

Marketing and Distribution

Inland Empire/Desert Region (Riverside and San Bernardino counties)

This workforce demand report uses state and federal job projection data developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.

Summary

- Community college marketing and distribution programs provide the knowledge, skills, and abilities that prepare students for employment in four bachelor's degree-level occupations and two community college-level occupations.
- Community college-level occupations are projected to have 1,614 annual job openings through 2025, increasing employment by 4% in the region.
- The median hourly earnings for the community college-level occupations are between \$27.97 and \$28.62 per hour, above the regional \$24.36 per hour self-sustainable wage standard for a single adult with one child.
- Regional community colleges have issued an annual average of 26 awards in marketing and distribution programs over the last three academic years. Other postsecondary education providers in the region issued 48 awards annually over the last three academic years.
- The COE recommends expanding marketing and distribution programs. See the [recommendation section](#) for further detail.

Introduction

California Community College marketing and distribution (TOP 0509.00) programs prepare students for employment through instruction related to marketing functions and tasks that facilitate the flow of goods and services to customers and/or ultimate consumers (Taxonomy of Programs, 2012). The knowledge, skills, and abilities trained by marketing and distribution programs lead to six distinct occupations, collectively referred to as the marketing occupational group in this report. The marketing occupational group is separated into community college-level and bachelor's degree-level occupations to illuminate job opportunities for individuals with varying education levels.

The **community college-level occupations** in this report either require a high school diploma or a bachelor's degree. While buyers and purchasing agents typically require a bachelor's degree, it is considered a community college-level occupation because over one-third of incumbent workers possess a community college-level of educational attainment; "some college, no degree" and an "associate degree." Between 31% and 34% of incumbent workers in these occupations have a community college-level education, some college

or an associate degree, as their highest level of educational attainment. The community college-level occupations included in the marketing occupational group are:

- Buyers and Purchasing Agents (SOC 13-1028)
- Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012)

The **bachelor's degree-level occupations** in this report typically require workers to obtain a bachelor's degree and work experience prior to employment. Between 14% and 29% of workers in these occupations have a community college-level education, some college or an associate degree, as their highest level of educational attainment. The bachelor's degree-level occupations included in the marketing occupational group are:

- Advertising and Promotions Managers (SOC 11-2011)
- Market Research Analysts and Marketing Specialists (13-1161)
- Marketing Managers (11-2021)
- Sales Managers (11-2022)

This report's educational supply and employment demand portions focus solely on the community college-level jobs students are likely to obtain after completing a community college marketing and distribution program in the Inland Empire/Desert Region.

Job Counts and Projections

In 2020, there were 25,948 total marketing jobs in the Inland Empire/Desert Region. Employment for the community college-level marketing occupational group is projected to increase by 4% through 2025; 1,614 job openings are projected annually. Exhibit 1 displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers age 55 years and greater in the region.

Exhibit 1: Five-year projections for the marketing occupational group, 2020-2025

| Occupation | 2020 Jobs | 2025 Jobs | 5-Yr % Change (New Jobs) | 5-Yr Openings (New + Replacement Jobs) | Annual Openings (New + Replacement Jobs) | % of workers age 55+ |
|--|-----------|-----------|--------------------------|--|--|----------------------|
| Sales Managers | 4,701 | 4,893 | 4% | 2,036 | 407 | 20% |
| Market Research Analysts and Marketing Specialists | 4,077 | 4,560 | 12% | 2,393 | 479 | 16% |
| Marketing Managers | 1,189 | 1,285 | 8% | 571 | 114 | 20% |
| Advertising and Promotions Managers | 80 | 87 | 9% | 44 | 9 | 18% |

| Occupation | 2020 Jobs | 2025 Jobs | 5-Yr % Change (New Jobs) | 5-Yr Openings (New + Replacement Jobs) | Annual Openings (New + Replacement Jobs) | % of workers age 55+ |
|--|---------------|---------------|--------------------------|--|--|----------------------|
| Bachelor's Degree-level Total | 10,047 | 10,825 | 8% | 5,044 | 1,009 | 18% |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 12,419 | 13,077 | 5% | 6,448 | 1,290 | 30% |
| Buyers and Purchasing Agents | 3,482 | 3,529 | 1% | 1,622 | 324 | 31% |
| Community College-level Total | 15,901 | 16,606 | 4% | 8,069 | 1,614 | 30% |
| Total | 25,948 | 27,431 | 6% | 13,113 | 2,623 | 25% |

Source: Emsi 2021.3

Exhibit 2 shows the number of job ads posted during the last 12 months and the regional and statewide average time filling each occupation. Over the previous 12 months, there were 14,135 job ads for the marketing occupational group in the region. There were insufficient job advertisements for advertising and promotions managers in the region to provide generalizable job advertisement information. As a result, the job ad search for advertising and promotions managers was expanded to the state level.

On average, regional employers fill online job advertisements for marketing workers in 37 days, four days shorter than the statewide time to fill. Job advertisements indicate that regional employers may face fewer challenges filling open positions than other employers in California.

Exhibit 2: Job ads and time to fill

| Occupation | Job Ads | Regional Average Time to Fill (Days) | Statewide Average Time to Fill (Days) |
|--|---------------|--------------------------------------|---------------------------------------|
| Sales Managers | 2,044 | 38 | 41 |
| Market Research Analysts and Marketing Specialists | 1,341 | 40 | 41 |
| Marketing Managers | 697 | 38 | 44 |
| Advertising and Promotions Managers* | 857 | - | 42 |
| Bachelor's Degree-level Total | 4,939 | 39 | 42 |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 9,280 | 37 | 40 |
| Buyers and Purchasing Agents | 747 | 33 | 36 |
| Community College-level Total | 10,027 | 37 | 40 |

| Occupation | Job Ads | Regional Average Time to Fill (Days) | Statewide Average Time to Fill (Days) |
|--------------|---------------|--------------------------------------|---------------------------------------|
| Total | 14,966 | 37 | 41 |

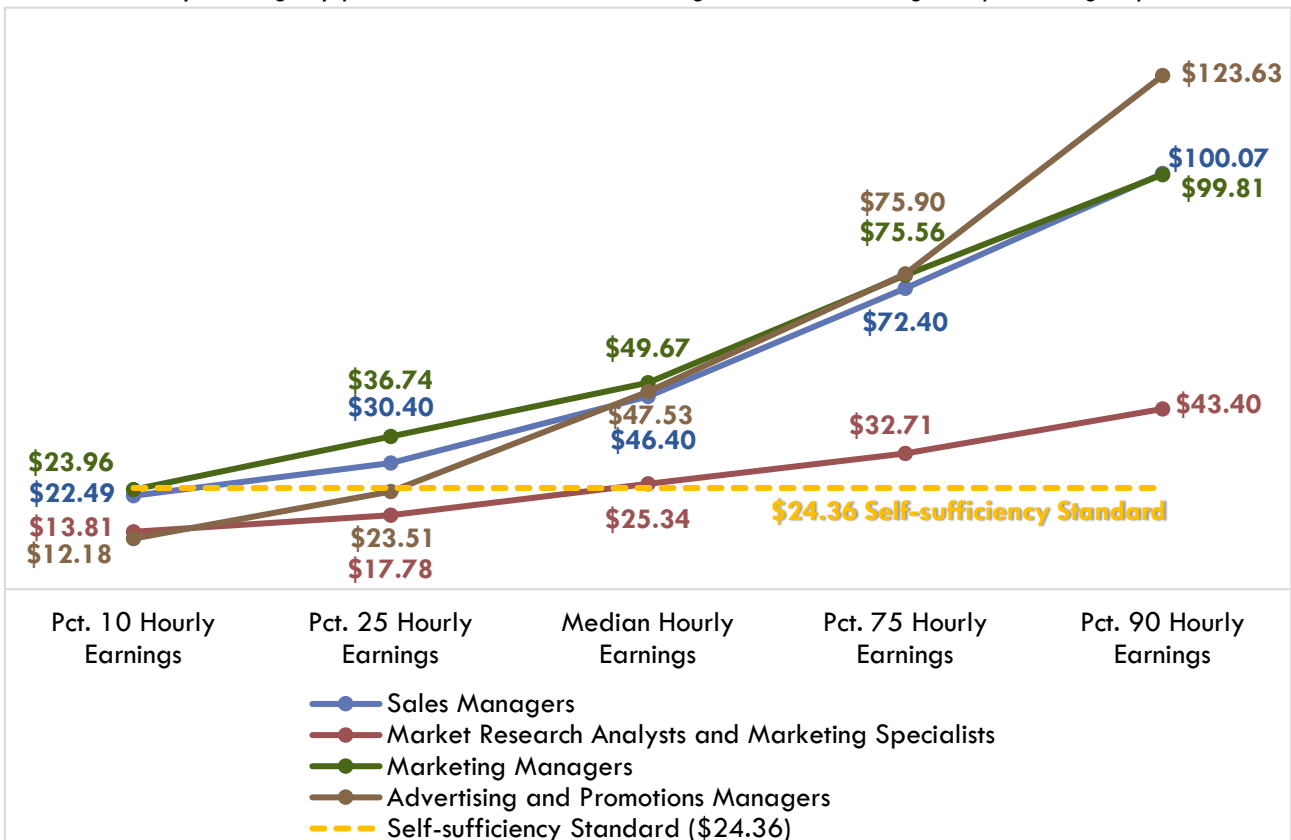
Source: Burning Glass – Labor Insights
 *California job advertisement information

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide self-sustainable income. The University of Washington estimates that a self-sufficient hourly rate for a single adult with one school-age child is \$24.36 per hour or \$51,452 annually in Riverside County; \$23.73 per hour or \$50,119 annually in San Bernardino County (Pearce, 2021). For this study, the higher hourly earnings requirement in Riverside County is adopted as the self-sufficiency standard for the two-county region.

Exhibit 3 displays the hourly earnings for the bachelor's degree-level marketing and distribution occupations. The median hourly earnings for the bachelor's degree-level occupations surpass the regional self-sufficiency standard, indicating that at least the top 50% of workers earn a self-sustainable wage.

Exhibit 3: Hourly earnings by percentile for the bachelor's degree-level marketing occupational group

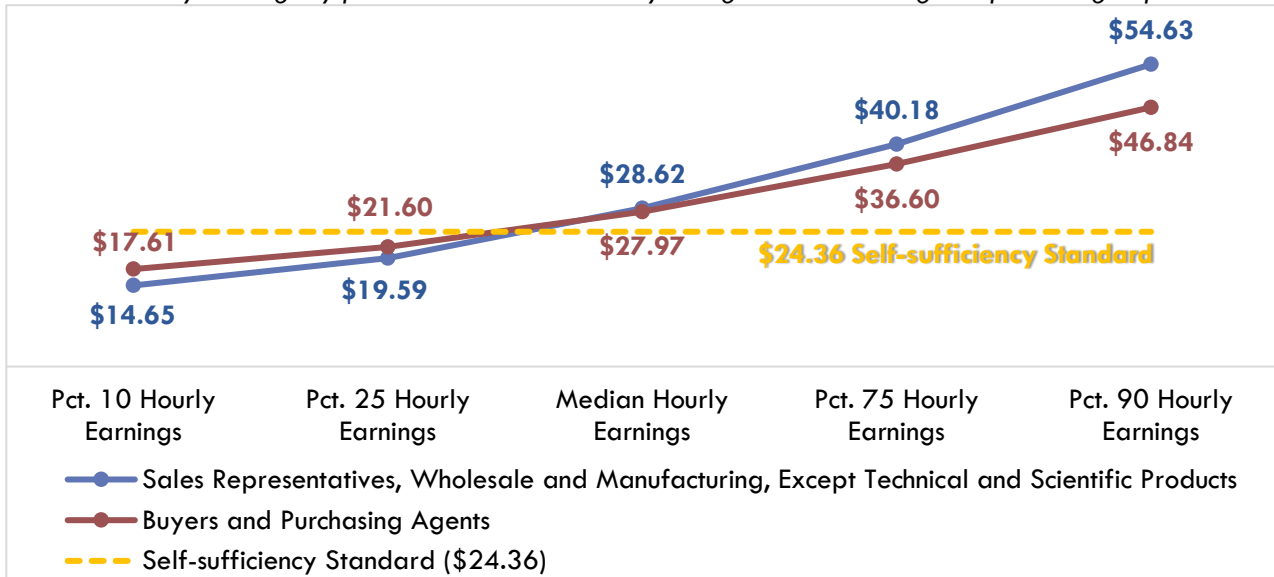


Source: Emsi 2021.3

According to the occupational guides developed by the California Labor Market Information Division, benefits for the bachelor's degree-level occupations typically include health and life insurance, vacation, sick leave, and holidays (Detailed Occupational Guides, 2021).

Exhibit 4 displays the hourly earnings for the community college-level marketing occupational group. The median hourly earnings for these occupations surpass the regional self-sufficiency standard, indicating that at least the top 50% of workers earn a self-sustainable wage.

Exhibit 4: Hourly earnings by percentile for the community college-level marketing occupational group



Source: Emsi 2021.3

Benefits information, typically provided by the California Labor Market Information Division's occupational guides, is not available for buyers and purchasing agents. Benefits for sales representatives typically include medical, dental, vacation, and sick leave (Detailed Occupational Guides, 2021).

Advertised Salary from Online Job Ads

Exhibit 5 displays online job ad salary data for the marketing occupational group over the last 12 months. Online job ad salary information reveals that employers are willing to pay the community college-level marketing occupational group between \$52,000 and \$64,000 annually, above the region's \$51,452 annual (\$24.36 hourly) self-sufficiency standard. Consider the salary information with caution since only 43% (6,480 out of 14,966) of online job ads for these occupations provided salary information. The salary figures are prorated to reflect full-time, annual wage status.

Exhibit 5: Advertised salary information

| Occupations | Number of job ads | Real-Time Salary Information | | | | Average Annual Salary |
|--|-------------------|------------------------------|----------------------|----------------------|--------------------|-----------------------|
| | | Less than \$35,000 | \$35,000 to \$49,999 | \$50,000 to \$74,999 | More than \$75,000 | |
| Bachelor's Degree-level Occupation | | | | | | |
| Sales Managers | 633 | 8% | 15% | 32% | 45% | \$76,000 |
| Market Research Analysts and Marketing Specialists | 783 | 26% | 48% | 20% | 6% | \$45,000 |
| Marketing Managers | 269 | 7% | 20% | 39% | 34% | \$71,000 |
| Advertising and Promotions Managers* | 317 | 5% | 27% | 31% | 37% | \$73,000 |
| Community College-level Occupations | | | | | | |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 4,155 | 16% | 26% | 27% | 31% | \$64,000 |
| Buyers and Purchasing Agents | 323 | 6% | 39% | 34% | 21% | \$52,000 |

Source: Burning Glass – Labor Insights

*California job advertisement information

Employers, Skills, Education, and Work Experience

Exhibit 6 displays the employers that posted the most job ads during the last 12 months. Displaying employer names provides some insight into where students may find employment after completing a program. Charter Communications posted the most job advertisements for the marketing occupational group in the region, primarily seeking sales representatives, wholesale and manufacturing, except technical and scientific products.

Exhibit 6: Employers posting the most job ads for the marketing occupational group

| Occupation | Top Employers |
|--|--|
| Bachelor's Degree-level Occupation | |
| Sales Managers (n=2,044) | <ul style="list-style-type: none"> • Anthem Blue Cross • Carters Incorporated • Wells Fargo |
| Market Research Analysts and Marketing Specialists (n=1,341) | <ul style="list-style-type: none"> • Esri • San Manuel Casino • Virtue Marketing, Inc. |
| Marketing Managers (n=697) | <ul style="list-style-type: none"> • Anthem Blue Cross • San Manuel Casino • Monster Energy |

| Occupation | Top Employers | |
|--|--|---|
| Advertising and Promotions Managers* (n=857) | <ul style="list-style-type: none"> • Deloitte • Disney | <ul style="list-style-type: none"> • Microsoft • Amazon |
| Community College-level Occupations | | |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (n=9,280) | <ul style="list-style-type: none"> • Charter Communications • Premium Retail Services • ServiceMaster | <ul style="list-style-type: none"> • Anthem Blue Cross • Esri |
| Buyers and Purchasing Agents (n=747) | <ul style="list-style-type: none"> • Anthem Blue Cross • Esri • Prime Healthcare Services | <ul style="list-style-type: none"> • Riverside County • San Manuel Casino |

Source: Burning Glass – Labor Insights
 *California job advertisement information

Exhibit 7 lists a sample of specialized and employability skills employers seek when looking for workers to fill positions in the marketing occupational group. Specialized skills are occupation-specific skills that employers request for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job ads may be utilized to guide curriculum development.

Exhibit 7: Sample of in-demand skills from employer job ads

| Occupation | Specialized skills | Employability skills |
|--|--|--|
| Bachelor's Degree-level Occupation | | |
| Sales Managers (n=1,961) | <ul style="list-style-type: none"> • Business Development • Customer Service • Budgeting • Prospective Clients • Scheduling | <ul style="list-style-type: none"> • Communication Skills • Building Effective Relationships • Teamwork/Collaboration • Problem Solving • Organizational Skills |
| Market Research Analysts and Marketing Specialists (n=1,313) | <ul style="list-style-type: none"> • Social Media • Digital Marketing • Scheduling • Customer Service • Market Strategy | <ul style="list-style-type: none"> • Communication Skills • Creativity • Organizational Skills • Teamwork/Collaboration • Detail-Oriented |
| Marketing Managers (n=672) | <ul style="list-style-type: none"> • Budgeting • Social Media • Digital Marketing • Project Management • Market Strategy | <ul style="list-style-type: none"> • Communication Skills • Creativity • Teamwork/Collaboration • Planning • Organizational Skills |

| Occupation | Specialized skills | Employability skills |
|--|---|--|
| Advertising and Promotions Managers* (n=841) | <ul style="list-style-type: none"> Digital Marketing Project Management Social Media Budgeting Advertising Campaigns | <ul style="list-style-type: none"> Creativity Communication Skills Teamwork/Collaboration Detail-Oriented Organizational Skills |
| Community College-level Occupations | | |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (n=8,573) | <ul style="list-style-type: none"> Customer Service Prospective Clients Product Sales Business Development Sales Management | <ul style="list-style-type: none"> Communication Skills Building Effective Relationships Organizational Skills Teamwork/Collaboration Problem Solving |
| Buyers and Purchasing Agents (n=697) | <ul style="list-style-type: none"> Procurement Enterprise Resource Planning (ERP) Scheduling Contract Management Supply Chain Management | <ul style="list-style-type: none"> Communication Skills Organizational Skills Detail-Oriented Planning Teamwork/Collaboration |

Source: Burning Glass – Labor Insights
 *California job advertisement information

Exhibit 8 displays the typical entry-level education, educational attainment, and minimum advertised education requirements for the marketing occupational group. According to the Bureau of Labor Statistics, between 14%-34% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree" and an "associate degree."

Exhibit 8: Typical entry-level education, educational attainment, and minimum advertised education requirements

| Occupation | Typical Entry-Level Education Requirement | CC-Level Educational Attainment* | Number of Job Ads | Real-Time Minimum Advertised Education Requirement | | |
|--|---|----------------------------------|-------------------|--|------------------|-----------------------------|
| | | | | High school or vocational training | Associate degree | Bachelor's degree or higher |
| Bachelor's Degree-level Occupation | | | | | | |
| Sales Managers | Bachelor's degree | 29% | 1,428 | 27% | 3% | 70% |
| Market Research Analysts and Marketing Specialists | Bachelor's degree | 15% | 2,019 | - | 10% | 90% |
| Marketing Managers | Bachelor's degree | 14% | 509 | 9% | 3% | 88% |
| Advertising and Promotions Managers** | Bachelor's degree | 17% | 525 | 8% | 3% | 89% |

| Occupation | Typical Entry-Level Education Requirement | CC-Level Educational Attainment* | Number of Job Ads | Real-Time Minimum Advertised Education Requirement | | |
|--|---|----------------------------------|-------------------|--|------------------|-----------------------------|
| | | | | High school or vocational training | Associate degree | Bachelor's degree or higher |
| Community College-level Occupations | | | | | | |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | High school diploma or equivalent | 31% | 5,037 | 58% | 4% | 38% |
| Buyers and Purchasing Agents | Bachelor's degree | 34% | 557 | 39% | 8% | 53% |

Source: Emsi 2021.3, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

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Exhibit 9 displays the work experience typically required to enter each occupation and the real-time work experience requirements from employer job ads.

Exhibit 9: Work experience required and real-time work experience requirements

| Occupation | Work Experience Typically Required | Real-Time Work Experience | | | |
|--|------------------------------------|---------------------------|-------------|-------------|----------|
| | | Number of job ads | 0 – 2 years | 3 – 5 years | 6+ years |
| Bachelor's Degree-level Occupation | | | | | |
| Sales Managers | Less than 5 years | 1,430 | 35% | 48% | 17% |
| Market Research Analysts and Marketing Specialists | None | 693 | 62% | 35% | 3% |
| Marketing Managers | 5 years or more | 501 | 18% | 49% | 33% |
| Advertising and Promotions Managers* | Less than 5 years | 595 | 32% | 33% | 35% |
| Community College-level Occupations | | | | | |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | None | 4,286 | 68% | 29% | 3% |
| Buyers and Purchasing Agents | None | 530 | 39% | 55% | 6% |

Source: Emsi 2021.3, Burning Glass – Labor Insights

*California job advertisement information

Programs Completions and Student Outcomes

Exhibit 10 displays student completions for marketing and distribution (0509.00) programs over the last three academic years. Over the last three academic years, regional community colleges have issued 26 awards

annually in marketing and distribution programs. Program completion and student outcome methodologies can be found in the appendix.

Exhibit 10: 2017-20, Annual average community college awards for marketing and distribution programs in the region

| TOP 0509.00 – Marketing and Distribution | Associate Degree | Certificate requiring 30 to < 60-semester units | Certificate requiring 6< 18-semester units | Total CC Annual Average Awards, Academic Years 2017-20 |
|--|------------------|---|--|--|
| Moreno Valley | - | 0 | - | 0 |
| Norco | 0 | 0 | - | 1 |
| Riverside | 11 | 12 | 3 | 25 |
| Total | 11 | 13 | 3 | 26 |

Source: MIS Data Mart

California program outcome data may provide a 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 11. Among the students exiting marketing and distribution programs in the region, 77% of students reported working in their field of study, the median annual earnings were \$29,034, and 53% attained a living wage. The outcome methodology is available in the appendix section of this report.

Exhibit 11: 0509.00 – Marketing and distribution strong workforce program outcomes

| Strong Workforce Program Metrics: 0509.00 – Marketing and Distribution Academic Year 2018-19, unless noted otherwise | Inland Empire/Desert Region | California |
|--|-----------------------------|------------|
| Unduplicated count of enrolled students (2019-20) | 1,012 | 16,741 |
| Completed 9+ career education units in one year (2019-20) | 40% | 37% |
| Perkins Economically disadvantaged students | 74% | 89% |
| Students who attained a noncredit workforce milestone in a year (2019-20) | - | 90% |
| Students who earned a degree, certificate, or attained apprenticeship (2019-20) | 15 | 365 |
| Transferred to a four-year institution (transfers) | 56 | 1,045 |
| Job closely related to the field of study (2017-18) | 77% | 73% |
| Median annual earnings (all exiters) | \$29,034 | \$33,948 |
| Median change in earnings (all exiters) | 17% | 17% |
| Attained a living wage (completers and skills-builders) | 53% | 47% |

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 12 displays awards that other postsecondary education providers reported in marketing/marketing management, general (CIP 52.1401) programs. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available. On average, three other postsecondary education institutions in the region have issued 48 awards annually over the last three academic years.

Exhibit 12: Other educational provider marketing/marketing management, general programs, three-year annual average credentials in the region

| 52.1401 – Marketing/Marketing Management, General | Master's Degree | Bachelor's Degree | Award <1 Academic Year | Other Educational Providers Annual Average Credentials, Academic Years 2016-19 |
|---|-----------------|-------------------|------------------------|--|
| California Baptist University | - | 32 | - | 32 |
| La Sierra University | 6 | 10 | - | 16 |
| University of Redlands | - | - | 1 | 1 |
| Total | 6 | 42 | 1 | 48 |

Source: IPEDS

Recommendation

Community college marketing and distribution programs provide the knowledge, skills, and abilities that prepare students for employment in four bachelor's degree-level occupations and two community college-level occupations. This report's educational supply and employment demand portions focus solely on the community college-level jobs students are likely to obtain after completing a community college marketing and distribution program in the Inland Empire/Desert Region.

The community college-level marketing occupational group is expected to have 1,614 annual job openings and increase employment by 4% over the next five years in the region. The median hourly earnings for the community college-level marketing occupational group are between \$27.97 and \$28.62 per hour, above the \$24.36 per hour self-sustainable wage standard.

Regional community college marketing and distribution (0509.00) programs have issued 26 awards annually over the last three academic years. Other postsecondary education providers have issued 48 awards annually in marketing-related programs over the previous three academic years. Among the students exiting marketing and distribution programs in the region, 77% of students reported working in their field of study, the median annual earnings were \$29,034, and 53% attained a living wage.

The Centers of Excellence recommends expanding marketing and distribution programs to meet regional demand for marketing workers. Colleges considering this program should partner with applicable employers

to document their demand for marketing workers and the skills needed for students to earn self-sustainable earnings after exiting the program.

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Appendix: Occupation definitions, sample job titles, five-year projections, and earnings for marketing occupations

Occupation Definitions (SOC code), Education and Training Requirement, Community College Education Attainment

Bachelor's Degree-level

Advertising and Promotions Managers (11-2011)

Plan, direct, or coordinate advertising policies and programs or produce collateral materials, such as posters, contests, coupons, or giveaways, to create extra interest in the purchase of a product or service for a department, an entire organization, or on an account basis.

Sample job titles: Account Executive, Advertising Manager (Ad Manager), Advertising Sales Manager (Ad Sales Manager), Classified Advertising Manager (Classified Ad Manager), Communications Director, Communications Manager, Creative Services Director, Marketing and Promotions Manager, Promotions Director, Promotions Manager

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Work Experience: Less than 5 years

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 17%

Marketing Managers (11-2021)

Plan, direct, or coordinate marketing policies and programs, such as determining the demand for products and services offered by a firm and its competitors, and identify potential customers. Develop pricing strategies with the goal of maximizing the firm's profits or share of the market while ensuring the firm's customers are satisfied. Oversee product development or monitor trends that indicate the need for new products and services.

Sample job titles: Account Supervisor, Brand Manager, Business Development Director, Business Development Manager, Commercial Lines Manager, Market Development Executive, Marketing Coordinator, Marketing Director, Marketing Manager, Product Manager

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Work Experience: 5 years or more

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 14%

Sales Managers (11-2022)

Plan, direct, or coordinate the actual distribution or movement of a product or service to the customer.

Coordinate sales distribution by establishing sales territories, quotas, and goals and establish training programs for sales representatives. Analyze sales statistics gathered by staff to determine sales potential and inventory requirements and monitor the preferences of customers.

Sample job titles: District Sales Manager, National Sales Manager, Regional Sales Manager, Sales and Marketing Vice President (Sales and Marketing VP), Sales Director, Sales Manager, Sales Supervisor, Sales Vice President (Sales VP), Store Manager

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Work Experience: Less than 5 years

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 29%

Market Research Analysts and Marketing Specialists (13-1161)

Research conditions in local, regional, national, or online markets. Gather information to determine potential sales of a product or service, or plan a marketing or advertising campaign. May gather information on competitors, prices, sales, and methods of marketing and distribution. May employ search marketing tactics, analyze web metrics, and develop recommendations to increase search engine ranking and visibility to target markets.

Sample job titles: Business Development Specialist, Communications Specialist, Demographic Analyst, Market Analyst, Market Research Analyst, Market Research Consultant, Market Research Specialist, Market Researcher

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 15%

Community College-level

Buyers and Purchasing Agents (13-1028)

Purchase farm products either for further processing or resale. Includes tree farm contractors, grain brokers and market operators, grain buyers, and tobacco buyers. Buy merchandise or commodities, other than farm products, for resale to consumers at the wholesale or retail level, including both durable and nondurable goods. Analyze past buying trends, sales records, price, and quality of merchandise to determine value and yield. Select, order, and authorize payment for merchandise according to contractual agreements. May conduct meetings with sales personnel and introduce new products. Includes assistant wholesale and retail buyers of nonfarm products. Purchase machinery, equipment, tools, parts, supplies, or services necessary for the operation of an establishment. Purchase raw or semifinished materials for manufacturing. May negotiate contracts.

Sample job titles: Buyer, Grocery Buyer, Procurement Specialist, Purchaser, Purchasing Coordinator, Retail Buyer, Trader, Procurement Official, Purchasing Administrator, Purchasing Agent, Grain Buyer, Grain Merchandiser, Grain Origination Specialist, Purchasing Agent, Tobacco Buyer

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: Between one and twelve months of on-the-job training

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 34%

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

Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.

Sample job titles: Account Representative, Customer Account Technician, Inside Salesperson, Outside Sales Representative, Route Sales Representative, Sales Consultant, Sales Professional, Sales Representative (Sales Rep), Salesman, Salesperson

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Between one and twelve months of on-the-job training

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 31%

Appendix: Methodology

Exhibit 10 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2017 and 2020 from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total of associate degrees and certificates issued 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 records. 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, 2021 a). 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, 2021 a).

Job postings data is limited to the information provided by employers and the ability of artificial intelligence search engines to identify this information. Additionally, preliminary calculations by Georgetown Center on Education and the Workforce found that "just 30 to 40 percent of openings for candidates with some college or an associate degree, and only 40 to 60 percent of openings for high school diploma holders appear online" (Carnevale et al., 2014). Online job postings often do not reveal employers' hiring intentions; it is unknown if employers plan to hire one or multiple workers from a single online job posting or collecting resumes for future hiring needs. A closed job posting may not be the result of a hired worker.

Table 1. 2020 to 2025 job growth, wages, entry-level education, training, and work experience required for the marketing occupational group in the Inland Empire/Desert Region (Riverside and San Bernardino Counties combined)

| Occupation (SOC) | 2020 Jobs | 5-Year Change (New Jobs) | 5-Year % Change (New Jobs) | Annual Openings (New + Replacement Jobs) | Entry-Experienced Hourly Wage (10 th to 90 th percentile) | Median Hourly Wage (50 th percentile) | Average Annual Earnings | Entry-Level Education & On-The-Job-Training | Work Experience Required |
|--|---------------|--------------------------|----------------------------|--|---|--|-------------------------|---|--------------------------|
| Sales Managers (11-2022) | 4,701 | 192 | 4% | 407 | \$22.49 to \$100.07 | \$46.40 | \$118,500 | Bachelor's degree & None | Less than 5 years |
| Market Research Analysts and Marketing Specialists (13-1161) | 4,077 | 483 | 12% | 479 | \$13.81 to \$43.40 | \$25.34 | \$59,500 | Bachelor's degree & None | None |
| Marketing Managers (11-2021) | 1,189 | 96 | 8% | 114 | \$23.96 to \$99.81 | \$49.67 | \$120,400 | Bachelor's degree & None | 5 years or more |
| Advertising and Promotions Managers (11-2011) | 80 | 7 | 9% | 9 | \$12.18 to \$123.63 | \$47.53 | \$124,100 | Bachelor's degree & None | Less than 5 years |
| Bachelor's Degree-level Total | 10,047 | 778 | 8% | 1,009 | - | - | - | - | - |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (41-4012) | 12,419 | 659 | 5% | 1,290 | \$14.65 to \$54.63 | \$28.62 | \$71,200 | High school diploma or equivalent & 1-12 months | None |
| Buyers and Purchasing Agents (13-1028) | 3,482 | 47 | 1% | 324 | \$17.61 to \$46.84 | \$27.97 | \$62,700 | Bachelor's degree & 1-12 months | None |
| Community College-level Total | 15,901 | 705 | 4% | 1,614 | - | - | - | - | - |
| Total | 25,948 | 1,483 | 6% | 2,623 | - | - | - | - | - |

Source: Emsi 2021.3