Competitor Scorecard

Challenging the Competition

Economic Performance of the Huntsville, Austin, Charlotte, and Raleigh Metropolitan Areas

A Report Compiled for the

Chamber of Commerce of
Huntsville/Madison County
and the
Huntsville Industrial Development Board

by

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January 2005

MEETING THE CHALLENGE OF GROWTH

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MEETING THE CHALLENGE OF GROWTH

Final Report For The 2004 Analysis

This report updates the June 2004 Competitor Scorecard report with the addition of three indicators:

1. Number of Graduate Science & Engineering Students Enrolled in each MSA from 1998 through 2002. (page 15)
2. University Academic Research & Development Expenditures Per Student (normalized on university enrollment) for 1997 through 2002. (page 16)
3. Utility Patents Issued per 100,000 population from 1998 through 2002. (page 17)

Also, the data tables for Manufacturing Employment (page 10) and Annual Unemployment Rate (page 13) were expanded to include preliminary 2004 data. the summary of Significant Economic Announcements for each of the four metropolitan statistical areas is revised to reflect the major announcements and activities for calendar year 2004. (pages 19. 24, 29, 34)

Finally, the report summary (page 4) has been revised to reflect the new information that became available in the past six months.

MEETING THE CHALLENGE OF GROWTH

Competitor Scorecard
Challenging the Competition
Summary
January 2005

Calendar year 2004 was good economically for each of the four Metropolitan Statistical Areas, Austin, TX MSA; Charlotte, NC-SC MSA; Huntsville, AL MSA; and Raleigh, NC MSA. The recent economic recession in the U.S. economy was individually felt in each area. Reviewing each area's performance during the time period from just before the start of the recession (1998/1999) through the beginning of recovery (2002/2003) is the focus of this scorecard. The economic performance measures used in this scorecard attempt to show the current strength of the particular area's economy as well as their long-term economic performance.

Employment changes show much about the momentum or lack of momentum existing in a particular regional economy. All four metropolitan areas experienced growth in non-manufacturing employment. This growth more than overcame the losses in manufacturing employment yielding a modest gain in total employment. Austin and Charlotte saw an increase in the number of business proprietors while the number of business owners in Huntsville and Raleigh fell slightly between 1998 and 2002. Average Annual Pay and Per Capita Personal Income grew in all four MSAs during this turbulent economic period of 1998- 2003.

The drop in manufacturing employment was no surprise given the national recession but the magnitude and duration of Austin MSA's manufacturing job loss is significant. However Austin MSA's gains in non-manufacturing sectors of the 1990's were so great, that even after the recent losses of 2000-2002, Austin MSA remains at a higher level of overall employment than in 1998.

Huntsville MSA's economic performance can be characterized as relatively stable for the past decade. But even though this "stability" has limited economic losses, Huntsville MSA has not enjoyed the economic gains (e.g., employment, labor force, and population growth rates) of the other three technology-based peer MSAs. Huntsville's percentage loss of jobs in the professional and technical sector in 2001-2002 should be specifically noted.

It is also interesting to note that Government employment, Huntsville MSA's largest employment sector, did not decrease in any of the four metropolitan areas during this two year period of 2001 to 2002. Austin MSA and Charlotte MSA actually experienced an increase in government employment during the economic downturn.

Total population, number of people in the labor force, and the number of people not in the labor force over an extended period of time may reflect the ability of an area to fill new jobs in the short-term as well as the attractiveness of its quality of life. The number of residents, households, housing units and labor force grew in all four MSAs. The economic slowdown of 2001-2002 hit the larger metropolitan areas hardest in terms of employment but population and housing continued growing but at a slower rate than in the pre-recession years..

Workforce supply to meet the demand of the technology-based industries in an area may be represented by the number of graduate science and engineering students enrolled in the local universities. Raleigh MSA with Duke University, University of North Carolina at Chapel Hill, and North Carolina State University leads all four MSAs in both the number of students (8,910) and in the growth rate of graduate science and engineering student enrollment (9.6% from 1998 to 2002). Austin MSA with the University of Texas has about one-half the number of students (4,292) and less than one-half the growth rate (4.1%) of the Raleigh MSA Huntsville MSA with Alabama A&M University and the University of Alabama in Huntsville has the third largest number of graduate science and engineering students (1,258 in 2002). Charlotte MSA with the University of North Carolina at Charlotte has the smallest number of graduate science and engineering students with 1,182 in 2002.

The sample of significant economic announcements in each of the four MSAs in calendar year 2004 includes 28 for Raleigh MSA, 27 for Austin MSA, 22 for Charlotte MSA, and 16 for Huntsville MSA. Of course, the significance of each announcement is yet to be experienced and is relative only to the respective MSA.

In summary, benchmarking peers for economic performance measures is challenging yet insightful for assessing an areas economic performance against the potential for success. The period over which economic performance is measured should consider the general condition of the United States economy. There is no doubt that economic activity of a specific area will be influenced by the strength of the overall U.S. economy. The question to be answered is given the state of the U.S. economy, has a region achieved its potential for a given time period.

The analysis for this Competitor Scorecard report suggests that the four technology-based economic areas have different levels of momentum, appeal, and economic potential. Considering the economic performance of each for the past decade and how well each weathered the recession, all four MSAs have significant potential for economic growth for the foreseeable future. Subsequent scorecards will measure the progress of each of these peer cities. The difference between areas may be how well economic leaders develop and implement their respective strategy.

MEETING THE CHALLENGE OF GROWTH

Benchmarking And Tracking
The Regional Economic Growth Initiative

Background
Austin, Charlotte, and Raleigh areas are now generally recognized as the technology growth centers of the Southeast. Although considerably larger than Huntsville, these metropolitan areas do provide goals for Huntsville to consider and insights into technology-based economic growth. The mission of the Huntsville Regional Economic Growth Initiative is to position the Huntsville area as one of the leading technology-based economic growth centers in the Southeast comparing consistently and favorably with Austin, Raleigh-Durham, and Charlotte. This is an ambitious goal.

To assess the Huntsville Region's relative competitive position, the University of Alabama in Huntsville tracks the economic performance of Huntsville, AL MSA; Austin, TX MSA; Charlotte, NC MSA; and Raleigh, NC MSA.

Definitions of Metropolitan Areas
Huntsville MSA includes the counties of Madison and Limestone. Austin MSA includes the counties of Bastrop, Caldwell, Hays, Travis, and Williamson. Charlotte MSA includes the counties of Anson, Cabarrus, Gaston, Mecklenburg, Union, and York, SC. Raleigh MSA includes the counties of Franklin, Johnston, and Wake.

Adjustments have been made to historical data where possible to accommodate the change in definition of Metropolitan Areas implemented in 2003.

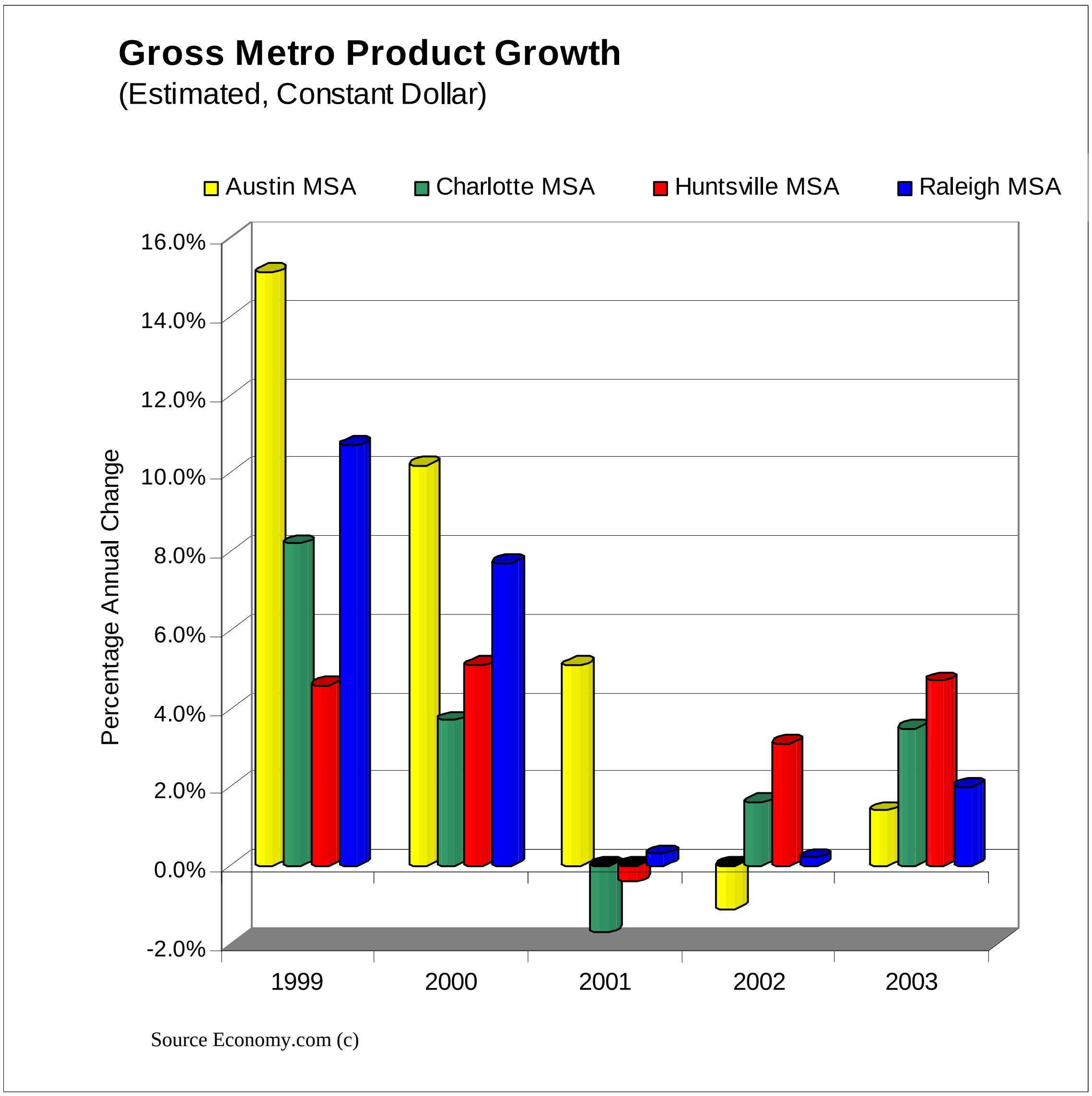
The Economic Performance Indicators in this report include:

1. Gross Metro Product
2. Total Labor Force
3. Total Employment
4. Manufacturing Employment
5. Number of Proprietors
6. Unemployment Rate
7. Average Annual Pay
8. Per Capita Personal Income
9. Population
10. Number of Households
11. Number of Housing Units
12. Employment Change by Industry Sector

Performance comparisons are generally made over the most recent 5-year period except where data is unavailable. For each measure, the period of comparison is shown. Growth rates are calculated as the average annual rate of change over the period.

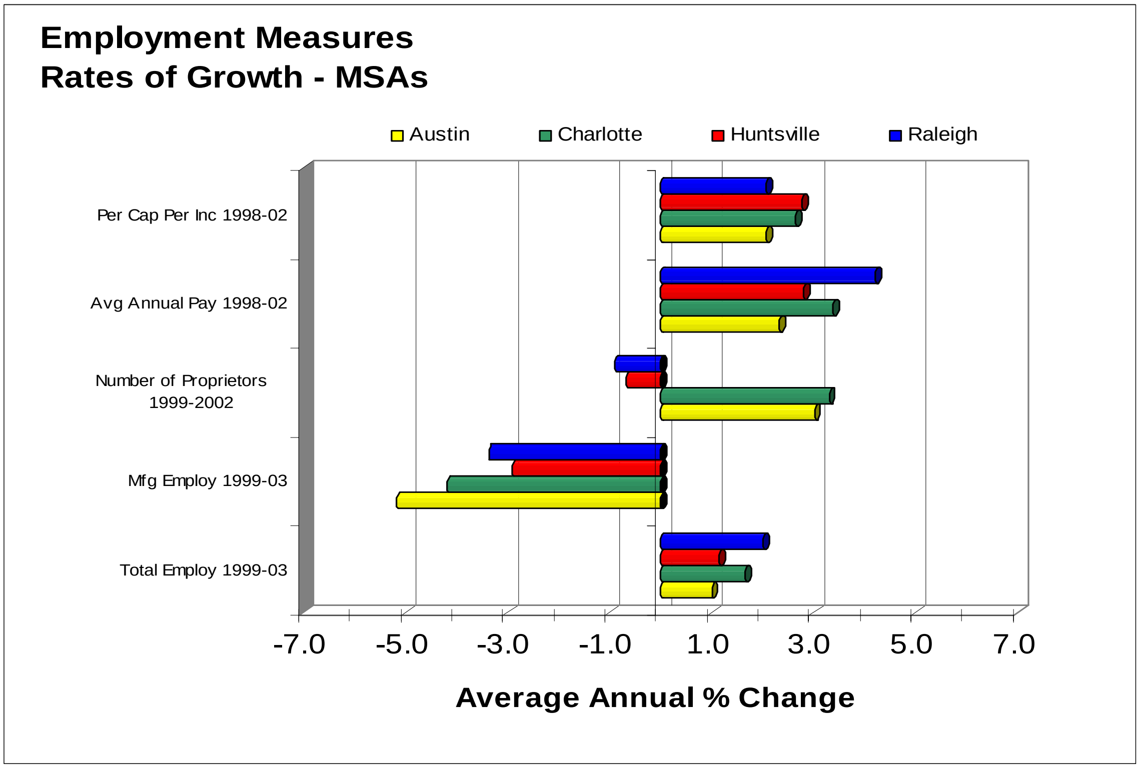
Gross Metro Product
(Total Economic Output for a MSA)

Growth in Gross Metro Product illustrates the economic slowdown generally considered to be from 1999 to 2001 and the subsequent slow economic recovery beginning in 2002/ 2003. Austin's rate of GMP growth fell the most and over the longest period of time, even turning negative in 2002. Austin MSA has been the slowest to recover of the four MSAs compared. Charlotte and Huntsville MSAs' GMP growth rate also turned negative but did so one year earlier than Austin MSA. The Huntsville MSA experienced the most growth in 2003, the last year of the comparison period.



Employment Measures

Employment measures include the Economic Performance Indicators most closely associated with employed persons and their earnings.



Overview

Total Employment

Total employment improved most in the Raleigh MSA with a 2.02% average annual increase from 1999-2003. Charlotte MSA followed at 1.66%. Huntsville MSA at 1.16% was slightly ahead of Austin MSA at 1.0%.

Manufacturing Employment

Manufacturing employment continued to decline in all of the MSAs in 2003. For the 5 year period of 1999-2003, Austin MSA experienced the largest average annual loss of 5.17% vs. a 2003 loss of 9.1%. Charlotte MSA lost 4.17% of its manufacturing jobs from 1999 to 2003 vs. 6.6% loss in 2003. Raleigh MSA dropped 3.37% in manufacturing employment from 1999-2003 with a 6.4% loss in 2003. Huntsville MSA experienced the least percentage loss of manufacturing jobs over the 5 year period at 2.92% but experienced a 6.6% loss in 2003.

Proprietors

The number of proprietors (a measure of self-employment) is an important measure generally reflecting growth in smaller businesses and should be considered as important as the measures of ‘people employed’ in a region that values entrepreneurialism. This

Economic Performance Measure is compared over the 4-year period of 1999-2002. Nationally, the number of proprietors grew 2.3% and Alabama's proprietors grew by 1.21%. Charlotte MSA had the largest average annual growth of 3.31% from 118,700 to 135,600. In 2002, Charlotte's proprietor growth rate was 6.1%. Austin MSA proprietors grew by 3.02% to 162,635 or 21,335. Huntsville MSA proprietors decreased by -0.67% to 31,661 (a loss of 1,147). Raleigh MSA was down -0.88% to 81,242.

Average Annual Pay

For the years 1998 through 2002, average annual pay rose an average of 3.03% nationally per year to $36,167 and 3.11% in Alabama to $30,513. Of the four metropolitan areas, Raleigh MSA had the largest average annual increase at 4.22% to $36,200. Charlotte followed at 3.38% annually (to $38,744). Huntsville MSA moved into the third position with a 5-year average annual increase of 2.82% ($37,631) by a significant (4.7%) increase from 2001-2002. Austin MSA gains in the late nineties generated an average annual increase of 2.33%. However, Austin MSA experienced a decline of -0.3% and -3.1% in 2001 and 2002 respectively.

Per Capita Personal Income

Huntsville MSA led the three other metropolitan areas in average annual per capita income growth at 2.77% to $28,959. However, both the national and state per capita income grew slightly more at 2.99% and 3.2% respectively. Close behind Huntsville MSA is Charlotte MSA at 2.65% for the 5 year period to a 2002 per capita personal income of $33,083. Austin MSA and Raleigh MSA each had a 2.09% average annual growth from 1998-2002.

Huntsville MSA had the largest difference between Average Annual Pay and Per Capita Personal Income in at $8,672 of all four MSAs in this comparison and larger than the State of Alabama ($4,965) and the U.S. ($5,261).

In summary, all four metropolitan areas experienced growth in non-manufacturing employment to overcome the manufacturing employment losses yielding a modest gain in total employment. Austin and Charlotte saw an increase in the number of proprietors while the number of Huntsville and Raleigh proprietors fell slightly. Average Annual Pay and Per Capita Personal Income grew in all four MSAs during this turbulent economic period of 1998- 2003.

Data Tables

Total Employment

MSA	1999	2000	2001	2002	2003
Austin, TX	692,478	729,088	732,673	725,049	727,194
Charlotte, NC-SC	750,547	810,939	809,445	805,962	812,957
Huntsville, AL	166,277	169,407	171,070	168,313	175,888
Raleigh-Durham, NC	619,435	659,846	673,684	664,402	681,933
Alabama	1,919,500	1,931,200	1,908,700	1,883,200	1,874,800
U.S. (000)	130,536	132,441	130,659	130,096	130,035

Source: U.S. Department of Labor Bureau of Labor Statistics

Manufacturing Employment

MSA	1999	2000	2001	2002	2003	2004 (p)
Austin, TX	77,800	82,800	76,200	63,500	57,700	57,000
Charlotte, NC	134,200	130,800	121,300	113,700	106,200	101,200
Huntsville, AL	36,300	36,500	35,300	33,400	31,000	30,000
Raleigh, NC	83,100	83,800	84,300	33,400	69,100	65,100
Alabama	357,500	351,400	325,500	307,400	293,700	281,600
U.S. (000)	17,322	17,263	16,441	15,259	14,510	14,329

Source: U.S. Department of Labor Bureau of Labor Statistics (p) preliminary

Proprietors

MSA	1998	1999	2000	2001	2002
Austin, TX	141,300	144,457	150,342	153,597	162,635
Charlotte, NC	116,400	118,698	123,284	127,853	135,637
Huntsville, AL	32,758	32,085	33,065	30,140	31,661
Raleigh, NC	85,002	80,485	83,505	76,381	81,242
Alabama	375,612	379,896	390,497	381,888	398,246
United States	26,558,200	26,762,300	25,536,800	28,184,200	29,617,500

Source: Bureau of Economic Analysis

Average Annual Pay

MSA	1998	1999	2000	2001	2002
Austin, TX	$34,952	$38,298	$40,409	$40,273	$39,021
Charlotte, NC	$33,148	$34,650	$36,392	$37,573	$38,744
Huntsville, AL	$32,983	$33,490	$35,009	$35,949	$37,631
Raleigh, NC	$29,895	$31,731	$34,049	$35,609	$36,200
Alabama	$26,407	$27,444	$28,453	$29,469	$30,513
United States	$31,411	$32,774	$34,718	$35,604	$36,167

Source: Bureau of Economic Analysis

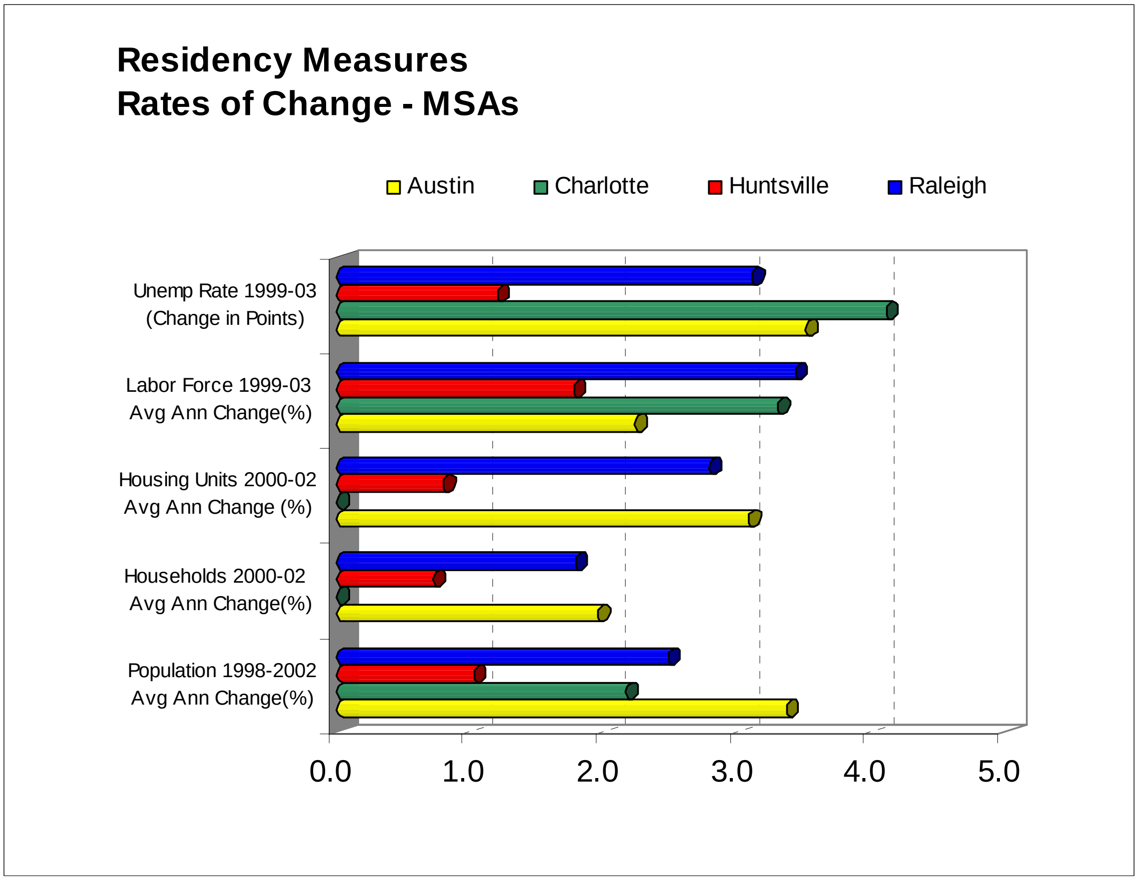
Per Capita Personal Income

MSA	1998	1999	2000	2001	2002
Austin, TX	$28,685	$31,021	$32,549	$32,678	$31,677
Charlotte, NC	$29,218	$30,497	$32,187	$32,716	$33,083
Huntsville, AL	$25,439	$25,848	$27,589	$28,327	$28,959
Raleigh, NC	$30,148	$31,425	$33,658	$33,926	$33,293
Alabama	$22,025	$22,722	$23,768	$24,845	$25,548
United States	$26,883	$27,939	$29,847	$30,527	$30,906

Source: Bureau of Economic Analysis

Residency Economic Measures

Resident measures include the Economic Performance Indicators most closely associated with persons residing and/or actively employed or pursuing employment in the metropolitan area.



Overview

Population

The number of people living in the Austin MSA grew an average of 3.35% per year from 1998 to 2002. Raleigh MSA followed at a 2.47% average annual rate. Charlotte MSA was a close third at 2.16% and Huntsville MSA grew at an average rate of 1.02% per year, a rate faster than Alabama's 0.34% and slightly faster than the national average of 0.86%.

Households

The number of households (occupied housing units) grew in all three of the MSAs for which data is available from 2000 to 2002. Austin MSA grew the fastest at 1.95% to 495,135. Raleigh MSA was a close second at 1.78% while Huntsville MSA followed at 0.72%. Comparable data is not available for Charlotte for this time period.

Housing Units
Housing units (places for people to live) grew even faster than the number of households in Austin (3.08%) and Raleigh (2.78%) MSAs. Huntsville MSA housing units grew at 0.80%, essentially the same average annual rate as the number of households.

Labor Force
The number of people employed and looking for employment grew between 1999-2003 in Raleigh MSA (3.42%), Charlotte MSA (3.29%) and Austin MSA (2.22%). Huntsville MSA labor force grew at an average annual rate of 1.77% to 184,177 between 1999 and 2000.

Unemployment Rate
The number of people in the labor force seeking employment changed significantly on a national, state, and regional basis. Nationally, the annual unemployment rate grew from 4.2% in 1999 to 6.0% in 2003. Alabama's unemployment rate grew from 4.8% to 5.8% in the same period. Huntsville had its lowest unemployment rate in 2000 and experienced the least increase from 1999 to 2003 from an annual rate of 3.3% to 4.5%. Charlotte MSA experienced the largest increase in unemployment rate from 2.6% to 6.7%, an increase of 4.1 percentage points. Austin MSA increased from 2.2% to 5.7% by 2003 or 3.5 points. Raleigh MSA unemployment increased 3.1 percentage points to 4.7% by 2003.

Overall, the number of residents, households, housing units and labor force grew in all four MSAs. The economic slowdown of 2001-2002 hit the larger metropolitan areas hardest in terms of employment while population and housing grew but at a slower rate.

Data Tables

Total Labor Force

MSA	1999	2000	2001	2002	2003
Austin, TX	708,312	743,877	761,998	768,643	771,330
Charlotte, NC	770,252	838,880	852,597	859,919	871,677
Huntsville, AL	172,014	174,363	177,261	176,043	184,177
Raleigh, NC	629,285	671,668	696,389	700,415	715,376

Source: U.S. Department of Labor, Bureau of Labor Statistics

Annual Unemployment Rate

MSA	1999	2000	2001	2002	2003	2004(p)
Austin, TX	2.2%	2.0%	3.8%	5.7%	5.7%	4.0%
Charlotte, NC	2.6%	3.3%	5.1%	6.3%	6.7%	5.2%
Huntsville, AL	3.3%	2.8%	3.5%	4.4%	4.5%	3.9%
Raleigh, NC	1.6%	1.8%	3.3%	5.1%	4.7%	3.3%
Alabama	4.8%	4.5%	5.3%	5.9%	5.8%	5.4%
United States	4.2%	4.0%	4.7%	5.8%	6.0%	5.4%

Source: U.S. Department of Labor, Bureau of Labor Statistics (p) preliminary

Housing Units

MSA	2000	2001	2002
Austin, TX	496,004	526,354	541,781
Charlotte, NC	616,213	n/a	n/a
Huntsville, AL	148,318	149,409	151,862
Raleigh, NC	495,058	519,223	536,359

Source: U.S. Census Bureau

Households

MSA	2000	2001	2002
Austin, TX	467,791	495,385	495,135
Charlotte, NC	575,527	n/a	n/a
Huntsville, AL	132,673	130,049	135,537
Raleigh, NC	462,100	485,171	486,780

Source: U.S. Census Bureau

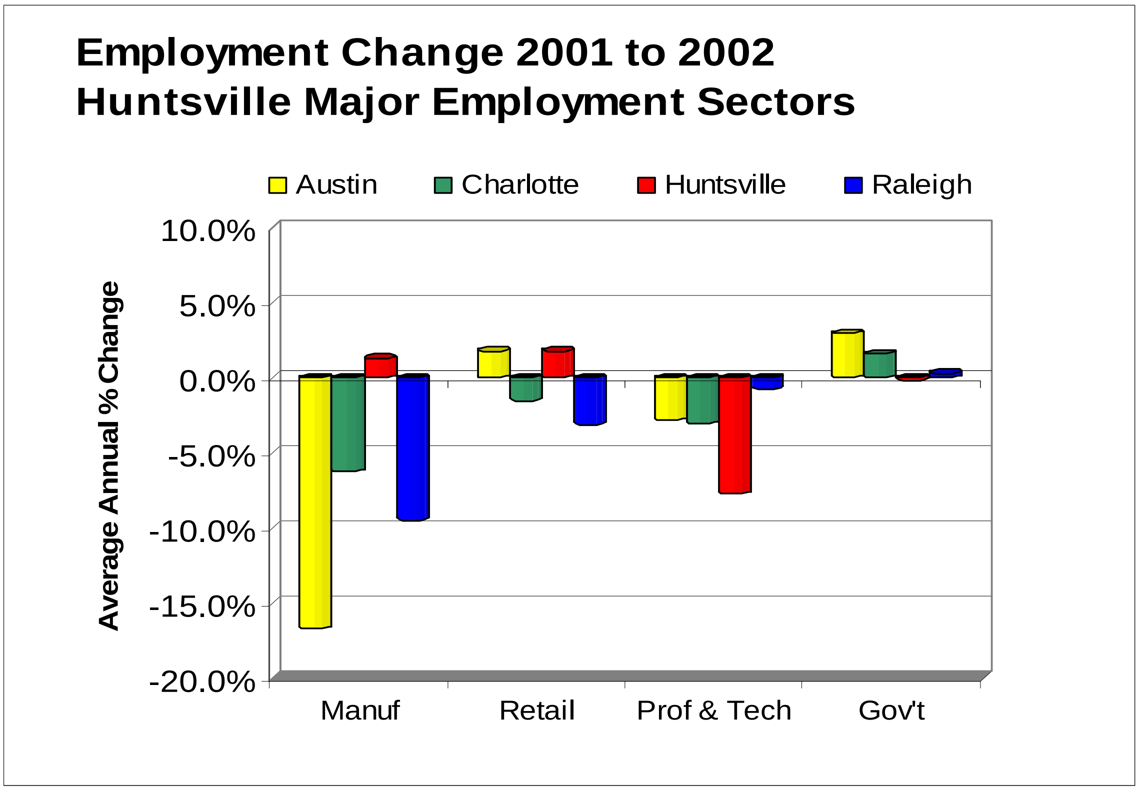
Population

MSA	1998	1999	2000	2001	2002
Austin, TX	1,155,579	1,205,898	1,249,763	1,322,488	1,349,291
Charlotte, NC	1,430,538	1,471,582	1,499,293	1,548,408	1,584,898
Huntsville, AL	336,527	339,572	342,376	348,167	353,742
Raleigh, NC	1,128,261	1,161,857	1,187,941	1,235,574	1,267,676
Alabama	4,404,701	4,430,141	4,451,601	4,466,440	4,478,896
United States	276,115,288	279,294,713	282,477,754	285,093,813	287,973,924

Source: U.S. Census Bureau

Employment Sector Changes

Changes in employment by major sector illustrate the changes in composition of a region's industrial base. There were major reclassifications of employment sectors in 2001 that was driven largely by the implementation of the North American Industrial Classification System (NAICS). Due to these changes, the comparison is for a one-year period which happens to be during the recent economic slowdown.



Overview

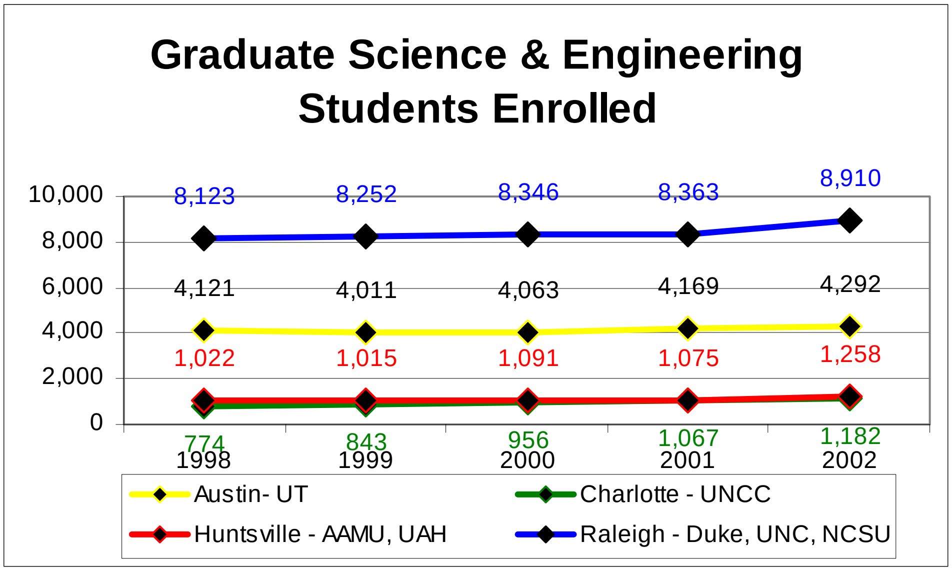
The sectors of largest employment in the Huntsville MSA in 2002 were Manufacturing (34,182), Retail (25,553), Professional & Technical (26,237), and Government (43,377). This chart compares only these sectors for all four MSAs. The detailed report by MSA includes all of the major sectors of employment in each MSA.

The drop in manufacturing employment was no surprise but the magnitude of Austin MSA's loss was significant. Similarly, Huntsville MSA's drop in the professional and technical sector should be noted.

It is also interesting to note that Government employment, Huntsville MSA's largest sector, did not decrease in any of the four metropolitan areas. Austin MSA and Charlotte MSA actually experienced an increase in government employment during this downturn.

Graduate Science & Engineering Student Enrollment

The supply of technical talent to meet the demand of a technology-based industries is an important variable in the growth potential of an economic area. Both the number of students as well as the trend in enrollment are shown for Austin MSA, Charlotte MSA, Huntsville MSA, and Raleigh MSA.



Raleigh MSA leads all four of the MSAs in both the enrollment level and rate of enrollment growth of science & engineering students. The three research universities located in the Raleigh-Durham area had a combined graduate science and engineering student enrollment in 2002 of 8,910, up from 8,123 in 1998.

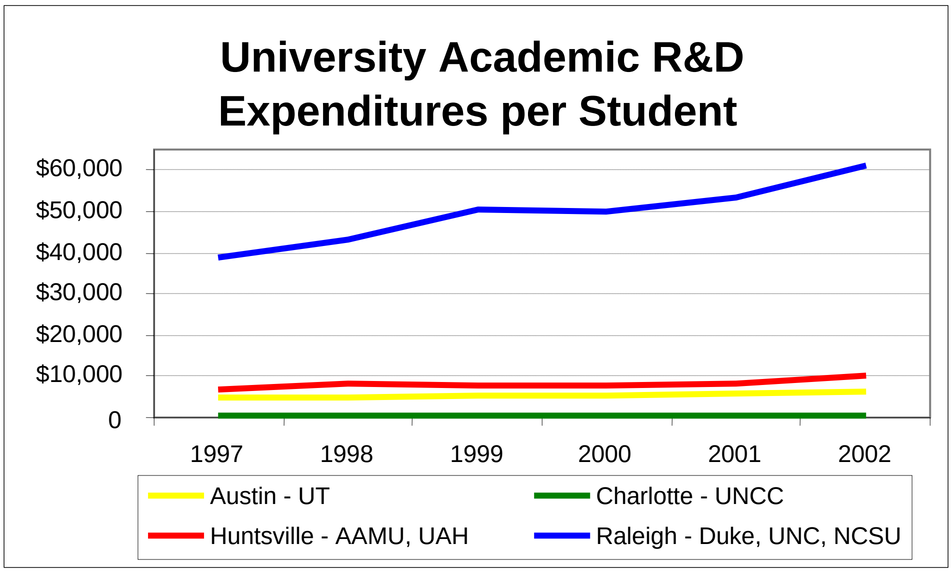
Austin MSA's University of Texas has approximately one-half of the Raleigh MSA enrollment levels. The enrollment trend is up from 4,121 students in 1998 and 4,292 in 2002.

Huntsville MSA has the third largest enrollment of graduate science & engineering students in its two research universities, Alabama A&M University and the University of Alabama in Huntsville. Enrollment increased from 1,022 students in 1998 to 1,258 in 2002.

Charlotte MSA has the fourth largest enrollment of the four MSAs in this analysis. The University of North Carolina at Charlotte has increased its enrollment from 774 in 1998 to 1,182 in 2002.

University Academic Research & Development Expenditures

Research universities are important contributors to the growth of the technology-based economies of the Austin MSA, Charlotte MSA, Huntsville MSA, and Raleigh MSA. Total R&D expenditures per student are shown here to represent the investment in new technology within an MSA. Funding per student is used to normalize the data for differences in university size. Raleigh MSA with its three major research universities and combined R&D expenditures of over $1 billion in 2002 has a sizable advantage over the other three areas. The Raleigh MSA also leads in the growth trend for R&D funding as shown below.



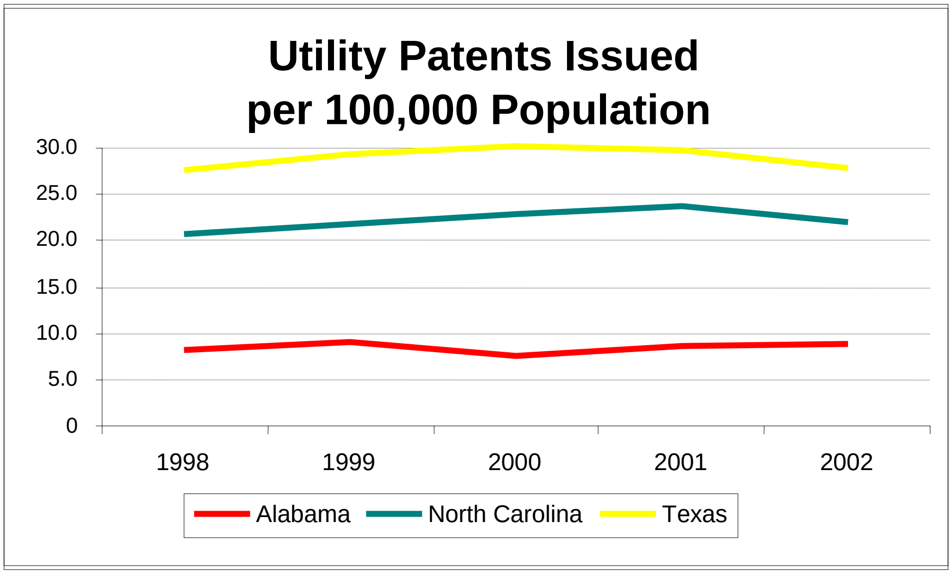
University Academic R&D Expenditures per Student

	1997	1998	1999	2000	2001	2002
Austin - UT	$4,892	$5,006	$5,278	$5,457	$5,903	$6,420
Charlotte - UNCC	$384	$396	$536	$452	$459	$509
Huntsville - AAMU, UAH	$7,011	$8,038	$8,000	$7,780	$8,290	$10,213
Raleigh - Duke, UNC, NCSU	$38,912	$43,214	$50,217	$49,772	$53,421	$61,245

Note: Previous year enrollments were used where current year enrollment was not available.

Patent Generation

Patents issued are shown here to represent the generation of new technology and the application of technology in an area. Patent generation is presented as a predictor of future economic vitality for the region. Patent data is available on a statewide basis and is normalized for differences in size of the states by using a per 100,000 population basis. Texas leads North Carolina and Alabama in the number of Utility Patents issued per 100,000 in population. The trend for all three states is relatively steady for the period 1998 to 2002.



Utility Patents Issued per 100,000 Population

	1998	1999	2000	2001	2002
Alabama	8.3	9.1	7.6	8.5	8.9
North Carolina	20.7	21.8	22.8	23.7	21.9
Texas	27.7	29.4	30.2	29.9	27.8

Detailed Analysis of:

- **Huntsville MSA**
- **Austin MSA**
- **Charlotte MSA**
- **Raleigh MSA**

Huntsville Metropolitan Area

Significant Economic Announcements (Calendar Year 2004)

- Direct TV Call Center Coming to Thornton Research Park (July 2004), 1000 jobs.
- Northrop Grumman Adds Missile Defense Jobs (June 2004), 500 jobs.
- Dynetics Headquarters in Cummings Research Park Will Add Jobs in R&D and Engineering Services (December 2004), 420 jobs, $21,000,000 investment.
- West Corporation Adding More Customer Service Representatives at Call Center (August 2004), 300 jobs.
- The Boeing Company Adding Hi-tech Jobs (September 2004), 300 jobs.
- Toyota Motor Manufacturing Alabama Expansion to Add Jobs (September 2004), 300 jobs, $250,000,000 investment.
- Embassy Suites Hotel Opening In Huntsville (July 2004), 200 jobs, $40,000,000 investment.
- Lockheed Martin Adding Jobs in Missile Defense (December 2004), 160 jobs.
- Mitchell Plastics Establishes Operation in Chase Industrial Park (April 2004), 75 jobs, $7,100,000 investment.
- Analytical Services, Inc. Adding Jobs in Engineering Services (August 2004), 63 jobs, $2,839,100 investment.
- CAS, Inc. (April 2004), 50 jobs, $7,000,000 investment.
- Brown Precision (December 2004), 30 jobs, $5,063,000 investment.
- Wolverine Tube (June 2004), 4 jobs, $100,000 investment.
- Huntsville International Airport Expansion and Renovation (June 2004), $87,000,000 investment.
- Westin Hotel (December 2004), $50,000,000 investment.
- Huntsville International Airport West Runway Extension (May 2004), $31,123,560 investment.

(Source: Chamber of Commerce of Huntsville/Madison County and The Huntsville Times)

Huntsville MSA Overview

Huntsville MSA's position relative to the other three MSAs for the past 5 years (1998 - 2003) is generally unchanged from the 10-year Baseline Analysis report completed in February 2003.

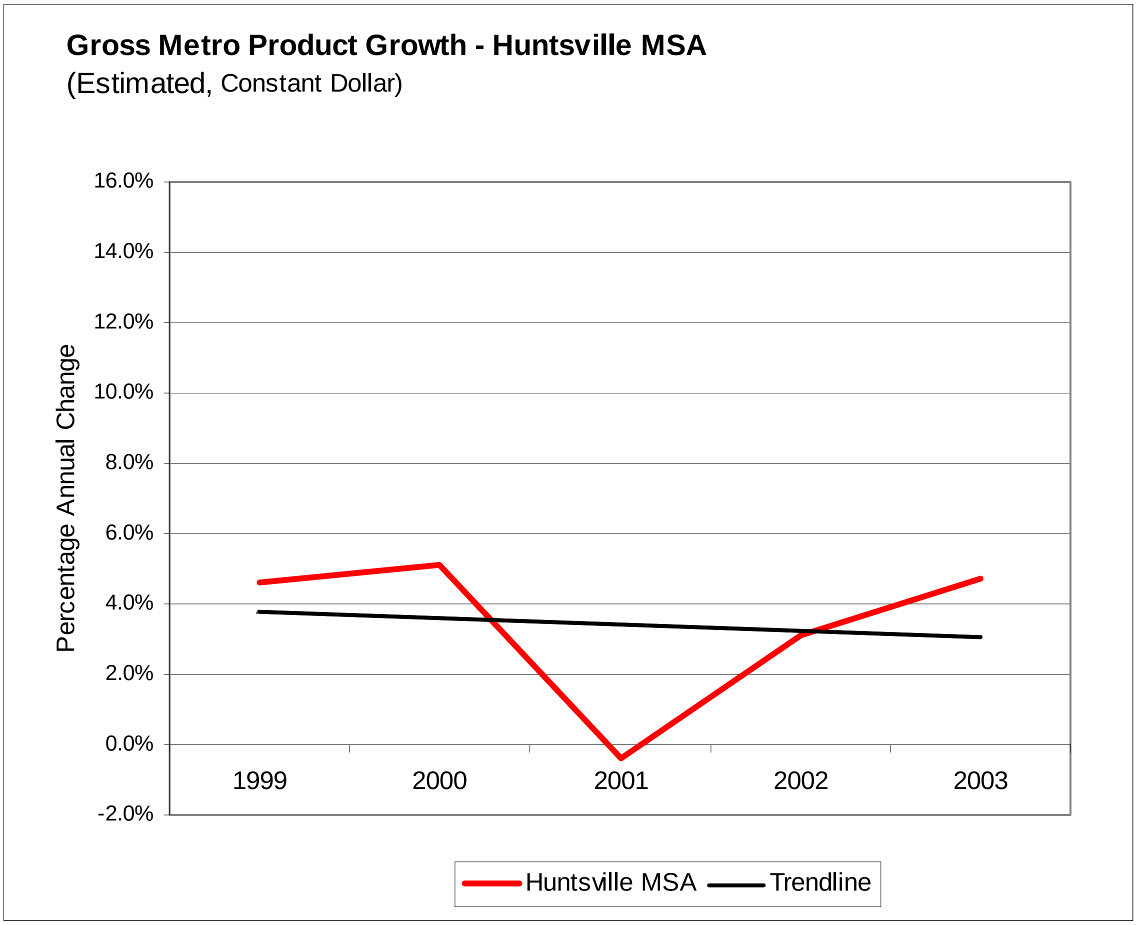
Gross Metro Product fell sharply in 1998 and 2000 but recovered significantly in 2001. The recovery from the economic slowdown began in 2001 even though the trend for GMP growth was down from 1999-2003.

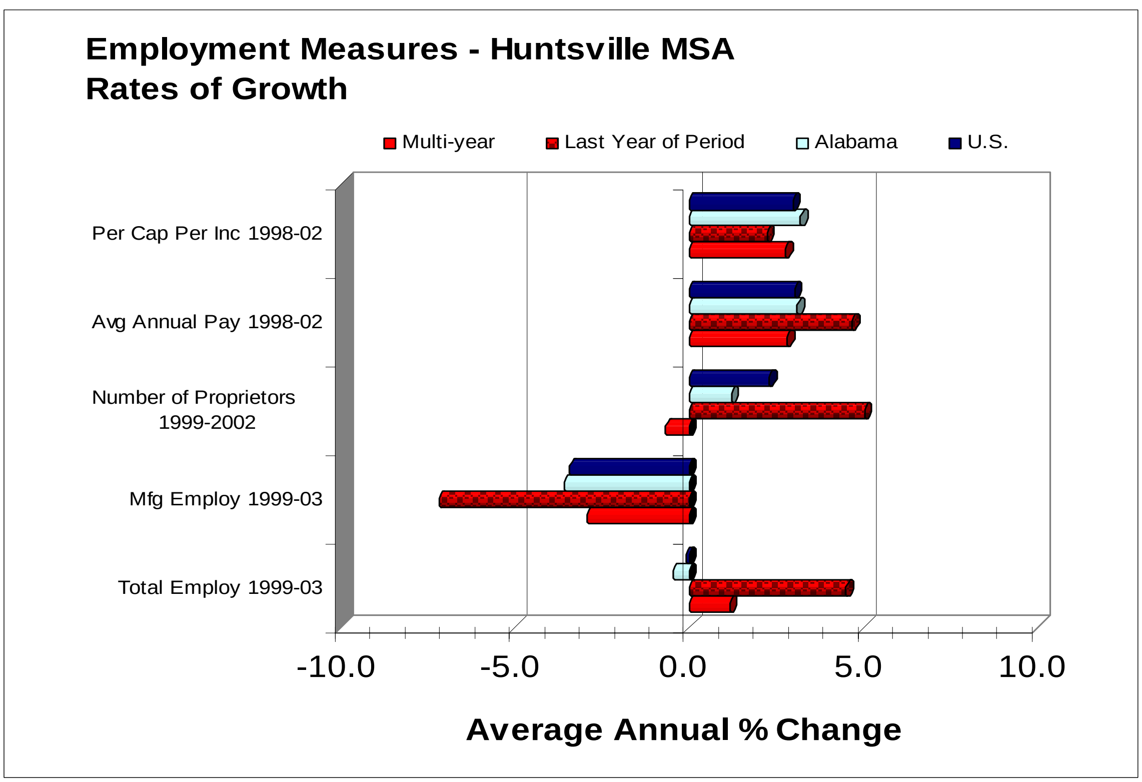
Employment Measures for Huntsville MSA in the 2002/2003 year generally show an improvement over the 5-year period analysis. Total employment recovered significantly (4.5%) during 2003 compared to a net average annual gain of 1.16% for the 1998-2003 period. The 2003 gain in total employment for Huntsville MSA led all four MSAs in this comparison. Huntsville added 9,611 jobs between 1998 and 2003. Charlotte MSA's total employment gain was a distant second at 2.6%.

Manufacturing employment loss, however, continued in the 5-year period (down 2.92%) and accelerated in 2001 (-3.3%), 2002 (-5.4%) and 2003 (-7.2%). Only Austin MSA had a larger loss (-9.1%) between 2002 and 2003.

The number of proprietors increased in the Huntsville MSA from 2001 to 2002 with a 5% growth rate to 31,661. For the analysis period 1998 to 2002, the number of proprietors in the Huntsville MSA was down -0.67% or 414. The number of proprietors in the U.S. increased 5.1% from 2001 to 2002 while Alabama proprietors increased 4.3%.

Average Annual Pay improved 2.82% to $37,631 from 1998 to 2002. Average annual increase in pay was greatest in 2000 (4.5%) and 2002 (4.7%). Per Capita Personal Income increased 2.77% to $28,959 from 1998 to 2002. However, the average annual increase in per capita personal income slowed from the high of 6.7% in 2000 to 2.2% in 2002.


Gross Metro Product Growth - Huntsville MSA
(Estimated, Constant Dollar)
Percentage Annual Change
16.0%
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
-2.0%
1999
2000
2001
2002
2003
Huntsville MSA
Trendline

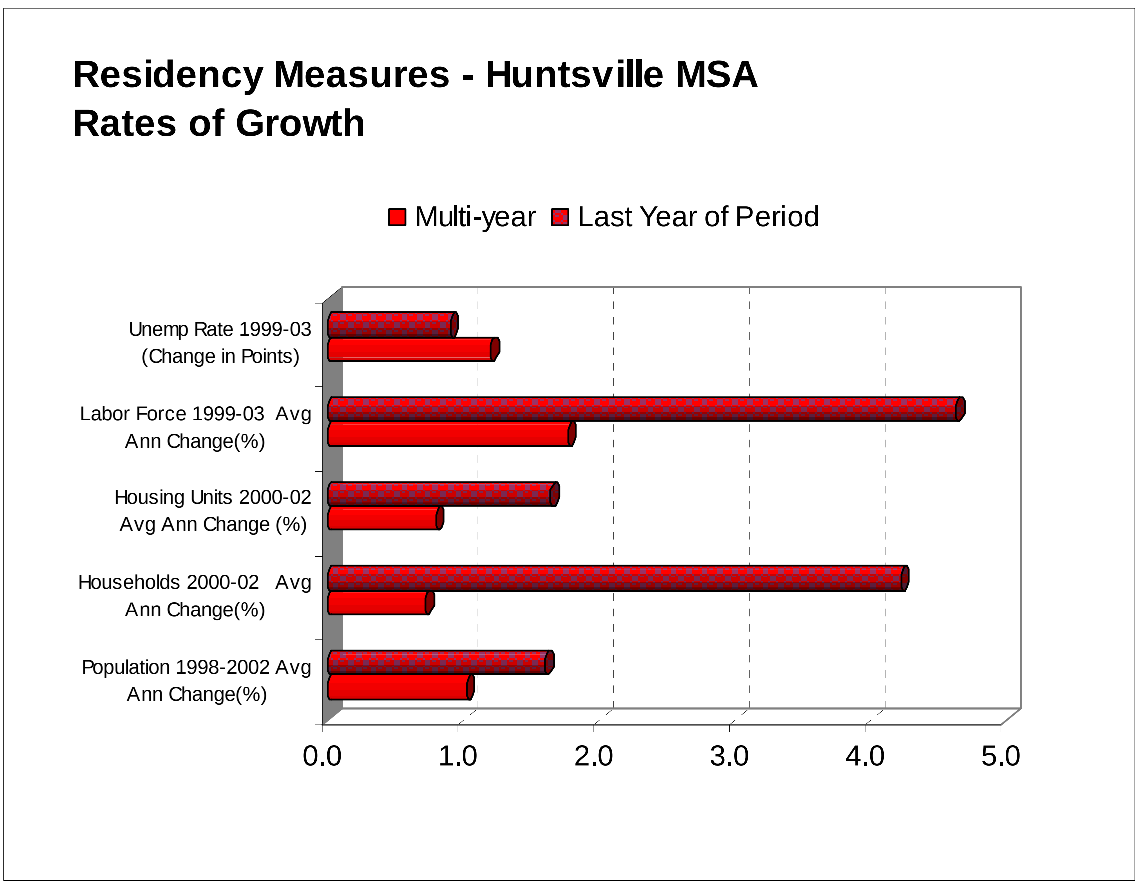

Employment Measures - Huntsville MSA
Rates of Growth
Multi-year
Last Year of Period
Alabama
U.S.
Per Cap Per Inc 1998-02
Avg Annual Pay 1998-02
Number of Proprietors 1999-2002
Mfg Employ 1999-03
Total Employ 1999-03
-10.0
-5.0
0.0
5.0
10.0
Average Annual % Change

Huntsville Metropolitan Area, continued

Population change for the Huntsville MSA was up slightly (1.02% average annual increase) for the 5-year period 1998-2002 to 353,742. Growth in population increased 1.6% in 2002. The 2003 estimated population (357,907) grew 1.2% from 2002 to 2003.

The number of households grew significantly (4.2%) between 2001 and 2002. For the three year period 2000 – 2002, households grew at an average annual rate of 0.72% to 135,537. Housing units grew at (0.8%) about the same average annual rate as households for the 3-year period. However, housing unit growth (1.64%) more closely matched the household growth (0.72%) between 2001 – 2002.

Labor force change in the Huntsville MSA experienced a slowdown in 2002 with a -0.7% loss. However for the 5-year period 1999-2003, total labor force grew 1.77% to 184,177. Huntsville MSA's annual unemployment rate for 2003 was 4.5% but was more stable and therefore experienced the least improvement of the four MSAs in this comparison. For the 1999-2003 period, Huntsville MSA's unemployment rate increased 1.2 points, Alabama increased 1.0 points and the U.S. unemployment rate increased 1.8 points.

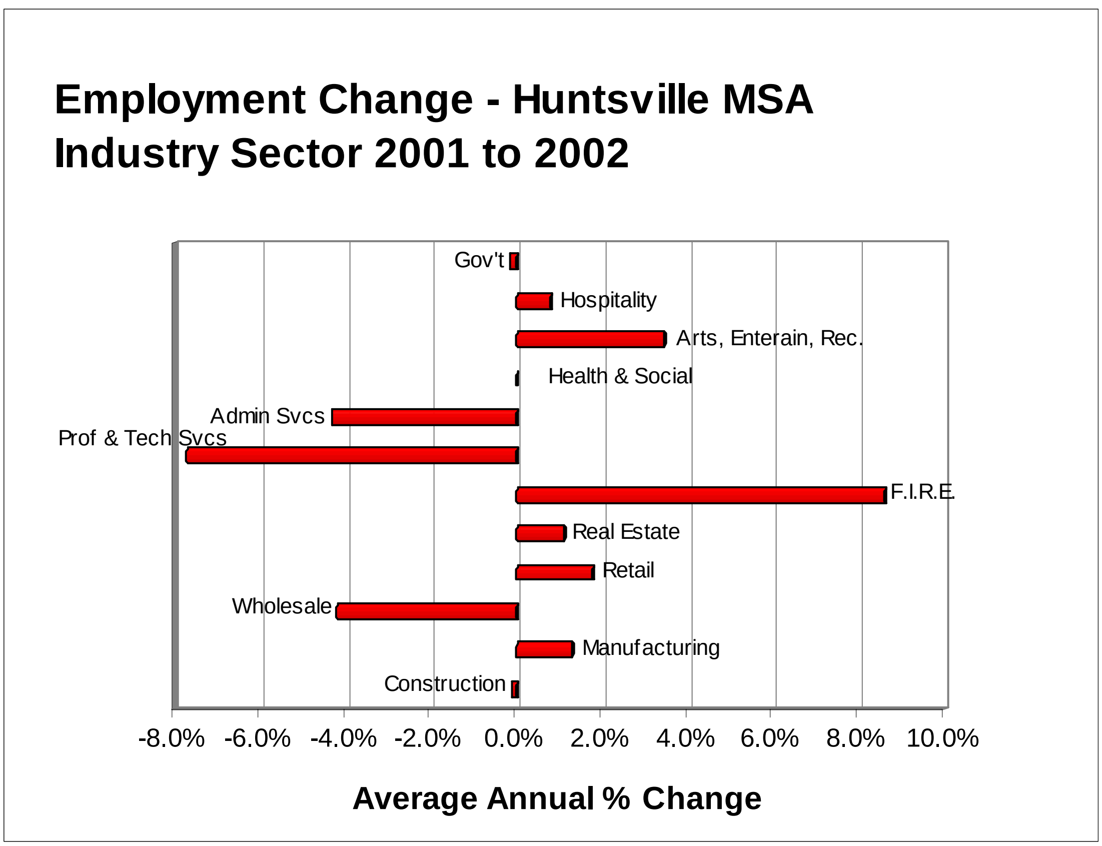


Huntsville Metropolitan Area, continued

Changes in employment by major sector illustrate the changes in composition of a region's industrial base. There were major reclassifications of employment sectors in 2001 that was driven largely by the implementation of the North American Industrial Classification System (NAICS). Due to these changes, the comparison is for a one-year period which happens to be during the recent economic slowdown.

The largest gains occurred in the Real Estate (909 jobs), Retail (446 jobs) and Manufacturing (436 jobs). However on a percentage basis, the Finance, Insurance, and Real Estate (F.I.R.E.) sector grew the most at 8.6% (58 jobs). Losses in the Professional and Technical Services sector (-7.7%, -2,194 jobs) are most significant as this sector comprises a significant component of the MSA's technology-based jobs. Government employment was basically flat with a decline of 66 jobs.

Several new employment sectors appeared in the 2001 reclassification. One that is interesting and possibly relevant is the Arts, Entertainment, and Recreational sector. In the Huntsville MSA, this sector grew 3.5% to 2,578 jobs. This was second only to Raleigh MSA (6.4%) in terms of average annual growth rate.



Austin, Texas Metropolitan Area

Significant Economic Announcements (Calendar Year 2004)

- Home Depot Technology Center to Employ Engineers, Programmers, and Software Developers (July 2004), 500 jobs, $1,000,000,000 investment.
- Bernard Harris Publishing Adding Jobs in Directory Publishing (May 2004), 150 jobs.
- TASUS to Open Plastic Injection Mold Manufacturing Plant (January 2004), 100 jobs, $6,000,000 investment.
- Applied Micro Circuits Corp. Will Add Jobs In Computer Chip Design and Marketing (Summer 2004), 100 jobs.
- Midway Games Adding Jobs in Computer Gaming Industry (Fall 2004), 50-100 jobs.
- 360 Commerce (March 2004), 50-75 jobs.
- Opus Healthcare (Summer 2004), 50 jobs.
- ClearCube Technology (Fall 2004), 43 jobs.
- GTI Coatings (September 2004), 38 jobs, $1,000,000 investment.
- Molecular Imprints (Summer 2004), 37 jobs.
- Spinal Concepts (April 2004), 30 jobs.
- NetQoS (Fall 2004), 30 jobs.
- Texas Neurorehab Center (April 2004), 27 jobs.
- Calply (Summer 2004), 25-30 jobs.
- Northgate Innovations (April 2004), 20 jobs.
- PharmaForm (April 2004), 20 jobs.
- Convio (July 2004), 15-20 jobs.
- MessageOne (Fall 2004), 15 jobs.
- QuickArrow (Fall 2004), 10 jobs.
- Zebra Imaging (Fall 2004), 10 jobs.
- Acoustical Resources (April 2004), 6-10 jobs.
- Apple Expands to 240,000 square feet of space (May 2004)
- National Instruments Corp Adds 100+ jobs (April 2004)
- Sematech Receives $40 million from Texas Enterprise Fund (March 2004)
- Wireless New Start, Aleron, Raised $31.5 million in Venture Capital (Jan. 2004)
- Greater Austin Chamber Launches New $3.5 million Marketing Campaign for 2004-2008.
- Zimmer Holdings Orthopedic Plant Closes – Loss of 550 jobs
  (Sources: Austin American-Statesman and Greater Austin Chamber of Commerce)

Austin MSA Overview

Austin MSA economic performance measures for the past 5 years indicate a period of great turbulence in its economy lead by the loss of manufacturing and technology jobs. However, the labor force, population and housing growth continued growing beyond the depth of the economic slowdown. It appears as though residents remained in the MSA even after the loss of a job.

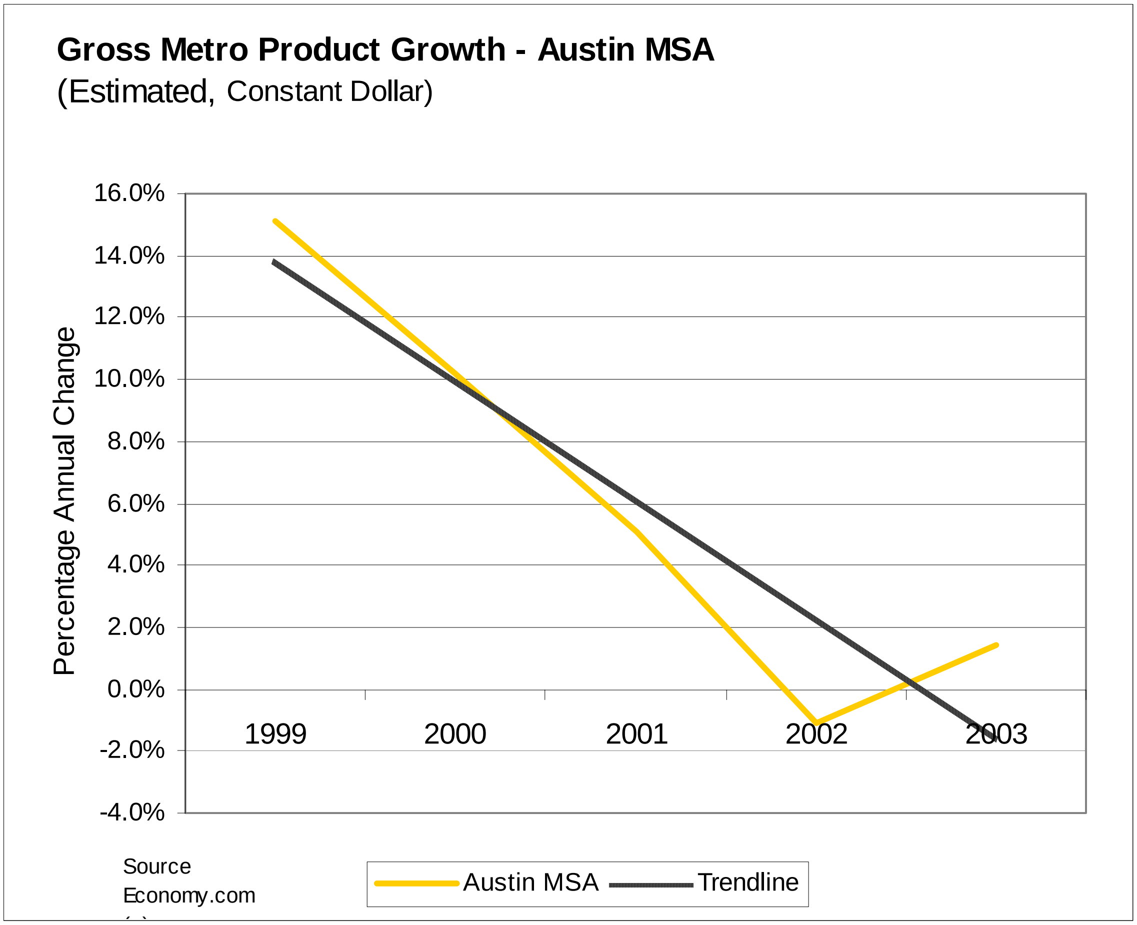
Gross Metro Product annual growth shrank from 1999 to 2002 but increased in 2003. The growth rate declined one year longer than the other three MSAs compared. Austin's 2003 increase was also the least of the MSAs.

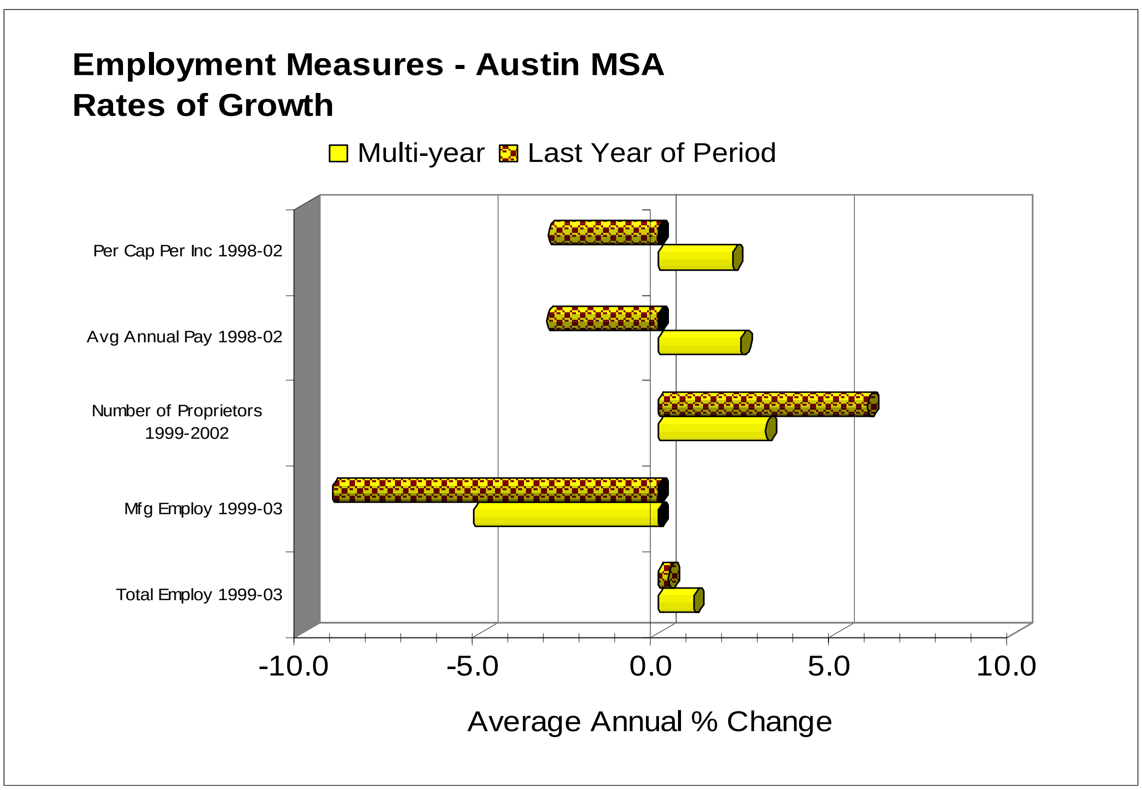
Employment measures for the 2002/03 timeframe generally show a significant change of direction from the 5-year trend. Although total employment has been relatively flat (0.5% , -1.0%, 0.3%) since 2001, the strength of 1998, 1999, and 2000 resulted in a 1.0% average annual growth rate for the period 1999-2003 to 727,194 persons employed. Austin MSA trailed all three other areas in this comparison for average annual growth in total employment.

Manufacturing employment took a disproportionate loss of 25,100 jobs shrinking from 82,800 jobs (11.3% of total employment) in 2000 to 57,700 jobs (7.9% of total employment) in 2003.

The number of proprietors increased each year since 1999 with an average annual growth of 3.02% for the 4-year period. The strongest increase came in 2002 with a 5.9% annual growth to 162,635 proprietors. The numbers suggest that the entrepreneurial spirit in the Austin MSA did not die with the employment layoffs. The number of proprietors in the U.S. increased 5.1% from 2001 to 2002.

Average Annual Pay and Per Capita Personal Income both increased over the 5-year period at an average annual rate of 2.3% and 2.09% respectively. However, the growth rate was highest in 1998 and shrank each of the remaining years with a net reduction of -3.1% in both average annual pay and per capita personal income during 2002.


Gross Metro Product Growth - Austin MSA
(Estimated, Constant Dollar)
Percentage Annual Change
16.0%
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
-2.0%
-4.0%
1999
2000
2001
2002
2003
Source
Economy.com
Austin MSA
Trendline


Employment Measures - Austin MSA
Rates of Growth
Multi-year
Last Year of Period
Per Cap Per Inc 1998-02
Avg Annual Pay 1998-02
Number of Proprietors 1999-2002
Mfg Employ 1999-03
Total Employ 1999-03
-10.0
-5.0
0.0
5.0
10.0
Average Annual % Change

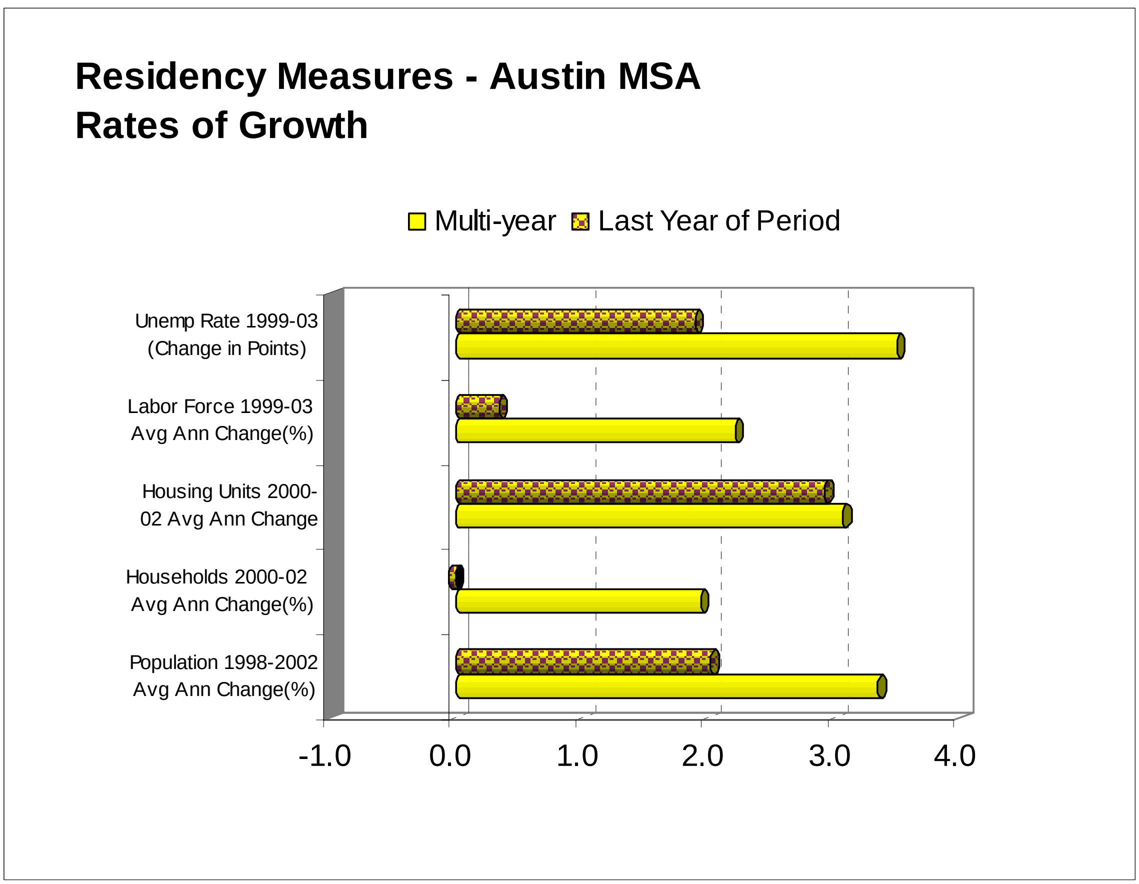
Austin, Texas Metropolitan Area, continued

Residency Measures of Population, Households, Housing Units, and Labor Force were positive for the period of comparison but the rate of growth slowed significantly in the 2001/02 period.

Population rose at an average annual rate of 3.35% for the 1998 – 2002 period to 1,377,633. The estimated 2003 numbers currently available also show continued growth.

The number of households grew 5.9% in 2001 but was down -0.1% in 2002 resulting in a 1.95% average annual growth rate for the period 2000-2002. However, the number of housing units continued to grow significantly into 2002 (2.93%) for an average annual rate of 3.08% for the 3-year period.

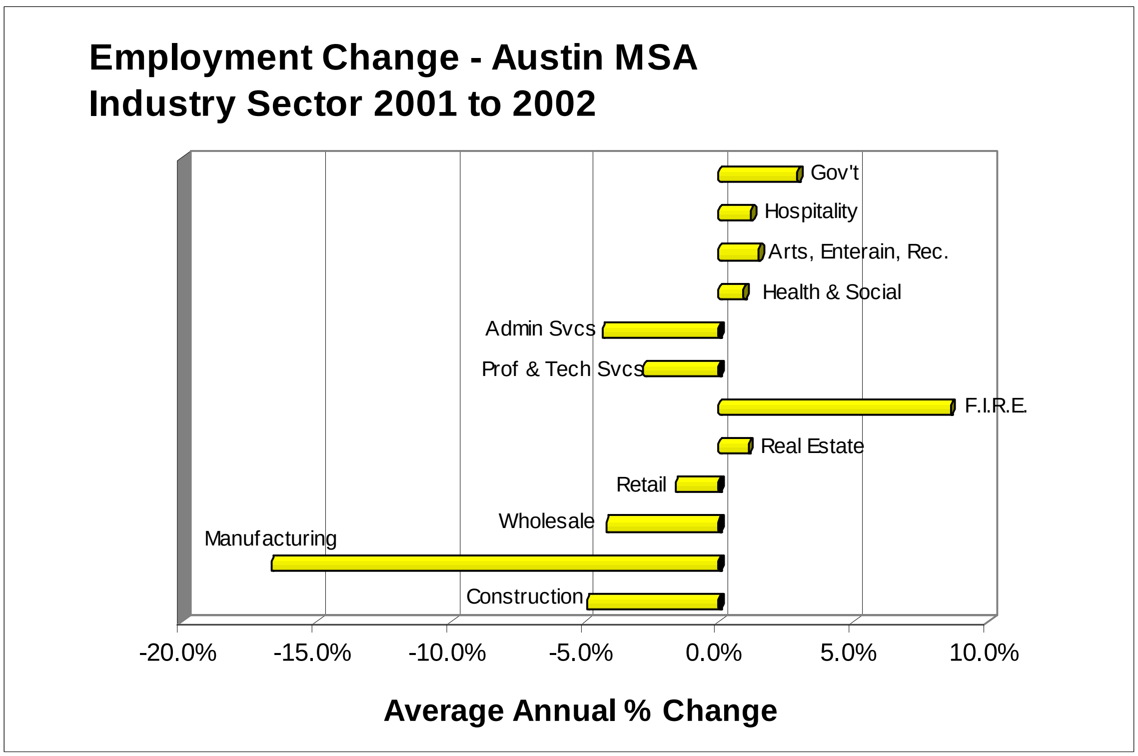
Labor Force grew through 2002 but was flat in 2003 which resulted in an average annual change of 2.22% for the 1999 – 2003 period. With the labor force growing and employment flat or shrinking depending on sector, the unemployment rate climbed to 5.7% in 2003 up from 2.0% in 2000.



Austin, Texas Metropolitan Area, continued

Changes in employment by major sector illustrate the changes in composition of a region's industrial base. There were major reclassifications of employment sectors in 2001 driven largely by the implementation of the North American Industrial Classification System (NAICS). Due to these changes, the comparison is for a one-year period which happens to be during the recent economic slowdown.

The largest percentage change in an employment sector occurred in the F.I.R.E. (increased 8.6% to 5,326 jobs) and Manufacturing (decrease of 16.7%) during 2002. Austin MSA's largest employment sector is Government at 147,014 in 2002 which increased 4,200 jobs in the same period. Austin MSA lost 2,000 jobs in the Professional/Technical sector while Real Estate (909) and Hospitality (689) sectors experienced large increases. Arts, Entertainment and Recreation also increased 252 jobs to a total of 17,298.



Charlotte, North Carolina Metropolitan Area

Significant Economic Announcements (Calendar Year 2004)

- Freightliner Adds 600 Jobs (June 2004)
- Time Warner Cable Adding Jobs at Corporate Service Center (March 2004), 350 jobs, $36,000,000 investment.
- Premier, Inc. Adding Jobs in Hospital Supply Purchasing (March 2004), 270 jobs.
- Viscotec to Add 140 Jobs in Burke County (May 2004), Auto products, $20 million investment
- US Airways Training Facility Moving to Charlotte (June 2004), 130 jobs.
- Pavestone Company, A Concrete Manufacturing Company, Will Add Jobs in Management, Sales, Administration and Production (January 2004), 100 jobs, $1,500,000 investment.
- Framatome ANP Adding Engineering Jobs (March 2004), 100 jobs, $4,000,000
- Rubbermaid Foodservice Products Adding Administrative and Professional Jobs (May 2004), 100 jobs.
- Sygma Network Adding Jobs in Food Service Distribution (November 2004), 100 jobs.
- Black & Decker Distribution Center to Add Jobs (June 2004), 100 jobs.
- Illinois Tool Works Adding Jobs in Manufacturing (February 2004), 75-100 jobs, $10,000,000 investment.
- UCS Sprint, Inc. moves HQ to Gaston County (May 2004), 65 jobs, $3 million investment
- 84 Lumber (June 2004), 30 jobs, $4,000,000 investment.
- Blue Bell Ice Cream (September 2004), 30 jobs.
- Merck & Co. (April 2004), 25 jobs, $20,000,000 investment.
- Stark Carpet Corporation (October 2004), 25 jobs.
- Southern Ideal Door (July 2004), 20-25 jobs.
- Littler Mendelson (January 2004), 6 jobs.
- Amsino International (February 2004), 6 jobs.
- VSAmerica Inc. (March 2004), 3 jobs.
- Annual (Econ. Dev.) Fundraising Goal Topped at $4.3 Million (June 2004)
- N.C. Legislature Funds Emergency Economic Development Incentive Fund (May 2004), $20 million

  (Sources: The Charlotte Observer and the Charlotte Chamber of Commerce)

Charlotte MSA Overview

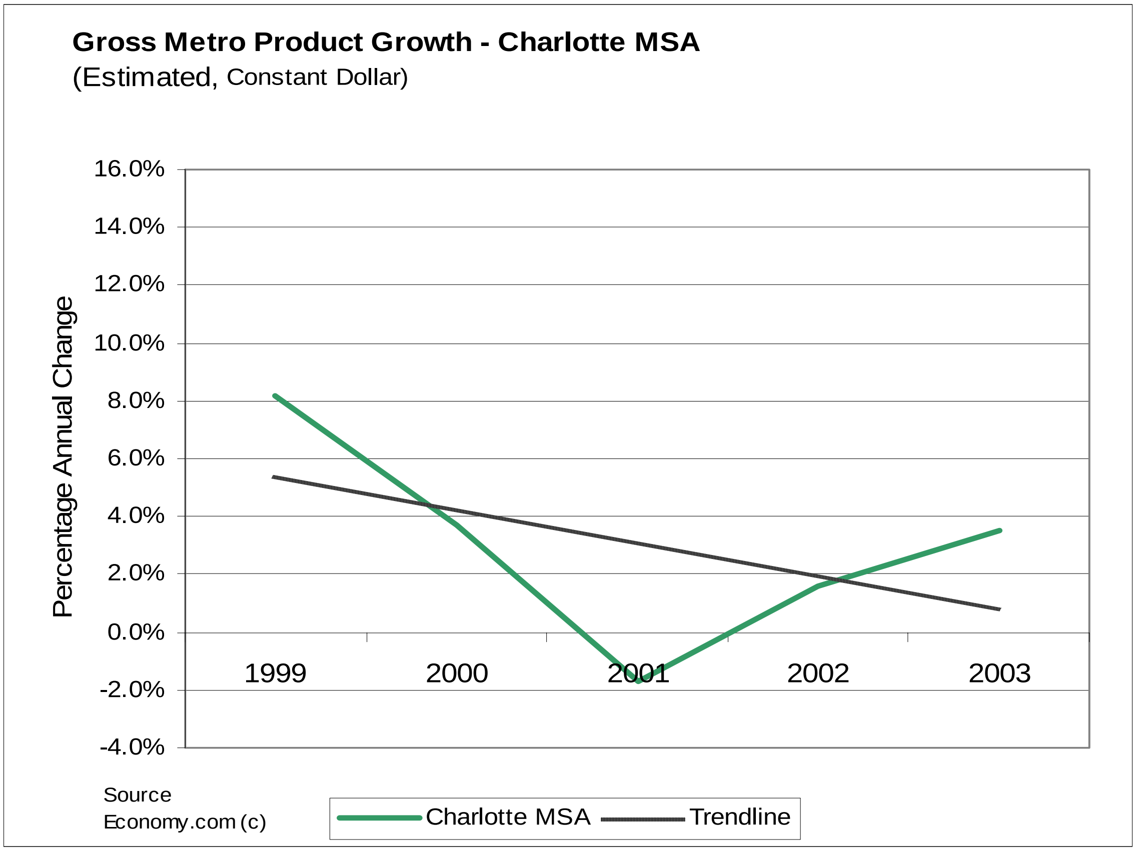
Charlotte MSA has the largest population at 1,585,000 in 2002 of the four MSAs in this comparison. Economic performance slowed during the recession but continued growing in most measures.

Gross Metro Product growth rate slowed from 1999 to 2001 but increased 2002 and 2003. The sharp decline in the rate of growth from 1999 to 2001 yielded a downward trend for the 5 year period.

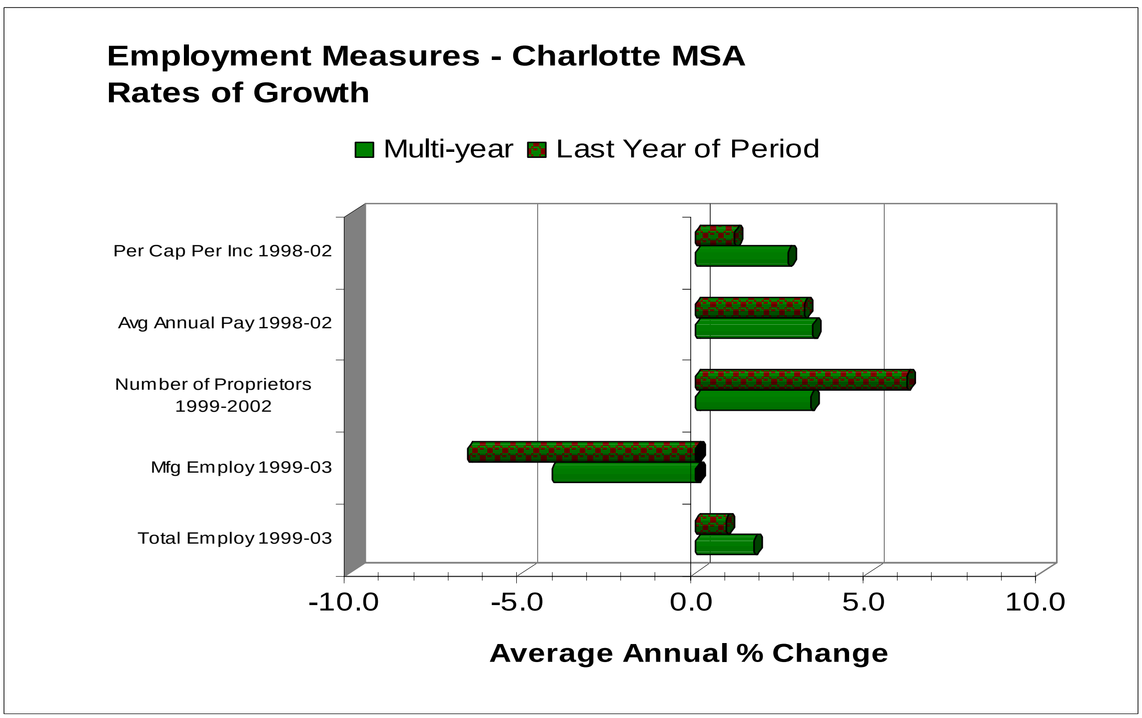
Employment Measures were generally positive for the 5 year period of review but manufacturing employment took a significant hit from 1999–2003 dropping at an average annual rate of -4.17% (30,900 jobs in total over the five year period) to 106,200 in 2003. This average annual loss was the highest of the four MSAs compared even though Charlotte MSA had the most manufacturing jobs in 1998 at 137,100.

The number of proprietors increased each year from 1999-2002 for a 2002 total of 135,637. Growth jumped from 3.7% in 2001 to 6.1% in 2002 placing Charlotte second to only Raleigh MSA for the same period. The number of proprietors in the U.S. increased 5.1% from 2001 to 2002.

Average Annual Pay and Per Capita Personal Income grew in each year from 1998 to 2002 but at a slowing rate. Average annual pay grew at an average annual rate of 3.38% to $38,744 while per capita personal income grew at an average annual rate of 2.65% to $33,083.



Gross Metro Product Growth - Charlotte MSA
(Estimated, Constant Dollar)
Percentage Annual Change
16.0%
14.0%
12.0%
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
-2.0%
-4.0%
1999
2000
2001
2002
2003
Source
Economy.com (c)
Charlotte MSA
Trendline



Employment Measures - Charlotte MSA
Rates of Growth
Multi-year
Last Year of Period
Per Cap Per Inc 1998-02
Avg Annual Pay 1998-02
Number of Proprietors 1999-2002
Mfg Employ 1999-03
Total Employ 1999-03
-10.0
-5.0
0.0
5.0
10.0
Average Annual % Change

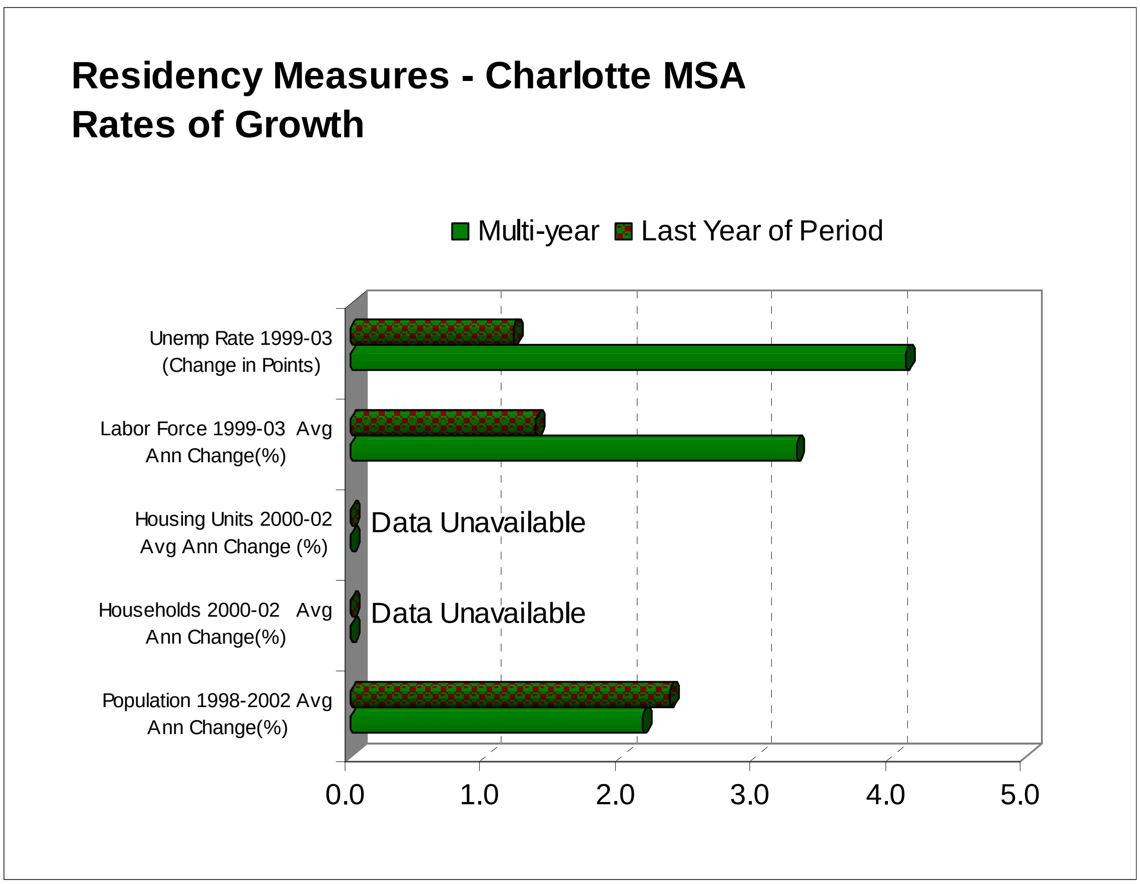
Charlotte, North Carolina Metropolitan Area, continued

Population grew in the Charlotte MSA at an average annual rate of 2.16% from 1998 to 2002. However, the rate of increase slowed to 2.4% in 2002 from 3.3% in 2001.

Household and Housing Unit information is not currently available for the Charlotte MSA for the 2000-2002 period.

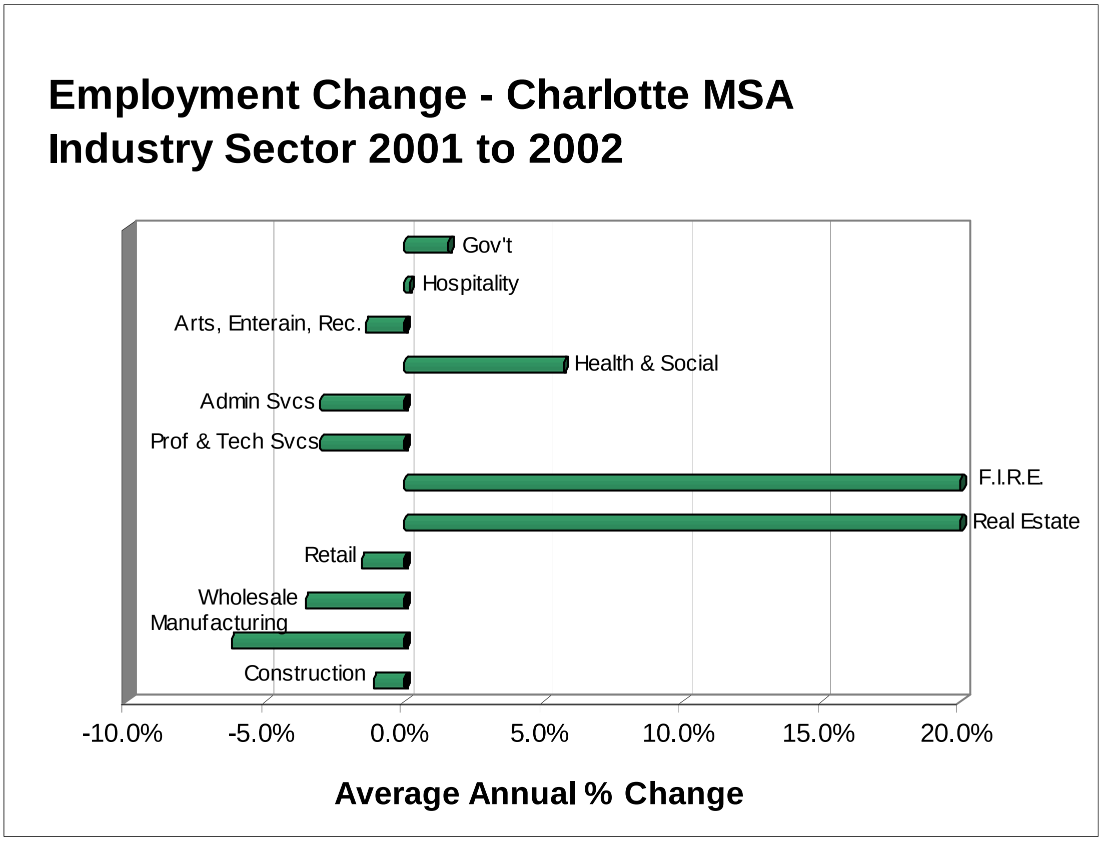
Labor Force grew each year from 1998 through 2003 to 871,677 for an average annual rate of 3.29% second only to Raleigh MSA. The rate of growth dropped from 8.9% in 2000 to 1.6% in 2001, 0.9% in 2002, and 1.4% in 2003.

Annual Unemployment Rate for the Charlotte MSA increased to 6.7% or 4.1 points from 1999 to 2003, the most of the four MSAs compared. Nationally, the U.S. unemployment rated grew only 1.8 points in the same period. In 2003, the unemployment rate increased only 0.4 points from 2002.



Charlotte, North Carolina Metropolitan Area, continued

Employment Sector changes for the Charlotte MSA were mixed as shown in the chart below. The F.I.R.E. sector grew by 21.6% (12,210 to 61,938 jobs) from 2000 to 2002. Real Estate sector grew 24.6%, slightly more percentage-wise but had approximately one-half the growth (5,666 jobs) of F.I.R.E. Sectors with the largest number of jobs lost were Manufacturing (6,711 jobs), Wholesale (2,017), and Retail (1,545).



Raleigh, North Carolina Metropolitan Area

Significant Economic Announcements (Calendar Year 2004)

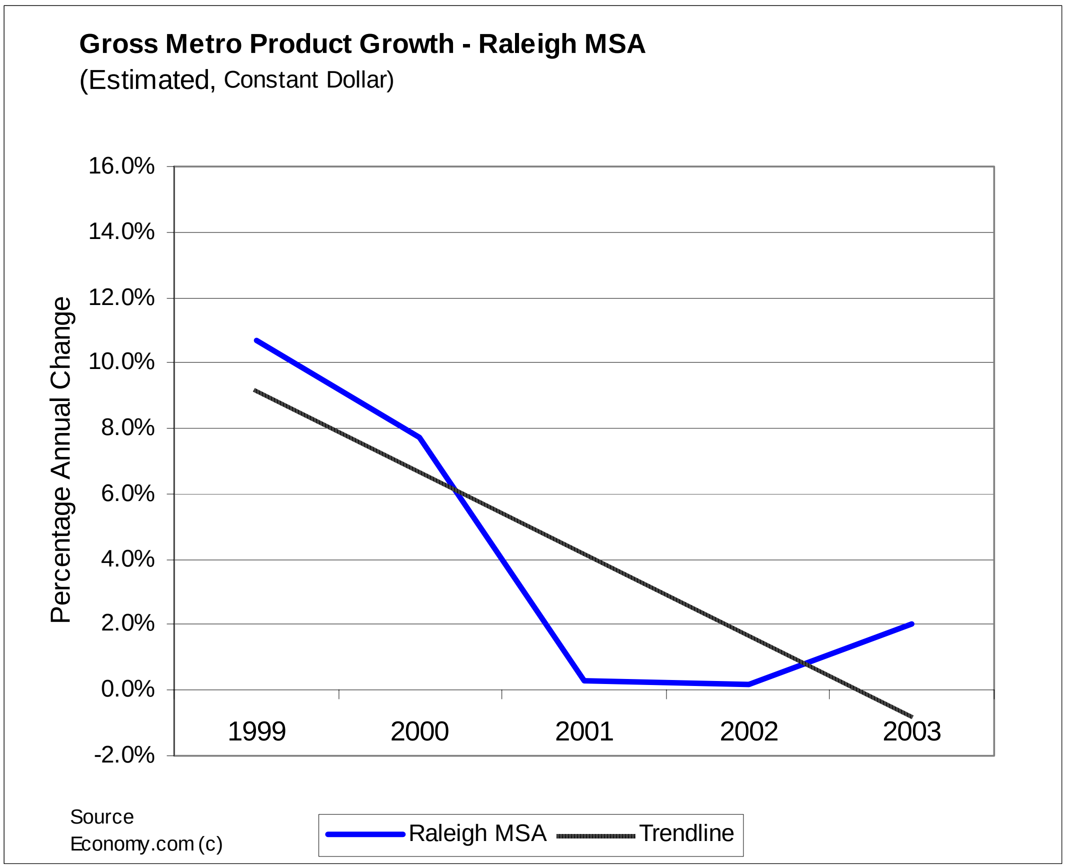
- Silver Line Opening Window Manufacturing Plant (December 2004), 800 jobs, $21,000,000 investment.
- PrimeTV/Gatelinx Opening Call Center (1st Quarter 2004), 500-1000 jobs.
- Credit Suisse First Boston Creating Jobs in Software Development and Securities Trades Processing (October 2004), 400 jobs, $100,000,000 investment.
- Network Appliance Expanding and Creating Jobs in Technology Storage Solutions Industry (3rd Quarter 2004), 361 jobs.
- CREE Adding Jobs In Semiconductor Manufacturing (May 2004), 300 jobs, $306,000,000 investment.
- Harris Microwave Adding Jobs In Communications (June 2004), 258 jobs, $1,125,000 investment.
- Merck & Co. Opening Vaccine Manufacturing Plant (June 2004), 200 jobs, $300,000,000 investment.
- Synthon Pharmaceuticals Invests in New Research Facility (June 2004), 157 jobs, $10.3 million investment
- Good Technologies Opening Call Center (November 2004), 150 jobs, $1,150,000 investment.
- Saks Fifth Avenue Creating Retail Sales Jobs (3rd Quarter 2004), 130 jobs.
- Red Hat (2nd Quarter 2004), 100 jobs.
- Qualcomm Creating Jobs In Digital and Wireless Technology Industry(1st Quarter 2004), 90 jobs.
- Pergo Adding Floor Manufacturing Jobs (2nd Quarter 2004), 86 jobs.
- Parata Systems Opening Customer Service Call Center (September 2004), 75 jobs, $75,000 investment.
- Catalyst Solutions (August 2004), 50 jobs, $1,032,300 investment.
- Aeroglide Corporation (2nd Quarter 2004), 40 jobs.
- Semtech (1st Quarter 2004), 40 jobs.
- Aqua America (4th Quarter 2004), 30-60 jobs.
- Skanska USA Building Inc. (2nd Quarter 2004), 30-50 jobs.
- Adherex (January 2004), 30 jobs, $1,275,000 investment.
- Knowledge Vector (June 2004), 25 jobs, $100,000 investment.
- AlphaVax (March 2004), 20 jobs, $4,500,000 investment.
- International Rectifier Opens a Design Center in Cary (March 2004)
- TapRoot, Wireless Software, Secures $7 million in Venture Capital (April 2004)
- Greater Raleigh Chamber of Commerce **Competitive Edge[3]** Raises $8.5 million over 5 years to create 50,000 jobs (May 2004)
- Andrx, Generic Drug Maker, Again Delays Plans to Open Plant (June 2004)
- Winn Dixie Closes Its Regional HQ in Clayton (April 2004), 378 jobs lost
- N.C. Legislature Funds Emergency Economic Development Incentive Fund (May 2004), $20 million

  (Sources: The News & Observer, Wake County Economic Development Program, Greater Raleigh Chamber of Commerce, and the Greater Durham Chamber of Commerce)

Raleigh MSA Overview

Raleigh MSA generally faired best in most economic performance measures of the four MSAs compared over the 1998-2003 timeframe. However, job losses and a slowing economy after 2001 have created economic challenges for the area.

Gross Metro Product was flat in 2001 and 2002 but began to grow again in 2003. The growth rate trend was down for the 1999-2003 period due primarily to the slowdown of 2001.

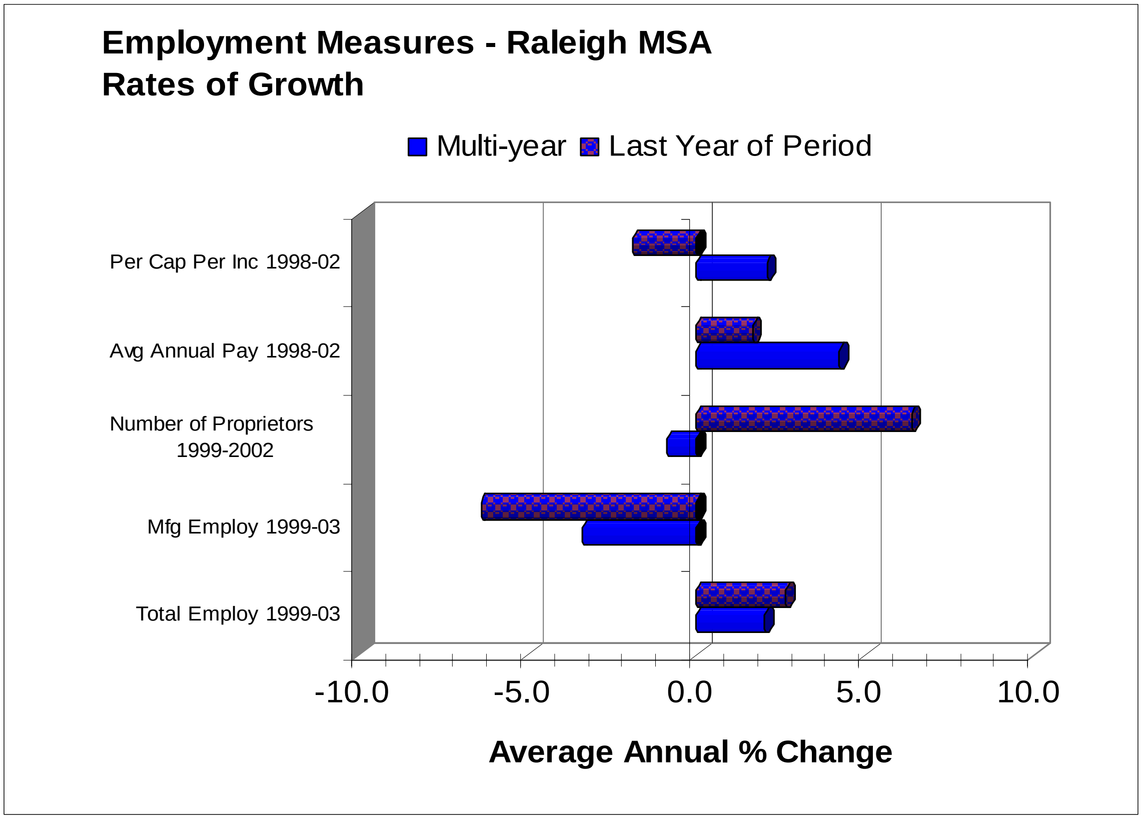


Total Employment grew by 62,498 jobs from 1999 reaching 681,933 in 2003. The 5-year average annual growth was the highest of all four MSAs at 2.02%. Jobs declined by -1.4% in 2002 but were growing again in 2003(2.6%).

Manufacturing Employment declined the most (-10,500 jobs, -12.5%) in 2002 and the losses continued in 2003 (-4,700 jobs, -6.4%) but at a slower rate of decline.

The number of Proprietors declined between 1999 and 2003 (-0.88%) but grew significantly (6.4%) in 2002 to 81,242. This was the largest increase in 2002 of all four MSAs compared.

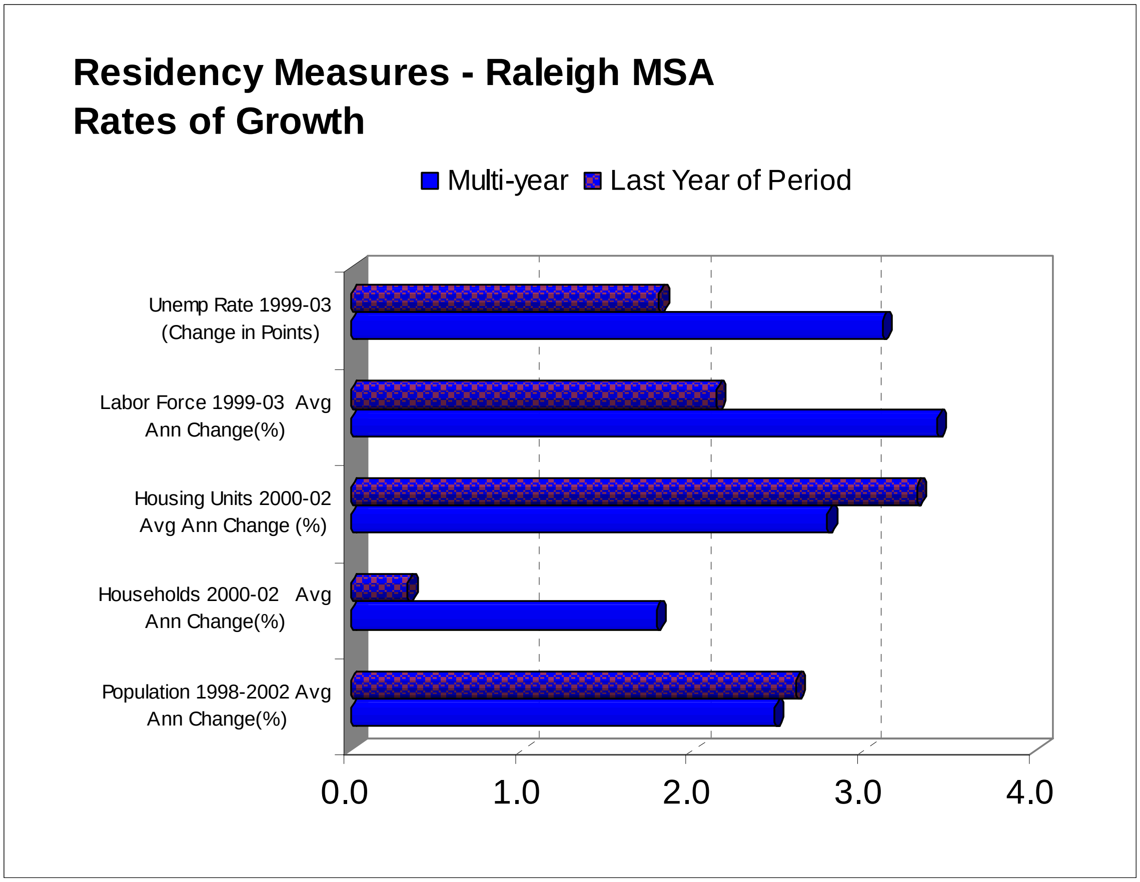
Average Annual Pay and Per Capita Personal Income grew between 1998 and 2003 but slowed significantly in 2001 and 2002. Average annual pay grew from $29,895 in 1998 to $36,200 in 2002 while per capita personal income grew from $30,148 to $36,200 for the same period. However, during 2002 per capita personal income fell by 1.9%.



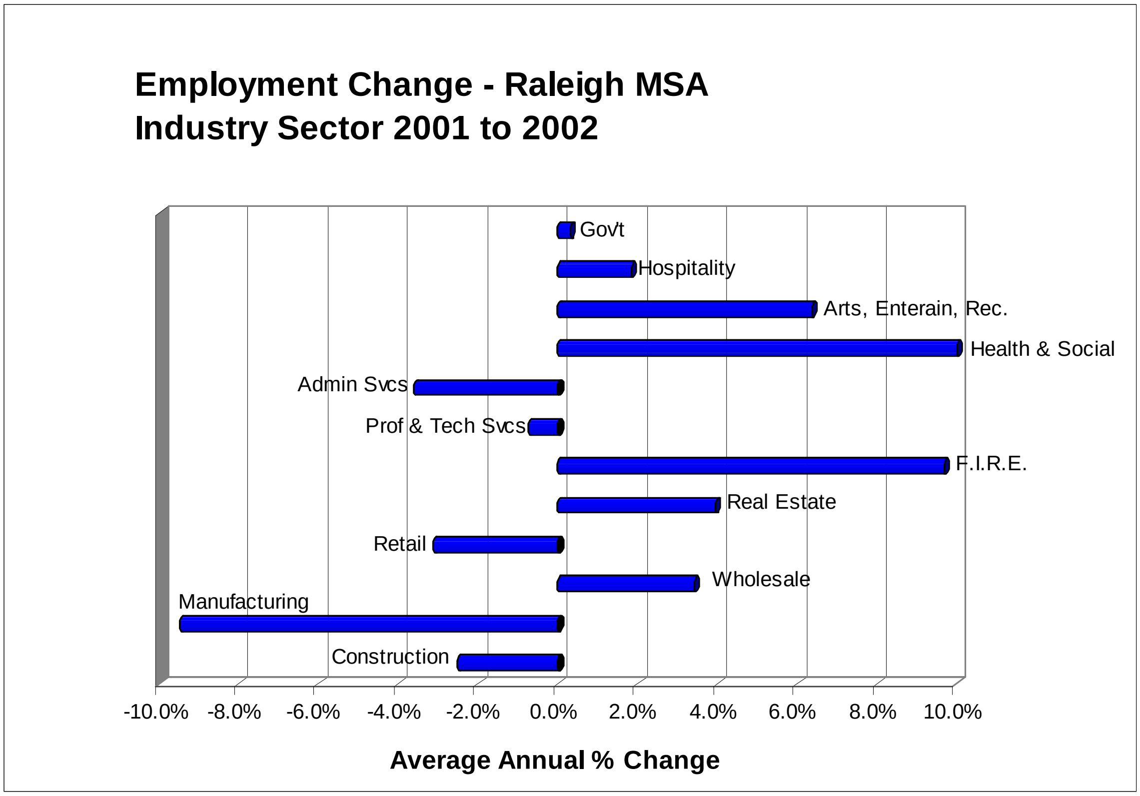
Population of Raleigh MSA grew at an average annual rate of 2.47% from 1998 to a 2002 total of 884,489. The rate of population growth increased 2.6% during 2002. Even during the economic slowdown, Raleigh MSA maintained a relatively stable population base.

Households increased at an average annual rate of 1.78% which was close to the population increase. However, Housing Units continued to grow significantly in 2001 (4.88%) and 2002 (3.3%).

Labor Force of Raleigh MSA grew at the largest rate of all four MSAs compared. For the 1999-2003 period, the average annual growth rate was 3.42%. The total labor force expanded in 2003 by 2.6% to 715,376. Annual Unemployment Rate peaked in 2002 at 5.1% and grew by 3.1 points between 1999 and 2003 (4.7%).


Residency Measures - Raleigh MSA
Rates of Growth
Multi-year
Last Year of Period
Unemp Rate 1999-03 (Change in Points)
Labor Force 1999-03 Avg Ann Change(%)
Housing Units 2000-02 Avg Ann Change (%)
Households 2000-02 Avg Ann Change(%)
Population 1998-2002 Avg Ann Change(%)
0.0
1.0
2.0
3.0
4.0

Growth in employment sectors between 2001 and 2002 was lead by Health and Social Services (10.6%) and F.I.R.E. (9.7%) while Real Estate added 3,155 jobs (4.0%). Government (83,378 jobs) and Retail (61,036 jobs) are the largest sectors but their growth was relatively flat for the period. The Professional and Technical Services sector declined by -0.7%, the least amount of all four MSAs. Arts, Entertainment, and Recreation reached 10,196 jobs in 2002.



Sources of Data and Information

Data sources were selected based on availability, and consistency of information over the time period reviewed. Most of the data is available directly from the source. The comparisons and comments are those of the UAH Office for Economic Development which retains the copyright for this report.

Anecdotal information regarding economic announcements was obtained through chambers of commerce, economic development organizations and newspapers in the respective areas.

In alphabetical order:

- Austin American-Statesman
- Chamber of Commerce of Huntsville/Madison County
- Charlotte Chamber of Commerce
- Charlotte Observer
- Economy.com – all data copyrighted.
- Greater Austin Chamber of Commerce
- Greater Durham Chamber of Commerce
- Greater Raleigh Chamber of Commerce
- The Huntsville Times
- The News & Observer – Raleigh
- U.S. Bureau of Economic Analysis
- U.S. Department of Labor, Bureau of Labor Statistics
- U.S. Census Bureau
- Wake County Economic Development Program

Contact for this Report

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University of Alabama in Huntsville
Office for Economic Development
Von Braun Research Hall A11
Huntsville, AL 35899
256.824.2605