

## **Chapter 2**

### **Triad Region**

## TRIAD REGION: INTRODUCTION

According to the 2000 Census, Greensboro has the third largest population among all cities in North Carolina. Greensboro's growth and development have implications far outside of its immediate municipal boundary.

The City of Greensboro also has the largest population in the Piedmont Triad (or Triad) region of North Carolina. However, defining the Triad region has long been difficult. The region is not consistently defined at federal, state, or local levels and few if any definitions include the same counties. In spite of this, it is important to have key statistics for those areas in the region whose population and economies are directly related to Greensboro.

Of the counties that are contiguous to Guilford County, four were selected as being a part of the Triad region for this study. In many cases, some of the cities within these selected counties were examined as well, to compare with Greensboro. The four counties chosen are Rockingham County to the north, Randolph County to the south, Alamance County to the east and Forsyth County to the west.

Persons and businesses in these adjacent counties have significant interaction with and impact upon Greensboro and Guilford County on a regular basis. Likewise, many choices made by governmental decision-makers in these counties, in addition to the health of their economies, may directly or indirectly impact Greensboro.

Annexation agreements, the provision of water and sewer services, and the increasing incorporations of towns within Guilford County are all issues that require closer examination. They are studied for the purpose of comparison since all of these cities and towns interact with and affect the City of Greensboro and each other in various ways.

### Definitions of the Triad Region

Below are some of the varying definitions of the Triad region from the perspectives of the federal, state, and local agencies working on regional initiatives.

Federal: Following the 1990 census, the federal Office of Management and Budget (OMB) defined the Greensboro region as being part of a Metropolitan Statistical Area (MSA). The OMB defines MSAs for purposes of collecting, tabulating and publishing federal data. The general concept of an MSA is that of a large population nucleus, together with adjacent communities having a high degree of social and economic integration with that core.

To qualify as an MSA, an area must include at least one city with 50,000 or more inhabitants, or a Census Bureau-defined urbanized area (of at least 50,000 inhabitants) and a total metropolitan population of at least 100,000. The county in this area that contains the largest city becomes a "central county", along with any adjacent counties that have at least 50 percent of their population in the urbanized area surrounding that largest city. Additional "outlying counties" are included in a MSA if they meet specified requirements of commuting to the central county and other selected requirements of metropolitan character (such as population density and percent urban).

In December 2000, the OMB announced the adoption of new Standards for Defining Metropolitan and Micropolitan Statistical Areas. The OMB will apply the new standards with Census 2000 data and will announce definitions based on these standards in 2003.

Preliminary data from Census 2000 indicate that the primary, or core, Greensboro metropolitan area will be the three-county area composed of Guilford, Davidson, and Randolph Counties. Other counties in the area may qualify to be “combined” with this core area – meaning that there may be other counties with enough commuting to qualify as having a regional role, but of a secondary nature. The secondary or combined region may be a nine-county area that includes Alamance, Davie, Forsyth, Rockingham, Stokes, and Yadkin Counties.

State: For economic development and marketing purposes, the North Carolina Department of Commerce defines the region as a 12-county area that includes Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Montgomery, Randolph, Rockingham, Stokes, Surry, and Yadkin Counties. The Piedmont Triad Partnership, a local nonprofit organization devoted to marketing the Piedmont Triad for business expansions and relations, uses this same definition.

The state also defines 18 lead regional organizations throughout the state charged with regional planning and technical assistance. Guilford County is one of six counties served by the Piedmont Triad Council of Governments. This lead organization assists five additional counties: Alamance, Caswell, Davidson, Randolph, and Rockingham.

The Environment and Natural Resources Region is a 15-county area that includes Alamance, Alleghany, Ashe, Caswell, Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, Stokes, Surry, Watauga, Wilkes, and Yadkin Counties.

The North Carolina Department of Transportation is also organized by planning divisions or regions. The NCDOT Division 7 includes the five-county area of Alamance, Caswell, Guilford, Orange, and Rockingham.

Piedmont Authority for Regional Transportation: The Piedmont Authority for Regional Transportation (PART) coordinates regional transportation planning. This is done in an effort to enhance the quality of all forms of transportation for all citizens through efficient use and protection of our natural, economic, and human resources. PART has members from a five-county area that includes Alamance, Davidson, Forsyth, Guilford, and Randolph Counties. These members include the four metropolitan planning organizations in the region: Greensboro, Winston-Salem, High Point, and Burlington. Each is involved in transportation planning within their respective urban area.

Metropolitan Planning Organization: The City of Greensboro Department of Transportation is the lead transportation planning agency for the Greensboro Urban Area Metropolitan Planning Organization (MPO). The member agencies include the City of Greensboro, Guilford County, and the North Carolina Department of Transportation. There are four separate MPOs within the Piedmont Triad region. They individually serve Greensboro, Winston-Salem, High Point, and Burlington. MPOs conduct the continuing, cooperative, and comprehensive transportation planning process for the area. Key MPO goals include:

- plan for the development and operation of an integrated, intermodal transportation system;
- foster the safe, efficient, and economical movement of people and freight;
- foster economic growth and development; and
- minimize the negative effects of transportation, including air pollution.

The Greensboro MPO planning area covers most of Guilford County, excluding the Gibsonville, Whitsett, High Point, and Jamestown areas.

## TRIAD REGION: SUMMARY HIGHLIGHTS

The “Triad region” is not consistently defined at federal, state or local levels and few definitions include the same counties. In spite of this, it is important to have key statistics for those areas in the region whose population and economies are directly related to Greensboro.

### Commuting and Transportation

Of the approximately 142,000 people working in Greensboro in 1990, just over half (56.4 percent) were residents of Greensboro. In the same year, approximately 62,000 people per day commuted into Greensboro to work from other areas within the region. Of those 62,000, approximately 35,000 were coming from outlying areas within Guilford County, including all of the City of High Point. Although Census 2000 commuting data have not been released, other studies indicate that the number of commuters into Greensboro continued to rise throughout the 1990s.

### Population and Employment

Greensboro's population grew by 21.8 percent from 1990 to 2000, slightly ahead of Guilford County, which had a 21.2 percent rate. In the past 10 years, six towns, all within a 10-mile radius of Greensboro, have incorporated. The towns are Stokesdale, Whitsett, Summerfield, Pleasant Garden, Sedalia, and Oak Ridge.

Many of these suburban (and recently incorporated) communities immediately surrounding Greensboro had significantly higher population growth rates. For example, Summerfield, which adjoins Greensboro's northwest border, had a population growth rate of 316.0 percent. The town of Whitsett, east of Greensboro, experienced a 156.0 percent growth rate.

Randolph County had the highest population growth rate (22.4 percent) of all Triad regional counties during the 1990s, while Rockingham experienced the lowest (6.8 percent). The population growth rates in Alamance and Forsyth Counties were lower than Guilford County's rate of 21.2 percent.

Among Metropolitan Statistical Areas (MSAs) in the state, from 1990 to 2000, the Raleigh-Durham-Chapel Hill, NC MSA experienced the highest population growth rate (38.4 percent), followed by the Charlotte-Gastonia-Rock Hill, NC-SC MSA (29.1 percent) and the Greensboro-Winston-Salem-High Point, NC MSA (19.2 percent).

### Agriculture

Farmland acreage in all counties in the Triad region has declined since 1974 according to data from the United States Census Bureau. However, according to the Census of Agriculture, the average size of farms (in acreage) in all counties of the Triad region increased between the years 1974 and 1997. In 1997, 39 percent of the land in Alamance County was reported to be farmland, closely followed by Rockingham County, where 37 percent of the land was reported to be farmland. Randolph, Guilford and Forsyth Counties each had close to or below 30 percent of the county's land reported as farmland.

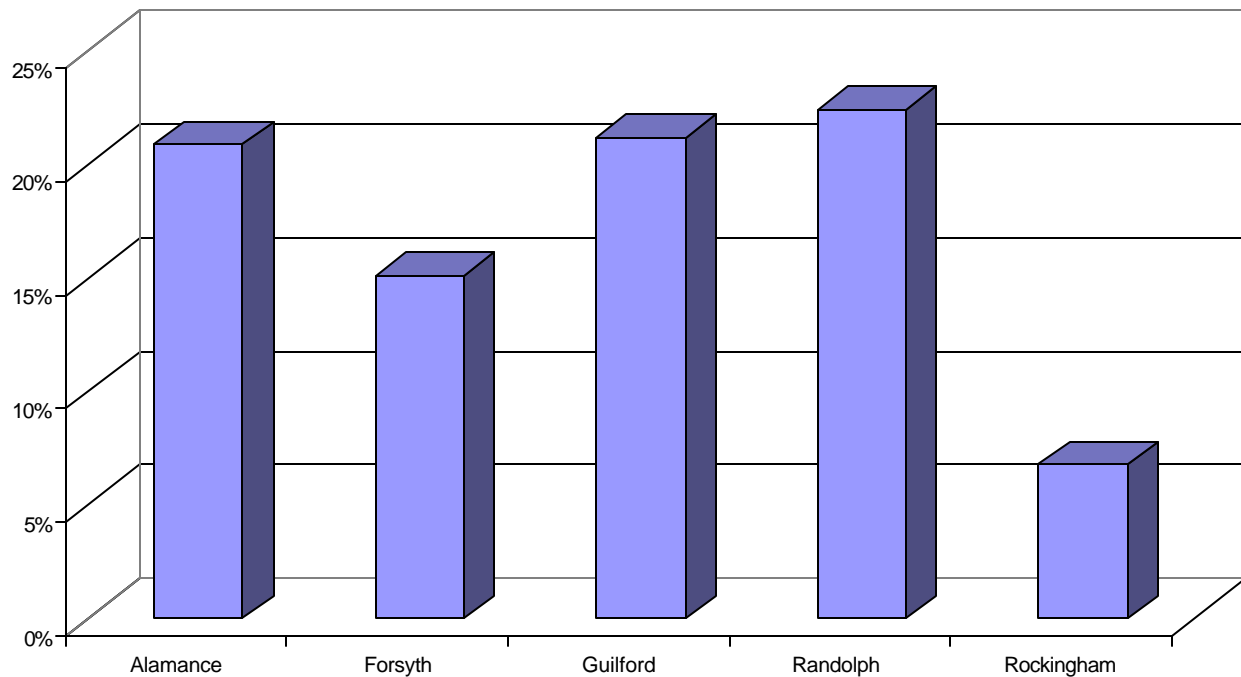
### Retail Sales

The City of Greensboro accounted for over a third of all retail sales within the five-county Triad region for the period 1999-2000. Winston-Salem followed at 23.5 percent. Among the regional counties, Guilford had the highest proportion of retail sales at 51.5 percent. Annual per capita retail sales in Greensboro were the highest among all other cities in the region at 35.4 percent.

Table 2-1: Triad Regional Population Growth, 1970-2000					
Municipality	1970	1980	1990	2000	Percent Change, 1990-2000
Burlington	35,930	37,266	39,498	44,917	13.7%
Greensboro	144,076	155,642	183,894	223,891	21.8%
High Point	63,229	63,380	69,428	85,839	23.6%
Winston-Salem	133,683	131,885	143,485	185,776	29.5%
County					
Alamance	96,502	99,319	108,213	130,800	20.9%
Forsyth	215,118	243,683	265,878	306,067	15.1%
Guilford	288,645	317,154	347,420	421,048	21.2%
Randolph	76,358	93,000	106,546	130,454	22.4%
Rockingham	72,402	83,426	86,064	91,928	6.8%
County Regional Totals	749,025	836,582	914,121	1,080,297	18.2%

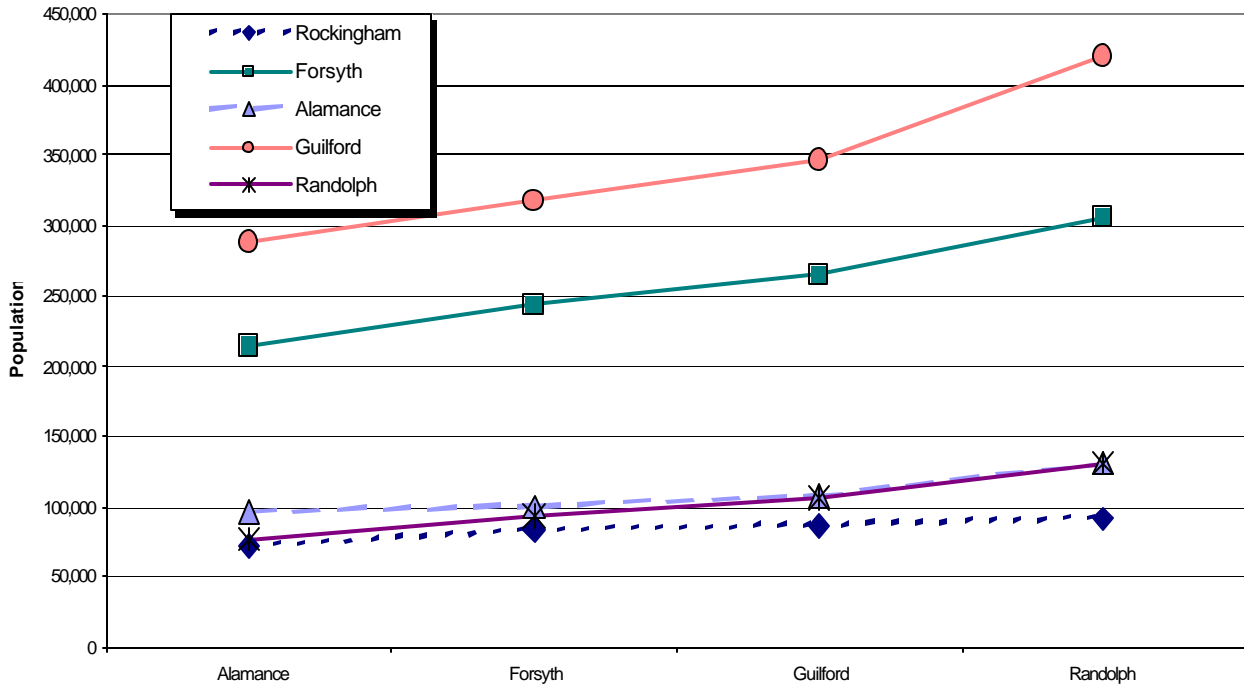
Source: US Census Bureau, Census of Population & Housing, 1970-2000.

Figure 2-1: Triad Regional Population Growth, Percent Change in Counties from 1990-2000



Source: US Census Bureau, Population & Housing, 1970-2000.

Figure 2-2: Triad Regional Population Growth in Selected Counties, 1970-2000



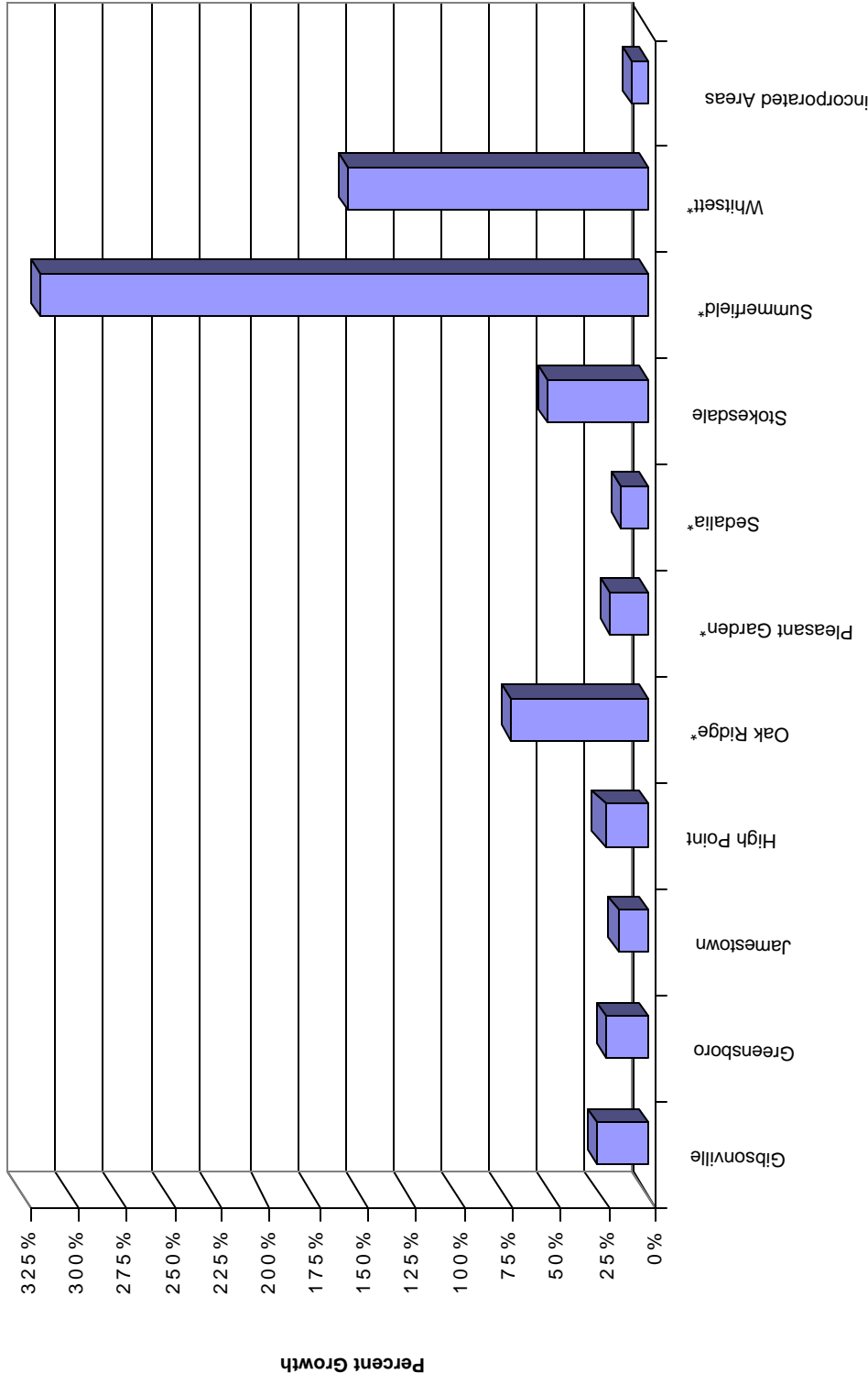
Source: US Census Bureau, Population & Housing, 1970-2000.

Table 2-2: Population Growth in Triad Regional North Carolina Counties and Selected Municipalities, 1990-2000				
County or Municipality	1990	2000	Growth	Percent Growth
Alamance County	108,213	130,800	22,587	20.9%
Burlington	39,498	44,917	5,419	13.7%
Elon College	4,448	6,738	2,290	51.5%
Graham	10,368	12,833	2,465	23.8%
Mebane	4,754	7,284	2,530	53.2%
Unincorporated Areas	43,786	52,380	8,594	19.6%
Forsyth County	265,878	306,067	40,189	15.1%
Clemmons	6,020	13,827	7,807	129.7%
Kernersville	10,899	17,126	6,227	57.1%
Lewisville*	6,433	8,826	2,393	37.2%
Winston-Salem	143,485	185,776	42,291	29.5%
Unincorporated Areas	94,928	70,840	-24,088	-25.4%
Guilford County	347,420	421,048	73,628	21.2%
Gibsonville	3,445	4,372	927	26.9%
Greensboro	183,894	223,891	39,997	21.8%
Jamestown	2,662	3,088	426	16.0%
High Point	69,428	85,839	16,411	23.6%
Oak Ridge*	2,322	3,988	1,666	71.7%
Pleasant Garden*	3,921	4,714	793	20.2%
Sedalia*	540	618	78	14.4%
Stokesdale	2,134	3,267	1,133	53.1%
Summerfield*	1,687	7,018	5,331	316.0%
Whitsett*	268	686	418	156.0%
Unincorporated Areas	79,422	86,605	7,183	9.0%
Randolph County	106,546	130,454	23,908	22.4%
Archdale	6,975	9,014	2,039	29.2%
Asheboro	16,362	21,672	5,310	32.5%
Randleman	2,612	3,557	945	36.2%
Trinity*	6,470	6,690	220	3.4%
Unincorporated Areas	69,780	83,693	13,913	19.9%
Rockingham County	86,064	91,928	5,864	6.8%
Eden	15,238	15,908	670	4.4%
Reidsville	12,183	14,485	2,302	18.9%
Unincorporated Areas	50,703	53,075	2,372	4.7%
Regional Total	914,121	1,080,297	166,176	18.2%

Source: NC Office of State Planning, 1999 estimates released in the fall of 2000.  
 \*Incorporated in the 1990s; number for 1990 represents the population that was living within the original (as incorporated) boundary of the town in that year.



**Figure 2-3: Population Growth in Guilford County Municipalities, 1990-2000**

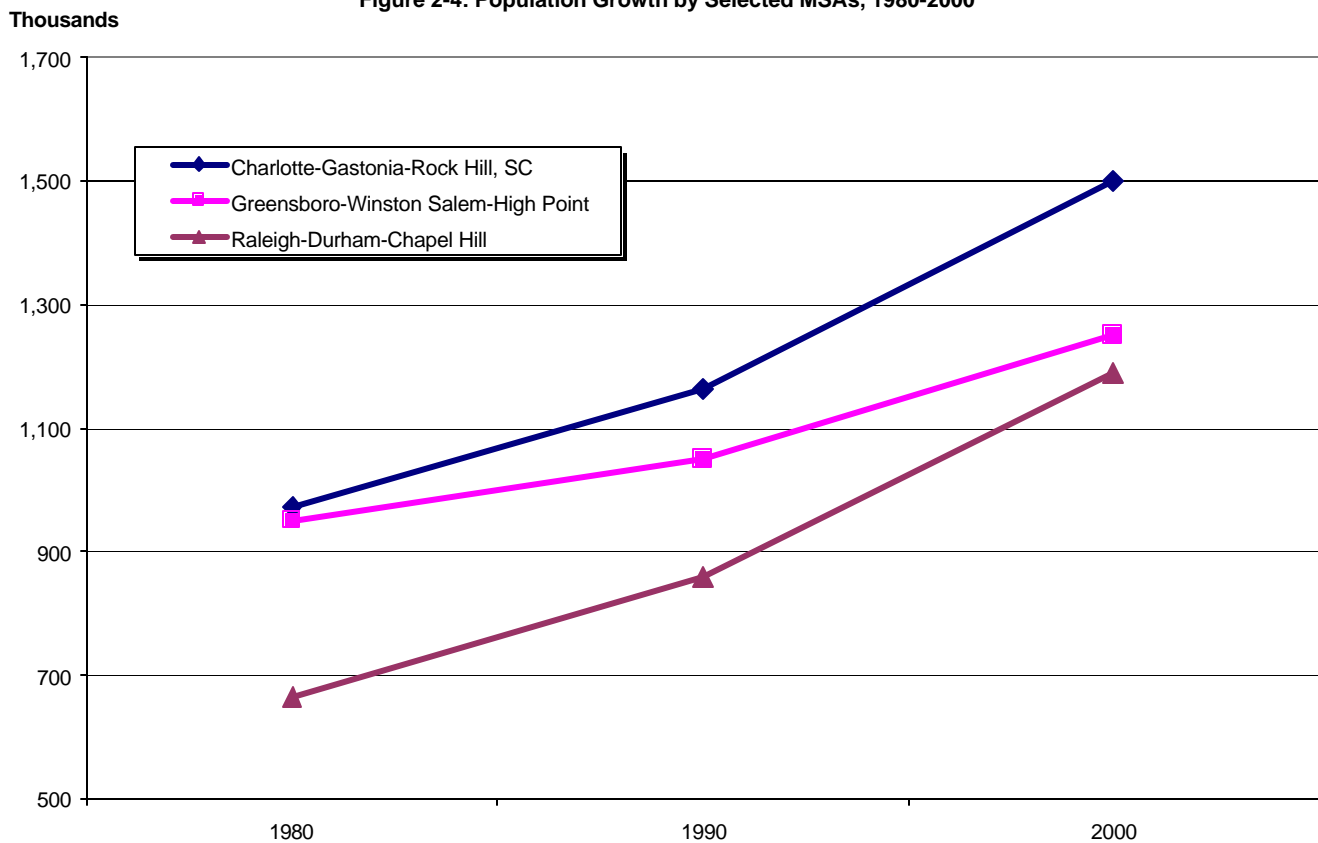


Source: NC Office of State Planning, 1999 estimates released in the fall of 2000. \*Incorporated in the 1990s; number for 1990 represents the population that was living within the original (as incorporated) boundary of the town in that year.

Table 2-3: Population Growth by Selected MSAs, 1980-2000					
MSA	Census			1990-2000 Growth	
	1980	1990	2000	Number	Percent
Charlotte-Gastonia-Rock Hill, SC	971,447	1,161,546	1,499,293	337,747	29.1%
Greensboro-Winston Salem-High Point	950,763	1,050,304	1,251,509	201,205	19.2%
Raleigh-Durham-Chapel Hill	664,789	858,516	1,187,941	329,425	38.4%

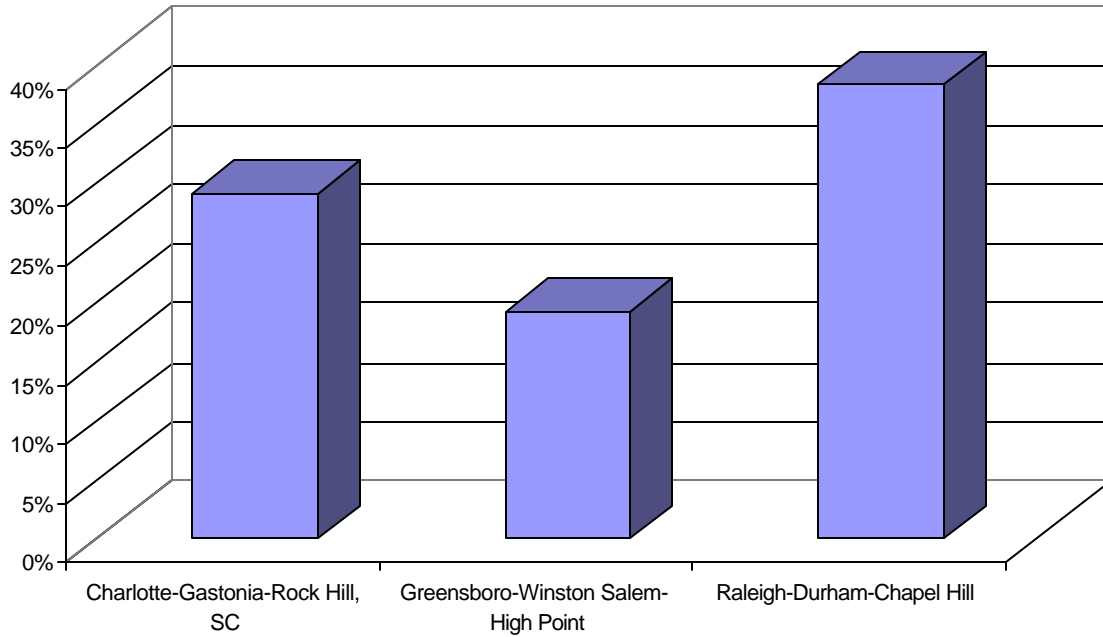
Source: US Census Bureau, 1980, 1990, & 2000 Census of Population & Housing.

Figure 2-4: Population Growth by Selected MSAs, 1980-2000



Source: US Census Bureau, 1980, 1990, & 2000 Census of Population

**Figure 2-5: Percent Population Growth by Selected MSAs, 1990-2000**

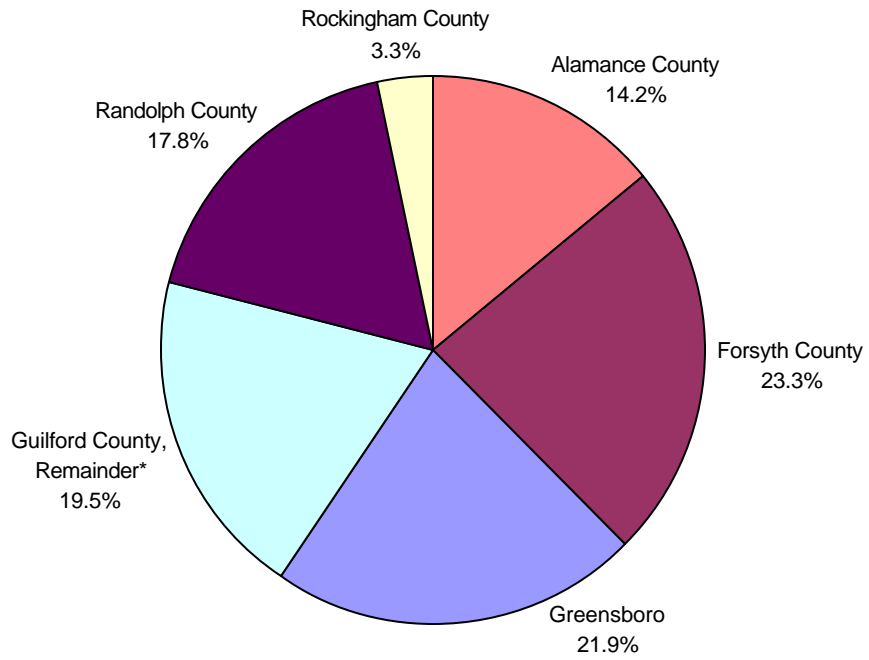


Source: US Census Bureau, 1980, 1990, & 2000 Census of Population & Housing.

County/ Municipality	Population <sup>1</sup>		Employment <sup>2</sup>	
	Number	Percent	Number	Percent
Alamance County	15,829	14.2%	11,184	10.0%
Forsyth County	25,968	23.3%	28,999	25.9%
Greensboro	24,316	21.9%	37,171	33.1%
Guilford County, Remainder*	21,687	19.5%	22,832	20.4%
Randolph County	19,770	17.8%	9,627	8.6%
Rockingham County	3,681	3.3%	2,327	2.1%
Total	111,251	100.0%	112,140	100.0%

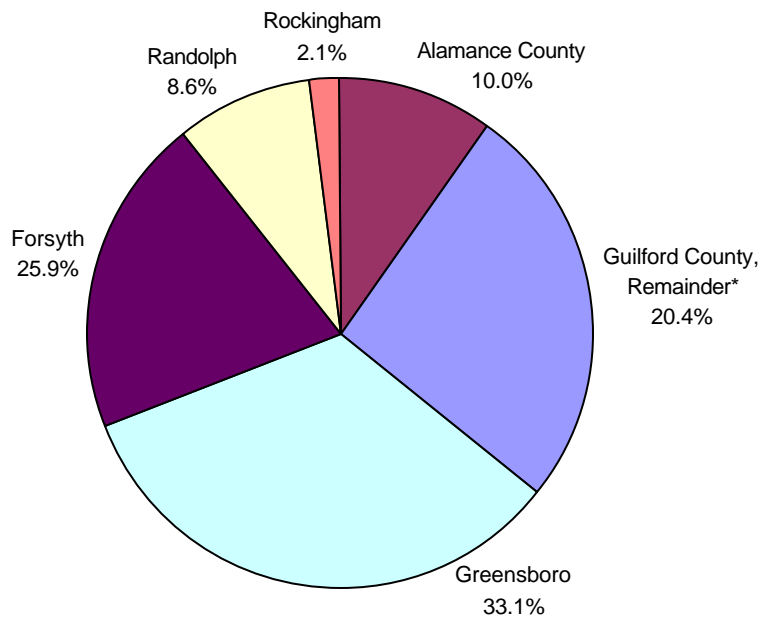
Source: <sup>1</sup>NC Office of State Planning, 2000 & <sup>2</sup>NC Employment Security Commission, Employment & Wages in NC, 1990-1999. \*Does not include Greensboro.

**Figure 2-6: Overall Triad Regional Population Growth Share by Location, 1990-1999**



Source: NC Office of State Planning, 2000 . \*Does not include Greensboro.

**Figure 2-7: Overall Triad Regional Employment Growth Share by Location, 1990-1999**

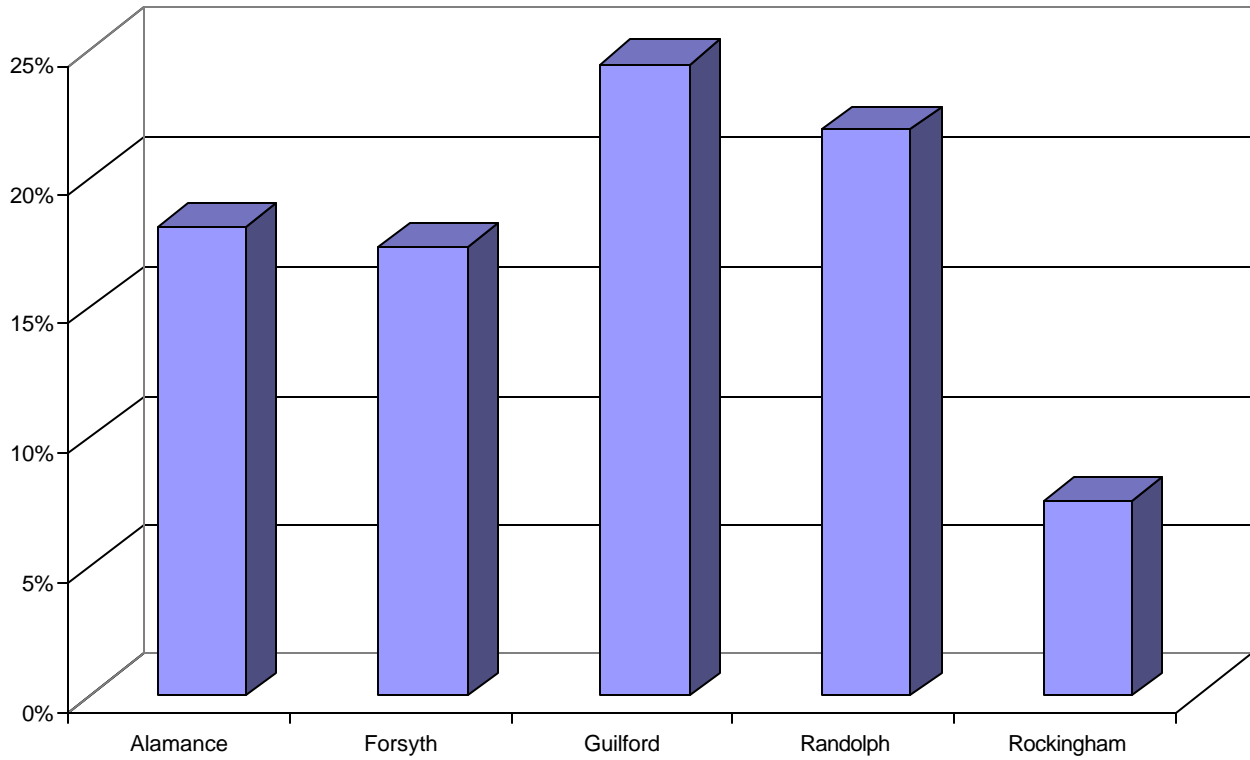


Source: NC Employment Security Commission, Employment & Wages in NC, 1990-1999. \*Does not include Greensboro.

County	1990	1999	Growth	Percent Growth
Alamance	54,081	65,265	11,184	20.7%
Forsyth	151,590	180,589	28,999	19.1%
Guilford	225,208	285,211	60,003	26.6%
Randolph	40,890	50,517	9,627	23.5%
Rockingham	31,584	33,911	2,327	7.4%
Regional Total	503,353	615,493	112,140	22.3%

Source: NCESC, Employment & Wages in NC, 1990 & 1999. 1999 information is as of the 4th Quarter, 1999.

Figure 2-8: Percent Employment Growth in Triad Regional Counties, 1990-1999



Source: NCESC, Employment & Wages in NC, 1990 & 1999 Annual Editions.

Category	1980	1990	Growth 1980-1990
Greensboro Residents Working in Greensboro	55,054	80,123	45.5%
Percent of Greensboro Residents (Labor Force) Working in Greensboro	74.1%	81.2%	7.1%
Number of Persons Working in Greensboro	95,372	141,983	48.9%
Greensboro's Proportion of Guilford County Employment	59.0%	62.0%	3.0%
Jobs in Greensboro	95,372	141,983	48.9%
Greensboro Residents Commuting Out	19,212	18,549	-3.5%
Persons Commuting In to Greensboro to Work	40,318	61,860	53.4%
Net Daily Commuting Inflow	21,106	43,311	105.2%

Source: US Census Bureau, 1980 & 1990 Census of Population & Housing, Journey to Work. Data from the 2000 Census will not be tabulated & published until 2003.

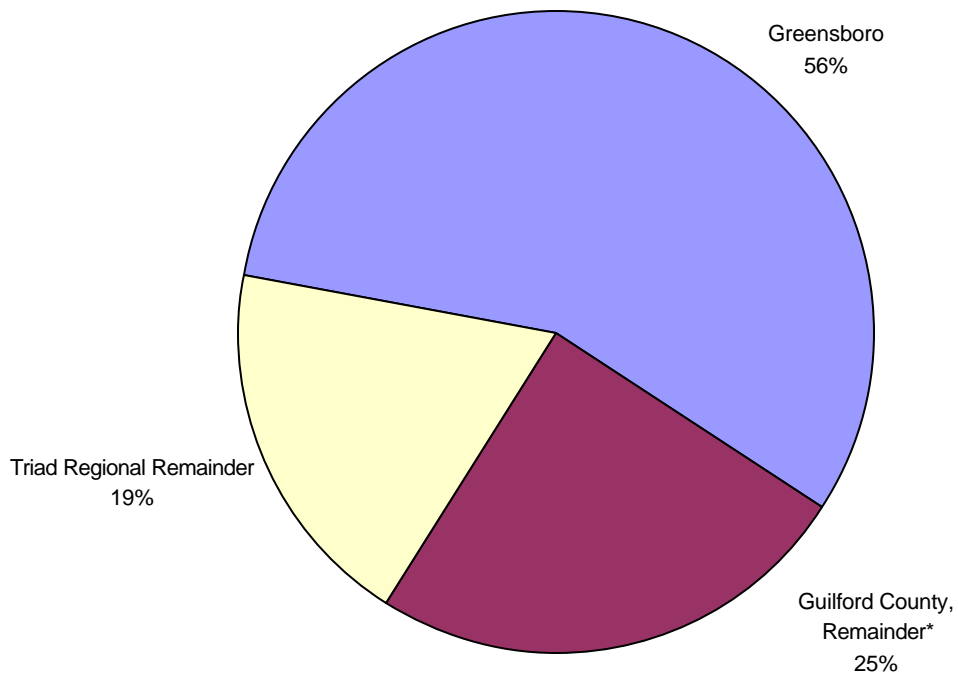
County/ Municipality	In to Greensboro From:	Out of Greensboro to:	Net Commuting
Guilford County, Remainder*	30,582	8,652	21,930
Randolph County	5,775	650	5,125
Rockingham County	5,134	736	4,398
Forsyth County, Remainder	4,984	809	4,175
Other	5,746	2,622	3,124
High Point	4,587	2,376	2,211
Alamance County	3,155	972	2,183
Winston-Salem	1,897	1,732	165
Total	61,860	18,549	43,311

Source: US Census Bureau, 1990 Census of Population & Housing, Journey to Work. \*Not including Greensboro & High Point.

Table 2-8: Persons Working in Greensboro by Place of Residence, 1990		
Municipality/ County	Number	Percent of Total Jobs
Greensboro	80,123	56.4%
Guilford County, Remainder*	30,582	21.5%
Forsyth County, Remainder**	4,984	3.5%
Randolph County	5,775	4.1%
Other***	5,746	4.0%
Rockingham County	5,134	3.6%
High Point	4,587	3.2%
Alamance County	3,155	2.2%
Winston-Salem	1,897	1.3%
Total	141,983	100.0%

Source: US Census Bureau, 1990 Census of Population & Housing, Journey to Work. \*Does not include Greensboro & High Point. \*\*Does not include Winston-Salem. \*\*\*Includes Davidson Co.; portions of these numbers are estimated, as detailed commuting patterns information is only available for areas within the MSA.

**Figure 2-9: Persons Working in Greensboro by Place of Residence, 1990**

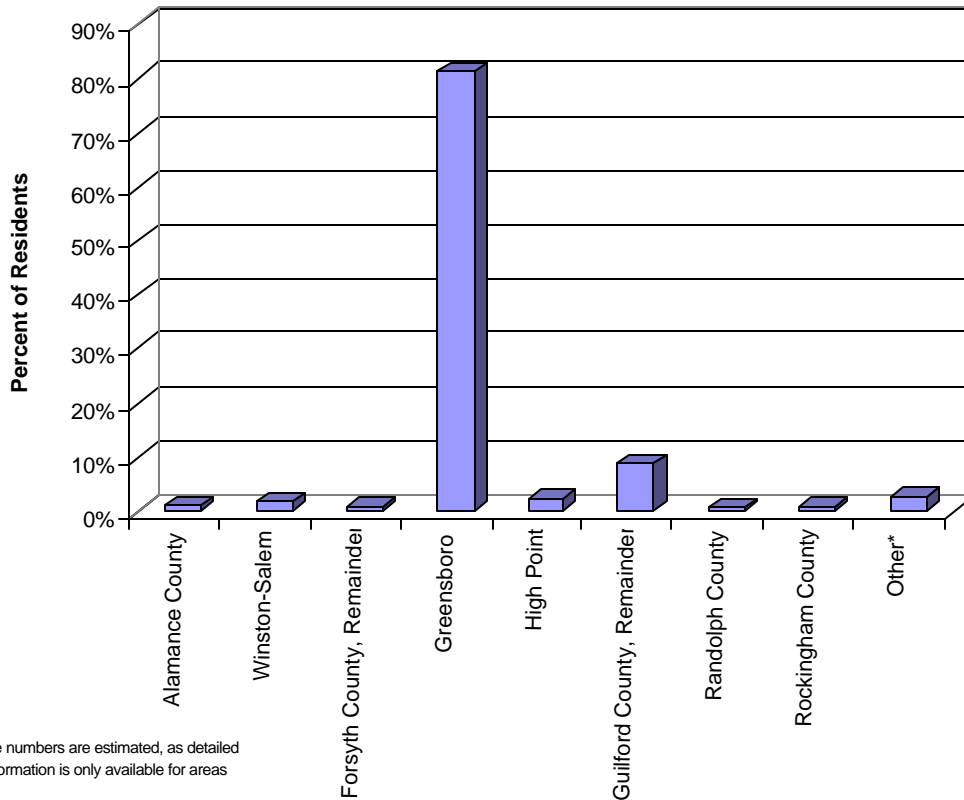


Source: US Census Bureau, 1990 Census of Population & Housing, Journey to Work. \*Includes High

Table 2-9: Where Greensboro Residents Work, 1990		
County/ Municipality	Number	Percent
Alamance County	972	1.0%
Winston-Salem	1,732	1.8%
Forsyth County, Remainder	809	0.8%
Greensboro	80,123	81.2%
High Point	2,376	2.4%
Guilford County, Remainder	8,652	8.8%
Randolph County	650	0.7%
Rockingham County	736	0.7%
Other*	2,622	2.7%

Source: US Census Bureau, 1990 Census of Population & Housing, Journey to Work. \*Note: Includes Davidson County; portions of these numbers are estimated, as detailed commuting patterns information is only available for areas within the MSA.

Figure 2-10: Where Greensboro Residents Work, 1990



\*Note: Portions of these numbers are estimated, as detailed commuting patterns information is only available for areas within the MSA.



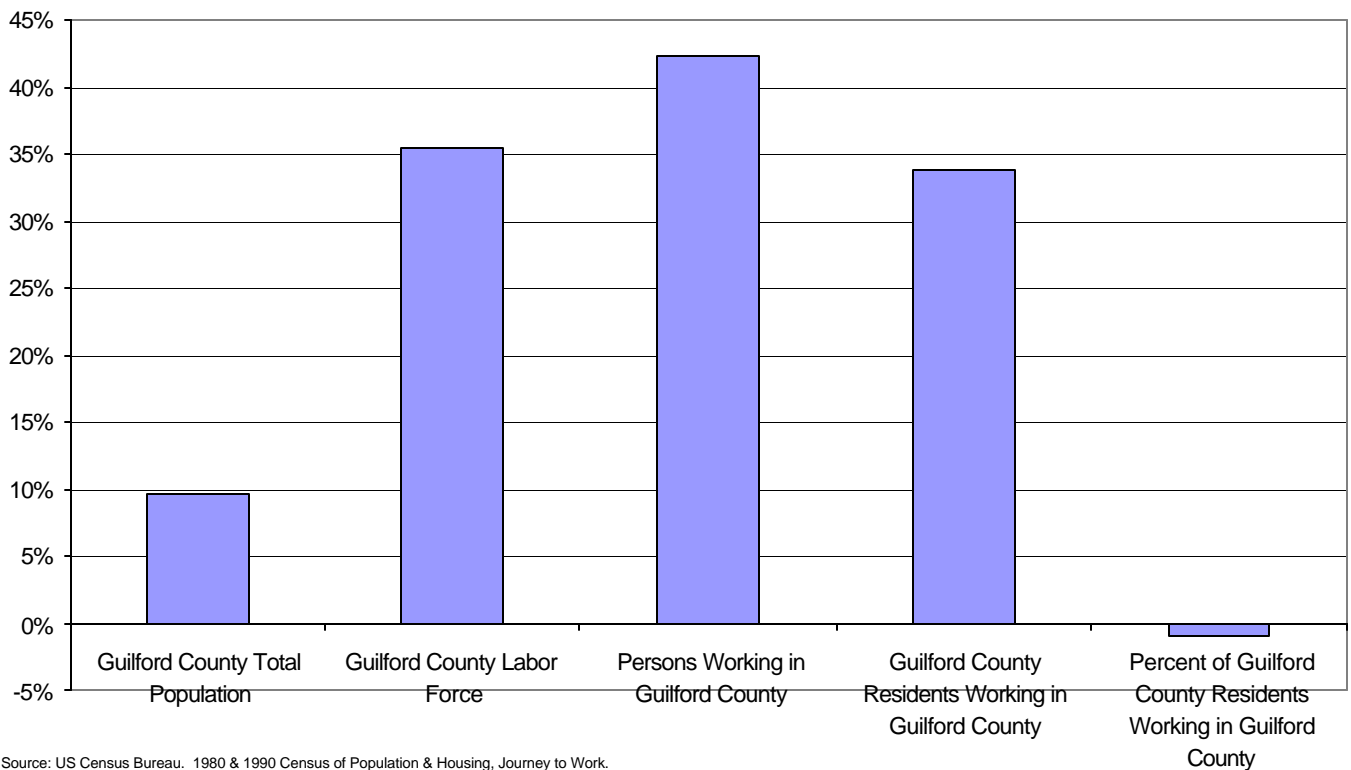
County	In to Guilford County From:	Out of Guilford County to:
Forsyth	13,320	5,407
Alamance	5,143	3,146
Randolph	17,436	2,594
Rockingham	7,898	1,240
Other*	19,644	6,246
Total	63,441	18,633
Net Commuting Inflow	44,808	

Source: US Census Bureau, 1990 Census of Population & Housing, Journey to Work. \*Note: Includes Davidson County; portions of these numbers are estimated, as detailed commuting patterns information is only available for areas within the MSA.

	1980	1990	Growth 1980-1990
Guilford County Total Population	317,154	347,420	9.5%
Guilford County Labor Force	137,370	185,853	35.3%
Persons Working in Guilford County	162,028	230,661	42.4%
Guilford County Residents Working in Guilford County	125,057	167,220	33.7%
Percent of Guilford County Residents Working in Guilford County	91.0%	90.0%	-1.0%

Source: US Census Bureau. 1980 & 1990 Census of Population & Housing, Journey to Work.

Figure 2-11: Guilford County Commuting, Growth From 1980 to 1990

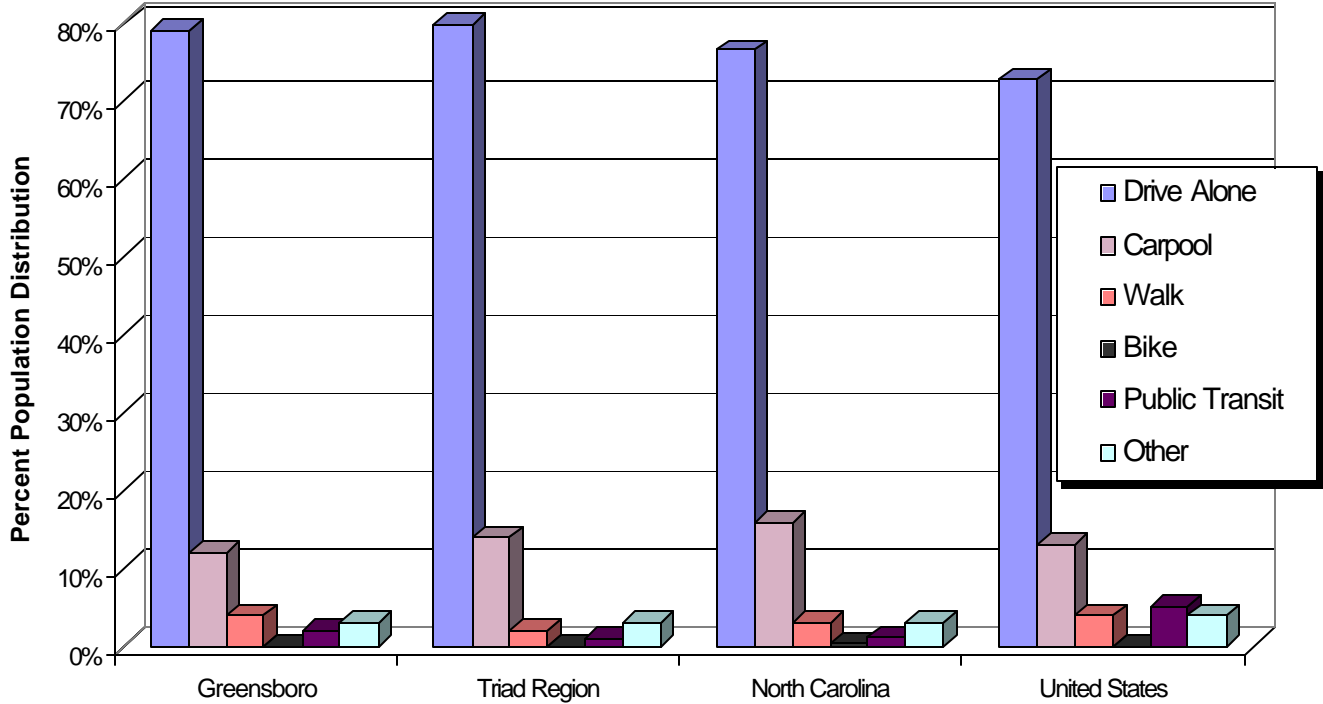


Source: US Census Bureau. 1980 & 1990 Census of Population & Housing, Journey to Work.

Area	Drive Alone	Carpool	Walk	Bike	Public Transit	Other	Total
Greensboro	79%	12%	4%	0%	2%	3%	100%
Triad Region	80%	14%	2%	0%	1%	3%	100%
North Carolina	77%	16%	3%	0%	1%	3%	100%
United States	73%	13%	4%	0%	5%	4%	100%

Source: US Census Bureau, 1990 Census of Population & Housing, Journey to Work.

Figure 2-12: Transportation Mode Share Comparisons in Selected Areas 1990

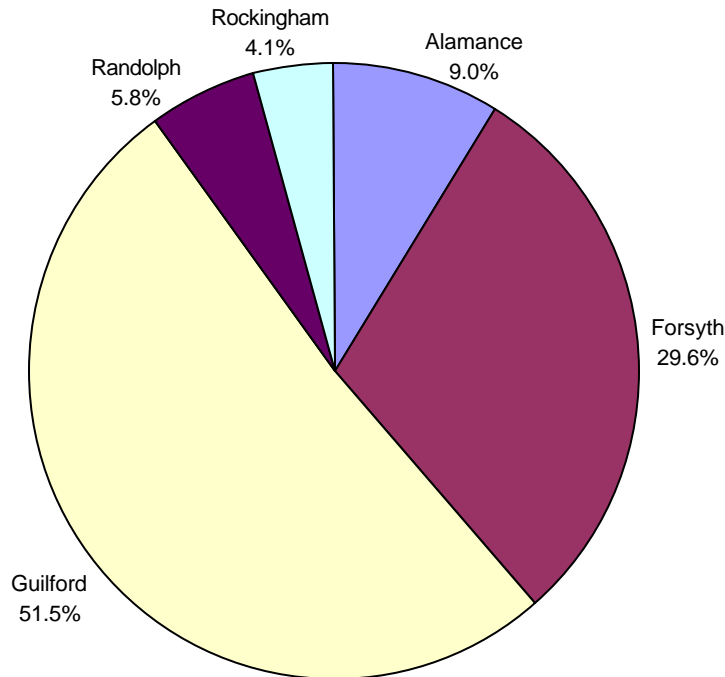


Source: US Census Bureau, 1990 Census of Population & Housing, Journey to Work.

Regional Municipalities*	Gross Retail Sales	Annual Retail Sales per Capita*	Proportion of the Population Within the Region	Proportion of Retail Sales within the Region
Archdale	72,643,082	\$8,076	0.9%	0.4%
Asheboro	467,190,404	\$23,905	1.9%	2.6%
Burlington	1,108,076,989	\$25,511	4.2%	6.2%
Eden	229,550,983	\$14,948	1.5%	1.3%
Graham	152,966,746	\$12,450	1.2%	0.9%
Greensboro	6,365,619,467	\$30,573	20.3%	35.4%
High Point	1,734,827,446	\$22,360	7.6%	9.7%
Kernersville	465,972,755	\$29,445	1.5%	2.6%
Reidsville	250,478,550	\$17,460	1.4%	1.4%
Winston-Salem	4,219,136,972	\$24,308	16.9%	23.5%
<b>Regional Counties</b>				
Alamance	1,620,577,735	\$13,065	12.10%	9.0%
Forsyth	5,315,588,103	\$18,214	28.46%	29.6%
Guilford	9,243,741,011	\$23,496	38.37%	51.5%
Randolph	1,044,671,046	\$8,270	12.32%	5.8%
Rockingham	733,567,773	\$8,174	8.75%	4.1%
<b>Regional Totals</b>	<b>17,958,145,668</b>	<b>\$17,514</b>	<b>100.0%</b>	<b>100.0%</b>

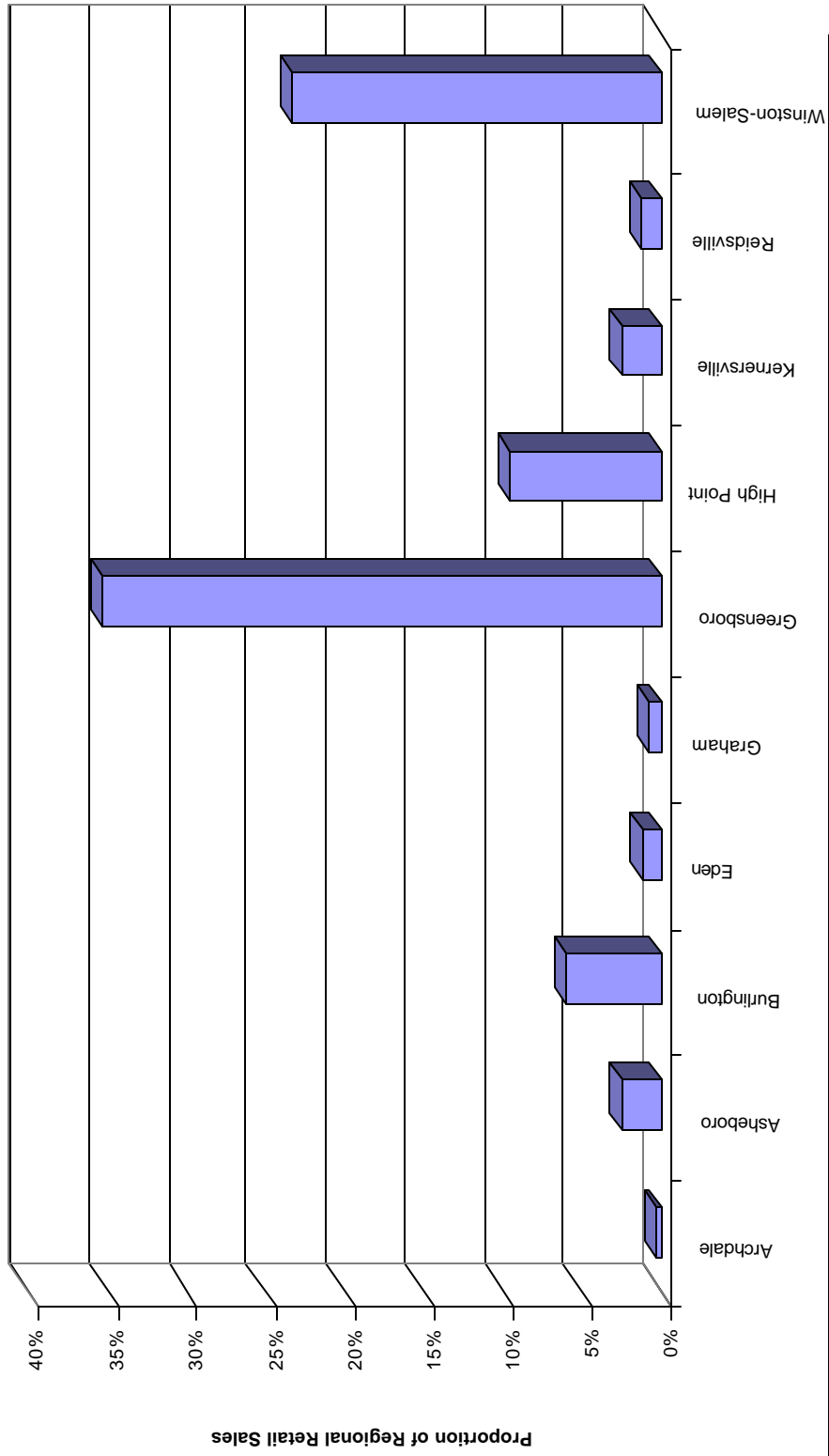
Source: NC Dept. of Revenue, State Sales & Use Tax Reports, July 1999-June 2000. \*Total gross retail sales divided by population. \*\*Only towns of 10,000+ people.

Figure 2-13: Triad Regional Retail Sales by County, 1999-2000



Source: NC Dept. of Revenue, State Sales & Use Tax Reports, July 1999-June 2000.

Figure 2-14: Triad Regional Retail Sales by Municipality, 1999-2000

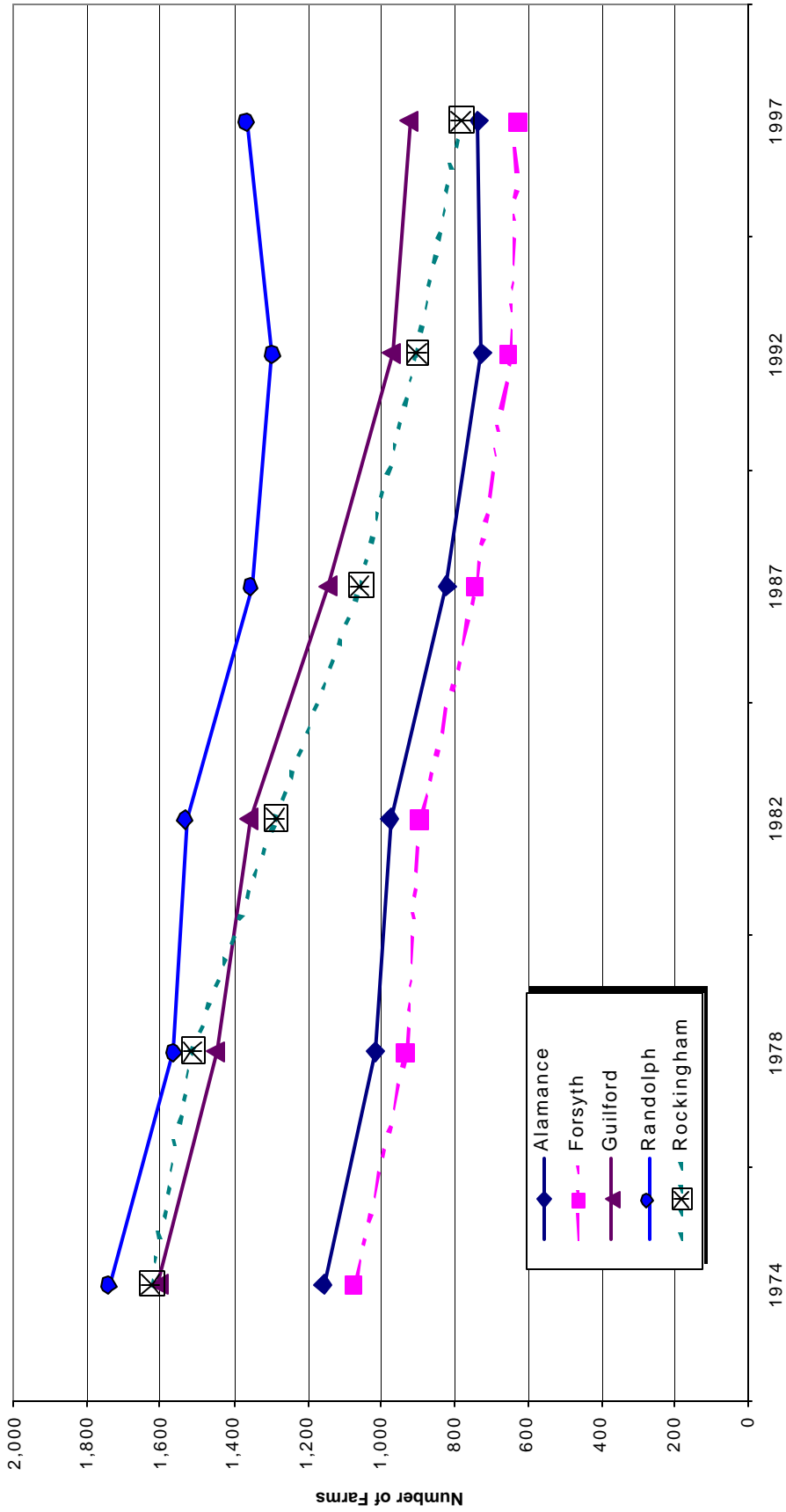


Source: NC Dept. of Revenue, State Sales & Use Tax Reports, July 1999-June 2000.

Table 2-14: Triad Regional Agriculture by County, 1974-1997					
	Farms (Number)	Land in Farms (Acres)	Average Size of Farms (Acres)	Percentage of Land in Farms	Total County Acreage
Alamance					275,642
1974	1,155	124,857	108	45%	
1978	1,013	118,082	117	43%	
1982	972	114,973	118	42%	
1987	821	99,826	122	36%	
1992	725	101,073	139	37%	
1997	731	107,801	147	39%	
Forsyth					262,189
1974	1,072	73,960	69	28%	
1978	929	66,003	71	25%	
1982	893	59,678	67	23%	
1987	735	55,132	75	21%	
1992	647	47,837	74	18%	
1997	621	51,091	82	19%	
Guilford					416,083
1974	1,607	164,180	102	39%	
1978	1,444	142,099	98	34%	
1982	1,354	135,965	100	33%	
1987	1,141	126,369	111	30%	
1992	970	113,654	117	27%	
1997	920	111,882	122	27%	
Randolph					503,981
1974	1,736	180,744	104	36%	
1978	1,561	170,690	109	34%	
1982	1,527	163,951	107	33%	
1987	1,350	154,350	114	31%	
1992	1,293	144,858	112	29%	
1997	1,366	148,301	109	29%	
Rockingham					362,541
1974	1,626	176,903	109	49%	
1978	1,512	163,647	108	45%	
1982	1,286	148,090	115	41%	
1987	1,056	137,426	130	38%	
1992	902	130,879	145	36%	
1997	780	133,842	172	37%	

Source: US Census Bureau, 1997 Census of Agriculture.

Figure 2-15: Decline in Number of Triad Regional Farms, 1974-1997

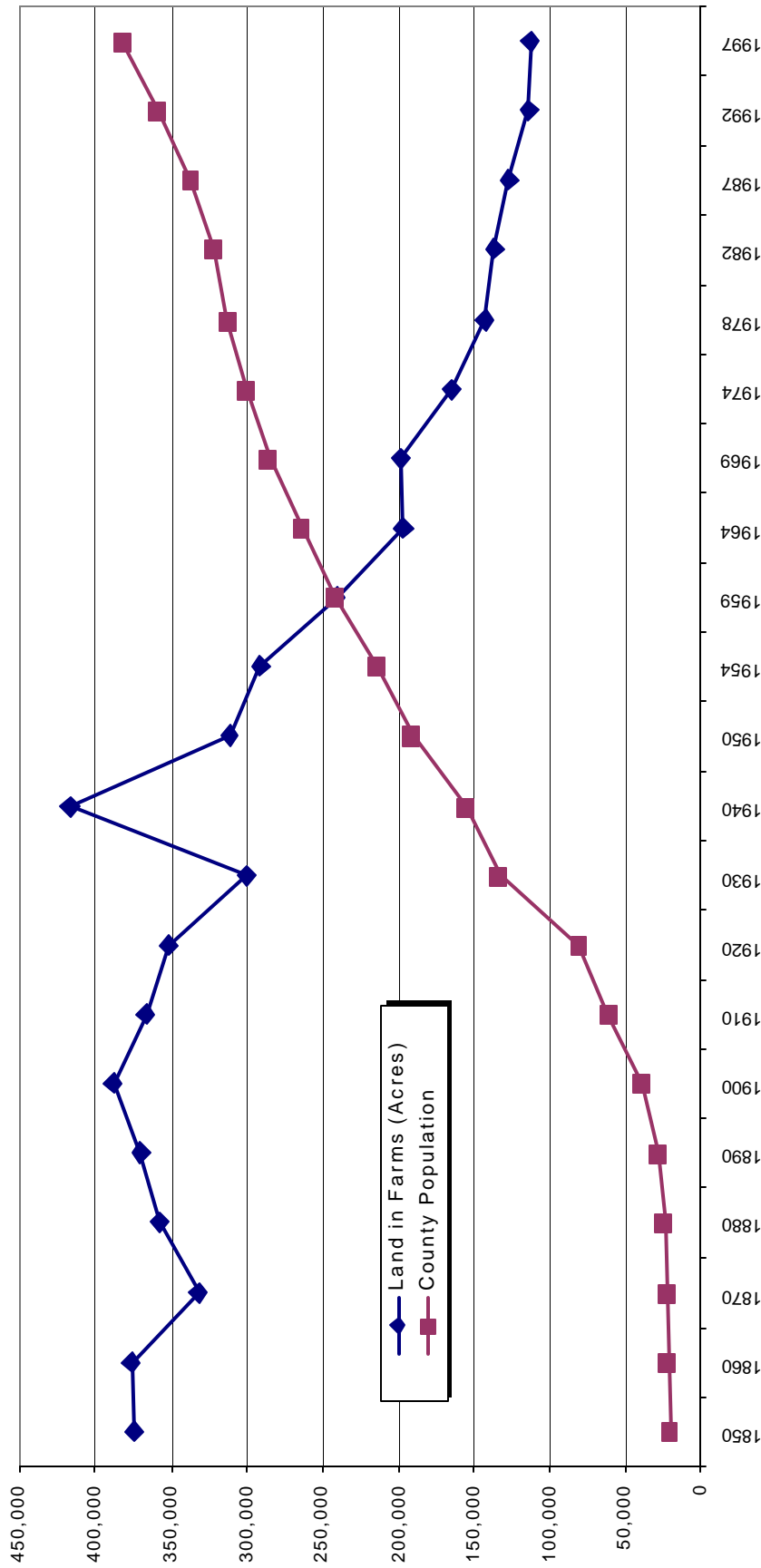


Source: US Census Bureau, 1997 Census of Agriculture.

Table 1: Guilford County Land in Farms vs. Population, 1850-1997			
Year	Farms (Number)	Land in Farms (Acres)	County Population
1850	1,668	373,746	19,754
1860	1,503	376,537	20,056
1870	2,100	332,205	21,736
1880	2,810	356,653	23,585
1890	2,920	370,576	28,052
1900	3,497	388,940	39,074
1910	3,776	366,828	60,497
1920	4,021	350,659	79,272
1930	3,864	300,677	133,010
1940	4,941	416,640	153,916
1950	4,768	311,091	191,057
*1954	4,511	290,335	213,242
*1959	3,020	239,638	240,974
*1964	2,302	197,035	263,348
*1969	2,240	197,472	284,383
1974	1,607	164,180	300,663
1978	1,444	142,099	312,456
1982	1,354	135,965	322,600
1987	1,141	126,369	336,905
1992	970	113,654	357,737
1997	920	111,882	381,916

Source: US Census Bureau, Census of Agriculture, 1850-1997. \*Annualized county population estimates provided by Guilford County Planning Dept., 2001. Note: Total of Guilford County in Acres=416,083.

Figure 2-16: Guilford County Land in Farms vs. Population, 1850-1997



Source: US Census Bureau, Census of Agriculture, 1850-1997. \* Annualized county population estimates provided by Guilford County Planning Dept., 2001.  
 Note: Total of Guilford County in Acres=416,083.