

Labor Market Analysis for Program Recommendation:

TOP Code: 1250.00/ Emergency Medical Services

CIP Code: 51.0904/ Emergency Medical Technology

/Technician (EMT Paramedic)

(EMS Healthcare Sciences, AS) (EMS Public Safety, AS)

(EMS Emergency Management, COA) (EMS Healthcare Sciences, COA)

(EMS Public Safety Operations, COA) (EMS Leadership, COA)

South Central Coast Center of Excellence, September 2026



FOR LABOR MARKET RESEARCH
SOUTH CENTRAL COAST

Summary

Program LMI Endorsement		
Endorsed: All LMI Criteria Met	Endorsed: Some LMI Criteria Met	Not LMI Endorsed
☐	☒	☐
Criterion	Finding	Comments
Supply Gap	☒ Met	There is projected to be 243 annual job openings in the South Central Coast (SCC) Region for these emergency response occupations, which is less than the 701 awards conferred by educational institutions . Though supply is greater than demand, firefighting, EMTs and paramedics are critical public safety jobs . Agencies throughout the state and nation have reported ongoing shortages . Additionally, supply is likely overstated because students completing related training programs may be satisfying continuing education requirements.
Self-Sufficiency Standard Living Wage ¹	☒ Not Met	The majority (52%) of annual job openings for these emergency response occupations have entry-level hourly wages below the Santa Barbara County living wage of \$29.80 .
Education	☒ Met	Though all (100%) of annual job openings for these emergency response occupations typically require a postsecondary nondegree award, between 58% and 64% of workers in the field have completed some college or an associate degree as their highest level of education .
Additional Considerations		
Emerging Occupation(s)	None	N/A

The South Central Coast Center of Excellence for Labor Market Research (SCC COE) prepared this report to determine whether there is a supply gap in the SCC regional labor market related to three middle-skill occupations:

- Emergency Medical Technicians (29-2042)

¹ The living wage endorsement criteria in this report uses the University of Washington's Center for Women's Welfare Self-Sufficiency Standard, which the COE refers to as a living wage; the living wage for Los Angeles, San Luis Obispo, Santa Barbara, and Ventura counties, last updated in March 2024.

- *Paramedics (29-2043)*
- *Firefighters (33-2011)*

These three occupations are directly related to the six proposed programs analyzed in this report. However, it is important to note that several challenges exist when quantifying the demand and supply for these emergency medical services (EMS) occupations and employers continue to report ongoing shortages.

Wildfires across the U.S and California have strained limited resources to calm and contain their spread. Nationwide, there have been reports of an alarming shortage of firefighters. Within the past four decades, emergency calls have tripled, and the number of available personnel has waned with the number of volunteer firefighters having dropped by 25% (200,000 volunteers).² Not only are shortages present for firefighters, but paramedics and Emergency Medical Technicians (EMT) as well. With emergency calls drastically increasing, EMS are unable to keep up with them, causing dangerous conditions such as increased response times.³ As a result of these shortages, EMTs and paramedics are facing burnout, increasing the turnover rates around the country by 30%.⁴

Furthermore, hiring practices for firefighters, EMTs, and paramedics vary at the federal, state, and local level. In the western U.S., the application period for federal wildland firefighters is usually mid-October, with selection completed by mid-February. At the state level, Cal Fire accepts applications for seasonal firefighting positions during November, while city and county governments typically announce openings as they are needed.⁵ On the contrary, many local authorities for each county have autonomy on how they choose to hire EMS workers.⁶

Finally, because most firefighting positions typically require an EMT certification, it is not possible to quantify the number of completers in related programs that are obtaining a new certification or completing continuing education requirements. Similarly, students completing firefighting programs may be incumbent workers satisfying continuing education requirements rather than training to become new firefighters. For these reasons, the supply of new job candidates is likely overstated throughout this report.

² Mark Hyman and Larry Deal, "Alarming Shortage: the nation is facing an alarming shortage of firefighters," ABC 33/40 News, last modified March 7, 2024, <https://abc3340.com/news/inside-your-world/alarming-shortage-the-nation-is-facing-an-alarming-shortage-of-firefighters>.

³ Russo-Lennon, Barbara. "FDNY EMS Response Time Climbs As Staffing and Pay Crisis Deepens." *AmNewYork*, 21 Sept. 2026, www.amny.com/news/fdny-ems-response-time-climbs-crisis/.

⁴ "Is There an EMT Shortage? Why Workers Are Leaving." *ScienceInsights*, 4 Mar. 2026, scienceinsights.org/is-there-an-emt-shortage-why-workers-are-leaving/.

⁵ "Entry-Level Firefighting Careers," Centers of Excellence for Labor Market Research, last modified June 14, 2023, <https://coeccc.net/california/2023/03/entry-level-firefighting-careers/>.

⁶ CDC. "Emergency Medical Services (EMS): Local Authority, Funding, Organization, and Management." www.cdc.gov/ems-community-paramedicine/php/us/local-authority.html. Accessed 29 Sept. 2026.

Based on the available data there does not appear to be a supply gap for these emergency response occupations. However, there are several challenges to quantifying the labor gap for these occupations, as noted above. For these reasons, supply is overstated and there is likely a supply gap for these occupations. Additionally, Emergency Medical Technicians, Paramedics, and firefighters are all critical public safety occupations. Though typical education requirements for these occupations align with a community college education, the majority of annual job openings have entry-level wages below the Self-Sufficiency Standard living wage. **Therefore, due to some of the regional labor market criteria being met, the COE endorses this proposed program.**

Exhibit 1 lists the occupational demand, supply, typical entry-level education, and educational attainment for the occupations included in this report.

Exhibit 1: Labor Market Endorsement Summary

Occupation (SOC)	Demand (Annual Openings)	Supply (CC and Non-CC)	Entry-Level Hourly Earnings (25 th Percentile)	Typical Entry-Level Education	Community College Educational Attainment
Emergency Medical Technicians (29-2042)	121	325	\$18.90	Postsecondary nondegree award	58%
Paramedics (29-2043)	35	59	\$35.47	Postsecondary nondegree award	64%
Firefighters (33-2011)	187	316	\$36.68	Postsecondary nondegree award	58%
Total	343	701	N/A	N/A	N/A

Demand:

- The number of jobs related to these emergency response occupations is projected to grow 7% through 2030 in the SCC region. There is projected to be 343 annual job openings due to job creations and replacements.
- Hourly entry-level wages for these emergency response occupations in Santa Barbara County range from \$18.90 to \$36.68; the majority (52%) of annual job openings have entry-level wages below the Self-Sufficiency Standard living wage (\$29.80 for Santa Barbara County).
- There were 205 online job postings for these emergency response occupations over the past 12 months. The highest number of postings were for paramedics, Emergency Medical Technicians – Basic, and firefighters.
- The typical entry-level education for these emergency response occupations is a postsecondary nondegree award.
- Between 58% and 64% of workers in the field have completed some college or an associate degree as their highest level of education.

Supply:

- There was an average of 701 awards conferred by seven community colleges in the SCC Region from 2022 to 2025.

- It is important to note that these awards can train new workers as well as satisfy continuing education requirements for incumbent workers. Therefore, supply is overstated.
- Non-community college institutions did not confer any related awards from 2021 to 2024.
- SCC community college students that exited Emergency Medical Services (1250.00) programs in the 2023-24 academic year had a median annual wage of \$39,492 (or \$18.99 per hour) after exiting the program and 30% attained the regional living wage (Self-Sufficiency Standard).
- Throughout the SCC Region, 69% of Emergency Medical Services (1250.00) students that exited their program in 2022-23 reported that they are working in a job closely related to their field of study.

Demand

Occupational Projections:

Exhibit 2 compares historical and projected changes in employment for these occupations compared to the number of jobs in 2020. Notably, employment for these emergency response occupations throughout Santa Barbara grew 38% from 2020 to 2025, which is significantly higher when compared to employment for these occupations in the SCC Region and throughout California. From 2025 to 2030, employment for these emergency response occupations in California, throughout the SCC Region, and Santa Barbara is projected to grow in all areas.

Exhibit 2: Historical and Projected Employment for Emergency Response Occupations in the SCC Region, 2020-2030

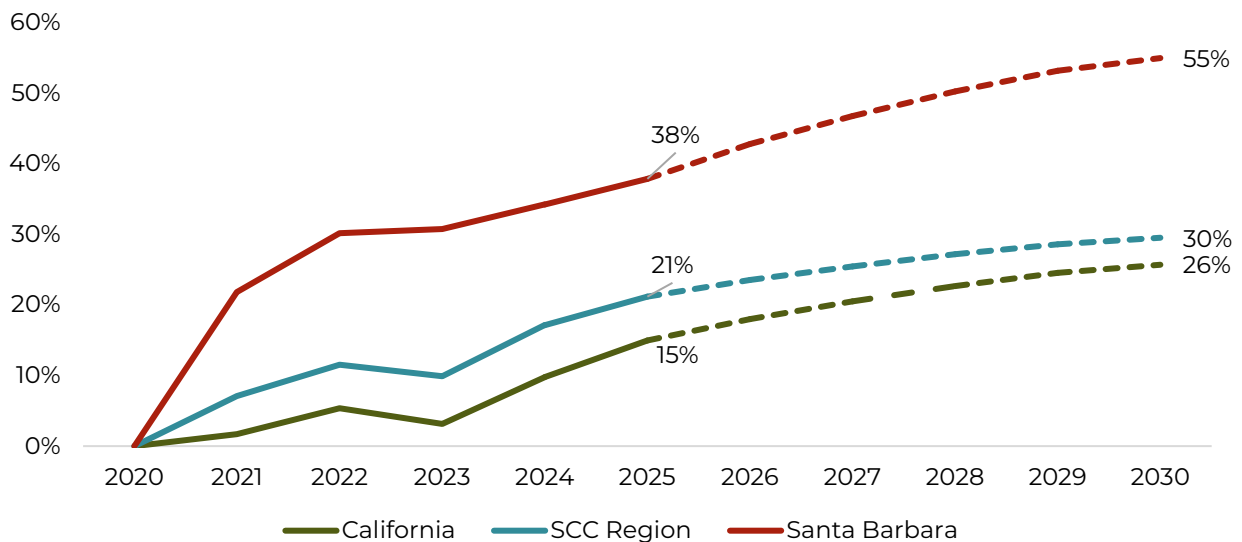


Exhibit 3 shows the five-year occupational demand projections for these emergency response occupations. In the SCC Region, the number of jobs related to these occupations is projected to grow 7% by 2030. There is projected to be 343 jobs available annually due to new job creations and replacements. Santa Barbara County has the highest number of jobs and annual openings.

Exhibit 3: Occupational Demand in the SCC Region⁷

Geography	2025 Jobs	2030 Jobs	2025-2030 Change	2025-2030 % Change	Annual Openings
Northern Los Angeles	955	1,018	63	7%	83
San Luis Obispo	566	592	26	5%	46
Santa Barbara	1,274	1,432	158	12%	121
Ventura	1,173	1,199	26	2%	91
SCC Region	3,966	4,239	273	7%	343

Wages:

The labor market endorsement in this report considers the entry-level hourly wages for these emergency response occupations in relation to the living wage of the county where the requesting community college is located. This report was requested by Allan Hancock College, which is in Santa Barbara County. Wages for other counties are included below to provide a complete analysis of the SCC Region.

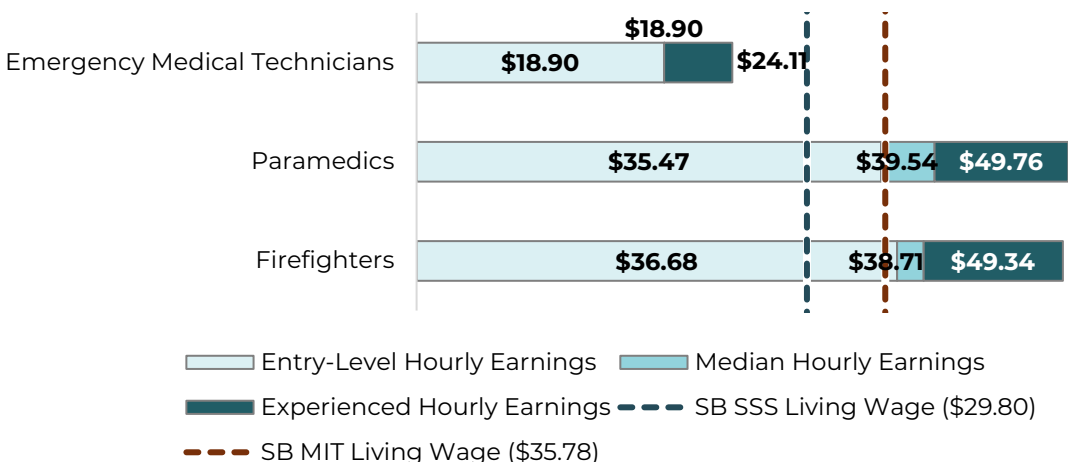
In addition to the Self Sufficiency Standard living wage, data for the MIT Living Wage, updated on February 15, 2026, is provided as a reference. Currently, the MIT Living Wage in Santa Barbara County is \$35.78. Both figures account for geographic-specific costs of necessities such as housing, food, health care, and transportation to assess the cost of living, and are notated in the exhibits below.

⁷ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Santa Barbara

The majority (52%) of annual openings for these emergency response occupations have entry-level wages below the Self-Sufficiency Standard living wage for one adult (\$29.80 in Santa Barbara County). Typical entry-level hourly wages range between \$18.90 and \$36.68. Notably, entry level wages are above the living wage for *Firefighters (33-2011)* and *Paramedics (29-2043)*. However, wages for *Emergency Medical Technicians (29-2042)* are below the living wage, even at the experienced level. Exhibit 4, shows the wage range for each of these emergency response occupations in Santa Barbara County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

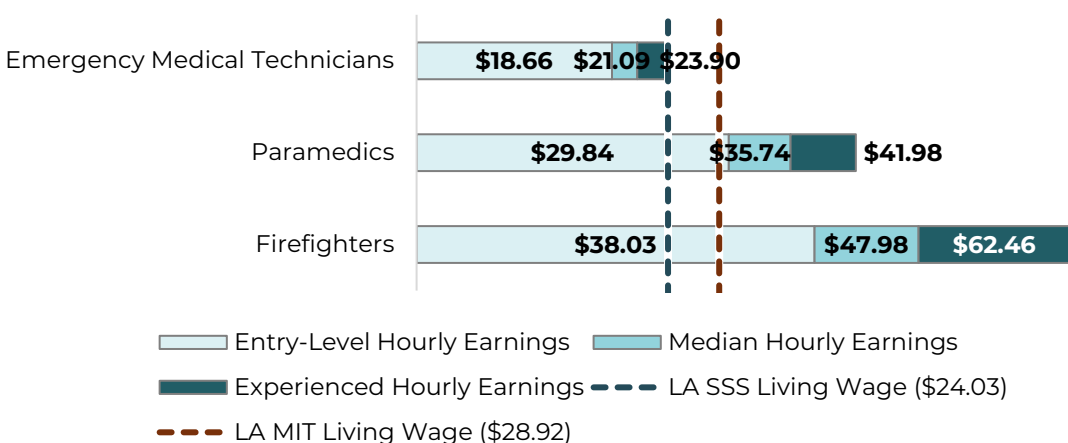
Exhibit 4: Wages by Occupation in Santa Barbara County



Northern Los Angeles

The majority (72%) of annual openings for these emergency response occupations have entry-level wages above the Self-Sufficiency Standard living wage for one adult (\$24.03 in Los Angeles County). Typical entry-level hourly wages range between \$18.66 and \$38.03. Notably, entry level wages are above the living wage for *Firefighters (33-2011)* and *Paramedics (29-2043)*. However, wages for *Emergency Medical Technicians (29-2042)* are below the living wage, even at the experienced level. Exhibit 5, shows the wage range for each of these emergency response occupations in Northern Los Angeles and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

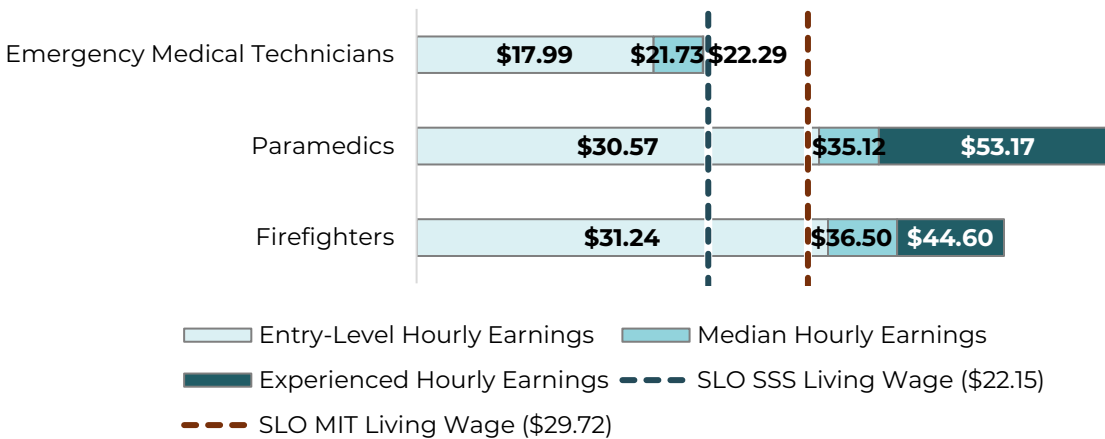
Exhibit 5: Wages by Occupation in Northern Los Angeles County



San Luis Obispo

The majority (78%) of annual openings for these emergency response occupations have entry-level wages above the Self-Sufficiency Standard living wage for one adult (\$22.15 in San Luis Obispo County). Typical entry-level hourly wages range between \$17.99 and \$31.24. While entry level wages are above the living wage for *Firefighters (33-2011)* and *Paramedics (29-2043)*, wages for *Emergency Medical Technicians (29-2042)* are slightly above the living wage at the experienced level. Exhibit 6 shows the wage range for each of these emergency response occupations in San Luis Obispo County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

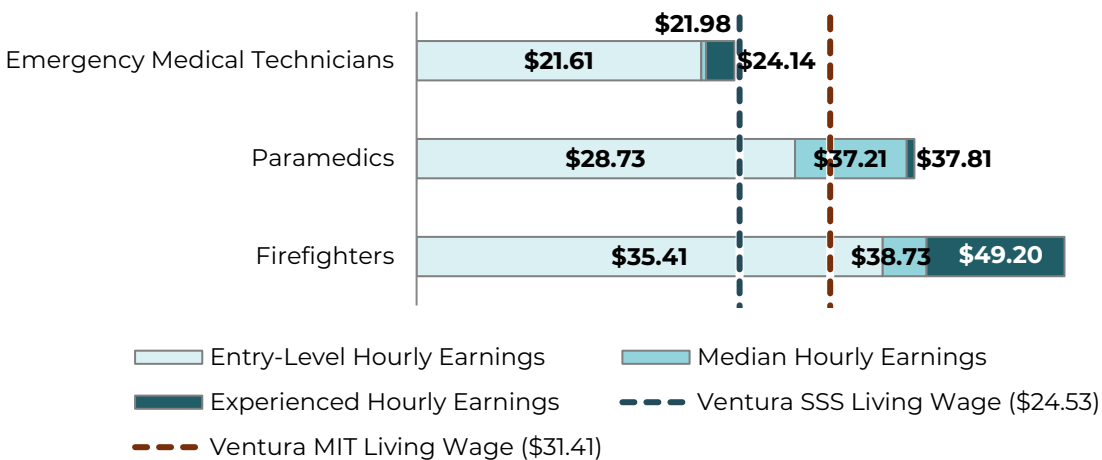
Exhibit 6: Wages by Occupation in San Luis Obispo County



Ventura

The majority (84%) of annual openings for these emergency response occupations have entry-level wages above the Self-Sufficiency Standard living wage for one adult (\$24.53 in Ventura County). Typical entry-level hourly wages range between \$21.61 and \$35.41. While entry level wages are above the living wage for *Firefighters (33-2011)* and *Paramedics (29-2043)*, wages for *Emergency Medical Technicians (29-2042)* are below the living wage, even at the experienced level. Exhibit 7, on the next page, shows the wage range for each of these emergency response occupations in Ventura County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

Exhibit 7: Wages by Occupation in Ventura County



Job Quality

Based on the SCC COE's analysis of traditional labor market and job quality indicators⁸, the occupations analyzed in this report are split between medium and high-quality across the SCC Region, and Santa Barbara County, as shown in Exhibit 8.

Exhibit 8: Job Quality Level by County

Occupation	Northern LA	San Luis Obispo	Santa Barbara	Ventura	SCC Region
Emergency Medical Technicians	Medium	Medium	Medium	Medium	Medium
Paramedics	Medium	High	High	High	High
Firefighters	High	High	Medium	Medium	High

To better understand measures of job quality for these occupations in Northern Los Angeles County, Exhibit 9 shows which job quality criteria were met for each occupation. Notably, all three occupations met the criteria for number of jobs, positive projected change, demand, employer sponsored health insurance, and the number of hours worked per week. However, none were considered “Best Jobs” by U.S. News & World Report in 2025.

Exhibit 9: Job Quality Indicators for
Emergency Response Occupations in Santa Barbara County

Job Quality Measure	Emergency	Paramedics	Firefighters
# of Jobs	Met	Met	Met
Positive Projected Change	Met	Met	Met
Demand (Annual Openings)	Met	Met	Met
Living Wage (SSS)	Not Met	Met	Met
Living Wage (MIT)	Not Met	Met	Met
Employer Sponsored Health Insurance	Met	Met	Met
# of Hours Worked Per Week	Met	Met	Met
Automation Risk	Met	Met	Not Met
U.S. News & World Report Best Job	Not Met	Not Met	Not Met

Job Postings:

There were 205 online job postings related to these emergency response occupations listed in the past 12 months in the SCC Region. Exhibit 10 shows the number of job postings by county. Approximately 34% of job postings were in Santa Barbara County.

Exhibit 10: Number of Job Postings by County (n=205)

County	Job Postings	Percentage of Job Postings
Santa Barbara	70	34%
Ventura	68	33%
Northern Los Angeles	41	20%

⁸ "South Central Coast Labor Market Landscape: Assessing Job Quality in the South Central Coast Region," South Central Coast Center of Excellence for Labor Market Research, last modified October 2025, <https://coeccc.net/south-central-coast/2025/09/south-central-coast-labor-market-landscape-assessing-job-quality-in-the-scc-region/>.

County	Job Postings	Percentage of Job Postings
San Luis Obispo	26	13%
Total Postings	205	100%

Of the 205 postings, just under half (43%) were for *Paramedics (29-2043)* followed by *Emergency Medical Technicians (29-2042)*, as shown in Exhibit 11.

Exhibit 11: Number of Job Postings by Occupation (n=205)

Occupation	Job Postings	Percentage of Job Postings
Paramedics	88	43%
Emergency Medical Technicians	79	39%
Firefighters	38	19%
Total Postings	205	100%

The top employers in the region, by number of job postings, are shown in Exhibit 12.

Exhibit 12: Top Employers by Number of Job Postings (n=205)

Employer	Job Postings	Percentage of Job Postings
Global Medical Response	71	35%
AMR	38	19%
Lehigh Valley Health Network	17	8%
Spectraforce Technologies	5	2%
County Santa Barbara Health	4	2%
Northrop Grumman	4	2%
General Atomics	4	2%
University Village Thousand Oaks CCRC	4	2%
City Of Ventura	4	2%
Lincare	3	1%

The top specialized, soft, and computer skills listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 13.

Exhibit 13: Top Skills by Number of Job Postings (n=205)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Ambulances (126)	Communication (95)	R (Programming Language) (13)
Medical Equipment (96)	Operations (78)	Microsoft Office (9)
Emergency Medical Services (95)	Professionalism (75)	Amazon Product Advertising API (1)
Defibrillation (79)	Customer Service (56)	Microsoft Excel (1)
Electrocardiography (75)	Management (56)	Microsoft Outlook (1)
National Incident Management Systems (70)	Compassion (49)	N/A

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Cardiopulmonary Resuscitation (CPR) (65)	Confidentiality (31)	
Good Driving Record (63)	Prioritization (11)	
Intravenous Hydration (63)	Quality Assurance (11)	
Emergency Response (43)	Leadership (10)	

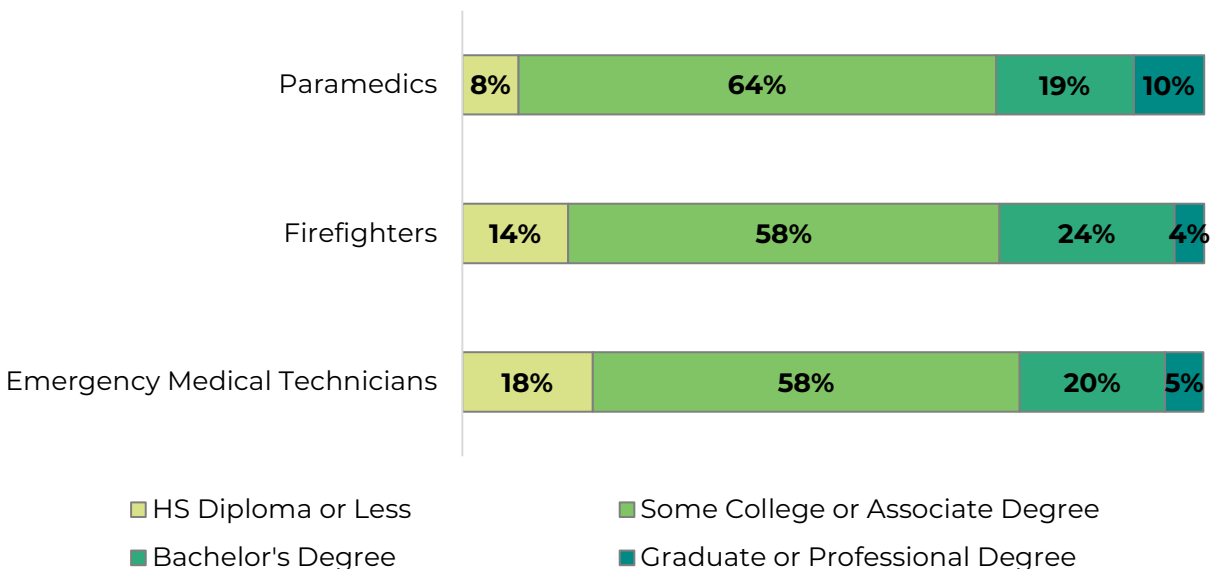
Educational Attainment:

The Bureau of Labor Statistics (BLS) lists the following as the typical entry-level education for these emergency response occupations:

- Postsecondary nondegree award
 - *Emergency Medical Technicians (29-2042)*
 - *Paramedics (29-2043)*
 - *Firefighters (33-2011)*

The national-level educational attainment data indicates between 58% and 64% of workers in the field have completed some college or an associate degree as their highest level of education. Exhibit 14 shows the educational attainment for each occupation, sorted by highest community college educational attainment to lowest.

Exhibit 14: National-level Educational Attainment for Occupations



Of the 85% of the cumulative job postings for these emergency response occupations that listed a minimum education requirement in the SCC Region, 99% (173) requested a high school diploma or GED, and 1% (1) requested a bachelor's degree.

Educational Supply

Community College Supply:

Exhibit 15 shows the three-year average number of awards conferred by community colleges in the related TOP codes:

- Emergency Medical Services (1250.00)
- Paramedic (1250.10)
- Fire Technology (2133.00)
- Wildland Fire Technology (2133.10)
- Fire Academy (2133.50)

The college with the most completions in the region is Allan Hancock College (176), followed by College of the Canyons (152), and Cuesta (149).

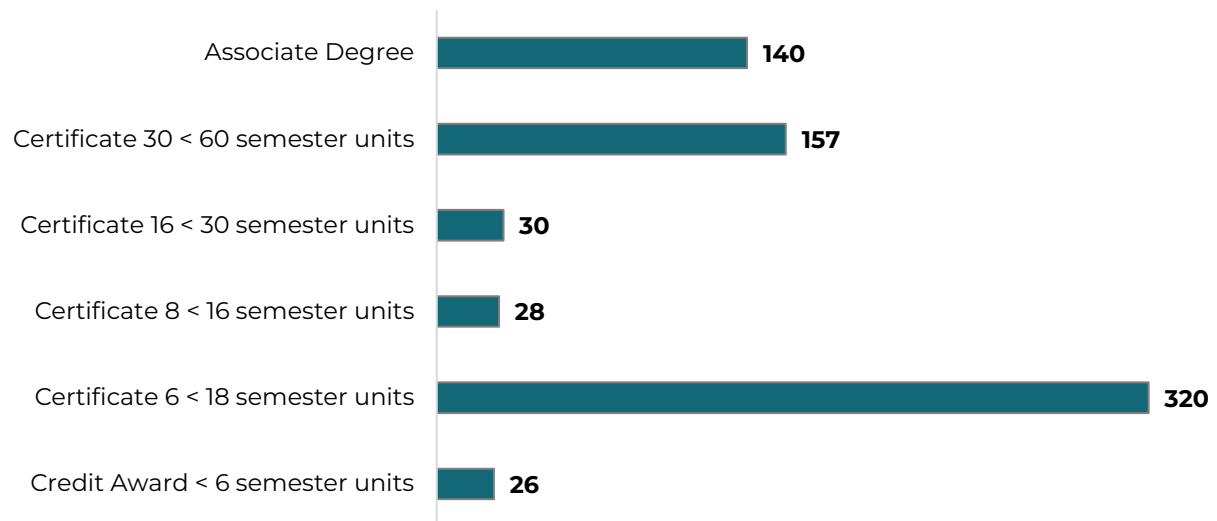
Exhibit 15: Regional Community College Awards (Certificates and Degrees), 2022-2025

College	2022-2023 Awards	2023-2024 Awards	2024-2025 Awards	3-Year Award Average
1250.00 (Emergency Medical Services)				
Allan Hancock	61	71	37	56
Canyons	90	99	115	101
Cuesta	166	94	158	139
Moorpark	11	30	22	21
Oxnard	6	4	10	7
Supply Subtotal/Average	334	298	342	325
1251.00 (Paramedic)				
Allan Hancock	18	5	0	8
Cuesta	1	19	8	9
Moorpark	0	0	2	1
Ventura	47	49	29	42
Supply Subtotal/Average	66	73	39	59
2133.00 (Fire Technology)				
Allan Hancock	42	72	58	57
Antelope Valley	17	14	26	19
Canyons	54	43	54	50
Oxnard	78	124	63	88
Supply Subtotal/Average	191	253	201	215
21033.10 (Wildland Fire Technology)				
Allan Hancock	3	14	10	9
Antelope Valley	5	11	15	10
Supply Subtotal/Average	8	25	25	19

College	2022-2023 Awards	2023-2024 Awards	2024-2025 Awards	3-Year Award Average
2133.50 (Fire Academy)				
Allan Hancock	47	60	29	45
Antelope Valley	0	3	8	4
Oxnard	44	42	14	33
Supply Subtotal/Average	91	105	51	82
Supply Total/Average	690	754	658	701

Exhibit 16 shows the annual average community college awards by type from 2022-23 to 2024-25. The plurality of the awards are for certificates between 6 and less than 18 semester units, follow by certificates between 30 and less than 60 semester units, and associate degrees.

Exhibit 16: Annual Average Community College Awards by Type, 2022-2025



Community College Student Outcomes:

Exhibit 17 shows the Strong Workforce Program (SWP) metrics for Emergency Medical Services (1250.00) programs at Allan Hancock College (AHC), the SCC Region, and California. Of the 1,899 Emergency Medical Services (1250.00) students throughout the region in the 2024-25 academic year, 22% (425) attended AHC.

AHC students that exited Emergency Medical Services (1250.00) programs in the 2023-24 academic year had slightly lower median annual earnings (\$38,468 or \$18.49 per hour) compared to all Emergency Medical Service (1250.00) students in the SCC Region (\$39,492 or \$18.89 per hour); both figures are lower than statewide (\$42,880 or \$20.62 per hour). A lower percentage of AHC (21%) and SCC Region (30%) Emergency Medical Services (1250.00) students attained the living wage when compared to all Emergency Medical Services (1250.00) students in the state (46%).

Exhibit 17: Emergency Medical Services (1250.00)
Strong Workforce Program Metrics, 2024-25⁹¹⁰

SWP Metric	AHC	SCC Region	California
SWP Students	425	1,899	22,197
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	38%	35%	35%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	Insufficient Data	88%	67%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	3%	3%	5%
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2023-24)	4%	4%	3%
SWP Students with a Job Closely Related to Their Field of Study (2022-23)	87%	69%	74%
Median Annual Earnings for SWP Exiting Students (2023-24)	\$38,468 (\$18.49)	\$39,492 (\$18.99)	\$42,880 (\$20.62)
Median Change in Earnings for SWP Exiting Students (2023-24)	55%	41%	32%
SWP Exiting Students Who Attained the Living Wage (2023-24)	21%	30%	46%

Non-Community College Supply:

To comprehensively analyze the regional supply, it is crucial to include data from other institutions offering related training programs. Over the past three years (2021-2024), there were no awards conferred by non-community college institutions under the related Classification of Instructional Programs (CIP) codes:

- Fire Prevention and Safety Technology/Technician (43.0201)
- Fire Science/Fire-fighting (43.0203)
- Wildland/Forest Firefighting and Investigation (43.0206)

⁹ All SWP metrics are for 2024-25 unless otherwise noted. Metrics data is sourced from DataVista.

¹⁰ Data that is not available in DataVista is denoted in Exhibit 15 as "data unavailable." Data may not be available for various reasons, including cases where data is masked to protect personally identifiable information.

Regional Demographics

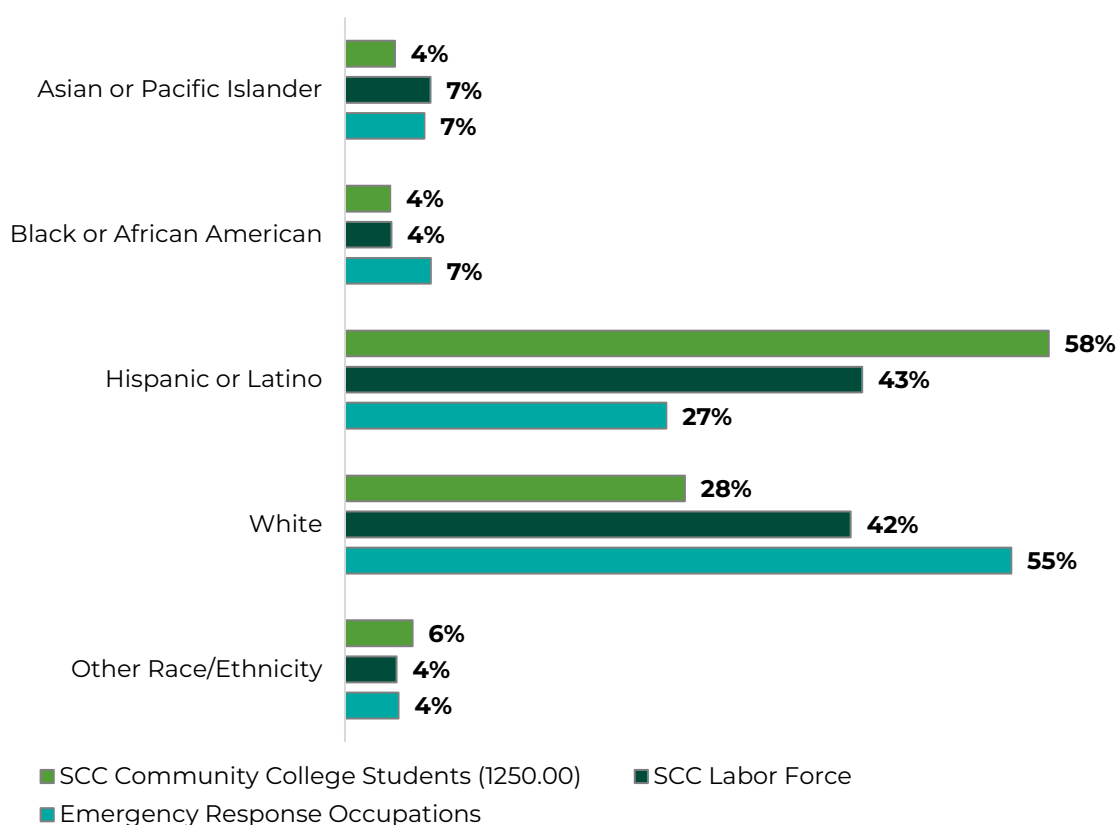
This section examines demographic data for SCC community college students in Emergency Medical Services (1250.00) programs compared to the SCC labor force, along with occupational data, to identify potential diversity and equity issues addressable by community college programs.

Ethnicity:

Exhibit 18 compares the ethnicity of SCC community college students enrolled in Emergency Medical Services (1250.00) programs, the overall SCC labor force, and occupation-specific data for the three emergency response occupations included in this report.

Notably, 55% of workers employed in these emergency response occupations are white, which is higher than the labor force (42%) and community college Emergency Medical Services (1250.00) students (28%). Conversely 58% of community college Emergency Medical Services (1250.00) are Hispanic or Latino which is higher than the labor force (43%) and workers in these emergency response occupations (27%).

Exhibit 18: Program and County Demographics by Ethnicity

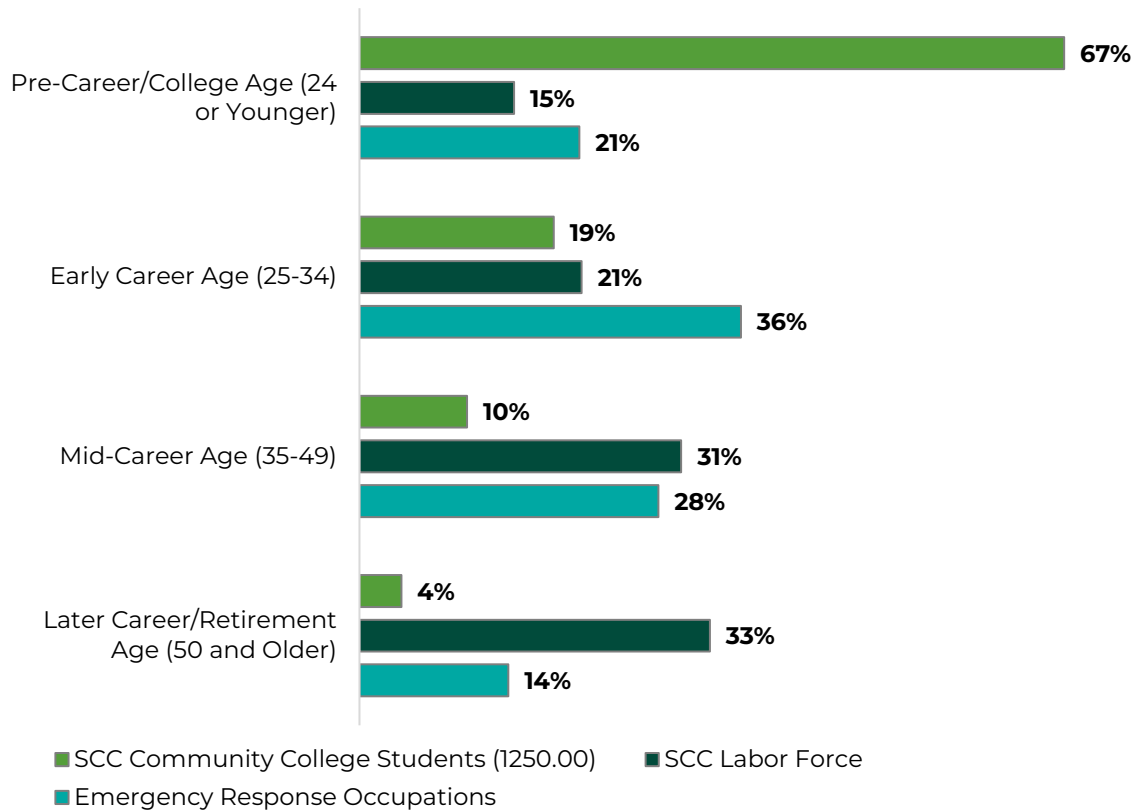


Age:

Exhibit 19 compares the age of SCC community college students enrolled in Emergency Medical Services (1250.00) programs, the overall SCC labor force, and occupation-specific data for the three emergency response occupations included in this report.

The majority of (67%) community college Emergency Medical Services (1250.00) are Pre-Career/College Age (24 or Younger), which is significantly higher than the labor force (15%) and workers in these emergency response occupations (21%).

Exhibit 19: Program and County Demographics by Age

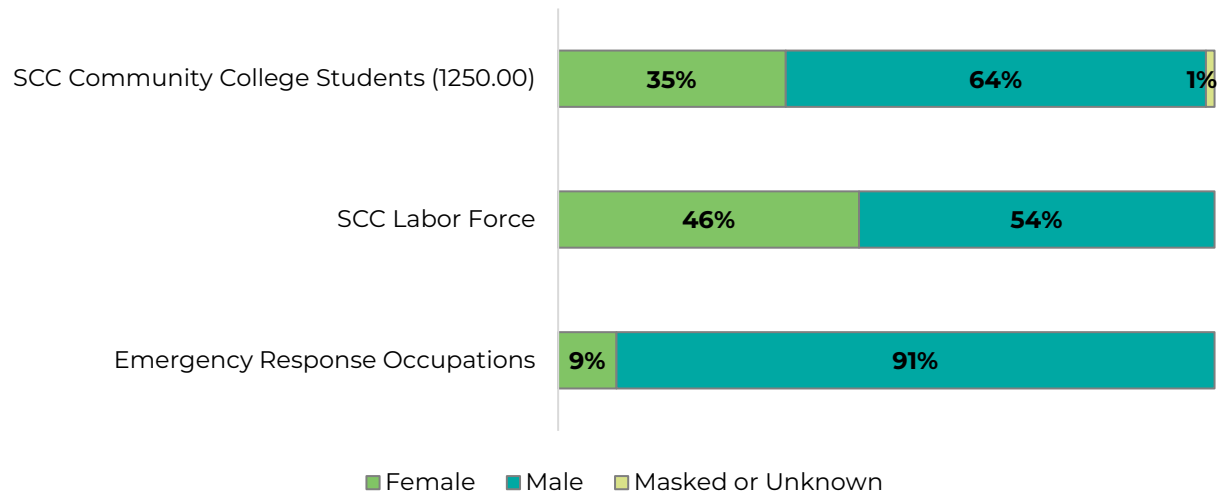


Sex:

Exhibit 20 compares the sex of SCC community college students enrolled in Emergency Medical Services (1250.00) programs, the overall SCC labor force, and occupation-specific data for these emergency response occupations.

There is a majority of male Emergency Medical Service (1250.00) students (64%) and workers in these emergency response occupations (91%), which is higher than the labor force (54% male).

Exhibit 20: Program and County Demographics by Sex



Appendix A: Methodology

Traditional Labor Market Data

The SCC COE prepared this report by analyzing data from occupations and education programs. Occupational data is derived from Lightcast, a labor market analytics firm that consolidates data from the California Employment Development Department (EDD), U.S. Bureau of Labor Statistics (BLS) and other government agencies.

Data included in this analysis represents the labor market demand for relevant positions most closely related to the proposed program as expressed by the requesting college in consultation with the SCC COE. Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges.

Program supply data is drawn from two systems: Taxonomy of Programs (TOP) and Classification of Instructional Programs (CIP).

Using a TOP-SOC crosswalk, the SCC COE identified middle-skill jobs for which programs within these TOP codes train. Middle-skill jobs include:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

The SCC COE determined labor market supply for an occupation or SOC code by analyzing the number of program completers or awards in a related TOP or CIP code. The COE developed a “supply table” with this information, which is the source of the program supply data for this report. TOP code data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP code data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data), also known as IPEDS.

TOP is a system of numerical codes used at the state level to collect and report information on California community college programs and courses throughout the state that have similar outcomes. CIP codes are a taxonomy of academic disciplines at institutions of higher education in the United States and Canada. Institutions outside of the California Community College system do not use TOP codes in their reporting systems.

Online Job Postings Data

Online job postings data, also known as real-time labor market information, captures job post advertisements for occupations relevant to the field of study which can signal demand and show what employers are looking for in potential employees but is not a perfect measure of the quantity of open positions. Online job postings data is sourced from Lightcast, a labor market analytics firm that scrapes, collects, and organizes data from online job boards such as LinkedIn, Indeed, Glassdoor, Monster, GovernmentJobs.com, and thousands more.

There are several limitations when analyzing job postings. A single job posting may not represent a single job opening, as employers may be creating a pool of candidates for future openings or hiring for multiple positions with a single posting. Additionally, not all jobs are posted online, and jobs may be filled through other methods such as internal promotion, word-of-mouth advertising, physical job boards, or a variety of other channels.

Additionally, Lightcast uses natural language processing (NLP) to determine the related company, industry, occupation, and other information for each job posting. However, NLP has limitations that include understanding contextual words of phrases; determining differences in words that can be used as nouns, verbs, and/or adjectives; and misspellings or grammatical errors.¹¹ For these reasons, job postings could be assigned to the wrong employer, industry, or occupation within Lightcast's database.

Geography

The South Central Coast region encompasses San Luis Obispo, Santa Barbara, and Ventura counties, as well as parts of Northern Los Angeles County. Exhibit 22 shows the 34 ZIP codes used to define Northern Los Angeles County.

Exhibit 21: Northern Los Angeles ZIP Codes

ZIP Code	Primary City	ZIP Code	Primary City
91310	Castaic	93532	Lake Hughes
91321	Newhall	93534	Lancaster
91322	Newhall	93535	Lancaster
91350	Santa Clarita	93536	Lancaster
91351	Canyon Country	93539	Lancaster
91354	Valencia	93543	Littlerock
91355	Valencia	93544	Llano
91380	Santa Clarita	93550	Palmdale
91381	Stevenson Ranch	93551	Palmdale
91382	Santa Clarita	93552	Palmdale
91383	Santa Clarita	93553	Pearblossom
91384	Castaic	93563	Valyermo
91385	Valencia	93584	Lancaster
91386	Canyon Country	93586	Lancaster
91387	Canyon Country	93590	Palmdale
91390	Santa Clarita	93591	Palmdale
93510	Acton	93599	Palmdale

Though traditional labor market information is available at the ZIP code level, it does not always add up to data reported at the county level for multiple reasons:

- ZIP codes are not official geographically bounded areas, unlike states and counties.
- ZIP codes may cross county lines, such as ZIP code 93461, which is primarily in San Luis Obispo County, but also crosses into Kern County.

For these reasons, the number of jobs and average annual openings for each county may not add up to the total for the SCC Region. However, considering jobseekers may cross county lines for opportunities, the traditional labor market data is reflective of opportunities available to jobseekers in the SCC Region.

Additionally, job postings data is available only at the city or county level. To analyze job postings for the entire SCC region, the SCC COE developed a list of cities available in Lightcast for analysis. Additionally, demographic data is not available at the ZIP code level but is available at the Census Bureau's Public Use Microdata Area (PUMA) level. Demographic data was sourced via IPUMS and analyzed by the SCC COE.

¹¹ K. R. Chowdhary, Fundamentals of Artificial Intelligence (Basingstoke: Springer Nature, 2020), <https://link.springer.com/book/10.1007/978-81-322-3972-7>.

Appendix B: Data Sources

Data Type	Source
Occupational Projections, Wages, and Job Postings	Traditional and real-time labor market information are captured using data from Lightcast , a labor market analytics firm.
Living Wage	Per the CCCCCO, this report's endorsement criteria uses the University of Washington's Center for Women's Welfare Self-Sufficiency Standard last updated in March 2024. The MIT Living Wage, updated on February 15, 2026, is a nationally recognized living wage metric and is provided for reference.
Typical Education and Training Requirements, and Educational Attainment	The Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which BLS publishes projections data.
Emerging Occupation Descriptions, Additional Education Requirements, and Employer Preferences	The O*NET database includes information on skills, abilities, knowledge, work activities, and interests associated with occupations.
Educational Supply	The CCCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions).
Job Quality	To classify each occupation as High, Medium, or Low Quality, the SCC COE identified nine criteria, five of which are considered traditional labor market information indicators (Traditional LMI Indicators) and four of which are considered Job Quality Indicators. These criteria were used to determine occupations that have significant employment and demand, pay at or above the living wage, typically provide employer-sponsored health insurance and full-time hours, have a lower risk of automation, and are considered a "Best Job" by U.S. News & World Report. For more information, see the SCC COE's South Central Coast Labor Market Landscape report.
Student Metrics and Demographics	Data Vista , a statewide data system supported by the California Community Colleges Chancellor's Office provides data on progress, success, employment, and earnings outcomes for California community college students.
Population and Occupation Demographics	The Census Bureau's American Community Survey (ACS) is the premier source for detailed population and housing information. Data is sourced from IPUMS USA, a database providing access to ACS and other Census Bureau data products.

All representations have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. The most recent data available at the time of the analysis was examined; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

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