

Entrepreneurship Occupational Group

Inland Empire/Desert Region: Riverside-San Bernardino-Ontario Metropolitan Statistical Area (Riverside and San Bernardino counties combined)

Summary

- Occupations in the entrepreneurship group are expected to **increase new employment 9%** between 2017 and 2022 in the Inland Empire/Desert Region. Nearly **22,700 employment and self-employment job openings** will be available over the five-year timeframe.
- The entry-level wage for each of the occupations in the entrepreneurship group is **above the MIT Living Wage estimate of \$12.30 per hour** for a single adult living in the Inland Empire/Desert Region.
- Based on the average annual number of program completions for the selected community college programs (**17 average annual community college awards**), and the annual openings for entrepreneur occupations in the local region (**4,533 annual job openings**), there appears to be an opportunity for program growth.

Introduction

Entrepreneurs are individuals who start their own company in any discipline they choose. For this reason, the occupations selected for this report are general business management occupations which require knowledge, skills, and abilities that are similar to those required by an entrepreneur. The occupations included in this report are listed below:

- Administrative Service Managers
- Business Operations Specialists, All Other
- General and Operations Managers
- Managers, All Other
- Sales Managers

Job Opportunities

In 2017, there were nearly 45,400 jobs in the entrepreneurship occupational group in the Inland Empire/Desert Region. However, only 15% or nearly 6,800 of these jobs are classified as self-employed. Across the local region, employment related to the entrepreneurship occupational group is expected to increase 9% through 2022. Employers in the local region will need to hire nearly 22,700 more workers (about 3,100 for self-employed) over the next five years to fill new jobs and to backfill jobs that workers that are permanently leaving (includes retirements). The self-employed portion of this occupational group also has a larger portion of workers over the age of 55 (39% compared to 26% for both employed and self-employed). Appendix A, Table 1 and Table 2 shows the projected job growth for each of the occupations in this group.

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

Type of Employment	2017 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
All (Employees and Self-Employed)	45,369	9%	22,666	4,533	26%
Self-Employed only	6,793	9%	3,069	614	39%

Source: EMSI 2018.1

Earnings

The entry-level wage for each occupation in the entrepreneurship occupational group is above the MIT Living Wage estimate of \$12.30 per hour, or \$25,584 annually 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). On average, traditionally employed workers in these occupations make more than their self-employed counterparts except for business operations specialists, all other, which indicates that this could be a lucrative opportunity for entrepreneurs. See Exhibit 2 for wage information by occupation for the local region.

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

Occupation Entry to Experienced Hourly Earnings Range*	All (Employees + Self- Employed)		Self-Employed only	
	Hourly Range	Annual Average**	Hourly Range	Annual Average**
General and Operations Managers	\$30.76 to \$66.70	\$115,500	\$22.26 to \$23.74	\$47,800
Sales Managers	\$23.47 to \$63.48	\$105,100	\$23.00 to \$25.12	\$49,900
Administrative Services Managers	\$32.23 to \$57.13	\$98,400	\$28.10 to \$28.31	\$58,700
Business Operations Specialists, All Other	\$23.14 to \$39.89	\$68,000	\$40.49 to \$44.29	\$87,400
Managers, All Other	\$16.07 to \$33.03	\$58,000	\$15.29 to \$19.50	\$35,800

Source: EMSI 2018.1

*Entry Hourly is 25th percentile wage, experienced is 75th percentile wage.

**Rounded to the nearest \$100

Skills

Exhibit 3 lists a sample of in-demand specialized, soft, and software and programming skills that employers are seeking when looking for workers to fill these occupations. These skills are extracted from online job postings for the selected occupations. While these skills represent what employers are looking for in traditional employees, they might not be completely in line with the skillset required by entrepreneurs, which is likely more expansive given the multitude of business responsibilities they face.

Exhibit 3: Sample of in-demand skills from employer job ads for the entrepreneurship occupational group in the Inland Empire/Desert Region, Mar 2017 – Feb 2018

Occupation	Specialized skills	Soft skills	Software and Programming skills
Managers, All Other (n=1,366)	<ul style="list-style-type: none"> Project Management Budgeting 	<ul style="list-style-type: none"> Communication Skills Planning 	<ul style="list-style-type: none"> Microsoft Office
General and Operations Managers (n=1,329)	<ul style="list-style-type: none"> Supervisory Skills Budgeting 	<ul style="list-style-type: none"> Communication Skills Planning 	<ul style="list-style-type: none"> Microsoft Office

Occupation	Specialized skills	Soft skills	Software and Programming skills
Sales Managers (n=783)	<ul style="list-style-type: none"> Sales Management Sales 	<ul style="list-style-type: none"> Communication Skills Writing 	<ul style="list-style-type: none"> Microsoft Office
Administrative Services Managers (n=242)	<ul style="list-style-type: none"> Budgeting Supervisory Skills 	<ul style="list-style-type: none"> Communication Skills Planning 	<ul style="list-style-type: none"> Microsoft Office
Business Operations Specialists, All Other (n=135)	<ul style="list-style-type: none"> Budgeting E-Commerce 	<ul style="list-style-type: none"> Communication Skills Planning 	<ul style="list-style-type: none"> Microsoft Office

Source: Burning Glass – Labor Insights

Education

Exhibit 4 displays the entry-level education level education typically required to enter these occupations according to the Bureau of Labor Statistics and educational attainment for incumbent workers with “some college, no degree” and an “associate degree” according to the U.S. Census.

Exhibit 4: Typical entry-level education and educational attainment for the entrepreneurship occupational group in the Inland Empire/Desert Region, Mar 2017 – Feb 2018

Occupation	Typical Entry-Level Education Requirement	Educational Attainment (Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework)
Managers, All Other	Bachelor’s degree	26%
General and Operations Managers	Bachelor’s degree	35%
Sales Managers	Bachelor’s degree	22%
Administrative Services Managers	Bachelor’s degree	38%
Business Operations Specialists, All Other	Bachelor’s degree	24%

Source: EMSI 2018.1, Current Population Survey

Industry

Exhibit 5 displays the industries that employ the most self-employed and entrepreneurship occupations in the local region. Staffing patterns show the industries that employ the most of a Entrepreneurship occupational group in the Inland Empire/Desert Region, March 2018

specific occupation. General business management occupations tend to be dispersed evenly across many industries, but the industries with the highest concentration of each occupation in the region are listed below.

Exhibit 5: Top Industries employing each occupation in the entrepreneurship occupational group in the Inland Empire/Desert Region

Occupation	Top Industries Staffing Pattern for All Employees + Self-Employed (NAICS)	Top Industries Staffing Pattern for Self-Employed only (NAICS)
Managers, All Other (n=953)	<ul style="list-style-type: none"> Residential Building Construction (2361) 	<ul style="list-style-type: none"> Residential Building Construction (2361)
General and Operations Managers (n=1,033)	<ul style="list-style-type: none"> Local Government, Excluding Education and Hospitals (9039) 	<ul style="list-style-type: none"> Special Food Services (7223)
Sales Managers (n=582)	<ul style="list-style-type: none"> Automobile Dealers (4411) 	<ul style="list-style-type: none"> Management, Scientific, and Technical Consulting Services (5416)
Administrative Services Managers (n=205)	<ul style="list-style-type: none"> Local Government, Excluding Education and Hospitals (9039) 	<ul style="list-style-type: none"> Aerospace Product and Parts Manufacturing (3364)
Business Operations Specialists, All Other (n=135)	<ul style="list-style-type: none"> Federal Government, Civilian (9011) 	<ul style="list-style-type: none"> Management, Scientific, and Technical Consulting Services (5416)

Source: EMSI 2018.1

Other Top Self-Employed Occupations in Inland Empire/Desert Region

Although this report has solely focused on managerial positions, there are other occupations in the region with a high concentration of self-employed individuals. While these occupations are not the focus of the small business and entrepreneurship program, it is valuable to know which large occupations (999 jobs in 2017 or more) have the highest concentration of self-employed individuals, which are displayed in Exhibit 6. This exhibit illuminates the occupations in which entrepreneurship is most common.

Exhibit 6: Occupations with the largest portion of self-employed individuals as a percentage of total employment in the Inland Empire/Desert Region (with at least 999 jobs in 2017)

Occupation	Total 2017 Jobs	Total Self-Employed	% Self-Employed
1. Barbers	999	963	96%
2. Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	1,180	1,121	95%
3. Real Estate Brokers	1,216	1,059	87%
4. Writers and Authors	1,303	1,093	84%
5. Hairdressers, Hairstylists, and Cosmetologists	9,412	7,267	77%
6. Photographers	1,423	1,088	76%
7. Real Estate Sales Agents	4,639	3,500	75%
8. Farmers, Ranchers, and Other Agricultural Managers	1,688	972	58%
9. Musicians and Singers	1,552	883	57%
10. Childcare Workers	13,526	7,255	54%
11. First-Line Supervisors of Non-Retail Sales Workers	4,183	2,097	50%

Source: EMSI 2018.1

Student Completions

Exhibit 7 shows the annual average regional community college awards (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). Please note, an award is not equivalent to a single person in search of a job opening since a student may earn more than one award, such as an associate degree in addition to a certificate.

Community College student outcome information was obtained from the CTE LaunchBoard based on the selected TOP code(s) and region.

Exhibit 7: Annual average community college student completions for the small business and entrepreneurship program in the Inland Empire/Desert Region

0506.40 – Small Business and Entrepreneurship	Annual Average Community College Headcount (2016-17)	Community College Annual Average Awards (2014-17)
Chaffey – Small Business Entrepreneur	105	
Associate Degree		4
Certificate 30 to < 60 semester units		1*
Certificate 18 to < 30 semester units		1
Mt. San Jacinto – Small Business Operations	50	
Certificate 30 to < 60 semester units		1*
Palo Verde		
Certificate 6 to < 18 semester units		9
Riverside - Entrepreneurship	200	
Associate Degree		1
Certificate 18 to < 30 semester units		2
Moreno Valley	62	
Norco	75	
Victor Valley	85	
Total community college headcount (2016-17)	577	
Total annual average community college awards		17

Source: LaunchBoard, IPEDS, COCI

*Chaffey awarded one certificate 30 to < 60 semester units in 2014-15, and Mt. San Jacinto awarded one certificate 30 to < 60 semester units in 2016-17.



0506.40 – Small Business and Entrepreneurship program Strong Workforce outcomes in the Inland Empire/Desert Region in the academic year 2015-16:

- Number of course enrollments: 586 (California median: 1,610)*
- Number of students who transferred to a 4-year institution: 43 (CA: 71)
- Employed in the second fiscal quarter after exit: 55% (CA: 61%)
- Median earnings in the second fiscal quarter after exit: \$6,381 (CA: \$6,899)
- Employed in the fourth fiscal quarter after exit: 53% (CA: 58%)
- Median annual earnings: \$22,814 (CA: \$22,676)
- The percentage in a job closely related to the field of study: 25% (CA: 76%) [2014-15]
- Median change in earnings: 49% (CA: 47%)
- The proportion of students who attained a living wage: 47% (CA: 48%)

*academic year 2016-17

Sources

Economic Modeling Specialists International (EMSI)
Labor Insight/Jobs (Burning Glass)
CTE LaunchBoard
California Community Colleges Chancellor's Office Management Information Systems (MIS)
Current Population Survey (CPS), Bureau of Labor Statistics
Chancellor's Office Curriculum Inventory (COCI, version 2.0)
O*Net Online
MIT Living Wage Calculator
Center of Excellence TOP to SOC Crosswalk

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Appendix A: Occupation definitions, five-year projections, and earnings for the entrepreneurship occupational group

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.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 35%

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.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 22%



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.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 38%

Managers, All Other (11-9199)

All managers not listed separately.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 26%

Business Operations Specialists, All Other (13-1199)

All business operations specialists not listed separately.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 24%

Table 1. 2017 to 2022 job growth for the entrepreneurship occupational group in the Inland Empire/Desert Region, **All (Employees and Self-Employed)**

Occupation (SOC)	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
General and Operations Managers (11-1021)	20,517	22,473	1,956	10%	10,536	2,107
Managers, All Other (11-9199)	8,558	9,293	735	9%	3,802	760
Business Operations Specialists, All Other (13-1199)	7,534	8,112	578	8%	4,053	811
Sales Managers (11-2022)	5,367	5,676	309	6%	2,599	520
Administrative Services Managers (11-3011)	3,392	3,675	283	8%	1,676	335
Total	45,369	49,230	3,861	9%	22,666	4,533

Source: EMSI 2018.1

Table 2. 2017 to 2022 job growth for the entrepreneurship occupational group in the Inland Empire/Desert Region, **Self-Employed only**

Occupation (SOC)	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Managers, All Other (11-9199)	6,136	6,667	531	9%	2,730	546
General and Operations Managers (11-1021)	258	269	11	4%	116	23
Sales Managers (11-2022)	221	235	14	6%	108	22
Business Operations Specialists, All Other (13-1199)	159	187	28	18%	105	21
Administrative Services Managers (11-3011)	20	23	3	15%	11	2
Total	6,793	7,380	587	9%	3,069	614

Source: EMSI 2018.1