

Upstate Regional Workforce & Education Advisory Board Meeting

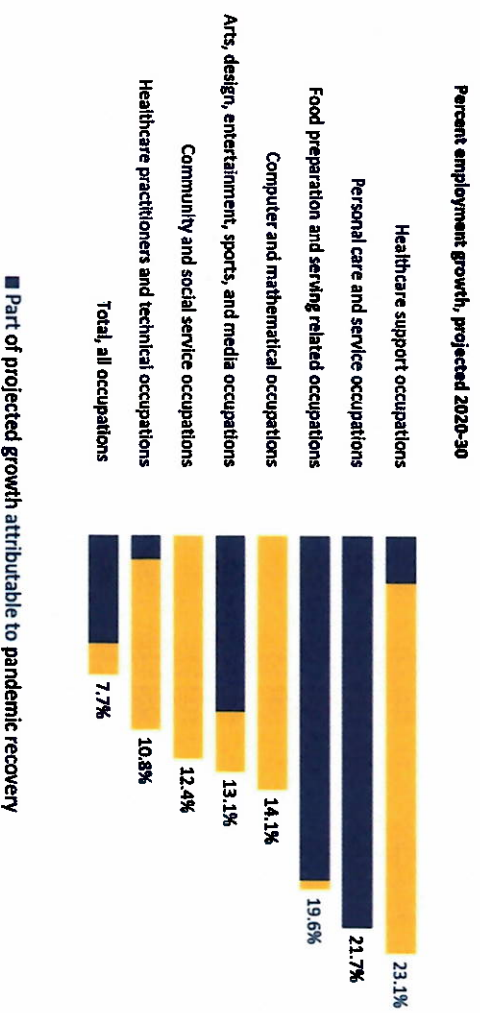
August 30, 2022

Topics:

1. National Trends
2. Upstate Workforce Region Trends
3. Career & Technical Education Data
4. Labor Market Dynamics
5. Top Skills Gaps (data from small survey)
6. An Interesting Part of the Puzzle
7. Questions and Discussion

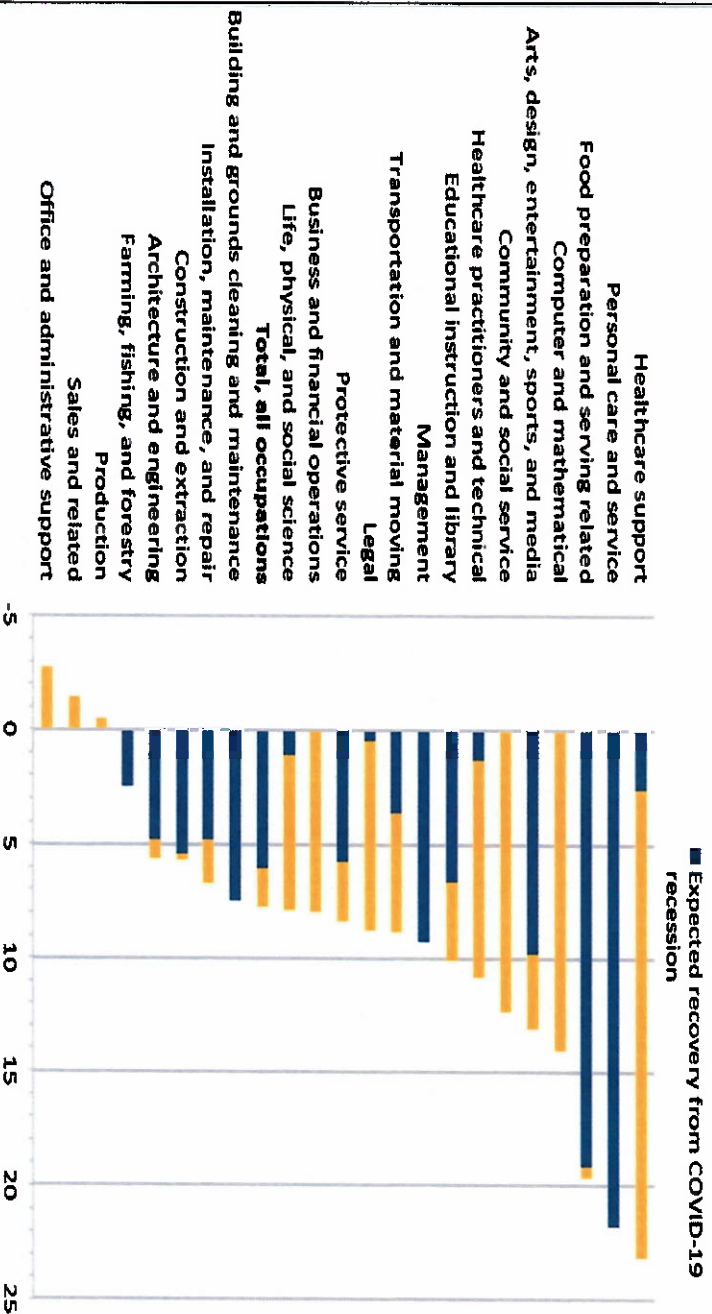
1. National Trends

Projected Percent Change by Selected Occupational Groups, 2020-30



https://www.bls.gov/emp/images/percent_change.png

Chart 1. Projected employment change by occupational group, 2020–2030 (percent)



Note: Expected recovery from COVID-19 recession represents the reversal of declines in employment between 2019 and 2020 for occupational groups that experienced declines during that period.

Source: Bureau of Labor Statistics, *Employment Projections 2020 – 2030*.
<https://www.bls.gov/news.release/pdf/ecopro.pdf>

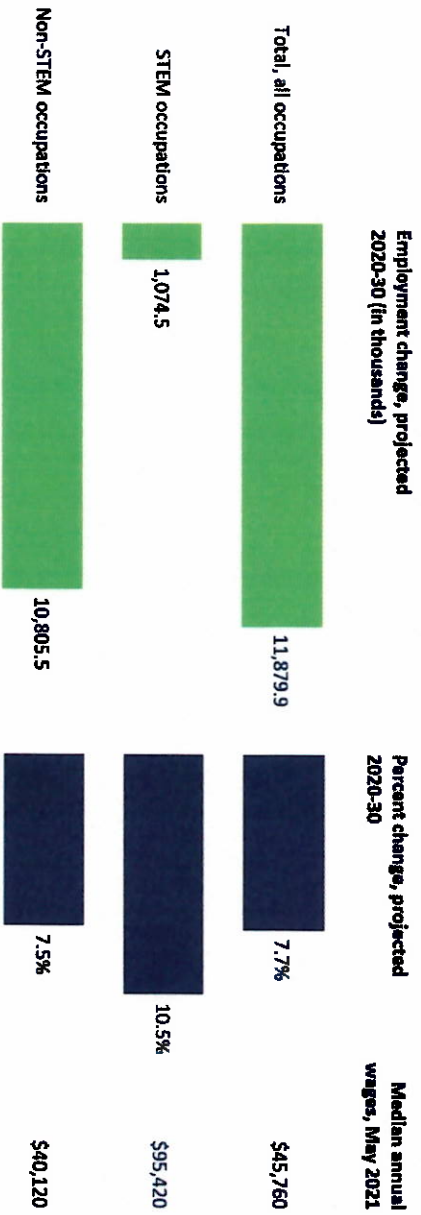
Chart 6. Ten fastest growing occupations, projected 2020–30, excluding occupations with above-average cyclical recovery

| | Percent employment change, projected 2020–30 | Employment change, projected 2020–30 (in thousands) | Median annual wage, May 2020 |
|---|---|--|---------------------------------|
| Wind turbine service technicians | 68.2% | 4.7 | \$56,230 |
| Nurse practitioners | 52.2% | 114.9 | \$111,680 |
| Solar photovoltaic installers | 52.1% | 6.1 | \$46,470 |
| Statisticians | 35.4% | 14.9 | \$92,270 |
| Physical therapist assistants | 35.4% | 33.2 | \$59,770 |
| Information security analysts | 33.3% | 47.1 | \$103,590 |
| Home health and personal care aides | 32.6% | 1,129.9 | \$27,080 |
| Medical and health services managers | 32.5% | 139.6 | \$104,280 |
| Data scientists and mathematical science occupations, all other | 31.4% | 19.8 | \$98,230 |
| Physician assistants | 31.0% | 40.1 | \$115,390 |

Note: Data excludes occupations that had a decline in wage and salary employment from 2019 to 2020 greater than the decline for all occupations from 2019 to 2020 (approximately 6%). These excluded occupations may have fast growth rates that do not reflect structural growth, but only cyclical recovery.

Source: Bureau of Labor Statistics, *Employment Projections 2020 – 2030*.
<https://www.bls.gov/news.release/pdf/ecopro.pdf>

STEM Occupations are Projected to Grow Faster



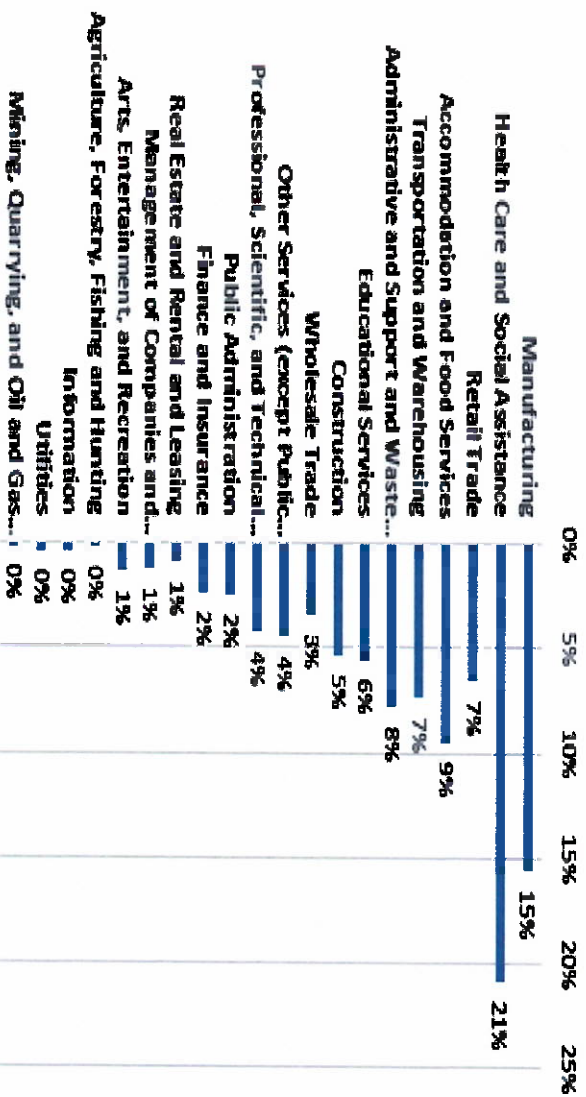
Note: Wage data are from the Occupational Employment and Wage Statistics program, U.S. Bureau of Labor Statistics.

<https://www.bls.gov/emp/graphics/stem-occupations.htm>

2. Upstate Workforce Region Trends

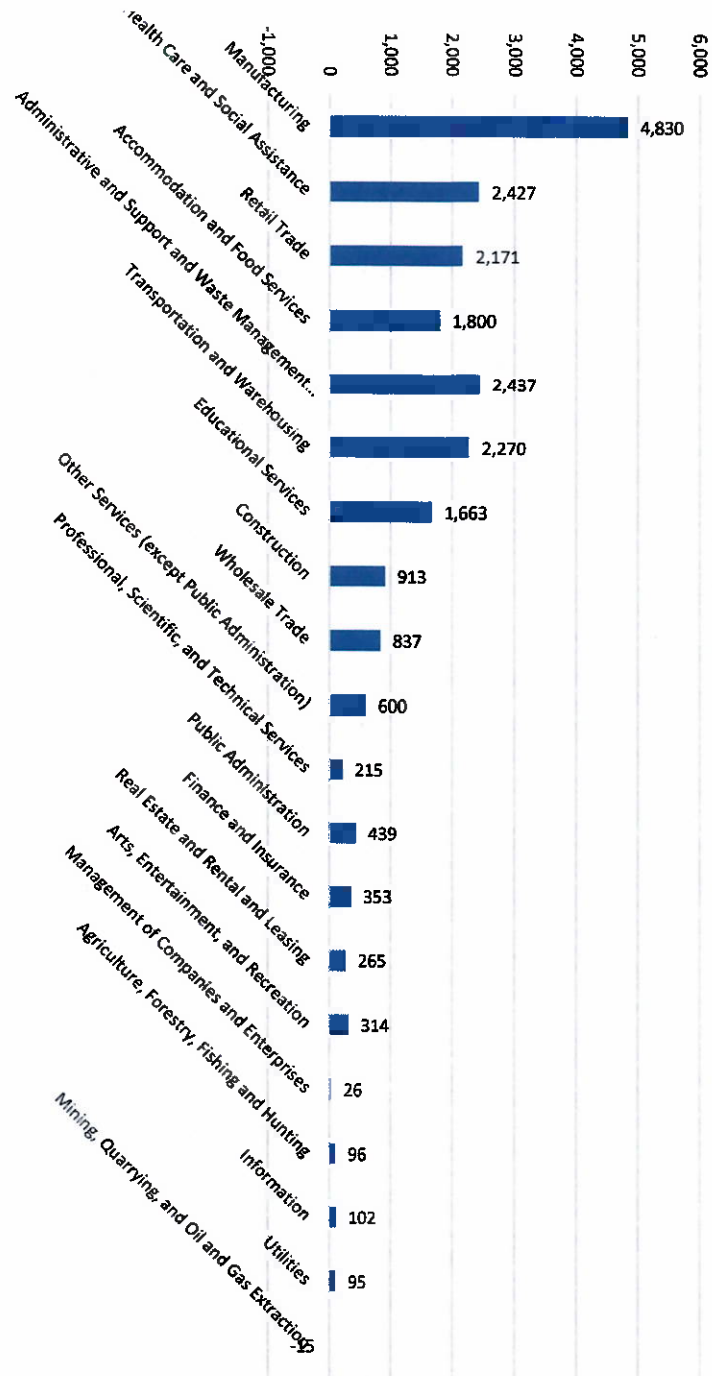
Upstate Workforce Region - % of Total Employment Growth by NAICS Industry Classification, 5-year Forecast

Source: SC Dept of Commerce Q2, 2021



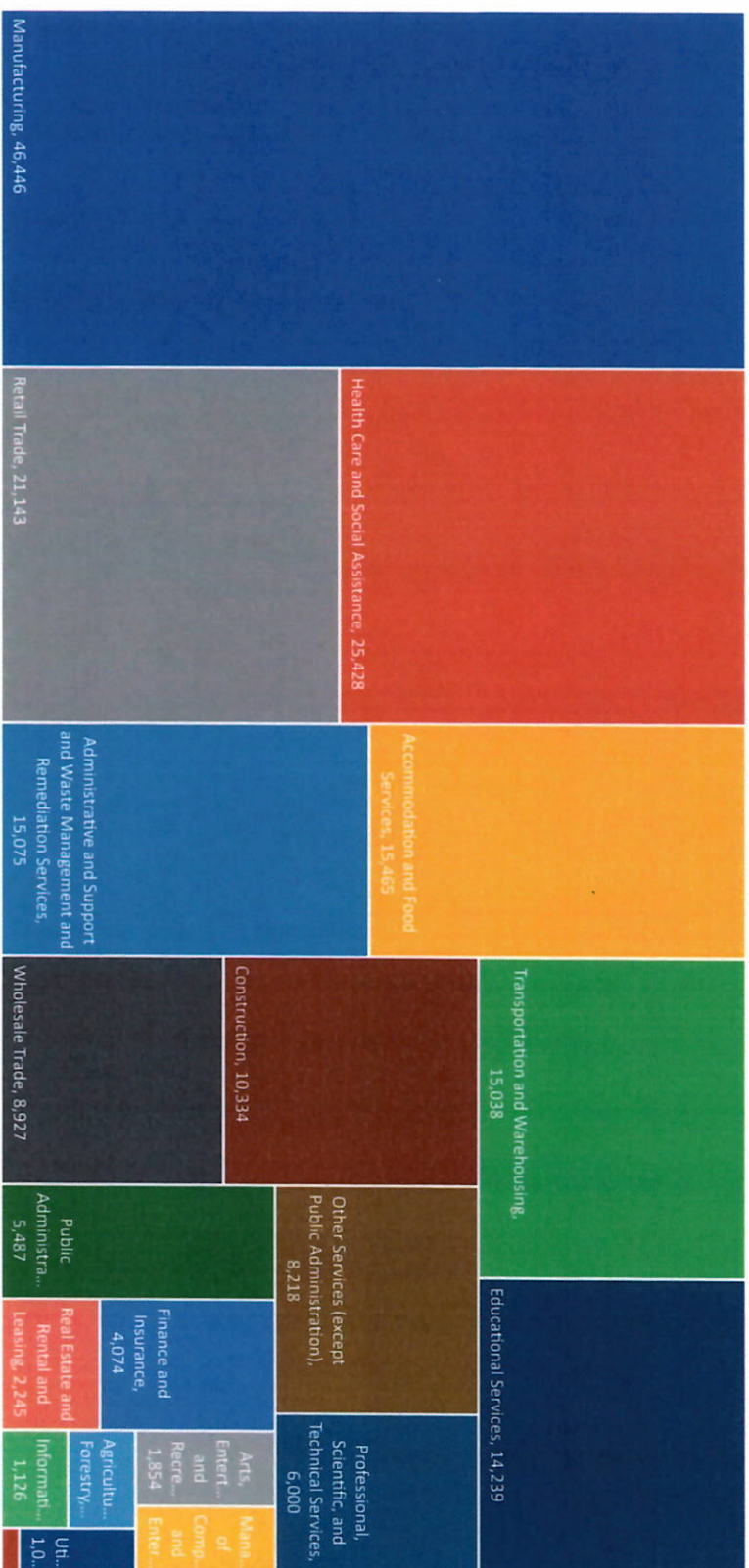
2020 - 2030 Change in Employment by NAICS Classification, Upstate Workforce Region

Source: SC Dept of Commerce, Jobs EQ*, Data as of 2021Q4



Forecasted 2030 Employment by NAICS Classification, Upstate Workforce Region

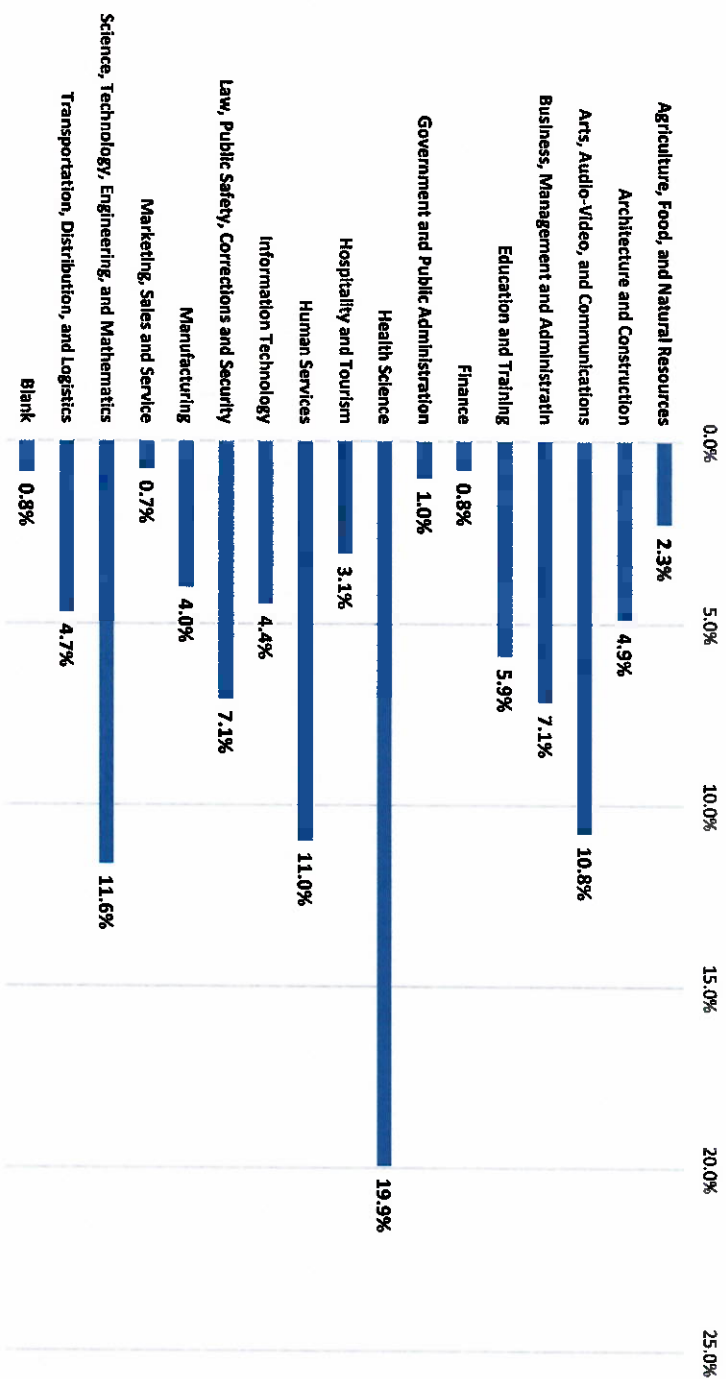
Source: SC Dept of Commerce, JobSEQ[®], Data as of 2021Q4



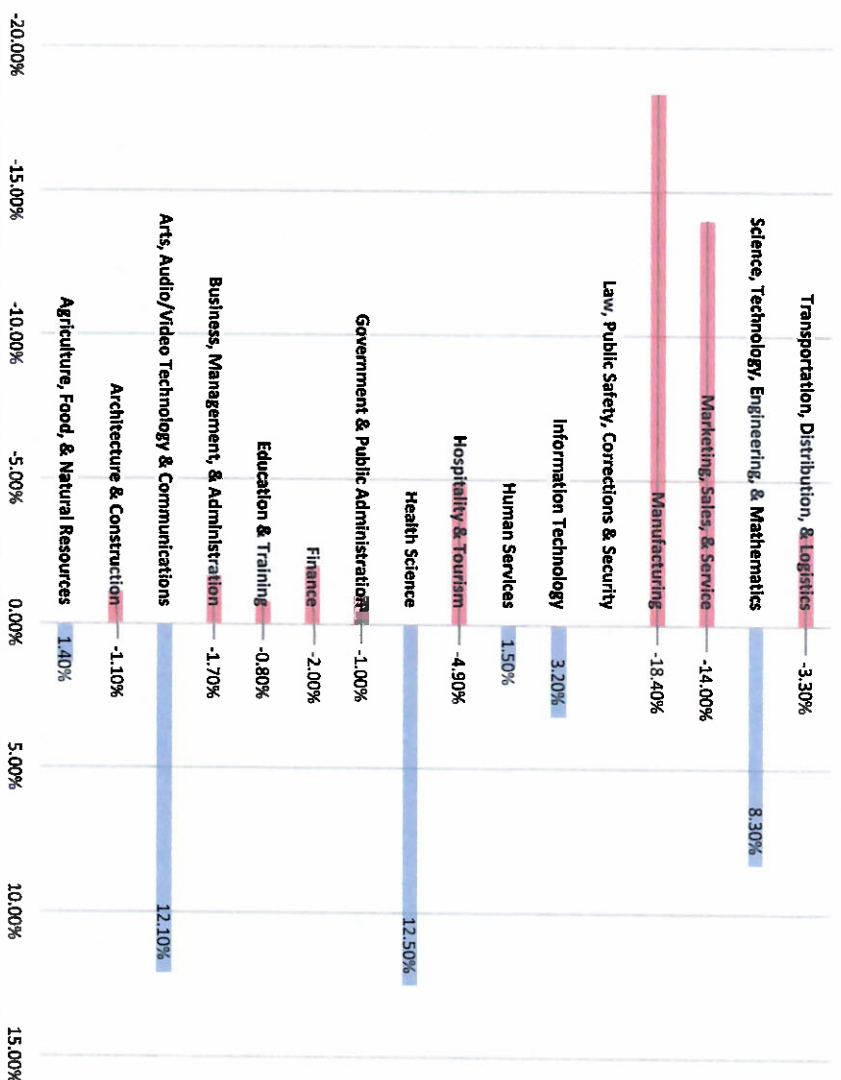
3. Career & Technical Education Data

2021 Percentages by IGP Cluster

Source: School District Data Cherokee, Spartanburg, Union (2021)



IGP Cluster Supply and Industry Employment Demand

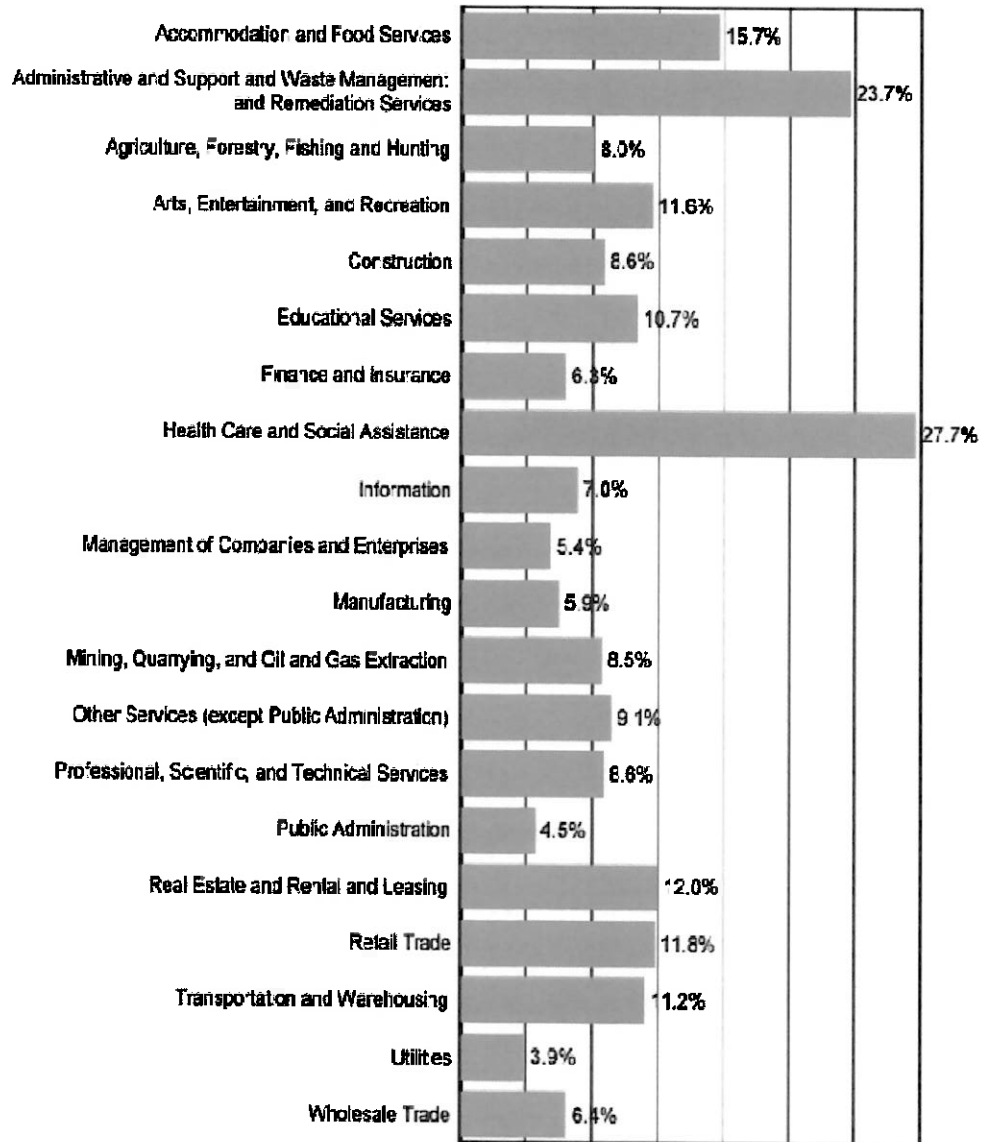


NOTE:

The estimated deficit or surplus metrics by IGP clusters (labor supply pipeline) are obtained by calculating the percent of employment for the UW/F region using the 2030 SC Department of Commerce estimates and subtracting the 2020 IGP cluster percentage.

4. UWR Labor Market Dynamics

Turnover by Industry



Source: U.S. Census Bureau, Local Employment Dynamics - 2020 Q1

A 30-day sampling of online job adds as of June 7, 2022 for the Upstate Workforce Region indicated that:

- Material movers and truck drivers were the top two demanded occupations.
- First-line supervisors of sales workers and retail salespersons were the third and fourth most demanded occupations, respectively.
- Registered nurses were the fifth most demanded occupation.
- Fast food workers and food preparation supervisors were the sixth and seventh most demanded, respectively.
- Manufacturing workers and first-line production supervisors were eleventh and twelfth most demanded occupations, respectively.
- Nursing assistants, orderlies, licensed practical nurses, and other health support workers were highly demand and all were in the top 20 occupations.

Recently announced industrial development in the Upstate Workforce Region includes:

- Logistics and supply-chain firms
- Automotive – including a large EV manufacturing component
- Advanced battery systems manufacturing
- Biotechnology firms
- Datacenters including cryptocurrency mining
- Numerous large-scale construction projects

Top 20 Occupational Openings

Upskilling
June-2022

| Occupation Name (Soccode) | Job Openings |
|--|--------------|
| Registered Nurses (28-1141) | 276 |
| Heavy and Tractor-Trailer Truck Drivers (53-3032) | 104 |
| Retail Salespersons (41-2031) | 100 |
| First-Line Supervisors of Retail Sales Workers (41-1011) | 95 |
| Customer Service Representatives (43-4051) | 89 |
| Laborers and Freight, Stock, and Material Movers, Hand (53-7062) | 75 |
| Licensed Practical and Licensed Vocational Nurses (29-2061) | 67 |
| Food Service Managers (11-9051) | 63 |
| Maintenance and Repair Workers, General (49-9071) | 52 |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012) | 49 |
| Medical and Health Services Managers (11-9111) | 41 |
| Managers, All Other (11-9189) | 39 |
| Industrial Engineering Technologists and Technicians (17-3026) | 38 |
| General and Operations Managers (11-1021) | 37 |
| Security Guards (33-9032) | 36 |
| Production Workers, All Other (51-9199) | 34 |
| Health Technologists and Technicians, All Other (29-2099) | 33 |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners (37-2011) | 33 |
| Medical Assistants (31-9092) | 32 |
| Speech-Language Pathologists (28-1127) | 32 |

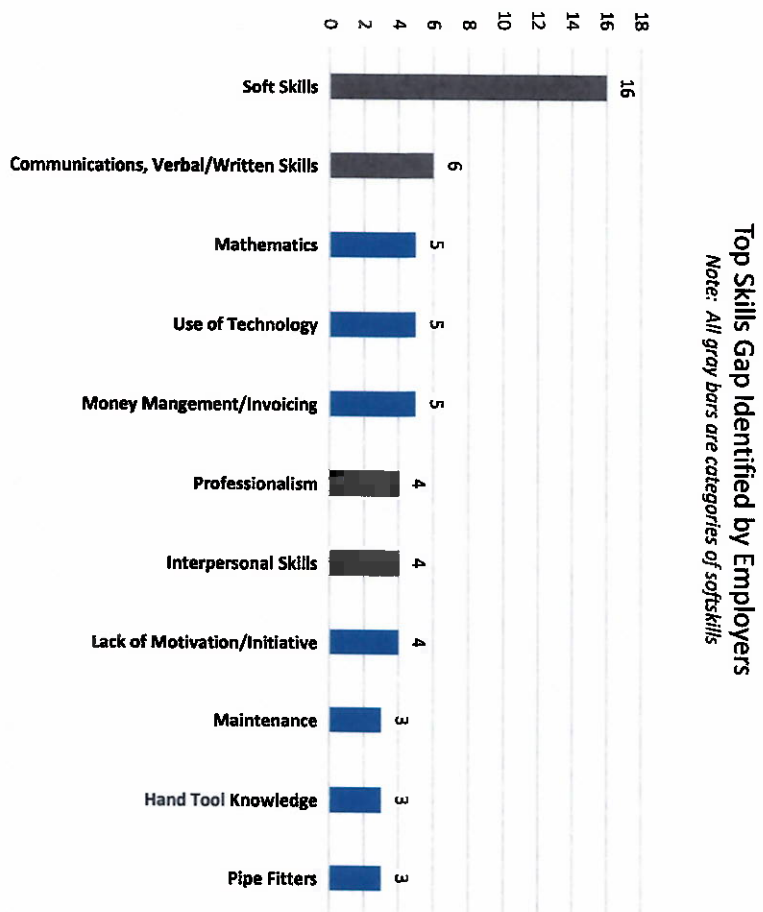
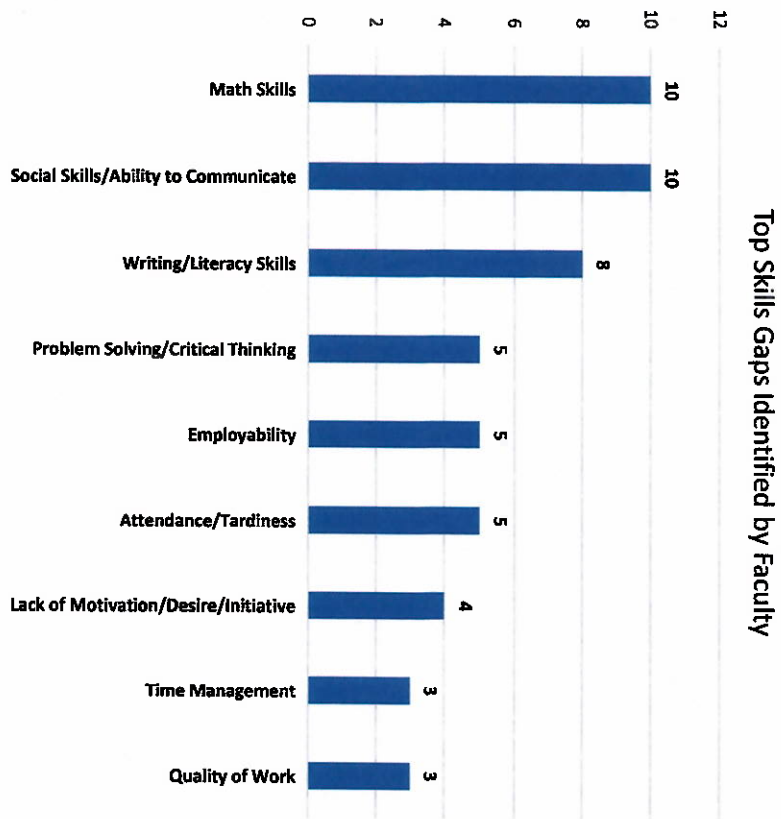
Source: S.C. Department of Employment & Workforce & The Conference Board's Help Wanted Online® data series

Upstate Workforce Region Occupations that are 2X 2022 Poverty Level Income for Family of Four, Ranked by Mean Annual Wage
Source: 2021 Q4 Data, SC Department of Commerce – Annual Growth Rate 2.2.5%

| Occupation | Mean Annual Wage | Annual Growth Rate |
|--|------------------|--------------------|
| Surgeons, Except Ophthalmologists | 294,700 | 3.3% |
| Physicians | 222,300 | 4.3% |
| Nurse Anesthetists | 185,500 | 6.7% |
| Podiatrists | 165,700 | 11.8% |
| Aircraft Pilots and Flight Engineers | 159,300 | 7.9% |
| Petroleum Engineers | 142,500 | 4.4% |
| Architectural and Engineering Managers | 130,600 | 9.0% |
| Veterinarians | 113,600 | 5.9% |
| General and Operations Managers | 109,900 | 3.0% |
| Industrial Production Managers | 107,900 | 5.3% |
| Nuclear Engineers | 107,600 | 5.1% |
| Medical and Health Services Managers | 105,700 | 3.3% |
| Atmospheric and Space Scientists | 105,600 | 4.2% |
| Training and Development Managers | 104,700 | 2.8% |
| Nurse Practitioners | 104,200 | 6.8% |
| Miscellaneous Computer Occupations | 103,700 | 3.9% |
| Human Resources Managers | 102,900 | 6.4% |
| Nurse Midwives | 102,400 | 7.5% |
| Natural Sciences Managers | 102,200 | 4.8% |
| Computer and Information Systems Managers | 101,200 | 3.3% |
| Physician Assistants | 99,900 | 6.1% |
| Industrial Engineers, Including Health and Safety | 91,500 | 8.2% |
| Electrical and Electronics Engineers | 90,400 | 2.7% |
| Financial Analysts and Advisors | 88,400 | 3.7% |
| Mathematicians | 88,100 | 2.7% |
| Mechanical Engineers | 88,000 | 6.5% |
| Chemists and Materials Scientists | 88,000 | 4.9% |
| Software and Web Developers, Programmers, and Testers | 86,300 | 4.9% |
| Transportation, Storage, and Distribution Managers | 84,900 | 5.7% |
| Materials Engineers | 83,600 | 4.5% |
| Public Relations and Fundraising Managers | 80,900 | 2.5% |
| Transportation Inspectors | 78,900 | 2.5% |
| Chemical Engineers | 78,700 | 2.7% |
| Operations Research Analysts | 78,600 | 4.5% |
| Securities, Commodities, and Financial Services Sales Agents | 78,100 | 4.4% |
| Health Teachers, Postsecondary | 77,900 | 2.5% |
| Nuclear Technicians | 77,000 | 6.2% |

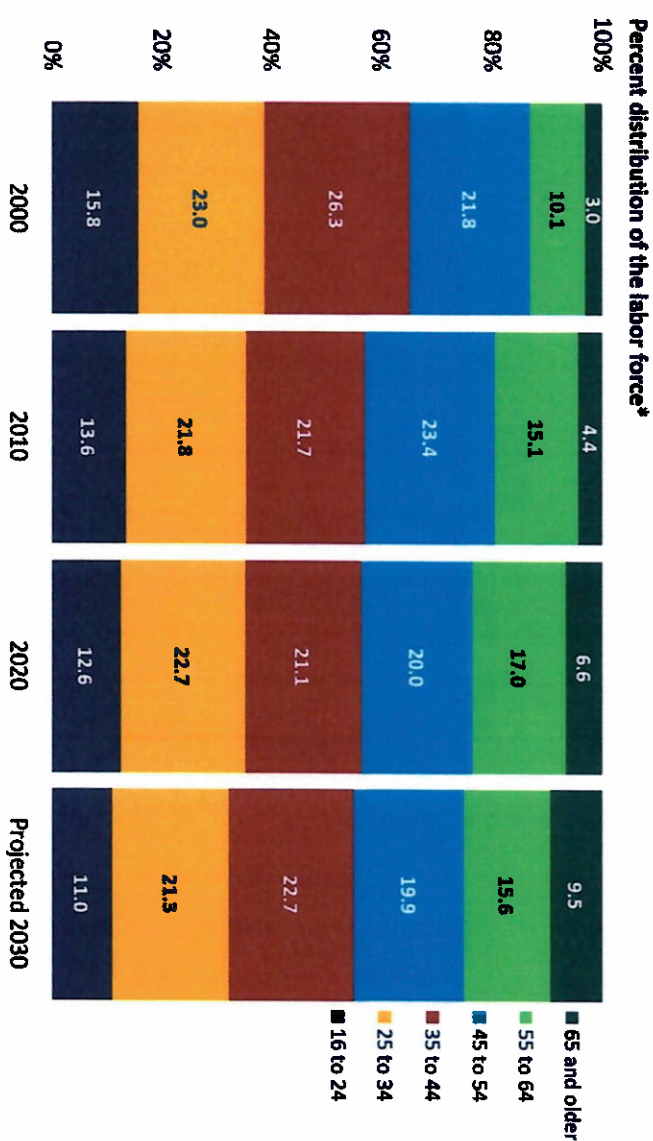
| | | |
|--|--------|-------|
| First-Line Supervisors of Production and Operating Workers | 72,700 | 3.2% |
| Computer and Information Analysts | 72,600 | 3.2% |
| Elevator and Escalator Installers and Repairers | 72,400 | 7.8% |
| Therapists | 72,300 | 2.6% |
| Property, Real Estate, and Community Association Managers | 71,900 | 3.0% |
| Miscellaneous Business Operations Specialists | 71,800 | 7.4% |
| Financial Examiners | 71,800 | 7.3% |
| Human Resources Workers | 70,100 | 5.2% |
| Social and Community Service Managers | 69,400 | 4.0% |
| Compliance Officers | 68,800 | 4.4% |
| Market Research Analysts and Marketing Specialists | 68,500 | 5.6% |
| Registered Nurses | 68,200 | 3.7% |
| Biomedical Engineers | 66,600 | 6.6% |
| Occupational Health and Safety Specialists and Technicians | 66,400 | 7.3% |
| Statisticians | 65,200 | 4.9% |
| Logisticians and Project Management Specialists | 65,000 | 8.1% |
| Miscellaneous Mathematical Science Occupations | 65,000 | 9.0% |
| Air Traffic Controllers and Airfield Operations Specialists | 62,600 | 6.0% |
| Engineering Technologists and Technicians, Except Drafters | 61,900 | 3.2% |
| Subway and Streetcar Operators | 61,900 | 4.1% |
| Miscellaneous Media and Communication Equipment Workers | 60,900 | 3.3% |
| Hoist and Winch Operators | 59,300 | 6.2% |
| Training and Development Specialists | 58,500 | 4.2% |
| Miscellaneous Life, Physical, and Social Science Technicians | 58,300 | 3.0% |
| Diagnostic Related Technologists and Technicians | 58,000 | 4.9% |
| Heavy Vehicle and Mobile Equipment Service Technicians and Mechanics | 57,900 | 2.6% |
| First-Line Supervisors of Transportation and Material Moving Workers | 56,600 | 5.4% |
| Flight Attendants | 56,600 | 11.0% |
| Aircraft Mechanics and Service Technicians | 56,200 | 8.4% |

5. Top Skills Gap (data from small local survey)



6. An Interesting Part of the Puzzle

Labor Force Share, by Age Group, 2000, 2010, 2020 and Projected 2030



Source: https://www.bls.gov/emp/images/lf_aging.png

7. Questions and Discussion

Chart 3. Labor force growth by age group, 10-year growth rates, 1970 to 2020 and 2020–30 projected (in thousands)

