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Professor Porter donated his time as senior advisor to this project.

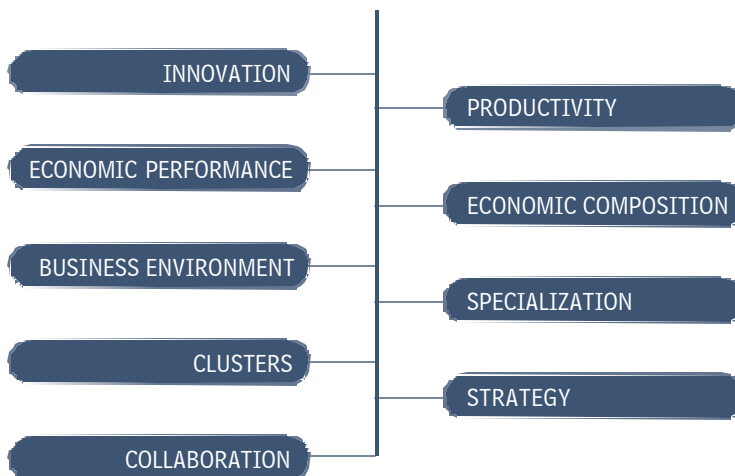
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# South Carolina Competitiveness Initiative



PHASE 1 PRESENTATION  
Columbia, South Carolina — December 8, 2003



# ECONOMIC PERFORMANCE

For years, South Carolina has pursued a low-cost economic strategy, emphasizing its abundant and flexible workforce, good physical infrastructure, and responsive government in order to attract manufacturing operations. While this strategy has succeeded historically in creating jobs, it has been less successful in raising the standard of living in the state. For example:

- Average wages in South Carolina were 80.5% of the national average in 2001;
- Wages in South Carolina grew 3.6% per year from 1990-2001 vs. 3.9% for the U.S.;
- Gross state product per worker was 82.2% of the U.S. average in 2001, growing at 3.6% per year, the same as the national average; and
- Patents per 10,000 workers in South Carolina were 3.6 in 2001 vs. 7.7 for the U.S.

Moreover, with the emergence of many low cost competitors around the world (e.g. China, India, Mexico, etc.), creating jobs is becoming increasingly difficult: in October 2003, South Carolina's unemployment rate was 7.1%, higher than the US rate of 6.0%.

ECONOMIC PERFORMANCE
<p><b>EMPLOYMENT</b></p> <ul style="list-style-type: none"> <li>▪ South Carolina's employment grew 1.3% annually from 1990 to 2002, below the U.S. average of 1.5%</li> </ul>
<p><b>UNEMPLOYMENT</b></p> <ul style="list-style-type: none"> <li>▪ South Carolina's unemployment rate of 7.1% in October 2003 was higher than the national average of 6.0%</li> </ul>
<p><b>AVERAGE WAGES</b></p> <ul style="list-style-type: none"> <li>▪ The state's average wages of \$28,634 in 2001 were 80.5% of the national average of \$35,550</li> </ul>
<p><b>WAGE GROWTH</b></p> <ul style="list-style-type: none"> <li>▪ Growth of average wages in South Carolina was 3.6% from 1990 to 2001, below the US rate of 3.9%</li> </ul>
<p><b>MANUFACTURING EXPORT DOLLARS</b></p> <ul style="list-style-type: none"> <li>▪ Manufacturing exports per worker were 16% lower than the US average in 2001, but grew 7.7% faster from 1997 to 2001</li> </ul>
<p><b>GROSS STATE PRODUCT PER WORKER</b></p> <ul style="list-style-type: none"> <li>▪ GSP per worker of \$63,181 in 2001, was 82.2% of the U.S. average of \$76,898; annual growth of 3.6% from 1990 to 2001 was the same as the US</li> </ul>

INNOVATION OUTPUT
<p><b>PATENTS PER EMPLOYEE</b></p> <ul style="list-style-type: none"> <li>▪ South Carolina's 3.6 patents per 10,000 employees in 2001 was well below the national average of 7.7</li> </ul>
<p><b>PATENT GROWTH</b></p> <ul style="list-style-type: none"> <li>▪ Annual patent growth in South Carolina from 1990-2001 was 4.3%, below the 6.5% rate for the U.S.</li> </ul>
<p><b>ESTABLISHMENT FORMATION</b></p> <ul style="list-style-type: none"> <li>▪ The growth rate for establishments was 2.1% from 1991 to 2000, higher than the US average of 1.5%</li> </ul>
<p><b>VENTURE CAPITAL INVESTMENTS</b></p> <ul style="list-style-type: none"> <li>▪ VC funding in South Carolina was \$3 per worker in 2002, below the national average of \$155 per worker</li> </ul>
<p><b>SBIR AWARD DOLLARS</b></p> <ul style="list-style-type: none"> <li>▪ South Carolina's \$2.56 Small Business Innovation Research awards per worker in 2001 was below the US average of \$8.50, although South Carolina's growth of 36.6% was far higher</li> </ul>
<p><b>FAST GROWTH FIRMS</b></p> <ul style="list-style-type: none"> <li>▪ The state had 0.8% of the Inc 500 fast growing companies in 2002, vs. 1.4% of employment. These ratios were approximately the same in 1994</li> </ul>

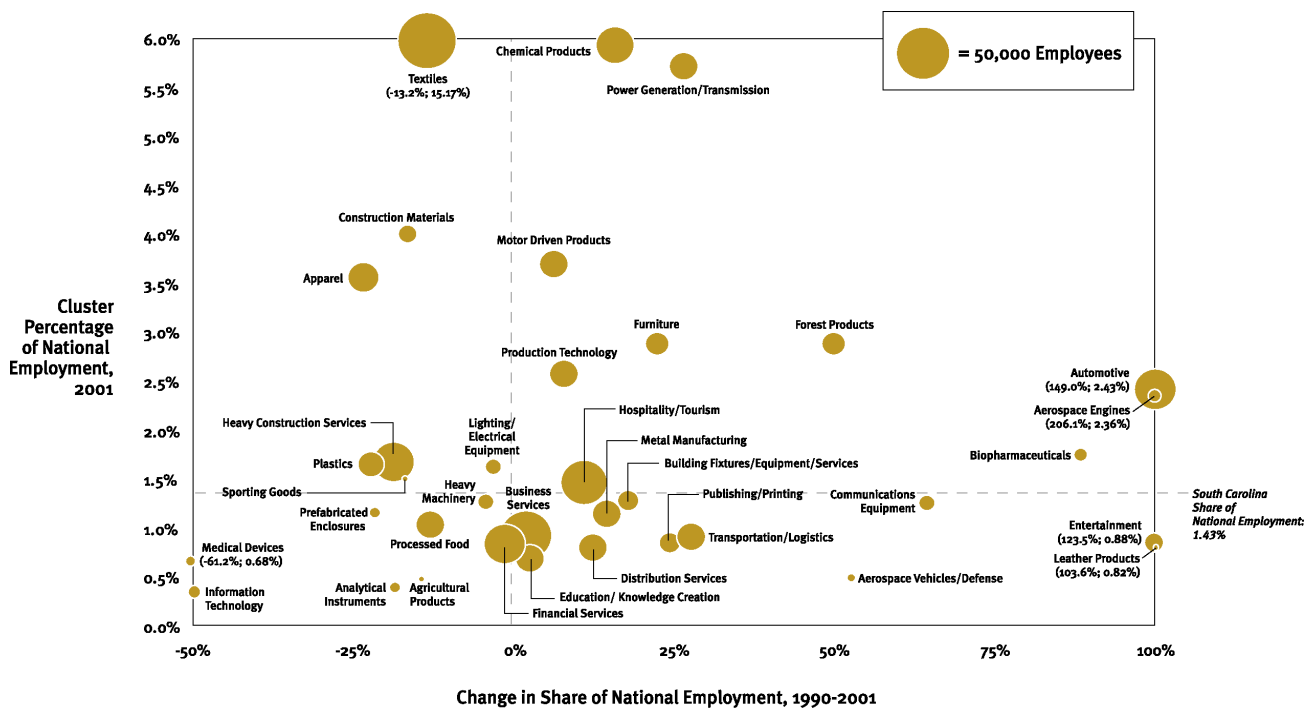
Note: Wage data is provided by NAICS codes, as compared to SIC codes, after 2001; black font indicates areas of relative success, red indicates significant lag.

Source: Bureau of Labor Statistics; Bureau of Econ Analysis; Intern'l Trade Admin; U.S. Patent and Trademark Office; PricewaterhouseCooper Money Tree; American Chamber of Commerce Researchers Assoc; MA Division of Employment & Training; Development Report Card for the States; Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

# ECONOMIC COMPOSITION

South Carolina has a good base for developing strong clusters, including positions in autos, textiles, chemical products, tourism, forest products, production technology, and power generation and transmission. (see below) Nevertheless, average wages significantly lag the US. Common explanations for this lag include:

- South Carolina's disproportionately large employment in several low wage clusters, such as textiles and apparel;
- The state's relatively large rural population, which, like rural America overall, makes much lower average wages; and
- South Carolina's relatively large African-American population, which resembles African-Americans nationwide in having a lower per capita income.



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

While these factors account for some of the gap in average wages, they do not tell the whole story. In fact:

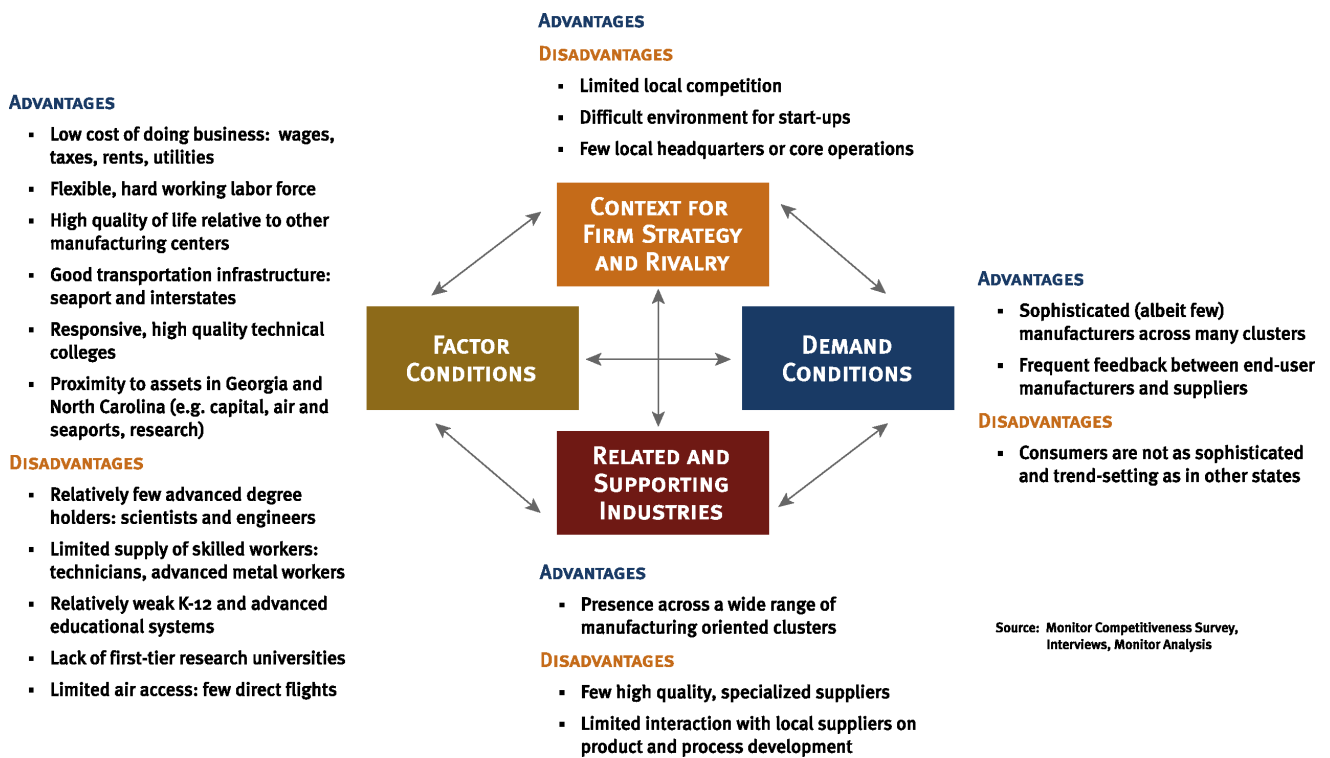
- The mix of clusters accounts for 31% of the gap between South Carolina wages and US wages;
- Average wages in rural South Carolina are actually higher than in rural America, and the larger rural population in the state explains only 13.1% of the gap;
- South Carolina's minority population (African-American, Hispanic, and Asian) is only slightly larger than the US minority population, and accounts for only 10.2% of the gap.

The economic performance issue for South Carolina is more pervasive. Prosperity is lower in South Carolina across all clusters, in many rural regions but also in the cities, and across all demographic groups. The data suggest that the principle reason for the lag in average wages is that the value created per worker, per year is less in South Carolina than for the United States as a whole.

# THE BUSINESS ENVIRONMENT

If prosperity is to rise in South Carolina, workers must create more value each year. Boosting businesses' ability to create more value requires upgrading the quality of the business environment in which they operate. South Carolina's business environment does have many strengths, including:

- A strong technical college system;
- New leadership in the research universities committed to economic development;
- Attractive cost structure relative of other US states;
- Good highway system and the Port of Charleston;
- Valuable assets such as the Savannah River Site, SPAWAR; and
- A dense network of economic development organizations eager to take action.



There are also a number of key challenges, including:

- Improving but still relatively poor educational system, and the resulting limited skill set in the workforce;
- Lack of a top-tier research university;
- Difficult environment for start-ups and small firms;
- Lack of cluster councils, and university-industry linking organizations

# FINDINGS FOR FOUR SOUTH CAROLINA CLUSTERS

In addition to an assessment of the state overall, the South Carolina Competitiveness Initiative looked at four clusters— automotive, chemical products, textiles, and tourism — to gain a deeper understanding of the issues, challenges, and opportunities in South Carolina, and to support several large clusters that have a significant economic impact on the state’s economy.

The clusters illustrate and reinforce several of the **key themes** coming out of the analysis of the state overall, including:

- The success in creating jobs and attracting capital investments, but also the low value creation and average wages;
- The flexible workforce and good physical infrastructure, but also the limited investment in education, skills, and research;
- The presence of sophisticated operations in several clusters, but also the difficult environment for start-ups and small companies, and the limited networking and collaboration across firms;
- The importance of government leadership in recruiting, but also the limited participation of the private sector and universities in economic development.

In dealing with the legacy of the long-pursued low cost strategy, each cluster faces a slightly different mix of challenges and opportunities, but all must seek to create a business environment that enables South Carolina companies to pursue **differentiated position** vis-à-vis other regions.

The **automotive cluster** should continue to establish itself as a leader in R&D in the American South; build on its ability to support sophisticated, more customized manufacturing (e.g. BMW, Honda, American La France); and focus on attracting firms reliant on importing and exporting.

The **chemical products cluster** should build on several niche opportunities-commercialization of SRS technology, biopharmaceutical manufacturing, and defense against weapons of mass destruction (i.e., chemical, biological, and nuclear).

The **textile cluster** needs to make a strategic transition from one providing inputs into the apparel business, to one that: supplies materials to end-users which will remain based in the United States for years to come (e.g. autos, construction), develops innovative new products, and provides high-end fabrics requiring fast and short production runs for demanding US customers.

The **tourism cluster** must improve collaboration amongst its disparate members to identify a set of highly attractive, high-spending tourist segments, determine how South Carolina can best package its tourism assets to create a highly desirable destination for some of these segments and execute on a strategy that creates and markets this new destination to the right tourists.

# PROPOSED AGENDA FOR ACTION

The South Carolina Competitiveness Initiative suggests a vision of South Carolina where the state becomes a premiere region in the U.S. for advanced processing. South Carolina can be most successful by taking new ideas and innovations, and executing on them. South Carolina will manufacture newly conceived products, and execute complex processes for service providers. In order to reach this vision we suggest South Carolina pursue eight campaigns:

**ACTIVATE AND UPGRADE CLUSTERS** (upgrade existing clusters by building critical mass and fostering linkages, and broaden cluster portfolio by seeding new clusters);

**CONTINUE TO ENHANCE EDUCATION AND WORKFORCE TRAINING** (significantly raise SAT scores and graduation rates by 2015, and leverage technical colleges to provide the workers needed for advanced processing);

**INVEST IN RESEARCH AND THE UNIVERSITY SYSTEM** (increase investment in focused research areas aligned with the needs of industry, and build a multidisciplinary research campus in Charleston);

**INCREASE SUPPORT FOR START-UPS AND LOCAL FIRMS** (create a supportive environment for start-ups and streamline regulations and policies to encourage expansions and upgrades);

**CREATE AN EXPLICIT ECONOMIC DEVELOPMENT PROGRAM FOR DISTRESSED AREAS** (increase prosperity of disadvantaged sectors in South Carolina);

**CREATE NEW INSTITUTIONS TO SUPPORT ECONOMIC DEVELOPMENT** (support and create institutions for collaboration focused on upgrading the local business environment);

**LAUNCH INTERNAL AND EXTERNAL MARKETING CAMPAIGNS** (create a can-do mentality in South Carolina and position the state as a location full of opportunities for leading companies and talented people);

**MEASURE PROGRESS IN RAISING PROSPERITY** (define and track of set of metrics that measure progress toward prosperity, and provide direction for the above campaigns)

In order to implement these campaigns, South Carolina should create an organizational structure consisting of a central leadership group-made-up of leaders from business, government, and academia-surrounded by working groups each responsible for one of the campaigns. The working groups would consist of individuals and organizations critical to the achievement of each campaign. Each group would be responsible for: 1) defining objectives; 2) developing a specific action agenda; 3) assigning responsibility to individuals and groups; 4) helping to identify appropriate metrics to track progress; 5) clarifying the timing for carrying-out the agenda; and 6) reporting progress to the leadership group and other working groups at a later date.

South Carolina is at an inflection point in its economic trajectory. It faces a number of significant challenges which, if not met, will depress the standard of living in the state, and push talented individuals to move to more prosperous locales. Fortunately, South Carolina has enough assets already in place to begin addressing these challenges. If South Carolina fails to raise prosperity over the next decade, it will not be due to lack of aptitude, but rather to lack of execution.