WHY THIS STUDY

A long-term economic diversification strategy and strong job growth in the Charleston region have transformed the area’s economy to STEM-based (Science, Technology, Engineering and Math) over the past decade. As a result, employers are finding it more difficult to fill positions in many of the growth sectors. The local school districts, colleges and universities, and local training programs are aggressively ramping their resources to train local residents in high-demand skills to help fill local jobs, but talent demand is currently outpacing local supply in some cases. As a result, the region must also depend on recruiting workers from out-of-the-area and out-of-state to fill local jobs.

The Charleston Metro Chamber of Commerce works with the local public school districts, area colleges and universities, and local employers to help understand the types of skills employers are seeking, and help local educators understand and respond to employers’ needs.

The Chamber produced the Charleston region’s first Talent Demand Study in 2014 with funding support and participation from Charleston Regional Development Alliance, Charleston Southern University, College of Charleston, Medical University of South Carolina and Trident Technical College. Last updated in 2016, this 2018 analysis provides a fresh update in identify the fastest-growing and most in-demand occupations as well as assess talent supply gaps.

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www.charlestonchamber.org/talentdemand
KEY FINDINGS

In the next five years, the Charleston Metro Area will add nearly

35,000

new jobs to the region. This current forecast is

32%

higher than the 2016 study’s five-year job growth prediction.

80%

of this job growth will be in 10 specific occupations.
OCCUPATION GROWTH

2017 BASELINE EMPLOYMENT

OCCUPATIONS WITH HIGHEST PERCENTAGE OF GROWTH
2017 - 2022

Software & IT: 21.8%
Production & Mechanical: 17.9%
2017 - 2022 JOB GROWTH

- Production & Mechanical: 5,911
- Hospitality: 4,444
- Medical: 3,661
- Business Operations Support: 3,391
- Software & IT: 2,535
- Personal Services: 2,507
- Logistics: 2,089
- Business Management: 1,134
- Construction: 1,129
- Education: 862
- Finance: 726
- Engineering: 699

Business Management: 10.8%
Engineering: 10.2%
TALENT SUPPLY GAPS

ANNUAL JOB OPENINGS BEYOND LOCAL GRADUATE OUTPUT

Production & Mechanical

Jobs in high demand include:
• Assemblers and Fabricators
• Welders
• Machinists
• Industrial Machinery Maintenance/Repair
• Aircraft Mechanics
• Automotive Mechanics
• Computer-Controlled Machine Tool Operators and Programmers
• Painting Machine Operators

Software & IT

Jobs in high demand include:
• Computer Systems and Information Analysts
• Software Developers and Programmers

Hospitality

Jobs in high demand include:
• Food and Culinary
• Hotels and Conventions
Many of these skills can be obtained by on-the-job training and experience. Additional recruitment into existing formal training programs and certifications could help meet the demand for high-end servers, chefs and hospitality management.

Construction

Jobs in high demand include:
• Carpenters
• Electricians
• Pipelayers
• Plumbers / Pipefitters / Steamfitters
• Heavy Equipment Operators

Many of these skills can be obtained by on-the-job training and experience. Additional recruitment into existing formal training programs and certifications could help close the gap.
The Charleston Metro Chamber is committed to ensuring that current and future generations have career opportunities in our region’s fastest growing occupations. Through regional partnerships, the Chamber serves as a catalyst to providing programs and services to introduce local students to the skills and jobs in highest demand.

**Career Academies**

Career Academies are career-themed schools within high schools, in which the learning environment reflects the atmosphere and expectations of the 21st century workplace. Local businesses help teachers to understand and incorporate the needs of local employers. For instance, TEALS brings 19 computer science professionals into five local high schools to educate teachers and students in computer science.

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<thead>
<tr>
<th>High Schools</th>
<th>Academy Partners</th>
<th>Pathways</th>
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<tbody>
<tr>
<td>22</td>
<td>150</td>
<td>5</td>
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**Youth Apprenticeship Program**

Apprenticeship Carolina, Trident Technical College and the Charleston Metro Chamber, along with five area manufacturing firms, launched a pilot program in August 2014 with 11 area high school juniors. Now in it’s fifth year, there are:

<table>
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<tr>
<th>Youth Apprentices</th>
<th>Employer Hosts</th>
<th>Pathways</th>
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<tbody>
<tr>
<td>92</td>
<td>54</td>
<td>17</td>
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</table>

At the end of the two-year program, students will have earned a high school diploma, certification in a specific field from Trident Tech, credentialing from the U.S. Department of Labor and two years of paid work experience.
Master of Science in Computer Science

Master of Science in
• Civil Engineering
• Electrical Engineering
• Mechanical Engineering

Graduate Certificates in
• Aeronautical
• Built Environment & Public Health
• Composites
• Computer
• Geotechnical
• Manufacturing
• Mechatronics
• Power and Energy
• Structural & Transportation Engineering

Graduate Degrees in
• Computer Engineering
• Computer Science
• Digital Production Arts
• Electrical Engineering
• Mechanical Engineering

Announced the South Carolina Aeronautical Training Center will be completed in 2019.

This $80 million training center will provide training for more than 5,000 students annually.
AREA COLLEGES AND UNIVERSITIES ADDED
30+ NEW STEM DEGREES

2017

Bachelor of Science in
• Cyber Security

Master of Medical Science in
• Physician Assistant Studies

Master of Science in
• Biology
• Psychology

Ph.D. in
• Computer and Information Sciences

Ph.D. in
• Biomedical Data Science and Informatics

Accelerated Health-related Graduate Degree Programs
• Nine offered jointly by Medical University of South Carolina and Clemson University
Explore Charleston
(Formally Charleston Area Convention & Visitors Bureau)
Boosting their workforce development efforts to connect hospitality employers with additional workers, including:

• Commissioning wages and compensation studies to help employers offer competitive compensation packages
• Minimizing employee transportation challenges through Park & Ride programs and neighborhood job fairs
• Increasing resources in third-party recruiting and resume-screening services and professional development for hospitality employees

Lean Manufacturing Certificate Program
In 2017 and 2018, the Charleston Metro Area’s three county governments, along with the South Carolina Department of Commerce and other state partners, held community outreach events across the region to expand the local production workforce in response to employers’ needs. The result was the creation of an accelerated manufacturing certification program – at no cost to participants – resulting in 499 additional workers in the Charleston region (as of July 2018) who now hold Lean Manufacturing Certificates. Statewide replication is now under consideration.

South Carolina Aeronautical Training Center
This state-of-the-art 218,000 square foot complex, opening in 2019, is being constructed on the main campus of Trident Technical College in North Charleston. The facility will increase capacity to provide training for well-paying jobs in expanding manufacturing industries for more than 5,000 students annually.

Curriculum includes:
• Additive Manufacturing
• Aircraft Assembly and Maintenance
• Automation and Mechatronics
• Composites and Materials
• CNC Machining and Tooling
• Engineering and Quality Control
...and much more
In spring 2018, the Center for Business Research was tasked with assessing the region’s talent demand and supply and any major shifts since in-depth audits in 2014 and 2016 by Austin-based Avalanche Consulting as part of One Region: A Global Competitiveness Strategy. The CBR analyzed updated data for the Charleston Metro Area from the U.S. Bureau of Labor Statistics, EMSI and Avalanche Consulting as provided on charlestonregionaldata.com, and IPEDS data (Institutional Post-Secondary Education Data System) from the National Center for Education Statistics. Concurrently, the CBR analyzed new workforce development initiatives in the region that originated after the 2014 and 2016 audits and which were created to close local talent supply gaps. As many of these initiatives continue to ramp up in 2018 and 2019, they will help address the talent gap.

This study was produced in partnership with

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