**B. Labor Market Information (LMI Data)**

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**Finance Occupations**

**Labor Market Information Report**

**City College of San Francisco**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

November 2019

# Recommendation

Based on all available data, there appears to be a significant undersupply of Finance workers compared to the demand for this cluster of occupations in the Bay region and in the Mid-Peninsula sub-region (San Francisco and San Mateo Counties). The gap is about 5,150 students annually in the Bay region and 2,282 students annually in the Mid-Peninsula sub-region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0501.00 - Business and Commerce, General 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 City College of San Francisco and in the region.

# Introduction

This report profiles Finance Occupations in the 12 county Bay region and in the Mid-Peninsula sub-region for a proposed new program at City College of San Francisco. Labor market information (LMI) is not available at the eight-digit SOC Code level for Financial Quantitative Analysts (13-2099.01) or for Financial Managers, Branch or Department (11-3031.02) , therefore, the data shown in Tables 1 and 2 is for Financial Specialists, All Other (SOC 13-2099) and Financial Managers (SOC 11-3031) and likely overstates demand for Financial Quantitative Analysts and Financial Managers, Branch or Department. Tables 3, 4, 6, 9, 10 and 11 uses job postings data from Burning Glass at the eight-digit SOC Code level for Financial Quantitative Analysts and Financial Managers, Branch or Department.

|  |
| --- |
| * **Personal Financial Advisors (SOC 13-2052)**: Advise clients on financial plans using knowledge of tax and investment strategies, securities, insurance, pension plans, and real estate. Duties include assessing clients' assets, liabilities, cash flow, insurance coverage, tax status, and financial objectives. |
| *Entry-Level Educational Requirement: Bachelor's degree* |
| *Training Requirement: Long-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 16%* |
|  |
| * **Financial Specialists, All Other (SOC 13-2099):** All financial specialists not listed separately. |
| *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: 26%* |
|  |
| * **Financial Managers (SOC 11-3031):** Plan, direct, or coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment. |
| *Entry-Level Educational Requirement: Bachelor's degree* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 26%* |
|  |
| * **Financial Analysts (SOC 13-2051):** Conduct quantitative analyses of information affecting investment programs of public or private institutions. |
| *Entry-Level Educational Requirement: Bachelor's degree* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 10%* |
| * **Credit Counselors (SOC 13-2071):** Advise and educate individuals or organizations on acquiring and managing debt. May provide guidance in determining the best type of loan and explaining loan requirements or restrictions. May help develop debt management plans, advise on credit issues, or provide budget, mortgage, and bankruptcy counseling. |
| *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: 34%* |

# Occupational Demand

**Table 1. Employment Outlook for Finance 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 |
| Personal Financial Advisors | 10,887 | 11,370 | 483 | 4% | 4,678 | 936 | $26.25 | $46.84 |
| Financial Specialists, All Other | 5,260 | 5,518 | 258 | 5% | 2,461 | 492 | $24.66 | $38.11 |
| Financial Managers | 24,727 | 27,432 | 2,705 | 11% | 12,095 | 2,419 | $38.50 | $73.39 |
| Financial Analysts | 16,490 | 17,442 | 952 | 6% | 7,986 | 1,597 | $30.48 | $49.33 |
| Credit Counselors | 790 | 861 | 71 | 9% | 400 | 80 | $16.82 | $23.62 |
| **Total** | **58,154** | **62,623** | **4,469** | **8%** | **27,620** | **5,524** | **$32.39** | **$57.73** |

*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 Finance Occupations in Mid-Peninsula 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 |
| Personal Financial Advisors | 5,322 | 5,617 | 295 | 6% | 2,325 | 465 | $26.62 | $59.23 |
| Financial Specialists, All Other | 2,163 | 2,312 | 149 | 7% | 1,060 | 212 | $24.04 | $44.34 |
| Financial Managers | 8,948 | 10,110 | 1,162 | 13% | 4,573 | 915 | $44.44 | $83.08 |
| Financial Analysts | 7,542 | 8,019 | 477 | 6% | 3,692 | 738 | $32.00 | $51.97 |
| Credit Counselors | 154 | 191 | 36 | 23% | 103 | 21 | $16.56 | $23.38 |
| **TOTAL** | **24,129** | **26,248** | **2,120** | **9%** | **11,753** | **2,351** | **$34.61** | **$64.24** |

*Source: EMSI 2018.4*

**Mid-Peninsula Sub-Region** includes San Francisco and San Mateo Counties

### Job Postings in Bay Region and Mid-Peninsula Sub-Region

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

|  |  |  |
| --- | --- | --- |
| Occupation | Bay Region | Mid-Peninsula |
| Financial Managers, Branch or Department (11-3031.02) | 9,972 | 4,496 |
| Financial Analysts (13-2051.00) | 7,347 | 3,233 |
| Personal Financial Advisors (13-2052.00) | 2,497 | 830 |
| Credit Counselors (13-2071.00) | 194 | 60 |
| Financial Quantitative Analysts (13-2099.01) | 159 | 126 |
| **Total** | **20,169** | **8,745** |

*Source: Burning Glass*

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | Mid-Peninsula | Common Title | Bay | Mid-Peninsula |
| Financial Analyst | 2,760 | 1,060 | Accounting Analyst | 228 | 88 |
| Accounting Manager | 2,075 | 1,113 | Treasury Analyst | 219 | 109 |
| Senior Financial Analyst | 1,240 | 485 | Accounting Supervisor | 192 | 44 |
| Tax Manager | 1,039 | 494 | Pricing Analyst | 183 | 53 |
| Financial Advisor | 820 | 188 | Investment Analyst | 180 | 130 |
| Director of Finance | 576 | 276 | Tax Director | 176 | 89 |
| Financial Consultant | 559 | 184 | Financial Solutions Advisor | 161 | 40 |
| Branch Manager | 529 | 153 | Assistant Branch Manager | 145 | 39 |
| Finance Analyst | 413 | 167 | Branch Manager In Training | 128 | 23 |
| Finance Manager | 390 | 143 | Portfolio Analyst | 122 | 68 |
| Portfolio Manager | 369 | 208 | Executive Director | 116 | 50 |
| Director of Accounting | 363 | 193 | Wealth Management Advisor | 115 | 50 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Finance 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) |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 5,248 | 5,399 | 8% | 9.2% |
| Portfolio Management (523920) | 3,920 | 3,956 | 13% | 6.7% |
| Investment Advice (523930) | 3,572 | 3,608 | 10% | 6.1% |
| Commercial Banking (522110) | 2,948 | 2,970 | (7%) | 5.1% |
| Securities Brokerage (523120) | 2,148 | 2,100 | (21%) | 3.6% |
| Investment Banking and Securities Dealing (523110) | 1,926 | 1,949 | 2% | 3.3% |
| Miscellaneous Intermediation (523910) | 1,506 | 1,534 | 17% | 2.6% |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 1,382 | 1,425 | 38% | 2.4% |
| Local Government, Excluding Education and Hospitals (903999) | 1,326 | 1,334 | 5% | 2.3% |
| Offices of Certified Public Accountants (541211) | 1,289 | 1,298 | 11% | 2.2% |
| Custom Computer Programming Services (541511) | 1,226 | 1,249 | 16% | 2.1% |
| Electronic Computer Manufacturing (334111) | 1,184 | 1,199 | 7% | 2.0% |

*Source: EMSI 2018.4*

**Table 6. Top Employers Posting Finance Occupations in Bay Region and Mid-Peninsula Sub-Region (Nov 2017 - Oct 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Mid-Peninsula |
| Bank of America | 656 | PricewaterhouseCoopers | 124 | Wells Fargo | 363 |
| JP Morgan Chase Company | 267 | University California | 122 | Bank of America | 226 |
| Wells Fargo | 238 | U.S. Bancorp | 111 | Deloitte | 171 |
| Fidelity Brokerage Services | 215 | Charles Schwab | 98 | JP Morgan Chase Company | 118 |
| Apple Inc. | 192 | Accenture | 96 | Facebook | 99 |
| Deloitte | 190 | Hertz Corporation | 90 | PricewaterhouseCoopers | 82 |
| Google Inc. | 185 | Stanford University | 87 | Gap Inc. | 73 |
| Mutual of Omaha Company | 156 | Facebook | 86 | Salesforce | 72 |
| Bank of the West | 145 | Bvoh | 83 | Fidelity Brokerage Services | 67 |
| Kaiser Permanente | 124 | Ernst & Young | 72 | Oracle | 66 |

*Source: Burning Glass*

# Educational Supply

There are 17 community colleges in the Bay Region issuing 374 awards annually on TOP 0501.00 - Business and Commerce, General. There are two colleges in the Mid-Peninsula sub-region issuing 69 awards annually on this TOP code.

**Table 7. Awards on TOP 0501.00 - Business and Commerce, General in the Bay Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Head Count | Associates | Certificates | Total |
| **Alameda** | East Bay | n/a |  |  | 0 |
| **Berkeley City** | East Bay | 504 | 5 | 7 | 11 |
| **Cabrillo** | Santa Cruz & Monterey | 997 | 36 | 8 | 44 |
| **Canada** | Mid-Peninsula | 609 |  |  | 0 |
| **Chabot Hayward** | East Bay | 550 | 0 | 19 | 19 |
| **Contra Costa** | East Bay | n/a |  |  | 0 |
| **Deanza** | Silicon Valley | n/a |  |  | 0 |
| **Diablo Valley** | East Bay | 850 | 39 | 23 | 62 |
| **Evergreen Valley** | Silicon Valley | 817 |  |  | 0 |
| **Foothill** | Silicon Valley | n/a |  |  | 0 |
| **Gavilan** | Silicon Valley | 426 | 23 | 5 | 28 |
| **Hartnell** | Santa Cruz & Monterey | 553 |  |  | 0 |
| **Laney** | East Bay | 743 |  |  | 0 |
| **Las Positas** | East Bay | 1,171 | 12 |  | 12 |
| **Los Medanos** | East Bay | 754 |  | 12 | 12 |
| **Marin** | North Bay | 202 | 1 | 0 | 1 |
| **Merritt** | East Bay | 512 | 5 |  | 5 |
| **Mission** | Silicon Valley | 686 | 7 |  | 7 |
| **Monterey** | Santa Cruz & Monterey | 46 | 5 | 1 | 6 |
| **Napa** | North Bay | 472 | 5 |  | 5 |
| **Ohlone** | East Bay | n/a | 84 |  | 84 |
| **San Francisco** | Mid-Peninsula | 382 | 30 | 11 | 41 |
| **San Francisco Ctrs** | Mid-Peninsula | 24 |  |  | 0 |
| **San Jose City** | Silicon Valley | 608 | 1 |  | 1 |
| **San Mateo** | Mid-Peninsula | 539 | 28 |  | 28 |
| **Santa Rosa** | North Bay | 2,404 |  |  | 0 |
| **Skyline** | Mid-Peninsula | 1,008 |  |  | 0 |
| **Solano** | North Bay | 906 |  |  | 0 |
| **West Valley** | Silicon Valley | 659 |  | 8 | 8 |
| **Total Bay Region** | | **16,422** | **281** | **93** | **374** |
| **Total Mid-Peninsula Sub-Region** | | **1,953** | **58** | **11** | **69** |

# *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 5,524 annual openings for the Finance occupational cluster and 374 annual awards for an annual undersupply of 5,150 students. In the Mid-Peninsula sub-region, there is also a gap with 2,351 annual openings and 69 annual awards for an annual undersupply of 2,282 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0501.00 - Business and Commerce, General**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | City College of San Francisco (All CTE Programs) | State (TOP 0501.00) | Bay  (TOP 0501.00) | Mid-Peninsula (TOP 0501.00) | City College of San Francisco (TOP 0501.00) |
| % Employed Four Quarters After Exit | 75% | 73% | 64% | 70% | 80% | n/a |
| Median Quarterly Earnings Two Quarters After Exit | $13,996 | $10,170 | $7,885 | $9,047 | $9,841 | n/a |
| Median % Change in Earnings | 40% | 50% | 49% | 52% | 186% | n/a |
| % of Students Earning a Living Wage | 63% | 55% | 53% | 58% | 50% | n/a |

*Source: Launchboard Pipeline (version available on 11/14/18)*

# Skills, Certifications and Education

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Accounting | 8,118 | Account Reconciliation | 1,811 | Customer Contact | 1,227 |
| Budgeting | 6,327 | Financial Modeling | 1,795 | Financial Advising | 1,216 |
| Financial Analysis | 5,979 | Accounting Management | 1,792 | Sarbanes-Oxley (SOX) | 1,199 |
| Financial Reporting | 3,756 | Staff Management | 1,786 | SQL | 1,163 |
| Finance | 3,345 | Oracle | 1,620 | Hyperion | 1,155 |
| Generally Accepted Accounting Principles (GAAP) | 3,016 | SAP | 1,618 | Business Process | 1,068 |
| Financial Planning | 2,440 | Sales | 1,617 | Financial Management | 1,049 |
| Project Management | 2,407 | Enterprise Resource Planning (ERP) | 1,603 | Wealth Management | 1,003 |
| Customer Service | 2,174 | Business Development | 1,450 | Spreadsheets | 1,002 |
| Financial Statements | 2,170 | Process Improvement | 1,422 | Business Planning | 952 |
| Public Accounting | 2,100 | External Auditing | 1,347 | Key Performance Indicators (KPIs) | 934 |
| Economics | 2,019 | Variance Analysis | 1,301 | NetSuite | 919 |
| Scheduling | 1,927 | General Ledger | 1,286 | Business Administration | 900 |
| Account Reconciliation | 1,811 | Balance Sheet | 1,247 | Accruals | 893 |
| Financial Modeling | 1,795 | Month-End Close Processes | 1,245 | Risk Management | 893 |

*Source: Burning Glass*

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

Note: 62% 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 |
| Certified Public Accountant (CPA) | 4,637 | Project Management Certification | 134 |
| Series 7 | 1,051 | Series 63 | 123 |
| Certified Financial Planner (CFP) | 611 | Certified Treasury Professional (CTP) | 115 |
| Driver's License | 603 | Certified Information Systems Auditor (CISA) | 99 |
| Investment Advisor | 348 | Project Management Professional (PMP) | 73 |
| Series 66 | 314 | Securities License | 73 |
| Series 65 | 242 | Chartered Retirement Planning Counselor | 72 |
| Insurance License | 219 | Accident Health and Life (Insurance) | 70 |
| Mortgage License | 217 | Life and Health Insurance License | 65 |
| Financial Accounting Standards Board (FASB) | 166 | Life Insurance License | 62 |
| Series 6 | 156 | Variable Annuity License | 62 |
| Chartered Financial Analyst (CFA) | 144 | Insurance Agent Certification | 59 |
| Project Management Certification | 134 | Chartered Financial Consultant | 48 |
| Series 63 | 123 | Security Clearance | 47 |
| Certified Treasury Professional (CTP) | 115 | Licensed Mortgage Loan Originator | 43 |

*Source: Burning Glass*

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

Note: 28% 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 | 784 (5%) |
| Associate Degree | 249 (2%) |
| Bachelor’s Degree or Higher | 13,554 (93%) |

*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

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