April 2023

Labor Market Analysis

Business Management with an Emphasis in Accounting



Prepared by Central Valley/Mother Lode Center of Excellence



POWERED BY California Community Colleges

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COVID-19 Statement: This report includes employment projection data by Lightcast. Lightcast'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.

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Summary

The Central Valley/Mother Lode Center of Excellence developed this report for Porterville College to determine whether there is demand in the local labor market that is not being met by the supply from community college programs. This report summarizes labor market demand, wages, skills, and postsecondary supply for *Business Management with an Emphasis in Accounting Occupations*, which include:

- Administrative Services Managers (SOC 11-3012)
- Cost Estimators (13-1051)
- Accountants and Auditors (13-2011)

Key Findings

- Occupational Demand Business Management with an Emphasis in Accounting Occupations have a labor market demand of 890 annual job openings in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. Between 2021 and 2026, accountants and auditors are projected to have the most demand with 592 annual job openings and a projected growth rate of 11 percent.
- Wages Average entry-level earnings of \$28.22/hour for Business Management with an Emphasis in Accounting Occupations are higher than the living wage in the SCV/SML subregion, which is \$11.91/hour for a single adult.¹ Administrative services managers earn the highest entry-level wage, \$29.24/hour.
- Employers and Occupational Titles Employers in the SCV/SML subregion include Robert Half, Creative Financial Staffing, and PCL Construction. The most common job titles are accountants and staff accountants.
- Skills and Certifications The top baseline skill is management, the top specialized skill is accounting, and the top software skill is Microsoft Excel. The most in-demand certification is a certified public accountant.
- Education A bachelor's degree is typically required for Business Management with an Emphasis in Accounting Occupations.
- Supply and Demand Analysis Based on 890 annual openings (i.e., demand), and 111 postsecondary degrees awarded (i.e., supply), an analysis of supply and demand suggests there is an undersupply of 779 workers in the SCV/SML subregion. In the CVML region, 146 awards were conferred suggesting an undersupply of 1,236 workers based on 1,382 annual openings in CVML.

Recommendation

Based on a comparison of demand and supply, there is an undersupply of trained workers in the SCV/SML subregion and the CVML region. The Center of Excellence recommends that Porterville College work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of Business Management with an Emphasis in Accounting workers.

¹ The term "living wage" in Center of Excellence reports is calculated by averaging the self-sufficiency wages from the Insight Center's California Family Needs Calculator for each county in the subregion: https://insightcced.org/tools-metrics/self-sufficiency-standard-tool-for-california/.

Introduction

The Central Valley/Mother Lode Center of Excellence developed this report to provide Porterville College with labor market information for Business Management with an Emphasis in Accounting. The geographical focus for this report is the South Central Valley/Southern Mother Lode (SCV/SML) subregion, but regional demand and supply data has been included for broader applicability and use. Analysis of the program and occupational data related to Business Management with an Emphasis in Accounting resulted in the identification of applicable occupations, known as *Business Management with an Emphasis in Accounting Occupations*. The Standard Occupational Classification (SOC) System code and occupational titles used in this report from the Bureau of Labor Statistics and O*NET OnLine are shown below.).

Administrative Services Managers (SOC 11-3012)

- Job Description: Plan, direct, or coordinate one or more administrative services of an organization, such as records and information management, mail distribution, and other office support services.
- **Knowledge:** Customer and Personal Service, Administration and Management, English Language, Administrative, Computers and Electronics
- Skills: Active Listening, Reading Comprehension, Time Management, Speaking, Coordination

Cost Estimators (SOC 13-1051)

- Job Description: Prepare cost estimates for product manufacturing, construction projects, or services to aid management in bidding on or determining price of product or service. May specialize according to particular service performed or type of product manufactured.
- **Knowledge:** Mathematics, Engineering and Technology, English Language, Building and Construction, Computers and Electronics
- Skills: Mathematics, Critical Thinking, Reading Comprehension, Active Listening, Judgement and Decision Making

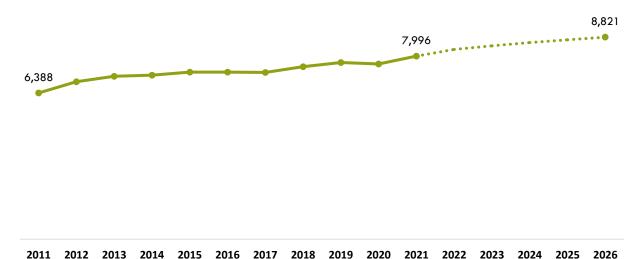
Accountants and Auditors (SOC 13-2011)

- Job Description: 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.
- **Knowledge:** Economics and Accounting, English Language, Mathematics, Administration and Management, Customer and Personal Service
- Skills: Active Listening, Reading Comprehension, Critical Thinking, Speaking, Writing

Occupational Demand

Exhibit 1 a shows trends for Business Management with an Emphasis in Accounting Occupations in the SCV/SML subregion. Between 2021 to 2026, the number of jobs for Business Management with an Emphasis in Accounting Occupations is projected to increase by 825 jobs, or 10 percent.





Between 2021 to 2026, demand for Business Management with an Emphasis in Accounting Occupations in

the SCV/SML subregion is 890 annual openings (Exhibit 1b). Accountants and auditors are projected to have the most demand with 592 annual job openings and a projected growth rate of 11 percent.

Exhibit 1b. Occupational projections for Business Management with an Emphasis in Accounting Occupations
in the SCV/SML subregion

Occupation	2021 Jobs	2026 Jobs	5-Year Change	5-Year % Change	Annual Openings
Accountants and Auditors	5,225	5,807	582	11%	592
Administrative Services Managers	1,504	1,620	116	8%	152
Cost Estimators	1,267	1,394	127	10%	146
TOTAL	7,996	8,821	825	10%	890

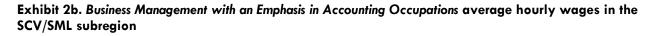
Wages

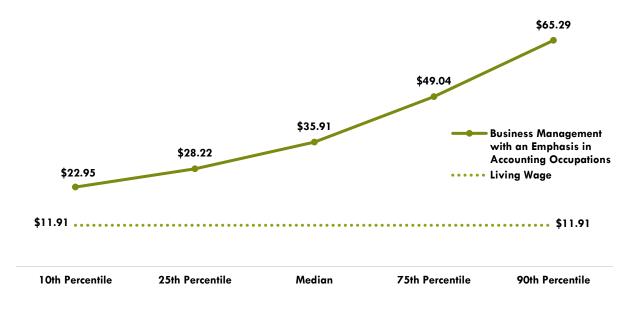
The average living wage for a single adult in the SCV/SML subregion is \$11.91/hour.² Exhibit 2a shows the hourly wages of *Business Management with an Emphasis in Accounting Occupations*. Administrative services managers earn the highest entry-level wage, \$29.24/hour in the subregion.³ Please note 10th and 25th percentiles are considered entry-level wages while 75th and 90th are considered experienced wages, either by gained by long-term employment, extra training, etc.

Exhibit 2a. Business Management with an Emphasis in Accounting Occupations hourly wages in the
SCV/SML subregion

Occupation	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings
Administrative Services Managers	\$29.24	\$36.02	\$53.90
Accountants and Auditors	\$28.77	\$36.08	\$45.83
Cost Estimators	\$26.64	\$35.62	\$47.39

Exhibit 2b shows the average hourly wages for *Business Management with an Emphasis in Accounting* Occupations; the average entry-level wage is higher than the average entry-level living wage for the SCV/SML subregion.





² The term "living wage" in Center of Excellence reports is calculated by averaging the self-sufficiency wages from the Insight Center's California Family Needs Calculator for each county in the subregion: https://insightcced.org/tools-metrics/self-sufficiency-standard-tool-for-california/.

 $^{^3}$ Entry-level wages are derived from the $25^{\rm th}$ percentile.

Job Postings

There were 1,968 job postings for Business Management with an Emphasis in Accounting Occupations in the SCV/SML subregion from October 2022 to March 2023.⁴

Top Employers

The top employers with the most job postings are listed in Exhibit 3. The top employers in online job postings were Robert Half, Creative Financial Staffing, and PCL Construction.

Exhibit 3. Top employers of Business Management with an Emphasis in Accounting Occupations by number of job postings

Employer
Robert Half
Creative Financial Staffing
PCL Construction
Intuit
Jobot
AppleOne
GPAC
Moss Adams
Crowe
Randstad

Top Occupational Titles

Exhibit 4 shows the O*NET OnLine occupational titles for Business Management with an Emphasis in Accounting Occupations in the SCV/SML subregion. Common job titles in postings include: Accountants, Staff Accountants, and Estimators.

Exhibit 4. Top occupational titles in job postings for Business Management with an Emphasis in Accounting Occupations

Occupational Title
Accountants
Staff Accountants
Estimators
Account Trainees
Accounting Associates

⁴ Other than occupation titles and job titles, the categories below can be counted one or multiple times per job posting, and across several areas in a single posting. For example, a skill can be counted in two different skill types, and an employer can indicate more than one education level.

Salaries

Exhibit 5 shows the "Market Salaries" for Business Management with an Emphasis in Accounting Occupations. These are calculated by Lightcast using a machine learning model built from millions of job postings every year. This accounts for adjustments based on location, industry, skills, experience, education, among other variables.

Exhibit 5. Market salaries for Business Management with an Emphasis in Accounting Occupations

Market Salary	Job Postings
\$56,000-\$62,999	143
\$70,000-\$76,999	128
\$49,000-\$55,999	125
\$63,000-\$69,999	95
\$105,000-\$203,000	90

Education

Of the 1,968 job postings, 1,711 listed a preferred or minimum educational requirement for the position being filled. Among those, 68% requested a bachelor's degree, 13% requested a high school diploma or GED, and 10% requested a master's degree (Exhibit 6).

Exhibit 6. Education levels requested in job postings for Business Management with an Emphasis in	
Accounting Occupations	

Education Level	Job Postings	% of Job Postings
Bachelor's degree	1,161	68%
High school or GED	221	13%
Master's degree	172	10%
Associate degree	119	7%
Ph.D. or professional degree	38	2%

Baseline, Specialized, and Software Skills

Exhibit 7 depicts the top baseline, specialized, and software skills in job postings. The most important baseline skills are management, operations, and customer service. The top specialized skills are accounting, auditing, and financial statements. The top software is Microsoft Excel.

Exhibit 7. In-demand Business Management with an Emphasis in Accounting Occupations baseline, specialized, and software skills

Baseline Skills	Specialized Skills	Software Skills
Management	Accounting	Microsoft Excel
Operations	Auditing	Spreadsheets
Customer Service	Financial Statements	Accounting Software
Detail Oriented	Finance	QuickBooks (Accounting Software)
Budgeting	Generally Accepted Accounting Principles	SAP Applications

Certifications

Of the 1,968 job postings, 591 contained certification data. Among those, 21% indicated a need for a Certified Public Accountant. The next top certifications are Certified Internal Auditor and Enrolled Agent (EA) (Exhibit 8).

Exhibit 8. Top Business Management with an Emphasis in Accounting Occupations certifications requested in job postings

Certifications	% of Job Postings
Certified Public Accountant	21%
Certified Internal Auditor	8%
Enrolled Agent (EA)	5%
Financial Accounting Standards Board (FASB) Certified	3%
Master of Business Administration (MBA)	3%

Education, Work Experience, & Training

A bachelor's degree is typically required for Business Management with an Emphasis in Accounting Occupations (Exhibit 9).

Exhibit 9. Education, work experience, training, and Current Population Survey results for Business Management with an Emphasis in Accounting Occupations⁵

Occupation	Typical Entry-level Education	Work Experience Required	Typical On-The-Job Training	CPS
Accountants and Auditors	Bachelor's degree	None	None	11.6%
Administrative Services Managers	Bachelor's degree	Less than 5 years	None	34.8%
Cost Estimators	Bachelor's degree	None	Moderate-term	37.4%

⁵ "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, https://www.bls.gov/cps/.

Supply

An analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) for the last three program years shows that, on average, 111 awards were conferred in the SCV/SML subregion (Exhibits 10 and 11).

Exhibit 10. TOP and CIP codes for Business Management with an Emphasis in Accounting Occupations

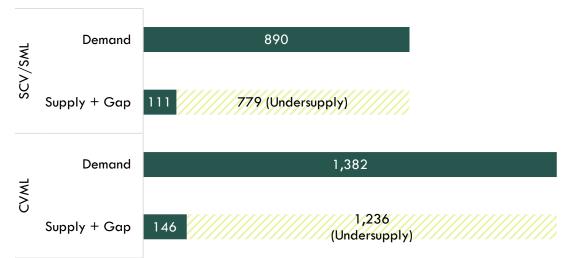
TOP Titles	CIP Titles		
050600 - Business Management	52.0201 - Business Administration and Management, General		
000000 - Dosmess Management	52.0701 - Entrepreneurship/Entrepreneurial Studies		

Exhibit 11. Postsecondary supply for Business Management with an Emphasis in Accounting Occupations

TOP/ CIP Code- Title	College	Associate Degree	Certificate 12 < 18 Semester Units	Certificate 16 < 30 Semester Units	Certificate 18 < 30 Semester Units	Certificate 30 < 60 Semester Units	Certificate 6 < 18 Semester Units	Credit Award, < 6 Semester Units	TOTAL
050600 - Business Management	Cerro Coso	1				3			4*
	Clovis	2			0				2*
	Columbia		1			1	1	7	10
	Fresno City	8		16	26				50*
	Modesto	19					1		20
	Porterville	5							5*
	Reedley College	4		32	0				36*
	Sequoias	0							0*
	West Hills Coalinga	3				2			5*
	West Hills Lemoore	4		2	0	3			9*
52.0201 - Business Administration and Management, General	Humphreys University-Stockton and Modesto Campuses	5							5
TOTAL SCV/SML		27	0	50	26	8	0	0	111
TOTAL CVML		51	1	50	26	9	2	7	146
								*SCV/S	ML awards

Without considering the supply from relevant Accounting programs (nearly 400 in the CVML region), there is an undersupply of 779 Business Management with an Emphasis in Accounting workers in the SCV/SML subregion and an undersupply of 1,236 workers in the region (Exhibit 12).

Exhibit 12. Business Management with an Emphasis in Accounting Occupations workforce demand (annual job openings), postsecondary awards (supply), and additional students needed to fill gap in the SCV/SML subregion and region



Student Outcomes

Exhibits 13a -13b summarize outcomes from California Community College Chancellor's LaunchBoard for TOP codes related to *Business Management with an Emphasis in Accounting Occupations*. Notably, 67% of students obtained a job closely related to their field of study in the subregion, and 65% in the region.

Exhibit 13a. Regional metrics for TOP 050600 - Business Management

Metric	
Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status	158
Number of Students Who Transferred	349

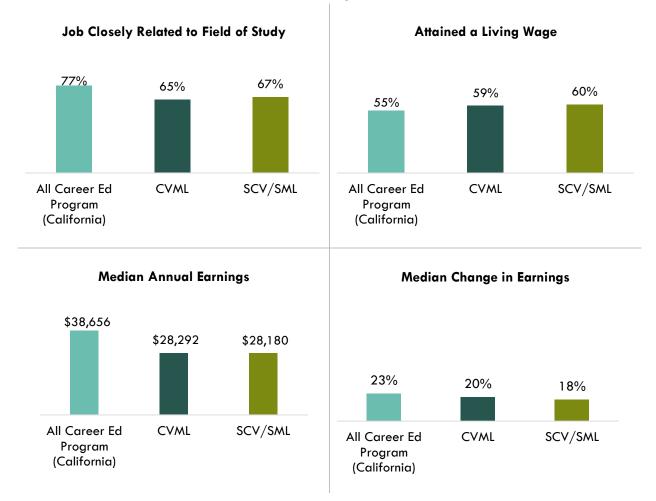


Exhibit 13b. Metrics for TOP 050600 - Business Management

Recommendation

This report suggests there is a shortage of 779* workers in the SCV/SML subregion and a shortage of 1,236* workers in the CVML region for *Business Management with an Emphasis in Accounting Occupations*. Based on these findings, it is recommended that Porterville College work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of Business Management with an Emphasis in Accounting workers in the region.

*This shortage does not include the supply from traditional and relevant Accounting programs (nearly 400 in the CVML region). Even with these completions, there is still an undersupply.

Appendix: Methodology & Data Sources

Data Sources

Labor market and educational supply data compiled in this report derive from a variety of sources. Data were drawn from external sources, including the Economic Modeling Specialists, Inc., the California Community Colleges Chancellor's Office Management Information Systems Data Mart and the National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). Below is the summary of the data sources found in this study.

Data Type	Source
Labor Market Information/Population Estimates and Projections/Educational Attainment	Economic Modeling Specialists, Intl. (LIGHTCAST). LIGHTCAST occupational employment data are based on final LIGHTCAST industry data and final LIGHTCAST staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level LIGHTCAST earnings by industry: economicmodeling.com.
Typical Education Level and On-the-job Training	Bureau of Labor Statistics (BLS) uses a system to assign categories for entry- level education and typical on-the-job training to each occupation for which BLS publishes projections data: https://www.bls.gov/emp/tables/educational- attainment.htm.
LaunchBoard	Chancellor's Cal-PASS Plus LaunchBoard. https://www.calpassplus.org/LaunchBoard/SWP.aspx
Labor Force, Employment and Unemployment Estimates	California Employment Development Department, Labor Market Information Division: labormarketinfo.edd.ca.gov.
Job Posting and Skills Data	Lightcast.
Additional Education Requirements/ Employer Preferences	The O*NET Job Zone database includes over 900 occupations as well as information on skills, abilities, knowledge, work activities and interests associated with specific occupations: onetonline.org.

Key Terms and Concepts

Annual Job Openings: Annual openings are calculated by dividing the number of years in the projection period by total job openings.

Education Attainment Level: The highest education attainment level of workers age 25 years or older.

Employment Estimate: The total number of workers currently employed.

Employment Projections: Projections of employment are calculated by a proprietary Economic Modeling Specialists, Intl. (LIGHTCAST) formula that includes historical employment and economic indicators along with national, state and local trends.

LaunchBoard (Attained the Living Wage): Among SWP students who exited college and did not transfer to any postsecondary institution, the proportion who attained the district county living wage for a single adult measured immediately following academic year of exit

LaunchBoard (Median Annual Earnings): Among SWP students who exited the community college system and who did not transfer to any postsecondary institution, median earnings following the academic year of exit.

LaunchBoard (Median Change in Earnings): Among SWP students who exited and who did not transfer to any postsecondary institution, median change in earnings between the second quarter prior to the beginning of the academic year of entry and the second quarter after the end of the academic year of exit from the last college attended.

LaunchBoard (Job Closely Related to Field of Study): Among SWP students who responded to the CTE Outcomes Survey and did not transfer to any postsecondary institution, the proportion who reported that they are working in a job very closely or closely related to their field of study.

Living Wage: The cost of living in a specific community or region for one adult and no children. The cost increases with the addition of children.

Occupation: An occupation is a grouping of job titles that have a similar set of activities or tasks that employees perform.

Percent Change: Rate of growth or decline in the occupation for the projected period; this does not factor in replacement openings.

Replacements: Estimate of job openings resulting from workers retiring or otherwise permanently leaving an occupation. Workers entering an occupation often need training. These replacement needs, added to job openings due to growth, may be used to assess the minimum number of workers who will need to be trained for an occupation.

Total Job Openings (New + Replacements): Sum of projected growth (new jobs) and replacement needs. When an occupation is expected to lose jobs, or retain the current employment level, number of openings will equal replacements.

Typical Education Requirement: represents the typical education level most workers need to enter an occupation.

Typical On-The-Job Training: indicates the typical on-the-job training needed to attain competency in the skills needed in the occupation.

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