

Labor Market Analysis for Noncredit Program
 Recommendation
 0509.40/Sales and Salesmanship
 (Solar Sales Representatives and Assessors)
 Orange County Center of Excellence, November 2023



Summary

Program LMI Endorsement	Endorsed: All LMI Criteria Met <input checked="" type="checkbox"/>	Endorsed: Some LMI Criteria Met <input 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 6,493 middle-skill annual job openings throughout Los Angeles and Orange counties for these middle-skill sales occupations, which is more than the 34 awards conferred by educational institutions.	
Living Wage: (Entry-Level, 25 th)	<i>Comments:</i> Entry-level hourly wages for sales representatives, wholesale and manufacturing, except technical and scientific products are \$23.72, which is above the OC living wage of \$20.63.	
Education:	<i>Comments:</i> The typical entry-level education for <i>sales representatives, wholesale and manufacturing, except technical and scientific products</i> is a high school diploma or equivalent. However, nearly one-third of workers in the field have completed some college or an associate degree as their highest level of education.	

Emerging Occupation(s)

	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	<i>Comments:</i> Currently, there is no singular occupation specifically for solar sales representatives and assessors in the federal Bureau of Labor Statistics (BLS) Standard Occupational Classification System (SOC). Data for the emerging occupation <i>Solar Sales Representatives and Assessors</i> (41-4011.07) is primarily grouped under the broader <i>Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products</i> (41-4011) SOC code. However, a review of online job postings shows that this emerging occupation may also appear under <i>Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products</i> (41-4012). Therefore, data for both occupations, as well as an analysis of online job postings related to solar sales, is included in this report.	

The Orange County Center of Excellence for Labor Market Research (OC COE) prepared this report to determine whether there is a supply gap in the Los Angeles/Orange County regional labor market related to four sales occupations:

- Middle-Skill
 - Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)

- Above Middle-Skill – denoted with an asterisk (*) throughout this report.
 - Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (41-4011)*

Middle-skill occupations typically require a community college education while above middle-skill occupations typically require at least a bachelor’s degree.

Based on the available data, there appears to be a supply gap for *sales representatives, wholesale and manufacturing, except technical and scientific products*, the middle-skill occupation, in the region. Additionally, typical entry-level hourly wages are above the living wage and typical education requirements for this occupation aligns with a community college education. **Therefore, due to all 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
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)	LA: 4,671 OC: 1,822	LA: 27 OC: 7	OC: \$23.72	High school diploma or equivalent	31%
Middle-Skill Total	6,493	34	N/A	N/A	N/A
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (41-4011)*	LA: 617 OC: 374	Accounted for Above	OC: \$35.74	Bachelor's degree	31%
Above Middle-Skill Total	991	Accounted for Above	N/A	N/A	N/A
Total	7,484	34	N/A	N/A	N/A

Demand:

- The number of jobs related to *sales representatives, wholesale and manufacturing, except technical and scientific products* is projected to decrease 4% through 2026; however, there is projected to be 6,493 annual job openings due to retirements and replacements.
- Hourly entry-level wages for *sales representatives, wholesale and manufacturing, except technical and scientific products* are \$23.72 in Orange County, which is above the living wage of \$20.63.
- There were 38,895 online job postings for these sales occupations over the past 12 months. Of those, 3% (1,112) were related to solar sales.
- The typical entry-level education for *sales representatives, wholesale and manufacturing, except technical and scientific products* is a high school diploma or equivalent.
- Approximately 31% and 34% of *sales representatives, wholesale and manufacturing, except technical and scientific products* have completed some college or an associate degree as their highest level of educational attainment.

Supply:

- There was an average of 34 awards conferred by 3 community colleges in Los Angeles and Orange Counties from 2019 to 2022.
- There were no awards conferred by non-community college institutions from 2019 to 2021.
- Orange County community college students that exited sales and salesmanship programs in the 2020-21 academic year had a median annual wage of \$37,266 after exiting the program and 34% attained the regional living wage.
- Throughout Orange County, 100% of sales and salesmanship students that exited their program in 2019-20 reported that they are working in a job closely related to their field of study. However, this figure represents only six students.

Demand

Occupational Projections:

Exhibit 2 shows the annual percent change in jobs for both sales occupations researched in this report from 2017 through 2027. Employment in these sales occupations declined 8% from 2019 to 2020 in Orange County, which is similar to the 7% decline across all occupations due to the COVID-19 pandemic. Employment in these sales occupations is projected to decline through 2027.

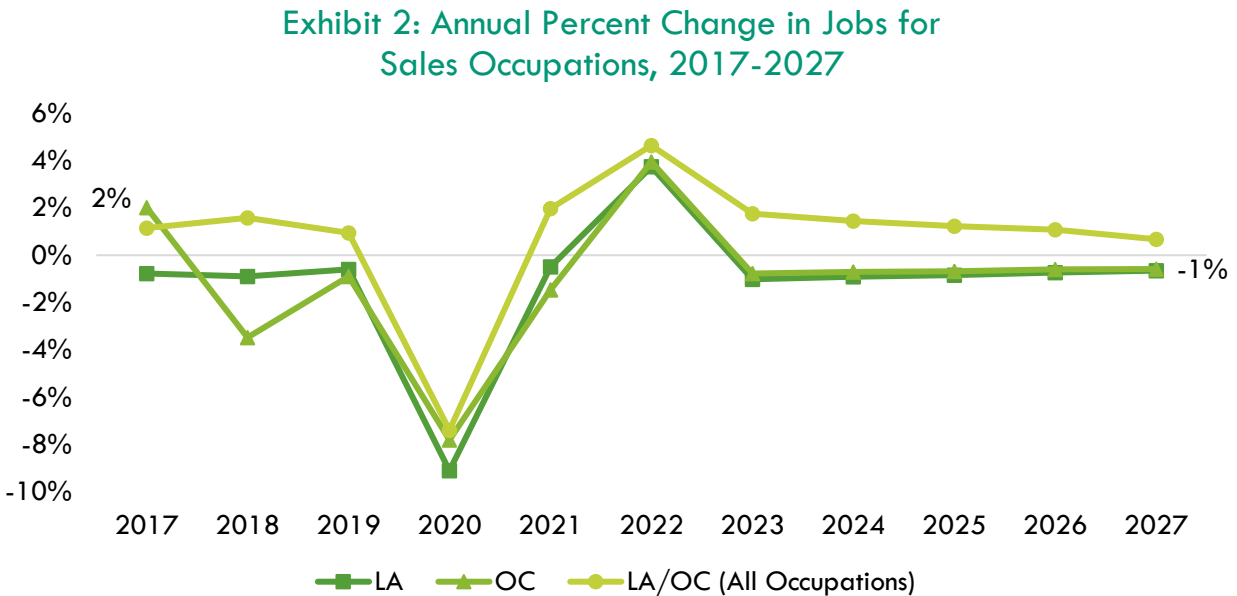


Exhibit 3 shows the five-year occupational demand projections for *sales representatives, wholesale and manufacturing, except technical and scientific products*. In Los Angeles/Orange County, the number of jobs related to this occupation is projected to decrease 4% through 2027. There is projected to be 6,493 jobs available annually due to retirements and replacements.

Exhibit 3: Middle-Skill Occupational Demand in Los Angeles and Orange Counties¹

Geography	2021 Jobs	2026 Jobs	2021-2026 Change	2021-2026 % Change	Annual Openings
Los Angeles	47,659	45,553	(2,106)	(4%)	4,671
Orange	18,535	17,829	(706)	(4%)	1,822
Total	66,194	63,382	(2,812)	(4%)	6,493

¹ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Exhibit 4 shows the five-year occupational demand projections *sales representatives, wholesale and manufacturing, technical and scientific products*. In Los Angeles/Orange County, the number of jobs related to this occupation is projected to decline by 1% through 2027. There is projected to be 991 jobs available annually due to retirements and replacements.

Exhibit 4: Above Middle-Skill Occupational Demand in Los Angeles and Orange Counties

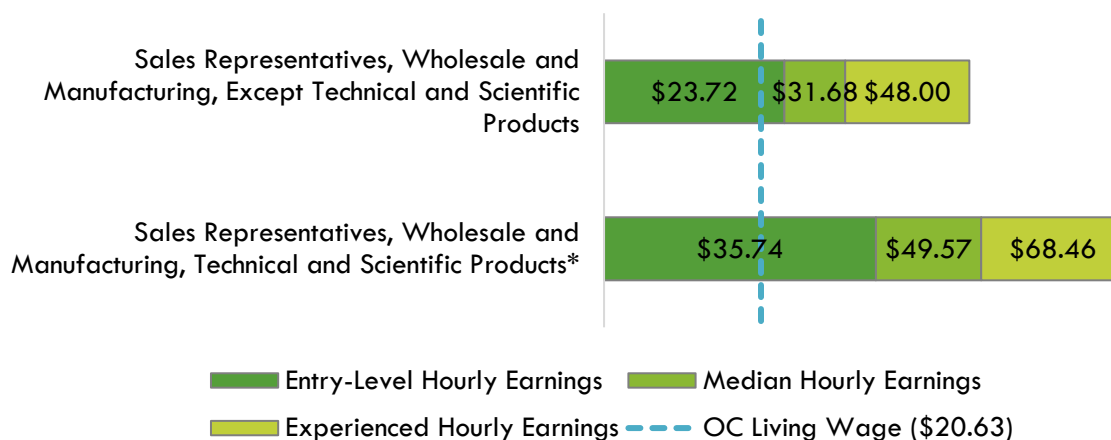
Geography	2021 Jobs	2026 Jobs	2021-2026 Change	2021-2026 % Change	Annual Openings
Los Angeles	6,172	6,087	(85)	(1%)	617
Orange	3,708	3,681	(27)	(1%)	374
Total	9,880	9,768	(111)	(1%)	991

Wages:

The labor market endorsement in this report considers the entry-level hourly wages for these occupations in Orange County as they relate to the county’s living wage. Los Angeles County wages are included below in order to provide a complete analysis of the LA/OC region.

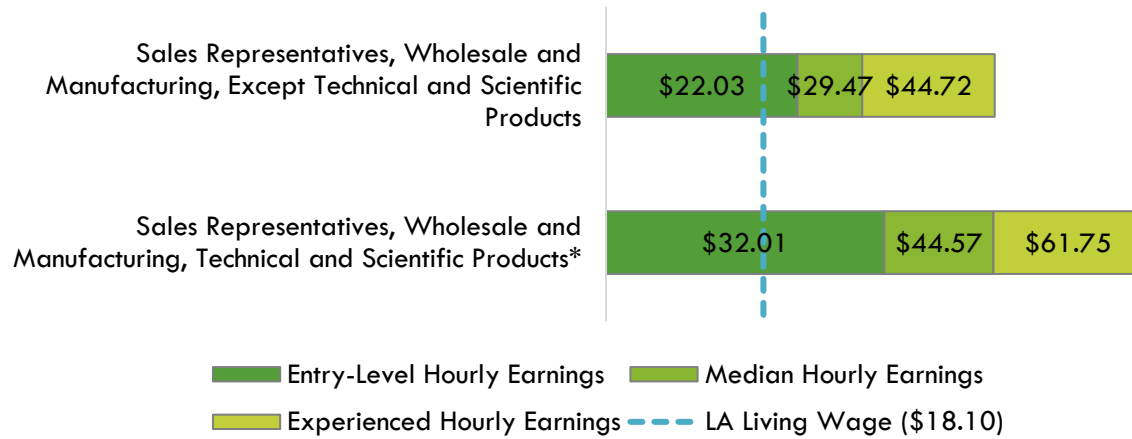
Entry-level hourly earnings for *sales representatives, wholesale and manufacturing, except technical and scientific products*, the sole middle-skill occupation, are \$23.72, which is above the living wage for one adult (\$20.63 in Orange County). Orange County’s average wages (\$40.36) are slightly above the average statewide wage of \$39.46 for these occupations. Exhibit 5, shows the wage range for each of these sales occupations in Orange County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

Exhibit 5: Wages by Occupation in Orange County



Entry-level hourly earnings for *sales representatives, wholesale and manufacturing, except technical and scientific products*, the sole middle-skill occupation, are \$22.03, which is above the living wage for one adult (\$18.10 in Los Angeles County). Los Angeles County’s average wages (\$37.66) are below the average statewide wage of \$39.46 for these occupations. Exhibit 6 shows the wage range for each of these sales occupations in Los Angeles County how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

Exhibit 6: Wages by Occupation in Los Angeles County



Job Postings:

Important Online Job Postings Data Note: 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. 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.² For these reasons, job postings could be assigned to the wrong employer, industry, or occupation within Lightcast's database.

Additionally, 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.

There were 38,895 online job postings related to these sales occupations listed in the past 12 months. Of those, 91% (35,562) were for middle-skill sales occupations. Exhibit 7 shows the number of job postings by occupation.

Exhibit 7: Number of Job Postings by Occupation (n=38,895)

Occupation	Job Postings	Percentage of Job Postings
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	35,562	91%
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products*	3,333	9%
Total Postings	38,895	100%

² K. R. Chowdhary, Fundamentals of Artificial Intelligence (Basingstoke: Springer Nature, 2020), <https://link.springer.com/book/10.1007/978-81-322-3972-7>.

The top employers for these sales occupations in the region, by number of job postings, are shown in Exhibit 8.

Exhibit 8: Top Employers by Number of Job Postings (n=38,895)

Employer	Job Postings	Percentage of Job Postings
Spectrum	446	1%
Nordstrom	322	1%
AT&T	303	1%
Mutual of Omaha	242	1%
GPAC	223	1%
T-Mobile US	205	1%
24 Hour Fitness	164	0.4%
Aston Carter	164	0.4%
Victra	155	0.4%
UnitedHealth Group	136	0.3%

The top specialized, soft, and computer skills listed by those most frequently mentioned in job postings (denoted in parentheses) are shown for these middle-skill occupations in Exhibit 9.

Exhibit 9: Top Skills by Number of Job Postings (n=38,895)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Selling Techniques (10,715)	Sales (32,667)	Microsoft Excel (5,189)
Marketing (9,325)	Communications (17,942)	Microsoft Office (4,722)
Sales Prospecting (9,240)	Customer Service (15,797)	Salesforce (3,639)
Customer Relationship Management (6,518)	Management (9,954)	Microsoft PowerPoint (3,402)
Outside Sales (4,439)	Presentations (7,544)	Microsoft Outlook (3,106)
Business Development (4,145)	Self-Motivation (7,197)	Microsoft Word (1,437)
Business To Business (3,998)	Detail Oriented (5,278)	Customer Relationship Management (CRM) Software (1,056)
Account Management (3,918)	Microsoft Excel (5,189)	Spreadsheets (445)
Cold Calling (3,739)	Problem Solving (5,081)	Zoom (Video Conferencing Tool) (416)
Product Knowledge (3,651)	Leadership (4,961)	Google Workspace (409)

Of the 38,895 online job postings for these sales occupations, 3% (1,112) were related to solar sales. Exhibit 10 shows the top job titles for job postings related to solar sales.

Exhibit 10: Top Solar Sales Job Titles (n=1,112)

Job Title	Job Postings	Percentage of Job Postings
Solar Sales Representatives	198	18%
Solar Sales Consultants	129	12%
Solar Consultants	77	7%
Sales Representatives	48	4%
Solar Energy Consultants	47	4%
Outside Sales Representatives	28	3%
Account Managers	23	2%
Outside Solar Sales Representatives	21	2%
Solar Advisors	21	2%
Inside Sales Representatives	16	1%

The top employers for solar sales job postings, by number of job postings, are shown in Exhibit 11.

Exhibit 11: Top Solar Sales Employers by Number of Job Postings (n=1,112)

Employer	Job Postings	Percentage of Job Postings
Sunrun	74	7%
Titanium Solar	33	3%
Better Earth	24	2%
Smart Solar Energy	23	2%
Voltaic Energy	21	2%
Lumio HX	20	2%
Solar Energy Partners	20	2%
Green Home Systems	17	2%
Skyline Smart Energy	17	2%
Neotric Power	15	1%

The top specialized, soft, and computer skills listed by those most frequently mentioned in job postings (denoted in parentheses) are shown for these middle-skill occupations in Exhibit 12.

Exhibit 12: Top Solar Sales Skills by Number of Job Postings (n=1,112)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Solar Sales (540)	Sales (819)	Salesforce (103)
Selling Techniques (201)	Communications (442)	Microsoft Office (47)
Customer Relationship Management (182)	Customer Service (362)	Microsoft Excel (46)
Sales Prospecting (152)	Self-Motivation (247)	Zoom (Video Conferencing Tool) (41)
Solar Consulting (107)	Leadership (161)	Customer Relationship Management (CRM) Software (29)
Salesforce (103)	Mentorship (133)	Microsoft PowerPoint (27)
Outside Sales (102)	Strong Work Ethic (130)	Google Meet (22)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Marketing (100)	Interpersonal Communications (127)	Virtual Learning Environments (21)
Business Development (99)	Management (115)	Microsoft Outlook (14)
Sales Process (98)	Presentations (114)	Spreadsheets (13)

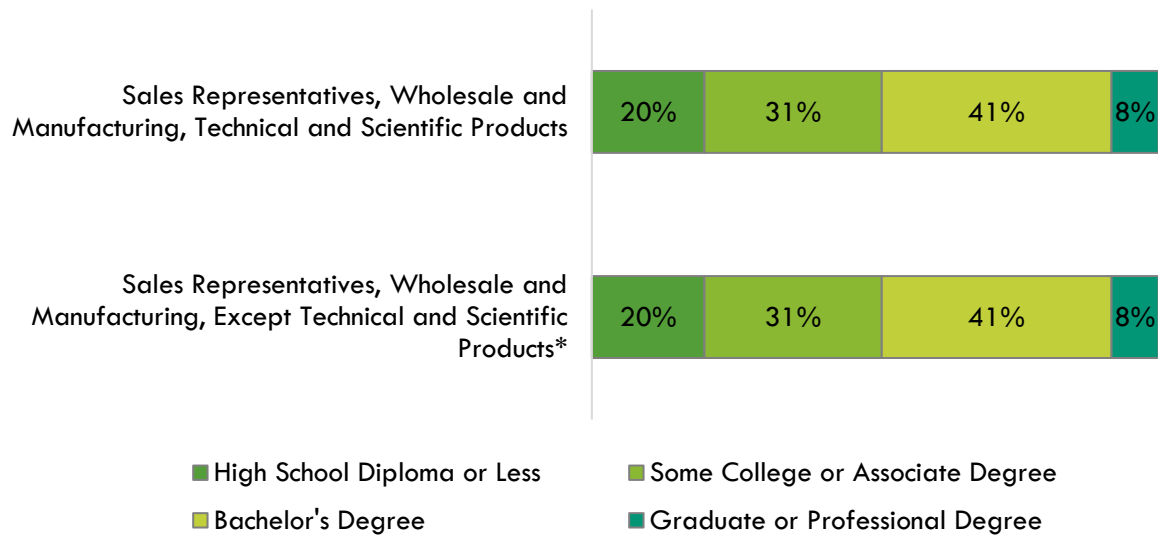
Educational Attainment:

The Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entry-level education for *sales representatives, wholesale and manufacturing, except technical and scientific products*; and a bachelor's degree for *sales representatives, wholesale and manufacturing, technical and scientific products*. The national-level educational attainment data indicates approximately 31% of workers have completed some college or an associate degree as their highest level of education. Notably, the educational attainment data is the exact same for both occupations. Exhibit 13 shows the educational attainment for each occupation, sorted by highest community college educational attainment to lowest.

Of the 53% of the cumulative job postings for these middle-skill sales occupations that listed a minimum education requirement in Los Angeles/Orange County, 60% (12,335) requested a bachelor's, master's, or doctoral degree and 40% (8,104) requested a high school diploma or an associate degree.

Of the 20% of the postings specifically for solar sales positions that listed a minimum education requirement, 53% (118) requested a bachelor's degree and 47% (106) requested a high school diploma or an associate degree.

Exhibit 13: National-level Educational Attainment for Occupations



Educational Supply

Community College Supply:

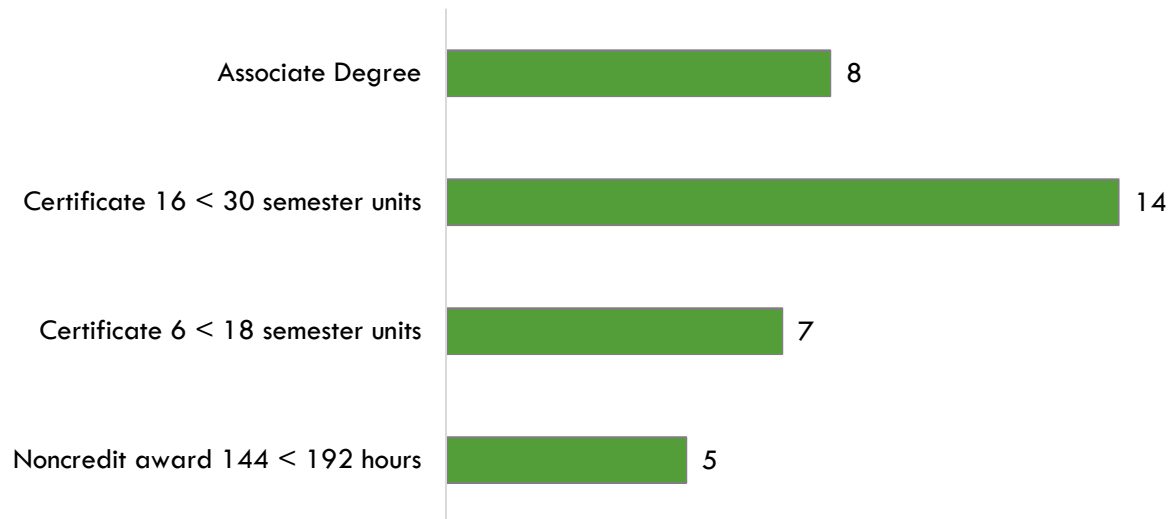
Exhibit 14 shows the three-year average number of awards conferred by community colleges in the related TOP code: Sales and Salesmanship (0509.40). Only three community colleges throughout Los Angeles and Orange counties conferred awards under this TOP code over the past three years. Over the past 12 months, there were no other related program recommendation requests from regional community colleges.

Exhibit 14: Regional Community College Awards (Certificates and Degrees), 2019-2022

TOP Code	Program	College	2019-2020 Awards	2020-2021 Awards	2021-2022 Awards	3-Year Award Average
0509.40	Sales and Salesmanship	Glendale	0	9	5	5
		Santa Monica	19	25	23	22
		LA Subtotal	19	34	28	27
		Orange Coast	5	6	10	7
		OC Subtotal	5	6	10	7
Supply Total/Average			24	40	38	34

Exhibit 15 shows the annual average community college awards by type from 2018-19 through 2020-21. The plurality of the awards are for certificates between 16 and less than 30 semester units, followed by associate degrees.

Exhibit 15: Annual Average Community College Awards by Type, 2018-2021



Community College Student Outcomes:

Exhibit 16 shows the Strong Workforce Program (SWP) metrics for sales and salesmanship programs in Rancho Santiago Community College District (RSCCD), the Orange County Region, and California. Currently, there is only one course under the sales and salesmanship TOP code at RSCCD colleges. Therefore, student outcomes data for RSCCD is not available.

Orange County students that exited sales and salesmanship programs in the 2020-21 academic year had a 46% median change in earnings, which is significantly higher than students throughout the state (25%). A large percentage of Orange County students (100%) sales and salesmanship students reported being employed in their field of study when compared to students throughout the state (70%).

Exhibit 16: Sales and Salesmanship (0509.40) Strong Workforce Program Metrics, 2020-21³

SWP Metric	RSCCD	OC Region	California
SWP Students	N/A	168	1,441
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	N/A	72%	49%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	N/A	Insufficient Data	62%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	N/A	Insufficient Data	48
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2019-20)	N/A	22	94
SWP Students with a Job Closely Related to Their Field of Study (2019-20)	N/A	100%	70%
Median Annual Earnings for SWP Exiting Students	N/A	\$37,266 (\$17.92)	\$32,076 (\$15.42)
Median Change in Earnings for SWP Exiting Students	N/A	46%	25%
SWP Exiting Students Who Attained the Living Wage	N/A	34%	35%

Non-Community College Supply:

For a comprehensive regional supply analysis, it is also important to consider the supply from other institutions in the region that provide training programs for these sales occupations. Due to different data collection periods, the most recent two-year period of available data is from 2019 to 2021. Between 2019 and 2021, there were no related awards conferred by non-community college institutions.

³ All SWP metrics are for 2020-21 unless otherwise noted.

Regional Demographics

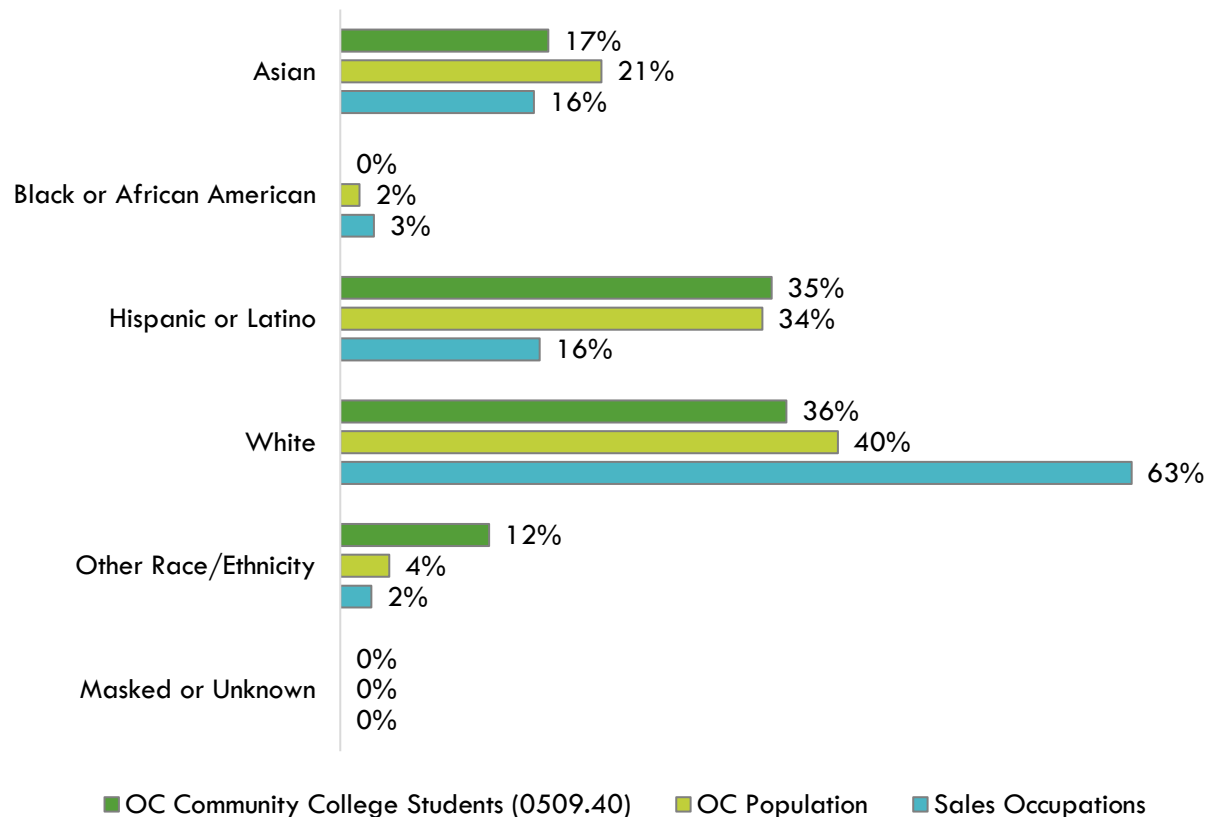
This section analyzes demographic data for Orange County community college students enrolled in sales and salesmanship programs compared to the OC population, as well occupational data, for the purpose of identifying potential diversity and equity issues that can be addressed by community college programs.

Ethnicity:

Exhibit 17 shows the ethnicity of Orange County community college students enrolled in sales and salesmanship programs compared to the overall Orange County population, as well as the two sales occupations included in this report. Notably, 63% of workers employed in these sales occupations are white, which is significantly higher than the population (40%) and community college sales and salesmanship students (36%). Conversely, 35% of community college sales and salesmanship students are Hispanic or Latino, which is similar to the Orange County population (34%) and significantly higher than workers in these sales occupations (16%).

There are no significant differences for each occupation when examining disaggregated data (not shown).

Exhibit 17: Program and County Demographics by Ethnicity



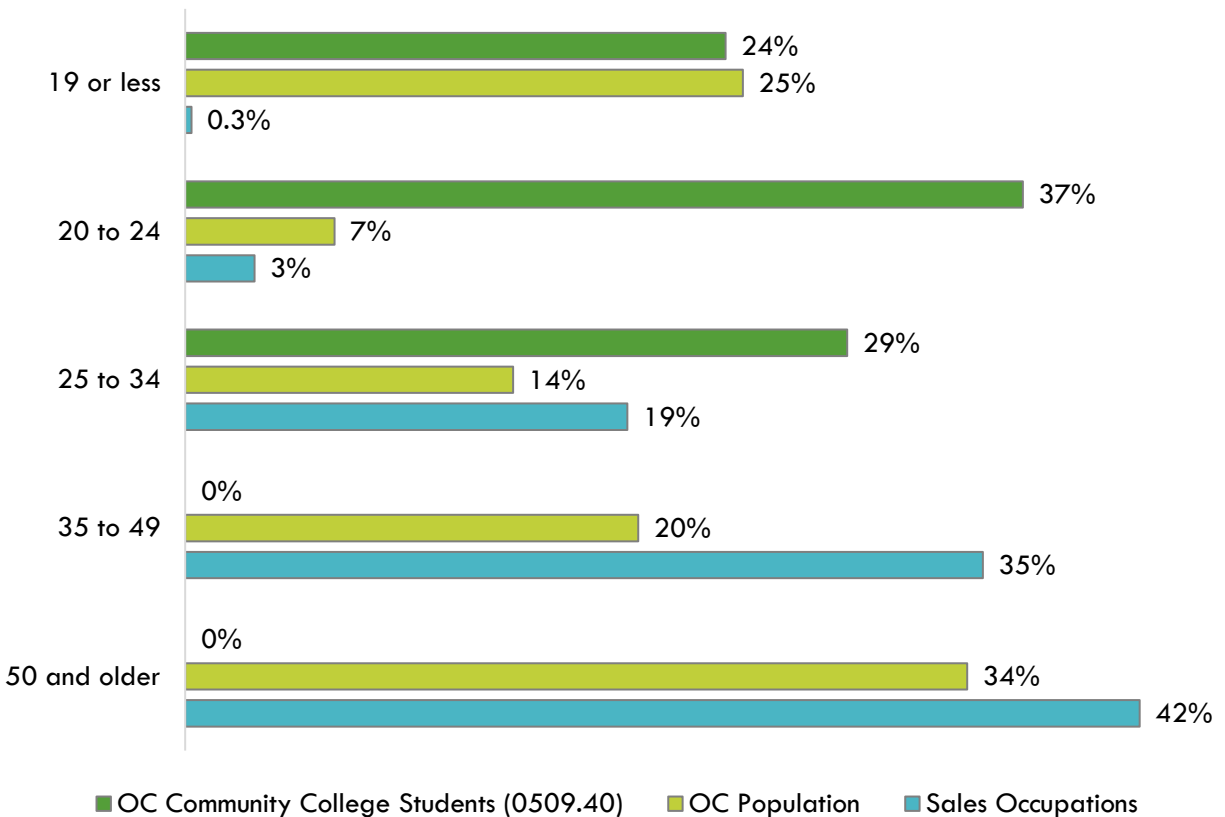
Age:

There are no significant differences for each occupation when examining disaggregated data (not shown).

Exhibit 18 shows the age of Orange County community college students enrolled in sales and salesmanship programs compared to the overall Orange County population, as well as the two sales occupations included in this report. The plurality of workers in these sales occupations are 50 and older (42%), which is higher than the population (34%) and significantly higher than community college sales and salesmanship students (0%). Only 3% of workers in these occupations are 24 or less, which is significantly lower than the population (32%), and community college sales and salesmanship students (61%).

There are no significant differences for each occupation when examining disaggregated data (not shown).

Exhibit 18: Program and County Demographics by Age



Sex:

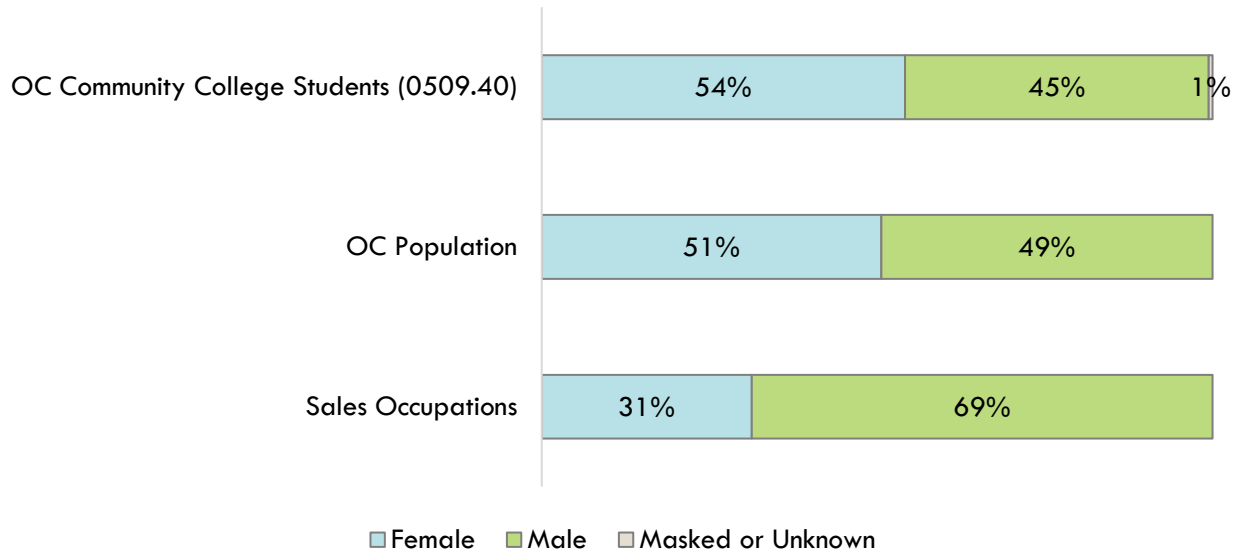
There are no significant differences for each occupation when examining disaggregated data (not shown).

Exhibit 19 shows the sex of Orange County community college students enrolled in sales and salesmanship programs compared to the overall Orange County population as well as these sales occupations.

Though the Orange County population is split nearly evenly between men and women, 69% of workers in these sales occupations and 54% of sales and salesmanship students are men.

There are no significant differences for each occupation when examining disaggregated data (not shown).

Exhibit 19: Program and County Demographics by Sex



Appendix A: Methodology

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

Using a TOP-SOC crosswalk, the OC 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 OC 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.

Data included in this analysis represent the labor market demand for relevant positions most closely related to the proposed program as expressed by the requesting college in consultation with the OC 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. 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.

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.

Appendix B: Data Sources

Data Type	Source
Occupational Projections, Wages, and Job Postings	<p>Traditional labor market information data is sourced from Lightcast, a labor market analytics firm. Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment Statistics and the American Community Survey. For more information, see https://lightcast.io/</p>
Living Wage	<p>The living wage is derived from the Insight Center’s California Family Needs Calculator, which measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, child care, health care, transportation, and taxes. For more information, see: https://insightccd.org/family-needs-calculator/</p> <p>The living wage for one adult in Orange County is \$20.63 per hour (\$42,910.40 annually). This figure is used by the CCCCCO to calculate the percentage of students that attained the regional living wage.</p>
Typical Education and Training Requirements, and Educational Attainment	<p>The Bureau of Labor Statistics (BLS) provides information about education and training requirements for hundreds of occupations. 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. For more information, see https://www.bls.gov/emp/documentation/education/tech.htm</p>
Emerging Occupation Descriptions, Additional Education Requirements, and Employer Preferences	<p>The O*NET database includes information on skills, abilities, knowledges, work activities, and interests associated with occupations. For more information, see https://www.onetonline.org/help/online/</p>
Educational Supply	<p>The CCCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. For more information, see: https://datamart.cccco.edu</p> <p>The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions). For more information, see https://nces.ed.gov/ipeds/use-the-data/survey-components/7/completions</p>
Student Metrics and Demographics	<p>LaunchBoard, a statewide data system supported by the California Community Colleges Chancellor's Office and hosted by Cal-PASS Plus, provides data on progress, success, employment, and earnings outcomes for California community college students. For more information, see: https://www.calpassplus.org/LaunchBoard/Home.aspx</p>

Data Type	Source
Population and Occupation Demographics	<p>The Census Bureau's American Community Survey (ACS) is the premier source for detailed population and housing information. For more information, see: https://www.census.gov/programs-surveys/acs</p> <p>Data is sourced from IPUMS USA, a database providing access to ACS and other Census Bureau data products. For more information, see: https://usa.ipums.org/usa/about.shtml</p>

For more information, please contact the Orange County Center of Excellence:

Jesse Crete, Ed. D., Director
 crete_jesse@rscdd.edu

Jacob Poore, Assistant Director
 poore_jacob@rscdd.edu

November 2023

