

# Certified Public Accountant Occupations Labor Market Analysis: San Diego County

January 2019

## Summary

According to available labor market information, there is demand for occupations that could be trained by a *Certified Public Accountant* program. For the purpose of this report, these occupations are referred to as "Certified Public Accountant Occupations." *Certified Public Accountant Occupations* in San Diego County have a labor market demand of 1,479 annual job openings. Eight educational institutions in San Diego County supply 573 awards for these occupations, suggesting that there is a supply gap. These occupations' median earnings are higher than the Self-Sufficiency Standard, suggesting that students who successfully complete a program and obtain employment in a related field may earn a living wage.

The following list summarizes findings from the labor market analysis for Certified Public Accountant Occupations:

- Between 2018 and 2023, Certified Public Accountant Occupations are projected to increase by 764
  jobs or five percent.
- Employers in San Diego County will need to hire 1,479 workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.
- Between 2010 and 2018, there was an average of 2,547 online job postings per year for Certified Public Accountant Occupations in San Diego County.
- On average, the median hourly earnings for Certified Public Accountant Occupations is \$27.68; this
  is more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$15.99
  per hour.
- There are three Taxonomy of Programs (TOP) and four Classification of Instructional Programs (CIP) codes related to Certified Public Accountant Occupations.
- According to TOP data, seven community colleges supply the region with awards for these
  occupations: MiraCosta College, Palomar College, San Diego Continuing Education, San Diego City
  College, San Diego Mesa, San Diego Miramar College, and Southwestern College. According to
  CIP data, one non-community college supplies the region with awards, National University.

- Comparing labor demand (annual openings) with labor supply suggests that there is a supply gap
  for these occupations in San Diego County, with 1,479 annual openings and 573 awards.
   Comparatively, there are 19,332 annual openings in California and 4,608 awards.
- 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, KPMG, Proven Software, and Intuit.
- Based on online job postings between January 1, 2016 and December 31, 2018, the top listed educational requirement for the two Certified Public Accountant Occupations is a bachelor's degree.

#### Introduction

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

- Accountants and Auditors (SOC 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. For
  this report, Accountants and Auditors include:
  - Auditors (SOC 13-2011.02): Examine and analyze accounting records to determine financial status of establishment and prepare financial reports concerning operating procedures.
- Tax Preparers (SOC 13-2082): Prepare tax returns for individuals or small businesses.

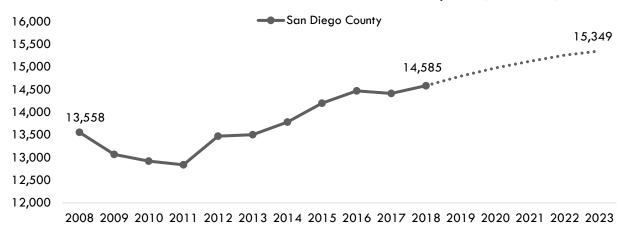
For the purpose of this report, these occupations are referred to as Certified Public Accountant Occupations.

#### **Projected Occupational Demand**

Between 2018 and 2023, Certified Public Accountant Occupations are projected to increase by 764 jobs or five percent (Exhibit 1). Employers in San Diego County will need to hire 1,479 workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover.

<sup>&</sup>lt;sup>1</sup> 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.

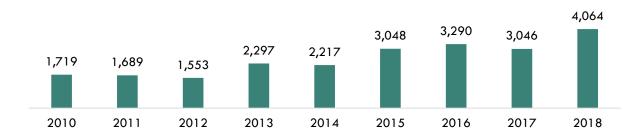
Exhibit 1: Number of Jobs for Certified Public Accountant Occupations (2008-2023)<sup>2</sup>



## **Online Job Postings**

Between 2010 and 2018, there was an average of 2,547 online job postings per year for Certified Public Accountant Occupations in San Diego County (Exhibit 2).

Exhibit 2: Number of Online Job Postings for Certified Public Accountant Occupations in San Diego County (2010-2018)<sup>3</sup>



# **Earnings**

The median hourly earnings of Certified Public Accountant Occupations range from \$21.64 to \$33.72 (Exhibit 3a). On average, the median hourly earnings for Certified Public Accountant Occupations is \$27.68; 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

<sup>&</sup>lt;sup>2</sup> Economic Modeling Specialists, Int'l. (EMSI). San Diego (6073). 2018.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2008-2023.

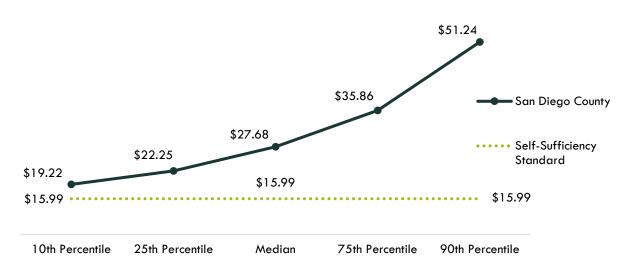
<sup>&</sup>lt;sup>3</sup> Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2010-2018.

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

Exhibit 3a: Hourly Earnings for Certified Public Accountant Occupations in San Diego County

Occupational Title	Entry-Level Hourly Earnings (10th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (90 <sup>th</sup> Percentile)
Accountants and Auditors	\$22.78	\$33.72	\$57.48
Tax Preparers	\$15.66	\$21.64	\$45.01

Exhibit 3b: Hourly Earnings for Certified Public Accountant Occupations in San Diego County<sup>5</sup>



## **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.<sup>6</sup> There are three TOP codes and four CIP codes related to Certified Public Accountant Occupations (Exhibit 4).

Exhibit 4: Related TOP and CIP Codes for Certified Public Accountant Occupations

Certified Public Accountant Occupations
TOP 050200: Accounting
TOP 050210: Tax Studies
TOP 050400: Banking and Finance
CIP 52.0301: Accounting

<sup>&</sup>lt;sup>5</sup> EMSI. San Diego (6073). 2018.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2018-2023.

<sup>&</sup>lt;sup>6</sup> 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).

CIP 52.0302: Accounting Technology/Technician and Bookkeeping		
CIP 52.0803: Banking and Financial Support Services		
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 Continuing Education, San Diego City College, San Diego Mesa, San Diego Miramar College, and Southwestern College. According to CIP data, one non-community college supplies the region with awards, National University (Exhibit 5).

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
	<ul> <li>MiraCosta</li> </ul>	91	0	
	<ul> <li>Palomar</li> </ul>	92	0	
	<ul> <li>San Diego Continuing</li> <li>Ed</li> </ul>	204	0	
	<ul> <li>San Diego City</li> </ul>	43	0	
	San Diego Mesa	40	0	
	San Diego Miramar	15	0	
	<ul> <li>Southwestern</li> </ul>	60	0	
050210	Tax Studies	18	0	18
	<ul> <li>MiraCosta</li> </ul>	6	0	
	San Diego City	12	0	
050400	Banking and Finance	8	0	8
	San Diego Miramar	5	0	
	<ul> <li>Southwestern</li> </ul>	3	0	
52.0301	Accounting	0	2	2

	<ul> <li>National University</li> </ul>	0	2	
52.0302	Accounting Technology/Technician and Bookkeeping	0	0	0
52.0803	Banking and Financial Support Services	0	0	0
52.1601	Taxation	0	0	0
			Total	573

## **Demand vs. Supply**

Comparing labor demand (annual openings) with labor supply<sup>7</sup> suggests that there is a supply gap for these occupations in San Diego County, with 1,479 annual openings and 573 awards. Comparatively, there are 19,332 annual openings in California and 4,608 awards<sup>8</sup> (Exhibit 6).

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

Community Colleges and Other Postsecondary Educational Institutions	<b>Demand</b> (Annual Openings)	<b>Supply</b> (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	1,479	573	906
California	19,332	4,608	14,724

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.

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<sup>&</sup>lt;sup>7</sup> 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.

<sup>&</sup>lt;sup>8</sup> Centers of Excellence Student Outcomes supply table. (coeccc.net/Supply-and-Demand.aspx).

#### **Student Outcomes**

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

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 <sup>9</sup>	15,606	146,381
Completed 12+ CTE units in one year <sup>10</sup>	1,448	18,220
Completed 48+ CTE contact hours in one year <sup>11</sup>	353	1,227
Number of students who got a degree or certificate <sup>12</sup>	405	2,806
Number of students who transferred <sup>13</sup>	2,059	18,750
Employed in the second fiscal quarter after exit <sup>14</sup>	68%	72%
Employed in the fourth fiscal quarter after exit <sup>15</sup>	67%	72%
Job closely related to field of study <sup>16</sup>	N/A	N/A
Median earnings in the second fiscal quarter after exit <sup>17</sup>	\$8,866	\$10,000
Median change in earnings <sup>18</sup>	33%	53%
Attained a living wage <sup>19</sup>	64%	65%

<sup>&</sup>lt;sup>9</sup> The number of enrollments in courses assigned to the TOP code in the selected year.

<sup>&</sup>lt;sup>10</sup> The number of students who completed 12 or more credit CTE units.

<sup>11</sup> The number of students who completed 48 or more noncredit CTE instructional contact hours.

<sup>&</sup>lt;sup>12</sup> 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.

<sup>&</sup>lt;sup>13</sup> 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.

<sup>14</sup> Among all exiters with a valid SSN, the percentage who were employed two quarters after exiting California Community Colleges.

<sup>15</sup> Among exiting students with a valid SSN, the percentage who were employed four quarters after exiting California Community Colleges.

<sup>16</sup> Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

<sup>&</sup>lt;sup>17</sup> Among exiting students, the median second-quarter earnings one year after the year in which they exited California Community Colleges.

<sup>&</sup>lt;sup>18</sup> Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting California Community Colleges.

<sup>19</sup> Among completers and skills builders who exited, the proportion of students who attained a living wage.

# **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, KPMG, Proven Software, and Intuit (Exhibit 8).

Exhibit 8: Top Employers in San Diego County for Certified Public Accountant Occupations<sup>20</sup>

Top Employers	
<ul> <li>H&amp;R Block</li> </ul>	<ul> <li>PricewaterhouseCoopers</li> </ul>
<ul> <li>General Atomics</li> </ul>	<ul><li>Viasat</li></ul>
<ul> <li>KPMG</li> </ul>	<ul> <li>Booz Allen Hamilton Inc.</li> </ul>
<ul> <li>Proven Software Inc.</li> </ul>	Sempra Energy
<ul> <li>Intuit Inc.</li> </ul>	<ul> <li>Next Level Resources</li> </ul>

### Skills, Education, and Certifications

Certified Public Accountant Occupations have varying educational requirements; they range from a high school diploma or equivalent to a bachelor's degree (Exhibit 9a).

Exhibit 9a: Educational Requirements for Certified Public Accountant Occupations<sup>21</sup>

Occupational Title	Typical Entry-Level Education	
Accountants and Auditors	Bachelor's degree	
Tax Preparers	High school diploma or equivalent	

Based on online job postings between January 1, 2016 and December 31, 2018, the top listed educational requirement for the two Certified Public Accountant Occupations is a bachelor's degree (Exhibit 9b).<sup>22</sup>

<sup>&</sup>lt;sup>20</sup> Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2016-2018.

<sup>&</sup>lt;sup>21</sup> EMSI. San Diego (6073). 2018.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2018-2023.

<sup>&</sup>lt;sup>22</sup> Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2016-2018.

Exhibit 9b: Educational Requirements for Certified Public Accountant Occupations in San Diego County<sup>23</sup>



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 Certified Public Accountant Occupations in San Diego County<sup>24</sup>

Specialized Skills	Soft Skills	Software Skills
<ul> <li>Accounting</li> <li>Account Reconciliation</li> <li>Generally Accepted Accounting Principles (GAAP)</li> <li>General Ledger</li> </ul>	<ul> <li>Communication Skills</li> <li>Detail-Oriented</li> <li>Research</li> <li>Organizational Skills</li> <li>Problem Solving</li> </ul>	<ul> <li>Microsoft Excel</li> <li>Enterprise Resource Planning (ERP)</li> <li>Microsoft Word</li> <li>QuickBooks</li> </ul>
<ul> <li>Financial Statements</li> </ul>		• SAP

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<sup>&</sup>lt;sup>23</sup> Bureau of Labor Statistics, Educational attainment for workers 25 years and older by detailed occupation. bls.gov/emp/ep\_table\_111.htm.

<sup>&</sup>lt;sup>24</sup> Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 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.