



TALENT 2020

& BEYOND

Skills in demand for a challenging economy



Critical Areas for A Skills-First Approach

Ecosystem Player	Description and Needs	Metrics That Matter
Emerging and Existing Workforce	Students and individuals looking for a new role or job and guidance on what they need to know and be able to do in order to find and keep a good job, and how to obtain those skills	<ul style="list-style-type: none"> Employment Salary Upward career mobility Return on investment (training/education)
Employers	Private-sector companies, the military and other government agencies looking to hire the talent they need, upskill their workforce, or help them find their next role	<ul style="list-style-type: none"> Improved time to hire Improved retention Lower training costs Larger, more diverse talent pipeline
Education, Training and Credentialing Providers	Higher education, workforce agencies and partners, shorter-form programs (e.g. bootcamps), industry certification organizations	<ul style="list-style-type: none"> Completion rates Salary of graduates Adoption of tool or standard Increased student demand

Adapted from US Chamber of Commerce Foundation, Landscape Analysis, February 2020

The Challenge Ahead

As a result of the ongoing pandemic, the Charleston region has experienced a drastic swing from record low to record high unemployment. We are now faced with a new challenge — how to get people back to work and advance economic recovery.

THE IMPACTS WITHIN INDUSTRY SECTORS have been uneven. Economies recovering from downturns have historically shifted to where workforce demand is strongest, with employers hiring for the roles that are becoming increasingly important, rather than rehiring for the jobs shed in the past. For instance, last mile delivery of consumer goods will likely remain strong while traditional retail suffers.

Industry and occupational data creates an additional challenge. Industry workforce

data includes a myriad of occupations, while titles for these occupations are used differently between companies and are only a signal of possible skills. This makes it difficult to get an accurate view of present and future needs, limiting the effectiveness of the available data.

It is time for a new, more effective approach that will help employers better identify the skills they need their employees to have and to potentially access a wider talent pool. It would direct job seekers to understand the

skills they have or need to acquire to transition into these emerging, high-demand areas. Leading with skills over occupational titles creates better alignment and increases potential employment matches.

A **skills-forward** approach will help our K-12 and higher education systems better understand what competencies are of greatest value to our region's

“The driving question isn’t, ‘When will the jobs come back?’ But rather, ‘Where will the jobs be and what skills will they require?’”

future growth. It will guide our technical college system offerings to ensure needed short-term training and degree programs address skills shortages in our market.

This talent report is organized around this shift in how we look at the workforce this region will need now and in the future. It considers how to expedite a return to lower unemployment and what skills we prioritize as critical in both our emerging and displaced workforce.

Demand Now

Top 20 Talent Shortages

The short-term impacts of COVID-19 are best demonstrated through state data tracking, advertised job openings and unemployment insurance recipients. Below are select occupations with job openings in the Charleston Metro Area on August 15, 2020, which may represent potential talent shortages in the market. These occupations represent those earning at least the Charleston Metro Area median wage of \$37,440 annually in 2019.

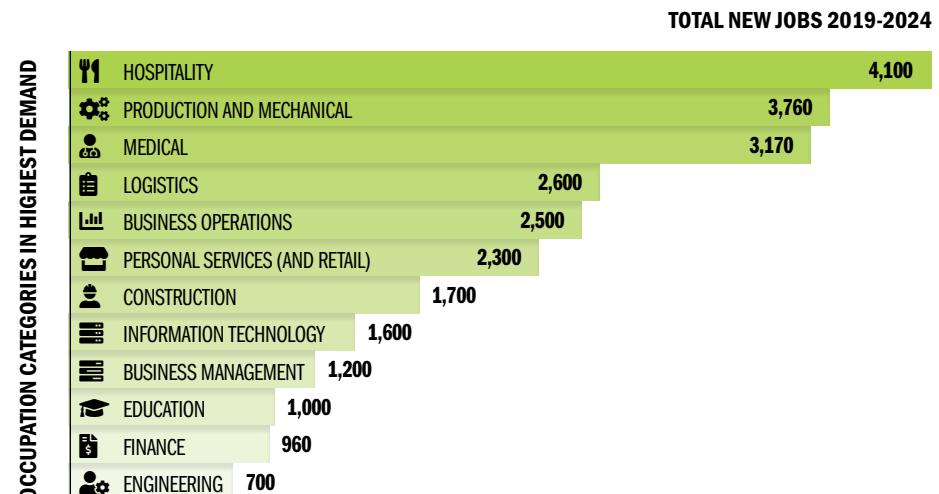
OCCUPATIONS WITH POTENTIAL TALENT SHORTAGES (CANDIDATES PER OPENING)	MEDIAN WAGE ADVERTISED	JOB OPENINGS	POTENTIAL CANDIDATES*	POTENTIAL CANDIDATES* PER JOB OPENING
Healthcare Practitioners and Technicians	\$78,933	1085	342	0.3
Technical Writers	\$69,700	22	16	0.7
Loan Officers	\$80,830	25	21	0.8
Heating, Air Conditioning and Refrigeration Mechanics and Installers	\$46,490	69	93	1.4
First-Line Supervisors of Retail Sales Workers	\$41,280	240	339	1.4
Police and Sheriff's Patrol Officers	\$47,440	25	39	1.6
Management Analysts	\$75,680	28	45	1.6
General and Operations Managers	\$97,640	210	361	1.7
Electrical Engineers	\$95,220	20	35	1.8
Automotive Service Technicians and Mechanics	\$44,760	85	158	1.9
Medical and Health Services Managers	\$99,680	40	83	2.1
Operating Engineers and Other Construction Equipment Operators	\$41,350	33	88	2.7
First-Line Supervisors of Mechanics, Installers and Repairers	\$54,730	24	68	2.8
Heavy and Tractor-Trailer Truck Drivers	\$38,740	132	442	3.4
Plumbers, Pipefitters and Steamfitters	\$48,470	32	111	3.5
First-Line Supervisors of Production and Operating Workers	\$66,180	76	325	4.3
Electricians	\$41,380	49	220	4.5
Financial Managers	\$111,990	21	100	4.8
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$66,170	21	100	4.8
Carpenters	\$47,400	32	157	4.9

Source: SCworks.org Labor Market Information

* Candidates include underemployed and unemployed workers registered in the SCWorks.org system.

Projected Demand for the Future

The Charleston Metro Area is expected to add 28,000 new jobs in the next five years (2019-2024). The top categories below make up 91% of that projected growth. The Hospitality forecast was adjusted downward 15% based on US Census Bureau Small Business Pulse Surveys, which were conducted to gauge employers' outlook in response to the COVID-19 pandemic. Expectations are that recovery in that sector will occur upon wide availability of a vaccine. The Production & Mechanical category and Engineering category were adjusted for both the expected expansion (+1,500) at Volvo and potential contraction (-10%) at Boeing. Logistics occupations were adjusted upward for the expected 1,000 jobs at the Dorchester County Walmart distribution center recently announced.



Notable Trend Shifts from Past to Future



% CHANGE 2014-2019

Biological and Agricultural Engineering

-11% +19%

Aerospace Engineering

-11% +17%

Biomedical Engineering

-6% +12%

TOP GROWTH OCCUPATION WITH 500+ WORKERS

Maintenance Mechanics

+6% +12%



PROJECTION 2019-2024

% CHANGE 2014-2019

Hospitality: Entertainment*

+28% +6%

Hospitality: Food & Culinary*

+19% +7%

Business Operations: Information Processing**

+18% +6%

Business Operations: Management**

+17% +6%

Retail Sales***

+11% +6%

* The change in hospitality occupation growth rates above is estimated based on impacts by COVID-19, however availability of a vaccine or other therapeutics could push this sector toward a faster recovery.

** Business Operations occupations were not manually adjusted. The biggest factor influencing the pace of growth may be automation.

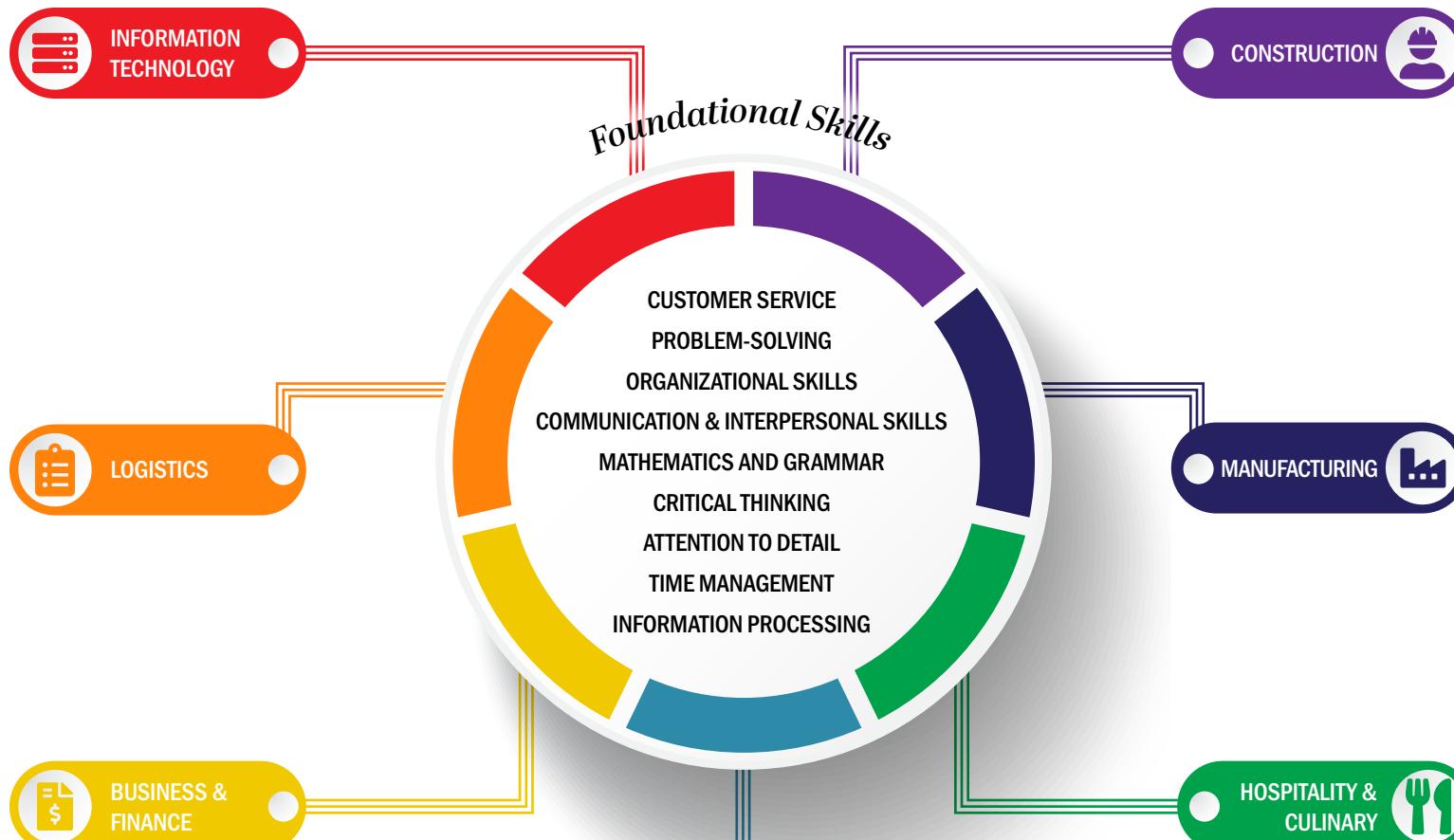
*** Retail Sales occupations were already experiencing an impact of a shift to e-commerce and the COVID-19 impact will likely accelerate that trend.

In-Demand Skills for 2020 & Beyond

- + Object-Oriented Development Software (Python, C#)
- + Web Platform Development Software (JavaScript, jQuery, Bootstrap, Node.js, XSLT)
- + File Versioning Software (Git)
- + Database User Interface and Query Software (SQL)
- + Enterprise Application Integration Software (XML)

- + Forklift/lift/hoist/pallet truck operations
- + Commercial Drivers License (CDL)
- + Inventory Management Software
- + Global Positioning Systems (GPS)
- + Inventory control/record keeping

- + Sales, business development and Customer Relationship Management (CRM) Software
- + Calculation and analysis of financial data
- + Project management and project management software
- + Microsoft Office (Word, Excel, PowerPoint)
- + Preparation of research or operations reports



UPSKILLING EXAMPLES & SALARIES

Nursing Assistant → Registered Nurse



Food/Culinary → Manufacturing



Retail Sales → Logistics



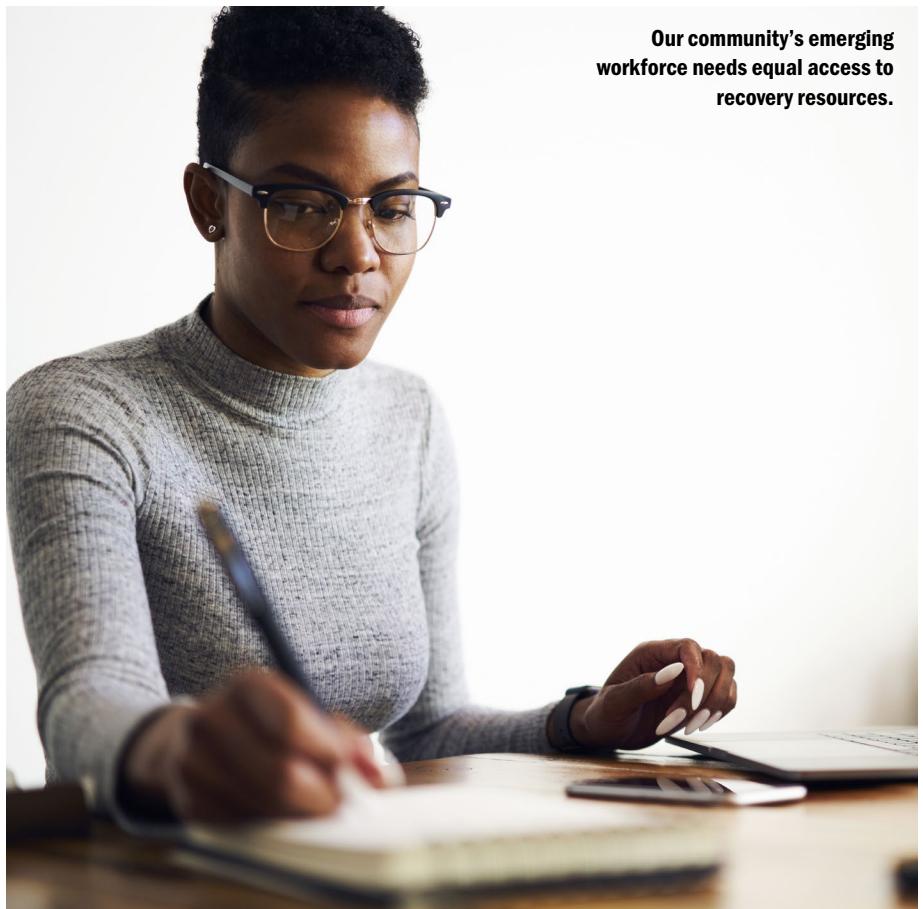
Source: SC Dept of Employment & Workforce (SCDEW) and U.S. Bureau of Labor Statistics, 2020.

All salaries based on average annual salary in Charleston Metro Area

- + Skilled crafts & trades (HVAC, electrician, plumber, carpenter, masonry, concrete, etc.)
- + Read work orders, blueprints or diagrams
- + Heavy equipment operation
- + Measurements for installation/assembly (wood, metal, masonry, aggregate materials)
- + Physical endurance and dexterity
- + Read work orders, blueprints or diagrams
- + Operate and repair machinery/equipment
- + Quality control
- + Production planning
- + Forklifts/other loader operations

- + Food safety & preparation
- + Quality control
- + Project management
- + Production planning
- + Inventory planning/management

- + Phlebotomy
- + Coding & billing
- + Medical procedure assistance & patient care
- + Advanced cardiac monitoring & life support
- + Administration & regulatory compliance



Our community's emerging workforce needs equal access to recovery resources.

OCCUPATION CATEGORIES, CHARLESTON METRO AREA (Data sorted by 2019 Average Wage)	% OF OCCUPATIONS ILLED BY WHITES	% OF OCCUPATIONS ILLED BY PEOPLE OF COLOR	2019 AVERAGE WAGE
Management, business and financial	81%	19%	\$98,950
Computer, engineering and science	85%	15%	\$80,523
Healthcare practitioners and technicians	79%	21%	\$79,701
Education, legal, community service, arts and media	80%	20%	\$56,928
Law enforcement	78%	22%	\$50,580
Construction and extraction	74%	26%	\$45,120
Production	57%	43%	\$43,310
Office and administrative support	67%	33%	\$38,560
Sales and related occupations	71%	29%	\$38,000
Transportation and material moving	58%	42%	\$34,850
Installation, maintenance and repair occupations	78%	22%	\$33,170
Healthcare support	42%	58%	\$31,220
Personal care and service	67%	33%	\$29,160
Building and grounds cleaning and maintenance	47%	53%	\$27,020
Food preparation and serving related	57%	43%	\$24,290
Total Workforce	71%	29%	\$47,800

Sources: 2018 ACS, US Census Bureau; 2019 Wage Survey, US Bureau of Labor Statistics, 8/2020

Barriers To Opportunity

Moving towards economic recovery requires the displaced and emerging workforce to gain in-demand skills. However, not everyone in our community will have equal access to do so.

PRESENT AND HISTORICAL WORKFORCE DATA shows that Black and Hispanic workers are not accessing the same opportunities as their white counterparts. Black and Hispanic workers disproportionately occupy lower-skill, lower-wage occupations in our region such as food preparation, grounds cleaning and maintenance, and administrative support. Conversely, white workers

disproportionately occupy positions in technology, finance, education and practitioner-level healthcare. (see table).

This disparity can be found early in the workforce pipeline—beginning from birth and continuing through high school, college and career opportunities. The pandemic has exacerbated these trends. Nationally, Black unemployment rose to 16.8% in

May, up from 6.0% in January 2020, as compared to white unemployment which was 12.4% in May and 3.1% in January. During the pandemic, Black (23%) and Hispanic (24%) workers are more likely than white (15%) to have been laid off.

There are other significant barriers facing Black and Hispanic Americans in obtaining the education and skills required to access high wage, in-demand occupations, including treatment within the criminal justice system, access to transportation and access to quality healthcare.

Social capital inequity is another barrier for Black workers. The emerging white workforce is more likely to have access to

parents, teachers, coaches and mentors who form a well-connected network of individuals to offer a “leg up” to a recent college graduate, while the emerging or displaced Black and Hispanic workforce often does not.

As the nation grapples with racial disparities in our communities and in our systems, we must come to understand these barriers and collectively work to address them. Using a skills-forward approach to get workers into living wage jobs in high demand will require an intentional focus on helping Black and Hispanic workers overcome barriers, while working to alter the systems that perpetuate the inequities.

Skills Development in the Emerging Workforce

While promoting economic recovery will require aligning the displaced workforce with immediate demand, ensuring economic prosperity over the long term also requires an ongoing commitment to develop the emerging workforce.

PRESENTLY, ONLY 46% OF HIGH SCHOOL GRADUATES are college or career ready; that number needs to climb to a minimum level of 60% to be competitive as a region. Cultivating career interest and early college opportunities are proven methods to advance career readiness. Promising initiatives in place before the economic downturn need to continue, adapting to distancing constraints and employer workplace protocols.

Activating Career Interest: Computer Programming through TEALS

Katie Susol was choosing classes at Hanahan High School in 2018 when she found an Intro to Computer Science class and decided to take it. At that time, she didn't realize that along with teaching computing skills, her teacher would be teaming up with five IT professionals from Blackbaud to deliver state-of-the-art instruction and real-world advice about careers in IT.

Being the only female in class wasn't something she noticed right away until a friend pointed it out, but to Katie, it was no big deal. She was interested in being a Mechanical Engineer before the class, and now with computing skills, she's open to robotics and mechatronics.

"It was so helpful to be taught by experts in computer science. Now I know what Blackbaud does and how they solve problems for their customers who in turn help their communities. Very cool!"

Advancing Pathways to College & Career: Youth Apprenticeships

Trident Technical College's Youth Apprenticeship program continues to lead



the nation in expertise and execution, and in this challenging environment, has been able to adapt and forge ahead. Launching a new mobile phone app for students to track hours and competencies, conducting employer interviews remotely, and hosting virtual signing day celebrations and onboarding are just a few examples of meeting employers and students where needed to keep this award-winning program on track.

To date, more than 300 students have been enrolled in Youth Apprenticeships in high-demand occupations. Apprentices earn a diploma, a Department of Labor credential, no-cost college credit and paid work experience.

Principles for Talent Advancement in 2020 & Beyond

Whether talent advancement is viewed through the lens of the emerging or displaced workforce, or towards attracting high-demand talent to our region, the following principles will be required to ensure alignment between employer need and workforce availability.



EQUITY: Acquiring in-demand skills leading to higher wages must be accessible to everyone in the region. Special attention to helping low-income workers, many of whom are Black or Hispanic, must take priority in regional initiatives advancing the skills of the workforce.



AGILITY: Job seekers must be willing to adapt to rapidly changing market conditions. The occupations once held by displaced workers may take years to return to previous levels. These job seekers need to overcome reluctance to pursue education or training and acquire new skills.



ADAPTABILITY: Higher education institutions and other training providers need to address and overcome barriers slowing the creation and operation of short-term programs of study. Employer input is critical in driving the skills and competencies needed in these new programs.



PREPAREDNESS: Skills and competencies important to occupations aligned with state and national preparedness strategies will be in high demand for the foreseeable future. Looking at the supply chain and workforce struggles our nation faced in 2020, these preparedness roles became apparent in many sectors including logistics, healthcare, manufacturing and IT.



SECURITY: The increase in remote workers, and the likelihood that many will stay remote, only adds greater need and urgency for a workforce skilled in IT infrastructure and cybersecurity. The skills shortage in this area was pronounced prior to 2020; demand for these skills has risen considerably and will remain elevated.



RESPONSIBILITY: Job seekers must take responsibility for remaining life-long learners who continually acquire skills in response to changing market needs. To attract and retain a skilled workforce, employers must take responsibility for providing employees access to training and skills development opportunities.



VALUE: Organizations seeking to serve either job seekers or the emerging workforce must demonstrate a high level of value to those populations. Programs of study, career exposure events and career experiences must provide a high return for students' time and financial investment and result in alignment with high-demand occupations.



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