

DRAFT

Section Four

AREAS OF EMPHASIS

Target Industries and Regional Innovation Capacities

Since the early beginnings of the textile mills in the 1800s, manufacturing has provided the foundation of economic growth in the SC Appalachian region. With the industry employing nearly 100,000 people across six counties, a strong and diverse manufacturing foundation is seen by the region's economic developers as essential for weathering up-and-down business cycles and for achieving the new innovations it will take to keep the region vibrant in the 21st century.⁷

In 2009, the Upstate SC Alliance commissioned the comprehensive *Upstate Target Industry Study*, which was conducted by three of the nation's most prominent economic development consulting firms. One of the major themes of the study was the idea that regions should perform an honest appraisal of what distinguishes them economically and then strive to build leadership in those specialties. This idea is at the very heart of cluster-based economic development. Chapter 2 states, "Cluster development is attractive because once a cluster begins to establish itself, it tends to be a self-fueling growth engine. Companies within clusters are more profitable and efficient due to their ability to cross-pollinate their organizations with the best talent, proven processes and cutting edge research. This attracts other leading firms, which further attracts the best and brightest."⁸

Using traditional, academic cluster analysis and location quotients, the

study outlined key businesses in the region and their interrelated competitive advantages. The following passage highlights some key findings from the study:

"The region has a strong set of complimentary assets including a traditional base in advanced materials (including a legacy presence in textiles), energy production, advanced manufacturing, precision plastics and chemicals, and automotive. These core strengths, coupled with aggressive educational institutions committed to embracing the

economic development demands of a changing regional environment, are the building blocks that will allow the Upstate to realize economic growth in each target sector."⁹

The Upstate Target Industry Study produced recommendations for the region's economic developers on which industries they could target in order to build upon existing clusters. The four recommended target industries from the study were advanced materials,

automotive, biosciences, and energy. Further research and analysis led the Upstate Alliance to add another industry to this list: aerospace. The study provided an objective, region-wide economic analysis that identifies clusters and that recommends synergistic target industries. This information is being used by the Upstate Alliance to market the region on a global level.

Before describing each region-wide cluster and target industry, it is

The region has a strong set of complimentary assets including a traditional base in advanced materials,... energy production, advanced manufacturing, precision plastics and chemicals, and automotive.

Upstate Target Industry Study, 2009

important to note that each individual county economic development team does not limit itself to targeting only these industries. Unique local assets, innovation in other sectors, and infrastructure developments have led to the identification of the following additional target industries:

Agribusiness

Despite being home to the largest county in South Carolina and one of the fastest-growing cities in the United States, the SC Appalachian Region is also fortunate enough to have rural areas with prime agricultural lands and an extensive network of food manufacturers and processors. In addition to the large, commercial food industry, small-scale farms, local farmers markets, and farm-to-table restaurants are found throughout the region. Agribusiness opportunities exist on many scales and can be found not only in the SC Appalachian region, but across the state, as well.

Corporate Headquarters

While Greenville County has already named corporate headquarters (CHQ) as one of its local target industries, the entire region sees potential in this sector as well. Many companies headquartered in other U.S. regions are attracted to the idea of locating their headquarters close to their manufacturing centers in the Southeast. Further, the low-cost and pro-business environment of the SC Appalachian Region is also attractive to them. As a result, the number of CHQ prospects is increasing, as site location consultants are submitting more Requests for Information to the region's economic developers.

Data Centers

Companies who are looking to locate new data centers are finding strategic assets such as raw water capacity (necessary for cooling

systems), a low cost of doing business, and an attractive cost of living/quality of life for the workforce. Evidence of this potential is exemplified by the company Integral Solutions in Spartanburg, which occupies the only "Category 4" data center in South Carolina (Category 4 represents the highest standardized level of capacity).

Defense Related Industries

Strategic assets for the defense industry include the region's strong presence of automotive and aerospace industries (both complimentary industries), as well as the prevalence of engineering talent in the regional workforce (the region boasts one of the highest engineers per capita ratios in the US). Lockheed Martin's development of an assembly and training operations center for the T-50A in Greenville County is just one example of success in this area.

Transportation, Distribution, and Logistics (TDL)

A combination of assets make TDL a logical target industry for several counties. The region is intersected by two major interstate highways (I-85 and I-26) and it is located as a center point between the major southeastern cities of Atlanta (130 miles) and Charlotte (100 miles). The new Inland Port rail terminal has transformed the region's industrial transport capacity. The deepening of the Port of Charleston, SC expands the region's ability to import and export. The GSP International Airport recently announced a new cargo service between Greenville-Spartanburg International Airport and Munich, Germany that would be based out of the airport and serve customers in the Carolinas, Kentucky, Tennessee, and Georgia.

Regional Innovation Capacities: Advanced Materials

While the name advanced materials is general and could pertain to a wide variety of products, this cluster is comprised of four distinct areas of strength in the region's economy:

- Metal-Working and Fabrication
- Opto-Electronics and Photonics
- Advanced Textiles
- Plastics

With nearly 800 firms employing over 44,000 people, the advanced materials cluster is one of the strongest in the area. Innovative research facilities and a highly skilled workforce will continue to bolster the advanced materials firms in the region and draw new investment to the area.



Clemson University's Advanced Materials Center in Anderson County.
Photo credit: Clemson University.

Regional Innovation Capacities: Advanced Materials

There is a **strong base of advanced material-related companies** performing cutting edge R&D.

Clemson University Advanced Materials Center (CU-AMC), which houses the 111,000 square foot state of the art Advanced Materials Research Laboratory. The Center also houses a world class Electron Microscope Facility, which attracts clients from numerous industries.

Clemson's Center for Optical Materials Science and Engineering Technologies (COMSET) has the ability to manufacture optical fiber makes Clemson one of only four universities in the world with that specific capacity. COMSET is a member of the six-university Carolina Photonics Consortium.

Clemson's Center for Advanced Engineering Fibers and Films (CAEFF) specializes in R&D associated with innovative fiber and film companies – a very strong industry in the SC Appalachian Region.

Clemson Institute for Advanced Materials and Manufacturing (CIAM2) couples research with rapid, efficient development of new products and processes to support global industrial competitiveness.

Composites Manufacturing Technology Center (CMTC). Located in Anderson, CMTC is one of nine Navy Centers of Excellence in the U.S. CMTC improves manufacturing processes for composite materials and facilitates technology transfers of manufacturing and repair issues.

The Advanced Fiber-Based Materials Center of Economic Excellence at Clemson University helps develop advanced synthetic polymers, including wool, cotton and silk. The Center also focuses on composite materials based on metals, ceramics and polymers – which have applications in several of the region's industrial clusters, including Automotive, Aerospace, and Bioscience.

The LEED certified **Duke Energy Innovation Center** in Anderson houses the South Carolina Research Authority's (SCRA) advanced materials applied research operations. This Center provides world class start-up company incubation space with both wet and dry lab capacity.

Note: The list above is a set of examples for regional innovation capacity in the advanced materials industry. Other innovation capacities do exist and this list is not intended to be comprehensive.

Regional Innovation Capacities: Aerospace

Anchored by the South Carolina Technology and Aviation Center (SC-TAC), a 2,600-acre aviation center/ business park with an 8,000 foot runway, the region's Aerospace cluster is dynamic and growing. Of the 160+ aviation related companies in South Carolina, a third of them are found in the SC Appalachian Region. Important innovation capacities for this cluster are found in the region, and they must be supported to ensure continued growth of this industry.



Regional Innovation Capacities: Aerospace

The **SC Technology and Aviation Center (SC-TAC)** is a 2,600 acre aviation/ business park with an 8,000 foot runway. SC-TAC is home to 80+ technology and aviation companies.

Of the over 160 aviation and aerospace-related companies in South Carolina, more than 50 are located in the Upstate. Some of these companies (and what they produce) include:

- **GE Aviation** – high-pressure turbine blades
- **Parker Hannifin TechSeal Division** – headquarters and gasket & seal manufacturing
- **Lockheed Martin** – commercial and military aircraft maintenance and modification
- **Michelin** – aircraft tires
- **Cytec Solvay Group** – carbon fibers and aircraft components
- **Champion Aerospace** – aerospace ignition systems and airframe components

The region is within **close proximity to major original equipment manufacturers (OEMs)**, such as the Boeing facility in Charleston, Gulfstream in Savannah, and Honda in North Carolina.

Synergies exist between the region's aerospace cluster and its other engineering -intensive clusters, including automotive (drive train technologies), energy (wind turbines and blades), and advanced materials.

Greenville-Spartanburg International Airport (GSP) is also a great asset for the industry. Leaders at GSP are currently constructing Commercial Development Systems to meet the needs of aircraft-related companies looking to locate at the airport.

The region also benefits from having **multiple general aviation facilities** across

Note: The list above is a set of examples for regional innovation capacity in the aerospace industry. Other innovation capacities do exist and this list is not intended to be comprehensive.

Regional Innovation Capacities: Automotive

While the nation as a whole has declined in automobile production compared to previous generations, the South has done comparatively well in recent years. During the 2000s, automotive employment in South Carolina rose by 3.3% even as the industry's employment declined by 22% nationally. The region's automotive cluster represents one of its signature strengths, with global powerhouses such as BMW, Michelin, and Clemson University's International Center for Automotive Research (CU-ICAR) leading the way. It will be important for the region to support and build upon the innovation capacities described in the table to ensure continued growth in the regional automotive industry.



An aerial view of BMW Manufacturing Co. in Spartanburg County. Photo credit: BMW Manufacturing Co.

Regional Innovation Capacities: Automotive

The Automotive Cluster is anchored by the **North American Headquarters of both BMW and Michelin**, who collectively employ approximately 16,000 workers. Several Tier 1 and Tier 2 suppliers have located within the region as a result. Not only do all of these automotive companies create jobs, but many conduct cutting edge R&D which drives future expansion.

The **Clemson University International Center for Automotive Research (CU-ICAR)** sits on a 250 acre campus and houses advanced research labs in automotive design and development, automotive manufacturing, and systems integration. Facilities at CU-ICAR are structured to be available for use in commercial partnership arrangement with private industry. CU-ICAR is also competitively positioned to attract federally-funded R&D projects.

The 90,000 square foot **Carroll A. Campbell Jr. Graduate Engineering Center** at CU-ICAR houses Clemson's automotive engineering graduate program.

Approximately 300 work at **BMW's Information Technology Research Center (ITRC)** at CU-ICAR - BMW's only R&D center outside of Germany.

Clemson University Computational Center for Mobility Systems (CCMS) at CU-ICAR is home to some of the most powerful automotive computing infrastructure in the world.

Synergy exists between regional advanced materials cluster and automotive cluster, particularly in R&D for stronger, lighter composites that improve fuel efficiency.

Strong presence of international firms and proximity to U.S. ports (Charleston, Savannah) create an attractive location for other international automotive manufacturers.

Note: The list above is a set of examples for regional innovation capacity in the automotive industry. Other innovation capacities do exist and this list is not intended to be comprehensive.

Regional Innovation Capacities: Bioscience

The bioscience, or life science as it is sometimes called, industry includes number of things which share the common link of biology-inspired, life-enhancing products and processes. Bioscience impacts agriculture, energy, medical devices, pharmaceuticals, and a plethora of other industries. The bioscience industry in the SC Appalachian Region has developed around biomaterials and medical devices. Biomaterials research has been a focus at Clemson University since the 1960s and is presently one of the University's eight emphasis areas for research.



Clemson University's new Life Sciences Facility. Photo credit: Clemson University.

Regional Innovation Capacities: Bioscience

Clemson University's Bioengineering Translational Research Program (CU-BTR) houses the Center for Biomaterials for Tissue Regeneration, the Center for Vascular Disease Diagnosis & Management, the T.B. Pace Orthopedic Research Laboratory, and the SC Medical Technology Program.

The **Clemson University Genomics Institute (CUGI)** develops and distributes genomic and bioinformatic tools and services in the life sciences industry.

The **Center for Bioelectronics, Biosensors and Biochips (C3B)** at Clemson University develops research and leadership in bioelectronics, biosensors, and biochips.

The **Institute for Biological Interfaces of Engineering (IBIOE)** at Clemson University develops biomaterials technology and produces for disease management.

The **Greenwood Genetic Center (GCC)**, which houses the J.C. Self Research Institute of Human Genetics, the Center for Molecular Studies, and the Center for Anatomic Studies and the SC Biotechnology Incubation Facility. *Note: While Greenwood is directly south of the SC Appalachian region, the Greenwood Genetic Center has a significant regional economic impact.*

The region is home to a variety of incubation spaces and over 600 clinical trials are being conducted at any time in a variety of disciplines such as oncology, pediatric oncology, women's health, cardiology and vascular disease.

According to a 2016 study conducted by TEconomy Partners and the Bioscience Innovation Organization, Greenville-Mauldin-Easley ranked 13th out of the nation's large MSAs in terms of location quotient for employment in drugs and pharmaceuticals.¹⁰

There is a strong network of medical device companies in the region, including: Kiyatec, Sensortech, St. Jude Medical, Lab21, Ortec, Poly-Med, CreatiVasc, Bausch & Lomb, Sealed Air Corp, Milliken Healthcare, Aaron Industries, and Covidien Healthcare.

Note: The list above is a set of examples for regional innovation capacity in the bioscience industry. Other innovation capacities do exist and this list is not intended to be comprehensive.

Regional Innovation Capacities: Energy

The energy industry has a diverse and profound presence in the SC Appalachian region. There are numerous assets which strengthen this, including General Electric's gas and wind turbine manufacturing plant in Greenville, which is the world's largest. The Upstate SC Alliance notes that "from traditional and renewable power generation to a strong base of utility companies to component manufacturers – the Upstate is a global exporter of energy solutions."¹¹ There are numerous assets and innovation capacities in this industry which the region must support in order to ensure continued growth opportunities.



An aerial view of Oconee Nuclear Station in Oconee County. Photo credit: The State Media Company

Regional Innovation Capacities: Energy

Wind Energy — GE Energy's 413 acre Greenville campus is the largest gas and wind turbine manufacturing plant in the world. Operations include the engineering headquarters for Renewable Energy where on and offshore wind turbines are designed which range from 1.5 to 4.1 megawatts. At its Tyger River location, Timken is supplying wind turbine products to China's Xinjiang Goldwind Science & Technology Company, one of the world's top wind power equipment manufacturers. ILJIN America recently announced an expansion in its wind turbine bearings business. Other companies like Ahlstrom and AGY are making specialty products for turbine blades.

Nuclear Energy — Of South Carolina's seven existing nuclear plants, three are located in Oconee County. Four additional plants are projected to come on-line in the state, with two of them being planned for Cherokee County.

Solar Energy — There is an emerging network of solar companies developing in the region, including the North American HQ of Staubli and other companies such as Ulbrich Precision Flatware and KEMET.

The region contains one of the top five MSA's in the world for engineering talent per capita. This is no surprise given the presence of the Clemson University College of Engineering and Science, which trains over 3,600 undergraduates and 1,100 graduate students annually. Because the region offers a high quality of life and an affordable cost of living, many talented engineering graduates desire to stay in the area. This wealth of engineering talent draws companies from the energy sector to the region.

The region's energy cluster feeds off of its advanced materials cluster, particularly in regards to metal fabrication for energy components and machinery as well as from new developments in plastics, photonics, and photoelectronics.

Note: The list above is a set of examples for regional innovation capacity in the energy industry. Other innovation capacities do exist and this list is not intended to be comprehensive.

Workforce Development

High school and college graduation rates are on the rise and the region is home to one of the highest concentrations of engineers in the nation, yet the ability to supply enough workers with the technical skills necessary for the influx of jobs in advanced manufacturing remains a concern for local economic developers. While the region possesses an adequate population of workers for a project of almost any size, the availability of technologically skilled manufacturing labor is presenting significant challenges to employers. Manufacturing in the 21st century is a completely different ball game than the region's textile-based manufacturing economy of previous generations. With modern manufacturers in need of Certified Production Technicians (CPTs), Certified Logistics Technicians (CLTs), Computer Numerical Control (CNC) operators, mechatronics specialists, and the like, it is incumbent upon the region to train its workforce for 21st century technology-based manufacturing. It is also the responsibility of the workers, however, to seize upon the training opportunities that are available throughout the region. The fundamental challenge is matching workers to training opportunities and then creating an efficient pipeline to the workplace.

While technical manufacturing skills levels are the problem most often cited in the economic development community, there are still more basic challenges associated with literacy and early childhood education. When a resident is illiterate or faces cognitive challenges due to an under-stimulating early childhood, it is much more difficult for that person to enter the workforce pipeline. Recognizing the threat these education deficiencies pose to the future workforce in the state, the SC State Chamber of Commerce is taking action by advocating "for the necessary changes and improvements to ensure a capable, productive, and sustainable workforce." To that end, the

following goals were set with the hope that they will be achieved by 2025:

- The Education and Economic Development Act will be fully implemented across all school districts.
- All SC public K-12 schools will utilize a learning model that has competency progression, focused personalized learning and is technology based.
- 90% of all SC high school students will graduate on-time as measured by the US Dept. of Education's Uniform Graduation Rate formula.
- All SC parents will have access to quality early childhood development programs that include a strong focus on brain development prenatal to age three.
- 10% yearly increase in the number of students completing a Career and Technology Education (CATE) Program1 of Study leading to a specialized stackable credential of value.
- 10% yearly increase in Technical College issued certificates and credentials in areas that support SC's workforce sector strategies.
- SC will exceed the national average for awarding 2 and 4 college degrees in disciplines that support SC's workforce sector strategies.
- Double the number of businesses supporting WorkKeys and registered as Work Ready Communities supporters.
- Apprenticeship will continue growing at a yearly rate of 10 %.

- Businesses participating in the Youth Apprenticeship Initiative will by increase 10% each year and will be in all 46 counties.¹²

Workforce Initiatives in the Region

Other CEDS 2018-2022 priorities include support for the technical college and university training programs that are adapting their curriculums in order to address the region's technical skills gap and various local, state, and federal workforce development initiatives found in the region.

Oconee County has launched a **Youth Apprenticeship Program** in partnership with the School District of Oconee County and Apprenticeship Carolina. This workforce development program aims to place young people in various business settings in order to acquire hands-on experience and gain a deeper understanding of today's global business environment. Ultimately the program will ensure a qualified workforce for the community.

In a promising collaboration between Greenville Technical College, Clemson University, and Greenville County, the new **Center for Manufacturing Innovation (CMI)** recently opened on the Millennium Campus near CU-ICAR. CMI will attempt to address the lack of interest that many young people have about careers in advanced manufacturing. There is great opportunity and demand for promising careers in this arena, but there is a misinformed stigma must be addressed. CMI will create an internationally recognized learning environment that integrates research and education while increasing the pipeline of advanced manufacturing technicians.

Funded in part by the US EDA, the Clemson University's new Advanced Technological Education Center house their **Center for Workforce Development** and the **Center for Aviation and Automotive Technological Education**. The facility provides opportunities for students, faculty, and industry partners to better collaborate, drive innovation, and enhance research in STEM fields primarily focused in Advanced Manufacturing.

Construction is underway for a new **Tri-County Technical College (TCTC) campus in the Oconee Industry and Technology Park**. This collaborative development will not only increase local workforce capacity, but also co-locate TCTC with a new high school career development center, and an adult education facility.

The new \$9 million **Center for Advanced Manufacturing and Industrial Technologies (CAMIT)** on the Spartanburg Community College (SCC) campus of Cherokee County will be a state-of-the-art facility for hands-on high tech training. The 27,000-square-foot center was be the third on the SCC Cherokee Campus when it opened in fall of 2015.

Constructed in part with federal funds, the **QuickJobs Training Center** on the Anderson Campus of Tri-County Technical College continues to provide outstanding continuing education for the regional labor pool.

Along with the state's world-class training programs, counties across the state are participating in the South Carolina's **ACT Work Ready Communities** initiative. As of July 2016, all 46 counties in the state had received their certification. This demonstrates a commitment to fostering a successful business and workforce development environment, assuring local businesses that they are providing a highly-skilled labor pool well-above industry standards.

SucceedSC is a statewide initiative aims to help "connect the dots" between small to mid-size employers and chronically unemployed citizens. This sustained unemployment is often due to a range of factors, ranging from disability to a lack of educational credentials. Small to mid-size employers, meanwhile, often cannot find the workers they need. SucceedSC aims to fill the pipeline between this underemployed population and state/technical college training and placement services.

The workforce development programs found in South Carolina have long been the model for success in the United States, especially the state's long-established technical college system and nationally recognized state workforce training programs, **readySC** and **Apprenticeship Carolina**. Each of these programs have demonstrated an award-winning ability to help train and facilitate lasting relationships between employers and workers.

Product Development and Availability

The Availability of Product

All local economic developers in the region suggest that the availability of product is among their greatest challenges to fostering investment and job creation. “Product” in this context means sites and buildings. More so than ever, prospects with the ability to locate and create jobs are less interested in taking on the risks—costs, time, permitting, etc.—involved in constructing new buildings. Furthermore, they are looking for sites which have very specific infrastructure capacities, as well as excess capacities which they deem attractive for future expansion goals. Economic development prospecting has increasingly become a precise science over the last few decades, where location consultants rapidly filter sites for their clients with great specificity. Like an employer who receives 100 job applications for a single job opening, these consultants must set very high minimum criteria in order to filter out all but the most attractive locations.

While many factors play into where companies decide to expand and locate, it is an indisputable fact that regions with an outstanding inventory of available sites and buildings are better positioned to land projects. Without such an inventory, communities are often weeded out at the beginning of a prospect’s search. Shovel-ready sites and buildings keep communities in the hunt.

InfoMentum

In an effort to help market the region’s available sites, buildings, and business parks, SCACOG created InfoMentum Online – a customized GIS application which serves as a core research resource for economic developers. This national award-winning program provides integrated research tools to attract industry and create jobs in the SC Appalachian region. The wide array of regional geographic,

demographic, and economic information provided by this customized decision support system enables economic developers to quickly create maps, tables, and high quality graphics. The end result is a professional, comprehensive presentation of local information customized to satisfy specific client needs. In the modern era of business prospect site selection, InfoMentum Online is a major asset for the region.

Available Sites

The definitions of terms like “certified site,” “shovel-ready site,” and “pad-ready site” vary from developer to developer, state to state, and consultant to consultant. The bottom line is that these sites are deemed the most ready to go in terms of a prospect locating or expanding their business. Every economic developer has a wish list for the sites they market, whether it is increased sewer capacity, better ingress/egress roads, a rail spur that connects to a nearby line, and so forth. Given the intense competition to land projects, these wish lists are typically long. There is a role for the public sector, therefore, in helping available sites to reach their economic development potential. Even when sites and buildings are privately owned, the public sector must recognize that the logical incentive driving the property owner (maximal return on investment) is different than the incentive of the economic developer (maximal investment and job creation). Often times it can be more profitable for an owner to sell their property as-is without making any infrastructure or site improvements. Helping bridge the incentive gap between the private site owner and the economic developer in order to reach a mutually beneficial outcome is thus an important part of CEDS 2013-2017.

CEDS 2013-2017 proposes a general strategy: help as many economic development sites as possible become (or become closer to)

gap between the private site owner and the economic developer in order to reach a mutually beneficial outcome is thus an important part of CEDS 2018-2022.

Available Buildings

Most often the domain of private real estate companies, available buildings (or lack thereof) is a significant challenge for SC Appalachian Region economic developers. While there are many empty industrial buildings throughout the region, a large number of them are remnants from the textile industry of generations past. The classic complaint about such buildings in regards to modern industrial prospects is that the ceiling heights are too low. CEDS 2018-2022 places the restoration of such older facilities into productive uses as a high priority. While there is a need for new, more modern industrial and commercial facilities in the region, economic development planning also requires a strategy for in-fill development and existing property restoration.

While available buildings will always be the rightful domain of real estate development professionals in the private sector, there can be successful public-private partnerships which increase available product through the construction of speculative shell buildings. Oconee County in the west of the region, for example, has had great success in partnering with local utility companies in constructing two such buildings of 50,000 square feet each. There are a variety of ways to form such partnerships and a variety of financial programs to help make speculative building deals happen. While the public-private partnership in Oconee County utilized a state tax credit program, there are other helpful programs like USDA's Rural Economic Development Loan & Grant (REDLG) program, which can help put a deal together through advantageous lending terms to a community. The bottom line is that if a community is getting very little prospect activity due to its lack of available, suitable buildings, and if the private real estate

market is not supplying product to meet prospect demand, then a reasonable strategy option for local economic developers is to seek partnerships which create the capital necessary for shell buildings to be constructed. Sometimes such buildings are occupied quickly, and sometimes they sit empty for a matter of years. Ultimately, however, they become filled with job creating companies. They also keep a community in the hunt for prospects through increased visibility during site selection searches. Such increased visibility is generally seen as a worthy economic development goal.

Cherokee County Development Board

Gaffney Distribution Center
34 Commerce Drive Gaffney
Gaffney, South Carolina 29340

LOCATION DESCRIPTION
Tax Map ID#: 118000048002
Municipality:
Zoning: N
Land Use: S
E
V

PRICING INFORMATION
Sale Price: \$19,400,000
Annual Lease Rate: \$4.50/sq.ft./year

BUILDING INFORMATION
Tenancy: Single Tenant (1 Building)
Year Built: 1995
Building Condition:
Total Building Area: 548,183 Sq. Feet
Site Size: 77 acres
Bldg Dimensions: Rectangular
Slab Thickness: Less than 6"
Wall Material: Concrete

UTILITIES
Water Provider:
Wastewater Pro:
Natural Gas Pro:
Telecom. Pro:
Electric Provide:
Alternative Gas:

TRANSPORTATION
Road Serving Bldg: Victory Trail Road (2 lanes)
Runway Access: No
Rail Access: No
Nearest Intermodal: CSX Charlotte
Nearest Interstate:
Nearest Port:
Nearest Coastal:
Nearest Comm.

SPACE INFORMATION
Available Area: 548,183 Sq. Feet
Office Area: 17,183 Sq. Ft. Sq. Feet
Air Cond. Area: Floor
Primary Lighting: Fluorescent
Drive-In Doors: 1
Auto Spaces: 258
Most Recent Use: Distribution/Warehouse
Comments:

Minimum Area:
Heated Area:
Fire Suppression:
Clear Ht Ranges:
Deck Doors:
Trailer Spaces:

Cherokee County Development Board | 601 Campus Dr. Gaffney, SC 29341
1-800-445-2222 | 803-445-2222 | 803-445-2222

Source of Property Information: Listed by InfoMentum
Disclaimer: Though all reasonable efforts have been made to ensure the accuracy of the information presented in this document, the Cherokee County Development Board and the InfoMentum make no warranties, express or implied, regarding the completeness and timeliness of the data and/or the accuracy of the information presented.

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Sample InfoMentum-generated flyer for an available building in Cherokee County.

Infrastructure

Physical infrastructure capacity plays as an important role as any in determining regional economic development success. Succinctly stated in a 2009 study commissioned by the Upstate Alliance, "...a region's ability to move people, goods and services effectively and efficiently will be a discriminating factor in the very near future and does in fact differ significantly by region....The ability to attract and retain companies and talent is predicated on both the absolutes of the presence (or lack thereof) of adequate infrastructure..."¹³ CEDS 2018-2022 will focus on supporting the physical infrastructure areas which play a huge role in attracting and supporting business activity:

- Highways and Roads
- Water and Sewer
- Airports and Seaports
- Power, Natural Gas, and Telecommunications
- Rail Service

Highways and Roads

Clearly the foundation of the region's highway infrastructure is the presence of Interstate 85 and Interstate 26. In the six counties of the SC Appalachian Region and the four SC counties immediately surrounding it, there are 225 miles of interstate highway which provide outstanding north-south and east-west connectivity not only to neighboring states, but to international airports and world class seaports. While some counties in the region have more interstate frontage property than others, each of the six counties at least touches I-85, which in turn connects to the east-west I-26 in Spartanburg County. I-385 (a small offshoot of I-85 in Greenville County) also connects to I-26 en route through the state capitol of Columbia and on to its terminus in Charleston, where lies one of the largest and busiest seaports in the U.S. These interstates offer even closer drive

times to the major international airports in Atlanta and Charlotte, though the growing Greenville-Spartanburg International Airport (GSP) along I-85 is terrific in its own right. In sum, the abundant interstate access within the region plays an essential role in the region's economic development.

Regional road/highway challenges fall under two general categories: 1) increasing traffic congestion from a fast growing population, and 2) ensuring fast access to interstates/highways from the rural areas. Regarding the former, the interstate system has undergone some major improvements over the years to relieve congestion – including the recent widening of I-385, the redesigning of the I-85/I-385 interchange to allow for future expansion, construction of the I-185 Bypass around Greenville, and the re-routing of I-85 through Spartanburg, which created additional interstate frontage in the County by adding a new a I-85 route while still maintaining the old one. These initiatives have helped, however CEDS 2018-2022 supports more congestion-relieving activity. While increased rail service for both commuters and freight should continue to be promoted, reasonable interstate by-pass development should also be explored in the urban areas in order to alleviate gridlock. Furthermore, the widening of I-85 from its current two lanes between Cherokee and Spartanburg Counties is set to begin in late 2017 and will provide some congestion relief.

While the region is fortunate to have a great deal of interstate capacity, it is still a relatively rural area in the foothills of the Blue Ridge Mountains. This rural character and beauty contributes to the area's high quality of life. Nevertheless, the region can maintain its bucolic character and still provide citizens and businesses reasonably fast access to nearby interstates through a system of good local roads and highways. This goal can mean the difference between a resident

of northern Oconee County being able to drive to a medical specialist in Greenville in a reasonable amount of time versus spending half a day on the commute. It can mean the difference between a contractor in northern Pickens County winning a construction job in North Georgia versus that same contractor not bidding on the project because the drive time is prohibitive. CEDS 2018-2022 supports activities which improve the road and highway networks in a responsible way in order to improve regional connectivity for all residents.

Water and Sewer

Water and sewer capacity is always a critical concern for economic developers – particularly in regards to building new economic development capacity for prospects. Public water and sewer expansion is expensive – both in terms of construction and maintenance – thus it is difficult for local governments to absorb such costs without new bird-in-hand customers waiting on the other side. It is not uncommon to hear a local economic developer say something along the lines of, “If we just had sewer along Highway X, that area would take off.” Whether that particular statement is true or not, it denotes a fundamental dilemma for local government leadership: where to expand water and sewer in order to support economic development. An even larger challenge is the funding of such expansion.

One economic developer stated, “Water [line construction] is easy. Sewer is the real challenge.” Viewing water from a macro perspective, the region has plentiful supply with numerous lakes and rivers. While there is a state-wide concern about water shortages revolving around disagreements between neighboring states and who should have access to which bodies of water, that is an issue broader in scope than that of a regional CEDS. On a micro level, water supply is adequate for economic development projects. That does not mean that there are

not significant capital challenges associated with connecting water to sites in order to build economic development capacity. In fact, such capacity building is becoming more of a challenge each year in a prolonged down-turned economy when local tax revenues are in decline. To compound that issue, State and Federal budgets are in much worse position to fund expansion projects through appropriations and grants.

The same challenges which apply to connecting water also apply to connecting sewer in the region, only sewer is a much more expensive challenge. Most land in the region is historically rural, mountainous, or both; thus, much developable property must play catch-up in sewer capacity. Large job-creating projects are often filtered to competing sites which are shovel-ready or certified, and that description virtually always entails robust water and sewer connections (large lines, high capacity). As a result of this challenge, efforts to generate more capital for water and sewer investment are a major priority of CEDS 2018-2022.

Airports and Seaports

Close proximity to international airports and seaports is an outstanding economic development asset of the region. A major priority of CEDS 2018-2022 is to build upon this regional advantage. With the notable exception of Cherokee County, every county in the region has at least one airport with an asphalt runway capable of handling private commercial aircraft. Greenville-Spartanburg International Airport (GSP), the largest airport in the region, is expanding both in terms of direct flight options (especially with the recent arrival of Southwest Airlines) and in terms of physical size/capacity. Less and less are regional customers driving to Atlanta, Charlotte, Columbia, or Asheville to fly when the options and prices at nearby GSP are consistently competitive.

Proximity to the Port of Charleston and the Port of Savannah through outstanding interstate highway and rail access is a specialized advantage that the region's economic developers enjoy when contending for international business. A boon to the region and to South Carolina as a whole is the fact that these ports will undergo major deepening initiatives over the next decade to allow for even more economic activity.

Rail Service and the Inland Port

The region is served by two major rail lines, Norfolk Southern and CSX, plus several smaller line companies. Major employers such as Milliken, BMW, General Electric, and Michelin, depend on the regional rail network for delivering and receiving freight. There is potential for more rail-served industrial sites in the SC Appalachian Region, although development of such can be costly. With many major prospects seeking rail sites, a great amount of investment is needed in rail spur lines in order for the region to capitalize on these opportunities.

In July of 2012, the South Carolina Ports Authority announced that it would work with Norfolk Southern to develop the Greer Inland Port rail facility and terminal. Opened in 2013 and centrally located in the SC Appalachian Region, development has had a transformational impact by improving the efficiency of international container movements between the Port of Charleston and the region. Referred to as "a port without water," it provides a place for transferring shipping containers between trains and trucks for shipment to or from the coast. The facility improves the movement of freight in this 218-mile corridor by converting all-truck container moves to more efficient multimodal moves between the region and the port. In the first seven months of 2017, more than 74,000 containers were handled at the facility, far exceeding the numbers from the same period in the prior year.¹⁴ This development will not only enhance the region's rail

capacity, but it will also improve traffic conditions on the region's highways.



An aerial view of the Greer Inland Port. Photo credit: The SC Ports Authority.

Power, Natural Gas and Telecommunications

Served by one major southeastern power company and a variety of other regional electric cooperatives, the region enjoys strong electrical infrastructure as well as comparatively low costs. Natural gas is also widely available throughout the region, though there are rural areas where accessibility could be improved. Naturally, modern telecommunications infrastructure (Wi-Fi, fiber optic, etc.) has developed further in more urban areas where there are more customers for this private utility. Each year, however, more people are becoming connected to the internet through advances in technology,

such as portable smart phones and tablets. CEDS 2018-2022 is supportive of improving access to all of these important sources of infrastructure in the region.

Aging Infrastructure

In addition to improving the capacity and connectivity of all infrastructure areas covered in this section, the SC Appalachian Region shares the nation-wide challenge of replacing and/or restoring aged and deteriorated infrastructure. There are numerous roads and bridges throughout the region in need of restoration. The same is true for public water, sewer, rail, and all other types of public infrastructure facilities. CEDS 2018-2022 supports not only expanding infrastructure capacity to help foster new economic developments, but also maintaining a quality business environment through existing infrastructure replacement and restoration.

Entrepreneurship

Many empirical studies find that the majority of net new jobs throughout the developed world come from small business and industry. While entrepreneurial start-ups do not receive the media attention of big splash, large company announcements, the combined impact of small businesses throughout the SC Appalachian Region cannot be understated. Thus, it is critical to support increased capacity building for entrepreneurship to ensure the pathway to starting a business is clear and that innovative entrepreneurs are able to operate in a supportive environment. To that end, there are multiple agencies and organizations across the region that provide valuable services to the small business community, including Clemson University's Small Business Development Centers, local chambers of commerce, chapters of the Service Corps of Retired Executives (SCORE), incubators and soft-landing spaces, and community development corporations.

Incubators, Accelerators, and Soft Landings Programs

The presence of small business incubators and accelerators are critical in 21st century entrepreneurship. These public/private facilities help launch innovative new businesses typically by offering lower initial lease rates and specialized technical/scientific facilities. Additionally, "soft landing" programs assist foreign and domestic entrepreneurs by helping them work through regulatory, legal, trade, and a variety of other business operating issues. Continued support of the following notable programs and initiatives in the SC Appalachian Region is a major priority of CEDS 2018-2022.

With the success of these entrepreneurial support initiatives, the seeds for other programs are being planted throughout the region – including a small business incubator being planned by the local Chamber of Commerce in the Easley/Powdersville area (Pickens County). Once again, support of such future and existing initiatives is

a critical priority of CEDS 2018-2022.

Examples from the Region

The **Center for Business and Entrepreneurial Development (CBED)** at Spartanburg Community College – Tyger River Campus. This 363,000 square foot multi-use incubator and soft landings facility is an invaluable tool for entrepreneurs to start up a new venture, jump start an expansion or relocation, beta-test a new product line, or train employees on new products or processes.

NEXT Innovation Center – an "Entrepreneur Resource Collaborative" spawned out of the Greenville Chamber of Commerce, the center provides high tech entrepreneurs with office space near downtown at below market rates.

Tri-County Entrepreneurial Development Corporation in Oconee County is a small business incubator which offers entrepreneurs both physical office space and mentorship from the community's wealth of retired business professionals.

The **Pickens Innovation Center**, a partnership between the Pickens Revitalization Association, the City of Pickens, and Clemson University, is a downtown Pickens technology incubator. The Pickens Innovation Center represents a collaborative open center that appreciates entrepreneurs and celebrates new ideas. The Center seeks to serve those driven people with entrepreneurial spirit and drive in the surrounding area who are seeking support in developing and commercializing their idea.

e-Merge at the Garage in Anderson, SC will consist of incubator/accelerator programs providing entrepreneurial flexible work space and access to capital for start ups in Health Care, IT Intelligence, Culinary Arts/Agribusiness and Education opportunities.

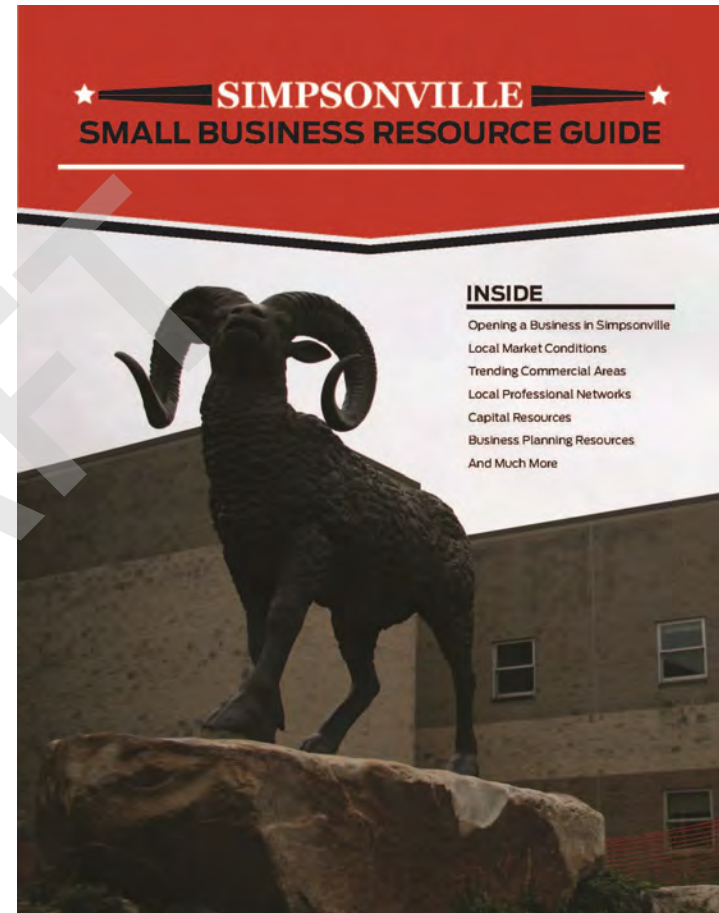
With support from the Appalachian Regional Commission, the City of Gaffney and the Timken Corporation, **bGEN** was founded to provide support for entrepreneurs in the areas of business services, education, finance, networking, and brand development. In addition, low-cost start-up space is available.

Entrepreneur Friendly Communities

Cited as major strategic project in CEDS 2013-2017, SCACOG recently launched the "Entrepreneur Friendly Toolkit" planning website for communities. Found at www.EFToolkit.com, the site allows communities to go through a 7-step on-line planning process designed to get their ducks in a row for supporting and attracting entrepreneurs. The seven steps include:

1. Market Research
2. Business Planning Resources
3. Business Capital
4. Networks and Incubators
5. Compliance
6. Marketing and Promotion
7. Centralized Information

A community task force fills out a strategic plan table (on the website) for each of these steps. Each of the tables combine at the end in an automatically generated report entitled "The City/County of _____ Entrepreneur Friendly Action Plan". The EF Toolkit also guides the local Task Force through the creation of an online local business (and business prospect) survey, development of a local area capital matrix of business capital providers, publication of a local business assistance guide, planning of a local small business resource fair, and more. Communities who go through the rigorous process develop a foundation for supporting small business development. With three communities having completed the process so far, CEDS 2018-2022 calls for the EF Toolkit to be utilized in communities throughout the region.



Access to Capital

There is a wide array of capital sources to support business and economic development in the SC Appalachian Region. Understanding that access to capital is a critical component of economic development, the CEDS 2018-2022 initiative supports maintaining a robust network of capital sources – ranging from loans to grants to tax credits.

Finance

While the great majority of small business lending activity is rightfully handled by private banks in the US, governments programs from agencies such as the Small Business Administration (SBA) and the US Department of Agriculture (USDA) can play a pivotal role in certain situations by partnering with private lenders to provide gap financing and loan guarantees for businesses in exchange for their commitment to create jobs. These arrangements can provide win-win scenarios for both the borrower (less up-front equity) and the participating private lender (shared risk, first position on collateral). There are also angel networks and venture capital initiatives in the private sector which provide equity investments and loans to high potential companies deemed too risky for some bank loans. Many of these companies fail, but some succeed spectacularly and have a huge economic development impact.

Grants

Economic development grant writing for local government applicants in the SC Appalachian Region is ably handled by the Grants Division of SCACOG. Most of these grants involve public infrastructure and site improvements to accommodate job creating projects, though many economic development grants also involve feasibility studies and other professional services. Common grant funding sources for economic

development projects in the region include:

- The Appalachian Regional Commission
- The Community Development Block Grant Program
- USDA – Rural Development
- The Economic Development Administration

As of August 2017, there were 25 active projects in the region receiving federal grant funding totaling just under \$11 million. A complete list of projects can be found in the appendix of this document.

Tax Credits

Statutory tax credits from the State and Federal Government, including Job Tax Credits and Investment Tax Credits, play an important role in providing businesses with access to capital. Because there are many business tax credits available, because they change on an annual basis, and because they are often multi-layered in how they are administered, it is most practical to reference the website of the South Carolina Department of Revenue for further detail (www.sctax.org). One particularly helpful tax credit program for the region is the presence of South Carolina Free Trade Zone Number 38, granted by the South Carolina Ports Authority. This FTZ is along the I-85 corridor where many leading regional employers, such as BMW and Adidas, take advantage of it in their international trade activities. FTZ 38 is a great financial incentive used by economic developers throughout the region when recruiting international companies.

Local Asset-Based Economic Development

Each of the six counties and 42 municipalities within the SC Appalachian Region possess unique assets from which residents derive economic opportunity. There are three broad asset categories that CEDS 2018-2022 emphasizes: Agribusiness/Local Food, Tourism, and Downtown Development.

Agribusiness and Local Food

In June of 2013, an outstanding study was conducted by the South Carolina Coastal Conservation League and numerous regional partners on the feasibility of a “food hub” for the SC Appalachian Region. The *Upstate Region Local Food Hub Feasibility Study* examines the potential for starting a regional food hub like the highly successful GrowFood Carolina found in Charleston, SC. The study defines a regional food hub as, “a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand.”¹⁵ The study offers the following basic conclusion in support of creating a regional food hub:

*The majority of other necessary pieces needed to establish a local food hub are in place. Local food supply and demand data, food producer survey results, retailer and consumer survey and interview results, demographic research, and farm data all show that there is the potential to increase local food supply and satisfy ever-increasing demand.*¹⁶

The concept of increasing opportunities for local farmers via farmers markets and shared public-private processing facilities is supported by CEDS 2018-2022. Numerous local initiatives have taken off or are under development, including:

- Greenville Forward “Gardening for Good” urban farming program
- LiveWell healthy food labeling program
- Mill Village Farms “Good to Go” mobile market and youth training program
- Hub City Farmer’s Market Co-Op grocery
- Oconee County Agricultural Center
- City of Williamston Incubator Kitchen
- Feed and Seed Food Hub and Training Center



Mill Village Farms' Mobile Market. Photo: Mill Village Farms

Moving forward, CEDS 2018-2022 supports regional Agribusiness and Local Food Strategies, including:

- A regional food policy council
- A regional food marketplace close to market centers

- ◊ *Aggregate local products for presentation into market*
- ◊ *Building skilled labor to meet consumer demand*
- Increased agricultural training initiatives to ensure that the aging farming community is one day replaced by new entrepreneurial farmers
- Sub-regional food satellites close to farms
- Interstate coordination with nearby NC, GA and TN
- Farmland Matchup
- Support of new agricultural innovations, such as the hydroponic method of strawberry farming found at Modern Harvest Farms in Woodruff (Spartanburg County), which utilizes 90% less water and 80% less fertilization year-round to grow an impressive quantity in a temperature controlled "CropBox"

Downtown Development

Downtown development initiatives have continued to gain momentum throughout the region. There are now four certified Main Street Communities designated by the National Trust for Historic Preservation: Gaffney (Cherokee County), Pickens (Pickens County), Williamston (Anderson County), and Woodruff (Spartanburg County). Other downtown areas continue to develop and revitalize. Beautiful and bustling downtown Greenville serves a national award-winning benchmark for micropolitan cities. Downtown Spartanburg has made extraordinary revitalization progress in recent months, highlighted by its robust Northside neighborhood revitalization which includes partnerships with Purpose Built Communities out of Atlanta, the Healthy Food Hub initiative (farmers market, community garden, etc.), and the US Department of Housing and Urban Development's Choice Neighborhood Program (a \$300K planning grant). The downtown areas of Anderson, Greer, and Traveler's Rest all continue to grow their reputations as regional destinations, while downtown Walhalla recently received federal ARC grant funding for major streetscape

renovations. County by county there is a downtown revitalization renaissance underway. CEDS 2018-2022 calls for supporting these developments through professional planning, facilitation, GIS-based market research, and grant writing services.

Tourism

The SC Appalachian Region is rightfully focused on taking advantage of its tourism assets as an economic development strategy. The region's attractive inventory includes:

- The majestic Blue Ridge Mountains, with lush forests, state and federal parks, campgrounds, trails, lakes, rivers and waterfalls which attract outdoor enthusiasts to the region year-round.
- A rich heritage, ranging from centuries-old Cherokee Indian sites to Revolutionary War battlefields at Cowpens and Kings Mountain. There are also numerous museums throughout the region which document its proud culture, people and places.
- Arts and entertainment venues which are diverse and outstanding – including nationally renowned art collections; state-of-the-art outdoor and indoor arenas for big ticket concerts; a variety of concert halls and theaters which accommodate everything from major symphonies, operas and ballet to intimate chamber ensembles and theatrical productions; specialized community festivals with themes ranging from South Carolina Peaches to William Shakespeare.
- A variety of sports entertainment venues with loyal and passionate fan bases. The Clemson University Tigers football program brings the largest annual tourism draw to the region, though there are equally passionate fan bases for other teams throughout the region – ranging from nationally ranked high school football teams to smaller private colleges with rich athletic traditions and loyal fan bases. The region also boasts

professional minor league baseball and hockey teams as well as the training camp for the National Football League's Carolina Panthers.

Renowned hiking and blueway (river) trails are having a great public health and economic impact on the region. Examples include the nearly 20-mile Swamp Rabbit Trail running through Greenville County, which draws more than 500,000 people per year, generates nearly \$7 million in annual tourism revenue, and has revitalized the downtown area of Travelers Rest.¹⁷ Extension of this trail plus the development of the Doodle Trail in Pickens County is poised to have the same positive effect. The Upstate Forever *Reconnecting People to Rivers* initiative is actively mapping new blueway paddle trails in the region and



A group of cyclists along the Swamp Rabbit Trail in Greenville County. Photo: GHS Swamp Rabbit Trail

Spartanburg County has seen a particularly positive effect thus far.

The region's equine industry is a substantial economic and quality of life contributor. It offers a large and diverse equine

population that

accommodates most sport disciplines and provides numerous competition and pleasure riding venues. Most notable is Clemson's T. Ed Garrison Livestock Arena Complex, which adjoins nearly 8,000 acres and 40+ miles of marked and mapped trails for riding, hiking, and mountain biking in the University's South Forest. Additional assets

include Spartanburg County's Camp Croft, Greenville County's Riverbend Park, the Clemson Issaqueena Forest trail system, numerous private foundations such as the Parker Bowie Farm in Anderson County which offers public access to its 900 acres of trails and fields.

South Carolina tourism is a \$20.2 billion per year industry, supporting one out of every ten SC jobs, and produces more than \$1.2 billion in local and state tax revenues.¹⁸ While the region is adorned with amazing assets, the industry faces its own set of challenges. In rural communities such as Westminster (Oconee County), for example, there is extremely limited lodging/accommodation capacity for the many annual visitors who would otherwise stay overnight and shop in local establishments. A challenge for these communities is to find innovative ways to capitalize on these missed opportunities when the free market does not fill the gap, such as establishment of RV Parks or local B&B incentives. Some communities have potential for conferences yet no capacity to host them. CEDS 2018-2022 calls for increased collaboration in order to address these challenges and further bolster the tourism industry.

Global Competitiveness

Upstate SC, a ten-county region that includes the SC Appalachian Region, is undergoing a five-year planning process through the Brookings Institution's Global Cities Initiative (GCI).¹⁹ Led by the Upstate SC Alliance, whose mission is to market the region for economic development on a global level, a broad and diverse steering committee of stakeholders has assembled to develop strategies for becoming more globally connected and competitive. After a competitive application process, Upstate SC was selected for the program in late 2013.

The first phase, a year-long process to develop the *Upstate SC Regional Export Plan*, was completed in early 2015 and culminated with the publication of the document in March of that year. (The outline of that plan can be found in the strategic plan section of this document.) In 2016, the second phase, the development of a foreign direct investment (FDI) plan, was completed. Like the export plan, the FDI plan will include goals, objectives, strategies, tactics and policy recommendations geared towards attracting more FDI to the region. The Upstate is endowed with many tremendous international companies which help fuel its industrial clusters (automotive, aerospace, advanced materials, etc.). The Regional Export and FDI plans will sharpen the region's strategies and help it transition from a global player to a global leader in the world economy.



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Section Five

2018-2022 STRATEGIC PLAN

GOAL 1: TARGET INDUSTRIES

Promote not only the growing regional target industries of advanced materials, aerospace, automotive, bioscience, and Energy, but also local target industries which are unique to individual counties and communities.

Supportive Findings

- ◆ Objective, scientific cluster analysis has revealed five growing, technologically promising industry clusters in the region: advanced materials, aerospace, automotive, bioscience, and energy.
- ◆ The Upstate Alliance is marketing these clusters as target industries for the region on a global level.
- ◆ There are outstanding regional foundations of innovation capacity and institutional partners for each cluster/target industry.
- ◆ In addition to the five region-wide target industries, individual counties have also analyzed their unique assets in order to form their own additional targets.

Objectives

1. Provide capacity-building technical assistance for the recruitment and enhancement of the region's advanced materials, aerospace, automotive, bioscience, and energy industries.
2. Provide technical assistance to capacity-building and recruitment efforts for local target industries which are supported by a community's own unique assets. These include corporate headquarters, agribusiness, data centers, and transportation, distribution, and logistics, among others.

Strategic Projects, Programs, and Activities

1. Provide GIS-based research, map making, and location decision

analysis for communities, universities, industries, and other related partners to further strengthen regional cluster-based economic development.

2. Provide strategic economic development planning and grant-writing services to further expand the capacity of all target industries.

Performance Measures

1. Track the number of new industrial announcements and existing industrial expansions by target industry/cluster.
2. Track the capital investment and job creation numbers of new industrial announcements and existing industrial expansions by target industry/cluster.

Strategic Partners

Appalachian Development Corporation
County and City economic developers within the region
SCACOG
SC Department of Commerce
Upstate Alliance

GOAL 2: WORKFORCE DEVELOPMENT

Cultivate an efficient and skilled 21st Century workforce through enhanced training and coordination of resources in the SC Appalachian Region.

Supportive Findings

- ◆ Regional graduation rates have improved at all scholastic levels and the region has a population of workers large enough to accommodate virtually any economic development project.
- ◆ The availability of technologically skilled manufacturing labor presents significant challenges in regional economic development, as available skilled labor is important to the cluster of regional industries that is driving economic growth.
- ◆ With regional manufacturers in need of Certified Production Technicians (CPTs), Certified Logistics Technicians (CLTs), Computer Numerical Control operators (CNCs), mechatronics specialists, and the like, the effective coordination of workers and training programs is as challenging as it is essential.
- ◆ The region shares the significant state-wide challenges associated with illiteracy and the need for early childhood intervention and education.
- ◆ There is a broad array of programs, initiatives and educational institutions that serve as assets to the region's workforce development efforts.
- ◆ The SC Chamber of Commerce has developed an outstanding list

of goals and strategies which are reflective of the workforce challenges and opportunities in the SC Appalachian Region.

Objectives

1. Support the region's three Workforce Investment Boards (WIBs) and all of the programs they oversee.
2. Support the SC Technical College System and other professional schools and workforce organizations that are training the regional workforce and connecting it with employers.
3. Promote the workforce development goals and strategies developed by the South Carolina Chamber of Commerce.

Strategic Projects, Programs, and Activities

- ◆ Continue to partner with regional workforce investment boards through coordination, strategic planning, and grant writing assistance.
- ◆ Provide strategic planning and grant writing services to technical colleges and other professional workforce organizations.
- ◆ Offer assistance with strategic planning, technical support, and grant-writing to all the SC programs and partners that are working to achieve the workforce goals and strategies outlined by the South Carolina Chamber of Commerce.

Performance Measures

1. Track number of workforce development initiatives supported by SCACOG grant writing, planning, and GIS-based research services.
2. Continue to track the performance of meeting the goals established by the SC Chamber of Commerce for the SC Appalachian Region.

Strategic Partners

County and City economic developers within the region

Greenville County Workforce Investment Board

Local school systems, colleges and universities within the region

SCACOG

SC Department of Commerce

Upstate SC Alliance

Upstate Workforce Investment Board

Worklink Workforce Investment Board

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GOAL 3: PRODUCT DEVELOPMENT

Improve regional economic development capacity by increasing the quality and quantity of shovel-ready sites and suitable buildings for expanding and locating businesses.

Supportive Findings

- ◆ A region with an outstanding inventory of available sites and buildings is better positioned to land projects.
- ◆ In an increasingly competitive environment where companies desire to expand or relocate quickly, site consultants use specific criteria to filter up to shovel ready, high capacity locations.
- ◆ Without an impressive inventory of sites and buildings, communities are often not considered by prospects or even by existing companies that wish to expand. Availability of Product keeps communities in the hunt and provides positive visibility.

Objectives

1. Help market regional industrial sites and buildings.
2. Help identify new industrial and office sites throughout the region.
3. Help improve the connectivity of sites throughout the region.
4. Help improve the developability of sites throughout the region.
5. Help improve the inventory of suitable, available buildings throughout the region.

Strategic Projects, Programs, and Activities

1. Utilizing Infomentum Online, a state of the art program offered by SCACOG, provide GIS data and mapping services to help economic developers market available sites and buildings throughout the region.

2. When they are not publicly owned, improve the availability of sites by encouraging communities to enter mutually beneficial, long-term option agreements between property owners and local economic development agencies. This will improve the region's ability to negotiate on more sound footing with prospects.
3. Improve the connectivity of sites by helping communities assess site utility connections and providing grant-writing and planning support to improve site utility connections.
4. Improve the developability of sites by offering grant-writing and planning assistance for due diligence associated with environmental assessments, mitigations, and right-of-way/easement analysis.
5. Help improve the inventory of suitable, available buildings for prospects by offering grant-writing and planning assistance for the redevelopment of existing facilities and the development of speculative shell buildings, when (1) the community deems it appropriate, and (2) when local market conditions deem it necessary for attracting expansion and location projects.

Performance Measures

1. Track number of site/building projects assisted through SCACOG grant, planning and GIS support services
2. Track number of available sites and buildings posted/marketed (custom flyers) through SCACOG's InfoMentum comprehensive industrial property database.

Strategic Partners

Appalachian Development Corporation
County and City local economic developers within the region
Real estate developers within the region
SCACOG
SC Department of Commerce
Upstate Alliance
Utility providers within the region

GOAL 4: INFRASTRUCTURE

Make the SCACOG region attractive for economic development by sustaining and enhancing physical infrastructure.

Supportive Findings

- ◆ With 225 miles of interstate highway along I-85 and I-26, the region has a great foundation for transportation infrastructure. These interstates provide fast access to surrounding regions and to world class airports and seaports.
- ◆ Road and highway networks must continue to be upgraded in order alleviate congestion and to foster successful development in a growing region.
- ◆ Communities face great capital challenges for extending and upgrading their water and sewer services in order to facilitate new investment and job creation.
- ◆ Power, natural gas, and telecommunications play an increasingly important role in the region and must continue to be supported.
- ◆ While several major regional employers rely on rail service, there is potential to connect more sites to rail in order to attract major economic development prospects. Opened in 2013, the Greer Inland Port rail terminal is already having a positive impact on truck traffic by increasing intermodal product transport.

Objectives

1. Promote effective transportation and land use planning throughout the region.
2. Support improving and increasing the economic development capacity of Greenville Spartanburg International Airport and all other regional airports.
3. Support increasing the capacity of the Port of Charleston, which is a great asset for international business development in the region.
4. Support increasing the capacity and connectivity of regional water, sewer, rail, power, natural gas, and telecommunications infrastructure.
5. Support the expansion of the Greer Inland Port rail facility and terminal.
6. Support the replacement and/or refurbishment of aged public infrastructure.

Strategic Projects, Programs, and Activities

1. Conduct responsible transportation and land use planning which accounts for the region's growing population, increasing traffic challenges, and escalating need for jobs.
2. Provide strategic planning and grant writing to help increase the region's economic development capacity in air travel and freight transport.
3. Support the expansion of the Port of Charleston by writing formal letters of support and providing analysis on how impactful the Port is to the SC Appalachian Region.
4. Provide strategic planning and grant writing services to support increased capacity and connectivity to water, sewer, rail, power, natural gas, and telecommunications infrastructure.
5. Assist with any technical support needed in the development of the Inland Port, including GIS, strategic planning, and grant-writing

services.

6. Support the replacement and/or refurbishment of aged infrastructure through grant-writing and strategic planning services.

Performance Measures

1. Maintain a dialogue with each County economic development organization and planning department in order to stay informed and offer assistance to infrastructure challenges and opportunities.
2. Track major infrastructure improvements that have a significant economic development impact in each county of the region.
3. Track number of projects assisted by the SCACOG (grants, GIS, planning, etc.) on an annual basis.

Strategic Partners

County and City local economic developers within the region

County and City planners within the region

Greenville-Spartanburg International Airport

Infrastructure grant-providing agencies active in the region, including the Economic Development Administration, USDA, and the Appalachian Regional Commission

Regional airports within the region

SCACOG

SC Department of Commerce

SC Department of Transportation

SC Ports Authority

SC Technology and Aviation Center

Upstate Alliance

US Housing and Urban Development CDBG Program

GOAL 5: ENTREPRENEURSHIP

Make the SCACOG Region the most entrepreneur friendly region in South Carolina.

Supportive Findings

- ♦ Most jobs are created by small to mid-size business.
- ♦ Keeping a business alive is often more difficult than starting a business, thus a nourishing entrepreneurial environment is critically important.
- ♦ Many exciting initiatives have developed over the last several years which have given great momentum to the subject of regional entrepreneurship.

Objectives

1. Help communities develop a supportive environment for entrepreneurship.
2. Increase the number of small business incubators, accelerators, and soft landing programs throughout the region.
3. Continue to provide analytical tools which support entrepreneurial activity.

Strategic Projects, Programs, and Activities

1. Develop a region-wide, voluntary Entrepreneur Friendly program which allows individual communities to assess and improve upon their small business environments through a set of measurable steps. While details of this program are still under development, it will involve a core set of entrepreneur friendly criteria based upon best practices as well as a peer-to-peer review component which will allow good ideas to be shared throughout the region.
2. Provide strategic planning and grant-writing services to support

existing and future small business incubators, accelerators, and soft landing programs throughout the region.

3. Continue to promote and update the Plan-A-Biz tool in order to provide assistance in small business decision analysis.

Performance Measures

1. Track number of communities who execute entrepreneur support planning by utilizing the Entrepreneur Friendly Toolkit.
2. Track number of entrepreneurial projects supported by SCACOG planning, grant-writing, and GIS based research services.
3. Continue tracking the development of business incubators and accelerators in the region.

Strategic Partners

Appalachian Development Corporation

Chambers of commerce, and other community business groups throughout the region

Clemson University Small Business Development Centers (SBDC)

County and City economic developers within the region

SCACOG

SC Department of Commerce

Service Corps of Retired Executives (SCORE)

GOAL 6: ACCESS TO CAPITAL

Increase access to business capital in the SC Appalachian Region.

Supportive Findings

- ◆ Access to capital is a critical component of economic development.
- ◆ While most lending is executed in the private sector, there are situations in which government gap financing programs, loan guarantee programs, and private sector angel or venture capital networks can partner to make impactful loans and investments.
- ◆ There is an impressive network of economic development finance institutions working in the region.
- ◆ There are valuable grant and tax credit programs working in the region to help foster investment and job creation.
- ◆ While strong programs and resources are in place, communities are often unaware of them and thus are unable to assist local businesses and prospects.

Objectives

1. Equip communities with the business capital resources and information they need to assist the business community.
2. Increase economic development grant funding in the region.
3. Increase awareness of local, regional, state, and federal capital providers.
4. Generate regional economic and market data that is useful for business planning and capital formation.

Strategic Projects, Programs, and Activities

1. Utilizing SCACOG's Entrepreneur Friendly Toolkit, create a locally

customized "capital matrix" in individual communities which helps them to share information and make referrals to the region's robust network of capital sources.

2. Continue to provide economic development grant writing services throughout the region.
3. Publish information on economic development finance institutions and programs.
4. Continue to provide market research and state/federal incentive information through SCACOG's InfoMentum program, which often helps entrepreneurs complete their business plans and loan applications.

Performance Measures

1. Track number of communities who develop the EF Toolkit Capital Matrix.
2. Track job creation and capital investment figures in successfully funded economic development projects.
3. Track the amount of information published and the number of referrals made to the outstanding capital resources available to businesses in the region.
4. Track the amount of InfoMentum market research and information provided to economic development organizations and their clients.

Strategic Partners

Appalachian Development Corporation and other economic development finance institutions and programs within the region
County and City local economic developers within the region
SCACOG
SC Department of Commerce
SC Department of Revenue
Upstate Alliance

GOAL 7: LOCAL ASSET-BASED ECONOMIC DEVELOPMENT

Strengthen the unique, local community assets which have a significant impact on regional economic development.

Supportive Findings

- ◆ Each of the six counties and 42 municipalities within the SC Appalachian Region possess unique assets from which residents derive economic opportunity.
- ◆ With attractive natural resources, historic places, arts & entertainment, and sporting venues, the SC Appalachian Region has a strong tourism industry.
- ◆ There is great potential of downtown areas in the region to foster economic growth and job creation.

Objectives

1. Make the SC Appalachian Region a globally recognized tourism destination.
2. Make the SC Appalachian Region known for its vibrant downtown areas.
3. Help communities reach the full economic potential of their rich agricultural resources.

Strategic Projects, Programs, and Activities

1. Support tourism initiatives, downtown development, and agribusiness development throughout the region with strategic planning, marketing, and grant-writing efforts.
2. Promote economic development finance institutions for capital-seeking

Performance Measures

1. Track number of tourism, downtown development, and agribusiness initiatives that are supported by SCACOG professional planning, GIS-based market research, and grant writing services.
2. Track number of National Main Street Designations awarded to the communities in the region by the National Trust for Historic Preservation.
3. Track new tourism, hiking trail, and blue way trail developments throughout the region.
4. Track Farmers Market activity and regional food hub developments.

Strategic Partners

Chambers of Commerce, Convention and Visitor Bureaus, and agricultural organizations throughout the region

County and City local economic developers within the region

SCACOG

SC Department of Commerce

SC Department of Parks, Recreation, and Tourism

Upstate Alliance

GOALS 8 & 9: GLOBAL COMPETITIVENESS

Carry out the goals, objectives, strategies, and tactics articulated in the Upstate SC Metropolitan Export Plan.

Attract more Foreign Direct Investment (FDI) to the region.

Supportive Findings

- ◆ 95% of all consumers live outside of the U.S.
- ◆ From 2005-2009, U.S. Manufacturers that exported saw revenues grow by 37%, while those that did not export saw revenues fall by 7%.
- ◆ Compared to non-exporters, U.S. business service exporters (engineering, architecture, etc.) have 100% higher sales, 70% higher employment, and 20% higher wages.
- ◆ Every billion dollars of exports supports 5,590 jobs
- ◆ With a growing number of major international companies locating and/or expanding, the region must capitalize on the opportunity to attract more job-creating Foreign Direct Investment (FDI).

Objectives

1. Maintain our strong export intensity—equal to or greater than 20%—as the region's economy continues to develop and diversify.
2. Increase exporting activity by 75% for domestic companies and small business, including actively developing new international markets.

3. Foster strong, export-oriented business culture with reputation as competitive trading region.
4. Develop a set of goals, objectives, strategies and tactics for attracting increased foreign direct investment to the region.

Strategies and Tactics

1. Align and strengthen the export support system.
 - ◇ Create a seamless pipeline to deliver export support.
 - ◇ Develop an Export Road Map.
 - ◇ Leverage business retention programs for referrals
 - ◇ Create new support Tools
2. Drive participation in exporting.
 - ◇ Tailor programs to targeted clusters
 - ◇ Organize engineering task force
 - ◇ Integrate exports into business planning
 - ◇ Create geography-focused opportunities
 - ◇ Raise awareness of exporting benefits
3. Heighten global awareness.
 - ◇ Cultivate global leadership
 - ◇ Establish a World Affairs Council
 - ◇ Develop protocol for leveraging global networks
 - ◇ Increase global partnerships
 - ◇ Promote the region as a global leader
4. Actively make policy recommendations at the local, state, and federal levels based on the Market Assessment findings of the Upstate SC Metropolitan Export Plan.
 - ◇ Support of export service providers
 - ◇ Pursuit of free trade agreements
 - ◇ Support for export financing

- ◇ Improve transportation infrastructure
 - ◇ Streamlined regulatory requirements
 - ◇ Eliminate tax barriers to competitiveness
5. Develop a Metropolitan Foreign Direct Investment Plan as the next phase of the Brookings Institution Global Cities Initiative.

Performance Measures

1. Referrals to export service pipeline
2. Companies participating in trade missions
3. Companies receiving export finance support
4. Participation in outreach events and initiatives
5. Globally engaged organizations in the region
6. New international region-to-region and city-to-city partnerships
7. Trade-related mentions in the media
8. Inbound and outbound delegation visits
9. Publication of a Metropolitan Foreign Direct Investment Plan

Steering Committee

Brookings Institution
 Clemson University
 ECI –Find New Markets
 Economic Development Organizations of 9 SC Upstate Counties plus the City of Greer
 GSP International Airport
 JP Morgan Chase
 Private sector participation from numerous engineering, distribution/logistics, manufacturing, construction, and financial

companies
 SCACOG
 SC Department of Commerce
 SC Manufacturing Extension Partnership
 SC Ports Authority
 University of South Carolina Upstate
 Upstate SC Alliance
 US Commercial Service (South Carolina)

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Section Six

ECONOMIC RESILIENCE

Regional economic prosperity is linked to an area's ability to prevent, withstand and/or quickly recover from major disruptions to its economic base. Such disruptions often include general economic downturns (e.g., the housing crash), downturns in particular industries that effect a region's dominant employers (e.g., major plant closings), or other externalities such as natural disasters.

Resilience through Diversity

The Areas of Emphasis and the numerous industrial clusters/target industries outlined in CEDS 2018-2022 exemplify the diverse set of economic engines driving the SC Appalachian Region. This was not the case a generation ago, when the textile industry was dominant, yet ultimately bound for decline. After experiencing the economic shock of the textile exodus, regional players in government, education, and industry responded with aggressive and innovative leadership that has led to an economic transformation. A diverse manufacturing base continues to grow. Infrastructure continues to expand, especially in the areas of rail and air transport. Increased exports and FDI are transforming the entire state of SC. Entrepreneur support is more robust than it has ever been with incubators and accelerators emerging in every county. Major investments continue to be made in order create a 21st century workforce. Tourism assets are becoming more fully developed and attracting an increasing number of visitors each year. While the region is known for manufacturing, it also boasts one of the highest engineers-per-capita ratios in the U.S. Professional services and the financial industry are also growing, as TD Bank recently located its regional headquarters in the region. Clemson University, a U.S. News and World Report top 25 public university, is driving innovation in automotive, advanced materials, energy, bioscience, aerospace, agriculture, and more. While there are many painful economic shocks which one might imagine, the region continues to develop "steady state" levels of resilience through

diversity.

Resilience through Responsiveness and Coordination

As a new federal CEDS Guideline, SCACOG looks forward to both fully planning and embracing its role as a coordinator of regional responsiveness to economic shocks. SCACOG will:

- Conduct pre-disaster recovery planning to define key stakeholders, roles, responsibilities, and key actions.
- Establish a process for monitoring and communication of the economic development community's needs.
- Identify, contact, and coordinate with key local, regional, state and federal officials.
- Continue to coordinate communication between regional stakeholders.
- Continue to provide GIS based research, planning, and grant writing services in order to bolster resilience.

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Section Seven

CONCLUSION

A Plan of Action

The South Carolina Appalachian Council of Governments, serving as the EDA Economic Development District for the SC Appalachian Region, is in a strong position to support the goals outlined in CEDS 2018-2022. SCACOG will continue to work with the CEDS Steering and Advisory Committees to support the vital projects which aim to create economic growth in the region. SCACOG will:

- Continuously evaluate the CEDS 2018-2022 Goals and Objectives in relation to the economic realities of the region;
- Support the Strategic Projects, Programs and Activities outlined for each Area of Emphasis in CEDS 2018-2022;
- Help execute on-going and future Vital Projects of CEDS 2018-2022;
- Provide EDA with annual CEDS updates which include qualitative and quantitative performance measures.

SCACOG will carry out CEDS 2013-2017 in a manner which:

- Promotes economic development and opportunity;
- Fosters effective transportation access;
- Enhances and protects the environment;
- Maximizes effective development and use of the workforce consistent with any applicable State or local workforce investment strategy;
- Promotes the use of technology in economic development, including access to high-speed telecommunications;
- Balances resources through sound management of physical development; and
- Obtains and utilizes funds and other resources.

Although these efforts will require many strategic partners to work both collaboratively and energetically over the course of the next five

years, the SC Appalachian Region is committed to answering this important call.

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Section Eight

NOTES

Notes

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Section Nine

APPENDIX