# TRIDENT LWIA WORKFORCE REPORT 2012





The *Trident 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 Trident Local Workforce Investment Area (LWIA) are Retail Trade and Healthcare and Social Assistance. Employment growth is anticipated by 2018 in several industries, especially Health Care and Social Assistance and Manufacturing. The highest wages are paid by the Management of Companies and Enterprises and Manufacturing industries.

The LWIA's population grew by 18 percent from 2000 to 2010, and it has more residents aged 20 to 39 and fewer residents aged 70 and older than the state's average.

Employment is rising, and unemployment is declining. The LWIA has a historically lower unemployment rate than the state and maintained that advantage during and after the recession. Employment is concentrated in Charleston, and over 4,000 more people enter the LWIA for work than leave it every day. Administrative and Support and Waste Management and Remediation Services is the largest industry represented in unemployment claims. This industry includes office administrative services; facilities support services; employment services; services to buildings and dwellings; and waste collection, treatment, and disposal services.

Trident has a higher proportion of residents with more than a high school education than the state does as a whole. For projected growing jobs, 4 percent require no diploma, 32 percent require a diploma or GED, 30 percent require an associate's degree or training, and 34 percent require a bachelor's degree or higher.

Trident LWIA businesses desire a trained workforce with the future focus being on healthcare, manufacturing, and professional services. Technology has become part of most occupations, requiring continuous training and skill-upgrading. A challenge for the LWIA is to match the skill levels of the workforce with open positions. There may be a mismatch between the employer's skill demands and the occupations that the worker will accept.

Trident LWIA has several factors working in its favor. It has a growing population and several educational institutions available to strengthen the workforce. For 2012, The Citadel was named the top public institution in the South by U.S. News and World Report for a second consecutive year; its Master of Business Administration program was named one of the best in the nation by the Princeton Review. When it comes to tourism, Charleston was listed as the top city in the United States and destination city in the world by Condé Nast's 2012 Readers' Choice Awards. Google has invested an additional \$600 million in its Berkeley County facility. The Manufacturing sector is a growing employment force and has a high job multiplier. Workers are becoming smarter and are gaining skills; the LWIA is transitioning well from low to middle skilled jobs. The future looks bright for the Trident LWIA.

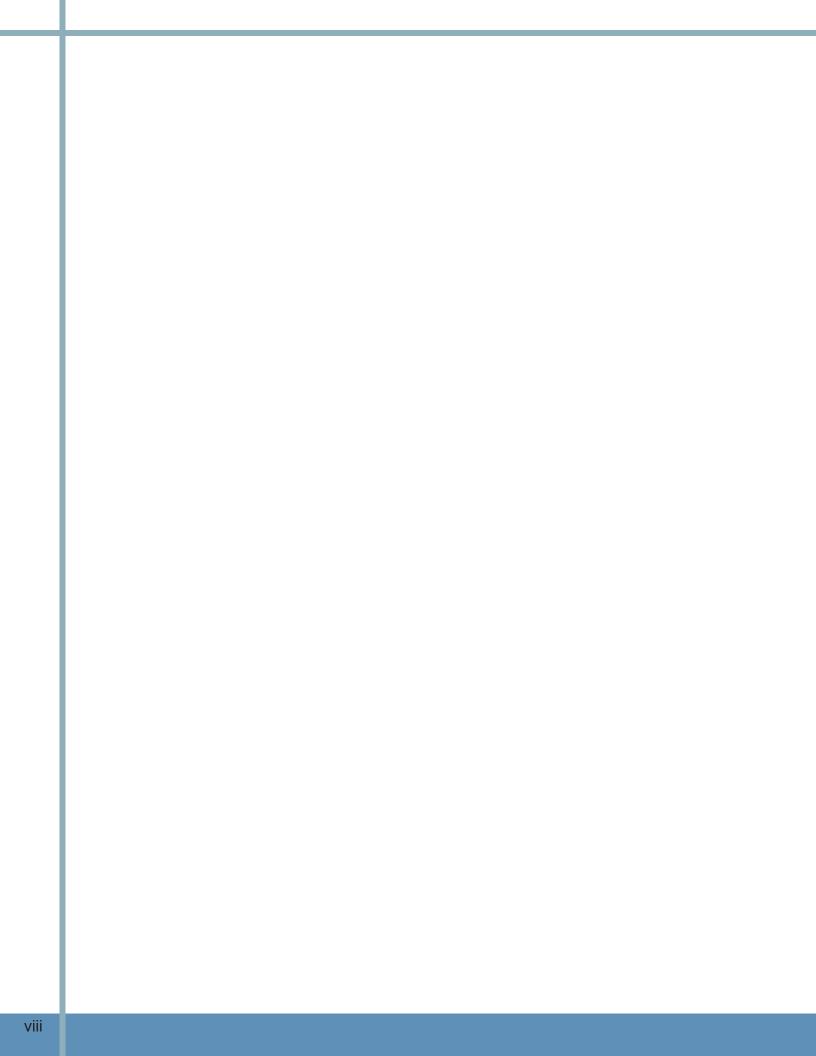
The patterns and trends described in this report offer cause for both optimism and concern. Trident LWIA has an exciting future ahead of it, and it can lead the way in delivering the skilled talent and economic opportunities that businesses and workers in the area deserve.

# Introduction

The Trident Local Workforce Investment Area is composed of Berkeley, Charleston, and Dorchester counties and is located in the southeastern part of the state. The area is characterized by its rich history and coastline. The historical economy included the agriculture, hospitality, transportation, and trade industries.

The economic changes this year in the Trident 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).

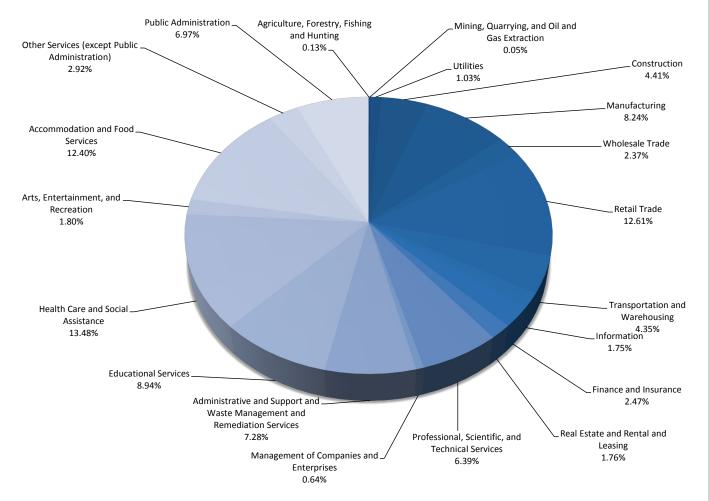
The purpose of the Trident LWIA Workforce Report is to present a comprehensive view of the status of Trident counties' economy and workforce. The report includes an analysis of Trident LWIA's workforce, industries, economic climate, and factors that will affect all three. Forecasts will be made for the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



## ECONOMIC DISCUSSION: A CURRENT PICTURE OF THE WORKFORCE

#### EMPLOYMENT BY INDUSTRY

Figure 1: Trident 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)

The Healthcare and Social Assistance and Retail Trade are the top two industries employing workers in the Trident LWIA. Industries, like Educational Services and Manufacturing, are healthy and flourishing, while others, like Construction, are still recovering from the recession. The 2010 per capita income for a Trident LWIA resident was \$36,127, which was an increase of 39.7 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 Trident LWIA Location Quotients - 2011

Industry and Sectors	Location Quotient
Berkeley County	
Primary Metal Manufacturing	19.5
Textile Mills	13.9
Chemical Manufacturing	4.1
Charleston County	
Scenic and Sightseeing Transportation	7.4
Support Activities for Transportation	3.9
Transportation Equipment	3.1
Dorchester County	
Transportation Equipment Manufacturing	6.6
Non-metallic Mineral Product Manufacturing	5.7
Forestry and Logging	4.5

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

Textile Mills and Primary Metal Manufacturing top the most concentrated industries in this area with location quotients over 13. Textile Mill companies transform a basic fiber into a product like yarn or fabric and are a highly-focused sector in Berkeley County. Other manufacturing sectors located throughout the area include Chemical; Non-metallic Mineral Product; and Transportation Equipment.

#### AVERAGE ANNUAL WAGE BY INDUSTRY

The annual wages for the Management of Companies are the highest for any LWIA industry. These workers administer and oversee the planning and decision making of companies and manage the securities of establishments. Manufacturing workers are the second highest paid group of employees in the LWIA.

High wage industries like Professional, Scientific, and Technical Services and Finance and Insurance 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** \$49,140 Other Services (except Public Administration) \$29,328 Accommodation and Food Services \$17,992 Arts, Entertainment, and Recreation \$20,124 Health Care and Social Assistance \$47,164 **Educational Services** \$40,976 Administrative and Support and Waste... \$27,612 Management of Companies and Enterprises \$97,552 Professional, Scientific, and Technical Services \$61.828 Real Estate and Rental and Leasing \$36,764 Finance and Insurance \$58,552 Information \$45,812 Transportation and Warehousing \$38,480 Retail Trade \$26,832 Wholesale Trade \$51,116 Manufacturing \$65,520 Construction \$43,524 Utilities \$59.852 Mining, Quarrying, and Oil and Gas Extraction \$47,424 Agriculture, Forestry, Fishing and Hunting \$26,156 \$20,000 \$40,000 \$60,000 \$80,000 \$100,000 \$120,000

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 Food Preparers, have high turnover. These are not necessarily the most robust jobs as far as wages, but they are jobs.

Figure 4 lists occupations, such as Registered Nurses, Elementary School Teachers, and First-Line Supervisors, that pay a higher wage. With Accommodations and Food, Retail Trade, and Healthcare comprising nearly 39 percent of the employment in the Trident LWIA, positions including Cooks, Retail Salespersons, and Registered Nurses are, not surprisingly, reflected in the list of top occupations.

Figure 4: Top 20 Occupations with Wages - 2012

	Total	Hourly Average
Occupational Title	Employment	Wage (\$)
All Occupations	291,750	19.80
Retail Salespersons	12,000	11.76
Registered Nurses	9,060	30.65
Cashiers	8,810	9.56
Combined Food Preparation and Serving Workers, Including Fast Food	7,750	8.67
Waiters and Waitresses	6,480	8.79
Laborers and Freight, Stock, and Material Movers, Hand	5,800	12.34
Customer Service Representatives	5,490	15.02
Office Clerks, General	5,000	12.81
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	4,670	10.49
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	4,440	15.05
First-Line Supervisors of Office and Administrative Support Workers	3,950	22.34
General and Operations Managers	3,700	53.32
Stock Clerks and Order Fillers	3,660	10.95
Team Assemblers	3,450	18.25
First-Line Supervisors of Retail Sales Workers	3,380	19.30
Maintenance and Repair Workers, General	3,310	17.09
Bookkeeping, Accounting, and Auditing Clerks	3,280	16.80
Elementary School Teachers, Except Special Education	3,200	23.40
Cooks, Restaurant	2,910	10.35
Heavy and Tractor-Trailer Truck Drivers	2,790	17.38

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 Trident area, 24 of the top 50 jobs in 2012 are considered low-skill jobs. Nineteen are middle skill, and seven are high-skill occupations.

Figure 5: Top Occupations By Skill Classification - Trident 2012

CLULAN LOW
Skillset: LOW
Bartenders
Cashiers
Combined Food Preparation and Serving Workers, Including Fast Food
Construction Laborers
Cooks, Fast Food
Cooks, Restaurant
Customer Service Representatives
Driver/Sales Workers
Food Preparation 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
Maids and Housekeeping Cleaners
Office Clerks, General
Personal Care Aides
Receptionists and Information Clerks
Retail Salespersons
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive
Security Guards
Shipping, Receiving, and Traffic Clerks
Stock Clerks and Order Fillers
Teacher Assistants
Waiters and Waitresses
Skillset: MIDDLE
Automotive Service Technicians and Mechanics
Bill and Account Collectors
Bookkeeping, Accounting, and Auditing Clerks
Carpenters
First-Line Supervisors of Construction Trades and Extraction Workers
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
Licensed Practical and Licensed Vocational Nurses
Maintenance and Repair Workers, General
Medical Assistants
Nursing Assistants
Police and Sheriff's Patrol Officers
Registered Nurses
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products
Team Assemblers Skillset: HIGH
Accountants and Auditors
Civil Engineers
Elementary School Teachers, Except Special Education
Management Analysts
Medical and Clinical Laboratory Technologists
Middle School Teachers, Except Special and Career/Technical Education
Secondary School Teachers, Except Special and Career/Technical Education

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

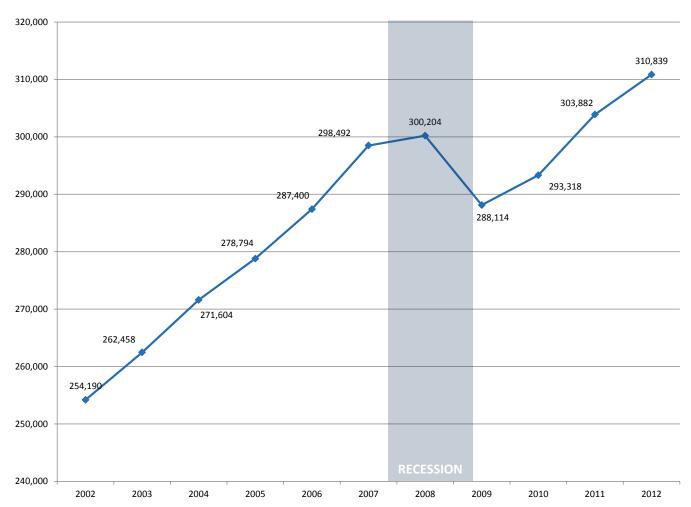
#### EMPLOYMENT AND UNEMPLOYMENT

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

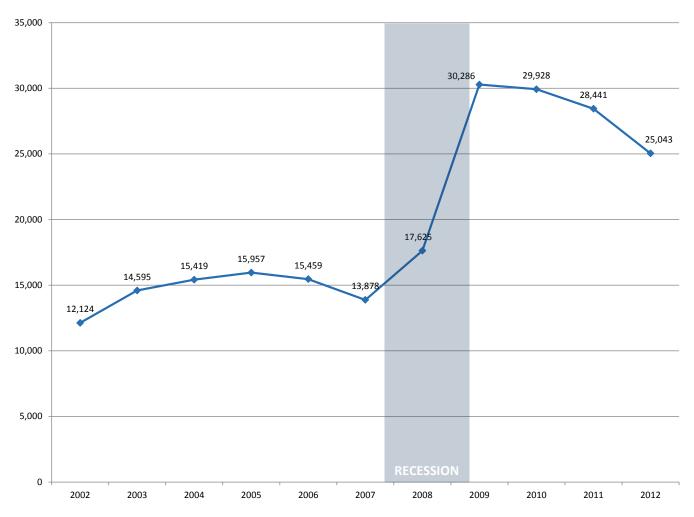
In Figure 6, the recession (officially from December 2007 through June 2009) had a great effect on the labor force. Employment dropped, and unemployment increased by 118 percent.

Figure 6: Employment - 2002-2012



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

Figure 7: Unemployment - 2002-2012

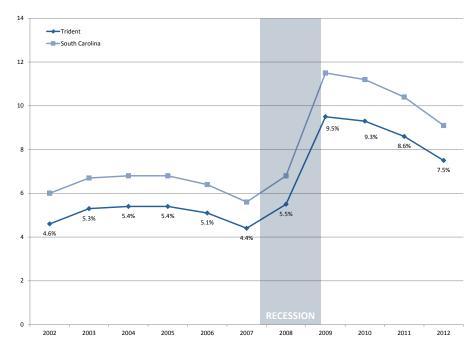


Source: BLS, SCDEW, LAUS

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 Trident LWIA area and South Carolina. Trident has historically been consistently below the state's rate and remained so during and after the recession. During the recession though, the Trident rate more than doubled from 4.4 percent in 2007 to 9.5 percent in 2009.

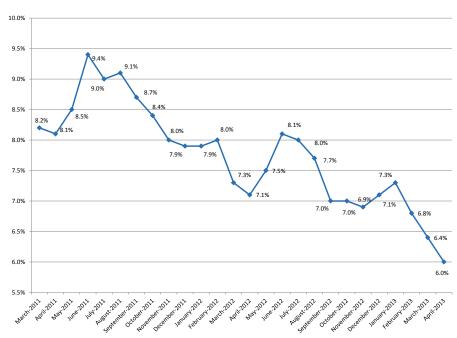
Figure 8: Annual Unemployment - 2002-2012



Source: BLS, SCDEW, LAUS

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

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



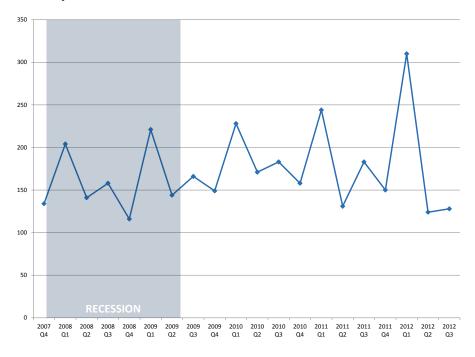
Source: BLS, SCDEW, LAUS

#### 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 Trident 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	Trident	South Carolina
0 to 4	8,715	63,766
5 to 9	2,943	19,667
10 to 19	2,070	13,316
20 to 49	1,548	9,881
50 to 99	557	3,907
100 to 249	307	2,433
250 to 499	72	757
500 to 999	25	328
1000 +	21	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 Trident 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 20-39 age cohorts, Trident has a notably higher proportion of population, and in the 70+ age cohorts, the LWIA has a markedly lower proportion of population.

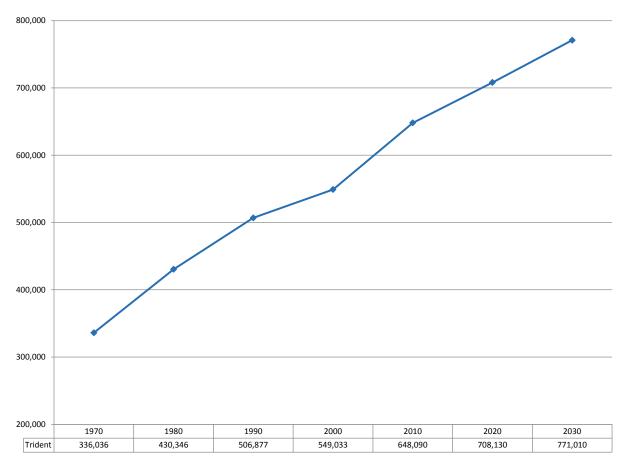
Figure 12: Population by Age

Age Range	Trident	SC	US
0-4	6.9%	6.5%	6.6%
5-9	6.4%	6.4%	6.6%
10-14	6.2%	6.5%	6.7%
15-19	7.0%	7.2%	7.2%
20-24	8.0%	7.2%	7.0%
25-29	8.1%	6.6%	6.8%
30-34	6.9%	6.2%	6.4%
35-39	6.9%	6.5%	6.6%
40-44	6.7%	6.8%	7.0%
45-49	7.2%	7.2%	7.4%
50-54	6.9%	7.0%	7.2%
55-59	6.1%	6.5%	6.3%
60-64	5.5%	5.9%	5.3%
65-69	3.9%	4.5%	3.9%
70-74	2.8%	3.3%	3.0%
75-79	2.0%	2.5%	2.4%
80-84	1.4%	1.7%	1.9%
85 and older	1.3%	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 1980 to 1990 (up 17.8 percent), the growth of the population of this area slowed down, growing just 8.3 percent over the next 10 years. Growth accelerated by 18 percent over the ten years to 2010. Growth is projected to increase less than 1 percent per year to 2030.

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

	Total	Moved From Different State	Moved From Abroad	Moved From Different County	Moved Within Same County
Population 1 year and over	647,207	4.6%	0.5%	4.1%	8.4%
Hispanic or Latino origin (of any race)	32,771	7.2%	3.3%	2.8%	10.5%
White alone, not Hispanic or Latino	411,090	5.3%	0.3%	4.0%	7.7%
Population 25 Years and Over					
Less than high school graduate	53,315	2.1%	0.9%	4.2%	7.9%
High school graduate/GED	118,169	2.9%	0.3%	3.4%	7.0%
Some college or associate's degree	128,318	3.4%	0.3%	3.4%	6.9%
Bachelor's degree	84,413	5.6%	0.6%	3.1%	7.8%
Graduate or professional degree	45,546	5.1%	0.5%	1.8%	5.2%

Source: US Census Bureau, ACS, SCDEW

In-migration (people moving into Trident) shows that just fewer than 6 percent of residents with a

graduate degree came from out of state or out of the country. While over 5 percent each of Hispanics and Whites moved into Trident from another state, 3.3 percent of Hispanics came from abroad. Though 18 percent of residents moved, 5.1 percent came from outside of South Carolina.

#### COMMUTING PATTERNS

Nearly all of the workers (92 percent) of Trident live and work in the LWIA. The tables in Figure 15 show that over 14,000 workers commute in from other areas to work in the LWIA. Colleton County draws a notable portion of Trident County's residents out of the area to work. Over 4,200 more employees commute into the area than leave it to work.

Figure 15: Commuting Patterns - 2010

To Trident WIA From	14,463
Colleton County, SC	3,489
Orangeburg County, SC	2,066
Georgetown County, SC	588
Williamsburg County, SC	474

From Trident WIA To	10,223
Colleton County, SC	1,156
Orangeburg County, SC	935
Richland County, SC	673
Georgetown County, SC	333
Beaufort County, SC	313

Source: US Census Bureau, ACS

#### EDUCATIONAL ATTAINMENT

The Trident LWIA is fortunate in that the LWIA has a lower concentration of residents with a high school diploma or GED or less than the state as a whole. The Trident LWIA also has a higher percent of residents with more than a high school diploma or GED than the state does.

Figure 16: Educational Attainment - Trident and South Carolina 2011

Education Level	Trident	SC
No school	1.0	1.1
Grades 1-9	4.9	7.0
10th Grade	2.4	3.3
11th Grade	2.5	3.2
12th Grade-no diploma	1.6	1.8
HS grad/GED	27.5	30.9
Some College	21.5	20.1
Associates	8.4	8.4
Bachelors	19.6	15.6
Masters+	10.6	8.6

Source: US Census Bureau, ACS, SCDEW

No school Grades 1-9 10th Grade Masters+ 1.0% 4.9% 2.4% 11th Grade 10.6% 2.5% .12th Grade-no diploma 1.6% Bachelors 19.6% HS grad/GED 27.5% Associates 8.4% Some College 21.5%

Figure 17: Educational Attainment - Trident 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** Government and Public Administration Finance **Education and Training** Business, Management and Administration Arts, Audio/Video Technology and Communications **Architecture and Construction** SC ■ Trident Agriculture, Food and Natural Resource

Figure 18: Percent of Students Declaring a Career Clusters In Trident 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

20.0

25.0

5.0

Source: SC Department of Education

Many students in the Trident 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	Trident	SC
Agriculture, Food and Natural Resource	1.6	3.3
Architecture and Construction	3.6	4.4
Arts, Audio/Video Technology and Communications	17.0	15.1
Business, Management and Administration	5.6	6.4
Education and Training	4.6	6.0
Finance	0.9	1.0
Government and Public Administration	3.3	3.3
Health Science	21.2	22.0
Hospitality and Tourism	3.8	2.8
Human Service	5.6	6.4
Information Technology	4.1	3.1
Law, Public Safety, Corrections and Security	8.8	7.7
Manufacturing	2.1	2.0
Marketing, Sales and Service	1.7	1.2
Science, Technology, Engineering and Mathematics	13.2	11.6
Transportation, Distribution, and Logistics	3.1	3.8

Source: SC Department of Education

### DEGREES AWARDED

In higher education, Trident area colleges and universities have conferred a wide variety of awards. Of the top 20, Business Administration and Management are the most popular followed by Liberal Arts. The institutions included in this data are Charleston Southern University, College of Charleston, the Medical University of South Carolina, The Citadel, and Trident Technical College.

Figure 20: Top 20 Majors in Trident - 2011

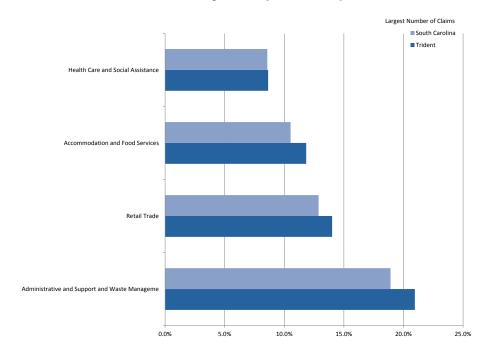
Majors	
Business Administration and Management, General	655
Liberal Arts and Sciences/Liberal Studies	368
Registered Nursing/Registered Nurse	272
Psychology, General	269
Biology/Biological Sciences, General	217
Speech Communication and Rhetoric	205
Political Science and Government, General	182
Medicine	163
Accounting	150
Social Work	150
Criminal Justice/Safety Studies	135
Physical Education Teaching and Coaching	119
English Language and Literature, General	116
History, General	112
Nursing - Registered Nurse Training, BSN Generic	112
Culinary Arts/Chef Training	86
Early Childhood Education and Teaching	84
Airframe Mechanics and Aircraft Maintenance Tech	81
Elementary Education and Teaching	80
Pharmacy	75

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 Trident LWIA area, the highest number of claims are filed are in the Administrative and Support and Waste Management and Remediation Services group followed by Retail Trade. The Administrative and Waste sector includes office administrative services; facilities support services; employment services; services to buildings and dwellings; and waste collection, treatment, and disposal services. These industries highlight the diverse economy of the Trident LWIA with workers supporting a variety of facilities in the area and in the high turnover of the retail industry.

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



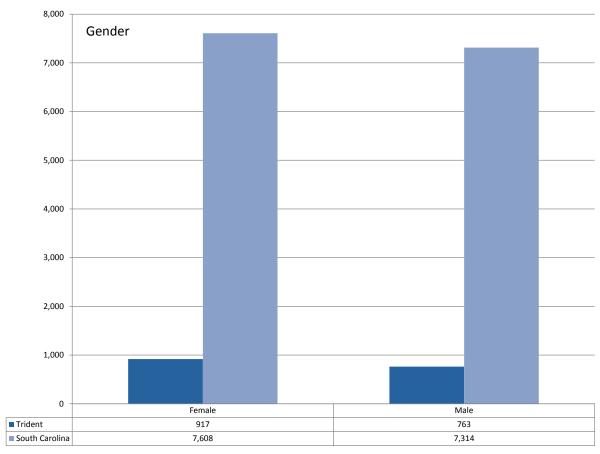
Occupation	Trident	South Carolina
Administrative and Support and Waste Management	308	2,373
Retail Trade	206	1,616
Accommodation and Food Services	174	1,321
Health Care and Social Assistance	127	1,076
Transportation and Warehousing	115	414
Professional, Scientific, and Technical Services	112	698
Construction	102	820
Manufacturing	72	2,267
Wholesale Trade	56	445
Other Services (except Public Administration)	41	292
Real Estate and Rental and Leasing	33	213
Educational Services	33	222
Finance and Insurance	28	300
Information	27	122
Public Administration	24	206
Arts, Entertainment, and Recreation	8	94
Management of Companies and Enterprises	2	35
Mining, Quarrying, and Oil and Gas Extraction	1	10
Utilities	1	22

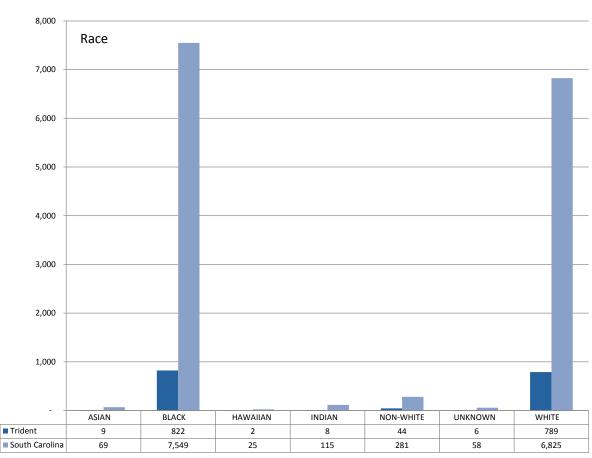
Source: SCDEW

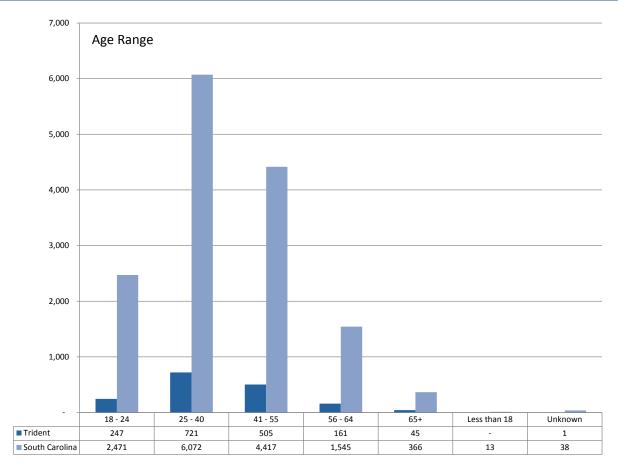
# UNEMPLOYMENT INSURANCE CLAIMANT CHARACTERISTICS

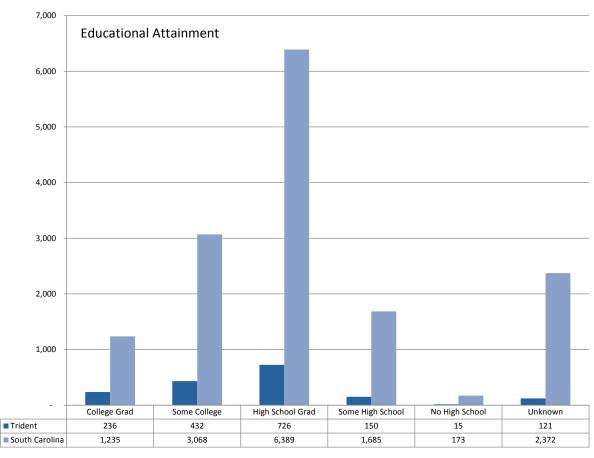
The people in this area who were receiving unemployment insurance benefits in April 2013 were typically female, black, 25-40 years old, and were high school graduates or earned a GED.

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 Trident LWIA was Sales and Related Occupations followed by Food Preparation and Serving Related Occupations.

#### Online Job Advertisements

Figure 23: Trident HWOL - April 2013 by Major Group

Occupation	# of Job Ads
Sales and Related Occupations	1,723
Food Preparation and Serving Related Occupations	1,400
Office and Administrative Support Occupations	1,140
Healthcare Practitioners and Technical Occupations	1,122
Computer and Mathematical Occupations	1,119
Miscellaneous	1,064
Transportation and Material Moving Occupations	898
Management Occupations	805
Installation, Maintenance, and Repair Occupations	720
Construction and Extraction Occupations	596
Building and Grounds Cleaning and Maintenance Occupations	470
Business and Financial Operations Occupations	436
Architecture and Engineering Occupations	344
Production Occupations	299
Education, Training, and Library Occupations	292
Personal Care and Service Occupations	289
Healthcare Support Occupations	264
Arts, Design, Entertainment, Sports, and Media Occupations	263
Protective Service Occupations	129
Community and Social Services Occupations	84
Legal Occupations	65
Life, Physical, and Social Science Occupations	43
Farming, Fishing, and Forestry Occupations	12
Military Specific Occupations	5

Note: A job advertisement may include multiple openings.

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

#### INDUSTRY PROJECTIONS

The Health Care and Social Assistance industry is projected to have the largest growth from 2008 to 2018, growing by 7,919 jobs or 792 jobs/year. This sector includes services such as ambulatory health care services, hospitals, nursing and residential care facilities, and social assistance services. Manufacturing reports the next largest growth with a projected 610 openings/year. This sector includes Primary Metal Manufacturing; Chemical Manufacturing; Non-metallic Mineral Product Manufacturing; and Transportation Equipment Manufacturing.

Figure 24: Industry Projections - 2008-2018

Industry	Estimate Employment (2008)	Projected Employment (2018)	Change	Percent Change	Annual Percent Change
Total Employment, All Jobs	312,326	355,001	42,675	13.66	1.29
Health Care and Social Assistance	33,299	41,218	7,919	23.78	2.16
Retail Trade	35,797	39,962	4,165	11.64	1.11
Accommodation and Food Services	32,657	35,887	3,230	9.89	0.95
Educational Services	26,208	29,483	3,275	12.50	1.18
Manufacturing	22,676	28,776	6,100	26.90	2.41
Government	25,312	26,384	1,072	4.24	0.42
Administrative and Support and Waste Management and Remediation	20,671	22,650	1,979	9.57	0.92
Professional, Scientific, and Technical Services	16,811	22,515	5,704	33.93	2.96
Construction	17,864	19,114	1,250	7.00	0.68
Other Services (Except Government)	12,910	14,591	1,681	13.02	1.23
Transportation and Warehousing	10,906	11,534	628	5.76	0.56
Wholesale Trade	7,571	8,182	611	8.07	0.78
Finance and Insurance	7,502	7,977	475	6.33	0.62
Information	5,337	6,252	915	17.14	1.60
Real Estate and Rental and Leasing	5,214	5,857	643	12.33	1.17
Arts, Entertainment, and Recreation	4,252	5,273	1,021	24.01	2.18
Agriculture, Forestry, Fishing and Hunting	2,344	2,239	-105	-4.48	-0.46
Management of Companies and Enterprises	1,109	1,450	341	30.75	2.72
Utilities	1,014	1,055	41	4.04	0.40
Mining	176	178	2	1.14	0.11

Source: BLS, SCDEW, QCEW, WI

#### OCCUPATIONAL PROJECTIONS

Many of the occupations projected to have numerous openings between 2008 and 2018 in this area support a growing economy. The diverse industrial base of the Trident LWIA drives a need for manufacturing employees, including Team Assemblers; Industrial Machinery Mechanics; Machinists; and Industrial Engineers. Healthcare occupations as well as other technical occupations lead the projected employment listing, as shown in Figure 25.

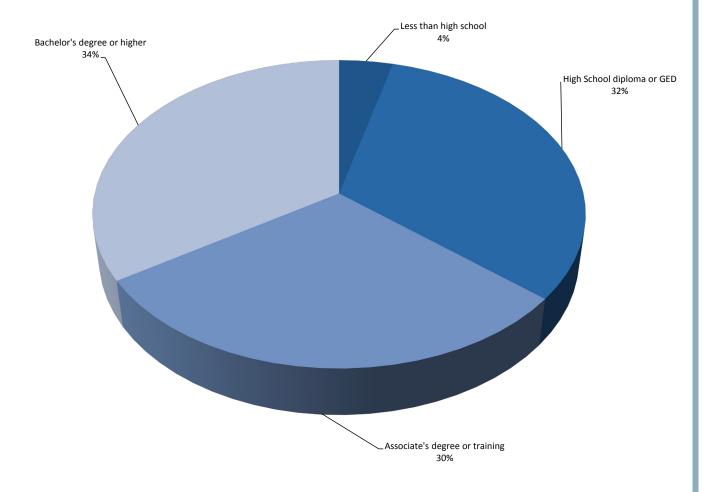
Figure 25: Growing Occupations - 2008-2018

Occupation	Estimated Employment (2008)	Projected Employment (2018)
Team Assemblers	3,322	4,604
Industrial Machinery Mechanics	896	1,380
Pharmacy Technicians	1,037	1,349
Machinists	909	1,306
Industrial Engineers	722	1,143
Paralegals and Legal Assistants	787	1,042
Personal and Home Care Aides	704	971
Mechanical Engineers	677	910
Dental Assistants	530	728
Purchasing Agents, Exc Wholesale, Retail & Farm	513	675
Engineering Managers	505	655
Dental Hygienists	444	614
Personal Financial Advisors	351	483
Computer and Information Systems Managers	359	474
Veterinary Technologists and Technicians	182	250
Environmental Engineers	162	213
Medical Equipment Repairers	128	168
Environmental Engineering Technicians	88	114
Painting, Coating, and Decorating Workers	86	112
Environmental Scientists and Specialists	61	83

Source: BLS, SCDEW, OES, WI

Of the top 50 projected growing occupations by percent change, 16 require a high school diploma or GED, two require less than a high school diploma or GED, 17 require a bachelor's degree or more, 15 need an associate's degree or require some kind of postsecondary vocational training. Each of the two requiring less than a high school diploma or GED does 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 manual labor jobs, as shown in Figure 27.

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

Occupation
Broadcast Technicians
Chemical Plant and System Operators
Computer, Automated Teller & Office Mach. Repairer
Conveyor Operators and Tenders
Crane and Tower Operators
Dispatchers, Except Police, Fire, and Ambulance
Extruding and Forming Machine Setters, Operators
Farmworkers & Laborers, Crop, Nursery & Greenhouse
File Clerks
Mail Clerks and Mail Machine Operators
Meter Readers, Utilities
Order Clerks
Payroll and Timekeeping Clerks
Postal Service Clerks
Postal Service Mail Carriers
Postmasters and Mail Superintendents
Radio and Television Announcers
Roofers
Telemarketers
Word Processors and Typists

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	5
Middle	28
High	17

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 Trident 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 and a larger-than-the-state share of 20-39 year olds, this area looks to have the human resources to meet the 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. The LWIA has a higher percent of residents aged 25 and older with a college degree than the state does as a whole.

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. Both had the need for workers in Business, Management, and Administration; Health Science; and Marketing, Sales, and Service. In addition, Hospitality and Tourism was a long-term demand. Most of the top projected occupations require at least a high school diploma or GED.

Figure 29: Comparison of Supply and Demand

	Dem	and	Supply	
	Top online ads	Projected Occupations	Degrees Earned	Career Clusters Selected
Agriculture, Food and Natural Resource	1.9	2.0	0.6	1.6
Architecture and Construction	7.1	6.7	1.1	3.6
Arts, Audio/Video Technology and Communications	2.5	1.2	3.8	17.0
Business, Management and Administration	13.2	17.8	16.2	5.6
Education and Training	3.6	4.9	19.7	4.6
Finance	4.0	2.1	0.0	0.9
Government and Public Administration	0.2	0.2	3.2	3.3
Health Science	12.8	9.8	25.4	21.2
Hospitality and Tourism	8.6	13.1	2.7	3.8
Human Service	5.0	5.4	6.0	5.6
Information Technology	8.8	2.1	2.4	4.1
Law, Public Safety, Corrections and Security	1.7	1.7	3.6	8.8
Manufacturing	3.2	6.1	1.4	2.1
Marketing, Sales and Service	16.3	17.0	0.3	1.7
Science, Technology, Engineering and Mathematics	2.9	2.6	11.9	13.2
Transportation, Distribution, and Logistics	8.3	7.1	1.6	3.1

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:

- The supply of Health Science and STEM graduates and students is greater than employment demand in the short- and long-terms, while just the opposite is true for the Hospitality and Tourism; Marketing, Sales and Service; and Transportation, Distribution, and Logistics industries.
- There are many post-secondary degrees being earned in Education and Training that exceed short-term demand.
- There is a short-term demand that is not being met by today's graduates in the area for Architecture and Construction; Finance; and Information Technology.
- There is an overabundance of the Arts, Audio/Video Technology and Communication and Law, Public Safety, Corrections and Security clusters selected by students that will exceed long-term demand.
- The long-term demand for workers in Business, Management and Administration and Manufacturing is not projected to be met by today's students.

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
- 2. 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 Trident LWIA area, overall, encompasses a growing and diverse economy. The population continues to increase steadily, and the education level for the population is higher than the state as a whole with higher percentages of residents with education beyond high school. The workforce (current and potential) does face challenges in having the proper mix of employer demand being met by trained applicants. 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 that:

- There is an undersupply of students choosing Business, Management and Administration; Hospitality and Tourism; Manufacturing; Transportation, Distribution, and Logistics; and Marketing, Sales and Service studies to meet the area's future employment demand.
- There is an oversupply students choosing Arts, Audio/Video Technology and Communication; Law, Public Safety, Corrections and Security; STEM; and Health Sciences that will far outpace the future employment demand in the LWIA.
- 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 not only get hired but retain their positions and thus reduce employee turnover.

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