

# 2011 REGIONAL ECONOMIC SCORECARD

*The 4<sup>th</sup> Annual Report on Prosperity  
and Income Competitiveness*

Produced for the Community by the  
Greenville Chamber and *ACCELERATE!*

# REPORT OVERVIEW

## Report background

We are fortunate to live in a region as dynamic as Upstate South Carolina. Thanks to the enterprising spirit of our residents and the vision of our leaders, the region has been able to reshape itself as the larger economy around it has shifted. Our transformation from being the “textile capital of the world” to being known as a leader in the automotive industry is a high-profile example of this transformation. Other examples abound. From downtown revitalization efforts to the creation of a new medical school, the Upstate continues to re-imagine its future as one of the world’s premier business communities.

During these times of transition, we must ask ourselves how well we are doing compared to other communities that compete with us. We need an objective measure of our competitive rank. That measure, we believe, is Per Capita Personal Income (PCPI).

The Greenville Chamber launched the original Economic Scorecard project in 2007, after having noticed a long-term downward trend in our per capita income relative to the nation. The Chamber contracted with economic researchers at Clemson University to help the region better understand what contributes to strong income growth. We hope this understanding will lead to better policy support and resource allocation to impact our region’s future.

## Geography matters

The report compares the Upstate region with a number of peer communities identified through statistical analysis.

### Peer cities

- Birmingham, AL
- Charleston, SC
- Columbia, SC
- Greensboro/Winston Salem, NC
- Jackson, MS
- Jacksonville, FL
- Knoxville, TN
- Lexington, KY
- Little Rock, AR
- Louisville, KY
- Richmond, VA

We also chose a few “best-in-class” communities that are well known for their economic vibrancy.

### Target cities

- Austin, TX
- Charlotte, NC
- Nashville, TN
- Raleigh, NC

## Clemson model

Income growth is determined by four broad inputs: human capital, innovation, entrepreneurship and concentrated strength of the economy. The Economic Scorecard model provides an objective assessment of these four indices based on statistical analysis.

### Outcomes of competitiveness

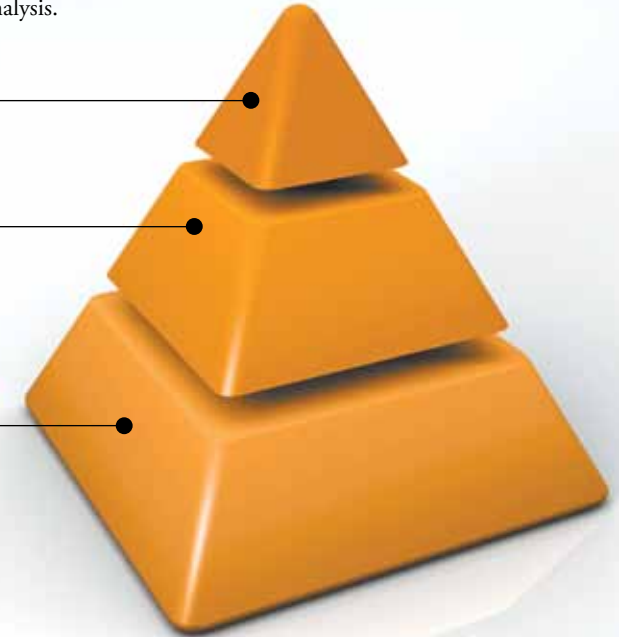
- Income, jobs and sustainable development

### Environment for development

- Industrial composition
- Physical infrastructure
- Social, cultural and institutional environment

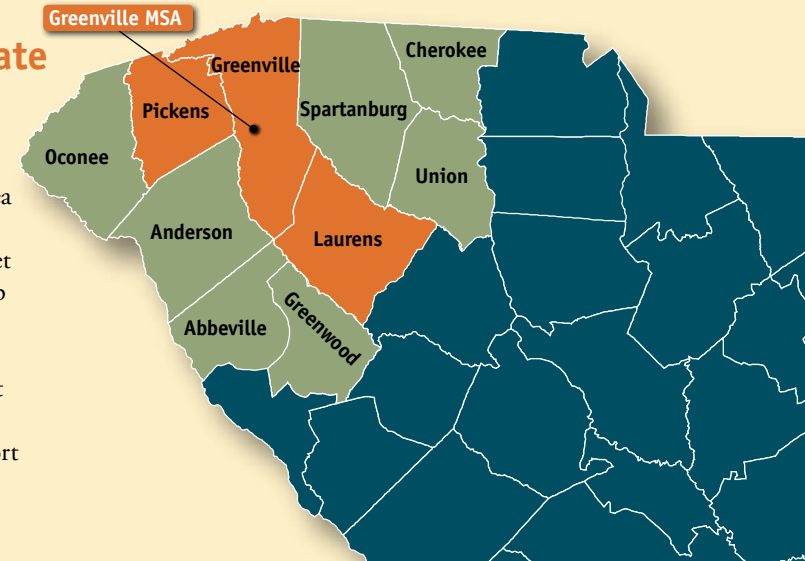
### Competitiveness inputs

- Human capital
- Innovative activity and capacity
- Concentrated economic strength
- Entrepreneurial environment

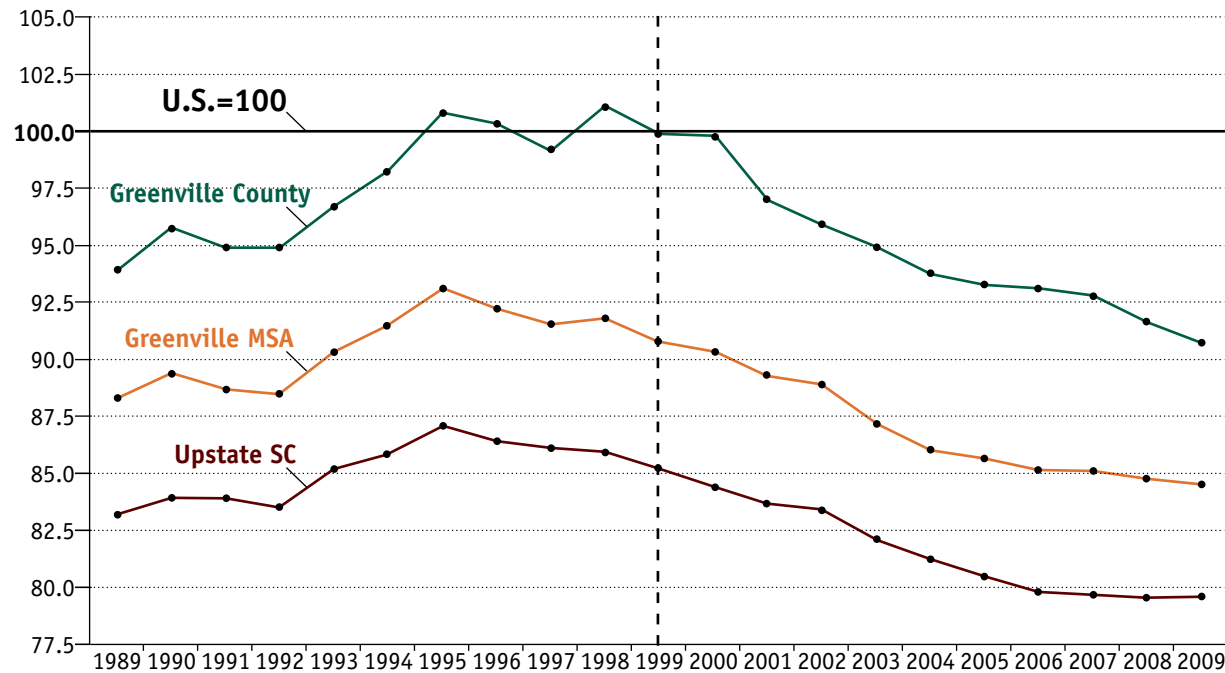


## Greenville MSA & Upstate

In this chart, two areas of the Upstate are highlighted: the three-county Greenville Metropolitan Statistical Area (MSA) and the 10-county Upstate SC region. All of the Peer Cities and Target Cities examined have a similar makeup — a more densely populated core of counties surrounded by less densely populated counties. While we may not look the same at first glance, the Peer Cities under consideration in this report were chosen based on sound statistical analysis.



## Per Capita Personal Income Relative to U.S.



## Why does Per Capita Personal Income matter?

Per Capita Personal Income is one of the best ways to measure a community's overall level of wealth. It is determined by taking all sources of income (wages, interest, dividends, governmental transfers, etc.) that



come into a community and then dividing that number by the total population in that area.

In 2009, Per Capita Personal Income was \$35,963 in Greenville County. The U.S. stood at \$39,635.

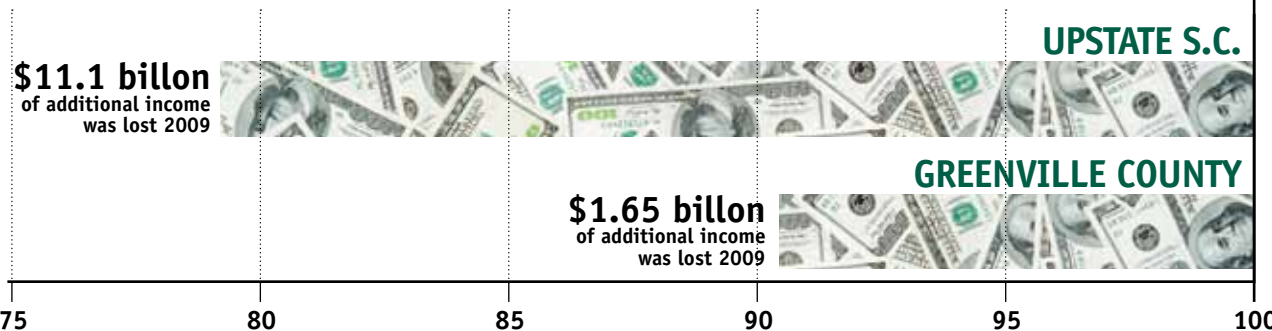
As the charts indicate, Greenville County has seen a long-term decline in its per capita income relative to the U.S. The same trend is occurring across the Upstate. We are much less competitive now than we were in the late 1990s.

## What we've lost

The cost of declining competitiveness

Every year that we are below the U.S. per capita income level, we are missing out on potential income for our community. In 2009 alone, if we had been at the U.S. level, the Upstate would have had more than \$11 billion in additional income to spend in our region. The economic impact of closing the gap between the region and the U.S. would be tremendous.

U.S. Average 100



"It's troubling to see such a long-term decline in this measure of our community's wealth. The Upstate deserves better and we know that we can accomplish much by working together."



Mark Crocker,  
Dixon Hughes Goodman, LLP

# HUMAN CAPITAL

## Why human capital?

Workforce will be THE differentiating factor among communities in the economy of the future. As the nature of manufacturing, health care and many other industries are evolving into ever more technical forms, the ability of a community to develop, attract and retain talent becomes more critical.

## Indicators

### High school graduates

Percent of labor force with a high school diploma.

### Associate degrees

Percent of labor force with an associate degree.

### Baccalaureate degrees

Percent of labor force with a bachelor's degree.

### Graduate or Professional degrees

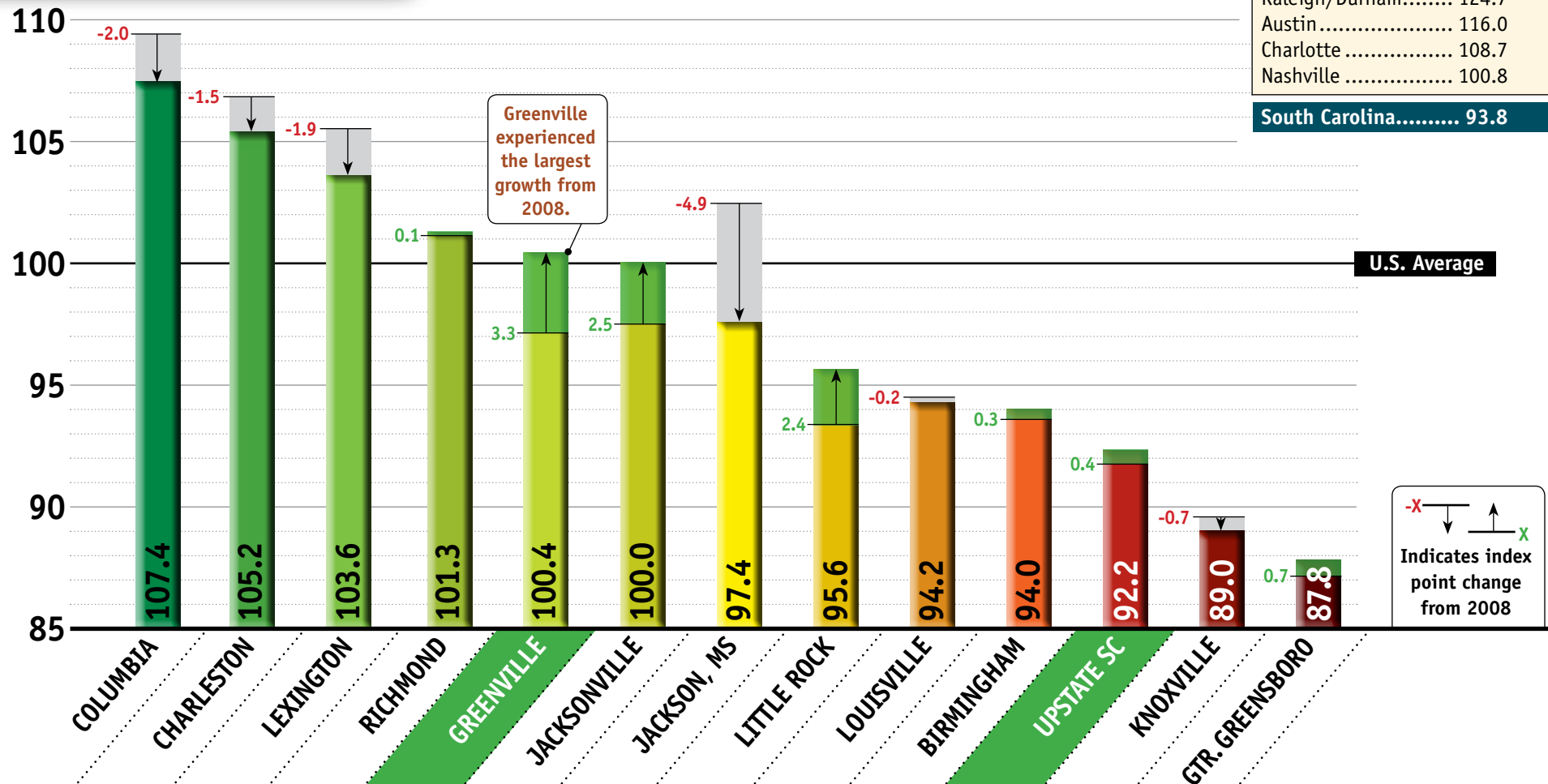
Percent of labor force with a graduate or

professional degree.

### Knowledge workers

Percent of employment in occupations classified as management, business/operations, finance, computers, math, architecture, engineering, sciences, law, education, health care, arts, design, entertainment and media.

## Human Capital Index



## TARGET CITIES

|                |       |
|----------------|-------|
| Raleigh/Durham | 124.7 |
| Austin         | 116.0 |
| Charlotte      | 108.7 |
| Nashville      | 100.8 |

South Carolina..... 93.8

## Highlights

The Upstate continues to make gains on the Human Capital Index, which is perhaps the most important driver of wealth in any region.

The Greenville MSA now meets the national average of residents with a baccalaureate degree. The Upstate is still only at about 83% of the national average. Given the importance of bachelor's degrees to the regional economy and the value they contribute to per capita income, much work

remains to be done in this area.

A significant portion of jobs that will be created in the region during the next decade will require associate degrees, rather than four-year degrees. The Upstate has an advantage in this area. It leads all of the communities under review, except for Charlotte, in terms of percent of population with an associate degree. A system of strong technical and community colleges is key.

## Labor Force Education (Associates Degrees)

The Greenville MSA ranks first among the small peer cities while the Upstate ranks first among the large peer cities

GREENVILLE MSA

113.3  
1st Small Peer Cities

UPSTATE SC

119.8  
1st Large Peer Cities

## The value of education

If we can grow the number of residents with a college degree by just 1%, we will increase our total personal income in the region by slightly more than \$1 billion per year (based on CEOs for Cities model).



## What's working?

### Center for Excellence

The Greenville Chamber's Center for Excellence is creating positive culture change in 46 Upstate schools. Partnering with 1,700 educators and 18,000 students, the Center brings the same process improvement and problem-solving strategies used by the region's major employers to bear in the classroom. This improves student engagement, performance and provides critical thinking skills required in today's competitive economy.



Center for Excellence in Action.

### MedEx Academy

Launched in the summer of 2010 by the Greenville Hospital System University Medical Center, MedEx Academy is a strategic effort to get more young people into the health care career pipeline. By working in concert with academic institutions and providing interactive experiences for students interested in health care careers, the Academy will enhance student career decision making.

## What can we do to improve?

Perhaps the most important thing we can do is to ensure that education and training resources are aligned to the needs of current and emerging industries in our region. The first step is to ensure that we have identified players in those industries and have understood clearly their issues and needs. We must craft solutions that are flexible for both the employer and the learner, allowing multiple pathways for people to engage in the process.

Greenville Works, a workforce and economic development collaborative, may provide a model for moving this agenda forward. Based on a very focused industry call program, the dozen or so partners in Greenville Works are able to quickly identify emerging trends, develop solutions and deploy them in partnership with employers.

**"Investment in human capital through education is a must to maintain a competitive advantage in the marketplace. While talent attraction, recruitment and retention are critical to a growing economy, the ability and willingness to educate our own creates a powerful 'grow our own' model for the state."**



Brenda Thames, Greenville Hospital System University Medical Center

# INNOVATION CAPACITY

## Why innovation?

A community that can generate new ideas, technologies, products and processes has a competitive advantage. Having a high level of “idea churn” sets the stage for new business formation, offers opportunity for the existing industry base and attracts new talent (both individuals and companies) from outside the region. Innovation leads to higher-paying jobs.

## Indicators

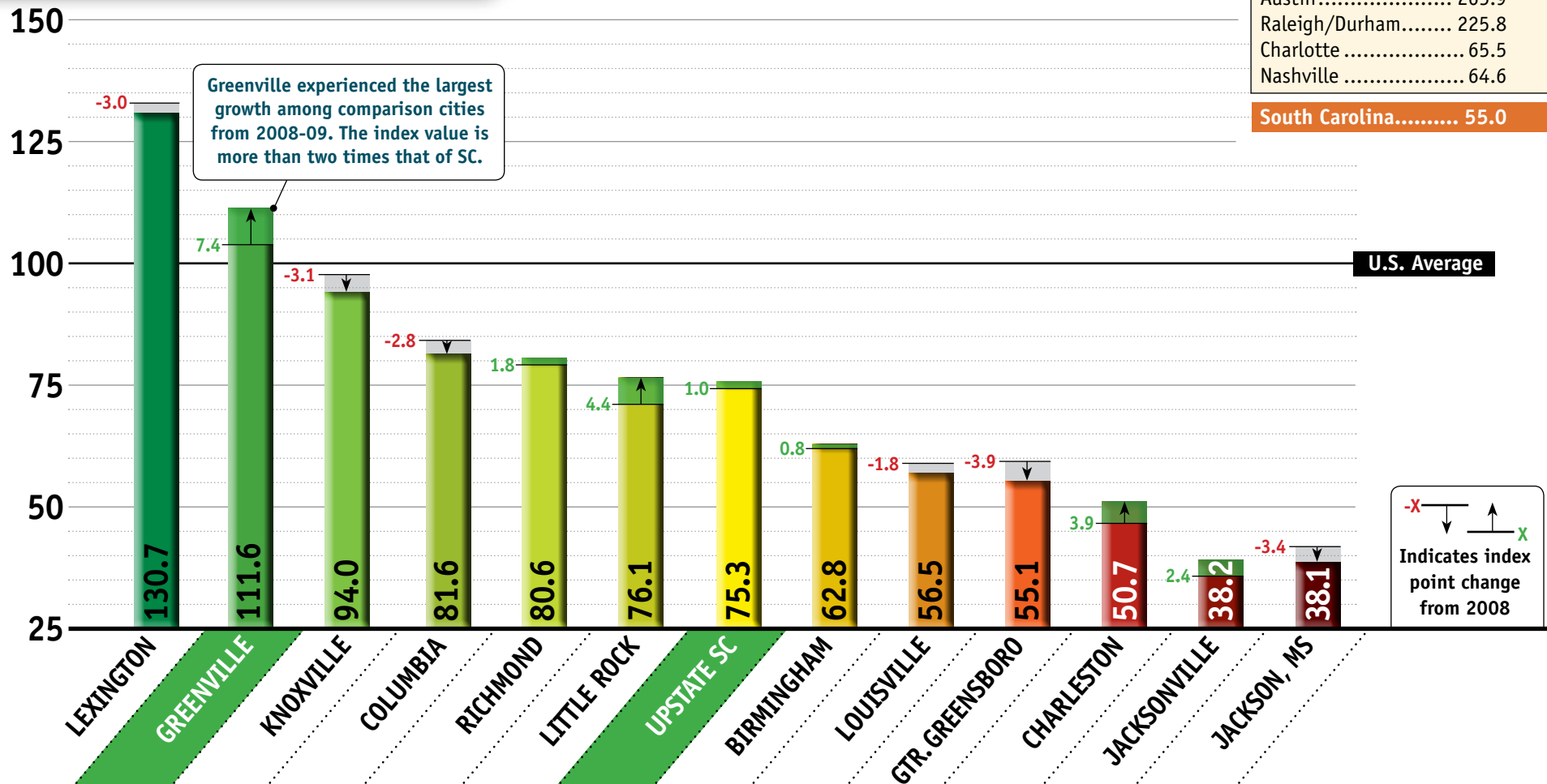
### Patents per 10,000 workers

Number of patents issued in an area, per 10,000 workers, in 2007 and 2008.

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

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

## Innovation Capacity Index



## TARGET CITIES

|                |       |
|----------------|-------|
| Austin         | 265.9 |
| Raleigh/Durham | 225.8 |
| Charlotte      | 65.5  |
| Nashville      | 64.6  |

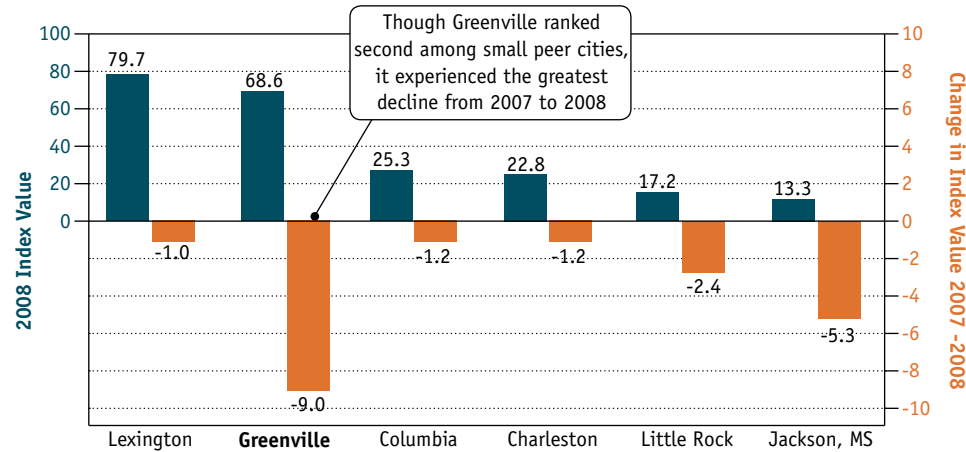
South Carolina..... 55.0

## Highlights

The Upstate continues to do fairly well in terms of the Innovation Capacity Index, scoring higher than nine other communities under review. The Greenville MSA fares even better with only three communities scoring higher.

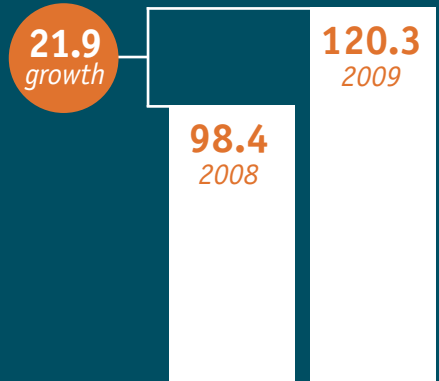
Historically, the region has had a strong amount of patenting activity, with industries such as Milliken, GE, Kemet and Clemson University leading the way. Another key component of our strength is the amount of engineering talent that is employed in the region.

### Patents per 10,000 Workers, Small Peer Cities



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

Greenville not only ranked 1<sup>st</sup> overall when compared to the peer cities, it also experienced the most growth in index value from 2008 to 2009.



## What's working?

The Advanced Materials Research Laboratory, located in Anderson County, is dedicated to making materials better, smarter and faster. The Upstate has long had a competitive advantage in the materials sector, with many companies building their reputations on superior materials engineering and technology. The AMRL builds on this expertise and provides a focal point for innovation in this critical sector of our economy.



Community support for innovation can take many forms. One of the most powerful is the development of communities with shared interests and ongoing collaboration across organizations. InnoMobility is an emerging initiative that will organize the region's industrial, academic and entrepreneurial capabilities to discover and develop high-impact innovations related to the global transformation of mobility.



Advanced Materials Research Laboratory, Clemson University. (Photo provided by Clemson University)



## What can we do to improve?

Culture matters, too. It's not just about technology. While it is an important component, not all innovation can be captured in terms of patents, employment in scientific occupations, etc. In many cases, innovative business models and practices can create tremendous wealth for a community. To help foster such opportunities, the region should strongly support communities of innovation, such as InnoVenture, TEDx, NEXT, Social Media Club, Greenville Spartanburg Anderson Technology Council, Manufacturers Roundtable and other organizations that tend to be "frothy with ideas."

"Operational excellence secures the present. Innovation excellence secures the future."



Roger Milliken, past Chairman & CEO, Milliken & Company, (1915-2010)

# ENTREPRENEURIAL ENVIRONMENT

## Why entrepreneurship?

Entrepreneurship is the driving force behind wealth creation. Turning new business ideas into viable commercial enterprises, entrepreneurial firms tend to deploy the most recent advances in technology and business processes. Some breakthrough organizations will deploy simpler – even non-technology-oriented ideas – that can revolutionize an industry or create an entirely new industry. Having those sorts of creative firms in the Upstate will ensure that we remain a premier business community.

## Indicators

### Business churning

Total number of establishment births and deaths as a percentage of all firms in an area.

### Establishments per 1,000 employees

Number of businesses in an area, presented per 1,000 employees.

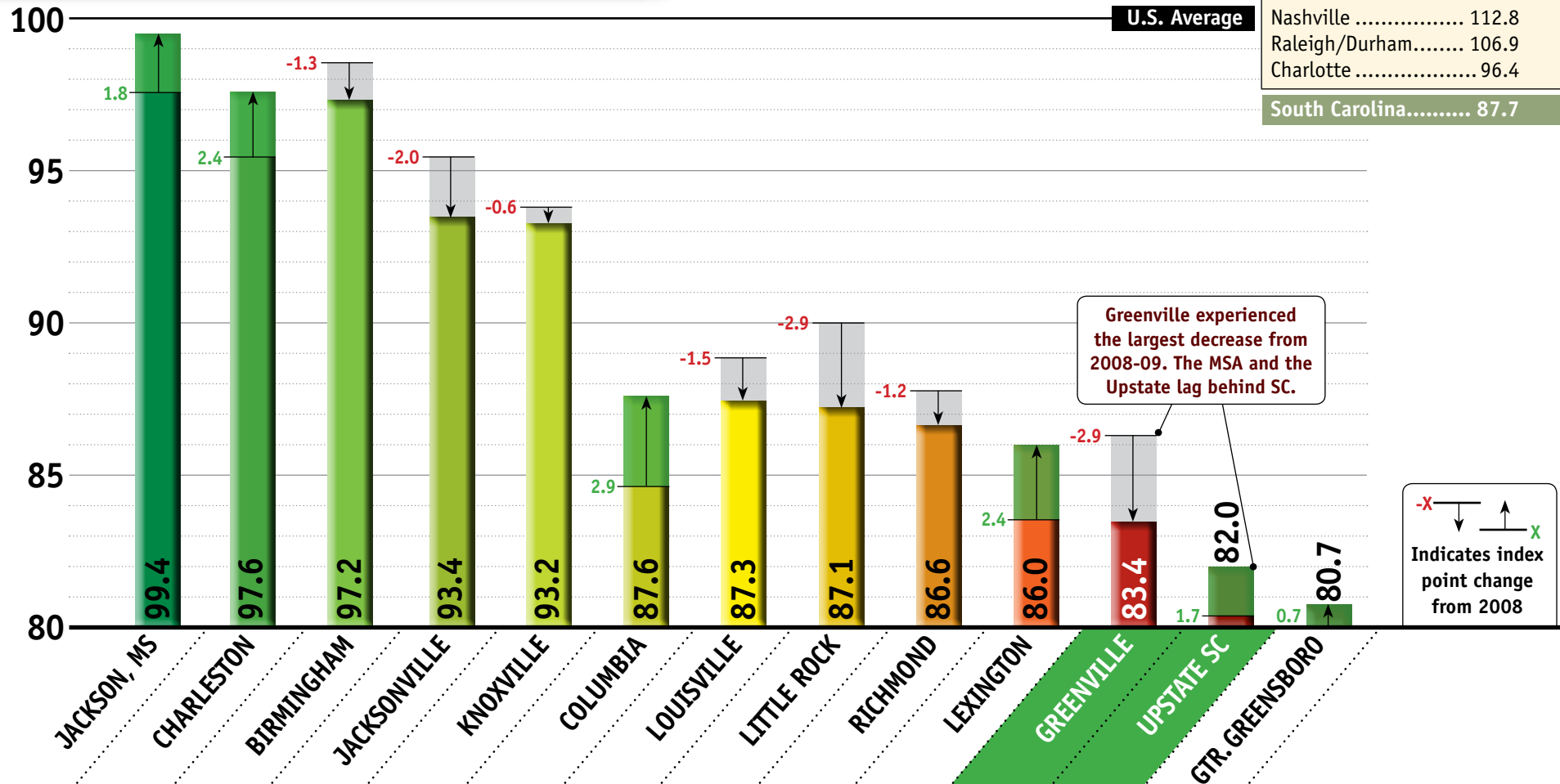
### Proprietors' income share

Percentage of an area's income generated by self-employed business owners.

### Employment in business services

Share of regional employment in the professional and technical services industries.

## Entrepreneurial Environment Index



## TARGET CITIES

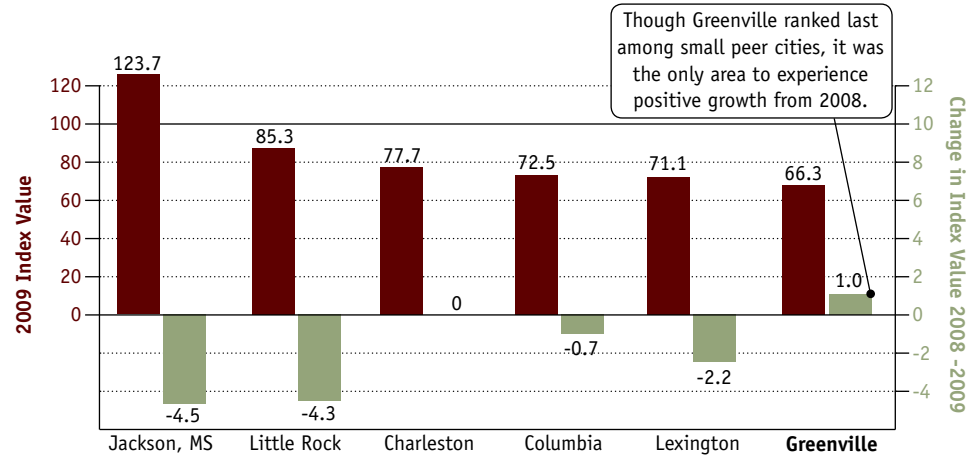
|                     |       |
|---------------------|-------|
| Austin .....        | 115.2 |
| Nashville .....     | 112.8 |
| Raleigh/Durham..... | 106.9 |
| Charlotte .....     | 96.4  |
| South Carolina..... | 87.7  |

## Highlights

The Upstate does not fare so well in terms of taking innovative ideas and turning them into commercial enterprises. Our entrepreneurial score falls behind all but one comparison community. Given the importance of entrepreneurs to job creation, we must pay close attention to this area.

The Upstate has a lower business churn rate than other communities and our business services sector is a bit lower as well. The Greenville MSA fares a bit better. Both of these are key ingredients for the health of entrepreneurial firms.

## Proprietors' Income as a Percent of Total Income, Small Peer Cities



## What's working?

NEXT is an initiative dedicated to building an entrepreneurial ecosystem that nurtures the startup and growth of knowledge-based companies with global impact through: attraction and retention of firms and talent, infrastructure development, advocacy and concierge service. The firms targeted by NEXT pay, on average, more than double the area's average wage and they have the potential to rapidly grow their employment base. The NEXT model has expanded into Anderson County with the creation of a best practices forum at Clemson's Advanced Materials Research Lab.

With the addition of the NEXT Innovation Center (NIC) in 2009, an important component of the entrepreneurial infrastructure was added to the community. This center provides a location where like-minded firms can discuss the latest issues in technology, opportunities for joint business ventures, and benchmark best practices. The NIC has recently garnered some na-



NEXT won the 2010 Innovators Award from the Southern Growth Policies Board.

tional exposure through *Men's Journal* and other publications.

Programs such as NEXT create the positive buzz and momentum that will pull other entrepreneurial firms and talent to our region, as well as get area individuals excited about the possibility of launching a new firm.

## What can we do to improve?

One of the key constraints that startups face is access to capital. Banks are more risk averse and the venture capital industry, already small in South Carolina, is shrinking. According to Matt Dunbar, Executive Director of the Upstate Carolina Angel Network (UCAN), there are over 60,000 accredited investors in South Carolina, but less than one percent of them are active angel investors. We



need to educate both the investor and entrepreneurial communities on the risks and rewards of angel investing and bring more capital to the table to fund entrepreneurial ventures.

## Job creation and entrepreneurs

"Gazelles" are younger, smaller firms that experience rapid employment growth. Those that survive to become "high-impact firms" account for almost all of the private sector employment and revenue growth in the economy. Cultivating high-impact firms is critical to ensuring income growth in the region.



**"The entire region is richer for its support and encouragement of innovative technologies and entrepreneurship."**



Ralph Hulseman,  
President & CEO, Hoowaki, LLC

# CONCENTRATED ECONOMIC STRENGTH

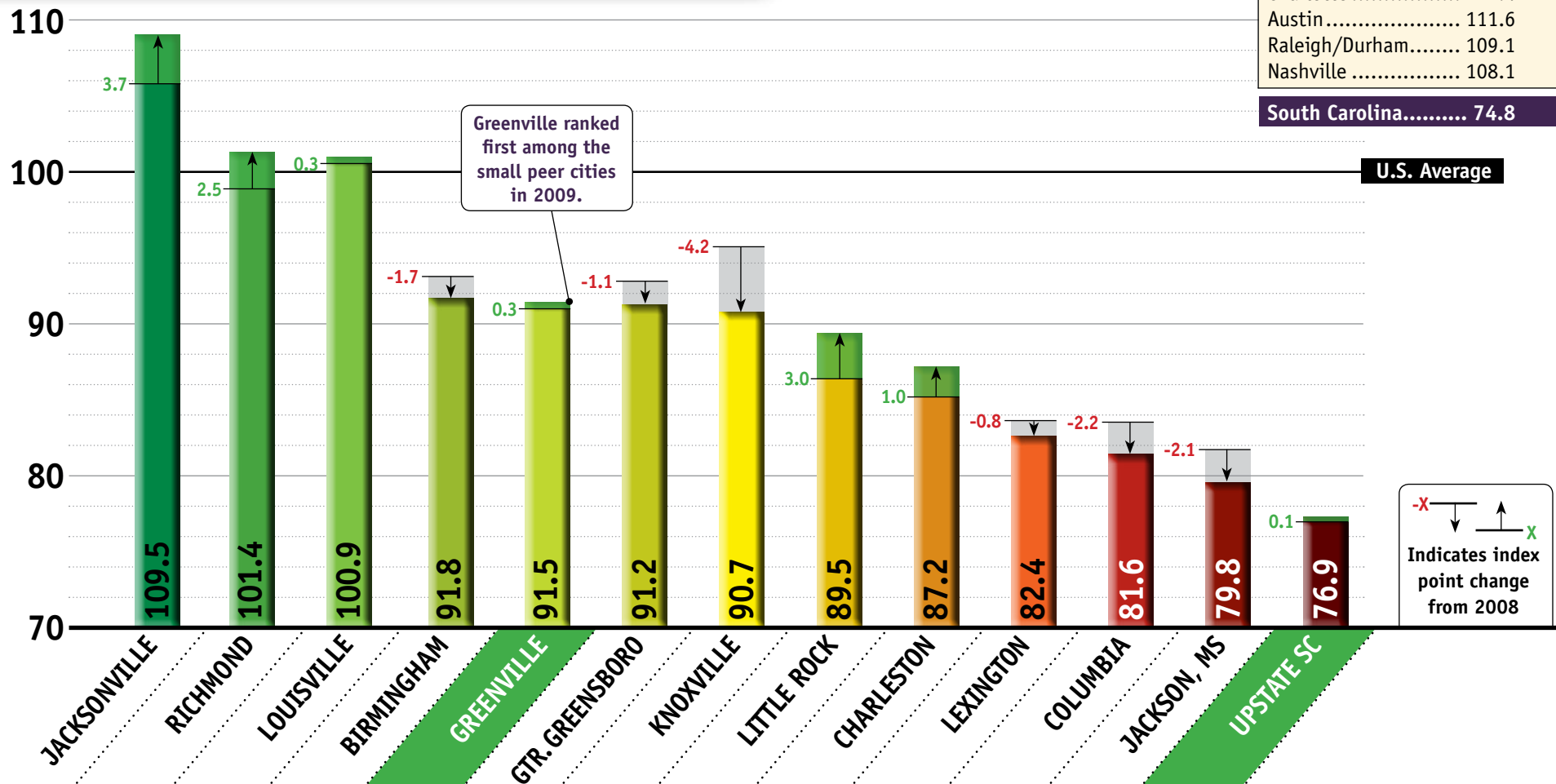
## Why concentrated strength?

This measure provides a gauge of how well-positioned the region is to capitalize on opportunities in the existing industry structure. With greater diversity and density of industry, comes a greater exchange of ideas across industry, enhanced labor productivity and a greater likelihood of new business development. Higher wage industries in a region allow for greater growth in per capita income and are less vulnerable to low-wage, offshore competition. Finally, the presence of high-wage occupations indicate that a region has a relatively high share of the most productive jobs in an industry, a competitive advantage in many ways.

## Indicators

- Concentration of jobs in high wage industries (traded industries only) : Employment Diversity Index, 2008 and 2009
- Concentration of industry jobs in high wage occupations (traded industries only) : Employment per Square Mile, 2008 and 2009

## Concentrated Economic Strength Index



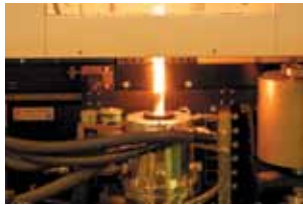
### TARGET CITIES

|                |       |
|----------------|-------|
| Charlotte      | 121.4 |
| Austin         | 111.6 |
| Raleigh/Durham | 109.1 |
| Nashville      | 108.1 |
| South Carolina | 74.8  |

## Highlights

Traded sectors are those that sell goods and services outside of the local market area, thereby bringing in additional income to the region. In the Greenville region, these highly important firms run the gamut of industries from aerospace engines to transportation and logistics. How strong is our region in these traded sectors? The data seems fairly clear: the Upstate has ample opportunity to create more value in the industries in which we already compete, as well as to compete in industries that are only emerging in our region.

### Areas of focus



ADVANCED MATERIALS



AUTOMOTIVE



AVIATION



BIOSCIENCE



ENERGY

## What's working?

Moving up the economic value chain is the name of the game. The broad range of economic development-related organizations in the region are deliberately targeting higher-value companies and higher-paying jobs, while not ignoring other opportunities that may come their way. For example, the Upstate SC Alliance, the marketing organization for economic development in our region, recently contracted with an internationally-known site selection consulting firm, McCallum-

Sweeney, to develop a very targeted marketing strategy. The final report identified niche market opportunities within four broad sectors in which our region already has a competitive advantage: advanced materials, biosciences, automotive and energy. By targeting higher-value-adding niche sectors, the Upstate will be able to begin to close the gap on this Index as well as improve both capital investment and job creation numbers.

## What can we do to improve?

In a sense, this metric will improve as the other Scorecard metrics improve. By bringing to bear community resources on education, entrepreneurship and innovation in alignment with higher-value industries, the Upstate will see significant changes in this metric, as well as the others.

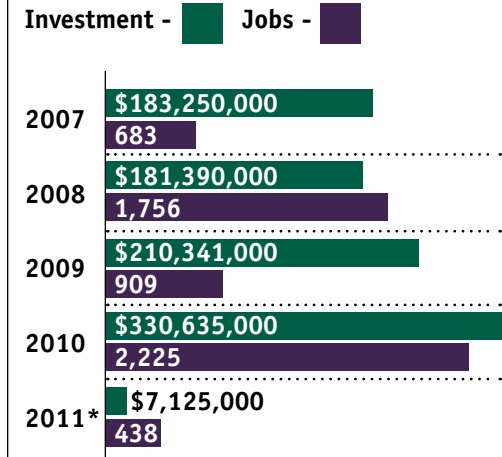
*ACCELERATE!*, the Chamber's five-year plan to improve competitiveness, is central to supporting these efforts. A significant amount of success has occurred thus far.

Resources supplied by *ACCELERATE!* allowed the Chamber to take a lead role in the efforts to land Southwest Airlines. By enhancing our existing air service at GSP International Airport, we have an additional tool for recruiting new companies to the region. *ACCELERATE!* resources are allowing the NEXT initiative to grow to provide more support to high-impact firms that find our unique blend of assets attractive. A "catalytic project" based on the NEXT program is currently being developed. Also, the Chamber's Center for Excellence is being expanded into new schools and impacting more students.

While some success is occurring, additional resources must be developed and strategies deployed. *ACCELERATE!* provides an opportunity to bring additional business resources and leadership to the table to improve our competitiveness in all of these critical areas.



## Investment and Capital Investment Numbers for Greenville County



\* 1st Quarter

**"By targeting very specific niches, it is much more likely that the Upstate will succeed in recruiting, growing and launching companies that will positively impact our economic base. Targeting higher-value industries will lead to higher wealth for the entire region."**



George Acker, Duke Energy Chair, Upstate SC Alliance

## 2011 Economic Scorecard Leadership Team

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William Cdebaca, *Fluor Corporation*  
Mark Crocker, *Dixon Hughes Goodman, LLP*  
Hank Hyatt, *Greenville Chamber*  
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## Produced for the Community by

the Greenville Chamber, with assistance through the *ACCELERATE!* initiative and in partnership with the Upstate SC Alliance.

The Greenville Chamber is dedicated to creating one of the world's premier business regions by building community prosperity, enhancing quality of life through collaboration, and being the voice of business.

*ACCELERATE!* is a five-year plan, created by the Chamber in partnership with local CEOs, to address income competitiveness and build economic momentum in our region. It focuses on three main priorities:

- Improving Business Conditions
- Developing and Recruiting World-Class Talent
- Fostering High Impact Startups

For more information on *ACCELERATE!*, visit [www.accelerategreenville.org](http://www.accelerategreenville.org) or call 864.242.1050

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