

# South Carolina Economic Analysis Report

June 30

# 2015

An examination of the  
state's economy and  
workforce.





The 2015 South Carolina Economic Analysis Report is published by the Business Intelligence Department (BID) of the South Carolina Department of Employment and Workforce (SCDEW). The information and analyses provided in this publication are based on data collected from sources throughout South Carolina and the United States.

### About SCDEW and BID:

The Business Intelligence Department compiles and publishes employment statistics, job forecasts, wage data, demographics, and other labor market information to help public and private organizations, researchers, and others better understand today's complex workforce.

The Business Intelligence Department produced this report under the leadership of:

Executive Director - Cheryl Stanton

Business Intelligence Department Director - Brenda Lisbon

South Carolina Department of Employment and Workforce

1550 Gadsden Street Columbia, South Carolina 29201

(803) 737-2660

[www.dew.sc.gov](http://www.dew.sc.gov)

[www.scworkforceinfo.com](http://www.scworkforceinfo.com)



## Table of Contents

<b>Executive Summary .....</b>	<b>8</b>
<b>Introduction.....</b>	<b>9</b>
<b>Gross Domestic Product (GDP).....</b>	<b>10</b>
Comparison of GDP of Southern Region and South Carolina .....	10
GDP in Recovery Since the Great Recession .....	11
GDP by Metropolitan Statistical Area .....	11
<b>State Personal Income .....</b>	<b>12</b>
Per Capita Personal Income by Metropolitan Statistical Area.....	13
<b>Population Characteristics of South Carolina .....</b>	<b>14</b>
<b>South Carolina Labor Force.....</b>	<b>16</b>
Unemployment Rate .....	17
<b>Jobless Populations Facing Challenges.....</b>	<b>18</b>
Hispanics.....	18
Native Americans.....	18
Homeless.....	18
Veterans .....	19
Ex-Offenders.....	19
Juvenile Offenders .....	20
Limited English Proficiency .....	20
Illiterate .....	20
Migrant/Seasonal Workers.....	21
Foster Care .....	21
Temporary Assistance for Needy Families (TANF).....	21
Disabled .....	22
<b>South Carolina Industry Employment .....</b>	<b>22</b>
South Carolina Leading Industries.....	22
<b>South Carolina Occupational Employment .....</b>	<b>24</b>

<b>Statewide and Local Workforce Investment Area (LWIA) Industry and Occupational Employment Projections .....</b>	<b>25</b>
Statewide Industry Employment Projections.....	25
Local Workforce Investment Area Industry Employment Projections.....	26
Statewide Occupational Employment Projections.....	27
Growing or Declining Statewide Occupations .....	28
Local Workforce Investment Area Occupational Employment Projections.....	30
<b>South Carolina Commuting Patterns .....</b>	<b>30</b>
<b>Job Skills Gap.....</b>	<b>33</b>
Data Sources .....	33
Labor Supply.....	34
Labor Force and Jobs .....	35
Labor Demand .....	37
Labor Supply Versus Labor Demand .....	39
Recent Postsecondary Completers Versus Projected Annual Job Openings .....	41
Twelfth Grade Student Career Cluster Choices Versus Projected Annual Openings .....	44
Soft Skills.....	46
Job Skills Gap Conclusion .....	47
<b>Required Language.....</b>	<b>48</b>

## List of Figures

Figure 1 - South Carolina Real GDP Growth .....	10
Figure 2 - Southeastern U.S. Real GDP Growth .....	10
Figure 3 - South Carolina Real GDP, 2010-2014 .....	11
Figure 4 - Real GDP by Metropolitan Area, 2009-2013 .....	12
Figure 5 - South Carolina Personal Income as a Percent of U.S. ....	13
Figure 6 - Per Capita Personal Income by Metropolitan Area, 2009-2013 .....	13
Figure 7 - Chart: Per Capita Personal Income by Metropolitan Area, 2009-2013 .....	14
Figure 8 - South Carolina Demographic Characteristics .....	15
Figure 9 - South Carolina Population Censuses and Projection .....	15
Figure 10 - South Carolina Labor Force, 2005-2015.....	16
Figure 11 - South Carolina Unemployment Rate, 2005-2015 .....	17
Figure 12 - South Carolina Nonfarm Industry Employment, 2009, 2014 .....	23
Figure 13 - South Carolina Private Industry Employment, 2014 .....	23
Figure 14 - South Carolina Occupational Employment, May 2014 .....	24
Figure 15 - South Carolina Top Occupations, 2014 .....	25
Figure 16 - South Carolina Industry Employment Projections to 2022.....	26
Figure 17 - Local Workforce Investment Area Industry Employment Projections, 2012-2022 ..	27
Figure 18 - South Carolina Occupational Employment Projections to 2022.....	28
Figure 19 - Top 20 Fastest Growing or Declining Occupations, 2012-2022.....	29
Figure 20 - Local Workforce Investment Area Projected Annual Job Openings, 2012-2022.....	30
Figure 21 - South Carolina County Commuting Patterns, 2011 .....	32
Figure 22 - South Carolina Measures of Labor Supply by Education Level.....	34
Figure 23 - South Carolina Labor Force Versus Jobs.....	35
Figure 24 - Top Occupations Requiring High School or Less But Filled by Higher Educated ...	36
Figure 25 - South Carolina Labor Force Versus Employment .....	36
Figure 26 - South Carolina Measures of Labor Demand by Education Level.....	37
Figure 27 - South Carolina Total Hires Versus Job Postings .....	38
Figure 28 - South Carolina Total Hires Versus Job Openings.....	38
Figure 29 - South Carolina Labor Force Versus Job Openings .....	39
Figure 30 - South Carolina Labor Force Versus Job Postings.....	39
Figure 31 - South Carolina Unemployed Versus Job Postings.....	40
Figure 32 - South Carolina Labor Force Versus Total Hires.....	40
Figure 33 - South Carolina Postsecondary Completers by Career Cluster, 2012-2013.....	42
Figure 34 - South Carolina Projected Annual Job Openings by Career Cluster, 2012-2022 .....	42
Figure 35 - South Carolina Postsecondary Education Gap by Career Cluster, 2012-2013 .....	43
Figure 36 - South Carolina Twelfth Grade Student Choices by Cluster and LWIA, 2012-2013 .	45



## Executive Summary

South Carolina's Gross Domestic Product was \$190.3 billion in 2014 or 27<sup>th</sup> in the nation. The growth in real dollars was 2.2 percent. The growth of the GDP in real dollars since 2010 has been \$10.5 billion or 6.4 percent with Manufacturing, Real Estate and Rental and Leasing, and Health Care and Social Assistance leading the way. Most of the state's metropolitan areas have seen moderate growth over the past several years.

The state's personal income growth of 4.3 percent outpaced the nation's growth of 3.9 in 2014 and reached \$178.5 million dollars. South Carolina's per capita income in 2014 was \$36,934 or 80 percent of the U.S average. Hilton Head Island-Bluffton-Beaufort metropolitan area had the highest figure at \$41,663.

The state's population is growing and gained an additional Congressional seat as a result of the 2010 U.S. Census. Over the period 2009-2013, the percent of the population graduating high school and those obtaining at least a Bachelor's degree increased to 85.6 percent and 26.1 percent, respectively. The veterans' share of the population decreased over the period, while the disabled population increased. The population has become more mobile over that time frame. The state is projected to have a population of 5.5 million by 2030.

South Carolina's labor force and employment have been increasing since the end of the Great Recession. The unemployment rate dropped considerably until the past year when improving economic conditions attracted more people into the labor force searching for work.

Many of the state's jobless face significant barriers to employment that workforce officials help to overcome. Those populations include Hispanics, Native Americans, homeless, ex-offenders, and others.

Professional and Business Services; Trade, Transportation, and Utilities; and Leisure and Hospitality led the state in private sector industry employment growth from 2009 to 2014. South Carolina had over 1.876 million wage and salary employees in 2014 with an average hourly wage of \$19.03. The state's industry and occupational employment are projected to grow by 11.54 percent over the period 2012 to 2022. The Local Workforce Investment Area (LWIA) employment projections are uneven across the state with urban areas generally growing faster than the rural areas.

The state's commuting patterns show an interconnected economy with significant travel between counties for much of South Carolina's workforce.

An extensive analysis of the job skills gap shows that the question may be more of quality than quantity. Employers are finding the soft skills of many potential candidates to be lacking. Many students and graduates have career desires or awards in professions that either have an oversupply of recent potential workers or low employer demand, while projected job openings in several career clusters/geographic combinations are bereft of potential graduates. Other findings generally show an oversupply of labor force compared to job demand on the upper half of the educational spectrum.

## Introduction

South Carolina has made notable progress in recovering from the Great Recession of the 2007-2010 period (the officially-recognized definition from the National Bureau of Economic Research, NBER, is December 2007 to June 2009.) Most economic indicators now point to increasing activity. Mark Vitner, Senior Economist with Wells Fargo Securities, wrote in his economic roundup in early 2015, “South Carolina’s recovery is accelerating and is now firmly outpacing the nation. The state has bounced back as a formidable manufacturing hub, with a high concentration in transportation-related production, thanks to BMW and Boeing.”<sup>1</sup>

The report went on to praise the state for its economic development efforts in the export markets, including tire manufacturing. The South Carolina Department of Commerce reported that the state in 2014 closed deals worth over \$5 billion in capital investments, adding over 19,000 new jobs to the state.<sup>2</sup> Recently, Volvo Car Corporation selected the Charleston, South Carolina area for the location of its first North American plant.

Certainly, these projects will add momentum to the state’s recovery as highlighted in this report. The purpose of the South Carolina Economic Analysis Report is to present an overview of key metrics used in examining South Carolina’s economy and workforce. The Business Intelligence Department of the Department of Employment and Workforce compiles and publishes numerous data series on the state of the workforce. These measures and other pertinent data sources were utilized in this examination.

This report highlights a number of measures that illuminate several aspects of the state’s economy. The following section gives an overview of Gross Domestic Product for the state, region, and metropolitan areas. Personal income of the state and metropolitan areas continues in the next section followed by population data and demographic characteristics. A detailed discussion of the state’s labor force follows. A presentation of the jobless population that faces significant barriers to employment continues afterward.

South Carolina’s industry employment and leading industries highlight a subsequent section of the report along with a portrayal of current occupational employment. Employment projections for industries and occupations statewide and by Local Workforce Investment Area follow. A detailed presentation and explanation of the state’s commuting patterns succeeds the projections narrative. Finally, an in-depth study of the job skills gap completes the document.

---

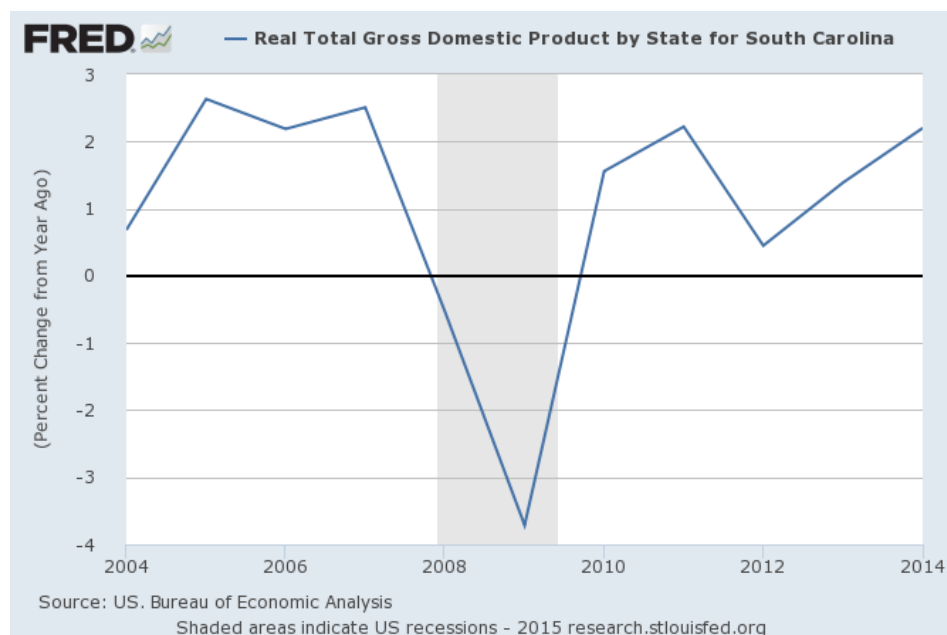
<sup>1</sup> Wells Fargo, Southern States: 2015 Economic Outlook, February 12, 2015; [https://www08.wellsfargomedia.com/downloads/pdf/com/insights/economics/regional-reports/Southern\\_Economic\\_Chartbook\\_02122015.pdf](https://www08.wellsfargomedia.com/downloads/pdf/com/insights/economics/regional-reports/Southern_Economic_Chartbook_02122015.pdf); accessed on May 21, 2015.

<sup>2</sup> SC Department of Commerce, 2014 Activity Report; [http://sccommerce.com/sites/default/files/document\\_directory/activity\\_report.pdf](http://sccommerce.com/sites/default/files/document_directory/activity_report.pdf); accessed on May 21, 2015.

## Gross Domestic Product (GDP)

The Gross Domestic Product (GDP) statistic is a measure of the overall health of a state's economy. It is an inflation-adjusted measure of a state's production based on a weighted average of national prices for those products produced within each state. In 2014, the state had a growth of 2.2 percent in real dollars from the previous year, while the nation also

**Figure 1**

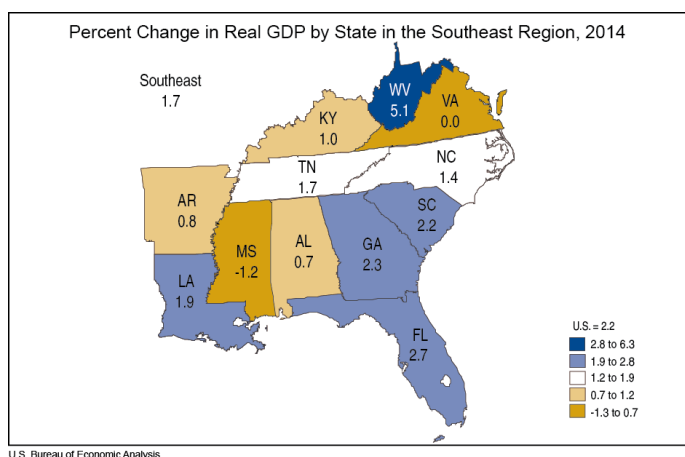


grew at 2.2 percent. **Figure 1** highlights the percentage growth of the state's GDP for the period 2004-2014. GDP year-over-year growth hovered around 2 percent before the Great Recession then fell to a decline of nearly 4 percent in 2009 before rebounding above 1 percent. In current dollars, the GDP for South Carolina was \$190.3 billion in 2014. This figure ranks 27<sup>th</sup> in the nation.

### *Comparison of GDP of Southern Region and South Carolina*

South Carolina grew at the fourth fastest rate in the southeastern United States in 2014 as shown in **Figure 2**. Overall, the 12 states of the southeast grew at a tepid 1.7 percent in 2014 compared to 2.2 percent for the nation. West Virginia grew at the fastest pace at 5.1 percent, while Mississippi declined by 1.2 percent.

**Figure 2**



### GDP in Recovery Since the Great Recession

For a more detailed view of the state's economy, **Figure 3** reveals South Carolina's GDP by industry for 2010-2014. Overall, the economy grew over \$10.5 billion dollars in real terms over the 5-year period, or 6.4 percent. Manufacturing has grown \$1.8 billion or almost 7 percent to become the state's largest industry. Other industries showing notable GDP growth levels include Real Estate and Rental and Leasing; Health Care and Social Assistance; Wholesale Trade; and Professional, Scientific, and Technical Services. Agriculture, Utilities, Construction, and Finance and Insurance declined over the period.

**Figure 3**

South Carolina Real GDP, 2010-2014

Industry	2010	2011	2012	2013	2014	Change 2010 to 2014	Percent Change 2010 to 2014
<b>All industry total</b>	<b>\$164,081</b>	<b>\$167,724</b>	<b>\$168,477</b>	<b>\$170,816</b>	<b>\$174,573</b>	<b>\$10,492</b>	<b>6.4%</b>
Agriculture, forestry, fishing, and hunting	1,108	860	1,004	1,106	1,046	-62	-5.6%
Mining	238	242	244	269	276	38	16.0%
Utilities	4,910	4,931	4,453	4,531	4,456	-454	-9.2%
Construction	7,262	6,936	7,219	7,315	7,199	-63	-0.9%
Manufacturing	27,060	28,570	28,557	28,005	28,893	1,833	6.8%
Wholesale trade	8,984	9,208	9,495	9,681	10,152	1,168	13.0%
Retail trade	12,064	12,029	12,098	12,652	13,007	943	7.8%
Transportation and warehousing	3,649	3,788	3,831	3,899	4,068	419	11.5%
Information	4,472	4,343	4,364	4,638	4,794	322	7.2%
Finance and insurance	7,535	7,352	6,965	7,213	7,143	-392	-5.2%
Real estate and rental and leasing	20,610	21,559	21,473	21,869	22,402	1,792	8.7%
Professional, scientific, and technical services	7,750	8,250	8,362	8,470	8,787	1,037	13.4%
Management of companies and enterprises	1,431	1,517	1,671	1,754	1,826	395	27.6%
Administrative and waste management services	7,081	7,402	7,517	7,530	7,970	889	12.6%
Educational services	1,128	1,144	1,147	1,115	1,151	23	2.0%
Health care and social assistance	10,641	10,899	10,947	11,280	11,831	1,190	11.2%
Arts, entertainment, and recreation	1,106	1,158	1,160	1,175	1,221	115	10.4%
Accommodation and food services	5,787	6,011	6,135	6,271	6,293	506	8.7%
Other services, except government	3,977	3,971	4,005	4,130	4,121	144	3.6%
Government	27,343	27,704	27,916	27,958	28,050	707	2.6%

SOURCE: US Bureau of Economic Analysis

Dollars in millions of chained 2009 dollars

### GDP by Metropolitan Statistical Area

**Figure 4** shows the GDP for the state's Metropolitan Statistical Areas (MSAs) over the period 2009-2013. Each MSA, except Hilton Head Island-Bluffton-Beaufort, has seen positive growth in GDP, though the growth has been uneven. The Charlotte MSA, which includes Chester, Lancaster, and York counties, grew the most over the period, even outpacing the state's growth overall. Charleston-North Charleston and Greenville-Anderson-Mauldin grew the most of the wholly internal South Carolina MSAs.

**Figure 4**
**Real Gross Domestic Product (GDP) by Metropolitan Area, 2009-2013**

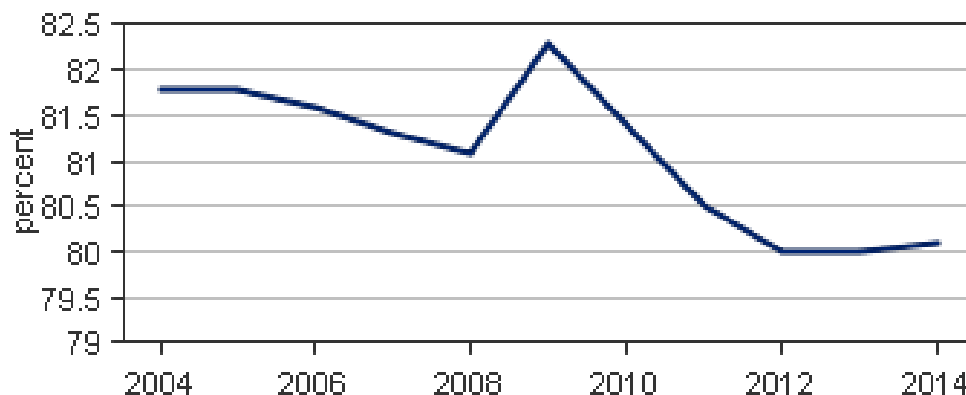
Metropolitan Area	Millions of chained (2009) dollars					Percent Change			
	2009	2010	2011	2012	2013	2010	2011	2012	2013
<b>U.S. metropolitan areas</b>	<b>\$12,994,636</b>	<b>\$13,268,823</b>	<b>\$13,474,305</b>	<b>\$13,826,165</b>	<b>\$14,060,496</b>	<b>2.1</b>	<b>1.5</b>	<b>2.6</b>	<b>1.7</b>
Augusta-Richmond County, GA-SC	18,780	19,352	19,634	19,740	19,497	3.0	1.5	0.5	-1.2
Charleston-North Charleston, SC	27,641	28,137	29,577	30,215	30,667	1.8	5.1	2.2	1.5
Charlotte-Concord-Gastonia, NC-SC	112,306	115,229	120,092	125,714	130,318	2.6	4.2	4.7	3.7
Columbia, SC	31,492	31,410	32,024	32,541	33,199	-0.3	2.0	1.6	2.0
Florence, SC	7,003	6,896	6,979	7,141	7,369	-1.5	1.2	2.3	3.2
Greenville-Anderson-Mauldin, SC	29,880	30,837	32,162	32,377	32,841	3.2	4.3	0.7	1.4
Hilton Head Island-Bluffton-Beaufort, SC	7,491	7,337	7,144	7,226	7,264	-2.1	-2.6	1.1	0.5
Myrtle Beach-Conway-North Myrtle Beach, SC-NC	13,292	13,446	13,842	14,005	14,221	1.2	2.9	1.2	1.5
Spartanburg, SC	10,645	11,322	11,955	12,136	12,193	6.4	5.6	1.5	0.5
Sumter, SC	2,976	2,983	3,101	3,342	3,257	0.2	4.0	7.8	-2.5
<b>South Carolina</b>	<b>160,046</b>	<b>162,616</b>	<b>167,704</b>	<b>170,212</b>	<b>172,176</b>	<b>1.6</b>	<b>3.1</b>	<b>1.5</b>	<b>1.2</b>

SOURCE: US Bureau of Economic Analysis

## State Personal Income

Personal income is defined as the income received for persons in a given area from all sources. South Carolina's total personal income in 2014 in current dollars was \$178.5 million dollars, an increase of 4.3 percent from a year earlier. This percent increase was the 15<sup>th</sup> highest in the nation. The national change in income was 3.9 percent for the year.

Per capita personal income is calculated as the total personal income of the residents of an area divided by the population of the area. It is often used as an indicator of consumers' purchasing power and of the economic well-being of the residents of an area. South Carolina's per capita personal income in 2014 was \$36,934. The per capita income is 80 percent of the national average of \$46,129. The state has been falling further behind the nation over the past 11 years, as illustrated in **Figure 5**, but did improve its position last year.

**Figure 5**
**South Carolina Per Capita Income as a Percent of the U.S.**


*SOURCE: U.S. Bureau of Economic Analysis*

**Per Capita Personal Income by Metropolitan Statistical Area**

Hilton Head Island-Bluffton-Beaufort MSA had the highest per capita personal income in 2013 at \$41,663, while Myrtle Beach-Conway-North Myrtle Beach had the lowest at \$32,094 as shown in **Figure 6**.

**Figure 6**
**Per Capita Personal Income by Metropolitan Area**

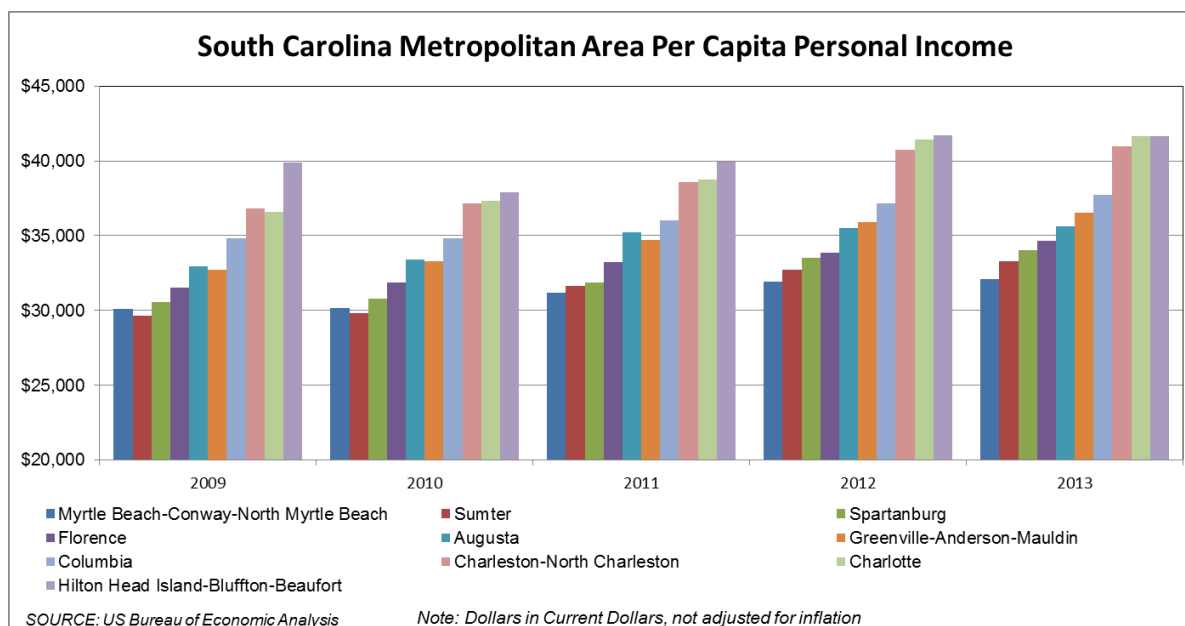
Metropolitan Area	2009	2010	2011	2012	2013
Myrtle Beach-Conway-North Myrtle Beach, SC	\$30,112	\$30,162	\$31,169	\$31,920	\$32,094
Sumter, SC	\$29,648	\$29,833	\$31,637	\$32,697	\$33,310
Spartanburg, SC	\$30,534	\$30,757	\$31,873	\$33,518	\$34,040
Florence, SC	\$31,496	\$31,882	\$33,257	\$33,861	\$34,646
Augusta-Richmond County, GA-SC	\$32,965	\$33,408	\$35,237	\$35,486	\$35,625
Greenville-Anderson-Mauldin, SC	\$32,710	\$33,302	\$34,716	\$35,896	\$36,525
Columbia, SC	\$34,830	\$34,819	\$36,032	\$37,143	\$37,711
Charleston-North Charleston, SC	\$36,826	\$37,168	\$38,594	\$40,744	\$40,953
Charlotte-Concord-Gastonia, NC-SC	\$36,573	\$37,307	\$38,758	\$41,436	\$41,645
Hilton Head Island-Bluffton-Beaufort, SC	\$39,901	\$37,912	\$39,976	\$41,730	\$41,663

*SOURCE: US Bureau of Economic Analysis*

*Note-- All dollar estimates are in current dollars (not adjusted for inflation).*

The chart in **Figure 7** illustrates the per capita personal income of the state's MSAs over the 5-year period 2009-2013. Each Metropolitan area has seen positive growth in income since the depths of the Recession in 2009.

Figure 7



## Population Characteristics of South Carolina

Certain population characteristics are important in terms of economic and workforce issues. Among those characteristics are educational attainment, veterans and disability status, and geographic mobility. A more educated workforce attracts industries into the state. Veterans offer work skills that are attractive to potential employers. The disabled workforce may require special conditions for employment. A mobile population can bring in valuable skills to the workforce.

**Figure 8** displays such information for the state over the 5-year period 2009-2013. Over time lower percentages of the population aged 25 and older have an education of less than a high school diploma, and higher percentages obtained more than a high school education. In 2013, over 85 percent of the population 25 and older had a high school education, and over 26 percent held a bachelor's degree or higher. The increasingly educated population bodes well for the state economically.

The veterans' population share of the civilian population aged 18 or higher has decreased by 1.2 percent over the past five years in the state. The percentage of South Carolinians with a disability among the civilian noninstitutional population has increased over the period by nearly a full percentage point; however, the percentage of those over the age of 65 with a disability has declined by almost three percentage points. The table demonstrates that a higher portion of the population moved in 2013 than in 2009, climbing from 14.3 percent to 14.9 percent.

Over the recent past, South Carolina's population has been on the rise. From 2000 to 2010, the state increased by over 15 percent, gaining a Congressional seat in the process. The rate of

increase is projected to decline to just over 4 percent over each of the next several 5-year periods to 2030 as illustrated in **Figure 9**.

**Figure 8**

Subject	South Carolina				
	2013 Estimate	2012 Estimate	2011 Estimate	2010 Estimate	2009 Estimate
<b>EDUCATIONAL ATTAINMENT</b>					
Population 25 years and over	3,198,816	3,151,616	3,110,532	3,074,357	3,019,333
Less than 9th grade	5.0%	5.2%	5.6%	5.5%	5.9%
9th to 12th grade, no diploma	9.3%	10.0%	10.3%	10.5%	10.5%
High school graduate (includes equivalency)	29.4%	29.8%	30.7%	30.5%	30.3%
Some college, no degree	21.3%	21.1%	20.8%	20.6%	20.6%
Associate's degree	8.9%	8.9%	8.6%	8.4%	8.4%
Bachelor's degree	16.6%	16.0%	15.6%	15.8%	15.9%
Graduate or professional degree	9.5%	9.1%	8.4%	8.8%	8.4%
Percent high school graduate or higher	85.6%	84.9%	84.2%	84.1%	83.6%
Percent bachelor's degree or higher	26.1%	25.1%	24.1%	24.5%	24.3%
<b>VETERAN STATUS</b>					
Civilian population 18 years and over	3,669,343	3,609,405	3,563,610	3,521,443	3,441,651
Civilian veterans	10.0%	10.9%	11.2%	11.6%	11.2%
<b>DISABILITY STATUS OF THE CIVILIAN NONINSTITUTIONALIZED POPULATION</b>					
Total Civilian Noninstitutionalized Population	4,678,122	4,623,171	4,579,231	4,536,835	4,454,344
With a disability	14.5%	14.0%	13.8%	13.9%	13.6%
Under 18 years	1,076,621	1,078,022	1,079,476	1,078,477	1,078,199
With a disability	4.6%	4.0%	3.8%	3.7%	3.6%
18 to 64 years	2,893,842	2,868,533	2,862,576	2,841,495	2,777,503
With a disability	12.7%	12.4%	12.3%	12.4%	11.9%
65 years and over	707,659	676,616	637,179	616,863	598,642
With a disability	37.2%	37.1%	37.4%	38.4%	40.0%
<b>RESIDENCE 1 YEAR AGO</b>					
Population 1 year and over	4,720,602	4,668,886	4,624,180	4,577,399	4,501,739
Same house	84.7%	84.2%	84.3%	84.6%	85.3%
Different house in the U.S.	14.9%	15.4%	15.2%	15.1%	14.3%
Same county	8.3%	8.6%	8.8%	8.4%	8.1%
Different county	6.6%	6.8%	6.4%	6.6%	6.2%
Same state	3.1%	3.5%	3.0%	3.3%	3.0%
Different state	3.5%	3.4%	3.4%	3.3%	3.2%
Abroad	0.4%	0.4%	0.4%	0.4%	0.4%

Source: U.S. Census Bureau, 2013 American Community Survey, Table - CP02: Comparative Social Characteristics in the United States

**Figure 9**

	South Carolina Population Census and Projections: 2000 - 2030					
	April 1, 2000	April 1, 2010	July 1, 2015	July 1, 2020	July 1, 2025	July 1, 2030
	Census	Census	Projection	Projection	Projection	Projection
<b>South Carolina</b>	<b>4,012,012</b>	<b>4,625,364</b>	<b>4,823,200</b>	<b>5,020,800</b>	<b>5,235,500</b>	<b>5,451,700</b>

Source: U.S. Census Bureau, Census 2000 and Census 2010, S.C. Department of Health and Environmental Control - Vital Records Department. Population projections calculated by South Carolina Budget and Control Board, Office of Research and Statistics.

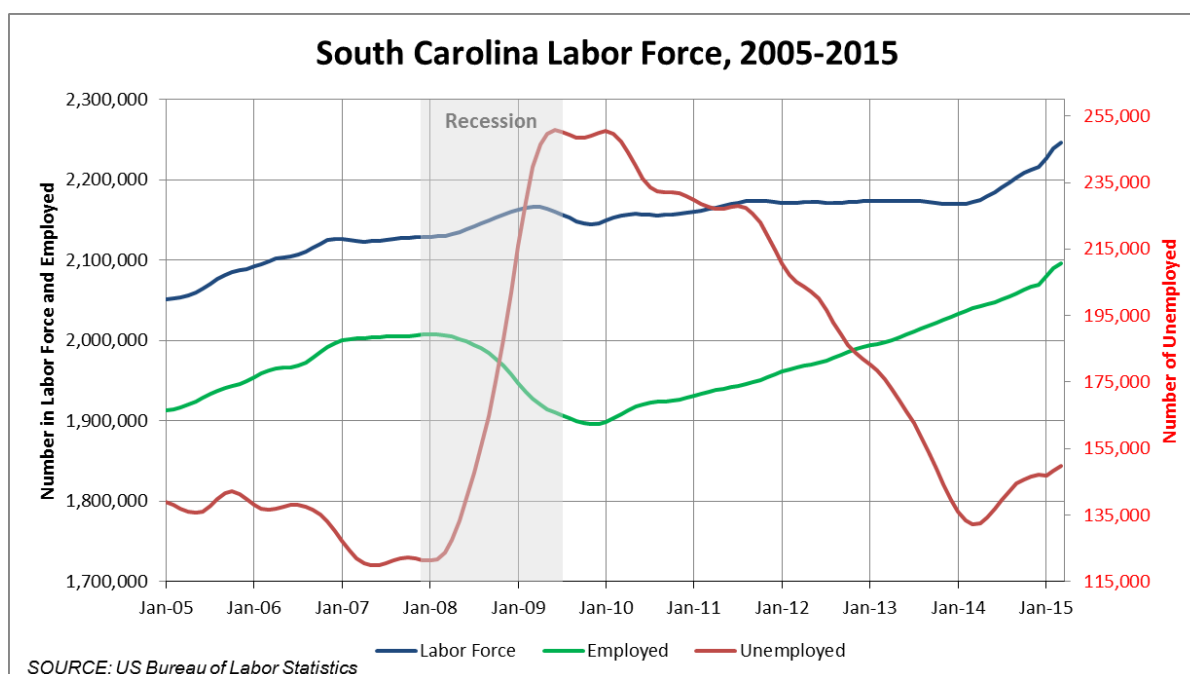
## South Carolina Labor Force

An important component of the economy is the labor force in South Carolina. The past 10 years have seen tumultuous times for the state's labor force. It has seen the booming times of increasing employment in a robust economy before the Great Recession to the worst economic conditions since the 1930s followed by a long and slow recovery, where employment has finally surpassed pre-recession highs in the last two years.

By definition, the labor force measures people at their residence location and equals the sum of the employed and the unemployed. **Figure 10** below illustrates the movement of the labor force (left scale), employed (left scale), and unemployed (right scale) from 2005 forward.

The labor force rose from 2005 to 2007 when it dipped slightly. It ascended to a high of 2,166,582 in March 2009 before it fell again. The labor force remained fairly stable at about 2,172,000 from mid-2011 until the first quarter of 2014 when it began rising again to reach an all-time high of 2,245,987 in March 2015.

**Figure 10**



The dramatic movement of the unemployed exhibited in the above chart highlights the chaotic nature of the economy in South Carolina over the past decade. Unemployment hovered around 138,000 people monthly to the middle of 2006 before falling to a low of 119,800 in May of 2007. By early 2008, conditions began to deteriorate, and unemployment skyrocketed to a high of 250,700 people in June 2009. It then began a slow decline to March 2014. As the recovery

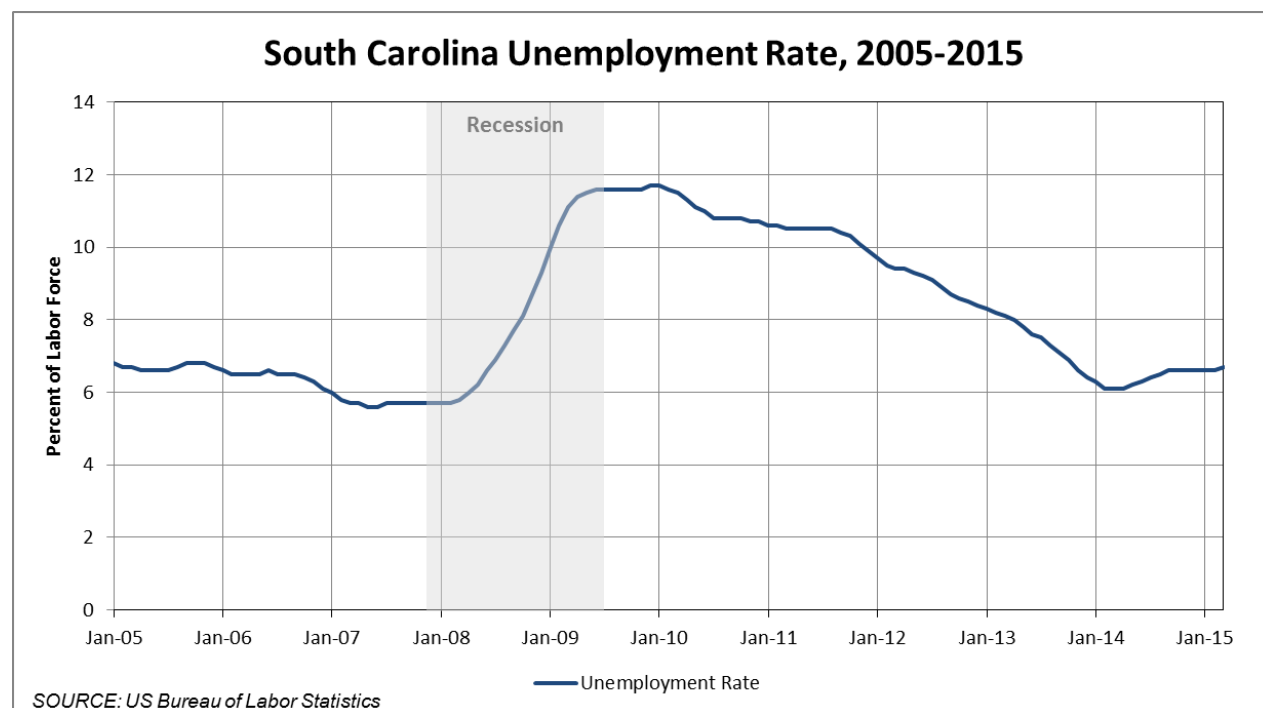
accelerated, unemployment began to rise again as many people became encouraged over job prospects and initiated job searches.

Employment steadily rose over the period 2005 to 2008, where it reached its pre-recession high of 2,007,667 in January 2008. Then employment began to decline as the recession intensified. Employment fell by almost 112,000 people from January 2008 to November 2009, the depth of the employment recession. Since that low, employment has steadily risen by over 200,000 to reach a record high of 2,096,110 in March 2015.

### Unemployment Rate

The unemployment rate is the percent of the labor force that is unemployed. In South Carolina, the unemployment rate remained relatively steady at about 6.7 percent from 2005 through the third quarter of 2006 when it fell to a pre-recession low of 5.6 percent in May and June of 2007. In early 2008, the rate began to climb and accelerated in the fall of that year to reach a high of 11.7 percent by December 2009 and January 2010. The unemployment rate then began to fall, reaching 6.1 percent in early 2014. At that point, the rate rose modestly to 6.7 percent in March 2015, as the job recovery enticed people to join the workforce. **Figure 11** highlights the movement of the unemployment rate over the period.

**Figure 11**



## **Jobless Populations Facing Challenges**

South Carolina citizens and its workforce are very diverse. Different population groups often face varying challenges and barriers and may need more specific or dedicated services to meet their employment and training needs.

### *Hispanics*

Hispanics have accounted for a significant portion of the state's population growth. This population more than doubled from 2000 to 2010 and has continued to increase, reaching 254,780 in 2013. Hispanics were responsible for almost a quarter of the state's 2000-2010 population growth and now represent a bit over five percent of the state's population. Though the growth has slowed to 13 percent of population change since 2010, this still means a growing need for services tailored to Hispanics.

### *Native Americans*

The 2013 U.S. Census of Annual Estimates of Resident Population shows that there were 25,706 single-race American Indians/Alaskan Natives and another 25,494 mixed-race American Indians/Alaskan Natives in South Carolina. The state is home to several Native American tribes and groups, including the Catawba, the Pee Dee, the Waccamaw, and the Santee.

Native Americans had nearly double the poverty rate (29.1%) of the total U.S. population (15.9%) in 2012. They had a lower percent of their population with a high school diploma than the U.S. population (82.0 percent vs 86.4 percent) and also a lower percent having a Bachelor's degree than the nation's population as a whole (17.4 percent vs. 29.1 percent). Potential workers may not have the necessary technical or scholastic training to obtain good employment. In addition, the unavailability or lack of access to services exacerbates the presence of poverty in the Native American community.

### *Homeless*

On a given night in January 2013, there were an estimated 6,544 homeless people in South Carolina, including 636 veterans, according to the U.S. Interagency Council on Homelessness. South Carolina's homeless rate per 10,000 people is 13.7, while the national rate is 19.3. The state's rate of veteran homelessness is 16.1, and for the nation the figure is 27.3. The state's number of homeless increased by 33 percent from 2012 to 2013.

For the homeless, basic needs are a priority. Some people may need help finding treatment to address an underlying cause of homelessness. The unpredictability of being homeless causes employers to be wary of this group. There is a stigma associated with being homeless that makes it more difficult to find employment. People are homeless for many reasons including: misfortune, substance abuse problems, medical issues, mental health issues, etc. All these

reasons contribute to the difficulty of finding employment. The simple issues of having a bath, a shave, and a suit for a job interview become major hurdles. Education and training are important but may be secondary to transportation to the job. Creating stability of transportation, housing, and health/nutrition will raise the employability of this group. The stigma of being homeless must also be addressed. Many homeless people are also military veterans, adding to the already complicated issue. The National Coalition for the Homeless states that almost 40 percent of homeless men are military veterans.

### *Veterans*

According to the 2012 American Community Survey (ACS), South Carolina had 394,220 civilian veterans aged 18 or older. Veterans made up 8.3 percent of the state's total population, compared to 6.8 percent of the nation's population. From 2012 to 2013, veteran unemployment fell from 6.9 percent to 4.1 percent. The state's veteran labor force dropped to 160,000 in 2013.

Military veterans have varied and unique needs. Some veterans are homeless. Some veterans struggle with diagnosed or undiagnosed medical and mental health issues. Some veterans have difficulty entering the civilian world again. Veterans have a great deal to contribute to any company. Many veterans have jobs skills that transfer directly to the civilian world. Veterans are typically drug-free, show up to work on time, and have experience working in stressful situations. The military is all-encompassing and takes care of every aspect of a member's life, including wages, medical, dental, housing, and retirement. Once a member leaves the service, it may often be difficult for them to transition back into civilian life.

### *Ex-Offenders*

As of June 2013, South Carolina had an inmate population of 22,168 with 9,623 inmates being released in 2013. The average age of an inmate was 37 years old. The average sentence length is almost 14 years, with the average time actually served being about five years. Over half—55 percent—of inmates do not have a high school diploma or GED. Inmates age 17-21 without a high school diploma or GED are mandated to attend school and are assigned to one of the S.C. Department of Corrections' 10 high schools. Inmates older than 21 who are not high school or GED graduates are served in Corrections' Adult Education programs. For Fiscal Year (FY) 2011, over 5,700 inmates received credentials in education programs including GED/high school academics (1,209), vocational courses (2,769), and WorkKeys® training (1,756).

People who have been imprisoned face several challenges re-entering society, such as overcoming their past criminal history when seeking employment. Lack of education, poor computer skills, poor people skills, low self-esteem, substance abuse problems, and access to transportation are problems faced by an ex-offender during the job search.

### *Juvenile Offenders*

In 2013, the S.C. Department of Juvenile Justice (DJJ) handled 16,754 cases, 27.5 percent less than in 2008-2009. In these cases, 3,495 were paroled or on probation, and the average offender population at a facility was 369. There is a 15 percent recidivism rate among young offenders in community programs under DJJ supervision. The top five offenses putting a person into DJJ custody are assault and battery, shoplifting, disturbing school, public disorderly conduct, and simple marijuana possession.

Juvenile offenders have an entire lifetime ahead of them. Society at large forgives many youthful mistakes. There is always hope with this group. Several programs train the offenders in trades and skilled labor. Their educational training is important and obtaining a GED/diploma is the first step towards further studies. Maintaining motivation with this group is a challenge. Having gainful employment will provide the security and finances to prevent future problems with the law.

### *Limited English Proficiency*

The 2012 ACS lists 98,188 people of foreign-born status in South Carolina who were identified as having Limited English Proficiency (LEP). Noncitizens were more likely to have LEP than citizens (foreign-born but naturalized).

Immigrants and those with LEP often need help adjusting to life in a new country. They may need help finding housing, jobs, educational/training resources, or other services. They may need legal aid services to assist with paperwork and documentation. Communication is important no matter what job someone holds. The main issue here is language, and this can be overcome with instructional training and services.

### *Illiterate*

The U.S. Department of Education's National Assessment of Adult Literacy (NAAL) reported in 2003 (the latest survey available) that 15 percent of persons in households in the state lack basic literacy. At the time, this equaled about 465,000 people in South Carolina. With rising school enrollment and better access to education, illiteracy has declined in the last several decades.

Being illiterate increases the likelihood of being below the poverty line and having high health costs. This population tends to be older, and their family and friends may not even know that they cannot read. A feeling of shock is often expressed when someone confesses to being illiterate, leaving the person who is unable to read or write with feelings of shame. It is important to understand the group and remove the stigma. Illiteracy may stem from poor education or a learning disorder. Education and training for this group is essential considering reading is a central part of learning and succeeding in the workplace.

### *Migrant/Seasonal Workers*

According to the U.S. Department of Labor's National Agricultural Workers Survey in the 2009-2010 survey period, 74 percent of all farm workers in the U.S. are born in Mexico, 82 percent are Hispanic, and 72 percent speak English less than "well." Sixty-three percent had less than a high school education.

The U.S. Department of Labor highlighted, in its Migrant and Seasonal Farmworkers (MSFW) Report for Program Year 2012, that South Carolina's One Stop Centers had taken 1,931 job applications for MSFWs and placed 1,271 into a job or 66 percent of those served. South Carolina Legal Services, a nonprofit organization providing legal services to low income state residents, notes that there are 28 registered migrant worker labor camps in 12 counties in the state.

The growing pace of economic globalization has created more migrant workers than ever before. Unemployment and increasing poverty have prompted many workers in developing countries to seek work elsewhere. Unskilled and cheap labor is wanted in developed nations, so the two forces meet. Migrant workers and their families have poorer physical health than the general population, higher infant mortality rates, and shorter life expectancy. Migrant farm workers often toil 12-14 hours a day, every day, during a harvest season. Issues affecting this community include poverty, worker abuse, sanitation, legal issues, and safety. Language barriers and mistrust of government are also common in the community.

### *Foster Care*

The average time a child spent in foster care was 15.9 months in FY 2013, the lowest average during the past four years, according to the South Carolina Department of Social Services (DSS). In FY 2013, there were 1,220 children waiting for adoption. As of June 2013, there were 3,734 children receiving in-home foster care services.

This group may lack stability as children and may have problems associated with their home situations. On a positive note, educational services are available for the children. This helps them overcome their unique issues and pursue a path for employment.

### *Temporary Assistance for Needy Families (TANF)*

For FY 2012-2013, the number of TANF households served decreased to 415,475 in South Carolina, a 6.5 percent decline from the previous fiscal year. The average wage of a TANF recipient employed through a South Carolina Department of Social Services program was \$8.27 per hour. This group may have difficulty obtaining a family-sustaining wage. Even when they have jobs, the pay is often low. Training and employment support should be provided as this group may often lack the education and needed skills to get a better job.

### *Disabled*

Estimates from U.S. Census Bureau's American Community Survey in 2012 show the state had a disabled labor force of more than 123,000 people. Over 27,000 of those people were unemployed, for a disabled unemployment rate of 22.2 percent. Therefore, this group will continue to need focused services to overcome substantial barriers to employment.

### **South Carolina Industry Employment**

South Carolina's economy took a significant hit during the Great Recession, but it has staged a remarkable comeback since the bottom of the downturn in 2009. In terms of nonfarm industry employment, the state has grown by 133,500 jobs, or 7.4 percent, between 2009 and 2014 as shown in the table in **Figure 12**. The sector leading the growth is Professional and Business Services with a gain of over 54,000 jobs; followed by Trade, Transportation, and Utilities gaining almost 25,000 new jobs; and Leisure and Hospitality adding 20,000 positions. Government, the largest of all sectors, gained 8,700 or 2.5 percent.

Several sectors declined over the period, led by Construction down nearly 6 percent; Natural Resources and Mining down by almost 5 percent; Financial Activities down by 4.3 percent; and Information, dropping by 2.6 percent.

In terms of the private sector economy, Retail Trade is the largest sector in 2014 with 15 percent of the employment, followed by Manufacturing with 14 percent, and Accommodations and Food Services with 13 percent. The chart in **Figure 13** illustrates the percentage breakdown of private industry employment.

### *South Carolina Leading Industries*

Another measure of the strength of an economy is industry specialization or answering the question "How does an industry's portion of the employment mix in the state compare to its portion in the nation?" This question identifies the definition of the location quotient (LQ). An LQ above 1.0 indicates that the industry has a higher concentration of employment in the state than it does in the nation. In South Carolina, six industry sectors led the state in 2013 in terms of employment specialization with LQs greater than 1.0 as measured by the Quarterly Census of Employment and Wages (QCEW)—Utilities, Construction, Manufacturing, Retail Trade, Administrative and Waste Services, and Accommodation and Food Services.

These industries highlight the state's strong economic base of tourism and manufacturing.

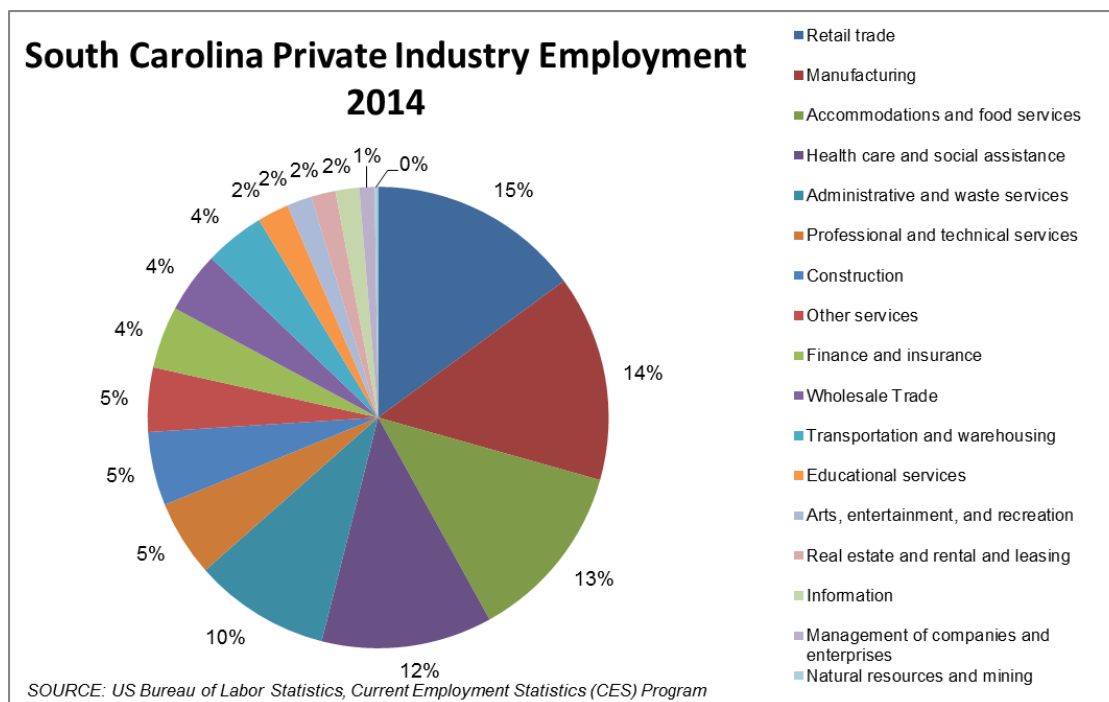
Figure 12

South Carolina Nonfarm Industry Employment - Annual Averages 2009, 2014

Series Code	Title	2009	2014	2014-2009	Percent Growth
00000000	Total nonfarm	1,815,100	1,948,600	133,500	7.4%
05000000	Total private	1,467,500	1,592,300	124,800	8.5%
06000000	Goods-producing	305,400	316,300	10,900	3.6%
07000000	Service-providing	1,509,700	1,632,300	122,600	8.1%
08000000	Private service-providing	1,162,100	1,276,000	113,900	9.8%
10000000	Natural resources and mining	4,100	3,900	-200	-4.9%
20000000	Construction	87,500	82,300	-5,200	-5.9%
30000000	Manufacturing	213,800	230,100	16,300	7.6%
40000000	Trade, transportation, and utilities	348,200	373,100	24,900	7.2%
50000000	Information	27,200	26,500	-700	-2.6%
55000000	Financial activities	100,800	96,500	-4,300	-4.3%
60000000	Professional and business services	199,700	254,100	54,400	27.2%
65000000	Education and health services	208,400	225,800	17,400	8.3%
70000000	Leisure and hospitality	208,500	228,500	20,000	9.6%
80000000	Other services	69,400	71,700	2,300	3.3%
90000000	Government	347,600	356,300	8,700	2.5%

SOURCE: US Bureau of Labor Statistics, Current Employment Statistics (CES) Program

Figure 13



## South Carolina Occupational Employment

South Carolina had 1.876 million wage and salary occupational employees in 2014 with an average hourly wage of \$19.03. **Figure 14** summarizes over 800 detailed occupations into major occupational groups and presents employment and average wage information.

**Figure 14**

South Carolina Occupational Employment, May 2014

Occupation Code	Occupation Title	Employment	Average Hourly Wage
<b>0</b>	<b>Total, All Occupations</b>	<b>1,876,480</b>	<b>\$19.03</b>
110000	Management Occupations	80,380	\$45.29
130000	Business and Financial Operations Occupations	68,800	\$28.68
150000	Computer and Mathematical Occupations	34,270	\$31.94
170000	Architecture and Engineering Occupations	35,720	\$35.56
190000	Life, Physical, and Social Science Occupations	8,600	\$27.57
210000	Community and Social Service Occupations	21,630	\$18.96
230000	Legal Occupations	12,530	\$36.03
250000	Education, Training, and Library Occupations	111,640	\$21.84
270000	Arts, Design, Entertainment, Sports, and Media Occupations	17,390	\$20.56
290000	Healthcare Practitioners and Technical Occupations	115,470	\$32.19
310000	Healthcare Support Occupations	52,700	\$12.49
330000	Protective Service Occupations	46,240	\$16.61
350000	Food Preparation and Serving Related Occupations	184,220	\$9.61
370000	Building and Grounds Cleaning and Maintenance Occupations	67,150	\$10.85
390000	Personal Care and Service Occupations	45,530	\$10.77
410000	Sales and Related Occupations	208,750	\$14.96
430000	Office and Administrative Support Occupations	294,060	\$15.41
450000	Farming, Fishing, and Forestry Occupations	4,300	\$15.41
470000	Construction and Extraction Occupations	67,390	\$18.00
490000	Installation, Maintenance, and Repair Occupations	83,530	\$19.91
510000	Production Occupations	185,950	\$16.93
530000	Transportation and Material Moving Occupations	130,220	\$14.92

SOURCE: SC Department of Employment and Workforce, Occupational Employment Survey (OES)

The Office and Administrative Support category had the highest occupational employment with 294,000 employees, followed by Sales and Related with 209,000, and then Production occupations with 186,000 employees. The highest average hourly wages were found in Management occupations at \$45.29, Legal occupations at \$36.03, and Architecture and Engineering occupations at \$35.56. Food Preparation and Serving Related occupations had the lowest average wage at \$9.61 per hour.

Retail Salespersons, Cashiers, and Team Assemblers are the top detailed occupations in the state in terms of the number of employees. **Figure 15** presents the top 20 occupations in the state.

**Figure 15**

**South Carolina Top Occupations, May 2014**

Occupation Title
Retail Salespersons
Cashiers
Team Assemblers
Combined Food Preparation and Serving Workers
Customer Service Representatives
Laborers and Freight, Stock, and Material Movers
Registered Nurses
Waiters and Waitresses
Secretaries and Administrative Assistants
Office Clerks, General
Janitors and Cleaners, Except Maids and Housekeepers
General and Operations Managers
Stock Clerks and Order Fillers
First-Line Supervisors of Office and Administrative Workers
Heavy and Tractor-Trailer Truck Drivers
Maintenance and Repair Workers, General
Bookkeeping, Accounting, and Auditing Clerks
First-Line Supervisors of Retail Sales Workers
Sales Representatives, Wholesale and Manufacturing
Nursing Assistants

SOURCE: SC Department of Employment and Workforce,  
Occupational Employment Survey (OES)

## Statewide and Local Workforce Investment Area (LWIA) Industry and Occupational Employment Projections

### *Statewide Industry Employment Projections*

**Figure 16** presents the latest available statewide industry employment projections over the 10-year period 2012-2022. Overall, all industries are projected to grow by 11.5 percent or by 228,800 jobs. Construction; Health Care and Social Assistance; Professional, Scientific, and Technical Services; and Administrative and Support and Waste Management are each expected to increase employment by over 20 percent. Only State and Federal Government are projected to decline.

Over the period, Health Care and Social Assistance is projected to take over the top spot in industry employment from Retail Trade, which is the second largest in 2022. Manufacturing and Accommodation and Food Services remain in third and fourth place, respectively.

**Figure 16**

**South Carolina Industry Employment Projections to 2022**

Industry	2012 Estimated Employment	2022 Projected Employment	Total 2012-2022 Employment Change	Total Percent Change
<b>Total, All Industries</b>	<b>1,983,585</b>	<b>2,212,392</b>	<b>228,807</b>	<b>11.54%</b>
Construction	77,510	99,892	22,382	28.88%
Health Care and Social Assistance	225,765	284,803	59,038	26.15%
Professional, Scientific, and Technical Services	79,490	97,807	18,317	23.04%
Administrative and Support and Waste Management	139,778	168,228	28,450	20.35%
Transportation and Warehousing	50,860	59,728	8,868	17.44%
Real Estate and Rental and Leasing	25,420	28,727	3,307	13.01%
Finance and Insurance	65,868	73,640	7,772	11.80%
Educational Services	164,216	182,632	18,416	11.21%
Arts, Entertainment, and Recreation	26,543	29,495	2,952	11.12%
Other Services (except Public Administration)	81,310	90,317	9,007	11.08%
Wholesale Trade	65,769	72,188	6,419	9.76%
Accommodation and Food Services	190,193	207,650	17,457	9.18%
Mining, Quarrying, and Oil and Gas Extraction	1,148	1,246	98	8.54%
Utilities	12,125	13,108	983	8.11%
Retail Trade	226,368	243,921	17,553	7.75%
Information	25,715	27,332	1,617	6.29%
Public Administration-Local	68,729	72,819	4,090	5.95%
Management of Companies and Enterprises	16,435	17,332	897	5.46%
Agriculture, Forestry, Fishing and Hunting	28,935	29,792	857	2.96%
Manufacturing	220,007	220,893	886	0.40%
Public Administration-State	41,162	41,003	-159	-0.39%
Public Administration-Federal	27,940	24,499	-3,441	-12.32%

SOURCE: SC Dept of Employment and Workforce, Industry Employment Projections Program

*Local Workforce Investment Area Industry Employment Projections*

Local Workforce Investment Area industry projections were made for the period 2012-2022, the latest available. Employment growth is projected to be uneven across the state as can be observed in **Figure 17**. Catawba, Greenville, and Trident are projected to grow the fastest with an annual growth rate over 1.3 percent. Upstate, WorkLink, and Santee-Lynches should grow about 1 percent annually.

Figure 17

## Local Workforce Investment Area Industry Employment Projections, 2012-2022

Area	2012 Estimated Employment	2022 Projected Employment	Average Annual Growth Rate	2012-2022 Employment Change	2012-2022 Percent Change
Catawba	113,199	132,167	1.56	18,968	16.76
Greenville	253,170	290,776	1.39	37,606	14.85
Lowcountry	91,673	104,057	1.28	12,384	13.51
Lower Savannah	116,065	128,977	1.06	12,912	11.12
Midlands	337,201	377,000	1.12	39,799	11.80
Pee Dee	126,589	140,842	1.07	14,253	11.26
Santee-Lynches	69,488	76,694	0.99	7,206	10.37
Trident	310,590	355,526	1.36	44,936	14.47
Upper Savannah	86,033	96,225	1.13	10,192	11.85
Upstate	151,495	167,510	1.01	16,015	10.57
Waccamaw	154,212	174,651	1.25	20,439	13.25
Worklink	123,940	137,185	1.02	13,245	10.69
South Carolina	1,983,585	2,212,392	1.10	228,807	11.54

SOURCE: SC Dept of Employment and Workforce, Industry Employment Projections Program

Trident, Midlands, and Greenville LWIAs, encompassing the state's largest urban areas, are expected to grow the most, adding over 35,000 jobs each. Catawba is projected to overtake Lower Savannah in industry employment by 2022.

### Statewide Occupational Employment Projections

The latest available statewide occupational projections coincide with the statewide industry projections for the period 2012-2022. **Figure 18** highlights the projections by major occupation group. As with the industry projections of Construction and Health Care and Social Assistance leading the employment growth, so two major health-related occupation groups and Construction lead in percent increase of occupational employment growth. In numeric terms, Office and Administrative Support occupations are projected to increase the most with over 28,000 new positions, while Healthcare Practitioners and Technical occupations should add 24,500 jobs.

Figure 18

## South Carolina Occupational Employment Projections to 2022

Occupations	2012 Estimated Employment	2022 Projected Employment	Total 2012-2022 Employment Change	Total Percent Change
<b>Total, All Occupations</b>	<b>1,983,585</b>	<b>2,212,392</b>	<b>228,807</b>	<b>11.54%</b>
Healthcare Support Occupations	53,417	68,239	14,822	27.75%
Construction and Extraction Occupations	74,150	91,139	16,989	22.91%
Healthcare Practitioners and Technical Occupations	119,607	144,110	24,503	20.49%
Computer and Mathematical Occupations	31,541	37,573	6,032	19.12%
Personal Care and Service Occupations	62,600	74,245	11,645	18.60%
Business and Financial Operations Occupations	71,290	81,673	10,383	14.56%
Community and Social Service Occupations	24,599	27,968	3,369	13.70%
Building and Grounds Cleaning and Maintenance Occupations	82,237	93,207	10,970	13.34%
Legal Occupations	13,602	15,411	1,809	13.30%
Transportation and Material Moving Occupations	127,680	143,922	16,242	12.72%
Education, Training, and Library Occupations	106,103	119,221	13,118	12.36%
Installation, Maintenance, and Repair Occupations	84,248	94,093	9,845	11.69%
Architecture and Engineering Occupations	38,391	42,551	4,160	10.84%
Life, Physical, and Social Science Occupations	9,873	10,861	988	10.01%
Arts, Design, Entertainment, Sports, and Media Occupations	23,002	25,240	2,238	9.73%
Food Preparation and Serving Related Occupations	179,201	196,157	16,956	9.46%
Office and Administrative Support Occupations	301,345	329,351	28,006	9.29%
Sales and Related Occupations	223,782	240,484	16,702	7.46%
Protective Service Occupations	46,729	50,170	3,441	7.36%
Management Occupations	109,774	117,193	7,419	6.76%
Production Occupations	180,767	189,656	8,889	4.92%
Farming, Fishing, and Forestry Occupations	19,647	19,928	281	1.43%

Source: SC Dept of Employment and Workforce, Occupational Employment Projections Program

### Growing or Declining Statewide Occupations

A major purpose of projecting occupational employment is to understand which ones are growing and which ones are declining. This information can help career advisors in the workforce development community or school guidance offices lead their clients into meaningful careers or avoid obsolete ones. **Figure 19** below highlights the fastest growing and declining occupations statewide in percentage terms over the projection period 2012-2022. Most of the listed growing occupations are in the Healthcare industry, while many of the declining occupations are being displaced by technological innovation.

**Figure 19**
**Top 20 Projected Fastest Growing or Declining Occupations, 2012-2022**

Rank	Growing Occupations	Declining Occupations
1	Insulation Workers, Mechanical	Fallers
2	Home Health Aides	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders
3	Interpreters and Translators	Textile Bleaching and Dyeing Machine Operators and Tenders
4	Diagnostic Medical Sonographers	Textile Knitting and Weaving Machine Setters, Operators, and Tenders
5	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	Data Entry Keyers
6	Personal Care Aides	Postal Service Clerks
7	Information Security Analysts	Postal Service Mail Sorters, Processors, and Processing Machine Operators
8	Skincare Specialists	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
9	Physician Assistants	Textile Cutting Machine Setters, Operators, and Tenders
10	Health Specialties Teachers, Postsecondary	Computer Operators
11	Nursing Instructors and Teachers, Postsecondary	Word Processors and Typists
12	Physical Therapist Assistants	Postal Service Mail Carriers
13	Occupational Therapy Assistants	Information and Record Clerks, All Other
14	Medical Secretaries	Travel Agents
15	Helpers--Electricians	Sewing Machine Operators
16	Personal Financial Advisors	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
17	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Switchboard Operators, Including Answering Service
18	Physical Therapist Aides	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
19	Dental Hygienists	Meter Readers, Utilities
20	Market Research Analysts & Marketing Specialists	Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers

SOURCE: SC Dept of Employment and Workforce, Occupational Employment Projections Program

Note: Fastest growing by percent increase with at least 100 new positions; fastest declining by percent decrease with at least 50 fewer positions.

### Local Workforce Investment Area Occupational Employment Projections

Similar to the LWIA Industry Employment Projections of 2012-2022 is the LWIA Occupational Employment Projections for 2012-2022. **Figure 20** presents the key metric from the projections, average annual job openings, as well as the percent of total for each LWIA.

The economy is expected to produce over 71,000 job openings annually statewide from 2012 to 2022. This figure includes workers added because of expanding employment but also to replace employees for reasons such as retirement or leaving an occupation permanently.

Trident LWIA is expected to have over 12,000 job openings per year, while Santee-Lynches LWIA, with the smallest share of openings at 3.4 percent, should add nearly 2,500.

**Figure 20**

#### Local Workforce Investment Area Occupational Employment Projections, 2012-2022

Area	Average Annual Job Openings	Percent of Total
Catawba	4,627	6.5%
Greenville	9,782	13.7%
Lowcountry	3,583	5.0%
Lower Savannah	4,119	5.8%
Midlands	11,985	16.8%
Pee Dee	4,511	6.3%
Santee-Lynches	2,451	3.4%
Trident	12,058	16.9%
Upper Savannah	3,125	4.4%
Upstate	5,310	7.5%
Waccamaw	6,185	8.7%
WorkLink	4,365	6.1%
<b>South Carolina</b>	<b>71,263</b>	<b>100.0%</b>

SOURCE: SC Dept of Employment and Workforce,  
Occupational Employment Projections Program

### South Carolina Commuting Patterns

Another measure of the economy in South Carolina is referred to as commuting patterns. These are trips workers make from their homes to their primary job with at least one end of the commute in the state. A primary job is the highest-paying job a worker has if holding multiple jobs. For this analysis, one end of the work travel may be out-of-state either in North Carolina or Georgia. A border state resident may work in South Carolina or an in-state resident may work in one of the two neighboring states.

The table in **Figure 21** presents a summary of commuting patterns for the year 2011. For each South Carolina county, the table shows IntraCounty trips, those that stay within the county, One-Way Outbound and One-Way Inbound trips, which represent the direction of travel. A final column of data shows the difference between inbound and outbound commuting trips.

Not surprisingly, the counties with the major urban areas and employment centers lead the list of top commuting counties— Charleston, Greenville, and Richland. The rural counties have the least amount of work-commuting activity. Greenville and Charleston each have over 100,000 intracounty trips.

Lexington County has the highest number of outbound trips from any county at over 63,700 trips as nearly 43,000 of those head to Richland County. Greenville and York are next with at least 51,000 outbound trips each. Nearly 35,000 York County commuters head to North Carolina.

Richland, Greenville, and Charleston counties have the most inbound commuting trips with over 91,000 trips each. Lexington, Spartanburg, and York are also major commuting destinations. Richland County shows the highest differential between inbound and outbound commuters with over 67,000 more incoming than outgoing worker trips a day. Dorchester and Berkeley lead in the greatest difference in outbound over inbound commuters at over 23,000 each. Overall, the state has 38,000 more outgoing commuters than inbound ones.

The state's commuting patterns show the interconnectivity of South Carolina's economy as nearly twice as many commuters travel outside of their residence county or state to work than stay within county. This travel has major implications for the transportation system and its upkeep, a major political issue in the state this year.

Figure 21

South Carolina County Commuting Patterns, 2011

County	IntraCounty	One-Way Outbound From County	One-Way Inbound to County	One-Way Inbound - Outbound
Abbeville	2,535	5,847	2,717	-3,130
Aiken	25,466	28,579	20,858	-7,721
Allendale	786	2,851	1,700	-1,151
Anderson	32,937	39,720	22,933	-16,787
Bamberg	1,525	5,729	1,792	-3,937
Barnwell	3,169	5,937	10,584	4,647
Beaufort	31,529	15,659	14,496	-1,163
Berkeley	18,481	48,337	24,686	-23,651
Calhoun	1,010	5,005	2,448	-2,557
Charleston	101,799	35,367	91,272	55,905
Cherokee	9,391	12,428	8,671	-3,757
Chester	3,408	9,123	3,964	-5,159
Chesterfield	6,698	13,283	6,609	-6,674
Clarendon	3,186	6,392	3,125	-3,267
Colleton	5,114	6,910	4,242	-2,668
Darlington	9,760	12,622	9,774	-2,848
Dillon	4,351	7,512	4,146	-3,366
Dorchester	12,432	41,659	15,276	-26,383
Edgefield	2,066	6,963	2,902	-4,061
Fairfield	2,096	5,786	4,069	-1,717
Florence	29,629	19,467	25,423	5,956
Georgetown	9,793	10,684	9,644	-1,040
Greenville	124,686	51,214	100,196	48,982
Greenwood	15,076	12,809	11,303	-1,506
Hampton	2,095	4,404	2,068	-2,336
Horry	73,060	26,056	29,726	3,670
Jasper	1,836	5,743	4,026	-1,717
Kershaw	7,396	18,361	7,170	-11,191
Lancaster	6,745	17,378	8,239	-9,139
Laurens	8,406	18,196	9,513	-8,683
Lee	1,228	5,185	2,544	-2,641
Lexington	42,311	63,744	52,128	-11,616
Marion	2,947	6,151	3,371	-2,780
Marlboro	2,957	4,815	3,057	-1,758
McCormick	537	2,754	719	-2,035
Newberry	6,297	10,791	6,480	-4,311
Oconee	12,572	17,314	8,212	-9,102
Orangeburg	16,702	14,400	13,888	-512
Pickens	16,117	22,815	17,186	-5,629
Richland	89,985	48,668	116,090	67,422
Saluda	1,781	5,108	2,729	-2,379
Spartanburg	62,662	45,612	48,803	3,191
Sumter	19,272	14,315	12,978	-1,337
Union	3,893	6,893	3,319	-3,574
Williamsburg	3,863	12,474	4,801	-7,673
York	40,490	51,000	34,143	-16,857
<b>Total</b>	<b>880,075</b>	<b>832,060</b>	<b>794,020</b>	<b>-38,040</b>

SOURCE: U. S. Census Bureau, Longitudinal Employer-Household Dynamics (LEHD) Program, 2011 Primary Jobs

Note: Information consists of a commuting trips to a primary job where at least one end of the trip is in South Carolina. The other end may be in South Carolina, North Carolina, or Georgia. Primary jobs are those that pay a worker the highest salary if holding multiple jobs.

## Job Skills Gap

There has recently been much discussion in the workforce community and media about the existence of a “job skills gap.” Discussions have presented wide-ranging conclusions from lack of a skills gap to specifying gaps of various degrees, depending on information used. Some of the research that has taken place to quantify and study the issue is detailed by the U.S. Department of Labor.<sup>3</sup>

This analysis for South Carolina will cover the topic from a broad perspective as well as in detail using numerous data sources from a supply versus demand perspective where possible. The data-driven approach is meant to yield a greater understanding and clarity of the topic.

### *Data Sources*

Labor market data for this project is drawn from a variety of government sources responsible for producing employment and educational statistics as well as one private source of labor demand. Several data sets from these sources are utilized and categorized as labor supply and labor demand.

On the job demand side of the analysis, one of the best sources of information is the Occupational Employment Projections (OEP) program, produced by SCDEW in partnership with the U. S. Bureau of Labor Statistics (BLS). An important aspect of the OEP is the expectation of a full-employment economy in the projected year. The data output from the program’s models, the annual job openings and projected year employment, should be viewed as if the economy reaches full production capacity in the projection year. From this source, the average annual job openings and the projected year employment by detailed occupation are used for comparison. The job openings metric includes openings due to growth in the economy as well as due to replacements from retirements or others permanently leaving the occupation. Another demand source utilized is the Help Wanted Online<sup>®</sup> (HWOL) data series, produced by The Conference Board. A final source of job demand is the Total Hires data from the U.S. Census Bureau’s Quarterly Workforce Indicators (QWI) program.

The sources used for labor supply analyses are the OEP base year employment of the two employment projections (2010, 2012), QWI Beginning of Quarter Employment, the Occupational Employment Statistics (OES), U.S. Census Bureau’s American Community Survey (ACS) and Current Population Survey (CPS), the South Carolina Commission on Higher Education (CHE), and the South Carolina Department of Education.

<sup>3</sup> Labor Market Information (LMI) Win-Win Network Community of Practice  
(<https://winwin.workforce3one.org/page/about>)

## Labor Supply

**Figure 22** highlights the sources of labor supply used for statewide analysis. The information is identified by four general categories of educational attainment—Less than high school, High school diploma or equivalent, Some college or associate's degree, and Bachelor's degree or higher. This categorization was used because each data element can be classified in this manner, and it makes for a like comparison across the data sources. Defining and quantifying actual job skills would not yield as unifying a metric as educational attainment does as the information does not exist in all data series.

**Figure 22**

South Carolina Measures of Labor Supply by Education Level

Education Level	Estim 2010 OEP Employment	% of Total	Estim 2012 OEP Employment	% of Total	OES 2013	% of Total	QWI 2013 Beg Qtr Employ 25+	% of Total
Less than high school	485,840	28%	559,324	29%	531,300	29%	208,446	13%
High school diploma or equivalent	766,313	45%	792,736	41%	781,960	43%	486,671	31%
Some college or associate's	187,200	11%	222,246	11%	197,110	11%	507,458	33%
Bachelor's or higher	282,491	16%	364,675	19%	302,080	17%	354,044	23%
<b>Total</b>	<b>1,721,844</b>	<b>100%</b>	<b>1,938,981</b>	<b>100%</b>	<b>1,812,450</b>	<b>100%</b>	<b>1,556,620</b>	<b>100%</b>

Education Level	CPS 2013 Employed*	% of Total	CPS 2013 Unemployed*	% of Total	CPS 2013 Labor Force*	% of Total	ACS 2013 Employed Ages 25-64	% of Total
Less than high school	128,200	7%	17,900	15%	146,000	8%	142,921	8%
High school diploma or equivalent	514,800	29%	42,900	37%	557,700	30%	442,642	26%
Some college or associate's	487,900	28%	34,900	30%	522,500	28%	571,198	34%
Bachelor's or higher	628,500	36%	20,000	17%	648,500	35%	537,601	32%
<b>Total</b>	<b>1,759,400</b>	<b>100%</b>	<b>115,700</b>	<b>100%</b>	<b>1,874,700</b>	<b>100%</b>	<b>1,694,362</b>	<b>100%</b>

Education Level	CPS 2013 Employed**	% of Total	CPS 2013 Unemployed**	% of Total	CPS 2013 Labor Force**	% of Total
Less than high school	173,153	9%	34,597	21%	207,750	10%
High school diploma or equivalent	582,187	29%	62,062	37%	644,249	30%
Some college or associate's	602,449	30%	46,879	28%	649,328	30%
Bachelor's or higher	657,004	33%	22,467	14%	679,471	31%
<b>Total</b>	<b>2,014,792</b>	<b>100%</b>	<b>166,005</b>	<b>100%</b>	<b>2,180,797</b>	<b>100%</b>

SOURCES: Bureau of Labor Statistics (BLS) & SCDEW, Occupational Employment Projections (OEP) Program, Occupational Employment Statistics Program (OES); U.S. Census Bureau 2013 Quarterly Workforce Indicators Data (QWI) Longitudinal-Employer Household Dynamics Program, Current Population Survey (CPS), American Community Survey (ACS).

Notes: Percentages may not add due to rounding.

\* Current Population Survey, 2013 Annual Average for Persons aged 25 years and older

\*\* Current Population Survey, 2013 Annual Average for Persons aged 16 years and older

The figure includes 11 separate measures of labor supply. The analysis includes base year employment (2010 and 2012) from the past two occupational employment projections, the OES for 2013, the 2013 average annual beginning-of-quarter employment from the QWI, two sets of 2013 annual averages from the CPS, and the 2013 one-year estimate of employment from the ACS.

The employment projections and occupation employment data include an occupation code that is matched to worker characteristics defined by the BLS and include the typical educational requirements for entry into the occupations. These data are measures of jobs. The QWI data are also a measure of jobs. The ACS and CPS data are the result of interviews of respondents as to their level of education. These two elements are measures of people. The differences in what is being measured and the method by which the data are collected and disseminated produce numeric and percentage differences in the educational breakdown of the labor supply information. The jobs data (OES and OEP) align much more closely with each other than with the person-survey (CPS and ACS) information. The QWI jobs or employment measure uses ACS data in its processing and is somewhat of a hybrid between the other jobs data and person surveys, and its results generally fall between them.

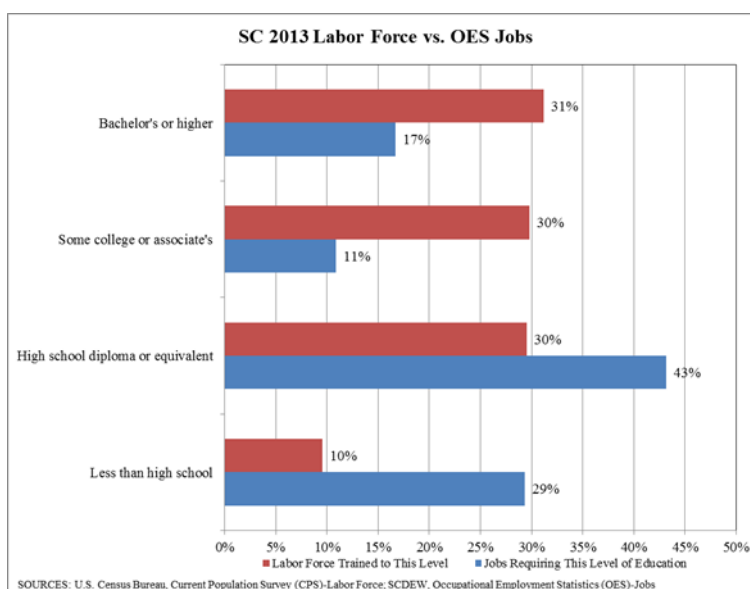
The CPS and ACS data show higher percentages on the upper two levels of education and lower percentages on the lower two levels as compared to the BLS data (except for the unemployed, which measures a much smaller segment of the population).

### *Labor Force and Jobs*

A common labor supply comparison made is shown in **Figure 23**. The chart highlights the composition of the labor force (employed plus unemployed) and the number of jobs in percentage terms by educational level. In the Bachelor's degree or higher category, 31 percent of the workforce says they are educated to that level, while only 17 percent of the jobs require that level of training. In the Some college or associate's degree category, 30 percent of the workforce is trained to that level to fill the 11 percent of the jobs requiring that education level.

In the lower two categories of education combined, the chart shows that 72 percent of the jobs require a high school diploma or lower, while 40 percent of the persons in the labor force have only those levels of education. The chart implies that, in general terms, much of the workforce is overeducated for the jobs they hold.

**Figure 23**



The percentage composition for the employed portion of the labor force is nearly identical to that of the labor force as a whole. Examination of that employment reinforces the above assertion that many are overeducated for their current positions as illustrated in **Figure 24**.

The table shows a selection of top occupations, which have the highest employment and requiring only a high school education or less, but the positions are filled by employees with at least some college education.

It should be noted that the BLS assignment of the typical educational requirements for entry into an occupation do not include all paths of entry. Many positions require higher levels of education than the typical level stated by BLS. Also, changing entry requirements for some occupations may lead to higher educated individuals entering jobs than those who already hold a similar position. However, BLS notes a rising of educational attainment of workers over time.

For these and other reasons, the above contrast between data sets may not be as stark in actuality as the chart displays. This

simplification of the actual workforce through representative data illustrates the difficulty in quantifying a potential skills gap when countervailing trends are present in the data.

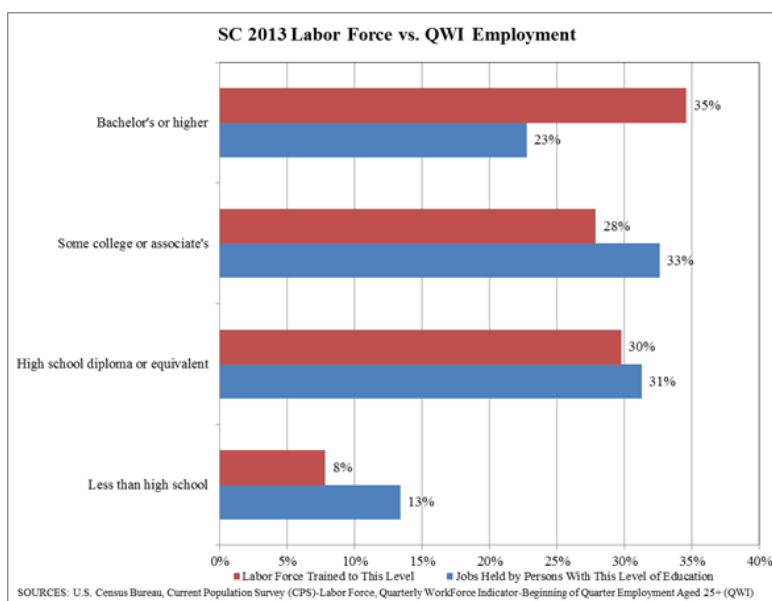
Another comparison of data sources of labor supply is illustrated in **Figure 25**. As in the chart of Figure 23, the 2013 annual average of the labor force is displayed. In addition, the 2013 annual average of QWI

**Figure 24**

SC Selected Top Occupations Requiring High School Education or Less Filled by Higher-Educated Employees, 2013

Occupation	Percent Holding Bachelor's Degree or Higher	Percent Having Some College or Associate's Degree
Retail salespersons	28%	41%
Cashiers	3%	31%
Secretaries and administrative assistants	26%	52%
Driver/sales workers and truck drivers	13%	24%
Customer service representatives	21%	44%
Production workers	7%	21%
Janitors and building cleaners	7%	11%
Grounds maintenance workers	7%	18%
Waiters and waitresses	5%	37%
Miscellaneous assemblers and fabricators	15%	32%
Child care workers	14%	29%

SOURCE: U.S. Census Bureau, Current Population Survey (CPS), 2013 Annual Average

**Figure 25**


measure of Beginning of Quarter Employment is presented. This data element shows the percentage of jobs held by persons trained to each of the four education levels.

The chart presents a much closer comparison of labor force to jobs for each category, especially at the lower three levels of education, than did Figure 23. The message here is that, for example, in the top category, though 23 percent of the jobs are held by someone with a Bachelor's degree or higher, fully 35 percent of the labor force holds at least a four-year degree and is educated for a high-skill position. For the lower three levels, the percentages of jobs outpace the labor force to fill them at each level. This means that the deficits are presumably filled by those from a higher level of education than is needed for the positions.

The analyses in this section illustrate the difficulty in quantifying a job skills gap. Separate data sources provide differing results when measuring jobs. Each is accurate for the data presented, but do not support the prevailing story of a jobs gap as clearly as may be claimed by some.

### Labor Demand

**Figure 26** highlights the sources of labor demand used for statewide analysis. The information is identified by the same four general categories of educational attainment as for labor supply—Less than high school, High school diploma or equivalent, Some college or associate's degree, and Bachelor's degree or higher.

**Figure 26**

#### South Carolina Measures of Labor Demand by Education Level

Education Level	Proj 2020 OEP Employ- ment	% of Total	OEP Avg Ann Openings, 2010-20	% of Total	Proj 2022 OEP Employ- ment	% of Total	OEP Avg Ann Openings, 2012-22	% of Total	HWOL 2013 Job Postings	% of Total	QWI 2013 Total Hires 25+	% of Total
Less than high school	554,284	28%	21,469	32%	620,118	29%	23,480	34%	8,600	15%	37,891	18%
High school diploma or equivalent	863,471	44%	27,113	41%	871,676	40%	25,273	36%	20,902	36%	68,694	33%
Some college or associate's	221,273	11%	6,911	10%	261,125	12%	8,354	12%	12,012	21%	65,507	31%
Bachelor's or higher	329,690	17%	11,065	17%	415,804	19%	12,850	18%	16,851	29%	37,292	18%
<b>Total</b>	<b>1,968,718</b>	<b>100%</b>	<b>66,558</b>	<b>100%</b>	<b>2,168,723</b>	<b>100%</b>	<b>69,957</b>	<b>100%</b>	<b>58,365</b>	<b>100%</b>	<b>209,384</b>	<b>100%</b>

SOURCES: Bureau of Labor Statistics (BLS) & SCDEW, Occupational Employment Projections (OEP) Program;

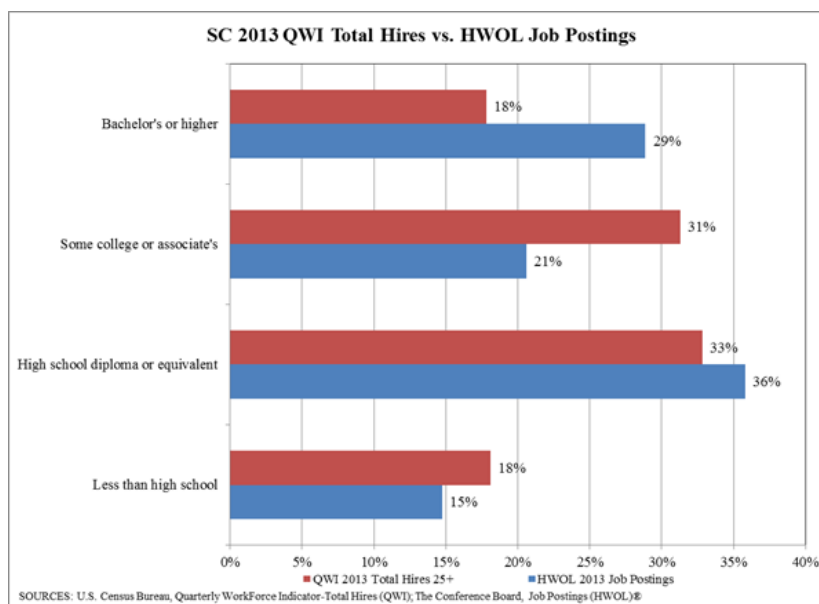
U.S. Census Bureau 2013 Quarterly Workforce Indicators Data (QWI) Longitudinal-Employer Household Dynamics Program;

The Conference Board, Help Wanted Online Data Series ®(HWOL).

The future year employment and the annual openings data are from the latest two employment projections analyses. Each employment element can be thought of as future demand and the average annual openings information can be both current and future because its figures would apply for each year of the projection period. For all of the projections information, in the upper two categories of education, the percentages compare closely, varying by only two percentage points. For the lower two levels of education, the range is wider.

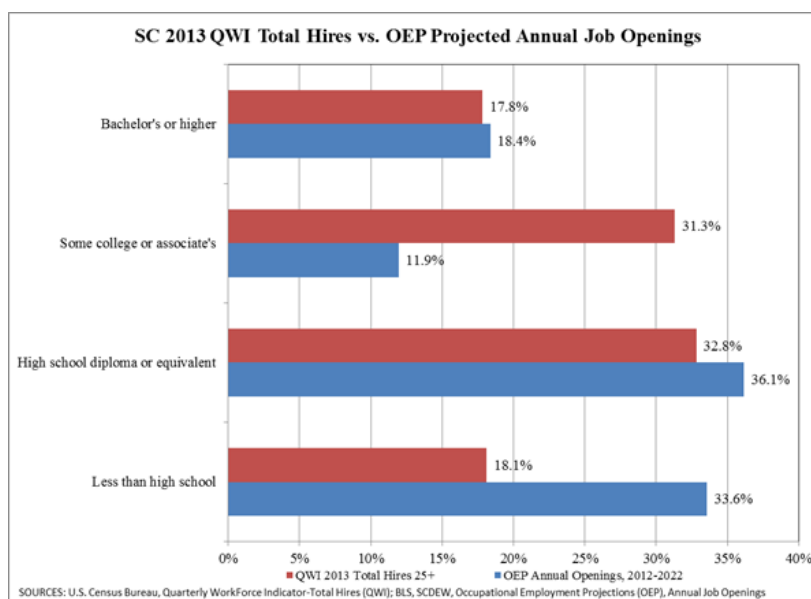
The Help Wanted Online® data series shown is the annual average for 2013 and includes an occupational code that is matched to worker characteristics of required education for entry into an occupation. The findings are compiled from over 16,000 internet job boards monthly. The HWOL percentage summary varies widely for the two upper levels of education compared to the projections data. There is about a 10 percent difference in each of the two levels in the desired demand versus the projected demand. The gap is even wider at the lowest education level. The QWI Total Hires actual demand data compares much more closely for the lower two categories to the HWOL desired employer demand in percentage terms as shown in **Figure 27**. There is much variation in the upper two categories. This presents a comparison of unfilled jobs (HWOL) to filled jobs (QWI). There appears to be unmet demand at the Bachelor's degree level.

**Figure 27**



The chart in **Figure 28** highlights the comparison of the latest annual average projected openings to the QWI Total Hires by percent. This graphic compares projected demand to actual demand. For the Bachelor's degree or higher level, the demand matches well at about 18 percent for each source. The High School level also compares well. However, 31 percent of the actual hirings occurred at the Some College category, while only 12 percent of total openings were projected to be available at that level. About one-third of openings

**Figure 28**



were projected to be available at the lowest education level, while only 18 percent of jobs filled took place there.

### *Labor Supply Versus Labor Demand*

Comparing various measures of labor supply and demand yields an understanding of whether or not supply can or will meet demand. One such comparison is the available labor force to the projected job openings as shown in **Figure 29**.

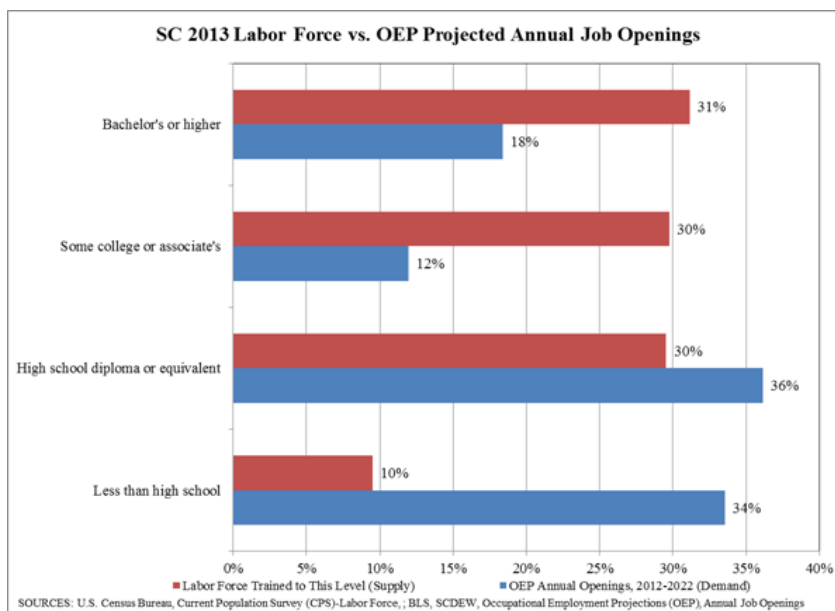
For the top two educational categories, the graphic shows that 61 percent of the labor force is trained with at least some college, while only 30 percent of the job openings are available at those same levels.

Generally, the opposite situation is true for the lower two levels. That is, more job openings are available (70 percent) for a smaller share of the labor force (40 percent). This means that persons not able to find positions at their higher level of training must search for jobs requiring less education.

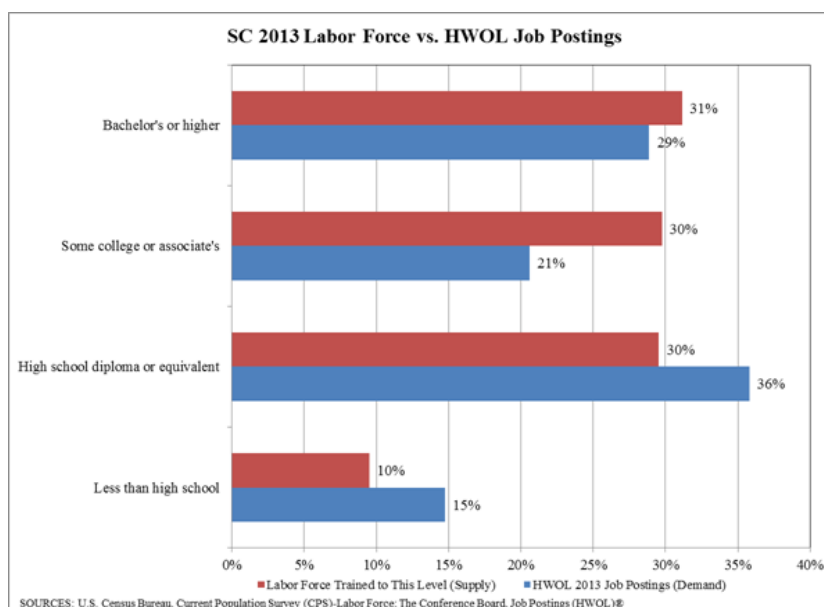
Another useful comparison is the labor force and the HWOL job postings information. **Figure 30** shows a close agreement between the data sets for the Bachelor's degree or higher category with just a two percent difference. In fact, the greatest difference for any category is nine percent.

Overall, this is a very good match between labor supply and demand. Taking the top three categories

**Figure 29**



**Figure 30**



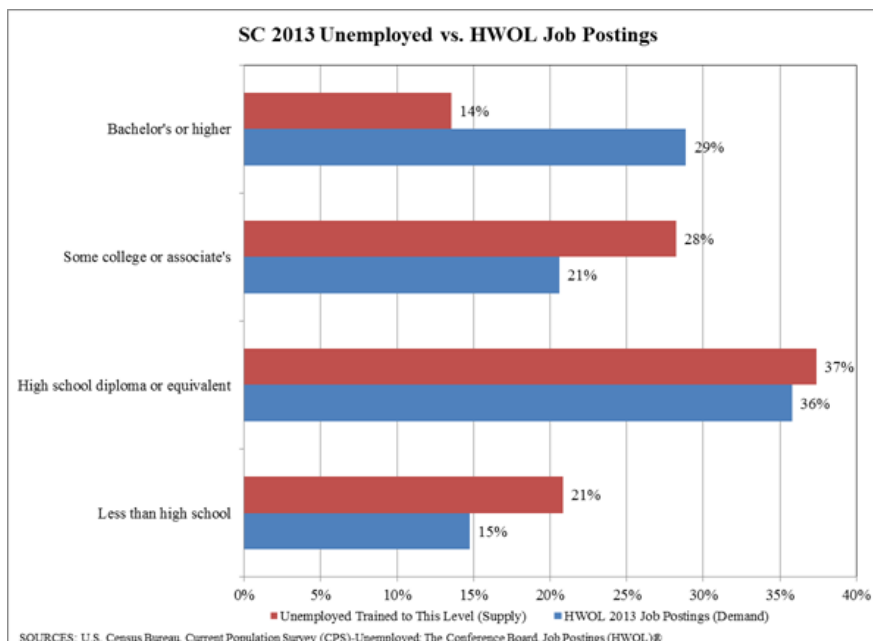
together shows that supply outpaces demand by 91 percent to 86 percent. Again, this does not show a supply gap for skilled labor.

What about a narrow view of available labor as in the unemployed? How would the unemployed compare to the HWOL desired demand? The chart in **Figure 31** highlights the comparison.

This shows a severe supply gap at the upper level with a moderate demand gap for the remaining categories taken together. It represents those without work but actively searching compared to advertised employer demand. In essence, though, the supply is too narrow. More than just those searching are truly available to accept a posted job. Those currently working

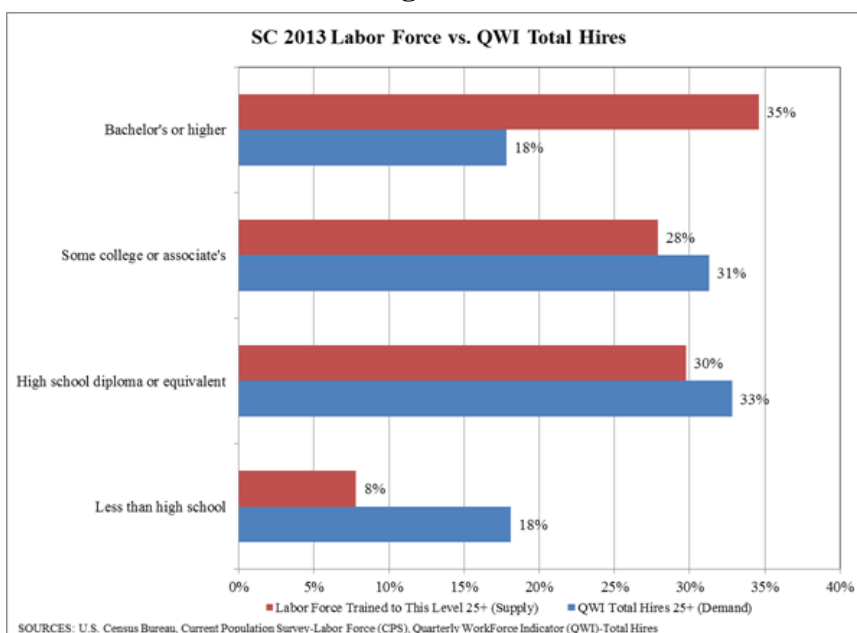
at a lower level than desired, those working part-time seeking full-time work, or those not actively searching for work would all be part of a larger labor pool.

**Figure 31**



Another labor supply versus demand analysis is shown in **Figure 32**. The graphic presents the labor force compared to the actual hires for persons aged 25 and older. For the Bachelor's degree or higher category, nearly twice the percentage of the labor force was available for the actual hires that were made (35 percent to 18 percent). For the two middle categories, there is a close match with the Total Hires demand measure exceeding the supply by six percent overall.

**Figure 32**



The comparison supports the point made earlier that labor oversupply on the upper end of the educational spectrum leads to many in the workforce taking positions for which they are over trained.

### *Recent Postsecondary Completers Versus Projected Annual Job Openings*

A more detailed analysis of supply and demand gap statewide is shown by comparing the number of completions from public and independent postsecondary schools with projected annual job openings. This analysis uses data from the CHE for the state and compares it to the latest available statewide analysis on the average annual job openings from SCDEW's OEP Program, 2012-2022, which shows the openings for an average year over the 10-year period. The listed openings are projected to be available for each of the ten years.

The CHE completer database covers the most recently available school year 2012-2013 (July 1 to June 30 for the term) and includes the Classification of Instructional Programs (CIP) code, the institution name, and number of graduates in each of 10 degree classifications. Each CIP code is matched to one of 16 career clusters for comparison to the OEP data. The OEP data details the expected job openings for an average year over the period 2012 to 2022 and includes the occupational code, which is matched to a career cluster, to the educational job requirements to enter the occupation, to the typical work experience needed for the job, and to the on-the-job training needed for the position.

The CHE databases were summarized by career cluster and by degree awarded. The employment projections were summarized by career cluster and by education level required for the job for those categories matching the CHE degree program summaries. A comparison was made for the two primary data sets in terms of the number of graduates to the number of projected job openings for each of the two variables. **Figures 33, 34, and 35** present tables highlighting the entire analysis.

**Figure 33**

South Carolina Postsecondary Completers by Career Cluster, 2012-2013

Career Clusters	Postsecondary Non-Degree Award	Associate's	Bachelor's	Master's	Doctorate	Total
Agriculture, Food & Natural Resources	50	95	357	68	12	582
Architecture & Construction	598	189	140	53	5	985
Arts, Audio/Video Technology & Communications	150	95	2,139	194	25	2,603
Business Management & Administration	525	1,003	3,246	997	15	5,786
Education & Training	271	3,056	4,409	2,092	158	9,986
Finance	235	236	950	154	-	1,575
Government & Public Administration	-	-	739	67	13	819
Health Science	3,147	2,127	1,703	655	756	8,388
Hospitality & Tourism	268	167	474	31	7	947
Human Services	648	610	1,927	802	41	4,028
Information Technology	359	464	473	111	16	1,423
Law, Public Safety, Corrections & Security	153	667	600	42	218	1,680
Manufacturing	1,185	479	31	-	-	1,695
Marketing	31	77	858	40	-	1,006
Science, Technology, Engineering & Mathematics	95	591	5,535	840	251	7,312
Transportation, Distribution & Logistics	689	144	3	7	-	843
Grand Total	8,404	10,000	23,584	6,153	1,517	49,658

SOURCE: SC Commission on Higher Education (CHE)

NOTE: For CHE, all awards above Bachelor's degree and below Doctorate level were included in Master's.

**Figure 34**

South Carolina Projected Average Annual Job Openings by Career Cluster, 2012-2022

Career Cluster	Postsecondary Non-Degree Award	Associate's	Bachelor's	Master's	Doctorate	Total
Agriculture, Food & Natural Resources		45	86		-	131
Architecture & Construction	211	34	463			708
Arts, Audio/Video Technology & Communications	126	16	274			416
Business, Management and Administration			2,008	7		2,015
Education & Training	94	178	2,373	574	370	3,589
Finance			1,179			1,179
Government & Public Administration			158	24		182
Health Science	2,395	2,438	494	305	905	6,537
Hospitality & Tourism			120			120
Human Service	270	21	334	161		786
Information Technology		86	886			972
Law, Public Safety, Corrections & Security	214	159	15		214	602
Manufacturing	224	293				517
Marketing			629			629
Science, Technology, Engineering & Mathematics			1,160	19	10	1,189
Transportation, Distribution & Logistics	857	18	82			957
Grand Total	4,391	3,288	10,261	1,090	1,499	20,529

SOURCE: BLS, SCDEW, Occupational Employment Projections (OEP), 2012-2022 Projections

**Figure 35**

South Carolina Postsecondary Education Gap by Career Cluster, 2012-2013

Career Cluster	Postsecond-ary Non-Degree Award	Associate's	Bachelor's	Master's	Doctorate	Total
Agriculture, Food & Natural Resources	50	50	271	68	12	451
Architecture & Construction	387	155	-323	53	5	277
Arts, Audio/Video Technology & Communications	24	79	1,865	194	25	2,187
Business, Management and Administration	525	1,003	1,238	990	15	3,771
Education & Training	177	2,878	2,036	1,518	-212	6,397
Finance	235	236	-229	154	0	396
Government & Public Administration	0	0	581	43	13	637
Health Science	752	-311	1,209	350	-149	1,851
Hospitality & Tourism	268	167	354	31	7	827
Human Service	378	589	1,593	641	41	3,242
Information Technology	359	378	-413	111	16	451
Law, Public Safety, Corrections & Security	-61	508	585	42	4	1,078
Manufacturing	961	186	31	0	0	1,178
Marketing	31	77	229	40	0	377
Science, Technology, Engineering & Mathematics	95	591	4,375	821	241	6,123
Transportation, Distribution & Logistics	-168	126	-79	7	0	-114
Grand Total	4,013	6,712	13,323	5,063	18	29,129

SOURCE: BLS, SCDEW, Occupational Employment Projections (OEP); SC Commission on Higher Education (CHE)

Several observations can be made concerning the results. One is that there are over 29,000 more total graduates than job openings for the year. In the overwhelming number of cases, the number of graduates is greater than the number of openings for each of the cluster/degree combinations. A few notable exceptions are:

- More graduates with Bachelor's degrees are required in Architecture and Construction;
- More graduates with Doctorate degrees are required in Education and Training;
- More graduates with Bachelor's degrees are required in Finance;
- Health Science is short of graduates at the Associate's and Doctorate levels;
- Information Technology is short of Bachelor's degree-holders by over 400 graduates;
- More graduates with postsecondary certificates are required in Law, Public Safety, Corrections and Security; and
- More graduates with Bachelor's degrees and non-degree awards are required in Transportation, Distribution, and Logistics.

Of course, more than just recent graduates would be able to fill the projected openings. The oversupply of graduates overall may partially explain why many occupations are filled with

overqualified candidates as highlighted in Figure 24. Analysis of the two previous school-year completers, not shown, revealed similar numbers of graduates as well as distributions across degrees and career clusters.

#### *Twelfth Grade Student Career Cluster Choices Versus Projected Annual Openings*

A final examination of potential labor supply and projected demand is with South Carolina twelfth grade students and projected job openings. Many high schools seniors are on the cusp of entering the workforce within one year. High school students in the state must choose one of 16 career clusters in order to focus their educational efforts. For the school year 2012-2013, their choices were summarized by career cluster and LWIA on a percentage basis. The average annual job openings from the 2012-2022 OEP program, the latest available at the LWIA level, were summarized in a similar manner. Again, the OEP data details the expected job openings for each year over the period 2012 to 2022. The differences between the two data sets show whether or not a gap exists between potential labor supply and demand. Obviously, there is no certainty that the students will actually join the workforce in an occupation within their chosen cluster or in the geographic area in which they attended school. The tables below in **Figure 36** highlight this analysis.

## Figure 36

### South Carolina Twelfth Grade Student Career Cluster Choices by Local Workforce Investment Area for 2012-2013 School Year (Supply)

Cluster	Catawba	Greenville	Lowcountry	Lower Savannah	Midlands	Pee Dee	Santee-Lynches	Trident	Upper Savannah	Upstate	Waccamaw	Worklink
Agriculture, Food & Natural Resources	2.6%	3.9%	1.9%	2.6%	1.8%	2.4%	3.3%	1.1%	5.0%	2.4%	3.1%	5.0%
Architecture & Construction	3.5%	2.4%	3.0%	4.0%	3.3%	3.9%	3.1%	2.6%	5.4%	3.8%	1.3%	3.8%
Arts, Audio/Video Technology & Communications	19.3%	10.2%	19.0%	10.3%	24.1%	8.0%	9.9%	16.6%	10.8%	12.9%	15.7%	12.9%
Business, Management & Administration	6.7%	10.4%	13.8%	9.6%	5.8%	8.1%	8.8%	6.5%	9.1%	6.3%	8.8%	6.4%
Education & Training	8.1%	8.5%	11.4%	7.1%	4.9%	7.0%	9.7%	5.6%	5.7%	8.9%	6.6%	7.0%
Finance	0.8%	1.5%	0.7%	0.8%	0.7%	1.4%	0.7%	1.4%	0.7%	0.8%	0.4%	0.5%
Government & Public Administration	4.6%	2.8%	3.1%	6.7%	4.4%	8.5%	5.8%	3.3%	3.5%	1.5%	2.1%	2.1%
Health Science	20.8%	23.3%	17.8%	24.6%	20.0%	29.6%	21.5%	21.8%	25.5%	25.1%	17.3%	25.3%
Hospitality & Tourism	2.7%	2.7%	3.6%	3.4%	3.6%	2.0%	3.2%	4.7%	0.9%	1.8%	2.9%	2.7%
Human Service	3.3%	5.8%	5.0%	5.0%	5.0%	4.8%	6.7%	5.5%	6.3%	6.5%	7.1%	4.6%
Information Technology	3.3%	2.3%	3.6%	2.8%	2.5%	2.5%	3.1%	3.5%	1.2%	2.9%	3.1%	2.8%
Law, Public Safety, Corrections & Security	7.8%	6.6%	4.0%	6.3%	5.2%	4.5%	10.1%	7.0%	3.2%	7.9%	5.3%	6.6%
Manufacturing	1.7%	2.7%	0.7%	2.3%	1.0%	1.6%	2.8%	2.3%	3.8%	4.7%	1.9%	3.1%
Marketing	1.8%	1.5%	1.4%	0.9%	2.2%	1.2%	0.3%	2.0%	0.3%	0.8%	0.3%	1.3%
Science, Technology, Engineering & Mathematics	8.3%	12.8%	9.3%	9.9%	13.0%	10.7%	6.6%	13.8%	12.4%	9.8%	21.1%	12.1%
Transportation, Distribution & Logistics	4.6%	2.5%	1.6%	3.8%	2.6%	3.8%	4.5%	2.5%	6.0%	3.9%	2.9%	3.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SOURCE: South Carolina Department of Education, Office of Intervention Services

### South Carolina Projected Average Annual Job Openings by Career Cluster and Local Workforce Investment Area Over the Period 2012-2022 (Demand)

Cluster	Catawba	Greenville	Lowcountry	Lower Savannah	Midlands	Pee Dee	Santee-Lynches	Trident	Upper Savannah	Upstate	Waccamaw	Worklink
Agriculture, Food & Natural Resources	0.6%	0.4%	0.9%	3.6%	0.9%	2.3%	3.1%	0.7%	3.7%	0.9%	0.9%	1.2%
Architecture & Construction	5.9%	6.2%	9.6%	9.1%	5.7%	4.8%	7.6%	7.6%	6.0%	6.5%	8.0%	7.6%
Arts, Audio/Video Technology & Communications	0.9%	1.3%	0.3%	0.4%	0.9%	0.3%	0.2%	0.9%	0.2%	0.5%	0.9%	0.5%
Business, Management & Administration	15.1%	15.6%	12.3%	14.8%	18.0%	12.9%	12.6%	15.3%	12.5%	13.4%	11.8%	12.5%
Education & Training	6.6%	4.4%	5.2%	5.7%	6.5%	6.1%	6.9%	4.6%	6.6%	5.6%	5.0%	6.9%
Finance	5.2%	3.7%	3.0%	3.1%	4.5%	3.5%	2.7%	3.6%	1.8%	2.9%	2.8%	2.6%
Government & Public Administration	0.5%	0.5%	0.3%	0.5%	0.6%	0.6%	0.7%	0.5%	0.6%	0.2%	0.3%	0.5%
Health Science	9.1%	10.4%	9.4%	8.8%	12.2%	14.1%	13.4%	12.4%	8.6%	10.3%	7.2%	10.6%
Hospitality & Tourism	14.5%	14.1%	25.7%	15.7%	12.7%	14.1%	14.1%	15.7%	12.3%	15.3%	28.5%	15.1%
Human Service	4.6%	3.9%	4.1%	1.7%	3.9%	4.8%	4.1%	3.6%	3.7%	3.3%	3.4%	3.2%
Information Technology	1.8%	2.2%	0.5%	0.5%	2.2%	1.3%	0.4%	2.3%	0.7%	0.8%	0.6%	0.9%
Law, Public Safety, Corrections & Security	2.2%	1.9%	3.0%	3.9%	4.5%	3.9%	3.6%	3.2%	3.3%	2.4%	3.0%	3.1%
Manufacturing	10.2%	10.9%	3.3%	9.9%	6.2%	9.5%	9.2%	6.2%	21.5%	14.7%	3.8%	12.8%
Marketing	14.8%	12.8%	16.7%	11.2%	13.1%	12.8%	12.8%	13.7%	9.7%	13.3%	18.6%	14.1%
Science, Technology, Engineering & Mathematics	1.2%	2.4%	0.1%	1.0%	1.1%	0.6%	0.5%	1.5%	1.0%	0.9%	0.2%	1.3%
Transportation, Distribution & Logistics	6.8%	9.0%	5.5%	10.1%	6.9%	8.6%	8.1%	8.1%	7.7%	8.8%	4.9%	7.1%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SOURCE: BLS, SCDEW- Occupational Employment Projections (OEP), 2012-2022

### South Carolina Difference in Student Career Cluster Choices and Projected Job Openings by Local Workforce Investment Area (Supply-Demand)

Cluster	Catawba	Greenville	Lowcountry	Lower Savannah	Midlands	Pee Dee	Santee-Lynches	Trident	Upper Savannah	Upstate	Waccamaw	Worklink
Agriculture, Food & Natural Resources	2.0%	3.5%	1.0%	-1.0%	0.9%	0.1%	0.2%	0.3%	1.3%	1.5%	2.2%	3.7%
Architecture & Construction	-2.4%	-3.8%	-6.6%	-5.1%	-2.4%	-0.8%	-4.5%	-5.0%	-0.6%	-2.7%	-6.8%	-3.9%
Arts, Audio/Video Technology & Communications	18.5%	9.0%	18.8%	9.9%	23.1%	7.7%	9.6%	15.7%	10.7%	12.4%	14.8%	12.4%
Business, Management & Administration	-8.4%	-5.2%	1.6%	-5.2%	-12.1%	-4.9%	-3.8%	-8.9%	-3.5%	-7.1%	-3.0%	-6.1%
Education & Training	1.5%	4.1%	6.1%	1.4%	-1.6%	1.0%	2.8%	0.9%	-0.9%	3.3%	1.6%	0.1%
Finance	-4.4%	-2.3%	-2.3%	-2.3%	-3.8%	-2.1%	-2.0%	-2.2%	-1.1%	-2.2%	-2.4%	-2.1%
Government & Public Administration	4.1%	2.4%	2.8%	6.2%	3.8%	7.9%	5.1%	2.7%	2.9%	1.3%	1.8%	1.6%
Health Science	11.7%	12.9%	8.4%	15.7%	7.8%	15.5%	8.2%	9.4%	16.9%	14.7%	10.1%	14.7%
Hospitality & Tourism	-11.8%	-11.4%	-22.1%	-12.3%	-9.1%	-12.1%	-11.0%	-11.0%	-11.4%	-13.4%	-25.6%	-12.3%
Human Service	-1.4%	1.9%	0.9%	3.3%	1.1%	0.0%	2.6%	1.9%	2.6%	3.2%	3.7%	1.4%
Information Technology	1.5%	0.0%	3.0%	2.3%	0.3%	1.2%	2.7%	1.2%	0.5%	2.1%	2.5%	1.9%
Law, Public Safety, Corrections & Security	5.6%	4.7%	1.0%	2.4%	0.7%	0.6%	6.5%	3.8%	-0.1%	5.5%	2.3%	3.5%
Manufacturing	-8.5%	-8.3%	-2.6%	-7.6%	-5.2%	-7.9%	-6.5%	-3.9%	-17.7%	-10.1%	-2.0%	-9.7%
Marketing	-13.0%	-11.3%	-15.3%	-10.4%	-11.0%	-11.6%	-12.5%	-11.7%	-9.4%	-12.5%	-18.3%	-12.8%
Science, Technology, Engineering & Mathematics	7.1%	10.4%	9.2%	8.9%	11.9%	10.1%	6.1%	12.3%	11.5%	8.8%	20.9%	10.9%
Transportation, Distribution & Logistics	-2.1%	-6.5%	-3.8%	-6.3%	-4.3%	-4.8%	-3.5%	-5.6%	-1.7%	-4.8%	-2.0%	-3.3%
Grand Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

SOURCES: BLS, SCDEW- Occupational Employment Projections (OEP), 2012-2022; South Carolina Department of Education, Office of Intervention Services

Arts, Audio-Video Technology, and Communications; Health Sciences; and Science, Technology, Engineering, and Mathematics (STEM) were the top three student choices in most of the LWIAs, while Business Management and Administration; Marketing; and Hospitality and Tourism were, generally, the top three clusters with the largest projected openings. These six clusters were where most of the gaps occurred between the supply and demand for the LWIAs. There were additional clusters with other mismatches for a few of the LWIAs as well. Occupations such as Customer Service Representatives, Retail Salesperson, Waiters and Waitresses, Food Preparation and Serving Workers, seen in the Marketing and Hospitality and Tourism clusters, are among the most demanded by South Carolina employers but not what students are choosing. These occupations require less education than many occupations that students desire.

This analysis gives an indication as to the skills gap that has been in the news over the past several years. Students' choices for a career do not match up with the needs of employers in many situations. The previous analysis of recent college completers produced similar results in that there were severe supply/demand mismatches in several key comparisons. Though overall supply seems to meet employer demand, examining the data at a deeper level reveals supply gaps in certain clusters/degrees and geographies in the state, at least as far as new potential workers are concerned. Of course, not all the students and graduates would find work in-state, and also many out-of-state graduates would come to South Carolina to work. The analysis does not imply a closed system but presents the available information to better understand the dynamics of the workforce.

### *Soft Skills*

Soft skills are those attributes not defined by technical accomplishments or certifications attained. They are interpersonal skills or character traits that define an individual. Job advertisements from the HWOL database identify hard and soft skills that employers seek. Analysis of data over the past three years indicates that many soft skills are listed as a part of the job postings, such as communication skills, integrity, team-orientation, detail-orientation, problem solving skills, and self-motivation. For example, oral and written communication skills appeared in 46,800 job postings in the state or 27 percent of the total ads over a four-month period in the latter part of 2014 and early 2015. Over 20,500 ads for the same time frame listed the soft skill "integrity."

Many of these requisite soft skills appear in ads across the workforce spectrum, including most occupations, experience levels desired, or education required. These skills can be learned or improved upon through proper training. They should be a part of the basic educational package that high school and postsecondary students should be expected to have mastered before entering the workforce, but those skills are missing in many individuals. The fact that advertisements list these requirements indicates that there is a soft skills gap experienced by employers.

*Job Skills Gap Conclusion*

This examination utilized 19 separate data series in a comprehensive analysis but may not be the final answer on this complex subject as other sources or specific employer surveys may highlight differing aspects of the skills gap topic.

Perhaps, there is a question of quality of the workforce not so much as quantity. Many students and graduates have career desires or awards in professions that have either an oversupply of recent potential workers or a low employer demand. Employers require improved soft skills of their potential employees across the workforce.

In terms of supply versus demand, the findings generally show that there is an oversupply of the labor force on the upper half of the educational spectrum when compared to job demand.

**Required Language**

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.”

The Federal Government reserves a paid-up, nonexclusive and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use for federal purposes: i) the copyright in all products developed under the grant, including a subgrant or contract under the grant or subgrant; and ii) any rights of copyright to which the recipient, subrecipient or a contractor purchases ownership under an award (including but not limited to curricula, training models, technical assistance products, and any related materials). Such uses include, but are not limited to, the right to modify and distribute such products worldwide by any means, electronically or otherwise. Federal funds may not be used to pay any royalty or license fee for use of a copyrighted work, or the cost of acquiring by purchase a copyright in a work, where the Department has a license or rights of free use in such work, although they may be used to pay costs for obtaining a copy which is limited to the developer/seller costs of copying and shipping. If revenues are generated through selling products developed with grant funds, including intellectual property, these revenues are program income. Program income must be used in accordance with the provisions of this grant award and 2 CFR 200.307.





South Carolina Department of Employment and Workforce

1550 Gadsden Street Columbia, South Carolina 29201

(803) 737-2660

[www.dew.sc.gov](http://www.dew.sc.gov)

[www.scworkforceinfo.com](http://www.scworkforceinfo.com)

