

# CHAPTER I POPULATION

## Introduction

The Population Element of this report details some demographic characteristics of the local population and makes projections about future changes in the population based on both local and macro-trends.

Demography is the study of characteristics of human populations. It deals with various attributes of specific population groups. These include size, growth rates, density, geographic shifts in distribution, and determination of population makeup by sex, race, and age distribution. Demographics are used to predict how the make-up of the study population will change over time. They may also take socioeconomic factors like education, income, family size, marital status, employment and housing choices into account. Planners manipulate demographic data to predict what shape the community is likely to take in the future and to specify what sort of facilities and services will be required.

Some population trends are macro-trends. That is, they are happening on a broad scale to the general population or a whole generation. On the other hand, some population characteristics are attributable to local environmental and economic conditions. Local demographic changes are subject to much more rapid change than macro-trends. Macro-trends moderate local trends and vice versa.

## Regional Population Patterns and Local Population Distribution

Whitfield County experienced its most rapid period of population growth in the 1940s and 1960s increasing by almost a third each of those decades. During the 1970s growth slowed to 19.4% and during the 1980s to 10.2%, a trend generally in line with growth in carpet manufacturing employment. During the period 1940-80 Whitfield growth outstripped both state and national growth. Since 1980 Whitfield has grown slower than the state but faster than the nation. Figures from the 2000 Census show a 15.3% increase over the decade in Whitfield compared to 26.4% for Georgia and 13.1% for the nation.

**Table I-1  
Historical Population Growth**

	1940	1950	1960	1970	1980	1990	2000
<b>Count</b>							
United States	131,669,275	151,325,798	179,325,175	203,302,031	226,542,199	248,718,301	281,421,906
Georgia	3,123,723	3,444,578	3,943,116	4,587,930	5,463,105	6,478,149	8,186,453
Whitfield	26,105	34,432	42,109	55,108	65,775	72,462	83,525
<b>Percent Change over period</b>							
	<b>1940-50</b>	<b>1950-60</b>	<b>1960-70</b>	<b>1970-80</b>	<b>1980-90</b>	<b>1990-2000</b>	<b>1940-2000</b>
United States	14.93%	18.50%	13.37%	11.43%	9.79%	13.15%	113.73%
Georgia	10.27%	14.47%	16.35%	19.08%	18.58%	26.37%	162.07%
Whitfield	31.90%	22.30%	30.87%	19.36%	10.17%	15.27%	219.96%

Source: U.S. Bureau of Census

Whitfield has a larger population than any of the Georgia counties on which it abuts. Except for the 1975-80 period, Whitfield saw a larger numeric population increase than any of the surrounding counties. On a percentage growth basis, Whitfield ranked next to last. Growth fluctuations were generally similar as Murray and Gordon are closely linked to Whitfield economically. Catoosa and Walker are also linked though their ties with the Chattanooga MSA are much stronger. Murray County has been the primary recipient of the growth overflow from the carpet industry both in jobs created and population growth to meet the employment demands in Whitfield.

**Table I-2  
Regional Historical Population Growth**

	<b>1970</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>
<b>Count</b>							
Georgia	4,587,930	5,058,535	5,463,105	5,962,639	6,478,149	7,188,538	8,186,453
Whitfield	55,108	62,317	65,775	68,475	72,462	78,475	83,525
Catoosa	28,271	31,816	36,991	39,332	42,464	47,879	53,282
Gordon	23,570	28,075	30,070	32,557	35,067	38,381	44,104
Murray	12,986	16,876	19,685	22,188	26,147	29,905	36,506
Walker	50,691	55,296	56,470	57,171	58,310	60,573	61,053
<b>Numeric change over period</b>							
	<b>1970-75</b>	<b>1975-80</b>	<b>1980-85</b>	<b>1985-90</b>	<b>1990-95</b>	<b>1995-2000</b>	<b>1970-2000</b>
Georgia	470,605	404,570	499,534	515,510	710,389	997,915	3,598,523
Whitfield	7,209	3,458	2,700	3,987	6,013	5,050	28,417
Catoosa	3,545	5,175	2,341	3,132	5,415	5,403	25,011
Gordon	4,505	1,995	2,487	2,510	3,314	5,723	20,534
Murray	3,890	2,809	2,503	3,959	3,758	6,601	23,520
Walker	4,605	1,174	701	1,139	2,263	480	10,362
<b>Percent change over period</b>							
	<b>1970-75</b>	<b>1975-80</b>	<b>1980-85</b>	<b>1985-90</b>	<b>1990-95</b>	<b>1995-2000</b>	<b>1970-2000</b>
Georgia	10.26%	8.00%	9.14%	8.65%	10.97%	13.88%	78.43%
Whitfield	13.08%	5.55%	4.10%	5.82%	8.30%	6.44%	51.57%
Catoosa	12.54%	16.27%	6.33%	7.96%	12.75%	11.28%	88.47%
Gordon	19.11%	7.11%	8.27%	7.71%	9.45%	14.91%	87.12%
Murray	29.96%	16.64%	12.72%	17.84%	14.37%	22.07%	181.12%
Walker	9.08%	2.12%	1.24%	1.99%	3.88%	0.79%	20.44%

Whitfield County has four municipalities within its borders. Dalton is the county seat and is significantly larger in population than the other three cities. Except for Tunnel Hill, the cities have experienced about the same average growth during the last 20 years.

Cohutta, the smallest of the Whitfield municipalities, has had a nearly static corporate limit. These limits are extensive for the population and have allowed for the near 50% growth of the population.

Dalton growth has been limited by annexation problems created by the existence of a separate city

school system. Most of the city land area is developed. Much of the undeveloped land has been released and developed in the last 5 years. The increase in the 2000 population is due primarily to an expected increase in population per household with the influx of young hispanic families.

Tunnel Hill experienced a court mandated deannexation in the early 1970s and a resulting adjustment in its population. Growth since 1980 has been slow but consistent. The last two years have seen a pickup in growth both from annexation and new construction.

Varnell likewise experienced court mandated deannexation in the 1970s. Population growth has been significant primarily due to annexation. Census estimates shown in Table I-3 are low for 1995 as annexations were not reported to the Census. The 2000 count corrects for the extensive annexations that have occurred in the last decade.

**Table I-3  
Whitfield County and Cities Historical Population Growth**

<b>Population</b>	<b>1970</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>
Whitfield	55,108	62,317	65,755	68,475	72,462	78,475	83,525
Dalton	18,872	20,110	20,939	21,080	22,218	22,950	27,912
Cohutta	393	400	407	444	529	585	582
Tunnel Hill	1,146	1,040	936	945	970	973	1,209
Varnell	314	300	282	294	358	389	1,491

  

<b>Percent Change over period</b>	<b>1970-75</b>	<b>1975-80</b>	<b>1980-85</b>	<b>1985-90</b>	<b>1990-95</b>	<b>1995-2000</b>	<b>1970-2000</b>
Whitfield	13.08%	5.55%	4.10%	5.82%	8.30%	6.44%	51.57%
Dalton	6.56%	4.12%	0.67%	5.40%	3.29%	21.62%	47.90%
Cohutta	1.78%	1.75%	9.09%	19.14%	10.59%	-0.51%	48.09%
Tunnel Hill	-9.25%	-10.00%	0.96%	2.65%	0.31%	24.25%	5.50%
Varnell	-4.46%	-6.00%	4.25%	21.77%	8.66%	283.29%	374.84%

Vacant buildable land within incorporated Dalton is relatively scarce and expensive compared to buildable land outside the city. This has forced most single family residential growth into the unincorporated portions of the county. The lack of wastewater treatment facilities and limited capacity of water systems in unincorporated Whitfield County has limited development of multi-family and higher density residential development which might otherwise have occurred there. The county has embarked on a massive upgrade and expansion of its water system which will increase residential growth in all parts of the county.

**Population Projections**

Population projections are systematically determined forecasts of future levels of population within a given area. They may also include more specific information about demographic trends within the population. They are used to predict a community's future needs for schools, hospitals, and other community facilities, as well as roads, sewer and water treatment facilities. Population projections are also used to determine how many acres within a study area should be reserved for various land

uses.

Various methods can be used to predict population trends. Most of them take a known base year population and apply formulas representing assumptions about rates of growth to this base number. Usually the most current U.S. Census count, taken nation-wide every ten years, is used as the base year population. Generally, the larger a study area, the more reliable will be the projections. This is true because unpredictable changes over the broad area tend to counterbalance each other. In a small area, a minor economic change like the unexpected closing of a large plant can render the most careful population projections inaccurate. Since Whitfield County's local economy is relatively dependent upon the carpet industry, population projections could be radically affected by market or technological changes affecting carpet production. Forecasts also become decreasingly reliable as they project further into the future. We can be fairly sure of next year's population increase but are less confident about population trends in the year 2020.

Two different projection methods were used to generate alternative population growth scenarios for this report:

#### Scenario One: Cohort-Component Method

The NGRDC used the cohort-component method to generate the population projections for Whitfield County in Scenario One. The NGRDC regression model uses a base population from the 1998 Census estimate. The logic of the cohort-component method calls for the preparation of separate projections for births, deaths, and net migration (in-migration minus out-migration). The base population minus deaths, plus births, plus or minus net migration yields the projected population. NGRDC projections are based on national fertility and survival rates. The other variable, net-migration rate, is usually linked to employment opportunities within the projection area, but can also be affected by other factors.

Migration rates were calculated by subtracting 1998 population projected from the 1990 actual Census count assuming no migration from the 1998 Census estimate by age, race and sex and converting the difference to an annual rate. In the projections the migration rate was assumed to stay constant for the next 20 years. These projections were completed before detailed data was available from the 2000 Census and have not been adjusted to include any new data.

**Table I-4**  
**Whitfield County Projected Population Growth**  
**Scenario One - Cohort Component Method**

	2000	2001	2002	2003	2004	2005	2010	2015	2020
Whitfield	84,565	85,889	87,233	88,574	89,981	91,385	98,413	106,356	116,053

Source: North Georgia RDC

#### Scenario Two: Employment to Population Method

A second common method of population forecasting is to project how many new jobs will be created

each year through the target year, and then estimate how much population these jobs would support. There are three major variables to consider in projecting population based on employment. These are 1) the rate of employment growth, 2) the percentage of the resident population in the labor force and 3) the percentage of the total work force drawn from outside the study area. The assumption for employment growth is drawn from Chapter 3. Two alternatives are presented for the other assumptions.

The historic ratio of workers to total resident population (16 years +), the "labor force participation rate," is used to estimate how many people will be added to the local population for each new job created. In its basic form, the employment to population model assumes that ratio of workers to population in a given community will remain relatively stable over time.

Macro forces can, and do, affect the labor force participation rate. When families decide to have fewer children, the divorce rate fluctuates, or the general population ages, the labor force participation rate may change. For example, from 1970 to 1980 a huge influx of women into the job market radically increased the ratio of workers to total population nationally. Another reason for the national increase in the labor force participation rate is that baby boomers have all reached working age, and these workers now make up a greater than normal proportion of the general population. When they age and drop out of the job market, the ratio will swing back the other direction.

Local labor force participation rates have been higher than state or national rates since the 1970's. Women have always made up a large percentage of Whitfield County's manufacturing employment. Labor force participation rates used in Scenario Two (shown in Table I-3) were held constant under assumption A and were allowed to drop slightly as baby boomers are expected to begin retiring under assumption B. The national projection for the year 2006 is a 67.1% labor force participation rate. Using a higher labor force participation factor yields a more conservative population figure than if it were kept at present levels.

Another factor used in the employment to population projection formula is the "net commuting" ratio. Because the employment data in this model uses Georgia Department of Labor data collected by place of work as well as place of residence, population estimates based on employment trends must be adjusted to discount people who can be expected to work in the county and live elsewhere. Historically, net commuting in Whitfield County has been inward and has ranged from 8.4% in 1980 to 24.2% in 1990. In other words, more people commute here from surrounding counties than vice versa. The higher the predicted in- commuting ratio, the less resident population will be generated by the mathematical model for a given employment base. Scenario 2 assumes the current in-commuting rate of 28.0% will remain constant under assumption A. Assumption B is that an ever growing percentage of Whitfield County's work force would continue to live in surrounding counties in the future

The final assumption under the Scenario Two projection is that the number of jobs generated in a small local area will follow straight line trends. Because local manufacturing is concentrated in the carpet industry rather than diversified, employment levels will actually follow a more erratic course from year to year. Stagnation at a national level in the home building industry could result in a depression of the carpet market and reduce the number of new jobs created in future years, a major employer could go out of business, or technology could drastically reduce the number of employees

required to keep production at current levels. However, industry experts are generally confident that the industry is becoming more efficient and competitive internationally and expect growth over the next 10 years to be on par with the gross national product.

Furthermore, as explained in the following chapter on Economic Development, the absorption of labor supply by the carpet industry has depressed the growth of the commercial and service sectors and peripheral industries in the area well below their potential. Even if labor demands in the carpet industry were to undergo some downward fluctuations, historical evidence indicates that commercial and service businesses would expand to capitalize on available labor, keeping employment growth relatively stable.

**Table I-5  
Employment to Population Projection Method  
Scenario 2 based on Employment Projections**

	2000	2001	2002	2003	2004	2005	2010	2015	2020
Whitfield (a)	84,619	87,710	89,519	91,345	93,177	95,021	104,503	113,637	124,044
Whitfield (b)	84,736	87,709	89,394	91,089	92,786	94,488	104,648	112,977	122,416

Source: North Georgia RDC

(a) Assumptions: Constant labor force participation rate and commuting rate.

(b) Assumptions: Falling labor force participation rate and constant commuting rate.

**Assumptions**

**A**

Participation	72.1%	72.1%	72.1%	72.1%	72.1%	72.1%	72.1%	72.1%	72.1%
Commuting	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%

**Assumptions B**

Participation	72.0%	71.9%	71.8%	71.7%	71.6%	71.5%	70.0%	69.5%	69.0%
Commuting	28.0%	28.2%	28.4%	28.6%	28.8%	29.0%	30.0%	31.0%	32.0%

The projection in Scenario Two demonstrates how much the county's population could grow if its economic engine could attract all the labor needed to meet market demand. Scenario Two A projects a population of 124,044 in the year 2020. This would indeed be possible if employment growth followed 1980 to 1989 trends. The employment to population method would have yielded an even higher projected population if labor force participation rates and in-commuting ratios had been set at lower levels. Thus, this high-end population figure would be well within the realm of possibility, if the community chose to institute policies leading to rapid growth of the labor force.

Scenario Two B adjusts the labor force participation rate down slightly to adjust and allows the in-commuting rate to rise slightly which are the most probable scenarios. The effect of this adjustment can be seen to be relatively modest in its effects on projected population.

In reality, labor shortages are most likely to be the limiting factor in employment growth projections. Once the labor force within a 30 mile radius of Whitfield County is absorbed, employment growth must level off. This means that factories which might have located here will be built elsewhere.

Labor availability is a product of many factors including educational opportunities, wage levels, cost of living and availability of housing. Without more aggressive worker education and recruitment, and in the absence of aggressive public sector support for the creation of more affordable housing units, it is unlikely that Scenario Two can occur.

### Preferred Scenario

The three alternative population growth scenarios call for between 31,500 and 39,400 increase in population from 2000 to 2020. The variances between them reflect different data sources, methodologies and basic assumptions as described above. No one can know for sure what level of growth the future will bring. We can be reasonably sure that actual numbers will fall within the range set by the most optimistic and conservative of these projections.

Scenario Two B is the preferred scenario and the one used to project community facility needs, and acres of land required for each sector in the Land Use Element. Scenario Two A represents a level of growth which could be managed without placing undue strains on other aspects of community development.

### **City Population Projections**

It should be noted that the process for projecting city populations is not an exact science. Population growth can be altered by many factors which can change over time, including changes in annexation policy, the improvement of basic infrastructure such as sewerage service which would allow for higher density development. NGRDC city population projections take into account the current annexation policy of local officials and their plans for future economic and housing development.

Dalton's population growth scenario is closely linked to, and dependent on, agreements between the city and Whitfield County on annexation and infrastructure extension policy. One of the assumptions behind the numbers is that Dalton will capture a bulk of the high and medium density housing built in the county for the next five years, until sewer service is extended into the county. After about 2005 the county will become more active in developing this type of housing and the city's population growth rate will level off somewhat. Dalton's population will continue to grow after the year 2005 through annexations on its immediate borders and replacement of other uses with medium or high density residential. Population per housing unit will increase through about 2005 with the continuing influx of young hispanic families and then begin to decline in line with national trends as hispanic family size begins to fall. Accordingly, Dalton is projected to grow 12% from 2000 to the year 2010, and 7% in the decade from 2010 to 2020.

The City of Cohutta has had a 48% increase in population since 1970. However, the city has expressed the desire for controlled, high-quality growth and is selective in its annexation. Based on the desires of the citizens of Cohutta to keep their community size intimate and to see Whitfield County zone adjacent land primarily as agricultural and estate type residential development their population growth rate was maintained at a little less than the countywide rate. From 2000 to 2020, Cohutta projections call for a 33% population increase.

In contrast to Cohutta's policy of slow growth, the City of Varnell, traditionally the county's smallest incorporated municipality, is actively seeking new population. The city has adopted an aggressive annexation policy and is currently expanding city services (police, fire and garbage service) in order to encourage annexation requests from individual property owners within adjacent subdivisions. With a population of only 358 people in 1990, Varnell has grown to 1491, bypassing Cohutta and Tunnel Hill. The city expects to increase by a little over 10% over the each 5-year period, primarily through annexation, for a total growth of 56% from 2000 to 2020. The projections above may need to be revised upward in five years if the city's annexation strategy is fully realized.

Tunnel Hill has a current population of 1,209. Unlike Cohutta and Varnell, Tunnel Hill is directly adjacent to 1-75, and is in a position to develop more commercial and light industrial activities which could attract population. An 9-hole public golf course located inside the city is another drawing card for the bedroom community. The city is efficiently run and provides a higher level of police protection and garbage service than the surrounding unincorporated area. Tunnel Hill is not aggressively pursuing growth, however, over the next two decades the city will gladly entertain annexation requests from surrounding property owners as long as the proposed land use is consistent with the county's comprehensive plan. Based on current and past year annexation requests, Tunnel Hill anticipates a growth rate of 10% per 5-year period from 2000 to 2020.

**Table I-6  
Population Projections for Cities in Whitfield County  
2000 through 2020**

	2000	2001	2002	2003	2004	2005	2010	2015	2020
Dalton	27,912	28,000	28,100	28,200	28,300	28,400	28,900	29,400	30,000
Cohutta	582	592	602	611	621	631	679	727	775
Tunnel Hill	1,209	1,233	1,257	1,281	1,305	1,330	1,465	1,610	1,770
Varnell	1,491	1,535	1,580	1,620	1,660	1,700	1,900	2,100	2,325

Source: North Georgia RDC

### **Population by Age**

The rise in the median age for Whitfield County reflects national trends, such as the aging of the baby-boom generation, deferral of having children until later in life, and longer life spans for senior citizens. The County will continue to be affected by this national trend, so that the median age of the population will rise; however, Dalton and Whitfield County attract a greater number of individuals in the 25 to 44 age groups than surrounding rural counties due to plentiful manufacturing employment. The 2000 Census may well show a one-time lowering of the median age due to the huge influx of young families in the last decade. This is not shown in estimates or projections of age which are base on Census estimates.

The Census predicts a decline in the size of the age 5-14 for the United States over the next 20 years and a very small increase in this age group for Georgia. This is a break from historic patterns and is not expected to occur locally for at least the next 5 years. The size of this younger age group is very much affected by trends in the hispanic community which are impossible to predict at this time.

As shown on Table I-7, the median age for Whitfield County increased from 1970 to 1990 by 6.2 years. This increase is greater than the 4.7 year statewide increase. The four cities have also seen a rise in median age during the same time period. Their median ages are slightly higher than Whitfield County.

**Table I-7  
Age Distribution  
Whitfield County, Dalton,  
Cohutta, Tunnel Hill, and Varnell**

<b>Whitfield County</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
0 to 4 yrs.	5,627	5,191	5,151	6,810
5 to 9 yrs.	5,819	5,727	5,067	6,344
10 to 14 yrs.	5,615	5,842	5,333	6,049
15 to 19 yrs.	4,919	6,081	5,780	6,071
20 to 24 yrs.	4,697	5,783	5,858	5,949
25 to 29 yrs.	4,448	5,495	6,272	6,484
30 to 34 yrs.	3,640	5,452	6,166	6,646
35 to 39 yrs.	3,345	4,281	5,676	6,536
40 to 44 yrs.	3,139	4,281	5,454	6,071
45 to 49 yrs.	2,969	3,350	4,555	5,514
50 to 54 yrs.	2,636	3,350	3,789	5,083
55 to 59 yrs.	2,402	2,851	3,291	4,113
60 to 64 yrs.	1,960	2,453	2,868	3,279
65 to 69 yrs.	1,460	1,856	2,478	2,707
70 to 74 yrs.	983	1,856	1,866	2,194
75 to 79 yrs.	690	777	1,388	1,664
80 to 84 yrs.	390	776	864	1,092
85+ yrs.	369	387	606	919
Total	55,108	65,789	72,462	83,525
Median Age	26.0	28.9	32.2	33.0
<b>Dalton</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
0 to 4 yrs.	2,095	1,544	1,484	2,474
5 to 9 yrs.	1,877	1,696	1,400	2,054
10 to 14 yrs.	1,851	1,551	1,423	1,869
15 to 19 yrs.	1,402	1,851	1,635	2,137
20 to 24 yrs.	1,274	1,907	2,033	2,434
25 to 29 yrs.	1,252	1,816	1,934	2,443
30 to 34 yrs.	1,282	1,595	1,684	2,305
35 to 39 yrs.	1,197	1,198	1,636	1,996
40 to 44 yrs.	1,044	1,197	1,500	1,720
45 to 49 yrs.	1,053	1,080	1,186	1,668
50 to 54 yrs.	969	1,080	1,055	1,512
55 to 59 yrs.	778	1,026	935	1,157
60 to 64 yrs.	550	926	941	941
65 to 69 yrs.	477	768	867	783
70 to 74 yrs.	342	768	705	773
75 to 79 yrs.	232	354	598	657
80 to 84 yrs.	135	353	406	488
85+ yrs.	58	229	339	501
Total	17,868	20,939	21,761	27,912
Median Age	26.7	30.3	32.9	31.1

<b>Cohutta</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
0 to 4 yrs.	n.a.	30	31	40
5 to 9 yrs.	n.a.	32	56	44
10 to 14 yrs.	n.a.	29	37	43
15 to 19 yrs.	n.a.	38	32	54
20 to 24 yrs.	n.a.	45	32	32
25 to 29 yrs.	n.a.	51	41	40
30 to 34 yrs.	n.a.	27	52	49
35 to 39 yrs.	n.a.	18	55	56
40 to 44 yrs.	n.a.	18	28	48
45 to 49 yrs.	n.a.	22	28	41
50 to 54 yrs.	n.a.	21	31	34
55 to 59 yrs.	n.a.	23	25	26
60 to 64 yrs.	n.a.	15	18	26
65 to 69 yrs.	n.a.	11	32	21
70 to 74 yrs.	n.a.	11	16	8
75 to 79 yrs.	n.a.	6	9	10
80 to 84 yrs.	n.a.	6	4	8
85+ yrs.	n.a.	4	2	2
Total	n.a.	407	529	582
Median Age	n.a.	27.9	33.4	33.8

<b>Tunnel Hill</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
0 to 4 yrs.	n.a.	68	63	71
5 to 9 yrs.	n.a.	96	68	78
10 to 14 yrs.	n.a.	90	70	92
15 to 19 yrs.	n.a.	93	87	96
20 to 24 yrs.	n.a.	61	58	82
25 to 29 yrs.	n.a.	89	65	60
30 to 34 yrs.	n.a.	92	82	80
35 to 39 yrs.	n.a.	67	90	86
40 to 44 yrs.	n.a.	66	82	108
45 to 49 yrs.	n.a.	50	76	90
50 to 54 yrs.	n.a.	49	68	86
55 to 59 yrs.	n.a.	29	46	63
60 to 64 yrs.	n.a.	22	35	61
65 to 69 yrs.	n.a.	22	30	40
70 to 74 yrs.	n.a.	22	22	42
75 to 79 yrs.	n.a.	9	16	37
80 to 84 yrs.	n.a.	9	8	25
85+ yrs.	n.a.	2	4	12
Total	n.a.	936	970	1,209
Median Age	n.a.	28.4	34.5	37.4

<b>Varnell</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
0 to 4 yrs.	n.a.	17	30	95
5 to 9 yrs.	n.a.	22	26	131
10 to 14 yrs.	n.a.	28	28	139
15 to 19 yrs.	n.a.	23	28	129
20 to 24 yrs.	n.a.	19	17	92
25 to 29 yrs.	n.a.	27	26	107
30 to 34 yrs.	n.a.	26	31	114
35 to 39 yrs.	n.a.	18	35	141
40 to 44 yrs.	n.a.	17	32	129
45 to 49 yrs.	n.a.	12	26	113
50 to 54 yrs.	n.a.	12	17	101
55 to 59 yrs.	n.a.	20	14	78
60 to 64 yrs.	n.a.	9	13	47
65 to 69 yrs.	n.a.	7	14	19
70 to 74 yrs.	n.a.	7	9	19
75 to 79 yrs.	n.a.	7	7	19
80 to 84 yrs.	n.a.	7	3	8
85+ yrs.	n.a.	4	2	10
Total	n.a.	282	358	1,491
Median Age	n.a.	31.0	33.9	32.4

Source: Bureau of Census 1970, 1980, 1990

North Georgia RDC 1999 based on Census 1998 estimates

Population projections for Whitfield County and each of the cities by age group were done by NGRDC and are based on the preferred projection method. Following the national trend of the aging of the population, Whitfield County and city residents in the 45-64 age groups will increase as a percentage of the total population through 2010 and thereafter decline slightly. Due to aging of the baby boomer population, the 65+ age group will continue to increase as a percentage of the total population through the year 2020.

**Table I-8  
Projected Age Distribution  
Whitfield County  
2000 to 2020**

<b>Whitfield County</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>
0 to 4 yrs.	6,644	6,519	7,223	7,957	9,126
5 to 9 yrs.	5,809	7,002	6,870	7,462	8,251
10 to 14 yrs.	6,025	6,433	7,723	7,418	8,028
15 to 19 yrs.	6,312	7,060	7,517	8,800	8,504
20 to 24 yrs.	5,804	6,891	7,693	7,964	9,360
25 to 29 yrs.	5,651	5,977	7,092	7,735	7,977
30 to 34 yrs.	6,181	5,997	6,345	7,350	8,030
35 to 39 yrs.	6,759	6,764	6,559	6,769	7,866
40 to 44 yrs.	6,662	7,329	7,371	6,991	7,231
45 to 49 yrs.	6,233	7,270	7,998	7,848	7,498
50 to 54 yrs.	5,744	6,683	7,769	8,318	8,132
55 to 59 yrs.	4,677	6,037	6,988	7,927	8,487
60 to 64 yrs.	3,440	4,584	5,871	6,636	7,581
65 to 69 yrs.	2,588	3,134	4,144	5,156	5,836
70 to 74 yrs.	2,163	2,288	2,736	3,529	4,381
75 to 79 yrs.	1,784	1,876	1,947	2,273	2,961
80 to 84 yrs.	1,195	1,421	1,450	1,470	1,739
85+ yrs.	1,064	1,223	1,352	1,375	1,428
<b>Total</b>	<b>84,735</b>	<b>94,488</b>	<b>104,648</b>	<b>112,978</b>	<b>122,416</b>
<b>Median Age</b>	<b>30.0</b>	<b>31.1</b>	<b>31.5</b>	<b>31.2</b>	<b>31.2</b>
<b>% Age 5-14</b>	<b>14.0%</b>	<b>14.2%</b>	<b>13.9%</b>	<b>13.2%</b>	<b>13.3%</b>
<b>% Age 45-64</b>	<b>23.7%</b>	<b>26.0%</b>	<b>27.4%</b>	<b>27.2%</b>	<b>25.9%</b>
<b>% Age 65 &amp; Over</b>	<b>10.4%</b>	<b>10.5%</b>	<b>11.1%</b>	<b>12.2%</b>	<b>13.4%</b>

**Table I-8a  
Projected Age Distribution  
Cities of Dalton, Cohutta,  
Tunnel Hill, and Varnell**

<b>Dalton</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>
0 to 4 yrs.	2,517	2,562	2,606	2,659
5 to 9 yrs.	2,090	2,127	2,163	2,208
10 to 14 yrs.	1,902	1,935	1,969	2,009
15 to 19 yrs.	2,174	2,213	2,251	2,297
20 to 24 yrs.	2,477	2,520	2,564	2,616
25 to 29 yrs.	2,486	2,529	2,573	2,626
30 to 34 yrs.	2,345	2,387	2,428	2,477
35 to 39 yrs.	2,031	2,067	2,102	2,145
40 to 44 yrs.	1,750	1,781	1,812	1,849
45 to 49 yrs.	1,697	1,727	1,757	1,793
50 to 54 yrs.	1,538	1,566	1,593	1,625
55 to 59 yrs.	1,177	1,198	1,219	1,244
60 to 64 yrs.	957	974	991	1,011
65 to 69 yrs.	797	811	825	842
70 to 74 yrs.	787	800	814	831
75 to 79 yrs.	668	680	692	706
80 to 84 yrs.	497	505	514	525
85+ yrs.	510	518	527	537
<b>Total</b>	<b>28,400</b>	<b>28,900</b>	<b>29,400</b>	<b>30,000</b>
<b>Cohutta</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>
0 to 4 yrs.	43	47	50	53
5 to 9 yrs.	48	51	55	59
10 to 14 yrs.	47	50	54	57
15 to 19 yrs.	59	63	67	72
20 to 24 yrs.	35	37	40	43
25 to 29 yrs.	43	47	50	53
30 to 34 yrs.	53	57	61	65
35 to 39 yrs.	61	65	70	74
40 to 44 yrs.	52	56	60	64
45 to 49 yrs.	44	48	51	55
50 to 54 yrs.	37	40	42	45
55 to 59 yrs.	28	30	32	35
60 to 64 yrs.	28	30	32	35
65 to 69 yrs.	23	25	26	28
70 to 74 yrs.	9	9	10	11
75 to 79 yrs.	11	12	12	13
80 to 84 yrs.	9	9	10	11
85+ yrs.	2	2	2	3
<b>Total</b>	<b>632</b>	<b>678</b>	<b>724</b>	<b>776</b>

<b>Tunnel Hill</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>
0 to 4 yrs.	78	86	95	104
5 to 9 yrs.	86	95	104	114
10 to 14 yrs.	101	111	123	135
15 to 19 yrs.	106	116	128	141
20 to 24 yrs.	90	99	109	120
25 to 29 yrs.	66	73	80	88
30 to 34 yrs.	88	97	107	117
35 to 39 yrs.	95	104	115	126
40 to 44 yrs.	119	131	144	158
45 to 49 yrs.	99	109	120	132
50 to 54 yrs.	95	104	115	126
55 to 59 yrs.	69	76	84	92
60 to 64 yrs.	67	74	81	89
65 to 69 yrs.	44	48	53	59
70 to 74 yrs.	46	51	56	61
75 to 79 yrs.	41	45	49	54
80 to 84 yrs.	28	30	33	37
85+ yrs.	13	15	16	18
<b>Total</b>	<b>1331</b>	<b>1464</b>	<b>1612</b>	<b>1771</b>

<b>Varnell</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>
0 to 4 yrs.	108	121	134	148
5 to 9 yrs.	149	167	185	204
10 to 14 yrs.	158	177	196	217
15 to 19 yrs.	147	164	182	201
20 to 24 yrs.	105	117	130	143
25 to 29 yrs.	122	136	151	167
30 to 34 yrs.	130	145	161	178
35 to 39 yrs.	161	180	199	220
40 to 44 yrs.	147	164	182	201
45 to 49 yrs.	129	144	159	176
50 to 54 yrs.	115	129	142	157
55 to 59 yrs.	89	99	110	122
60 to 64 yrs.	54	60	66	73
65 to 69 yrs.	22	24	27	30
70 to 74 yrs.	22	24	27	30
75 to 79 yrs.	22	24	27	30
80 to 84 yrs.	9	10	11	12
85+ yrs.	11	13	14	16
<b>Total</b>	<b>1700</b>	<b>1898</b>	<b>2103</b>	<b>2325</b>

Source: Bureau of Census 1970, 1980, 1990

## **Race and Ethnic Group Characteristics**

The population of Whitfield County is primarily Caucasian. The percentage of non-white population remained relatively stable from 1970 to 1990, rising from 4.0% in 1970 to 4.7% in 1980 and 6.8% in 1990. The last decade has seen a major shift as minorities now represent an estimated 27.8% of the population with Hispanics representing most of the increase.

**Table I-9  
Racial/Ethnic Composition**

	<b>Total</b>	<b>White</b>	<b>Black</b>	<b>Native Am.</b>	<b>Asian</b>	<b>Other</b>	<b>Multi-Racial</b>	<b>Hispanic</b>
<b>Whitfield</b>								
1970	55,108	52,898	2,133	42	23	12	n.a.	n.a.
1980	65,789	62,722	2,518	132	144	273	n.a.	526
1990	72,462	67,533	2,901	172	323	1,533	n.a.	2,321
2000	83,525	67,602	3,214	293	794	10,031	1,591	18,419
2005	94,488	73,758	3,800	230	1,300	15,400		23,000
2010	104,648	79,688	4,100	260	2,000	18,600		29,500
2015	112,977	83,187	4,400	290	3,100	22,000		35,000
2020	122,416	87,196	4,700	320	4,900	25,300		41,000
<b>Dalton</b>								
1970	18,872	16,889	1,955	5	14	9	n.a.	n.a.
1980	20,939	18,586	2,046	74	67	166	n.a.	237
1990	22,213	18,607	2,317	62	223	1,004	n.a.	1,422
2000	27,912	18,468	2,153	123	493	5,904	771	11,219
2005	28,400	16,150	2,160	140	750	9,200		13,000
2010	29,000	14,670	2,170	160	1,000	11,000		15,500
2015	29,500	13,140	2,180	180	1,250	12,750		18,000
2020	30,000	11,610	2,190	200	1,500	14,500		20,500
<b>Cohutta</b>								
1970	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1980	407	383	22	2	0	0	n.a.	0
1990	529	510	15	1	0	3	n.a.	4
2000	582	553	10	1	1	7	10	5
2005	650	619	20	1	2	8		8
2010	750	712	25	1	3	9		12
2015	850	805	30	1	4	10		15
2020	950	898	35	1	5	11		18
<b>Tunnel Hill</b>								
1970	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1980	936	919	16	0	1	0	n.a.	9
1990	970	950	16	0	1	3	n.a.	4
2000	1,209	1,142	31	2	4	19	11	48
2005	1,320	1,247	40	3	5	25		58
2010	1,455	1,364	50	4	6	31		68
2015	1,600	1,491	60	5	7	37		78
2020	1,760	1,633	70	6	8	43		88
<b>Varnell</b>								
1970	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1980	282	281	0	1	0	0	n.a.	1
1990	358	354	3	0	0	1	n.a.	1
2000	1,491	1,323	71	1	6	53	37	78
2005	1,700	1,537	86	2	10	65		90
2010	1,900	1,712	100	3	10	75		100
2015	2,100	1,881	115	4	15	85		110
2020	2,325	2,080	130	5	15	95		120

Source: Bureau of Census 1970, 1980, 1990, and 2000  
Estimates and Projections by NGRDC

The U.S. Census may classify people of Hispanic origin as any race, but also counts them separately

as a heritage group. A rise in the Hispanic population has been observed in Whitfield County since 1985. The NGRDC estimates that the Hispanic population is now about 15,500, but the hard data will not be available until the 2000 Census results are released. Hispanics have traditionally been one of the largest undercounted segments of the population. However, a major effort in the county to get everyone counted with emphasis on the Hispanic community will hopefully result in an accurate count.

Hispanics growth has been primarily in Dalton which contains about 60% of this minority primarily due to the existence of multifamily housing. As Hispanics have become more established, they are buying homes and spreading throughout the county.

### Households

Households are defined by the U.S. Census as a group of people sharing the same housing unit. A household may, or may not, constitute a family. Household size has been declining nationally and in the State of Georgia due to changes in lifestyle and housing design, aging of the population and fragmentation of family units through divorce. This means that more individual housing units were needed in 2000 to accommodate a given number of people than would have been required to house the same number in 1990. This trend is projected to have generally reached its limit.

**Table I-10**  
**Households and Average Household Size**  
**1970- 2020**

	1970	1980	1990	2000	2005	2010	2015	2020
<b>Households</b>								
Whitfield	16,611	22,466	26,859	29,385	33,506	37,241	40,205	43,720
Dalton	6,056	7,778	8,733	9,689	10,143	10,358	10,576	10,830
Cohutta	n.a.	144	203	222	242	260	279	298
Tunnel Hill	n.a.	323	344	451	494	543	594	653
Varnell	n.a.	98	126	510	588	664	742	830
<b>Average Household Size</b>								
Whitfield	3.30	2.91	2.67	2.82	2.82	2.81	2.81	2.80
Dalton	3.07	2.64	2.42	2.81	2.80	2.79	2.78	2.77
Cohutta	n.a.	2.82	2.61	2.62	2.61	2.61	2.61	2.60
Tunnel Hill	n.a.	2.90	2.82	2.68	2.69	2.70	2.71	2.71
Varnell	n.a.	2.88	2.84	2.92	2.89	2.86	2.83	2.80
Georgia	3.25	2.84	2.66	2.65	2.64	2.63	2.62	2.61
U.S.	3.14	2.76	2.63	2.59	2.59	2.58	2.58	2.57

Sources: U.S. Bureau of Census, 1970, 1980, 1990, 1999; Projections by NGRDC.

Household sizes for Whitfield County and the City of Dalton have increased significantly between

1990 and 2000 primarily due to the considerable in-migration of young Hispanic populations, which tend to have larger families. In addition, many unrelated Hispanics will live together in the same household in order to minimize individual housing costs. Household size in Varnell also exceeds the State and National averages. This is attributed to the numerous annexations undertaken by the city in the past 5 years, which primarily consisted of residential subdivisions inhabited by younger families with children. Household size for the cities of Tunnel Hill and Cohutta are comparable to State and National averages.

Average household size for 1970 through 2000 was calculated from census data by dividing the non-institutional population by the number of occupied units. The methodology for projecting household size for each jurisdiction through the year 2020 was achieved by applying national trend projections to the year 2000 statistics for each jurisdiction. Per national trends, the projections indicate a continual decline in household size for each jurisdiction.

Projections for number of households were calculated by dividing population projections by the average household size. Based upon this methodology, 14,138 new housing units will be needed in Whitfield County over the next 20 years to accommodate future population growth.

### **Educational Attainment**

In spite of a firm local commitment to quality schools, Whitfield County has lagged behind the state and nation in terms of formal education completed. One fifth of those 25 years of age and over did not make it into high school. This is generally in line with surrounding counties but well above Georgia. Only 59.8% are high school graduates, again in line with surrounding counties but well below the state. College graduates constitute 12% (20% in Dalton) of the adult population well below state and national levels.

Because of plentiful manufacturing jobs in Whitfield County that have not traditionally required a high school diploma, dropping out has carried little perceived negative impact. According to 1990 Census data, about one quarter of students are still dropping out in both Dalton and Whitfield County high schools. Current dropout rates appear to have improved in the Dalton school system, gotten worse in the county and remained about the same statewide but these figures are not strictly comparable. Average SAT scores for both local systems exceed statewide scores. About the same percentage of graduates go into post-secondary education.

**Table I-11  
Educational Attainment  
for persons 25 years of age and older**

	<b>% 8th Grade or Less</b>	<b>% HS Grad. or Higher</b>	<b>% With Bachelors +</b>
U.S.	n.a.	77.6	21.4
Georgia	12.0	70.9	19.3
Whitfield	19.6	59.8	12.0
Cohutta	23.8	55.6	10.2
Dalton	20.6	61.9	20.0
Tunnel Hill	12.2	73.2	9.4
Varnell	31.9	46.8	3.4
Murray	23.5	52.1	5.5
Gordon	18.8	58.4	9.2
Catoosa	14.3	63.8	8.1
Walker	19.4	58.3	8.4

**Table I-12  
Recent Educational Characteristics**

	<b>1995-96</b>	<b>1996-97</b>	<b>1997-98</b>	<b>1998-99</b>
<b>Dropout rates (grades 9-12)</b>				
Whitfield County Schools	13.0%	11.5%	8.9%	9.2%
Dalton City Schools	5.0%	4.8%	3.7%	4.8%
Georgia	8.6%	7.3%	6.5%	6.5%
<b>SAT Combined Scores</b>				
Whitfield County Schools	1071	1056	1094	1033
Dalton City Schools	1047	1078	1037	1044
Georgia	970	976	978	980
<b>Percent of graduates proceeding to post-secondary education in Georgia</b>				
Whitfield County Schools	29.3%	49.0%	37.9%	46.3%
Dalton City Schools	29.1%	46.8%	46.1%	44.8%
Georgia	36.2%	45.9%	45.3%	44.0%

The educational level of the county population has been adequate for performing most manufacturing jobs in the past, so that there was a reasonable match between jobs and educational skills. However, manufacturing processes within the carpet industry are becoming more automated, and worker obsolescence has become an increasing problem. Many manufacturers currently have in-house retraining programs.

The severe lack of employees and subsequent mass hiring of Hispanic workers with little or no English skills has resulted in less focus on dropout prevention in the last few years. Many plants support ESOL and GED classes to bring whoever they can hire up to better performance levels.

Lack of higher education prevents many local residents from moving into management level jobs being created within the carpet industry. Recruiting for these jobs occurs on a national scale, and white collar jobs are often filled by newcomers to the area. Local workers will need to master a range of educational areas to move up the job ladder.

Beyond the ability to read and follow instructions, skills most in demand by the carpet industry are general business knowledge, and technical grasp of electronics, math, physics and computer technology.

### **Income**

Average household and per capita income figures for Whitfield County and the cities are based on Census data. The Bureau of Economic Analysis also produces income data and is sometimes more current. However, BEA data includes capital gains. Census income data was used by NGRDC because the exclusion of capital gains gives a truer representation of income for the county. Since Whitfield County has a concentration of large carpet industries, any major sales, mergers, etc. tend to skew average income upward.

Median household income in Whitfield County was greater than the state average in 1969 and 1979 by about \$1,000. By 1989 the County's median household income was \$1,200 below the state and has remained less than the State through 1999. The decline is probably due to the increased competitiveness within the carpet industry in the early 1980s as tufted flooring saturated the market and growth rates decreased. With this increased competitiveness came consolidation. By the early 1990s several large carpet firms were beginning to dominate the market and as part of their increasing size were creating middle managers and research and development departments. The higher pay in the newly created positions has once more brought parity in median family income.

**Table I-13  
Per Capita Income  
(in Current Dollars)**

	<b>1969</b>	<b>1979</b>	<b>1989</b>	<b>1994</b>	<b>1999</b>
Georgia	2,649	6,402	13,631	21,940	26,614
Whitfield	2,769	6,579	13,324	21,786	25,579
Dalton	n.a.	7,383	15,284	n.a.	27,342
Cohutta	n.a.	n.a.	9,388	n.a.	18,423
Tunnel Hill	n.a.	n.a.	12,950	n.a.	24,861
Varnell	n.a.	n.a.	10,185	n.a.	22,553

Source: U.S. Census

**Table I-14**  
**Median Household Income**  
**(in Current Dollars)**

	<b>1969</b>	<b>1979</b>	<b>1989</b>	<b>1994</b>	<b>1999</b>
Georgia	6,571	15,033	29,021	33,623	38,554
Whitfield	7,566	16,148	27,797	33,323	37,701
Dalton	n.a.	14,924	24,517	n.a.	31,427
Cohutta	n.a.	n.a.	19,259	n.a.	27,258
Tunnel Hill	n.a.	n.a.	32,443	n.a.	44,234
Varnell	n.a.	n.a.	20,625	n.a.	33,621

Source: U.S. Census

Median household income characteristics for each city vary slightly from the statistics for Whitfield County. Dalton's median household income is less than the County's and is probably due to the fact that all public housing (which is occupied by low income households) is located in the City. Cohutta's median household income is also lower than the County and is attributed to a relatively high number of elderly, retired households living within the city. Tunnel Hill's median household income characteristics are higher than the county, which is attributed to a number of subdivisions located within the city, which are occupied by two-wage earner families.

Per capita income trends in Whitfield County and cities has followed the same pattern as median household income. Overall, the County's per capita income remains just slightly lower than the State average as well, with the cities exhibiting the same variation as noted in reference to median household income.

The distribution of household income in 1989 for Whitfield County was close to that of the state with a small amount of attenuation at the extremes. The pattern for Dalton shows a slight shift to lower incomes probably due to smaller household size. Cohutta and Varnell show a greater shift to lower incomes and Tunnel Hill shows a shift toward the upper incomes. Countywide this pattern probably still pretty much pertains. The tremendous growth in Varnell has probably altered its income distribution pattern to be more in line with the County. In Dalton the shift has been toward the ends though not extremes with lesser growth in the middle incomes. (See Table I-15.)

**Table I-15  
1989 Household Income Distribution**

	Cohutta	Dalton	Tunnel Hill	Varnell	Whitfield	Georgia
Households	194	8,836	341	150	29,953	2,366,575
Less than \$5,000	19	767	0	13	1,721	187,826
\$5,000 to \$9,999	19	946	17	21	2,234	210,252
\$10,000 to \$14,999	21	977	25	11	2,499	204,142
\$15,000 to \$24,999	59	1,800	73	39	5,499	418,568
\$25,000 to \$34,999	49	1,314	61	19	4,649	383,733
\$35,000 to \$49,999	13	1,263	90	23	5,058	420,917
\$50,000 to \$74,999	11	921	58	17	3,486	341,667
\$75,000 to \$99,999	3	448	10	0	1,019	109,354
\$100,000 or more	0	400	7	7	788	90,116
<b>Percent of Households</b>						
Less than \$5,000	9.8%	8.7%	0.0%	8.7%	6.4%	7.9%
\$5,000 to \$9,999	9.8%	10.7%	5.0%	14.0%	8.3%	8.9%
\$10,000 to \$14,999	10.8%	11.1%	7.3%	7.3%	9.3%	8.6%
\$15,000 to \$24,999	30.4%	20.4%	21.4%	26.0%	20.4%	17.7%
\$25,000 to \$34,999	25.3%	14.9%	17.9%	12.7%	17.2%	16.2%
\$35,000 to \$49,999	6.7%	14.3%	26.4%	15.3%	18.8%	17.8%
\$50,000 to \$74,999	5.7%	10.4%	17.0%	11.3%	12.9%	14.4%
\$75,000 to \$99,999	1.5%	5.1%	2.9%	0.0%	3.8%	4.6%
\$100,000 or more	0.0%	4.5%	2.1%	4.7%	2.9%	3.8%