

# Business Occupation Group

*Inland Empire/Desert Region (Riverside and San Bernardino County)*

## Summary

- Employment for the business occupational group is expected to **increase by 10% between 2017 and 2022** in the Inland Empire/Desert Region. More than **14,100 job openings** will be available over the five-year timeframe.
- The entry-level wage for each occupation in the business occupational group is **above the MIT Living Wage estimate of \$12.30 per hour** for a single adult living in the Inland Empire/Desert Region.
- There appears to be an opportunity for program expansion based on the average annual number of program completions for the selected community college programs (**704 average annual community college awards, 15 other institutional awards, 719 awards total**), and the annual openings for business occupations in the region (**2,823 annual job openings**).
- Although all four occupations included in this report typically require a bachelor's degree for entry, **approximately one-third** of current workers within each occupation have only attained a community college-level of education.
- Three out of the four occupations typically require previous work experience, and two require five years or more.

## Introduction

This report provides data on occupations related to the business administration, general program, preparing students for positions of responsibility within professional careers, usually including business law, economics, mathematics, managerial accounting, and computer systems. The occupations most closely associated with the business occupational group are:

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

## Job Opportunities

In 2017, there were more than 27,100 jobs in the business occupational group in the Inland Empire/Desert Region. This occupational group is projecting to expand employment by 10% by 2022. Employers in the region will need to hire 14,117 workers over the next five years to fill new jobs and backfill jobs that workers are permanently vacating (includes retirements). Appendix A, Table 1 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.

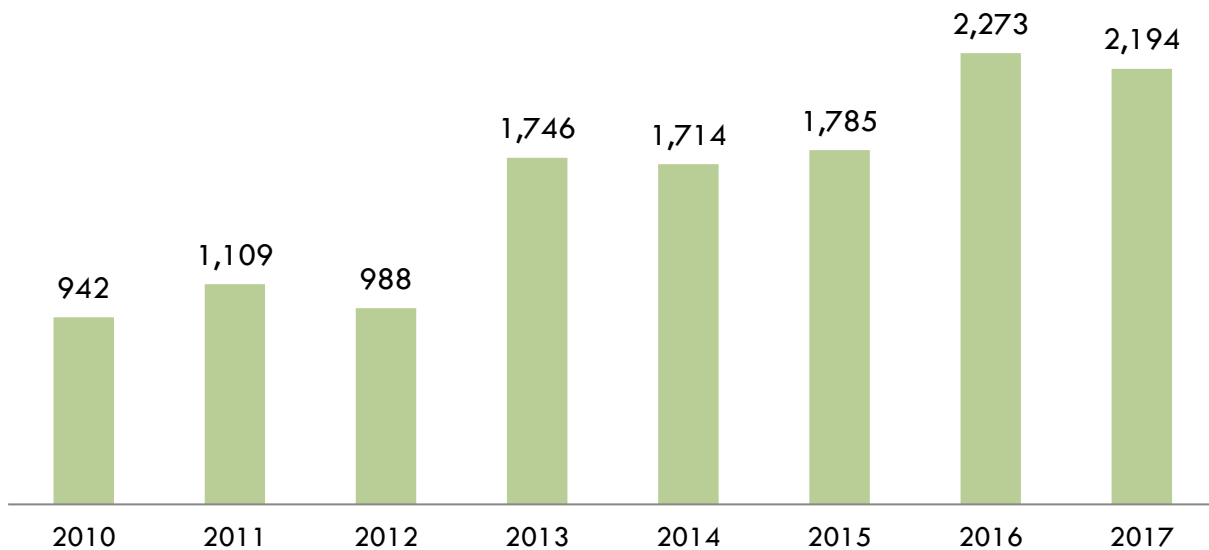
*Exhibit 1: Five-year projections for the business occupational group in the Inland Empire/Desert Region*

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	27,121	10%	14,117	2,823	25%

Source: EMSI 2018.3

Over the last 12 months (July 2017 to June 2018), there were 2,662 advertisements (ads) for jobs in the business occupational group in the Inland Empire/Desert Region. From 2010 to 2017, there was an annual average of 1,594 job ads per year (Exhibit 2).

*Exhibit 2: Number of online job postings for the business occupational group in the Inland Empire/Desert Region, 2010 to 2017*



Source: Burning Glass – Labor Insights

On average, local employers fill online job posting for the business 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, with only slight variations by occupation. Exhibit 3 shows the number of job ads posted during the last 12 months along with the regional and national average time to fill.

*Exhibit 3: Job ads by each of the business occupations in the Inland Empire/Desert Region and time to fill, July 2017 – June 2018*

Occupation	Job Ads	Regional Average Time to Fill (Days)	National Average Time to Fill (Days)
General and Operations Managers	1,812	38	36
Administrative Services Managers	336	31	34
Cost Estimators	323	47	41
Industrial Production Managers	191	41	40
<b>TOTAL</b>	<b>2,662</b>	<b>-</b>	<b>-</b>

Source: Burning Glass – Labor Insights

## Earnings

The entry-level wage for each of the occupations in the business occupational group is above the MIT Living Wage estimate of \$12.30 per hour for a single adult living in the Inland Empire/Desert Region. These wages are also sufficient for an adult living in a household with one other working adult and one child (\$14.50 per hour, per adult or \$30,160 annually for each adult). Exhibit 4 displays wage information for this occupational group in the Inland Empire/Desert Region.

*Exhibit 4: Earnings for the business occupational group in the Inland Empire/Desert Region*

Occupation	Entry to Experienced Hourly Earnings Range*	Median Wage*	Average Annual Earnings
General and Operations Managers	\$31.37 to \$67.17	\$46.97	\$117,300
Administrative Services Managers	\$34.74 to \$60.39	\$46.85	\$104,300
Industrial Production Managers	\$34.76 to \$60.87	\$45.81	\$102,800
Cost Estimators	\$20.37 to \$37.35	\$28.18	\$64,000

Source: EMSI 2018.3

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

## Work Locations, Employers, Skills, and Education

Exhibit 5 displays the top employers posting job ads from job ads during the last 12 months.

*Exhibit 5: The top employers posting job ads for the business occupational group in the Inland Empire/Desert Region, July 2017 – June 2018*

Occupation	Top Employers
General and Operations Managers (n=1,664)	<ul style="list-style-type: none"> <li>Dollar Tree Stores, Inc.</li> <li>24 Hour Fitness</li> </ul>
Administrative Services Managers (n=295)	<ul style="list-style-type: none"> <li>Target Corporation</li> <li>University of California, Riverside</li> </ul>
Cost Estimators (n=199)	<ul style="list-style-type: none"> <li>Boudreau Pipeline Corporation</li> <li>Earth Tek Engineering Corporation</li> </ul>
Industrial Production Managers (n=123)	<ul style="list-style-type: none"> <li>BrightView Landscapes</li> <li>Karma Automotive</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 6 lists a sample of in-demand specialized and soft skills that employers are seeking when looking for workers to fill business positions.

*Exhibit 6: Sample of in-demand skills from employer job ads for business occupations in the Inland Empire/Desert Region, July 2017 – June 2018*

Occupation	Specialized skills	Soft skills	Software and Programming skills
General and Operations Managers (n=1,663)	<ul style="list-style-type: none"> <li>Scheduling</li> <li>Budgeting</li> <li>Retail Industry Knowledge</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>
Administrative Services Managers (n=290)	<ul style="list-style-type: none"> <li>Budgeting</li> <li>Scheduling</li> <li>Repair</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>
Cost Estimators (n=272)	<ul style="list-style-type: none"> <li>Budgeting</li> <li>Project Management</li> <li>Scheduling</li> </ul>	<ul style="list-style-type: none"> <li>Communication Skills</li> <li>Detail-Oriented</li> <li>Computer Literacy</li> </ul>	<ul style="list-style-type: none"> <li>Microsoft Office</li> <li>AutoCAD Software</li> </ul>
Industrial Production Managers (n=185)	<ul style="list-style-type: none"> <li>Scheduling</li> <li>Budgeting</li> <li>Lean Manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>Planning</li> <li>Communication Skills</li> <li>Problem Solving</li> </ul>	<ul style="list-style-type: none"> <li>Microsoft Office</li> <li>Enterprise Resource Planning (ERP) Software</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 7 displays the work experience and entry-level education typically required to enter each occupation according to the Bureau of Labor Statistics, educational attainment for incumbent workers with “some college, no degree” and an “associate degree” according to the U.S. Census, and the minimum advertised education requirement requested by employers in online job ads.

*Exhibit 7: Educational attainment and online job ads with minimum advertised education requirements for the business occupational group in the Inland Empire/Desert Region, July 2017 – June 2018*

Occupation	Work Experience Required	Typical Entry-Level Education Requirement	Community College-Level 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%	1,272	41%	4%	55%
Administrative Services Managers	Less than 5 years	Bachelor's degree	38%	235	27%	7%	66%
Cost Estimators	None	Bachelor's degree	39%	153	27%	7%	66%
Industrial Production Managers	5 years or more	Bachelor's degree	30%	120	21%	7%	72%

Source: EMSI 2018.3, Burning Glass – Labor Insights

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

## Student Completions

Exhibit 8 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 9, along with the relevant CIP code. Please note, a credential is not 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 8: Annual average community college student completions for business administration programs in the Inland Empire/Desert Region

<b>0505.00 – Business Administration</b>	<b>Annual Community College Headcount (2016-17)</b>	<b>Community College Annual Average Awards (2014-17)</b>
<b>Barstow</b> – Business Administration	306	
Associate Degree for Transfer		9
<b>Chaffey</b> – General Business, Business Administration	771	
Associate Degree		28
Certificate 30 to < 60 semester units		13
Certificate 18 to <30 semester units		1*
Associate Degree for Transfer		166
<b>Copper Mountain</b> – Business Administration	33	
Associate Degree		14
Associate Degree for Transfer		15
<b>Crafton Hills</b> – Business Administration		
Associate Degree for Transfer		51
<b>Desert</b> – Business Administration		
Associate Degree		5
Associate Degree for Transfer		102
<b>Moreno Valley</b> – Business Administration	277	
Associate Degree for Transfer		13
<b>Mt. San Jacinto</b> – Business Administration	331	
Associate Degree		55
Certificate 30 to < 60 semester units		7
Associate Degree or Transfer		83
<b>Norco</b> – Business Administration	542	
Associate Degree for Transfer		24
<b>Palo Verde</b> – Business Management, Business Administration	98	
Associate Degree for Transfer		1
<b>Riverside</b> – Business Administration, Quality Assurance Process Analyst, Quality Assurance Inspector, Quality Assurance, Quality Assurance Level II	978	
Associate Degree for Transfer		17
<b>San Bernardino</b> – Business Administration		
Associate Degree		33
Certificate 18 to <30 semester units		2
Associate Degree for Transfer		67
<b>Victor Valley</b>	110	
<b>Total Community College Headcount (2016-17)</b>	<b>3,384</b>	
<b>Total Annual Average Community College Awards</b>		<b>704</b>

Source: LaunchBoard, IPEDS, COCI

\*Chaffey was awarded one certificate 18 to <30 semester units in 2015-16

**0505.00 – Business Administration, General program Strong Workforce outcomes in the Inland Empire/Desert Region in the academic year 2015-16 [unless noted otherwise]:**

- Number of course enrollments: 3,885 (California median: 483) [2016-17]
- Number of students who transferred to a 4-year institution: 499 (CA: 81)
- Employed in the second fiscal quarter after exit: 64% (CA: 68%)
- Median earnings in the second fiscal quarter after exit: \$6,775 (CA: \$7,711)
- Employed in the fourth fiscal quarter after exit: 61% (CA: 67%)
- Median annual earnings: \$24,828 (CA: \$26,947)
- The percentage in a job closely related to the field of study: 70% (CA: 83%) [2014-15]
- Median change in earnings: 39% (CA: 45%)
- The proportion of students who attained a living wage: 45% (CA: 47%)

*Exhibit 9: Annual average community college 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 Awards (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 awards</b>	<b>15</b>

Source: IPEDS

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

**Sources**

- O\*Net Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists International (EMSI)
- CTE LaunchBoard
- MIT Living Wage Calculator
- Chancellor’s Office Curriculum Inventory (COCI, version 2.0)
- The Integrated Postsecondary Education Data System (IPEDS)

Michael Goss, Director  
 Center of Excellence, Inland Empire/Desert Region  
[michael.goss@chaffey.edu](mailto:michael.goss@chaffey.edu)  
 July 2018

## **Appendix A: Occupation definitions, sample job titles, five-year projections, and earnings for business 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 business 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)	19,679	2,020	10%	2,056	\$31.37 to \$67.17	\$46.97	\$117,300	Bachelor's degree & none	5 years or more
Administrative Services Managers (11-3011)	3,074	270	9%	307	\$34.74 to \$60.39	\$46.85	\$104,300	Bachelor's degree & none	Less than 5 years
Cost Estimators (13-1051)	2,927	270	9%	347	\$20.37 to \$37.35	\$28.18	\$64,000	Bachelor's degree & 1 to 12 months	None
Industrial Production Managers (11-3051)	1,440	61	4%	114	\$34.76 to \$60.87	\$45.81	\$102,800	Bachelor's degree & none	5 years or more
<b>Total</b>	<b>27,121</b>	<b>2,621</b>	<b>10%</b>	<b>2,823</b>	-	-	-	-	-

Source: EMSI 2018.3

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