

Accounting Occupations Labor Market Information Report Mission College

Prepared by the San Francisco Bay Center of Excellence for Labor Market Research August 2020

Recommendation

Based on all available data, there appears to be an undersupply of Accounting workers compared to the demand for this cluster of occupations in the Bay region and in the Silicon Valley sub-region (Santa Clara County). There is a projected annual gap of about 10,582 students in the Bay region and 2,750 students in the Silicon Valley Sub-Region.

This report also 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 Mission College and in the region.

Introduction

This report profiles Accounting Occupations in the 12 county Bay region and in the Silicon Valley sub-region for a proposed new CPA Exam Preparation program at Mission College. Labor market information (LMI) is not available at the eight-digit SOC Code level for Accountants (13-2011.01) and Auditors (13-2011.02), therefore, the data shown in Tables 1 and 2 is for Accountants and Auditors (at the six digit SOC level). Tables 3, 4, 6, 9, 10 and 11 use job postings data from Burning Glass at the eight-digit SOC Code level for Accountants (13-2011.02).

• **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: 48%

• 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. Excludes "Tax Examiners and Collectors, and Revenue Agents" (13-2081).

Entry-Level Educational Requirement: Bachelor's degree Training Requirement: None Percentage of Community College Award Holders or Some Postsecondary Coursework: 16%

- Tax Preparers (13-2082): Prepare tax returns for individuals or small businesses.
 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: 31%
- Tax Examiners and Collectors, and Revenue Agents (13-2081): Determine tax liability or collect taxes from individuals or business firms according to prescribed laws and regulations. Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: Moderate-term on-the-job training Percentage of Community College Award Holders or Some Postsecondary Coursework: 34%

Occupational Demand

Table 1. Employment Outlook for Accounting Occupations in Bay Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open- ings	Average Annual Open- ings	25% Hourly Wage	Median Hourly Wage
Bookkeeping, Accounting, and Auditing Clerks	45,755	46,657	902	2%	28,243	5,649	\$19.65	\$25.52
Accountants and Auditors	49,003	52,588	3,585	7%	27,245	5,449	\$31.36	\$40.13
Tax Preparers	3,656	3,893	237	6%	2,418	484	\$18.35	\$30.56
Tax Examiners and Collectors, and Revenue Agents	773	779	7	1%	335	67	\$35.82	\$45.10
TOTAL	99,187	103,917	4,730	5%	58,241	11,648	\$25.52	\$33.08

Source: EMSI 2020.3

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 Accounting Occupations in Silicon Valley Sub-Region

Occupation	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	5-Yr Open- ings	Average Annual Open- ings	25% Hourly Wage	Median Hourly Wage
Bookkeeping, Accounting, and Auditing Clerks	10,818	10,996	177	2%	6,626	1,325	\$19.63	\$25.52
Accountants and Auditors	14,794	15,755	961	6%	8,074	1,615	\$32.65	\$40.22
Tax Preparers	971	1,036	65	7%	637	127	\$23.55	\$33.58
Tax Examiners and Collectors, and Revenue Agents	293	295	2	1%	125	25	\$34.53	\$44.41
TOTAL	26,877	28,082	1,205	4%	15,461	3,092	\$27.10	\$34.11

Source: EMSI 2020.3

Silicon Valley Sub-Region includes Santa Clara County

Job Postings in Bay Region and Silicon Valley Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (July 2019 - June 2020)

Occupation	Bay Region	Silicon Valley Sub-Region
Accountants	18,112	4,000
Bookkeeping, Accounting, and Auditing Clerks	13,837	2,912
Auditors	4,247	1,222
Tax Examiners and Collectors, and Revenue Agents	1,345	351
Tax Preparers	1,055	252
TOTAL	38,596	8,737

Source: Burning Glass

Table 4a. Top Job Titles for Accounting Occupations for latest 12 months (July 2019 - June 2020) Bay Region

Common Title	Bay	Common Title	Bay
Accountant	3,922	General Ledger Accountant	635
Senior Accountant	3,119	Fund Accountant	627
Staff Accountant	2,958	Accounts Receivable Clerk	594
Bookkeeper	2,196	Junior Accountant	539
Accounting Clerk	1,499	Tax Accountant	535
Accounts Payable Specialist	1,482	Accounting Specialist	517
Accounts Payable Clerk	1,349	Revenue Accountant	515
Accounts Receivable Specialist	701	Internal Auditor	493
Accounting Assistant	692	Property Accountant	487

Tax Associate	673	Audit Associate	448
Senior Tax Associate	663	Tax Preparer	434
Tax Professional	644	Cost Accountant	416

Table 4b. Top Job Titles for Accounting Occupations for latest 12 months (July 2019 - June 2020)	
Silicon Valley Sub-Region	

Common Title	Silicon Valley	Common Title	Silicon Valley
Accountant	916	Internal Auditor	139
Senior Accountant	541	Tax Preparer	132
Staff Accountant	503	Tax Accountant	130
Bookkeeper	419	Cost Accountant	123
Accounts Payable Specialist	333	Junior Accountant	118
Accounting Clerk	333	Audit Senior	117
Accounts Payable Clerk	252	Tax Professional	116
Senior Tax Associate	246	Accounts Receivable Clerk	114
Tax Associate	220	Audit Manager	111
General Ledger Accountant	218	Accounting Specialist	92
Revenue Accountant	212	Internal Audit Manager	89
Accounts Receivable Specialist	158	Fund Accountant	75
Accounting Assistant	154	Senior Revenue Analyst	61
Audit Associate	148	Accounting Manager	58

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Accounting 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)
Offices of Certified Public Accountants (541211)	10,107	10,298	2%	9%
Other Accounting Services (541219)	7,861	7,962	1%	7%
Corporate, Subsidiary, and Regional Managing Offices (551114)	5,394	5,446	1%	5%
Local Government, Excluding Education and Hospitals (903999)	4,431	4,467	1%	4%
Tax Preparation Services (541213)	3,204	3,282	2%	3%
Payroll Services (541214)	2,447	2,564	5%	2%
Internet Publishing and Broadcasting and Web Search Portals (519130)	2,149	2,317	8%	2%
Custom Computer Programming Services (541511)	1,973	2,085	6%	2%
State Government, Excluding Education and Hospitals (902999)	1,527	1,551	2%	1%
Federal Government, Civilian, Excluding Postal Service (901199)	1,500	1,488	-1%	1%
Colleges, Universities, and Professional Schools (State Government) (902612)	1,449	1,463	1%	1%
Office Administrative Services (561110)	1,361	1,348	-1%	1%
Electronic Computer Manufacturing (334111)	1,300	1,331	2%	1%
Software Publishers (511210)	1,239	1,336	8%	1%
Religious Organizations (813110)	1,206	1,201	0%	1%
Research and Development in the Physical, Engineering, and				
Life Sciences (except Nanotechnology and Biotechnology)				
(541715)	1,192	1,217	2%	1%
Commercial Banking (522110)	1,137	1,145	1%	1%
Computer Systems Design Services (541512)	1,128	1,175	4%	1%
Source: EMSI 2020.3				

Employer	Bay	Employer	Bay	Employer	Silicon Valley	
H&R Block	637	Moss Adams Llp	65	KPMG	161	
	468	•	64		123	
Acca		Sprouts Farmers Markets	-	Intuit		
KPMG	442	Republic Bancorp	64	PricewaterhouseCoopers	122	
Intuit	377	Stanford University	63	H&R Block	104	
PricewaterhouseCoopers	335	Jackson Hewitt Tax Service	50	Acca	99	
Nelson	259	BDO International	49	Anthem Blue Cross	94	
		University Of California				
Anthem Blue Cross	234	Berkeley	45	Deloitte	91	
Deloitte	212	US Department of Treasury	44	Google Inc.	63	
Ernst & Young	139	Amazon	43	Ernst & Young	58	
Marriott International						
Incorporated	100	Facebook	42	Stanford University	39	
		Certified Mobile Notary				
RSM US LLP.	99	Service	42	Grant Thornton	30	
Bvoh	93	University California	41	Western Digital	25	
		Compass Group North				
Alphalist	74	America	41	RSM US LLP.	25	
Grant Thornton	72	Anderson Windows	41	Splunk	24	
				Super Micro Computer		
Wells Fargo	70	Rsi	38	Incorporated	23	
Google Inc.	70	Protiviti	38	Sprouts Farmers Markets	23	
Pacific Gas and Electric						
Company	68	Bpm	38	Intellipro Incorporated	23	
H&R Block	637	Moss Adams Llp	65	KPMG	161	
Acca	468	Sprouts Farmers Markets	64	Intuit	123	
KPMG	442	Republic Bancorp	64	PricewaterhouseCoopers	123	
Intuit	377	Stanford University	63	H&R Block	104	
PricewaterhouseCoopers	335	Jackson Hewitt Tax Service	50	Acca	99	
Nelson	259	BDO International	49	Acco Anthem Blue Cross	94	
Theison	239		49	Aninem blue Cross	94	
Anthony Place Creat	224	University Of California	45	Dalaitta	01	
Anthem Blue Cross	234	Berkeley	45	Deloitte	91	
Deloitte	212	US Department of Treasury	44	Google Inc.	63	
Ernst & Young	139	Amazon	43	Ernst & Young	58	
Marriott International						
Incorporated	100	Facebook	42	Stanford University	39	
		Certified Mobile Notary				
RSM US LLP.	99	Service	42	Grant Thornton	30	
Bvoh	93	University California	41	Western Digital	25	

Table 6. Top Employers Posting Accounting Occupations in Bay Region and Silicon Valley Sub-Region (July 2019- June 2020)

Source: Burning Glass

Educational Supply

There are 28 community colleges in the Bay Region issuing 800 awards on average annually (last 3 years ending 2018-19) on TOP 0502.00-Accounting. There are seven (7) colleges in the Silicon Valley Sub-Region issuing 255 awards on average annually (last 3 years) on this TOP code.

There are three (3) Other Educational Institutions in the Bay Region issuing 27 awards on average annually (last 3 years ending 2016-17) on TOP 0502.00-Accounting. There are no Other Educational Institutions in the Silicon Valley Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

There are six (6) Other Educational Institutions in the Bay Region issuing 239 Bachelor's Degrees on average annually (last 3 years ending 2018-19) on TOP 0502.00-Accounting. There is one (1) Other Educational Institution in the Silicon Valley Sub-Region issuing 87 Bachelor's Degrees on average annually (last 3 years ending 2018-19) on this TOP code.

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College	Sub-Region	Associates	Certificate Low Unit	Noncredit	Total	
Alameda	East Bay		3		3	
Berkeley City	East Bay	5	7		12	
Cabrillo	SC - Monterey	19	32		51	
Canada	Mid-Peninsula	7	13		20	
Chabot Hayward	East Bay	16	29		45	
Contra Costa	East Bay		6		6	
De Anza	Silicon Valley	29	49		78	
Diablo Valley	East Bay	14	36		50	
Evergreen Valley	Silicon Valley	24	5		29	
Foothill	Silicon Valley	26	15	48	89	
Gavilan	Silicon Valley	6	3		9	
Hartnell	SC - Monterey		6		6	
Laney	East Bay	16	6		22	
Las Positas	East Bay		8	1	8	
Los Medanos	East Bay	16	9		25	
Marin	North Bay		4		4	
Merritt	East Bay	10	3		13	
Mission	Silicon Valley	16	9		25	
Monterey	SC - Monterey	6	5		11	
Napa	North Bay	5	6		11	
Ohlone	East Bay	5	40		45	
San Francisco	Mid-Peninsula	7	15		22	
San Francisco Ctrs	Mid-Peninsula			17	17	
San Jose City	Silicon Valley	11	13		24	
San Mateo	Mid-Peninsula	28	63		91	
Santa Rosa	North Bay		35		35	
Skyline	Mid-Peninsula	12	16		28	
Solano	North Bay	11	9		20	
West Valley	Silicon Valley		1		1	
Total Bay Region		289	445	66	800	
Total Silicon Valley Sub-Region		112	95	48	255	
Source: Data Mart						

Source: Data Mart

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

Table 7b. Other Educational Institutions Awards on TOP 0502.00-Accounting in Bay Region

College	Sub-Region	Associate Degree	Award < 1 academic yr.	Award 1 < 2 academic yrs.	Total
Central Coast College	Santa Cruz- Monterey		14		14
Empire College	North Bay	9		3	12
Golden Gate University- San Francisco	Mid-Peninsula	1			1
Total Bay Region		10	14	3	27
Total Silicon Valley Sub-Region		0	0	0	0

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Table 7c. Bachelor's Degree Awards on TOP 0502.00-Accounting in Bay Region

College	Sub-Region	Bachelor's Degree
Santa Clara University	Silicon Valley	87
Holy Names University	East Bay	4
Menlo College	Mid-Peninsula	30
Notre Dame de Namur University	Mid-Peninsula	4
Saint Mary's College of California	East Bay	38

University of San Francisco	Mid-Peninsula	76
Total Bay Region		239
Total Silicon Valley Sub-Region		87

Source: Data Mart

Note: The annual average for awards is 2014-15 to 2016-17.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 11,648 annual openings for the Accounting occupational cluster and 1,066 annual (3-year average) awards from community colleges and Other Educational Institutions for an annual undersupply of 10,582 students. In the Silicon Valley Sub-Region, there is also a gap with 3,092 annual openings and 342 annual (3-year average) awards from community colleges and Other Educational Institutions for an annual undersupply of 2,750 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	Mission College All CTE Programs	State 0502.00	Bay 0502.00	Silicon Valley 0502.00	Mission College 0502.00
% Employed Four Quarters After Exit	74%	77%	72%	75%	77%	77%
Median Quarterly Earnings Two Quarters After Exit	\$10,550	\$10,336	\$10,000	\$11,929	\$14,070	\$12,633
Median % Change in Earnings	46%	49%	53%	67%	110%	132%
% of Students Earning a Living Wage	63%	66%	65%	70%	76%	79%

Source: Launchboard Pipeline (version available on (8/7/20)

Skills, Certifications and Education

Table 9. Top Skills for Accounting Occupations in Bay Region (July 2019 - June 2020)

Skill	Postings	Skill	Postings	Skill	Postings
Accounting	29,959	Enterprise Resource Planning	4,929	SAP	2,531
Account Reconciliation	10,259	Customer Billing	4,644	Oracle	2,516
General Ledger	7,995	Invoice Processing	4,380	Tax Preparation	2,488
Generally Accepted				-	
Accounting Principles	7,750	Data Entry	4,050	Customer Contact	2,430
Financial Statements	7,618	Financial Analysis	3,989	Sarbanes-Oxley (SOX)	2,396
Month-End Close Processes	6,547	Customer Service	3,918	Payroll Processing	2,363
Accounts Payable Receivable	6,402	NetSuite	3,484	Pivot Tables	2,052
Budgeting	5,946	Tax Returns	3,436	Business Administration	1,967
Financial Reporting	5,657	Spreadsheets	3,397	Accounting Management	1,956
Scheduling	5,603	Expense Reports	3,299	Internal Auditing	1,932
Quickbooks	5,589	Bank Reconciliation	3,154	Fixed Assets	1,892
Public Accounting	5,420	Customer Checkout	3,065	Calculation	1,885
Bookkeeping	5,250	Accruals	2,920	Economics	1,810
External Auditing	5,095	Accounting Software	2,910	Project Management	1,809
Balance Sheet	5,079	Accounting Systems	2,553	General Ledger Accounting	1,787

Source: Burning Glass

Table 10. Certifications for Accounting Occupations in Bay Region (July 2019 - June 2020)

Note: 69% 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
Certified Public Accountant (CPA)	10,278	Information Systems Certification	103
Certified Information Systems Auditor (CISA)	813	IT Infrastructure Library (ITIL) Certification	92
		Certified Regulatory Compliance Manager	
Driver's License	721	(CRCM)	83

Certified Information Systems Security			
Professional (CISSP)	357	Taxation Certification	79
Certified Internal Auditor (CIA)	313	Security Clearance	68
Financial Accounting Standards Board (FASB)	218	Certified Fraud Examiner (CFE)	67
Business License	163	Certified Payroll Professional (CPP)	66
Certificate in Accounting	144	Chartered Financial Analyst (CFA)	62
Institute of Internal Auditors (IIA)	128	Investment Advisor	61
Licensed Attorney	108	Project Management Professional (PMP)	53
Certified Information Security Manager (CISM)	105	Certified Protection Professional (CPP)	51
Project Management Certification	103	Certified Professional Coder	51

Source: Burning Glass

Table 11. Education Requirements for Accounting Occupations in Bay Region

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.

Education (minimum advertised)	Latest 12 Mos. Postings	Percent 12 Mos. Postings
High school or vocational training	2,583	10%
Associate Degree	1,299	5%
Bachelor's Degree or Higher	22,466	85%

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/ 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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