# Labor Market Analysis for Program Review: 0502.00/Accounting



CVML Center of Excellence, February 2025

### Summary

Program LMI Endorsement	Endorsed: All LMI Criteria Met	X	Endorsed: Some LMI Criteria Met		Not LMI Endorsed		
	Program LMI Er	ndor	sement Criteria				
	Yes ✓	1		N	lo 🗆		
Supply Gap:	Comments: There are projected to be 1,274 annual job openings throuthe SCV/SML subregion for the accounting-related occupations, which is than the 163 awards conferred by SCV/SML educational institutions (non-CC).						
	Yes ☑			No □			
Living Wage: (Entry-Level, 25 <sup>th</sup> )	Comments: All three accounting-related occupations have entry-level hourly wages above the SCV/SML living wage of \$16.08.						
	Yes ✓	1		No □			
Education:	Comments: The majority of all annual openings (94%) for the occupations studied in this report typically require some college, no degree. Between 30% and 49% of workers in the field have completed some college or an associate degree as their highest level of education.						
Emerging Occupation(s)							
Ye	s 🗆		No ☑				
	Con	nments	s: N/A				

The CVML Center of Excellence for Labor Market Research (CVML COE) prepared this report to determine whether there is a supply gap in the South Central Valley/Southern Mother Lode regional labor market related to the following occupations:

- Tax Preparers (SOC 13-2082)
- Bookkeeping, Accounting, and Auditing Clerks (SOC 43-3031)
- New Accounts Clerks (SOC 43-4141)

Based on the available data, there appears to be a supply gap for the accounting-related occupations. All three occupations have entry-level hourly wages above the subregion's living wage, and 94% of the annual openings for these occupations have a typical entry-level education of some college, no degree. **Due to all the regional labor market criteria being met, the COE endorses this proposed program.** 

Exhibit 1 lists the occupational demand, supply, typical entry-level education, and educational attainment for the accounting-related occupations.

Exhibit 1: Labor Market Endorsement Summary<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Due to the change in the occupation name, the 31% for Buyers and Purchasing Agents in Exhibit 1, is associated with SOC 13-1020, per the educational attainment data provided by the Bureau of Labor Statistics.

Occupation (SOC)	Demand (Annual Openings)	Supply (CC and Non-CC)	Entry-Level Hourly Earnings (25th percentile)	Typical Entry- Level Education	Community College Educational Attainment
Tax Preparers (13-2082)	NCV/NML: 32 SCV/SML: 67		NCV/NML: \$17.07 SCV/SML: \$18.29	High school diploma or equivalent	30%
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	NCV/NML: 713 SCV/SML: 1,202	NCV/NML: 176 SCV/SML: 163	NCV/NML: \$20.26 SCV/SML: \$19.98	Some college, no degree	49%
New Accounts Clerks (43-4141)	NCV/NML: 3 SCV/SML: 5		NCV/NML: \$19.18 SCV/SML: \$20.28	High school diploma or equivalent	43%
Total	2,023	339			

### Demand:

- The number of jobs related to the accounting-related occupations is projected to increase 1% through 2028. There will be 1,274 annual job openings (SCV/SML).
- The entry-level hourly wage for the accounting-related occupations is between \$18.29 and \$20.28 in the South Central Valley/Southern Mother Lode subregion.
- There were 2,444 online job postings for the accounting-related occupations in the past 12 months.
- The Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entrylevel education for Tax Preparers and New Accounts Clerks, and some college, no degree for Bookkeeping, Accounting, and Auditing Clerks.
- Between 30% and 49% of workers in the field have completed some college or an associate degree as their highest level of education.

### Supply:

- Between 2020 and 2023, there was an average of 148 awards conferred by nine community colleges in the SCV/SML subregion.
- Between 2019 and 2022, non-community college institutions in the SCV/SML subregion conferred an average of 15 awards in relevant programs.

#### **Demand**

### **Occupational Projections**

Exhibit 2 shows the annual percent change in jobs for the accounting-related occupations from 2018 through 2028. Employment in these occupations experienced a 3% increase in 2022 (SCV/SML), and a 5% increase across all occupations in 2022 (CVML). However, there was a 5% decrease in 2023 (SCV/SML), and a 0% increase across all occupations in 2023. Employment projections through 2028 for the accounting-related occupations are projected to remain steady across the two subregions and CVML region.

Exhibit 2: Annual Percent Change for Accounting-Related Occupations and Paramedics, 2018-2028

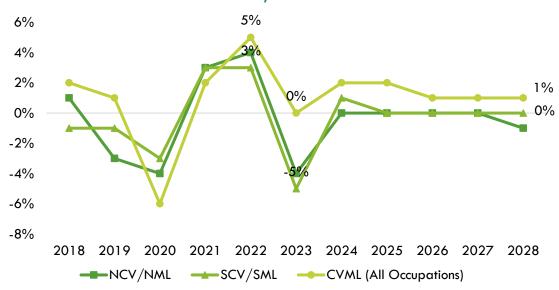


Exhibit 3 shows the five-year occupational demand projections for the accounting-related occupations. In the SCV/SML subregion, the number of jobs related to these three occupations is projected to increase by 1% through 2028. However, there are projected to be 1,274 jobs available annually in the SCV/SML subregion.

Exhibit 3: Occupational Demand in NCV/NML, SCV/SML and CVML<sup>2</sup>

Geography	2023 Jobs	2028 Jobs	2023-2028 Change	2023-2028 % Change	Annual Openings
NCV/NML	6,272	6,280	9	0%	749
SCV/SML	10,633	10,720	87	1%	1,274
CVML	16,905	17,000	96	1%	2,023

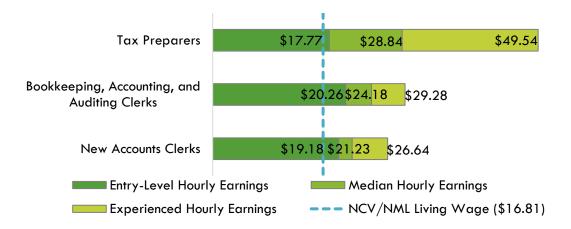
### Wages:

The labor market endorsement in this report considers the entry-level hourly wages for the three occupations of interest as they relate to the subregions and region's living wage. NCV/NML, SCV/SML, and CVML wages are included below to provide a complete analysis of the subregions and region.

The typical entry-level hourly wage for *Tax Preparers* (\$17.77), *Bookkeeping*, Accounting, and *Auditing Clerks* (\$20.26), and *New Accounts Clerks* (\$19.18) are above the living wage for one adult in the NCV/NML subregion (\$16.81). The NCV/NML average wage for these occupations is \$26.83, which is below the average statewide wage of \$28.69. Exhibit 4a shows the wage range for the three occupations of interest and how they compare to the NCV/NML subregion's living wage.

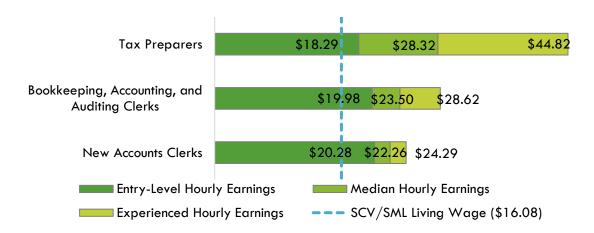
Exhibit 4a: Wages by Occupation in NCV/NML

<sup>&</sup>lt;sup>2</sup> Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.



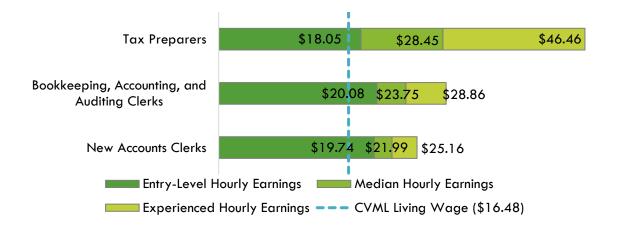
The typical entry-level hourly wage for Tax Preparers (\$18.29), Bookkeeping, Accounting, and Auditing Clerks (\$19.98), and New Accounts Clerks (\$20.28) are above the living wage for one adult in the SCV/SML subregion (\$16.08). The SCV/SML average wage for these occupations is \$26.16, which is below the average statewide wage of \$28.69. Exhibit 4b shows the wage range for the three occupations of interest and how they compare to the SCV/SML subregion's living wage.

Exhibit 4b: Wages by Occupation in SCV/SML



The typical entry-level hourly wage for Tax Preparers (\$18.05), Bookkeeping, Accounting, and Auditing Clerks (\$20.08), and New Accounts Clerks (\$19.74) are above the living wage for one adult in the CVML subregion (\$16.48). The CVML average wage for these occupations is \$26.41, which is below the average statewide wage of \$28.69. Exhibit 5 shows the wage range for the three occupations of interest and how they compare to the CVML subregion's living wage.

Exhibit 5: Wages by Occupation in CVML



### Job Postings:

Online job postings data is sourced from Lightcast, a labor market analytics firm that scrapes, collects, and organizes data from online job boards such as LinkedIn, Indeed, Glassdoor, Monster, GovernmentJobs.com, and thousands more. Lightcast uses natural language processing (NLP) to determine the related company, industry, occupation, and other information for each job posting. However, NLP has limitations that include understanding contextual words of phrases; determining differences in words that can be used as nouns, verbs, and/or adjectives; and misspellings or grammatical errors. For these reasons, job postings could be assigned to the wrong employer, industry, or occupation within Lightcast's database.

Additionally, there are several limitations when analyzing job postings. A single job posting may not represent a single job opening, as employers may be creating a pool of candidates for future openings or hiring for multiple positions with a single posting. Additionally, not all jobs are posted online, and jobs may be filled through other methods such as internal promotion, word-of-mouth advertising, physical job boards, or a variety of other channels.

There were 2,444 online job postings for the three accounting-related occupations listed in the past 12 months. Exhibit 6 shows the number of job postings for these occupations.

Exhibit 6: Number of Job Postings by Occupation (n=2,444)

Occupation	Job Postings	Percentage of Job Postings
Bookkeeping, Accounting, and Auditing Clerks	2,016	82%
Tax Preparers	330	14%
New Accounts Clerks	98	4%

The top employers in the region for the accounting-related occupations by number of job postings are shown in Exhibit 7.

Exhibit 7: Top Employers by Number of Job Postings (n=2,444)

Employer	Job Postings	Percentage of Job Postings
Robert Half	1 <i>57</i>	6%
AppleOne	94	4%
Intuit	93	4%
Creative Financial Staffing	80	3%
Wells Fargo	76	3%
PrideStaff	62	3%
Jackson Hewitt	56	2%
Express Employment Professionals	53	2%
Randstad	51	2%
Aston Carter	40	2%

The top specialized, common, and software skills for the accounting-related occupations listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 8.

Exhibit 8: Top Skills by Number of Job Postings (n=2,444)

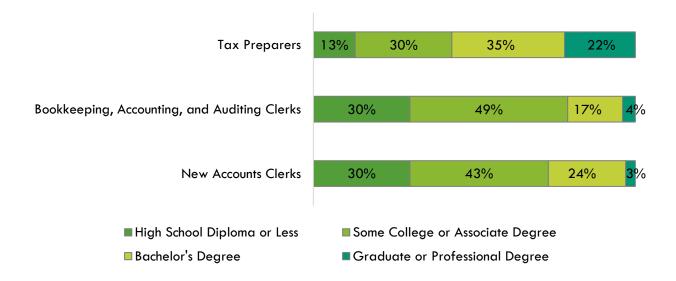
Top Specialized Skills	Top Common Skills	Top Software Skills
Accounting (1,568)	Communication (903)	Microsoft Excel (607)
Accounts Payable (1,272)	Detail Oriented (859)	Accounting Software (583)
Invoicing (1,151)	Customer Service (636)	QuickBooks (Accounting Software) (457)
invoicing (1,131)	Costollier service (050)	3011 water (437)
Bookkeeping (1,042)	Microsoft Excel (607)	Microsoft Office (395)
Accounts Receivable		
(1,036)	Filing (473)	Microsoft Outlook (224)
Financial Statements (758)	Management (460)	Spreadsheets (202)
Data Entry (607)	Microsoft Office (395)	Microsoft Word (140)
Accounting Software (583)	Organizational Skills (391)	TurboTax (99)
Finance (536)	Problem Solving (375)	SAP Applications (97)
Auditing (467)	Collections (360)	Microsoft PowerPoint (53)

#### **Educational Attainment:**

The Bureau of Labor Statistics (BLS) lists a high school diploma or equivalent as the typical entry-level education for *Tax Preparers* and *New Accounts Clerks* and some college, no degree for *Bookkeeping*, *Accounting*, and *Auditing Clerks*. National-level educational attainment data indicates that between 30% and 49% of workers have completed some college or an associate degree as their highest level of education, as shown in Exhibit 9.

Of the 2,444 online job postings, 62% (equivalent to 1,521 postings) of cumulative job postings for the occupations of interest listed a minimum education requirement in the SCV/SML subregion. Of the 1,521 postings, 39% requested a high school diploma or equivalent.

Exhibit 9: National-level Educational Attainment for Accounting-Related Occupations



### **Educational Supply**

### Community College Supply:

Exhibits 10a and 10b show the annual and three-year average number of awards conferred by community colleges in the programs that have historically trained for any of the three occupations included in this report. The colleges with the most completions are San Joaquin Delta (North) and Bakersfield (South).

Exhibit 10a: NCV/NML Community College Awards (Certificates and Degrees) 2020-21 through 2022-23

TOP Code	Program	College	2020- 2021 Awards	2021- 2022 Awards	2022- 2023 Awards	3-Year Award Average
		Columbia	8	5	1	5
		Merced	21	13	21	18
0502.00	Accounting	Modesto	22	24	22	23
		San Joaquin Delta	90	120	75	95
		Subtotal/Average	141	162	119	141
	NCV/NML Supply Grand Total			162	119	141

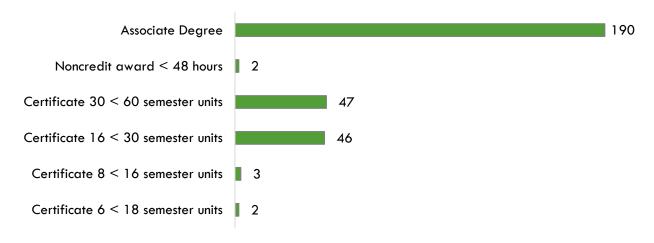
## Exhibit 10b: SCV/SML Community College Awards (Certificates and Degrees) 2020-21 through 2022-23

TOP Code	Program	College	2020- 2021 Awards	2021- 2022 Awards	2022- 2023 Awards	3-Year Award Average
		Bakersfield	48	40	51	46
		Clovis	1	9	8	6
0502.00	Accounting	Fresno City	61	37	40	46
0302.00	9	Madera	1	4	3	3
		Porterville	4	-	3	2

	Reedley	12	16	14	14
	Sequoias	15	23	20	19
	West Hills Coalinga	11	8	2	7
	West Hills Lemoore	7	4	4	5
	Subtotal/Average	160	141	145	148
SCV/SML	Supply Grand Total	160	141	145	148

Exhibit 11 shows the annual average community college awards by type from 2020-21 through 2022-23. Of the 289 awards conferred in the CVML region, 66% of all awards were for an associate degree (190).

Exhibit 11: Annual Average Community College Awards by Type, 2020-21 through 2022-23



### **Community College Student Outcomes:**

Exhibit 12 shows the Strong Workforce Program (SWP) metrics for the accounting-related occupations in the West Kern Community College District (WKCCD), the SCV/SML subregion, the CVML region, and California. Of the 89,413 accounting students statewide in the 2022-23 academic year, 8% (7,515) attended a CVML institution.

CVML students that exited accounting programs in the 2021-22 academic year had median annual earnings (\$40,444), which is below the statewide median annual earnings (\$49,278). Notably, 74% of SCV/SML accounting students attained a living wage, which is higher than the percentage of students who attained a living wage statewide (64%).

Exhibit 12: Accounting (0502.00) Strong Workforce Program Metrics

WKCCD	SCV/SML Region	CVML	California
28	4,531	7,515	89,413
<b>39</b> %	<b>39</b> %	40%	<b>36</b> %
N/A	88%	<b>87</b> %	<b>72</b> %
N/A	<b>2</b> %	3%	3%
N/A	13%	12%	11%
NI/A	70%	720/	71%
N/A	70 70	<b>7 2</b> 70	7 1 70
\$51,637	\$39,618	\$40,444	\$49,278
(\$24.83)	(\$19.05)	(\$19.44)	(\$23.69)
N/A	32%	210/	35%
IN/A	<b>32</b> 70	31 70	35 70
960/	74%	74%	64%
00 70	/ = /0	<b>/ T</b> /0	<b>07</b> 70
	28 39% N/A N/A N/A \$51,637	Region  28 4,531  39% 39%  N/A 88%  N/A 2%  N/A 13%  N/A 70%  \$51,637 \$39,618 (\$24.83) (\$19.05)  N/A 32%	WKCCD       Region       Region         28       4,531       7,515         39%       39%       40%         N/A       88%       87%         N/A       2%       3%         N/A       13%       12%         N/A       70%       72%         \$51,637       \$39,618       \$40,444         (\$24.83)       (\$19.05)       (\$19.44)         N/A       32%       31%



### Non-Community College Supply:

For a comprehensive regional supply analysis, it is also important to consider the supply from other institutions in the region that provide training programs for any of the three occupations studied in this report. Exhibits 13a and 13b show the annual and three-year average number of awards conferred by non-community college institutions in programs that have historically trained for the occupations of interest. Between 2019 and 2022, non-community colleges in the SCV/SML subregion conferred an average of 15 awards annually in related training programs.

Exhibit 13a: NCV/NML Subregional Non-Community College Awards, 2019-2022

CIP Code	Program	College	2019- 2020 Awards	2020- 2021 Awards	2021- 2022 Awards	3-Year Award Average
52.0301	Accounting	Humphreys University-Stockton and Modesto Campuses	12	2	4	6
		University of the Pacific	-	32	25	19
		Subtotal/Average	12	34	29	25
52.0302	Accounting Technology/Technician and Bookkeeping	Stellar Career College	18	6	7	10
		Subtotal/Average	18	6	7	10
	NCV/NML Supply Grand Total			40	36	35

### Exhibit 13b: SCV/SML Subregional Non-Community College Awards, 2019-2022

CIP Code	Program	College	2019- 2020 Awards	2020- 2021 Awards	2021- 2022 Awards	3-Year Award Average
52.0301	Accounting	Fresno Pacific University	8	8	9	8
		Subtotal/Average	8	8	9	8
52.0202	Accounting	California Aeronautical University	-	-	-	-
	Technology/Technician and Bookkeeping	Santa Barbara Business College- Bakersfield	9	13	-	7
		Subtotal/Average	9	13	-	7
SCV/SML Supply Grand Total		1 <i>7</i>	21	9	15	

### Appendix A: Methodology

The CVML COE prepared this report by analyzing data from occupations and education programs.

Occupational data is derived from Lightcast, a labor market analytics firm that consolidates data from the California Employment Development Department (EDD), U.S. Bureau of Labor Statistics (BLS) and other government agencies. Program supply data is drawn from two systems: Taxonomy of Programs (TOP) and Classification of Instructional Programs (CIP).

Using a TOP-SOC crosswalk, the CVML COE identified middle-skill jobs for which programs within these TOP codes train. Middle-skill jobs include:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

The CVML COE determined labor market supply for an occupation or SOC code by analyzing the number of program completers or awards in a related TOP or CIP code. The COE developed a "supply table" with this information, which is the source of the program supply data for this report. TOP code data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP code data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data), also known as IPEDS. TOP is a system of numerical codes used at the state level to collect and report information on California community college programs and courses throughout the state that have similar outcomes. CIP codes are a taxonomy of academic disciplines at institutions of higher education in the United States and Canada. Institutions outside of the California Community College system do not use TOP codes in their reporting systems.

Data included in this analysis represent the labor market demand for relevant positions most closely related to the proposed program as expressed by the requesting college in consultation with the CVML COE. Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study which can signal demand and show what employers are looking for in potential employees but is not a perfect measure of the quantity of open positions.

All representations have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. The most recent data available at the time of the analysis was examined; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

### Appendix B: Data Sources

Data Type	Source
Occupational Projections, Wages, and Job Postings	Traditional labor market information data is sourced from Lightcast, a labor market analytics firm. Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment Statistics and the American Community Survey. For more information, see <a href="https://lightcast.io/">https://lightcast.io/</a>
Living Wage	The living wage is derived from the Insight Center's California Family Needs Calculator, which measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, childcare, health care, transportation, and taxes. For more information, see: <a href="https://selfsufficiencystandard.org/California/">https://selfsufficiencystandard.org/California/</a> Wage figures are used by the CCCCO to calculate the percentage of students that attained the regional living wage.
Typical Education and Training Requirements, and Educational Attainment	The Bureau of Labor Statistics (BLS) provides information about education and training requirements for hundreds of occupations. 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 BLS publishes projections data. For more information, see <a href="https://www.bls.gov/emp/documentation/education/tech.htm">https://www.bls.gov/emp/documentation/education/tech.htm</a>
Emerging Occupation Descriptions, Additional Education Requirements, and Employer Preferences	The O*NET database includes information on skills, abilities, knowledges, work activities, and interests associated with occupations. For more information, see <a href="https://www.onetonline.org/help/online/">https://www.onetonline.org/help/online/</a>
Educational Supply	The CCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. For more information, see: <a href="https://datamart.cccco.edu">https://datamart.cccco.edu</a> The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions). For more information, see <a href="https://nces.ed.gov/ipeds/use-the-data/survey-components/7/completions">https://nces.ed.gov/ipeds/use-the-data/survey-components/7/completions</a>
Student Metrics and Demographics	DataVista, a statewide data system supported by the California Community Colleges Chancellor's Office and hosted by Cal-PASS Plus, provides data on progress, success, employment, and earnings outcomes for California community college students. For more information, see: <a href="https://datavista.cccco.edu/">https://datavista.cccco.edu/</a>

Data Type	Source
Population and Occupation Demographics	The Census Bureau's American Community Survey (ACS) is the premier source for detailed population and housing information. For more information, see: <a href="https://www.census.gov/programs-surveys/acs">https://www.census.gov/programs-surveys/acs</a>
	Data is sourced from IPUMS USA, a database providing access to ACS and other Census Bureau data products. For more information, see: <a href="https://usa.ipums.org/usa/about.shtml">https://usa.ipums.org/usa/about.shtml</a>

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