

Business Management

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

This workforce demand report uses state and federal job projection data that was 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

- The knowledge, skills, and abilities provided by the community college business management
 programs lead to three distinct occupations, collectively referred to as the business management
 occupational group.
- Employment for the business management occupational group is expected to increase by 10% between 2019 and 2024. A total of 2,564 annual job openings will be available each year over the five-year timeframe.
- The entry-level, 25th percentile, hourly wages for the occupations in this group are between \$32.07 and \$34.86 per hour, exceeding the \$19.94 per hour self-sustainable hourly wage estimate for a single adult with one child in the region.
- There were 162 awards issued from regional community college business management programs over the last three academic years. There were 1,738 awards issued annually from private educational institutions in the region that offer related training programs in the previous three academic years.
- The Centers of Excellence **recommends** expanding business management programs. See the recommendation section for further details.

Introduction

This report provides data on programs and occupations related to business management. The California Community College business management program prepares students for employment through the instruction of the planning, organizing, directing, and controlling business operations. These programs include various theories, tools, and practical applications used to maintain business sustainability through the management of capital, financial, and human resources (Taxonomy of Programs, 2012). The knowledge, skills, and abilities trained by business management programs leads to the following occupations. These three occupations are collectively referred to as the business management occupational group in this report:

General and Operations Managers (SOC 11-1021)



- Administrative Services and Facilities Managers (11-3011)
- Industrial Production Managers (11-3051)

While the occupations included in the *business management* occupational group typically require a Bachelor's degree, nationwide data indicates that between 30% to 37% of these workers reported a community college-level education as their highest level of educational achievement; some college, a postsecondary nondegree award, or an associate degree.

Job Opportunities

In 2019, there were 23,554 jobs in the business management occupational group in the Inland Empire/Desert region (IEDR). This occupational group is projected to increase employment by 10% through 2024. Employers are expected to have 12,821 job openings over the next five years to fill new jobs and backfill jobs that workers are permanently vacating (includes occupational transfers and retirements). Exhibit 1 displays five-year projected job growth, and Exhibit 2 displays historical (2014 to 2019) and projected (2019-2024) jobs for the business management occupational group.

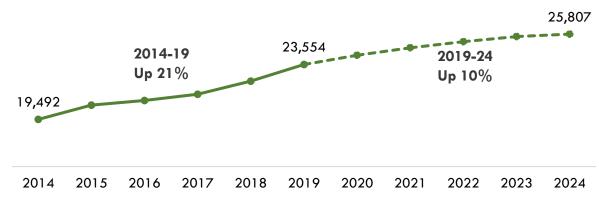
Exhibit 1: Five-year projections for each occupation in the business management occupational group

| Occupation | 2019 Jobs | 2024 Jobs | 5-Yr % Change (New Jobs) | 5-Yr Openings (New + Replacement Jobs) | Annual Openings (New + Replacement Jobs) | % of workers age 55+ |
|---|--------------|--------------|-----------------------------------|--|--|----------------------------|
| General and Operations Managers | 19,198 | 21,160 | 10% | 10,742 | 2,148 | 24% |
| Administrative Services and Facilities Managers | 2,687 | 2,921 | 9% | 1,397 | 279 | 33% |
| Industrial Production Managers | 1,669 | 1,726 | 3% | 682 | 136 | 30% |
| Total | 23,554 | 25,807 | 10% | 12,821 | 2,564 | 25% |

Source: EMSI 2020.3



Exhibit 2: Historical and projected jobs for the business management occupational group, 2014 – 2024



Source: EMSI 2020.3

Job Postings

Exhibit 3 displays the number of job ads posted during the last 12 months, along with the regional and statewide average time to fill for the business management occupational group. On average, local employers fill online job postings for the business management occupational group within 36 days. This regional average is three days shorter than the statewide average of 39 days, indicating that local employers may face fewer challenges filling open positions than other employers in California as a whole.

Exhibit 3: Job ads and time to fill, Sep 2019 - Aug 2020

| Occupation | Job Ads | Regional Average Time to Fill (Days) | California Average Time to Fill (Days) |
|---|---------|---|---|
| General and Operations Managers | 3,199 | 37 | 40 |
| Industrial Production Managers | 888 | 39 | 43 |
| Administrative Services and Facilities Managers | 618 | 25 | 28 |
| Total | 4,705 | 36 | 39 |

Source: Burning Glass - Labor Insights

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide a self-sustainable level of income. The Brookings Institute, Advancing Opportunity in California's Inland Empire report found that a "good job" wage in the region is above the \$18.00 per hour, or \$37,440 per year (Shearer, Shah & Gootman, p. 25). The Family Needs Calculator estimates that a self-sustainable wage for a single adult with one school-age child is \$19.94 per hour (Pearce & Manzer, 2018).



The business management occupational group's entry-level wages exceed the Family Needs Calculator self-sustainability rate and the Brookings Institute's "good job" wage. Exhibit 4 displays the hourly earnings for each occupation in the IEDR.

\$48.16 \$47.03 \$46.61 \$34.86 \$34.23 \$32.07 Family \$18.00 General and Operations Administrative Services Industrial Production and Facilities Managers Managers Managers Entry-Level (25th percentile) Median-Level (50th percentile) --- Family Needs Wage (\$19.94/hour) --- Good Job Wage (\$18.00/hour)

Exhibit 4: Hourly earnings for the business management occupational group

Source: EMSI 2020.3

According to occupational guides developed by the California Labor Market Information Division, the business management occupational group's benefits typically include medical, dental, and vacation benefits (Detailed Occupational Guides, 2020).

Employers, Skills, Education, and Work Experience

Exhibit 5 displays the employers posting the most job ads for the business management occupational group during the last 12 months in the IEDR.

Exhibit 5: Employers posting the most job ads for business management occupations, Sep 2019 – Aug 2020

| Occupation | Employers | |
|---|---|---|
| General and Operations Managers (n=2,818) | XPO LogisticsAmazonFedEx | DHL ExpressCVS Health |
| 11 (= (0() | Niagara Bottling, LLCMasTec, Inc. | Dover CorporationClark Pacific |
| Administrative Services and | University of California, Riverside LeBeau and Associates, Inc. California State University, San Bernardino | Riverside CountyStarbucks Coffee Company |

Source: Burning Glass – Labor Insights



Exhibit 6 displays a sample of specialized and employability skills that employers seek when looking for workers to fill positions in the *business management occupational group*. Specialized skills are occupation-specific skills that employers are requesting 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 postings may be utilized as a helpful guide for curriculum development.

Exhibit 6: Sample of in-demand skills from employer job ads, Sep 2019 – Aug 2020

| Occupation | Specialized Skills | Employability Skills |
|---|---|---|
| General and Operations Managers (n=2,975) | BudgetingSchedulingStaff ManagementSupervisory Skills | Communication Skills Planning Problem Solving Microsoft Office |
| Industrial Production Managers (n=851) | Quality ManagementProduction ManagementBudgetingScheduling | Communication SkillsProblem SolvingPlanningMicrosoft Office |
| Administrative Services and Facilities Managers (n=583) | BudgetingSchedulingStaff ManagementAccounting | Communication SkillsPlanningOrganizational SkillsProblem Solving |

Source: Burning Glass - Labor Insights

Exhibit 7 displays the entry-level education typically required to enter each occupation according to the Bureau of Labor Statistics (BLS), educational attainment for incumbent workers with "some college, no degree" and an "associate degree" according to the U.S. Census (2016-17) and the real-time minimum advertised education requirement from employer job ads. Job posting data indicates that some employers are willing to hire business management workers with less than a Bachelor's degree.

Exhibit 7: Typical entry-level education, educational attainment, and minimum advertised education requirements for the business management occupational group, Sep 2019 – Aug 2020

| | Typical Entry- | CC-Level | Real-Time Minimum Advertised Education Requirement | | | | | |
|---------------------------------------|-----------------------------|----------------------------|--|---|---------------------|-----------------------------------|--|--|
| Occupation | Level Education Requirement | Educational Attainment* | Number of Job Ads | High school diploma or vocational training | Associate degree | Bachelor's degree or higher | | |
| General and Operations Managers | Bachelor's degree | 35% | 2,321 | 34% | 5% | 61% | | |
| Industrial Production Managers | Bachelor's degree | 30% | 676 | 15% | 6% | 79% | | |



| Occupation | Typical Entry- | CC-Level | Real-Time Minimum Advertised Education Requirement | | | | |
|---|-----------------------------|----------------------------|--|---|---------------------|-----------------------------------|--|
| | Level Education Requirement | Educational Attainment* | Number of Job Ads | High school diploma or vocational training | Associate degree | Bachelor's degree or higher | |
| Administrative Services and Facilities Managers | Bachelor's degree | 37% | 437 | 38% | 7% | 55% | |

Source: EMSI 2020.3, Burning Glass - Labor Insights

Exhibit 8 displays the work experience typically required to enter each occupation and the real-time work experience requirements from employer job ads.

Exhibit 8: Work experience required and real-time work experience requirements, Sep 2019 - Aug 2020

| | Work Experience | Real-Time Work Experience | | | | |
|---|-----------------------|---------------------------|----------------|----------------|-------------|--|
| Occupation | Typically Required | Number of Job Ads | 0 – 2 years | 3 – 5 years | 6+ years | |
| General and Operations Managers | 5 years or more | 2,335 | 30% | 50% | 20% | |
| Industrial Production Managers | 5 years or more | 661 | 16% | 57% | 27% | |
| Administrative Services and Facilities Managers | Less than 5 years | 453 | 28% | 49% | 23% | |

Source: EMSI 2020.3, Burning Glass - Labor Insights

Student Completions and Program Outcomes

Exhibit 9 displays annual average completion data for the California Community College business management program, based on the most recent three academic years.

Exhibit 9: 2016-19, Annual average community college awards for the business management programs in the IEDR

| 0506.00 — Business Management | Associate degree | Certificate requiring 30< 60-semester units | Certificate requiring 18< 30-semester units | Certificate requiring 6< 18-semester units | CCC Annual Average Awards, Academic Years 2016-19 |
|----------------------------------|---------------------|---|--|--|--|
| Barstow | 15 | - | 1 | - | 16 |
| Chaffey | 15 | - | 16 | - | 31 |
| Crafton Hills | 5 | 1 | - | - | 6 |
| Moreno Valley | 6 | 5 | - | - | 11 |
| Mt. San Jacinto | 7 | 6 | - | - | 13 |

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



| 0506.00 — Business Management | Associate degree | Certificate requiring 30< 60-semester units | Certificate requiring 18< 30-semester units | Certificate requiring 6< 18-semester units | CCC Annual Average Awards, Academic Years 2016-19 |
|----------------------------------|---------------------|---|---|--|--|
| Norco | 5 | 6 | - | - | 11 |
| Palo Verde | 3 | 1 | - | 13 | 1 <i>7</i> |
| Riverside | 23 | 30 | - | - | 53 |
| Victor Valley | - | 4 | - | - | 4 |
| Total | 79 | 53 | 17 | 13 | 162 |

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 codes and region is provided in Exhibit 10. The outcome methodology is available in the appendix section of this report.

Exhibit 10: 0506.00 – Business management strong workforce program outcomes

| Strong Workforce Program Metrics: 0506.00 — Business management Academic Year 2017-18, unless noted otherwise | Inland Empire/Desert Region | California |
|---|-----------------------------------|------------|
| Unduplicated count of enrolled students (2018-19) | 3,731 | 38,289 |
| Completed 9+ career education units in one year (2018-19) | 32% | 35% |
| Perkins Economically disadvantaged students (2018-19) | 88% | 77% |
| Students who attained a noncredit workforce milestone in a year (2018-19) | - | 28% |
| Students who earned a degree, certificate, or attained apprenticeship (2018-19) | 120 | 1,426 |
| Transferred to a four-year institution (transfers) | 228 | 3,261 |
| Job closely related to the field of study (2016-17) | 78% | 75% |
| Median annual earnings (all exiters) | \$28,442 | \$34,828 |
| Median change in earnings (all exiters) | 29% | 27% |
| Attained a living wage (completers and skills-builders) | 58% | 56% |

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Awards granted from private educational institutions are displayed in Exhibit 11 along with the relevant CIP code. Please note, ITT Technical Institute-San Bernardino closed on September 6, 2016, and is no longer contributing to the region's supply.

Exhibit 11: Annual average private educational institution awards from business administration and



management, general programs in the Inland Empire/Desert region

| 52.0201 – Business Administration and Management, General | Bachelor's degree | Associate Degree | Award < 1 year | Private Educational Institutions Annual Average Certificates or Other Credit Awards (2014-17) |
|--|----------------------|---------------------|-------------------|---|
| California State University-San Bernardino | 861 | - | - | 861 |
| ITT Technical Institute-San Bernardino (CLOSED in 2016) | 1 | - | - | 1 |
| La Sierra University | 27 | - | - | 27 |
| Platt College-Ontario | - | 4 | - | 4 |
| Platt College-Riverside | - | 6 | - | 6 |
| Summit College | - | - | 13 | 13 |
| University of California-Riverside | 611 | - | - | 611 |
| University of Redlands | 214 | - | - | 214 |
| Total annual average other awards | 1,714 | 10 | 13 | 1,738 |

Source: IPEDS

Recommendation

The knowledge, skills, and abilities provided by the community college business management program lead to three distinct occupations, collectively referred to as the business management occupational group. These combined occupations are expected to have 2,564 annual job openings over the next five years. General managers will have the most annual job openings, 2,148, and industrial production managers will have the fewest, 136 annual job openings. The 25th percentile hourly wages for each occupation in this group exceeds the \$19.94 self-sustainable wage needed for a single adult with one child in the region. The occupations in this group typically require a Bachelor's degree to enter employment. While at least 30% of incumbent workers hold a community college-level of education, most employer job ads are requesting a candidate with a Bachelor's degree or higher.

Nine regional community colleges offer *business management* programs, conferring an annual average of 162 awards over the last three academic years; 79 associate degrees and 83 certificates. Private educational institutions issued 1,738 annual average awards during the previous three years; 1,714 were Bachelor's degrees, ten (10) associate degrees, and 13 awards of less than one year.



The Centers of Excellence **recommends** expanding *business management* programs, but only if they are designed for students to continue their education at a four-year institution to achieve a Bachelor's degree. Substantial employment demand exists for the *business management* occupational group, but most employers are seeking workers with an educational attainment of a Bachelor's degree or higher. Colleges should identify and partner with relevant employers to understand the skills, knowledge, and abilities needed to secure gainful employment in this field.

Contact

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Appendix: Occupation definitions, sample job titles, five-year projections for business management occupations

General and Operations Managers (11-1021)

Plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services.

Sample job titles: Business Manager, Facility Manager, General Manager (GM), Operations Director, Operations Manager, Plant Superintendent, Store Manager

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 35%

Administrative Services and Facilities Managers (11-3011)

Plan, direct, or coordinate one or more administrative services of an organization, such as records and information management, mail distribution, facilities planning and maintenance, custodial operations, and other office support services.

Sample job titles: Administrative Coordinator, Administrative Director, Administrative Manager,
Administrative Officer, Administrative Specialist, Administrator, Business Administrator, Business Manager,
Facilities Manager, Office Manager

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 37%



Industrial Production Managers (11-3051)

Plan, direct, or coordinate the work activities and resources necessary for manufacturing products in accordance with cost, quality, and quantity specifications.

Sample job titles: Area Plant Manager, General Production Manager, Manufacturing Coordinator,
Manufacturing Manager, Plant Manager, Plant Senior Manager, Product Line Manager, Production Control
Manager, Production Manager, Sub Plant Manager

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 30%

Appendix: Program Completion and Outcome Methodology

Exhibit 9 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2016 and 2019, 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 variation 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 records provided by 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, 2020a). 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, 2020a).

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 the hiring intentions of employers; it is unknown if employers plan to hire one or multiple workers from a single online job posting, or if they are collecting resumes for future hiring needs. A closed job posting may not be the result of a hired worker.



Table 1: 2019 to 2024 job growth, wages, education, training, and work experience required for the business management occupational group, IEDR

| Occupation (SOC) | 2019 Jobs | 5-Yr Change | 5-Yr % Change | Annual Openings (New + Replacement Jobs) | Entry-Experienced Hourly Wage Range (25 th to 75 th percentile) | Median Hourly Wage (50 th percentile) | Average Annual Earnings | Typical Entry- Level Education & On-The-Job Training Required | Work Experience Required |
|---|--------------|----------------|------------------|--|---|--|-------------------------------|---|--------------------------------|
| General and Operations Managers (11-1021) | 19,198 | 1,962 | 10% | 2,148 | \$32.07 to \$69.10 | \$48.16 | \$11 <i>7</i> ,100 | Bachelor's degree & None | 5 years or more |
| Administrative Services and Facilities Managers (11-3011) | 2,687 | 234 | 9% | 279 | \$34.23 to \$62.30 | \$47.03 | \$103,800 | Bachelor's degree & None | Less than 5 years |
| Industrial Production Managers (11-3051) | 1,669 | 57 | 3% | 136 | \$34.86 to \$60.20 | \$46.61 | \$106,700 | Bachelor's degree & None | 5 years or more |
| Total | 23,554 | 2,253 | 10% | 2,564 | - | - | - | - | - |

Source: EMSI 2020.3