** Bookkeeping Occupations**

**Labor Market Information Report**

**Las Positas College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

December 2019

# Recommendation

Based on all available data, there appears to be a significant undersupply of Bookkeeping 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). There is a projected annual gap of about 4,852 students in the Bay region and 1,238 students in the East Bay Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 0502.00 - Accounting 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 Las Positas College and in the region.

# Introduction

This report profiles Bookkeeping Occupations in the 12 county Bay region and in the East Bay sub-region for a proposed new program at Las Positas College.

|  |
| --- |
| * **Bookkeeping, Accounting, and Auditing Clerks (SOC 43-3031):** Compute,classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers. Excludes “Payroll and Timekeeping Clerks” (43-3051). |
| Entry-Level Educational Requirement: Some college, *no degree* |
| Training Requirement: Moderate-term *on-the-job training* |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 48% |

# Occupational Demand

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2018 Jobs | 2023 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Bookkeeping, Accounting, and Auditing Clerks | 47,823 | 48,843 | 1,019 | 2% | 27,844 | 5,569 | $15.02 | $25.13 |

*Source: EMSI 2019.2*

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2018 Jobs | 2023 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Bookkeeping, Accounting, and Auditing Clerks | 12,527 | 12,677 | 150 | 1% | 7,143 | 1,429 | $13.95 | $23.57 |

*Source: EMSI 2019.2*

**East Bay Sub-Region** includes Alameda and Contra Costa Counties

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

**Table 3. Number of Job Postings by Occupation for latest 12 months (November 2018 - October 2019)**

| Occupation | Bay Region | East Bay |
| --- | --- | --- |
| Bookkeeping, Accounting, and Auditing Clerks | 14,122 | 4,444 |

*Source: Burning Glass*

**Table 4a. Top Job Titles for Bookkeeping Occupations for latest 12 months (November 2018 - October 2019) Bay Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Bay | Common Title | Bay |
| Bookkeeper | 2,047 | Accounts Receivable | 164 |
| Accounting Clerk | 1,611 | Accounting Associate | 160 |
| Accounts Payable Specialist | 1,594 | Accounts Receivable Analyst | 132 |
| Accounts Payable Clerk | 1,299 | Accounts Payable Coordinator | 116 |
| Accounts Receivable Specialist | 686 | Clerk | 105 |
| Accounting Assistant | 686 | Accounting Coordinator | 98 |
| Accounts Receivable Clerk | 613 | Accounts Receivable Coordinator | 97 |
| Accounting Specialist | 548 | AP Clerk | 78 |
| Specialist | 345 | Account Clerk | 71 |
| Accounts Payable | 313 | Accounts Payable Associate | 61 |
| Accountant | 283 | Coordinator | 54 |
| Bookkeeper/Office Manager | 226 | Accounts Payable Processor | 52 |
| Accounts Payable Analyst | 169 | Finance Assistant | 40 |
| Accounting Technician | 166 | Accounts Receivable Associate | 40 |

**Table 4b. Top Job Titles for Bookkeeping Occupations for latest 12 months (November 2018 - October 2019) East Bay Sub-Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | East Bay | Common Title | East Bay |
| Bookkeeper | 704 | Accounts Payable Coordinator | 51 |
| Accounting Clerk | 539 | Accounts Receivable Analyst | 49 |
| Accounts Payable Specialist | 485 | Clerk | 42 |
| Accounts Payable Clerk | 406 | Accounting Technician | 42 |
| Accounting Assistant | 237 | Account Clerk | 35 |
| Accounts Receivable Specialist | 235 | Accounting Coordinator | 32 |
| Accounts Receivable Clerk | 181 | Accounting Associate | 32 |
| Accounting Specialist | 140 | Accounts Receivable Coordinator | 23 |
| Accounts Payable | 135 | Accounts Payable Associate | 18 |
| Accountant | 81 | Accounts Receivable Associate | 16 |
| Accounts Receivable | 71 | Financial Management Technician | 15 |
| Specialist | 69 | Specialist Clerk | 13 |
| Bookkeeper/Office Manager | 57 | Administrative Assistant | 13 |
| Accounts Payable Analyst | 57 | Accounts Payable Processor | 13 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Bookkeeping Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2018) | Jobs in Industry (2022) | % Change (2018-22) | % in Industry (2018) |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 2,217 | 2,261 | 2% | 5% |
| Local Government, Excluding Education and Hospitals (903999) | 1,899 | 1,897 | 0% | 4% |
| Offices of Certified Public Accountants (541211) | 1,839 | 1,909 | 4% | 4% |
| Other Accounting Services (541219) | 1,743 | 1,823 | 5% | 4% |
| Colleges, Universities, and Professional Schools (State Government) (902612) | 994 | 1,058 | 6% | 2% |
| Religious Organizations (813110) | 915 | 897 | -2% | 2% |
| Plumbing, Heating, and Air-Conditioning Contractors (238220) | 794 | 843 | 6% | 2% |
| Colleges, Universities, and Professional Schools (611310) | 757 | 799 | 6% | 2% |
| Internet Publishing and Broadcasting and Web Search Portals (519130) | 748 | 921 | 23% | 2% |
| Custom Computer Programming Services (541511) | 742 | 824 | 11% | 2% |
| Hotels (except Casino Hotels) and Motels (721110) | 696 | 691 | -1% | 1% |
| Office Administrative Services (561110) | 661 | 627 | -5% | 1% |
| Offices of Lawyers (541110) | 662 | 647 | -2% | 1% |
| Tax Preparation Services (541213) | 651 | 682 | 5% | 1% |
| New Car Dealers (441110) | 545 | 546 | 0% | 1% |
| Residential Property Managers (531311) | 499 | 520 | 4% | 1% |
| Elementary and Secondary Schools (Local Government) (903611) | 494 | 493 | 0% | 1% |
| Commercial Banking (522110) | 465 | 429 | -8% | 1% |
| Payroll Services (541214) | 474 | 550 | 16% | 1% |
| Temporary Help Services (561320) | 482 | 491 | 2% | 1% |

*Source: EMSI 2019.2*

**Table 6. Top Employers Posting Bookkeeping Occupations in Bay Region and East Bay Sub-Region (November 2018 - October 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | East Bay |
| Sprouts Farmers Markets | 61 | In House Vacancy | 13 | Nelson | 26 |
| Nelson | 44 | Anthem Blue Cross | 13 | Sprouts Farmers Markets | 25 |
| US Army | 38 | Old Republic International | 12 | Alameda Health System | 22 |
| Stanford University | 35 | Lucile Packard Childrens Hospital | 12 | University Of California Berkeley | 18 |
| Marriott International Inc | 25 | Highlands Point Apartments | 11 | US Army | 15 |
| Hilton Hotel Corporation | 23 | Compass Group | 11 | Lennar Corporation | 15 |
| Alameda Health System | 23 | Seneca Family Of Agencies | 10 | Toll Brothers Incorporated | 12 |
| Lennar Corporation | 21 | Republic Bancorp | 10 | Old Republic International | 11 |
| Aladdin Bail Bonds | 21 | Kavaliro | 10 | Seneca Family Of Agencies | 10 |
| University Of California Berkeley | 17 | Hntb | 10 | Highlands Point Apartments | 10 |
| Sfmta | 16 | Hertz Corporation | 10 | Eastbay | 10 |
| Information Technology Group | 16 | Eastbay | 10 | University California | 9 |
| California State University | 16 | Compass Group Plc US | 10 | Mt Diablo Unified | 9 |
| University California | 15 | Aramark | 10 | In House Vacancy | 9 |
| Rite Aid Corporation | 15 | Alphalist | 10 | West Contra Costa USD | 8 |
| Ernst & Young | 15 | RSM US LLP. | 9 | Peterson Trucks | 8 |
| Toll Brothers Incorporated | 13 | Mt Diablo Unified | 9 | Common Interest Management Services | 8 |

*Source: Burning Glass*

# Educational Supply

There are 28 community colleges in the Bay Region issuing 717 awards on average annually (last 3 years) on TOP 0502.00 – Accounting. There are 10 colleges in the East Bay Sub-Region issuing 191 awards on average annually (last 3 years) on this TOP code.

**Table 7. Awards on TOP 0502.00 - Accounting in Bay Region**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Associate | Certificate 18+ units | Certificate Low unit | Noncredit | Grand Total |
| Berkeley City College | East Bay | 5 |  | 8 |  | 13 |
| Cabrillo College | Santa Cruz - Monterey | 21 | 9 | 16 |  | 46 |
| Cañada College | Mid-Peninsula | 8 | 7 | 3 |  | 18 |
| Chabot College | East Bay | 16 | 29 |  |  | 45 |
| City College of San Francisco | Mid-Peninsula | 6 | 8 | 6 |  | 20 |
| College of Alameda | East Bay | 12 | 2 |  |  | 14 |
| College of Marin | North Bay | 1 | 6 |  |  | 7 |
| College of San Mateo | Mid-Peninsula | 28 | 38 | 32 |  | 98 |
| Contra Costa College | East Bay |  | 6 |  |  | 6 |
| De Anza College | Silicon Valley | 32 | 10 | 36 |  | 78 |
| Diablo Valley College | East Bay | 12 | 9 | 24 |  | 45 |
| Evergreen Valley College | Silicon Valley | 25 | 1 | 4 |  | 30 |
| Foothill College | Silicon Valley | 25 | 5 | 11 |  | 41 |
| Gavilan College | Santa Cruz - Monterey | 7 | 3 |  |  | 10 |
| Hartnell College | Santa Cruz - Monterey |  | 4 |  |  | 4 |
| Laney College | East Bay | 16 | 5 |  |  | 21 |
| Las Positas College | East Bay |  | 7 |  |  | 7 |
| Los Medanos College | East Bay | 14 | 9 |  |  | 23 |
| Merritt College | East Bay | 8 | 3 |  |  | 11 |
| Mission College | Silicon Valley | 16 | 7 | 1 |  | 24 |
| Monterey Peninsula College | Santa Cruz - Monterey | 3 | 2 | 2 |  | 7 |
| Napa Valley College | North Bay | 6 | 7 |  |  | 13 |
| Ohlone College | East Bay | 5 | 6 |  |  | 11 |
| San Francisco Ctrs | Mid-Peninsula |  |  |  | 23 | 23 |
| San Jose City College | Silicon Valley | 13 | 12 |  |  | 25 |
| Santa Rosa Junior College | North Bay |  | 20 | 10 |  | 30 |
| Skyline College | Mid-Peninsula | 12 | 10 | 4 |  | 26 |
| Solano College | North Bay | 11 | 5 | 3 |  | 19 |
| West Valley College | Silicon Valley |  | 0 | 2 |  | 2 |
| **Total Bay Region** |  | **302** | **230** | **162** | **23** | **717** |
| **Total East Bay Sub Region** |  | **83** | **76** | **32** | **-** | **191** |

# *Source: Data Mart*

Note: The annual average for awards is 2015-16 to 2017-18.

# Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 5,569 annual openings for the Bookkeeping occupational cluster and 717 annual (3-year average) awards for an annual undersupply of 4,852 students. In the East Bay Sub-Region, there is also a gap with 1,429 annual openings and 191 annual (3-year average) awards for an annual undersupply of 1,238 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0502.00 - Accounting**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | Las Positas College (All CTE Programs) | State (0502.00) | Bay (0502.00) | East Bay (0502.00) | Las Positas College (0502.00) |
| % Employed Four Quarters After Exit | 74% | 75% | 72% | 75% | 71% | 73% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $10,000 | $10,000 | $11,929 | $10,570 | $10,440 |
| Median % Change in Earnings | 46% | 28% | 53% | 67% | 60% | 50% |
| % of Students Earning a Living Wage | 63% | 64% | 65% | 70% | 67% | 72% |

*Source: Launchboard Pipeline (version available on 11/4/19)*

# Skills, Certifications and Education

**Table 9. Top Skills for Bookkeeping Occupations in Bay Region (November 2018 - October 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Accounting | 10,899 | Accounting Software | 1,385 | Record Keeping | 852 |
| Accounts Payable / Accounts Receivable | 6,403 | Generally Accepted Accounting Principles (GAAP) | 1,352 | SAP | 830 |
| Bookkeeping | 3,989 | Financial Reporting | 1,332 | Bank Reconciliation | 813 |
| Data Entry | 3,475 | Budgeting | 1,162 | Oracle | 813 |
| Invoice Processing | 3,295 | Financial Statements | 1,161 | Accruals | 812 |
| Quickbooks | 2,977 | Payroll Processing | 1,114 | Payables | 735 |
| Account Reconciliation | 2,843 | Accounting Systems | 1,099 | Accounting Management | 725 |
| Customer Billing | 2,504 | NetSuite | 1,093 | Balance Sheet | 698 |
| General Ledger | 2,421 | Cash Deposits and Receipts | 1,081 | Filing | 694 |
| Month-End Close Processes | 2,317 | Scheduling | 1,075 | Mailing | 681 |
| Customer Checkout | 2,313 | External Auditing | 1,052 | Mail Sorting | 600 |
| Expense Reports | 2,230 | Invoice Matching | 1,037 | Business Administration | 597 |
| Spreadsheets | 1,826 | Customer Contact | 991 | Customer Accounts | 592 |
| Enterprise Resource Planning (ERP) | 1,708 | Invoicing | 963 | Full Cycle Accounts Payable | 567 |
| Customer Service | 1,678 | Invoice Preparation | 875 | Expense Report Processing | 547 |

*Source: Burning Glass*

**Table 10. Certifications for Bookkeeping Occupations in Bay Region (November 2018 - October 2019)**

Note: 95% 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 | 358 | Certified Payroll Professional (CPP) | 8 |
| Certificate in Accounting | 74 | Leadership In Energy And Environmental Design (LEED) Certified | 6 |
| Business License | 55 | Certified Professional Coder | 6 |
| Certified Public Accountant (CPA) | 45 | Certified Medical Assistant | 6 |
| Bookkeeping Certification | 19 | MBE Certified | 5 |
| Security Clearance | 13 | ITIL Certification | 5 |
| First Aid CPR AED | 13 | IT Infrastructure Library (ITIL) Certification | 5 |
| Quickbooks Certification | 11 | Real Estate Certification | 4 |
| Typing Certification | 10 | Medical Billing and Coding Certification | 4 |
| CDL Class C | 10 | Certified Management Accountant (CMA) | 4 |
| Certified Information Systems Auditor (CISA) | 9 | All Data Certification | 4 |
| Contractors License | 8 | ADP Payroll Certification | 4 |

*Source: Burning Glass*

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

Note: 61% 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 | 1,947 | 23% |
| Associate Degree | 1,460 | 17% |
| Bachelor’s Degree or Higher | 5,199 | 60% |

*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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