

■ Introduction

An understanding of a community's past, present and projected population characteristics serves as the basis of any comprehensive planning effort. This chapter provides basic information about Columbia County's residents and households, including past trends, the population's current characteristics, and forecasts of the future. The data in this chapter provides a basis for the Economic Development, Transportation, Community Facilities, Housing, and Land Use elements of the Growth Management Plan. Future population and housing data, along with future employment forecasts, 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 elements of this Plan.

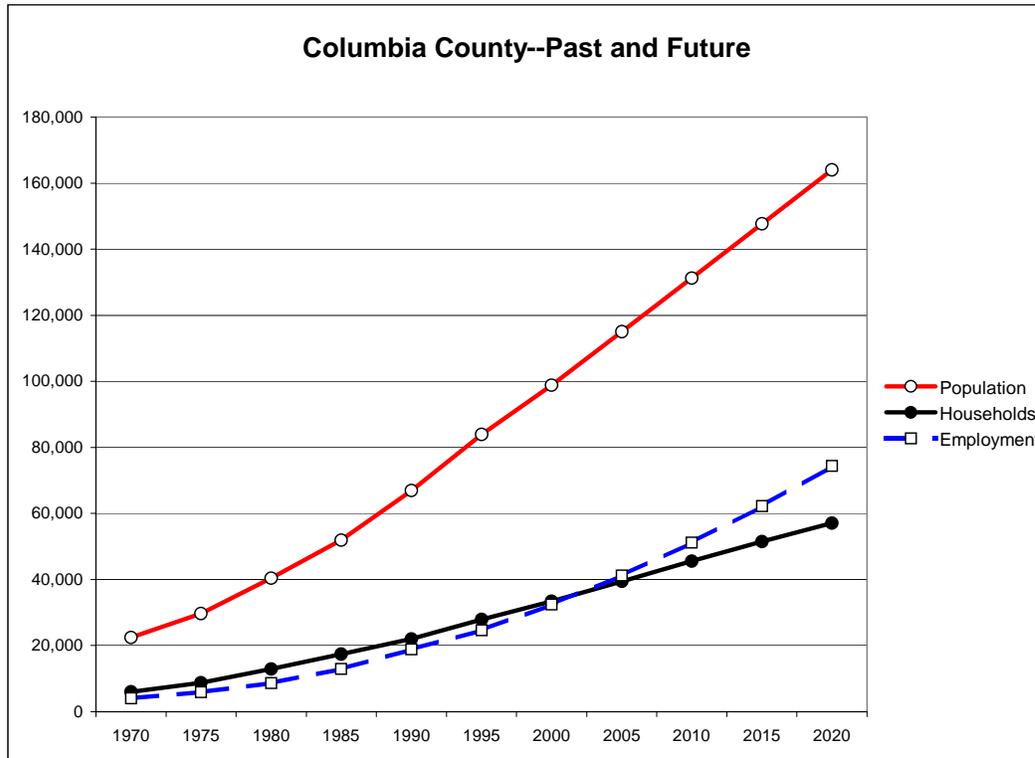
In all cases, the most recent data available is presented in this chapter, even though that data may be several years old or even no more recent than the last census, taken in 1990. More detailed data to support current estimates for 2000, as well as some detailed data required to be included to meet State requirements, are contained in Appendix A.

■ Summary

Columbia County has experienced massive growth over the past thirty years, and that growth has become a steady annual increase since 1985. During the 1990's, Columbia County's population grew at almost twice the average annual rate for Georgia. Compared to its neighbors, Richmond and McDuffie Counties, Census Bureau estimates for 1990-99 indicate that almost all of the growth in the three counties occurred in Columbia County (92%).

Forecasts suggest that this growth will continue at roughly the same pace. The following chart illustrates population, household and employment growth in Columbia County from 1970 to today, and on to the year 2020.

Interestingly, as the chart reveals, up until now, there has been less than 1 job for every household in the county (although there are, on average, more than one employed person in each household). This underlines Columbia County's historic role as a "bedroom" community to Augusta-Richmond County and major employers such as the Savannah River Site, Ft. Gordon and the regional medical community. Projections from 2000 forward, however, show an increasing jobs-to-households ratio, suggesting a growing local employment base and a lessening reliance on commuter-oriented jobs.



	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Population	22,474	29,658	40,474	51,894	66,910	83,922	98,766	115,016	131,247	147,636	164,041
Households	6,008	8,738	12,936	17,389	21,974	27,884	33,380	39,481	45,563	51,505	57,066
Employment	4,016	5,863	8,676	12,886	18,814	24,607	32,253	40,856	50,383	60,756	71,902

Since 1990, the average household size in the county has been decreasing. At the same time, the proportion of the population 65 and older has steadily increased from less than 6% to over 8%. These trends reflect that:

- The housing supply is beginning to reflect a small but growing proportion of duplexes, townhouses and multi-family developments.
- Overall, families in Columbia County are maturing. Having moved to the county, many families put down roots and have stayed. The children are now growing up, many have left for college or jobs, and mom and dad are still in the house with the younger kids, or have become “empty nesters.”
- Many “empty nesters” are crossing into the retirement years, but are remaining in the county and will probably continue to do so. The view of Columbia County as “home” is strongly held and a driving force in the community.

By the year 2020, the population of the County is projected to grow to 164,000 from 99,000 today, 14,000 of who will be in Grovetown and Harlem and 150,000 of who will be in the unincorporated portion of the county.

■ The Planning Area

Columbia County is one of five counties that comprise the Augusta-Aiken Metropolitan Statistical Area (MSA). The MSA includes Richmond and McDuffie Counties and, in South Carolina, Aiken and Edgefield Counties, all of which are organized socially and economically around the MSA's central city, Augusta. On the Georgia side of the Savannah River, Columbia County is also a member of the Central Savannah River Regional Development Center (RDC), which is also centered on Augusta. According to the latest population estimates by the Census Bureau, about 41% of the people in the MSA live in Augusta-Richmond County, while Columbia County is home to 20%. Including McDuffie County, two-thirds of the MSA's 461,000 people are located in Georgia.

In examining statistical comparisons to Columbia County's geographic area, data is often presented in this chapter for McDuffie and Richmond County as Columbia's closest and most relevant neighbors.¹ In some cases, where relevant, comparisons to the other counties in the MSA and the metro area itself are given, as well as comparisons to Georgia as a whole.

Technically, Columbia County's Growth Management Plan only covers the unincorporated portion of the county, particularly for land use. The county's two cities—Harlem and Grovetown—have their own planning programs. However, many of the County's services and community facilities are county wide by their very nature. For this reason, many of the statistics presented in this chapter are for the county as a whole, while breakdowns between the two cities and the unincorporated area often are given.

■ Columbia County, Past and Present

Population and Household Trends

Since 1970, Columbia County's population has increased over four-fold from 22,000 to 99,000. The vast majority of this increase has occurred in the unincorporated portions of the county, where the population has grown over five-fold from 18,000 to 90,000 during the same thirty years. Table P-1 shows the increases in population in the county and its cities from 1970 to 2000.

Table P-1 also shows the number of households in the county and the unincorporated area from 1970 to 2000, and the average household size.² Notably, the average household size in the unincorporated area has been consistently at or above the average for the county as a whole, reflecting smaller average household sizes in Harlem and Grovetown.

¹ Lincoln County, which is located across Clarks Hill Lake to the north of the county, is not part of the MSA and therefore has a more limited social or economic relationship to Columbia County.

² Households include individuals living alone in housing units and families of 2 or more. Persons living in group quarters, such as nursing homes, dormitories and institutions, are not included in households. Currently, the Census Bureau estimates that a total of 1,102 people live in group quarters in the county.

Table P-1
Population and Household Trends
Columbia County

	1970	1975*	1980	1985*	1990	1995	2000
Total Population							
Columbia County	22,474	29,769	40,474	51,891	66,910	83,922	98,766
Grovetown	3,169	3,277	3,384	3,515	3,645	4,356	5,983
Harlem	1,540	1,513	1,485	1,853	2,220	2,411	2,538
Unincorporated Area	17,765	24,980	35,605	46,524	61,045	77,155	90,245
Number of Households							
Columbia County	6,008	8,738	12,936	17,389	21,974	27,884	33,380
Unincorporated Area	4,494	7,135	11,240	15,589	19,976	25,358	30,751
Average Household Size**							
Columbia County	3.58	3.39	3.13	2.95	2.99	2.97	2.92
Unincorporated Area	3.86	3.44	3.13	2.96	3.03	3.03	2.92

*Columbia County Population from Bureau of Economic Analysis. Other figures interpolated for mid-decade estimate.

**Based on population in households only (excludes population in group quarters).

Source: U.S. Bureau of Census, Woods & Poole Economics. Year 2000--COOPER-ROSS sv (see Appendix A).

Columbia County has far outpaced growth in its neighboring counties. Table P-2 shows the populations for the three counties, as well as the MSA and the State of Georgia, reported in the last three decennial censuses, and the Census Bureau's estimated population figures for 1999.

Table P-2
Comparison of Population Trends
Columbia, Richmond, McDuffie County, and the State

	1970	1980	1990	1999	Average Annual Rate of Increase		
					1970s	1980s	1990s
Columbia County	22,474	40,474	66,910	93,312	6.06%	5.16%	3.76%
Richmond County	162,437	181,629	189,719	190,310	1.12%	0.44%	0.03%
McDuffie County	15,276	18,546	20,119	21,814	1.96%	0.82%	0.90%
Augusta-Aiken MSA*	305,953	364,340	417,823	460,826	1.76%	1.38%	1.09%
Georgia	4,589,575	5,463,105	6,478,216	7,788,240	1.76%	1.72%	2.07%

* The Augusta-Aiken MSA consists of Columbia, Richmond and McDuffie Counties, Ga., and Aiken and Edgefield Counties, S.C.

Source: U.S. Bureau of the Census.

As the population in Columbia County has grown numerically, the average annual rate of increase has lessened (every year, it takes a lower percentage to produce the same number of new people). Still, the rate of increase continued to be high, and was almost twice the rate for Georgia as a whole during the 1990s. Richmond and McDuffie Counties, on the other hand, fell to very low rates of increase during the 1990s, adding less than 2,300 people between them between 1990 and 1999 (compared to Columbia County's 26,400). During this period, Columbia County captured 92% of all of the population growth among the three counties (and over 61% of all of the growth in the entire MSA).

Table P-3 provides some insight into population changes in Columbia County and the metro region during the past decade. Population change is comprised of many components. Babies that are born and people who die comprise net natural increase to the extent that births outnumber deaths. Importantly, net natural increase does not involve the movement of populations; existing families grow larger while existing residents die. The other major component of population change involves migration—people moving into or out of an area. The Census Bureau reports several types of migration: *net international migration* involves the movement of people from and to other countries, *net federal movement* includes military buildups or reductions, and *net domestic migration* results from the movement of people from and to other parts of the United States (including moves between counties within the region). Positive figures indicate that more people moved into a county than moved out; negative figures indicate a net outflow of people.

Table P-3 reveals a number of factors that are important to understanding the dynamics of population growth in Columbia County and its social and economic relationship to the metro area. While all of the counties in the Augusta-Aiken MSA showed positive net natural increase (births over deaths), the clear majority of Columbia County's growth resulted from migration—more people moving into the county than moving out. Richmond County, on the other hand, barely showed a net increase in population between 1990 and 1999, and then primarily due to growth in federal military and civilian personnel. During the 1990s, 17,000 more people moved out of Richmond County than moved in. This loss was primarily offset by net natural increase (14,000) and international migration and federal personnel movements (4,000).

McDuffie County owes the majority of its growth in the 1990s to net natural increase, which accounted for 55% of the county's growth during the decade. Between the 1990 Census and July 1, 1999, only 762 more people moved into McDuffie County than moved out. Meanwhile, about 2,900 children were born and almost 2,000 residents died, for a net natural increase of over 900.

On the South Carolina side of the river, Aiken County was the next highest "recipient" of immigration in the MSA, with net migration accounting for 52% of its 1990-99 population growth. Although net migration accounted for 48% of Edgefield County's growth in the 1990s, the numbers were very small (and about equal to McDuffie County) at fewer than 800.

Table P-3
Components of Population Change
Columbia and Neighboring Counties, the Augusta MSA and the State

	Columbia County	Richmond County	McDuffie County	Georgia	Aiken County, SC	Edgefield County, SC	Augusta MSA*
4/1/90 Population	66,031	189,719	20,119	6,478,149	120,991	18,360	415,220
Births 1990-99	10,456	31,034	2,894	1,053,424	17,817	2,559	64,760
Deaths 1990-99	3,736	17,081	1,961	525,580	10,925	1,709	35,412
Net Natural Increase	6,720	13,953	933	527,844	6,892	850	29,348
Net International Migration 1990-99	819	842	42	105,839	500	21	2,224
Net Federal Movement 1990-99	331	3,240	25	25,254	35	9	3,640
Net Domestic Migration 1990-99	19,753	(17,095)	756	665,418	7,396	800	11,610
Residual	(342)	(349)	(61)	(14,264)	(413)	(51)	(1,216)
Net Migration	20,561	(13,362)	762	782,247	7,518	779	16,258
7/1/99 Population	93,312	190,310	21,814	7,788,240	135,401	19,989	460,826

* The Augusta-Aiken MSA consists of Columbia, Richmond, McDuffie, Aiken and Edgefield Counties.
Source: Population Estimates Program, U.S. Bureau of the Census.

An important statistic on Table P-3 is the net domestic migration figure for the MSA. Overall, only 11,600 more people moved into the region than moved out, while Columbia County showed a net of almost 19,800 domestic move-ins. This, in combination with the net migration figures for the other counties, suggests a notable movement of people out of Augusta-Richmond County and into one of the other counties in the metro area (most notably Columbia County and to a lesser extent Aiken County).

Population by Age

After many years of high growth, attracting families with children and new families in their childbearing ages, Columbia County is beginning to mature. Table P-4 shows the age breakdown of the county's population from the 1990 census and as estimated by the Census Bureau for 1998. The table shows the number of residents by age category and the change from 1990 to 1998, both numerically and as a percentage.

Overall, the county grew by almost 27% between 1990 and 1998. However, the county grew by lesser percentages in every age category below 35, and exceeded the countywide average in every age category over 35. While the school-aged categories continued to grow at percentages near the average, percentage increases among those over 65 were notably high. The group that increased the least was 18 to 34 years old, the years most closely identified with the "family formation" years. The distribution figures for 1990 and 1998 on Table P-4 bear out this shift in population age profile, which is emphasized by the percentage shift in the last column on the table.

Table P-4
Population by Age--1990 & 1998
Columbia County

	People		Change 1990-98		Population Profile Shift			
	1990	1998	Number	Percent	Distribution		Change 1990-98	
					1990	1998	Points	Percent
0 to 5	6,739	8,522	1,783	20.9%	10.1%	9.4%	-0.7%	-7.1%
6 to 13	9,515	12,416	2,901	23.4%	14.2%	13.6%	-0.6%	-4.2%
14 to 17	4,285	5,722	1,437	25.1%	6.4%	6.3%	-0.1%	-1.9%
18 to 21	3,543	4,078	535	13.1%	5.3%	4.5%	-0.8%	-15.5%
22 to 34	14,462	16,420	1,958	11.9%	21.6%	18.0%	-3.6%	-16.6%
35 to 44	12,870	18,200	5,330	29.3%	19.2%	20.0%	0.7%	3.8%
45 to 54	7,325	12,186	4,861	39.9%	10.9%	13.4%	2.4%	22.2%
55 to 64	4,268	6,080	1,812	29.8%	6.4%	6.7%	0.3%	4.6%
65 to 74	2,600	4,766	2,166	45.4%	3.9%	5.2%	1.3%	34.6%
75 or older	1,303	2,728	1,425	52.2%	1.9%	3.0%	1.0%	53.7%
Total	66,910	91,118	24,208	26.6%	100.0%	100.0%		

Source: U.S. Bureau of Census.

Table P-5 further suggests how the demographics of Columbia County are shifting, as compared to the State. The table shows the percentage distribution of the population by age group for 1990 and 1998. The last two columns compare the county to Georgia by showing the county's percentage of the State for each age group. In 1990, the county had a much higher percentage of school-aged children and people between 35 and 54 ("parent"-aged) than the State. Also in 1990, the county had much lower percentages than the State in the college-aged group (18 to 21) and (especially) among those 65 and older.

By 1998, changes are clearly evident on Table P-5. While the percentages in the school-aged groups remain strong, the differences over the State had lessened. This also occurred among the "parent"-aged groups (35 to 54). The college-aged

Table P-5
Population Age Comparison--1990 & 1998
Columbia County and the State

	Columbia County		Georgia		Columbia County as a % of Georgia	
	1990	1998	1990	1998	1990	1998
0 to 5	10.1%	9.4%	9.3%	9.0%	7.8%	4.2%
6 to 13	14.2%	13.6%	11.8%	11.8%	20.5%	15.8%
14 to 17	6.4%	6.3%	5.7%	5.8%	12.5%	8.4%
18 to 21	5.3%	4.5%	6.6%	5.8%	-19.9%	-23.4%
22 to 34	21.6%	18.0%	22.9%	19.9%	-5.5%	-9.5%
35 to 44	19.2%	20.0%	15.7%	17.1%	22.5%	16.8%
45 to 54	10.9%	13.4%	10.3%	12.9%	6.5%	3.8%
55 to 64	6.4%	6.7%	7.6%	7.9%	-16.6%	-15.3%
65 to 74	3.9%	5.2%	6.0%	5.5%	-34.8%	-4.7%
75 or older	1.9%	3.0%	4.1%	4.4%	-52.5%	-31.4%
Total	100.0%	100.0%	100.0%	100.0%		

Source: U.S. Bureau of Census.

group and the family-formation group both increased in their under-representation compared to the State. Among those over 65, however, the county profile is drawing closer to that of the State.

This “aging” of Columbia County’s population is evident from the Census Bureau’s annual estimates for the county since the last census. Table P-6 shows these figures.

Table P-6
Proportion of Population 65 or Older--1990-98
Columbia County

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Population	66,910	70,096	72,667	76,617	80,037	83,924	86,075	88,731	91,118
Age 65 or older	3,903	4,071	4,231	4,535	5,104	5,716	6,314	6,909	7,494
Percent 65 +	5.8%	5.8%	5.8%	5.9%	6.4%	6.8%	7.3%	7.8%	8.2%

Note: All figures are for July 1 of the year shown.
Source: Annual Estimates, U.S. Bureau of the Census.

According to the Census Bureau’s estimates, the proportion of the county’s population 65 or older began to increase around 1993-94, and had risen significantly by 1998. This trend supports a view of the county’s population that has developed through observation and experience, which can be summarized as follows:

- Overall, families in Columbia County are maturing. Having moved to the county, many families put down roots and have stayed. The children are now growing up, many have left for college or jobs, and mom and dad are still in the house with the younger siblings, or have become “empty nesters.”
- Many “empty nesters” are crossing into the retirement years, but are remaining in the county and will probably continue to do so. The view of Columbia County as “home” is strongly held and a driving force in the community.

Race and Sex Characteristics

Columbia County is home to a small but growing minority population. As shown on Table P-7, about 14% of the county’s population in 1990 was Black or of another racial group (American Indian, Asian, “other”). By 1997, the Census Bureau estimates that this had grown to almost 17%. Although this is a small percentage increase overall, it reflects a major increase in minority populations in the county. Between 1990 and 1997, racial minorities accounted for 25% of the county’s net population increase. On a percentage increase basis, the county’s minority population is growing much faster than the White population. The ethnic group showing the greatest percentage increase, however, was persons of Hispanic origin (although the majority were classified by the Census Bureau as “White”). Among racial groups, Asians (and “other” minorities to

a small extent) showed the highest percentage increase, while the Black population gained the most numerically. Since neither ethnic nor racial concentrations are growing in the county, increases due to in-migration are being absorbed into the community as a whole. (See Appendix A for details on historic racial characteristics going back to 1970.)

Table P-7
Racial Characteristics
Columbia County

	1990		1997		1990-97 Increase	
	Number	Percent	Number	Percent	Number	Percent
White	56,785	86.0%	73,872	83.2%	17,087	23.1%
Black	7,282	11.0%	11,351	12.8%	4,069	35.8%
Other Races	1,964	3.0%	3,589	4.0%	1,625	45.3%
Total Population	66,031	100.0%	88,812	100.0%	22,781	100.0%
<i>Hispanic Origin*</i>	962	1.5%	2,331	2.6%	1,369	58.7%

*67% of Hispanic persons in 1990 were classified by the Census as "White," 5% as "Black" and 28% as "Asian" or "Other."

Source: U.S. Bureau of Census.

Table P-8
Population by Sex--1990-1997
Columbia County and the State

	1990		1997	
	Columbia	Georgia	Columbia	Georgia
Male	33,384	3,141,761	44,361	3,650,375
Female	33,526	3,336,455	44,451	3,835,867
% Male	49.9%	48.5%	49.9%	48.8%
% Female	50.1%	51.5%	50.1%	51.2%

Source: U.S. Bureau of Census.

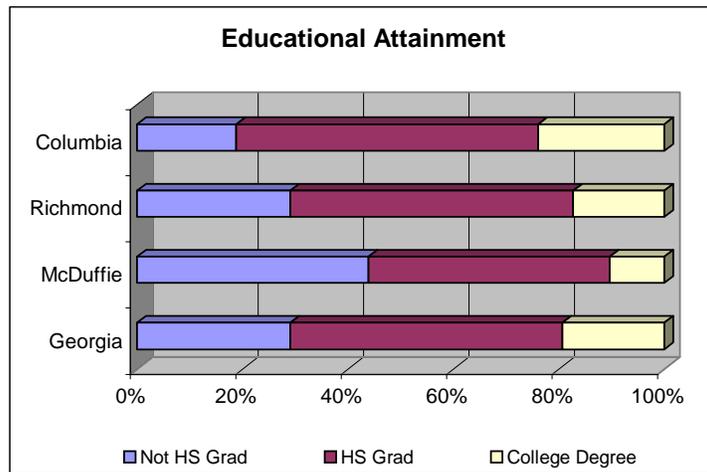
The breakdown of Columbia County's residents by sex differs only slightly from the breakdown for Georgia as a whole. Table P-8 shows the characteristics by sex from the 1990 Census and the most recent estimate by the Census Bureau for both the county and the State. The percentages for Columbia County remain the same for both 1990 and 1997 (male—49.9%, female—50.1%), while the statewide percentages have increased slightly for males (from 48.5% to 48.8%). Nationwide, females outnumber males by several percentage points due to their longer life expectancy. The differences between Columbia County and the State are believed to reflect three factors: the much lower

proportion of elderly in the county compared to the State, a slightly higher proportion of predominantly male households (related to Ft. Gordon in Richmond County), and a relatively larger proportion of two-parent families.

Educational Attainment

As a group, Columbia County's residents are well educated. In comparison to the State in 1990 (the latest year that comparable data is available), the county's adult population over 25 years old had a higher proportion holding college degrees and a much lower proportion with less than a high school education.

The differences are much greater when Columbia County is compared to its neighboring counties. While Richmond County had the same proportion of adults as the State who did not complete high school, the proportion with college degrees was lower. McDuffie County had far more adult residents with less than a high school education and far fewer holding college degrees. Table P-9 provides greater detail on educational attainment in 1990.



	Columbia County	Richmond County	McDuffie County	Georgia
Not High School Grad	18.9%	29.1%	43.9%	29.1%
High School Grad	57.3%	53.7%	45.7%	51.6%
College Degree	23.9%	17.3%	10.4%	19.3%

Table P-9
Years of School Completed--1990
 Columbia, Richmond, McDuffie County, and the State

	Columbia County		Richmond County		McDuffie County		Georgia	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Less than 9th grade	2,906	7.2%	14,136	12.3%	2,322	18.8%	483,755	12.0%
12th grade, no diploma	4,665	11.6%	19,191	16.7%	3,100	25.1%	686,060	17.1%
High School Graduate	12,238	30.5%	34,495	30.1%	3,792	30.7%	1,192,935	29.6%
Some college, no degree	7,707	19.2%	20,628	18.0%	1,351	10.9%	684,109	17.0%
Associate degree	3,020	7.5%	6,451	5.6%	508	4.1%	199,403	5.0%
Bachelor's degree	6,186	15.4%	13,185	11.5%	832	6.7%	519,613	12.9%
Graduate degree	3,391	8.5%	6,604	5.8%	447	3.6%	257,545	6.4%
Total--25 or older	40,113	100.0%	114,690	100.0%	12,352	100.0%	4,023,420	100.0%

Source: 1990 Census, STF3A database, U.S. Bureau of the Census.

Table P-10
Public School Data--1998
Columbia, Richmond, McDuffie County, and the State

	Columbia County	Richmond County	McDuffie County	Georgia
K-12 Enrollment*				
Public Schools	17,972	35,750	4,431	1,228,692
Private Schools	1,332	3,061	-	82,114
% in Public School	93.1%	92.1%	100.0%	93.7%
High School Dropout Rate	4.6%	7.5%	10.9%	6.5%
High School Graduates				
Total	1,130	1,740	218	59,393
% College Prep	67.9%	63.3%	45.0%	61.9%
% HOPE Eligible	62.3%	53.4%	51.7%	59.8%

* Does not include students enrolled in home-study programs.
 Source: Georgia Department of Education.

Table P-11
School System Test Scores--1998
Columbia, Richmond, McDuffie County, and the State

	Columbia County	Richmond County	McDuffie County	Georgia
SAT--Highest Avg Scores				
Verbal	518	466	478	491
Math	521	460	475	487
Graduation Tests*				
Language Arts	98%	91%	87%	94%
Math	97%	82%	75%	88%
Science	91%	65%	50%	74%
Social Studies	91%	71%	53%	78%
All Tests	86%	59%	43%	68%
Writing	98%	88%	85%	92%
Iowa Tests of Basic Skills				
Grade 3	72	43	55	57
Grade 5	67	45	49	56
Grade 8	66	44	42	54

* Percent of 11th graders passing on first try.
 Source: Georgia Department of Education.

Columbia County's public school system is one of the finest in the nation, and has been a major factor in attracting new residents to the county, particularly families with or planning to have children.

Table P-10 presents data on the public school systems of Columbia, Richmond and McDuffie Counties for school year 1998-99 as well as Statewide averages. Compared to its neighboring counties and the State as a whole, Columbia County schools had a lower high school dropout rate, and higher proportions of its high school graduates had completed course work for college preparation and were HOPE scholarship eligible.

The excellence of Columbia County's schools is borne out by the scholastic achievement of its students. As shown on Table P-11, across the board Columbia County students excel on test scores when compared to State wide averages and particularly when compared to its neighboring counties. SAT scores are higher than the State averages while those in Richmond and McDuffie Counties are lower than the State averages. On rising senior graduation tests, a higher percentage of 11th graders pass the tests on their first try than the State wide average, while Richmond and (especially) McDuffie County students fall below the State wide averages in every category. The same is true for the Basic Skill tests that measure performance among 3rd, 5th and 8th graders—Columbia County students exceed State wide averages at every level while Richmond and McDuffie County students are less well prepared than those in the State as a whole.

The excellence of the Columbia County schools, particularly when compared to the school systems in neighboring counties, has been a primary factor in the county's explosive growth for decades. The affluence of the families that this system attracts further supports the school system financially and creates demand for housing in the higher price ranges, along with an expectation of a higher level of community amenities and quality of life.

Income

Table P-12 compares the median household income and per capita income levels of Columbia County with those of its neighboring metro counties, and the State in 1989³ and 1995. Median household income is an important indicator of the affluence of a community's households, since financial well-being and most major financial decisions are based on family income. Per capita income is the average amount of income per person in a given area, which in combination with median household income is indicative of the "buying power" of residents.

In 1990, the per capita income (PCI) for Columbia County's residents and for the State as a whole was very close. Between 1990 and the end of 1995, however, while the county's "share" of total state wide personal income grew slightly and median household income increased notably, the PCI is reported to have fallen to only 86% of the State. The increase in average family size to support such a result is not evident in the available data, so the drop is statistically suspicious and not considered reliable for planning purposes.

Table P-12

Household and Per Capita Income

Columbia, Richmond, McDuffie County, and the State

	Columbia County	Richmond County	McDuffie County	Georgia	Columbia as a Percentage of:		
					Richmond	McDuffie	Georgia
Total Personal Income*							
1989	\$ 1,045.6	\$ 2,906.0	\$ 261.6	\$ 105,563.6	36.0%	399.8%	0.99%
1995	\$ 1,570.1	\$ 3,861.8	\$ 366.9	\$ 155,959.2	40.7%	427.9%	1.01%
Per Capita Income (PCI)							
1989	\$ 16,534	\$ 15,445	\$ 13,007	\$ 16,466	107.1%	127.1%	100.4%
1995	\$ 18,708	\$ 19,846	\$ 17,142	\$ 21,696	94.3%	109.1%	86.2%
Median Household Income							
1989	\$ 38,354	\$ 23,497	\$ 20,322	\$ 27,317	163.2%	188.7%	140.4%
1995	\$ 49,274	\$ 28,701	\$ 26,948	\$ 33,623	171.7%	182.8%	146.5%

* In millions (000,000s) of dollars.

Note: Dollar figures are current to each year indicated.

Sources: Personal Income and PCI--U.S. Bureau of Economic Analysis; Median Income--U.S. Bureau of the Census

³ The 1990 Census reported annual incomes for calendar year 1989.

Compared to Georgia, the relative wealth of Columbia County's population is clear with median household incomes over 40% higher than the State. Columbia County's households were considerably more affluent than those in either of the two neighboring counties, since median household incomes in Columbia County approach twice the medians in Richmond and McDuffie. The fact that median incomes are proportionally much higher than PCI compared to the other two counties and the State reflects the larger average household sizes in Columbia County—higher household income spread over more people in the household reduces the per capita figure.

Table P-13 examines the trends over time of PCI in neighboring counties, the metro region and the State. For each income year reported in a decennial Census (1969, 1979 and 1989), the county had a somewhat higher PCI than the other counties and the MSA on a fairly consistent basis. For 1997, however, the BEA has estimated unexpected drops in Columbia County's PCI relative to all of the other jurisdictions. As noted above, this trend is not supported by other data and will require confirmation in the 2000 Census before concern should be raised.

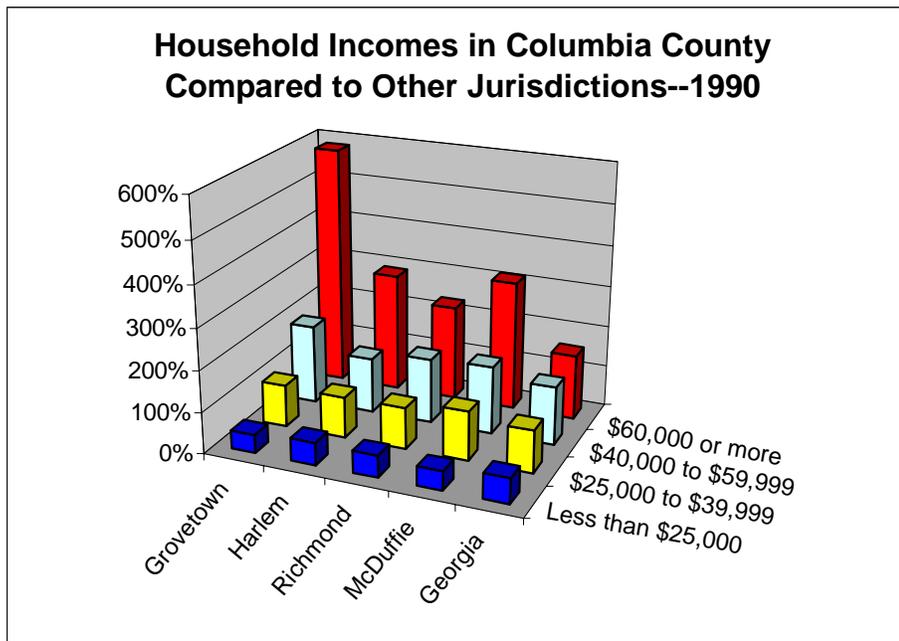
Table P-13
Per Capita Income Trends
Columbia, Richmond, McDuffie County, the MSA and the State

	Per Capita Income				Columbia as a Percentage of:			
	1969	1979	1989	1997	1969	1979	1989	1997
Columbia	\$ 3,327	\$ 7,521	\$ 16,534	\$ 20,525	100.0%	100.0%	100.0%	100.0%
Richmond	\$ 3,049	\$ 6,985	\$ 15,445	\$ 21,465	109.1%	107.7%	107.1%	95.6%
McDuffie	\$ 2,937	\$ 6,567	\$ 13,007	\$ 18,373	113.3%	114.5%	127.1%	111.7%
Augusta-Aiken MSA	\$ 3,100	\$ 7,095	\$ 15,735	\$ 20,821	107.3%	106.0%	105.1%	98.6%
Georgia	\$ 3,170	\$ 7,680	\$ 16,466	\$ 23,882	105.0%	97.9%	100.4%	85.9%

Note: Dollar figures are current to each year indicated.

Source: U.S. Bureau of Economic Analysis.

The proportion of households by income grouping in 1990 is yet another indicator of the county's higher income status. Tables A-4, A-5 and A-6 in Appendix A provide detailed data on the income groupings (based on 1989 annual incomes) for households in Columbia County, its two cities, its neighboring counties and the State. Because the data is so dated, it is not given particular emphasis in this Chapter. However, the relationships between Columbia County and the other jurisdictions are believed to persist today, although the actual figures will have changed somewhat. As summarized on the accompanying graph comparing household incomes, Columbia County had a considerably lower proportion of its households in its lowest quartile (under \$25,000) than any of the other jurisdictions, while its second quartile (\$25-40,000) was roughly equivalent to all of the other jurisdictions. A much larger proportion of Columbia's households fell into the next highest income quartile (\$40-60,000), while Columbia's households outstripped the other jurisdictions in the highest quartile (over \$60,000) by multiples of 2 to 6 times.



Household Income	Columbia County compared to:				
	Grovetown	Harlem	Richmond	McDuffie	Georgia
Less than \$25,000	44%	54%	53%	46%	61%
\$25,000 to \$39,999	102%	99%	100%	119%	103%
\$40,000 to \$59,999	191%	135%	158%	164%	141%
\$60,000 or more	583%	289%	231%	314%	157%

The data in this section on income portray Columbia County’s households as both affluent and family-oriented. This should not overshadow the fact that many families in the county fall into the lower income quartile, some of who were living in poverty and may continue to do so.

■ Columbia County Tomorrow

The Columbia County Growth Management Plan forecasts population growth to the year 2020. Importantly, the forecasts are made for the county assuming continuation of the Grovetown and Harlem city limits, as they exist today. Future annexations, which may or may not occur, cannot be anticipated because of the myriad of factors (both political and financial) that go into consideration of an annexation by a city council. Annexations would not affect countywide forecasts, but could reduce the potential number of people expected in the unincorporated portions of the county after the annexations are taken into account. Thus, the forecasts for the unincorporated area can be considered “upper limits” and may eventually be less to the extent that the cities may expand in the future.

Population Forecasts

In order to estimate the county’s population over the next twenty years, several data sources were analyzed. In particular, emphasis was placed on the extent to which various data set predictions conformed to population estimates made for the latter years of the 1990s based on actual building permit data. Among the contenders, the countywide data set prepared by Woods & Poole Economics⁴ most closely reflected actual experience. The forecasts prepared by Woods & Poole were therefore adopted for the Growth Management Plan.

Forecasts for the cities of Grovetown and Harlem are not available from Woods & Poole or any other reliable source. Forecasts therefore have been prepared for the two cities in order to arrive at estimates for the unincorporated portions of the county. First, second and third-order (straight-line, parabola and “ess” curve) regressions were applied to the 1990-1998 population estimates of the Census Bureau. For Harlem, growth has been slow but steady, and a straight-line regression appears to yield the most reliable results. Grovetown, on the other hand, had experienced a burst of growth through 1998, most reflective of an “ess” curve in the short run. In the long run to 2020, however, the “ess” curve trend line actually begins to show a population decrease in 2009. The “ess” curve data points therefore were used for 1999 and 2000, and provided a new “base” of 1990-2000 for the regressions. The most realistic projection for Grovetown using the new 2000 estimate appears to be a straight line over the long run, resulting in an increase between 2000 and 2020 from almost 6,000 to over 10,600.⁵ If the rate of increase experienced between 1990 and 1998 continues for the next 20 years, however, Grovetown’s population could approach 21,800 by 2020.

Table P-14 shows the population in Columbia County from 1990, and projected forward to 2020 in five-year increments. The population data and forecasts for Grovetown and Harlem are also shown. Subtracted from the county total, this yields the forecast population for the unincorporated portions of the county. Detailed annual data for the years 2000-2005 are presented in Appendix A.

⁴ *Columbia County Data Pamphlet*, Woods & Poole Economics, Inc., Washington D.C., 1999.

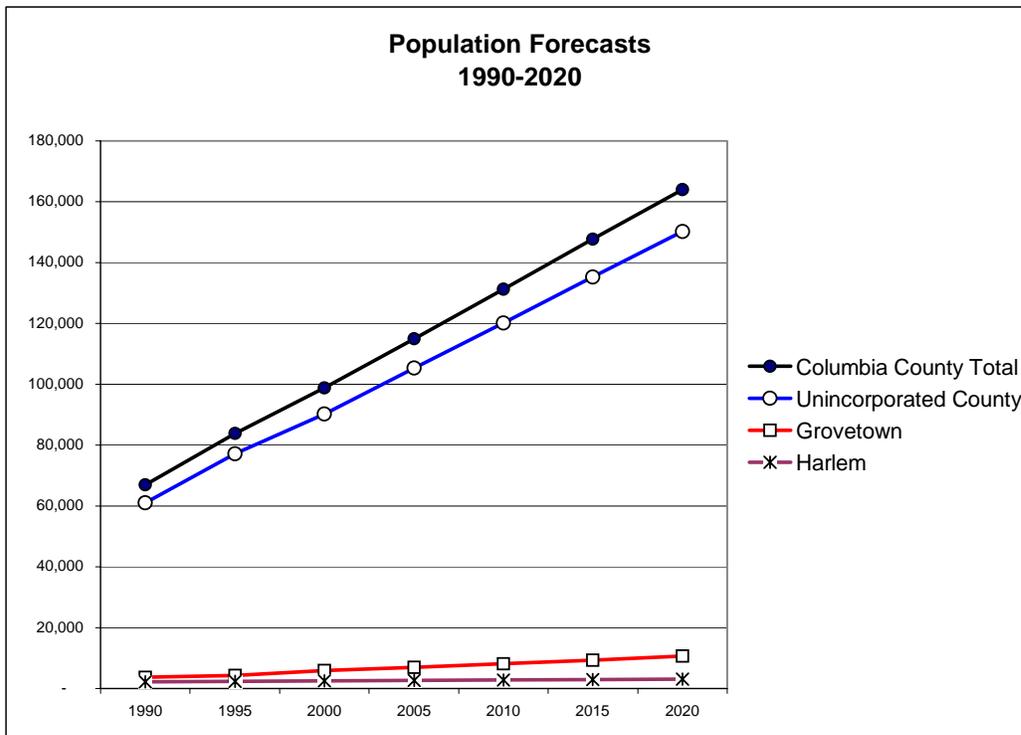
⁵ Estimates for the cities assume that the city limits do not change, since the effect of annexations cannot be projected. Any annexations, of course, would increase the population figures if residential areas are involved.

Table P-14
Population Forecasts
Columbia County and its Cities

	1990	1995	2000	2005	2010	2015	2020
Columbia County Total	66,910	83,922	98,766	115,016	131,247	147,636	164,041
<i>Grovetown</i>	3,645	4,356	5,983	6,972	8,184	9,396	10,608
<i>Harlem</i>	2,220	2,411	2,538	2,699	2,860	3,021	3,182
Subtotal--Cities	5,865	6,767	8,521	9,671	11,044	12,417	13,790
Unincorporated County	61,045	77,155	90,245	105,345	120,203	135,219	150,251

Sources: 1990, U.S. Bureau of the Census, U.S. Department of Commerce.
 1995-2000, Cooper-Ross sv based on analysis of housing supply.
 County totals, 2005-2020, Woods & Poole Economists, Washington, D.C., 1999.
 City totals, 2005-2020, Cooper-Ross sv based on 1990-98 Census estimates.
 Note: All data are as of July 1 of the year shown.

The population forecasts shown on Table P-14 are graphically illustrated on the following chart:



Population Forecasts by Age

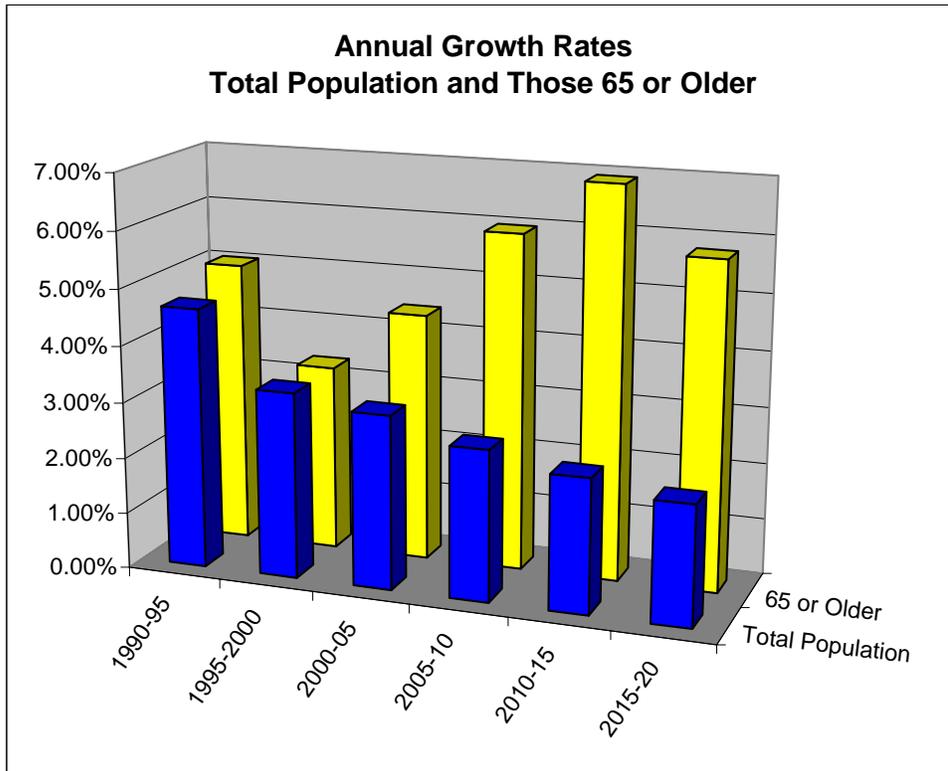
Table P-15 shows the population forecast for Columbia County to 2020 broken down by age category. Of particular note, every age category under 45 is projected to increase at a percentage less than the average for the total population, while those over 45, and particularly those over 65, are expected to increase at much higher percentages. At the two extremes, elementary school aged children are projected to increase by only 40%, while the number of those between 45 and 65 will double and the number over 65 will more than triple. This trend was seen in recent past trends (see Tables P-5 and P-6) and is expected to continue.

Table P-15
Population Forecasts by Age
Columbia County

	2000	2005	2010	2015	2020	Increase 2000-2020	
						Number	Percent
0 to 6	10,682	11,908	13,470	15,106	16,590	5,908	55.3%
7 to 11	8,661	9,253	10,014	11,061	12,186	3,525	40.7%
12 to 14	5,042	5,858	6,199	6,656	7,299	2,257	44.8%
15 to 17	4,788	5,875	6,300	6,709	7,272	2,484	51.9%
18 to 44	42,213	46,332	49,854	54,231	59,533	17,320	41.0%
45 to 64	21,532	28,533	35,711	40,316	43,199	21,667	100.6%
65 and over	5,848	7,257	9,699	13,557	17,962	12,114	207.1%
Total Population	98,766	115,016	131,247	147,636	164,041	65,275	66.1%

Source: Woods & Poole Economics, 1999.

The projected shift in the age of Columbia County's population is emphasized when growth rates are compared. The accompanying chart shows the growth rates for the population as a whole and for the group 65 and over, by 5-year increments beginning in the 1990-95 time period and continuing through the 2015-2020 time period. (As discussed earlier, steady annual increases show a falling growth rate as the total increases.) Notably, while the overall rate of growth will continue to lessen (in line with historic patterns), the growth rate for the elderly population will increase, at least through the 2010-2015 time period. This indicates that the increase in elderly population will accelerate for the next 15 years, and will still be increasing at a higher rate than the county overall at the end of the forecast period.



	1990-95	1995-2000	2000-05	2005-10	2010-15	2015-20
Annual Growth Rate						
Total Population	4.6%	3.3%	3.1%	2.7%	2.4%	2.1%
65 or Older	5.0%	3.3%	4.4%	6.0%	6.9%	5.8%
Population Count						
Total Population	83,922	98,766	115,016	131,247	147,636	164,041
65 or Older	4,967	5,848	7,257	9,699	13,557	17,962

Household and Housing Forecasts

Table P-16 translates the population forecast for the unincorporated portion of the county into households and housing units. The unincorporated area is the focus of this table because the data primarily pertains to future demands for land use development in the unincorporated area, over which the County has authority.

The number of households is based on the average household size projected for the county each 5 years to 2020. The number is derived by dividing the future population by the average household size to determine the number of households. Over the next twenty years, as the population in unincorporated Columbia County increases by 60,000 people, it is estimated that the number of households will increase by almost 22,000.

The number of households equals the number of occupied housing units. The total number of housing units, including those that are vacant, is estimated by applying an occupancy factor (that is, the percentage of all units that are expected to be occupied). The same occupancy percentage estimated for 2000 is used for each subsequent year. The figure represents a healthy residential market, which is assumed to continue in the county into the future.

Table P-16
Household and Housing Unit Forecasts
 Unincorporated Columbia County

	1990	1995	2000	2005	2010	2015	2020	Change 2000-2020
Population	61,045	77,155	90,245	105,345	120,203	135,219	150,251	60,006
Avg. Household Size*	3.03	3.03	2.92	2.88	2.85	2.84	2.85	-0.071
Households	19,976	25,358	30,751	36,578	42,176	47,612	52,720	21,969
Occupancy Rate	92.5%	93.5%	94.5%	94.5%	94.5%	94.5%	94.5%	-
Housing Units	21,588	27,116	32,541	38,707	44,631	50,383	55,788	23,247

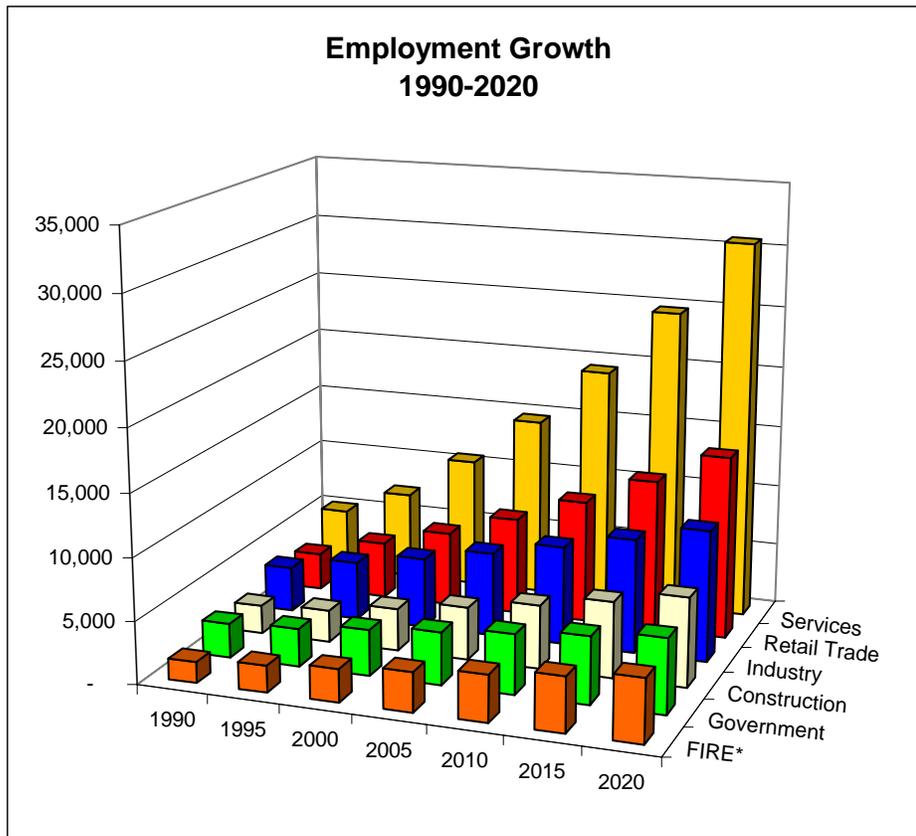
* 2000 to 2020: Woods & Poole Economics, 1999.

Employment Growth

The Woods & Poole population forecasts for Columbia County were selected because they were judged to be the most consistent with actual data. For that reason, the employment forecasts by Woods & Poole have also been accepted. Woods & Poole prepares their forecasts using a highly sophisticated national econometric model that closely associates changes in population and employment, and is based on national, regional and local economic trends. A detailed description of the Woods & Poole methodology is attached as Appendix B.

Employment in the county (that is, the number of people working in the county, not the number of residents who have jobs) is expected to grow by almost 130% over the next 20 years, from 32,400 now to 74,400. By far, the greatest increase will be in the “Services” category—that is, establishments that provide services to individuals or to other businesses—followed by “Retail Trade” (establishments that sell merchandise). The “Industry” group—manufacturing, transportation/communication/utilities and wholesale trade—will also increase significantly, as will FIRE (finance, insurance and real estate). Farming, on the other hand, is expected to diminish over the coming years, eventually disappearing from the Columbia County economy.

The following graph shows employment growth for each of the key economic sectors in the county (the Agriculture, Forestry and Fishing category and the Mining category are not included).



	1990	1995	2000	2005	2010	2015	2020
FIRE*	1,669	2,144	2,627	3,164	3,744	4,368	5,035
Government	2,744	3,070	3,675	4,233	4,804	5,387	5,983
Construction	2,304	2,605	3,442	4,244	5,128	6,094	7,142
Industry	3,659	4,735	5,719	6,814	7,989	9,246	10,583
Retail Trade	3,023	4,615	6,105	7,913	9,966	12,264	14,806
Services	5,120	7,169	10,631	14,622	19,297	24,655	30,697

* Finance, Insurance, and Real Estate.

Additional and more detailed information on employment can be found in the Economic Development chapter.