



Summary

Program LMI Endorsement	All LMI Criteria Met	Some LMI Criteria Met (Proceed with Caution)	LMI Criteria NOT Met
	✓	<input type="checkbox"/>	<input type="checkbox"/>

Program LMI Endorsement Criteria		
Supply Gap	Yes ✓	No <input type="checkbox"/>
	<i>Comments:</i> There is <i>projected</i> to be 4,369 annual job openings throughout the Inland Empire/Desert region, which is more than the 114 annual average awards conferred by educational institutions over the last 3 years . Supply data includes both community college awards (30) and non-community college awards (84).	
Living Wage	Yes ✓	No <input type="checkbox"/>
	<i>Comments:</i> All (100%) of annual job openings for these seven occupations have entry-level hourly wages above the IE/D living wage of 13.74. ¹	
Education	Yes ✓	No <input type="checkbox"/>
	<i>Comments:</i> Most job postings for target occupations require either an associate degree or high school or equivalent (50%). See exhibits 8 and 9 for more details.	

The Inland Empire/ Desert (IE/D) Center of Excellence for Labor Market Research (IE/D COE) reviewed the following occupations to prepare this report:

- Middle-Skill (typically require training/education above a HS diploma but less than a bachelor’s degree)
 - Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel (41-3091)
 - Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)
- Above Middle-Skill (typically require a bachelor’s degree)
 - Advertising and Promotions Managers (11-2011)
 - Sales Managers (11-2022)
 - Public Relations Managers (11-2032)
 - Buyers and Purchasing Agents (13-1028)
 - Market Research Analysts and Marketing Specialists (13-1161)

Summary of findings

Demand

- The number of jobs related to the middle-skill occupations – Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel (41-3091), Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012) - is projected to increase 9% through 2027, with 2,567 annual job openings (new and replacement jobs).
- Hourly entry-level wages for all occupations are above living wage at the 25th percentile hourly wage ranging from \$22.16 to \$48.16 in IE/D.
- There were 10,618 online job postings from 3,083 employers over the past 12 months with the highest postings for sales representatives.
- Most job postings for target occupations require a bachelor’s degree (49%), followed by high school or equivalent (45%), and associate degree (5%).

Supply

- On average, there were 114 annual awards conferred by educational institutions over the last 3 years in related fields: 30 from community colleges and 84 from other institutions (e.g., 4-year universities, private schools).
- IE/D community college students that exited these programs in the 2021-22 academic year earned a median annual wage of \$30,710 (\$14.76 per hour).
- 71% of students that exited their program in 2021-22 reported that they are working in a job closely related to their field of study.

¹ While the [UW self-sufficiency standard](#) is currently used by the CO and other COEs, the self-sufficiency standard was last updated by UW in 2021, does not account for significant increases in the cost of living in the Inland Empire the last three years, and is below the State of California minimum wage of \$16.00. For these reasons, the COE will provide an alternative living wage calculation from MIT in the analysis below as an additional reference point. MIT estimates, the living wage for an adult with no kids living in 2024 is \$26.30 in Riverside County and \$25.17 in San Bernadino County.

- Community college programs play an important role diversifying the talent pipeline in these occupations. Most IE/D professionals in marketing and sales occupations are Hispanic/Latino or White (83%), “mid career (35 - 54)” (46%), and male (58%). Most community college students in related programs are Hispanic/Latino (57%), “pre-career/college (24<)” (49%), and female (53%).

Introduction

California Community College Marketing and Distribution (TOP 0509.00) programs prepare students for employment using marketing functions and tasks that facilitate the flow of goods and services to customers and/or ultimate consumers (Taxonomy of Programs, 2023). The knowledge, skills, and abilities trained by marketing and distribution programs lead to employment in occupations related to marketing and sales.

Job Demand

In 2022, there were 40,468 jobs in occupations related to marketing and sales in the IE/D region. Regional employment for this occupation group is projected to increase by 10% through 2027 with 4,369 job openings projected annually. Exhibit 1 displays the job count, five-year projected job growth, and job openings in the region.

Exhibit 1. Five-year projections for occupations related to marketing and sales. IE/D Region 2022-2027

Occupation	SOC	2022 Jobs	2027 Jobs	2022 - 2027 % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	14,160	15,262	8%	7,642	1,528
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	41-3091	8,826	9,715	10%	5,196	1,039
Market Research Analysts and Marketing Specialists	13-1161	5,819	6,663	14%	3,639	728
Sales Managers	11-2022	7,438	7,900	6%	3,222	644
Buyers and Purchasing Agents	13-1028	3,811	3,983	5%	1,937	387
Public Relations Managers	11-2032	280	316	13%	136	27
Advertising and Promotions Managers	11-2011	134	151	13%	80	16
Total		40,468	43,990	10%	21,852	4,369

SOURCE: LIGHTCAST 2023.4

Job Postings

The following analysis for occupations related to marketing and sales using online job posting data.

Important note: The data produced in this section were generated by leveraging online job posting data sourced from Lightcast, which is the labor market analytics software tool COEs use to produce these briefs. The job posting data is collected from scraping online job boards such as LinkedIn, Indeed, Glassdoor and many others. The process Lightcast uses to assemble this data does have some limitations due to methods that recruitment professionals sometimes use (e.g., posting one job to fill multiple positions). For example, the number of jobs posted is not necessarily the same as the number of job vacancies.² While not perfect, Lightcast leverages machine learning and other AI technologies to enrich, deduplicate and aggregate this information to make it a meaningful dataset.

Exhibit 2 displays the number of job ads posted for occupations related to marketing and sales over the last 12 months and the median posting duration. Over the previous 12 months, there were 10,618 unique job postings for occupations related to marketing and sales in the region from 3,083 employers.

² "Job Posting Analytics (JPA) Methodology." Lightcast Knowledge Base, <https://kb.lightcast.io/en/articles/6957446-job-posting-analytics-jpa-methodology>

Exhibit 2. Job ads and posting duration, IE/D Region, May 2023 – April 2024

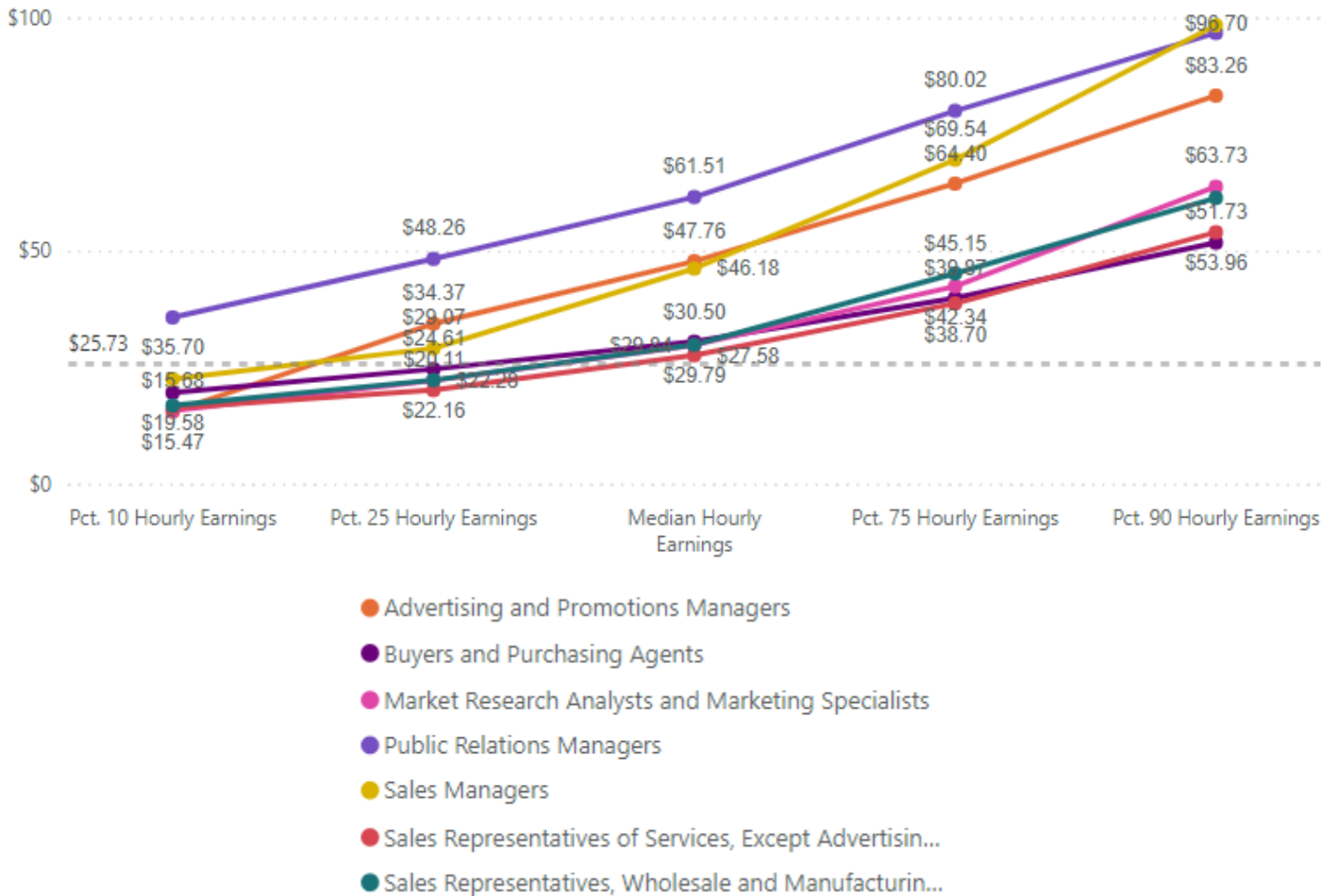
Occupation (SOC)	Unique Postings	Median Days Posted
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	3,376	29
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	2,632	30
Sales Managers	1,728	28
Market Research Analysts and Marketing Specialists	1,381	30
Buyers and Purchasing Agents	994	29
Public Relations Managers	424	27
Advertising and Promotions Managers	83	36
Total	10,618	30

SOURCE: LIGHTCAST 2023.4

Earnings

Exhibit 3 displays the hourly earnings for occupations related to marketing and sales and includes comparison of hourly earnings as compared to the MIT IE/D living wage of \$25.73.³

Exhibit 3. Hourly earnings by percentile for occupations related to marketing and sales, IE/D Region, 2022



SOURCE: LIGHTCAST 2023.4

All entry-level earnings (that is, the earnings of the lowest paid 10% of employees in the IE/D) were above the UW Self-Sufficiency Standard for the IE/D⁴. Three of the seven occupations we also above the MIT living wage for an adult with no children (\$25.73).

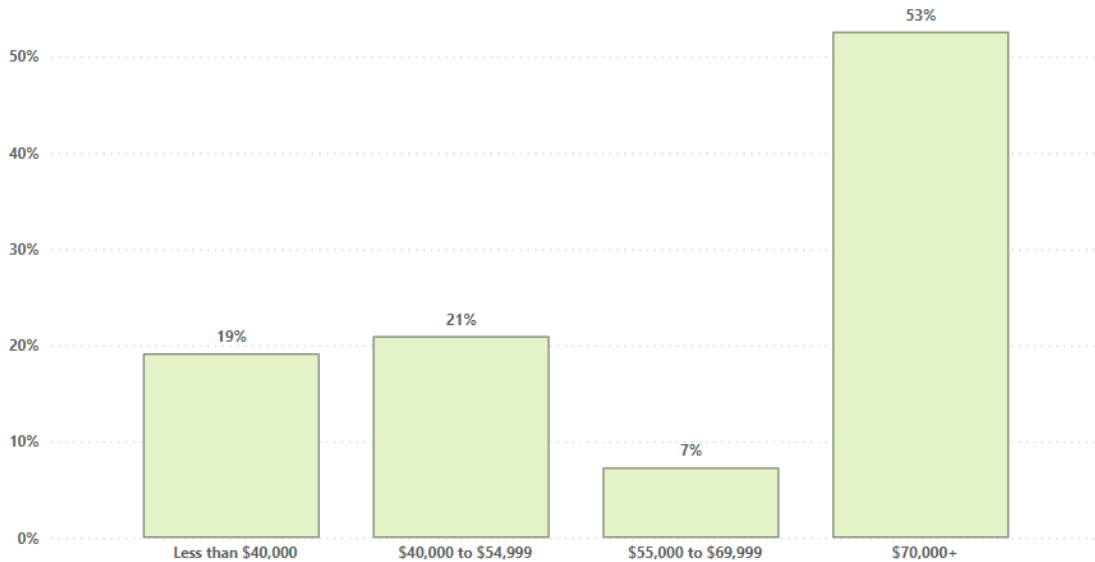
³ While the [UW self-sufficiency standard](#) is currently used by the CO and other COEs, the self-sufficiency standard was last updated by UW in 2021, does not account for significant increases in the cost of living in the Inland Empire the last three years, and is below the State of California minimum wage of \$16.00. While the COE uses this standard for the LMI Wage criteria, For these reasons, the provides an alternative living wage calculation from MIT in the analysis as an additional reference point. MIT estimates, the living wage for an adult with no kids living in 2024 is \$26.30 in Riverside County and \$25.17 in San Bernadino County.

⁴ *ibid*

Advertised Salary from Online Job Ads

Exhibit 4 displays the regional online advertised salaries for the occupations related to marketing and sales over the last 12 months. Online job ad salary information data suggests most employers (53%) advertise an annual salary greater than \$70,000.

Exhibit 4. Online advertised salaries for occupations related to marketing and sales, *IE/D Region, May '23 to April '24*



SOURCE: LIGHTCAST 2023.4

Online Job Advertisements: top job titles, skills, education & work experience.

Exhibit 5 displays the job titles most frequently used in job postings for the occupations related to marketing and sales over the last 12 months. Assessing the top advertised job titles may provide insight into the types of positions sought by employers.

Exhibit 5. Job titles most frequently used in job ads, IE/D May '23 to April '24

Job Title	Unique Postings	Total Postings
Sales Representatives	607	2219
Sales Managers	257	1028
Account Managers	239	1210
Account Executives	169	1114
Buyers	123	803
Retail Sales Representatives	121	497
Lead Sales Associates	116	369
Business Development Managers	110	600
Sales Leads	97	346
Business Development Representatives	96	557
Commercial Sales Managers	78	189

SOURCE: LIGHTCAST 2023.4

Exhibit 6 displays the employers posting the most job ads for this occupational group during the last 12 months. Showing employer names can provide insight into where students may find employment after completing a program and may inform job development and other employer engagement targets for faculty and staff involved in related programs. AutoZone and Dollar General had the highest unique job posts for this occupational group in the last 12 months. Posting intensity is the ratio of total job posts to unique job posts which are deduplicated. A higher posting intensity can represent the level of effort and activity the organization is putting into hiring for that position. The following report comes directly from Lightcast’s Job Posting Analytics dashboard.

Exhibit 6. Employers posting the most job ads, IE/D May '23 to April '24

Company	Total/Unique (May 2023 - Apr 2024)	Posting Intensity	Median Posting Duration
AutoZone	210 / 93	2 : 1	34 days
Dollar General	315 / 83	4 : 1	20 days
Esri	207 / 67	3 : 1	35 days
Spectrum	699 / 63	11 : 1	27 days
MarketSource	157 / 47	3 : 1	29 days
University of California	334 / 44	8 : 1	41 days
US Foods Holding	603 / 41	15 : 1	25 days
Marriott International	110 / 38	3 : 1	24 days
County Of Riverside	121 / 36	3 : 1	29 days
Chico's FAS	135 / 34	4 : 1	53 days

SOURCE: LIGHTCAST 2023.4

Exhibit 7 displays the top common, specialized and computer skills that were included in the job postings over the last 12 months. Today’s demand is an important indicator of which skills employers are looking for in the current market. Analyzing skills from a historical perspective as well as projecting the future needs of employers may provide insight into how the job posting skills demand compares to the market as a whole. Rapidly growing skills are those that are increasing in demand at a faster rate than the market as a whole. ⁵

Exhibit 7. Top 10 in-demand skills from employer job ads, IE/D May '23 to April '24

Common skills	Total Postings	Skill Growth Relative to Market	Specialized skills	Total Postings	Skill Growth Relative to Market
Sales	7602	Stable	Marketing	3068	Rapidly Growing
Communication	4892	Lagging	Selling Techniques	2236	Lagging
Customer Service	4601	Stable	Sales Prospecting	1691	Growing
Management	3233	Stable	Customer Relationship Management	1412	Rapidly Growing
Leadership	1805	Stable	Sales Management	1192	Lagging
Presentations	1691	Rapidly Growing	Merchandising	1118	Growing
Self-Motivation	1613	Rapidly Growing	Business Development	1101	Stable
Interpersonal Communications	1418	Growing	Product Knowledge	906	Growing
Problem Solving	1417	Growing	Business To Business	867	Growing
Writing	1413	Growing	Purchasing	839	Rapidly Growing

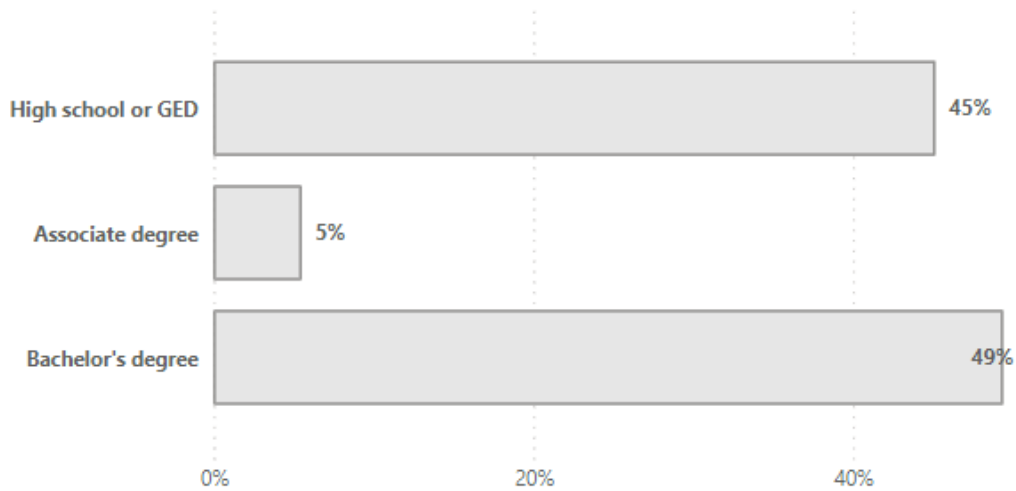
⁵ “What are Lightcast Skill Projects”, Lightcast Knowledge base, <https://kb.lightcast.io/en/articles/8496296-what-are-lightcast-skill-projections>

Computer Skills	Total Postings	Skill Growth Relative to Market
Microsoft Excel	1334	Growing
Microsoft Office	1281	Growing
Microsoft Outlook	778	Rapidly Growing
Microsoft PowerPoint	758	Rapidly Growing
Salesforce	604	Rapidly Growing
Microsoft Word	416	Stable
Customer Relationship Management (CRM) Software	302	Growing
Spreadsheets	235	Rapidly Growing
Zoom (Video Conferencing Tool)	106	Growing
SAP Applications	91	Rapidly Growing

SOURCE: LIGHTCAST 2023.4

Exhibit 8 includes the minimum educational requirements from job postings for this occupational group with bachelor's degree (49%) significantly greater than associate degree (5%) but close to high school diploma or equivalent (45%).

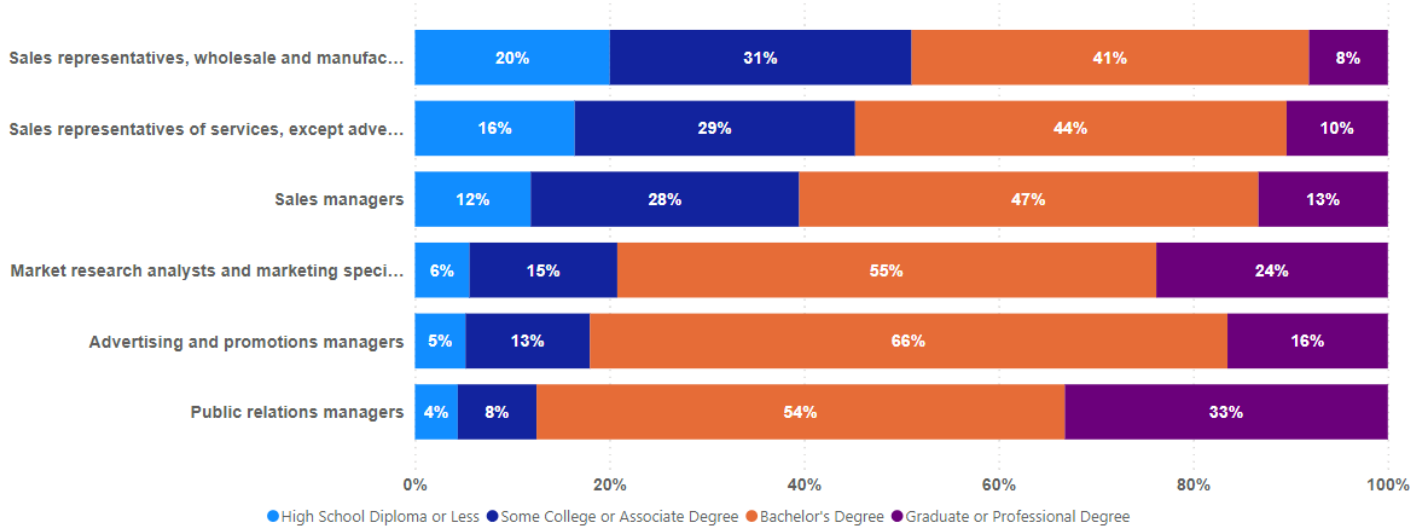
Exhibit 8 Minimum educational requirements in job postings for this occupational group, 2022



SOURCE: LIGHTCAST 2023.4

For the middle-skill occupations, the Bureau of Labor Statistics (BLS) education attainment data in Exhibit 9 for current professionals in the occupations of interest indicates that between 29% and 31% of workers have completed some college or an associate degree as their highest level of education. For the above middle-skill occupations, between 8% and 28% have completed a bachelor's degree.

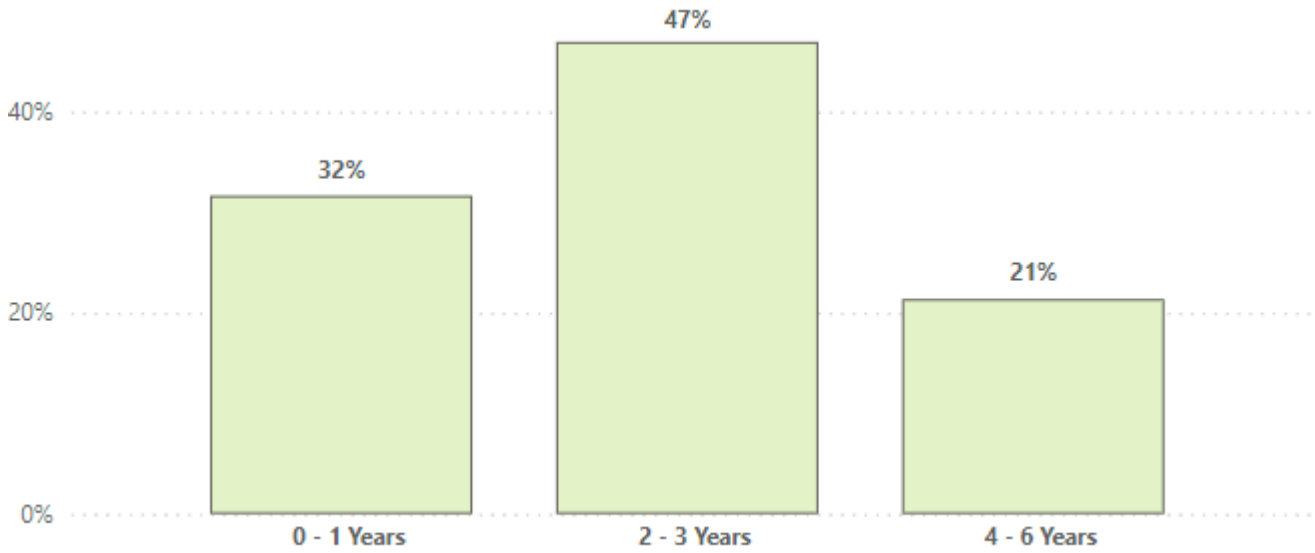
Exhibit 9 National-level Education Attainment for Occupations



SOURCE: BLS 2021

Exhibit 10 displays the work experience typically required from employer job ads for this occupational group. The plurality (47%) of employers listing minimum experience requirements sought candidates with 2 - 3 years of previous work experience.

Exhibit 10 Work experience requirements, IE/D May '23 to April '24



SOURCE: LIGHTCAST 2023.4

Student Completions and Program Outcomes

Exhibit 11 displays student completions for the Marketing and Distribution (TOP 0509.00) programs over the last three academic years (2019-2022). In the previous three academic years, five regional community colleges issued an average of 30 awards in relevant programs.

Exhibit 11 Annual average community college awards for Marketing and Distribution (TOP 0509.00)

Top Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
0509.00	Marketing and Distribution	Chaffey	0	4	9	4
0509.00	Marketing and Distribution	Desert	1	2	2	2
0509.00	Marketing and Distribution	Moreno Valley	7	0	4	4
0509.00	Marketing and Distribution	Riverside	19	15	15	16
0509.40	Sales and Salesmanship	Riverside	0	0	5	2
0509.70	E-Commerce (business emphasis)	Norco College	0	2	5	2
Total			27	23	40	30

SOURCE: MIS DATA MART

Non-Community College Supply

Award completion data is available for Marketing/Marketing Management, General (52.1401) in the IE/D for non-community college programs.

In the previous three academic years, three regional non-community colleges institutions issued an average of 84 awards in relevant programs.

CIP	CIP with Title	College	2019-2020 Awards	2020-2021 Awards	2021-2022 Awards	3-Year Award Average
52.1401	52.1401 - Marketing/Marketing Management, General	California Baptist University	39	58	39	45
52.1401	52.1401 - Marketing/Marketing Management, General	La Sierra University	15	18	25	19
52.1401	52.1401 - Marketing/Marketing Management, General	University of Phoenix-California	28	18	11	19
Total			82	94	75	84

SOURCE: IPEDS

California program outcome data may provide useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP code and region is provided in Exhibit 12.

Exhibit 12 Marketing and Distribution strong workforce program outcomes, IE/D, most recent academic year

Program metric title	Inland Empire/Desert	Statewide
Attained a living wage (completers and skills-builders)	52%	51%
Completed 9+ career education units in one year	43%	42%
Job closely related to the field of study	71%	68%
Median annual earnings (all exiters)	\$30,710	\$39,052
Median change in earnings (all exiters)	0%	0%
Students who attained a noncredit workforce milestone in a year		71%
Students who earned a degree, certificate, or attained apprenticeship	20	426
Unduplicated count of enrolled students	850	14,337

SOURCE: LAUNCHBOARD

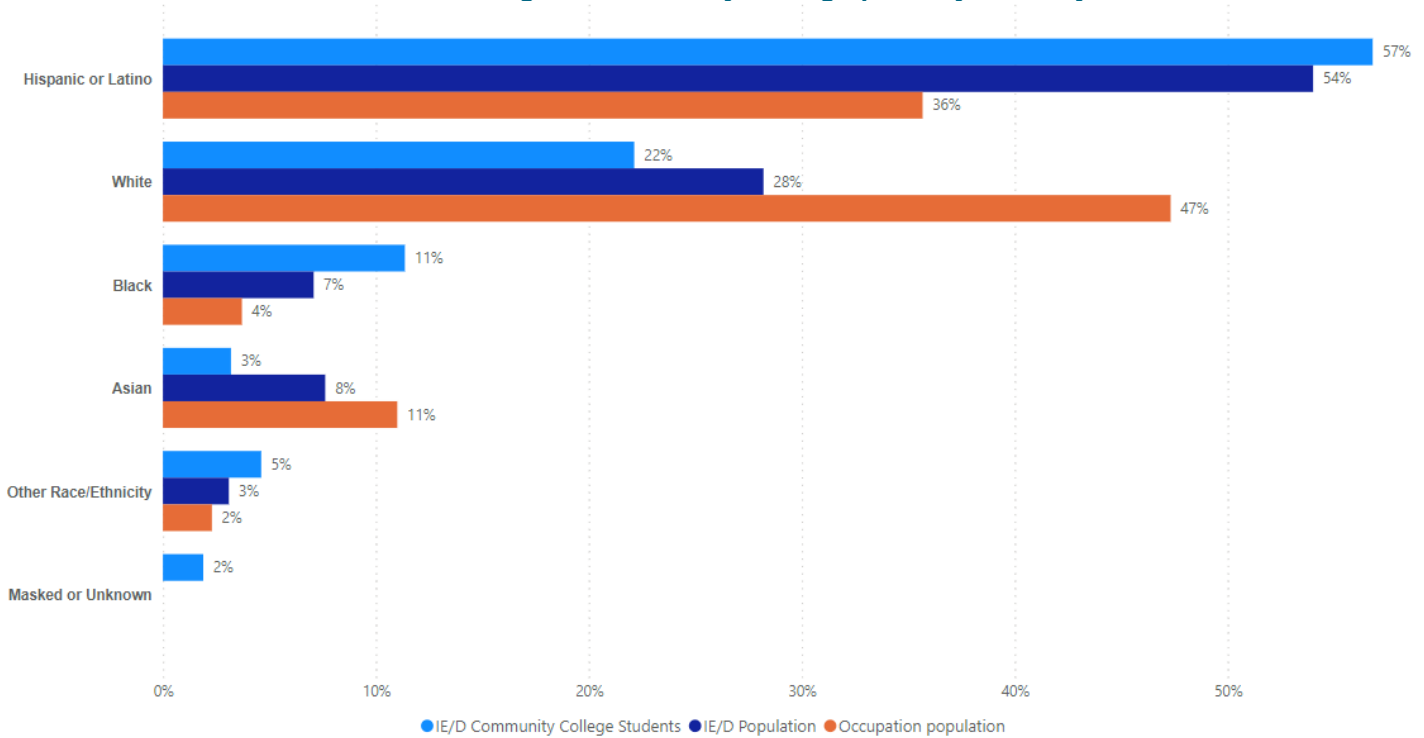
Building an Inclusive Economy

This section examines demographic data for IE/D community college students in Marketing and Distribution programs compared to the IE/D population. We also include demographics for related occupation data for the seven occupations related to marketing and sales. This analysis can be used to:

- Understand the community college system’s current or potential role supporting a diverse talent pipeline into the occupations of interest.
- Inform students (and the faculty and staff working with them) the extent to which individuals from similar demographic groups are over or underrepresented in the professions related to their field of study.
- Inform employers of the diverse talent pipeline coming from the community college system for the occupations analyzed.

Notably, 11% of students enrolled in Marketing and Distribution programs are Black, which is significantly higher than Black workers in occupations related to marketing and sales in the IE/D region (4%). Additionally, 47% of the IE/D population that are employed in occupations related to marketing and sales are White, which is significantly higher than both IE/D community college students (22%) and IE/D population (28%). Though 36% of the workers employed in occupations related to marketing and sales are Hispanic/Latino, 57% of students in Marketing and Distribution programs are Hispanic/Latino and 54% of the IE/D population are Hispanic/Latino.

Exhibit 13 Program and County Demographics by Ethnicity



SOURCE: LIGHTCAST 2023.4 AND LAUNCHBOARD

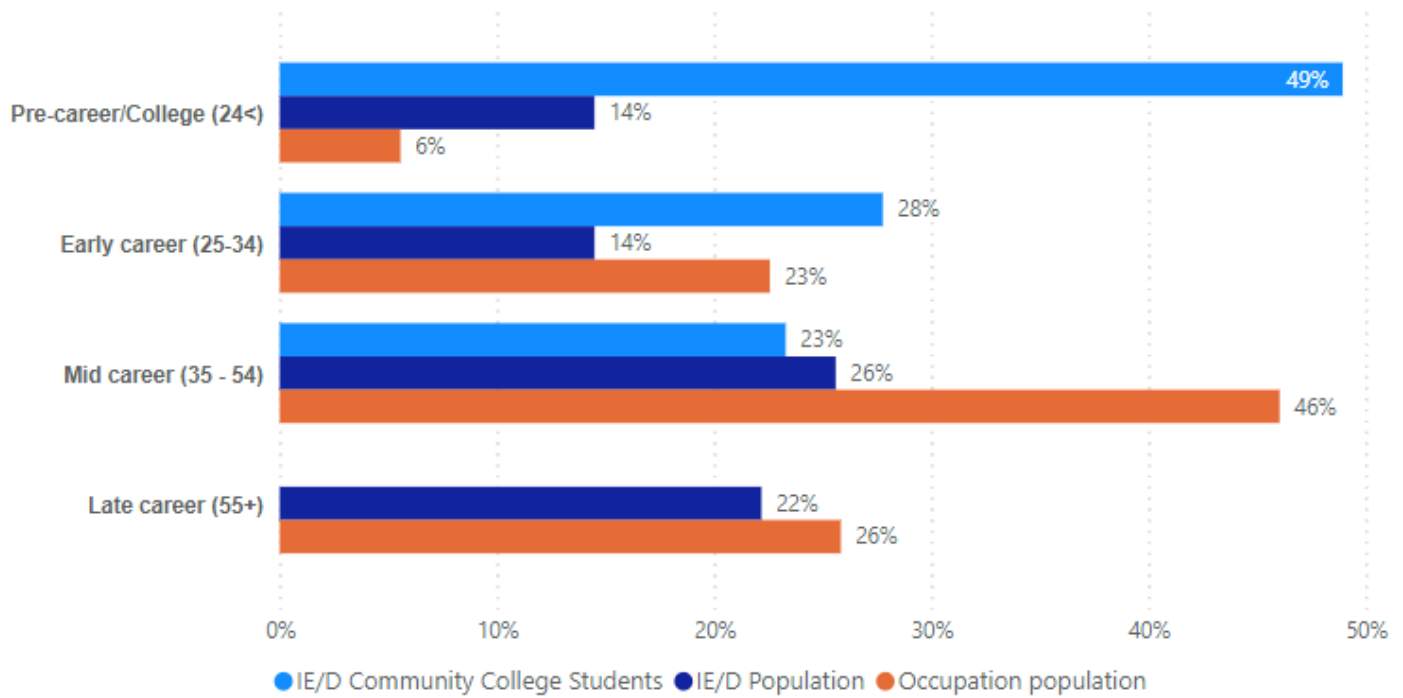
Most IE/D professionals in marketing and sales occupations are Hispanic/Latino or White (83%), “mid career (35 - 54)” (46%), and male (58%). Most community college students in related programs are Hispanic/Latino (57%), “pre-career/college (24<)” (49%), and female (53%). Major takeaways:

- Community colleges are an important talent source for employers committed to greater racial/ethnic diversity, especially Hispanic/Latino professionals.
- College programs may want to consider strategies to engage more women into these programs.

Exhibit 14 compares the age of IE/D community college students enrolled in Marketing and Distribution programs compared to the IE/D population.

Most students enrolled in Marketing and Distribution programs are either in the “pre-career/college” category (49%) or “early career (25 - 34)” category (28%) as compared to IE/D population and workforce in these seven occupations related to marketing and sales. These programs are an important entry point for young marketing and sales professionals.

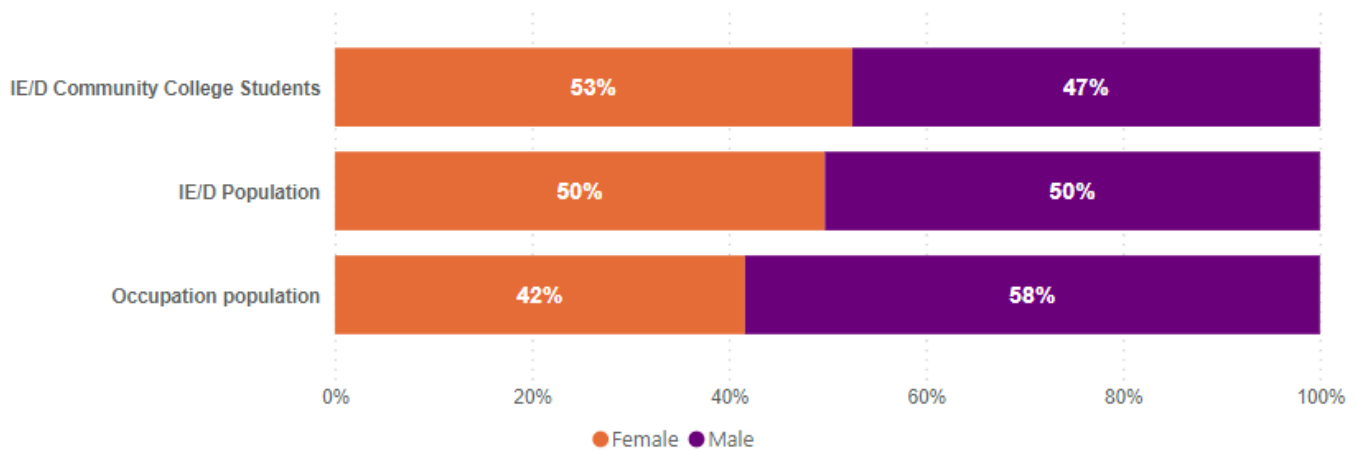
Exhibit 14 Program and County Demographics by Age



SOURCE: LIGHTCAST 2023.4

Exhibit 15 compares the gender of IE/D County community college students enrolled in Marketing and Distribution programs compared to the IE/D population. We also include demographics for related occupation data for the seven occupations related to marketing and sales to identify potential diversity and equity issues addressable by community college programs.

Exhibit 15 Program and County Demographics by Gender



SOURCE: LIGHTCAST 2023.4

Appendix: Methodology

Exhibit 11 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2020 and 2023 from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total during the timeframe, divided by three in this case to calculate an annual average. This is done to minimize the effect of atypical variations that might be present in a single year.

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor's Office Management Information Systems (MIS) by community colleges, which come from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from California's Employment Development Department's Unemployment Insurance database. When available, outcomes for completers are reported to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2023a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS) administered by Santa Rosa Junior College (LaunchBoard, 2023a).

Appendix: References

Type of Data	Source
Occupational Projections, Wages, and Job Postings	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. https://lightcast.io/
Living Wage	The living wage is derived from MITs Living Wage Calculator, which measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, childcare, health care, transportation, and taxes. For more information, see: https://livingwage.mit.edu/pages/methodology The living wage for one adult in San Bernardino County is \$25.17 per hour (\$52,353.60 annually). The living wage for one adult in Riverside County is \$26.30 per hour (\$54,704 annually). The average living wage to represent Inland Empire/Desert is \$25.74 per hour (53,539.20 annually)
Typical Education and Training Requirements, and Educational Attainment	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
Educational Supply	The CCCC Data Mart provides information about students, courses, student services, outcomes and faculty and staff. For more information, see: https://datamart.cccco.edu 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
Student Metrics and Demographics	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