C·O·E CENTERS OF EXCELLENCE
FOR LABOR MARKET RESEARCH

Entrepreneurship

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

Summary

Business Administration	+	Business Management	+	Small Business and Entrepreneurship

Five Bachelor's Degree-level Occcupations
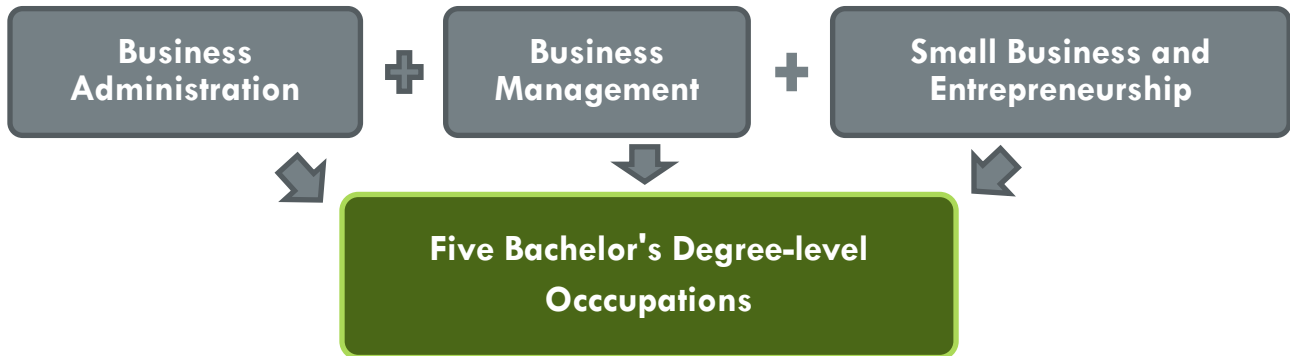
Over the next five years (2021-2026), the combined employment for the entrepreneurship occupational group is projected to:

Increase Employment by 7%

4,321 Annual Job Openings

Median Hourly Earnings **$29.73 to $75.12** Above the $21.82 Hourly Living Wage Standard

1,774 Total Annual Awards
In Four Business and Entrepreneurship Programs
1,770 Program Awards from Community College Programs
4 Program Awards from Other Postsecondary Education Providers

The Inland Empire/Desert Centers of Excellence
👍 **Recommends**
Entreprenuership Program Expansion
to meet the need for more workers in the region

Introduction

The Bureau of Labor Statistics broadly defines entrepreneurs as individuals that "discover new and imaginative ways to combine factors of production and bear the risks of the free market with hopes of creating a profitable enterprise" (Cooksey et al., 2017). The three California Community College programs

that provide training for entrepreneurship occupations are business administration (TOP 0505.00), business management (0506.00), and small business and entrepreneurship (0506.40).

This report quantifies the demand for management jobs that may benefit from entrepreneurship training. Entrepreneurs are unique individuals who utilize various knowledge, skills, and abilities to establish new business ventures. The Indeed Career Guide classifies eleven hard and soft skills an entrepreneur needs to accommodate the different business roles they will take on, build their business, and develop leadership skills (Indeed, 2021).

1. Business management skills
2. Teamwork and leadership skills
3. Communication and listening skills
4. Customer service skills
5. Financial skills
6. Analytical and problem-solving skills
7. Critical thinking skills
8. Strategic thinking and planning skills
9. Technical skills
10. Time management and organizational skills
11. Branding, marketing, and networking skills

As a result, this report identifies five management occupations based on the Indeed Career Guide entrepreneurial hard and soft skills, collectively referred to as the entrepreneurship group. These occupations may also require job-specific skills training that is available outside of an entrepreneurship program. The entrepreneurship group occupations are:

- Administrative Services Managers (SOC 11-3012)
- Chief Executives (11-1011)
- General and Operations Managers (11-1021)
- Business Operations Specialists, All Other (13-1199)
- Sales Managers (11-2022)

Job Counts and Projections

In 2021, there were 45,533 combined entrepreneurship group jobs in the region. Employment for this group is expected to rise by 7% through 2026 and is projected to have 4,321 annual job openings across all industries.

Exhibit 1 displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers aged 55 years and older working in the entrepreneurship group.

Exhibit 1: Five-Year Projections for The Entrepreneurship Group, Inland Empire/Desert Region, 2021-2026

Occupation	2021 Jobs	2026 Jobs	5-Yr % Change (New Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
General and Operations Managers	23,093	25,206	9%	2,397	25%
Business Operations Specialists, All Other	11,960	12,571	5%	1,004	26%
Sales Managers	5,790	5,984	3%	527	21%
Chief Executives	2,435	2,469	2%	182	45%
Administrative Services Managers	2,256	2,402	6%	211	34%
Total	**45,533**	**48,638**	**7%**	**4,321**	**26%**

Source: Lightcast 2022.4

Exhibit 2 shows the number of job ads posted during the last 12 months and the regional and statewide average time filling each occupation in private sector industries. Despite this effort to quantify real-time demand for entrepreneurs, job advertisements (ads) provide little insight into regional demand for entrepreneurs because entrepreneurs are self-employed and create their own job opportunities.

Over the last 12 months (December 2021 to November 2022), there were 7,163 job ads posted for the entrepreneurship group in the local region. On average, regional employers fill online job ads for these occupations within 40 days, the same number of days as the statewide average time to fill. This indicates that regional employers face similar challenges filling open positions as other employers in California.

Exhibit 2: Job Ads and Time to Fill for Entrepreneurship Occupations, Inland Empire/Desert Region, Dec 2021-Nov 2022

| Occupation	Job Ads	Regional Average Time to Fill (Days)	Statewide Average Time to Fill (Days)
General and Operations Managers	3,999	35	37
Sales Managers	1,817	46	41
Administrative Services Managers	709	36	37
Business Operations Specialists, All Other	489	N/A	N/A
Chief Executives	140	44	45
Total	**7,163**	**40**	**40**

Source: Burning Glass – Labor Insights

Earnings and Benefits

Community colleges should ensure that their training programs lead to employment opportunities that provide self-sustainable income. Community colleges should ensure their training programs lead to employment opportunities that provide a living wage. The MIT living wage calculator estimates that an individual must earn $21.82 per hour or $45,386 annually in California to be self-sufficient (Glasmeier, 2022).

Exhibit 3 displays the hourly earnings for the entrepreneurship occupational group. The 25th percentile hourly earnings for all of the occupations, except business operations specialists, all other, surpass the living wage standard. The median hourly earnings for all of the occupations exceed the living wage standard, indicating that at least half of the workers in this occupational group earn a living wage.

Exhibit 3: Hourly Earnings by Percentile for Entrepreneurship Occupations, Inland Empire/Desert Region, 2021
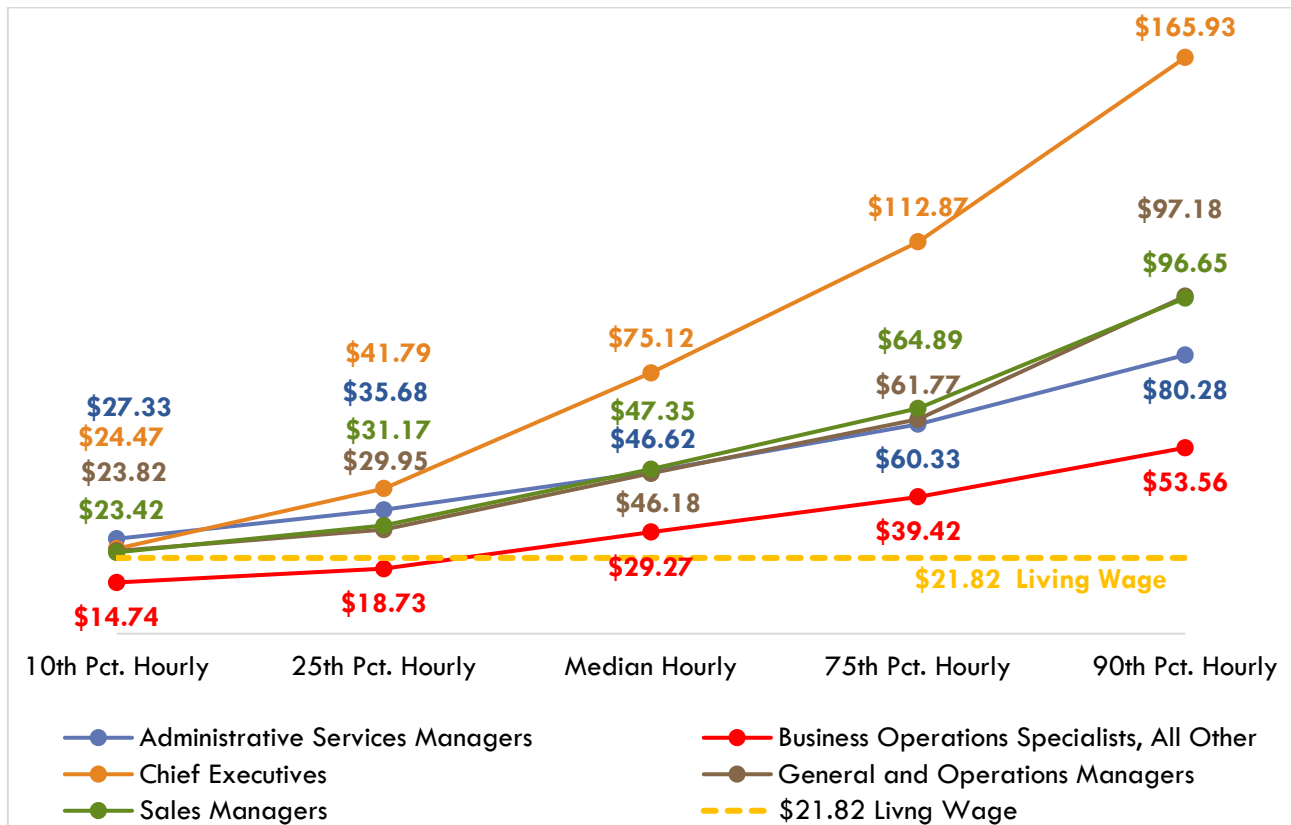
Source: Lightcast 2022.4

Advertised Salary from Online Job Ads

Exhibit 4 displays online job ad salary data for the entrepreneurship group over the last 12 months in the Inland Empire/Desert Region. Online job ad salary information reveals that employers are willing to pay this occupational group an annual average salary between $62,000 and $90,000. All advertised salaries for this occupational group are above the region's $45,386 annual ($21.82 hourly) living wage standard. Consider the salary information with caution since only 67% (4,469 out of 7,163) of online job postings for these

occupations provided salary information. The salary figures are prorated to reflect full-time, annual wage status.

Exhibit 4: *Advertised Salary Information for The Entrepreneurship Occupations, Inland Empire/Desert Region, Dec 2021 to Nov 2022*

Occupations	Real-Time Salary Information					
	Number of job postings	Less than $35,000	$35,000 to $49,999	$50,000 to $74,999	More than $75,000	Average Annual Salary
General and Operations Managers	*2,718*	8%	23%	29%	39%	$71,000
Sales Managers	*1,256*	6%	10%	26%	58%	$86,000
Business Operations Specialists, All Other	*237*	13%	42%	21%	25%	$62,000
Administrative Services Managers	*395*	9%	14%	29%	49%	$76,000
Chief Executives	*100*	10%	5%	18%	68%	$90,000

Source: Burning Glass – Labor Insights

Employers, Skills, Education, and Work Experience

Exhibit 5 displays the employers that posted the most job ads in the region during the last 12 months. Displaying employer names provides insight into where students may find employment after completing a program.

Exhibit 5: *Employers Posting the Most Job Ads for Entrepreneurship Occupations, Inland Empire/Desert Region, Dec 2021 to Nov 2022*

Occupation	Top Employers	
General and Operations Managers *(n=3,999)*	• Dollar Tree • CVS Health • Anthem Blue Cross	• DHL Express • GXO Logistics • XPO Logistics
Sales Managers *(n=1,817)*	• Carters Incorporated • Anthem Blue Cross • Kindred Healthcare Incorporated	
Business Operations Specialists, All Other *(n=489)*	• Target • Anthem Blue Cross • Sunrun	• Intergraded Security Management Group
Administrative Services Managers *(n=709)*	• Uline Shipping Supplies • Target • University of California, Riverside	
Chief Executives *(n=140)*	• Great Clips • University of California, Riverside	

Source: Burning Glass – Labor Insights

Exhibit 6 lists a sample of specialized and employability skills employers seek when looking for workers to fill positions in the entrepreneurship 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 postings may be utilized to guide curriculum development.

Exhibit 6: Sample of In-Demand Skills from Employer Job Ads, Inland Empire/Desert Region, Dec 2021 to Nov 2022

Occupation	Specialized skills	Employability skills
General and Operations Managers (n=3,999)	- Budgeting - Scheduling - Operations Management - Supervisory Skills - Customer Service - Staff Management	- Communication Skills - Planning - Problem Solving - Teamwork/Collaboration - Organizational Skills
Sales Managers (n=1,817)	- Sales Management - Sales Goals - Customer Service - Business Development - Budgeting - Scheduling	- Communication Skills - Building Effective Relationships - Teamwork/Collaboration - Problem Solving - Planning
Business Operations Specialists, All Other (n=409)	- E-Commerce - Sales - Customer Service - Product Sales	- Communication Skills - Problem Solving - Writing - Planning - Teamwork/Collaboration - Organizational Skills
Administrative Services Managers (n=709)	- Budgeting - Scheduling - Staff Management - Project Management - Facility Management	- Communication Skills - Planning - Organizational Skills - Problem Solving - Teamwork/Collaboration
Chief Executives (n=140)	- Budgeting - Staff Management - Strategic Planning - Client Based Retention - Public Administration	- Communication Skills - Planning - Organizational Skills - Building Effective Relationships - Teamwork/Collaboration

Source: Burning Glass – Labor Insights

Exhibit 7 displays the typical entry-level education, educational attainment, and minimum advertised education requirements for the entrepreneurship group. According to the Bureau of Labor Statistics, between 19%-35% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree" and an "associate degree." Job advertisements indicate that most employers seek candidates with a bachelor's degree or higher.

Exhibit 7: Typical Entry-Level Education, Educational Attainment, and Minimum Advertised Education Requirements, Inland Empire/Desert Region, Dec 2021 to Nov 2022

Occupation	Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Real-Time Minimum Advertised Education Requirement		
			Number of Job Ads	High school or vocational training	Associate degree	Bachelor's degree or higher
General and Operations Managers	Bachelor's degree	35%	3,999	41%	5%	54%
Sales Managers	Bachelor's degree	29%	1,817	26%	4%	71%d
Business Operations Specialists, All Other	Bachelor's degree	27%	251	24%	13%	64%
Administrative Services Managers	Bachelor's degree	33%	709	39%	12%	49%
Chief Executives	Bachelor's degree	19%	140	8%	1%	91%

Source: Lightcast 2022.4, Burning Glass – Labor Insights
*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Student Completions for Entrepreneurship Programs

Skills training related to public sector management and entrepreneurship is covered in the following California Community College TOP programs:

- Business Administration (TOP 0505.00)
- Business Management (TOP 0506.00)
- Small Business and Entrepreneurship (TOP 0506.40)

All three programs equip students with the requisite skills to succeed in business leadership and administration; the small business and entrepreneurship program provides the most direct entrepreneur training. Over the last three academic years, regional community colleges issued an average of 1,770 awards annually in these three entrepreneurship-related programs—exhibits 9, 11, and 13 display completion data for community college entrepreneur programs in the region. The student completion and outcome methodology are available on page 17.

Community college **business administration (TOP 0505.00)** programs are designed to give a broad, balanced introduction to professional careers in business, usually including business law, economics, mathematics, managerial accounting, and computer systems (Taxonomy of Programs, 2012). Exhibit 9 displays student completions for business administration programs over the last three academic years. Chaffey College has issued the most awards in business administration programs over the previous three academic years in the region.

Exhibit 9: Annual Average Community College Awards for Business Administration Programs in The Inland Empire/Desert Region, 2019-22

TOP 0505.00 – Business Administration (Local Program Title)	Academic Year 2019-20	Academic Year 2020-21	Academic Year 2021-22	Total CC Annual Average Awards, Academic Years 2019-22
Barstow (Business Administration/Business Administration 2.0/Customer Service and Digital Literacy)				**47**
Associate Degree-Transfer	24	51	48	41
Noncredit	0	0	18	6
Chaffey (Business Administration 2.0/General Business)				**331**
Associate Degree-Transfer	251	326	306	294
Associate Degree	15	35	8	19
Certificate 16 < 30-semester units	15	26	10	17
Copper Mountain (Business Administration/Business Administration 2.0)				**25**
Associate Degree-Transfer	16	18	13	16
Associate Degree	13	10	5	9
Crafton Hills (Business Administration 2.0)				**69**
Associate Degree-Transfer	61	74	73	69
College of the Desert (Business Administration/Business Administration 2.0)				**168**
Associate Degree-Transfer	176	159	169	168
Moreno Valley (Business Administration 2.0)				**68**
Associate Degree-Transfer	59	66	79	68
Mt. San Jacinto (Business Administration/Business Administration 2.0)				**246**
Associate Degree-Transfer	169	189	203	187
Associate Degree	43	65	51	53
Certificate 16 < 30-semester units	8	6	5	6

TOP 0505.00 – Business Administration (Local Program Title)	Academic Year 2019-20	Academic Year 2020-21	Academic Year 2021-22	Total CC Annual Average Awards, Academic Years 2019-22
Norco (Business Administration 2.0)				**126**
Associate Degree-Transfer	107	130	141	126
Palo Verde (Business Administration/Business Management)				**20**
Associate Degree-Transfer	6	2	2	3
Associate Degree	10	21	19	17
Riverside City (Business Administration/Business Administration 2.0 for Transfer)				**266**
Associate Degree-Transfer	210	266	322	266
San Bernardino Valley (Business Administration/Business Administration 2.0/Business Workplace Essential Skills/Career Essentials for the Business World)				**149**
Associate Degree-Transfer	134	121	113	123
Associate Degree	21	20	34	25
Certificate 16 < 30-semester units	0	0	5	2
Victor Valley (Business Administration 2.0)				**32**
Associate Degree-Transfer	13	36	48	32
Total	**1,351**	**1,621**	**1,672**	**1,548**

Source: MIS Data Mart

California program outcome data may provide useful insight into the likelihood of success for the proposed program. Community college student outcome information for the business administration program is provided in Exhibit 10. The outcome methodology is available in the appendix section of this report.

Exhibit 10: 0505.00 – Business Administration Strong Workforce Program Outcomes, Academic Year 2020-21, unless noted

Strong Workforce Program Metrics: 0505.00 – Business Administration	Inland Empire/Desert Region	California
SWP Students who took at least 0.5 units in any single credit course or who had at least 12 positive attendance hours in any noncredit course	4,578	46,190
Share of SWP Students Who Earned nine or More Career Education Units in the District in a Single Year	41%	38%
Share SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	63%	72%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	1,498	15,975
Share of SWP Students Who Transferred to a Four-Year Postsecondary Institution (19-20)	34%	37%

Strong Workforce Program Metrics: 0505.00 – Business Administration	Inland Empire/Desert Region	California
Share of SWP Students with a Job Closely Related to Their Field of Study (18-19)	71%	72%
Median Annual Earnings for SWP Exiting Students (19-20)	$32,504	$34,044
Median Change in Earnings for SWP Exiting Students (19-20)	28%	29%
SWP Exiting Students Who Attained the Living Wage (19-20)	57%	45%

Sources: LaunchBoard Strong Workforce Program Metrics

Community college **business management (TOP 0506.00)** programs prepare students in planning, organizing, directing, and controlling business operations. 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). Exhibit 11 displays the program completions for business management programs in the region. Riverside City College has awarded the most business management programs in the region.

Exhibit 11: Annual Average Community College Awards for Business Management Programs in The Inland Empire/Desert Region, 2018-21

TOP 0506.00 – Business Management (Local Program Title)	Academic Year 2019-20	Academic Year 2020-21	Academic Year 2021-22	Total CC Annual Average Awards, Academic Years 2019-22
Barstow (Management)				**19**
Associate Degree	21	14	14	16
Certificate 16 < 30-semester units	1	4	2	2
Chaffey (Management)				**30**
Associate Degree	15	24	12	17
Certificate 16 < 30-semester units	18	9	12	13
Crafton Hills (Business Administration/Business Management)				**6**
Associate Degree	2	6	9	6
Certificate 30 < 60-semester units	0	1	0	0
Moreno Valley (Business Administration: Management/Project Management Professional)				**8**
Associate Degree	3	4	4	4
Certificate 30 < 60-semester units	3	4	5	4

TOP 0506.00 – Business Management (Local Program Title)	Academic Year 2019-20	Academic Year 2020-21	Academic Year 2021-22	Total CC Annual Average Awards, Academic Years 2019-22
Mt. San Jacinto (Management/Supervision)				**11**
Associate Degree	6	7	7	7
Certificate 16 < 30-semester units	7	1	5	4
Norco (Business Administration: Management Concentration)				**12**
Associate Degree	1	8	7	5
Certificate 30 < 60-semester units	5	8	8	7
Riverside City (Bus Admin-Management Concentration/Business Administration: Human Resources/ Business Administration: Management/Management)				**80**
Associate Degree	36	29	43	36
Certificate 30 < 60-semester units	46	31	46	41
Certificate 6 < 18-semester units	2	4	4	3
Victor Valley (Management)				**6**
Certificate 30 < 60-semester units	4	2	11	6
Total	**170**	**156**	**189**	**172**

Source: MIS Data Mart

Community college student outcome information for the business management program is provided in Exhibit 12.

Exhibit 12: 0506.00 – Business Management Strong Workforce Program Outcomes, Academic Year 2020-21, unless noted

Strong Workforce Program Metrics: 0506.00 – Business Management	Inland Empire/Desert Region	California
SWP Students who took at least 0.5 units in any single credit course or who had at least 12 positive attendance hours in any noncredit course	3,397	39,996
Share of SWP Students Who Earned nine or More Career Education Units in the District in a Single Year	35%	37%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	78%	88%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	111	1,966
Share of SWP Students Who Transferred to a Four-Year Postsecondary Institution (19-20)	21%	29%

Strong Workforce Program Metrics: 0506.00 – Business Management	Inland Empire/Desert Region	California
Share of SWP Students with a Job Closely Related to Their Field of Study (18-19)	69%	77%
Median Annual Earnings for SWP Exiting Students (19-20)	$34,692	$38,656
Median Change in Earnings for SWP Exiting Students (19-20)	25%	23%
SWP Exiting Students Who Attained the Living Wage (19-20)	60%	55%

Sources: LaunchBoard Strong Workforce Program Metrics

Community college **small business and entrepreneurship (TOP 0506.40)** programs prepare students in the principles, practices, and strategies of small business wholesale, retail, or service operations for owners/managers, and marketing principles and methods applicable to developing businesses (Taxonomy of Programs, 2012). Exhibit 13 displays the program completions for the region's small business and entrepreneurship programs.

Exhibit 13: 2018-21, Annual average community college awards for small business and entrepreneurship programs in the Inland Empire/Desert Region

TOP 0506.40 – Small Business and Entrepreneurship (Local Program Title)	Academic Year 2019-20	Academic Year 2020-21	Academic Year 2021-22	Total CC Annual Average Awards, Academic Years 2019-22
Barstow (Entrepreneurship and Innovation)				**0**
Certificate 16 < 30-semester units	0	0	1	0
Chaffey (Small Business Entrepreneur)				**8**
Associate Degree	4	3	6	4
Certificate 16 < 30-semester units	4	3	4	4
Moreno Valley College (Entrepreneurial Essentials/Entrepreneurial Foundations/Entrepreneurship and the Team)				**0**
Certificate 16 < 30-semester units	0	0	0	0
Mt. San Jacinto (Small Business/Entrepreneurship)				**2**
Certificate 16 < 30-semester units	2	2	1	2
Norco (Entrepreneurial Essentials/Entrepreneurial Foundations/Entrepreneurship and the Team/ Entrepreneurship: Getting Started/Legal and Finance)				**1**
Certificate 6 < 18-semester units	1	1	0	1
Palo Verde (Small Business Management)	10	6	14	**10**
Certificate 6 < 18-semester units	10	6	14	10

TOP 0506.40 – Small Business and Entrepreneurship (Local Program Title)	Academic Year 2019-20	Academic Year 2020-21	Academic Year 2021-22	Total CC Annual Average Awards, Academic Years 2019-22
Riverside City (Business Skills Bootcamp/Entrepreneurial Essentials/Entrepreneurial Foundations/ Entrepreneurship/Entrepreneurship and the Team)				**28**
Associate Degree	5	3	8	5
Certificate 16 < 30-semester units	5	5	8	6
Certificate 8 < 16-semester units	0	0	1	0
Noncredit	0	17	32	16
San Bernardino Valley (Entrepreneurship: General/Real Estate/Tax/ Practical Entrepreneurship)				**2**
Certificate 16 < 30-semester units	0	1	5	2
Victor Valley (Entrepreneurship)				**0**
Certificate 16 < 30-semester units	0	0	0	0
Total	**31**	**41**	**80**	**51**

Source: MIS Data Mart

Community college student outcome information for the small business and entrepreneurship program is provided in Exhibit 14.

Exhibit 14: 0506.40 – Small business and entrepreneurship strong workforce program outcomes, the Academic Year 2017-18, unless noted

Strong Workforce Program Metrics: 0506.40 – Small Business and Entrepreneurship	Inland Empire/Desert Region	California
SWP Students who took at least 0.5 units in any single credit course or who had at least 12 positive attendance hours in any noncredit course	796	9,385
Share of SWP Students Who Earned Nine or More Career Education Units in the District in a Single Year	32%	33%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	55%	77%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	22	525
Share of SWP Students Who Transferred to a Four-Year Postsecondary Institution (19-20)	12%	16%
Share of SWP Students with a Job Closely Related to Their Field of Study (18-19)	67%	66%
Median Annual Earnings for SWP Exiting Students (19-20)	$27,298	$32,608
Median Change in Earnings for SWP Exiting Students (19-20)	20%	30%
SWP Exiting Students Who Attained the Living Wage (19-20)	47%	43%

Sources: LaunchBoard Strong Workforce Program Metrics

Exhibit 15 displays awards reported by other postsecondary education providers in entrepreneurship/entrepreneurial studies (CIP 52.0701) programs. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available. On average, one other regional postsecondary education institution issued four awards annually.

Exhibit 15: Other educational provider entrepreneurship/entrepreneurial studies programs, Inland Empire/Desert Region, Academic Years 2017-2020

52.0701 – Entrepreneurship/ Entrepreneurial Studies	Academic Year 2017-18	Academic Year 2018-19	Academic Year 2019-20	Total Annual Average Awards, Academic Years 2017-20
California Baptist University				**4**
Bachelor's Degree	0	2	9	4
Total	**0**	**2**	**9**	**4**

Source: IPEDS

Recommendation for Entrepreneurship Programs

The five occupations in the entrepreneurship group are expected to have 4,321 combined annual job openings and increase employment by 7% over the next five years. The median hourly earnings for this group are between $29.73 and $75.12, surpassing the $21.82 per hour living wage standard.

Community college programs related to entrepreneurship have issued 1,770 awards annually over the last three academic years. According to the strong workforce program metrics, the median annual earnings for entrepreneurship program completers in the region are between $27,298 and $34,692. One other postsecondary educational institution in the region, California Baptist University, has issued an annual average of four bachelor's degrees in an entrepreneurship program over the last three academic years.

The COE recommends expanding existing entrepreneurship programs to meet the regional need for more workers in this field. Community college program completers will likely need to transfer to a four-year educational institution to obtain a bachelor's degree before entering employment. Colleges considering this program should partner with four-year educational institutions and local employers to ensure their training provides the skills needed to transfer to a four-year educational institution and obtain a job in this field.

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

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

Chief Executives (11-1011)

Determine and formulate policies and provide overall direction of companies or private and public sector organizations within guidelines set up by a board of directors or similar governing body. Plan, direct, or coordinate operational activities at the highest level of management with the help of subordinate executives and staff managers.

Sample job titles: Chief Diversity Officer (CDO), Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Nursing Officer, Chief Operating Officer (COO), Executive Director, Executive Vice President (EVP), Operations Vice President (Operations VP)

Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Work Experience: Five years or more
Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 19%

General and Operations Managers (11-1021)

Plan, direct, or coordinate the operations of public or private sector organizations, overseeing multiple departments or locations. 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. Excludes First-Line Supervisors.

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

Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Work Experience: Five years or more
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.

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 five years
Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 29%

Administrative Services Managers (11-3012)

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

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

Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Work Experience: Less than five years
Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 33%

Business Operations Specialists, All Other (13-1199)

Sample job titles: Business Continuity Planners, Sustainability Specialists, Online Merchants, Security Management Specialists

Entry-Level Educational Requirement: Bachelor's degree
Training Requirement: None
Work Experience: None
Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 27%

Appendix: Methodology

Exhibits 9, 11, and 13 display the average annual California Community College (CCC) awards conferred during the three academic years between 2019 and 2022, 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 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, 2022a). 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, 2022a).

Job advertisement 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 advertisements often do not reveal employers' hiring intentions; it is unknown if employers plan to hire one or multiple workers from a single online job ad or collect resumes for future hiring needs. A closed job ad may not be the result of a hired worker.

Table 2. 2021 to 2026 job growth, wages, entry-level education, training, and work experience required for the entrepreneurship group in all industries, Inland Empire/Desert Region, 2021

Occupation (SOC)	2021 Jobs	5-Year Change (New Jobs)	5-Year % Change (New Jobs)	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10th to 90th percentile)	Median Hourly Wage (50th percentile)	Entry-Level Education & On-The-Job-Training	Work Experience Required
General and Operations Managers (11-1021)	23,093	2,113	9%	2,397	$23.82 to $97.18	$46.18	Bachelor's degree & None	Five years or more
Business Operations Specialists, All Other (13-1199)	11,960	611	5%	1,004	$14.74 to $53.56	$29.27	Bachelor's degree & None	None
Sales Managers (11-2022)	5,790	194	3%	527	$23.42 to $96.65	$47.35	Bachelor's degree & None	Less than five years
Administrative Services Managers (11-3012)	2,256	147	7%	211	$27.33 to $80.28	$46.62	Bachelor's degree & None	Less than five years
Chief Executives (11-1011)	2,435	41	2%	182	$24.47 to $165.93	$75.12	Bachelor's degree & None	Five years or more
Total	**45,533**	**3,106**	**7%**	**4,321**	-	-	-	-

Source: Lightcast 2022.4