



Program Endorsement Brief

ACCOUNTING OCCUPATIONS IN WOODLAND COMMUNITY
COLLEGE SERVICE AREA

North/Far North Center of Excellence
JANUARY 2021

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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.

If, for any reason, this document is not accessible or if you have specific needs for readability, please contact us, and we will do our utmost to accommodate you with a modified version. To make a request, Ebony Benzing by phone at (916) 563-3215 or by email at Ebony.Benzing@losrios.edu.

Summary

The North/Far North Center of Excellence for Labor Market Research prepared this report to provide regional labor market supply and demand data related to accounting occupations in the Woodland Community College service area of Colusa, Lake, and Yolo counties. This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from existing community college programs.

Key findings include:

- The Woodland Community College service area held 3,526 jobs for accounting occupations in 2019 - about 11% of all accounting jobs in the North. These jobs are projected to increase by 4% in both the college's three-county service area and the North subregion over the next five years.
- The Colusa-Lake-Yolo area is projected to have about 450 annual openings for accounting occupations through 2024.
- Wages for accounting occupation are typically above the North (Greater Sacramento) region's living wage of \$13.18 per hour.
- Between 46 and 48% of incumbent accounting-support workers have education consistent with community college offerings (some college or associate degrees). Only 15% of accountants and auditors have the same education level, as the occupation typically requires a bachelor's degree for entry-level work.
- Analysis of postsecondary accounting program awards in the North (Greater Sacramento) region shows that, on average, 334 awards were issued each year between the 2016-2017 and 2018-2019 academic years.

Introduction

The North/Far North Center of Excellence was asked to provide labor market information for a proposed program at a regional community college. This report focuses on the following Standard Occupational Classification (SOC) occupations and codes:

- Accountants and Auditors (13-2011)
- Bill and Account Collectors (43-3011)
- Billing and Posting Clerks (43-3021)
- Payroll and Timekeeping Clerks (43-3051)
- Bookkeeping, Accounting, and Auditing Clerks (43-3031)

A review of related programs revealed the following program(s) and Taxonomy of Programs (TOP) code(s) are appropriate for inclusion in this report:

- Accounting (0502.00)
- Tax Studies (0502.10)

The corresponding Classification of Instructional Programs (CIP) code(s) are:

- Accounting (52.0301)
- Accounting Technology/Technician and Bookkeeping (52.0302)
- Taxation (52.1601)

The SOC titles, SOC codes, and job descriptions from the Bureau of Labor Statistics (BLS) and O*Net OnLine are shown below.

Accountants and Auditors (13-2011)

Examine, analyze, and interpret accounting records to prepare financial statements, give advice, or audit and evaluate statements prepared by others. Install or advise on systems of recording costs or other financial and budgetary data.

Bill and Account Collectors (43-3011)

Locate and notify customers of delinquent accounts by mail, telephone, or personal visit to solicit payment. Duties include receiving payment and posting amount to customer's account, preparing statements to credit department if customer fails to respond, initiating repossession proceedings or service disconnection, and keeping records of collection and status of accounts.

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.

Payroll and Timekeeping Clerks (43-3051)

Compile and record employee time and payroll data. May compute employees' time worked, production, and commission. May compute and post wages and deductions, or prepare paychecks.

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.

Occupational Demand

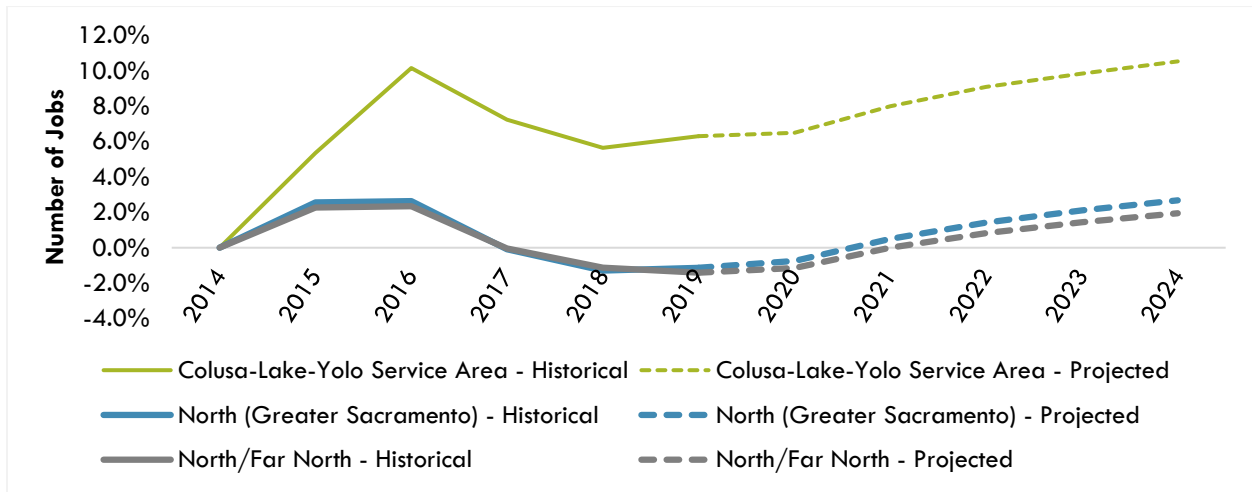
Exhibit 1 summarizes the five-year projected job growth for the selected occupations in Woodland Community College's three-county service area, Greater Sacramento, and the North/Far North.

Exhibit 1. Employment and projected demand, 2019-2024

| Occupation | SOC | 2019 Jobs | 2024 Jobs | 2019-2024 Jobs Change | 2019-2024 Jobs % Change | 2019-2024 Annual Openings |
|--|--------------|---------------|---------------|-----------------------|-------------------------|---------------------------|
| Accountants and Auditors | 13-2011 | 1,243 | 1,311 | 69 | 5.5% | 142 |
| Bill and Account Collectors | 43-3011 | 117 | 119 | 2 | 1.7% | 17 |
| Billing and Posting Clerks | 43-3021 | 302 | 325 | 23 | 7.6% | 39 |
| Bookkeeping, Accounting, and Auditing Clerks | 43-3031 | 1,621 | 1,667 | 46 | 2.8% | 216 |
| Payroll and Timekeeping Clerks | 43-3051 | 244 | 244 | 1 | 0.3% | 33 |
| Colusa-Lake-Yolo Counties | TOTAL | 3,526 | 3,666 | 140 | 4.0% | 447 |
| Accountants and Auditors | 13-2011 | 13,324 | 13,962 | 638 | 4.8% | 1,447 |
| Bill and Account Collectors | 43-3011 | 1,542 | 1,544 | 2 | 0.1% | 217 |
| Billing and Posting Clerks | 43-3021 | 3,123 | 3,404 | 281 | 9.0% | 397 |
| Bookkeeping, Accounting, and Auditing Clerks | 43-3031 | 11,978 | 12,276 | 298 | 2.5% | 1,517 |
| Payroll and Timekeeping Clerks | 43-3051 | 1,992 | 2,006 | 14 | 0.7% | 258 |
| North (Greater Sacramento) subregion | TOTAL | 31,959 | 33,191 | 1,232 | 3.9% | 3,836 |
| Accountants and Auditors | 13-2011 | 14,934 | 15,009 | 76 | 0.5% | 1,678 |
| Bill and Account Collectors | 43-3011 | 2,373 | 2,235 | (138) | (5.8%) | 1,674 |
| Billing and Posting Clerks | 43-3021 | 4,620 | 4,564 | (56) | (1.2%) | 4,186 |
| Bookkeeping, Accounting, and Auditing Clerks | 43-3031 | 17,034 | 17,198 | 164 | 1.0% | 16,645 |
| Payroll and Timekeeping Clerks | 43-3051 | 2,891 | 2,877 | (14) | (0.5%) | 2,397 |
| North/Far North | TOTAL | 41,852 | 41,884 | 32 | 0.1% | 26,580 |

Exhibit 2 compares the percent change in the number of jobs between 2014 through 2019 and the projected changes through 2024. The rate of change is indexed to the total number of jobs in 2014.

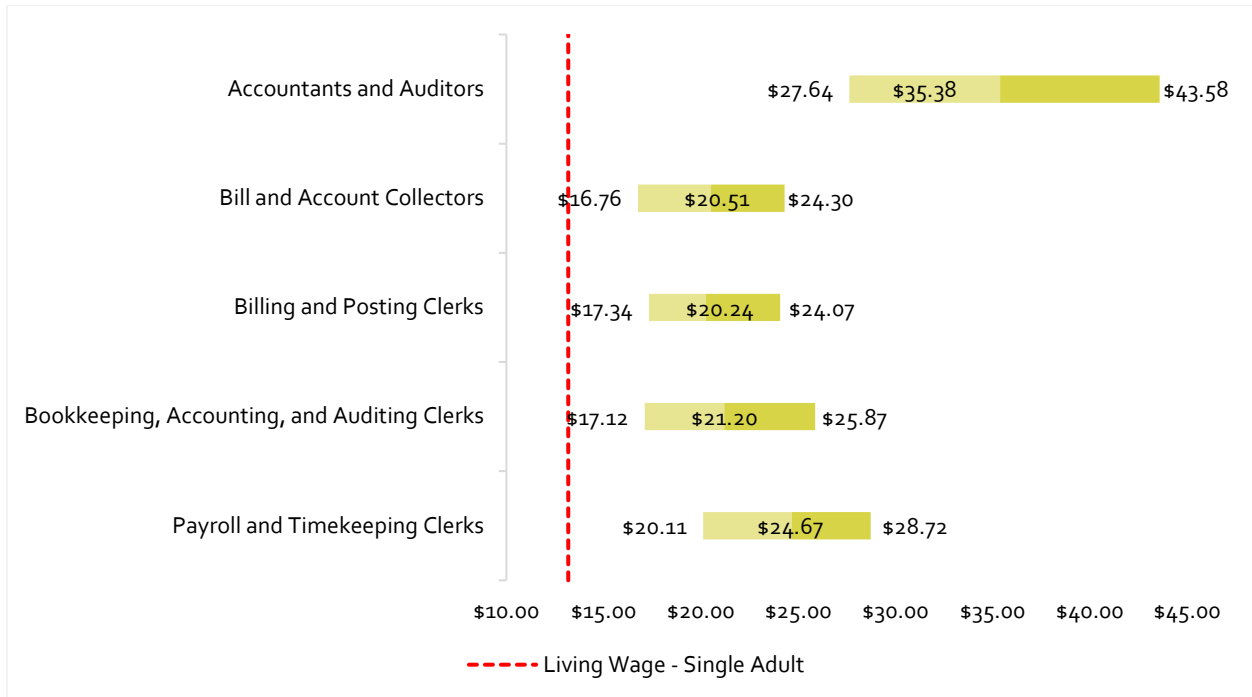
Exhibit 2. Changes in employment, 2014-2024



Wages

Exhibit 3 compares the entry-level, median, and experienced wages for the selected occupations to the North (Greater Sacramento) living wage for a single adult.¹

Exhibit 3. Comparison of wages by occupation, North (Greater Sacramento) region



¹ Living wage is defined as the level of income a single adult with no children must earn to meet basic needs, including food, housing, transportation, healthcare, taxes, and other miscellaneous basic needs. The 25th-percentile and 75th-percentile hourly wages are used as proxy for entry-level and experienced-level wages.

Job Postings

This section of the report analyzes recent data from online job postings (real-time labor market information). Online job postings may provide additional insight into recent changes in the labor market that are not captured by historical data. Job postings data comes from Burning Glass Labor Insights and represents new listings posted online within the last year, from January 1, 2020, to December 31, 2020, in the Colusa-Lake-Yolo service area of Woodland Community College.

Occupations and Job Titles

Exhibit 4 details the number of online job postings for the selected occupations. Burning Glass identified a pool of 626 job postings for the selected occupations in the Colusa-Lake-Yolo service area.

Exhibit 4. Number of job postings by occupation

| SOC Code | Occupation | Job Postings | Share of Job Postings |
|--------------------|--|--------------|-----------------------|
| 43-3031.00 | Bookkeeping, Accounting, and Auditing Clerks | 247 | 39% |
| 13-2011.01 | Accountants | 233 | 37% |
| 43-3051.00 | Payroll and Timekeeping Clerks | 47 | 8% |
| 43-3011.00 | Bill and Account Collectors | 38 | 6% |
| 13-2011.02 | Auditors | 35 | 6% |
| Total Job Postings | | 26 | 4% |

Exhibit 5 shows the top 10 job titles with the most job postings and the share of job postings. All 626 job postings included a job title.

Exhibit 5. Top jobs titles for selected occupations in the Colusa-Lake-Yolo area

| Job Title | Job Postings | Share of Job Postings |
|-----------------------------|--------------|-----------------------|
| Bookkeeper | 28 | 4% |
| Staff Accountant | 18 | 3% |
| Accounts Payable Clerk | 18 | 3% |
| Accountant Trainee | 18 | 3% |
| Accounts Payable Specialist | 14 | 2% |
| Accountant | 14 | 2% |
| General Accountant | 13 | 2% |
| Accounting Assistant | 13 | 2% |

| Job Title | Job Postings | Share of Job Postings |
|------------------------|--------------|-----------------------|
| Tax Associate | 12 | 2% |
| Accountant Auditor III | 12 | 2% |

Employers

Exhibit 6 shows the top 10 employers for job postings related to the selected occupations. Please note that 32% of job postings have been excluded because they did not include an employer.

Exhibit 6. Top employers for selected occupations in the Colusa-Lake-Yolo area

| Employer | Job Postings | Share of Job Postings |
|--|--------------|-----------------------|
| Intuit | 74 | 12% |
| University California Davis | 18 | 3% |
| UC Davis Health | 17 | 3% |
| University of California | 13 | 2% |
| State of California | 12 | 2% |
| B&R Head & Block Repair | 11 | 2% |
| County of Colusa | 9 | 1% |
| Valet Living | 7 | 1% |
| University Enterprises Incorporated | 6 | 1% |
| Rural Community Assistance Corporation | 6 | 1% |

Skills and Certifications

Exhibit 7 shows the top 10 specialized skills for the selected occupations. Six percent of job postings have been excluded because they did not include a skill.

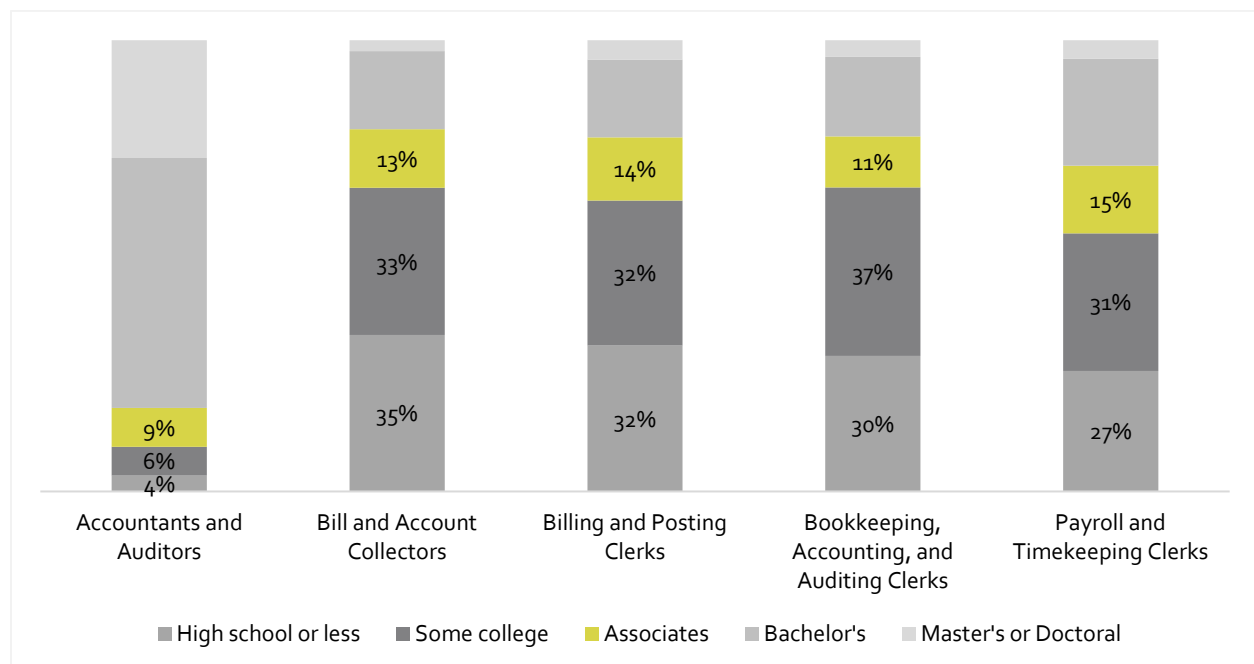
Exhibit 7. Top skills for selected occupations in the Colusa-Lake-Yolo area

| Specialized Skill | Job Postings | Share of Job Postings |
|------------------------|--------------|-----------------------|
| Accounting | 407 | 65% |
| Customer Service | 140 | 22% |
| Budgeting | 117 | 19% |
| General Ledger | 111 | 18% |
| Bookkeeping | 109 | 17% |
| Scheduling | 106 | 17% |
| Calculation | 101 | 16% |
| Customer Contact | 100 | 16% |
| Account Reconciliation | 96 | 15% |
| Spreadsheets | 93 | 15% |

Education and Training Requirements

The U.S. Census Bureau and Bureau of Labor Statistics collects data on the level of education achieved by workers employed in occupations. Exhibit 8 shows the national-level educational attainment of the current workforce in the selected occupations.

Exhibit 8. Educational attainment for selected occupations, 2018



The Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which the BLS publishes projections data. Exhibit 9 shows the entry-level job requirements for the selected occupations.

Exhibit 9. Typical education, training, and work experience for selected occupations

| Occupation | Typical Entry-Level Education Required | Work Experience Required | Typical On-the-job Training Required |
|--|--|--------------------------|--------------------------------------|
| Accountants and Auditors | Bachelor's degree | None | None |
| Bill and Account Collectors | High school diploma or equivalent | None | Moderate-term on-the-job training |
| Billing and Posting Clerks | High school diploma or equivalent | None | Moderate-term on-the-job training |
| Bookkeeping, Accounting, and Auditing Clerks | Some college, no degree | None | Moderate-term on-the-job training |
| Payroll and Timekeeping Clerks | High school diploma or equivalent | None | Moderate-term on-the-job training |

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards issued in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes. Exhibit 10 shows the TOP and CIP codes related to the selected occupations.

Exhibit 10. Related TOP and CIP programs and codes for the selected occupations

| TOP Programs and Codes | Aligned CIP Programs and Codes |
|---|--|
| <ul style="list-style-type: none"> Accounting (0502.00) Tax Studies (0502.10) | <ul style="list-style-type: none"> Accounting (52.0301) Accounting Technology/Technician and Bookkeeping (52.0302) Taxation (52.1601) |

Program Supply

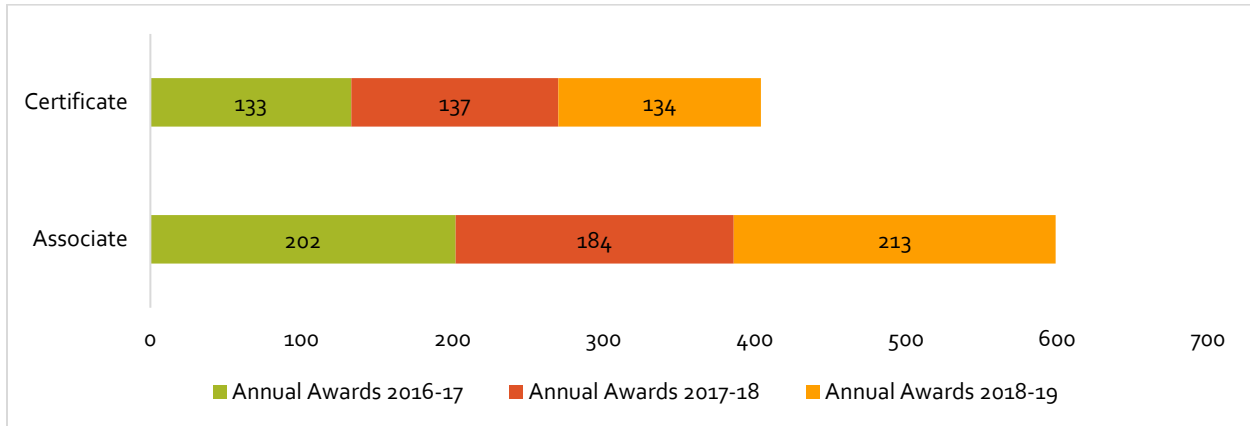
Exhibit 11 compares the average number of certificates and degrees conferred by North (Greater Sacramento) region postsecondary training providers in the selected programs over the last three academic years.

Exhibit 11. Regional awards (certificates and degrees), 2016-17 through 2018-19

| Program | College | Annual Awards 2016-2017 | Annual Awards 2017-2018 | Annual Awards 2018-2019 | 3-Year Annual Awards Average |
|---|-----------------|----------------------------|----------------------------|----------------------------|------------------------------------|
| Accounting (0502.00) and Accounting Technology/Technician and Bookkeeping (52.0302) | American River | 52 | 54 | 67 | 58 |
| | Asher College | 30 | 13 | 29 | 24 |
| | Cosumnes River | 52 | 77 | 59 | 63 |
| | Folsom Lake | 20 | 21 | 14 | 18 |
| | Lake Tahoe | 3 | 6 | 1 | 3 |
| | MTI College | 15 | 7 | 6 | 9 |
| | Sacramento City | 24 | 20 | 28 | 24 |
| | Sierra College | 111 | 94 | 110 | 105 |
| | Woodland | 3 | 2 | 5 | 3 |
| | Yuba | 19 | 4 | 6 | 10 |
| Tax Studies (0502.10) and Taxation (52.1601) | American River | 1 | 7 | 1 | 3 |
| | Cosumnes River | 0 | 2 | 0 | 1 |
| | Yuba | 5 | 1 | 4 | 3 |
| Accounting (52.0301) | Woodland | 0 | 5 | 7 | 4 |
| | Yuba | 0 | 8 | 10 | 6 |
| Totals | | 335 | 321 | 347 | 334 |

Exhibit 12 shows the distribution of issued awards by type.

Exhibit 12. Regional awards by type, 2016-17 through 2018-19



Findings

- The North (Greater Sacramento) subregion held 31,959 jobs for accounting occupations in 2019. About 11% of these jobs were located in Woodland Community College's three-county service of Colusa, Lake, and Yolo counties.
- Jobs for accounting occupations are projected to increase by 4% in the North subregion over the next five years. This job growth is mirrored in the Colusa-Lake-Yolo area.
- Over the next five years, accounting occupations are projected to have 3,836 annual openings in the North subregion. The Colusa-Lake-Yolo area is projected to have about 450 annual openings.
- Wage data shows that accounting occupations tend to earn more than the subregion's living wage. The 2020 living wage for a single adult in the North (Greater Sacramento) region is \$13.18 per hour. Reported earnings for accounting occupations range from a low of \$17 per hour for entry-level work to a high of nearly \$44 per hour for experienced workers, with most occupations earning around \$20 to \$24 per hour. Accountants and auditors have the highest reported earnings at \$28 to \$44 per hour.
- According to real-time labor market information, there were 626 online job postings for accounting occupations in the Colusa-Lake-Yolo area between January 1, 2020, and December 31, 2020. Thirty-nine percent of job postings were for bookkeeping, accounting, auditing clerks, and 37% of job postings were for accountants and auditors.
- Entry-level educational requirements vary by occupation. Occupations considered as support workers in the accounting jobs group (i.e., bill and account collectors; billing and posting clerks; bookkeeping, accounting, and auditing clerks; and payroll and timekeeping clerks) require a high school diploma or some college, but no degree for entry-level work. Only accountants and auditors need a bachelor's degree for employment.
- In terms of educational attainment among the incumbent workforce, between 46% and 48% of bill and account collectors, billing and posting clerks, payroll and timekeeping clerks, and bookkeeping, accounting, and auditing clerks have an education level consistent with community college offerings (some college or associate degrees). Significantly fewer accountants and

auditors (15%) have the same education level; 81% of accountants and auditors have at least a bachelor's degree.

- Analysis of postsecondary accounting-related program awards in the North (Greater Sacramento) region shows that, on average, 334 awards were issued each year between the 2016-2017 and 2018-2019 academic years.

Recommendations

- Based on a three-year average of annual awards in related North (Greater Sacramento) region programs (334 certificates and degrees) and projected yearly openings (3,836 openings), the region seems to have room for new training programs related to the occupation.
- The North/Far North Center of Excellence recommends moving forward with programmatic changes.

| COE Recommendation | | |
|-------------------------------------|----------------------------|-------------------------------|
| Move forward with the program | Program is not recommended | Additional information needed |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Appendix A. Methodology and Sources

Occupations in this report were identified using O*Net. This report's findings were determined using labor market data from the Bureau of Labor Statistics (BLS), U.S. Census Bureau data from Emsi, and jobs posting data from Burning Glass.

Sources used for data analysis purposes in this report include:

- U.S. Department of Labor/Employment and Training Administration (DOL ETA) O*NET Online
- Burning Glass, Labor Insight/Jobs
- Economic Modeling Specialists, International (EMSI)
- California Employment Development Department, Labor Market Information Division (EDD, LMID)
- Bureau of Labor Statistics, Occupational Employment Statistics (OES)
- California Community Colleges Chancellor's Office, Cal-PASS Plus LaunchBoard
- The Self-Sufficiency Standard for California 2020. Center for Women's Welfare, University of Washington. <http://www.selfsufficiencystandard.org/California>
- California Community Colleges Chancellor's Office Management Information Systems (MIS Data Mart)
- U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS)

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