

Chapter 4

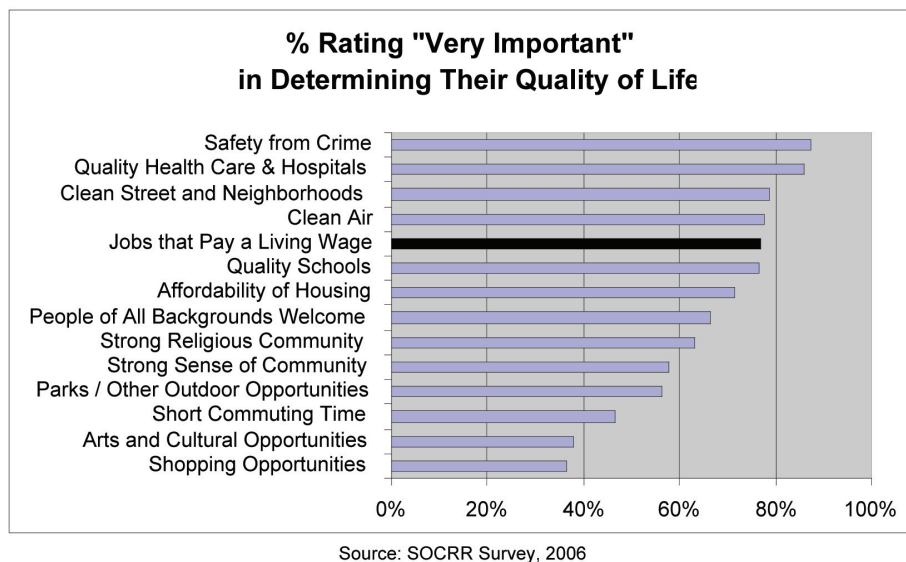
Jobs and the Economy in the Chattanooga Region

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Jobs, the Economy and Quality of Life

Jobs are critical to the vitality of the Chattanooga region. The availability and quality of jobs not only stimulates economic activity within the region, but also is essential to overall quality of life. From high-performing schools to fighting crime to creating healthy communities, jobs form the lynchpin through which all aspirations for reaching the region's full potential are connected.

The particular industrial mix of jobs that exist in the local economy is important. Census data indicates that during the 1990s cities with a large manufacturing base grew substantially more slowly than cities with high relative proportions of jobs in the services, wholesale and retail trade, finance, insurance, and real estate sectors.¹ Growth is therefore dependent not only on the number of jobs present in the community, but also on the kinds of jobs – whether they have long-term sustainability and ability to support an acceptable quality of life.



Hamilton County residents understand the connection between economic opportunity and quality of life. As part of the 2006 countywide survey, 77% of respondents indicated that the availability of jobs that pay a living wage was “very important” to their quality of life - fifth among fourteen factors.

Yet, when asked about the employment situation in Hamilton County today, in terms of quality and availability, most respondents indicated that it was either “fair” or “poor” (68%) -- as opposed to excellent or good -- 28%.

Table 1 – Employment Situation Rating

Rating	Percent
Excellent	3%
Good	25%
Fair	40%
Poor	28%
Don't Know	3%

Source: SOCRR Survey, 2006

Among African-Americans and women, there were higher levels of dissatisfaction with the availability and quality of jobs. More than half of all African-Americans- more than double the percentage of whites – rated the employment situation as “poor”.

Table 2 – Employment Situation Rating by Race

Race	Excellent/Good	Fair	Poor
White	32%	42%	22%
African American	13%	34%	53%

Source: SOCRR Survey, 2006

While 32% of men rated the current employment situation as “excellent” or ”good” and 25% rated it as “poor”, the numbers were reversed for women – with 25% rating it as “excellent” or “good” and 32% rating it as “poor”

Table 3 – Employment Situation Rating by Gender

Gender	Excellent/Good	Fair	Poor
Men	32%	40%	25%
Women	25%	39%	32%

Source: SOCRR Survey, 2006

Finally, respondents with different levels of educational attainment also differed in their assessment of the employment situation – with individuals with higher educational attainment slightly more likely to rate the employment situation as excellent or good and less likely to rate it as poor.

Table 4 – Employment Situation Rating by Educational Attainment

Education	Excellent/Good	Fair	Poor
High School Education or Less	27%	35%	34%
Some College	27%	40%	30%
College Graduate	32%	44%	21%

Source: SOCRR Survey, 2006

Measuring the Chattanooga Region's Economy

This chapter will review several indicators of economic growth in Hamilton County, the City of Chattanooga and a number of peer regions. The indicators included in this report are:

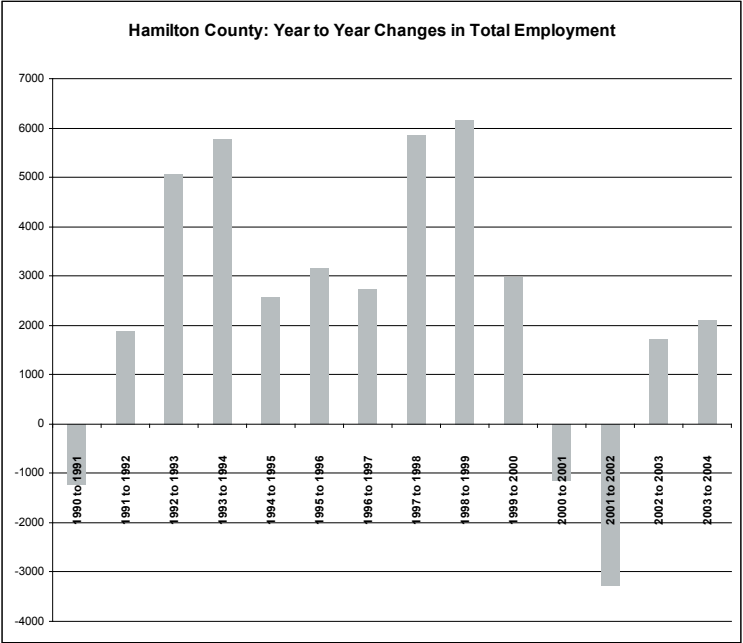
- ⊙ Employment by Sector and Occupation
- ⊙ Income
- ⊙ Educational Attainment
- ⊙ Business attraction and retention
- ⊙ Airport Activity

Jobs and the Economy in the Chattanooga Region

Employment

Examining employment by sector is perhaps one of the most telling means of determining the economic structure of a given area. Hamilton County enjoyed sustained employment growth² from 1990 to 2000. However, this trend ended in 2001, when employment declined by more than 1,000 jobs.

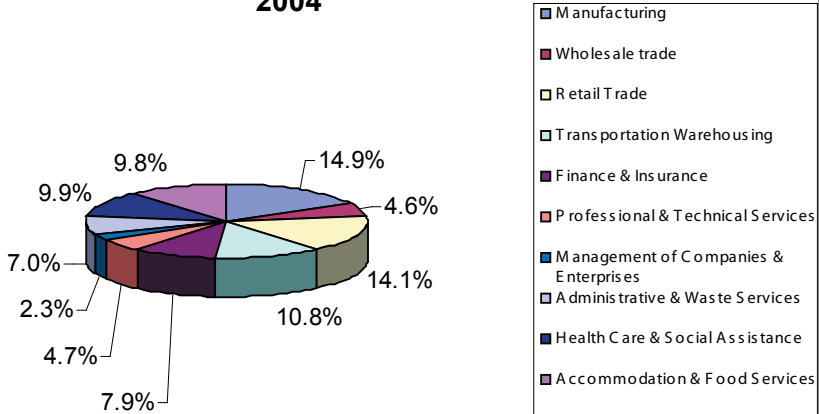
Hamilton County Year-to-Year Changes in Employment, 1990-2004



Source: U.S. Bureau of Labor Statistics

Both the local expansion and decline in employment tracked national trends. As the national economic decline continued, local declines in the overall number of jobs from 2001 to 2002 were also observed, amounting to a net loss of more than 3,000 jobs over this time period. The national economic recovery is reflected in the increased overall employment observed in the 2002-2004 time period. By 2004, there were 163,648 jobs in Hamilton County, up by 27.1% since 1990, but down by 0.4% from peak employment in 2000.

Hamilton County Share of Employment by Sector, 2004



Source: U.S. Bureau of Labor Statistics

By 2004, the leading sectors³ in Hamilton County, in terms of share of overall employment, were Manufacturing⁴ (14.9%), Retail Trade⁵ (14.1%), Transportation and Warehousing⁶ (10.8%), Health Care and Social Assistance⁷ (9.9%) and Accommodation and Food Services⁸ (9.8%) – accounting for 59.5% of all employment.

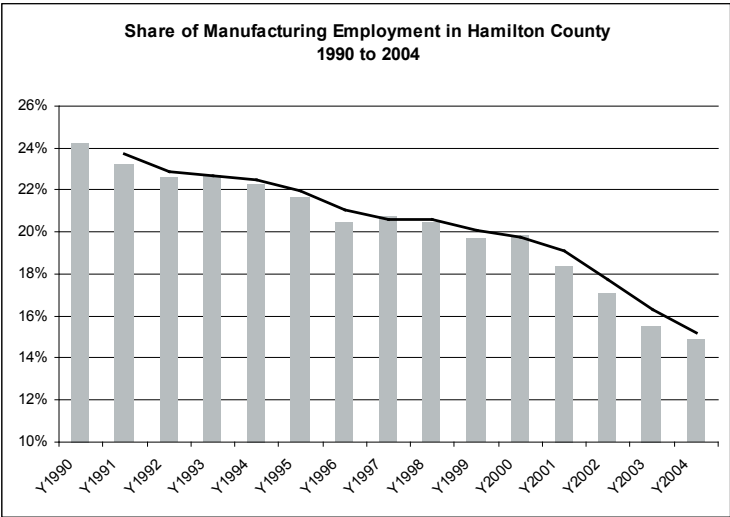
Table 5 – Employment Changes by Industry, Hamilton County

	Y1990	Y2000	Y2002	Y2004	Change 1990 to 2000	Change 2000 to 2002	Change 2002 to 2004	Overall Change 1990 to 2004
Total Employment	129,268	164,360	159,838	163,648	35,092	-4,522	3,810	34,380
Utilities	385	316	254	241	-69	-62	-13	-144
Construction	6,367	8,763	7,292	7,734	2,396	-1,471	442	1,367
Manufacturing	31,351	32,209	27,295	24,342	858	-4,914	-2,953	-7009
Wholesale Trade	7634	7,165	6,992	7,514	-469	-173	522	-120
Retail Trade	19,110	22,980	23,252	23,092	3,870	272	-160	3982
Transportation/Warehousing	4,260	17,726	17,760	17,599	13,466	34	-161	13,339
Information	2,640	2,683	2,330	2,534	43	-353	204	-106
Finance/Insurance	9,316	11,950	12,501	12,957	2,634	551	456	3,641
Real Estate/Rental/Leasing	1,851	2,151	2,501	2,513	300	350	12	662
Professional/Technical Services	5,414	6,921	7,380	7,680	1,507	459	300	2,266
Management of Companies/Enterprises	571	3,633	3,229	3,844	3,062	-404	615	3,273
Administrative and Waste Services	8,214	11,118	10,837	11,522	2,904	-281	685	3,308
Educational Services	1,906	2,256	2,330	2,407	350	74	77	501
Health Care/Social Assistance	10,829	13,349	14,424	16,140	2,520	1,075	1,716	5,311
Leisure/Hospitality	1,262	2,121	1,728	1,839	859	-393	111	577
Accommodations/Food Services	12,960	13,482	14,179	16,118	522	697	1,939	3,158
Other Services	4,743	5,235	5,215	5,364	492	-20	149	621

Source: U.S. Bureau of Labor Statistics

The current industrial mix reflects a series of dramatic shifts over the last 14 years. The largest employment increases from 1990 to 2004 were in the Transportation and Warehousing (+13,339), Health Care and Social Assistance (+5,311), Retail Trade (+3,982), Finance and Insurance⁹ (+3,541), Administrative and Waste Services¹⁰ (+3,308), Management of Companies and Enterprises¹¹ (+3,273), and Accommodation and Food Services (+3,158) sectors.

Between 1990 and 2004, the greatest job losses could be found in Manufacturing, with the greatest job declines in this sector occurring from 2000 to 2002 (-4,914) and 2002 to 2004 (-2,953). Overall, manufacturing employment losses from 1990 to 2004 were -7,009 jobs. During the 14-year period of economic and employment growth, manufacturing was the only sector to lose more than 150 jobs. These losses in the manufacturing sector reflect a marked shift in the structure of the economy in Hamilton County, as the proportion of county employment involved in this sector has declined by more than 40% since 1990.



Source: U.S. Bureau of Labor Statistics

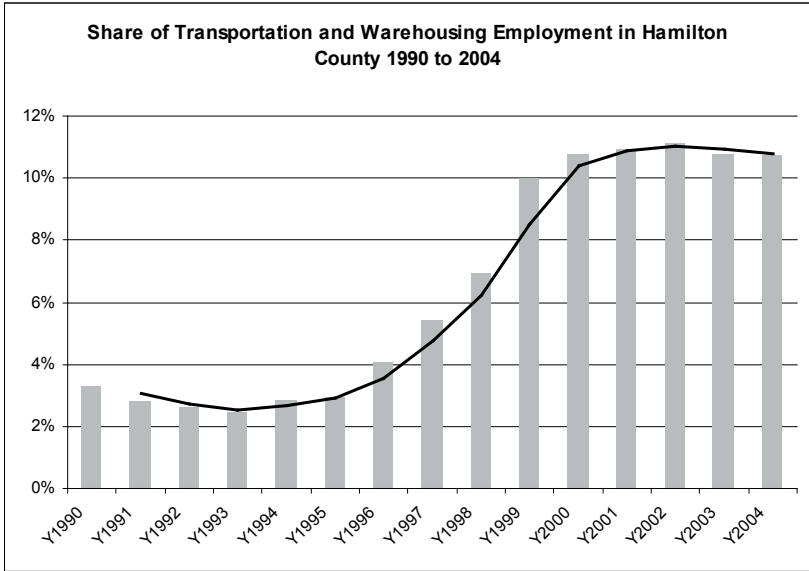
Within the manufacturing sector in Hamilton County, Food Manufacturing was the dominant subsector in 2004, representing almost a quarter of all manufacturing jobs. Other significant subsector employment in 2004 was in Fabricated Metal Product Manufacturing (13%), Machinery Manufacturing (11%) and Chemical Manufacturing (9.9%).

Table 6 – Hamilton County Manufacturing Subsectors, 2004

Industry	Employees	Proportion
Manufacturing Total	24,177	100.0%
Food manufacturing	5,989	24.8%
Fabricated metal product manufacturing	3,150	13.0%
Machinery manufacturing	2,665	11.0%
Chemical manufacturing	2,393	9.9%
Printing and related support activities	1,283	5.3%
Textile mills	1,064	4.4%
Nonmetallic mineral product manufacturing	1,059	4.4%
Paper manufacturing	1,012	4.2%
Primary metal manufacturing	978	4.0%
Plastics and rubber products manufacturing	699	2.9%
Miscellaneous manufacturing	706	2.9%
Transportation equipment manufacturing	671	2.8%
Electrical equipment and appliance manufacturing	563	2.3%
Beverage and tobacco product manufacturing	480	2.0%
Computer and electronic product manufacturing	383	1.6%
Furniture and related product manufacturing	396	1.6%
Textile product mills	259	1.1%
Apparel manufacturing	210	0.9%
Wood product manufacturing	217	0.9%

Source: U.S. Bureau of Labor Statistics

Between 1990 and 2004, job gains in the Transportation and Warehousing sector have offset the loss of manufacturing jobs. In 1990, this sector represented just under 4% of all employment in Hamilton County. By 2004, Transportation and Warehousing employment exceeded 10% of all employment in the county. Transportation and Warehousing accounted for 38.8% of net job growth in Hamilton County between 1990 and 2004.



Source: U.S. Bureau of Labor Statistics

The most dominant subsector of Transportation and Warehousing in 2004 was Truck Transportation, representing almost 79% of Transportation and Warehousing employment. The only other subsector exceeding 10% in 2004 was Couriers and Messengers, representing just under 13% of Transportation and Warehousing employment in the county. This data indicates that Hamilton County is increasing in importance as a ground transportation hub.

Table 7 – Hamilton County Transportation and Warehousing Subsectors, 2004

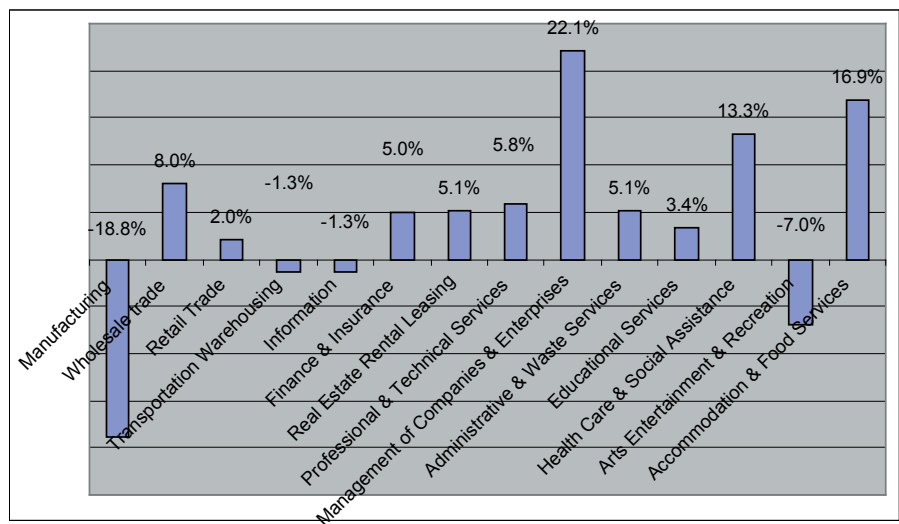
Industry	Employees	Proportion
Transportation Total	17,468	100.0%
Truck transportation	13,742	78.7%
Couriers and messengers	2,239	12.8%
Warehousing and storage	830	4.8%
Support activities for transportation	331	1.9%
Transit and ground transportation	310	1.8%
Air transportation	16	0.1%

Source: U.S. Bureau of Labor Statistics

More recently, between 2001 and 2004 the Management of Companies and

Enterprises (+22.1%), Wholesale Trade (+8.0%), Health Care and Social Assistance (13.3%) and Accommodation and Food Services (16.9%) sectors have evidenced relatively high rates of growth while the Manufacturing (-18.8%), Arts, Entertainment and Recreation¹² (-7.0%) Transportation Warehousing (-1.3%) and Information¹³ (-1.3%) sectors experienced contractions in employment.

Hamilton County Employment Growth by Sector, 2001-2004



Source: U.S. Bureau of Labor Statistics

Occupation

While a sector analysis looks at employment by industry, another way to look at employment is by occupational categories. United States Bureau of Labor Statistics data¹⁴ indicates that in 2004 the most prevalent occupation in the Chattanooga metropolitan area (MSA) was Office and Administrative Support, comprising 16.1% of all occupations within the MSA. Transportation/ Material Moving and Production were the only additional occupational categories where more than 10% of the workforce was employed. While the percentage of employees in Office and Administrative Support trailed national numbers, concentrations in Transportation/Material moving and Production occupations were higher than national rates.

Table 8 – Occupation Proportions – Chattanooga MSA and United States, 2004

Occupational Category	Chattanooga MSA		US	
	Employees	Prop	Employees	Prop
Office and administrative support occupations	36,520	16.1%	22,784,330	17.5%
Transportation and material moving occupations	27,780	12.3%	9,594,920	7.4%
Production occupations	25,770	11.4%	10,249,220	7.9%
Sales and related occupations	21,220	9.4%	13,930,320	10.7%
Food preparation and serving related occupations	20,270	9.0%	10,797,700	8.3%
Healthcare practitioners and technical occupations	12,570	5.6%	6,547,350	5.0%
Management occupations	12,390	5.5%	5,960,560	4.6%
Education, training, and library occupations	10,030	4.4%	8,078,500	6.2%
Installation, maintenance, and repair occupations	9,920	4.4%	5,305,260	4.1%
Construction and extraction occupations	8,640	3.8%	6,370,400	4.9%
Business and financial operations occupations	7,800	3.4%	5,410,410	4.2%
Building and grounds cleaning and maintenance occupations	6,900	3.0%	4,342,550	3.3%
Healthcare support occupations	5,680	2.5%	3,363,800	2.6%
Protective service occupations	4,650	2.1%	3,056,660	2.3%
Personal care and service occupations	3,290	1.5%	3,188,850	2.4%
Computer and mathematical occupations	3,280	1.4%	2,952,740	2.3%
Architecture and engineering occupations	3,170	1.4%	2,382,480	1.8%
Community and social services occupations	2,380	1.1%	1,692,950	1.3%
Arts, design, entertainment, sports, and media occupations	2,000	0.9%	1,683,310	1.3%
Legal occupations	1,400	0.6%	986,740	0.8%
Life, physical, and social science occupations	680	0.3%	1,185,730	0.9%
Farming, fishing, and forestry occupations	120	0.1%	443,070	0.3%
Source: U.S. Bureau of Labor Statistics				

There are local differences in occupational participation rates across gender. According to United States Equal Opportunity Commission data¹⁵, men hold 54.3% of all jobs in the region. For certain occupations – Officials and Managers (68%), Craft Workers (88.8%), Operatives [manufacturing occupations] (73.5%) and Laborers (60.4%), male dominance is even more pronounced. Women, on the other hand, hold most Professional, Technician, Sales, Office/Clerical and Service jobs in the region.

Table 9 – EEO Occupations by Race/Gender – Chattanooga MSA, 2003

Racial/Ethnic Group and Sex	Total Employment	Officials & Managers	Professionals	Technicians	Sales Workers	Office & Clerical Workers	Craft Workers	Operatives	Laborers	Service Workers
ALL EMPLOYEES	100	100	100	100	100	100	100	100	100	100
Men	54.3	68	35	44	46.7	17.9	88.8	73.5	60.4	46.4
Women	45.7	32	65	56	53.3	82.1	11.2	26.5	39.6	53.6
WHITE	79.5	92.3	89.2	85.6	85.6	83	88.5	72.5	55.8	72.1
Men	43	63.3	31.6	39.2	41.1	15.5	79.4	52.9	33.8	32.7
Women	36.5	29	57.6	46.4	44.6	67.5	9.1	19.5	22	39.4
MINORITY	20.5	7.7	10.8	14.4	14.4	17	11.5	27.5	44.2	27.9
Men	11.3	4.7	3.4	4.8	5.6	2.4	9.4	20.6	26.6	13.7
Women	9.2	3	7.4	9.6	8.8	14.6	2.1	7	17.6	14.1
BLACK	15.2	5.9	8	11.7	11.3	15.5	8.6	20.8	25.2	21.7
Men	7.6	3.5	2.1	3.2	4	1.9	6.8	15.1	13.3	9.3
Women	7.6	2.4	6	8.5	7.3	13.6	1.8	5.7	11.9	12.3
HISPANIC	3.8	0.7	0.8	0.9	1.7	0.7	2.3	4.7	17.5	5.1
Men	2.9	0.4	0.4	0.5	1	0.2	2.1	4.1	12.6	4
Women	0.9	0.3	0.4	0.4	0.7	0.5	0.2	0.7	4.9	1.1
ASIAN AMERICAN	1.1	0.8	1.7	1.3	1.1	0.6	0.5	1.6	1.3	0.8
Men	0.6	0.6	0.9	0.9	0.4	0.2	0.5	1.1	0.5	0.3
Women	0.5	0.2	0.8	0.4	0.6	0.4	0.1	0.5	0.8	0.6
AMERICAN INDIAN	0.3	0.3	0.3	0.5	0.3	0.2	0.2	0.4	0.2	0.3
Men	0.2	0.2	0.1	0.3	0.1	0.1	0.2	0.3	0.1	0.1
Women	0.1	0.1	0.2	0.2	0.2	0.1	0	0.1	0.1	0.2

Source: U.S. Equal Employment Opportunity Commission

There are also significant gender differences in workforce participation by race and ethnicity. Among Whites, a majority of those employed - 54% - are men. Among Latinos, 76% of those employed are men. By comparison, employment in the African-American community is evenly divided by gender.

While whites account for 79% of the overall workforce, they account for even greater percentages of Officials/Managers (92.3%), Professionals (89.2%), Craft Workers (88.5%), Technicians (85.6%), Sales Workers (85.6%), and Office/Clerical Workers (83%).

African Americans, who comprise 15.2% of the regional workforce, are over-represented in the Laborer (25.2%), Service (21.7%), Operative (20.8%) and Office/Clerical (15.5%) occupations.

While Latinos account for 3.8% of the total workforce, they account for 17.5% of Laborers, 5.1% of Service Workers and 4.7% of Operatives.

Between 2001 and 2004, three occupations in the Chattanooga MSA grew by more than 30% - Computer/Mathematical occupations (89.6%), Arts/Design/Entertainment /Sports/Media (42.9%) and Legal (30.8%). Nine occupational categories exhibited growth rates of 10% or more. The number of jobs declined in seven occupational categories, with the largest reduction in Production occupations (13.1%).

Table 10 - Occupational Change – Chattanooga MSA, 2001-2004

Occupational Category	Growth Rate
Computer/ Mathematical Occupations	89.6%
Arts/Design/ Entertainment/Sports/Media	42.9%
Legal	30.8%
Food Preparation/Serving Related	28.2%
Community/Social Services	22.1%
Building Grounds Cleaning/ Maintenance	17.7%
Healthcare Practitioners/Technical	11.7%
Installation/Maintenance/Repair	11.3%
Personal Care/ Service	10.4%
Healthcare Support	7.8%
Sales/ Related	5.2%
Education/ Training/ Library Occupations	3.2%
Business/ Financial Operations	1.6%
Management	-0.5%
Transportation/Material Moving	-2.7%
Office/ Administrative Support	-2.9%
Architecture/Engineering	-3.4%
Protective Service	-7.7%
Construction/Extraction	-10.3%
Production	-13.1%

Source: U.S. Bureau of Labor Statistics

Income

Data from the 2006 countywide survey suggest that among those respondents who provided information on household income, just under half had incomes in the \$20,000 to \$60,000 range.

Table 11 – Hamilton County Income Distribution

Income Category	Percent
Below \$12,000	7%
12 but less than 20 thousand	9%
20 but less than 30 thousand	11%
30 but less than 40 thousand	14%
40 but less than 50 thousand	10%
50 but less than 60 thousand	7%
60 but less than 80 thousand	11%
80 but less than 100 thousand	7%
Above 100 thousand	9%
Refused	17%

Source: SOCRR Survey, 2006

Census data¹⁶ indicates that the median household income in Hamilton County in 2000 was \$38,930. In 2000, Hamilton County's median household income was higher than Chattanooga's (\$32,006) and Tennessee's (\$36,360) but less than the United States' median household income of \$41,994.

The Bureau of Economic Analysis compiles per capita income data on an annual basis at the national, state, MSA and county levels.¹⁷ Between 2000 and 2004, per capita income grew in Hamilton County by 12.8% - higher than the growth rate in the region and nationally, but lagging behind the statewide growth rate.

Table 12 – Per Capita Income, 2000-2004

	2000	2001	2002	2003	2004	00-04 %
United States	29,845	30,574	30,810	31,484	33,050	10.7%
Tennessee	26,097	26,870	27,490	28,440	29,844	14.4%
Chattanooga MSA	26,955	27,215	27,741	28,519	29,912	11.0%
Hamilton County	29,822	30,186	30,909	32,009	33,632	12.8%

Source: U.S. Bureau of Economic Analysis

Income is closely related to education. Nationally, the occupational categories that have the highest proportion of college-educated persons also evidence the highest average median income.

Table 13 – National Occupational Salaries, 2004¹⁸

OCCUPATIONS	Median Income	Total Employed	%College Educated	%Full Time Employed	
MANAGEMENT	\$67,120	7,092,460	48.8%	79.1%	
LEGAL	\$58,010	934,850	75.2%	74.7%	
ARCHITECTURE, ENGINEERING	\$54,900	2,411,260	58.2%	81.1%	
COMPUTER AND MATHEMATICAL	\$58,500	2,772,620	60.7%	77.8%	
BUSINESS AND FINANCIAL OPERATIONS	\$47,350	4,772,120	56.8%	74.0%	
HEALTHCARE PRACTITIONERS AND TECHNICAL	\$43,820	6,185,020	53.6%	61.6%	
LIFE, PHYSICAL, AND SOCIAL SCIENCE	\$46,370	1,078,630	78.3%	68.9%	
EDUCATION, TRAINING, AND LIBRARY	\$36,940	7,772,470	77.9%	61.1%	
ARTS, DESIGN, ENTERTAINMENT, SPORTS, AND MEDIA	\$34,580	1,503,680	54.8%	55.2%	
INSTALLATION, MAINTENANCE AND REPAIR	\$33,830	5,215,970	5.6%	76.7%	
CONSTRUCTION AND EXTRACTION WORKERS	\$33,160	6,124,600	5.0%	61.7%	
COMMUNITY AND SOCIAL SERVICES	\$31,690	1,576,980	70.2%	65.1%	
TRANSPORTATION AND MATERIAL MOVING	\$23,180	9,395,000	5.6%	61.1%	
PRODUCTION	\$25,000	10,726,670	5.6%	69.2%	
OFFICE AND ADMINISTRATIVE SUPPORT	\$25,670	22,754,570	14.5%	62.5%	
PROTECTIVE SERVICE	\$28,850	2,993,490	20.0%	74.0%	
HEALTHCARE SUPPORT	\$21,040	3,173,400	8.3%	49.6%	
SALES AND RELATED	\$20,770	13,339,570	27.0%	62.1%	
BUILDING AND GROUNDS CLEANING AND MAINTENANCE	\$18,570	4,262,880	4.7%	49.9%	
PERSONAL CARE AND SERVICE	\$17,540	2,919,280	1.4%	44.0%	
FOOD PREPARATION AND SERVING RELATED	\$15,240	10,067,080	6.8%	40.6%	

Source: U.S. Bureau of Labor Statistics

Eight occupational categories have the highest incomes (median wage from \$36,940 to \$67,120) and relatively higher percentages of college-educated jobholders (from 48.8%--Management to 81.1%--Architecture and Engineering). On the other end of the continuum, nine occupational categories have lower median incomes (\$15,240 to \$23,180) and much lower percentages of college-educated jobholders (from 1.4%--Personal Care and Service to 27.0%--Building and Grounds Cleaning and Maintenance). At the very lowest end of the continuum, jobs are also either seasonal or part time.

In the Chattanooga MSA, this continuum exists among a similar grouping of occupational categories, where the higher-education-requisite occupations are associated with relatively higher annual salaries.

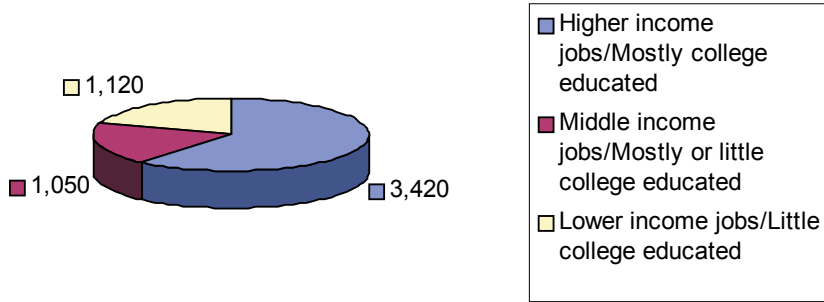
From this analysis, it is possible to categorize occupations as either (1) Higher income/mostly college-educated; (2) Middle income/moderately college-educated; and (3) Lower income/low college-educated.

Between 2001 and 2004, higher income/mostly college educated occupations accounted for 3,420 of the 5,590 new positions created accounting for 61.9% of net job growth in the region. A shift is therefore evident with regard to Chattanooga's occupational structure, where the highest-paid and highest education-requisite occupations have experienced the greatest growth.

Table 14 – Chattanooga MSA Occupational Salaries, 2004¹⁹

OCCUPATION	AVG. SALARY
Physicians and Surgeons, All Other(291069)	\$181,280
Chief Executives(111011)	\$129,550
Optometrists(291041)	\$101,700
\$98,000 and Above	
Pharmacists(291051)	\$94,450
General and Operations Managers(111021)	\$82,860
\$78,000	
Management Occupations(110000)	\$74,460
Civil Engineers(172051)	\$65,470
\$58,000	
Industrial Engineers(172112)	\$57,470
Healthcare Practitioner and Technical Occupations(290000)	\$55,130
Computer Programmers(151021)	\$53,350
\$53,000	
Materials Engineers(172131)	\$52,400
Education Administrators, All Other(119039)	\$51,500
Sales Representatives, Services, All Other(413099)	\$49,800
\$48,000	
Registered Nurses(291111)	\$47,350
Insurance Underwriters(132053)	\$44,260
Civil Engineering Technicians(173022)	\$43,160
\$43,000	
Physical Therapist Assistants(312021)	\$40,830
Real Estate Sales Agents(419022)	\$39,430
Middle School Teachers(252022)	\$38,920
\$38,000	
Education Teachers, Postsecondary(251081)	\$37,120
Public Relations Specialists(273031)	\$34,780
Sheet Metal Workers(472211)	\$33,560
Health Educators(211091)	\$33,370
\$33,000	
Licensed Practical and Licensed Vocational Nurses(292061)	\$32,540
Machinists(514041)	\$31,430
Fire Fighters(332011)	\$30,970
Dental Assistants(319091)	\$28,090
\$28,000	
Social and Human Service Assistants(211093)	\$25,310
Construction Laborers(472061)	\$24,690
Medical Assistants(319092)	\$23,440
\$23,000	
Laborers and Freight, Stock, and Material Movers (537062)	\$21,670
Nursing Aides, Orderlies, and Attendants(311012)	\$19,670
Building and Grounds Cleaning and Maintenance Occupations	\$18,490
\$18,000	
Janitors and Cleaners, Except Maids and Housekeeping Cleaners(372011)	\$17,980
Teacher Assistants(259041)	\$16,590
Food Preparation and Serving Workers	\$13,630
Source: U.S. Bureau of Labor Statistics	

**Occupational Category Growth, Chattanooga
MSA, 2001-2004**



Source: U.S. Bureau of Labor Statistics

Educational Attainment

In Hamilton County, the proportion of persons with a college, graduate or professional degree increased from 19.8% in 1990 to 23.8% in 2000. Education attainment, however, differed by race and gender. Whites in Hamilton County were two and a half times more likely to have a college degree than African-Americans. A smaller percentage of women (21.2%) had a college degree than men (27.0%).

Table 15 – Educational Attainment, Hamilton County, 2000

Category	% College-Educated
African-American	10.6%
White	26.6%
Male	27.0%
Female	21.2%

Source: U.S. Census Bureau

The 2006 countywide survey indicated that 32% of Hamilton County adults had at least a college degree. Crosstabulations by race and gender confirm that disparities in educational attainment among Hamilton County residents persist. There is a 16 percentage-point gap between Whites and African-Americans in gaining a college degree. One-third more men reported having a college education than women.

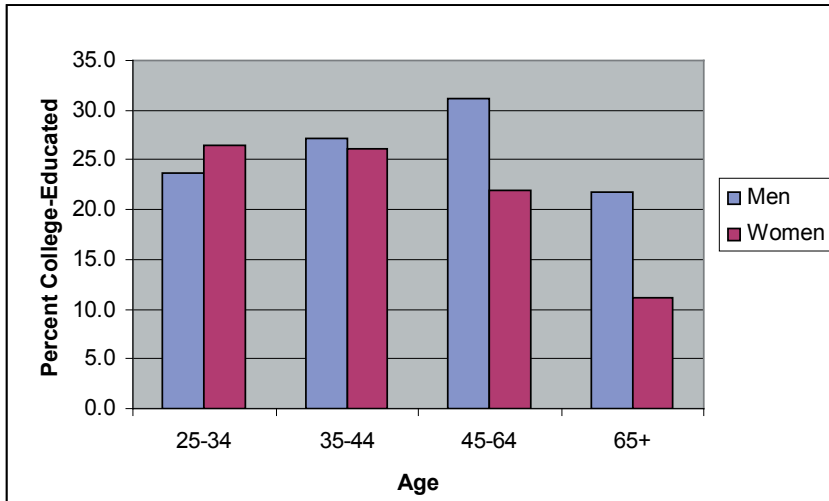
Table 16 – Educational Attainment by Race/Gender/Age

	What was the last level of schooling you completed?					
	less than high school graduate	high school graduate	some college	college graduate	post-graduate	NA
Male	8%	25%	26%	26%	13%	2.0%
Female	8%	31%	34%	18%	8%	2%
African-American	13%	34%	33%	15%	3%	2%
White	7%	27%	30%	23%	11%	1%
Other		25%	35%	23%	17%	

Source: SOCRR Survey, 2006

In part, historical racism and sexism may explain these gaps. For example, when 2000 Census data is disaggregated by age and gender, it is apparent that men had higher college attainment rates than women for those age 35 and older. For each successively older age range, the male-female college attainment gap was increasingly larger. These pronounced male-female college attainment differences within the upper age categories explain the overall male-female college attainment gap. But, significantly, a higher percentage of women between the ages of 25 and 34 had a college degree than men.

Hamilton County College Attainment by Age, 2000



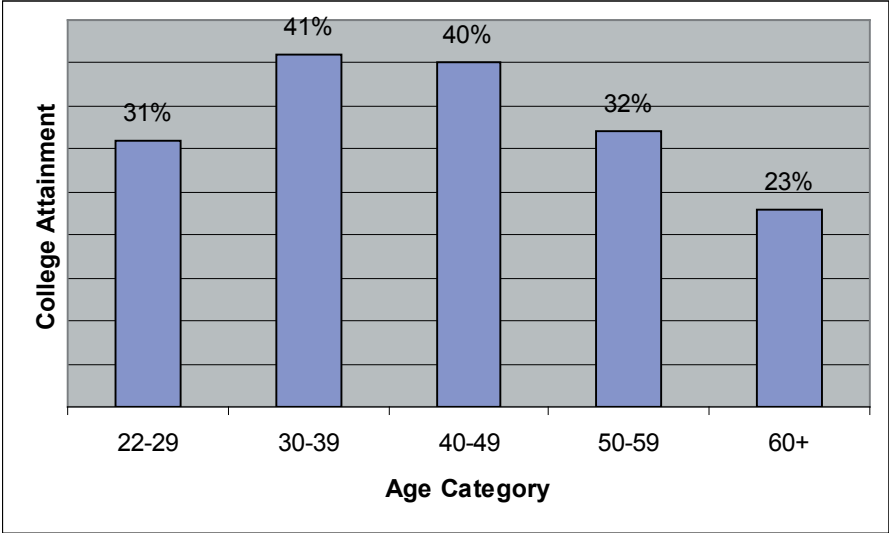
Source: U.S. Bureau of the Census

The 2006 countywide survey reflects a similar gender-age gap. Among survey respondents in their twenties, 31% had a college degree or greater: in some cases, respondents may have been still attending college (Census data generally looks at educational attainment for adults 25 and older). The rate of attaining a college degree increases to 41% and 40% respectively for those in their thirties and forties and declines back down to 32% for those in their fifties. Among those survey respondents sixty years and older, only 23% had a college degree.

The relationship between age, gender and educational attainment explains a lot about the countywide rate of educational attainment. Older women were less likely to attain college diplomas. A majority of older residents – those over 60 – are women (57.3%). According to the 2000 Census, 18.2% of all county residents were over 60 compared to 16.2% of all Americans – in other words, the share of the population with the lowest education attainment rate was 12.3% higher in Hamilton County than in the nation as a whole.

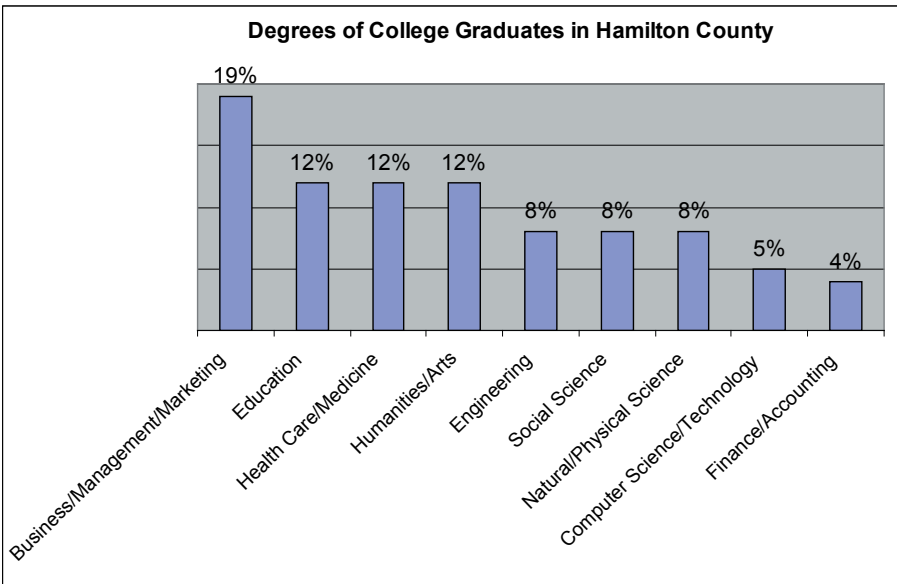
The countywide survey indicates that among respondents holding at least a bachelor's degree, the largest proportion graduated with degrees in Business/ Management/ Marketing (19%), followed by Education, Health Care and Humanities/Arts (12% each), while comparatively lower proportions of respondents reported attaining degrees in Engineering, Social Science and Natural Physical Science (8% each). Only 5% of college graduates reported the attainment of a degree in the Computer/Science/Technology field.

College Attainment by Age, 2006



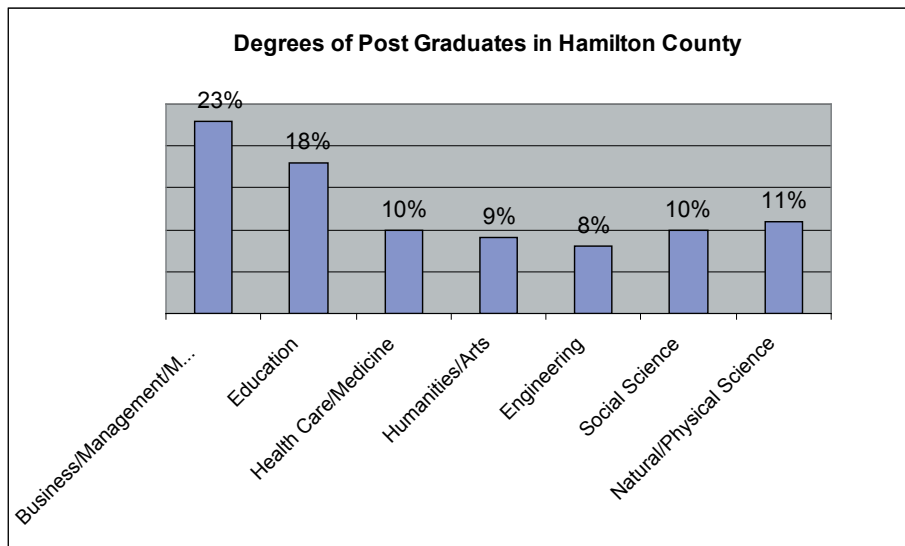
Source: SOCRR Survey, 2006

College Graduate Degrees – Hamilton County



Source: SOCRR Survey, 2006

Post Graduate Degrees – Hamilton County



Source: SOCRR Survey, 2006

The highest percentages of post-graduates in Hamilton County attained degrees in Business/Management/Marketing (23%) and Education (18%). Natural/Physical Science (11%), Health Care/Medicine (10%) and Social Science (10%) were the only additional categories with a frequency of 10% or more.

Business attraction and retention

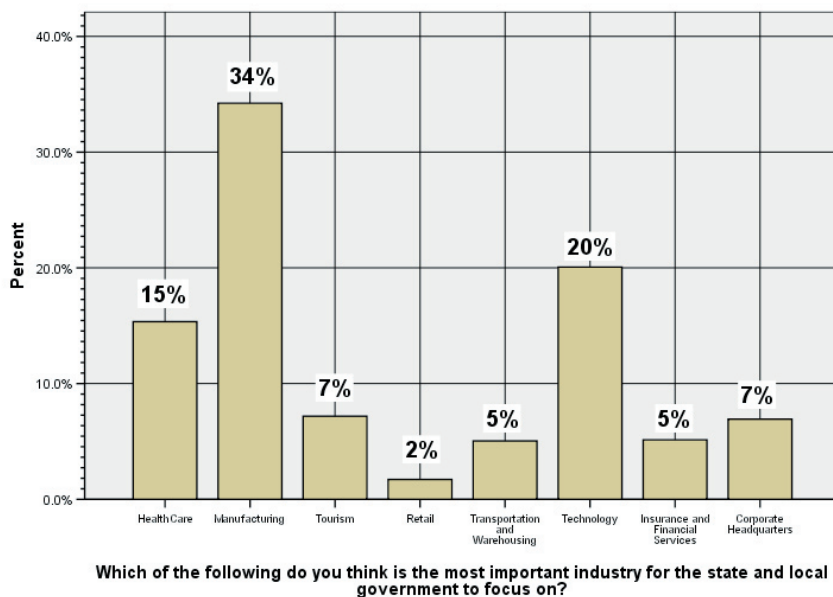
Business attraction and retention provides a measure of the manner in which firms move to, from and within the region. Firms are important generators of economic development because they provide capital investment, jobs and spending induced through company operation and financial input-output relationships with firms in ancillary industries.

Table 17 - Job Creation Factors

	One of the Most Important	Very Important	Somewhat Important	Not Too Important	Not at All Important	Don't Know
Quality public schools	19%	66%	13%	1%	1%	1%
An effective local government that is free of corruption	19%	67%	9%	1%	1%	3%
Low taxes	15%	58%	22%	3%	1%	2%
Affordable cost of living	14%	68%	16%	1%	0%	1%
Good quality of life	14%	72%	13%	0%	0%	1%
Public safety	13%	70%	16%	1%	0%	1%
A well-educated workforce	12%	67%	18%	2%	1%	1%
Quality colleges and universities	10%	60%	25%	3%	1%	1%
Infrastructure such as roads and airports	8%	61%	26%	3%	2%	1%
Availability of investment capital	6%	43%	37%	6%	2%	7%

Source: SOCRR Survey, 2006

Chattanooga area residents have some clear ideas about both how to attract new businesses and what types of firms they would like to see come to the community. When asked whether different factors were important to a good environment for creating jobs in Hamilton County, more than 80% of Chattanooga area residents identified five factors as either one of the most important or very important – good quality of life (86%), an effective local



Source: SOCRR Survey, 2006

government that is free of corruption (86%), quality public schools (84%), public safety (83%) and affordable cost of living (82%).

Respondents were also asked to indicate what industry they felt was most important to the attraction of good jobs over the next five years. Hamilton County residents cited manufacturing, health care and technology as the industries that government officials should focus on when looking to attract new jobs.

Measurement of growth in firms is not a measurement of job growth per se, because firms vary greatly in the size of their respective workforces. However, a review of the growth in firms, as well as in the size distribution of firms, can provide a great deal of information when combined with sector-specific employment data.

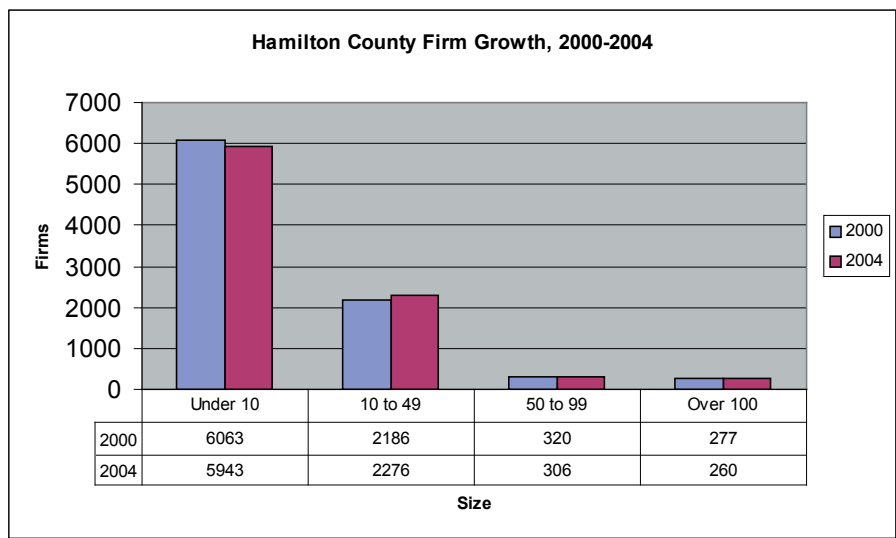
Table 18 – Hamilton County Firms, 2000-2004²⁰

TOTAL	2000	2004	Growth %
Health care and social assistance	8,846	8,785	-0.7
Accommodation & food services	896	1,003	11.9
Real estate & rental & leasing	671	721	7.5
Professional, scientific & technical services	334	359	7.5
Arts, entertainment & recreation	725	777	7.2
Finance & insurance	111	118	6.3
Transportation & warehousing	602	627	4.2
Information	201	208	3.5
Manufacturing	145	150	3.4
Other services (except public administration)	495	492	-0.6
Retail trade	1,042	1,013	-2.8
Wholesale trade	1,496	1,439	-3.8
Management of Companies and Enterprises	656	601	-8.4
Admin, support, waste mgt, remediation	57	52	-8.7
services	460	417	-9.3
Construction	747	674	-9.8

Source: U.S. Census Bureau

Overall, between 2000 and 2004 the number of firms in Hamilton County declined by 61, or .7%.²¹ The greatest increases were in Health Care and Social Assistance (11.9%), Accommodation and Food Services (7.5%), Real Estate Rental and Leasing (7.5%), Professional, Scientific and Technical Services (7.2%) Arts, Entertainment and Recreation (6.3%) and Finance and Insurance (4.2%) sectors.

Conversely, there were significant declines in the number of firms within Construction (-9.8%), Administrative Support (-9.3%) and Wholesale Trade (-8.4%). The Management of Companies and Enterprises sector is composed largely of firms that operate as corporate headquarters: Hamilton County has lost a total of five firms (-8.7%) of this type over the 2000-2004 time period.



Source: U.S. Census Bureau

The Hamilton County economy is dominated (with respect to employment) by small businesses. In 2004, 67.6% of all firms in the county employed fewer than ten people, and 93.5% had fewer than 50 employees.

The number of firms employing fewer than ten people declined by 120 over the 2000-2004 time period. In the two categories of firms employing 50 or more persons, the number of firms declined by 14 (50 to 99 employees) and 17 (over 100 employees).

Firms with 10 to 49 employees made up 25.9% of all firms in Hamilton County in 2004, and grew by 90 firms from 2000 to 2004. This category was the only one to experience growth during this time period.

Table 19 –Hamilton County Firm Growth by Size and Sector, 2000-2004²²

	Under 10 2004 Firms	Under 10 2000-04 Change	10 to 49 2004 Firms	10 to 49 2000-04 Change	50 to 99 2004 Firms	50 to 99 2000-04 Change	100 and Over 2004 Firms	100 and Over 2000-04 Change
Total	5,943	-120	2,276	90	306	-14	260	-17
Construction	483	-63	168	5	13	-11	10	-4
Manufacturing	233	27	160	-7	38	-11	61	-12
Wholesale trade	409	-20	171	-25	15	-8	6	-2
Retail trade	988	-60	368	-2	60	18	23	-13
Transportation & warehousing	120	-10	64	14	13	-1	11	4
Information	97	16	40	-10	8	0	5	-1
Finance & insurance	498	6	114	21	2	-4	13	2
Real estate & rental & leasing	308	26	48	3	2	-4	1	0
Professional, scientific & technical services	609	30	147	28	10	-8	11	2
Management of companies & enterprises	24	-10	17	2	5	1	6	2
Admin, support, waste mgt, remediation services	276	-10	86	-20	24	-13	31	0
Educational services	50	-2	24	1	7	2	9	0
Health care and social assistance	666	27	259	54	41	21	37	5
Arts, entertainment & recreation	73	0	32	6	9	1	4	0
Accommodation & food services	301	21	361	21	38	6	21	2
Other services	770	-28	213	2	38	6	21	2
Unclassified establishments	26	-54	0	0	20	-2	10	-1

Source: U.S. Census Bureau

Between 2000 and 2004, the highest growth in businesses employing fewer than ten people occurred in the Professional, Scientific and Technical (+30), Health Care and Social Assistance (+27), Manufacturing (+27), Real Estate, Rental and Leasing (+26) and Accommodation and Food Services (+21) sectors. These gains were offset by losses in the Construction (-63), Retail Trade (-60), Unclassified Establishments (-54), Other Services (-28) and Wholesale Trade (-20) sectors.

In firms employing 10 to 49 persons, the highest growth occurred in the Health Care and Social Assistance (+54), Professional, Technical and Scientific (+28) and Accommodation and Food Services (+21) sectors. Substantial losses in the number of firms occurred with regard to the Wholesale Trade (-25), Administrative Support, Waste Management and Remediation Services (-20) and Information (-10) sectors.

The high growth sectors in firms employing between 50 and 99 persons were Health Care and Social Assistance (21) and Retail Trade (18). Accommodation and Food Services and Other Services added six firms each between 2000 and 2004.

In firms employing 100 or more persons, the only sectors that had growth in excess of two firms were Health Care and Social Assistance (+5) and Transportation and Warehousing (+4). Substantially large losses in the number of firms over 2000 and 2004 occurred in the Retail Trade (-13) and Manufacturing (-12) sectors.

Business license application data can also be used to track the types of new firms operating in Hamilton County. Between 2001 and 2005, there were 7,326 new business license applications: the top ten license applications accounted for 61.8% of all new business applications.

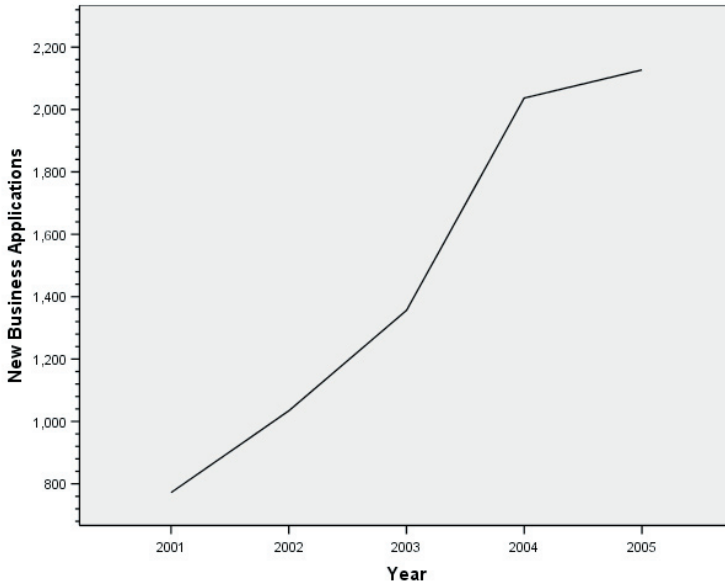
Table 20 – Hamilton County Business Application Business Categories, 2001-2005

	2001	2002	2003	2004	2005	Total
General Contracting	107	141	146	282	242	918
Misc. Merchandise Stores	74	120	166	232	277	869
Business Services	71	105	115	199	220	710
Personal Services	68	105	110	158	212	653
Apparel Stores	24	33	44	106	108	315
Grocery and Food Stores	24	29	94	70	68	285
Automotive Leasing and Repair	23	38	43	77	99	280
Auto/Cycle/Boat Dealers	30	35	45	49	59	218
Furniture and Electronic Stores	23	30	34	51	37	175
Durable Goods	18	9	29	45	45	146
Total	462	645	826	1,269	1,367	4,569
Annual % Increase		39.6	28.1	53.6	7.7	

Source: Hamilton County Clerk

The most frequent business license applications over this time period were within the General Contracting category. There were more than 500 new applications for Miscellaneous Merchandise Stores, Business Services, and Personal Services categories covering the 2001 to 2005 time period. The number of applications grew successively with each passing year since 2001, but the rate of growth slowed to 7.7% in 2005, after averaging 41.3% over the prior three years.

Hamilton County New Business Applications, 2001-2005



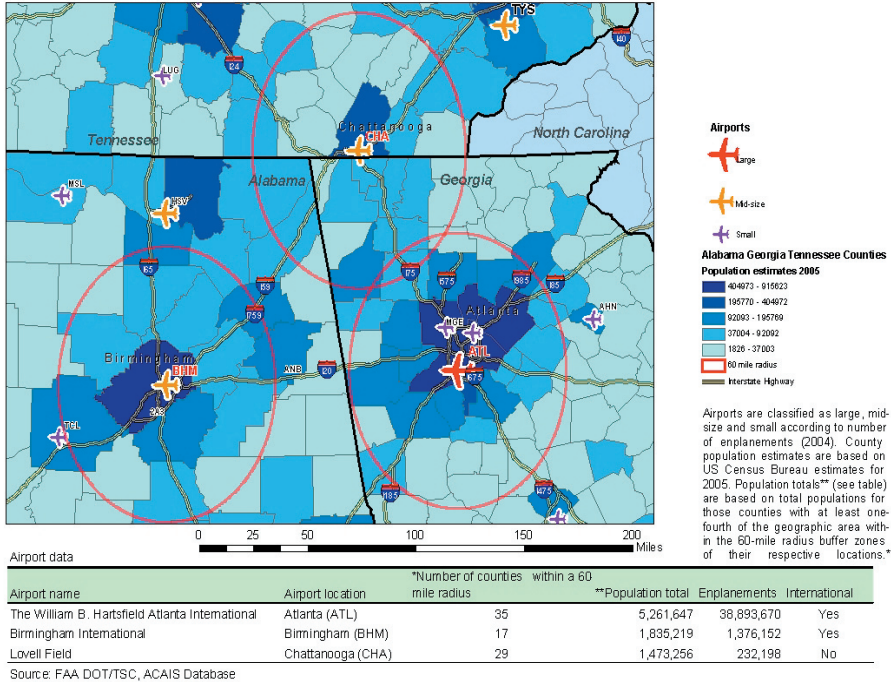
Source: Hamilton County Clerk

Airport Activity

Airport activity is closely tied to economic growth. Bruckner has found that a ten percent increase in passenger enplanements in a metro area results in a one percent increase in service employment, controlling for reverse causality.²³ Button's study of 300 metropolitan areas similarly confirmed a positive relationship between the level of high-technology employment and airport size.²⁴ Additionally, Green found that passenger boardings per capita and passenger originations per capita are "powerful predictors of population and employment growth".²⁵

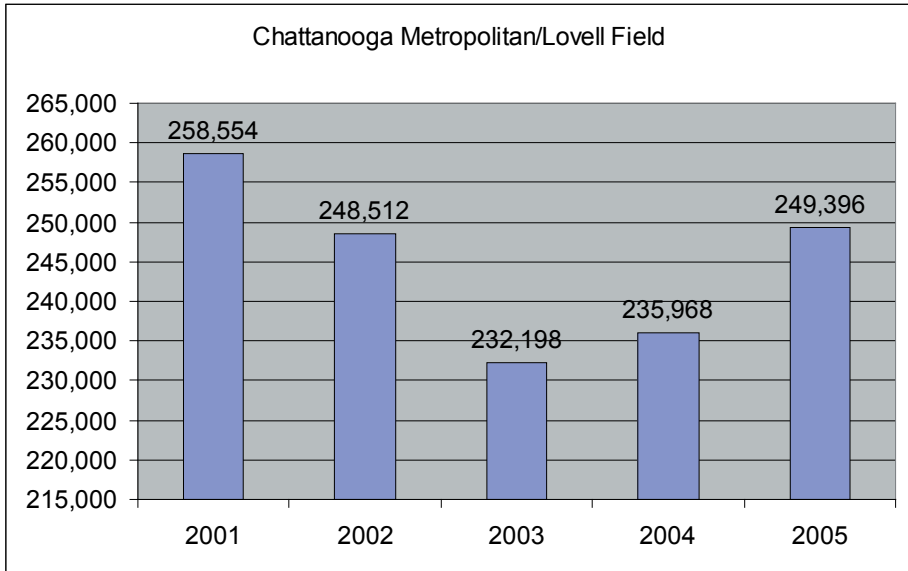
Map 3 - Market Areas for Selected Airports

Airports: Locations and Regions for Atlanta, Chattanooga, and Birmingham



Enplanements at Chattanooga Metropolitan Airport declined between 2001 and 2003 and increased over the last two years. By 2005, Chattanooga Metropolitan Airport supported over 249,000 enplanements, and plans to support 500,000 enplanements by 2008. This increase has been accomplished despite intense competition from other airports in the region, which are situated near Chattanooga and provide an alternate service option for passengers in the region. Hartsfield Atlanta International is the busiest airport in the United States, and one of the busiest in the world, supporting almost 40 million enplanements in 2004. Birmingham International Airport had almost 1.4 million enplanements during the same year. An estimated 55% of passengers in the Chattanooga market board at other airports within the larger region.²⁶

Chattanooga Airport Enplanements



Source : U.S. Federal Aviation Administration

Jobs and the Economy in Chattanooga and Peer Cities/Counties

Employment

In 2004, Hamilton County ranked first among benchmark counties in share of employment in Transportation and Warehousing (10.8%), second in Finance and Insurance (7.9%), third in Management of Companies and Enterprises (2.3%) and fifth in Accommodation and Food Services (9.8%).²⁷

Among benchmark counties, Winnebago County had the highest share in manufacturing employment (23.3%), while Washoe County had the lowest share (7.8%). The counties with the six highest proportions of manufacturing employment all had shares exceeding 16%.

A large number of benchmark counties had high shares of employment in the Health Care and Social Assistance sector. Lehigh County had the highest share of employment (19.1%) in this sector, and six counties had employment shares of 15% or more. Hamilton County was ranked 13th among 14 counties (9.9%).

The Retail Trade Sector also had substantial shares of employment in comparison counties. The lowest share of employment among all benchmark counties was 12.6% (Winnebago County), and the counties with the five highest shares in employment in Retail Trade all exceeded 15%. Hamilton County's share of employment in this sector was ranked fifth (tied with Washtenaw County at 14.1%) among benchmark counties.

Manufacturing was the leading (highest-share) industry in five counties, including Hamilton County (Winnebago, Washtenaw, Allen and Madison). Retail Trade (Marion, Lane, Cumberland and Ada) and Health Care and Social Assistance (Ingham, Richland, Lehigh and Forsyth) were the leading industries in four counties each, while Accommodation and Food Services was the leading industry in Washoe County.

While Manufacturing remained a leading employer in most benchmark counties, Washoe County (Reno Nevada) was the only county of all benchmark cities/counties to gain in manufacturing employment between 2001 and 2004, and in this case the gain was less than 1%. Most other counties experienced a net double-digit percentage loss of manufacturing employment. Hamilton County's job loss in manufacturing was the third highest among the benchmark jurisdictions.

Table 21 – Employment Share by Industry – Benchmark Counties, 2004

Industry	Total	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation Warehousing	Information	Finance & Insurance	Real Estate Rental Leasing	Professional & Technical Services	Management of Companies & Enterprises	Administrative & Waste Services	Educational Services	Health Care & Social Assistance	Arts, Entertainment & Recreation	Accommodation & Food Services	Other Services Except Public Admin
Hamilton County/ Chattanooga TN	163,648	7,734	24,342	7,514	23,092	17,599	2,534	12,957	2,513	7,680	3,944	11,522	2,407	16,140	1,839	16,118	5,364
Lehigh County/ Allentown PA	156,204	7,871	22,521	7,318	19,851	5,917	4,603	8,711	2,270	6,046	4,166	10,765	2,717	29,865	2,733	11,941	5,614
Washnetaw County/ Ann Arbor MI	22,806	5,760	22,806	4,357	18,369	2,493	3,796	3,122	2,524	14,193	2,315	9,569	1,700	20,096	2,053	11,929	4,478
Ada County/ Boise ID	159,931	12,316	20,836	8,144	21,928	4,341	3,676	7,669	2,926	9,459	5,233	16,868	1,178	21,469	2,308	15,041	5,138
Richland County/ Columbia SC	153,785	9,012	11,189	6,505	21,516	1,794	4,682	16,632	2,891	10,081	1,766	15,303	2,347	22,913	1,947	16,159	6,163
Lane County/ Eugene OR	117,478	6,752	19,442	5,487	18,359	2,684	3,305	4,014	2,558	5,880	1,544	8,150	1,186	17,235	1,820	11,506	5,294
Cumberland County/ Fayetteville NC	79,695	4,787	9,165	2,388	15,133	3,978	2,066	2,458	1,484	3,558	500	7,414	837	9,363	894	11,442	3,504
Allen County/Fort Wayne IN	160,610	9,980	29,504	10,636	20,163	6,781	3,265	9,595	1,825	5,980	1,255	10,125	2,575	25,316	1,898	15,527	5,473
Madison County/ Huntsville AL	128,655	5,980	24,159	4,185	19,598	nd	1,998	3,347	1,805	22,977	417	12,452	1,119	10,252	1,195	12,641	4,296
Ingham County/ Lansing MI	118,891	5,072	16,350	nd	17,941	4,465	2,602	7,468	2,951	7,752	1,504	6,445	1,787	19,102	1,679	12,547	6,719
Washoe County/Reno NV	178,539	19,872	13,851	10,648	22,625	9,105	3,120	6,734	3,999	8,464	2,112	13,141	1,197	18,039	5,938	32,898	5,054
Winnabago County/ Rockford IL	122,754	5,715	28,636	5,277	15,465	nd	2,079	5,497	1,359	4,155	241	12,861	1,731	18,432	1,125	9,877	4,963
Marion County/ Salem OR	98,405	6,410	12,121	2,969	15,162	nd	1,530	3,740	1,997	3,369	712	7,320	1,765	13,618	1,337	9,483	4,690
Forsyth County/ Winston-Salem NC	157,647	7,555	25,442	nd	20,027	8,157	1,893	9,942	1,958	6,597	2,959	11,539	7,520	27,125	1,786	13,564	4,406
Hamilton County/ Chattanooga TN	163,648	4,7%	14,9%	4,6%	14,1%	10,8%	1,5%	7,9%	1,5%	4,7%	2,3%	7,0%	1,5%	9,9%	1,1%	9,8%	3,3%
Lehigh County/ Allentown PA	156,204	5,0%	14,4%	4,7%	12,7%	3,8%	2,9%	5,6%	1,5%	3,9%	2,7%	6,9%	1,7%	19,1%	1,7%	7,6%	3,6%
Washnetaw County/ Ann Arbor MI	130,462	4,4%	17,5%	3,3%	14,1%	1,9%	2,9%	2,4%	1,9%	10,9%	1,8%	7,3%	1,3%	15,4%	1,6%	9,1%	3,4%
Ada County/ Boise ID	159,931	7,7%	13,0%	5,1%	13,7%	2,7%	2,3%	4,8%	1,8%	5,9%	3,3%	10,5%	0,7%	13,4%	1,4%	9,4%	3,2%
Richland County/ Columbia SC	153,785	5,9%	7,3%	4,2%	14,0%	1,2%	3,0%	10,8%	1,9%	6,6%	1,1%	10,0%	1,5%	14,9%	1,3%	10,5%	4,0%
Lane County/ Eugene OR	117,478	5,7%	16,5%	4,7%	15,6%	2,3%	2,8%	3,4%	2,2%	5,0%	0,8%	6,9%	1,0%	14,7%	1,5%	9,8%	4,5%
Cumberland County/ Fayetteville NC	79,695	6,0%	11,5%	3,0%	19,0%	5,0%	2,6%	3,1%	1,9%	4,5%	0,8%	9,3%	1,1%	11,7%	1,1%	14,4%	4,4%
Allen County/Fort Wayne IN	160,610	6,2%	18,4%	6,6%	12,6%	4,2%	2,0%	6,0%	1,1%	3,7%	0,8%	6,3%	1,6%	15,8%	1,2%	9,7%	3,4%
Madison County/ Huntsville AL	128,655	4,2%	18,8%	3,3%	15,2%	N/A	1,6%	2,6%	1,4%	17,9%	0,3%	9,7%	0,9%	8,0%	0,9%	9,8%	3,3%
Ingham County/ Lansing MI	118,891	4,3%	13,8%	N/A	15,1%	3,8%	2,2%	6,3%	2,5%	6,5%	1,3%	5,4%	1,5%	16,1%	1,4%	10,6%	5,7%
Washoe County/Reno NV	178,539	11,1%	7,8%	6,0%	12,7%	5,1%	1,7%	3,8%	2,2%	4,7%	1,2%	7,4%	0,7%	10,1%	3,3%	18,4%	2,8%
Winnabago County/ Rockford IL	122,754	4,7%	23,3%	4,3%	12,6%	N/A	1,7%	4,5%	1,1%	3,4%	0,2%	10,5%	1,4%	15,0%	0,9%	8,0%	4,0%
Marion County/ Salem OR	98,405	6,5%	12,3%	3,0%	15,4%	N/A	1,6%	3,8%	2,0%	3,4%	0,7%	7,4%	1,8%	13,8%	1,4%	9,8%	4,8%
Forsyth County/ Winston-Salem NC	157,647	4,8%	16,1%	N/A	12,7%	5,2%	1,2%	6,3%	1,2%	4,2%	1,9%	7,3%	4,8%	17,2%	1,1%	8,6%	2,8%

Source: U.S. Bureau of Labor Statistics

Table 22 – Industry Growth Rates – Benchmark Counties, 2001-2004

Table 22. Changes in employment by industry: 2001 to 2004																	
Industry	Total	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation Warehousing	Information	Finance & Insurance	Real Estate Rental Leasing	Professional & Technical Services	Management of Companies & Enterprises	Administrative & Waste Services	Educational Services	Health Care & Social Assistance	Arts Entertainment & Recreation	Accommodation & Food Services	Other Services Ex. Public Admin
United States	-0.7%	2.1%	-13.0%	-1.5%	-0.8%	-3.1%	-13.7%	3.0%	2.0%	-1.5%	-1.1%	1.2%	10.4%	8.0%	3.8%	5.1%	1.9%
Hamilton County/ Chattanooga TN	0.3%	-5.0%	-18.8%	8.0%	2.0%	-1.3%	-1.3%	5.0%	5.1%	5.8%	22.1%	5.1%	3.4%	13.3%	-7.0%	16.9%	1.4%
Lehigh County/ Allentown PA	-0.4%	12.4%	-26.0%	3.1%	4.1%	-1.5%	2.4%	-3.1%	-6.0%	10.5%	47.9%	1.3%	-9.4%	10.3%	2.5%	12.2%	-4.1%
Washtenaw County/ Ann Arbor MI	-3.5%	-6.8%	-14.6%	2.0%	-4.9%	12.4%	-24.9%	-7.7%	11.0%	-9.7%	-10.9%	-9.3%	40.5%	9.0%	22.1%	9.4%	15.3%
Ada County/ Boise ID	3.0%	-4.5%	-11.8%	0.8%	2.1%	-9.2%	12.0%	13.5%	8.2%	3.1%	-20.4%	28.6%	37.5%	13.3%	11.6%	2.6%	0.3%
Richland County/ Columbia SC	1.4%	2.1%	-6.5%	5.1%	-0.3%	-1.8%	-16.9%	-0.2%	-1.8%	8.9%	-16.5%	3.0%	2.6%	10.5%	22.4%	-1.7%	-0.5%
Lane County/ Eugene OR	2.0%	6.1%	-1.3%	3.5%	2.6%	2.2%	-10.9%	1.3%	2.0%	5.5%	-15.9%	27.4%	11.2%	2.2%	18.0%	-2.1%	-4.6%
Cumberland County/ Fayetteville NC	4.8%	2.4%	-22.0%	-5.7%	-0.5%	0.5%	-11.6%	-11.5%	5.0%	20.0%	45.8%	37.3%	5.4%	25.5%	-6.4%	18.0%	8.0%
Allen County/Fort Wayne IN	-3.3%	-2.5%	-11.4%	-11.8%	-4.4%	nd	-23.5%	-12.7%	-7.2%	-8.0%	-28.7%	12.5%	11.4%	11.8%	-2.9%	6.6%	-5.2%
Madison County/ Huntsville AL	5.1%	-6.5%	-10.5%	-8.9%	11.6%	nd	-17.9%	3.8%	-2.6%	5.7%	60.4%	33.8%	17.4%	24.1%	6.1%	8.7%	13.5%
Ingham County/ Lansing MI	-3.7%	-17.2%	-17.2%	nd	-7.2%	1.5%	0.6%	7.2%	2.1%	-7.9%	-22.7%	-10.0%	37.6%	10.2%	-8.8%	5.6%	-1.0%
Washoe County/Reno NV	5.0%	28.2%	0.6%	-3.0%	7.6%	1.5%	-13.1%	6.3%	-1.2%	6.7%	-21.7%	20.2%	13.8%	13.2%	-4.6%	-8.0%	9.3%
Winnebago County/ Rockford IL	-2.6%	1.0%	-17.0%	-5.6%	-2.0%	nd	-2.8%	2.7%	6.9%	7.2%	-28.3%	26.7%	8.9%	6.8%	1.7%	-3.9%	-6.1%
Marion County/ Salem OR	4.3%	5.1%	-3.0%	-3.7%	6.5%	0.0%	-17.6%	9.7%	-11.7%	1.9%	23.8%	34.6%	4.9%	6.2%	2.7%	8.0%	-3.0%
Forsyth County/ Winston-Salem NC	-3.3%	-13.4%	-14.8%	nd	-5.3%	-14.0%	-46.7%	-6.4%	-12.4%	-10.5%	73.1%	-7.4%	9.1%	15.1%	-10.2%	7.8%	-7.3%

Source: United States Bureau of Labor Statistics

Source: U.S. Bureau of Labor Statistics

By comparison, five industries – Health Care, Educational Services, Administrative and Waste Services, Accommodation/Food Services and Professional/Technical Services – had job growth in ten or more of the benchmark counties.

Among the 14 benchmark counties, Hamilton County had the highest rate of growth in employment in the Wholesale Trade sector (+8.0%), was second in Accommodation and Food Services (+16.9%), fifth in Finance and Insurance (+5.0%), Fourth in Real Estate (+5.1%), fifth in Professional and Technical Services (+5.8%) and tied for fourth in Health Care (+13.3%).

Occupation

A comparison of occupational employment data²⁸ among peer metropolitan areas reveals that the Chattanooga MSA ranked in the top five in share of employment in seven occupations. The benchmark MSA with the highest number of occupational employment shares ranked in the top five was Boise, Idaho (12).

In 2004, Chattanooga ranked first in Transportation and Material Moving (12.3%), second in Food Preparation and Serving (9.0%), third in Management occupations (5.5%), and fourth in Health Care Practitioners and Technical (5.6%), Installation, Maintenance and Repair (4.4%), Protective Service (2.1%) and Production (11.4%) occupations.

Table 23 – Occupational Employment Structure – Benchmark MSAs, 2004

	Management occupations	Business and financial operations occupations	Computer and mathematical occupations	Architecture and engineering occupations	Life, physical, and social science occupations	Legal occupations	Education, training, and library occupations	Healthcare practitioners and technical occupations	Community and social services occupations	Arts, design, entertainment, sports, and media occupations
Chattanooga, TN	5.5%	3.4%	1.4%	1.4%	0.3%	0.6%	4.4%	5.6%	1.1%	0.9%
Huntsville, AL	5.0%	5.9%	6.0%	7.5%	1.0%	0.5%	4.5%	4.6%	0.6%	1.2%
Boise, ID	7.4%	4.2%	2.6%	3.1%	1.0%	0.8%	5.1%	4.9%	1.4%	1.2%
Rockford, IL	4.4%	3.6%	0.9%	1.9%	0.6%	0.4%	6.2%	5.6%	1.4%	1.0%
FortWayne, IN	4.0%	3.3%	1.5%	2.0%	0.5%	0.4%	4.6%	5.3%	1.1%	1.1%
Winston-Salem, NC	4.8%	3.2%	1.7%	1.3%	0.5%	0.5%	5.7%	5.0%	0.9%	0.9%
Reno, NV	3.9%	2.8%	1.2%	1.2%	0.6%	0.5%	3.5%	13.7%	0.7%	1.3%
Eugene, OR	3.9%	3.8%	1.5%	1.5%	1.0%	0.6%	1.5%	8.7%	2.1%	1.3%
Salem, OR	4.7%	5.5%	1.8%	1.0%	0.7%	1.1%	6.3%	4.1%	0.9%	2.9%
Allentown, PA	4.6%	3.8%	1.6%	1.9%	0.6%	1.3%	6.1%	5.8%	1.5%	1.0%
Columbia, SC	5.7%	4.6%	2.1%	1.4%	0.6%	1.3%	6.2%	5.8%	1.0%	1.7%
AnnArbor, MI	4.3%	4.0%	2.5%	3.4%	N/A	0.4%	7.5%	7.0%	1.2%	1.3%
Lansing, MI	4.2%	5.7%	2.1%	1.6%	1.2%	0.7%	8.0%	4.9%	1.4%	1.5%
Fayetteville, NC	3.6%	3.0%	1.1%	1.0%	0.6%	0.6%	9.3%	5.0%	1.7%	0.6%
	Construction and extraction occupations	Installation, maintenance, and repair occupations	Healthcare support occupations	Protective service occupations	Food preparation and serving related occupations	Building and grounds cleaning and maintenance occupations	Personal care and service occupations	Sales and related occupations	Office and administrative support occupations	Production occupations
Chattanooga, TN	3.8%	4.4%	2.5%	2.1%	9.0%	3.0%	1.5%	9.4%	16.1%	11.4%
Huntsville, AL	3.0%	4.2%	1.8%	2.2%	7.3%	3.3%	1.6%	9.3%	15.4%	8.8%
Boise, ID	5.6%	4.7%	2.5%	2.2%	8.0%	3.0%	1.8%	9.5%	18.1%	6.2%
Rockford, IL	4.1%	4.1%	2.4%	1.5%	6.9%	2.6%	1.6%	10.2%	15.7%	16.8%
FortWayne, IN	4.8%	4.2%	2.1%	1.8%	8.5%	3.2%	2.1%	9.8%	15.5%	15.5%
Winston-Salem, NC	3.8%	4.9%	2.5%	1.6%	8.2%	3.0%	1.8%	9.9%	17.0%	13.8%
Reno, NV	7.5%	3.5%	1.8%	2.0%	8.8%	3.8%	3.8%	9.2%	17.1%	4.7%
Eugene, OR	4.9%	4.0%	3.0%	1.8%	8.1%	4.3%	1.9%	11.1%	16.7%	9.0%
Salem, OR	4.7%	3.7%	2.9%	2.4%	8.9%	3.3%	2.5%	9.5%	18.3%	7.5%
Allentown, PA	4.1%	4.8%	3.5%	1.7%	8.3%	3.2%	2.3%	10.4%	16.9%	10.0%
Columbia, SC	3.7%	4.2%	2.3%	2.4%	8.3%	3.4%	1.8%	9.6%	20.1%	7.0%
AnnArbor, MI	4.0%	4.0%	2.5%	1.8%	8.2%	3.2%	2.3%	9.5%	16.5%	10.1%
Lansing, MI	3.7%	3.7%	2.8%	1.8%	8.4%	2.9%	2.2%	10.0%	18.3%	8.1%
Fayetteville, NC	3.9%	4.8%	3.7%	2.9%	9.8%	3.6%	1.8%	12.0%	16.4%	8.0%
										Transportation and material moving occupations
										12.3%
										6.5%
										8.3%
										8.5%
										8.8%
										7.9%
										7.6%
										7.4%
										7.3%
										6.8%
										6.1%
										8.6%

Source: U.S. Bureau of Labor Statistics

Across benchmark MSAs, the highest shares of employment were found in Office and Administrative Support occupations. Huntsville, Alabama had the lowest share of employment in this occupation (15.4%), and the top five MSAs had shares of 17% or more. In one MSA – Columbia, South Carolina – Office and Administrative Support occupations accounted for one-fifth of all employment in 2004.

Production also accounted for high shares of employment. While the Rockford, Illinois MSA had the highest share of Production occupations (16.8%), Reno, Nevada had the lowest (4.7%). In all, six benchmark MSAs had shares of Production occupations in excess of 10%, and two benchmark MSAs had shares in excess of 15%.

Three MSAs ranked first in share of employment for at least three occupations. Huntsville was ranked first in Business and Financial Operations (5.9%), Computer and Mathematical (6.0%), and Architecture and Engineering (7.5%) occupations, while Reno was ranked first in Healthcare Practitioners and Technical (13.7%), Construction and Extraction (7.5%), Building and Grounds Cleaning/Maintenance (4.3%) and Personal Care and Service (3.8%) occupations.

Fayetteville, North Carolina was ranked first in employment in five occupations: Education, Training and Library (9.3%), Healthcare Support (3.7%), Protective Service (2.9%), Food Preparation and Serving (9.8%) and Sales Related (12.0%) occupations.

Between 2001 and 2004, employment grew in three occupational categories across the benchmark regions - Business and Financial Operations, Education, Training and Library occupations (13 of 14 regions), and Arts, Design, Entertainment, Sports and Media (12 of 14 regions). Two occupations sustained job losses across regions - Management (11 of 14 regions) and Production (10 of 14 regions).

The Chattanooga Metropolitan Statistical Area had the highest percentage growth in Computer and Mathematical occupations (+89.6%), Legal occupations (+30.8%), and Food Preparation and Serving Related occupations (+28.2%) compared to all other benchmark regions. The Chattanooga MSA ranked second in Arts, Design, Entertainment, Sports and Media occupations (+42.9%) to the Rockford MSA (+43.4%).

Income

In 2000, Chattanooga ranked 9th in per capita income among benchmark cities at \$19,689. Ann Arbor, Michigan had the highest per capita income of the benchmark cities, while Allentown, Pennsylvania had the lowest observed per capita income.

Table 25 – Per Capita Income, Benchmark Cities, 2000

City/State	Per Capita Income	Rank
Ann Arbor MI	\$ 26,419	1
Huntsville AL	\$ 24,015	2
Boise ID	\$ 22,696	3
Reno NV	\$ 22,520	4
Winston-Salem NC	\$ 22,468	5
Eugene OR	\$ 21,315	6
Rockford IL	\$ 19,781	7
Chattanooga TN	\$ 19,689	8
Fayetteville NC	\$ 19,141	9
Salem OR	\$ 19,141	10
Columbia SC	\$ 18,853	11
Fort Wayne IN	\$ 18,517	12
Lansing MI	\$ 17,924	13
Allentown PA	\$ 16,282	14

Source: U.S. Census Bureau

Overall, the Chattanooga MSA ranked 9th among benchmark counties in job creation between 2001 and 2004. But the reason for its relative low ranking is attributable to slow growth in lower income/low college education-requisite occupations.

In higher and middle-income occupations, Chattanooga's growth rate among benchmark regions ranked third and fifth respectively.

In the twelve MSAs where there was net job growth, lower income jobs accounted for most of the new jobs in six MSAs. In Chattanooga, Huntsville, Rockford and Eugene, a majority of new jobs were higher income/college educated occupations.

Table 26 – Occupation/Salary Group Growth – Benchmark Cities, 2001-2004

MSA	Total job change 2001 to 2004	Higher income jobs/Mostly college educated	Rank	Middle income jobs/Mostly or little college educated	Rank	Lower income jobs/Little college educated
Chattanooga TN	5,590	3,420	9	1,050	3	1,120
Allentown PA	11,910	130	3	4,490	10	7,290
Ann Arbor MI	-4,220	2,760	14	890	5	-7,870
Boise ID	17,140	2,540	1	2,210	6	12,390
Columbia SC	16,480	-1,180	2	-940	13	18,600
Eugene	5,710	3,210	8	220	4	2,280
Fayetteville NC	8,800	1,030	6	220	8	7,550
Fort Wayne IN	610	-100	11	960	11	-250
Huntsville AL	9,480	6,260	5	880	1	2,340
Lansing MI	-60	-330	12	-680	12	950
Reno NV	10,910	540*	4	3,840	9	6,530
Rockford IL	2,190	1,740	10	-900	7	1,350
Salem OR	6,980	-1,190	7	1,910	14	6,260
Winston-Salem NC	-570	4,700	13	-1,190	2	-4,080

Source: Bureau of Labor Statistics

*Excludes Farming, Fishing and Forestry and Life, Physical and Social Science Occupations due to lack of 2001 and 2004 data.

Educational Attainment

Both Hamilton County and Chattanooga were ranked low in educational attainment among the peer jurisdictions in this study. In 2000, 32.5% of males (ranked 10th) and 27.9% of females (ranked 11th) in Hamilton County had at least a Bachelor's degree. Census 2000 data at the city level indicates almost identical rankings for males (29.1%) and females (25.5%) - each ranked 11th among peer cities.

Washtenaw County – the home of the University of Michigan - ranked first among peer counties, with 54.8% of males and 53.5% of females holding at least a Bachelor's degree in 2000. This was the only comparison county in which the college attainment rate for both males and females exceeded 50%. Winnebago County ranked last in college attainment for males (26.6%) and females (24.9%).

Among comparison cities, Ann Arbor exhibited the highest college attainment rates for both males (75.1%) and females (71.4%). This rate was over 26 percentage points higher than the second-ranked city for male college attainment and over 28 percentage points higher than the second-ranked city for female college attainment. Allentown exhibited the lowest college attainment rates among peer cities for both males (27.1%) and females (19.9%).

When college attainment data for peer counties is disaggregated by both age and gender, Hamilton County ranks low across all age and gender categories. Washtenaw County exhibited the highest college attainment rates across all gender and age categories.

Table 27 – Educational Attainment, Benchmark Cities/Counties, 2000

25 Years and older college educated								
County/State	County				City			
	%Male	Rank	%Female	Rank	%Male	Rank	%Female	Rank
Washtenaw County/Ann Arbor MI	54.80%	1	53.50%	1	75.10%	1	71.40%	1
Madison County/Huntsville AL	45.90%	2	35.30%	4	48.20%	2	36.50%	5
Ingham County/Lansing MI	42.50%	3	39.00%	3	29.70%	10	28.20%	10
Ada County/Boise ID	42.10%	4	35.00%	5	44.50%	4	37.20%	4
Richland County/Columbia SC	41.00%	5	39.50%	2	42.70%	5	40.80%	3
Forsyth County/Winston-Salem NC	35.90%	6	33.80%	6	36.50%	6	34.30%	6
Lane County/Eugene OR	34.10%	7	31.60%	7	46.50%	3	42.60%	2
Allen County/Fort Wayne IN	33.50%	8	28.40%	9	29.10%	12	25.20%	12
Lehigh County/Allentown PA	32.60%	9	28.40%	10	21.70%	14	19.90%	14
Hamilton County/Chattanooga TN	32.50%	10	27.90%	11	29.10%	11	25.50%	11
Washoe County/Reno NV	31.90%	11	29.60%	8	32.50%	8	30.80%	8
Cumberland County/Fayetteville NC	29.30%	12	27.60%	12	35.40%	7	31.00%	7
Marion County/Salem OR	27.80%	13	24.90%	13	32.10%	9	29.10%	9
Winnebago County/Rockford IL	26.60%	14	24.90%	14	26.20%	13	24.80%	13

Source: U.S. Census Bureau

Table 28 – Educational Attainment by Age and Gender – Benchmark Counties, 2000

Geography	Men, 25 to 34 years old	Men, 35 to 44 years old	Men, 45 to 64 years old	Men, 65 years and older	Women, 25 to 34 years old	Women, 35 to 44 years old	Women, 45 to 64 years old	Women, 65 or older
Washtenaw County, Michigan	55.9	48.0	49.5	38.4	57.8	49.3	45.2	25.9
Richland County, South Carolina	34.7	31.7	36.0	31.5	40.6	33.9	29.6	17.9
Ingham County, Michigan	35.4	30.9	41.4	29.6	36.6	31.0	33.6	17.4
Forsyth County, North Carolina	30.0	32.4	33.1	21.7	33.1	33.5	27.1	14.9
Ada County, Idaho	31.3	33.9	40.8	28.6	34.1	29.3	28.1	14.5
Washoe County, Nevada	20.5	21.6	30.3	26.2	23.3	23.3	24.8	14.2
Madison County, Alabama	33.3	41.6	43.3	37.1	35.0	35.9	28.7	14.1
Lane County, Oregon	26.0	23.3	31.7	22.9	27.2	24.5	28.7	13.9
Marion County, Oregon	13.1	17.8	28.7	22.0	18.2	19.4	22.4	12.3
Hamilton County, Tennessee	23.8	27.2	31.2	21.7	26.4	26.2	21.9	11.1
Winnebago County, Illinois	20.4	20.6	23.0	16.3	21.6	20.6	19.6	10.4
Allen County, Indiana	25.6	26.0	28.3	20.1	25.6	22.5	20.7	9.4
Cumberland County, North Carolina	18.4	19.3	22.8	14.7	21.9	19.8	19.8	9.2
Lehigh County, Pennsylvania	26.4	28.2	30.4	16.6	29.5	26.6	21.9	8.0

HAMILTON COUNTY RANK

10 8 8 9 9 8 10 10

Source: U.S. Census Bureau

Airport Activity

In 2005, Reno/Tahoe International airport had the highest number of enplanements and was only one of two benchmark airports to support over one million enplanements for the year. Chattanooga Metropolitan Airport/Lovell field was ranked ninth among peer airports in 2005, with 249,396 enplanements for the year.

Table 29 – Airport Enplanements, Benchmark Cities, 2001-05

City	Airport	2001	2002	2003	2004	2005	01-05 %
Reno	Reno/Tahoe International	2,388,923	2,170,828	2,242,299	2,478,179	2,510,833	5.10%
Boise	Boise Air Terminal/Gowen Field	1,425,007	1,380,227	1,357,984	1,451,728	1,581,338	11.00%
Columbia	Columbia Metropolitan	537,727	513,307	510,860	625,825	725,573	34.90%
Huntsville	Huntsville International-Carl T Jones Field	473,148	481,374	512,540	585,058	619,499	30.90%
Allentown	Lehigh Valley International	478,367	397,408	494,173	507,203	419,122	-12.40%
Eugene	Mahlon Sweet Field	356,108	308,662	300,092	349,161	359,187	0.90%
Lansing	Capital City	269,066	260,685	273,426	330,416	314,593	16.90%
Fort Wayne	Fort Wayne International	295,469	288,996	294,127	329,135	307,682	4.10%
Chattanooga	Chattanooga Metropolitan/Lovell Field	258,554	248,512	232,198	235,968	249,396	-3.50%
Fayetteville	Fayetteville Regional/Grannis Field	131,286	129,705	120,651	158,782	153,524	16.90%
Rockford	Chicago/Rockford International	9,133	1,406	16,982	49,229	82,282	800.90%

Source: U.S. Federal Aviation Administration

Between 2001 and 2005, Chicago/Rockford International Airport was the fastest growing airport, in large part because it did not receive a commercial classification until 2003. Huntsville International Airport– Carl Jones Field and Columbia Metropolitan Airport were the only other airports with enplanement growth rates in excess of 30%. Chattanooga Metropolitan Airport– Lovell Field was one of only two airports to experience an overall decline in enplanements over the 2001-2005 time period.

Jobs and the Economy in Chattanooga's Neighborhoods

Employment

Based on 2000 Census data²⁹ five neighborhoods accounted for the location of 42% of all jobs in the county: Downtown (18%), Hickory Valley/Hamilton Place (6.9%), Woodmore/Dalewood (5.4%), Tyner/Greenwood (6.3%) and Bushtown/Highland Park (5.6%).

More than half (52.2%) of Finance, Insurance and Real Estate jobs and 14% of Manufacturing jobs are located Downtown. Education, Health and Social Service jobs were located across the county, with the highest concentrations in Bushtown/Highland Park and Glenwood/Eastdale.

Within neighborhoods, Apison had the highest concentration of Manufacturing

employment (58.2%), and five neighborhoods had Manufacturing employment shares greater than 32%. Hixson had the highest share of Retail Trade employment (39.4%), and five neighborhoods had Retail Trade employment shares of 24% or more.

Lookout Valley/Lookout Mountain had the highest employment share in the Transportation and Warehousing sector (38.6%). With the exception of Soddy Daisy (35.1%) and Collegedale (21.0%) and Dallas Bay/Lakesite (17.6%), employment shares for this sector in the remaining neighborhoods were 13.2% or less.

79% of all jobs in Glenwood/Eastdale were in the Educational, Health and Social Services sector. The five neighborhoods with the highest shares in this sector had proportions of 29.9% or more, and two (including Glenwood/Eastdale) had shares of over 50%.

Three neighborhoods had more than 13% of employment in Entertainment, Accommodation and Food Services (Walden/Mowbray/Flat Top Mountain, Brainerd and Hickory Valley/Hamilton Place). High employment shares in Professional, Management and Administrative services were found in Bonny Oaks/Hwy. 58 (21.0%), Woodmore/Dalewood (14.9%), Westview/Mountain Shadows (14.7%) and Signal Mountain (14.6%). Two neighborhoods had employment shares greater than 22% in Finance, Insurance and Real Estate (Downtown and Woodmore/Dalewood).

Table 30 – Employment by Industry and Neighborhood, 2000

Neighborhood	Agriculture	Construction	Manufacturing	Wholesale trade	Transportation, warehousing, utilities	Information	Finance, insurance, real estate	Professional, management, administrative services	Educational, health and social services	Entertainment, accommodations, food services	Other services (except public)	Public administration	Total
East Ridge	0	570	350	90	1,029	49	380	670	1,390	760	590	64	6,042
Hickory Valley/Hamilton Place	0	360	720	210	3,920	990	325	850	1,555	1,665	470	60	12,565
North Chattanooga/Hill City/UTC	4	690	630	120	450	90	135	985	2,125	745	550	370	7,204
Woodmore/Dalewood	20	450	580	235	1,310	1,095	174	2,225	765	745	550	195	9,809
Riverview/Stuart Heights	0	120	70	14	90	4	35	170	375	155	150	70	1,253
Lupton City/Norcross	25	105	390	75	245	20	75	50	135	55	140	0	1,335
Westview/Mountain Shadows	0	145	25	20	60	0	80	135	370	0	55	10	920
Bonny Oaks/Hwy. 58	4	115	140	90	510	75	150	445	290	120	150	30	2,123
Tyner/Greenwood	40	1,295	2,060	995	1,435	1,055	420	1,100	1,130	755	885	165	11,550
Harrison Bay	0	35	30	0	120	30	10	45	115	40	70	10	515
Birchwood	25	85	15	40	45	0	10	10	95	40	60	4	484
Apison	0	200	2,950	140	105	70	100	175	1,075	90	125	0	5,065
East Brainerd	0	150	45	10	300	50	165	70	155	160	140	15	1,260
Dallas Bay/Lakeside	0	130	65	0	45	0	40	50	100	75	50	4	683
Hixson	0	80	380	49	1,615	29	264	260	575	455	290	25	4,097
Northgate/Big Ridge	0	55	480	90	570	100	55	160	795	360	270	0	3,160
Harrison	0	150	20	20	105	0	10	0	80	325	10	35	755
Soddy Daisy	0	220	335	105	365	25	90	95	455	175	130	125	3,265
Bakewell	20	140	160	20	110	0	0	80	85	10	45	0	740
Falling Water/Browntown	10	360	85	30	140	25	65	185	175	75	195	50	1,395
Walden/Mowbray/Fiat Top Min	4	240	95	10	155	40	140	125	205	195	90	4	1,307
Mtn Creek/Moccasin Bend	40	560	1,635	230	420	190	130	210	1,320	185	95	65	5,255
Signal Mtn	0	100	10	20	85	45	85	150	300	35	135	50	1,025
Glenwood/Eastdale	0	29	395	135	90	20	85	155	4,890	79	240	10	6,147
Collegedale	10	335	465	95	275	745	60	250	585	290	145	155	3,555
Ridgedale/Oak Grove/Cifton Hills	40	1,590	1,555	715	900	480	109	425	1,095	225	405	118	7,697
Downtown	109	1,105	4,420	1,240	1,405	3,325	840	3,360	1,760	2,580	1,070	2,235	32,859
Dupont/Murray Hills	15	490	2,565	445	765	175	230	745	1,095	670	525	70	7,995
South Chattanooga	45	710	3,350	695	820	915	169	555	435	460	285	49	8,748
Red Bank	0	250	320	120	360	55	15	145	245	200	340	80	2,340
Brainerd	0	190	105	45	345	29	14	120	250	680	165	140	2,418
Bushtown/Highland Park	0	480	1,365	320	255	630	225	225	5,555	175	345	480	10,220
Lookout Valley/Lookout Min	90	330	1,070	165	225	30	75	295	305	450	220	90	5,450
Ooltewah/Summit	15	285	1,325	105	265	365	90	260	1,260	230	315	55	4,615
Middle Valley	0	230	155	25	255	25	30	95	225	84	100	0	1,264
Amnicola/East Chattanooga	0	944	2,980	830	225	605	85	295	445	155	90	770	7,454
Total	526	13,323	31,340	7,948	19,374	15,122	16,923	14,620	32,485	12,868	9,515	5,568	182,579

Source: U.S. Census Bureau

Table 31 – Employment Share by Industry and Neighborhood, 2000

Neighborhood	Agriculture	Construction	Manufacturing	Wholesale trade	Retail trade	Transportation, warehousing, utilities	Information	Finance, insurance, real estate	Professional, management, administrative services	Educational, health and social services	Entertainment, accommodations, food services	Other services (except public)	Public administration
East Ridge	0.0%	9.4%	5.8%	1.5%	17.0%	1.7%	0.8%	6.3%	11.1%	23.0%	12.6%	9.8%	1.1%
Hickory Valley/Hamilton Place	0.0%	2.9%	5.7%	1.7%	31.2%	7.9%	2.6%	11.3%	6.8%	12.4%	13.4%	3.7%	0.5%
North Chattanooga/Hill City/UTC	0.1%	9.6%	8.7%	1.7%	1.7%	1.2%	1.9%	4.3%	13.7%	29.5%	10.3%	7.6%	5.1%
Woodrose/Dalewood	0.2%	4.6%	5.9%	2.4%	13.4%	11.2%	1.8%	22.7%	14.9%	7.8%	7.6%	5.8%	2.0%
Riverview/Stuart Heights	0.0%	9.6%	5.6%	1.1%	7.2%	0.3%	0.0%	2.8%	13.6%	28.9%	12.4%	12.0%	5.6%
Lupton City/Norcross	1.9%	7.9%	29.2%	5.6%	18.4%	1.5%	1.5%	5.6%	3.7%	10.1%	4.1%	10.5%	0.0%
Westview/Mountain Shadows	0.0%	15.8%	2.7%	2.2%	2.2%	6.5%	0.0%	8.7%	14.7%	40.2%	0.0%	6.0%	1.1%
Bonny Oaks/Hwy. 58	0.2%	5.4%	6.6%	4.2%	24.0%	3.5%	0.2%	7.1%	21.0%	13.7%	5.7%	7.1%	1.4%
Tynes/Greenwood	0.3%	11.2%	17.8%	8.6%	12.4%	9.1%	1.9%	3.6%	9.5%	9.8%	6.5%	7.7%	1.4%
Harrison Bay	0.0%	6.8%	5.8%	0.0%	23.3%	5.8%	1.9%	1.9%	8.7%	22.3%	7.8%	13.8%	1.9%
Birchwood	5.1%	17.2%	3.0%	8.1%	9.1%	13.2%	0.0%	2.0%	2.0%	19.2%	8.1%	12.1%	0.8%
Arlson	0.0%	3.9%	58.2%	2.8%	2.1%	1.4%	0.7%	2.0%	3.5%	21.2%	1.8%	2.5%	0.0%
East Brainerd	0.0%	11.9%	3.6%	0.8%	23.8%	4.0%	0.0%	13.1%	5.6%	12.3%	12.7%	11.1%	1.2%
Dallas Bay/Lakeside	0.0%	19.0%	9.5%	0.0%	6.6%	17.6%	0.6%	5.9%	7.3%	14.6%	11.0%	7.3%	0.6%
Hixson	0.0%	2.0%	9.3%	1.2%	39.4%	0.7%	1.8%	6.4%	6.3%	14.0%	11.1%	7.1%	0.6%
Norrigate/Big Ridge	0.0%	1.7%	15.2%	2.8%	18.0%	3.2%	1.7%	7.1%	5.1%	25.2%	11.4%	8.5%	0.0%
Harrison	0.0%	19.9%	2.6%	2.6%	13.9%	0.0%	1.3%	0.0%	10.6%	43.0%	1.3%	4.5%	0.0%
Soddy Daisy	0.0%	6.7%	10.3%	3.2%	11.2%	35.1%	0.8%	2.8%	2.9%	13.9%	5.4%	4.0%	3.8%
Bakewell	2.7%	18.9%	21.6%	2.7%	14.9%	9.5%	0.0%	0.0%	10.8%	11.5%	1.4%	6.1%	0.0%
Falling Water/Brownstown	0.7%	25.8%	6.1%	2.2%	10.0%	1.8%	0.0%	4.7%	13.3%	12.5%	5.4%	14.0%	3.6%
Walden/Montbry/Flat Top Mtn	0.3%	18.4%	7.3%	0.8%	11.9%	3.1%	0.3%	10.7%	9.6%	15.7%	14.9%	6.9%	0.3%
Mtn Creek/Moccasin Bend	0.8%	10.7%	31.1%	4.4%	8.0%	3.6%	3.3%	2.5%	4.0%	25.1%	3.5%	1.5%	1.2%
Signal Mtn	0.0%	9.8%	1.0%	2.0%	8.3%	4.4%	1.0%	8.3%	14.6%	29.3%	3.4%	13.2%	0.9%
Glenwood/Eastdale	0.0%	0.5%	6.4%	2.2%	1.5%	0.3%	0.3%	1.4%	2.5%	78.6%	1.3%	3.9%	0.2%
Collegeville	0.3%	9.4%	13.1%	2.7%	7.7%	21.0%	1.7%	4.1%	7.0%	16.5%	8.2%	4.1%	4.4%
Ridgedale/Oak Grove/Clifton Hills	0.5%	20.2%	20.2%	9.3%	11.7%	6.0%	0.8%	1.4%	5.5%	14.2%	2.9%	5.3%	1.5%
Downtown	0.3%	3.4%	13.5%	3.8%	4.3%	10.7%	3.7%	26.9%	10.2%	5.4%	7.9%	3.3%	6.8%
Dupont/Murray Hills	0.2%	6.1%	32.1%	5.6%	9.8%	2.2%	2.6%	2.9%	9.3%	13.7%	8.4%	6.8%	0.9%
South Chattanooga	0.5%	8.1%	38.3%	7.9%	9.4%	10.5%	1.9%	3.0%	6.3%	5.0%	5.3%	3.3%	0.6%
Red Bank	0.0%	10.7%	13.7%	5.1%	15.4%	2.4%	0.6%	9.0%	6.2%	10.5%	8.5%	14.5%	3.4%
Brainerd	0.0%	7.9%	4.3%	1.9%	14.3%	1.2%	0.6%	5.0%	10.3%	28.1%	13.9%	6.8%	5.8%
Bucktown/Higland Park	0.0%	4.7%	13.4%	3.1%	6.2%	6.2%	0.6%	2.2%	2.2%	54.4%	1.7%	54.4%	4.7%
Lookout Valley/Lookout Mtn	1.7%	6.1%	19.6%	3.0%	4.1%	38.6%	0.6%	1.4%	5.4%	5.6%	8.3%	4.0%	1.7%
Colwell/Summit	0.3%	6.2%	28.7%	2.3%	5.7%	7.9%	1.0%	2.0%	5.6%	27.3%	5.0%	6.8%	1.2%
Middle Valley	0.8%	18.2%	12.3%	2.0%	20.2%	2.0%	2.4%	2.4%	7.5%	17.8%	6.6%	7.9%	0.0%
Amnicola/East Chattanooga	0.0%	12.7%	40.0%	11.1%	3.0%	8.1%	0.4%	1.1%	4.0%	6.0%	2.1%	1.2%	10.3%

Source: U.S. Census Bureau

Post-Census data suggests that patterns of employment may be changing. County Business Patterns³⁰ zip code data aggregated into regions indicate that some regions are gaining employment more rapidly than others. Of the survey areas where data were available, 84.2% of employment growth in Hamilton County from 1998 to 2003 occurred in East Brainerd. Red Bank/North Chattanooga was the only survey area to lose employment over this time period.

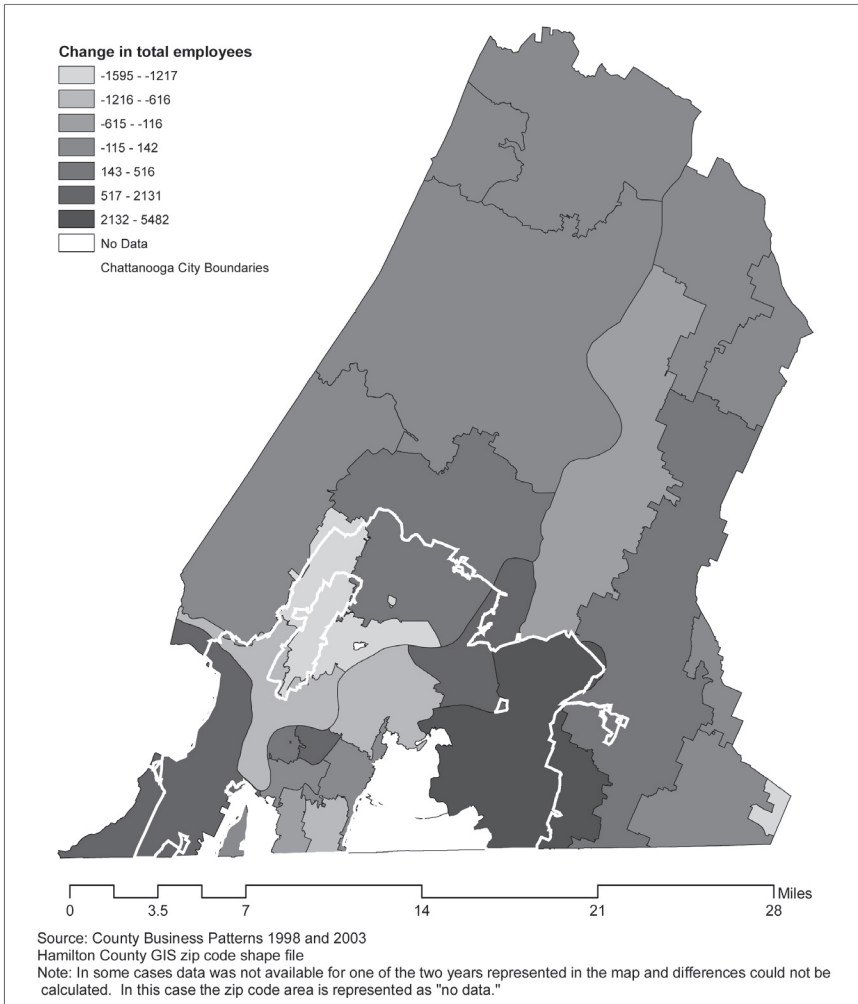
Table 32 – Employment Change by Region, 1998-2003

SOCCR SURVEY AREA	EMPLOYMENT CHANGE
East Brainerd	5,482
East Hamilton	51
North Hamilton	27
Hixson	332
Signal/Lookout/Lookout Valley	725
Red Bank/North Chattanooga	-611
Downtown/South Chattanooga	390
Brainerd/East Ridge ³¹	N/A
East Chattanooga	112
Source: U.S. Census Bureau	

A distinct pattern emerges when this data is disaggregated further to the zip code level. Between 1998 and 2003, the areas at the central core of Hamilton County (and the City of Chattanooga) have experienced the highest rates of employment contraction, although pockets of employment growth exist at the eastern and western portions of the Chattanooga city boundary.

Map 4

Hamilton County Business Patterns: Changes From 1998 to 2003 By Zip Code Boundary



Occupation

In 2000, a high concentration of employment across occupations was located within the Downtown neighborhood³². Additionally, the Hickory Valley/Hamilton Place and Tyner/Greenwood neighborhoods had high concentrations of employment among a wide range of occupational categories.

Several occupations were geographically concentrated. The Health Care Practitioners and Technicians occupational category was prominent in the Glenwood/Eastdale and Bushtown/Highland Park neighborhoods. The Transportation and Material Moving category was concentrated in the Amnicola/East Chattanooga, Lookout Valley/Lookout Mountain, Dupont/Murray Hills and Tyner/Greenwood neighborhoods. Production occupations were concentrated in the Apison, Amnicola/East Chattanooga, Dupont/Murray Hills, Downtown and South Chattanooga neighborhoods.

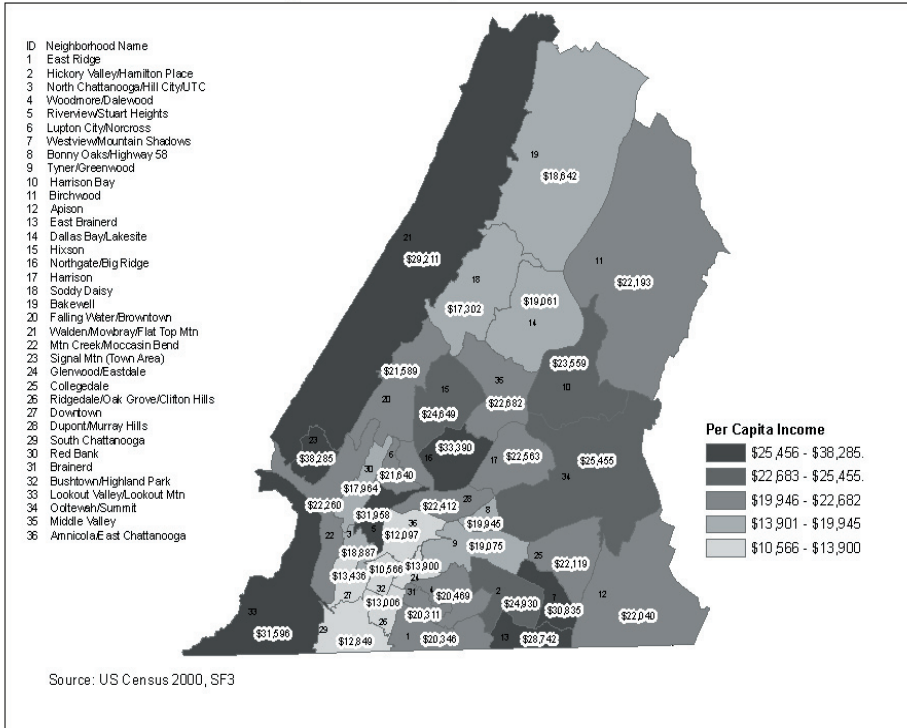
Within neighborhoods, the highest share of employment in Production occupations was found in Apison (28.1%), and three additional neighborhoods (Amnicola/East Chattanooga, Dupont/Murray Hills and Lupton City/Norcross) had Production employment shares greater than 20%.

Two neighborhoods had employment shares in Healthcare Practitioners and Technicians occupations that were greater than 20% (Bushtown/Highland Park and Glenwood/Eastdale).

Income

Census 2000 data indicates that Signal Mountain had the highest per capita income among Hamilton County's neighborhoods. Five neighborhoods – including two in Chattanooga - had per capita incomes above \$30,000. The lowest per capita income in 2000 was observed in Bushtown/Highland Park. Seven of the bottom-ten per capita incomes in Hamilton County were in neighborhoods located in Chattanooga.

Neighborhood Per Capita Income: Census 2000



With the geographic shift in employment, there has also been a shift in payroll. From 1998 to 2003, aggregate payroll in the county has grown from \$4.4 billion to \$5.2 billion, a 19.8% increase. Although the countywide increase in payroll has been substantial, it was below the U.S. average growth rate of 22.1% but above the average growth rate for Tennessee (17.2%)³³. An aggregation of County Business Patterns payroll data into the countywide survey areas indicates that (for areas in which data was available) East Brainerd comprised 67% of payroll growth in the county. The lowest growth in payroll was experienced in the North Hamilton and East Hamilton Survey areas.

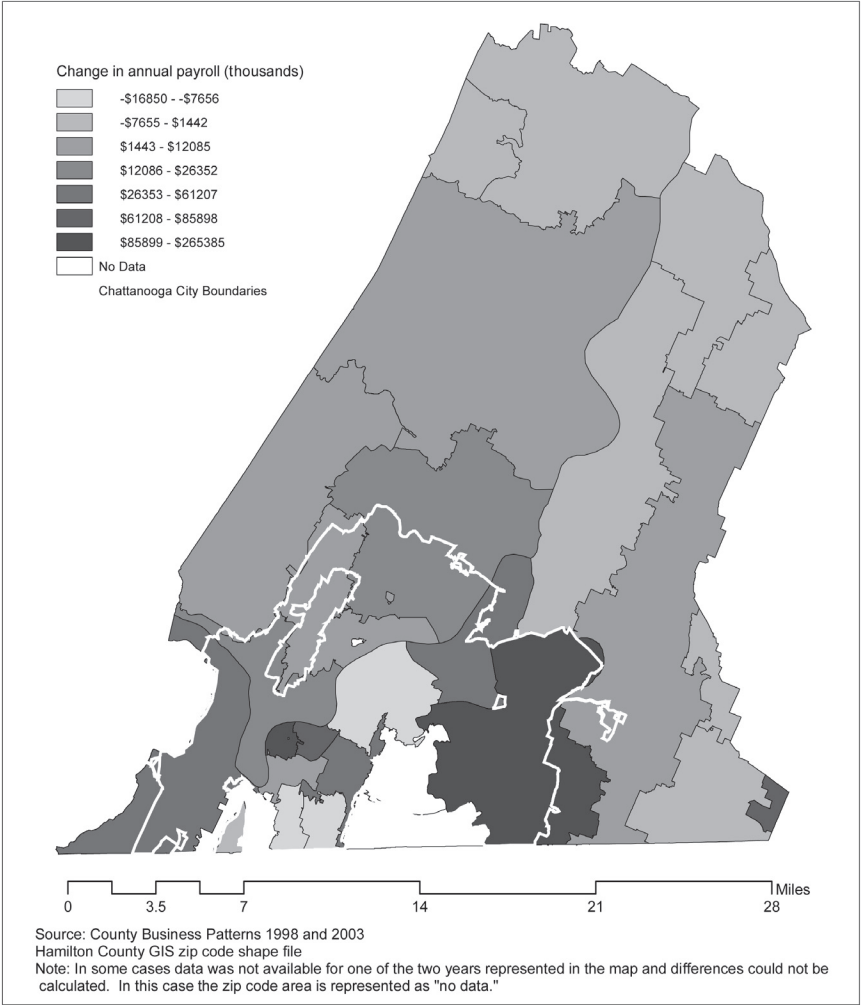
Table 33 – Payroll Change by Region, 1998-2003

SOCCR SURVEY AREA	PAYROLL CHANGE (\$000)
East Brainerd	265,385
East Hamilton	3,606
North Hamilton	2,264
Hixson	26,352
Signal/Lookout/Lookout Valley	22,477
Red Bank/North Chattanooga	8,228
Downtown/South Chattanooga	44,194
Brainerd/East Ridge ³⁴	N/A
East Chattanooga	23,341

Source: U.S. Census Bureau

A further disaggregation of payroll data to the zip code level indicates that payroll has decreased significantly in certain areas within Chattanooga's urban core.

**Hamilton County Business Patterns: Changes From 1998 to 2003
By Zip Code Boundary**



During this time period, increases in payroll have been observed at the periphery of the county. This finding is consistent with County Business Patterns establishment and employment data, which generally indicates a movement of economic opportunity from the urban core to the outer areas of the county and the larger MSA.

Business Attraction and Retention

An analysis of new business applications³⁵ by neighborhood between 2001 and 2005 reveals that Hickory Valley/Hamilton Place evidenced the most activity over this time period. Other neighborhoods that had relatively high numbers of new business applications were East Ridge, Ooltewah/Summit, Tyner/Greenwood and Woodmore/Dalewood. Across Neighborhoods, the highest number of applications occurred with respect to the Miscellaneous Retail Stores classification.

Table 34 – Business License Applications by Neighborhood

	Contracting	Durable Goods	Food Stores	Car, Cycle and Boat Dealers	Apparel Stores	Furniture, Electronics and Appliance Stores	Misc. Retail Stores	Personal Services	Business Services	Automotive Repair and Leasing	Total
Chattanooga	11	9	9	9	4	4	5	10	12	12	85
Apison	27	4	3	6	0	1	12	4	18	5	80
Bakewell	13	2	7	3	0	0	22	5	10	6	68
Birchwood	26	3	9	3	0	0	9	5	6	2	63
Bonny Oaks/Highway 58	12	0	3	4	11	2	13	21	19	8	93
Brainerd	10	3	6	2	11	4	19	21	21	3	100
Bushtown/Highland Park	9	4	3	0	15	2	14	6	14	1	68
Collegedale	22	2	4	3	1	4	19	14	17	7	93
Dallas Bay/Lakesite	32	1	5	3	7	3	19	4	19	5	98
Downtown	7	6	15	10	13	8	40	28	27	16	170
Dupont/Murray Hills	18	6	7	9	5	10	20	19	18	8	120
East Brainerd	20	3	3	4	5	7	27	16	14	5	104
East Ridge	40	3	18	13	12	11	48	40	46	10	241
Falling Water/Browtown	25	1	5	5	2	1	14	8	13	6	80
Glenwood/Eastdale	4	0	4	2	10	1	10	10	7	1	49
Harrison	18	1	5	4	4	0	13	4	25	4	78
Harrison Bay	17	0	4	1	3	0	14	4	13	4	60
Place	22	10	15	9	43	20	101	55	36	15	326
Hixson	33	3	11	7	24	4	34	27	24	6	173
Mtn	17	3	8	5	6	4	15	13	11	4	86
Lupton City/Norcross	14	2	2	6	2	3	16	16	9	4	74
Middle Valley	26	2	7	3	6	3	25	23	12	6	113
Mtn Creek/Moccasin Bend	11	7	6	4	2	2	9	16	12	6	75
City/UTC	10	5	9	3	13	6	23	25	29	6	129
Northgate/Big Ridge	15	3	4	2	7	3	16	22	20	9	101
Ooltewah/Summit	27	9	6	11	5	10	37	30	32	8	175
Red Bank	14	2	8	4	5	5	25	27	12	11	113
Grove/Clifton Hills	16	6	20	13	6	6	14	10	16	15	122
Riverview/Stuart Heights	5	1	4	1	9	3	21	11	9	1	65
Signal Mtn (Town Area)	7	4	2	0	4	2	9	10	11	2	51
Soddy Daisy	26	3	9	11	3	4	21	22	11	5	115
South Chattanooga	21	6	15	21	12	6	27	11	22	28	169
Tyner/Greenwood	22	15	5	14	11	9	23	37	29	14	179
Mtn	12	2	4	2	6	1	26	15	9	1	78
Shadows	12	2	9	1	5	3	20	9	17	1	79
Woodmore/Dalewood	19	5	18	12	22	13	47	27	36	23	222
Total	640	138	272	210	294	165	827	625	656	268	4095

Source: Hamilton County GIS, Hamilton County Clerk's Office

An alternate view of business attraction and retention can be obtained by assessing the geographic change in the number of firms by sector over the 1998-2003 time period. County Business Patterns data³⁶ aggregated to the countywide survey areas indicates that (for survey areas that had complete data) East Brainerd accounted for 82.1% of net firm growth in Hamilton County between 1998 and 2003.

Three survey areas experienced a net loss in firms over this time period. South Chattanooga experienced a net loss of 32 firms, while Red Bank/North Chattanooga and East Chattanooga had a net loss of 22 and three firms, respectively.

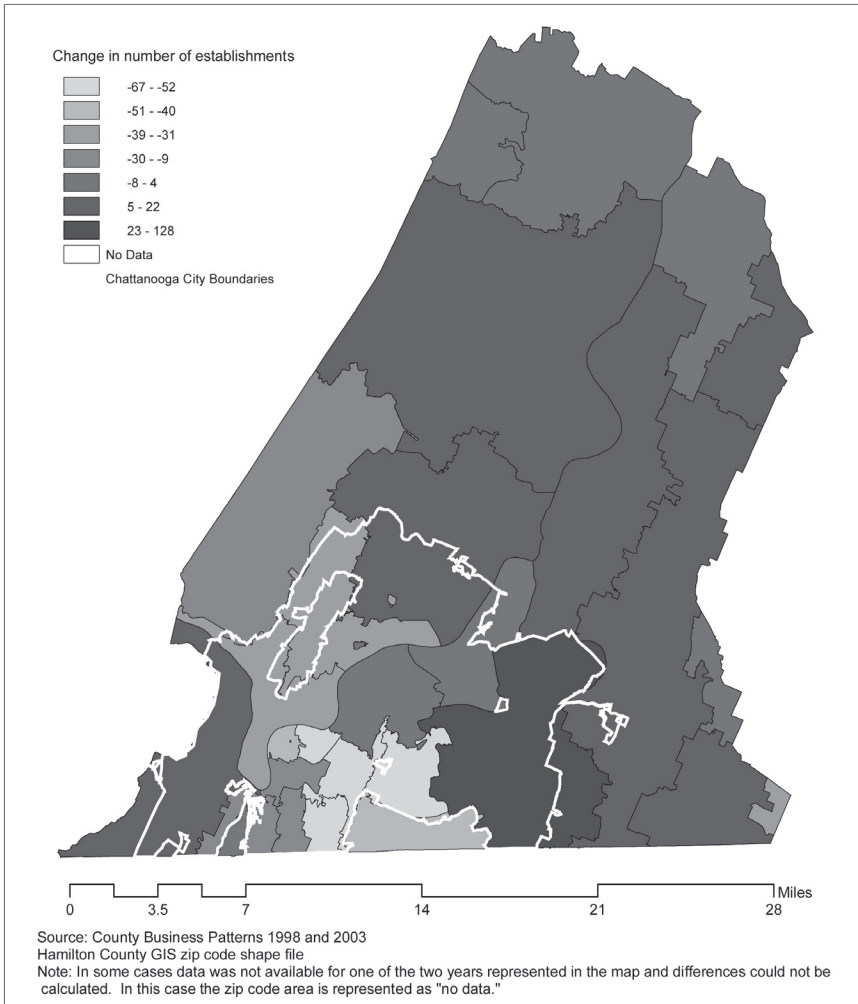
Table 35 – Hamilton County Firm Growth by Region, 1998-2003

SURVEY AREA	FIRM CHANGE
East Brainerd	128
East Hamilton County	10
North Hamilton County	4
Hixson	22
Signal/Lookout/Lookout Valley	-1
Red Bank/North Chattanooga	-22
Downtown/South Chattanooga	-32
Brainerd/East Ridge ³⁷	N/A
East Chattanooga	-3
Source: U.S. Census Bureau	

A disaggregation of County Business Patterns Data to the zip code level indicates that the number of firms has greatly declined within the urban core of Chattanooga. Conversely, significant growth in the number of firms has been observed in the areas to the east and northeast of the downtown area over the time period of analysis.

Map 6

Hamilton County Business Patterns: Changes From 1998 to 2003 By Zip Code Boundary



Endnotes

- ¹ See Glaeser, Edward and Jesse Shapiro, *City Growth: Which Places Grew and Why* in Redefining Urban and Suburban America: Evidence from the 2000 Census, Ed. Bruce Katz and Robert Lang (Washington, D.C.: Brookings Institution Press, 2003)
- ² United States Department of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages. Annual averages, private sector employment only. Employment data under the QCEW program represent the number of covered workers who worked during, or received pay for, the pay period including the 12th of the month. Excluded are members of the armed forces, the self-employed, proprietors, domestic workers, unpaid family workers, and railroad workers covered by the railroad unemployment insurance system. Definition taken from BLS.
- ³ All Sector Definitions were taken from the United States Department of Commerce, Bureau of the Census, NAICS 2002.
- ⁴ This sector comprises establishments primarily engaged in the physical or chemical transformation of materials or substances into new products. These products may be finished, in the sense that they are ready to be used or consumed, or semi-finished, in the sense of becoming a raw material for an establishment to use in further manufacturing.
- ⁵ The retail trade sector comprises establishments primarily engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise.
- ⁶ This sector comprises establishments primarily engaged in transporting passengers and goods, warehousing and storing goods, and providing services to these establishments. The modes of transportation are road (trucking, transit and ground passenger), rail, water, air and pipeline. These are further subdivided according to the way in which businesses in each mode organize their establishments. National post office and courier establishments, which also transport goods, are included in this sector.
- ⁷ This sector comprises establishments primarily engaged in providing health care by diagnosis and treatment, providing residential care for medical and social reasons, and providing social assistance, such as counseling, welfare, child protection, community housing and food services, vocational rehabilitation and child care, to those requiring such assistance.
- ⁸ This sector comprises establishments primarily engaged in providing short-term lodging and complementary services to travelers, vacationers and others, in facilities such as hotels, motor hotels, resorts, motels, casino hotels, bed and breakfast accommodation, housekeeping cottages and cabins, recreational vehicle parks and campgrounds, hunting and fishing camps, and various types of recreational and adventure camps. This sector also comprises establishments primarily engaged in preparing meals, snacks and beverages, to customer order, for immediate consumption on and off the premises.

⁹. This sector comprises establishments that are primarily engaged in financial intermediation. They raise funds by taking deposits and/or issuing securities and acquiring financial assets by making loans and/or purchasing securities. This sector also included establishments that are primarily engaged in the pooling of risk by underwriting annuities and insurance.

¹⁰. This sector comprises two different types of establishments: those primarily engaged in activities that support the day-to-day operations of other organizations; and those primarily engaged in waste management activities. The first type of establishment is engaged in activities such as administration, hiring and placing personnel, preparing documents, taking orders from clients, collecting payments for claims, arranging travel, providing security and surveillance, cleaning buildings, and packaging and labeling products. Waste management establishments are engaged in the collection, treatment and disposal of waste material, the operation of material recovery facilities, the remediation of polluted sites and the cleaning of septic tanks.

¹¹. This sector comprises establishments primarily engaged in managing companies and enterprises and/or holding the securities or financial assets of companies and enterprises, for the purpose of owning a controlling interest in them and/or influencing their management decisions.

¹². This sector comprises establishments primarily engaged in operating facilities or providing services to meet the cultural, entertainment and recreational interests of their patrons. These establishments produce, promote or participate in live performances, events or exhibits intended for public viewing; provide the artistic, creative and technical skills necessary for the production of artistic products and live performances; and preserve and exhibit objects and sites of historical, cultural or educational interest.

¹³. This sector comprises establishments primarily engaged in creating and disseminating (except by wholesale and retail methods) information and cultural products, such as written works, musical works or recorded performances, recorded dramatic performances, software and information databases, or providing the means to disseminate them. Establishments that provide access to equipment and expertise to process information are also included.

¹⁴. United States Department of Labor, Bureau of Labor Statistics, Metropolitan Area Occupational Employment and Wage Estimates, Occupational Employment Statistics Survey, November 2004. The OES survey is a semiannual mail survey measuring occupational employment and wage rates for wage and salary workers in nonfarm establishments in the United States. OES estimates are constructed from a sample of 1.2 million establishments. Forms are mailed to about 200,000 establishments in May and November of each year for a 3-year period. The nationwide response rate for the November 2004 survey was 78.7 percent for establishments, covering 73.0 percent of employment. Definition taken from BLS.

- ¹⁵. United States Equal Opportunity Commission, EEO-1 Dataset, Chattanooga MSA, 2003. As part of its mandate under Title VII of the Civil Rights Act of 1964, as amended, the Equal Employment Opportunity Commission requires periodic reports from public and private employers, and unions and labor organizations which indicate the composition of their work forces by sex and by race/ethnic category. Key among these reports is the EEO-1, which is collected annually from Private employers with 100 or more employees or federal contractors with 50 more employees. In 2003, over 40,000 employers with more than 50 million employees filed EEO-1 reports. Definition taken from EEO.
- ¹⁶. United States Department of Commerce, Bureau of the Census, Census 2000 Summary File SF-1 and SF-3.
- ¹⁷. United States Department of Commerce, Bureau of Economic Analysis, dataset CA 1-3, per capita personal income, 2000-2004. Estimates for 2000-2004 reflect county population estimates available as of April 2006. Per capita personal income was computed using Census Bureau midyear population estimates. Estimates for 2000-2004 reflect county population estimates available as of April 2006. Definition taken from BEA.¹⁸ See footnote 14.
- ¹⁹. See footnote 14.
- ²⁰. Due to low response totals, this table excludes the Fishing, Hunting and Agricultural Support, Mining, and Utilities sectors.
- ²¹. United States Department of Commerce, Bureau of the Census, County Business Patterns Firm Data, 2000 & 2004.
- ²². Due to low response totals, this table excludes the Fishing, Hunting and Agricultural Support, Mining, and Utilities sectors.
- ²³. See Bruckner, Jan K. "Airline Traffic and Urban Economic Development". *Urban Studies* 40:8 (July 2003), pp. 1455-1469.
- ²⁴. See Button, K., S. Lall, R. Stough and R. Trice. "High Technology Employment and Hub Airports". *Journal of Air Transport Management* 5 (1999), pp. 53-59.
- ²⁵. See Green, Richard K. "Airports and Economic Development". Unpublished manuscript (2006)
- ²⁶. Chattanooga Airport Authority Strategic Plan, 2006.
- ²⁷. See footnote 2.
- ²⁸. See footnote 14.
- ²⁹. Census Transportation Planning Package (CTPP2000) data on place-of-work employment by sector for the U.S. population based on 2000 long-form questionnaire responses and compiled by the Wisconsin-Milwaukee Employment and Training Institute, 2005.
- ³⁰. United States Department of Commerce, Bureau of the Census, Zip Code County Business Patterns, 1998-2003.
- ³¹. Data Unavailable for this area.
- ³². See footnote 29.

³³. U.S. Census Bureau County Business Patterns, Firm Data, U.S. and Tennessee, 1998-2003.

³⁴. Data unavailable for this area.

³⁵. For this analysis, data for the ten business categories with the highest number of countywide business applications were utilized. Businesses that listed an address outside of Hamilton County were excluded from this analysis.

³⁶. See footnote 30.

³⁷. Data unavailable for this area.