



Bookkeeping Occupations Labor Market Information Report Cabrillo College

Prepared by the San Francisco Bay Center of Excellence for Labor Market Research
June 2021

Recommendation

Based on all available data, there appears to be an “undersupply” of Bookkeeping 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 12,735 students in the Bay region and 957 students in the SC-Monterey Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 0502.00 - Accounting programs 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.

This report profiles Bookkeeping Occupations in the 12 county Bay region and in the SC-Monterey sub-region for existing low unit, local certificate(s) for state chaptering at Cabrillo College.

- **Billing and Posting Clerks (43-3021):** Compile, compute, and record billing, accounting, statistical, and other numerical data for billing purposes. Prepare billing invoices for services rendered or for delivery or shipment of goods.
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: 46%
- **Bookkeeping, Accounting, and Auditing Clerks (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: 49%
- **Office Clerks, General (43-9061):** Perform duties too varied and diverse to be classified in any specific office clerical occupation, requiring knowledge of office systems and procedures. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of answering telephones, bookkeeping, typing or word processing, stenography, office machine operation, and filing.
Entry-Level Educational Requirement: High school diploma or equivalent
Training Requirement: Short-term on-the-job training
Percentage of Community College Award Holders or Some Postsecondary Coursework: 44%

Occupational Demand

Table 1. Employment Outlook for Bookkeeping Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Billing and Posting Clerks	11,303	10,617	-685	-6%	6,538	1,090	\$ 19	\$ 25
Bookkeeping, Accounting, and Auditing Clerks	44,898	42,069	-2,829	-6%	27,397	4,566	\$ 20	\$ 26
Office Clerks, General	74,772	70,022	-4,750	-6%	47,328	7,888	\$ 16	\$ 21
Total	130,973	122,708	-8,265	-6%	81,263	13,544	\$17.63	\$23.06

Source: EMSI 2021.2

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 SC-Monterey Sub-region

Occupation	2019 Jobs	2024 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Billing and Posting Clerks	843	844	0	0%	512	85	\$ 18	\$ 22
Bookkeeping, Accounting, and Auditing Clerks	3,751	3,426	-324	-9%	2,238	373	\$ 19	\$ 24
Office Clerks, General	5,320	5,070	-249	-5%	3,400	567	\$ 16	\$ 19
Total	9,914	9,340	-574	-6%	6,150	1,025	\$17.31	\$21.15

Source: EMSI 2021.2

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 (May 2020 - Apr 2021)

Occupation	Bay Region	SC-Monterey
Bookkeeping, Accounting, and Auditing Clerks	8,484	596
Office Clerks, General	4,865	313
Billing, Cost, and Rate Clerks	710	33

Source: Burning Glass

Table 4a. Top Job Titles for Bookkeeping Occupations for latest 12 months (May 2020 - Apr 2021) Bay Region

Title	Bay	Title	Bay
Bookkeeper	1,043	Accounts Receivable Clerk	188
Office Assistant	781	Office Clerk	143
Accounts Payable Specialist	687	Accounts Payable	141
Accounting Clerk	502	Clerk	119
Office Administrator	486	Ap Specialist	118
Accounts Payable Clerk	453	Billing Specialist	115
Accounts Receivable Specialist	304	Accounting Associate	85
Accounting Assistant	284	Bookkeeper/Office Manager	83
Accounting Specialist	234	Billing Clerk	83

Source: Burning Glass

Table 4b. Top Job Titles for Bookkeeping Occupations for latest 12 months (May 2020 - Apr 2021) SC-Monterey Sub-Region

Title	SC-Monterey	Title	SC-Monterey
Bookkeeper	79	Accounts Payable Specialist	16
Accounts Payable Clerk	52	Accounting Technician	15
Office Assistant	49	Office Clerk	14
Accounting Clerk	40	Accounts Receivable Specialist	14
Accounts Receivable Clerk	23	Receptionist/Office Assistant	9
Accounting Assistant	19	Bookkeeper/Office Manager	9
Accounting Specialist	18	Price Accuracy Coordinator	8
Travel Specialist	17	Mobile Notary	8
Office Administrator	17	Clerk	8

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 (2019)	Jobs in Industry (2024)	% Change (2019-24)	% Occupation Group in Industry (2019)
Local Government, Excluding Education and Hospitals	6,229	5,874	-6%	5%
Corporate, Subsidiary, and Regional Managing Offices	3,570	3,155	-12%	3%
Colleges, Universities, and Professional Schools (State Government)	3,385	2,941	-13%	2%
Offices of Certified Public Accountants	2,942	3,076	5%	2%
Colleges, Universities, and Professional Schools	2,861	2,592	-9%	2%
Offices of Physicians (except Mental Health Specialists)	2,635	2,294	-13%	2%
Internet Publishing and Broadcasting and Web Search Portals	2,214	2,691	22%	2%
Religious Organizations	2,282	2,221	-3%	2%
Other Accounting Services	2,243	2,253	0%	2%
Services for the Elderly and Persons with Disabilities	1,987	2,695	36%	2%

Source: EMSI 2021.2

Table 6. Top Employers Posting Bookkeeping Occupations in Bay Region and SC-Monterey Sub-Region (May 2020 - Apr 2021)

Employer	Bay	Employer	SC-Monterey
Certified Mobile Notary Service	291	Certified Mobile Notary Service	27
Intuit	126	Intuit	21
Acca	76	Santa Cruz City Schools	10
University San Francisco	55	Pajaro Valley Unified School District	9
Nelson	54	Rite Aid Corporation	8
Sprouts Farmers Markets	49	Monterey Peninsula Unified	8
John Stewart Company	35	Employnet	8
Anthem Blue Cross	34	California State University	8
La Clinica De La Raza	33	North Monterey County Unified	7
Fremont Unified School District	30	Monterey County California	6

Source: Burning Glass

Educational Supply

There are 28 community colleges in the Bay Region issuing 809 awards on average annually (last 3 years ending 2018-19) on TOP 0502.00 - Accounting. In the SC-Monterey Sub-Region, there are three (3) community colleges that issued 68 awards on average annually (last 3 years) on this TOP code.

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

College	Subregion	Associate	Certificate Low	Noncredit	Total
Alameda	East Bay	8	3	0	11
Berkeley City	East Bay	5	7	0	12
Cabrillo	SC-Monterey	19	32	0	51
Canada	Mid-Peninsula	7	13	0	20
Chabot Hayward	East Bay	16	29	0	45
Contra Costa	East Bay	0	6	0	6
De Anza	Silicon Valley	29	49	0	78
Diablo Valley	East Bay	14	36	0	50
Evergreen Valley	Silicon Valley	24	5	0	29
Foothill	Silicon Valley	26	15	48	89
Gavilan	Silicon Valley	6	3	0	9
Hartnell	SC-Monterey	0	6	0	6
Laney	East Bay	16	6	0	22
Las Positas	East Bay	0	8	1	9
Los Medanos	East Bay	16	9	0	25
Marin	North Bay	0	4	0	4
Merritt	East Bay	10	3	0	13
Mission	Silicon Valley	16	9	0	25
Monterey	SC-Monterey	6	5	0	11
Napa	North Bay	5	6	0	11
Ohlone	East Bay	5	40	0	45
San Francisco	Mid-Peninsula	7	15	0	22
San Francisco Ctrs	Mid-Peninsula	0	0	17	17
San Jose City	Silicon Valley	11	13	0	24
San Mateo	Mid-Peninsula	28	63	0	91
Santa Rosa	North Bay	0	35	0	35
Skyline	Mid-Peninsula	12	16	0	28
Solano	North Bay	11	9	0	20
West Valley	Silicon Valley	0	1	0	1
Total		297	446	66	809

Source: Data Mart

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

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 13,544 annual openings for the Bookkeeping occupational cluster and 809 annual (3-year average) awards for an annual undersupply of 12,735 students. In the SC-Monterey Sub-Region, there is also a gap with 1,025 annual openings and 68 annual (3-year average) awards for an annual undersupply of 957 students.

Student Outcomes

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

Metric Outcomes	Bay All CTE Program	Cabrillo All CTE Program	State 0502.00	Bay 0502.00	SC-Monterey 0502.00	Cabrillo College 0502.00
Students with a Job Closely Related to Their Field of Study	75%	78%	72%	76%	70%	83%
Median Annual Earnings for SWP Exiting Students	\$44,575	\$39,206	\$39,049	\$53,870	\$38,793	\$44,548
Median Change in Earnings for SWP Exiting Students	31%	45%	32%	40%	27%	26%
Exiting Students Who Attained the Living Wage	52%	58%	59%	60%	59%	64%

Source: Launchboard Strong Workforce Program from version 2017-18.

Skills, Certifications and Education

Table 9. Top Skills for Bookkeeping Occupations in Bay Region (May 2020 - Apr 2021)

Skill	Posting	Skill	Posting
Accounting	6,817	Expense Reports	1,230
Accounts Payable / Accounts Receivable	3,117	Budgeting	1,122
Data Entry	2,933	Month-End Close Processes	1,117
Bookkeeping	2,902	Accounting Software	1,062
Customer Service	2,703	General Office Duties	1,017
Quickbooks	2,648	Customer Contact	1,011
Customer Billing	2,568	Enterprise Resource Planning (ERP)	999
Scheduling	2,011	Record Keeping	954
Invoice Processing	1,953	Financial Reporting	930
Customer Checkout	1,796	Payroll Processing	898
Account Reconciliation	1,780	Invoicing	897
Spreadsheets	1,609	Office Management	867
General Ledger	1,480	Financial Statements	852
Administrative Support	1,443	Mailing	809

Source: Burning Glass

Table 10. Certifications for Bookkeeping Occupations in Bay Region (May 2020 - Apr 2021)

Certification	Posting	Certification	Posting
Driver's License	734	Security Clearance	25
Real Estate Certification	143	Notary License	20
Typing Certification	66	Master Project Management	20
Business License	64	Branch Manager Certificate	16
Certificate in Accounting	59	Cdl Class C	14
First Aid Cpr Aed	51	Basic Life Saving (BLS)	14
Certified Public Accountant (CPA)	50	Quickbooks Certification	12
Business Development Certified	40	Medical Billing and Coding Certification	10
Bookkeeping Certification	37	Life and Health Insurance License	10

Certification	Posting	Certification	Posting
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Source: Burning Glass

Note: 90% 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.

Table 11. Education Requirements for Bookkeeping Occupations in Bay Region

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	3,853	47%
Associate's degree	973	12%
Bachelor's degree	3,346	41%

Source: Burning Glass

Note: 42% 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.

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 CCCCCO 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

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