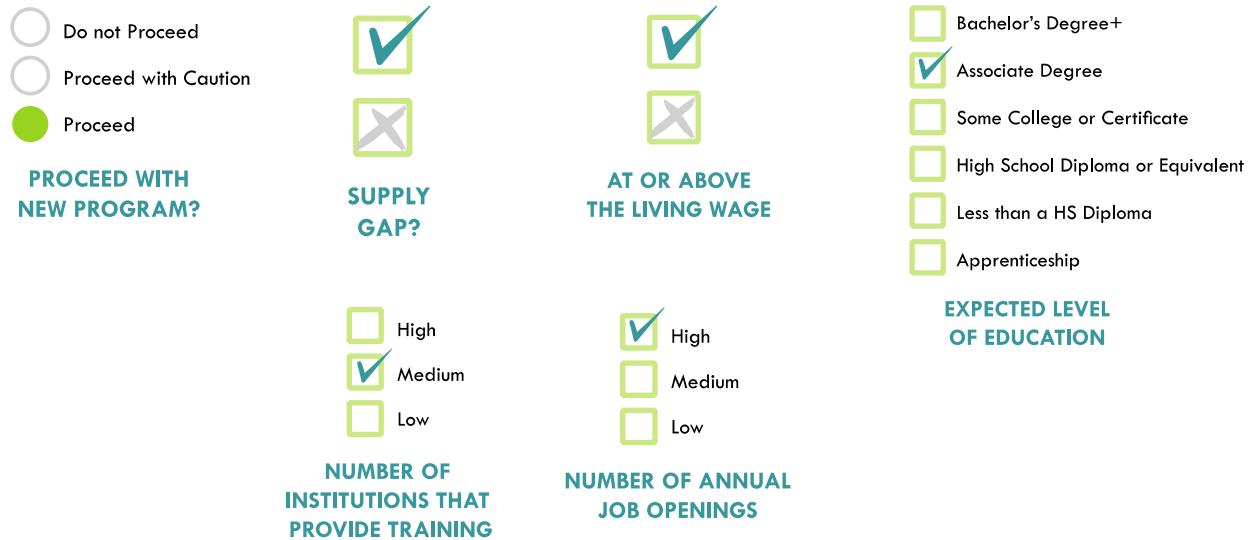


Accounting Occupations

Labor Market Analysis: San Diego County

April 2019

Summary



According to available labor market information, there is a supply gap for technician occupations that could be trained by an *Accounting* program, specifically Tax Preparers; Bookkeeping, Accounting, and Auditing Clerks; Payroll and Timekeeping Clerks; and Brokerage Clerks. For the purpose of this report, these occupations are referred to as “Accounting Occupations.” *Accounting Occupations* in San Diego County have a labor market demand of 2,446 annual job openings. Eight educational institutions in San Diego County supply 565 awards for these occupations, suggesting that there is a supply gap in the labor market. Nationally, the highest educational attainment for these occupations is some college, no degree; however, according to online job postings in San Diego County, the top listed educational requirement is a bachelor’s degree. The summary above indicates an expected level of education of an associate degree to reflect this discrepancy.

Introduction

This report provides labor market information in San Diego County for the following occupational codes in the Standard Occupational Classification (SOC)¹ system:

- **Tax Preparers** (SOC 13-2082): Prepare tax returns for individuals or small businesses.
- **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.
- **Payroll and Timekeeping Clerks** (SOC 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.
- **Brokerage Clerks** (SOC 43-4011): Perform duties related to the purchase, sale or holding of securities. Duties include writing orders for stock purchases or sales, computing transfer taxes, verifying stock transactions, accepting and delivering securities, tracking stock price fluctuations, computing equity, distributing dividends, and keeping records of daily transactions and holdings.

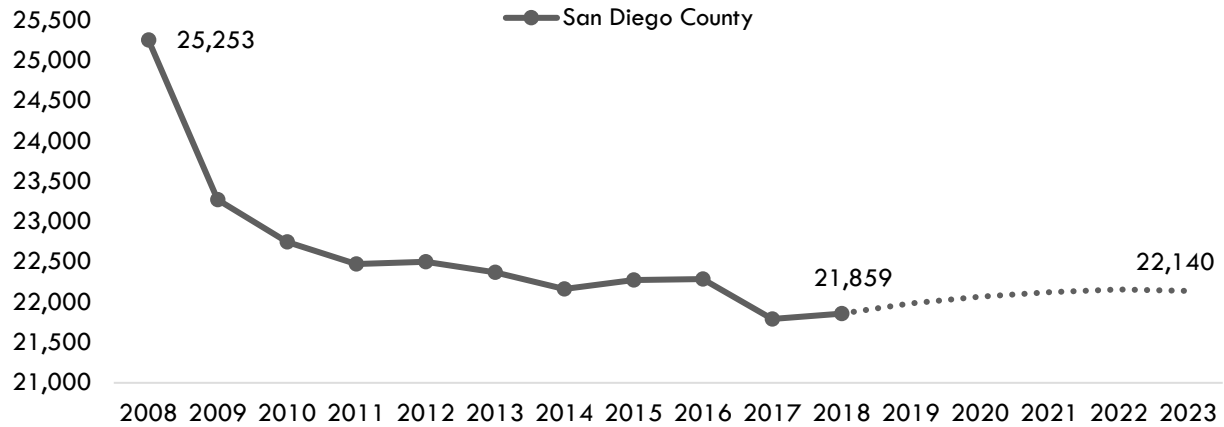
For the purpose of this report, these occupations are referred to as *Accounting Occupations*.

Projected Occupational Demand

Between 2018 and 2023, *Accounting Occupations* are projected to increase by 281 jobs or one percent (Exhibit 1). Employers in San Diego County will need to hire 2,446 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

¹ 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).

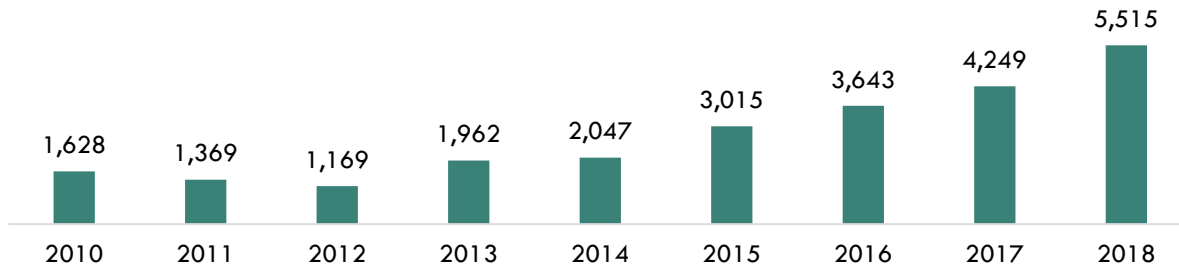
Exhibit 1: Number of Jobs for Accounting Occupations (2008-2023)²



Online Job Postings

Between 2010 and 2018, there was an average of **2,733** online job postings per year for *Accounting Occupations* in San Diego County (Exhibit 2).

Exhibit 2: Number of Online Job Postings for Accounting Occupations in San Diego County (2010-2018)³



Earnings

The median hourly earnings of *Accounting Occupations* range from **\$24.21** to **\$26.35** (Exhibit 3a). On average, the median hourly earnings for *Accounting Occupations* is **\$23.55**; this is more than the Self-Sufficiency Standard for a single adult in San Diego County, which is **\$15.99** per hour (Exhibit 3b).⁴

² Emsi 2019.01; QCEW, Non-QCEW, Self-Employed.

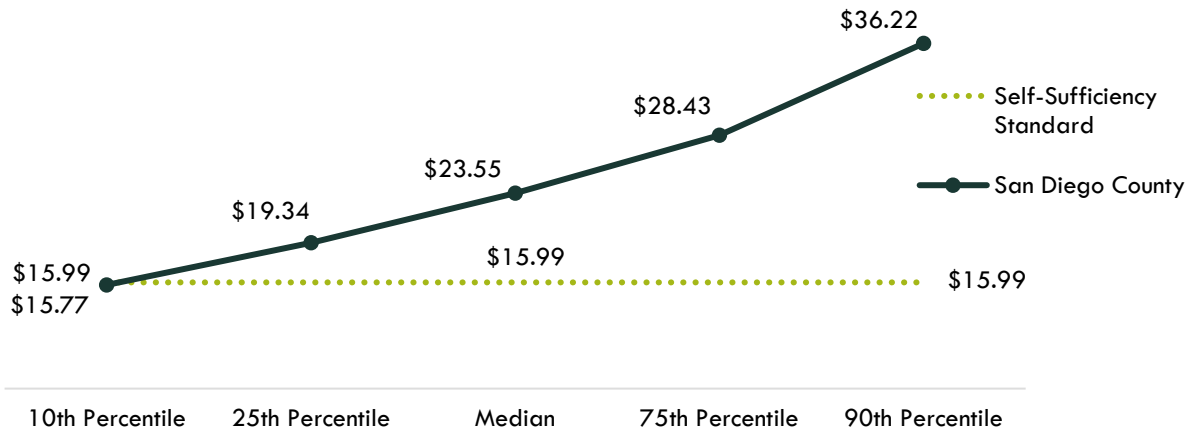
³ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2018.

⁴ The self-sufficiency wage in San Diego for one adult is \$15.99 (insightcced.org/2018-self-sufficiency-standard).

Exhibit 3a: Hourly Earnings for Accounting Occupations in San Diego County

Occupational Title	Entry-Level Hourly Earnings (10 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (90 th Percentile)
Brokerage Clerks	\$17.60	\$26.35	\$37.91
Payroll and Timekeeping Clerks	\$16.24	\$24.21	\$31.08
Tax Preparers	\$15.83	\$22.68	\$45.46
Bookkeeping, Accounting, and Auditing Clerks	\$13.44	\$20.95	\$30.43

Exhibit 3b: Hourly Earnings⁵ for Accounting Occupations in San Diego County⁶



Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.⁷ There are **two** TOP codes and **three** CIP codes related to *Accounting Occupations* (Exhibit 4).

⁵ 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.

⁶ Emsi 2019.01; QCEW, Non-QCEW, Self-Employed.

⁷ 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).

Exhibit 4: Related TOP and CIP Codes for Accounting Occupations

<i>Accounting Occupations</i>
TOP 050200: Accounting
TOP 050210: Tax Studies
CIP 52.0301: Accounting
CIP 52.0302: Accounting Technology/Technician and Bookkeeping
CIP 52.1601: Taxation

According to TOP data, *seven* community colleges supply the region with awards for these occupations: *MiraCosta College, Palomar College, San Diego City College, San Diego Continuing Education, San Diego Mesa College, San Diego Miramar College, and Southwestern College*. According to CIP data, *one* non-community college supplies the region with awards, *National University* (Exhibit 5). Educational institutions that do not report outcomes data (e.g., completion, supply) to the California Community Colleges Chancellor’s Office or Integrated Postsecondary Education Data System are not included in the analysis.

Exhibit 5: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Year 2013-14 through PY2016-17 Average)

TOP6 or CIP	TOP6 or CIP Title	3-Yr Annual Average CC Awards (PY14-15 to PY16-17)	Other Educational Institutions 3-Yr Annual Average Awards (PY13-14 to PY15-16)	3-Yr Total Average Supply (PY13-14 to PY16-17)
050200	Accounting	545	0	545
	• MiraCosta	91	0	
	• Palomar	92	0	
	• San Diego Cont. Ed.	204	0	
	• San Diego City	43	0	
	• San Diego Mesa	40	0	
	• San Diego Miramar	15	0	
	• Southwestern	60	0	

050210	Tax Studies	18	0	18
	• MiraCosta	6	0	
	• San Diego City	12	0	
52.0301	Accounting	0	2	2
	• National University	0	2	
			Total	565

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply⁸ suggests that there is a **supply gap** for these occupations in San Diego County, with **2,446** annual openings and **565** awards. Comparatively, there are **29,461** annual openings in California and **4,521** awards⁹ (Exhibit 6).

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

Community Colleges and Other Postsecondary Educational Institutions	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	2,446	565	1,881
California	29,461	4,521	24,940

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

Student Outcomes

Based on the information available in the California Community Colleges LaunchBoard, students who took courses in the related TOP codes exhibited the following outcomes (Exhibit 7).

⁸ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

⁹ Centers of Excellence Student Outcomes supply table. (coeccc.net/Supply-and-Demand.aspx).

**Exhibit 7: Strong Workforce Program Metrics for TOP 050200: Accounting
San Diego-Imperial Region vs. California (PY2015-16)**

Metric	San Diego-Imperial	California
Number of course enrollments ¹⁰	15,606	146,381
Completed 12+ CTE units in one year ¹¹	1,448	18,220
Completed 48+ CTE contact hours in one year ¹²	353	1,227
Number of students who got a degree or certificate ¹³	405	2,806
Number of students who transferred ¹⁴	2,059	18,750
Employed in the second fiscal quarter after exit ¹⁵	68%	72%
Employed in the fourth fiscal quarter after exit ¹⁶	67%	72%
Job closely related to field of study ¹⁷	N/A	N/A
Median earnings in the second fiscal quarter after exit ¹⁸	\$8,866	\$10,000
Median change in earnings ¹⁹	33%	53%
Attained a living wage ²⁰	64%	65%

Top Employers and Work Locations

Between January 1, 2016 and December 31, 2018, the top five employers in San Diego County for these occupations were [H&R Block](#), [General Atomics](#), [San Diego Community College District](#), [Sprouts Farmers Markets](#), and [Scripps Health](#) (Exhibit 8).

¹⁰ The number of enrollments in courses assigned to the TOP code in the selected year.

¹¹ The number of students who completed 12 or more credit CTE units.

¹² The number of students who completed 48 or more noncredit CTE instructional contact hours.

¹³ The number of unduplicated students who earned a locally-issued certificate, Chancellor's Office approved certificate, associate degree, and/or California Community Colleges bachelor's degree in the selected TOP code.

¹⁴ Students who took non-introductory courses or completed a California Community Colleges Chancellor's Office award in the selected TOP code in selected year who subsequently enrolled for the first time in a four-year institution the following year.

¹⁵ Among all exiters with a valid SSN, the percentage who were employed two quarters after exiting California Community Colleges.

¹⁶ Among exiting students with a valid SSN, the percentage who were employed four quarters after exiting California Community Colleges.

¹⁷ Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

¹⁸ Among exiting students, the median second-quarter earnings one year after the year in which they exited California Community Colleges.

¹⁹ Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting California Community Colleges.

²⁰ Among completers and skills builders who exited, the proportion of students who attained a living wage.

Exhibit 8: Top Employers in San Diego County for Accounting Occupations²¹

Top Employers	
<ul style="list-style-type: none"> • H&R Block • General Atomics • San Diego Community College District • Sprouts Farmers Markets • Scripps Health 	<ul style="list-style-type: none"> • Suna Solutions • University of California, San Diego • Proven Software Incorporated • Redline Resources • Jones Lang LaSalle Incorporated

Skills, Education, and Certifications

Accounting Occupations have educational requirements ranging from a high school diploma or equivalent to some college, no degree (Exhibit 9a).

Exhibit 9a: Educational Requirements for Accounting Occupations²²

Occupational Title	Typical Entry-Level Education
Bookkeeping, Accounting, and Auditing Clerks	Some college, no degree
Tax Preparers	High school diploma or equivalent
Payroll and Timekeeping Clerks	High school diploma or equivalent
Brokerage Clerks	High school diploma or equivalent

Based on online job postings between January 1, 2016 and December 31, 2018, the top listed educational requirement for *Accounting Occupations* is a [bachelor's degree](#) (Exhibit 9b).²³

²¹ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2016-2018.

²² Emsi, 2019.01; QCEW, Non-QCEW, Self-Employed.

²³ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2016-2018.

Exhibit 9b: Educational Requirements for Accounting Occupations in San Diego County²⁴

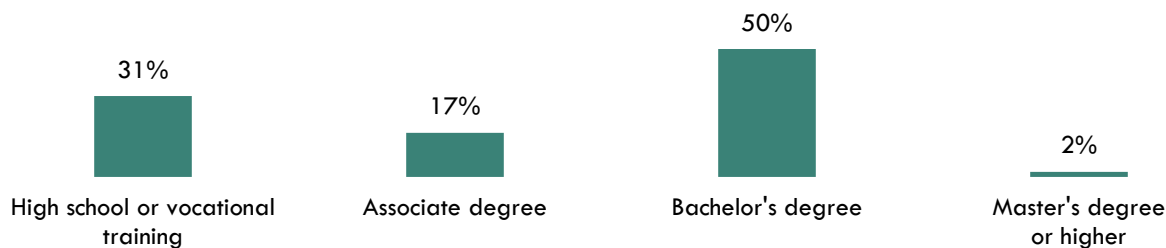


Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2016 and December 31, 2018.

Exhibit 10: Top Skills for Accounting Occupations in San Diego County²⁵

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

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²⁴ "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.

²⁵ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2016-2018.

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.