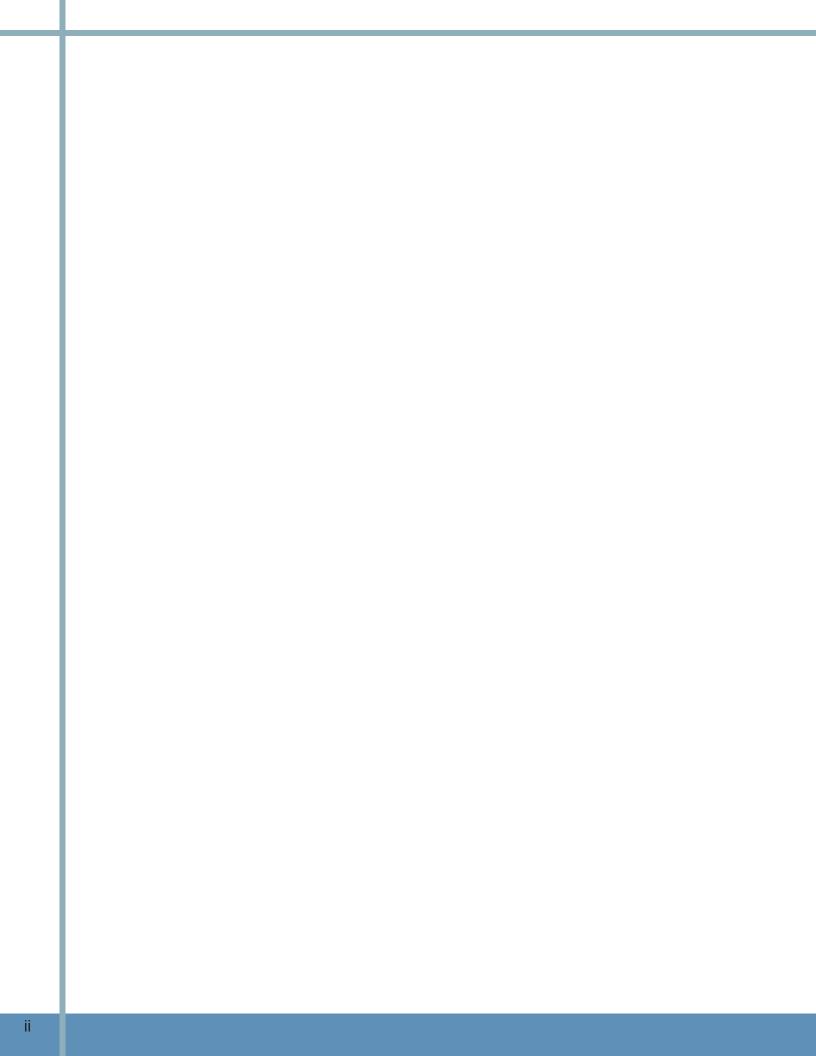
# WORKLINK LWIA WORKFORCE REPORT 2012





The Worklink Workforce Report is published by the Labor Market Information (LMI) Department of the South Carolina Department of Employment and Workforce. The information and analyses provided in this publication are based on data collected from sources throughout South Carolina and the United States.

#### About SC DEW and LMI:

The Labor Market Information 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.

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# **EXECUTIVE SUMMARY**

The employment leaders for WorkLink Local Workforce Investment Area (LWIA) are Manufacturing, Retail Trade, and Healthcare and Social Assistance. Employment growth is anticipated by 2018 in several industries, especially Healthcare and Social Assistance, Administrative and Support and Waste Management and Remediation Services. This latter sector includes office administrative services; facilities support services; employment services; services to buildings and dwellings; and waste collection, treatment, and disposal services. The highest wages are paid by the Utilities and the Management of Companies and Enterprises industries.

The LWIA's population grew by 11 percent from 2000 to 2010 and has more residents age 60 to 74 and fewer residents aged 25 to 39 than the state's average.

Employment is rising and unemployment is declining. Though the LWIA has a historically higher unemployment rate than the state, it fell below state's rate during and after the recession. Employment is concentrated in Anderson, and over 25,000 more people leave the LWIA for work than enter it every day. Administrative and Support and Waste Management and Remediation Services is the largest industry represented in unemployment claims.

WorkLink has a higher proportion of residents with a high school education than the state does as a whole. However, 19 percent of residents do not have a high school diploma, and a lower percent of residents have postsecondary training than does the state overall. For projected growing jobs, 5 percent require no diploma, 10 percent require a diploma and training, 7 percent require an associate's degree or vocational training, and 28 percent require a bachelor's degree or more.

WorkLink LWIA businesses desire a trained workforce with the current focus being on manufacturing-specific certifications, like Computer Numerical Control machining and welding. The advanced Manufacturing industry is having difficulty meeting its employee needs with WorkLink's contemporary workforce. Although many manufacturing firms are willing to train their workers, there exists a perception gap between current and former manufacturing techniques, opportunities, and environments.

WorkLink LWIA has several factors working in its favor. It has a growing population and several educational institutions available to strengthen the workforce. The Manufacturing sector is a major employment force and has a very high job multiplier. Workers are becoming smarter and are gaining skills. Unemployment rates are lower than the state's average. The future looks more sunny than cloudy for the LWIA.

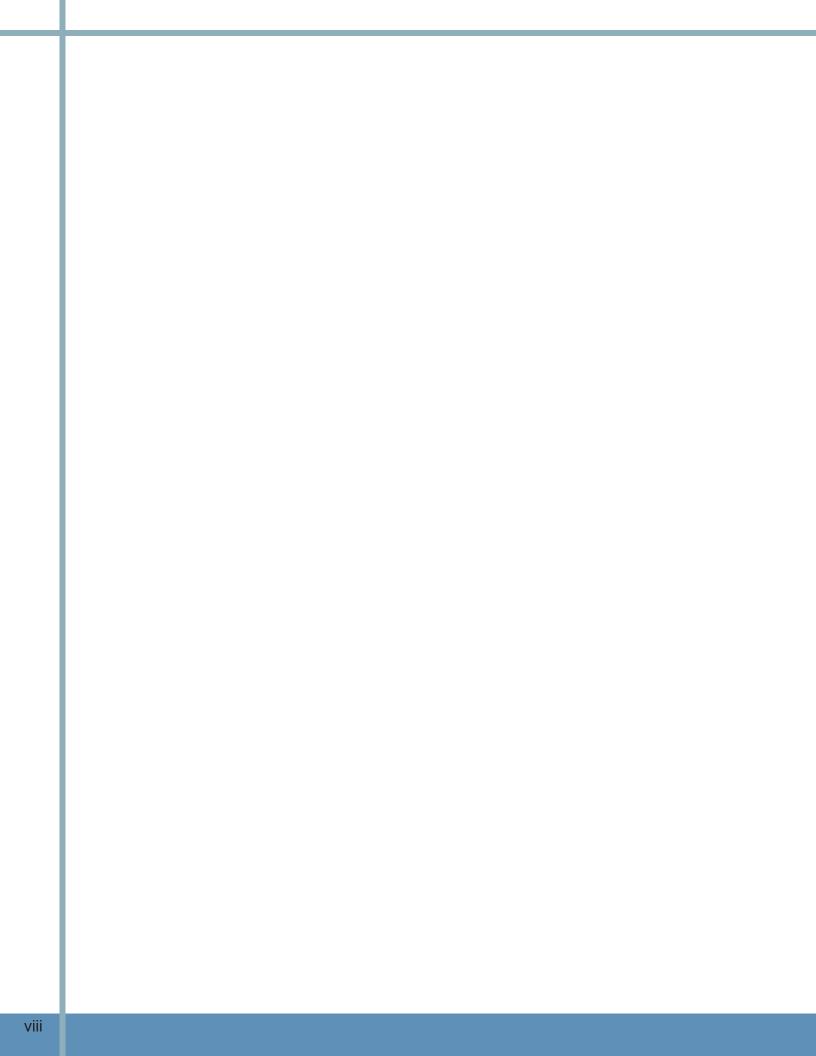
The patterns and trends described in this report offer cause for both optimism and concern. Work-Link LWIA has an exciting future ahead of it, and can lead the way in delivering the skilled talent and economic opportunities that businesses and workers in the area deserve.

#### INTRODUCTION

The WorkLink Local Workforce Investment Area is composed of Anderson, Oconee, and Pickens counties and is located in the north-western part of the state. The Blue Ridge Mountains and South Carolina's highest point at Sassafras Mountain are located in the LWIA, which borders North Carolina and Georgia. Several man-made lakes provide watersports and hydroelectric power; the Oconee Nuclear Station is also located in the LWIA. The historical economy included the Agriculture and Hospitality related industries, while the modern economy is dominated by Manufacturing and Retail trade.

The economic changes this year in the WorkLink LWIA demonstrate the shifting needs of employers and employees. Cultivating an understanding of the workforce allows all three counties to respond to anticipated future needs. Analyses help to identify the gap between what the workforce has in the way of talent and skills (supply) and what it may need in the future (demand).

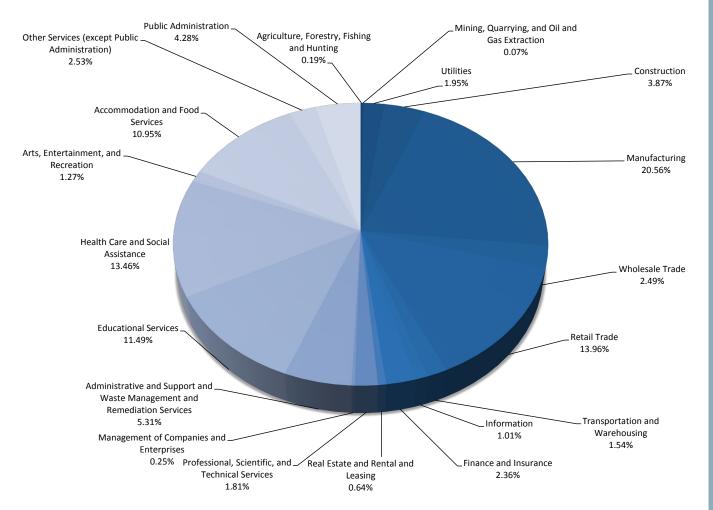
The purpose of the WorkLink LWIA Workforce Report is to present a comprehensive view of the status of WorkLink counties' economy and workforce. The report includes an analysis of WorkLink LWIA's workforce, industries, economic climate, and factors that will affect all three. Forecasts will be made for the workforce, industries, and the economy.



## ECONOMIC DISCUSSION: A CURRENT PICTURE OF THE WORKFORCE

#### EMPLOYMENT BY INDUSTRY

Figure 1: WorkLink LWIA Employment By Industry - 3rd Quarter 2012



Source: Bureau of Labor Statistics (BLS), SC Department of Employment & Workforce (SCDEW), Quarterly Census of Employment and Wages (QCEW)

Manufacturing and Retail Trade are the top two industries employing workers in the WorkLink LWIA. Industries like Educational Services and Healthcare and Social Assistance are healthy and flourishing, while others like Construction are still recovering from the recession. The 2010 per capita income for a WorkLink LWIA resident was \$29,955 which is an increase of 26.2 percent from 2000.¹ Economic growth has taken place in the past decade to enhance the LWIA's workers, although the area is still recovering from a tough business cycle.

# LOCATION QUOTIENT

A location quotient (LQ) is a useful tool for determining the concentration of workers in a given area. Location quotients compare the regional share of employment in a particular industry to the national share of employment in the same industry. The resulting quotient reveals the degree of regional specialization or concentration in an industry and provides insight into what makes the area unique in comparison to the national average. An LQ of 1.0 means the concentration of jobs in that industry matches the nation's value. Location quotients higher than 1.0 indicate the level of specialization the area has in particular sectors. Lower quotients can indicate a possible area that could be expanded.

Figure 2: Notable WorkLink LWIA Location Quotients - 2011

| Industry and Sectors                             | Location Quotient |
|--|-------------------|
| Anderson County                                  |                   |
| Textile Mills                                    | 32.1              |
| Plastics and Rubber Products Manufacturing       | 5.9               |
| Transportation Products Manufacturing            | 4.8               |
| Oconee County                                    |                   |
| Electrical Equipment and Appliance Manufacturing | 19.8              |
| Machinery Manufacturing                          | 5.7               |
| Forestry and Logging                             | 4.9               |
| Pickens County                                   |                   |
| Textile Mills                                    | 37.5              |
| Machinery Manufacturing                          | 4.5               |
| Computer and Electronic Products Manufacturing   | 2.8               |

Source: US Department of Labor, Bureau of Labor Statistics - http://data.bls.gov/location\_quotient

Textile Mills and Electrical Equipment and Appliance Manufacturing top the most concentrated industries in this area with LQs over 19. Textile Mill companies transform a basic fiber into a product like yarn or fabric and are a highly-focused sector in Anderson and Pickens counties. Other manufacturing sectors focused throughout the area include Plastics and Rubber Products; Computer and Electronic Products; and Machinery.

#### AVERAGE ANNUAL WAGE BY INDUSTRY

The annual wages for utility workers are usually among the highest for any LWIA industry. These workers have a wide range of education (high school diploma to PhD) and tend to stay in their jobs for a very long time, which increases the average wage as small raises accumulate over time. Wages for the management of companies are the second highest in the LWIA.

High wage industries like Information; Professional, Scientific, and Technical Services; and Education Services usually require at least a bachelor's degree. Having an education is an excellent way to enter a high-wage industry and have more options for employment.

Public Administration \$33,020 Other Services (except Public Administration) \$24,960 Accommodation and Food Services \$12,688 Arts, Entertainment, and Recreation \$14,612 Health Care and Social Assistance \$39,624 **Educational Services** \$46,488 Administrative and Support and Waste Management... \$20,020 Management of Companies and Enterprises \$75,764 Professional, Scientific, and Technical Services \$42,536 Real Estate and Rental and Leasing \$29,796 Finance and Insurance \$42,224 Information \$44,772 Transportation and Warehousing \$43,836 Retail Trade \$23,504 Wholesale Trade \$47,112 Manufacturing \$45,760 Construction \$35,412 Utilities \$75,920 Mining, Quarrying, and Oil and Gas Extraction \$45,708 Agriculture, Forestry, Fishing and Hunting \$23,712 \$10,000 \$20,000 \$30,000 \$40,000 \$50,000 \$60,000 \$70,000 \$80,000

Figure 3: Annual Average Wage by Industry - 3rd Quarter 2012

Source: BLS, SCDEW, QCEW

#### OCCUPATIONAL EMPLOYMENT

When examining the current occupational employment in the area, one can observe that some of the top 20 occupations are low-skill, low-pay jobs. These jobs, like Cashiers, Waiters and Waitresses, and Janitors, have high turnover. These are not necessarily the most robust jobs as far as wages, but they are jobs.

Figure 4 lists occupations, like Registered Nurses, Elementary School Teachers, and First-Line Supervisors, that pay a higher wage. Manufacturing, Retail Trade, and Healthcare comprise nearly half of the employment in the WorkLink LWIA, reflected in this list of top occupations: Team Assemblers; Laborers and Material Movers; Retail Salespersons; and Registered Nurses.

Figure 4: Top 20 Occupations with Wages - 2012

|  | Total      | Hourly Average |
|--|------------|----------------|
| Occupational Title   | Employment | Wage (\$)      |
| All Occupations  | 57,610     | 17.39          |
| Retail Salespersons  | 2,430      | 11.11          |
| Cashiers   | 2,080      | 8.49           |
| Combined Food Preparation and Serving Workers, Including Fast Food                           | 1,910      | 8.40           |
| Team Assemblers  | 1,550      | 12.50          |
| Registered Nurses  | 1,300      | 27.42          |
| Waiters and Waitresses   | 1,160      | 8.12           |
| Office Clerks, General   | 1,040      | 12.14          |
| Laborers and Freight, Stock, and Material Movers, Hand                                       | 990        | 12.01          |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive              | 930        | 14.40          |
| Elementary School Teachers, Except Special Education   | 880        | 20.40          |
| Maintenance and Repair Workers, General  | 860        | 18.40          |
| Customer Service Representatives   | 790        | 13.27          |
| Heavy and Tractor-Trailer Truck Drivers  | 760        | 14.12          |
| Stock Clerks and Order Fillers   | 710        | 10.66          |
| Bookkeeping, Accounting, and Auditing Clerks   | 660        | 15.63          |
| First-Line Supervisors of Retail Sales Workers   | 650        | 18.10          |
| Textile Knitting and Weaving Machine Setters, Operators, and Tenders                         | 640        | 14.21          |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners                                | 620        | 10.99          |
| First-Line Supervisors of Office and Administrative Support Workers                          | 620        | 22.21          |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 610        | 22.71          |

Source: BLS, SCDEW, Occupational Employment Statistics (OES)

#### SKILLS DATA

Employers are beginning to see that a person's skills, in addition to their education, may help in determining who to hire. Many times the degree is not as important as the skills gained through specialized training and/or experience. In order to be able to determine the current level of skills in the area, the top 50 current occupations by employment are presented, and assigned a low, middle, or high skill designation to that occupation. The definitions for those skills levels are:

- LOW: No high school or GED, or high school/GED with less than one year experience and no on-the-job-training (OJT), or short-term OJT
- MIDDLE: High school/GED with one year experience, or moderate OJT, or long-term OJT, or apprenticeship, or postsecondary vocational training, or some college, or Associate's Degree, or less than a Bachelor's Degree
- HIGH: Bachelor's Degree or higher

In the WorkLink area, 22 of the top 50 jobs in 2012 are considered low-skill jobs. Twenty-four are middle skill, and four are high-skill occupations.

Figure 5: Top Occupations By Skill Classification - WorkLink 2012

| Chillege LOW   |
|--|
| Skillset: LOW  |
| Billing and Posting Clerks   |
| Cashiers   |
| Combined Food Preparation and Serving Workers, Including Fast Food                           |
| Construction Laborers  |
| Cooks, Institution and Cafeteria   |
| Cooks, Restaurant  |
| Customer Service Representatives   |
| Food Preparation Workers   |
| HelpersProduction Workers  |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners                                |
| Laborers and Freight, Stock, and Material Movers, Hand                                       |
| Landscaping and Groundskeeping Workers   |
| Light Truck or Delivery Services Drivers   |
| Office Clerks, General   |
| Personal Care Aides  |
| Receptionists and Information Clerks   |
| Retail Salespersons  |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive              |
| Shipping, Receiving, and Traffic Clerks  |
| Stock Clerks and Order Fillers   |
| Teacher Assistants   |
| Waiters and Waitresses   |
| Skillset: MIDDLE   |
| Bookkeeping, Accounting, and Auditing Clerks   |
| Bus Drivers, School or Special Client  |
| Emergency Medical Technicians and Paramedics   |
| Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers    |
| First-Line Supervisors of Food Preparation and Serving Workers                               |
| First-Line Supervisors of Office and Administrative Support Workers                          |
| First-Line Supervisors of Production and Operating Workers                                   |
| First-Line Supervisors of Retail Sales Workers   |
| General and Operations Managers  |
| Heavy and Tractor-Trailer Truck Drivers  |
| Industrial Engineering Technicians   |
| Industrial Machinery Mechanics   |
| Inspectors, Testers, Sorters, Samplers, and Weighers   |
| Machinists   |
| Maintenance and Repair Workers, General  |
| Medical Secretaries  |
| Mixing and Blending Machine Setters, Operators, and Tenders                                  |
| Nursing Assistants   |
| Pharmacy Technicians   |
| Police and Sheriff's Patrol Officers   |
| Registered Nurses  |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products |
| Team Assemblers  |
| Textile Knitting and Weaving Machine Setters, Operators, and Tenders                         |
| Skillset: HIGH   |
| Accountants and Auditors   |
| Elementary School Teachers, Except Special Education   |
| Middle School Teachers, Except Special and Career/Technical Education                        |
| Secondary School Teachers, Except Special and Career/Technical Education                     |
| Secondary School Teachers, Except Special and Career/Technical Education                     |

Source: BLS, SCDEW, OES, Workforce Intelligence (WI)

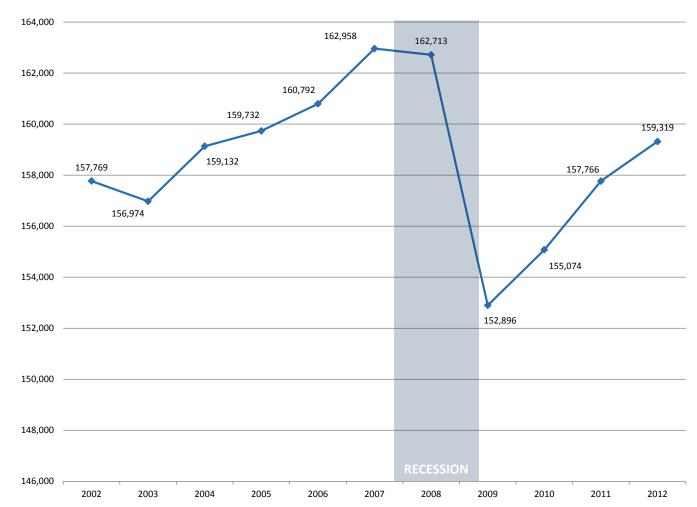
#### EMPLOYMENT AND UNEMPLOYMENT

A crucial indicator of the health of a workforce is its labor force levels. Labor force data count residents who are employed and unemployed. There are a few Federal definitions that will make discussion of the labor force a little easier to understand.

- Employed: Persons 16 years old or older who worked for pay any time during the week that includes the 12th of the month
- Unemployed: Persons 16 years old or older who are not working but want a job, and are able and willing to work
- Labor Force: Employed plus unemployed
- Unemployment Rate: Unemployment divided by labor force

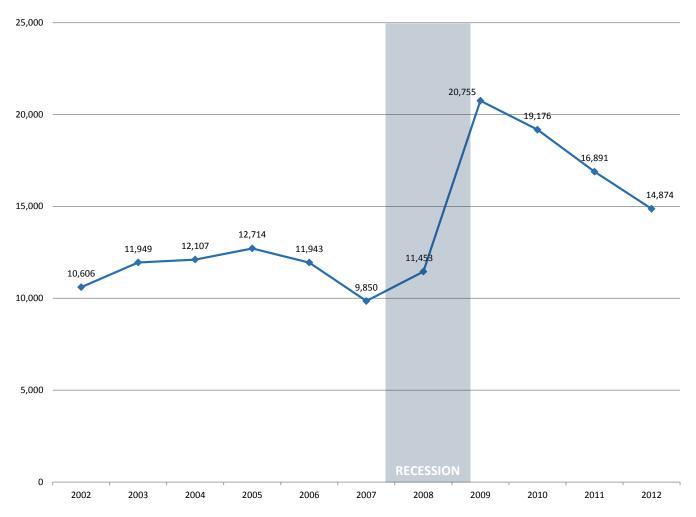
In Figure 6, the recession (officially from December 2007 through June 2009) had a great effect on the labor force. Employment dropped, and unemployment increased by 111 percent.

Figure 6: Employment - 2002-2012



Source: BLS, SCDEW, Local Area Unemployment Statistics (LAUS)

Figure 7: Unemployment - 2002-2012

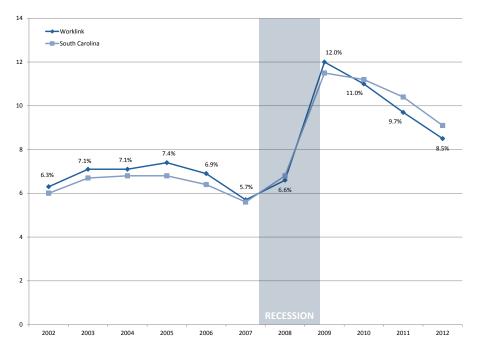


Source: BLS, SCDEW, LAUS

Tracking annual unemployment rates give a good snapshot of the state of an area's workforce. Annual rates smooth out the usual ups and downs of a month-to-month rate (due to normal seasonal or cyclical changes) to give a more accurate picture.

Figure 8 shows the annual rates for the WorkLink LWIA area and South Carolina. From 2002 to 2007 WorkLink was consistently above the state's rate but fell below it after the recession. During the recession, the WorkLink rate more than doubled from 5.7 percent in 2007 to 12.0 percent in 2009.

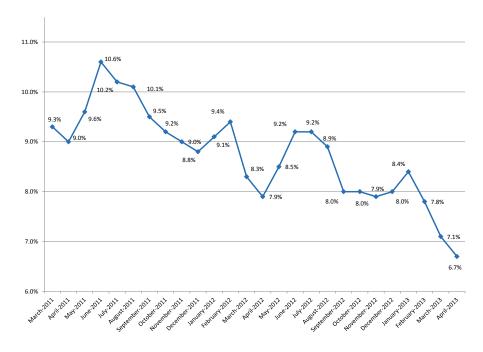
Figure 8: Annual Unemployment - 2002-2012



Source: BLS, SCDEW, LAUS

Figure 9 illustrates that the monthly unemployment rate has seen wide fluctuations since February 2011. The area seems to be steadily recovering from the recession.

Figure 9: Monthly Unemployment Rate - March 2011-April 2013



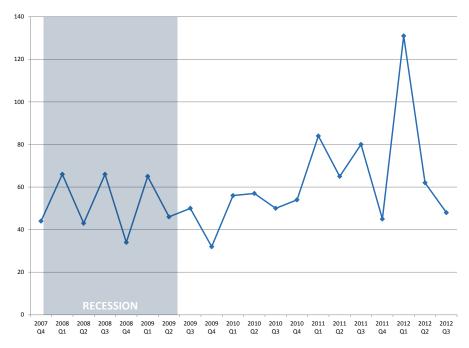
Source: BLS, SCDEW, LAUS

#### NEW STARTUP FIRMS

One way to see if an economy is improving is to examine data about startup firms. An increase in new companies might be an indicator of expansion in the area, whereas a drop in new firms shows a lack of confidence in the future. (Note: There is almost always a spike in startups in the first quar-

ter of the year.) Again, the recession had a major impact on normal business birth and death rates. Startups have been steady in the area with a large increase in early 2012.

Figure 10: New Startup Firms - 2007-2012



Source: BLS, SCDEW, QCEW

#### EMPLOYERS BY SIZE OF ESTABLISHMENT

By far, the largest category of business size in the area is small business. Small businesses (or establishments) are defined in South Carolina as companies employing 49 or fewer people. The WorkLink LWIA has 94 percent of establishments designated as small businesses, and South Carolina as a whole has 93 percent.

Small businesses may need more support and assistance than larger companies because they may not have a designated human resources department or person. They may rely on other resources, such as SC Works Centers, for help with hiring, training, or screening job candidates.

Figure 11: Employers by Size of Establishment - 3rd Quarter 2012

| Employees  | Worklink | South Carolina |
|------------|----------|----------------|
| 0 to 4     | 3,728    | 63,766         |
| 5 to 9     | 1,274    | 19,667         |
| 10 to 19   | 854      | 13,316         |
| 20 to 49   | 590      | 9,881          |
| 50 to 99   | 216      | 3,907          |
| 100 to 249 | 112      | 2,433          |
| 250 to 499 | 38       | 757            |
| 500 to 999 | 12       | 328            |
| 1000 +     | 7        | 264            |

Source: BLS, SCDEW, QCEW

# SUPPLY: WHAT'S OUT THERE?

A manufacturing assembly line needs to have resources and supplies on-hand so that the line does not have to stop. The same is true for the workforce. The supply of workers needs to be of the right quantity and quality to do the job. Is the supply of workers in line with what the companies in the WorkLink LWIA need? Seven streams of workforce supply provide an indication: population, commuting, education of the population, clusters of high school students, awards earned at higher education institutions, and characteristics of unemployment insurance claims and claimants.

#### POPULATION BY AGE

Age distribution in the area is similar to the state and the country with two exceptions. In the 25-39 age cohorts, WorkLink has a notably lower proportion of population, and in the 60-74 age cohorts, the LWIA has a markedly higher proportion of population.

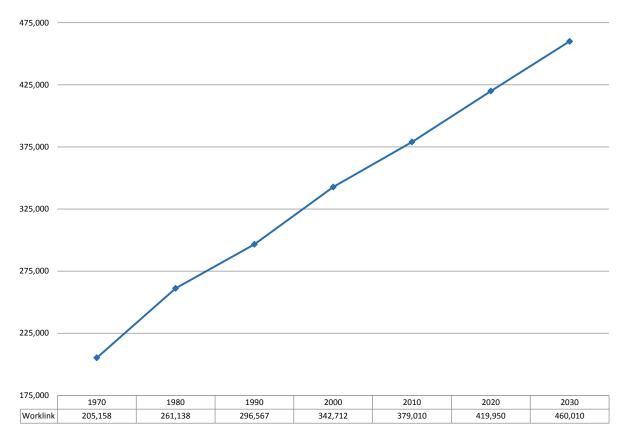
Figure 12: Population by Age

| Age Range    | Worklink | SC   | US   |
|--------------|----------|------|------|
| 0-4          | 6.0%     | 6.5% | 6.6% |
| 5-9          | 6.0%     | 6.4% | 6.6% |
| 10-14        | 6.5%     | 6.5% | 6.7% |
| 15-19        | 7.6%     | 7.2% | 7.2% |
| 20-24        | 7.8%     | 7.2% | 7.0% |
| 25-29        | 5.7%     | 6.6% | 6.8% |
| 30-34        | 5.7%     | 6.2% | 6.4% |
| 35-39        | 6.2%     | 6.5% | 6.6% |
| 40-44        | 6.7%     | 6.8% | 7.0% |
| 45-49        | 7.1%     | 7.2% | 7.4% |
| 50-54        | 7.0%     | 7.0% | 7.2% |
| 55-59        | 6.4%     | 6.5% | 6.3% |
| 60-64        | 6.3%     | 5.9% | 5.3% |
| 65-69        | 4.9%     | 4.5% | 3.9% |
| 70-74        | 3.8%     | 3.3% | 3.0% |
| 75-79        | 2.7%     | 2.5% | 2.4% |
| 80-84        | 2.0%     | 1.7% | 1.9% |
| 85 and older | 1.7%     | 1.5% | 1.7% |

Source: US Bureau of Census, American Community Survey (ACS)

#### POPULATION CHANGE AND MIGRATION

Figure 13: Population Projections to 2030



Source: US Census Bureau, Census 2000, SC Department of Health and Environmental Control - Vital Records Department. Population projections calculated by SC Budget and Control Board, Office of Research and Statistics

After a large jump in population from 1990 to 2000 (up 15.6 percent), the growth of the population of this area slowed down, growing just 10.6 percent over the next 10 years. Growth is projected to increase by about one percent per year to 2030.

Figure 14: Population Migration - 2011 - 5-Year Estimate

|   | Total   | Moved From<br>Different State | Moved From<br>Abroad | Moved From<br>Different County | Moved Within<br>Same County |
|---|---------|-------------------------------|----------------------|--------------------------------|-----------------------------|
| Population 1 year and over              | 374,211 | 2.7%                          | 0.4%                 | 3.7%                           | 9.3%                        |
|   |         |                               |                      |                                |                             |
| Hispanic or Latino origin (of any race) | 11,889  | 2.9%                          | 3.5%                 | 7.5%                           | 13.4%                       |
| White alone, not Hispanic or Latino     | 310,860 | 2.8%                          | 0.2%                 | 3.5%                           | 8.0%                        |
| Population 25 Years and Over            |         |                               |                      |                                |                             |
| Less than high school graduate          | 46,405  | 1.5%                          | 0.4%                 | 1.8%                           | 10.6%                       |
| High school graduate/GED                | 80,824  | 1.5%                          | 0.3%                 | 2.0%                           | 7.3%                        |
| Some college or associate's degree      | 71,908  | 2.1%                          | 0.1%                 | 2.3%                           | 6.5%                        |
| Bachelor's degree                       | 31,202  | 3.5%                          | 0.1%                 | 3.0%                           | 4.7%                        |
| Graduate or professional degree         | 19,378  | 5.0%                          | 1.1%                 | 2.2%                           | 3.4%                        |

Source: US Census Bureau, ACS, SCDEW

In-migration (people moving into WorkLink) shows that over six percent of residents with a gradu-

ate degree came from out of state or out of the country. This shows the strength of having a major research institution in Clemson University within the area. While nearly the same proportion, just under 3 percent each, of Hispanics and Whites moved into WorkLink from another state, 3.5 percent of Hispanics came from abroad. Though 16 percent of residents moved, only 3.1 percent came from outside of South Carolina.

#### COMMUTING PATTERNS

Most of the workers (70 percent) of WorkLink live and work in the LWIA. The tables in Figure 15 show that over 13,000 workers commute in from other areas to work in the LWIA. Greenville County draws a sizeable portion of WorkLink County's residents out of the area to work. Over 25,000 more residents commute out of the area than come in to work.

Figure 15: Commuting Patterns - 2010

| To WorkLink WIA From   | 13,355 |
|------------------------|--------|
| Greenville County, SC  | 7,280  |
| Abbeville County, SC   | 1,628  |
| Hart County, GA        | 476    |
| Spartanburg County, SC | 452    |

| From WorkLink WIA To   | 38,815 |
|------------------------|--------|
| Greenville County, SC  | 30,286 |
| Spartanburg County, SC | 2,574  |
| Greenwood County, SC   | 573    |
| Abbeville County, SC   | 433    |
| Laurens County, SC     | 312    |

Source: US Census Bureau, ACS

#### EDUCATIONAL ATTAINMENT

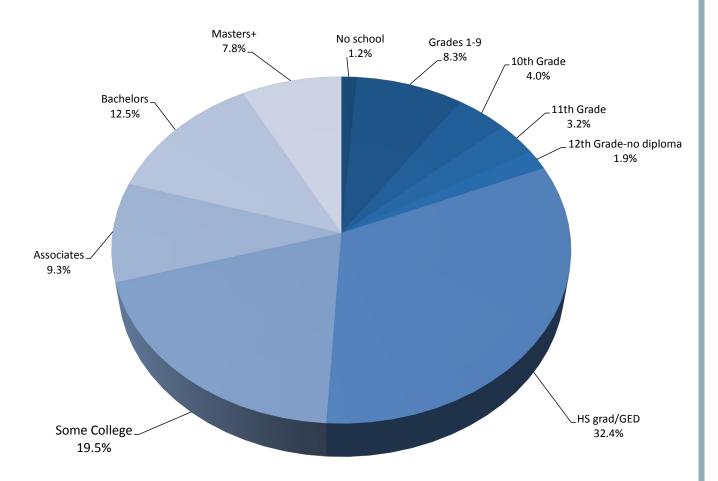
The WorkLink LWIA has a 1.5 percent higher concentration of residents with a high school diploma or GED than the state. However, the WorkLink LWIA has a higher percent of residents with less than a high school diploma or GED and also a lower percent of residents with a Bachelor's or Master's degree than the state.

Figure 16: Educational Attainment - WorkLink and South Carolina 2011

| Education Level       | Worklink | SC   |
|-----------------------|----------|------|
| No school             | 1.2      | 1.1  |
| Grades 1-9            | 8.3      | 7.0  |
| 10th Grade            | 4.0      | 3.3  |
| 11th Grade            | 3.2      | 3.2  |
| 12th Grade-no diploma | 1.9      | 1.8  |
| HS grad/GED           | 32.4     | 30.9 |
| Some College          | 19.5     | 20.1 |
| Associates            | 9.3      | 8.4  |
| Bachelors             | 12.5     | 15.6 |
| Masters+              | 7.8      | 8.6  |

Source: US Census Bureau, ACS, SCDEW

Figure 17: Educational Attainment - WorkLink 2011



Source: US Census Bureau, ACS, SCDEW

# CAREER CLUSTERS SELECTED BY HIGH SCHOOL STUDENTS

Eighth-grade students in South Carolina are required to choose a career cluster to concentrate on to lead them to a post-high school job or college major. There are 16 career clusters.

Transportation, Distribution, and Logistics
Science, Technology, Engineering and Mathematics
Marketing, Sales and Service
Manufacturing
Law, Public Safety, Corrections and Security
Information Technology
Human Service
Hospitality and Tourism
Health Science

Figure 18: Percent of Students Declaring a Career Clusters In WorkLink and SC - 2012

Note: Declared clusters for students declaring a specific cluster on their primary Electronic Individual Graduation Plan (e-IGP) for 2011-2012 year

10.0

15.0

5.0

■SC ■Worklink

25.0

20.0

Source: SC Department of Education

Government and Public Administration

Business, Management and Administration

Arts, Audio/Video Technology and Communications

Architecture and Construction

Agriculture, Food and Natural Resource

Finance

**Education and Training** 

Many students in the WorkLink area have chosen the Health Science career cluster in response to news of a shortage of healthcare workers in South Carolina. In keeping with the state trend, the area's students also picked the Arts, Audio/Video Technology and Communications cluster and the Science, Technology, Engineering and Math (STEM) cluster in notable numbers.

Figure 19: Career Clusters - 2012

| Cluster  | Worklink | sc   |
|--|----------|------|
| Agriculture, Food and Natural Resource           | 6.5      | 3.3  |
| Architecture and Construction                    | 4.3      | 4.4  |
| Arts, Audio/Video Technology and Communications  | 13.4     | 15.1 |
| Business, Management and Administration          | 4.7      | 6.4  |
| Education and Training                           | 6.3      | 6.0  |
| Finance  | 0.5      | 1.0  |
| Government and Public Administration             | 1.8      | 3.3  |
| Health Science                                   | 22.4     | 22.0 |
| Hospitality and Tourism                          | 2.9      | 2.8  |
| Human Service                                    | 7.3      | 6.4  |
| Information Technology                           | 2.8      | 3.1  |
| Law, Public Safety, Corrections and Security     | 7.6      | 7.7  |
| Manufacturing                                    | 2.6      | 2.0  |
| Marketing, Sales and Service                     | 0.7      | 1.2  |
| Science, Technology, Engineering and Mathematics | 12.3     | 11.6 |
| Transportation, Distribution, and Logistics      | 3.8      | 3.8  |

Source: SC Department of Education

#### DEGREES AWARDED

In higher education, WorkLink area colleges and universities have conferred a wide variety of awards. Of the top 20, Business Administration and Management are the two most popular followed by Teacher Education. The institutions included in this data are Anderson University, Clemson University, Southern Wesleyan University, and Tricounty Technical College.

Figure 20: Top 20 Majors in WorkLink - 2011

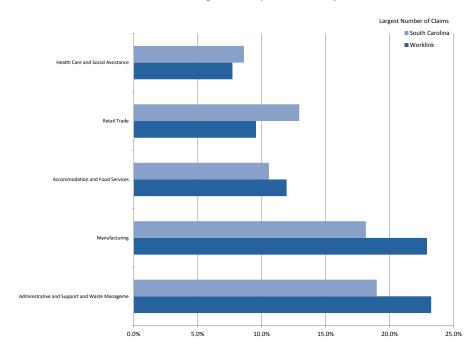
| Majors   |     |
|--|-----|
| Business Administration and Management, General    | 331 |
| Management   | 314 |
| Teacher Ed. and Professional Develop., Spec Levels | 219 |
| Mechanical Engineering                             | 207 |
| Civil Engineering, General                         | 202 |
| Psychology, General                                | 174 |
| Marketing/Marketing Management, General            | 169 |
| Biology/Biological Sciences, General               | 165 |
| Registered Nursing/Registered Nurse                | 165 |
| Parks, Recreation and Leisure Facilities Mgmt.     | 138 |
| Health Professions and Related Clinical Sciences   | 134 |
| Finance, General                                   | 127 |
| Accounting   | 124 |
| Liberal Arts and Sciences/Liberal Studies          | 124 |
| Computer and Information Sciences, General         | 119 |
| Nursing - Registered Nurse Training, BSN Generic   | 117 |
| Welding Technology/Welder                          | 108 |
| Elementary Education and Teaching                  | 106 |
| Architecture                                       | 97  |
| Political Science and Government, General          | 97  |

Source: SC Commission on Higher Education, http://www.che.sc.gov/New Web/Data&Pubs.htm

### CHARACTERISTICS OF UI CLAIMS BY OCCUPATION

Another source of supply for the workforce is people who are receiving unemployment compensation. In the WorkLink LWIA area, the highest number of claims are filed are in the Administrative and Support and Waste Management and Remediation Services group followed by Manufacturing. This is in line with the areas industry concentration of manufacturing companies and the industries that support manufacturing.

Figure 21: Characteristics of UI Claims by Occupation - April 2013



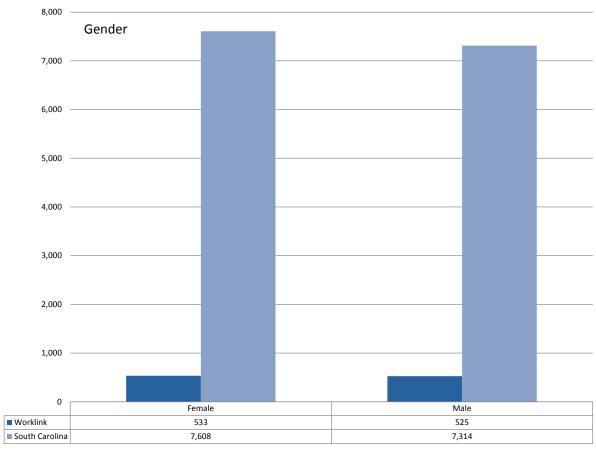
| Occupation                                      | Worklink | South Carolina |
|---|----------|----------------|
| Administrative and Support and Waste Management | 214      | 2,373          |
| Manufacturing                                   | 211      | 2,267          |
| Accommodation and Food Services                 | 110      | 1,321          |
| Retail Trade                                    | 88       | 1,616          |
| Health Care and Social Assistance               | 71       | 1,076          |
| Construction                                    | 61       | 820            |
| Professional, Scientific, and Technical Service | 52       | 698            |
| Other Services (except Public Administration)   | 21       | 292            |
| Wholesale Trade                                 | 20       | 445            |
| Real Estate and Rental and Leasing              | 16       | 213            |
| Educational Services                            | 15       | 222            |
| Transportation and Warehousing                  | 13       | 414            |
| Finance and Insurance                           | 12       | 300            |
| Public Administration                           | 9        | 206            |
| Utilities                                       | 3        | 22             |
| Information                                     | 3        | 122            |
| Arts, Entertainment, and Recreation             | 2        | 94             |

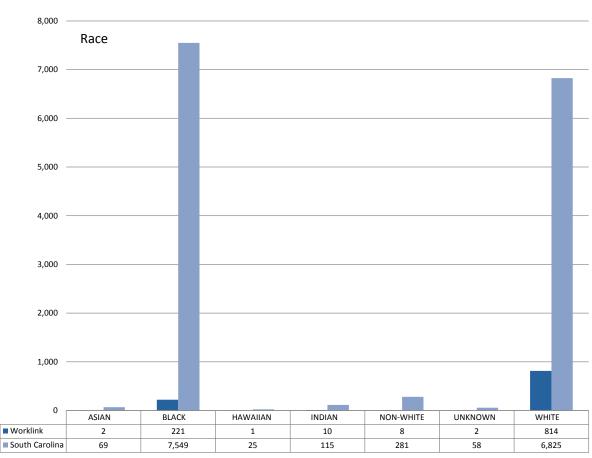
Source: SCDEW

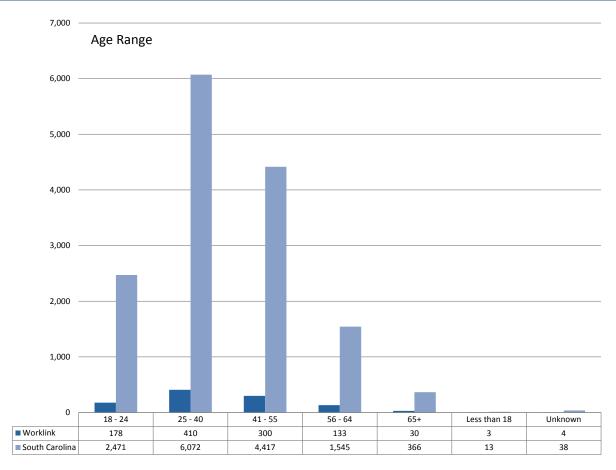
# UNEMPLOYMENT INSURANCE CLAIMANT CHARACTERISTICS

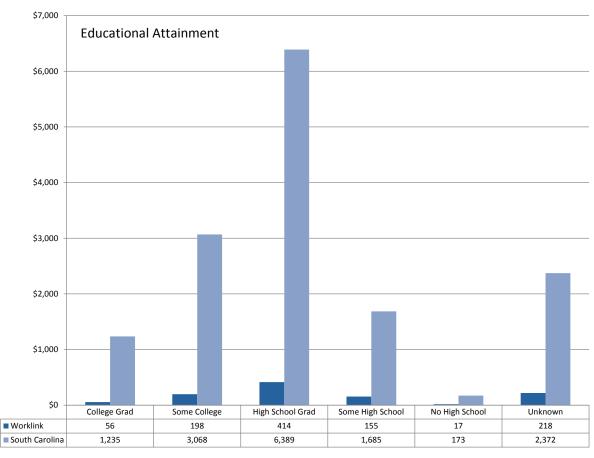
The people in this area who were receiving unemployment insurance benefits in April 2013 were typically female, white, 25-40 years old, and were high school graduates or earned a GED.

Figure 22: UI Claimant Characteristics - April 2013









Source: SCDEW

## DEMAND: WHAT DO WE NEED?

Workforce demand shows what is needed in an area to support current and future employers. This section examines current (real-time) demand through online job advertisements, industry and occupational projections to 2018, educational requirements for future jobs, and the skills needed for those occupations.

Online job advertisements give a snapshot of what positions need to be filled in an area. The data is from the Conference Board Help Wanted OnLine ® Data Series (HWOL) which measures the number of new and reposted job ads from over 16,000 Internet job boards. In April 2013, the largest occupational group with job ads in the WorkLink LWIA was Healthcare Practitioners and Technical Occupations followed by Sales and Related Occupations.

#### Online Job Advertisements

Figure 23: WorkLink HWOL - April 2013 by Major Group

| Occupation   | # of Job Ads |
|--|--------------|
| Healthcare Practitioners and Technical Occupations         | 610          |
| Sales and Related Occupations                              | 294          |
| Office and Administrative Support Occupations              | 210          |
| Transportation and Material Moving Occupations             | 188          |
| Architecture and Engineering Occupations                   | 180          |
| Computer and Mathematical Occupations                      | 172          |
| Management Occupations                                     | 152          |
| Production Occupations                                     | 131          |
| Installation, Maintenance, and Repair Occupations          | 125          |
| Healthcare Support Occupations                             | 121          |
| Food Preparation and Serving Related Occupations           | 110          |
| Construction and Extraction Occupations                    | 57           |
| Business and Financial Operations Occupations              | 50           |
| Education, Training, and Library Occupations               | 48           |
| Arts, Design, Entertainment, Sports, and Media Occupations | 46           |
| Personal Care and Service Occupations                      | 43           |
| Building and Grounds Cleaning and Maintenance Occupation   | 41           |
| Community and Social Services Occupations                  | 35           |
| Protective Service Occupations                             | 27           |
| Life, Physical, and Social Science Occupations             | 15           |
| Legal Occupations  | 3            |

Note: A job advertisement may include multiple openings.

Source: The Conference Board Help Wanted OnLine ® Data Series (HWOL)

#### INDUSTRY PROJECTIONS

The Healthcare and Social Assistance industry is projected to have the largest growth from 2008 to 2018, growing by 3,055 jobs or 306 jobs/year. This sector includes services such as ambulatory health care services, hospitals, nursing and residential care facilities, and social assistance services. Administrative and Support and Waste Management and Remediation Services reports the next largest growth with a projected 245 openings/year. This sector includes office administrative services; facilities support services; employment services; services to buildings and dwellings; and waste collection, treatment, and disposal services.

Figure 24: Industry Projections - 2008-2018

| Industry  | Estimate<br>Employment<br>(2008) | Projected<br>Employment<br>(2018) | Change | Percent Change | Annual Percent<br>Change |
|---|----------------------------------|-----------------------------------|--------|----------------|--------------------------|
| Total Employment, All Jobs                                      | 131,959                          | 140,520                           | 8,561  | 6.49           | 0.63                     |
| Health Care and Social Assistance                               | 14,299                           | 17,354                            | 3,055  | 21.37          | 1.96                     |
| Administrative and Support and Waste Management and Remediation | 5,197                            | 7,647                             | 2,450  | 47.14          | 3.94                     |
| Educational Services  | 15,003                           | 17,403                            | 2,400  | 16.00          | 1.50                     |
| Other Services (Except Government)                              | 5,923                            | 6,646                             | 723    | 12.21          | 1.16                     |
| Professional, Scientific, and Technical Services                | 2,101                            | 2,626                             | 525    | 24.99          | 2.26                     |
| Retail Trade  | 15,796                           | 16,288                            | 492    | 3.11           | 0.31                     |
| Accommodation and Food Services                                 | 13,429                           | 13,867                            | 438    | 3.26           | 0.32                     |
| Arts, Entertainment, and Recreation                             | 1,322                            | 1,522                             | 200    | 15.13          | 1.42                     |
| Management of Companies and Enterprises                         | 325                              | 434                               | 109    | 33.54          | 2.93                     |
| Transportation and Warehousing                                  | 1,466                            | 1,550                             | 84     | 5.73           | 0.56                     |
| Real Estate and Rental and Leasing                              | 863                              | 940                               | 77     | 8.92           | 0.86                     |
| Information   | 1,085                            | 1,128                             | 43     | 3.96           | 0.39                     |
| Wholesale Trade   | 2,558                            | 2,585                             | 27     | 1.06           | 0.11                     |
| Finance and Insurance   | 2,397                            | 2,406                             | 9      | 0.38           | 0.04                     |
| Government  | 6,621                            | 6,567                             | -54    | -0.82          | -0.08                    |
| Utilities   | 1,860                            | 1,698                             | -162   | -8.71          | -0.91                    |
| Construction  | 7,416                            | 7,222                             | -194   | -2.62          | -0.26                    |
| Manufacturing   | 24,652                           | 23,121                            | -1,531 | -6.21          | -0.64                    |

Source: BLS, SCDEW, QCEW, WI

#### OCCUPATIONAL PROJECTIONS

Many of the jobs that are projected to have numerous openings between 2008 and 2018 in this area are jobs that have high turnover due to low wages. The need for increased health services (for the aging Baby Boomers) puts healthcare-related jobs near the top of the projections list with seven projected occupations, including Medical Assistants, Pharmacy Technicians, and Personal and Home Care Aides. Landscaping and Groundskeeping occupations lead the projected employment listing with Public Relations Specialists, and Preschool Teachers included as well.

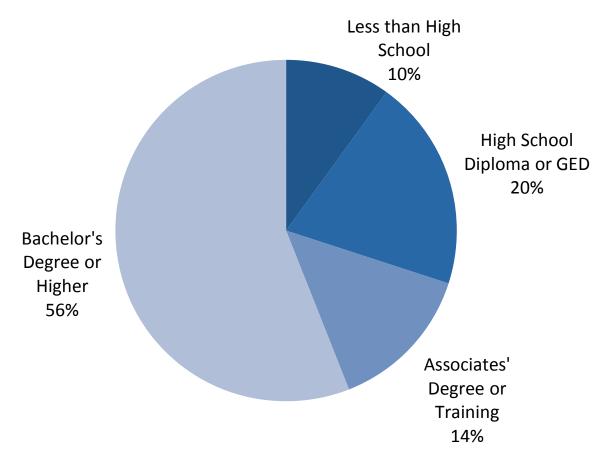
Figure 25: Growing Occupations - 2008-2018

| Occupation   | Estimated<br>Employment<br>(2008) | Projected<br>Employment<br>(2018) |
|--|-----------------------------------|-----------------------------------|
| Landscaping and Groundskeeping Workers                 | 1,683                             | 2,117                             |
| Medical Assistants                                     | 621                               | 804                               |
| Public Relations Specialists                           | 462                               | 580                               |
| Pharmacy Technicians                                   | 395                               | 536                               |
| Preschool Teachers, Except Special Education           | 393                               | 522                               |
| First-Line Supervisors/Managers of Landscaping Workers | 337                               | 436                               |
| Coaches and Scouts                                     | 234                               | 299                               |
| Food Servers, Nonrestaurant                            | 212                               | 275                               |
| Dental Assistants                                      | 191                               | 256                               |
| Personal and Home Care Aides                           | 151                               | 230                               |
| Dental Hygienists                                      | 169                               | 227                               |
| Management Analysts                                    | 155                               | 211                               |
| Physical Therapists                                    | 160                               | 207                               |
| Physician Assistants                                   | 105                               | 140                               |
| Compliance Officers, Except Agriculture                | 102                               | 130                               |
| Instructional Coordinators                             | 97                                | 127                               |
| Hazardous Materials Removal Workers                    | 39                                | 53                                |
| Veterinarians  | 32                                | 42                                |
| Environmental Engineers                                | 25                                | 32                                |
| Materials Engineers                                    | 15                                | 19                                |

Source: BLS, SCDEW, OES, WI

Of the top 50 projected growing occupations by percent change, 10 require a high school diploma or GED, five require less than a high school diploma or GED, 28 require a bachelor's degree or more, seven need an associate's degree or require some kind of postsecondary training. All of the five requiring less than a high school diploma or GED do require short-term on-the-job training (OJT), which is defined by the US Department of Labor as less than one month.

Figure 26: Education for Top 50 Projected Occupations



Source: BLS, SCDEW, OES, WI

It is just as important to know which occupations are declining in the area. Declines are often due to technological advances (i.e. computers or robots replacing humans), so many of the declining occupations are projected to be in textile manufacturing and administration, as shown in Figure 27.

Figure 27: Top 20 Projected Declining Occupations in WorkLink - 2008-2018

| Occupation  |
|---|
| Brickmasons and Blockmasons                         |
| Computer Operators                                  |
| Electrical and Electronics Repairers, Commercial    |
| Extruding and Forming Machine Setters, Operators    |
| Farmworkers & Laborers, Crop, Nursery & Greenhouse  |
| File Clerks   |
| Inspectors, Testers, Sorters, Samplers & Weighers   |
| Machine Feeders and Offbearers                      |
| Mail Clerks and Mail Machine Operators              |
| Maintenance Workers, Machinery                      |
| Meter Readers, Utilities                            |
| Order Clerks  |
| Postal Service Clerks                               |
| Postal Service Mail Sorters, Processors             |
| Roofers   |
| Sewing Machine Operators                            |
| Stationary Engineers and Boiler Operators           |
| Textile Cutting Machine Setters, Operators, Tenders |
| Textile Knitting and Weaving Machine Setters        |
| Textile Winding, Twisting, and Drawing Out Machine  |

Source: BLS, SCDEW, OES, WI

# Skills of Projected Occupations

Using the top 50 projected growing occupations, the skill levels needed for the future workforce based on the definitions given earlier in this report can be categorized.

Figure 28: Skill Levels

| Low    | 6  |
|--------|----|
| Middle | 16 |
| High   | 28 |

Source: BLS, SCDEW, OES, WI

Low-skilled jobs often have commensurate (i.e. low) pay and do not require much education, experience, or OJT. Does the supply of workers have the right skills for the jobs in the future?

# WORKFORCE CHALLENGES

The current economic situation in the WorkLink LWIA, the supply of workers, and the characteristics of workers who will be in demand has been reviewed. What can be gleaned from these findings? Are there gaps between supply and demand?

#### Supply Findings

With the population growing steadily until 2030 but a smaller-than-the-state share of 25-39 year olds, this area looks to have a challenge in having a proper mix of workers. In-migration from other states/countries adds a notable number of residents at the top end of the educational spectrum. But the LWIA has a higher percent of residents aged 25 and older with less than a high school diploma than the state as a whole. WorkLink LWIA exceeds the state with a higher proportion of its residents having a high school diploma/GED.

Many high school students selected the Health Science career cluster in keeping with state trends. The next most popular career cluster was Arts, Audio/Video/Technology, and Communications.

#### **Demand Findings**

Employer demand was consistent between online advertisements (current) and 2018 projected occupations (long-term needs) in general. Among the leaders by the need for workers were Business, Management, and Administration; Health Science; and Marketing, Sales, and Service. Hospitality and Tourism and Manufacturing were long-term demands. Most of the top projected occupations require at least a high school diploma or GED.

Figure 29: Comparison of Supply and Demand

|  | Demand     |             | Supp    | ly       |
|--|------------|-------------|---------|----------|
|  | Top online | Projected   | Degrees | Career   |
|  | ads        | Occupations | Earned  | Clusters |
| Agriculture, Food and Natural Resource           | 1.9        | 4.1         | 7.3     | 6.5      |
| Architecture and Construction                    | 5.7        | 5.4         | 5.2     | 4.3      |
| Arts, Audio/Video Technology and Communications  | 2.2        | 1.2         | 1.9     | 13.4     |
| Business, Management and Administration          | 10.9       | 14.2        | 17.2    | 4.7      |
| Education and Training                           | 1.4        | 8.1         | 17.3    | 6.3      |
| Finance  | 3.2        | 1.5         | 1.9     | 0.5      |
| Government and Public Administration             | 0.2        | 0.2         | 1.8     | 1.8      |
| Health Science                                   | 25.4       | 9.3         | 9.1     | 22.4     |
| Hospitality and Tourism                          | 3.6        | 14.7        | 0.0     | 2.9      |
| Human Service                                    | 5.0        | 6.5         | 7.2     | 7.3      |
| Information Technology                           | 4.6        | 1.2         | 3.0     | 2.8      |
| Law, Public Safety, Corrections and Security     | 1.1        | 1.9         | 0.9     | 7.6      |
| Manufacturing                                    | 5.6        | 11.3        | 4.2     | 2.6      |
| Marketing, Sales and Service                     | 15.0       | 13.8        | 3.0     | 0.7      |
| Science, Technology, Engineering and Mathematics | 7.1        | 1.7         | 19.4    | 12.3     |
| Transportation, Distribution, and Logistics      | 7.2        | 5.0         | 0.5     | 3.8      |

Source: BLS, SCDEW, WI, SC Department of Education, OES, HWOL

A few observations about the comparison that could be considered challenges to the workforce pipeline include:

- There are too few students and graduates in Marketing, Sales and Service than are needed in the short and long terms.
- There are more students and graduates in STEM than is required by employers in the short and long terms.
- There is a short-term employment need of Health Science and Transportation, Distribution, and Logistics graduates that is not being met.
- There is a long-term demand for Manufacturing; Hospitality and Tourism; and Business, Management, and Administration that is not projected to be met by today's students.
- There are notably more graduates in Agriculture, Food and Natural Resource; Business, Management and Administration; and Education and Training than there are current open positions in the area.
- There are more students choosing Law, Public Safety, Corrections and Security; Arts, Audio/ Video Technology and Communication; and Health Science that will far outpace employment demand long term.

There is always a demand for employees with soft skills. It is said that hard skills (training, degrees, or certification) get you hired, but soft skills get you fired. Many of our residents need to learn or get a refresher in soft skills in order to KEEP their jobs. Employers see the need.

#### Top 10 Soft Skills Found in Online Ads for South Carolina (April 2013)

- 1. Oral and written communication skills
- Customer Service Oriented
- 3. Problem solving
- 4. Detail oriented
- 5. Microsoft Office
- 6. Self-starting / Self-motivated
- 7. Organizational skills
- 8. Troubleshooting
- 9. Work independently
- 10. Sales experience

Source: The Conference Board Help Wanted OnLine ® Data Series (HWOL)

# CONCLUSION

The workforce (current and potential) in the WorkLink LWIA area faces several challenges. The population continues to increase steadily, but the education level for the population is lower than the state as a whole with lower percentages of residents with education beyond high school. There are high levels of employers advertising for jobs in business, management, marketing, and sales, and health care. However, some supply flows could be fine-tuned to be more in line with demand.

#### The data shows:

- There is an undersupply of students choosing Business, Management and Administration; Hospitality and Tourism; Manufacturing; and Marketing, Sales and Service studies to meet future demand.
- There is an oversupply of students choosing Arts, Audio/Video Technology and Communication; Law, Public Safety, Corrections and Security; Health Sciences; and STEM that will far outpace the area's future demand.
- Comprehensive soft skills training is needed for all students and job seekers (high school, post-secondary, adult, new and returning entrants to the labor force, and incumbent workers) so that they can retain their position and reduce employee turnover.

Getting education in alignment with the demands of employers will help the WorkLink LWIA meet the challenges it faces.