

# Business Management

*Inland Empire/Desert Region (Riverside-San Bernardino-Ontario Metropolitan Statistical Area)*

## Summary

- Employment for the management occupational group is expecting to **increase 9% between 2017 and 2022** in the Inland Empire/Desert Region. A total of **13,980 job openings** will be available over the five-year timeframe.
- The entry-level wage for each of the management occupations is **above the MIT Living Wage estimate of \$12.39 per hour** for a single adult living in the Inland Empire/Desert Region.
- **There appears to be an opportunity for program growth** based on the average annual number of program completers for the selected community college program in the region (**183 community college credentials, 15 other educational institution credentials, 198 total**), and the annual openings for management occupations across the region (**2,796 average annual openings**).

## Introduction

This report provides data on occupations related to the California Community College business management program (TOP 0506.00). This program prepares students for positions of responsibility within professional careers, through the instruction of planning, organizing, directing, and controlling business operations. The program includes 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 occupations included in the management occupational group are:

- Administrative Services Managers
- Cost Estimators
- General and Operations Managers
- Industrial Production Managers

## Job Opportunities

In 2017, there were 27,111 jobs in the management occupational group in the Inland Empire/Desert Region. This occupational group is projecting to increase employment by 9% by 2022. Employers in the region will need to hire 13,980 workers over the next five years to fill new jobs and backfill jobs that workers are permanently vacating (includes retirements). Table 1 in the appendix shows the projected job growth, wages, education, training, and work experience required for each of the occupations in this group in the Inland Empire/Desert Region.

*Exhibit 1: Five-year projections for the management occupational group in the Inland Empire/Desert Region*

Region	2017 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Inland Empire/Desert	27,111	9%	13,980	2,796	25%

Source: EMSI 2018.4

## Earnings

The entry-level wage for each of the occupations in the management occupational group is above the MIT Living Wage estimate of \$12.39 per hour for a single adult living in the Inland Empire/Desert Region (Glasmeier, 2019). These wages are also sufficient for two adults and one child (\$14.75 per hour, per adult or \$30,680 annually for each adult). Exhibit 2 displays wage information for this occupational group in the Inland Empire/Desert Region.

*Exhibit 2: Earnings for the management occupational group in the Inland Empire/Desert Region*

Occupation	Entry to Experienced Hourly Earnings Range*	Median Wage*	Average Annual Earnings
General and Operations Managers	\$31.36 to \$67.16	\$46.97	\$117,300
Administrative Services Managers	\$34.73 to \$60.39	\$46.85	\$104,300
Industrial Production Managers	\$34.73 to \$60.85	\$45.79	\$102,800
Cost Estimators	\$20.36 to \$37.35	\$28.17	\$64,000

Source: EMSI 2018.4

\*Entry Hourly is 25th percentile wage, the median is 50th percentile wage, experienced is 75th percentile wage.

## Job Postings, Employers, Skills, and Education

Exhibit 3 shows the number of job ads posted during the last 12 months along with the regional and national average time to fill. On average, local employers fill online job posting for the management occupational group within 39 days. This regional average is within two days of the national average, indicating that it is neither relatively easy nor difficult for local employers to find qualified candidates.

*Exhibit 3: Job ads by each of the management occupations in the Inland Empire/Desert Region and time to fill, Mar 2018 – Feb 2019*

Occupation	Job Ads	Regional Average Time to Fill (Days)	National Average Time to Fill (Days)
General and Operations Managers	2,645	38	36
Industrial Production Managers	669	42	41
Cost Estimators	545	47	41
Administrative Services Managers	472	31	34
<b>TOTAL</b>	<b>4,331</b>	<b>39</b>	<b>37</b>

Source: Burning Glass – Labor Insights

Exhibit 4 displays the employers posting the most job ads from job ads during the last 12 months in the Inland Empire/Desert Region.

*Exhibit 4: Employers posting the most job ads for the management occupational group in the Inland Empire/Desert Region, Mar 2018 – Feb 2019*

Occupation	Employers
General and Operations Managers (n=2,377)	<ul style="list-style-type: none"> <li>• XPO Logistics</li> <li>• DHL Supply Chain</li> </ul>
Industrial Production Managers (n=511)	<ul style="list-style-type: none"> <li>• Mars, Incorporated</li> <li>• Glanbia Nutritionals, Incorporated</li> </ul>
Cost Estimators (n=345)	<ul style="list-style-type: none"> <li>• Boudreau Pipeline</li> <li>• Walsh Group</li> </ul>
Administrative Services Managers (n=418)	<ul style="list-style-type: none"> <li>• California State University, San Bernardino</li> <li>• University of California, Riverside</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 5 lists a sample of in-demand specialized, employability, and software and programming skills that employers are seeking when looking for workers to fill management positions. Specialized skills are occupation-specific skills employers are requesting for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is commonly referred to as “soft skills.” The skills reported in job postings may be utilized as a helpful guide for curriculum development.

*Exhibit 5: Sample of in-demand skills from employer job ads for management occupations in the Inland Empire/Desert Region, Mar 2018 – Feb 2019*

Occupation	Specialized skills	Soft skills	Software and Programming skills
General and Operations Managers (n=2,425)	<ul style="list-style-type: none"> <li>Budgeting</li> <li>Scheduling</li> <li>Staff Management</li> </ul>	<ul style="list-style-type: none"> <li>Communication Skills</li> <li>Planning</li> <li>Organizational Skills</li> </ul>	<ul style="list-style-type: none"> <li>Microsoft Office</li> </ul>
Industrial Production Managers (n=635)	<ul style="list-style-type: none"> <li>Quality Assurance and Control</li> <li>Scheduling</li> <li>Budgeting</li> </ul>	<ul style="list-style-type: none"> <li>Communication Skills</li> <li>Planning</li> <li>Problem Solving</li> </ul>	<ul style="list-style-type: none"> <li>Microsoft Office</li> <li>Enterprise Resource Planning (ERP)</li> </ul>
Cost Estimators (n=487)	<ul style="list-style-type: none"> <li>Project Management</li> <li>Budgeting</li> <li>Scheduling</li> </ul>	<ul style="list-style-type: none"> <li>Communication Skills</li> <li>Computer Literacy</li> <li>Detail-Oriented</li> </ul>	<ul style="list-style-type: none"> <li>Microsoft Office</li> <li>AutoCAD</li> </ul>
Administrative Services Managers (n=427)	<ul style="list-style-type: none"> <li>Budgeting</li> <li>Scheduling</li> <li>Staff Management</li> </ul>	<ul style="list-style-type: none"> <li>Communication Skills</li> <li>Planning</li> <li>Teamwork/ Collaboration</li> </ul>	<ul style="list-style-type: none"> <li>Microsoft Office</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 6 displays the work experience and 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 minimum advertised education requirement requested by employers in online job ads.

*Exhibit 6: Educational attainment and online job ads with minimum advertised education requirements for the management occupational group in the Inland Empire/Desert Region, Mar 2018 – Feb 2019*

Occupation	Work Experience Required	Typical Entry-Level Education Requirement	Educational Attainment*	Minimum Advertised Education Requirement from Job Ads			
				Number of Job Postings (n=)	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
General and Operations Managers	5 years or more	Bachelor's degree	35%	1,838	35%	4%	61%
Industrial Production Managers	5 years or more	Bachelor's degree	30%	474	17%	5%	78%
Cost Estimators	None	Bachelor's degree	39%	260	29%	3%	68%
Administrative Services Managers	Less than 5 years	Bachelor's degree	38%	332	28%	9%	63%

Source: EMSI 2018.4, Burning Glass – Labor Insights

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

## Student Completions

Exhibit 7 shows the annual average regional community college credentials (associate degrees and certificates) conferred during the three academic years between 2014 and 2017, with the relevant TOP code as well as the program title used at each college, sourced from the Chancellor’s Office Curriculum Inventory (COCI). Credentials granted from other educational institutions from 2013 to 2016 are displayed in Exhibit 8, along with the relevant CIP code. Please note, a credential is not always equivalent to a single person in search of a job opening since a student may earn more than one credential, such as an associate degree in addition to a certificate. Community College student outcome information is from the CTE LaunchBoard based on the selected TOP code and region.

*Exhibit 7: Annual average community college student completions for business management programs in the Inland Empire/Desert Region*

<b>0506.00 – Business Management</b>	<b>Annual Community College Headcount (2016-17)</b>	<b>Community College Annual Average Credentials (2014-17)</b>
<b>Barstow - Management</b>	157	
Associate Degree		17
Certificate 18 to < 30 semester units		2
<b>Chaffey - Management</b>	363	
Associate Degree		11
Certificate 30 to < 60 semester units		2
Certificate 18 to < 30 semester units		8
Certificate 6 to < 18 semester units		1
<b>Copper Mountain</b>	14	
<b>Crafton Hills – Business Administration/Business Management</b>	207	
Associate Degree		6
Certificate 30 to < 60 semester units		1
<b>Moreno Valley – Business Administration: Management</b>	86	
Associate Degree		4
Certificate 30 to < 60 semester units		3
<b>Mt. San Jacinto – Management/Supervision</b>	301	
Associate Degree		6
Certificate 30 to < 60 semester units		6
<b>Norco – Business Administration: Management/Business Administration: Human Resources</b>	46	
Associate Degree		8
Certificate 30 to < 60 semester units		10

<b>0506.00 – Business Management</b>	<b>Annual Community College Headcount (2016-17)</b>	<b>Community College Annual Average Credentials (2014-17)</b>
<b>Palo Verde</b>	698	
Associate Degree		11
Certificate 30 to < 60 semester units		5
Certificate 6 to < 18 semester units		39
<b>Riverside – Business Administration: Management/Business Administration: Human Resources</b>	237	
Associate Degree		19
Certificate 30 to < 60 semester units		20
<b>San Bernardino</b>	912	
<b>Victor Valley – Management</b>	783	
Certificate 30 to < 60 semester units		5
<b>Total Community College Headcount (2016-17)</b>	<b>3,785</b>	
<b>Total Annual Average Community College Credentials (2014-17)</b>		<b>183</b>

Source: LaunchBoard, IPEDS, COCI

**0506.00 – Business Management program Strong Workforce outcomes in the Inland Empire/Desert Region in the academic year 2015-16 [unless noted otherwise]:**

- Number of course enrollments: 4,601 (California median: 294) [2016-17]
- Number of students who completed 12+ CTE units in one year: 675 (CA: 63) [2016-17]
- Number of students who transferred to a 4-year institution: 293 (CA: 32)
- Employed in the fourth fiscal quarter after exit: 63% (CA: 73%)
- Median annual earnings: \$25,111 (CA: \$32,148)
- The percentage in a job closely related to the field of study: 70% (CA: 83%) [2014-15]
- Median change in earnings: 40% (CA: 40%)
- The proportion of students who attained a living wage: 53% (CA: 63%)
- Economically disadvantaged students: 81% (CA: 73%) [2016-17]

*Exhibit 8: Annual average other educational institution student completions for business administration and management, general programs in the Inland Empire/Desert Region*

<b>52.0201 – Business Administration and Management, General</b>	<b>Other Educational Institutions Annual Average Certificates or Other Credit Credentials (2013-16)</b>
<b>Argosy University-Inland Empire</b>	
Associate Degree	1*
<b>Platt College - Ontario</b>	
Associate Degree	2
<b>Platt College - Riverside</b>	
Associate Degree	2
<b>Summit College</b>	
Award <1 academic year	10
<b>The University of America</b>	
Associate Degree	1*
<b>Total annual average other credentials</b>	<b>15</b>

Source: IPEDS

\*Argosy University and The University of America awarded one associate degree each in 2013-14.





## References

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

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

#### **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, Facilities Manager, Facility Manager, General Manager (GM), Operations Director, Operations Manager, Plant Manager, Plant Superintendent, Production Manager, Store Manager

*Entry-Level Educational Requirement: Bachelor's degree*

*Training Requirement: None*

*Work Experience Required: Five years or more*

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

#### **Administrative Services 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*

*Work Experience Required: Less than five years*

*Incumbent workers with a Community College Award or Some Postsecondary Coursework: 38%*



### **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*

*Work Experience Required: Five years or more*

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

### **Cost Estimators (13-1051)**

Prepare cost estimates for product manufacturing, construction projects, or services to aid management in bidding on or determining price of product or service. May specialize according to particular service performed or type of product manufactured.

**Sample job titles:** Acquisition Cost Estimator, Construction Estimator, Cost Analyst, Cost and Risk Analysis Manager, Cost Consultant, Cost Engineer, Cost Estimator, Estimator, Estimator Project Manager, Preconstruction Manager

*Entry-Level Educational Requirement: Bachelor's degree*

*Training Requirement: One to twelve months on-the-job training*

*Work Experience Required: None*

*Incumbent workers with a Community College Award or Some Postsecondary Coursework: 39%*



Table 1. 2017 to 2022 job growth, wages, education, training, and work experience required for the management occupational group, Inland Empire/Desert Region

Occupation (SOC)	2017 Jobs	5-Yr Change	5-Yr % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage*	Median Hourly Wage	Average Annual Earnings	Typical Entry-Level Education & On-The-Job Training Required	Work Experience Required
General and Operations Managers (11-1021)	19,666	1,928	10%	2,021	\$31.36 to \$67.16	\$46.97	\$117,300	Bachelor's degree & none	5 years or more
Administrative Services Managers (11-3011)	3,076	240	8%	298	\$34.73 to \$60.39	\$46.85	\$104,300	Bachelor's degree & none	Less than 5 years
Cost Estimators (13-1051)	2,928	334	11%	362	\$20.36 to \$37.35	\$28.17	\$64,000	Bachelor's degree & 1 to 12 months	None
Industrial Production Managers (11-3051)	1,440	64	4%	114	\$34.73 to \$60.85	\$45.79	\$102,800	Bachelor's degree & none	5 years or more
<b>Total</b>	<b>27,111</b>	<b>2,565</b>	<b>9%</b>	<b>2,796</b>	-	-	-	-	-

Source: EMSI 2018.4

\*Entry Hourly is 25th percentile wage, the median is 50th percentile wage, experienced is 75th percentile wage.