# Greater Greenville Regional Economic Scorecard, 2010



prepared by

David L. Barkley and Mark S. Henry Professors and Co-directors University Center for Economic Development Department of Applied Economics and Statistics Clemson University Clemson, South Carolina

and

Daniel Eades Research Associate University Center for Economic Development Clemson University UCED Research Report 03-2010-01 2010

University Center for Economic Development Clemson University <u>www.clemson.edu/uced</u>



### **Introduction**

The Greater Greenville Chamber of Commerce has an ongoing effort to develop an economic development strategy and implementation plan. This effort builds on analyses by Market Street Services, Inc. (2006) and the Chamber's Vision 2025 plan (2004). Efforts by the Chamber, and cooperating institutions and individuals, to implement the plan require an objective basis for monitoring economic development trends. The analysis provided in this report provides indicators needed to establish and maintain an effective system for monitoring economic development trends in Greenville County and the proximate region.

**Per capita income** is a key measure of economic progress in Greenville County and the South Carolina Upstate. As revealed in the pages of this report, real per capita income (after adjusting for inflation) has increased over the past twenty years in Greenville County and the region, but generally at rates slower than the U.S. average over the past decade. So while real per capita incomes are increasing in Greenville and the region, the increases have not been large enough to reach current levels in most "peer" cities in the South, nor in several "target cities" that are the leading economic engines in the region.

Three South Carolina Upstate regions are the focus of this report:

- 1. Greenville County
- 2. The **Greenville Metropolitan Statistical Area (MSA)** comprised of Greenville, Laurens and Pickens Counties, and
- 3. The **Greenville Combined Statistical Area (CSA):** Greenville, Laurens, Pickens, Anderson, Spartanburg, Oconee, Union and Cherokee Counties.



#### South Carolina Upstate

#### Peer and Target Cities

The MSA and CSA that are anchored by Greenville County were compared to all other MSAs and CSAs in the South to identify Greenville's peer group of small and large cities using quantitative indicators of innovation and growth potential. Appendix A provides a list of the community characteristics used to select cities that are similar to Greenville in business environment, innovation, and growth potential. Comparison cities for the Greenville MSA are five medium-sized metro areas: Charleston and Columbia, South Carolina; Jackson, Mississippi; Lexington, Kentucky; and Little Rock, Arkansas. Comparison cities for the Greenville, Florida; Knoxville, Tennessee; Louisville, Kentucky; and Richmond, Virginia. In addition to the peer cities, the Greenville Chamber of Commerce selected four metro areas as representative of highly competitive areas in the New Knowledge Economy: Austin, Texas; Charlotte, North Carolina; Nashville, Tennessee; and Raleigh/Durham, North Carolina.

Metro Area	Population (2000)	Population (2008)	Percent Change
Greenville MSA	599,940	624,715	4.1%
Jackson, MS CSA	525,246	565,749	7.7%
Lexington, KY CSA	602,733	666,707	10.6%
Charleston, SC MSA	603,178	644,506	6.9%
Little Rock, AR MSA	610,518	675,069	10.6%
Columbia, SC MSA	647,158	728,063	12.5%
Greenville CSA	1,128,104	1,241,618	10.1%
Knoxville, TN CSA	935,659	1,041,955	11.4%
Richmond, VA MSA	1,096,956	1,225,626	11.7%
Jacksonville, FL MSA	1,122,750	1,313,228	17.0%
Birmingham, AL CSA	1,129,721	1,198,932	6.1%
Louisville, KY MSA	1,161,975	1,244,696	7.1%
Greensboro/Winston-Salem CSA	1,414,656	1,552,495	9.7%
Target Cities			
Austin, TX MSA	1,249,763	1,652,602	32.2%
Nashville, TN MSA	1,311,789	1,550,733	18.2%
Raleigh/Durham CSA	1,314,589	1,690,557	28.6%
Charlotte, NC MSA	1,330,448	1,701,799	27.9%

# Peer Cities Selected for the Greenville MSA and CSA Regions

Traditional metrics for gauging regional competitiveness often include wage rates, local tax burdens, and land costs. These factors have been important in recruiting new firms to the region and in local business retention and expansion. However there is little variation in these factors across MSAs in the South, and low wage jobs in manufacturing are increasingly moving overseas. Accordingly, this report focuses on metrics for gauging how well the Grenville region is doing in the competition for New Economy jobs that are most likely to provide boosts to real per capita incomes of the residents of the region. These characteristics provide a set of benchmarks that Greenville can work towards in an implementation plan if Greenville is to reach and maintain top rank characteristics in innovation and growth potential.



Per Capita Income Levels, 1998 and 2008

Figure 1 displays the levels of nominal per capita income in 1988 and 2008 for the United States, the Greenville MSA (Greenville, Laurens and Pickens Counties), and in three proximate MSAs – Charlotte, Charleston and Columbia. The level of nominal per capita income increased in all regions by more than 33% since 1998. However, Charleston and Columbia have grown their local economies over the past two decades in ways that have enabled per capita incomes in Charleston and Columbia to surpass income in Greenville by about \$600 per person in 2008. In contrast, 1998 per capita income was almost \$2400 higher in Greenville than in Charleston and exceeded Columbia's per capita income by about \$200.

From 1998 to 2008, real per capita income (inflation adjusted 2008 prices) in Greenville grew substantially slower than both the national average and proximate MSAs with the notable exception of Charlotte. Per capita income in the Greenville MSA increased by 1.7% over the decade, better than the 1% growth of the Charlotte region, but substantially slower than Charleston (18.8% growth), Columbia (7.3% growth, and the US (11.5% growth). Basically, the 1998 to 2008 period was one of stagnation in real per capita income in the Greenville MSA remains about \$6,500 below the national average. Part of this difference may be the result of cost of living differences, but the ACCRA cost of living index (Appendix B) indicates that an income gap between the US average and the Greenville area continues to exist after adjusting for cost of living differences.

# Per Capita Income Trends 1988 to 2008

FIGURE 2. PER CAPITA INCOME TRENDS RELATIVE TO THE U.S.: 1988-2008 GREENVILLE CO, GREENVILLE MSA, GREENVILLE CSA, and SOUTH CAROLINA



Figure 2 presents a snapshot of how per capita income has trended over the most recent twenty year period for which data are available in the region compared to the national average. The per capita incomes are converted to ratios of the U.S. average from 1988 onward. As shown on the top green line, the per capita income of Greenville County rose from about 94% of the U.S. average in 1988 to 101% of the U.S. per capita income in 1998. Since 1998, however, the Greenville County per capita income has fallen back to about 91% of the U.S. average in 2007 (County data for 2008 will be released in late April, 2010).

The second major theme from this figure is that the larger the region considered, the lower the average per capita income level. The Greenville MSA (Greenville, Laurens and Pickens Counties) had a per capita income that was 84% of the U.S. average in 2008. The Greenville CSA per capita income (add Anderson, Spartanburg, Oconee, Cherokee and Union counties to the MSA) fell to 80% of the national average in 2008 – slightly below the SC (81%) average per capita income level.

# Greenville MSA versus South Carolina MSAs



FIGURE 3. PER CAPITA INCOMES (PCY) IN CHARLESTON, COLUMBIA, and GREENVILLE MSA COMPARED TO CHARLOTTE TARGET, 1988-2008

Figure 3 compares per capita income trends in selected MSAs in South Carolina. The Charlotte MSA, shown in red, has a per capita income level substantially higher than Greenville's MSA level, but the gap has not grown since 2006 as the recession slowed growth in the Charlotte region a bit more than in the Greenville MSA (see Figure 1). Since 2004, the Greenville MSA per capita income has fallen behind that of Columbia and Charleston. By 2008, the Charleston and Columbia MSAs have settled in at about 88% of the U.S. average while the Greenville MSA's per capita income is 84% of the national level. The contrast is striking between the steady increase in the Charleston MSA's per capita income decline relative to the national average since 1998 and Greenville's per capita income decline relative to the national average over the past decade.

# Greenville MSA versus Target MSAs



FIGURE 4. GREENVILLE MSA PER CAPITA INCOMES (PCY) COMPARED TO <u>TARGET MSAs</u> OVER THE 1988 TO 2008 PERIOD

Figure 4 highlights how per capita income has trended over time in the Greenville MSA compared to its "Target Cities." Since 1997, the four target MSAs (Austin, Raleigh, Nashville and Charlotte) generally have had per capita incomes near or above the national average. The relative incomes of the four target cities have trended downward since about 2002, perhaps reflecting the impacts of the recent downturns in the IT and financial sectors.

The major theme of this figure is that the Greenville MSA per capita income remained about 15% below its Target Cities throughout the ten-year period, with the exception of Austin. In 1999, Austin's per capita income was about 111% of the US average. It has fallen to about 96% of the US average in 2008. During the same period, Greenville's per capita income fell from 92% of the national average in 1998 to 84% in 2008. So the gap with Austin was 19% in 1999 but only 12% in 2008. It is noteworthy that the target cities have had substantial aggregate income growth over the past decade. However by 2008, on a per capita basis, the target cities have all fallen behind the national average.

<sup>1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008</sup> 

### **EMPLOYMENT GROWTH**

Employment growth in recent years provides an alternative "outcome" perspective on the performance of the Greenville economy. As shown in Figures 5A1 and 5B1, from 2003 to 2008, employment growth in the Greenville MSA, target cities and proximate cities all exceeded the national average.



Target cities Austin and Raleigh led the way with 19% and 18.7% employment growth, about 13% points above the national average from 2003 to 2008. This robust employment performance contrasts sharply with the decline in per capita incomes, *relative to the US average*, in these leading target cities. Nashville and Greenville had comparable employment gains, 9% and 8% respectively, from 2003 to 2008 that was about 3% points above the US average. Charlotte adding jobs at a 13.3% pace, more than double the US average gain.

Fast employment growth in these target MSAs, however, was accompanied by a decline in per capita incomes over this period as was illustrated in Figure 4. These conflicting signals about the robustness of the economies in these MSAs may be reconciled, in part, by comparing MSA population growth with MSA employment growth as shown in Figure 5A2. The blue bars represent employment growth in Figure 5A2 while the red bars are the differences between population growth and employment growth. In all the MSAs, the red bars are positive additions to employment growth meaning that population growth exceeded employment growth. This "excess" population growth is most pronounced in Charlotte, Raleigh and Nashville, suggesting that employment (and related income) growth has not been sufficient to prevent a decline in per

capita incomes, relative to the US average per capita income. However, employment and population growth in Austin and Greenville were similar, so in these MSAs it is not "excess" population growth that is likely to be the force behind declining per capita incomes relative the US average.



Since the great recession of 2008-2009, employment change in the Greenville MSA has been mixed compared to the target cities. As shown in Figure 5A3, the change in annual average employment in 2008 and 2009 in Greenville was near zero. However, during this period, employment dropped sharply in all the target cities. Charlotte's 6% drop fared worst among the target cities, followed by Nashville's decline of almost 5% and a 4% drop in the Raleigh MSA. Only Austin with a decline in employment of about 2% performed better than the national average.



This impressive performance by Greenville over the averages in 2008 and 2009 is tempered by employment change since the start of the recession from December 2007 through January 2010 (the most recent data available from Current Employment Statistics, BLS). As shown in Figure 5A4, Greenville dropped almost 8% of its employment during this period, similar to the decline in the Charlotte MSA. Only Austin and Raleigh bettered the US average employment loss, 6%.



Over the 2003 to 2008 period, in the proximate cities group shown in Figure 5B1, Charleston and Charlotte are the leaders, adding jobs at a 13% rate – more than double the US average. le Greenville and Columbia also exceeded national growth with 8% employment growth. Again, during this period, 2003 to 2008, per capita incomes in the Greenville MSA were falling, *relative to the US average*, despite employment growth in Greenville that outpaced the national average.



Within the proximate cites group (See Figure 5B2), employment gains exceeded population growth in Charleston while population growth in Charlotte substantially (5.2% points) exceeded employment growth. These facts suggest that strong employment growth in the Charleston MSA may have induced more labor force participation in response to a tighter local labor market resulting in upward pressure on wages in the region. In part, this could explain the rise in Charleston per capita incomes relative to the US average as illustrated in Figure 3. Greenville and Columbia both experienced employment and population growth rates that were approximately the same over the 2003 to 2008 period

![](_page_11_Figure_0.jpeg)

As shown in Figure 5B3, the change in *annual average* employment in 2008 and 2009 in Greenville was near zero. However, during this period, employment dropped sharply in all the proximate cities. Charlotte's 6% drop was the steepest but was followed closely by Charleston and Columbia at nearly 5%.

![](_page_11_Figure_2.jpeg)

As noted earlier, this impressive performance by Greenville over the averages in 2008 and 2009 is in sharp contrast to employment change since the start of the recession, from December 2007 through January 2010 (the most recent data available from Current Employment Statistics, BLS). As shown in Figure 5B4, Greenville dropped almost 8% of its employment during this period, similar to the decline in the Charlotte MSA. Charleston and Columbia have declined by a bit less than the US average employment loss, 6%.

![](_page_12_Figure_1.jpeg)

<u>Summary.</u> Two "outcome" metrics, per capita income and employment growth, are examined to gauge the performance of the Greenville area compared to proximate cities, target cities and US averages. Since 1998, the Greenville MSA has continued to fall behind the US average per capita income and is now (2008) below per capita income levels in target and proximate cities. The Greenville MSA had strong employment growth from 2003 to 2008 compared to the US average. However, the recent recessionary period and nascent recovery since mid 2009 have resulted in employment losses from December 2007 to January 2010 that exceed the national rates of loss. The rates of employment loss in the Greenville MSA are greater that in target and proximate MSAs, with the exception of the Charlotte MSA.

### **Development of Economic Competitiveness Scorecard**

Four steps were used to develop a scorecard for the Greenville economy. First, we identified the key characteristics of a competitive economy. Second, we selected a set of peer cities and target cities for comparisons with the Greenville MSA and CSA. Third, we developed sets of indices and benchmarks for Greenville and the peer and target cities. The indices were derived from data on the selected key characteristics of a competitive economy. Fourth, we identified strengths and weaknesses of the Greenville economy based on Greenville's relative rankings in characteristics that affect economic progress. An in-depth overview of the four steps is provided in the 2008 Greater Greenville Regional Economic Scorecard (www.clemson.edu/uced). The following discussion focuses on changes in Greenville's rankings from 2007 to 2008 in the six indices that reflect regional competitiveness in the New Economy.

#### **Indices of Competitiveness**

Labor Force Education Knowledge Workforce Innovative Activity and Capacity Entrepreneurial Environment Industrial Structure and Composition Industrial Diversity and Breadth

The six principal inputs of regional competitiveness (labor force education, knowledge workers, innovation, entrepreneurial environment, industrial diversity, and industrial composition) have multiple components. Thus, and index was developed for each competitiveness component that incorporated the multiple measures for the principal category and expressed the benchmark relative to the national average. The indices for the Greenville MSA and CSA permit ready comparisons with peer cities in the South as well as with the nation as a whole. The data used for the calculation of the six indices are provided in Appendix C. The index values represent how the metro area compares to the national average for a specific component of competitiveness. For example, an index value of 100 represents the national average and an index value of 90 means that the metro area is 10% below the national average. Alternatively, a metro index of 105 means the metro area is 5% above the national average.

# **Benchmarking Changes in Regional Competitiveness**

The 2007 to 2008 changes in Greenville's indices of competitiveness are represented graphically using a horizontal "speedometer." There are 12 spaces on the speedometer, each representing one of the 11 peer cities plus the Greenville CSA. Greenville's position among the 12 cities is represented by the green space, with the index values increasing as we move from left to right. For example, in the Index of Innovative Activity, Greenville ranks 5<sup>th</sup> out of the 12 metro areas (see Figure 1).

![](_page_14_Figure_2.jpeg)

Figure 1. Innovative Activity and Index

There are two arrows on each of the benchmarking speedometers, one for the Greenville CSA and one for the highest ranking metro area. One arrow indicates the direction of change of the Greenville index from 2007 to 2008. An arrow inside a box means that the index changed but that the Greenville CSA position among peer cities remained the same (see Figure 2).

![](_page_14_Figure_5.jpeg)

#### Figure 2. Labor Force Education Index

An arrow going from one box to another indicates that the metro area changed positions among its peers from 2007 to 2008. In figure 3, for example, Greenville CSA's innovation index declined by 0.4 but Greenville increased from 6<sup>th</sup> to 5<sup>th</sup> in the ranking. Finally, the highest ranked MSA has an arrow indicating if this metro area had an increasing or declining index. A comparison of the Greenville arrow with the arrow of the top ranked metro area provides insights into whether the competitiveness gap increased or decreased from 2007 to 2008.

![](_page_14_Figure_8.jpeg)

![](_page_15_Figure_0.jpeg)

# Benchmarking the Index of Labor Force Education

![](_page_15_Figure_2.jpeg)

Index values for labor force education are based on the percent of the labor force that have high school diplomas and the percent that are college graduates. The findings indicate that the Greenville area ranks last among the five small peer cities, the six large peer cities, and the four target cities in labor force education. Additionally, both the Greenville MSA (96.4) and Greenville CSA (89.0) regions have index values less than 100, indicating that labor force education measures are below the national average. However, over the past year the index values for the Greenville MSA and CSA regions increased 0.4 and 2.1 points, respectively.

	0007	0000	Index Point Change
2006 Census Region	2007	2008	2007-2008
Small Peer Cities			
Columbia, SC MSA	107.3	106.4	-0.9
Lexington, KY CSA	102.7	104.1	1.4
Charleston, SC MSA	105.2	103.3	-1.9
Jackson, MS CSA	101.1	101.9	0.8
Little Rock, AR MSA	102.3	98.6	-3.7
Greenville, SC MSA	96.0	96.4	0.4
Large Peer Cities			
Richmond, VA MSA	105.4	105.4	0.0
Jacksonville, FL MSA	98.9	95.9	-3.0
Birmingham, AL CSA	93.6	95.5	1.9
Louisville, KY MSA	93.5	94.5	1.0
Knoxville, TN CSA	88.8	91.7	2.9
Greensboro/Winston-Salem, NC CSA	91.2	90.6	-0.6
Greenville, SC CSA	86.9	89.0	2.1
Target Cities			
Raleigh/Durham, NC MSA	123.8	124.7	0.9
Austin, TXMSA	120.5	119.8	-0.7
Charlotte, NC MSA	110.2	108.6	-1.6
Nashville, TN MSA	102.3	103.5	1.2
Greenville, SC MSA	96.0	96.4	0.4
State and United States			
United States	100.0	100.0	0.0
South Carolina	91.3	91.7	0.4

Labor Force Education

Percent of labor force with a high school diploma, 2007 and 2008. Percent of labor force with a bachelor's degree, 2007 and 2008

### Benchmarking the Index of Knowledge Workers

![](_page_16_Figure_4.jpeg)

Knowledge workers are responsible for many of the new products and production processes that result in new economic activity. Over the past year (2007-2008) the Greenville MSA (93.7) fell below the U.S. average, and the MSA declined to last place among small peer cities. The Greenville MSA lost most of the gains in the index that were made in the previous year (2006-2007), and the gap with target cities increased. The Greenville CSA (86.0) fell 4.3 points between 2007 and 2008, maintaining sixth place among the large peer cities in knowledge workers and still lagging the national average (index value 100.0).

Knowledge Workers									
Index Point 2006 Census Region 2007 2008 Change 2007-2008									
Small Peer Cities									
Lexington, KY CSA	103.8	101.3	-2.6						
Columbia, SC MSA	104.7	101.1	-3.6						
Jackson, MS CSA	99.4	100.7	1.2						
Little Rock, AR MSA	100.6	100.0	-0.6						
Charleston, SC MSA	101.0	98.7	-2.3						
Greenville, SC MSA	100.8	93.7	-7.1						
Large Peer Cities									
Richmond, VA MSA	110.1	107.9	-2.2						
Jacksonville, FL MSA	97.4	101.8	4.4						
Birmingham, AL CSA	95.2	97.3	2.1						
Knoxville, TN CSA	89.0	93.9	5.0						
Louisville, KY MSA	93.1	93.7	0.6						
Greensboro/Winston-Salem, NC CSA	92.1	92.2	0.2						
Greenville, SC CSA	90.3	86.0	-4.3						
Target Cities									
Austin, TXMSA	123.5	122.1	-1.5						
Raleigh/Durham, NC MSA	122.2	120.0	-2.2						
Charlotte, NC MSA	112.8	111.0	-1.7						
Nashville, TN MSA	102.1	106.0	3.9						
Greenville, SC MSA	100.8	93.7	-7.1						
State and United States									
United States	100.0	100.0	0.0						
South Carolina	89.7	87.2	-2.4						

Percent of employment in occupations classified as management, business/operations, finance, computers, math, architecture, engineering, sciences, law, education, healthcare, arts, design, entertainment, media, and high-end sales, 2007 and 2008

### Benchmarking the Index of Innovative Activity

![](_page_18_Figure_1.jpeg)

Innovative activity and capacity in the metro areas is represented by patents per 10,000 workers; employment in computer, science, and engineering occupations (measure of industry R&D); and graduate students in health sciences, science, and engineering per 10,000 residents (measure of university R&D). Between 2007 and 2008 the Greenville MSA index increased by 1.1 points to 103.0, and the MSA maintained its ranking of second among the six small peer cities. The Greenville CSA index remained relatively unchanged at 73.9, and the CSA remained in its third place ranking among large peer cities. The Greenville MSA (103.0) had a higher innovation index than two of the target cities (Nashville 64.2) and Charlotte (62.5); however, the Greenville MSA innovation index was approximately 40% of index values for Austin, TX and Raleigh/Durham, NC.

#### **Innovative Activity and Capacity**

		In	dex Point Change
2006 Census Region	2007	2008	2007-2008
Small Peer Cities			
Lexington, KY CSA	147.8	134.2	-13.6
Greenville, SC MSA	101.8	103.0	1.1
Columbia, SC MSA	81.3	83.7	2.4
Little Rock, AR MSA	78.9	71.8	-7.0
Charleston, SC MSA	57.6	46.1	-11.5
Jackson, MS CSA	39.6	40.3	0.7
Large Peer Cities			
Knoxville, TN CSA	94.0	96.3	2.3
Richmond, VA MSA	79.7	79.4	-0.4
Greenville, SC CSA	74.3	73.9	-0.4
Birmingham, AL CSA	67.3	62.5	-4.9
Greensboro/Winston-Salem, NC CSA	59.0	60.1	1.1
Louisville, KY MSA	57.3	57.9	0.7
Jacksonville, FL MSA	37.5	35.4	-2.2
Target Cities			
Austin, TX MSA	264.7	264.3	-0.4
Raleigh/Durham, NC MSA	236.7	247.7	11.0
Greenville, SC MSA	101.8	103.0	1.1
Nashville, TN MSA	62.2	64.2	2.0
Charlotte, NC MSA	59.9	62.5	2.6
State and United States			
United States	100.0	100.0	0.0
South Carolina	54.4	52.3	-2.1

Patents per 10,000 workers, 2007

Percent of employment in computer, science, and engineering occupations, 2008

Graduate students in health science, science, and engineering per 10,000 residents, 2007

![](_page_19_Figure_0.jpeg)

### Benchmarking the Index of Entrepreneurial Environment

Creative workers and innovative activity are most likely to result in new businesses and jobs if the community has a supportive entrepreneurial environment. The entrepreneurial environment index for the Greenville MSA (84.1) and CSA (79.9) ranked low compared to the small and large peer cities, representing fourth and sixth positions, respectively. The Greenville MSA and CSA indices declined by - 3.4 and 2.2, respectively, from 2006 to 2007. As a result, the Greenville index values remain well below the four target cities and the U.S. average.

Entrepreneurial Environment									
Index Point Change   2006 Census Region 2006 2007 2006-2007									
Small Peer Cities									
Charleston, SC MSA	96.3	92.9	-3.4						
Jackson, MS CSA	94.1	94.3	0.2						
Little Rock, AR MSA	91.2	90.1	-1.1						
Greenville, SC MSA	87.5	84.1	-3.4						
Columbia, SC MSA	84.5	82.2	-2.3						
Lexington, KY CSA	82.5	82.7	0.2						
Large Peer Cities									
Birmingham, AL CSA	97.1	96.7	-0.5						
Jacksonville, FL MSA	95.9	95.7	-0.2						
Knoxville, TN CSA	98.5	91.3	-7.2						
Louisville, KY MSA	87.0	88.0	1.0						
Richmond, VA MSA	86.2	86.9	0.7						
Greenville, SC CSA	82.1	79.9	-2.2						
Greensboro/Winston-Salem, NC CSA	77.8	77.4	-0.4						
Target Cities									
Nashville, TN MSA	111.0	110.7	-0.3						
Austin, TX MSA	111.0	111.2	0.2						
Raleigh/Durham, NC MSA	113.4	111.1	-2.3						
Charlotte, NC MSA	97.4	96.7	-0.7						
Greenville, SC MSA	87.5	84.1	-3.4						
State and United States									
United States	100.0	100.0	0.0						
South Carolina	85.1	83.3	-1.7						

Business churning (Births + Deaths / Initial Estab.), 2005 and 2006

Establishments per 1,000 Employees, 2006 and 2007

Proprietors' Income as a share of Total Income, 2006 and 2007

Percent of employment in professional, scientific, and technical services industries, 2006 and 2007

### **Benchmarking Employment Diversity and Density**

![](_page_20_Figure_1.jpeg)

A diverse industrial base and high employment density (employees per square mile) are beneficial to regional economic growth because diversity and density facilitate the development and exchange of ideas and information among area businesses. The Greenville MSA (95.3) has a favorable diversity/density structure when compared to its small peer cities. The region experienced little change between 2006 and 2007 and maintained its first place ranking. The Greenville CSA (74.7) ranks low in comparison to large peer cities and the target cities. The CSA region experienced a 1.6 decline in its employment diversity and density index from 2006 to 2007.

Employ	vment	Diversit	v and	Densitv
	,	Difference	,	Donoity

			Index Point
2006 Census Region	2006	2007	Change 2006-2007
Small Peer Cities			
Greenville, SC MSA	95.5	95.3	-0.1
Little Rock, AR MSA	85.4	86.4	1.0
Columbia, SC MSA	81.6	82.8	1.2
Lexington, KY CSA	85.8	81.0	-4.8
Charleston, SC MSA	85.4	79.8	-5.6
Jackson, MS CSA	72.7	68.0	-4.7
Large Peer Cities			
Jacksonville, FL MSA	117.7	115.6	-2.1
Louisville, KY MSA	112.9	108.6	-4.3
Richmond, VA MSA	88.9	103.8	14.9
Birmingham, AL CSA	95.6	101.3	5.7
Knoxville, TN CSA	98.4	98.6	0.2
Greensboro/Winston-Salem, NC CSA	96.4	95.6	-0.8
Greenville, SC CSA	76.3	74.7	-1.6
Target Cities			
Charlotte, NC MSA	144.4	145.5	1.1
Raleigh/Durham, NC CSA	124.1	124.9	0.8
Nashville, TN MSA	123.7	123.1	-0.7
Austin, TX MSA	115.1	114.9	-0.2
Greenville, SC MSA	95.5	95.3	-0.1
State and United States			
United States	100.0	100.0	NA
South Carolina	67.9	65.9	-2.0

Employment Diversity Index, 2006 and 2007

Employment per Square Mile, 2006 and 2007

# **Benchmarking Industrial Structure and Composition**

![](_page_21_Figure_1.jpeg)

Economic development is strongest in regions with relatively young establishments, a large share of locally owned businesses, and a large share of jobs in high productivity occupations and high wage industries. As with the other indices the size of the geographic area influenced index values. The Greenville MSA (92.9) performed marginally better than the Greenville CSA (91.0), but the MSA still ranked next to last among small peer cities and last among the target cities. Over the one year period the Greenville MSA index declined by 2.5 points and the CSA index fell by 2.2 points. Indices for most of the peer and target cities declined during the 2006 to 2007 period.

Industrial Structure and Composition					
2006 Census Region	2006	2007	Index Point Change 2006-2007		
Small Peer Cities					
Charleston, SC MSA	97.4	98.2	0.8		
Little Rock, AR MSA	96.5	94.8	-1.7		
Jackson, MS CSA	93.7	93.8	0.0		
Columbia, SC MSA	94.7	93.7	-1.0		
Greenville, SC MSA	95.4	92.9	-2.5		
Lexington, KY CSA	92.9	91.7	-1.2		
Large Peer Cities					
Jacksonville, FL MSA	103.2	101.3	-1.9		
Richmond, VA MSA	99.6	99.3	-0.3		
Birmingham, AL CSA	98.1	97.2	-0.9		
Louisville, KY MSA	93.9	94.3	0.4		
Knoxville, TN CSA	90.6	93.4	2.8		
Greensboro/Winston-Salem, NC CSA	94.3	92.6	-1.7		
Greenville, SC CSA	93.3	91.0	-2.2		
Target Cities					
Austin, TX MSA	107.5	106.7	-0.8		
Raleigh/Durham, NC CSA	107.8	102.7	-5.1		
Charlotte, NC MSA	99.3	100.1	0.8		
Nashville, TN MSA	99.4	97.4	-2.0		
Greenville, SC MSA	95.4	92.9	-2.5		
State and United States			· · · · · · · · · · · · · · · · · · ·		
United States	100.0	100.0	0.0		
South Carolina	92.3	92.4	NA		

Percent of establishments less than 10 years age, 2005

Share of manufacturing establishments locally owned, 2002

High Productivity Employment Opportunities (traded industries only): 100 equals US average, 2006 and 2007

High Wage Industries Employment Opportunities (traded industries only): 100 equals US average, 2006 and 2007

The economic scorecards summarize the index values for Greenville relative to the averages for the small and large peer cities combined. The Greenville MSA and CSA values in the scorecards are derived by dividing the Greenville index value (for example, 103.0 for the MSA for innovative activity) by the average index value for the eleven peer cities (for example, 69.8 for innovative activity). The resulting scorecard value (103.0/69.8 = 1.48 X 100 = 148) indicates the extent to which Greenville is "above" or "below" average relative to its peer cities. The 2007 and 2008 scorecard values are provided for each benchmarking category, and the direction of the arrow indicates if Greenville's relative score increased or decreased from one year to the next. The Economic Scorecard, part 1 indicates that the Greenville MSA had marked improvements in innovative activity but experienced a large decline in the knowledge workers index.

![](_page_22_Figure_2.jpeg)

### ECONOMIC SCORECARD, PART 1: Benchmarking Greenville MSA Versus Small and Large Peer Cities

# Economic Scorecard, Part 2

Scorecard 2 compares the Greenville CSA index values to the 11 peer city average. The Greenville CSA gained on the peer cities in labor force education and innovative activity. Alternatively the Greenville CSA experienced minor declines in its relative position in entrepreneurial environment, knowledge workers, and industrial composition and diversity.

![](_page_23_Figure_2.jpeg)

# ECONOMIC SCORECARD, PART 2: Benchmarking Greenville CSA Versus Small and Large Peer Cities

### **Economic Scorecard, Part 3**

Scorecard 3 compares the Greenville MSA with the average index values for the four target cities (Austin, TX; Charlotte, NC; Nashville, TN; and Raleigh/Durham, NC). The scorecard indicates that the Greenville MSA experienced improvements in only labor force education. The MSA fell behind the target cities in the remaining competitiveness categories.

![](_page_24_Figure_2.jpeg)

#### ECONOMIC SCORECARD, PART 3: Benchmarking Greenville MSA Versus Four Target Cities (Austin, Charlotte, Nashville, Raleigh-Durham)

#### Economic Scorecard, Part 4

Scorecard part 4 compares the Greenville CSA with the average index values for the four target cities. Lower scores are provided for the Greenville CSA region than for the Greenville MSA region (see part 3). In addition, the Greenville CSA (as with the MSA) lost ground to the target cities in the competitiveness categories. Relative scores remained static or declined in all categories except labor force education.

![](_page_25_Figure_2.jpeg)

#### ECONOMIC SCORECARD, PART 4: Benchmarking Greenville CSA Versus Four Target Cities (Austin, Charlotte, Nashville, Raleigh-Durham)

# Appendix A

Metropolitan Area Characteristics Used in Cluster Analysis to Group 118 Southern Metro Areas According to New Economy Environment

#### A. Innovative Activity

Number of patents issued per 1000 population (USPTO, 1990-99)\* Academic R&D expenditures per capita (NSF, 1998-2000) Doctorates awarded in science and engineering per 1000 population (NSF, 1998-2000) Graduate science and engineering students per 1000 population (NSF, 1998-2000) Percentage of employment in technical professions - computer science; engineering except civil; natural, physical, and social science (BLS, 2000)

#### B. Labor Force Quality

Percentage of adult population (25+) that were high school graduates (Census, 2000) Percentage of adult population (25+) that were college graduates (Census, 2000) Percentage of population (age 16-64) that were employed (Census, 2000)

### C. Entrepreneurial Environment

Percentage change in number of establishments (CBP, 1990-2000) Percentage of establishments with fewer than 20 employees (BLS, 2000) Number of Inc. 500 companies per 100,000 population (www.inc500.com, 1990-2000) Venture capital investments (\$) per capita (Price Waterhouse Coopers, 2000) Percentage of employment in managerial and business professions (BLS, 2000) Percentage of employment in SIC 73, business services (CBP, 2000) Percentage of establishments in SIC 73, business services (CBP, 2000)

### D. Localization Economics

Percentage of employment in high-technology industries (CBP, 2000) Percentage of establishments in high-technology industries (CBP, 2000) Percentage of employment in information technology industries (CBP, 2000) Percentage of establishments in information technology industries (CBP, 2000) Percentage of employment in the largest 3 manufacturing industries (2-digit SIC, CBP, 2000) Percentage of establishments in largest 3 manufacturing industries (2 digit SIC, CBP, 1997) Population Density (Census, 2000)

### E. Competitiveness in Global Economy

Exports as a percent of gross metropolitan product, metro areas ranked in quantiles (DOC, 1999)

\*CBP = County Business Patterns; DOC = U.S Department of Commerce; BLS = U.S. Bureau of Labor Statistics; NSF = National Science Foundation; USPTO = U.S. Patent and Trademark Office.

### Appendix B

ACCRA Cost of Living Index in Peer and Target Cities

"C2ER, founded in 1961 as the American Chamber of Commerce Researchers Association (ACCRA), is a nonprofit professional organization comprising research staff of chambers of commerce, economic development organizations and agencies, and related organizations throughout the United States and Canada. In its dedication to improving business information through research, C2ER developed the ACCRA Cost of Living Index to meet the need for a measure of living cost differentials among urban areas. Originally titled Inter-City Cost of Living Indicators Project, the ACCRA Cost of Living Index has been published quarterly since 1968. The ACCRA Cost of Living Index is based on nearly 100,000 data points gathered primarily by C2ER members located in 400 cities." From: C2ER P.O. Box 100217, Arlington VA 22210 data download.

QTR 4 2008 - QTR 3 2009		
URBAN AREA AND STATE	COMPOSITE	HOUSING
Greenville, SC	<u>89.0</u>	<u>70.5</u>
Nashville, TN	89.0	69.6
Knoxville, TN	89.1	78.6
Louisville, KY	90.3	79.3
Jacksonville, FL	91.8	76.8
Winston-Salem, NC	92.0	82.4
Birmingham, AL	92.1	73.7
Lexington, KY	92.6	87.8
Charlotte, NC	94.5	80.4
Jackson, MS	95.1	91.6
Little Rock, AR	96.8	84.9
Austin, TX	96.8	83.6
Columbia, SC	97.9	80.3
Charleston, SC	101.2	92.0
Raleigh, NC	102.4	89.2
Richmond, VA	106.6	104.0

			Indexed Value Change			
2006 Census Region	2007	2008	2007 2008 2007-2008			
Small Peer Cities						
Columbia, SC MSA	86.7%	88.2%	102.6 103.8 1.2			
Little Rock, AR MSA	87.1%	88.1%	103.1 103.6 0.6			
Charleston, SC MSA	87.8%	87.5%	103.9 102.9 -1.0			
Lexington, KY CSA	83.8%	86.1%	99.2 101.3 2.1			
Jackson, MS CSA	83.6%	85.7%	98.9 100.8 1.9			
Greenville, SC MSA	80.8%	<b>81.6%</b>	95.6 96.0 0.4			
Large Peer Cities						
Jacksonville, FL MSA	87.8%	87.6%	103.9 103.1 -0.8			
Louisville, KY MSA	85.5%	87.0%	101.2 102.4 1.2			
Richmond, VA MSA	85.3%	85.2%	100.9 100.2 -0.7			
Birmingham, AL CSA	82.9%	84.7%	98.1 99.6 1.5			
Knoxville, TN CSA	81.8%	83.2%	96.8 97.9 1.1			
Greensboro/Winston-Salem, NC CSA	81.6%	81.9%	96.6 96.4 -0.2			
Greenville, SC CSA	<b>79.2%</b>	80.7%	93.7 94.9 1.2			
Target Cities						
Raleigh/Durham, NC MSA	87.3%	88.4%	103.3 104.0 0.7			
Austin, TX MSA	85.7%	86.5%	101.4 101.8 0.3			
Charlotte, NC MSA	86.0%	86.4%	101.8 101.6 -0.1			
Nashville, TN MSA	85.0%	85.7%	100.6 100.8 0.2			
Greenville, SC MSA	80.8%	81. <b>6</b> %	95.6 96.0 0.4			
State and United States						
United States	84.5%	85.0%	100.0 100.0 0.0			
South Carolina	82.1%	83.2%	97.2 97.9 0.7			

# Labor Force Education (High School Diploma)

Percent of labor force with a high school diploma, 2007 and 2008.

Source: U.S. Census Bureau, 2008 American Community Survey. http://www.census.gov/acs/www/

			Index	Value	Change
2006 Census Region	2007	2008	2007	2008	2007-2008
Small Peer Cities					
Columbia, SC MSA	30.8%	30.2%	112.0	109.0	-3.0
Lexington, KY CSA	29.2%	29.6%	106.2	106.9	0.7
Charleston, SC MSA	29.3%	28.7%	106.5	103.6	-2.9
Jackson, MS CSA	28.4%	28.5%	103.3	102.9	-0.4
Greenville, SC MSA	26.5%	<b>26.8%</b>	96.4	96.8	0.4
Little Rock, AR MSA	27.9%	25.9%	101.5	93.5	-8.0
Large Peer Cities					
Richmond, VA MSA	30.2%	30.6%	109.8	110.5	0.7
Birmingham, AL CSA	24.5%	25.3%	89.1	91.3	2.2
Jacksonville, FL MSA	25.8%	24.6%	93.8	88.8	-5.0
Louisville, KY MSA	23.6%	24.0%	85.8	86.6	0.8
Knoxville, TN CSA	22.2%	23.7%	80.7	85.6	4.8
Greensboro/Winston-Salem, NC CSA	23.6%	23.5%	85.8	84.8	-1.0
Greenville, SC CSA	22.0%	23.0%	80.0	83.0	3.0
Target Cities					
Raleigh/Durham, NC MSA	39.7%	40.3%	144.4	145.5	144.4
Austin, TXMSA	38.4%	38.2%	139.6	137.9	-1.7
Charlotte, NC MSA	32.6%	32.0%	118.5	115.5	-3.0
Nashville, TN MSA	28.6%	29.4%	104.0	106.1	2.1
Greenville, SC MSA	<b>26.5</b> %	26.8%	96.4	96.8	0.4
State and United States					
United States	27.5%	27.7%	100.0	100.0	0.0
South Carolina	23.5%	23.7%	85.5	85.6	0.1

#### Labor Force Education (Bachelor's Degree)

Percent of labor force with a bachelor's degree, 2007 and 2008

Source: U.S. Census Bureau, 2008 American Community Survey. http://www.census.gov/acs/www/

			Index	Value	Change
2006 Census Region	2007	2008	2007	2008	2007-2008
Small Peer Cities					
Lexington, KY CSA	41.0%	40.9%	103.8	101.3	-2.6
Columbia, SC MSA	41.4%	40.8%	104.7	101.1	-3.6
Jackson, MS CSA	39.3%	40.7%	99.4	100.7	1.2
Little Rock, AR MSA	39.8%	40.4%	100.6	100.0	-0.6
Charleston, SC MSA	39.9%	39.9%	101.0	98.7	-2.3
Greenville, SC MSA	39.8%	37.9%	100.8	93.7	-7.1
Large Peer Cities					
Richmond, VA MSA	43.5%	43.6%	110.1	107.9	-2.2
Jacksonville, FL MSA	38.5%	41.1%	97.4	101.8	4.4
Birmingham, AL CSA	37.6%	39.3%	95.2	97.3	2.1
Knoxville, TN CSA	35.1%	37.9%	89.0	93.9	5.0
Louisville, KY MSA	36.8%	37.8%	93.1	93.7	0.6
Greensboro/Winston-Salem, NC CSA	36.4%	37.3%	92.1	92.2	0.2
Greenville, SC CSA	35.7%	34.7%	90.3	86.0	-0.9
Target Cities					
Austin, TX MSA	48.8%	49.3%	123.5	122.1	-1.5
Raleigh/Durham, NC MSA	48.3%	48.5%	122.2	120.0	-2.2
Charlotte, NC MSA	44.5%	44.9%	112.8	111.0	-1.7
Nashville, TN MSA	40.3%	42.8%	102.1	106.0	3.9
Greenville, SC MSA	<b>39.8%</b>	37.9%	100.8	93.7	-7.1
State and United States					
United States	39.5%	40.4%	100.0	100.0	0.0
South Carolina	35.4%	35.2%	89.7	87.2	-2.4

Knowledge Workers

Percent of employment in occupations classified as management, business/operations, finance, computers, math, architecture, engineering, sciences, law, education, healthcare, arts, design, entertainment, media, and high-end sales, 2007 and 2008

Source: U.S. Census Bureau, 2008 American Community Survey.

http://www.census.gov/acs/www/

#### Patents per 10,000 Workers

			Index	Value	Change
2006 Census Region	2006	2007	2006	2007	2006-2007
Small Peer Cities					
Lexington, KY CSA	3.5	5.0	56.4	78.6	22.2
Greenville, SC MSA	4.2	4.9	68.4	77.5	9.2
Columbia, SC MSA	1.5	1.7	24.6	26.5	1.9
Charleston, SC MSA	2.4	1.5	38.5	24.0	-14.5
Little Rock, AR MSA	1.7	1.3	26.8	19.6	-7.2
Jackson, MS CSA	1.2	1.1	18.7	17.1	-1.7
Large Peer Cities					
Greenville, SC CSA	4.7	4.3	76.4	67.5	-8.9
Knoxville, TN CSA	3.3	3.6	53.3	56.4	3.1
Greensboro/Winston-Salem, NC CSA	2.9	2.7	46.2	42.0	-4.2
Richmond, VA MSA	2.5	2.6	41.1	40.1	-0.9
Louisville, KY MSA	2.1	1.9	33.9	30.4	-3.6
Jacksonville, FL MSA	2.0	1.9	31.7	29.8	-1.9
Birmingham, AL CSA	1.6	1.9	25.2	29.0	3.8
Target Cities					
Austin, TX MSA	26.9	27.2	434.3	426.7	-7.6
Raleigh/Durham, NC MSA	12.8	15.9	206.2	248.4	42.2
Greenville, SC MSA	4.2	4.9	68.4	77.5	9.2
Charlotte, NC MSA	2.2	2.2	34.9	34.5	-0.4
Nashville, TN MSA	1.6	1.5	25.2	23.7	-1.6
State and United States					
United States	6.2	6.4	100.0	100.0	0.0
South Carolina	2.8	2.5	44.4	38.9	-5.6

Patents per 10,000 workers, 2006 and 2007

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. 2010 by the President and Fellows of Harvard College.

			Index	Value	Change
Small Peer Cities	2007	2008	2007	2008	2007-2008
Columbia, SC MSA	4.7%	4.8%	101.9	100.3	-1.6
Lexington, KY CSA	4.7%	4.8%	101.1	99.9	-1.2
Greenville, SC MSA	4.6%	4.5%	98.6	94.8	-3.8
Little Rock, AR MSA	4.2%	3.8%	90.1	79.7	-10.4
Charleston, SC MSA	3.8%	3.7%	82.8	77.8	-5.0
Jackson, MS CSA	3.2%	3.4%	69.1	72.2	3.2
Large Peer Cities					
Richmond, VA MSA	5.1%	5.1%	110.3	107.4	-3.0
Knoxville, TN CSA	3.7%	4.5%	80.8	94.2	13.4
Greenville, SC CSA	3.6%	4.1%	77.1	85.7	8.6
Louisville, KY MSA	3.0%	3.7%	65.2	76.8	11.6
Jacksonville, FL MSA	3.7%	3.6%	81.0	76.3	-4.6
Greensboro/Winston-Salem, NC CSA	3.1%	3.5%	67.7	72.5	4.8
Birmingham, AL CSA	3.6%	3.2%	78.6	66.9	-11.7
Target Cities					
Austin, TX MSA	8.6%	8.8%	186.7	184.3	-2.4
Raleigh/Durham, NC MSA	8.7%	8.4%	188.3	176.0	-12.2
Charlotte, NC MSA	5.0%	5.1%	107.5	106.5	-0.9
Greenville, SC MSA	4.6%	4.5%	98.6	<b>94</b> .8	-3.8
Nashville, TN MSA	3.7%	4.1%	79.7	86.8	7.1
State and United States					
United States	4.6%	4.8%	100.0	100.0	0.0
South Carolina	3.3%	3.5%	72.3	72.6	0.4

#### Percent of Employment in Computer, Science, and Engineering Occupations

Percent of employment in computer, science, and engineering occupations, 2007 and 2008

Source: U.S. Census Bureau, 2008 American Community Survey. http://www.census.gov/acs/www/

			Index	Value	Change
2006 Census Region	2006	2007	2006	2007	2006-2007
Small Peer Cities					
Lexington, KY CSA	57.3	46.1	285.9	224.0	-61.9
Greenville, SC MSA	27.7	28.1	138.5	136.6	-1.9
Columbia, SC MSA	23.5	25.6	117.3	124.3	7.0
Little Rock, AR MSA	24.0	23.9	119.7	116.2	-3.4
Charleston, SC MSA	10.3	7.5	51.5	36.4	-15.1
Jackson, MS CSA	6.2	6.5	31.0	31.6	0.7
Large Peer Cities					
Knoxville, TN CSA	29.6	28.4	147.8	138.3	-9.6
Birmingham, AL CSA	19.7	18.8	98.2	91.5	-6.7
Richmond, VA MSA	17.6	18.6	87.9	90.6	2.7
Greenville, SC CSA	13.9	14.1	69.3	68.6	-0.8
Louisville, KY MSA	14.6	13.7	72.7	66.6	-6.0
Greensboro/Winston-Salem, NC CSA	12.6	13.5	63.0	65.7	2.7
Jacksonville, FL MSA	0.0	0.0	0.0	0.0	0.0
Target Cities					
Raleigh/Durham, NC MSA	63.2	65.5	315.7	318.8	3.1
Austin, TX MSA	34.7	37.4	173.1	181.9	8.8
Greenville, SC MSA	27.7	28.1	138.5	136.6	-1.9
Nashville, TN MSA	15.0	16.9	74.7	82.2	7.5
Charlotte, NC MSA	8.8	9.5	44.1	46.4	2.3
State and United States					
United States	20.0	20.6	100.0	100.0	0.0
South Carolina	9.3	9.3	46.4	45.3	-1.1

Graduate students in science, engineering, and health sciences per 10,000 residents, 2006 & 2007

Graduate students in health sciences, science, and engineering per 10,000 residents, 2006 & 2007

Source: NSF-NIH Survey of Graduate Students & Postdoctorates in S&E. National Science Foundation WebCASPAR Database.

http://webcaspar.nsf.gov/index.jsp?subHeader=WebCASPARHome

Business Churning 2004-2005 and 2005-2006

				Index Value		
2006 Census Region	2005	2006	2005	2006	2005-2006	
Small Peer Cities						
Charleston, SC MSA	23.8%	24.5%	107.8	106.3	-1.5	
Little Rock, AR MSA	20.8%	22.6%	94.4	98.3	3.9	
Jackson, MS CSA	21.4%	21.6%	96.9	94.0	-2.9	
Greenville, SC MSA	21.9%	21.6%	99.1	93.7	-5.4	
Columbia, SC MSA	20.8%	20.9%	94.4	90.8	-3.6	
Lexington, KY CSA	19.7%	20.5%	89.2	89.2	0.1	
Large Peer Cities						
Jacksonville, FL MSA	27.4%	27.9%	124.1	121.4	-2.6	
Richmond, VA MSA	21.1%	22.6%	95.8	98.4	2.6	
Birmingham, AL CSA	20.5%	21.3%	93.1	92.6	-0.5	
Louisville, KY MSA	20.3%	21.2%	92.0	92.0	0.0	
Greenville, SC CSA	20.9%	20.9%	95.0	91.1	-3.9	
Greensboro/Winston-Salem, NC CSA	20.2%	20.9%	91.5	91.0	-0.4	
Knoxville, TN CSA	20.5%	20.3%	92.8	88.3	-4.4	
Target Cities						
Austin, TX MSA	24.5%	26.3%	110.9	114.4	3.5	
Raleigh/Durham, NC MSA	23.2%	25.0%	105.3	108.8	3.5	
Charlotte, NC MSA	23.7%	25.0%	107.6	108.8	1.1	
Nashville, TN MSA	22.5%	24.3%	102.2	105.5	3.2	
Greenville, SC MSA	21.9%	21.6%	99.1	93.7	-5.4	
State and United States						
United States	22.1%	23.0%	100.0	100.0	0.0	
South Carolina	21.6%	22.1%	97.9	95.9	-1.9	

Business churning (Births + Deaths / Initial Estab.), 2005 and 2006

Source: U.S. Census Bureau, Statistics of U.S. Businesses (SUSB) <a href="http://www.census.gov/econ/susb/">http://www.census.gov/econ/susb/</a>

### Establishments per 1,000 Employees

			Index	Value	Change	
2006 Census Region	2006	2007	2006	2007	2006-2007	
Small Peer Cities						
Charleston, SC MSA	68.9	69.6	108.7	108.9	0.2	
Jackson, MS CSA	60.5	63.3	95.5	99.1	3.6	
Columbia, SC MSA	61.3	61.3	96.6	95.9	-0.7	
Little Rock, AR MSA	61.0	61.1	96.2	95.6	-0.6	
Lexington, KY CSA	58.2	58.4	91.8	91.4	-0.4	
Greenville, SC MSA	55.0	57.1	86.7	89.4	2.7	
Large Peer Cities						
Jacksonville, FL MSA	65.3	67.5	103.0	105.7	2.8	
Richmond, VA MSA	60.8	61.5	95.9	96.3	0.4	
Greenville, SC CSA	58.4	59.7	92.2	93.5	1.3	
Knoxville, TN CSA	57.2	58.7	90.3	91.9	1.6	
Birmingham, AL CSA	58.2	58.3	91.8	91.2	-0.5	
Greensboro/Winston-Salem, NC CSA	56.8	57.7	89.6	90.3	0.6	
Louisville, KY MSA	56.2	56.1	88.6	87.9	-0.8	
Target Cities						
Raleigh/Durham, NC MSA	61.4	62.3	96.9	97.5	0.6	
Austin, TX MSA	61.5	61.8	97.0	96.7	-0.3	
Greenville, SC MSA	55.0	57.1	86.7	89.4	2.7	
Charlotte, NC MSA	57.0	56.5	89.9	88.4	-1.5	
Nashville, TN MSA	53.1	54.4	83.8	85.2	1.4	
State and United States						
United States	63.4	63.9	100.0	100.0	0.0	
South Carolina	64.5	65.5	101.7	102.5	0.8	

Establishments per 1,000 Employees, 2006 and 2007

Source: U.S. Census Bureau, County Business Patterns. http://www.census.gov/econ/cbp/index.html

			Index	Index Value	
2006 Census Region	2006	2007	2006	2007	2006-2007
Small Peer Cities					
Jackson, MS CSA	13.2%	13.2%	110.8	114.9	4.1
Little Rock, AR MSA	11.0%	10.3%	92.6	89.9	-2.7
Lexington, KY CSA	8.1%	8.0%	67.7	69.7	2.0
Charleston, SC MSA	8.6%	7.9%	72.3	68.2	-4.1
Columbia, SC MSA	7.6%	7.3%	64.2	63.2	-1.1
Greenville, SC MSA	7.0%	6.5%	59.0	56.7	-2.4
Large Peer Cities					
Birmingham, AL CSA	13.8%	13.1%	116.0	113.6	-2.4
Knoxville, TN CSA	12.0%	11.4%	100.9	98.7	-2.2
Louisville, KY MSA	11.1%	11.3%	93.6	97.9	4.4
Greensboro/Winston-Salem, NC CSA	8.8%	8.3%	74.1	72.5	-1.6
Greenville, SC CSA	8.2%	7.7%	68.6	66.6	-2.0
Richmond, VA MSA	7.7%	7.3%	64.7	63.1	-1.6
Jacksonville, FL MSA	7.4%	7.3%	62.5	63.0	0.5
Target Cities					
Nashville, TN MSA	18.9%	18.3%	158.5	158.6	0.1
Austin, TXMSA	11.5%	11.2%	96.7	97.0	0.4
Charlotte, NC MSA	11.2%	10.4%	94.0	90.3	-3.7
Raleigh/Durham, NC MSA	8.6%	7.8%	72.2	68.2	-4.1
Greenville, SC MSA	7.0%	6.5%	59.0	56.7	-2.4
State and United States					
United States	11.9%	11.5%	100.0	100.0	0.0
South Carolina	8.5%	8.0%	71.7	69.6	-2.1

# Proprietors' Income as a Percent of Total Income

Proprietors' Income as a share of Total Income, 2006 and 2007

Source: Bureau of Economic Analysis, Regional Economic Accounts. Table CA04: Personal Income and Employment Summary

http://www.bea.gov/regional/reis/

			Index	Value	Change
2006 Census Region	2006	2007	2006	2007	2006-2007
Small Peer Cities					
Greenville, SC MSA	5.4%	4.9%	105.2	96.7	-8.5
Charleston, SC MSA	4.9%	4.5%	96.3	88.2	-8.2
Lexington, KY CSA	4.1%	4.1%	81.3	80.3	-0.9
Columbia, SC MSA	4.2%	4.0%	82.6	78.9	-3.7
Little Rock, AR MSA	4.1%	3.9%	81.5	76.6	-4.9
Jackson, MS CSA	3.7%	3.5%	73.2	69.2	-4.0
Large Peer Cities					
Jacksonville, FL MSA	4.8%	4.7%	94.1	92.6	-1.6
Richmond, VA MSA	4.5%	4.6%	88.4	89.9	1.5
Birmingham, AL CSA	4.5%	4.6%	87.6	89.2	1.6
Knoxville, TN CSA	5.6%	4.4%	110.1	86.3	-23.8
Louisville, KY MSA	3.8%	3.8%	73.7	74.3	0.6
Greenville, SC CSA	3.7%	3.5%	72.7	68.6	-4.1
Greensboro/Winston-Salem, NC CSA	2.9%	2.8%	56.1	55.7	-0.4
Target Cities					
Raleigh/Durham, NC MSA	9.1%	8.7%	179.3	170.1	-9.2
Austin, TX MSA	7.1%	7.0%	139.5	136.7	-2.8
Charlotte, NC MSA	5.0%	5.1%	98.0	99.3	1.3
Greenville, SC MSA	5.4%	4.9%	105.2	96.7	-8.5
Nashville, TN MSA	5.1%	4.8%	99.7	93.6	-6.0
State and United States					
United States	5.1%	5.1%	100.0	100.0	0.0
South Carolina	3.5%	3.3%	69.0	65.4	-3.6

#### Employment in Professional, Scientific, and Technical Industries

Percent of employment in professional, scientific, and technical services industries, 2006 and 2007

Source: U.S. Census Bureau, County Business Patterns. http://www.census.gov/econ/cbp/index.html

# **Employment Diversity Index**

			Index	Value	Change
2006 Census Region	2006	2007	2006	2007	2006-2007
Small Peer Cities					
Little Rock, AR MSA	6.8	7.2	109.9	112.2	2.4
Columbia, SC MSA	5.7	6.0	91.5	93.9	2.4
Jackson, MS CSA	6.3	6.0	101.9	92.8	-9.1
Lexington, KY CSA	5.9	5.6	95.5	87.1	-8.4
Greenville, SC MSA	5.0	5.1	79.8	79.3	-0.4
Charleston, SC MSA	5.3	4.7	84.6	72.5	-12.1
Large Peer Cities					
Birmingham, AL CSA	7.6	8.6	121.9	134.3	12.4
Richmond, VA MSA	6.2	8.3	98.8	128.9	30.1
Knoxville, TN CSA	7.2	7.5	115.8	117.2	1.3
Louisville, KY MSA	7.3	7.1	117.0	110.2	-6.8
Greensboro/Winston-Salem, NC CSA	5.2	5.4	83.8	83.5	-0.2
Jacksonville, FL MSA	5.4	5.4	86.1	83.3	-2.8
Greenville, SC CSA	4.6	4.6	73.9	70.8	-3.1
Target Cities					
Nashville, TN MSA	8.9	9.2	142.9	142.5	-0.4
Raleigh/Durham, NC CSA	7.0	7.2	113.1	112.6	-0.5
Charlotte, NC MSA	5.6	5.8	90.0	89.6	-0.4
Austin, TX MSA	5.8	5.7	93.5	89.2	-4.3
Greenville, SC MSA	5.0	5.1	79.8	79.3	-0.4
State and United States					
MSA Average	6.2	6.4	100.0	100.0	NA
South Carolina	5.5	5.4	88.2	84.3	-3.9

Employment Diversity Index, 2006 and 2007

Source: Bureau of Economic Analysis, Regional Economic Accounts. Table CA25: Total Employment by Industry. http://www.bea.gov/regional/reis/

### Employment per Square Mile

			Index	Value	Change
2006 Census Region	2006	2007	2006	2007	2006-2007
Small Peer Cities					
Greenville, SC MSA	189.3	195.1	111.2	111.3	0.2
Charleston, SC MSA	146.6	152.6	86.1	87.1	1.0
Lexington, KY CSA	129.8	131.3	76.2	75.0	-1.3
Columbia, SC MSA	122.2	125.7	71.8	71.7	0.0
Little Rock, AR MSA	103.9	106.1	61.0	60.6	-0.4
Jackson, MS CSA	74.1	75.7	43.5	43.2	-0.3
Large Peer Cities					
Jacksonville, FL MSA	254.0	259.1	149.2	147.9	-1.3
Greensboro/Winston-Salem, NC CSA	185.8	188.7	109.1	107.7	-1.4
Louisville, KY MSA	185.3	187.5	108.8	107.0	-1.8
Knoxville, TN CSA	137.8	140.3	80.9	80.1	-0.9
Richmond, VA MSA	134.5	137.9	79.0	78.7	-0.3
Greenville, SC CSA	134.0	137.8	78.7	78.6	-0.1
Birmingham, AL CSA	118.1	119.7	69.3	68.3	-1.0
Target Cities					
Charlotte, NC MSA	338.5	352.9	198.8	201.4	2.6
Austin, TXMSA	232.6	246.3	136.6	140.5	3.9
Raleigh/Durham, NC CSA	230.0	240.5	135.1	137.2	2.2
Greenville, SC MSA	189.3	195.1	111.2	111.3	0.2
Nashville, TN MSA	178.1	181.6	104.6	103.6	-1.0
State and United States					
MSA Average	170.3	175.2	100.0	100.0	0.0
South Carolina	81.2	83.3	47.7	47.5	-0.1

Employment per Square Mile, 2006 and 2007

Source: Bureau of Economic Analysis, Regional Economic Accounts. Table CA25: Total Employment by U.S. Census Bureau, State and County Quick Facts.

http://www.bea.gov/regional/reis/

http://quickfacts.census.gov/qfd/index.html

Percent Establishments Le	ss than 10 Years Old,	and Percent Locally	y Owned
---------------------------	-----------------------	---------------------	---------

	Percent Establishmente	Percent Ectablishments	Fetablishmonte	Establishments
2006 Census Region	< 10 Years	Locally Owned	<10 Years Index	Index
Small Peer Cities		,		
Charleston, SC MSA	64.5%	81.7%	110.7	100.2
Little Rock, AR MSA	58.1%	84.3%	99.9	103.4
Jackson, MS CSA	58.8%	80.4%	100.9	98.6
Columbia, SC MSA	58.3%	77.0%	100.2	94.4
Greenville, SC MSA	59.2%	77.8%	101.6	95.5
Lexington, KY CSA	56.8%	78.9%	97.5	96.8
Large Peer Cities				
Jacksonville, FL MSA	67.2%	84.4%	115.4	103.6
Richmond, VA MSA	58.3%	80.8%	100.1	99.2
Birmingham, AL CSA	57.0%	86.5%	97.9	106.2
Louisville, KY MSA	55.7%	85.1%	95.7	104.4
Knoxville, TN CSA	54.8%	82.4%	94.1	101.1
Greensboro/Winston-Salem, NC CSA	54.6%	81.8%	93.8	100.3
Greenville, SC CSA	57.3%	78.6%	98.4	96.4
Target Cities				
Austin, TX MSA	67.0%	83.6%	115.1	102.6
Raleigh/Durham, NC CSA	64.2%	80.5%	110.2	98.7
Charlotte, NC MSA	63.6%	79.2%	109.2	97.2
Nashville, TN MSA	60.6%	82.1%	104.0	100.8
Greenville, SC MSA	59.2%	77.8%	101.6	95.5
State and United States				
United States	58.2%	81.5%	100.0	100.0
South Carolina	59.4%	NA	102.0	NA

Percent of establishments less than 10 years age, 2005 Share of manufacturing establishments locally owned, 2002

Source: Specail Tabulation prepared by: U.S. Census Bureau. 1989-2005 Business Information Tracking Series. Source: Dun and Bradstreet Harris Database, 2002.

### **High Productivity Employment Opportunities**

			Index	Value	Change
2006 Census Region	2006	2007	2006	2007	2006-2007
Small Peer Cities					
Charleston, SC MSA	86.89%	88.45%	86.9	88.5	1.6
Columbia, SC MSA	87.26%	84.72%	87.3	84.7	-2.5
Lexington, KY CSA	81.01%	79.60%	81.0	79.6	-1.4
Greenville, SC MSA	87.35%	79.16%	87.3	79.2	-8.2
Jackson, MS CSA	75.86%	75.20%	75.9	75.2	-0.7
Little Rock, AR MSA	80.53%	74.40%	80.5	74.4	-6.1
Large Peer Cities					
Knoxville, TN CSA	78.26%	89.28%	78.3	89.3	11.0
Birmingham, AL CSA	89.45%	87.37%	89.5	87.4	-2.1
Richmond, VA MSA	90.53%	86.44%	90.5	86.4	-4.1
Greensboro/Winston-Salem, NC CSA	89.28%	82.35%	89.3	82.3	-6.9
Louisville, KY MSA	82.19%	81.74%	82.2	81.7	-0.4
Jacksonville, FL MSA	84.40%	79.46%	84.4	79.5	-4.9
Greenville, SC CSA	86.45%	79.07%	86.5	79.1	-7.4
Target Cities					
Austin, TX MSA	102.71%	100.40%	102.7	100.4	-2.3
Raleigh/Durham, NC CSA	122.16%	99.89%	122.2	99.9	-22.3
Charlotte, NC MSA	93.01%	93.88%	93.0	93.9	0.9
Nashville, TN MSA	94.85%	86.36%	94.8	86.4	-8.5
Greenville, SC MSA	87.35%	79.16%	87.3	79.2	-8.2
State and United States					
United States	100.00%	100.00%	100.0	100.0	0.0
South Carolina	84.03%	85.04%	84.0	85.0	1.0

High Productivity Employment Opportunities (traded industries only): 100 equals US average, 2006 and 2007

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. 2010 by the President and Fellows of Harvard College.

			Index	Value	Change
2006 Census Region	2006	2007	2006	2007	2006-2007
Small Peer Cities					
Little Rock, AR MSA	102.3%	101.5%	102.3	101.5	-0.8
Jackson, MS CSA	99.5%	100.3%	99.5	100.3	0.8
Columbia, SC MSA	97.1%	95.5%	97.1	95.5	-1.6
Greenville, SC MSA	97.2%	<b>95.3%</b>	97.2	95.3	-1.9
Charleston, SC MSA	91.8%	93.6%	91.8	93.6	1.8
Lexington, KY CSA	96.3%	93.0%	96.3	93.0	-3.2
Large Peer Cities					
Richmond, VA MSA	108.6%	111.6%	108.6	111.6	3.1
Jacksonville, FL MSA	109.5%	106.8%	109.5	106.8	-2.7
Birmingham, AL CSA	99.0%	97.3%	99.0	97.3	-1.7
Louisville, KY MSA	93.2%	95.4%	93.2	95.4	2.2
Greensboro/Winston-Salem, NC CSA	93.7%	94.0%	93.7	94.0	0.3
Greenville, SC CSA	91.9%	90.3%	91.9	90.3	-1.6
Knoxville, TN CSA	89.2%	89.2%	89.2	89.2	0.0
Target Cities					
Austin, TX MSA	109.7%	108.6%	109.7	108.6	-1.0
Raleigh/Durham, NC CSA	100.3%	102.0%	100.3	102.0	1.7
Charlotte, NC MSA	97.8%	100.1%	97.8	100.1	2.3
Nashville, TN MSA	98.1%	98.4%	98.1	98.4	0.3
Greenville, SC MSA	97.2%	95.3%	97.2	95.3	-1.9
State and United States					
United States	100.0%	100.0%	100.0	100.0	0.0
South Carolina	90.8%	90.1%	90.8	90.1	-0.7

### High Wage Industries Employment Opportunities

High Wage Industries Employment Opportunities (traded industries only): 100 equals US average, 2006 and 2007

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. 2010 by the President and Fellows of Harvard College.

Cluster Name	Employment	Average Industry Wages, Greenville Average Industry Wages, U.S.
Heavy Machinery	1,760	1.2
Business Services	16,792	1.1
Distribution Services	5,529	1.1
Processed Food	1,412	1.0
Information Technology	2,283	1.0
Chemical Products	1,586	1.0
Agricultural Products	312	0.9
Leather and Related Products	87	0.9
Plastics	4,570	0.9
Metal Manufacturing	3,675	0.8
Textiles	5,045	0.8
Production Technology	3,035	0.8
Publishing and Printing	1,173	0.8
Transportation and Logistics	5,872	0.8
Biopharmaceuticals	1,539	0.7

# High Productivity Employment Opportunities in the Greenville MSA, 2006

# High Productivity Employment Opportunities in the Greenville MSA, 2007

Cluster Name	Employment -	Average Industry Wages, Greenville
	Employment	Average Industry Wages, U.S.
Information Technology	2,208	1.2
Furniture	849	1.0
Production Technology	2,452	1.0
Heavy Machinery	1,678	1.0
Processed Food	1,319	1.0
Distribution Services	3,408	1.0
Business Services	11,977	0.9
Textiles	4,791	0.9
Leather and Related Products	66	0.9
Plastics	4,333	0.9
Chemical Products	1,325	0.9
Heavy Construction Services	6,887	0.8
Automotive	3,399	0.8
Construction Materials	390	0.8
Publishing and Printing	1,032	0.7

Cluster Name	Employment	Average Industry Wages, Greenville Average Industry Wages, U.S.
Leather and Related Products	721	1.4
Business Services	22,174	1.1
Heavy Machinery	3,249	1.1
Distribution Services	9,382	1.0
Chemical Products	3,988	1.0
Information Technology	2,988	1.0
Textiles	18,125	0.9
Processed Food	6,974	0.9
Plastics	10,360	0.9
Agricultural Products	484	0.9
Metal Manufacturing	6,949	0.8
Production Technology	8,455	0.8
Construction Materials	3,144	0.8
Transportation and Logistics	9,651	0.8
Automotive	14,153	0.8

# High Productivity Employment Opportunities in the Greenville CSA, 2006

# High Productivity Employment Opportunities in the Greenville CSA, 2007

Cluster Name	Employment	verage Industry Wages, Greenville
	p.ojo	Average Industry Wages, U.S.
Leather and Related Products	729	1.2
Heavy Machinery	3,383	1.0
Textiles	17,679	1.0
Information Technology	3,433	0.9
Distribution Services	6,822	0.9
Processed Food	8,260	0.9
Business Services	17,834	0.9
Furniture	2,000	0.9
Plastics	9,791	0.9
Chemical Products	3,592	0.9
Heavy Construction Services	11,258	0.8
Transportation and Logistics	10,605	0.8
Motor Driven Products	4,009	0.8
Production Technology	8,077	0.8
Building Fixtures, Equipment and Servic	2,649	0.8

Cluster Name	Employment	Average Industry Wages, U.S.
	Linployment	Average Traded Sector Wages, U.S.
Financial Services	2,748	1.9
Information Technology	2,283	1.5
Oil and Gas Products and Services	30	1.4
Power Generation and Transmission	5,455	1.4
Aerospace Vehicles and Defense	1,750	1.3
Communications Equipment	1,310	1.3
Biopharmaceuticals	1,539	1.2
Medical Devices	465	1.2
Aerospace Engines	750	1.2
Distribution Services	5,529	1.2
Analytical Instruments	425	1.1
Business Services	16,792	1.1
Chemical Products	1,586	1.1
Publishing and Printing	1,173	0.9
Heavy Construction Services	12,347	0.9

# High Wage Industries Employment Opportunities in the Greenville MSA, 2006

# High Wage Industries Employment Opportunities in the Greenville MSA, 2007

Cluster Name	Employment	Average Industry Wages, U.S.
	Linployment	Average Traded Sector Wages, U.S.
Financial Services	2,619	2.0
Information Technology	2,208	1.6
Power Generation and Transmission	5,070	1.4
Communications Equipment	770	1.3
Aerospace Vehicles and Defense	1,750	1.3
Biopharmaceuticals	1,655	1.2
Oil and Gas Products and Services	20	1.2
Analytical Instruments	425	1.1
Medical Devices	445	1.1
Distribution Services	3,408	1.1
Business Services	11,977	1.1
Aerospace Engines	760	1.1
Chemical Products	1,325	1.1
Publishing and Printing	1,032	0.9
Entertainment	1,401	0.9

Cluster Name	Employment	Average Industry Wages, U.S.
	Linployment	Average Traded Sector Wages, U.S.
Financial Services	4,868	1.9
Information Technology	2,988	1.5
Oil and Gas Products and Services	150	1.4
Power Generation and Transmission	6,250	1.4
Aerospace Vehicles and Defense	1,750	1.3
Communications Equipment	1,880	1.3
Biopharmaceuticals	1,599	1.2
Medical Devices	980	1.2
Aerospace Engines	760	1.2
Distribution Services	9,382	1.2
Analytical Instruments	1,660	1.1
Business Services	22,174	1.1
Chemical Products	3,988	1.1
Publishing and Printing	4,153	0.9
Heavy Construction Services	16,424	0.9
Entertainment	1,401	0.9

# High Wage Industries Employment Opportunities in the Greenville CSA, 2006

# High Wage Industries Employment Opportunities in the Greenville CSA, 2007

Cluster Name	Employment	Average Industry Wages, U.S.
		Average Traded Sector Wages, U.S.
Financial Services	4,858	2.0
Information Technology	3,433	1.6
Power Generation and Transmission	5,885	1.4
Communications Equipment	1,315	1.3
Aerospace Vehicles and Defense	1,750	1.3
Biopharmaceuticals	1,770	1.2
Oil and Gas Products and Services	190	1.2
Analytical Instruments	1,780	1.1
Medical Devices	966	1.1
Distribution Services	6,822	1.1
Business Services	17,834	1.1
Aerospace Engines	570	1.1
Chemical Products	3,592	1.1
Publishing and Printing	3,990	0.9
Entertainment	2,338	0.9

## **References**

Atkinson, R.D. and D.K. Correa. 2007. The 2007 State New Economy Index. The Information Technology and Innovation Foundation, Washington DC.

Barkley, D.L., M.S. Henry, D. Eades, and J. Lowdermilk. "Greater Greenville Regional Economic Scorecard, 2009." UCED Research Report 03-2008-01, EDA University Center for Economic Development, Clemson University, <u>www.clemson.edu/uced</u>.

Devol, Russ, etal. 2009. Best Performing Cities. Milken Institute.

Market Street Services. 2006. Economic Development Strategy: Greenville, SC. Market Street Services, Inc. Atlanta, GA.

Greater Greenville Chamber of Commerce. Vision 2025, 2004.

Image: http://www.magnoliapark.com/lifestyle.html