** Entrepreneurship Occupations**

**Labor Market Information Report**

**Laney College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

November 2018

# Recommendation

Based on all available data, there appears to be a significant undersupply of Entrepreneurship workers compared to the demand for this cluster of occupations in the Bay region and in the East Bay sub-region (Alameda and Contra Costa counties). The gap is about 23,667 students annually in the Bay region and 6,714 students in the East Bay 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 this 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 Laney College and in the region.

# Introduction

This report profiles Entrepreneurship Occupations in the 12 county Bay region and in the East Bay sub-region for a proposed new program at Laney College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Business Continuity Planners (13-1199.04) or 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 Business Continuity Planners and Online Merchants. In addition, EMSI data is not available for Purchasing Agents, Except Wholesale, Retail and Farm Products (SOC 13-1033) so data for Buyers and Purchasing Agents (SOC 13-1028) is used in Tables 1 and 2 as the closest occupational match. Burning Glass job postings data is available for Business Continuity Planners, Online Merchants and Purchasing Agents, Except Wholesale, Retail and Farm Products and is included in Tables 3, 4, 6, 9, 10 and 11 of this report.

|  |
| --- |
| * **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: 24%* |
| * **Buyers and Purchasing Agents (SOC 13-1028):** Purchase machinery, equipment, tools, parts, supplies, or services necessary for the operation of an establishment. Purchase raw or semi-finished materials for manufacturing. |
| *Entry-Level Educational Requirement: Bachelor's degree* |
| *Training Requirement: Moderate-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 0%* |
| * **Retail Salespersons (SOC 41-2031):** Sell merchandise, such as furniture, motor vehicles, appliances, or apparel to consumers. Excludes "Cashiers" (41-2011). |
| *Entry-Level Educational Requirement: No formal educational credential* |
| *Training Requirement: Short-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 39%* |
| * **Sales Managers (SOC 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 Community College Award Holders or Some Postsecondary Coursework: 22%* |

# Occupational Demand

**Table 1. Employment Outlook for Entrepreneurship Occupations in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Business Operations Specialists, All Other | 48,910 | 51,781 | 2,871 | 6% | 25,132 | 5,026 | $22.58 | $40.49 |
| Buyers and Purchasing Agents | 14,864 | 14,854 | (9) | (0%) | 7,099 | 1,420 | $21.24 | $36.24 |
| Retail Salespersons | 101,900 | 103,427 | 1,527 | 1% | 75,950 | 15,190 | $10.59 | $13.33 |
| Sales Managers | 21,502 | 22,831 | 1,329 | 6% | 10,475 | 2,095 | $24.84 | $62.81 |
| **Total** | **187,175** | **192,893** | **5,718** | **3%** | **118,656** | **23,731** | **$16.21** | **$27.93** |

*Source: EMSI 2018.4*

**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 Entrepreneurship Occupations in East Bay Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Business Operations Specialists, All Other | 13,252 | 13,825 | 573 | 4% | 6,571 | 1,314 | $20.20 | $38.68 |
| Buyers and Purchasing Agents | 3,987 | 3,995 | 8 | 0% | 1,880 | 376 | $20.35 | $34.30 |
| Retail Salespersons | 30,301 | 31,346 | 1,045 | 3% | 23,015 | 4,603 | $10.51 | $12.92 |
| Sales Managers | 4,934 | 5,112 | 179 | 4% | 2,258 | 452 | $24.40 | $61.56 |
| **TOTAL** | **52,473** | **54,278** | **1,805** | **3%** | **33,724** | **6,745** | **$15.01** | **$25.62** |

*Source: EMSI 2018.4*

**East Bay Sub-Region** includes Marin, Napa, Solano and Sonoma Counties

### Job Postings in Bay Region and East Bay Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (Oct 2017 - Sept 2018)**

|  |  |  |
| --- | --- | --- |
| Occupation | Bay Region | East Bay |
| Retail Salespersons (41-2031.00) | 25,657 | 8,079 |
| Sales Managers (11-2022.00) | 14,897 | 2,675 |
| Purchasing Agents, Except Wholesale, Retail, and Farm Products (13-1023.00) | 3,745 | 0 |
| Online Merchants (13-1199.06) | 894 | 191 |
| Security Management Specialists (13-1199.02) | 736 | 173 |
| Business Continuity Planners (13-1199.04) | 496 | 82 |
| Energy Auditors (13-1199.01) | 272 | 114 |
| Business Operations Specialists, All Other (13-1199.00) | 186 | 40 |
| Sustainability Specialists (13-1199.05) | 70 | 18 |
| Customs Brokers (13-1199.03) | 44 | 4 |
| **Total** | **46,997** | **4,845** |

*Source: Burning Glass*

**Table 4. Top Job Titles for Entrepreneurship Occupations for latest 12 months (Oct 2017 - Sept 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | East Bay | Common Title | Bay | East Bay |
| Sales Associate | 7,204 | 2,036 | Store Team Member | 402 | 116 |
| Sales Manager | 2,596 | 496 | Contract Manager | 389 | 2 |
| Retail Sales Associate | 2,440 | 910 | Store Associate | 358 | 160 |
| Sales Consultant | 1,697 | 594 | Retail Manager | 305 | 71 |
| Director of Sales | 1,380 | 215 | District Manager | 300 | 85 |
| Buyer | 1,197 | 2 | Sales Professional | 282 | 75 |
| Business Development Manager | 821 | 171 | Territory Sales Manager | 265 | 61 |
| Beauty Advisor | 799 | 34 | Contract Specialist | 264 | 0 |
| Regional Sales Manager | 596 | 118 | District Sales Manager | 249 | 57 |
| Territory Manager | 533 | 61 | Development Manager | 244 | 53 |
| Retail Associate | 524 | 171 | Procurement Specialist | 235 | 0 |
| Contract Administrator | 519 | 0 | Vice President of Sales | 218 | 23 |
| Sales, Retail Industry | 485 | 151 | Logistics Team Member | 213 | 81 |
| Regional Manager | 416 | 95 | Sales Operations Manager | 199 | 19 |
| Security Specialist | 411 | 102 | Retail Commission Sales | 193 | 10 |
| Retail Sales Representative | 402 | 119 | Business Development Executive | 191 | 34 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries Hiring Entrepreneurship Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2017) | Jobs in Industry (2022) | % Change (2017-22) | % in Industry (2017) |
| Family Clothing Stores (448140) | 12,512 | 12,553 | 6% | 6.7% |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 5,745 | 5,865 | 4% | 3.1% |
| Department Stores (452210) | 5,798 | 5,765 | (23%) | 3.1% |
| New Car Dealers (441110) | 5,598 | 5,676 | 12% | 3.0% |
| Warehouse Clubs and Supercenters (452311) | 5,565 | 5,624 | 12% | 3.0% |
| Home Centers (444110) | 5,077 | 5,035 | (2%) | 2.7% |
| Shoe Stores (448210) | 5,068 | 5,012 | 6% | 2.7% |
| Federal Government, Civilian, Excluding Postal Service (901199) | 4,989 | 4,952 | (1%) | 2.6% |
| Electronics Stores (443142) | 4,935 | 4,881 | (14%) | 2.6% |
| Women's Clothing Stores (448120) | 3,937 | 3,929 | (11%) | 2.1% |
| Sporting Goods Stores (451110) | 3,533 | 3,570 | 8% | 1.9% |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 3,389 | 3,461 | 31% | 1.8% |
| Custom Computer Programming Services (541511) | 3,311 | 3,348 | 12% | 1.8% |
| Supermarkets and Other Grocery (except Convenience) Stores (445110) | 2,870 | 2,879 | 4% | 1.5% |
| Local Government, Excluding Education and Hospitals (903999) | 2,636 | 2,644 | 4% | 1.4% |
| Cosmetics, Beauty Supplies, and Perfume Stores (446120) | 2,526 | 2,549 | 16% | 1.4% |
| Other Clothing Stores (448190) | 2,514 | 2,529 | 6% | 1.3% |
| Used Merchandise Stores (453310) | 2,513 | 2,524 | 12% | 1.3% |
| All Other Home Furnishings Stores (442299) | 2,447 | 2,452 | 8% | 1.3% |
| Hobby, Toy, and Game Stores (451120) | 2,093 | 2,091 | (0%) | 1.1% |
| Other Building Material Dealers (444190) | 2,036 | 2,058 | 4% | 1.1% |

*Source: EMSI 2018.4*

**Table 6. Top Employers Posting Entrepreneurship Occupations in Bay and East Bay Sub-Region (Oct 2017 - Sept 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | East Bay |
| Macy's | 1,558 | Verizon Communications Incorporated | 350 | Macy's | 500 |
| Lowe's Companies, Inc | 932 | Google Inc. | 340 | Target | 307 |
| Target | 818 | Ashley Furniture | 328 | Lowe's Companies, Inc | 302 |
| Nordstrom | 735 | Petco | 310 | Sears | 228 |
| Sears | 607 | CVS Health | 303 | Nordstrom | 196 |
| Gap Inc. | 596 | Office Depot | 236 | AT&T | 190 |
| Whole Foods Market, Inc. | 545 | Dick's Sporting Goods Incorporated | 235 | Ulta Beauty Inc. | 179 |
| AT&T | 473 | T Mobile Usa Incorporated | 229 | Ashley Furniture | 169 |
| Ulta Beauty Inc. | 453 | Accenture | 225 | Best Buy | 126 |
| Best Buy | 440 | Apple Inc. | 223 | Whole Foods Market, Inc. | 122 |

*Source: Burning Glass*

# Educational Supply

There are 15 community colleges in the Bay Region issuing 64 awards annually on TOP 0506.40 - Small Business and Entrepreneurship. There are six colleges in the East Bay Sub-Region issuing 31 awards annually on this TOP code.

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Headcount | Associates | Certificates | Noncredit | Total |
| **Alameda** | East Bay |  |  | 2 |  | 2 |
| **Canada** | Mid-Peninsula | 80 | 1 | 1 |  | 2 |
| **Chabot** | East Bay |  | 6 | 3 |  | 9 |
| **Deanza** | Silicon Valley | 306 |  | 4 |  | 4 |
| **Diablo Valley** | East Bay | 132 |  | 5 |  | 5 |
| **Las Positas** | East Bay |  | 4 | 1 |  | 5 |
| **Los Medanos** | East Bay |  | 4 | 2 |  | 6 |
| **Merritt** | East Bay | 97 |  | 4 |  | 4 |
| **Monterey** | Santa Cruz & Monterey |  | 1 |  |  | 1 |
| **San Francisco Ctrs** | Mid-Peninsula | 132 |  |  | 6 | 6 |
| **San Jose City** | Silicon Valley |  | 2 | 3 |  | 5 |
| **Santa Rosa** | North Bay | 95 |  | 12 |  | 12 |
| **Skyline** | Mid-Peninsula | 11 |  | 1 |  | 1 |
| **Solano** | North Bay | 21 | 1 |  |  | 1 |
| **West Valley** | Silicon Valley | 55 |  | 1 |  | 1 |
| **Total Bay Region** | | 929 | 19 | 39 | 6 | 64 |
| **Total East Bay Sub-Region** | | 229 | 14 | 17 | 0 | 31 |

# *Source: IPEDS, Data Mart and Launchboard*

NOTE: Headcount of students who took one or more courses is for 2016-17. The annual average for awards is 2014-17 unless there are only awards in 2016-17. The annual average for other postsecondary is for 2013-16.

# Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 23,731 annual openings for the Entrepreneurship occupational cluster and 64 annual awards for an annual undersupply of 23,667 students. In the East Bay sub-region, there is also a gap with 6,745 annual openings and 31 annual awards for an annual undersupply of 6,714 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) | Laney College  (All CTE Programs) | State (TOP 0506.40) | Bay  (TOP 0506.40) | East Bay (TOP 0506.40) | Laney College  (TOP 0506.40) |
| % Employed Four Quarters After Exit | 75% | 78% | 57% | 65% | 69% | 71% |
| Median Quarterly Earnings Two Quarters After Exit | $13,996 | $10,496 | $7,409 | $9,586 | $9,880 | $9,337 |
| Median % Change in Earnings | 40% | 43% | 44% | 48% | 12% | 12% |
| % of Students Earning a Living Wage | 63% | 62% | 53% | 64% | 64% | n/a |

*Source: Launchboard Pipeline (version available on 10/31/18)*

# Skills, Certifications and Education

**Table 9. Top Skills for Entrepreneurship Occupations in Bay Region (Oct 2017 - Sept 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Sales | 30,863 | Salesforce | 2,543 | Negotiation Skills | 1,516 |
| Customer Service | 15,415 | Basic Mathematics | 2,403 | E-Commerce | 1,500 |
| Retail Industry Knowledge | 12,345 | Cleaning | 2,403 | Inventory Management | 1,474 |
| Retail Sales | 8,401 | Lifting Ability | 2,217 | Inventory Control | 1,442 |
| Sales Goals | 8,269 | Prospective Clients | 2,173 | Key Performance Indicators (KPIs) | 1,399 |
| Customer Contact | 6,277 | Store Management | 2,012 | Software as a Service (SaaS) | 1,392 |
| Merchandising | 5,914 | Purchasing | 1,908 | Onboarding | 1,339 |
| Sales Management | 5,779 | Procurement | 1,904 | Account Management | 1,321 |
| Product Sales | 5,585 | Sales Strategy | 1,895 | Cash Handling | 1,290 |
| Business Development | 5,428 | Client Base Retention | 1,801 | Business Acumen | 1,252 |
| Product Knowledge | 5,313 | Customer Checkout | 1,754 | Outside Sales | 1,195 |
| Scheduling | 4,494 | Business Planning | 1,677 | Sales Support | 1,195 |
| Budgeting | 3,949 | Sales Planning | 1,631 | Staff Management | 1,156 |
| Project Management | 2,902 | Calculator | 1,624 | Product Management | 1,086 |
| Description and Demonstration of Products | 2,893 | Store Operations | 1,532 | Visual Merchandising | 1,073 |

*Source: Burning Glass*

**Table 10. Certifications for Entrepreneurship Occupations in the Bay Region (Oct 2017 - Sept 2018)**

Note: 89% 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Certification | Postings | Certification | Postings |
| Driver's License | 2,916 | Certified Information Security Manager (CISM) | 46 |
| Project Management Certification | 191 | Contractors License | 46 |
| Real Estate Certification | 190 | Cash Handling Certification | 43 |
| Cosmetology License | 152 | Certified Building Commissioning Professional | 39 |
| Food Handler Certification | 133 | First Aid Cpr Aed | 39 |
| IT Infrastructure Library (ITIL) Certification | 114 | Leadership In Energy And Environmental Design (LEED) Certified | 38 |
| Project Management Professional (PMP) | 109 | Certified Public Accountant (CPA) | 37 |
| ServSafe | 103 | SANS/GIAC Certification | 37 |
| Security Clearance | 100 | Purchasing Certification | 33 |
| Certified Information Systems Security Professional (CISSP) | 93 | Program Management Professional (PgMP) | 26 |
| Certified in Production and Inventory Management (CPIM) | 77 | Certified Energy Manager | 25 |
| Insurance License | 69 | Cisco Certified Network Associate (CCNA) | 24 |
| Property and Casualty License | 63 | Life Insurance License | 24 |
| Series 7 | 63 | Associate Business Continuity Professional | 23 |
| Insurance Agent Certification | 61 | Certified in Risk and Information Systems Control | 23 |
| Certified Information Systems Auditor (CISA) | 59 | ITIL Certification | 23 |
| Forklift Operator Certification | 56 | Mortgage License | 23 |
| American Production and Inventory Control Society (APICS) Certification | 54 | Certified Cost Engineer | 21 |
| Paralegal Certification | 54 | Life and Health Insurance License | 21 |
| Certified Purchasing Manager (CPM) | 53 | Six Sigma Certification | 21 |
| Certified Professional in Supply Management (CPSM) | 52 | PMI Certified Associate in Project Management (CAPM) | 20 |

*Source: Burning Glass*

**Table 11. Education Requirements for Entrepreneurship Occupations in Bay Region**

Note: 46% 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 |
| High school or vocational training | 10,206 (40%) |
| Associate Degree | 1,482 (6%) |
| Bachelor’s Degree or Higher | 13,530 (54%) |

*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/](http://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, Data Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), [doreen@baccc.net](mailto:doreen@baccc.net) or (831) 479-6481
* John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, [jcarrese@ccsf.edu](mailto:jcarrese@ccsf.edu) or (415) 267-6544