

## **Chapter IV. ECONOMIC ELEMENT**

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\*An overview of this Chapter can be found in *Chapter 1 – Introduction and Executive Summaries*.

The local economy affects every aspect of community life – from jobs and taxes to environmental quality. A healthy economic climate fosters greater income potential for City residents, a supportive environment for businesses to succeed, and increased fiscal stability of local governments to maintain and expand community services and infrastructure. A balanced and diversified economy can also help the City of Clemson and its residents successfully weather economic downturns.

The Economic Element of the Comprehensive Plan focuses on the components of the economy in the City and the surrounding region to include labor force characteristics, an analysis of income and wealth characteristics and distribution, commuting patterns, educational attainment, occupational outlook, existing business and industry, market forces, diversity of the economic base, and economic recruitment strategies. These factors, along with an assessment of current economic trends, form the basis for recommendations designed to contribute to a healthy economic climate in the City of Clemson.

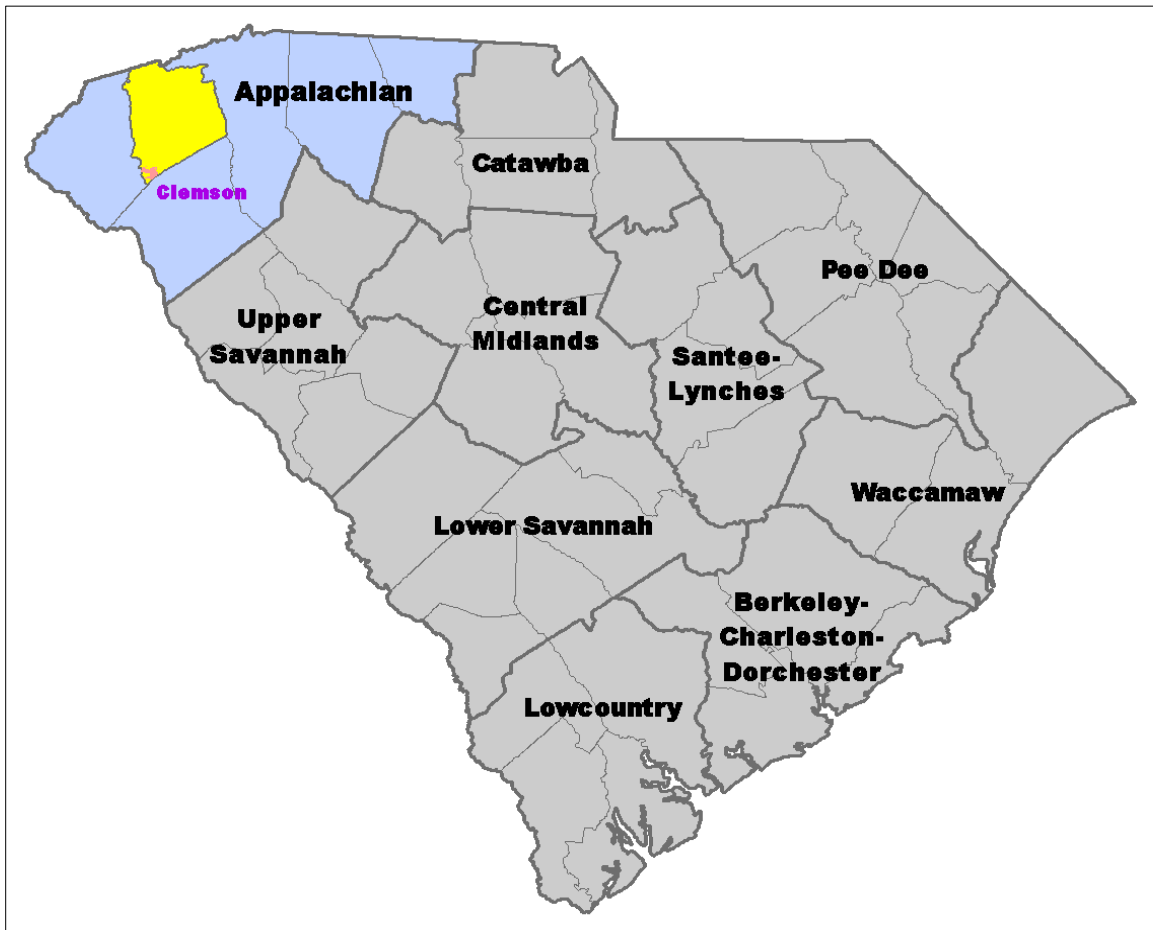
The Element provides a platform for local officials to identify the types of employment desired and the general location where such opportunities should be directed, while ensuring economic benefits to residents throughout the City. The Element also examines the role of the City within the context of the county, regional, and statewide economies.

Economic diversity is a vital component in achieving community sustainability. The ability of residents to live near their places of work and the provision of goods and services locally are major factors in a successful economy. The intent of this Element is to foster the development of a sound economic base for the City of Clemson that offers a wide range of employment opportunities for residents, supports the economic competitiveness of existing and future employers, promotes a highly trained and educated workforce, complements the City's cultural and natural resource base, and strengthens the overall quality of life for all residents.

## A. REGIONAL CONTEXT

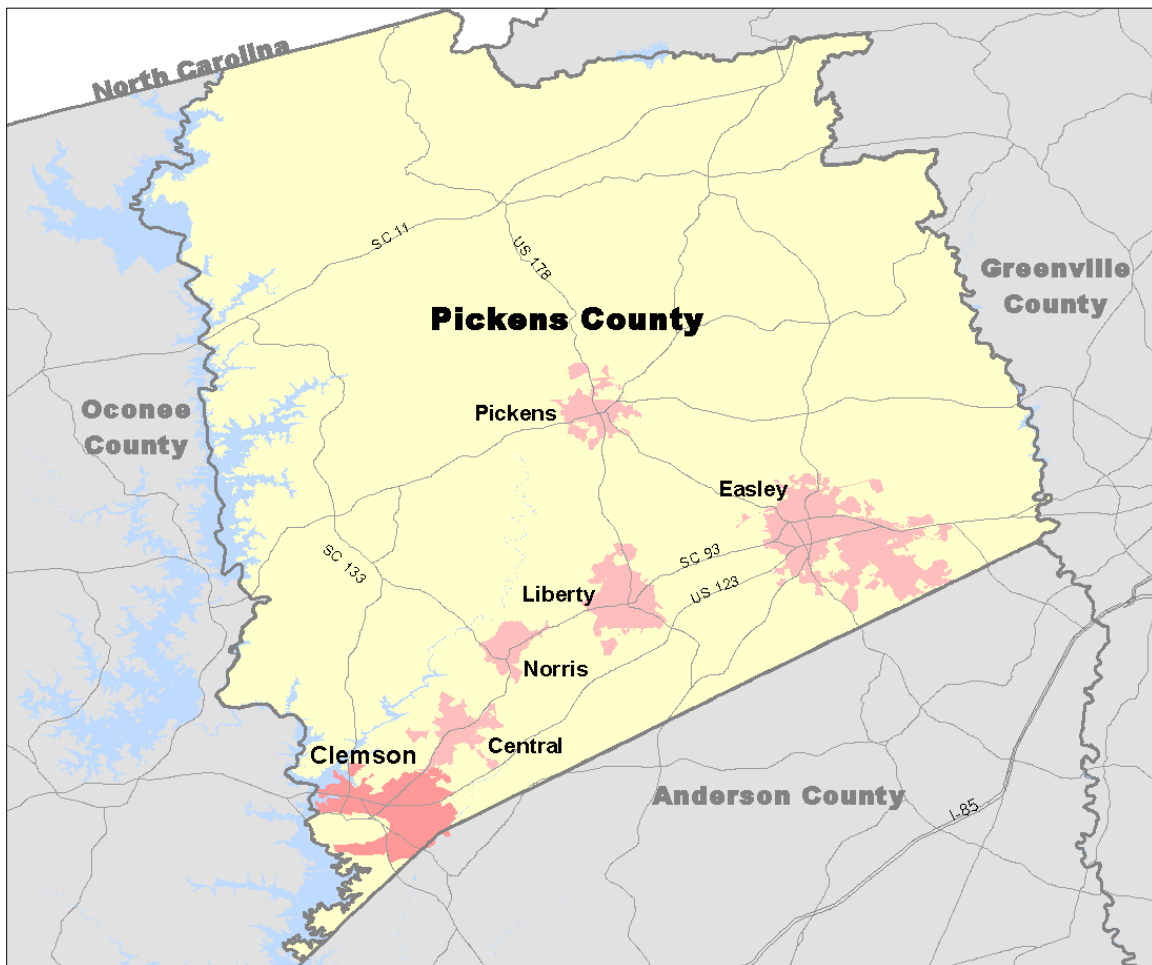
The City of Clemson is located in the northwestern corner of Upstate South Carolina. Most of the City is in Pickens County, with a small portion in Anderson County. The City lies within the ten-county Upstate SC Alliance service area for economic development and industrial recruitment, the six-county Appalachian Region for planning services, and the three-county Worklink service area for workforce development. The region is home to a population of more than 1,288,970 million and has experienced a growth rate of 30% over the last two decades. Along with Anderson and Greenville Counties, Pickens County is also within the Greenville Urbanized Area. This three-county designation encompasses more than 839,632 residents and 16 municipalities, including the City of Clemson.

MAP IV-1. PICKENS COUNTY AND CITY OF CLEMSON ECONOMIC LOCATION MAP



The City of Clemson is located in the southwestern corner of Pickens County, within a few miles of Interstate 85 that links Charlotte, North Carolina with Atlanta, Georgia. The City is adjacent to Clemson University, a state postsecondary institution that ranks 27<sup>th</sup> among the nation’s *Public Research Institutions*. The relative proximity of Clemson to the I-85 corridor and Clemson University, as well as to major southeastern cities such as Atlanta, Greenville, and Charlotte, all combine to make the City a very attractive place to live, work, learn, and retire.

MAP IV-2. CITY OF CLEMSON LOCATION MAP



## B. INCOME AND WEALTH

Railroads and agriculture played a vital role in the early economic development of the Upstate region that includes Pickens County and the area that would become Clemson. The introduction of the cotton gin in the late eighteenth century, along with the expansion of rail service into the Upstate in the mid-1800s, led to a change in the economic character of the region from small subsistence farms to an emerging textiles center by the start of the twentieth century.

The City of Clemson began as the Village of Calhoun, settled in 1872. The town, officially chartered twenty years later in 1892, developed around the rail line and contributed to the agricultural growth that characterized upstate South Carolina. Concerns for the economic well-being of the State and region prompted one of the most influential decisions to impact the growth of the future Clemson community. In 1889, lands of the former John C. Calhoun estate were donated to the State of South Carolina by Thomas Green Clemson for use in establishing a college to provide advanced education to residents in the fields of engineering and agriculture. The opening of Clemson Agricultural and Mechanical College with less than 500 students

influenced the development and composition of the Clemson community from that point forward. The expansion of its programs and rise as a nationally recognized research institution has contributed to the growth of Clemson University to an enrollment of more than 25,000 undergraduate and graduate students.

The landscape and development potential of the community was significantly impacted once more in 1963, with the creation of Lake Hartwell. The following decades were characterized by the annexation of surrounding lands by the City that helped to double its population and triple its land area. This expansion, combined with the University's continuing growth, has fueled further diversification of this scenic foothills community.

Emerging from an early agrarian, lumber, and textiles tradition, both Pickens County and the City of Clemson, as well as the Upstate as a whole, have successfully transitioned to a diversified economic base of advanced manufacturing, trade, health care, services, and tourism activity. The Upstate region has leveraged this economic transition over the last few decades with rapid residential, commercial, and industrial growth. Although not at the level of its more urban neighbors in Greenville and Spartanburg Counties, Pickens County has experienced increased development, with most growth concentrated in the Clemson and Easley areas along the more urbanized southern half of the County that borders Greenville and Anderson.

Today, Clemson University has become the largest employer in Pickens County with more than 3,810 employees and an annual statewide economic impact of more than \$4.6 billion. Pickens County is also home to nine international companies representing seven countries including Germany (BASF and era-contact), Denmark (Danfoss and KP Components), Finland/Canada (Safoplast), India (Wayward Acres), Japan (Yokohama and JR Automation), Switzerland (Sulzer), and. The continued recruitment of new domestic and international employers, coupled with the expansion of existing industries, tourism, and retail businesses will significantly strengthen the County and the City by raising the tax base and increasing the number and quality of job opportunities available to the residents of Pickens County and Clemson.

However, economic development is more than job creation. A well-designed economic development strategy raises the standard of living, strengthens the tax base, and increases the assets and income levels of local residents. Additional measures of economic health include sales revenue, diverse employment sectors, banking deposits, property tax base, capital investment, per capita and household income levels, educational attainment, and cost of living.

#### **1. PROPERTY TAX BASE**

Building a competitive economy in the City of Clemson includes optimizing property values. South Carolina now (2019) ranks 35<sup>th</sup> nationally in terms of its business tax climate, higher than its national ranking of 37<sup>th</sup> in 2014 (*2014 State Business Tax Climate Index*). The State ranks within the top ten for favorable corporate tax structure and within the top 25 for sales and property taxes. The State's lower overall ranking in 2014 was the result of its slide to 40<sup>th</sup> for individual income taxes and 30<sup>th</sup> in the nation for unemployment insurance taxes.

There are three elements to South Carolina’s property tax system: (1) the tax rate; (2) the assessment ratio; and (3) the property value. Assessment ratios applied to manufacturing, commercial, and other classes of real property are based on classifications and rates established by the State of South Carolina and are listed in Table IV-1. For residential uses, the assessment ratio is 4% for owner-occupied, principal residences and 6% for other residential uses (non-principal residences). A tax rate of 6% applies to other real estate such as commercial properties and agricultural real property owned by corporations, while private agricultural properties are assessed at 4%. Manufacturing and utilities pay a tax rate of 10.5% and rail lines and pipelines are taxed at 6%. A rate of 10.5% is also levied on Other Personal Property such as boats, recreational vehicles, and airplanes based on income tax depreciated value. Although the State sets the assessment rates, only local governments levy property taxes. There are no taxes on inventories, intangibles, or pollution control equipment.

**TABLE IV-1. SOUTH CAROLINA REAL PROPERTY ASSESSMENT RATES**

<b>Property Type</b>	<b>Tax Rate</b>
Manufacturing and Utility	10.5%
Railroads, Airlines and Pipelines	9.5%
Residential Real Estate (Primary Residence)	4.0%
Other Real Estate (Including Commercial and Residential Non-Owner-Occupied Property)	6.0%
Agricultural Real Property (Corporate)	6.0%
Agricultural Real Property (Private)	4.0%
Personal Property	10.5%

*Source: Property Tax Assessment Ratios, S.C. Department of Revenue, 2014*

The tax rate is generally reflected in mills or the millage rate. A mill is a unit of monetary value equal to one tenth of a cent, or one thousandth of a dollar and is assessed at the rate per \$1,000 of assessed value. For example, a tax rate of 200 mills translates into a tax of \$200 per \$1,000 of assessed value. In general terms, the appropriate tax or millage rate for a taxing entity is reached by dividing the assessed value of all property to be taxed by the revenues needed to be generated by the property taxes. Therefore, if an area is densely populated or includes major tax contributors the millage rate is likely to be lower than in an area with sparse development and few industries or major commercial businesses. Because individual property taxes are determined by multiplying the value of the property by the assessment ratio and then by the tax rate (millage), the millage rate is a determining factor in how high taxes will be on properties within Pickens County and the City of Clemson.

In 2007, the South Carolina Legislature passed legislation limiting local government spending by placing a cap on the millage rates set by local governments. The cap is tied to a formula based on the Consumer Price Index and population growth within the jurisdiction. Taxing entities within each County must maintain rates within this limit. Each taxing jurisdiction determines its tax rate annually by dividing the cost of its annual budget by the total assessed value within the taxing jurisdiction. For Fiscal Year 2019-20, the millage rate cap for the City is 5.19.

Beginning in 2007, the State also exempted residential owner-occupied properties from the school property tax. The County’s base millage rate for 2013 was 57.1 with a value of one mil at \$451,884. This base rate covers county operations and debt service. The City of Clemson had the highest millage rate among Pickens County’s seven municipalities in 2013 at 83.4, followed by the Town of Liberty at 80.0 and the Towns of Norris and Central at 72.2 and 72.0, respectively (Table IV-2). The value of one mil in the City of Clemson was \$55,057 in 2013. The Pickens County School System also exacts an additional countywide millage of 169.

**TABLE IV-2. TAX MILLAGE RATES FOR PICKENS COUNTY, MUNICIPALITIES AND PICKENS COUNTY SCHOOL DISTRICT**

Jurisdiction	2013 Millage Rate
<b>Pickens County – Base Millage</b>	<b>.06130</b>
Town of Central	.07830
<b>City of Clemson</b>	<b>.07880</b>
City of Easley	.06800
City of Liberty	.08430
Town of Norris	.07380
City of Pickens	.07830
Town of Six Mile	.03350
<b>Pickens County Schools</b>	<b>.176900</b>

Source: 2018 Property Tax Report, Pickens County Auditor

The value of the property tax base impacts the ability of the City and County to provide vital services and facilities and to make the necessary public investments to encourage private investment. The total assessed value in Pickens County was more than \$443 million in 2013, with an estimated total market value of more than \$8.1 billion. The County’s total taxable assessed value grew by more than \$136 million from 2004 to 2013. Taxes comprise nearly 66% of the County’s annual revenue, with 70% of this total derived from property taxes and 30% from sales and use taxes. The assessed value of property in the City of Clemson totaled nearly \$53 million, with an estimated actual taxable value of nearly \$1.1 billion. By 2019-2020, the assessed valuation in the City totaled more than \$99 million.

Taxable property contributed more than 47% of the City’s annual revenue. The City’s total taxable assessed value grew by \$49 million from 2010 to 2019. The City of Clemson also had a Tax Increment Finance (TIF) District that matured in 2018, contributing more than \$1.7 million of the \$5.3 million in annual property tax revenues in 2013. The District was created in 1998 as a long-term funding tool for planned redevelopment projects in the Downtown and development areas along the key corridors of U.S. Highways 123 and 76 and S.C. Highway 93. Annual tax collections by type for the County and the City of Clemson are shown in Table IV-3.

**TABLE IV-3. 2013 ANNUAL TAX COLLECTIONS  
PICKENS COUNTY AND THE CITY OF CLEMSON**

Jurisdiction	Property Taxes	Other Taxes
Pickens County	\$ 24, 129,899	\$ 7,517,014
City of Clemson	5,296,975*	2,638,318

\* Includes City of Clemson TIF District Revenues

Sources: Pickens County 2013 CAFR and City of Clemson 2013 CAFR

Table IV-4 lists the leading property taxpayers in the City of Clemson. These ten entities account for 10.3% of the City's property tax base and include utility providers, commercial businesses, and multi-family housing developers.

**TABLE IV-4. TOP 10 PROPERTY TAXPAYERS IN THE CITY OF CLEMSON, 2018**

Taxpayer	Taxable Assessed Value	% of Total City Assessed Value
Ibrahim Family Trust	\$ 1,754,960	2.42%
Duke Energy	1,741,400	2.40%
Breckenridge Group, Clemson	1,598,810	2.2%
Clemson Lofts PI, LLC	1,356,578	1.87%
Cellco Partnership DBA Verizon	1,085,490	1.5%
PC WMT, LLC	811,620	1.12%
CEV Berkeley, LP	738,310	1.02%
Midas Clemson, LLC	553,350	0.76%
CEV Clemson, LP	530,110	0.73%
Gateway Tiger (123), LLC	520,910	0.72%

Source: City of Clemson 2018 CAFR

An industrial property tax abatement is available to qualified manufacturing businesses that make a minimum capital investment in Pickens County. This incentive provides a five-year property tax abatement from county ordinary operating taxes at the rate of 57.1 in 2013. Abatement of municipal taxes is at the discretion of the municipality. Figure IV-1 uses an example formula from the South Carolina Department of Commerce to illustrate how the abatement can apply to an industrial property in Pickens County. The example also assumes that the property is located within the City of Clemson.



FIGURE IV-1. SAMPLE COUNTY INDUSTRIAL PROPERTY TAX ABATEMENT FORMULA<sup>1</sup>

<b>Fair Market Value of Property</b>	<b>\$ 50,000,000</b>
State Assessment Ratio for Manufacturing	x 10.5%
<b>Assessed Value</b>	<b>\$ 5,250,000</b>
Millage Rate (County Base + City Millage + School District Millage) <sup>2</sup>	x .3095
<b>Property Tax</b>	<b>\$ 1,624,875</b>
County Abatement (\$5,250,000 x 0.05710)	- \$ 299,775
<b>Property Tax After Abatement</b>	<b>\$ 1,325,100</b>

<sup>1</sup> Example assumes a property located within the City of Clemson.

<sup>2</sup> Rate based on 2013 data and does not include other special fees or millage rates that may apply.  
 Sources: S.C. Department of Commerce; 2013 Property Tax Report, S.C. Association of Counties

**2. TAXABLE SALES**

Other key indicators of community wealth include taxable sales in the form of revenues from retail sales, the local option sales tax, and accommodations and admissions taxes. The State of South Carolina has established a statewide base sales tax of 6%, with 5% of the tax directed to the public school system and 1% used to offset reductions in local property taxes. This sales tax is applied to the retail sale, lease, or rental of tangible personal property.

Local governments also have the option of adding local taxes on accommodations, retail sales, and prepared meals, as well as a local sales tax. These local sales taxes must be approved by voters and may be used for property tax relief; construction or repair of roads, bridges and schools; or other specific projects. Both the City of Clemson and Pickens County have adopted a Local Option Sales Tax (LOST). The first penny sales tax was approved by voters in 1995 to fund a variety of projects, with tax credits given to property owners on their annual property tax notices. Total revenues to the City of Clemson under the current LOST totaled \$1,745,748 in 2019.

Net taxable sales include automobiles, food, and merchandise. However, consumer money spent on gasoline, accommodations, and admission fees are not included in net taxable income total. The level of taxable sales generally reflects the overall state of the economy, which can influence purchasing decisions. Pickens County had more than \$860 million in net taxable sales in FY 2012. As shown in Table IV-5, gross sales have increased steadily in the City of Clemson since 2009 to total more than \$249 million in 2013, while gross sales countywide have made annual gains since 2011.

TABLE IV-5. GROSS RETAIL SALES IN PICKENS COUNTY AND CITY OF CLEMSON, 2011-2015

Year	City of Clemson	Pickens County
2011	\$ 207,085,405	\$ 1,968,115,000
2012	238,398,203	1,918,390,000
2013	259,663,932	2,001,476,000
2014	268,710,935	2,100,048,000
2015	272,756,339	2,197,224,000

Sources: Pickens County Economic Statistics; S.C. Department of Revenue

Travel and tourism revenue represents a growing industry in South Carolina, generating \$22.6 billion in travel-related spending in 2018. The statewide fiscal impact of tourism in 2018 exceeds \$2.1 billion in state and local government revenues. This is a 3.9% increase from 2017. Tourism supports one in ten jobs in South Carolina and roughly 12% of all employment in the State. Locally, Pickens County benefitted from nearly \$117 million in expenditures related to travel and tourism in 2018, ranking among the top sixteen South Carolina counties in total travel expenditures. Traveler generated tax revenues in the County, including accommodations and admissions taxes, exceeded \$3.6 million.

Admissions taxes are collected for any amusement venue for which an admission fee is being charged. These venues include night clubs, sporting events, amusement parks, golf courses, movie theaters, bowling alleys, concerts, and health clubs. Admissions taxes collected countywide in FY 2012 totaled \$1,528,738. An additional 2% state sales tax is imposed on the rental of rooms, lodging, and sleeping accommodations. Total accommodations tax collections within Pickens County approached \$411,000 in FY 2013-14, with \$247,857 of this total allocated to the City of Clemson. Pickens County, along with neighboring Greenville and Anderson Counties, is one of fifteen counties in the State that are classified as donor counties. A portion of the accommodations tax revenues collected in these donor counties is distributed to the State's other 31 counties, including neighboring Oconee County, that have less than \$400,000 in annual accommodations revenue.

The City of Clemson also adopted a 1% hospitality fee that is assessed on gross receipts from the sale of all food and beverages served by restaurants, lodging, and relayed food service establishments in the City. The City added a hospitality tax of 1% in 2003 to be directed to redevelopment, parks, infrastructure, capital equipment, and other projects that enhance the public safety, welfare, and health of residents and visitors. In FY 2013, the City received \$562,581 in hospitality fees and \$562,680 in hospitality taxes. The City received \$831,568 in hospitality taxes and \$832,125 in hospitality fess in 2019.

### **3. BANK DEPOSITS AND BANKRUPTCIES**

The presence of financial institutions and growth in personal bank deposits are also key indicators of individual wealth and economic independence. The City of Clemson has several FDIC-insured commercial banks, many offering multiple locations including a presence on the Clemson University Campus. FDIC-insured commercial bank locations in close proximity to City residents

include branches of First Citizens, BB&T, Wells Fargo, Founders Federal Credit Union, Bank of America, SunTrust, and PNC Bank, among others. None of these banks is headquartered in the County. The total value of bank deposits in the City of Clemson exceeded \$492,481,000 in 2013.

Pickens County residents file for personal bankruptcy at a much lower rate than state residents as a whole, ranking 40th out of all 46 counties in 2013. The filing rate per 1,000 residents for Pickens County was 1.06 compared to a statewide personal bankruptcy rate of 1.56 and a national rate of 3.29. This represents a steady five-year decrease from the 2009 County rate of 1.89.

#### **4. COMMERCIAL AND INDUSTRIAL LAND USES**

The availability of desirable land for industrial and commercial purposes is necessary for economic growth. For planning purposes, industrial land areas are those used to manufacture, assemble, process, or fabricate goods and/or to store (warehouse) or transport goods. Examples include manufacturing plants, industrial parks, truck terminals, and warehouses. There is no acreage currently in industrial use within the City.

Commercial land areas are used to conduct business, trade activities, administrative activities, professional activities or services, or personal services. Examples of commercial uses include establishments for retail sale or wholesale of goods and services, restaurants, entertainment facilities, administrative or professional offices, gas stations, grocery stores, hair stylists, dry cleaners, furniture stores, clothing stores, car sales, law offices, doctor offices, CPAs, real estate offices, hotels/motels, lumber sales, private gyms, post offices, and nursery or garden centers. Commercial land uses account for a small percentage of the City's land area at 5.5%, or 217 acres. Mixed uses that can include limited commercial activity comprise another 5.3% of land area, or 212 acres. Commercial uses in the City of Clemson are primarily concentrated along U.S. Highway 123, S.C. Highway 93, U.S. Highway 76, and College Avenue leading into the Downtown district.

#### **5. CAPITAL INVESTMENT**

Industrial capital investment is an important contributor to the local economy, yielding more tax revenue per investment dollar to schools and local governments than residential and commercial development. These capital investments include equipment, buildings, and land. The economic multiplier for manufacturing industries is typically much higher than for retail, health services, and personal business services.

From 2003 to 2013, state-assisted new and expanded manufacturing capital investment in Pickens County approached \$174 million. These investments yielded 2,347 new jobs. Over the ten-year period, the largest number of jobs were created in 2004, while the County's highest annual capital investment also occurred in 2004 at \$61 million. Table IV-6 lists state-assisted annual capital investment and job creation data for Pickens County from 2003 through 2013.

TABLE IV-6. STATE-ASSISTED CAPITAL INVESTMENTS AND JOB CREATION IN PICKENS COUNTY, 2003-2013\*

Year	Number of firms	Jobs Created	Capital Investment
2003	1	35	\$ 1,007,000
2004	4	560	61,000,000
2005	0	0	0
2006	2	550	34,000,000
2007	3	335	13,890,000
2008	3	235	11,000,000
2009	1	0	2,000,000
2010	2	95	9,980,000
2011	5	537	27,885,000
2012	0	0	0
2013	1	0	13,000,000
<b>Total</b>	<b>22</b>	<b>2,347</b>	<b>173,762,000</b>

\* Data reflects projects with direct SCDOC involvement

Source: S.C. Department of Commerce (SCDOC), 2014

## 6. INCOME

Income can be assessed through a variety of indicators that include per capita income, total personal income, poverty levels, living wage indicators, and earnings. *Per capita income* is an income average computed for each individual in the population. Per capita income in Pickens County increased from \$20,878 in 2012 to \$26,061 in 2019 (Table IV-7). Clemson residents experienced an even greater increase in per capita income, from \$23,025 to an estimated \$29,723. Estimated per capita income for City residents is slightly higher than that of the State at \$29,426.

TABLE IV-7. PER CAPITA INCOMES FOR CITY OF CLEMSON, PICKENS COUNTY AND MUNICIPALITIES

Location	2012 ACS	2019 ACS
Town of Central	\$ 13,370	\$ 18,080
<b>City of Clemson</b>	<b>23,025</b>	<b>29,723</b>
City of Easley	23,004	29,645
City of Liberty	17,993	30,809
Town of Norris	19,510	21,551
City of Pickens	17,898	17,951
Town of Six Mile	29,486	31,114
<b>Pickens County</b>	<b>20,878</b>	<b>26,061</b>
<b>South Carolina</b>	<b>23,906</b>	<b>29,426</b>

Sources: 2008-2012 and 2015-2019 American Community Surveys

*Total Personal Income* includes net earnings by place of residence; interest, dividends, and rent; and personal current transfer receipts. The 2019 per capita personal income for Pickens County

is \$39,289. Per capita personal income in City of Clemson is \$25,438, the highest in six years. The per capita personal income trend for the City and Pickens County are shown in Table IV-8.

**TABLE IV-8. PER CAPITA PERSONAL INCOME GROWTH  
PICKENS COUNTY AND CITY OF CLEMSON, 2013-2019**

Year	City of Clemson	Pickens County
2013	\$ 23,025	\$ 32,054
2014	23,235	33,232
2015	23,235	34,693
2016	23,590	35,704
2017	22,375	36,936
2018	24,157	38,095
2019	25,438	39,289

Sources: CAFR, City of Clemson and Pickens County, 2019

**Poverty level** data is based on thresholds established by the Federal government that are linked to changes in the cost of living and the Consumer Price Index (CPI). An individual is described as living in poverty when they have insufficient resources to meet basic living expenses including the costs of food, shelter, clothing, transportation, and health care. The percentage of Pickens County residents living in poverty is 18.4%, well above the percentage of impoverished State residents at 17.6% and the national poverty rate of 14.9%. Within the City of Clemson, the percentage of residents living in poverty is 37%. However, it must be noted that this high rate is attributed in part to the large numbers of college students living off campus who may not report income, but who receive additional support and funding from family and student financial aid programs.

**Low and moderate income (LMI) households** are those households with incomes below 80% of median family income. Using the U.S. Department of Housing and Urban Development definition, more than half (50.8%) of City of Clemson residents are considered to be LMI. This comparatively high percentage of City residents, along with the 44% of County residents who are LMI, can also be attributed in part to the high number of Clemson University students with limited incomes living in the City. In addition, 1,275 of City households (21.9%) are considered to have extremely low incomes of less than 30% of the area median income.

The **Basic Family Budget Calculator** developed by the Economic Policy Institute estimates the minimum income needed to cover basic living expenses to provide a secure, yet modest standard of living. Under the EPI model, a family of four living in the area would need an annual income of \$55,161 – or a monthly income of \$4,597 – to adequately provide for basic housing, food, transportation, childcare, taxes, and health care costs in 2013.

**Living wage indicators** have been developed by Penn State University researchers to determine the cost of living within communities in each state. The underlying living wage values are based on 2013 dollars using the CPI. The living wage estimate for families living and working in Clemson shows the full-time hourly rate that a resident must earn to support a family. Table IV-9

demonstrates the living wage with representative figures used under the Living Wage model for typical expenses such as childcare, transportation, medical, and housing costs. The model assumes that an individual is employed full-time at 2,080 hours annually. Based on this formula, the head of household for a typical family of four in the City of Clemson would have to make approximately \$17.86 an hour, or \$2,670 per month, to support the family's basic needs for housing, medical, childcare, transportation, and food.

**TABLE IV-9. 2013 LIVING WAGE ESTIMATE FOR CITY OF CLEMSON, S.C.**

Monthly Expense	Household Size				
	1 Adult	1 Adult 1 Child	2 Adults	2 Adults 1 Child	2 Adults 2 Children
Food	\$ 242	\$ 357	\$ 444	\$ 553	\$ 713
Child Care	0	342	0	0	0
Medical	124	382	273	380	359
Housing	546	659	592	659	659
Transportation	318	618	618	712	764
Other	70	150	123	154	175
After-Tax Income Required					
<i>Monthly</i>	1,300	2,508	2,050	2,458	2,670
<i>Annual</i>	15,600	30,096	24,600	29,496	32,040
Annual Taxes	2,494	4,792	3,919	4,706	5,112
Before Tax Income Required	18,094	34,888	28,519	34,202	37,152
<b>Living Wage (Hourly)</b>	<b>\$ 8.70</b>	<b>\$ 16.77</b>	<b>\$ 13.71</b>	<b>\$ 16.44</b>	<b>\$ 17.86</b>

Source: Living Wage Estimator, MIT, 2014

The **average annual wage** is computed by dividing total annual wages by annual average employment. Dividing the annual wage by 52 yields an approximation of the average weekly wages per employee. This average wage data can be influenced by work stoppages, labor turnover, retroactive payments, seasonal factors, and bonus payments, as well as the ratio of full to part-time workers in a community. The 2012 annual average wage for workers in Pickens County exceeded \$36,884, ranking 23<sup>rd</sup> among South Carolina counties. As shown in Table IV-10, average annual wages in Pickens County are \$3,762 lower than the State average and only 74% of the national average.

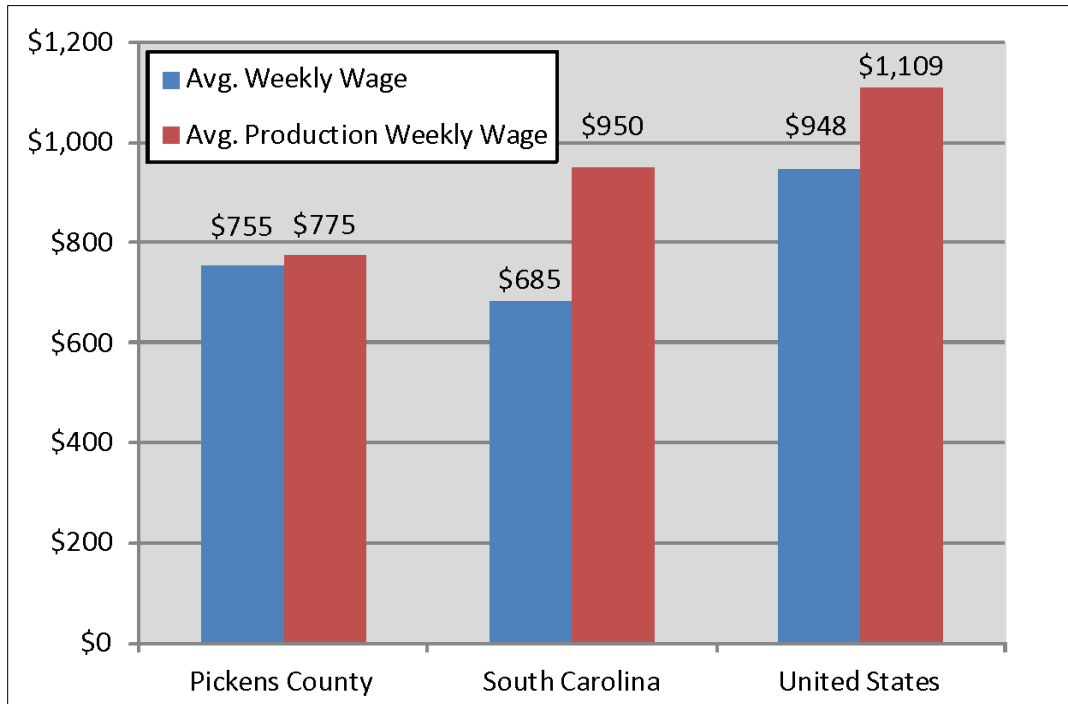
**TABLE IV-10. COMPARISON OF AVERAGE ANNUAL WAGE, PICKENS COUNTY AND SURROUNDING COUNTIES, 2012**

Location	Average Annual Wage	% of National Average	State Rank
Anderson County	\$ 36,413	73%	24
Greenville County	44,297	89%	5
Oconee County	43,380	87%	7
<b>Pickens County</b>	<b>36,884</b>	<b>74%</b>	<b>23</b>
South Carolina	40,646	82%	
United States	49,612	100%	

Source: 2014 County Profiles, S.C. Association of Counties

A comparison of average weekly wages is presented in Figure IV-2. Although Pickens County workers have a higher weekly wage at \$755 than residents statewide at \$685, they lag significantly behind the State and national average production weekly wages by \$175 and \$334, respectively.

**FIGURE IV-2. COMPARISON OF AVERAGE WAGES  
PICKENS COUNTY, SOUTH CAROLINA, AND THE UNITED STATES, 2012**



Source: U.S. Bureau of Labor Statistics, 2014

As detailed in Table IV-11, the highest average private sector weekly wages in Pickens County are generated by the Management of Companies and Enterprises (\$1,299), Information (\$1,165), Finance and Insurance (\$1,017), Wholesale Trade (\$1,000), and Manufacturing (\$922) sectors. The Arts, Entertainment and Recreation (\$328) and Accommodation and Food Services (\$251) sectors yielded the lowest average weekly wages. The average Manufacturing sector job in Pickens County offers well over three times the average weekly wage of an Accommodation and Food Services sector job.



TABLE IV-11. PICKENS COUNTY EMPLOYMENT AND WEEKLY WAGE BY SECTOR, 2013

NAICS	Sector	Establishments	Workers	Average Weekly Wage
11	Agriculture, Forestry, Fishing & Hunting	15	61	\$ 547
23	Construction	247	1,138	677
31-33	Manufacturing	128	5,703	922
42	Wholesale Trade	77	346	1,000
44-45	Retail Trade	321	5,113	462
48-49	Transportation and Warehousing	33	116	442
51	Information	20	331	1,165
52	Finance and Insurance	118	684	1,017
53	Real Estate, Rental and Leasing	55	171	627
54	Professional and Technical Services	151	658	895
55	Mgt of Companies and Enterprises	10	101	1,299
56	Administrative and Waste Services	112	1,170	416
61	Educational services	27	459	559
62	Health Care and Social Assistance	163	3,288	766
71	Arts, Entertainment, and Recreation	32	437	328
72	Accommodation and Food Services	222	4,763	251
81	Other Services (except Public Admin)	270	768	483

Source: Pickens County Labor Profile, S.C. Department of Commerce, 2014

Local average wages by sector are particularly relevant when considering the minimum living wage estimates previously provided in Table IV-9. County and City economic development strategies should consider the need to provide a balanced sector mix to ensure adequate earnings opportunity for residents. Although the services sector represents a growing segment of the national and local economy, these jobs often offer lower pay and fewer benefits than manufacturing, professional services, and technology sector employment.

Another important indicator of income is the number of taxpayers in the community receiving the Earned Income Tax Credit (EITC). Participation in the EITC is linked to the educational degree of residents in lower wage jobs in a community and is intended to benefit low-income taxpayers as a wage supplement. EITC-eligible taxpayers are most likely to work in the retail trade, health care, accommodation and food services, manufacturing, and construction sectors. In South Carolina, more than 1.1 million workers are eligible for EITC. Among those applying for the credit, 54% have a high school diploma or less and 36% also receive food stamps or SNAP benefits. Eligibility ranges from childless workers with incomes under \$13,980 to families with three or more children who have incomes under \$45,060. The maximum credit for 2012 ranges from a high of \$5,891 for a family with three or more children to a low of \$475 for a filer with no children. In South Carolina for tax year 2012, more than 484,447 residents qualified for the EITC, receiving more than \$1.1 billion in credit receipts. In Pickens County, nearly one out of five 2012 returns claimed the credit, with an average credit receipt of \$2,287. More than 630 Clemson residents, or only one of every eight residents filing a return, qualified and received more than \$1.1 million in EITC credits in 2012 (Table IV-12).



**TABLE IV-12. EARNED INCOME TAX CREDIT FILINGS AND RECEIPTS FOR PICKENS COUNTY AND MUNICIPALITIES**

<b>Tax Data</b>	<b>Total Tax Returns Filed</b>	<b>Number of Tax Returns Receiving EITC</b>	<b>Total EITC Received</b>	<b>Average EITC Credit Per Tax Filer</b>
Town of Central	1,665	339	\$ 705,077	\$ 2,080
<b>City of Clemson</b>	<b>4,971</b>	<b>631</b>	<b>1,125,307</b>	<b>1,783</b>
City of Easley	9,312	1,916	4,395,913	2,294
Town of Liberty	1,351	348	866,209	2,489
Town of Norris	383	88	204,094	2,319
City of Pickens	1,249	289	662,215	2,291
Town of Six Mile	267	62	148,733	2,399
<b>Pickens County</b>	<b>44,825</b>	<b>9,656</b>	<b>22,081,567</b>	<b>2,287</b>

Source: 2012 Tax Return Data, Brookings Institute

### C. LABOR FORCE

The labor force is the number of residents employed and those seeking employment and available for work. This number represents the combined pool of workers potentially available to employers. Employers require access to a qualified workforce to survive and grow, making the composition and size of a community’s labor force one of the most critical factors in building and maintaining a successful and strong economy.

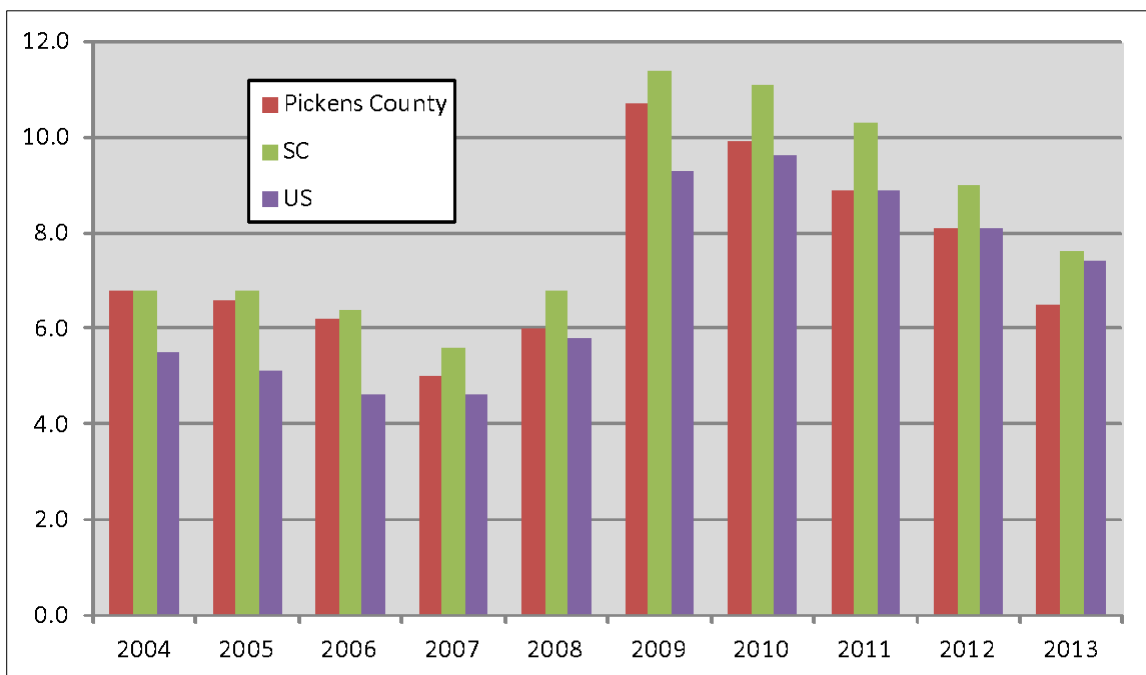
Information on the population base and labor force characteristics can provide insight into the ability of Pickens County and the City of Clemson to attract and retain sound employers, as well as adapt to changing global economic trends. An understanding of the local labor base requires an examination of the number of underemployed and unemployed, education and skill levels, youth approaching employment age, residents who are able but are not participating in the labor force, population growth, and commuting patterns.

A healthy economy requires a stable and growing population. In the decade from 2000 to 2010, the population of the six-county Appalachian region grew by 13.9% to approximately 1.171 million residents. The Pickens County population grew from 110,757 residents in 2000 to 119,224 in 2010, an increase of 7.6%. With a total population count of 11,897 in 2000, the City of Clemson increased by 16.9% to 13,905 in 2010. State projections indicate that the Pickens County population will exceed 132,900 by 2030, an increase of 11.5% over the 2010 count. The larger six-county Appalachian region is projected to grow by 17.1% from 1,171,497 residents in 2010 to an estimated 1,371,300 by 2030. Although projections to 2030 are not available for municipalities, the number of City of Clemson residents is estimated to grow by another 5% between 2010 and 2019 to 14,601 residents. Pickens County has nearly 58,000 residents in the civilian labor force, while the City of Clemson has 6,869 working residents.

**1. UNEMPLOYMENT AND UNDEREMPLOYMENT**

The unemployment rate is an estimate of the number of persons who do not have a job, but who are available and are actively seeking work. Unemployment in Pickens County has averaged slightly lower than unemployment statewide for eight of the last ten years and dipped below the national average in 2013. The County’s 2013 annualized unemployment rate was 6.5%, lower than the statewide and national rates of 7.6% and 7.4%. County unemployment was relatively stable from 2003 to 2006, reaching a low of 5.0% in 2007. The economic downturn of 2009 prompted a sharp rise in unemployment to 10.7% that was followed by a steady four-year recovery to a jobless rate of 6.5% in 2013. This pattern generally mirrored state and national unemployment trends over the same period. Figure IV-3 compares ten-year unemployment trends for Pickens County, South Carolina, and the United States. Unemployment in the City of Clemson has generally mirrored the rate for Pickens County over the last ten years.

**FIGURE IV-3. TEN-YEAR UNEMPLOYMENT RATE TREND FOR PICKENS COUNTY, SOUTH CAROLINA, AND THE UNITED STATES**



Source: U.S. Bureau of Labor Statistics, 2014

The top five sectors in Pickens County posting the highest number of unemployment insurance claims to date in 2014 are Administrative and Support and Waste Management, Manufacturing, Retail Trade, Health Care and Social Assistance, and Accommodation and Food Services. From 2006 through 2011, reported job losses due to layoffs and closures in the County were heaviest in manufacturing. Of the nine layoffs and closures reported, none were in the retail sector. Over the five-year period, there were four reported layoffs impacting 110 workers and five closures representing the loss of 739 jobs. The greatest number of job losses occurred in 2008, following the closure of three manufacturers that resulted in the loss of more than 282 jobs.

**TABLE IV-13. PICKENS COUNTY JOB LOSSES AND PLANT CLOSURES, 2006-2011**

Year	Employer	Location	Employees Impacted	Type
2011	Richmond Gear	Liberty	53	Layoff
2011	Liberty Denim	Liberty	185	Closure
2009	Easley Custom Plastics	Easley	40	Layoff
2009	Fibertech	Central	9	Layoff
2008	Alice Manufacturing	Easley	265	Closure
2008	Saco Lowell Parts	Easley	9	Closure
2008	Materials Management	Easley	8	Layoff
2007	Quality Foods	Pickens	20	Closure
2006	Alice Manufacturing - Elljean	Pickens	260	Closure

Source: Alliance Pickens, 2014

Another key workforce concern is underemployment. It is likely that in an increasingly service driven economy and a prolonged economic recovery, there will be many more members of the workforce who are *underemployed*. As much as the 12% of the State’s active labor force is estimated to be underemployed. Given the sluggish economic recovery since 2009, there are also a growing number of *discouraged workers* who are individuals not in the labor force, but who want and are available for work. These residents are excluded from the official unemployment rate if they have not searched for work in the preceding four weeks. Another growing segment of the underemployed workforce are the *involuntary part-time workers*. These workers are employed less than 35 hours per week but want to work full time and are available to do so. In most cases, their work hours have been reduced or they work in a part-time job.

A declining manufacturing sector and a growing dependence on retail and service sector employment can translate into lower wage job opportunities that rely on fluctuating demand and are susceptible to economic downturns. Many of these jobs are part-time or temporary and lack key benefits such as health insurance. Alliance Pickens data indicates that, within the Pickens County labor draw area, there are 49,600 unemployed workers and slightly less than 15,000 residents who are estimated to be considering re-entering the workforce. An additional 109,700 workers in the County’s labor shed are considered underemployed. These underemployed workers often have more skills than their jobs require. On a positive note, unemployment and underemployment are two factors that contribute to the potential pool of qualified labor for new businesses looking to locate in the community. Underemployed workers are often the first to respond to new job opportunities with new and expanding industries.

**2. EDUCATION AND SKILLS**

Education has long been a community priority among Clemson residents. An educated and skilled workforce is integral to building a strong local economy. Local educational attainment levels relative to State and national levels provide an important indicator of the long-term economic competitiveness of both Pickens County and the City of Clemson. Efforts to attract and retain employers in the community will continue to be impacted in part by the educational attainment

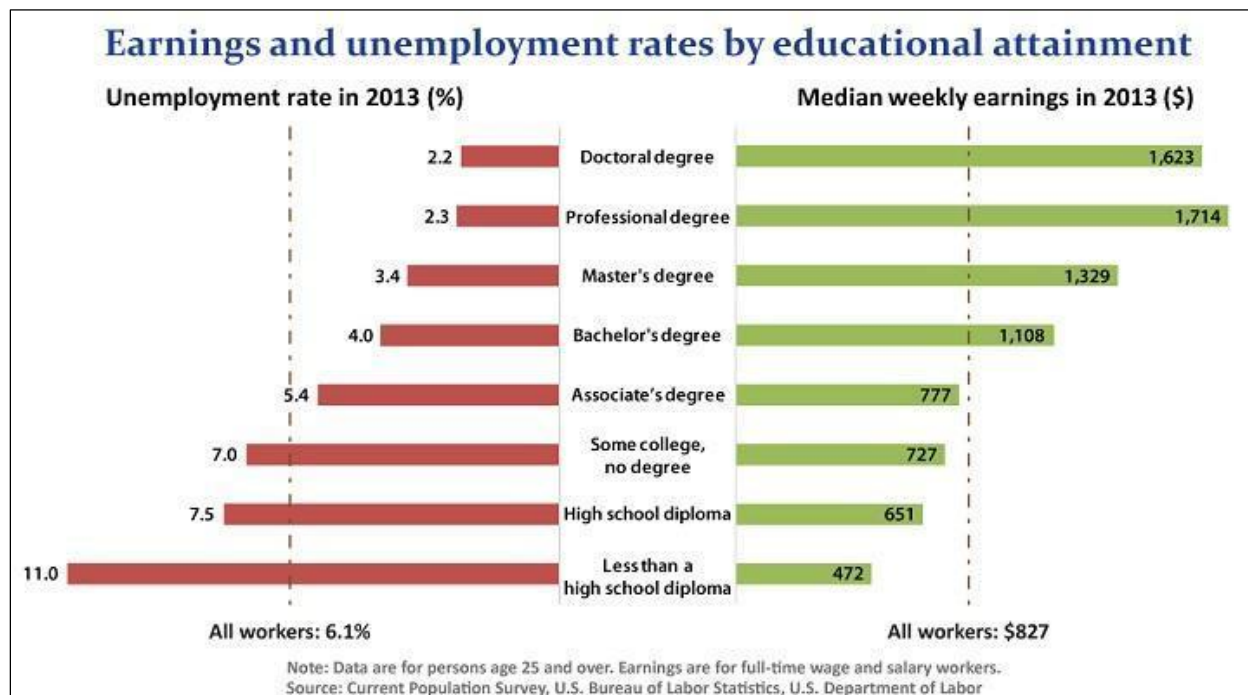
levels of area residents. By continuing to increase the educational levels of residents and encouraging postsecondary training, the City and County can build prosperous and sustainable communities and attract new and rewarding job opportunities.

Educational attainment is a key indicator of future earnings potential. U.S. Department of Labor data shows that the median lifetime earnings for a college graduate with a bachelor's degree is nearly \$1 million greater, or 84% more, than that of a person with only a high school diploma. In a typical working lifetime, a high school graduate will earn \$1.3 million for a lifetime of work; a college graduate with an associate degree will earn \$1.7 million and with a bachelor's degree will earn \$2.3 million; a graduate degree holder will earn \$2.5 million; and an individual with an advanced professional degree, such as a doctor or lawyer, can earn an average of \$4.4 million.

Pickens County and City of Clemson residents who lack advanced postsecondary training will be increasingly limited to lower-wage, lower-tech employment that offers limited security, benefits, and advancement opportunities. In addition to lower earnings for the individual without a high school diploma, low educational attainment can have an adverse financial impact on the community in the form of higher criminal justice and public safety costs, increased social support payments, higher health care costs, decreased tax revenues, and weakened community engagement.

As shown in Figure IV-4, national median weekly earnings in 2013 were \$472 for a person without a high school diploma compared to \$770 for a worker with an associate degree and \$1,108 for a bachelor's degree holder. Unemployment is also generally lower for individuals with higher educational attainment. At the national level, residents with no high school diploma experience a 2013 unemployment rate of 11% that is almost triple that of adults with a bachelor's degree at 4.0%. This gap is amplified at the local level, where Clemson residents who did not complete high school have a 42% jobless rate, while those with a bachelor's or graduate degree experience an unemployment rate of only 1.2%.

FIGURE IV-4. IMPACT OF EDUCATIONAL ATTAINMENT



Source: Current Population Survey, U.S. Department of Labor, U.S. Bureau of Labor Statistics

In South Carolina, a worker with less than a high school diploma will make an average annual wage of \$18,102, compared to a high school graduate or GED holder who will earn \$25,704. A South Carolinian with some college or an associate degree earns an average of \$31,143, while income with a bachelor’s degree will average \$43,365. A State resident with a graduate or professional degree will attain an annual average income of \$54,018 (*American Community Survey, 2008-2012*).

College readiness and postsecondary enrollment and completion among County residents will become increasingly critical in local economic development efforts. A recent study by the Georgetown University Center for Education and the Workforce estimated that by 2018, 63% of jobs in the United States will require some form of postsecondary education or training. State studies also reflect this need for advanced education, revealing that two-thirds of the State’s incumbent workforce now needs a minimum of 14 years of education to be successful in an increasingly technology-driven economy, with nearly 80% of all jobs requiring skill levels beyond high school.

Only 3.3% of Clemson residents aged 25 and over did not graduate from high school. This is significantly lower than the 17.7% of County and 15.9% of State residents who are not high school graduates. Well over half (63.3%) of the City’s population holds a four-year degree or higher. The City boasts a higher portion of residents with a bachelor’s degree and a graduate or professional degree at 28.3% and 35%, respectively. The percentage of City residents with a bachelor’s degree is more than double that of Pickens County at less than 14% and well above the State rate of less than 16%. More than a third of the City’s adult residents have earned a graduate or professional

degree, more than four times the rate of residents statewide. More than one of every three Pickens County residents with a postgraduate degree lives in the City of Clemson. As both an education provider and employer of residents with advanced degrees, Clemson University is a key factor in the high postsecondary degree attainment rate among City residents. Educational attainment levels for the City of Clemson and Pickens County are detailed in Table IV-14.

**TABLE IV-14. EDUCATIONAL ATTAINMENT FOR PERSONS 25+ YEARS, 2012**  
**CLEMSON, PICKENS COUNTY AND SOUTH CAROLINA**

Educational Attainment	Clemson		Pickens County		South Carolina	
	#	%	#	%	#	%
<b>Population 25+ Years</b>	<b>7,145</b>	<b>100.0%</b>	<b>72,940</b>	<b>100.0%</b>	<b>3,075,655</b>	<b>100.0%</b>
Less Than 9th Grade	57	0.8%	4,480	6.1%	173,610	5.6%
9th to 12th Grade, No Diploma	166	2.3%	8,464	11.6%	317,253	10.3%
High School Graduate/GED	910	12.7%	22,251	30.5%	932,051	30.3%
Some College, No Degree	1,043	14.6%	14,106	19.3%	633,902	20.6%
Associate Degree	446	6.2%	6,886	9.4%	263,552	8.6%
Bachelor's Degree	2,019	28.3%	9,813	13.5%	486,253	15.8%
Graduate/Professional Degree	2,504	35.0%	6,940	9.5%	269,034	8.7%

Source: 2008-2012 American Community Survey, U.S. Census

Educational achievement and skill proficiency levels among the local workforce strongly influence employer interest in locating to the area, as well as productivity and satisfaction with the workforce for existing employers. The path to educational achievement and job readiness starts in the Pre-K through 12 school system. Public schools are a vital community resource in attracting new employers and in preparing residents for the knowledge-based economy of the 21<sup>st</sup> century.

The Pickens County School District is the State's 14<sup>th</sup> largest school system, covering five attendance zones and 504 square miles. With an annual budget of \$105.3 million, the District operates a total of 26 schools with a combined 2014-2015 enrollment of 16,000 students in Grades Pre-K through 12. Of the 1,039 teachers employed by the School District of Pickens County, almost 64% have advanced degrees. A high percentage of Pickens County teaching professionals (93%) return from the previous school year. The proximity of the Clemson University School of Education helps assure an abundant supply of highly trained teaching professionals in local classrooms. Through its undergraduate and graduate education programs, the University prepares teachers, counselors, and leaders for preschool through grade 12 schools.

Pickens County schools include 16 elementary, five middle, and four high schools, with a career and technology center. Clemson area students in the Daniel attendance zone are served by Daniel High School and R.C. Edwards Middle School in Central and by Clemson Elementary in the City of Clemson. Five-year enrollment data for these schools shows a steady increase in the number of students at Clemson Elementary and Daniel High School, with a consistent student count at R.C. Edwards Middle School. Meanwhile, countywide district enrollment has declined by 475 students over the last five years.

**TABLE IV-15. FIVE-YEAR ENROLLMENT IN SCHOOLS SERVING THE CITY OF CLEMSON AND THE SCHOOL DISTRICT OF PICKENS COUNTY, 2009 TO 2013**

School	Grades	2009	2010	2011	2012	2013
Clemson Elementary	Pre-K-5	740	756	766	769	817
R.C. Edwards Middle School	6-8	787	796	768	764	767
Daniel High School	9-12	1,013	1,001	1,014	1,024	1,039
<b>School District of Pickens County</b>	<b>Pre-K-12</b>	<b>16,647</b>	<b>16,557</b>	<b>16,285</b>	<b>16,548</b>	<b>16,172</b>

Source: School District of Pickens County, 2014

As profiled in Table IV-16, the average districtwide per pupil expenditure was \$7,745 for the 2013-2014 school year. Fewer than half of the District’s students (48.7%) are eligible for free and reduced-price school lunches, with only 29% of students at Daniel High, 34% of students at R.C. Edwards, and 23% of Clemson Elementary students eligible for the income-based lunch subsidy.

More than 19% of District students are eligible for the gifted and talented program. Among the schools serving children from the City of Clemson, 29.3% of Daniel High students, 38% of R.C. Edwards Middle students, and 22% of Clemson Elementary students are in the gifted and talented program. Nearly 27% of all Pickens County high school students are enrolled in Advanced Placement or International Baccalaureate courses. Less than 13% of students are designated with disabilities other than speech. Sixty-one percent of all 7<sup>th</sup> and 8<sup>th</sup> graders in the County are enrolled in at least one high school course, almost double the state average of 30.9%. The system achieved an attendance rate of 96% in the 2013 school year.

**TABLE IV-16. STUDENT PROFILE FOR SCHOOLS SERVING THE CITY OF CLEMSON**

School	Per Pupil Expenditure	% Free/Reduced Lunch	% Gifted Talented Program	% Students w/Disabilities
Clemson Elementary	\$ 7,178	23%	22.0%	10.6%
R.C. Edwards Middle	\$ 6,505	34%	38.0%	12.2%
Daniel High School	\$ 6,620	29%	29.3%	11.2%
School District of Pickens County	\$ 7,745	49%	19.0%	12.3%
South Carolina	\$ 9,101	60%	12.0%	12.7%

Source: School and District Report Cards, S.C. Department of Education, 2014

Pickens County students were proficient above the State average in 28 of 30 grade levels and subject areas in the 2013-2014 school year on the South Carolina Palmetto Assessment of State Standards (SC PASS). Performance by Pickens County students in Grades 1 through 8 tests shows that 76.3% of County students scored proficient or above the state standards in English Language Arts and 73.1% of all students scored at the proficient or higher level in Math. Achievement in Science and Social Studies reached pass rates of 75.3% and 77.6%, respectively. The percentage of Pickens County students meeting or exceeding state standards in Writing was 79.9%. Pickens County proficiency rates are compared to State rates by subject in Table IV-17. The SC PASS will



be replaced by a new assessment for the 2014-2015 school year that will be fully aligned with the new national Common Core standards.

**TABLE IV-17. 2014 SC PASS PROFICIENCY RATES FOR THE SCHOOL DISTRICT OF PICKENS COUNTY (SDPC) AND SOUTH CAROLINA**

Subject	SDPC	South Carolina
English Language Arts	76.3%	73.3%
Math	73.1%	71.5%
Science	75.3%	69.2%
Social Studies	77.6%	75.0%
Writing	79.9%	76.0%

Source: School District of Pickens County, 2014

Considerable focus has been placed on raising high school graduation rates over the last decade. The 2013 on-time graduation rate for Pickens County high school students was 76.8%, compared to 76.2% for similar districts statewide (Table IV-18). Daniel High School had an 84.4% four-year graduation rate for 2013. To boost educational attainment, the School District also operates the Adult Education Center that served an enrollment of 155 students in the adult education and GED diploma program. There were 150 diploma completers in the 2013-2014 academic year.

While the focus on raising graduation rates has been warranted, it is no longer the end goal of public education. It must be accompanied by efforts to raise college readiness as demonstrated by additional measures of student academic achievement such as SAT and ACT college readiness scores, Advanced Placement course participation and pass rates, and postsecondary enrollment rates. Strengthening the college and career readiness of local high school graduates is an emerging factor in state and local economic competitiveness. By 2018, 63% of all new job openings will require college education.

As noted in the *Upstate Targeted Industry Study*, “the quality of a region’s K-12 education system can be evaluated looking at two measurements, education attainment and SAT (and ACT) scores.” The 2014 average composite SAT score for Pickens County high schools was 1489, 60 points above the statewide public school average of 1429 and 18 points above the national public school average of 1471. At 1597, the SAT average for Daniel High School was 108 points higher than the County, 168 points above the State, and 126 points above the national average. Composite ACT exam scores for County students were also higher than both the State and national averages. The Pickens County 2014 ACT average was 22.4, well above the State public school average of 20.4 and the national average of 21.0. Each of the District’s four high schools also exceeded the national score average, ranging from 21.1 at Liberty High School to a high of 24.1 at Daniel High School.

Table IV-18 details the performance data for the Pickens County School District and County high schools relative to SAT/ACT exam scores, the High School Assessment Program (HSAP) exit exam pass rates, the graduation rate, and the percentage of high school seniors eligible for the



*Legislative Incentive for Future Excellence* or LIFE scholarships. The LIFE scholarship is a merit-based state program established to assist South Carolina students in attending postsecondary institutions within the State.

**TABLE IV-18. COMPARISON OF SELECTED HIGH SCHOOL PERFORMANCE MEASURES**

High School	SAT Combined Average <sup>1</sup>	ACT Composite Score <sup>1</sup>	HSAP Pass Rate	4-Year Graduation Rate	% LIFE Scholar Eligible
Daniel High School	1597	24.1	93.5%	89.4%	66.1%
Easley High School	1437	22.1	93.2%	75.4%	49.5%
Liberty High School	1399	21.1	94.2%	74.3%	59.6%
Pickens High School	1464	21.8	92.7%	74.6%	57.3%
Pickens School District	1489	22.4	85.3%	76.8%	56.6%
<b>South Carolina<sup>2</sup></b>	<b>1429</b>	<b>20.4</b>	<b>77.4%</b>	<b>76.2%<sup>3</sup></b>	<b>31.8%</b>
<b>United States<sup>2</sup></b>	<b>1471</b>	<b>21.0</b>			

<sup>2</sup>Public school students only; <sup>3</sup>Data for similar districts in State

Source: <sup>1</sup>2014 Score Reports; 2013 School Report Cards, S.C. Department of Education

All four Pickens County high schools offer Advanced Placement (AP) courses. AP classes offer college-level coursework to high school students and are accompanied by exams that can lead to college credit. AP courses not only prepare students to succeed in college, but they also offer financial benefits for students and their families with opportunities to qualify for academic scholarships and earn college credits. These credits translate into significant tuition savings by reducing the number of courses that must be taken in college. AP course standards are established nationally by the College Board. These courses offer students an opportunity to take an exam and earn college credit in subjects ranging from art and history to physics and calculus. More than one-quarter of all Pickens County public high school students participate in AP coursework, while Daniel High School has an even higher AP enrollment of 30.7%. The District administered 1,153 Advanced Placement tests in 2014, up from 996 in 2013. The average 2014 exam pass rate (score of 3 or higher on a scale of 5) was 65%, down slightly from 66.1% in 2013. Statewide, the percentage of AP exams with passing scores of 3 or higher in similar school districts was less than 48%. School-level AP exam pass rates ranged from 51% at Liberty High School to a district high of 82% at Daniel High School.

To successfully graduate, South Carolina high school students have been required to pass both the High School Assessment Program (HSAP) exam and End of Course Tests (EOCTs) for five individual core classes in Math, English, Science, and Social Studies. The HSAP is administered in the second year of high school, with additional opportunities to retake the test given to students who do not pass. The EOCTs measure student proficiency in meeting minimum state curriculum standards in each gateway subject. Table IV-19 details the EOCT pass rates for Pickens County high school students in the five core subjects tested. However, 2014 is the final year of data for the high school exit exam. In April of 2014, the South Carolina Department of Education discarded the HSAP as a graduation requirement, to be replaced by new assessments in the 2014-2015 school year.

TABLE IV-19. END OF COURSE TEST PASS RATES<sup>1</sup> FOR PICKENS COUNTY HIGH SCHOOLS, 2013-2014

EOCT Subject	Daniel High School	Pickens County	South Carolina <sup>2</sup>
Algebra 1/Math for the Technologies	94.4%	84.2%	83.2%
English 1	77.3%	77.5%	79.7%
Biology 1/Applied Biology 2	92.0%	81.8%	80.9%
U.S. History & the Constitution	69.4%	62.3%	61.5%
<b>All 5 Subjects</b>	<b>82.3%</b>	<b>76.7%</b>	<b>76.8%</b>

<sup>1</sup>Score of 70 or above; <sup>2</sup>Similar districts in S.C.

Source: 2013 Report Cards, S.C. Department of Education

The District also partners with Tri-County Technical College to offer dual enrollment opportunities for high school students to gain both high school and college credit before graduation. Students must meet minimum SAT and ACT test score requirements and have parental and guidance office approval to participate in these courses. Dual enrollment courses transfer to any state technical college or public university in South Carolina and can be taken at no cost to the student if minimum credit hours are met per semester. These programs give many local students a head start on postsecondary attainment and help reduce the total costs associated with college.

### 3. WORKFORCE QUALITY

The quality of the workforce is the long-term key to attracting and retaining employers and raising income levels in the City of Clemson and Pickens County. A combination of real and perceived lack of skills among residents can hamper recruitment of new employers as well as the expansion of existing ones. The economic future of Pickens County hinges in large part on the ability of the community to meet changing workforce development requirements by improving access to training and raising resident proficiency in the core skill areas of mathematics, technology, communication, and writing.

The economic vulnerability of City and County residents with lower skill levels and educational attainment can be seen in recent studies. A *Labor Availability Report* was prepared in 2009 to assess the characteristics of the unemployed and underemployed residents of Pickens County. The study found that the majority of unemployed residents who were actively looking to re-enter the workforce had most recently held jobs in manufacturing. Those currently in the workforce, but who identified themselves as underemployed, were also most heavily represented within the manufacturing sector. Only 7% of all those seeking work had been laid off and another 6% were unemployed due to the closure or relocation of their former company. One-third (33%) claimed medical disability. Workers aged 55 years and older comprised 39% of the unemployed, while 35% were between the ages of 45 and 54 years. More than three of every four (76%) of the unemployed were female. Less than a third (28%) of these individuals held only a high school diploma or a GED and another 4% did not graduate from high school. Almost a third (30%) had some college, but no degree.

The study also surveyed employers in the Pickens County labor shed that included neighboring counties within a reasonable commuting distance. The overall productivity of the Pickens County workforce was rated *good* to *excellent* by 96% of surveyed employers. Workforce attitude was rated positive by 88% of employers. The reliability of local workers garnered a 90% positive rating, while teamwork ranked high among 86% of employers. Of the surveyed employers with additional operations in other communities, the majority noted that their Pickens County locations were at least as, or even more productive and profitable, than other sites.

The availability and quality of local education and technical training resources was also assessed. More than half (55%) of the Pickens County employers interviewed rated the local public schools as *good* to *excellent*, while the local technical colleges were rated as *good* to *excellent* by 97% of the employers. Employer ratings of basic skills revealed that computing skills are the weakest area, with only 58% rating the workforce as *good* to *excellent* in math. Well over two-thirds (68%) rated writing skills as positive and almost three-fourths (74%) were favorable about employee reading skills. The overall job readiness of the County's workforce was rated highly at 75%.

The shortage of skilled and technical workers surfaced as a common employer complaint. Skilled worker availability was considered to be adequate by 68% of the companies in the labor shed, with 22% viewing availability as only *fair*. Technical workers were in shorter supply, with availability rated as *excellent* or *good* by 63% of the interviewed companies and as *fair* by almost a third at 31%. Unskilled workers were in plentiful supply as noted by 93% of employers, while those with professional skills were considered available by 73% of employers.

The *2012 State of the Workforce Report* for South Carolina notes a significant demand shift during the last few decades from a low-skilled to a higher-skilled workforce. Most of the State's top 100 jobs now require middle-level skills and three-quarters (74%) of all top jobs are out of reach for low-skilled workers. Middle skill jobs are those that require more than a high school diploma and less than a four-year degree. Examples of middle skill occupations include registered nurses, dental hygienists, electrical technicians, auto mechanics, and legal secretaries. In the ten-year occupational forecasts through 2018, only 17% of the top 100 jobs are low-skilled, 53% are middle-skilled, and 30% are high-skilled. In addition to formal training, employers are placing a greater emphasis on soft skills that include professionalism and work ethic; oral and written communication, teamwork, and collaboration; and critical thinking and problem solving.

The Appalachian Workforce Development Board completed a five-year Comprehensive Economic Development Strategy (CEDS) in 2013 that identified regional goals for workforce education and skill development. The CEDS recognizes the measurable gains made in high school graduation rates throughout the Upstate over the last decade but emphasizes the continued need to raise the technical skills of the region's workforce. The CEDS also notes that providing a supply of technologically skilled labor will pose a challenge for economic development in the Upstate region. Occupations such as Certified Production Technicians (CPTs), Certified Logistics Technicians (CLTs), Computer Numerical Control operators (CNCs), and mechatronics specialists will be in higher demand as local and regional economic developers focus recruiting efforts on expanding the advanced manufacturing cluster. Many of these middle-skill jobs require more

than a high school diploma, yet less than a four-year degree. To successfully compete for jobs in higher wage, higher tech occupations such as these, Pickens County residents must be equipped with a strong foundation of academic, technical, and soft skills training.

#### **4. EXISTING AND PROJECTED EMPLOYMENT BY SECTOR**

The occupation of employed persons in the City of Clemson and Pickens County provides an overview of the local and regional economy and insight into individual earnings potential. As shown earlier in Table IV-11, Pickens County has a high number of employers engaged in Retail Trade with 321 establishments, Other Services with 270, Construction with 247, and Accommodation and Food Services with 222 employers. There are 128 Manufacturing sector employers in the County and 163 in the Health Care and Social Assistance sector.

Data on monthly employment by industry group from the Upstate SC Alliance reveals that Government has become the leading sector in Pickens County, employing 8,261 in 2013 (Table IV-20). Leisure and Hospitality ranks second with a workforce of more than 5,900, followed by Manufacturing with 5,527 employees. The Retail Trade sector employs more than 4,300 workers, while Education and Health Care Services provides 3,741 jobs in the County. The Transportation and Warehousing and the Natural Resources and Mining sectors comprise the smallest industry sectors at 147 and 94 jobs, respectively.

**TABLE IV-20. PICKENS COUNTY MONTHLY EMPLOYMENT BY SECTOR, 2013**

NAICS	Sector	Workers
1011	Natural Resources and Mining	94
1023	Construction	1,249
1013	Manufacturing	5,527
42	Wholesale Trade	397
44-45	Retail Trade	4,308
48-49	Transportation and Warehousing	147
1022	Information	319
1023	Financial Activities	989
1024	Professional and Business Services	2,302
1025	Educational and Health Care Services	3,741
1026	Leisure and Hospitality	5,905
1027	Other Services	781
10	Government	8,261

Source: Pickens County Labor Profile, S.C. Department of Commerce, 2014

As shown in Table IV-21, recent job openings in Pickens County have been strongest for Retail Supervisors, following closely by Industrial Engineers and Database Administrators. Health care occupations including both Registered and Licensed Practical Nursing are also among the top openings.

**TABLE IV-21. TOP 20 OCCUPATIONAL OPENINGS IN PICKENS COUNTY, 2014**

Occupation	Job Openings
First Line Supervisors of Retail Sales Workers	36
Industrial Engineers	33
Database Administrators	32
Registered Nurses	26
Retail Salespersons	25
Licensed Practical & Licensed Vocational Nurses	24
Network and Computer Systems Administrators	24
First Line Supervisors of Food Prep and Serving Workers	23
Customer Service Representatives	18
Speech-language Pathologists	17
Physical Therapists	16
Maintenance and Repair Workers	15
Computer Systems Analysts	14
Personal Care Aides	14
Combined Food Prep and Serving Workers	13
First Line Supervisors of Office and Admin Support	13
Social and Human Service Assistants	13
First Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	12
Insurance Sales Agents	12
Carpenters	11

Source: S.C. Department of Employment and Workforce, 2014

Overall job growth within the three-county Worklink Workforce Investment Area (WIA) – consisting of Anderson, Oconee, and Pickens Counties – is projected at slightly over 14% by 2020. The regional increase in job openings is projected to be strongest within the Health Care and Social Assistance sector at nearly 38%. Construction ranks second highest at 29%, followed by the Professional, Scientific and Technical Services sector with a ten-year growth rate that will approach 29%. Professional, Scientific and Technical Services include accounting, legal, architectural, engineering, design, computer design, consulting, scientific, and advertising. The growth rates are lowest for the Agriculture, Forestry, Fishing and Hunting sector at well under 1% and the Government sector, which will post a negative growth rate with a loss of 167 jobs. Table IV-22 details the current job counts and projected growth rates by industry in the WIA from 2010 to 2020.

TABLE IV-22. WORKLINK WIA LABOR MARKET OUTLOOK BY INDUSTRY TO 2020\*

Industry	2010 Job Count	# Growth 2010-20	% Growth 2010-20
Health Care and Social Assistance	6,846	2,594	37.89%
Retail Trade	15,093	1,927	12.77%
Manufacturing	16,545	1,784	10.78%
Accommodations and Food Services	12,773	1,528	11.96%
Construction	4,627	1,356	29.31%
Other Services (Except Government)	6,051	1,182	19.53%
Educational Services	7,464	1,018	13.64%
Administrative and Support and Waste Management	4,610	983	21.32%
Professional, Scientific and Technical Services	1,551	444	28.63%
Arts, Entertainment and Recreation	1,394	267	19.15%
Wholesale Trade	2,653	213	8.03%
Transportation and Warehousing	996	209	20.98%
Finance and Insurance	2,320	124	5.34%
Utilities	763	79	10.35%
Information	863	79	9.15%
Real Estate and Rental and Leasing	742	57	7.68%
Management of Companies and Enterprises	304	17	5.59%
Agriculture, Forestry, Fishing and Hunting	1,036	4	0.39%
Government	5,784	-167	- 2.89%
<b>All Jobs</b>	<b>99,569</b>	<b>14,069</b>	<b>14.13%</b>

\* Ranked by numerical job growth

Source: S.C. Department of Employment and Workforce, Industry Projections, 2014

State labor market projections for the Worklink WIA region show continued growth in health care occupations such as sonography, physical therapy, occupational therapy, dental hygiene, and surgical technology (Table IV-23). Average annual earnings potential for these health care professions range from a low of \$21,131 for physical therapy aides to a high of \$184,534 for general practitioners. Biomedical and environmental engineers place in the top twenty, with salaries that average near \$70,000 to more than \$80,000 per year. Skilled HVAC mechanics and masons will experience occupational growth rates of 42% and 39%, respectively.

**TABLE IV-23. 20 HIGH GROWTH OCCUPATIONS IN THE WORKLINK WIA REGION, 2010-2010**

Occupation	% Growth 2010-2020	Average Salary
Diagnostic Medical Sonographers	100%	\$ 59,223
Ushers, Lobby Attendants, Ticket Takers	100%	16,675
Occupational Therapy Assistants	60%	50,874
Physical Therapist Aides	55%	21,131
Biomedical Engineers	55%	80,654
Physical Therapist Assistants	48%	50,079
Physical Therapists	47%	76,593
Dental Hygienists	43%	48,164
Opticians	43%	32,420
Market Research Analysts/Marketing Specialists	42%	58,254
Heating, Cooling and Refrigeration mechanics	42%	34,559
Veterinary Technologists and Technicians	41%	25,127
Ambulance Drivers and Attendants	40%	24,210
Surgical Technologists	40%	33,722
Athletic Trainers	40%	37,865
Brick masons and Block masons	39%	38,154
Speech-Language Pathologists	39%	61,209
Environmental Engineers	38%	69,603
Family and General Practitioners	37%	184,534
Management Analysts	37%	86,631

Source: S.C. Department of Employment and Workforce, Occupational Projections, 2014

**5. EMPLOYMENT CENTERS**

Efforts to recruit new employers to the Upstate region and Pickens County have targeted industries such as aerospace, bioscience, advanced materials, automotive, and energy. New industrial announcements from 2007 to 2013 reflect this focus (Table IV-24). Pickens County successfully recruited five new employers representing nearly 250 new jobs and more than \$22.5 million in capital investment. The County also assisted 11 existing employers with expansions that have created 1,060 new jobs and investments of more than \$41.7 million in capital improvements to local operations.



TABLE IV-24. NEW AND EXISTING INDUSTRIAL ANNOUNCEMENTS IN PICKENS COUNTY, 2007-2013

Year	Employer	Target Industry	Capital Investment	Jobs	Type
2007	St. Jude	Med. Supplies & Devices	\$ 0	300	Expansion
2007	Techtronic Industries	Consumer Products	0	140	Expansion
2007	Fluid Routing Solutions	Automotive Supplier	5,000,000	115	Expansion
2008	Champion Aerospace	Aerospace	0	45	Expansion
2008	Techtronic Industries	Consumer Products	3,800,000	52	Expansion
2009	Tri-Tech USA	Mobile Kitchen Mfg.	4,000,000	50	New
2009	Milliken & Company	Broadwoven Fabrics	2,500,000	0	Expansion
2010	Allegro Industries	Biosciences	4,530,000	45	New
2011	VCI-SC Inc.	Advanced Materials	2,000,000	50	New
2011	KP Components	Multiple	10,000,000	50	New
2011	JR Automation Technologies	Multiple	2,000,000	54	New
2011	Kongsberg Automotive	Aerospace & Automotive	7,300,000	300	Expansion
2011	YH America	Automotive	5,140,000	93	Expansion
2012	Project Lighting	Other	2,500,000	10	Expansion
2012	Sealevel	Technology	2,500,000	5	Expansion
2013	TaylorMade Golf	Sporting Goods	13,000,000	0	Expansion

Source: Upstate SC Alliance, 2014

The County's list of the top twenty public and private employers includes nine manufacturers, one Pre-K-12 school system, one higher education institution, two health care providers, two retailers, and two local governments (Table IV-25). The list of major employers in Pickens County is topped by the State of South Carolina, with more than 4,880 employees, excluding Clemson University. The University is the County's second largest employer at more than 3,500 employees, followed by the School District of Pickens County at nearly 2,000. These three governmental employers make up approximately one-fifth of the total County employment base. The local governments of Pickens County and the City of Clemson also rank within the top 20, with a combined employment of almost 850. Health services providers Palmetto Baptist Medical Center (now Prisma Health Baptist Hospital) in Easley and Cannon Memorial Hospital (now AnMed Health Cannon) in Pickens rank sixth and sixteenth, respectively, providing more than 900 health care sector jobs. Wal-Mart and regional grocery store chain Bi-Lo are the only retail employers among the top twenty. The nine manufacturers on the list represent products that range from textiles and medical devices to capacitors and general aviation products. These nine manufacturers contribute more than 3,250 jobs to the County's employment base. Motor vehicle parts maker YH America is the leading manufacturing employer with 619 employees. Other private sector employers in the top ten include food services vendor ARAMARK Services and Contract Environmental Services, a business consulting contractor.



TABLE IV-25. TOP 20 EMPLOYERS IN PICKENS COUNTY, ALL SECTORS

Rank	Employer	Number of Employees	Employer Sector/Product
1	State of South Carolina	4,881	State Government
2	Clemson University	3,529	Higher Education
3	School District of Pickens County	1,893	Public Education
4	Contract Environmental Services	1,200	Business Consulting Services
5	ARAMARK Services	800	Food Services
6	Palmetto Baptist Medical Center	656	Healthcare
7	YH America, SC, LLC	619	Manufacturing - Vehicle Parts
8	Pickens County Government	592	Local Government
9	Wal-Mart	544	Retail - Department
10	Milliken & Co. (Pendleton Plant)	400	Manufacturing - Textiles
11	St. Jude Medical, Inc.	400	Manufacturing - Medical Devices
12	Reliable Automatic Sprinkler Co.	390	Manufacturing - Fire Sprinklers
13	Comatrol (Sauer-Danfoss Co.)	335	Manufacturing - Pumps & Motors
14	Cornell Dubilier	308	Manufacturing - Mita Capacitors
15	Shaw Industries	300	Manufacturing - Polymer & Fibers
16	Cannon Memorial Hospital	300	Healthcare
17	Bi-Lo	250	Retail - Grocery
18	City of Clemson	250	Local Government
19	Alice Manufacturing Company	250	Manufacturing - Textiles
20	Champion Aerospace	250	Manufacturing - Aviation Products

Source: Alliance Pickens, 2014

Within the City of Clemson, the employment base changes to one dominated by education, government, retail, and service sector jobs. Clemson University is considered the largest employer in the City, comprising more than 47% of the total employment base. Although not officially within the City limits, the University has a substantial impact on the City’s economy and employment that warrants inclusion on the list. The City of Clemson is the second largest employer and provides more than 3% of all jobs, followed by retail establishments that include two restaurants and two grocery chains that combined comprise nearly 5% of jobs in Clemson. Other sectors represented among the leading employers are construction, public education, and accommodations.

TABLE IV-26. TOP TEN EMPLOYERS IN THE CITY OF CLEMSON, 2013

Rank	Employer	Number of Employees	% of Total City Employ	Employer Sector/Product
1	Clemson University	4,727	47.27%	Higher Education
2	City of Clemson	312	3.12%	Local Government
3	Ingles Markets	218	2.18%	Retail - Grocery
4	Clemson Elementary School	112	1.12%	Public Education
5	Ruby Tuesday	110	1.10%	Retail - Restaurant
6	Bi-Lo	97	0.97%	Retail - Grocery
7	Pixie and Bills Restaurant	60	0.60%	Retail - Restaurant
7	Trehel Corporation	56	0.56%	Construction
9	University Inn	54	0.54%	Accommodations
10	Courtyard by Marriott	30	0.30%	Accommodations

Source: City of Clemson CAFR, 2014

## 6. COMMUTING PATTERNS

The *employment-residence (E-R) ratio* is a measure of the total number of workers working in an area, relative to the total number of workers living in that area. An E-R ratio of greater than 1.00 occurs when there are more persons working in an area than living there. The employment-residence ratio for Pickens County is 0.78 with a daytime population loss of over 9%, indicating that the County is considered to be a net exporter of labor to other counties (Table IV-27). Conversely, the City of Clemson's overall E-R ratio of 1.21 indicates that there are nearly 10% more persons working in the area than living in the area, making the City a net importer of workers. The daytime population of the City increases by nearly 1,300 persons as workers commute in from neighboring areas.

TABLE IV-27. DAYTIME POPULATION AND EMPLOYMENT RESIDENCE RATIOS  
CITY OF CLEMSON, PICKENS COUNTY AND SOUTH CAROLINA, 2010

Employment-Residence Ratio Factor	City of Clemson	Pickens County	South Carolina
Total Resident Population	13,596	117,823	4,511,428
Total workers working in area	7,354	39,571	1,957,105
Total workers living in area	6,057	50,511	1,989,319
Estimated daytime population	14,893	106,883	4,479,214
Daytime population change due to commuting	1,297	-10,940	-32,214
<i>Daytime population change due to commuting</i>	<i>9.5%</i>	<i>-9.3%</i>	<i>-0.7%</i>
Workers who lived and worked in same area	1,612	27,836	1,888,695
<i>Workers who lived and worked in same area</i>	<i>26.6%</i>	<i>55.1%</i>	<i>94.7%</i>
<b>Employment Residence (E-R) Ratio</b>	<b>1.21</b>	<b>0.78</b>	<b>0.98</b>

Source: U.S. Census Bureau, 2006-2010 American Community Survey

More recent data on worker commuting patterns is provided in Table IV-28. Of the more than 35,600 jobs in Pickens County, 46.5% are held by Pickens County residents. With an estimated 53.5% of jobs in the County held by non-residents, more than 19,072 workers from surrounding

counties travel to employers in Pickens County. Greenville County residents fill almost 14% of County jobs, while almost 13% of jobs are held by workers who live in Anderson County. Residents of neighboring Oconee County account for almost 9% of the Pickens County workforce. Workers commuting from Spartanburg County hold less than 3% of all jobs in Pickens County, with less than 6% of all County workers commuting from as far as Richland Lexington, York, Charleston, and Aiken Counties. More than 10% of workers in the County live in locations other than these counties. For Pickens County working residents who travel outside the County for work, most commute to Greenville County employers (American Community Survey, 2006-2010). Anderson is the second highest commuter destination for Pickens County workers, followed by Oconee and Spartanburg Counties. Table IV-28 lists the county of origin for workers commuting into Pickens.

**TABLE IV-28. COUNTIES WHERE PICKENS COUNTY WORKERS LIVE, 2010**

Jurisdictions	2010 Jobs Count	2010 Jobs Share
Total Jobs in Pickens County	35,639	100.0%
<b>Counties Where Pickens County Workers Live</b>		
Pickens County	16,567	46.5%
Greenville County	4,865	13.7%
Anderson County	4,497	12.6%
Oconee County	3,128	8.8%
Spartanburg County	955	2.7%
Richland County	565	1.6%
Lexington County	405	1.1%
Charleston County	404	1.1%
York County	313	0.9%
Aiken County	285	0.8%
All Other Locations	3,655	10.3%

Source: Alliance Pickens, Worker Commuting Patterns, July 2012

Among local municipalities and communities, the City of Clemson contributes the second largest jobs share of the County workforce, behind only the City of Easley. Data from the 2006-2010 American Community Survey indicates that more than 68% of Clemson working residents are employed in Pickens County and, of these, nearly one-third are employed within the City of Clemson. Nearly one-third (30.5%) of workers who live in the City travel outside of the County for employment. This is lower than the number of County resident workers who commute outside of Pickens County, but higher than the 24% of workers statewide who leave their home counties for work. Less than 1% of Clemson residents travel to work locations outside the State, compared to more than 5% of South Carolina working residents. These outgoing commuters from both the City and the County offer a potential labor pool for new and expanding industries and businesses, as additional or better opportunities are created closer to home.

The mean travel time to the workplace for Clemson residents is 17 minutes, compared to a commute of 23 minutes for both Pickens County and State residents. Well over half (54%) of Clemson residents in the workforce travel less than 15 minutes to work. Less than one-third (32%)

of all County residents and 29% of South Carolinians have such a short commute. More detailed data on worker travel times, mode of travel, and commuter data are provided in the *Transportation Element*.

## D. ECONOMIC DEVELOPMENT

Bolstered by a strong industrial base, workforce development emphasis, a seamless Pre-K-12 and higher education system, and abundant tourism assets, Pickens County is well-positioned for continued economic development growth. Pickens County offers a comparably low cost of doing business including factors such as low taxes and utility rates, as well as a generally lower cost of living. As a right-to-work state, South Carolina ranks as the nation's second least unionized state, with a rate of union membership at less than 3.5%. The unionization rate falls to only 1.6% among private manufacturers. Pickens County has no union presence.

State and local jurisdictions including the City of Clemson and Pickens County can go even further in creating a positive business climate through the offer of tax incentives that help employers hold down operating costs and realize a return-on-investment, the provision of infrastructure, the promotion of higher educational attainment levels among residents, and the availability of low to no-cost specialized workforce development and training programs. Local governments can also streamline development review and permitting processes to facilitate clear communication of expectations and regulations; ensure the consistent enforcement of codes, ordinances, and regulations; and promote the protection of existing and future business operations through sound planning for infrastructure and compatible land use.

### 1. INCENTIVES

Public investments and incentives, when part of a well-planned development strategy, can provide an attractive business climate and increase private investment. In addition to a low corporate income tax rate, the State of South Carolina and Pickens County provide multiple tax incentives to businesses to encourage economic growth (Table IV-29). Because the State does not tax real or personal property, property tax incentives are implemented in conjunction with each county. There is no State or local tax on inventories or intangibles. Among the strongest incentives available to State and local economic developers are the jobs tax credit, the fee-in-lieu of property taxes, and job development and retraining credits. The ability to offer of many of these incentives depends on the formal approval of the S.C. Department of Revenues and local city and county councils.

The State's 46 counties are ranked by the S.C. Department of Revenue each year in one of four tiers, with Tier I including the highest ranked counties and Tier IV including the lowest. Rankings are based on employment rates and per capita income. Pickens County is currently ranked among twelve counties in the second tier. This ranking is used by the State to determine the amount of jobs tax credits allocated to each county, with the larger credits going to counties with the greatest need. The 2014 jobs tax credit amount for Pickens County is \$2,750.

**TABLE IV-29. STATE AND LOCAL BUSINESS INCENTIVES AVAILABLE IN SOUTH CAROLINA**

Incentive	Description	Authority
Corporate Income Taxes	The S.C. corporate income tax rate is among the lowest in the Southeast. The State does not allow local governments to impose a corporate income tax and businesses are taxed only on the portion of income derived from in-state operations.	State
Jobs Tax Credits	Rewards new and expanding companies that create and maintain a minimum of 100 new jobs in manufacturing, processing, warehousing and distribution, research and development, agribusiness, or qualified technology intensive facility or corporate office. Credits are used against the State corporate income tax liability. Unused credits can be carried forward up to 15 years. Credit values range from \$1,500 to \$8,000 per job, depending on the county. Pickens County is classified as a Tier II County for 2014, with a credit of \$2,750.	State
Small Business Jobs Tax Credit	Created for companies in the above sectors, but that have fewer than 99 employees worldwide and will create a monthly average of 2 net new jobs. Companies get full credit for net new jobs that pay 120% of the County’s average hourly rate. For jobs paying less than 120% of the average wage rate, credits from \$750 to \$4,000 per job (or \$1,750 to \$5,000 in a multi-county industrial park) may be available.	State
Multi-County Industrial Park	Counties may also partner to form a multi-county industrial park in which a county agrees to share property taxes with a partner county. This partnership raises the value of the credits by \$1,000 per job, meaning credits from \$2,500 to \$9,000 per job may be available for qualifying companies.	State
Corporate Headquarters (HQ) Tax Credit	A 20% tax credit is available for companies that relocate or expand a corporate headquarters. Credit is based on the value of the portion of the facility dedicated to HQ operation or direct lease costs for the first five years of operation. Credit is applied against corporate income tax or license fee and can potentially eliminate corporate income taxes for as long as 10 years from the year earned. Companies must create a minimum of 40 new full-time jobs engaged in corporate HQ or research and development.	State
Job Development Credits	Allows new and expanding employers that are creating a minimum number of jobs to obtain a refund of employee withholding to use for approved business expenditures to offset the costs of locating or expanding a business. The maximum credit is \$3,250 per employee per year as determined by the South Carolina Coordinating Council for Economic Development. Companies generally can collect credits for up to 10 years on new full-time jobs with wages at or above the current county average wage.	State

Incentive	Description	Authority
Job Retraining Credits	Allows employers to obtain a refund of employee withholding to use for employee retraining for competitiveness and introduction of new technologies. Eligible businesses engaged in manufacturing, processing, or technology intensive industry can qualify for a refund of up to \$500 per full-time production or technology employee per year for retraining costs.	State
Research & Development Tax Credit	In order to reward companies for increasing research and development in a taxable year, South Carolina offers a credit equal to 5% of the taxpayer's qualified research expenses.	State
Sales Tax Exemptions	Sales tax exemptions are given for: machinery, equipment, and applicable repair parts used in the production of tangible goods; materials that become an integral part of the finished product; coal, coke, or other fuel for manufacturers, transportation companies, electric power companies, and processors; industrial electricity and other fuels used in manufacturing tangible personal property; research and development machinery and equipment; air, water and noise pollution control equipment; material handling equipment for manufacturing or distribution projects investing \$35 million or more; packaging materials; long distance telephone calls and access charges; and construction materials used to build a single manufacturing and distribution facility with a capital investment of at least \$100 million.	State
Property Tax Exemptions	South Carolina exempts three classes of property from local property taxation: all inventories (raw materials, work-in-progress, and finished goods); all intangible property; and all pollution control equipment.	State
5-Year Property Tax Abatement	Manufacturers investing \$50,000 or more and distribution or headquarters facilities investing \$50,000 or more with at least 75 jobs by the first year are entitled to a 5-year property tax abatement from county operating taxes that can yield 20-50% savings. School taxes are not included in the exemption.	State Pickens County
Infrastructure Development	Pickens County owns a <i>Class A</i> industrial park on U.S. Highway 123 with sites already served by a range of utilities.	Pickens County
Expedited Permitting	Company permits for new buildings and other improvements are processed expeditiously to allow companies to move quickly.	Pickens County
Fee-In-Lieu of Taxes (FILOT)	Companies can negotiate a fee with local governments in lieu of taxes. A FILOT allows companies making significant capital investments (\$2.5 million or greater) to negotiate lower assessment ratios and stabilize millage rates up to 30 years. The FILOT is offered in place of the 5-year abatement.	Pickens County

Source: Business Incentives, S.C. Department of Commerce; Alliance Pickens, 2014

In addition to the incentives listed, the wide range of tax credits available to employers includes credits for hiring displaced workers, conservation and habitat management credits, credits for port volume increases, childcare credits, textile mill and abandoned retail sites revitalization credits, minority business credit, recycling facility credit, and a credit for energy conservation and

renewable energy improvements. Another tax credit program available in the Upstate region is the *South Carolina Free Trade Zone Number 38*. This Free Trade Zone (FTZ) is managed by the South Carolina Ports Authority to encourage development along the I-85 corridor. Numerous large employers engaged in international trade, such as BMW and Adidas, have taken advantage of the FTZ 38 incentives. FTZ 38 is a great financial incentive used by economic developers throughout the region when recruiting international companies.

Access to capital is another requisite for economic development. Although most business lending is leveraged through the private sector banking system, government can provide gap financing programs and loan guarantee programs, as well as facilitate angel and venture capital networks that pair private investors with employers. Together with incentives, these tools can help communities take a proactive role in fostering economic investment, job creation, and desirable growth.

## **2. WORKFORCE DEVELOPMENT**

Local officials in communities throughout the Palmetto State consistently cite workforce development as the leading challenge in development efforts. The availability of a trained and highly skilled workforce is a major consideration in business location decisions for most employers. The emphasis of State and regional economic recruitment efforts to attract higher-wage, higher-tech employers also requires a better-educated and more technologically proficient workforce. This shift makes advanced education a requisite to achieving higher incomes and an improved quality of life. For residents who are trying to pull out of the cycle of dependence, finding a job with adequate earnings to support a family is a daunting challenge. Without advanced training, residents with minimal education will increasingly be restricted to less secure, minimum wage jobs with little opportunity for advancement.

The *Targeted Industry Study for Upstate SC* emphasizes that “the entire spectrum of education, from K-12 through college graduate programs and beyond, should be viewed with the same amount of importance.” There are a myriad of employment and training resources offered by State and local agencies and institutions in Pickens County that include the Pre-K-12 school system, career awareness and mentoring initiatives, the technical college system, adult education programs, a public senior research university, a private four-year university, specialized workforce training programs, and comprehensive job assessment and placement resources. Access to these training resources – coupled with quality day care, transportation, and new technologies for flexible learning alternatives – have significantly reduced the traditional barriers of time and place and contributed to the educational and professional success of Pickens County residents.

South Carolina’s Pre-K-12 school systems play an increasingly important and active role in the career preparation and choice of students under the State’s *Education and Economic Development Act* (EEDA). The Act mandated a shift toward expanding the exposure of middle and high school students to career information and opportunities, offering hands-on, career-oriented learning experiences, and creating an early educational pipeline between Pre-K-12 schools,



higher education, and the workplace. County middle school students receive early exposure to high-growth employment fields as they now face the required selection of a “career cluster” for high school. This pivotal decision required of each 8<sup>th</sup> grader greatly impacts course selection, the assignment of internships and job shadowing, and other aspects of their academic experience through high school graduation. Each high school student must complete a *Personal Pathways to Success* guide and an *Individual Graduation Plan*.

The *School District of Pickens County* (SPDC) is recognized as one of the leading school systems in South Carolina. As previously detailed in *Section C* of this Element, the SDPC is the single K-12 school system for the County, serving 16,000 students in the 2014-2015 school year. To encourage greater student interest and entry into high demand fields, the District has launched several *Science, Technology, Engineering and Mathematics* (STEM) programs in the schools in collaboration with public and private interest. The local non-profit *Manufacturers Caring for Pickens County* is partnering with the school system to pilot the use of 3D printing technology in all five middle schools. Local industries have donated the printers that will be used to promote engineering education. The District also introduced the *Glider Challenge* project for eighth graders and the *Sailboat Challenge* for second graders. In conjunction with NASA and Clemson University, local teachers and students worked with a NASA astronaut on several STEM initiatives. Afterschool STEM-focused clubs are active from elementary to high schools.

Local *Daniel High School* was recently named by *U.S. News and World Report* as the top-ranked *Traditional High School* in the State. The acclaimed *Pickens County Career and Technology Center* is a consolidated program of the four County high schools and Tri-County Technical College created to prepare students for 21<sup>st</sup> century manufacturing jobs. The Center has served the students of Pickens County for more than four decades and is one of the oldest career centers in the State. The Career and Technology Center launched the first *School-to-Registered-Apprenticeship* program in the Upstate and offers career training, job shadowing, and work-based learning opportunities. All these programs support the efforts of local economic developers and education providers to develop a *Scholar Technician* workforce with the technical and soft skills required in an advanced manufacturing environment.

Pickens County is also home to three post-secondary institutions – Clemson University, Southern Wesleyan University, and Tri-County Technical College. *Clemson University* is a *U.S. News and World Report Top 25 Public Research Institution* and one of the top 100 best college investments by *Kiplinger* magazine. With an enrollment of 16,931 undergraduate students and 4,351 graduate students, the public land grant institution offers more than 80 undergraduate majors, 110 graduate degree programs, and 44 areas of doctoral study. As listed in Table IV-30, Clemson’s research priorities support the growth of high-paying, knowledge-based industries with an emphasis on automotive and transportation technology, biotechnology and biomedical services, advanced materials, general education, leadership and entrepreneurship, information and communication technology, family and community living, and sustainable environment.



TABLE IV-30. KEY CLEMSON UNIVERSITY SUPPORT INITIATIVES FOR ECONOMIC DEVELOPMENT

Activity	Significance
Clemson University International Center for Automotive Research (CU-ICAR)	<ul style="list-style-type: none"> <li>• 250-acre campus with advanced research labs in Automotive Design and Development, Automotive Manufacturing, and Systems Integration</li> <li>• Available for use in commercial partnerships with private industry and competitively positioned to attract federally funded R&amp;D projects</li> <li>• Houses Clemson’s automotive engineering graduate program in the 90,000 ft<sup>2</sup> Carroll A. Campbell Jr. Graduate Engineering Center</li> <li>• Computational Center for Mobility Systems (CCMS) is home to some of the most powerful automotive computing infrastructure in the world</li> </ul>
Center for Optical Materials Science and Engineering Technologies (COMSET)	<ul style="list-style-type: none"> <li>• Research and development for new optical materials and photonics</li> <li>• Member of six-university Carolina Photonics Consortium</li> <li>• Makes Clemson one of only four universities in the world with capacity to manufacture optical fiber</li> </ul>
Clemson University Advanced Materials Center (CU-AMC)	<ul style="list-style-type: none"> <li>• Houses 111,000 ft<sup>2</sup> state of the art Advanced Materials Research Lab</li> <li>• Houses a world class Electron Microscope Facility that attracts clients from numerous industries</li> </ul>
Arthur M. Spiro Center for Entrepreneurial Leadership	<ul style="list-style-type: none"> <li>• Leverages intellectual capital into economic capital</li> <li>• Improves the transfer of academic innovations to new and established firms and broadens the base of entrepreneurial resources</li> </ul>
Center for Advanced Engineering Fibers and Films (CAEFF)	<ul style="list-style-type: none"> <li>• Specializes in research and development associated with innovative fiber and film companies</li> </ul>
Institute for Advanced Materials and Manufacturing (CIAM2)	<ul style="list-style-type: none"> <li>• Couples research with rapid, efficient development of new products and processes to support global industrial competitiveness</li> </ul>
Advanced Fiber-based Materials Center of Economic Excellence	<ul style="list-style-type: none"> <li>• Develops advanced synthetic polymers, including wool, cotton, and silk</li> <li>• Focuses on composite materials in metals, ceramics, and polymers for regional applications in Automotive, Aerospace, and Bioscience</li> </ul>
Bioengineering Translational Research Program (CU-BTR)	<ul style="list-style-type: none"> <li>• Houses the Center for Biomaterials for Tissue Regeneration, Center for Vascular Disease Diagnosis &amp; Management, the T.B. Pace Orthopedic Research Laboratory, and the S.C. Medical Technology Program</li> </ul>
Clemson University Genomics Institute (CUGI)	<ul style="list-style-type: none"> <li>• Develops and distributes genomic and bioinformatic tools and services in the life sciences industry</li> </ul>
Center for Bioelectronics, Biosensors and Biochips (C3B)	<ul style="list-style-type: none"> <li>• Develops research and leadership in bioelectronics, biosensors, and biochips</li> </ul>
Institute for Biological Interfaces of Engineering (IBIOE)	<ul style="list-style-type: none"> <li>• Develops biomaterials technology and produces for disease management</li> </ul>

Source: S.C. Appalachian Region CEDS, 2013-2017

Tri-County Technical College (TCTC) is one of 16 public, two-year colleges that comprise the SC Technical Education System. The College serves a three-county service area from its main campus in nearby Pendleton, as well as a satellite campus in Easley. TCTC has an enrollment of more than 3,600 students. TCTC operates under an open-door admissions mandate, providing a key entry

point into higher education for many low-income, first generation, disabled, and other non-traditional student populations. TCTC offers 65 programs of study ranging from Engineering Science and Machine Tool to Criminal Justice Technology and Nursing. Programs can lead to associate degrees, diplomas, and certificates designed for direct job placement, as well as associate degrees designed for transfer to four-year colleges and universities.

The College partners with several four-year institutions for transfer programs, including Clemson University, the University of South Carolina, and Lander University. Through the *Bridge to Clemson* program, TCTC and Clemson offer an innovative program that blends the traditional academic experience at Tri-County with the social and cultural experiences of being at Clemson University. Potential participants are identified by Clemson among applicants who narrowly miss admission to the University. Bridge students must earn a minimum number of transfer credits at TCTC during a Bridge year, while maintaining a 2.5 GPA. Successful students transition to Clemson for their sophomore year. Program participants are housed in a Clemson University complex with access to student life programs and services at both Tri-County and Clemson.

TCTC also delivers short-term continuing education courses, professional and career advancement programs, and customized training for business, industry, health care, and government agencies, as well as noncredit courses for personal enrichment. Through its *Center for Workforce Excellence*, the College offers an array of business and industry training programs that include team building, supervisory development, quality, safety, maintenance, interpersonal and technical skills, and other needs identified by area employers that have included mechatronics and industrial maintenance. TCTC is one of three Assessment Centers for the *Manufacturing Skill Standards Council* (MSSC) in the Appalachian region. The Pendleton Center trains and certifies production and materials handling workers as Certified Production Technicians and Certified Logistics Technicians.

*Southern Wesleyan University* is a four-year, liberal arts institution located in Central with an enrollment of approximately 2,200 students. Affiliated with the Wesleyan denomination, the Christ-centered institution offers a core curriculum in liberal arts to prepare students for graduate study and fields such as religion, education, music, business, medicine, law, and related professions. The University offers an Adult and Graduate Studies program using accelerated learning systems for working adults that combine efficient curriculum plans and convenient class scheduling.

In addition to the formal Pre-K-12 and higher education learning opportunities, the State also offers targeted training programs specifically tailored to the workforce development needs of business and industry. The internationally respected *readySC™* is a statewide training resource for new and expanding companies in South Carolina. Under the oversight of the S.C. Board for Technical and Comprehensive Education, *readySC™* offers tailored employee recruitment, screening, and training for these businesses at little or no cost to the company. Since its launch in the early 1960s, more than 266,800 workers have been trained for over 2,000 companies through this successful workforce development model. Short-term training is customized to meet the specific needs of employers and is conducted on-site as needed. In Pickens County, the

*readySC*<sup>TM</sup> program is accessed through the local campuses of Tri-County Technical College, with training that ranges from injection molding to biotechnology.

The South Carolina Technical College System and the S.C. Department of Commerce launched the *Apprenticeship Carolina*<sup>TM</sup> program in 2007 as a statewide, coordinated approach to the promotion and support of registered occupational apprenticeships. The program provides supervised on-the-job training and related technical instruction. Although apprenticeships in all registered occupations are supported, the State program focuses on the six areas of critical interest to South Carolina – construction technologies, energy, health care, information technology, advanced manufacturing, transportation and logistics, and tourism and services industries. Companies taking advantage of this program qualify for an income tax credit of \$1,000 for each registered apprentice employed for at least seven months. Regional workforce investment funds can also be leveraged for eligible expenditures including instruction, training, and wages. Trainees can also use lottery tuition assistance for apprenticeship programs. More than 10,400 South Carolinians have completed the program to date.

South Carolina is also divided into twelve *Workforce Investment Areas (WIA)* to meet the workforce development needs of employers and residents. Pickens County is part of the three-county *Worklinks* WIA region for workforce development programs. The WIA region is anchored by comprehensive *SC Works Centers* that offer an array of human services and employment related programs. The Centers serve customers in need of employment, job training, and career advancement services and also post job openings for local employers seeking potential job candidates. Center services include workshops, job fairs, employee screening, Work Keys testing, career assessment, computer classes, and individualized assistance to persons with special needs. Services are offered in partnership with the S.C. Department of Social Services, the S.C. Department of Employment and Workforce, S.C. Vocational Rehabilitation, Tri-County Technical College, and Pickens County Adult Education. Clemson area residents can access the SC Works Center located in the City of Clemson on Tiger Boulevard.

*WorkReadySC* is an employee credentialing program based on the *WorkKeys* assessment tool that focuses on core job skills such as communication, interpersonal skills, and problem-solving. The assessment is used in creating job profiles, in measuring skills levels of job applicants, and in identifying skill gaps of the existing and potential workforce. Participants must take and pass assessments in applied math, reading or information, and locating information in order to earn the nationally recognized *WorkReadySC Career Readiness Certificate*.

An additional state and regional workforce development resource is the *Work SC* database for residents seeking employment and online training. The program is managed by the S.C. State Library System.

The educational attainment of residents and the availability of workforce development and training programs will become more important as the State continues to focus its economic development strategy around target industries. Economic clusters are defined and shaped

around aggregations and concentrations of employers within a geographic region that have similar products, suppliers, and workforce skill requirements.

### **3. INFRASTRUCTURE AND UTILITIES**

As detailed in the *Community Facilities Element*, public investment in physical infrastructure and essential services – roads, water and sewer, stormwater drainage, utilities, recreation, education, and public safety – comprises a substantial share of public expenditures. Infrastructure, community facilities, and support services are in large part provided by local government and funded through taxes, fees, and State support. These investments significantly influence and assist economic development efforts. The location, timing and pace of new infrastructure impact the ability of Pickens County and the City of Clemson to service new and existing employers. To maximize the economic benefit of costly infrastructure investments, both the County and the City must develop and maintain a consistent and coordinated process for planning and prioritization of capital facilities and infrastructure needs. These infrastructure resources are described in greater detail in the *City of Clemson Community Facilities, Transportation, and Priority Investment Elements*.

Industrial and commercial development is largely dependent on available water and sewer service. Industrial recruitment generally centers on areas where water and sewer are either already available or can be extended with reasonable expense. Conversely, areas without water and sewer service are not attractive to new industrial and commercial development. Along with ready access to major transportation routes, the availability of water and sewer is a major catalyst for economic development.

Many businesses and industries require the reliability and access to water that only a public utility can provide. The City of Clemson owns and operates a public water system, providing water service to approximately 14,650 customers within its service boundary. The City of Clemson's water supply is obtained from Lake Hartwell through the Anderson Regional Joint Water System (ARJWS) and is converted to potable water at the Lake Hartwell Water Treatment Plant. The City's water distribution system includes two 500,000-gallon water elevated storage tanks and approximately 113 miles of transmission and distribution lines. The ARJWS recently completed a treatment plant expansion that increased treated water production from 2.02 million gallons per day (MGD) to 4.76 MGD. The expansion is expected to sustain system growth for the next 15 years.

The City of Clemson is served by two wastewater treatment facilities, with approximately 105 miles of gravity sewer, nine miles of force main sewer lines, and 16 wastewater pump stations with flow capacities ranging from 1,200 gallons per minute (GPM) to 50 GPM. The City's Cochran Road Plant is a 1.15 MGD extended aeration plant and currently has an average daily flow of 820,000 gallons per day (GPD). The Plant discharges treated wastewater into Lake Hartwell. In 2016 the City completed a land swap with Clemson University to acquire five additional acres adjacent to the Cochran Road Plant site that will enable the facility to expand to a capacity of 2.0 MGD by Spring of 2021. The Pendleton-Clemson Wastewater Treatment Plant in Pendleton is a

2.0 MGD facility that is jointly owned by the City of Clemson and the Town of Pendleton. The Plant has an average daily flow of 1.092 MGD and discharges treated wastewater into Eighteen Mile Creek. A preliminary engineering report has been completed for a project that will increase the capacity of the Pendleton-Clemson plant to 3.0 MGD to assure adequate capacity for the next twenty years.

Access to large capacity electric service and other utilities, such as natural gas and telecommunications, is essential for most new and expanding industrial, commercial, and institutional employers. Local utilities can also be mobilized in some cases to assist in developing incentive packages for new and expanding industries. Duke Energy provides electricity in the Clemson area, while the Fort Hill Natural Gas Authority (FHNGA) is the exclusive provider of natural gas service within the City of Clemson and the surrounding service area of Oconee and Pickens Counties and portions of Anderson County. The City of Clemson's Public Works Department provides solid waste collection and disposal service to residences and businesses within the City. All collected refuse is taken to the Pickens County Landfill, located off U.S. Highway 178 between the Cities of Liberty and Pickens.

Telecommunications technology has opened new economic opportunities for businesses to compete beyond the regional and state levels in national and international markets. Traditional telephone service is provided to Clemson residents by AT&T, Verizon, Vonage, Northland Communications, and Charter Communications. Mobile wireless telephone and data services are available in the area from multiple providers including AT&T, Sprint, T-Mobile, and Verizon Wireless. High-speed internet service is available within the City of Clemson from a number of providers, including AT&T, Comcast, Charter Cable and Internet, Hughes Net, Dish, Time Warner, Cox Communications, and CenturyLink. Wireless internet technology (WI-FI) is widely available in the City at many businesses, restaurants, hotels, and housing developments, as well as the University. In addition, the City of Clemson's Information Technology Department is providing wireless providers with information on possible locations on City properties for the development of a distributed antenna system, which could deliver greater service options for City residents and employers, reduce costs for municipal agencies, and increase the overall bandwidth available in the City. Increases in the strength of the wireless network will facilitate greater connectivity of service providers. There is also potential for local partnerships and facility sharing among public and private institutions in the Clemson area, with existing teleconferencing and distance learning facilities in operation at Clemson University and the Pendleton campus of Tri-County Technical College.

#### **4. TRANSPORTATION**

In today's global economy, commercial transportation is critical to a region's potential for business and industrial development. Time sensitive transportation services are increasingly important to gaining a competitive advantage in manufacturing and service-based industries. Although size and space requirements for new businesses and industry can vary widely among employer types and sectors, an accessible transportation infrastructure that provides easy access to materials, supplies, and markets is a common industry need. Depending on the specific needs

of the employer, this infrastructure network can include interstates and highways, aviation facilities, rail service, and ports. Convenient and efficient connectivity to areas nationwide and overseas is attractive to businesses and industries and is therefore an incentive for economic development and also contributes to the quality of life for area residents.

Its combination of interstate frontage along *Interstates 85* and *26* and its proximity to major U.S. airports and seaports (Charleston and Savannah) make the Upstate region a logistically cost-effective location for regional, national, and international companies. The local road networks of both Pickens County and the City of Clemson provides easy access to neighboring cities and the region. The City is linked to the City of Anderson and I-85 by U.S. Highways 76 and 123. U.S. Highway 123 connects Clemson to the Cities of Easley and Greenville to the east and the City of Seneca to the west. These transportation corridors open employment and shopping opportunities to residents and provide the region's labor force better access to employers.

Rail service is a key asset for manufacturers that require bulk raw materials and/or ship out finished products, offering a more cost-effective option for sending and receiving large or heavy items. Rail service for the Clemson area is provided by *Norfolk Southern Railway*. The rail line travels through the northern area of the City above U.S. Highway 123. A second rail line to the south and outside the City limits is also owned by Norfolk Southern. This line functions as a freight line for the Upstate manufacturing community.

The *South Carolina Inland Port* opened in October 2013, extending the Port of Charleston's reach 212 miles inland to the Upstate. Providing shippers with access to more than 95 million consumers within a one-day drive, the inland port boosts efficiency for international freight movements between the Port of Charleston and companies located across the Southeast. The port is the product of a partnership between the S.C. Ports Authority and Norfolk Southern. Additional port service for Pickens County and Clemson area businesses is available through three South Carolina seaports at terminals in Charleston, Georgetown, and Port Royal. Primary port service for Pickens County businesses is available less than four hours southeast through the *Port of Charleston* – one of the busiest container ports on the East coast.

The immediate Clemson area is served by four aviation facilities. *Greenville-Spartanburg International Airport* (GSP), located 45 miles away, provides business access to large cargo and commercial facilities and regularly scheduled commercial airline services. GSP serves 1.75 million passengers through six major airlines that offer 53 non-stop daily departures to 18 major cities and 22 airports across the United States. The airport continues to expand direct flight options, physical size, and capacity. General aviation services are available at the *Pickens County Airport*, located a few miles northeast; *Anderson County Airport*, located 18 miles away; and the *Oconee County Airport*, located within a mile of the City's western boundary.

Additional detail on the infrastructure, utilities, and transportation resources in Pickens County and the City of Clemson is presented in the *Community Facilities, Priority Investment, and Transportation Elements*.



### 5. INDUSTRIAL AND COMMERCIAL DEVELOPMENT SITES

Adequate land area and suitable sites are necessary to provide space to accommodate new and expanding business and industry. Advance planning is needed to ensure the long-term availability of sites that minimize development constraints and potential conflict with surrounding uses. The identification and inclusion of commercial and industrial land in land use planning and zoning becomes more pressing as residential, institutional, and commercial growth escalates. Although there is no land allocated for industrial use in the City of Clemson, Pickens County has developed a fully equipped industrial park on U.S. Highway 123 within an easy commute for Clemson residents. The *Pickens County Commerce Park* is a 310-acre *Class A* industrial park with 6,000 feet of frontage and a dedicated interchange on the four-lane U.S. Highway 123 near the Town of Liberty. The Park offers a full utility infrastructure that includes two electricity providers, a dedicated fiber switch, ample wastewater capacity, and a one-million-gallon water storage tank dedicated for Commerce Park use. The Park is home to two of the County's leading employers, St. Jude Medical and Taylormade.

Additional acreage is slated for industrial development in nearby Central, less than six miles from Clemson University and Downtown Clemson. The 516-acre *Redbud Ridge* parcel on U.S. Highway 123 is being marketed by Alliance Pickens. The site is bordered on the northwest by Eighteen Mile Creek.

Sensible growth initiatives encourage the development of land closer to existing urban development, provide incentives for infill and the redevelopment of previously developed areas, and avoid encroachment of new development into areas that lack the necessary public facilities, services, and infrastructure. Significant vacant structures can range from former shopping malls and strip commercial centers to big box retail, abandoned mills, multi-family housing, government buildings, and old schools. Often referred to as *greyfields*, these properties generally consist of a large structure with significant land area. These sites represent infill opportunities that do not require the expansion of new infrastructure and are convenient to existing transportation networks and housing markets. The revitalization of existing built properties and the infill of new development on vacant lands within developed areas can produce significant economic benefits and maximize existing infrastructure investments.

Vacant sites also offer an opportunity for local governments to recycle often highly visible, blighted properties into sources of tax revenue. Re-use often requires local governments to be creative and flexible in zoning and development guidelines. Marketing of such sites, coupled with coordination among property owners, economic development officials, lenders, and local decision-makers is also necessary. While much of the land in the City of Clemson is already developed, there are unique opportunities to develop on brownfield and infill sites, along with a few undeveloped greenfield sites. There are also redevelopment areas that may be suitable for specific types and densities of new development. Areas identified as having the potential for development and the proposed land use recommendations for those developments are discussed in greater detail in the Land Use Element.



The City of Clemson has several sites that are in need of physical and economic enhancement, as well as a few larger parcels of vacant land that offer opportunities for master planning to ensure quality development. As detailed in the *Land Use Element*, less than 634 acres (16%) of the land area in the City of Clemson is vacant. Few of the undeveloped parcels in the City are of significant size. Only 18 properties are larger than five acres and several of those properties are land-locked with inadequate access for development. Many of the undeveloped properties also have topographical limitations related to slope and/or flood plain.

The most significant opportunity for vacant lands is presented by the *Pacolet-Milliken tract* that is located in the southern section of the City, off U.S. Highway 76 and Old Stone Church Road. The land consists of more than 380 acres that are currently in timber and subject to periodic harvesting. Well over half of the parcel (230 acres) lies within the City limits and represents the largest vacant property remaining in the City of Clemson. Pacolet Milliken Enterprises partnered with the City of Clemson and the Town of Pendleton to develop a master plan for the entire tract, which stretches into unincorporated Anderson County and the Town of Pendleton. Planning efforts were completed in 2016 with the adoption of a Planned Development ordinance. The tract presents a rare opportunity for the City to add a mix of appropriately 1,600 residential units and 270,000 square feet of commercial uses that will serve the needs of the community while retaining the character of the surrounding area.

There are a few additional parcels that offer development potential. A large tract located on the northern side of Pendleton Road behind Mac's Drive-in is currently in agricultural use for timber. However, much of the property is also in one of the City's largest flood plains. Four vacant properties, ranging in size from 11 to 30 acres, are located in the eastern area of the City along S.C. Highway 93 and U.S. Highway 123. A 15-acre tract near U.S. Highway 76 in the southern area of the City is also undeveloped. These properties and their development constraints are detailed in the *Land Use Element*.

## **6. ENVIRONMENTAL CONSIDERATIONS**

The preservation of natural and environmental assets is an aspect of sound economic development that cannot be overlooked. Clean air and water are essential to a desirable quality of life and public health in the City of Clemson. Increased urbanization in the nearby Upstate metropolitan areas will have future impacts on the air quality in Pickens County and the City of Clemson. Air quality affects the public health, weather, quality of life, and economic potential of a community. Health and economic effects of air pollution can vary depending on the concentration level, duration, and the pollutant. Specific environmental effects of air pollution include damage to vegetation and crops, increased corrosion of metals, and deterioration of stone and paint on buildings and vehicles. Air quality problems can ultimately impede the recruitment of new industries and businesses to the area, resulting in reduced investment and employment opportunities. As part of the larger Upstate region, it is important that local leaders continue to analyze and monitor the factors related to air quality and develop local solutions that ensure the City's economic health and potential.

The City of Clemson has an abundance of surface water that includes Lake Hartwell and numerous creeks and streams. These resources also provide a critical natural habitat for countless numbers of plants and animals. The City of Clemson has approximately 6.5 miles of shoreline along Lake Hartwell, one of the Southeast's largest and most popular public recreation lakes. Demand for water from the Savannah River Basin is projected to increase drastically as communities in both Upstate South Carolina and Northeast Georgia (including the Atlanta metro area) seek additional sources to support their population and economic growth. Equitable distribution and use of water from the Lake is likely to turn into a political battle in the coming decade.

Not only does the health and safety of residents and employers depend on the quality of the water supply and recreational waters, the quality of these water resources is integral to future community and regional development efforts. Increased urbanization and a growing population can contribute to rising levels of point source and non-point source pollution. Sustained growth will place even greater demand on the water supply and elevate the protection of water resources as a long-term priority. In response, the City added a Stormwater Department to monitor and enforce water quality.

Energy conservation considerations can boost the bottom line for local businesses and industries and ultimately keep more dollars circulating in the local economy. Energy efficiency influences all aspects of the local economy, and any balanced discussion of energy use and conservation must include the economic sector, especially industrial and commercial interests, as well as large-scale institutional uses. Both direct and indirect impacts of energy investments affect a community's economic health. Direct costs to business and industry are easily measured through utility bill payments, equipment purchases, and new construction. The typical utility bill payment exits the local economy, leaving minimal lingering impact. However, investments in energy conservation measures by businesses, institutions, and industry can leverage community economic growth as local construction firms are used for facility modification and equipment installation and upgrades; when new, energy-efficient equipment is purchased from local vendors; and when energy savings increase an employer's productivity and profitability, resulting in business expansion and the addition of new jobs for local residents. In addition, strategies such as concentration of development, including employment centers and commercial services, reduces the number of trips and the need for infrastructure expansion, resulting in savings for individuals and local service providers.

#### **7. ECONOMIC DEVELOPMENT FOCUS AREAS**

Over the last decade, South Carolina has increasingly shaped its economic development strategy around target industries. Potential clusters, targets, and specialty sectors have been extensively identified and mapped in several State and regional studies. These identified targets are being used to identify areas for collaboration across jurisdictional boundaries that combine public and private investment to promote growth in a region. The State has pursued a long-term economic strategy that aims to foster growth and raise the State's per capita income to the national average. In addition to strengthening education and workforce development initiatives,

statewide economic growth potential has been identified in the aerospace, alternative energy, automotive, biotechnology and pharmaceuticals, distribution, food processing, forestry and wood products, plastics and chemicals, and recreation sectors.

In the ten-county Upstate SC Alliance region that includes Pickens County, five key regional growth opportunities have been identified following a Target Industry Study. The five target industries of the Upstate SC Alliance region are Advanced Materials, Biosciences, Automotive, Energy, and Aerospace.

- Subsectors of the Advanced Materials cluster include Metal Working and Fabrication; Optoelectronics and Photonics; Advanced Textiles; and Plastics. Currently an estimated 60,000 employees throughout the Upstate region are working in this sector.
- The Automotive cluster has become a regional strength, attracting major industry leaders such as BMW and Michelin, as well as numerous smaller suppliers. Over the last decade, automotive related employment rose by more than 3% in South Carolina, in sharp contrast to a 22% decline nationally.
- The Biosciences cluster in the Upstate centers on biomaterials and medical devices. The Upstate region was identified in a 2007 study as one of the top emerging biomedical device clusters in the nation (*S.C. Appalachian CEDS, 2013-2017*).
- Regional subsectors in Energy include nuclear and renewable energy.
- The Aerospace industry offers collaboration opportunities with the Advanced Materials and Energy clusters. More than 50 aviation and aerospace-related companies are located in the Upstate region.

At the County level, Alliance Pickens seeks to create a vibrant economy by focusing on four related industry targets in the Automotive, Advanced Manufacturing, Plastics and Metal Working, and Biotech and Pharmaceutical Research and Development sectors. The County has also pursued a niche in cultivating a supportive business environment for small, privately held companies to thrive. A brief assessment of each of these sectors follows in table IV-31, along with a summary of assets and potential for growth.

**TABLE IV-31. PICKENS COUNTY TARGET INDUSTRY**

Industry	Description
Automotive	<ul style="list-style-type: none"> <li>▪ Located in the center of the Southeast’s automotive hub, Pickens County and the surrounding region have a thriving and expanding automotive economy. Seeded by major area plant locations by Michelin and BMW, the area has attracted more than 100 automotive suppliers. One of the area's largest automotive suppliers is YH America in Easley, a supplier of power steering assemblies.</li> <li>▪ The Clemson University Center for Automotive Research has greatly increased the automotive research and development capacity in the region. This unique center is a tremendous asset to the local automotive industry and is a major reason Clemson University is recognized among the Top 10 Automotive Colleges and Universities in the U.S.</li> </ul>
Plastics and Metal Working	<ul style="list-style-type: none"> <li>▪ In excess of 245 plastics manufacturers have facilities in the region. The leading plastics manufacturer in Pickens County is Wilbert Plastics Services, a thermoplastic injection molder of a variety of products from automotive components to power tools.</li> <li>▪ In Pickens County alone, there are more than 1140 metal workers in precision machining, stamping, die casting, plating, and CNC applications. Sauer-Danfoss, a manufacturer of precision-machined hydraulic control valves, is located in Easley.</li> </ul>
Advanced Manufacturing	<ul style="list-style-type: none"> <li>▪ Pickens County is home to a diverse community of advanced manufacturers ranging from St. Jude Medical, a worldwide leader in the production of medical devices, to JR Automation, a firm that utilizes robotics and other automation technology to meet the unique manufacturing needs of their customers.</li> <li>▪ Clemson University is a driving force in the area of advanced manufacturing.</li> </ul>
Biotech/ Pharmaceutical and Research and Development	<ul style="list-style-type: none"> <li>▪ Clemson University has been the catalyst of the local and regional focus on these sectors. Clemson is committed to top tier research and programs for developing new products. From discovering the molecular connection between dietary fat and breast cancer to devising longer lasting knee implants, Clemson exhibits its ability and desire to assist primary research and product development.</li> </ul>

Source: Market Segments, Alliance Pickens, 2014

The City of Clemson is poised to benefit from the successful targeting of these industry segments by regional and County economic developers. Although the City has no land designated for industrial land use, the overall rise in educational attainment and earnings will improve the quality of life countywide. The City has additional economic development opportunities related to tourism, commercial and mixed-use development, Downtown and infill development, small business development, and University research and development.

The recreation and tourism sector plays a critical role as a provider of jobs and income in many South Carolina communities, both large and small. The economic impact of tourism in South Carolina is significant, supporting one in ten jobs in the State. The 2010 fiscal impact of tourism

was \$1.2 billion in State and local tax revenues. Tourism employment includes numerous sectors such as public and auto transportation, lodging, food service, entertainment and recreation, and general retail. Tourism-related jobs offer opportunities for residents with diverse skills and educational backgrounds, ranging from first-time job seekers to senior citizens and from part-time work to alternative work schedules. In addition to creating jobs, tourism provides new small business opportunities, while enabling a community to capitalize on natural, recreational, and historic assets and make these resources a key element in the local economy.

As outlined in the Cultural and Natural Resources Elements, the Clemson area has a wealth of natural and cultural sites that range from historic homes and gardens to one of the most popular recreational lakes in the southeast. Tourism development efforts should seek to capture a greater share of retail and tourist dollars by supporting existing tourist venues as well as providing opportunities to establish new tourist-related commercial operations. County and City leaders should seek to raise per capita tourism expenditures; improve the visitor mix; broaden the tourism product; and leverage tourism assets to attract and launch new businesses. Success in the tourism sector should be measured more by spending per visitor than merely by the number of visitors.

More than half of all private sector employees work for small businesses. Small business development can provide alternative employment for residents impacted by downsizings and plant closures. The potential impact of small business development can be considerable, especially when considering that small businesses with less than 100 employees continue to employ the majority of workers in South Carolina. A 2011 study by the Darla Moore School Business at the University of South Carolina revealed that smaller businesses with 20 or less employees comprise only 26% of the private firms in the State but are responsible for more than half of new employment growth. Such firms are well-positioned to serve the larger corporations recruited to the Upstate region that open new opportunities for small business start-ups. A distinct advantage of smaller firms is that they are locally owned and typically employ residents within the local community, do business with other community-based firms, and reinvest profits within the community. Such firms also tend to locate in existing facilities and utilize existing infrastructure, resulting in less capital investment on behalf of the local government to accommodate new business. Small business development strategies should be an integral part of local economic development plans. Entrepreneurial opportunities in the heritage and nature-based tourism, downtown retail, personal services, and specialty agriculture sectors are particularly ripe for cultivation.

The research and development activities of Clemson University also offer potential economic development opportunities for the City. As listed in Table IV-30, the University has proactively pursued research focus areas that are supported by specialized centers and institutes both on-campus and in communities throughout the Upstate. Many of the University's valuable research initiatives in support of economic development have been located in the Greenville, Charleston, or Columbia areas rather than the City of Clemson. Scale-appropriate research facilities would provide jobs that are a good fit to the Clemson community. The City should work closely with the University to identify future opportunities and appropriate locations for new initiatives.

The *2013-2017 Comprehensive Economic Development Strategy for the S.C. Appalachian Region* notes the important role that downtowns have played in the development of Upstate communities. The Plan promotes these historic central business districts for their “historic, cultural, aesthetically pleasing shopping appeal that is in demand throughout the region.” The regional economic development strategy that supports recruiting efforts for target industries, also elevates the importance of revitalizing traditional downtowns. As detailed in the *Land Use Element*, the core of Downtown Clemson includes intense commercial and mixed-use development. Potential options to strengthen this area that forms the heart of Clemson include the addition of cafes and sidewalk activities, public art, festivals, events, and other activities that enhance the character of the City.

Downtown Clemson is also the physical bridge of the Town-Gown Connection. Opportunities to enhance that physical and visual connection are found in strengthening pedestrian linkages to campus and through efforts to preserve the architectural character of Downtown Clemson in scale and materials. A key land use challenge facing the City is the need to diversify the local retail and service sector. As the population grows, the need for greater options to serve the daily needs of the community will likewise grow. Mixed-use development and targeted commercial infill should be encouraged along the main corridors and in the Downtown.

#### **8. ORGANIZATIONS AND PARTNERSHIPS**

The involvement of public and private organizations as economic development allies in the development process can support a sound economic growth strategy that addresses community needs and supports the City’s economic vision. These allies include municipal, State, and County organizations involved in planning, finance, education and training, construction, utilities, and engineering, as well as related regional and State economic resources. A partnership approach to economic development will continue to fuel the City of Clemson’s and Pickens County’s creation of a diverse economic base that provides a quality living environment and promotes sustainable economic and community development strategies.

This partnership approach to economic development has anchored Pickens County’s economic success to date. Economic development and industrial recruitment efforts for Pickens County are led by *Alliance Pickens*. The Alliance is a public/private economic development organization with the primary mission to attract, retain and grow the number of jobs for residents and increase the tax base in Pickens County. The Alliance represents the County as the lead entity in local economic recruitment efforts and is the official point of contact for the S.C. Department of Commerce.

The *City of Clemson* and *Pickens County* support economic development efforts by providing key infrastructure and public services. The County is also the source of key financial incentives such as property tax abatements, fee-in-lieu agreements, and other infrastructure and utility incentives. The City of Clemson, Pickens County, and neighboring municipalities also influence local economic development through land use planning and regulation, permitting, site planning, grants, and coordination of utilities.

Pickens County also benefits from a regional economic development partnership with nine of its neighboring counties through the *Upstate South Carolina Alliance*. These jurisdictions jointly fund the Alliance in a team approach to regional economic growth in the high growth Interstate 85 corridor of the northwestern corner South Carolina. The mission of the non-profit, public-private partnership is to promote capital investment and jobs creation within the region to benefit both urban and rural areas. Services provided by the Alliance to member communities include market research, economic impact analysis, labor analysis, project administration, site identification, product development, community profiles, domestic and international marketing missions, incentive facilitation, new and existing industry assistance, corporate relocation assistance, and event coordination. The Upstate SC Alliance is funded through member jurisdictions and more than 170 private sector business partners.

The *Clemson Area Chamber of Commerce* seeks to advocate for the local business community at the local, county, state, and federal level. The Chamber also promotes a positive business environment by strengthening the economic and civic vitality of the community, developing leadership, improving education, and marketing the City's assets. The Clemson Chamber is also an active member of the *Oconee Pickens Chamber Coalition* that is made up of the seven Chambers of Commerce in Oconee and Pickens Counties. These Chambers are members of the regional *Upstate Coalition*, an advocacy collaboration representing the business community and supporting public policy and economic development affecting Upstate South Carolina.

Current or potential small business owners in Pickens County can find assistance at the Clemson University office of the *South Carolina Small Business Development Center*, located in Sikes Hall. The Center provides managerial and technical assistance to those starting or expanding a business. A network of 17 Small Business Development Center (SBDC) offices has been established across the State under a cooperative agreement with the U.S. Small Business Administration. The Centers offer specialized programs for Veterans, Technology Commercialization, Export Assistance, Manufacturing Ventures, and Government Contracting. The SBDC programs are supported with federal, state and university funds and are available to present or prospective small business owners for little to no cost.

The City of Clemson reinstated its Economic Development Committee in 2017. This Committee meets every other month to discuss a wide range of issues related to economic development. The Committee is comprised of a cross section of citizens representing business owners, leaders, and citizens.



E. GOALS, OBJECTIVES AND STRATEGIES FOR IMPLEMENTATION

<b>Economy Element Vision</b>			
<i>“The City of Clemson is dedicated to being a great place to live, work, learn, and play by providing high quality living environments and promoting sustainable economic and community development strategies.”</i>			
<b>Goals/Objectives/Strategies</b>	<b>Accountable Agencies</b>	<b>Time Frame for Completion</b>	<b>Status</b>
<b>Goal IV.1. Formalize an economic development program for the City.</b>			
<b>Objective IV.1.1. Establish an Economic Development Committee</b>			
<u>Strategy IV.1.1.1.</u> Continue to appoint members as needed to the Economic Development Committee (EDC).	City Council	Ongoing	
<u>Strategy IV.1.1.2.</u> Create a part-time, City Economic Recruiter position responsible for recruitment of new businesses.	City Council	Short-term	
<u>Strategy IV.1.1.3.</u> Conduct a study of the impacts of different growth strategies on communities, stressing the importance of sustainable economic development on quality of life and financial stability.	City Economic Recruiter Planning and Codes	Ongoing	
<u>Strategy IV.1.1.4.</u> Set priorities for the City’s economic development.	EDC City Council City Economic Recruiter	Ongoing	
<u>Strategy IV.1.1.5.</u> Establish an annual budget for Community and Economic Development.	City Council Administration	Ongoing	
<u>Strategy IV.1.1.6.</u> Conduct an analysis of the impact of City policies and fees/licensing programs on business development.	EDC City Economic Recruiter	Short-term	
<u>Strategy IV.1.1.7.</u> Develop strategies to recognize and promote the unique and highly marketable assets critical to identified economic development priorities.	EDC City Council City Economic Recruiter	Ongoing	
<u>Strategy IV.1.1.8.</u> Create an Economic Development Corporation for the City.	City Council	Mid-term	
<b>Objective IV.1.2. Create an economic database.</b>			
<u>Strategy IV.1.2.1.</u> Update the <i>Clemson Area Market Study</i> .	City	Ongoing	
<u>Strategy IV.1.2.2.</u> Provide web-based access to market data to encourage existing businesses to grow based on identified market opportunities and recruit new businesses consistent with the priorities set by the Economic Development Committee.	City EDC City Economic Recruiter	Ongoing	

Goals/Objectives/Strategies	Accountable Agencies	Time Frame for Completion	Status
<b>Objective IV.1.3.</b> Improve communication between the various interest groups that comprise the Clemson community.			
<u>Strategy IV.1.3.1.</u> Initiate participation of neighborhood and business property owner associations in the Clemson Community Coalition.	City Community Members Neighborhood Council	Ongoing	
<u>Strategy IV.1.3.2.</u> Work with the Chamber of Commerce to establish a citywide merchants' network.	City Economic Recruiter Chamber of Commerce	Ongoing	
<u>Strategy IV.1.3.3.</u> Revise the City Business License form to obtain email addresses.	City	Short-term	
<b>Objective IV.1.4.</b> Foster economic growth through the provision of services and infrastructure.			
<u>Strategy IV.1.4.1.</u> Re-examine the demand for a new meeting and conference space in the City of Clemson.	City	Long-term	
<u>Strategy IV.1.4.2.</u> Maintain contact with local businesses to determine how local services and infrastructure could be improved to better serve their needs.	City Economic Recruiter Chamber of Commerce	Ongoing	
<u>Strategy IV.1.4.3.</u> Work with local partners to ensure the vitality and sustainability of Clemson Area Transit (CAT) as the area's public transit provider.	City CAT Partners City Liaison to University	Ongoing	
<u>Strategy IV.1.4.4.</u> Enhance urgent care and medical services within the Clemson area.	City Chamber of Commerce Healthcare Providers	Short-term	
<b>Goal IV.2. Make the City an attractive environment for economic development by maintaining and improving the quality of life in the City.</b>			
<b>Objective IV.2.1.</b> Sustain and enhance existing community character as a small town/college town.			
<u>Strategy IV.2.1.1.</u> Engage the community to undertake a community branding process to enhance the City's identity and define its cultural character.	City Community Members Neighborhood Council Chamber of Commerce Cultural Resources Coordinator	Short-term	
<b>Objective IV.2.2.</b> Broaden the City's housing options to meet the needs of a wider range of income levels.			
<u>Strategy IV.2.2.1.</u> Develop programs to address the City's aging housing stock, including use of the International Property Maintenance Code. Note Strategy moved to Housing Element.	City	Short-term	

Goals/Objectives/Strategies	Accountable Agencies	Time Frame for Completion	Status
<u>Strategy IV.2.2.2.</u> Identify long-term funding source for programs that assist LMI individuals with housing needs.	City	Short-term	
<u>Strategy IV.2.2.3.</u> Promote the City as a retirement destination.	City EDC Clemson University Chamber of Commerce	Ongoing	
<b>Objective IV.2.3.</b> Promote and protect Clemson’s natural resources as community amenities and sources of tourism.			
<u>Strategy IV.2.3.1</u> Promote Lake Hartwell as a destination for recreation and tourism.	City Chamber of Commerce	Ongoing	
<u>Strategy IV.2.3.2.</u> Promote surrounding natural resource areas as destinations for recreation and tourism.	City Chamber of Commerce	Ongoing	
<u>Strategy IV.2.3.3.</u> Support the efforts of the Chamber of Commerce Sports Tourism Council to attract sporting events to the Clemson area.	City Chamber of Commerce	Ongoing	
<u>Strategy IV.2.3.4.</u> Explore installing a multi-slip boat dock at Abernathy Park instead of boat platforms.	City Council Corp of Engineers	Mid-term	
<b>Objective IV.2.4.</b> Broaden the range of local retail opportunities.			
<u>Strategy IV.2.4.1.</u> Promote public/private partnerships to recruit and/or retain businesses that meet the growth objectives of the City of Clemson.	EDC City Chamber of Commerce City Economic Recruiter	Ongoing	
<u>Strategy IV.2. 4.2.</u> Create special events and public occasions to encourage tourism and promote community engagement and support for businesses.	EDC City Chamber of Commerce City Economic Recruiter	Ongoing	
<u>Strategy IV.2. 4.3.</u> Attract retail and other specialty/service establishments, such as unique cuisine restaurants, clothing boutiques, and art galleries identified by the Market Study.	EDC City Chamber of Commerce City Economic Recruiter	Ongoing	
<u>Strategy IV.2. 4.4.</u> Develop incentives that encourage local businesses to promote Clemson as a tourist destination including policies that allow visitor access to restrooms.	EDC City Chamber of Commerce City Economic Recruiter	Ongoing	

Goals/Objectives/Strategies	Accountable Agencies	Time Frame for Completion	Status
<b>Goal IV.3. Diversify the City’s employment base.</b>			
<b>Objective IV.3.1.</b> Enhance and encourage the retention of existing businesses and establishment of entrepreneurial start-ups.			
<u>Strategy IV.3.1.1.</u> Support efforts of the Chamber of Commerce Small Business Council to promote, educate, and support small business creation and expansion.	EDC City Chamber of Commerce City Economic Recruiter	Ongoing	
<u>Strategy IV.3.1.2.</u> Support and publicize the Chamber of Commerce’s annual Small Business Expo.	EDC City Chamber of Commerce	Ongoing	This event was a former Chamber of Commerce project and is not currently being considered
<u>Strategy IV.3.1.3.</u> Create incentive programs that encourage small business development and help fill vacant space.	Chamber of Commerce City Economic Recruiter	Short-term Ongoing	
<b>Objective IV.3.2.</b> Encourage the location of research and related higher tech industry in the Clemson area.			
<u>Strategy IV.3.2.1.</u> Promote options for attracting “clean” industry to the Clemson area.	EDC City Chamber of Commerce Local Jurisdictions	Ongoing	
<u>Strategy IV.3.2.2.</u> Work with Clemson University to locate research/office development within the City of Clemson to create jobs and investment consistent with the character of the City.	City EDC Clemson University Chamber of Commerce	Ongoing	
<b>Goal IV.4. Sustain and broaden the City’s economic partnership with regional institutions and local governing bodies, including Clemson University and local economic development agencies/authorities.</b>			
<b>Objective IV.4.1.</b> Reinforce and expand the relationship between the City and Clemson University.			
<u>Strategy IV.4.1.1.</u> Identify an appropriate niche for city-based economic development programs with university programs.	City EDC Clemson University Chamber of Commerce	Short-term Ongoing	
<u>Strategy IV.4.1.2.</u> Establish public-private partnerships to provide facilities for university related research.	City EDC Clemson University Chamber of Commerce	Ongoing	

Goals/Objectives/Strategies	Accountable Agencies	Time Frame for Completion	Status
<u>Strategy IV.4.1.3.</u> Develop a network between the City/Chamber/University programs to provide technical and related support to local groups, including entrepreneurs interested in starting businesses in Clemson.	City EDC Clemson University Chamber of Commerce	Ongoing	
<b>Objective IV.4.2.</b> Expand partnerships with local counties and municipalities to coordinate economic development strategies.			
<u>Strategy IV.4.2.1.</u> Work with Pickens, Anderson, and Oconee Counties to promote the Clemson area for economic development, including industrial recruitment efforts.	City EDC Alliance Pickens Clemson University Chamber of Commerce Local Jurisdictions City Economic Recruiter	Ongoing	
<u>Strategy IV.4.2.2.</u> Support a stronger Chamber of Commerce presence in relation to legislative advocacy, business recruitment, and retention.	Chamber of Commerce City	Ongoing	
<b>Goal IV.5. Utilizing the principles of smart growth for small towns, respond to the City’s growth constraints by reinforcing existing commercial corridors.</b>			
<b>Objective IV.5.1.</b> Promote mixed-use development along the main corridors and in the Downtown that fill an unmet or underserved need, with the right type of commercial tenants, and with architecture that respects the heritage of the community.			
<u>Strategy IV.5.1.1.</u> Maintain and enhance zoning standards that promote mixed-use developments in existing commercial corridors, including Downtown.	Planning and Codes Planning Commission	Ongoing	
<u>Strategy IV.5.1.2.</u> Review the architectural overlay standards that govern height and scale of buildings in the Commercial (C) and Commercial Mixed-Use (CM) districts.	Planning and Codes Planning Commission	Ongoing	
<u>Strategy IV.5.1.3.</u> Promote the use of public transit, walking, and biking by incorporating incentives into the City Zoning and Land Development Code.	Planning and Codes Planning Commission	Ongoing	
<u>Strategy IV.5.1.4.</u> Educate the public on the importance of sustainable economic development and smart growth strategies for small towns.	City EDC Planning and Codes Chamber of Commerce	Ongoing	
<b>Objective IV.5.2.</b> Continue to focus attention to the City’s Downtown district as the commercial heart of the City and focal community destination.			
<u>Strategy IV.5.2.1.</u> Update and maintain way-finding signage in the Downtown that fits with architectural character to make the area increasingly navigable for visitors, especially in regard to the parking deck.	City	Ongoing	

Goals/Objectives/Strategies	Accountable Agencies	Time Frame for Completion	Status
<u>Strategy IV.5.2.2.</u> Increase the number of public parking spaces available to serve the Downtown commercial district and consider metered parking strategies to more efficiently manage short term parking for on-street and deck parking.	City	Ongoing	
<u>Strategy IV.5.2.3.</u> Promote events that bring people Downtown, showcase local businesses, and make Keowee Trail a lakefront destination.	City EDC Chamber of Commerce Merchant Associations Other Local Groups	Ongoing	
<u>Strategy IV.5.2.4.</u> Establish a Visitors Center in Downtown Clemson with public toilets.	City Chamber of Commerce	Short-term	
<u>Strategy IV.5.2.5.</u> Use technology to provide up-to-date information regarding local businesses via Downtown kiosks.	City Chamber of Commerce City Economic Recruiter	Completed	
<u>Strategy IV.5.2.6.</u> Add wrought-iron fencing around Downtown street trees.	City Council Public Works		
<u>Strategy IV.5.2.7.</u> Maintain lights in trees along College Avenue year-round.	City Council Public Works		
<u>Strategy IV.5.2.8.</u> Hold a citywide clean-up day two times a year.	City Council Public Works Clemson University Friends of the Environment		