

Small Business and Entrepreneurship Occupations Labor Market Information Report Cabrillo College

Prepared by the San Francisco Bay Center of Excellence for Labor Market Research July 2020

Recommendation

Based on all available data, there appears to be an undersupply of Small Business and Entrepreneurship workers compared to the demand for this cluster of occupations in the Bay region and in the SC-Monterey sub-region (Monterey, San Benito, and Santa Cruz Counties). There is a projected annual gap of about 15,379 students in the Bay region and 545 students in the SC-Monterey Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0506.40-Small Business and Entrepreneurship in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Cabrillo College and in the region.

Introduction

This report profiles Small Business and Entrepreneurship Occupations in the 12 county Bay region and in the SC-Monterey sub-region for a proposed new program at Cabrillo College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Online Merchants (13-1199.06), therefore, the data shown in Tables 1 and 2 is for Business Operations Specialists, All Other (at the six digit SOC level) and likely overstates demand for Online Merchants. Tables 3, 4, 6, 9, 10 and 11 use job postings data from Burning Glass at the eight-digit SOC Code level for Online Merchants (13-1199.06).

Similarly, labor market information (LMI) is not available for Business Teachers, Postsecondary (25-1011) therefore, the data shown in Tables 1 and 2 is for Postsecondary Teachers (25-1099) and likely overstates demand for Business Teachers, Postsecondary. Tables 3, 4, 6, 9, 10 and 11 use job postings data from Burning Glass for Business Teachers, Postsecondary (25-1011).

COVID-19 Statement:

This report includes employment projection data by EMSI. EMSI's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy during the projection period will be at approximately full employment or potential output. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, they may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Other measures such as unemployment rates and monthly industry employment estimates will reflect the most recent information on employment and jobs in the state and, in combination with input from local employers, may help validate current and future employment needs as depicted here.

• Marketing Managers (SOC 11-2021): Plan, direct, or coordinate marketing policies and programs, such as determining the demand for products and services offered by a firm and its competitors, and identify potential customers. Develop pricing strategies with the goal of maximizing the firm's profits or share of the market while ensuring the firm's customers are satisfied. Oversee product development or monitor trends that indicate the need for new products and services.

Entry-Level Educational Requirement: Bachelor's degree

Small Business and Entrepreneurship Occupations in 12 County Bay Region and in SC-Monterey Sub-Region, 2020 Page 1 of 8 Training Requirement: None Percentage of Community College Award Holders or Some Postsecondary Coursework: 22%

• Business Teachers, Postsecondary (SOC 25-1011): Teach courses in business administration and management, such as accounting, finance, human resources, labor and industrial relations, marketing, and operations research. Includes both teachers primarily engaged in teaching and those who do a combination of teaching and research.

Entry-Level Educational Requirement: Doctoral or professional degree Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 0%

• Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products (SOC 41-4012): Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.

Entry-Level Educational Requirement: High school diploma or equivalent Training Requirement: Moderate-term on-the-job training Percentage of Community College Award Holders or Some Postsecondary Coursework: 31%

• Business Operations Specialists, All Other (SOC 13-1199): All business operations specialists not listed separately.

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of Community College Award Holders or Some Postsecondary Coursework: 23%

Occupational Demand

Table 1. Employment Outlook for Small Business and Entrepreneurship Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open- ings	Average Annual Open- ings	25% Hourly Wage	Median Hourly Wage
Marketing Managers	18,590	20,165	1,575	8%	10,213	2,043	\$62.45	\$82.52
Postsecondary Teachers*	40,763	42,071	1,307	3%	19,046	3,809	\$21.23	\$34.97
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	34,888	34,819	-69	0%	18,964	3,793	\$23.24	\$32.76
Business Operations Specialists, All Other	55,878	59,027	3,150	6%	30,758	6,152	\$29.60	\$40.86
TOTAL	150,118	156,082	5,964	4%	78,982	15,796	\$29.92	\$42.54

Source: EMSI 2020.1

Bay Region includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Table 2. Employment Outlook for Small Business and Entrepreneurship Occupations in SC-Monterey Sub-Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open- ings	Average Annual Open- ings	25% Hourly Wage	Median Hourly Wage
Marketing Managers	369	393	23	6%	193	39	\$41.70	\$59.47
Postsecondary Teachers*	2,960	3,051	90	3%	1,337	267	\$12.01	\$19.27
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,604	2,682	79	3%	1,488	298	\$21.40	\$31.31
Business Operations Specialists, All Other	1,989	2,100	110	6%	1,092	218	\$24.71	\$33.61

Small Business and Entrepreneurship Occupations in 12 County Bay Region and in SC-Monterey Sub-Region, 2020 Page **2** of **8**

TOTAL	7,923	8,225	302	4%	4,110	822	\$19.67	\$28.70
-------	-------	-------	-----	----	-------	-----	---------	---------

Source: EMSI 2020.1

SC-Monterey Sub-Region includes Monterey, San Benito, and Santa Cruz Counties

Job Postings in Bay Region and SC-Monterey Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (June 2019 - May 2020)

Occupation	Bay Region	4 County	SC-Monterey
Sales Representatives, Wholesale and Manufacturing,			
Except Technical and Scientific Products	45,616	12,403	1,202
Marketing Managers	37,791	11,766	213
Online Merchants	1,111	268	22
Business Teachers, Postsecondary	245	62	8
TOTAL	84,763	24,499	1,445

Source: Burning Glass

Table 4a. Top Job Titles for Small Business and Entrepreneurship Occupations for latest 12 months (June 2019 - May2020) Bay Region

Common Title	Вау	Common Title	Bay
Account Manager	8,125	Shopper, Retail Industry	774
Marketing Manager	7,292	Sales Executive	759
Sales Representative	6,015	Enterprise Account Manager	754
Product Manager	3,774	Business to Business Sales Representative	637
Product Marketing Manager	3,055	Sales Development Representative	567
Director of Marketing	2,404	Account Representative	538
Account Executive	2,182	Sales Coordinator	516
Outside Sales Representative	1,829	Senior Account Manager	467
Senior Product Manager	1,792	Director, Product Management	457
Sales Specialist	1,632	Sales Account Manager	443
Sales Consultant	1,576	Sales Professional	431
Inside Sales Representative	1,145	Account Director	431
Sales	917	Shopper	418
Digital Marketing Manager	780	Inside Sales	398

Table 4b. Top Job Titles for Small Business and Entrepreneurship Occupations for latest 12 months (June 2019 - May2020) 4-County Region

Common Title	SC- Monterey	Common Title	SC- Monterey
Marketing Manager	2,369	Sales Development Representative	204
Account Manager	2,229	Sales Executive	203
Sales Representative	1,651	Sales Account Manager	182
Product Manager	1,123	Business to Business Sales Representative	169
Product Marketing Manager	1,094	Director, Product Management	164
Director of Marketing	713	Shopper, Retail Industry	143
Outside Sales Representative	585	Field Sales Representative	141
Sales Specialist	539	Inside Sales	136
Senior Product Manager	534	Sales Coordinator	132
Sales Consultant	490	Account Representative	128
Account Executive	420	Security Manager	126
Inside Sales Representative	370	Enterprise Account Manager	120
Sales	251	Sales Professional	111
Digital Marketing Manager	245	Outside Sales	111

Table 4c. Top Job Titles for Small Business and Entrepreneurship Occupations for latest 12 months (June 2019 - May 2020) SC-Monterey Sub-Region

Small Business and Entrepreneurship Occupations in 12 County Bay Region and in SC-Monterey Sub-Region, 2020 Page **3** of **8**

Common Title	SC- Monterey	Common Title	SC- Monterey
Sales Representative	197	Inside Sales	23
Account Manager	146	Sales Professional	22
Sales Consultant	81	Bilingual Store Sales	22
Outside Sales Representative	65	Account Representative	19
Marketing Manager	46	Sales Executive	16
Business to Business Sales Representative	43	Inside Sales Representative	16
Account Executive	43	Outside Sales	13
Sales Specialist	36	Director of Marketing	13
Sales	32	Business Development Representative	13
Field Sales Representative	32	Sales Development Representative	12
Sales Coordinator	26	Regional Sales Representative	11
Shopper, Retail Industry	24	Product Manager	11

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Small Business and Entrepreneurship Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2019)	Jobs in Industry (2022)	% Change (2019-24)	% Occupation Group in Industry (2019)
Colleges, Universities, and Professional Schools (State Government)	18,467	18,081	(386)	(2%)
Colleges, Universities, and Professional Schools	13,290	15,016	1,726	13%
Colleges, Universities, and Professional Schools (Local Government)	9,209	8,679	(530)	(6%)
Corporate, Subsidiary, and Regional Managing Offices	6,112	6,399	287	5%
Internet Publishing and Broadcasting and Web Search Portals	4,628	5,756	1,128	24%
Federal Government, Civilian, Excluding Postal Service	4,209	4,067	(142)	(3%)
Custom Computer Programming Services	4,019	4,743	724	18%
Software Publishers	2,875	3,484	609	21%
Local Government, Excluding Education and Hospitals	2,425	2,516	91	4%
Computer Systems Design Services	2,240	2,522	282	13%
Wholesale Trade Agents and Brokers	2,092	1,408	(684)	(33%)
Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	1,839	1,903	64	3%
Administrative Management and General Management Consulting Services	1,716	2,055	339	20%
Source: FMSI 2020 1				

Source: EMSI 2020.1

Table 6. Top Employers Posting Small Business and Entrepreneurship Occupations in Bay Region and SC-Monterey Sub-Region (June 2019 - May 2020)

Employer	Вау	Employer	4 County	Employer	SC- Monterey
Amazon	1,374	Google Inc.	558	Bayer Corporation	55
Google Inc.	847	Apple Inc.	432	Best Version Media	40
Facebook	803	Intuit	394	Amazon	31
Salesforce	647	Vmware Incorporated	325	O'Reilly Automotive Inc	29
Apple Inc.	440	Amazon	274	Macy's	18
Intuit	419	Cisco Systems Incorporated	250	Office Depot	16
Cisco Systems Inc	392	Paypal	191	Threshold Enterprises Limited	15
Vmware Inc	383	Nvidia Corporation	188	Best Buy	15

Small Business and Entrepreneurship Occupations in 12 County Bay Region and in SC-Monterey Sub-Region, 2020 Page 4 of 8

Walmart / Sam's	325	Super Micro Computer Inc	159	Kelly Moore Paint Co	14
Visa	325	Adobe Systems	157	State Farm Insurance	12
				American Income Life	
O'Reilly Automotive Inc	299	eBay	133	Insurance	11
Dell	277	Palo Alto Networks	132	eBay	10
Thermo Fisher Scientific Inc	263	Walmart / Sam's	125	Victory Automotive	10
Adobe Systems	237	Servicenow	111	Quinn Company	10
Paypal	235	Hewlett-Packard	106	University California	9
Macy's	223	Dell	102	Spectrum	9
Wells Fargo	222	Bayer Corporation	97	Pebble Beach Resorts	9

Source: Burning Glass

Educational Supply

There are 13 community colleges in the Bay Region issuing 67 awards on average annually (last 3 years ending 2018-19) on TOP 0506.40-Small Business and Entrepreneurship. There are no colleges in the SC-Monterey Sub-Region issuing awards on this TOP code.

There are three (3) Other Educational Institutions in the Bay Region issuing 16 awards on average annually (last 3 years ending 2016-17) on TOP 0506.40-Small Business and Entrepreneurship. There is one Other Educational Institution in the SC-Monterey Sub-Region issuing 13 awards on average annually (last 3 years) on this TOP code.

There are five (5) Institutions in the Bay Region issuing 334 Bachelor's Degrees on average annually (last 3 years ending 2018-19) on TOP 0506.40-Small Business and Entrepreneurship. There is one Institution in the SC-Monterey Sub-Region issuing 264 Bachelor's Degrees on average annually (last 3 years) on this TOP code.

College	Sub-Region	Associates	Noncredit	Certificate Low Unit	Total
Alameda	East Bay			1	1
Canada	Mid-Peninsula	2		1	3
Chabot Hayward	East Bay	5		2	7
De Anza	Silicon Valley			4	4
Diablo Valley	East Bay			4	4
Las Positas	East Bay	2		2	4
Los Medanos	East Bay	6		4	10
Merritt	East Bay			3	3
Napa	North Bay			1	1
San Francisco Ctrs	Mid-Peninsula			9	9
San Jose City	Silicon Valley	2		5	7
Santa Rosa	North Bay		2	10	12
Skyline	Mid-Peninsula			2	2
Total Bay Region		16	2	49	67
Total Santa Cruz-Montere	y Sub-Region	0	0	0	0

Table 7a. Awards on TOP 0506.40-Small Business and Entrepreneurship in Bay Region

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

Table 7b. Other Education Institutions Awards on TOP 0506.40-Small Business and Entrepreneurship in Bay Region

College	Sub-Region	Award < 1 academic yr	Total
CET-Watsonville	Santa Cruz-	13	13
	Monterey		
Golden Gate University-San Francisco	Mid-Peninsula	1	1
John F. Kennedy University	East Bay	2	2
Total Bay Region		16	16
Total Santa Cruz-Monterey Sub-Region		13	13

Small Business and Entrepreneurship Occupations in 12 County Bay Region and in SC-Monterey Sub-Region, 2020 Page **5** of **8**

Table 7c. Bachelor's Degree Awards on TOP 0506.40-Small Business and Entrepreneurship in Bay Region

College	Sub-Region	Bachelor's Degree
Cogswell College	Silicon Valley	1
FIDM-Fashion Institute of Design & Merchandising-San Francisco	Mid-Peninsula	31
Mills College	East Bay	6
Santa Clara University	Silicon Valley	32
University of California-Santa Cruz	Santa Cruz-Monterey	264
Total Bay Region		334
Total Santa Cruz-Monterey Sub-Region		264

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 15,796 annual openings for the Small Business and Entrepreneurship occupational cluster and 417 annual (3-year average) awards for an annual undersupply of 15,379 students. In the SC-Monterey Sub-Region, there is also a gap with 822 annual openings and 277 annual (3-year average) awards for an annual undersupply of 545 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0506.40-Small Business and Entrepreneurship

2015-16	Bay (All CTE Programs)	Cabrillo College (All CTE Programs)	State (0506.40)	Bay (0506.40)	SC- Monterey (0506.40)	Cabrillo College (0506.40)
% Employed Four Quarters After Exit	74%	70%	71%	57%	n/a	n/a
Median Quarterly Earnings Two Quarters After Exit	\$10,550	\$8,510	\$9,865	\$7,378	n/a	n/a
Median % Change in Earnings	46%	58%	45%	45%	n/a	n/a
% of Students Earning a Living Wage	63%	54%	61%	53%	n/a	n/a

Source: Launchboard Pipeline (version available on 6/30/20)

Skills, Certifications and Education

Table 9. Top Skills for Small Business and Entrepreneurship Occupations in Bay Region (June 2019 - May 2020)

Skill	Postings	Skill	Postings	Skill	Postings
Sales	37,092	Product Development	8,305	Retail Industry Knowledge	4,621
Product Management	19,384	Customer Contact	8,284	Digital Marketing	4,575
Customer Service	14,971	Sales Goals	7,814	Sales Management	4,383
				Articulating Value	
Marketing	12,378	Prospective Clients	6,984	Propositions	4,313
Business Development	10,825	Account Management	6,621	Inside Sales	4,230
Project Management	10,686	Outside Sales	6,602	Client Base Retention	4,127
Product Sales	9,970	Market Strategy	6,374	E-Commerce	4,071
Budgeting	9,723	Scheduling	5,795	Thought Leadership	3,750
Salesforce	9,655	Marketing Management	5,767	Market Research	3,722
Business-to-Business	9,164	Social Media	5,593	Business Planning	3,536
		Key Performance Indicators		-	
Product Marketing	9,126	(KPIs)	5,288	Merchandising	3,522

Small Business and Entrepreneurship Occupations in 12 County Bay Region and in SC-Monterey Sub-Region, 2020 Page **6** of **8**

Software as a Service		Description and Demonstration			
(SaaS)	8,667	of Products	4,623	Negotiation Skills	3,416

Source: Burning Glass

Table 10. Certifications for Small Business and Entrepreneurship Occupations in Bay Region (June 2019 - May 2020)

Note: 88% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

Postings	Certification	Postings
7,097	Security Clearance	112
456	Accident Health and Life (Insurance)	106
436	Certified ScrumMaster (CSM)	86
	Automotive Service Excellence (ASE)	
418	Certification	73
	Certified Information Systems Security	
272	Professional (CISSP)	72
252	IT Infrastructure Library (ITIL) Certification	71
	Leadership In Energy And Environmental	
250	Design (LEED) Certified	59
163	Contractors License	55
137	Six Sigma Certification	49
117	Makeup Artist	48
116	Investment Advisor	42
114	Series 6	41
	7,097 456 436 418 272 252 250 163 137 117 116	7,097Security Clearance456Accident Health and Life (Insurance)436Certified ScrumMaster (CSM)Automotive Service Excellence (ASE)418CertificationCertified Information Systems Security272Professional (CISSP)252IT Infrastructure Library (ITIL) CertificationLeadership In Energy And Environmental250Design (LEED) Certified163Contractors License137Six Sigma Certification117Makeup Artist116Investment Advisor

Source: Burning Glass

Table 11. Education Requirements for Small Business and Entrepreneurship Occupations in Bay Region

Note: 41% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	7,337	15%
Associate Degree	1,102	2%
Bachelor's Degree or Higher	39,640	83%

Source: Burning Glass

Methodology

Occupations for this report were identified by use of skills listed in O*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCO Data Mart.

Sources

O*Net Online Labor Insight/Jobs (Burning Glass) Economic Modeling Specialists International (EMSI) CTE LaunchBoard www.calpassplus.org/Launchboard/ Statewide CTE Outcomes Survey Employment Development Department Unemployment Insurance Dataset Living Insight Center for Community Economic Development Chancellor's Office MIS system

Contacts

For more information, please contact:

- Doreen O'Donovan, Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), <u>doreen@baccc.net</u> or (831) 479-6481
- John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, <u>icarrese@ccsf.edu</u> or (415) 267-6544