

Accounting

Labor Market Analysis for San Diego Continuing Education

September 2019

Summary

- Do not Proceed
- Proceed with Caution
- Proceed

**PROCEED WITH
NEW PROGRAM?**



**SUPPLY
GAP?**



**AT OR ABOVE
THE LIVING WAGE**

- Bachelor's Degree+
- Associate Degree
- Some College or Certificate
- High School Diploma or Equivalent
- Less than a HS Diploma
- Apprenticeship

**EXPECTED LEVEL
OF EDUCATION**

- High
- Medium
- Low

**NUMBER OF
INSTITUTIONS THAT
PROVIDE TRAINING**

This report provides labor market information for occupation(s) selected by San Diego Continuing Education for its *Accounting* program. The training provided by this program is likely to lead to employment as *Bookkeeping, Accounting, and Auditing Clerks*. According to available labor market information, the occupation has a labor market demand of 1,951 annual job openings, while the average demand for an occupation in San Diego County is 277 annual job openings. Six community colleges supply the region with 319 for-credit awards (132 associate degrees, 90 certificates with 6 to < 18 units, and other certificates with varying numbers of units): MiraCosta College, Palomar College, San Diego City College, San Diego Mesa College, San Diego Miramar College, and Southwestern College. Only San Diego Continuing Education supplies noncredit awards for this occupation, which averaged 15 awards over the past three program years. In short, the region supplies 334 for-credit and noncredit awards for 1,951 annual job openings, suggesting that there is a labor market supply gap. Additionally, entry-level and median wages are above the living wage, suggesting that students who successfully complete a program and obtain employment in a related field may earn a living wage. The expected level of education is some college, no degree.

Introduction

This report provides labor market information (LMI) in San Diego County for occupation(s) related to the six-digit Taxonomy of Programs¹ (TOP) code, Accounting (TOP 050200). The purpose of this brief is to assist noncredit program providers in the region, such as San Diego Continuing Education (SDCE), with program development and review. SDCE identified one occupation from the Standard Occupational Classification (SOC)² system for *Accounting*, which will be the focus of this report:

Bookkeeping, Accounting, and Auditing Clerks (SOC 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. Sample reported job titles include:

- Accounts Receivable Clerk
- Accounts Payable Clerk
- Accounting Specialist
- Accounts Payable Specialist
- Accounting Technician
- Accounting Clerk
- Accounting Associate
- Accounting Assistant

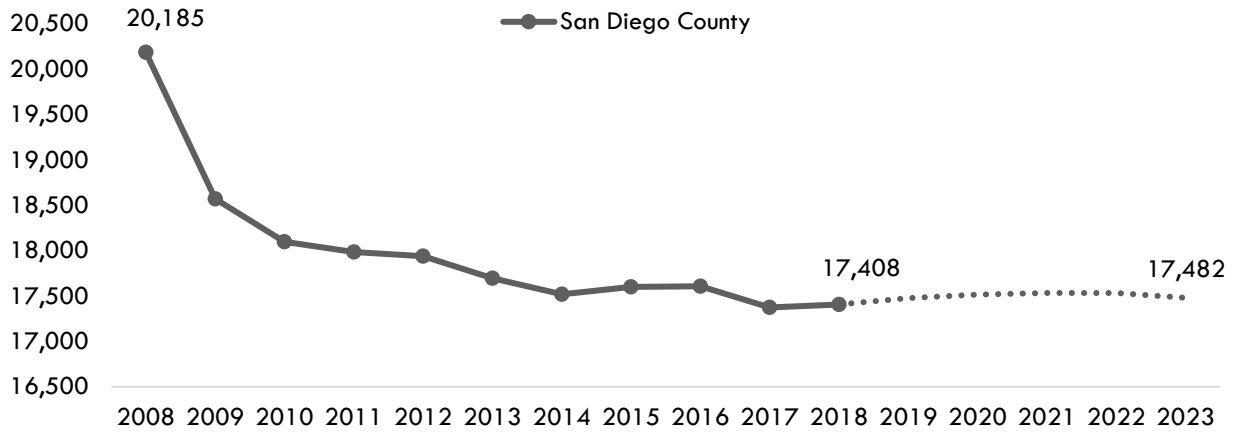
Projected Occupational Demand

Between 2018 and 2023, *Bookkeeping, Accounting, and Auditing* are projected to increase by 74 net jobs or zero percent (Exhibit 1). Employers in San Diego County will need to hire 1,951 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

¹ Taxonomy of Programs (TOP) is a system of codes used by the California Community Colleges for the purpose of collecting, calculating, or disseminating data about similar training programs.

² The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc).

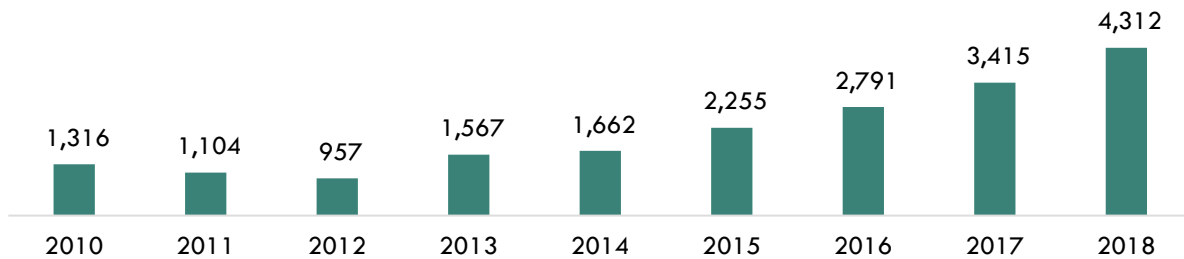
Exhibit 1: Number of Jobs for Bookkeeping, Accounting, and Auditing Clerks (2008-2023)³



Online Job Postings

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in labor market demand that are not captured by historical data. Between 2010 and 2018, there was an average of 2,153 online job postings per year for *Bookkeeping, Accounting, and Auditing Clerks* in San Diego County (Exhibit 2).

Exhibit 2: Number of Online Job Postings for Bookkeeping, Accounting, and Auditing Clerks in San Diego County (2010-2018)⁴



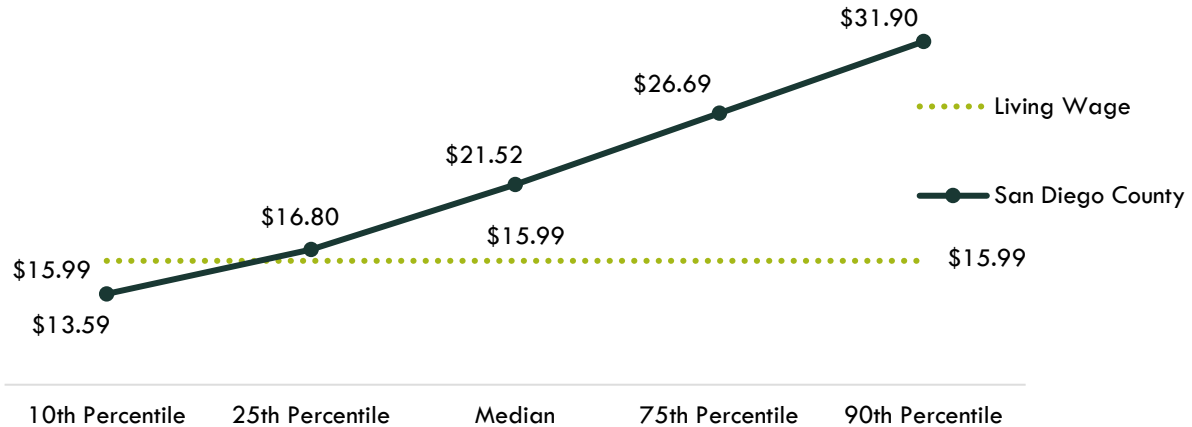
³ Emsi 2019.03; QCEW, Non-QCEW, Self-Employed.

⁴ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2018.

Earnings

Bookkeeping, Accounting, and Auditing have median hourly earnings of **\$21.52**; this is more than the living wage for a single adult in San Diego County, which is **\$15.99** per hour (Exhibit 3).⁵

Exhibit 3: Hourly Earnings⁶ for *Bookkeeping, Accounting, and Auditing* Clerks in San Diego County⁷



Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards conferred by a course or program in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.⁸ According to TOP and CIP⁹ data, **six** community colleges supply the region with for-credit awards for Accounting (TOP 050200): [MiraCosta College](#), [Palomar College](#), [San Diego City College](#), [San Diego Mesa College](#), [San Diego Miramar College](#), and [Southwestern College](#) (Exhibit 4a).

⁵ "California Family Needs Calculator." Insight Center for Community Economic Development, last updated 2018. insightccd.org/2018-family-needs-calculator.

⁶ 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

⁷ Emsi 2019.03; QCEW, Non-QCEW, Self-Employed.

⁸ TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data)

⁹ There are two CIP codes related to Accounting (TOP 050200): Accounting (CIP 520301) and Accounting Technology/Technician and Bookkeeping (CIP 520302).

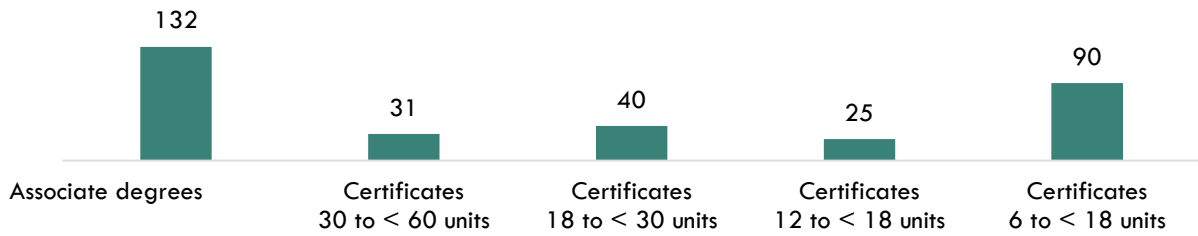
**Exhibit 4a: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions
(Program Years 2015-16 through 2017-18)**

College	Award Type	PY 15-16	PY 16-17	PY 17-18	3-Year Avg
MiraCosta	Associate of Arts (A.A.) degree	33	21	28	27
	Certificate 18 to < 30 units	29	14	10	18
	Certificate 12 to < 18 units	32	13	29	25
	Certificate 6 to < 18 units	15	13	5	11
	Total	109	61	72	81
Palomar	Associate of Science (A.S.) degree	0	12	29	14
	Associate of Arts (A.A.) degree	30	0	1	10
	Certificate 30 to < 60 units	32	12	40	28
	Certificate 6 to < 18 units	51	45	26	41
	Total	113	69	96	93
San Diego City	Associate of Science (A.S.) degree	4	4	5	4
	Associate of Arts (A.A.) degree	0	1	0	0
	Certificate 6 to < 18 units	25	32	34	30
	Total	29	37	39	35
San Diego Mesa	Associate of Science (A.S.) degree	17	25	9	17
	Certificate 18 to < 30 units	15	15	9	13
	Certificate 6 to < 18 units	0	3	3	2
	Total	32	43	21	32
San Diego Miramar	Associate of Science (A.S.) degree	8	8	11	9
	Certificate 18 to < 30 units	10	5	12	9
	Certificate 6 to < 18 units	0	0	1	0
	Total	18	13	24	18
Southwestern	Associate of Science (A.S.) degree	12	8	6	9
	Associate of Arts (A.A.) degree	54	35	37	42
	Certificate 30 to < 60 units	5	2	3	3
	Certificate 6 to < 18 units	0	7	12	6
	Total	71	52	58	60
Total		372	275	310	319

Note: The numbers may not add up exactly due to rounding.

Broken down by award type, the six colleges supplied the most awards in associate degrees (132), followed by certificates with 6 to < 18 units (90), and so forth (Exhibit 4b).

Exhibit 4b: Total Number of Awards by Type for Accounting (TOP 050200) in San Diego County (Three-Year Average 2015-16 through 2017-18)



In terms of noncredit awards, only San Diego Continuing Education provides noncredit awards for Accounting (TOP 050200), with an average of 15 noncredit awards (Exhibit 5).

Exhibit 5: Number of Noncredit Awards (Certificates and Degrees) Conferred by SDCE (Program Years 2015-16 through 2017-18)

Program Title	Award Type	PY 15-16	PY 16-17	PY 17-18	3-Year Avg
Account Clerk Program	Program Award	11	17	16	15

Demand vs. Supply

In short, the region supplies 334 for-credit and noncredit awards for 1,951 annual job openings, suggesting that there is a labor market supply gap (Exhibit 6).

Exhibit 6: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

TOP6 Program	Demand (Annual Openings)	Supply (Total Annual Average Supply)		Supply Gap or Oversupply
		Noncredit	For-Credit	
Accounting (TOP 050200)	1,951	15	319	1,617

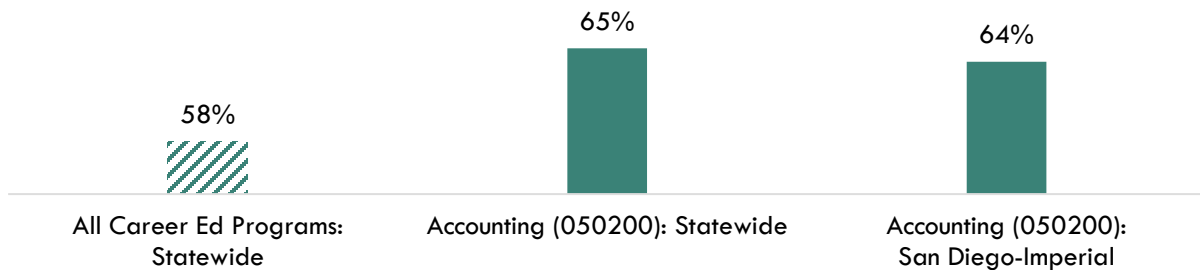
Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly

available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

Student Outcomes and Regional Comparisons

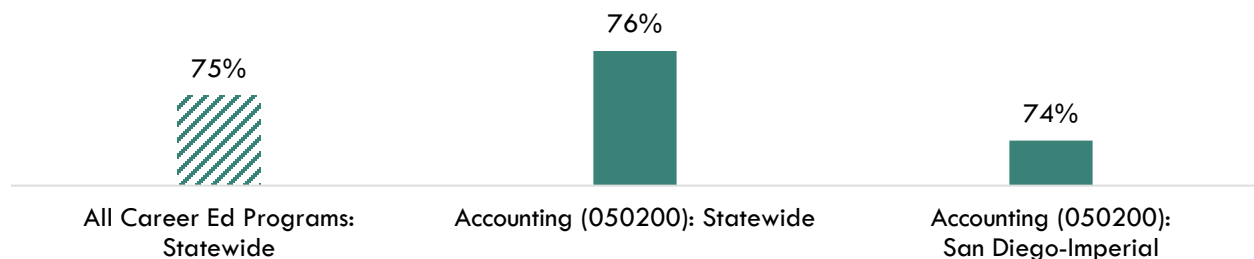
According to the California Community Colleges LaunchBoard, 64 percent of students in the San Diego-Imperial region earned a living wage after completing an Accounting (050200) program, compared to 65 percent statewide and 58 percent of students in Career Education programs in general across the state (Exhibit 7a).

Exhibit 7a: Proportion of Students Who Earned a Living Wage, PY2015-16¹⁰



According to the California Community Colleges LaunchBoard, 74 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing an Accounting (050200) program, compared to 76 percent statewide and 75 percent of students in Career Education programs in general across the state (Exhibit 7b).

Exhibit 7b: Percentage of Students in a Job Closely Related to Field of Study, PY2014-15¹¹



¹⁰ Among completers and skills builders who exited, the proportion of students who attained a living wage.

¹¹ Most recent year with available data is Program Year 2014-15. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

Top Employers and Work Locations

Between January 1, 2016 and December 31, 2018, the top five employers in San Diego County for this occupation were [General Atomics](#), [Sprouts Farmers Markets](#), [San Diego Community College District](#), [Scripps Health](#), and [University of California, San Diego](#) (Exhibit 8).

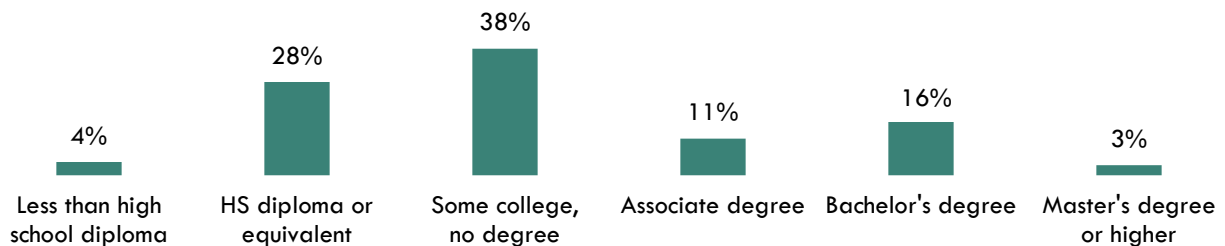
Exhibit 8: Top Employers in San Diego County for *Bookkeeping, Accounting, and Auditing Clerks*¹²

Top Employers	
• General Atomics	• Redline Resources
• Sprouts Farmers Markets	• U.S. Navy
• San Diego Community College District	• Suna Solutions
• Scripps Health	• Hilton Hotel Corporation
• University of California, San Diego	• Marriott International Incorporated

Skills, Education, and Certifications

Exhibit 9a indicates the educational attainment for the occupation found currently in the national labor force. The typical on-the-job training for this profession is [moderate-term on-the-job training](#). The typical entry-level education is [some college, no degree](#).¹³

Exhibit 9a: National Educational Requirements for *Bookkeeping, Accounting, and Auditing Clerks*¹⁴



¹² Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2016-2018.

¹³ Emsi 2019.03; QCEW, Non-QCEW, Self-Employed.

¹⁴ Emsi 2019.03; QCEW, Non-QCEW, Self-Employed.

Based on online job postings between January 1, 2016 and December 31, 2018, the top listed educational requirement for *Bookkeeping, Accounting, and Auditing Clerks* was a **bachelor's degree** (Exhibit 9b).¹⁵

Exhibit 9b: Educational Requirements for *Bookkeeping, Accounting, and Auditing Clerks* in San Diego County in Online Job Postings¹⁶

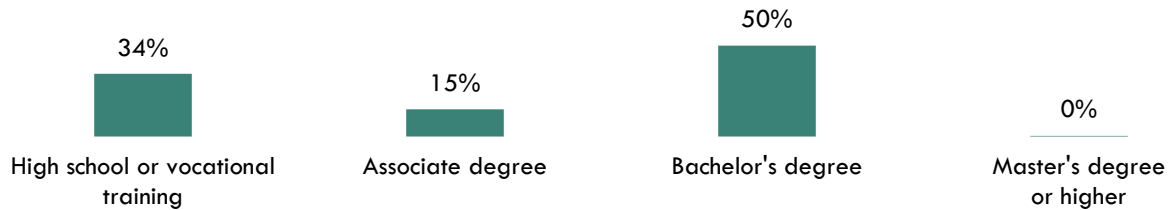


Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2016 and December 31, 2018.

Exhibit 10: Top Skills for *Bookkeeping, Accounting, and Auditing Clerks* in San Diego County¹⁷

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> Accounting Accounts Payable / Accounts Receivable Bookkeeping Data Entry Account Reconciliation 	<ul style="list-style-type: none"> Detail-Oriented Communication Skills Organizational Skills Research Multi-Tasking 	<ul style="list-style-type: none"> Microsoft Excel QuickBooks Enterprise Resource Planning Microsoft Word Accounting Software

¹⁵ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2016-2018.

¹⁶ "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified October 18, 2018. bls.gov/emp/tables/educational-attainment.htm.

¹⁷ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2016-2018.

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Important Disclaimers

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; 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 the report 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.