

**Program Endorsement Brief: 0502.00/Accounting**  
**Accounting (A.S. Degree)**  
**Business with Accounting Emphasis (A.S. Degree)**  
**CPA Exam Preparation I Certificate**  
**CPA Exam Preparation II Certificate**  
**CPA Licensure Accounting Study and Ethics Certificate**  
 Los Angeles/Orange County Center of Excellence, August 2021

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**Summary Analysis**

<b>Program Endorsement:</b>	<b>Endorsed: All Criteria Met</b> <input checked="" type="checkbox"/>	<b>Endorsed: Some Criteria Met</b> <input type="checkbox"/>	<b>Not Endorsed</b> <input type="checkbox"/>
<b>Program Endorsement Criteria</b>			
<b>Supply Gap:</b>	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
<b>Living Wage: (Entry-Level, 25<sup>th</sup>)</b>	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
<b>Education:</b>	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>
<b>Emerging Occupation(s)</b>			
	Yes <input type="checkbox"/>		No <input checked="" type="checkbox"/>

The Los Angeles/Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to three middle-skill occupations: *tax preparers* (13-2082), *bookkeeping, accounting, and auditing clerks* (43-3031), and *payroll and timekeeping clerks* (43-3051). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.<sup>1</sup>

However, the field of accounting is comprised of many occupations that typically require workers to obtain a bachelor's degree or more education. Therefore, two above middle-skill occupations are included in this report to illuminate a pathway for students who choose to continue their education beyond the community college level. The above middle-skill occupations in this report are *accountants and auditors* (13-2011) and *budget analysts* (13-2031).

This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupations.

Based on the available data, there appears to be a supply gap for the five accounting occupations in this report in the region. Furthermore, the majority of annual openings for the occupations in this report typically require less than a bachelor's degree, and the majority of

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<sup>1</sup> The COE classifies middle-skill jobs as the following:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

annual openings have entry-level wages that exceed the self-sufficiency standard wage in both Los Angeles and Orange counties. **Therefore, due to all the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

**Demand:**

- **Supply Gap Criteria** – Over the next five years, there is projected to be **14,200 jobs available annually** in the region due to retirements and workers leaving the field, **which is more than the 2,844 awards conferred annually** by educational institutions in the region.
  - **60% of these projected job openings are for the three middle-skill accounting occupations in this report.**
- **Living Wage Criteria** – Within Los Angeles County, **the majority (97%) of annual job openings** for these accounting occupations have **entry-level wages above the county’s self-sufficiency standard wage** (\$18.10 in Los Angeles County).<sup>2</sup>
- **Educational Criteria** – Within the LA/OC region, **60% of the annual job openings** for the accounting occupations in this report **require either a high school diploma or some college/no degree, but do not require a bachelor’s degree.**
  - Furthermore, national-level educational attainment data indicates between **31.7% and 48.6% of current workers in the three middle-skill accounting occupations in this report have completed some college or an associate degree.**

**Supply:**

- All **28 community colleges** in the LA/OC region issue awards related to accounting and/or finance, conferring an average of **1,918 awards annually** between 2017 and 2020.
- Between 2016 and 2019, there was an average of **926 awards conferred annually** in related training programs by non-community college institutions throughout the region.

**Occupational Demand**

Exhibit 1 shows the five-year occupational demand projections for the five accounting occupations in this report. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to decrease by 2% through 2024. However, there will be 14,200 job openings per year through 2024 due to retirements and workers leaving the field. Sixty percent of these openings (8,475) were for the three middle-skill occupations in this report: *tax preparers* (13-2082); *bookkeeping, accounting, and auditing clerks* (43-3031); and *payroll and timekeeping clerks* (43-3051).

*This report includes employment projection data by Emsi which uses EDD information. Emsi’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*

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<sup>2</sup> Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California on 8/30/2021. For more information, visit: <http://selfsufficiencystandard.org/california>.

be at approximately full employment. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it 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. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.

**Exhibit 1: Occupational demand in Los Angeles and Orange Counties<sup>3</sup>**

Geography	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	Annual Openings
Los Angeles	109,085	105,514	(3,571)	(3%)	10,104
Orange	42,544	42,337	(207)	(0%)	4,095
<b>Total</b>	<b>151,629</b>	<b>147,851</b>	<b>(3,778)</b>	<b>(2%)</b>	<b>14,200</b>

### Wages

The labor market endorsement in this report considers the entry-level hourly wages for the five accounting occupations in Los Angeles County as they relate to the county’s self-sufficiency standard wage. Orange County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

**Los Angeles County**— The majority (97%) of annual openings for the five accounting occupations in this report have entry-level wages above the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County).<sup>4</sup> Typical entry-level hourly wages are in a range between \$17.35 and \$36.06. The only occupation in this report with entry-level hourly wages below the self-sufficiency standard wage is *tax preparers* (\$17.35). Experienced workers can expect to earn wages between \$29.20 and \$58.38, which are higher than the self-sufficiency standard wage estimate.

**Orange County**— The majority (60%) of annual openings for the five accounting occupations in this report have entry-level wages below the self-sufficiency standard wage for one adult (\$20.63 in Orange County).<sup>5</sup> Typical entry-level hourly wages are in a range between \$15.82 and \$35.56. Only the above middle-skill accounting occupations in this report have entry-level wages above the county’s self-sufficiency standard wage; the three middle-skill occupations in this report (*tax preparers; bookkeeping, accounting, and auditing clerks; and payroll and timekeeping clerks*) have entry-level wages below the self-sufficiency standard (\$15.82; \$18.61; and \$19.98, respectively). Experienced workers can expect to earn wages between \$29.23 and \$57.62, which are higher than the self-sufficiency standard.

### Job Postings

There were 40,037 online job postings related to the accounting occupations in this report listed in the past 12 months. Exhibit 2 displays the job postings by occupation. The majority of job postings

<sup>3</sup> Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

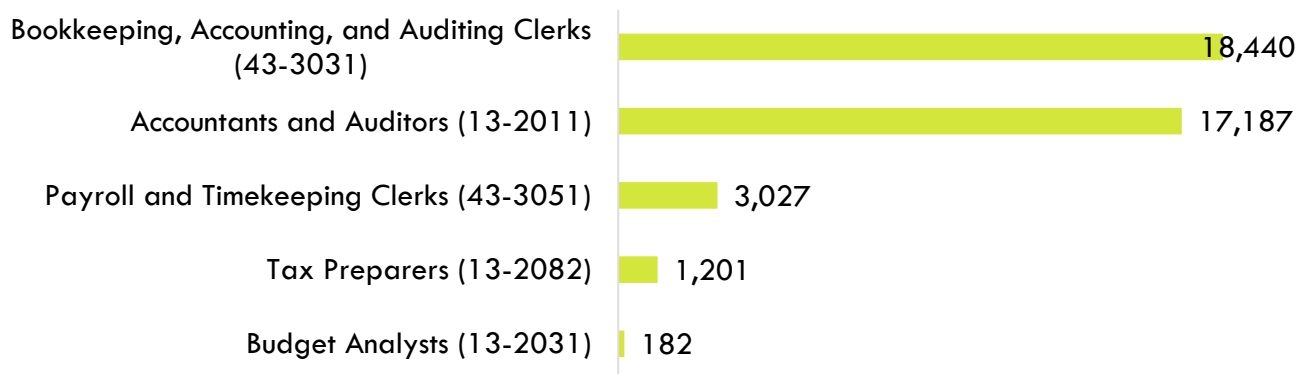
<sup>4</sup> Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California on 8/30/2021. For more information, visit: <http://selfsufficiencystandard.org/california>.

<sup>5</sup> Ibid.

(46%) were for *bookkeeping, accounting, and auditing clerks*, followed by *accountants and auditors* (43%). Together, *payroll and timekeeping clerks, tax preparers, and budget analysts* job postings account for only 11% of the related job postings in the region. The highest number of job postings were for *accounts payable clerks/specialists, bookkeepers, senior accountants, staff accountants, and accounts receivable clerks/specialists*. The top skills were *accounting, account reconciliation, general ledger, accounts payable/accounts receivable, and QuickBooks*. The top three employers, by number of job postings, in the region were *Intuit, KPMG, and Anthem Blue Cross*.

*It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.*

### Exhibit 2: Job postings by occupation (last 12 months)



### Educational Attainment

The Bureau of Labor Statistics (BLS) lists the following typical entry-level education levels for the accounting occupations in this report:

- **Bachelor's degree:** *accountants and auditors* (13-2011) and *budget analysts* (13-2031)
- **Some college/no degree:** *bookkeeping, accounting, and auditing clerks* (43-3031)
- **High school diploma:** *tax preparers* (13-2082) and *payroll and timekeeping clerks* (43-3051)

In the LA/OC region, 60% of the annual job openings for the occupations in this report are considered middle-skill, and do not require a bachelor's degree. Furthermore, national-level educational attainment data indicates between 31.7% and 48.6% of current workers in the three middle-skill accounting occupations in this report have completed some college or an associate degree. Of the 67% of accounting job postings listing a minimum education requirement in Los Angeles/Orange County, 72% (19,484) requested a bachelor's degree, 21% (5,699) requested a high school diploma and 6% (1,740) requested an associate degree.

**Educational Supply**

**Community College Supply**—Exhibit 3 shows the three-year average number of awards conferred by community colleges in the related TOP codes: Accounting (0502.00), Tax Studies (0502.10), and Banking and Finance (0504.00). The colleges with the most completions in the region are East LA, Irvine, and Mt. San Antonio. Over the past 12 months, there were twenty-two other related program recommendation requests from regional community colleges.

**Exhibit 3: Regional community college awards (certificates and degrees), 2017-2020**

TOP Code	Program	College	2017-2018 Awards	2018-2019 Awards	2019-2020 Awards	3-Year Award Average		
0502.00	Accounting	Cerritos	26	29	49	35		
		Citrus	20	18	18	19		
		Compton	-	1	-	0		
		East LA	397	635	577	536		
		El Camino	8	16	13	12		
		Glendale	52	63	63	59		
		LA City	16	5	7	9		
		LA Harbor	4	8	15	9		
		LA Mission	8	8	26	14		
		LA Pierce	5	29	39	24		
		LA Southwest	-	1	-	0		
		LA Trade-Tech	26	21	12	20		
		LA Valley	45	34	46	42		
		Long Beach	36	42	63	47		
		Mt San Antonio	114	174	187	158		
		Pasadena	30	23	16	23		
		Rio Hondo	17	14	17	16		
		Santa Monica	169	78	217	155		
		West LA	7	15	6	9		
		<b>LA Subtotal</b>			<b>980</b>	<b>1,214</b>	<b>1,371</b>	<b>1,188</b>
				Coastline	43	49	40	44
				Cypress	5	8	6	6
				Fullerton	18	17	9	15
				Golden West	19	36	17	24
				Irvine	142	201	316	220
				Orange Coast	112	104	124	113
				Saddleback	32	38	36	35
		Santa Ana	86	198	125	136		

TOP Code	Program	College	2017-2018 Awards	2018-2019 Awards	2019-2020 Awards	3-Year Award Average
		Santiago Canyon	55	7	6	23
		<b>OC Subtotal</b>	<b>512</b>	<b>658</b>	<b>679</b>	<b>616</b>
<b>Supply Subtotal/Average</b>			<b>1,492</b>	<b>1,872</b>	<b>2,050</b>	<b>1,805</b>
0502.10	Tax Studies	Glendale	-	-	2	1
		LA Pierce	16	20	17	18
		Mt San Antonio	-	7	9	5
		<b>LA Subtotal</b>	<b>16</b>	<b>27</b>	<b>28</b>	<b>24</b>
		Irvine	9	26	33	23
		Orange Coast	-	-	9	3
		Saddleback	3	3	12	6
		<b>OC Subtotal</b>	<b>12</b>	<b>29</b>	<b>54</b>	<b>32</b>
<b>Supply Subtotal/Average</b>			<b>28</b>	<b>56</b>	<b>82</b>	<b>55</b>
0504.00	Banking and Finance	Citrus	6	8	-	5
		Glendale	2	1	3	2
		LA City	5	9	21	12
		LA Mission	1	-	-	0
		LA Pierce	-	1	5	2
		LA Southwest	-	2	2	1
		LA Valley	26	34	34	31
		Long Beach	-	-	1	0
		Pasadena	8	5	1	5
		<b>LA Subtotal</b>	<b>48</b>	<b>60</b>	<b>67</b>	<b>58</b>
<b>Supply Subtotal/Average</b>			<b>48</b>	<b>60</b>	<b>67</b>	<b>58</b>
<b>Supply Total/Average</b>			<b>1,568</b>	<b>1,988</b>	<b>2,199</b>	<b>1,918</b>

**Non-Community College Supply**—For a comprehensive regional supply analysis, it is also important to consider the supply from other institutions in the region that provide training programs for accounting occupations. Exhibit 4 shows the annual and three-year average number of awards conferred by these institutions in the related Classification of Instructional Programs (CIP) Codes: Accounting (52.0301) and Accounting Technology/Technician and Bookkeeping (52.0302). Due to different data collection periods, the most recent three-year period of available data is from 2016 to 2019. Between 2016 and 2019, four-year colleges in the region conferred an average of 926 awards annually in related training programs.

**Exhibit 4: Regional non-community college awards, 2016-2019**

<b>CIP Code</b>	<b>Program</b>	<b>College</b>	<b>2016-2017 Awards</b>	<b>2017-2018 Awards</b>	<b>2018-2019 Awards</b>	<b>3-Year Award Average</b>
52.0301	Accounting	Advanced College	2	-	-	1
		Azusa Pacific Univ.	40	27	32	33
		Biola University	29	37	33	33
		CSU-Dominguez Hills	-	4	-	1
		CSU-Los Angeles	-	1	2	1
		CSU-Northridge	285	320	263	289
		Chapman University	55	43	53	50
		Claremont McKenna College	23	22	25	23
		DeVry Univ.-CA	36	29	21	29
		Los Angeles ORT College (CLOSED)	23	16	9	16
		Los Angeles Pacific College	-	-	10	3
		Loyola Marymount Univ.	62	53	63	59
		Mount Saint Mary's Univ.	20	14	20	18
		Pacific States University	5	-	-	2
		Pepperdine University	26	23	14	21
		Pitzer College	2	1	4	2
		Pomona USD Adult and Career Education	3	3	-	2
		Scripps College	1	2	3	2
		University of La Verne	41	47	37	42
		University of Phoenix-CA	19	20	22	20
USC	217	236	187	213		
Vanguard University of Southern California	3	6	6	5		
Woodbury University	17	13	12	14		
52.0302	Accounting Technology/ Technician and Bookkeeping	ABC Adult School	-	19	22	14
		Advanced College	-	2	1	1
		Hacienda La Puente Adult Education	28	24	20	24
		InterCoast Colleges-Santa Ana	4	1	1	2
		Premiere Career College	2	4	2	3
		Trident Univ. International	-	-	5	2
		University of Phoenix-CA	1	-	-	0
<b>Supply Total/Average</b>			<b>944</b>	<b>967</b>	<b>867</b>	<b>926</b>

Appendix A: Occupational demand and wage data by county

Exhibit 5. Los Angeles County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Accountants and Auditors (13-2011)	48,968	48,194	(773)	(2%)	3,944	\$26.70	\$36.62	\$49.63
Budget Analysts (13-2031)	1,302	1,325	23	2%	100	\$36.06	\$45.78	\$58.38
<b>Above Middle-Skill Total</b>	<b>50,270</b>	<b>49,519</b>	<b>(750)</b>	<b>(1%)</b>	<b>4,044</b>			
Tax Preparers (13-2082)	3,183	3,113	(71)	(2%)	330	\$17.35	\$31.50	\$44.48
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	50,859	48,325	(2,534)	(5%)	5,271	\$18.56	\$23.64	\$29.20
Payroll and Timekeeping Clerks (43-3051)	4,773	4,557	(216)	(5%)	459	\$20.51	\$26.80	\$31.57
<b>Middle-Skill Total</b>	<b>58,816</b>	<b>55,995</b>	<b>(2,821)</b>	<b>(5%)</b>	<b>6,060</b>			
<b>Total</b>	<b>109,085</b>	<b>105,514</b>	<b>(3,571)</b>	<b>(3%)</b>	<b>10,104</b>			



**Exhibit 6. Orange County**

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Accountants and Auditors (13-2011)	18,961	19,376	415	2%	1,646	\$25.42	\$34.84	\$47.23
Budget Analysts (13-2031)	445	453	8	2%	34	\$35.56	\$45.16	\$57.62
<b>Above Middle-Skill Total</b>	<b>19,406</b>	<b>19,829</b>	<b>423</b>	<b>2%</b>	<b>1,680</b>			
Tax Preparers (13-2082)	1,195	1,238	42	4%	135	\$15.82	\$28.24	\$39.11
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	20,087	19,456	(630)	(3%)	2,100	\$18.61	\$23.68	\$29.23
Payroll and Timekeeping Clerks (43-3051)	1,856	1,814	(42)	(2%)	180	\$19.98	\$26.09	\$30.75
<b>Middle-Skill Total</b>	<b>23,137</b>	<b>22,508</b>	<b>(629)</b>	<b>(3%)</b>	<b>2,415</b>			
<b>Total</b>	<b>42,544</b>	<b>42,337</b>	<b>(207)</b>	<b>(0%)</b>	<b>4,095</b>			

**Exhibit 7. Los Angeles and Orange Counties**

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Typical Entry-Level Education
Accountants and Auditors (13-2011)	67,929	67,570	(359)	(1%)	5,590	Bachelor's degree
Budget Analysts (13-2031)	1,747	1,778	31	2%	135	Bachelor's degree
<b>Above Middle-Skill Total</b>	<b>69,676</b>	<b>69,348</b>	<b>(328)</b>	<b>(0%)</b>	<b>5,725</b>	
Tax Preparers (13-2082)	4,379	4,350	(28)	(1%)	465	HS diploma or equivalent
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	70,946	67,781	(3,164)	(4%)	7,371	Some college, no degree
Payroll and Timekeeping Clerks (43-3051)	6,629	6,371	(258)	(4%)	639	HS diploma or equivalent
<b>Middle-Skill Total</b>	<b>81,953</b>	<b>78,503</b>	<b>(3,451)</b>	<b>(4%)</b>	<b>8,475</b>	
<b>Total</b>	<b>151,629</b>	<b>147,851</b>	<b>(3,778)</b>	<b>(2%)</b>	<b>14,200</b>	

## Appendix B: Sources

- O\*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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