



Summary

| | | | |
|--|---|---|---|
| Program LMI Endorsement | Endorsed: All LMI Criteria Met <input type="checkbox"/> | Endorsed: Some LMI Criteria Met <input checked="" type="checkbox"/> | Not LMI Endorsed <input type="checkbox"/> |
| Program LMI Endorsement Criteria | | | |
| | Yes <input checked="" type="checkbox"/> | | No <input type="checkbox"/> |
| Supply Gap: | <i>Comments:</i> there is projected to be 616 annual job openings in the South Central Coast (SCC) Region for these advertising and marketing occupations, which is more than the 109 awards conferred by educational institutions. | | |
| | Yes <input type="checkbox"/> | | No <input checked="" type="checkbox"/> |
| Self-Sufficiency Standard Living Wage ¹ : | <i>Comments:</i> All (100%) annual job openings for these advertising and marketing occupations have entry-level hourly wages below the Santa Barbara County living wage of \$29.80. | | |
| | Yes <input checked="" type="checkbox"/> | | No <input type="checkbox"/> |
| Education: | <i>Comments:</i> though all (100%) annual job openings for these advertising and marketing occupations typically require a high school diploma or equivalent, between 27% and 31% of workers in the field have completed some college or an associate degree as their highest level of education. | | |
| Additional Considerations | | | |
| Emerging Occupation(s): | Yes <input type="checkbox"/> | Some <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| | <i>Comments:</i> 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 two middle-skill occupations:

- *Advertising Sales Agents (41-3011)*
- *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)*

Based on the available data there appears to be a supply gap for these advertising and marketing occupations and typical education requirements for these occupations align with a community college education. However, 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.**

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.

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 |
|--|--------------------------|------------------------|---|-----------------------------------|--|
| Advertising Sale Agents (41-3011) | 36 | 11 | Santa Barbara: \$17.63 | High school diploma or equivalent | 27% |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012) | 580 | 98 | Santa Barbara: \$24.48 | High school diploma or equivalent | 31% |
| Total | 616 | 109 | N/A | N/A | N/A |

Demand:

- The number of jobs related to these advertising and marketing occupations is projected to decrease 4% through 2029 in the SCC region. There is projected to be 616 annual job openings due to job replacements.
- Hourly entry-level wages for these advertising and marketing occupations in Santa Barbara County range from \$17.63 to \$24.48; 100% of annual job openings have entry-level wages below the Self-Sufficiency Standard living wage (\$29.80 in Santa Barbara County).
- The typical entry-level education for these advertising and marketing occupations is a high school diploma or equivalent.
- Between 27% and 31% 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 109 awards conferred by six community colleges in the SCC Region from 2021 to 2024.
- Non-community college institutions did not confer any related awards from 2020 to 2023.
- SCC community college students that exited Marketing and Distribution programs in the 2022-23 academic year had a median annual wage of \$35,340 (\$16.99 per hour) after exiting the program and 27% attained the regional living wage (Self-Sufficiency Standard).
- Throughout the SCC Region, 84% of Marketing and Distribution students that exited their program in 2021-22 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 2019. Notably, employment for these advertising and marketing occupations in Northern Los Angeles County declined 17% from 2019 to 2024, which is significantly higher of a decline when compared to employment for these occupations in California, the SCC Region, and all other counties in the SCC region. From 2024 to 2029, employment for these advertising and marketing occupations is projected to decline in Northern Los Angeles County, and Ventura County, while employment in San Luis Obispo County and Santa Barbara County is projected to remain flat.

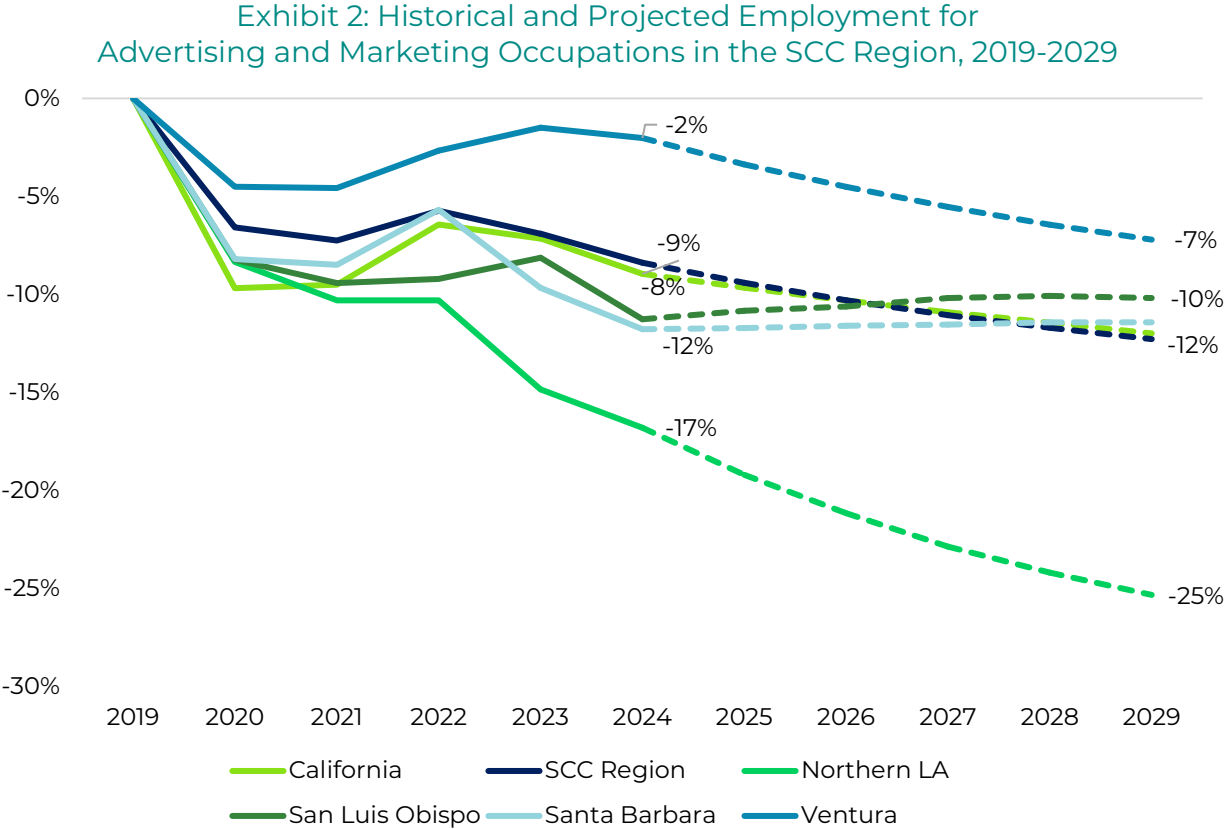


Exhibit 3 shows the five-year occupational demand projections for these advertising and marketing occupations. In the SCC Region, the number of jobs related to these occupations is projected to decrease 4% through 2029. There is projected to be 616 jobs available annually. Ventura County has the highest number of jobs and annual openings, but employment is projected to decrease through 2029.

Exhibit 3: Occupational Demand in the SCC Region²

| Geography | 2024 Jobs | 2029 Jobs | 2024-2029 Change | 2024-2029 % Change | Annual Openings |
|-----------------|-----------|-----------|------------------|--------------------|-----------------|
| Northern LA | 1,317 | 1,183 | (134) | (10%) | 111 |
| San Luis Obispo | 820 | 829 | 9 | 1% | 76 |
| Santa Barbara | 1,506 | 1,512 | 6 | 0% | 138 |

² Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

| Geography | 2024 Jobs | 2029 Jobs | 2024-2029 Change | 2024-2029 % Change | Annual Openings |
|-------------------|--------------|--------------|------------------|--------------------|-----------------|
| Ventura | 3,345 | 3,168 | (177) | (5%) | 286 |
| SCC Region | 6,983 | 6,686 | (297) | (4%) | 616 |

Wages:

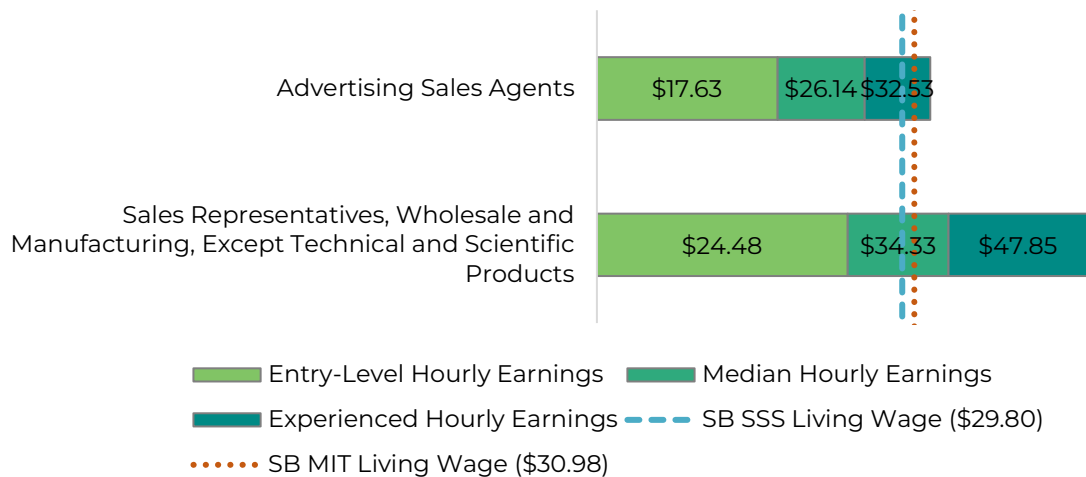
The labor market endorsement in this report considers the entry-level hourly wages for these advertising and marketing occupations in relation to the living wage of the county where the requesting community college is located. This report was requested by Santa Barbara City College, which is in Santa 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 10, 2025, is provided as a reference. Currently, the MIT Living Wage in Santa Barbara County is \$30.98. 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.

Santa Barbara

All (100%) annual openings for these marketing and advertising 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 \$17.63 and \$24.48. Median hourly wages for *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)* are above the living wage, while experienced level wages for *Advertising Sales Agents (41-3011)* are above it. Exhibit 4 shows the wage range for each of these marketing and advertising 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

All (100%) annual openings for these marketing and advertising occupations have entry-level wages below the Self-Sufficiency Standard living wage for one adult (\$24.03 in Los Angeles County). Typical entry-level hourly wages range between \$21.98 and \$22.59. Median hourly earnings for these marketing and advertising occupations in Northern Los Angeles County are above the living wage. Exhibit 5 shows the wage range for each of these marketing and advertising occupations in Northern Los Angeles and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

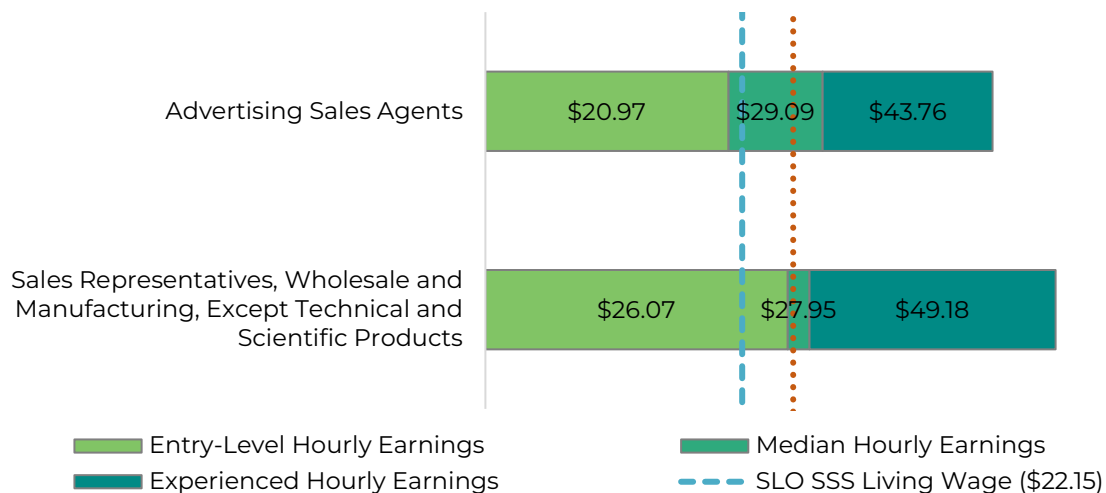
Exhibit 5: Wages by Occupation in Northern Los Angeles County



San Luis Obispo

The majority (92%) of annual openings for these marketing and advertising 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 \$20.97 and \$26.07. Median hourly earnings for *Advertising Sales Agents (41-3011)* are above the living wage. Exhibit 6 shows the wage range for each of these marketing and advertising occupations in San Luis Obispo County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

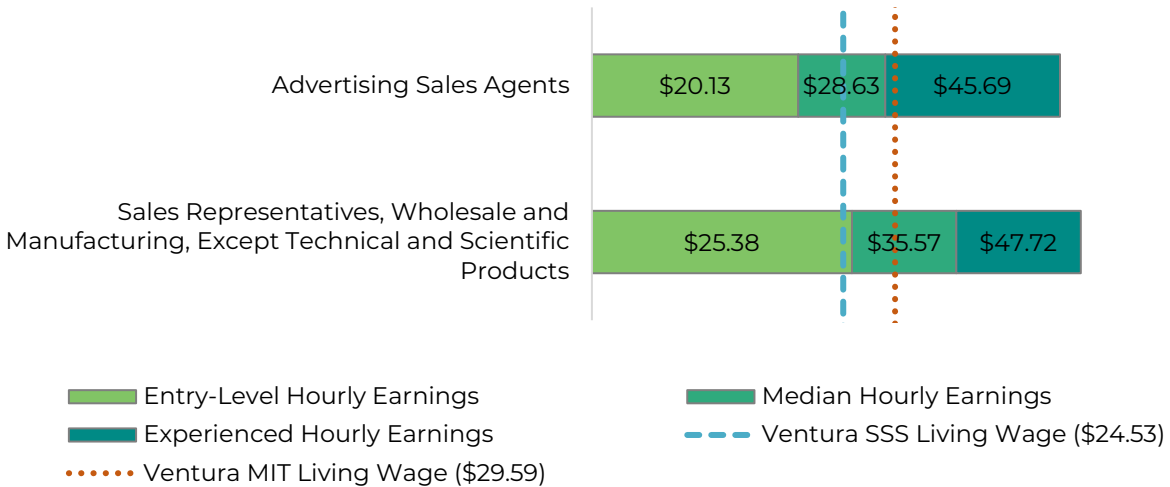
Exhibit 6: Wages by Occupation in San Luis Obispo County



Ventura

The majority (96%) of annual openings for these marketing and advertising 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 \$20.13 and \$25.38. Median hourly earnings for *Advertising Sales Agents (41-3011)* are above the living wage. Exhibit 7 shows the wage range for each of these marketing and advertising 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 Postings:

There were 2,017 online job postings related to these marketing and advertising occupations listed in the past 12 months in the SCC Region. Exhibit 8 shows the number of job postings by county. Approximately 48% of job postings were in Ventura County.

Exhibit 8: Number of Job Postings by County (n=2,017)

| County | Job Postings | Percentage of Job Postings |
|-----------------------|--------------|----------------------------|
| Ventura | 960 | 48% |
| Santa Barbara | 458 | 23% |
| Northern Los Angeles | 391 | 19% |
| San Luis Obispo | 207 | 10% |
| Total Postings | 2,017 | 100% |

Of the 2,017 postings, the majority (85%) were for *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)*, followed by *Advertising Sales Agents (41-3011)*, as shown in Exhibit 9.

Exhibit 9: Number of Job Postings by Occupation (n=2,017)

| Occupation | Job Postings | Percentage of Job Postings |
|--|--------------|----------------------------|
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 1,711 | 85% |
| Advertising Sales Agents | 306 | 15% |
| Total Postings | 2,017 | 100% |

The top employers in the region, by number of job postings, are shown in Exhibit 10.

Exhibit 10: Top Employers by Number of Job Postings (n=2,017)

| Employer | Job Postings | Percentage of Job Postings |
|-------------------------|--------------|----------------------------|
| CalPortland | 37 | 2% |
| T-Mobile US | 34 | 2% |
| Pinnacle Business Group | 33 | 2% |
| Yardi Systems | 31 | 2% |
| Fortune Energy | 27 | 1% |
| Spectrum | 26 | 1% |
| AppleOne | 17 | 1% |
| Cintas | 17 | 1% |
| Martin Brower | 17 | 1% |
| GPAC | 15 | 1% |

The top specialized, soft, and computer skills listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 11.

Exhibit 11: Top Skills by Number of Job Postings (n=2,017)

| Top Specialized Skills | Top Soft Skills | Top Computer Skills |
|--|------------------------|--|
| Marketing (569) | Sales (1579) | Microsoft Office (315) |
| Customer Relationship Management (499) | Communication (960) | Microsoft Excel (264) |
| Selling Techniques (458) | Customer Service (767) | Microsoft PowerPoint (172) |
| Sales Prospecting (448) | Management (481) | Salesforce (166) |
| Business To Business (312) | Presentations (393) | Microsoft Outlook (140) |
| Account Management (253) | Microsoft Office (315) | Microsoft Word (74) |
| Business Development (197) | Self-Motivation (299) | SAP Applications (67) |
| Good Driving Record (170) | Operations (276) | Customer Relationship Management (CRM) Software (52) |
| Sales Territory Management (166) | Microsoft Excel (264) | Google Sheets (37) |
| Outside Sales (158) | Problem Solving (264) | Google Workspace (34) |

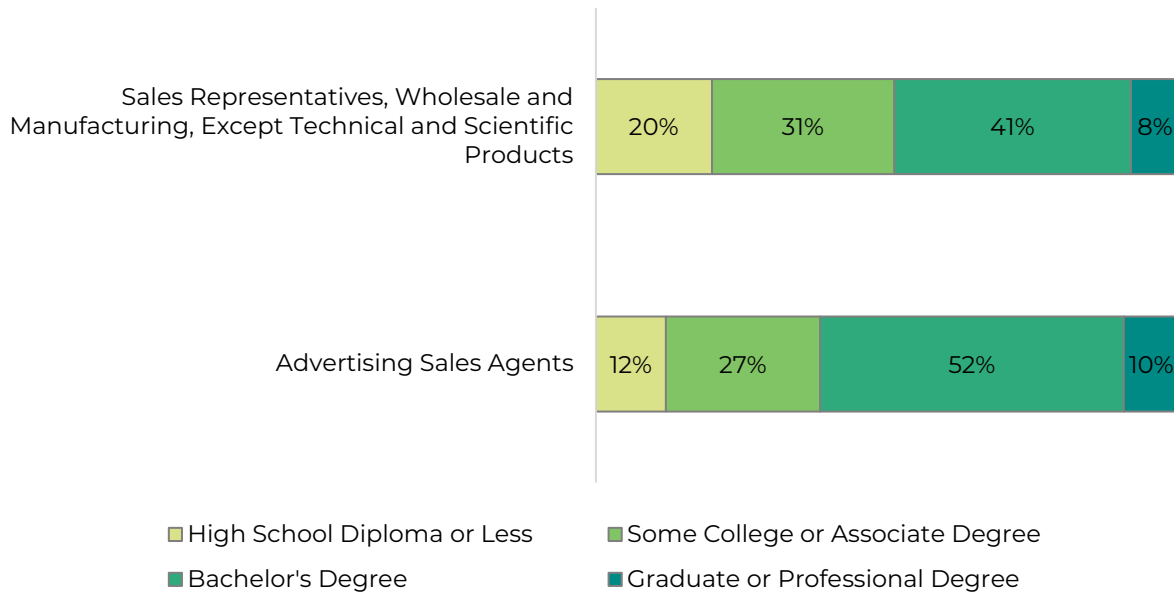
Educational Attainment:

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

- High School Diploma or Equivalent
 - *Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)*
 - *Advertising Sales Agents (41-3011)*

The national-level educational attainment data indicates between 27% and 31% of workers in the field have completed some college or an associate degree as their highest level of education. Exhibit 12 shows the educational attainment for each occupation, sorted by highest community college educational attainment to lowest.

Exhibit 12: National-level Educational Attainment for Occupations



Of the 56% of the cumulative job postings for these marketing and advertising occupations that listed a minimum education requirement in the SCC Region, 48% (534) requested a high school diploma or an associate degree, 52% (587) requested a bachelor's degree, and 0.3% (3) requested a graduate or professional degree.

Educational Supply

Community College Supply:

Exhibit 13 shows the three-year average number of awards conferred by community colleges in the related TOP codes:

- Marketing and Distribution (0509.00)
- Agriculture Business, Sales and Service (0112.00)

No awards were conferred for the following TOP codes:

- Sales and Salesmanship (0509.40)
- Display (0509.60)

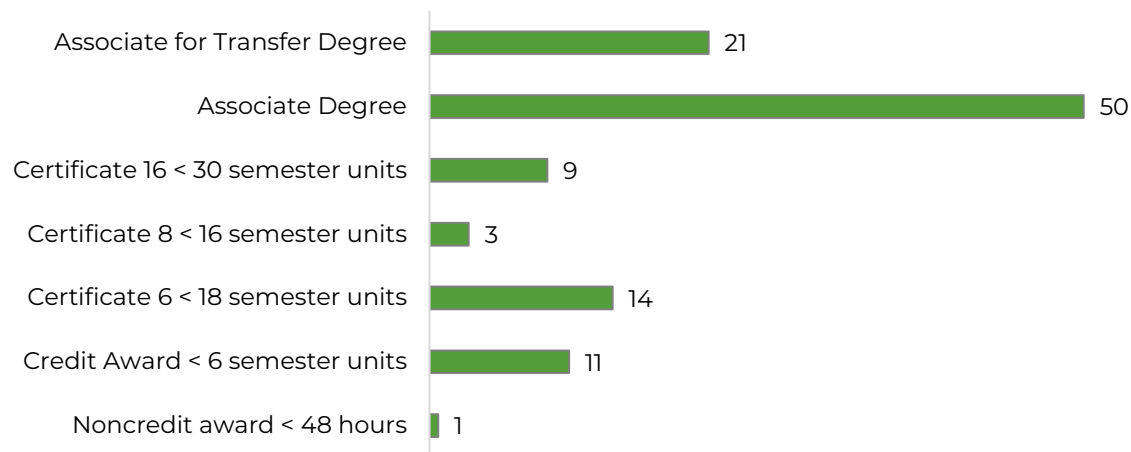
The college with the most completions in the region is Antelope Valley (28), followed by Santa Barbara (14), and College of the Canyons (7).

Exhibit 13: Regional Community College Awards (Certificates and Degrees), 2021-2024

| TOP Code | Program | College | 2021-2022 Awards | 2022-2023 Awards | 2023-2024 Awards | 3-Year Award Average |
|--------------------------------|---|-----------------|------------------|------------------|------------------|----------------------|
| 0112.00 | Agriculture Business, Sales and Service | Allan Hancock | 3 | 1 | 4 | 3 |
| | | Cuesta | 18 | 20 | 12 | 17 |
| | | Ventura | 4 | 2 | 0 | 2 |
| Supply Subtotal/Average | | | 25 | 23 | 16 | 21 |
| 0509.00 | Marketing and Distribution | Allan Hancock | 4 | 4 | 6 | 5 |
| | | Antelope Valley | 1 | 0 | 0 | 0 |
| | | Canyons | 44 | 36 | 36 | 39 |
| | | Santa Barbara | 21 | 20 | 35 | 25 |
| | | Ventura | 0 | 0 | 24 | 8 |
| Supply Subtotal/Average | | | 70 | 60 | 101 | 77 |
| 0509.40 | Sales and Salesmanship | Allan Hancock | 2 | 2 | 28 | 11 |
| Supply Subtotal/Average | | | 2 | 2 | 28 | 11 |
| Supply Total/Average | | | 97 | 85 | 145 | 109 |

Exhibit 14 shows the annual average community college awards by type from 2021-22 to 2023-24. The plurality of the awards are for associate degrees, followed by associate for transfer degrees, and certificate between 6 and less than 18 semester units.

Exhibit 14: Annual Average Community College Awards by Type, 2021-2024



Community College Student Outcomes:

Exhibit 14 shows the Strong Workforce Program (SWP) metrics for Marketing and Distribution programs at Santa Barbara City College (SBCC), the SCC Region, and California. Of the 1,402 Marketing and Distribution students throughout the region in the 2023-24 academic year, 35% (488) attended SBCC.

SBCC students that exited Marketing and Distribution programs in the 2022-23 academic year had lower median annual earnings (\$33,982 or \$16.34 per hour) compared to all Marketing and Distribution students in the SCC Region (\$35,340 or \$16.99 per hour); both figures are lower than statewide (\$40,924 or \$19.68 per hour). A lower percentage of SCC Marketing and Distribution students attained the living wage (27%) when compared to all Marketing and Distribution students in the state (39%).

Exhibit 15: Marketing and Distribution (0509.00) Strong Workforce Program Metrics, 2023-24³⁴

| SWP Metric | SBCC | SCC Region | California |
|---|-----------------------|-----------------------|-----------------------|
| SWP Students | 488 | 1,402 | 17,604 |
| SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year | 32% | 44% | 45% |
| SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course | 91% | 82% | 76% |
| SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status | 6% | 5% | 4% |
| SWP Students Who Transferred to a Four-Year Postsecondary Institution (2022-23) | 6% | 7% | 6% |
| SWP Students with a Job Closely Related to Their Field of Study (2021-22) | 85% | 84% | 67% |
| Median Annual Earnings for SWP Exiting Students (2022-23) | \$33,982 (\$16.34) | \$35,340 (\$16.99) | \$40,924 (\$19.68) |
| Median Change in Earnings for SWP Exiting Students (2022-23) | 83% | 41% | 33% |

³ All SWP metrics are for 2023-24 unless otherwise noted. Metrics data is sourced from DataVista.

⁴ 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.

| SWP Metric | SBCC | SCC Region | California |
|---|------------------|------------|------------|
| SWP Exiting Students Who Attained the Living Wage (2022-23) | Data Unavailable | 27% | 39% |

Non-Community College Supply:

To comprehensively analyze the regional supply, it is crucial to include data from other institutions offering marketing and distribution training programs. Over the past three years (2020-2023), there were no awards conferred by non-community college institutions under the related Classification of Instructional Programs (CIP) codes:

- Agricultural/Farm Supplies Retailing and Wholesaling (01.0105)
- Sales, Distribution, and Marketing Operations, General (52.1801)
- Selling Skills and Sales Operations (52.1804)
- General Merchandising, Sales, and Related Marketing Operations, Other (52.1899)

Regional Demographics

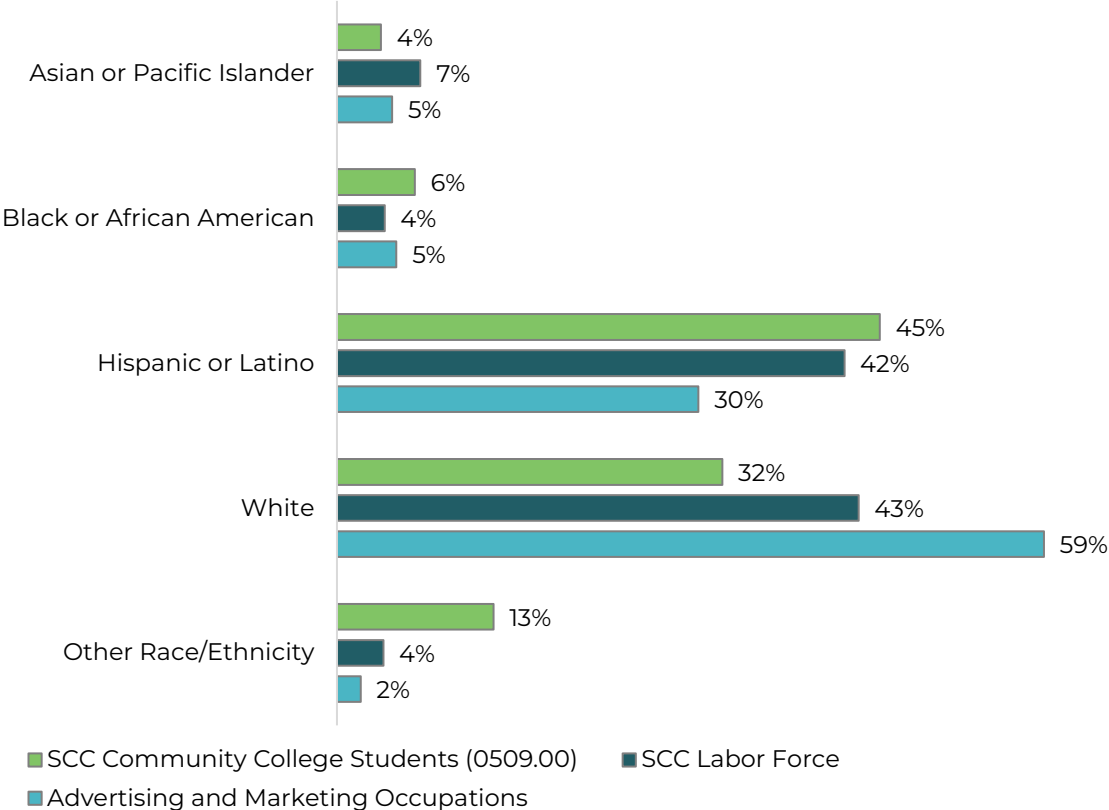
This section examines demographic data for SCC community college students in Marketing and Distribution programs compared to the SCC labor force, along with occupational data, to identify potential diversity and equity issues addressable by community college programs.

Ethnicity:

Exhibit 16 compares the ethnicity of SCC community college students enrolled in Marketing and Distribution programs, the overall SCC labor force, and occupation-specific data for the two advertising and marketing occupations included in this report.

Notably, 59% of workers employed in these advertising and marketing occupations are white, which is higher than the labor force (43%) and community college Marketing and Distribution students (32%). Conversely, 45% of community college Marketing and Distribution students are Hispanic or Latino which is slightly higher than the labor force (42%) and workers in these advertising and marketing occupations (30%).

Exhibit 16: Program and County Demographics by Ethnicity

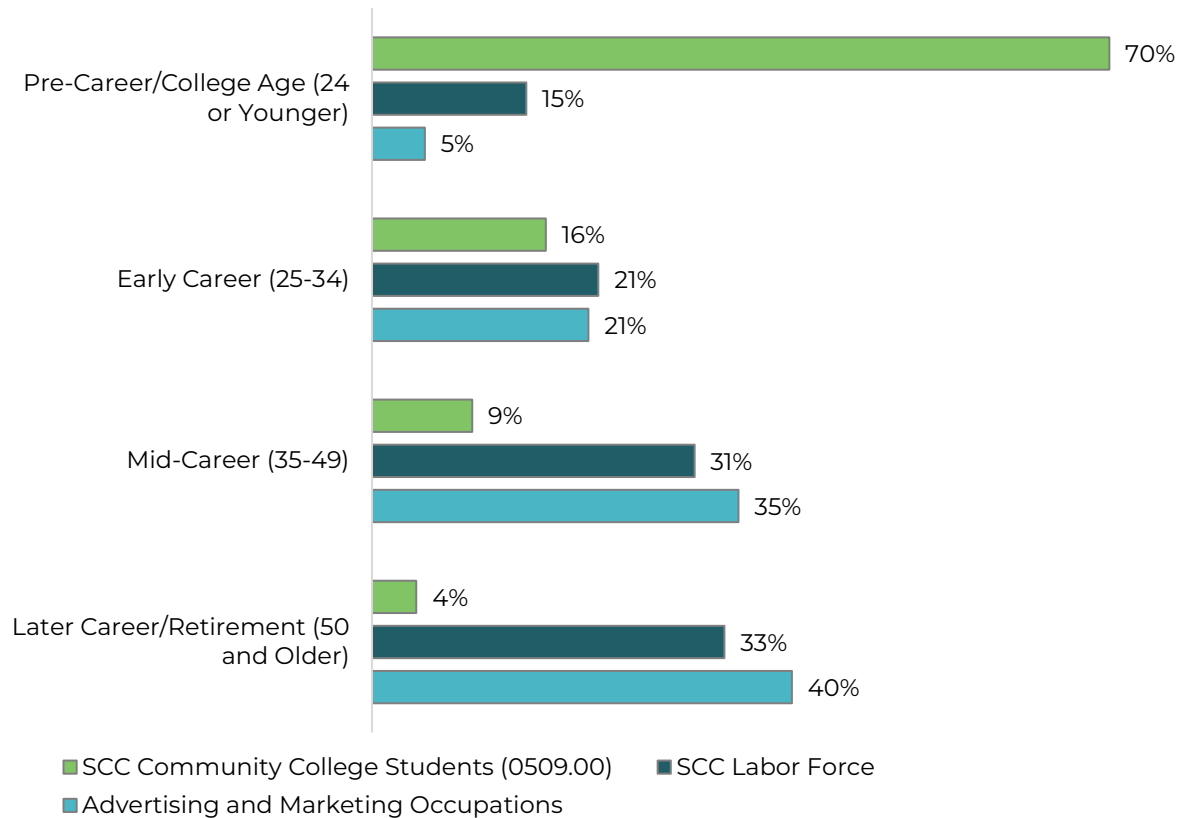


Age:

Exhibit 17 compares the age of SCC community college students enrolled in Marketing and Distribution programs, the overall SCC labor force, and occupation-specific data for the two advertising and marketing occupations included in this report.

The majority (75%) of workers in these advertising and marketing occupations are Mid-Career (35-49) and older, which is similar to the labor force (64%), but significantly higher than community college Marketing and Distribution students (13%). Conversely, 70% of community college Marketing and Distribution students are Pre-Career/College Age (24 or Younger), which is significantly higher than both the labor force (15%), and workers in these advertising and marketing occupations (5%).

Exhibit 17: Program and County Demographics by Age

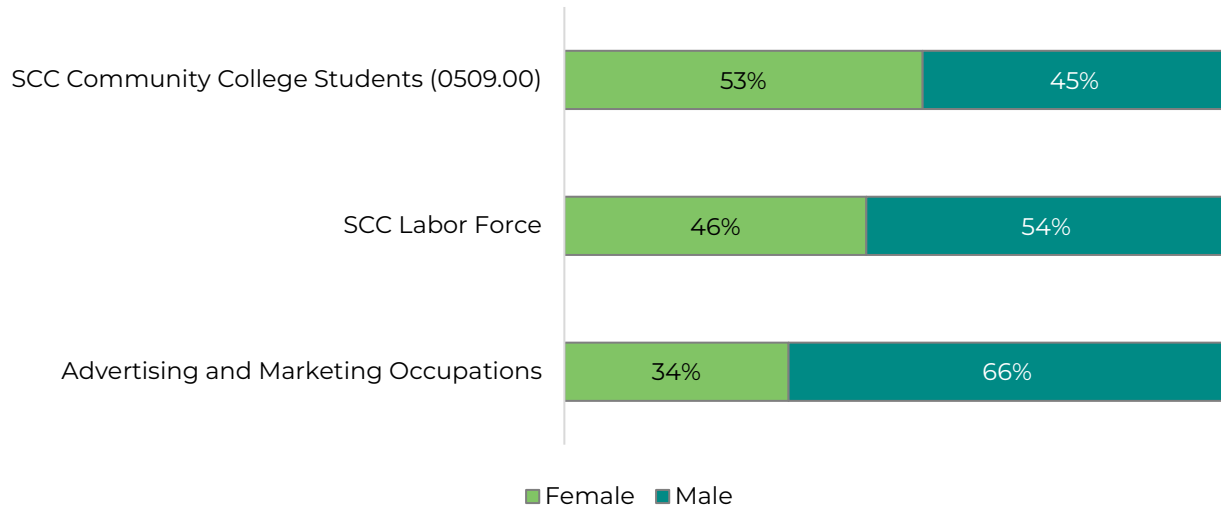


Sex:

Exhibit 18 compares the sex of SCC community college students enrolled in Marketing and Distribution programs, the overall SCC labor force, and occupation-specific data for these advertising and marketing occupations.

There is a slight majority of female students (53%) which contrasts with workers in these advertising and marketing occupations (34% female) and the labor force (46% female). Examining disaggregated data for each occupation (not shown), one occupation has a majority of female workers: *Advertising Sales Agents (41-3011)* (54% female).

Exhibit 18: 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.⁵ 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 19 shows the 34 ZIP codes used to define Northern Los Angeles County.

Exhibit 19: 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.

⁵ 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 CCCCO, 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 10, 2025, 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, knowledges, work activities, and interests associated with occupations. |
| Educational Supply | The CCCCO 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). |
| 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.

For more information, please contact the South Central Coast Center of Excellence:

Jacob Poore, Director

jacob.poore@canyons.edu

Ashley Kernan, Research Manager

ashley.kernan@canyons.edu



FOR LABOR MARKET RESEARCH
SOUTH CENTRAL COAST

Janneth Najera, Research Manager

janneth.najera@canyons.edu

April 2026