Single-family attached dwellings developed at maximum density of 8 units per acre, and apartments developed at maximum density of 10 units per acre	R-8A, RM- 10	High density residential, multi-family
Commercial			

Land Use Categories

Alpharetta Future Land Use Plan Map

Land Use Category	Uses Included	Compatible Zoning Districts	CUP Pod Designations
Professional Offices	Offices for such businesses as architectural or engineering services, financial institutions, insurance or real estate companies, medical or dental clinics	O-P	Office
Office Center	A planned development of office buildings in a campus environment with extensive landscaping and attention to design amenities. Commercial uses are ancillary to the office uses and should be internal to the office buildings and oriented to serving the office employees and visitors.	O-I, CUP	Office
Retail Sales & Services	Shopping centers and individual business properties offering products, entertainment, transient lodging, or services to the general public.	C-1, PSC	Commercial, shopping center
Central Business District	A combination of offices, shops and other businesses offering products, entertainment or services to the general public in a traditional downtown setting.	C-2	N/A
Industrial			
Business, Manufacturing & Warehousing	Research and development businesses and office-warehouse developments where companies have administrative or sales space as well as an area for limited assembly or fabrication, product testing or refurbishment, or temporary storage.	LI, CUP	Business center, office/distribution
Light Industrial	Limited manufacturing or processing, wholesale businesses, warehouse and distribution facilities.	LI	Light Indus- trial
Other		•	
Transportation/Communications/U tilities	Electric substations, radio/TV/cable broadcasting stations and towers, telephone switching stations, public transit stations and similar uses.	LI	Light Indus- trial
Parks/Recreation/Open	Public or private active or passive recreation uses, such as playgrounds, parks,	OS&R, SU	Open space,

Land Use Categories

Alpharetta Future Land Use Plan Map

Land Use Category	Uses Included	Compatible Zoning Districts	CUP Pod Designations
Space	nature preserves, golf courses and recreation centers.		recreation
Public/Institutional	State, federal or local government uses such as fire stations, libraries, post offices, schools and government offices; and institutional uses such as cemeteries and hospitals.	SU, or other districts where spe- cific uses are permitted	Uses as designated
Agriculture/Forestry	Profit-oriented agricultural uses such as crop production and general farming, the raising of livestock, and timbering or pulpwood harvesting.	AG	N/A
Undeveloped	Lands that are expected to remain vacant.	N/A	N/A

The following text describes the concepts behind the various land use designations on the Future Land Use Plan map.

Residential Estate

The Alpharetta area is in one of the largest equestrian centers between Florida and Kentucky, and equestrian activities constitute a major economic and lifestyle influence locally. For example, Wills Park contains major facilities for equestrian activities, there are polo fields to the north of the city, and the annual Atlanta Steeplechase is held in the area. Maintaining this equestrian influence is important both to Alpharetta's historic past and its economic future.

The Residential Estate designation is for those areas where horse farms or large tracts of land have been developed. The purpose of the Residential Estate designation is:

- To retain and conserve the rural character in the area;
- To protect sensitive natural resources areas;
- To encourage and accommodate the further development of estates and horse farms that are consistent with growth policies of the City and that blend into the overall fabric of the city.
- The adoption of a policy to provide a lower level of service to these areas, in terms of transportation and sewer improvements in order to maintain and protect the rural character.

Residential

In addition to the Residential Estate category, Residential uses have been placed within four categories based on minimum lot size and density characteristics. The Very Low Density Residential category encompasses development of ½- to 1-acre lots or larger, usually in a subdivision setting. The Low Density Residential category allows from two to three units per acre and encompasses developments with 12,000 or 15,000 square foot lots. The Medium Density Residential category includes single-family detached developments with minimum lot sizes down to 10,000 square feet, and single-family attached developments (such as duplexes or townhouses) at up to four dwelling units per acre. High Density Residential anticipates up to eight to ten dwelling units per acre, which most commonly will be townhouse or apartment developments. The minimum lot size or maximum density appropriate for a specific property would reflect prevailing land use patterns, the property's relationship to adjacent and nearby sites, and other applicable standards contained in the Unified Development Code.

The following discussion focuses on residential development as a whole. Other compatible land uses are permissible that provide services to the individuals living in the residential areas.

The purpose of the residential designations is:

- To retain and conserve the existing sound housing stock;
- To accommodate a variety of housing types at various income levels.
- To allow for the conversion of sites to more intensive residential use when appropriate;
- To ensure compatibility between established single family and newer multi-family development:
- To promote residential development that fosters a sense of community and provides essential mobility, recreation and open space.
- To provide for areas of innovative development, such as mixed use and traditional communities in appropriate locations.
- To provide and maintain a supply of developable land throughout the urban area for residential and other supportive urban uses, as demand warrants and service capabilities permit;
- To stabilize and protect the essential characteristics of residential environments, including natural features;
- To encourage locating residential development where full urban services, public facilities, and routes of public transportation are available: and
- To permit, in certain sections of the city, multi-family housing developments which are consistent with growth policies of the City and which blend into the overall fabric of the city
- Develop residential areas that utilize innovative urban design principles that encourage community, pedestrian linkages and mixed-use environments.

The designation of land for residential uses recognizes the need to provide land for support services to the individuals living in the area. Uses such as schools, parks and churches are compatible with the residential designations. However, in introducing such additional related uses into these residential environments, it is intended that they be designed, located and maintained with full and complete regard for the surrounding residential environment. In addition, to ensure that quality is an integral component in residential development, infrastructure should be adequate to support residents' needs.

Commercial

The Commercial category contains several use designations that, collectively, include all business activities other than industrial uses. These include offices, retail sales and services, and a special designation for the Central Business District.

Offices are specifically addressed by two categories: Professional Offices and Office Centers. The Professional Office category allows for business and professional office uses with limited supportive commercial activity. This category is appropriate for small office complexes and in transition areas where existing residences are often converted into office use. The second category, Office Center, provides flexibility for large developments and is intended to allow for an environment often referred to as a corporate campus. Office Centers often include limited convenience retail and business services establishments, as well as hotels and conference centers that are oriented to the employees and clients in the center. As major entranceways into the City, the interchanges along GA 400 have been designated for office use in order to preserve the corporate campus image of the city.

The Retail Sales and Services category provides for a wide range of shopping and customer service facilities in the city. The category embraces neighborhood and community level shopping and service facilities as well as regional facilities such as North Point Mall. Developments in this category may be an individual store, restaurant or service business, a hotel or a shopping center. Individual office uses may also be found in this designation. Retail sales and service nodes have been developed at appropriate locations within the city to avoid "retail creep."

The Central Business District designation indicates the area that serves as the focal point for Alpharetta's traditional downtown. It is intended that this area contain a compact arrangement of retail and commercial enterprises together with office, financial, entertainment, governmental and certain residential developments, all designed and situated to permit a close pedestrian relationship between uses.

The commercial designation indicates areas throughout Alpharetta that provide shopping and service opportunities of the following types:

- Regional retail facilities provide for the shopping and service requirements of the city and region.
- Community shopping and service facilities offer a wide variety of goods and services, inducing both convenience goods for neighborhood residents and shopping goods for a market area consisting of several neighborhoods.
- Neighborhood shopping and services facilities include: only those stores and services establishments that are easily accessible and are used frequently by neighborhood residents.
- Convenience stores are limited to food-oriented stores and personal services establishments close to residential uses.

Industrial

Under normal circumstances, certain types of industrial uses may place heavy demands on public facilities or cause significant impacts on the environment. The industrial uses allowed in Alpharetta are not intended to create such problems or demands, and have been divided into two categories. The intent of the Business, Manufacturing & Warehousing designation is to provide a variety of tracts for industrial uses that are limited to office-warehouse centers, wholesaling companies and similar businesses that have no significant impacts on the environment. At the present time the only land designated for Light Industrial is adjacent to Georgia 400 in the southern part of the city (which includes the Honda plant on Morrison Parkway and the older industrial area on Hembree Road) and the portion of the Windward Business Center where the CUP's Master Plan designates such uses.

Transportation/Communications/Utilities

This category designates existing electric substations, telephone facilities, cable TV, transmission towers and satellite downlink operations in the city. There are no known plans for future locations for such facilities, which will be considered on a case-by-case basis. The category also includes all streets and highways in the city.

Parks/Recreation/Open Space

The Parks/Recreation/Open Space land use classification is for those areas within the city that has been developed for park or recreation use or is designated open space. The recreation and park areas illustrated on the map include neighborhood, community and regional parks, recreation facilities and golf courses. Not all developed or needed open space areas are indicated on the Future Land Use Plan map. Open space is required in all zoning Master Plans submitted to the city and is required in other developments when necessary to address recreational and aesthetic concerns, or to create a buffer between different land uses, or as required by the Unified Development Code.

Public/Institutional

This designation includes sites and facilities in public ownership for such uses as medical, educational, cultural, governmental, administrative and protective services, and cemeteries. Churches, though institutional in character, are not singled out in this category; rather, they are included within the categories of surrounding properties.

Agriculture/Forestry

There are no profit-oriented agricultural operations currently existing or expected to be located within Alpharetta through the year 2020.

Undeveloped

This category includes lakes, of which two are large enough to be specifically designated—Lake Windward and the lake in the Oxford Green development on Westside Parkway. No other areas are designated to be Undeveloped on the Future Land Use Plan map. As shown on the Future Land Use Table, the city will be built out by the year 2025. Although some lands may remain vacant and undeveloped by that time, their locations cannot be anticipated.

■ Downtown Development Plan

The tremendous growth that has been reshaping Alpharetta's environs is affecting the downtown as well, altering its original role as a small town crossroads. Plans for a viable future for the downtown area must address both the diversity of its existing conditions and the external pressures that are acting upon it.

Internal Conditions

In terms of overall character, the heart of downtown Alpharetta retains the general form of a twentieth-century small town, featuring a blend of small-scale commercial buildings, community buildings, and residences. However, the building stock has changed in recent decades and will no doubt continue changing in response to new conditions. Many landmarks of the past, such as the Alpharetta Hotel and the Milton County Courthouse, are gone forever. However, new development has been designed in the main

street style. This style reflects the elements of historic architecture including the use of brick, columns, pediments and heavy cornices. Veneer finishes and replacement doors and windows have altered some commercial storefronts that appear old enough to be considered historic. In conversion to commercial use, some early twentieth-century residences, including bungalows and wood frame houses, have also undergone alterations such as porch enclosures and wood shingle roofs. Sometime after World War II, a number of ranch-style houses were constructed along North Main Street; today these residences seem oddly close to the traffic and commercial activity of the downtown core. Changing conditions are transitioning these houses into office and service commercial businesses.

Changes in building stock reflect changes in the activity and uses of the downtown area. The downtown has lost both its old hotel and movie theater, two elements once common to thriving small towns, and has been short of traditional restaurants as well. Natural expansion and zoning changes have combined to initiate evolving patterns of commercial growth. On the north side of town, the residences along Main Street have been rezoned for commercial and office use. Alterations for business use will bring gradual decline to the remaining residences and will probably culminate in the demolition and redevelopment of individual properties over time. A number of fast-food restaurants and other freestanding businesses have been constructed along major arteries on the south side of town, each surrounded by its own parking lot and curb cuts. These developments undermine the functional vitality and pedestrian orientation of the traditional downtown and introduce a suburban-style, "strip" pattern of growth.

Downtown Revitalization

Downtown Alpharetta has been striving to identify and establish a new niche for itself in the overall scheme of area development. Revitalization of the downtown has been focusing on developing an atmosphere or combination of assets not available in the surrounding shopping centers, malls, or mixed-use projects. The city's historic "small town" character can be a primary element of this approach, but the traditional forms and activities of the downtown area may need to be reshaped somewhat. For example, the downtown will develop as an "entertainment district" for residents and employees of the City. Several approaches would be the expansion of its concentration of discretionary-income businesses, such as antique stores and other specialty shops, quality restaurants and entertainment establishments, art galleries and other amenities that are noticeably scarce in the area. Alpharetta will continue to work to make the downtown area a "destination" within the city.

Design guidelines are another essential tool in this process and have recently been refined and expanded as discussed below. The guidelines address the rehabilitation of downtown's few remaining historic buildings while promoting modern commercial design that is sensitive to the massing and scale of traditional downtown buildings. The guidelines foster a distinct visual identity for the downtown, combining architectural supervision with recommendations for streetscape elements such as light fixtures, sidewalk materials, street trees, and distinctive signs. Elements of Alpharetta's historic past can be highlighted through public awareness mechanisms such as walking tours, special events, commemorative plaques, and descriptive brochures.

Design Guidelines

A carefully developed set of design guidelines can be an ideal tool for bringing visual and spatial unity to an existing or developing area. Design guidelines should respond both to the conditions of the built environment and to the expressed goals of the community. In areas featuring a well-defined concentration of mostly historic structures, design guidelines can focus on restoring the buildings to a dominant or common period of their past. In new communities, or in communities whose historic character is not a prior-

ity, design guidelines can foster a particular atmosphere or image by creating an entirely new look. Communities that have adopted this rather extreme approach, such as Helen, Georgia, often feature an architectural style that has no historic precedent but creates visual unity. The building stock of many communities—including Alpharetta—falls somewhere in the middle, combining traditional storefronts and residences with later construction which may differ considerably in terms of form and function. These conditions present a challenge to the development of comprehensive design guidelines, but the task is not an impossible one.

Alpharetta is typical of communities that possess a diminished stock of historic structures but have expressed a desire to project an image that respects the past. Situations vary, but a common approach is to research, identify, and restore the area's remaining landmarks to their original appearance or to their appearance during a unifying, influential period. For Alpharetta, the most representative period might be the late 1800's and early 1900's, when the Georgian revival style dominated the downtown visually. The materials, proportions, and character-defining details of these buildings then become the basis for design standards for the area as a whole. New construction is then executed in forms and materials that are compatible with the historic buildings without attempting to imitate them. The diverse conditions of existing, nonhistoric structures are more difficult to address, but a reasonable degree of visual unity can be achieved with the right design guidelines.

Effective design guidelines must be sufficiently detailed and comprehensive enough to direct the sensitive treatment of properties of all ages and types, residential as well as commercial. A number of source books and agencies, such as the National Park Service (NPS), provide guidance for the appropriate treatment of historic properties as well as contemporary infill development. For example the NPS's Technical Preservation Services provide the following "Guidelines for Rehabilitating Existing Historic Storefronts" (condensed from Preservation Brief #11, page 3):

Become familiar with the style of your building and the role of the storefront in the overall design. Don't "early up" a front. Avoid stock "lumberyard colonial" detailing such as coach lanterns, mansard overhangs, wood shakes, inoperable shutters, and small-paned windows except where they existed historically.

- Preserve the storefront's character even though there is a new use on the interior.
- Avoid use of materials that were unavailable when the storefront was constructed.
- Choose paint colors based on the building's historical appearance.

In adopting a design standards ordinance, the City of Alpharetta took an important step in addressing the variety of conditions of its downtown area. The creation of the Design Review Board has provided an important vehicle for adopting and applying design guidelines that will encourage a visually unified area "signature."

■ Land Use Assessment

Through careful planning, Alpharetta has positioned itself toward becoming a "Signature City" of well-designed residential and non-residential projects. Although growth is projected to continue, the city is maturing. Demand for both residential and non-residential development will continue to be high, in fact, without changes in land use policy and annexation the city will not be able to accommodate projected growth. Over the next few years Alpharetta will review innovative development techniques and land use policies that can potentially accommodate growth. The challenge for the city over the next few decades will be to balance the built and non-built environment, while at the same time continuing to offer amenities such as Greenspace that have created the high quality of life within the city.

8. Transportation Network

■ Introduction

Alpharetta occupies an enviable position within the transportation network serving the Atlanta Region. Transportation is a key ingredient in the economic well-being of a community and its quality of life. Roads, transit, sidewalks and bicycle paths take the community's residents to work, school, recreation and shopping, and bring employees, clients and customers into the city to work or do business.

Recent social and economic forces have created major changes in transportation. The city has grown tremendously, with its population and employment exploding in the last decade. The transportation system in the city has been greatly impacted by GA 400. This state highway stretching from the City of Atlanta to North Fulton County has helped open the city to residential and commercial development while at the same time generated large amounts of through traffic in the city. While the city is relatively well served in terms of the types and number of major thoroughfares within its boundaries, the capacity of the facilities is routinely exceeded during peak periods. The recent completion of the Comprehensive Transportation Plan (CTP) has taken a proactive approach in the balance of growth and maintenance of community character. The purpose of the CTP was to address transportation demands throughout the city while providing a balance of transportation modes and policies. The CTP reflects the goals and objectives of the city and is responsive to the needs and concerns of citizens.

This chapter on the Transportation Network examines the roads, transit, and pedestrian and bicycle facilities in the city and in the surrounding area with regard to current demands and service, and discussed plans for improvements to the Transportation Network that are planned or need consideration. An assessment of the network is included at the end of the chapter, followed by an identification of needs and a set of strategies that will be undertaken to bring about improvements.

Roads

The City's road network has evolved over time, beginning with a radial system of highways focused on the traditional downtown city center (some dating from the 1800s), subsequently overlain with a corridor system of improvements to distribute access from GA 400 to planned high-density developments along the freeway.

Streets, Roads, and Highways

The Transportation Plan map (Figure X)shows the major thoroughfares in and around Alpharetta by functional classification, and proposed transportation projects from the 2001 Comprehensive Transportation Plan. Three major road types are evaluated: freeways, arterials and collectors.

Freeways. Georgia State Route 400, a multi-laned divided, limited access facility, traverses the city with interchanges located at Mansell Road, Haynes Bridge Road, Old Milton Parkway, and Windward Parkway. This freeway experiences serious congestion during peak rush hours, particularly in the morning.

Arterials. The city has several arterial roadways that serve high volumes of traffic. Arterials are streets that integrate and complement the freeway system and/or serve trips of moderate length. These streets

often provide service between urban areas and smaller rural areas. Arterials within the City of Alpharetta include SR 9, SR 120, Rucker Road, and Mid Broadwell. There are about 91 miles of arterials in the city of Alpharetta.

Collectors. A number of major collectors traverse the city, feeding trips from local streets into the major thoroughfare system. These roads help link arterial roadways to trip origins and destinations. Collectors also provide circulation within urban areas and activity centers. There are nearly 67 miles of collector roads in the city. The area northwest of the city is served by collectors oriented toward downtown Alpharetta, including Providence Road and Mayfield Road (east of Bethany), and Cogburn Road. Within the city, Cumming Street- between SR 9 and Westside Drive functions as a collector, as well as Academy Street-Webb Bridge Road from Haynes Bridge to Kimball Bridge, Windward Parkway from North Point Parkway to McGinnis Ferry, and Clubhouse Drive from Windward Parkway to Douglas Road. Douglas Road, which is adjacent to the city on the east, functions as a collector, as does the Old Alabama Road Connector that extends from Mansell Road to Old Alabama Road on the south. Kimball Bridge Road, from Old Milton Pkwy to State Bridge Road on the east, functions as a collector, only a portion of which is in the city

Overall, there are more than 175 route miles within the city of Alpharetta. During 2000, many roadways within the city were operating at level of service E (absolute capacity) or F (failure). APENDIX XXX contains a table listing functional classification of major streets in the City's road network, number of lanes per direction of travel, design capacity, as well as the existing and future level of service as estimated by the ARC's regional model.

Bridges

There are **XXX** Bridges maintained by the City of Alpharetta. All are considered acceptable by the 200X Georgia DOT Bridge inspection. **Appendix XXX**, presents a listing of these bridges and there most recent rating assessment.

Signalization and Signage

In order to promote the safe and efficient movement of people and goods, the City of Alpharetta complies with the federal regulations presented in the Manual of Uniform Traffic Control Devices (MUTCD) to regulate, warn, and guide traffic along all streets, highways, bicycle and pedestrian facilities. These regulations cover traffic signals, signage and pavement markers in order to provide consistency in traffic control devices across jurisdictions throughout the United States.

Traffic Signals. Currently, the City maintains 105 traffic signals at intersection along the street network. **Appendix X** presents a listing of these intersections.

Regulatory Signage. Regulatory signs are used to inform road users of traffic laws or regulations and indicate the applicability of legal requirements. These signs primarily consist of STOP signs, YIELD signs, and SPEED LIMIT signs. The City is in the process of performing a street sign inventory which will be added to the appendix when completed.

■ Alternative Modes of Transportation

The creation of alternative modes of transportation within the City of Alpharetta and to provide movement in and out of the City is extremely important. The City recognizes that the movement of people includes more than just roads. Transportation facilities not only facilitate the movement of goods and services, but they also have a profound influence on urban form. Good transportation planning includes the incorporation of roads, sidewalks, bikeways, trails, public transit and land use. Only through a proper and appropriate combination of these factors will movement through the city be maximized, in addition to land use policies that encourage the use of alternative modes.

In addition to the goals and objectives outlined in the implementation chapter regarding alternative modes, following is a list of guiding principles developed during the update to the Comprehensive Transportation Plan:

- Identify one or more locations for internal circulator services.
- Develop policy statements regarding rail service along Georgia 400 and express bus and HOV lanes.
- Explore the formation of a Transportation Management Association (TMA) along Georgia 400 and/or the Windward/Northpoint area.
- Locate sidewalks on all collector and arterial roadways.
- Provide bicycle and pedestrian connections from all activity centers (i.e. schools, commercial districts, parks, etc.), and ensure that sidewalks exist from all public transportation in areas that link to the existing sidewalk system.
- Review development guidelines and subdivision regulations for appropriate language supporting development of the sidewalk and bicycle systems.
- Connect the Big Creek Greenway to the sidewalk and bike systems.
- Review roadways for "bike-friendly" shoulders.
- Locate bus shelters throughout the City to encourage and accommodate use of public transportation.

Transit

Public transportation service to Alpharetta has been expanded in recent years. Currently, there is one Park-Ride lot located at Windward Parkway and GA 400 and another at the Mansell Road interchange with GA 400, where commuters can connect to the MARTA bus system running south to Atlanta. This lot has a capacity for 418 vehicles. Bus routes 85, 140 and 141 service this lot. In addition, MARTA operates a bus route connecting downtown Alpharetta with Roswell, Perimeter Center and Lenox Square, and service between the Mansell Road Park/Ride lot and North Point Mall. In recent years bus routes have been expanded and now include service to the full length of Northpoint Parkway and along Windward Parkway. Since 1996, MARTA has opened four new rapid rail stations: Medical Center, Sandy Springs Perimeter Center, and North Springs. In conjunction with these openings, north side bus routes have been modified to redirect most bus routes into the rail stations. The transit system provides service to more than 5,100 passengers daily. The following table represents the transit conditions within the city:

Transit Operations with the City of	f Alpharetta
Bus Route Miles	4.71
Daily Transit Boardings	5,153
Service Miles	3,708

In order to facilitate greater transit usage, the City will continue to seek further improved public transportation expansion, including additional bus services along Old Milton Parkway, Westside Parkway and Kimball Bridge Road and the extension of rail into Alpharetta. In anticipation of expanded services, new developments are required to locate bus shelters at appropriate locations. A Park and Ride lot at Windward scheduled for 2002 is anticipated to become a potential MARTA station in the future.

There are currently 3 bus routes serving Alpharetta:

MARTA Route 85

From the North Springs rail station serving both Roswell and Alpharetta, the route follows GA 400 to Northridge Drive to Roswell Road and then to Alpharetta Highway onward to Windward Parkway. The route provides select trips to Georgia State University's North Campus. The route serves business parks, shopping areas and hotel

MARTA Route 140

From the North Springs rail station traveling along GA 400 to Mansell Road Park and Ride, the bus travels between the station and park and ride lot approximately every 12 minutes during rush hours.

MARTA Route 141

Serving Alpharetta and helping transport riders to North Point Mall, the route travels along Haynes Bridge Road, North Point Parkway, and Mansell Road to the park and ride lot. The route continues to travel along Mansell to Old Alabama Road, Holcomb Woods, and Holcomb Bridge Road to Crossville Road.

The overall trip to Atlanta was shortened in 1996 through connection to rail in Perimeter Center instead of Lenox. Access between Alpharetta and the Perimeter Center was greatly enhanced when the 141-Mansell Park/Ride bus was redirected to the Medical Center rail station (and thence by rail to Buckhead and Atlanta), and the local road circulation route was eliminated. Changes to the 141-North Point bus route were also beneficial, connecting the Mall area to downtown on a weekday and weekend. A great deal of public support has been expressed toward the extension of the MARTA rail line to Windward.

Pedestrian and Bikeway System

A comprehensive system of pedestrian and bicycle facilities is an important element of a high quality urban environment. Sidewalks provide pedestrians with safe, convenient access to local destinations and also facilitate recreational walking and jogging. Bikeways provide both a recreational outlet and serve as an alternate transportation opportunity for a variety of trips, from children going to school to light shopping errands to commuting. A network of sidewalks and bikeways unifies a community, both visually and functionally, and distinguishes it from the automobile-oriented environments of suburban and rural areas.

Pedestrian activities are encourages through the implementation of a sidewalk and greenway facility program presently under construction. As part of the City's Unified Development Code, sidewalks are required for all new developments. This requirement has been in effect since 1993. The city is in the process of developing a sidewalk program. The program accentuates existing sidewalks with plans to expand and create new sidewalks in designated locations throughout the city, including residential and recreational areas. High priority sidewalk projects based on existing gaps in the network are estimated to be 3 million dollars. Sidewalk projects have been funded at this level in the Short Term Work Plan.

Sidewalks. A pedestrian orientation is particularly critical to a community's downtown area, where shops, offices, services, and community institutions are close to one another. If sidewalks are well-placed, citizens can commute to the downtown by bus or car, then continue on foot to all of their downtown destinations. This minimizes short-term parking turnover and local traffic and also encourages spontaneous interaction of shoppers, workers, and visitors. Sidewalks, as well as crosswalks, should be distinctive, clearly delineated, and well-maintained. Sidewalk rights-of-way can be ideal areas in which to promote a visual identity for the downtown through streetscape upgrades such as paving materials and small shade trees. The City of Alpharetta has invested many resources in the livability and viability of the Central Business District. New roads and streetscape improvements have been added to assist in pedestrian and vehicular traffic circulation.

Sidewalks are important beyond the downtown for purposes of both transportation and recreation. Sidewalks facilitate walking as an alternative means of transportation and provide safe passage from public bus stops to transit riders' homes and offices as well as throughout residential subdivisions. Sidewalks should be included as an integral part of every neighborhood. For children and teenagers too young to drive, sidewalks are often the most viable link to schools, neighborhood playgrounds or parks, community gathering places, and school bus stops.

Bikeways. There are few designated on-street bicycle lanes in the city. Although several corridors have wide shoulders that can accommodate experienced cyclists.

Greenways. In October 1994, Alpharetta expanded its interest in extending the sidewalk system through adoption of the Greenways Concept Plan. Greater use of sidewalks reflects a growing awareness of aerobic fitness and also can enhance community spirit, as residents of all ages choose to walk, jog, play, and socialize in their immediate neighborhoods. In addition, bicycle facilities can be integrated with the pedestrian system to create greater utility and enhance the overall pathway environment. In addition to facilities along roadways, the Greenways Concept Plan struck out cross country, using flood plains and utility easements, to create a more park-like setting for the system. This improved quality of the system will attract greater usage by pedestrians and bicyclists alike, and will play a special role in linking neighborhoods with new or expanded recreational areas, community facilities, shopping and work. The 6-mile greenway along Big Creek includes 12-foot wide concrete paths.

Figure XXX combines the City's sidewalk plan with the Greenways Concept corridors. The greenway system has been coordinated to connect with a similar system in Roswell and with bikeways planned by Fulton County in the unincorporated areas.

■ Railroads

There are no passenger rail lines or facilities within the City, nor are there any freight lines.

Airports

There are no airports within the City of Alpharetta boundaries. The majority of air transportation is provided south of downtown Atlanta at Hartsfield International Airport. Over the years there have been many proposals to locate a multi-modal terminal in downtown Atlanta that will connect the northern suburbs to the airport by way of train. If a multi-modal rail system is developed, links to Hartsfield International Airport will be further enhanced for the City of Alpharetta.

■ Assessment—Transportation Network

The existing transportation network continues to be a challenge for the volume of traffic experienced by Alpharetta. A large number of east-west trips, mostly generated by traffic traveling to and from Georgia 400, create congested conditions in Alpharetta on a daily basis. While a number of road improvement projects have been initiated or are planned for the city, an updated correlation between the capacity of the roads as improved and demand from the massive projected population and employment growth expected over the next twenty years has not been made. Some of the roads within the city are currently operating at LOS E or F during peak periods.

Over the last decade, the city of Alpharetta has experienced explosive growth in both the residential and commercial populations. The internal road system can no longer handle current capacities and is suffering from severe congestion in several places. Another factor that must be considered while discussing Alpharetta's congestion problems is its place in the region. Many problems that the city faces are regional in scope and require the cooperation of other governments and agencies. The city recently completed a Comprehensive Transportation Plan (CTP) that address transportation issues within a multi-modal context.

It is understood that the city will never achieve non-congested conditions, or above Level of Service E on many of its major arterials during peak periods. A guiding principal of the plan development was to not to attempt to resolve regional transportation problems to the detriment of the city itself. Quality of life, aesthetics within the city, increased access and mobility of residents, preservation of neighborhoods and the availability of choices were strong underlying principals within the development of this plan. In addition to projects that are outlined in the CTP, several issues became apparent during this process:

- As transit becomes more convenient and traffic congestion increases a greater percentage of commuters may choose this option. It is estimated that currently 7% of the population now uses public transit as opposed to 1.1% in 1990.
- Adequate transit connections are critical to the economic health of the city's business sector.
- Employment is projected to increase to over 129,000 jobs within the city by the year 2020. Population will increase to a little under 50,000. With increased job opportunities it is expected that more and more residents will work closer to home. The city is aggressively implementing a more pedestrian/bike friendly internal circulation system to accommodate increased internal circulation.
- Maintenance and operation of the transportation system in the city is critical to the systems ability to function in an efficient and safe manner. Citywide transportation programs that address safety and maintenance are within the short, intermediate and long term work programs. This will assure greater efficient and effective utilization of the existing transportation infrastructure.

- The development of a Transportation Demand Association has been suggested to implement travel demand management measures that could further reduce peak hour congestion, reduce total travel and maximize the capacity of existing and planned transportation facilities. This association in conjunction with the CID to fund improvements would promote the following measures:
 - Facilitate a ridesharing program;
 - Provide employer-sponsored transit pass discounts;
 - Encourage telecommuting and compressed workweeks; and
 - Develop an internal shuttle

Land use and transportation planning go hand in hand. The City of Alpharetta has always been very consciences to this interrelation, and to the balance that must be maintained in order to continue and improve the quality of life for its residents and workers. Based in part on available and/or planned infrastructure, future land use strategies outline appropriate areas for various housing and commercial densities. In addition to roadways, the city has made, and will continue to make great strides towards making appropriate areas, such as the historic downtown, pedestrian friendly so that people will have several transportation options and not be so dependent on their automobile. The city's Comprehensive Transportation Plan presents a multi-modal plan of local and regional road projects; local and regional transit options, sidewalks and citywide transportation programs that enable to accommodate the projected growth within the city to the year 2020.

9. Housing Element

■ Introduction

The City of Alpharetta has experienced tremendous residential growth over the past twenty years. It is the City's goal to preserve existing neighborhoods while encouraging high quality residential development to accommodate a variety of housing types at all income levels. This element of the Comprehensive Plan is made up of four components: 1) an inventory of the existing housing stock; 2) an assessment of the adequacy and suitability for serving current and future populations as well as economic development needs; 3) a determination of future housing needs and goals; and 4) strategies to address current and future housing needs and goals.

■ Housing Stock Inventory

Housing Type, Age and Condition

During the 1980s Alpharetta's residential areas expanded dramatically. Using 2000 Census data, the City of Alpharetta had 8,903 single-family units and 5,725 multi-family units for a total of 14,648 housing units. The City added 8,761 new dwelling units from 1990 to 2000 for a 149% increase in total dwelling units. During the 1980s, the types of residential structures located in Alpharetta became more diverse. In 1980 92.6 percent of the housing stock was single-family houses. By 1990, housing types included condominiums, duplexes, apartments, cluster homes, and single family detached houses in a variety of sizes and styles. Although the majority of units in Alpharetta continued to be single-family detached homes, the total percentage of single-family units to total units had decreased to 60.7%, and this trend continued into 2000 when 60.8% of dwelling units were classified as single family. During the 1980s, multi-family units increased from 6.6% of the supply to 38.4% in 1990 and continued to increase into 2000, at which time they represented 39.1% of the housing stock. Multi-family units have become an increasing share of the housing market in the Atlanta Region and the State of Georgia.

In terms of age, the area's housing stock ranges from isolated houses built before the turn of the century to planned residential developments where construction has begun more recently. Most of the city's oldest residences are located in or near its historic downtown, along Main and Canton Streets and the Thompson Street District. The city's pre-World War II housing is typical of small southern towns, featuring both brick and wooden types such as bungalows, cottages, and two-story houses.

The decades following World War II brought a number of subdivisions to areas farther from downtown. Residential structures in these neighborhoods are mostly single family detached, consisting of the ranch-style and split-level types constructed nationwide during the same time period.

The period 1980 to 2000 was one of rapid expansion for housing inventory in the Atlanta region and the State of Georgia. Alpharetta was no exception to this new housing expansion. In 1980 there were 127 housing units built before 1939, or 11.4% of all units. In 1990 the percentage of houses built before 1939 decreased in real terms from 127 units to 44 units, and as a percentage of total units from 11.4% to 0.7% of all units. Alpharetta's percentage of older housing is very low compared to the 8.1% of housing units constructed before 1939 in the State of Georgia. By 2000, the housing stock in the city had increased by 13,532 units, suggesting that 92% of the city's housing stock has been added over the past twenty years.

	19	80	19	90	20	00
	Number	Percent	Number	Percent	Number	Percent
Single Family	1,033	92.6%	3,575	60.7%	8,903	60.89
SF Detached	N/A	-	3,064	52.0%	8,069	55.19
SF Attached	N/A	-	511	8.7%	834	5.7%
Multi Family	74	6.6%	2,259	38.4%	5,725	39.19
Mobile Homes	9	0.8%	53	0.9%	20	0.19
Total Units	1,116	100.0%	5,887	100.0%	14,648	100.09

296.662

17

35,769

212,938

28,462

192.972

28,462

0.3%

1.1%

7.3%

0.3%

1.1%

Source: US Census Bureau

Lacking Complete Plumbing

Georgia

Alpharetta

Georgia

Most of the housing in the Alpharetta area is in good condition. Houses and yards are generally well maintained, suggesting a sense of community spirit and pride of ownership among owners and residents. A "small town" character still pervades the older neighborhoods, while an upscale, quality atmosphere is expressed by the newer developments. Since the condition of Alpharetta's housing stock is good overall, the problems that do exist are not widespread or pervasive.

1.8%

Occasional instances of substandard units that do not conform to code tend to be scattered among adequately maintained units rather than concentrated in deteriorated areas. Other deteriorated or vacant units are located in transitional areas where rezonings and market forces are acting to resolve conflicts of use or building type. Codes enforcement actions by the City also serve to control the proliferation of substandard units before they can influence a deterioration of neighborhoods.

The percentage of housing units lacking complete plumbing decreased in Alpharetta between 1980 and 1990 from 1.5% to 0.3% of all housing units, a level that is maintained today. This reduction is especially significant in light of the fact that in 1980 Alpharetta was smaller in terms of land area.

Trends in Housing Construction

Between the beginning of 2001 and the end of 2004, the City authorized construction of over 1,112 new dwelling units through issuance of building permits. Additionally, 717 building permits were issued for expansion of existing single-family dwellings. Over this period, total new units authorized for single-family detached and attached housing exceeded 57% of all new construction, while multi-family units accounted for fewer than 20%. The total number of permitted units by year has varied considerably, from a high of 1,786 (in 1997) to a low of 233 (in 2004). Across all housing types, however, there has been a general decreasing trend in the number of units authorized over these past six years. Appendix A presents an analysis of this trend and provides projections for the coming five years to 2006.

Trends In Housing Type Alpharetta								
		To	otal Hous	ing Units	Permitte	d		
	1999	2000	2001	2002	2003	2004	1999 - 2005	% Of Total
Single Family	464	149	79	245	267	233	1,437	68%
Multi Family	296	88	275	13	-	-	672	32%
Mobile Homes	-	-	-	-	-	-	-	0%
Total All Units	760	88	354	258	267	233	2,109	100%

Housing Occupancy Characteristics

In 2000, homeowners made up the majority of residents in Alpharetta, accounting for 60.3% of all units. Renter occupied units made up 39% of all units. As noted earlier, housing types diversified in Alpharetta during the 1980s. In 1980 owner occupied units made up 80% of the supply and renter occupied units made up 20%, a much higher ratio (4 to 1) than the State's overall ratio of less than 2 to 1. By 1990, Alpharetta's owner to renter ratio had grown to almost 3 to 2, reflecting a higher percentage of multi-family units than average for the state as a whole.

The 1990 Alpharetta owner vacancy was considerably higher at 6.2% as compared to the State of Georgia's 2.5% vacancy rate. The renter vacancy rate was 13.8%. This vacancy rate was slightly higher than the state rental vacancy rate of 12.2%. By 2000, vacancy rates had fallen dramatically to 1.7% of owner housing and 5.6% of renter housing, reflecting the city's robust housing market.

Table 7-3
Housing Occupancy Characteristics
Alpharetta and Comparison to State

	198	80	199	90	200	00
	Number	Percent	Number	Percent	Number	Percent
Owner Occupied Units	865	79.70%	3,001	57.00%	8,387	60.29%
Renter Occupied Units	220	20.30%	2,264	43.00%	5,524	39.71%
Total Occupied Units	1,085	100.00%	5,265	100.00%	13,911	100.00%
Owner Vacancy Rate*						
Alpharetta				6.2%		1.7%
Georgia				2.5%		1.9%
Renter Vacancy Rate*						
Alpharetta				13.8%		5.6%
Georgia				12.2%		8.2%
Owner to Renter Ratio						
Alpharetta	3.93		1.33		1.52	
Georgia	1.86		1.85		2.08	

Source: U.S. Bureau of the Census.

Housing Value and Activity

During the last twenty years, residential building permit activity in the City of Alpharetta has been strong, particularly since 1990. During the decade of the 1990s, the City's population continued increase dramatically, maintaining a high demand for new housing. From 1990 through 2000, there were 4,528 permits issued for single-family detached units and 2,918 permits issued for multi-family units, for a total of 7,446 new units. Much of the growth and variety in residential construction has

Table 7-4 Housing Value And Ren Alpharetta And Georgia	nt			
	1	980	1990	2000
Owner Median Value				
Alpharetta	\$	51,400	\$ 119,500	\$ 226,300
Georgia	\$	23,100	\$ 70,700	\$ 111,200
Renter Median Rent				
Alpharetta	\$	155	\$ 630	\$ 908
Georgia	\$ \$	153	\$ 433	\$ 613
Source: US Census Bureau				

occurred since 1980 in the form of large-scale developments to the east of downtown.

As shown on Table 7-4, a comparison of housing costs from 1980 to 2000 shows that the median owner value more than quadrupled from \$51,400 in 1980 to \$226,300 in 2000. Alpharetta's 2000 median pur-

chase price was significantly higher than the County (\$270,999) and the State (\$162,954). Because of the abundance of multi-family units constructed during the 1980s and 1990s, median rental rates increased nearly six-fold between 1980 and 2000 from \$155 in 1980 to \$908 in 2000. Renter median rent in Alpharetta was significantly higher than both the County and State in 2000.

Assessment and Future Growth Needs

The Atlanta Regional Commission has identified the Atlanta region as having a very positive housing market, leading the nation in permits and starts during much of the past decade. Several factors will continue to fuel Alpharetta's residential growth, including location, transportation access, adequate infrastructure improvements and an abundance of executive housing and amenities. Vacant land still exists within the City for residential developments, and opportunities for innovative, mixed-use developments abound.

Although the majority of housing in Alpharetta is in good condition, there are several areas of concern that remain.

North Main Street Area

Parcels fronting on N. Main Street are zoned for office or commercial use, but the area includes a number of older residences and some offices that are in converted houses. These older homes and offices, which are well established and in good condition, maintain a residential atmosphere that probably will prevail for some time. Alpharetta will continue to encourage the conversion to professional uses that do not harm existing residential areas.

Thompson Street Area

Thompson Street appears to have developed following World War II, featuring houses, lots, and rights-of-way that are often smaller in scale than those of comparable neighborhoods. Zoning changes have been occurring on properties that back up to the neighborhood on the south (along Old Milton Parkway, which is a state highway) and on the north (along Academy Street).

It is the City's goal to preserve this neighborhood as an example of Alpharetta's small town past, by allowing conversion to office/professional uses while maintaining the residential character. The City will continue to encourage rezoning of the existing residences along Thompson Street to professional offices instead of commercial/retail in order to preserve the existing low-density use of Thompson Street.

Properties North of Marietta Street and East of Wills Road

An important goal of this Comprehensive Plan is to maintain the residential nature of the city's northwest quadrant; opening up this area to commercial or any more intensive use may jeopardize this goal and threaten the integrity of other neighborhoods in this part of town. Importantly, this Plan does not support the continued widening of Rucker Road west of Wills Road, and the City has consolidated its control over Wills Park activities through acquisition of the park and annexation. These actions reduce the potential future impact from the road improvements and park facilities and will have the effect of protecting this area.

While the City does seek to maintain a largely residential environment in this quadrant, the potential to redevelop some areas to encourage more diverse housing types and neighborhood-focused mixed-use projects is to be encouraged. This will help to promote affordable housing while also meeting the changing housing needs and wants of empty nesters and young professionals.

Trailer Street Area

Only one mobile home remains on Trailer Street and Christine Drive, which are adjacent to the Central Business District and north of an area that is in transition from residential to office use. The area represents one of the last remaining pockets of substandard housing in the city. Despite its small size, the development is split between office zoning and single-family zoning. This area is part of the Central Business District and although the City has committed considerable investment in capital improvements for the CBD, this area is primarily held by private property owners and is outside the scope of public investment. While codes enforcement actions have been a catalyst for change in this area, it is believed that the true potential of the property will be realized as market forces within the Downtown Area react to other City-sponsored initiatives and private sector investment.

Table 7-5

Comparison of Housing Costs--1990

Alpharetta, Fulton County and State

	A	lpharetta	County	(Georgia
Owner Housing Value					
25th Percentile	\$	87,600	\$ 61,300	\$	47,300
Median	\$	119,800	\$ 97,700	\$	71,300
75th Percentile	\$	169,200	\$ 185,400	\$	102,100
Rental Housing Rent					
25th Percentile	\$	493	\$ 261	\$	202
Median	\$	548	\$ 396	\$	344
75th Percentile	\$	612	\$ 521	\$	466

Canton Street Area

Canton Street between Church Street and Hopewell Road is the oldest residential district in the city with the largest collection of original cottage homes in the city. This area is immediately adjacent to the Central Business District and helps to support the business uses downtown. As commercial development grows adjacent to Canton Street (in downtown and along North Main Street), greater pressure will result to convert the single-family homes on Canton Street to businesses. One way to resist the pressure and preserve this residential district is to designate it as the Garden District of Alpharetta, which is outlined as part of the City's 2003 Downtown Plan. Programs could be developed to provide incentives and awards for residents who enhance the appear-

ance of their property. The retention of this residential area anchors surrounding neighborhoods and enhances the character of downtown

Affordable Housing

Source: U.S. Bureau of the Census.

Although further research needs to be conducted, the City is concerned that adequate affordable housing be available so that people who work in Alpharetta can live here. As reflected on Table 7-5, Alpharetta's median house cost and rent were higher than both the State and Fulton County. Using 1990 income figures, 36.2% of Alpharetta's population could only afford housing below the 25th percentile and 16 percent can only afford rents under the 25th percentile. Housing for people of modest means is necessary to provide an adequate employment base for Alpharetta's targeted office, high-tech, and retail development. Further, it is recognized that as Alpharetta's population ages and transition to retirement income sources, it could become increasingly difficult for some to remain residents of the area unless housing affordability is actively addressed. Realizing the City's goal of developing a community where people can live, work,

play, and stay is dependent upon providing housing that can be afforded by all of Alpharetta's workers and seniors.

It is the City's goal to provide a variety of housing options through: 1) the continued diversification of the new housing market to offer greater choice in housing selection, 2) allowing mixed uses and higher densities in the downtown area, and 3) continuation of its policy of preservation of older neighborhoods, such as the Thompson Street neighborhood. The City is also looking at mobility issues relating to employment and seeks to provide convenient transportation access to current and projected retail and service employees.

Future Growth Needs

Population and household projections indicate that Alpharetta will continue to grow over the next 20 years. Between 2005 and 2025 the City's population is projected to increase by almost 13,349. This increase translates into an even faster rate of household formation and a need for housing construction to accommodate the new households. By the year 2025, Alpharetta will add over 6,120 new households.

Appendix A presents the calculations for land that is expected to be used for new residential development and new units created. The ratio of single-family houses to multi-family units is projected to remain the same over the next 20 years; however, an increasing percentage of single-family units will be townhomes and condominiums.

Residential growth is projected to continue through infill and new developments on both the east and west sides of town. In addition, the amount of land needed to accommodate the 2025 population is greater than the amount of land available for such use. It is therefore assumed that the City will also continue to grow through annexation.

The area northwest of Alpharetta should be maintained as a low density residential and Residential Estate area, for which the area is zoned and the infrastructure can support. Areas of higher density residential development are expected to be expanded around current areas zoned CUP and in the Downtown District, and to be developed at the same rate as has been experienced recently.

	Lanes				xisting		ojected
	Larics		Existing				
Functional	per	Capacity	Volumes				
Class	direction	(veh/hour)	(veh/day)	AM v/c	PM v/c	AM v/c	PM v/c
Collector	2	1300	16420	0.51	1.30	0.99	0.93
Collector	1	650	1740	0.21	0.23	0.07	0.32
Arterial	1	650	8590	1.01	0.94	0.47	0.99
Arterial	1	650	10670	1.26	1.20	0.89	0.86
Arterial	2	1300	9350	0.40	0.77	0.43	0.93
Arterial	1	800	4160	0.44	0.38	0.08	0.48
Arterial	1	800	3690	0.42	0.31	0.44	0.27
Arterial	1	1050	11920	0.88	0.81	0.45	0.92
Collector	1	650	5240	0.62	0.65	0.56	0.87
Collector	1	700	5920	0.47	0.83	0.73	0.98
Arterial	1	650	3080	0.26	0.66	0.28	0.72
Collector	1	850	3040	0.27	0.28	0.19	0.34
Collector	1	800	3330	0.13	0.54	0.40	0.20
Collector	1	850	3400	0.13	0.50	0.66	0.35
Collector	2	1500	4620	0.30	0.20	0.23	0.76
Arterial	1	850	3900	0.35	0.27	0.34	0.55
Arterial	1	850	8860	0.66	0.95	1.02	1.12
Arterial	1	850	7810		0.83	0.77	0.80
Arterial	1	850	4890			0.27	0.76
Arterial	2	1300	16960	1.08		0.58	1.11
Arterial	3	2700	14890	0.31	0.49	0.31	0.54
Arterial	3	2700	14750	0.37	0.49	0.44	0.57
Arterial	3	2700	15700	0.34	0.55	0.47	0.57
Arterial	3	2700	17180	0.37	0.55	0.48	0.60
Arterial	2	1500	9550	0.44	0.59	0.57	0.78
Arterial	3	2250	6070	0.22	0.23	0.12	0.28
Arterial	3	2250	9400	0.16	0.53	0.31	0.29
Arterial	1	750	3830	0.21	0.74	0.21	0.38
Collector	1	750	3020	0.22	0.35	0.34	0.46
Collector	1	750	4620	0.20	0.66	0.54	0.46
Collector	1	750	2920	0.31	0.31	0.20	0.47
Collector	1	700	4280	0.18	0.84	0.32	0.99
Collector	1	850		0.06	0.41	0.31	0.33
Arterial	1	1000	11950	0.86	0.89	0.85	0.78
Arterial	1						1.01
	1						0.73
							0.39
							0.36
							0.54
							0.69
							1.00
							0.70
							0.91
							0.85
							0.80
							0.78
							0.76
							0.93
•	Collector Collector Arterial Arterial Arterial Arterial Arterial Arterial Collector Collector Collector Collector Collector Arterial Collector Collector Collector Collector Collector Collector Collector Collector Collector	Collector 2 Collector 1 Arterial 1 Arterial 2 Arterial 1 Arterial 1 Arterial 1 Arterial 1 Arterial 1 Arterial 1 Collector 1 Collector 1 Collector 1 Collector 1 Collector 2 Arterial 1 Arterial 2 Arterial 3 Arterial 3 Arterial 3 Arterial 3 Arterial 3 Arterial 1 Collector 2 Collector 3 Arterial 3 Arterial 3	Collector 2 1300 Collector 1 650 Arterial 1 650 Arterial 1 650 Arterial 1 800 Arterial 1 800 Arterial 1 1050 Collector 1 650 Collector 1 700 Arterial 1 650 Collector 1 850 Collector 1 850 Collector 2 1500 Arterial 1 850 Arterial 2 1300 Arterial 3 2700 Arterial 3 2700 Arterial 3 2250	Collector 2 1300 16420 Collector 1 650 1740 Arterial 1 650 8590 Arterial 1 650 10670 Arterial 1 800 4160 Arterial 1 800 3690 Arterial 1 1050 11920 Collector 1 650 3080 Collector 1 650 3080 Collector 1 700 5920 Arterial 1 650 3080 Collector 1 850 3040 Collector 1 850 3400 Collector 1 850 3400 Collector 1 850 3400 Collector 1 850 3400 Collector 2 1500 4620 Arterial 1 850 3400 Collector 2 1500 3480	Collector 2 1300 16420 0.51 Collector 1 650 1740 0.21 Arterial 1 650 8590 1.01 Arterial 1 650 10670 1.26 Arterial 1 650 10670 1.26 Arterial 1 800 9350 0.40 Arterial 1 800 4160 0.44 Arterial 1 800 3690 0.42 Arterial 1 1050 11920 0.88 Collector 1 650 5240 0.62 Collector 1 650 3080 0.26 Collector 1 850 3040 0.27 Collector 1 850 3400 0.13 Collector 1 850 3400 0.13 Collector 1 850 3400 0.13 Collector 1 850 3400 <td>Collector 2 1300 16420 0.51 1.30 Collector 1 650 1740 0.21 0.23 Arterial 1 650 8590 1.01 0.94 Arterial 1 650 10670 1.26 1.20 Arterial 1 650 10670 1.26 1.20 Arterial 1 800 4160 0.44 0.38 Arterial 1 800 3690 0.42 0.31 Arterial 1 1050 11920 0.88 0.81 Collector 1 650 5240 0.62 0.65 Collector 1 650 3080 0.26 0.66 Collector 1 850 3040 0.27 0.28 Collector 1 850 3400 0.13 0.50 Collector 1 850 3400 0.30 0.20 Arterial 1 85</td> <td>Collector 2 1300 16420 0.51 1.30 0.99 Collector 1 650 1740 0.21 0.23 0.07 Arterial 1 650 8590 1.01 0.94 0.47 Arterial 1 650 10670 1.26 1.20 0.89 Arterial 1 650 10670 1.26 1.20 0.89 Arterial 1 800 3690 0.40 0.77 0.43 Arterial 1 800 3690 0.42 0.31 0.44 Arterial 1 1050 11920 0.88 0.81 0.45 Collector 1 650 5240 0.62 0.65 0.56 Collector 1 650 3080 0.26 0.66 0.28 Collector 1 850 3040 0.27 0.28 0.19 Collector 1 850 3400 0.13 <t< td=""></t<></td>	Collector 2 1300 16420 0.51 1.30 Collector 1 650 1740 0.21 0.23 Arterial 1 650 8590 1.01 0.94 Arterial 1 650 10670 1.26 1.20 Arterial 1 650 10670 1.26 1.20 Arterial 1 800 4160 0.44 0.38 Arterial 1 800 3690 0.42 0.31 Arterial 1 1050 11920 0.88 0.81 Collector 1 650 5240 0.62 0.65 Collector 1 650 3080 0.26 0.66 Collector 1 850 3040 0.27 0.28 Collector 1 850 3400 0.13 0.50 Collector 1 850 3400 0.30 0.20 Arterial 1 85	Collector 2 1300 16420 0.51 1.30 0.99 Collector 1 650 1740 0.21 0.23 0.07 Arterial 1 650 8590 1.01 0.94 0.47 Arterial 1 650 10670 1.26 1.20 0.89 Arterial 1 650 10670 1.26 1.20 0.89 Arterial 1 800 3690 0.40 0.77 0.43 Arterial 1 800 3690 0.42 0.31 0.44 Arterial 1 1050 11920 0.88 0.81 0.45 Collector 1 650 5240 0.62 0.65 0.56 Collector 1 650 3080 0.26 0.66 0.28 Collector 1 850 3040 0.27 0.28 0.19 Collector 1 850 3400 0.13 <t< td=""></t<>

					2005 E	xisting	2030 Pr	ojected
		Lanes		Existing				
	Functional	per	Capacity	Volumes				
Segment	Class	direction	(veh/hour)	(veh/day)	AM v/c	PM v/c	AM v/c	PM v/c
MAXWELL ROAD	Collector	1	450	6660	0.80	1.14	0.93	0.99
MAYFIELD	Collector	1	650	4280	0.19	0.91	0.79	0.63
MAYFIELD	Arterial	1	700	5170	0.54	0.61	0.46	0.64
MCFARLAND	Collector	1	550	4520	0.77	0.57	0.23	0.73
MCGINNIS FERRY	Collector	1	850	5670	0.60	0.45	0.21	0.60
MCGINNIS FERRY	Collector	1	650	4340	0.27	0.94	1.44	0.98
MCGINNIS FERRY	Collector	1	550	6000	0.74	1.05	0.79	1.09
MCGINNIS FERRY	Collector	1	550	6450	0.87	0.93	0.70	1.06
MCGINNIS FERRY	Collector	1	750	2930	0.26	0.44	0.13	0.43
MCGINNIS FERRY	Collector	1	650	5270	0.36	0.95	0.81	0.83
MCGINNIS FERRY RD	Collector	1	700	4980	0.31	0.79	0.44	0.31
MCGINNIS FERRY RD	Collector	1	850	4520	0.50	0.35	0.26	0.28
MID BROADWELL RD	Arterial	1	850	3470	0.20	0.38	0.37	0.33
MID BROADWELL RD	Arterial	1	850	3410	0.20	0.39	0.19	0.53
MID BROADWELL RD	Arterial	1	600	6300	0.47	0.95	0.92	0.85
MID BROADWELL RD	Arterial	1	650	7720	0.89	0.79	0.63	1.18
NORTH POINT PKWY	Collector	3	2100	13940	0.46	0.53	0.26	0.45
NORTH POINT PKWY	Collector	3	2100	14850	0.49	0.56	0.32	0.54
NORTHPOINT PKWY	Collector	3	2100	13940	0.29	0.70	0.37	0.47
NORTHPOINT PKWY	Collector	2	1500	7380	0.17	0.65	0.51	0.50
NORTHPOINT PKWY	Arterial	3	2250	2660	0.14	0.07	0.03	0.11
NORTHPOINT PKWY	Arterial	3	2250	2660	0.14	0.07	0.03	0.11
NORTHPOINT PKWY	Arterial	3	2250	7280	0.23	0.25	0.16	0.22
NORTHPOINT PKWY	Arterial	3	2250	3490	0.04	0.26	0.15	0.11
OLD ALABAMA RD CONN	Collector	2	1500	7950	0.31	0.51	0.41	0.59
OLD ROSWELL RD	Collector	1	750	8910	0.54	0.98	1.04	0.77
OLD ROSWELL RD	Collector	1	750	3330	0.26	0.34	0.22	0.50
OLD ROSWELL RD	Collector	1	650	8510	0.87	0.91		
OLD ROSWELL RD	Collector	1	600	330	0.00	0.13	0.08	0.12
RUCKER RD	Arterial	1	600	2580	0.20	0.51	0.56	0.50
RUCKER RD	Arterial	1	650	2700	0.37	0.37	0.35	0.50
RUCKER RD	Arterial	1	600	3820	0.31	0.71	0.71	
RUCKER RD	Arterial	1	750	5770	0.65		0.45	0.99
SR 120	Arterial	3	3450	18740	0.41	0.48	0.32	0.49
SR 120	Arterial	2	1800	18740	0.78	0.91	0.62	0.93
SR 120	Arterial	3	3450	24800	0.46		0.50	0.69
SR 120	Arterial	3	3450	21570	0.35		0.53	0.75
SR 120	Arterial	1	1000	11650	0.62	1.06		0.80
SR 120	Arterial	2	2300	16920	0.36		0.43	0.81
SR 120	Arterial	1	1000	11870	0.69	1.00		0.96
SR 120	Arterial	2	2000	18550	0.74		0.86	0.86
SR 120	Arterial	2	2300	20320	0.49		0.65	0.72
SR 120	Arterial	2	2500	23660	0.63		0.69	0.72
SR 120	Arterial	2	2300	15680	0.43		0.49	0.73
SR 120	Arterial	3	3450	16800	0.45		0.49	0.73
SR 120	Arterial	3	3450	21230	0.23		0.46	0.58
SR 120	Arterial	2	2300	23950	0.57	0.57		0.56
STATE BRIDGE RD	Arterial	1	1000	9960	0.63			0.91
STATE BRIDGE KD	Aitellai	I	1000	9900	0.03	0.70	0.43	0.67

					2005 E	xisting	2030 Pr	ojected
		Lanes		Existing				
	Functional	per	Capacity	Volumes				
Segment	Class	direction	(veh/hour)	(veh/day)	AM v/c	PM v/c	AM v/c	PM v/c
WEBB BRIDGE RD	Collector	1	750	4020	0.39	0.49	0.43	0.94
WEBB BRIDGE RD	Collector	1	750	4050	0.25	0.62	0.60	0.73
WEBB BRIDGE RD	Collector	1	800	2350	0.26	0.26	0.18	0.49
WEBB BRIDGE RD	Collector	1	750	2350	0.27	0.28	0.18	0.49
WEBB BRIDGE RD	Collector	1	750	3290	0.13	0.60	0.45	0.48
WEBB BRIDGE RD	Collector	1	750	370	0.03	0.09	0.04	0.14
WEBB BRIDGE RD	Collector	1	750	2350	0.10	0.44	0.32	0.33
WEBB BRIDGE RD	Collector	1	750	370	0.03	0.09	0.04	0.15
WEBB BRIDGE RD	Collector	1	750	960	0.05	0.26	0.09	0.34
WEBB BRIDGE RD	Collector	1	750	1740	0.09	0.25	0.38	0.58
WEBB BRIDGE RD	Collector	1	750	960	0.05	0.26	0.09	0.34
WESTSIDE PKWY	Arterial	2	1500				0.35	0.25
WESTSIDE PKWY	Arterial	2	1500				0.13	0.56
WESTSIDE PKWY	Arterial	2	1500				0.28	0.22
WESTSIDE PKWY	Arterial	2	1500				0.12	0.45
WESTSIDE PKWY	Arterial	2	1500				0.13	0.56
WESTSIDE PKWY	Arterial	2	1500				0.35	0.25
WESTSIDE PKWY	Arterial	2	1500				0.63	0.51
WESTSIDE PKWY	Arterial	2	1500				0.36	0.83
WESTSIDE PKWY	Arterial	2	1500				0.27	0.21
WESTSIDE PKWY	Arterial	2	1500				0.11	0.43
WESTSIDE PKWY	Arterial	2	1500				0.06	0.12
WESTSIDE PKWY	Arterial	2	1500				0.05	0.13
WINDWARD PKWY	Arterial	2	1300	4410	0.33	0.26	0.21	0.71
WINDWARD PKWY	Arterial	2	1300	2490	0.17	0.18	0.12	0.48
WINDWARD PKWY	Arterial	2	1400	5000	0.11	0.50	0.48	0.28
WINDWARD PKWY	Collector	2	1500	14910	0.61	0.80	0.94	1.03
WINDWARD PKWY	Collector	2	1500	6820	0.13	0.66	0.75	0.45
WINDWARD PKWY	Collector	2	1500	13290	0.51	0.84	0.73	0.81
WINDWARD PKWY	Collector	2	1500	14340	0.58	0.79	0.52	0.79

SOURCE: Atlanta Regional Commission Regional Transportation Planning Model

NOTE: Roadway segments with a v/c ratio above 0.80 are typically considered operating at or below Level of Service D and likely experience high levels of congestion during peak travel times.

CALCULATED LOADS (from GDOT Bridge Inventory Data) REQUIRED LOADS (from GDOT Bridge Inventory Data) RE	
121-0298-0 121-02233X-002.1E CR 2233 Windward Pkwy WBL over Camp Creek 20 25 28 40 36 0 None 121-0300-0 121-09411M-005.80E CR 70 Webb Bridge Road over Big Creek 16 25 21 36 31 0 None 121-0301-0 121-09410M-000.30E CR 1331 Rucker Road over Foe Killer Creek 16 25 21 30 27 0 None 121-0591-0 121-01321X-000.58E CR 1321 Cumming Street over Big Creek Tributary 0 0 0 0 0 None, box cump Creek 121-0624-0 121-02233X-002.14E CR 2233 Windward Pkwy EBL over Camp Creek 20 25 28 40 36 0 None 121-0629-0 121-02233X-003.02E CR2233 Windward Pkwy EBL over Big Creek CR 2233 Windward Pkwy EBL over Big CR2233 Windward Pkwy EBL over Big CR2233 Windward Pkwy CR2233 Windward P	95.0
WBL over Camp 20 25 28 40 36 0 None	60.7
Creek 20 25 28 40 36 0 None	60.7
121-0300-0 121-09411M-005.80E CR 70 Webb Bridge Road over Big Creek 16 25 21 36 31 0 None 121-0301-0 121-09410M-000.30E CR 1331 Rucker Road over Foe Killer Creek 16 25 21 30 27 0 None 121-0591-0 121-01321X-000.58E CR 1321 Cumming Street over Big Creek Tributary 0 0 0 0 0 0 None, box cumpled to the product of	
121-0301-0 121-09410M-000.30E CR 1331 Rucker Road over Foe Killer Creek 16 25 21 30 27 0 None 121-0591-0 121-01321X-000.58E CR 1321 Cumming Street over Big Creek Tributary 0 0 0 0 0 0 None, box cumber Camp Creek 121-0624-0 121-02233X-002.14E CR 2233 Windward Pkwy EBL over Camp Creek 20 25 28 40 36 0 None 121-0629-0 121-02233X-003.02E CR2233 Windward Pkwy EBL over Big EBL over Big 0<	51.9
121-0591-0 121-01321X-000.58E CR 1321 Cumming Street over Big Creek Tributary 0 0 0 0 0 None, box cu	
Tributary 0 0 0 0 0 0 None, box cu 121-0624-0 121-02233X-002.14E CR 2233 Windward Pkwy EBL over Camp Creek 20 25 28 40 36 0 None	1
EBL over Camp 20 25 28 40 36 0 None	alvert 91.4
121-0629-0 121-02233X-003.02E CR2233 Windward Pkwy EBL over Big	05.0
EBL over Big	95.0
Creek 20 25 28 40 30 0 None	95.9
121-0630-0 121-02233X-003.03E CR 2233 Windward Pkwy WBL over Big Creek 20 25 28 40 36 0 None	95.9
121-5023-0 121-00085X-001.63S CR 85 Kimball Bridge Road over Big	64.1
Creek 16 25 21 36 31 0 None	ons ons
10 16 12 18 13 0	52.7
121-5258-0 121-09486M-001.47E CR 2227 Mansell Road EBL over Foe killer Creek 20 25 28 40 36 0 None	80.3
121-5259-0 121-09486M-001.48E CR 2227 Mansell Road WBL over Foe Killer	80.3
Creek 20 25 28 40 36 0 None	
over Big Creek 20 25 28 40 36 0 None	82.0
121-5261-0	82.0
121-5273-0 121-09409M-001.90N CR 1334 Haynes Bridge	
Road over Big Creek 20 25 28 40 36 0 None H Modified I	90.0
121-5286-0 121-02233X-003.73E CR 2233 Windward Pkwy over Big Creek Tributary Timber - 24 7	Fons Fons
13 21 17 32 24 0	65.7
121-5292-0 121-00189X-000.18N CR 189 Harris Road over Foe Killer Creek tributary 0 0 0 0 0 0 None, box cu	ilvert 99.9
121-0603-0 121-09407M-001.66E CR 1332 Rockmill Road over Foe Killer Creek tributary Tandem Truck	k 19
Note: This bridge was added by GDOT on Jan. 30, 2003 Tons Timber Truck Tons Timber Truck Tons	

This table was compiled from Georgia Department of Transportation's Bridge Inspection report dated October 12, 2001 includes only bridges within Apharetta's City Limits. The "Required Posting" column lists the data that should appear on the load limit signs.

Alpharetta Signalized Intersections

ID#	Street 1	Street 2
1001	Academy Street	State Route 9
1002	Canton Street	Milton Avenue
1003	Canton Street	Mayfield Road
1004	Mayfield Road	State Route 9
1005	Cumming Street	State Route 9
1006	Academy Street	Haynes Bridge Road
	GA 400 NB Ramps	Old Milton Parkway
2002	Morris Road	Old Milton Parkway
2003	Old Milton Parkway	Siemens Driveway
	North Point Parkway	Old Milton Parkway
	Cotton Creek Entry	Old Milton Parkway
	Brookside Parkway	Old Milton Parkway
	Old Milton Parkway	Park Bridge Parkway
	Old Milton Parkway	Southbridge Parkway
	GA 400 SB Ramps	Old Milton Parkway
	Amber Park Drive	Old Milton Parkway
	Kimball Bridge Road	Old Milton Parkway
	Haynes Bridge Road	Old Milton Parkway
	Old Milton Parkway	State Route 9
	Old Milton Parkway	Roswell Street
	Old Milton Parkway	Wills Road
	Old Milton Parkway	Post Office
	GA 400 NB Ramps	Windward Parkway
	North Point Parkway	Windward Parkway
	Edison Drive	Windward Parkway
	Marconi Drive	Windward Parkway
	Alderman Drive	Windward Parkway
	Windward Concourse	Windward Parkway
	Union Hill Road	Windward Parkway
	GA 400 SB Ramps	Windward Parkway
	Deerfield Parkway	Windward Parkway
	Nortel/South Trust Bank	Windward Parkway
	Westfield Drive (Home Depot Driveway)	Windward Parkway
	Walmart Driveway	Windward Parkway
3014	State Route 9	Windward Parkway
3015	State Route 9	Windward Greens Driveway
	Haynes Bridge Road	North Point Parkway
	Georgia Lane	Haynes Bridge Road
	Haynes Bridge Road	Mansell Road
	Blackwatch Lane	Haynes Bridge Road
	Mansell Road	Old Alabama Connector
	Mansell One Driveway	Mansell Road
	Georgia Lane	North Point Parkway
	North Point Drive	North Point Parkway
	Rockmill Road	North Point Parkway
4010	Kimball Bridge Road	North Point Parkway

	Haynes Bridge Road	North Point Drive
	GA 400 NB Ramps	Haynes Bridge Road
	GA 400 SB Ramps	Haynes Bridge Road
	Haynes Bridge Road	Northwinds Parkway
	Haynes Bridge Road	Morrison Parkway
4016	Morrison Parkway	Lakeview Parkway
4017	Haynes Bridge Road	Rainwater Boulevard
4018	Haynes Bridge Road	Woodhaven Way
4019	Devore Road	Haynes Bridge Road
4020	Alpharetta Crossing	Haynes Bridge Road
5001	Mansell Road	North Point Parkway
5002	Mansell Crossing - South Entrance (Toys "R" Us)	North Point Parkway
5003	Mansell Crossing - Middle Entrance (AmeriSuites)	North Point Parkway
5004	Mansell Crossing - North Entrance (O'Charley's)	North Point Parkway
5005	Center Bridge Road	North Point Parkway
5006	Center Bridge Road	North Point Center East
	North Point Mall - South Entrance (United Artist Theaters)	North Point Parkway
	North Point Mall - North Entrance (California Pizza Kitchen)	North Point Parkway
	North Point Court	North Point Parkway
5011	GA 400 SB Ramps	Mansell Road
	Davis Drive	Mansell Road
5013	Mansell Road	Westside Parkway
	Kingswood Place	Mansell Road
	Mansell Road	Old Roswell Road
	Colonial Center Parkway	Old Roswell Road
	Colonial Center Parkway	Mansell Road
	Mansell Road	Warsaw Road
5019	Mansell Road	Walmart Driveway
	Great Oaks Way South	North Point Parkway
	Great Oaks Way North	North Point Parkway
	North Point Parkway	Preston Ridge Road
	North Point Parkway	Webb Bridge Road
	Morris Road	North Point Parkway
	Clubhouse Drive	Windward Parkway
	Walnut Creek Crossing	Windward Parkway
9011	McGinnis Ferry Road	Windward Parkway
	Sanctuary Parkway	Westside Parkway
	Center Bridge Road	Westside Parkway
	Maxwell Road	Westside Parkway
	Hembree Road	Westside Parkway
	Lake Windward Drive	Webb Bridge Road
	Park Glenn Drive	Webb Bridge Road
9021	Webb Bridge Middle School D/W #2	Webb Bridge Road
	Webb Bridge Road	Webb Bridge Way
	Kimball Bridge Road	Webb Bridge Way
	State Route 9	Wills Road
	Maxwell Road	State Route 9
	Cogburn Road	State Route 9 State Route 9
	Harris Road	Upper Hembree Road
5021	THITID TOUG	opper membree Road

9028 Harris Road
9029 Mid Broadwell Road
9030 Cumming Street
9031 Kimball Bridge Road
9032 Webb Bridge Road

9033 North Point Parkway

Rucker Road Wills Road Henderson Parkway Rockmill Road Alpharetta High School Ent Alpharetta High School Ent