

Program Endorsement Brief: 0502/Accounting

Business Taxation Competency

Individual Taxation Competency

Cost Accounting Competency

Non-Profit Accounting Competency

Entry-Level Accounting

Payroll Accounting Competency

Orange County Center of Excellence, August 2020

Summary Analysis

Program Endorsement:	Endorsed: All Criteria Met	<input type="checkbox"/>	Endorsed: Some Criteria Met	<input checked="" type="checkbox"/>	Not Endorsed	<input type="checkbox"/>
Program Endorsement Criteria						
Supply Gap:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
Meets Living Wage: (Entry-Level, 25th)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>		
Typical Entry-Level Education:	HS Diploma or Less	<input type="checkbox"/>	Some College/ Cert./AA	<input checked="" type="checkbox"/>	Bachelor's Degree	<input type="checkbox"/>
					Graduate Degree	<input type="checkbox"/>
Emerging Occupation(s)						
Yes <input type="checkbox"/>			No <input checked="" type="checkbox"/>			

The 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 five middle-skill occupations: Tax Examiners and Collectors, and Revenue Agents (13-2081), Tax Preparers (13-2082), Bookkeeping, Accounting, and Auditing Clerks (43-3031), Payroll and Timekeeping Clerks (43-3051), and Brokerage Clerks (43-4011). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹ 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 middle-skill accounting and taxation occupations in the region. However, the majority of the annual openings for the occupations in this report have typical entry-level wages below the living wage in Orange County. **Therefore, due to some of the criteria being met, the COE endorses this proposed program.** Reasons include:

Demand:

- Over the next five years, there is projected to be **11,711 jobs available annually** in the LA/OC region due to retirements and workers leaving the field, **which is more than the 2,512 awards conferred annually** by educational institutions in the region.

¹ 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.

- Within the LA/OC region, **82% of the annual job openings** for middle-skill accounting and taxation occupations **typically require some college/no degree**.
 - Furthermore, the national-level educational attainment data indicates **between 30.1% and 49.4% of workers in the field have completed some college or an associate degree**.
- Within Orange County, **89% of the annual job openings** for these middle-skill accounting and taxation occupations have entry-level **wages below the county's living wage** (\$17.36).²

Supply:

- All **28 community colleges** in the region issue awards related to accounting and taxation, conferring an average of **1,593 awards annually** between 2016 and 2019.
- Between 2014 and 2017, there was an average of **919 awards conferred annually** in related training programs by **27 non-community college institutions** throughout the region.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for these middle-skill accounting and taxation occupations. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to decrease by 1% through 2024. However, there will be more than 11,700 job openings per year through 2024 due to retirements and workers leaving the field.

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 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.

² Living wage data was pulled from California Family Needs Calculator on 7/6/2020. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2019 Jobs	2024 Jobs	2019-2024 Change	2019-2024 % Change	Annual Openings
Los Angeles	72,493	71,812	(681)	(1%)	8,414
Orange	27,844	28,012	168	1%	3,298
Total	100,337	99,824	(513)	(1%)	11,711

Wages

The labor market endorsement in this report considers the entry-level hourly wages for these middle-skill accounting and taxation occupations in Orange County as they relate to the county’s living wage. Los Angeles 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.

Orange County—The majority (89%) of annual openings for these middle-skill accounting and taxation occupations have entry-level wages below the California Family Needs Calculator hourly wage (living wage) for one adult (\$17.36 in Orange County).⁴ Typical entry-level hourly wages are in a range between \$14.14 and \$30.48. Entry-level wages for three of these occupations (Tax Examiners and Collectors, and Revenue Agents; Payroll and Timekeeping Clerks; and Brokerage Clerks) are higher than the living wage for one adult in Orange County, while Tax Preparers and Bookkeeping, Accounting and Auditing Clerks earn entry-level hourly wages of \$14.14 and \$17.08, respectively, and are below the county’s living wage. Experienced workers can expect to earn wages between \$27.53 and \$49.52, which are higher than the living wage estimate. Orange County’s average wages are below the average statewide wage of \$24.39 for these occupations.

Los Angeles County—All of the annual openings for these middle-skill accounting and taxation occupations have entry-level wages above the living wage for one adult (\$15.04 in Los Angeles County). Typical entry-level hourly wages are in a range between \$15.72 and \$32.50. Entry-level wages for all of these occupations are higher than the living wage for one adult in Los Angeles County. Experienced workers can expect to earn wages between \$27.67 and \$52.81, which are higher than the living wage estimate. Los Angeles County’s average wages nearly meet the average statewide wage of \$24.39 for these occupations.

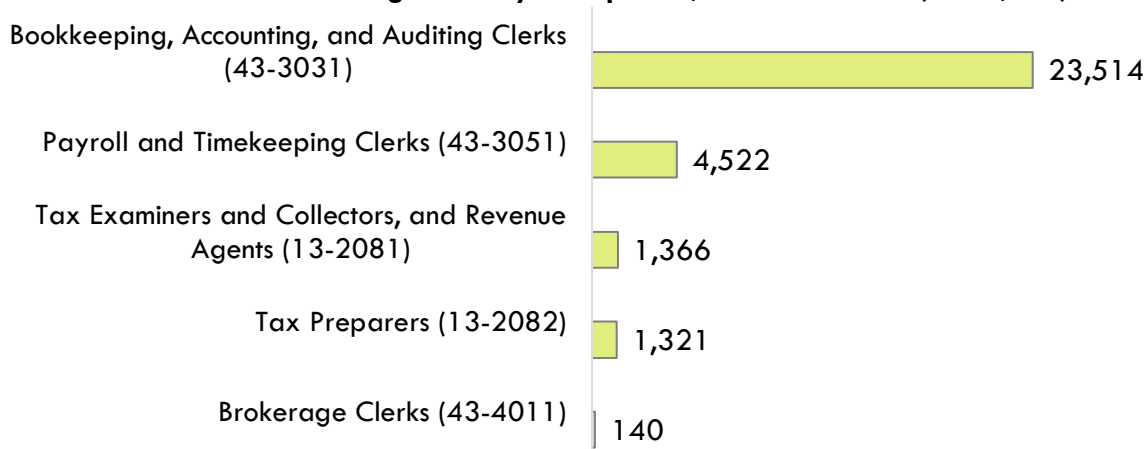
Job Postings—There were 30,863 online job postings related to middle-skill accounting and taxation occupations listed in the past 12 months. Of these job postings, 76% were for Bookkeeping, Accounting, and Auditing Clerks (43-3031), 15% were for Payroll and Timekeeping Clerks (43-3051), 4% were for Tax Examiners and Collectors, and Revenue Agents (13-2081), 4% were for Tax Preparers (13-2082), and 0.005% were for Brokerage Clerks (43-4011). Exhibit 2 displays the breakdown by number of job postings for each of these five occupations. The job titles with the most postings were bookkeepers, accounting clerks, accounts payable clerks, accounts payable specialists, and payroll specialists. The top skills were: accounting, accounts

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

⁴ Living wage data was pulled from California Family Needs Calculator on 7/6/2020. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

payable/receivable, bookkeeping, data entry, and payroll processing. The top three employers, by number of job postings, in the region were: H&R Block, Intuit, and CV Resources.

Exhibit 2: Job Postings Data by Occupation, Last 12 months (n=30,863)



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.

Educational Attainment—The Bureau of Labor Statistics (BLS) lists the following typical entry-level education for these middle-skill accounting and taxation occupations:

- Bachelor’s degree: Tax Examiners and Collectors, and Revenue Agents
- Some college, no degree: Bookkeeping, Accounting, and Auditing Clerks
- High school diploma or equivalent: Tax Preparers; Payroll and Timekeeping Clerks; and Brokerage Clerks

In Orange County, the majority of annual job openings (82%) typically require some college/no degree. The national-level educational attainment data indicates between 30.1% and 49.4% of workers in the field have completed some college or an associate degree. Of the 58% of middle-skill accounting and taxation job postings listing a minimum education requirement in Los Angeles/Orange County, 53% (9,459) requested a Bachelor’s degree, 33% (5,883) requested a high school diploma, and 14% (2,436) requested an associate degree.

Educational Supply

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

Exhibit 3: Regional community college awards (certificates and degrees), 2016-2019

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average		
0502.00	Accounting	Cerritos	25	26	29	27		
		Citrus	16	20	18	18		
		Compton	4	-	1	2		
		East LA	346	397	635	459		
		El Camino	15	8	16	13		
		Glendale	55	52	63	57		
		LA City	17	16	5	13		
		LA Harbor	8	4	8	7		
		LA Mission	10	8	8	9		
		LA Pierce	12	5	29	15		
		LA Southwest	2	-	1	1		
		LA Trade-Tech	25	26	21	24		
		LA Valley	80	45	34	53		
		Long Beach	27	36	42	35		
		Mt San Antonio	103	114	174	130		
		Pasadena	20	30	23	24		
		Rio Hondo	11	17	14	14		
		Santa Monica	52	169	78	100		
		West LA	17	7	15	13		
		LA Subtotal	845	980	1,214	1,013		
		Coastline	63	43	49	52		
		Cypress	4	5	8	6		
		Fullerton	14	18	17	16		
		Golden West	17	19	36	24		
		Irvine	169	142	201	171		
		Orange Coast	22	112	104	79		
		Saddleback	42	32	38	37		
		Santa Ana	95	86	198	126		
		Santiago Canyon	6	55	7	23		
		OC Subtotal	432	512	658	534		
		Supply Subtotal/Average			1,277	1,492	1,872	1,547
		0502.10	Tax Studies	LA Pierce	32	16	20	23
				Mt San Antonio	-	-	7	2
LA Subtotal	32			16	27	25		

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
		Irvine	16	9	26	17
		Saddleback	5	3	3	4
		OC Subtotal	21	12	29	21
		Supply Subtotal/Average	53	28	56	46
		Supply Total/Average	1,330	1,520	1,928	1,593

Non-Community College Supply—Since some of these occupations typically require a bachelor’s degree, it is important to consider the supply from four-year institutions in the region that provide training programs for these middle-skill accounting and taxation 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 2014 to 2017. Between 2014 and 2017, other educational institutions in the region conferred an average of 919 awards annually in related training programs.

Exhibit 4: Regional non-community college awards, 2014-2017

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
52.0301	Accounting	Advanced College	2	3	2	2
		Azusa Pacific University	29	25	40	31
		Biola University	-	17	29	15
		California State University-Northridge	196	250	285	244
		Chapman University	54	53	55	54
		Claremont McKenna College	25	24	23	24
		DeVry University-California	30	41	36	36
		Los Angeles ORT College-Los Angeles Campus	17	6	23	15
		Los Angeles ORT College-Van Nuys Campus	15	14	21	17
		Loyola Marymount University	60	59	62	60
		Mount Saint Mary's University	16	13	20	16

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
52.0302	Accounting Technology/ Technician and Bookkeeping	Pacific States University	4	5	5	5
		Pepperdine University	19	30	26	25
		Pitzer College	-	-	2	1
		Pomona Unified School District Adult and Career Education	4	3	3	3
		Scripps College	-	2	1	1
		Southern California Institute of Technology	1	-	-	0
		University of La Verne	16	34	41	30
		University of Phoenix-California	42	38	19	33
		University of Southern California	262	222	217	234
		Vanguard University of Southern California	8	6	3	6
		Woodbury University	22	27	17	22
		Hacienda La Puente Adult Education	28	26	28	27
		InterCoast Colleges-Anaheim	12	4	4	7
		Premiere Career College	8	8	2	6
		Southern California Institute of Technology	13	-	-	4
		University of Phoenix-California	-	-	1	0
Supply Total/Average			883	910	965	919

Appendix A: Occupational demand and wage data by county

Exhibit 5. Orange County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Tax Examiners and Collectors, and Revenue Agents (13-2081)	274	280	6	2%	24	\$30.48	\$38.95	\$49.52
Tax Preparers (13-2082)	1,770	1,824	54	3%	216	\$14.14	\$23.71	\$35.09
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	22,752	22,792	40	0%	2,708	\$17.08	\$22.14	\$27.53
Payroll and Timekeeping Clerks (43-3051)	2,224	2,245	21	1%	253	\$18.37	\$23.65	\$28.69
Brokerage Clerks (43-4011)	824	872	48	6%	97	\$19.80	\$24.22	\$27.61
Total	27,844	28,012	168	1%	3,298			

Exhibit 6. Los Angeles County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Tax Examiners and Collectors, and Revenue Agents (13-2081)	1,288	1,303	15	1%	111	\$32.50	\$41.54	\$52.81
Tax Preparers (13-2082)	5,092	5,215	123	2%	612	\$15.72	\$26.16	\$39.00
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	58,590	57,823	(767)	(1%)	6,870	\$17.14	\$22.23	\$27.67
Payroll and Timekeeping Clerks (43-3051)	5,885	5,833	(52)	(1%)	651	\$18.78	\$24.18	\$29.34

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Brokerage Clerks (43-4011)	1,639	1,639	0	0%	170	\$23.62	\$28.89	\$32.94
Total	72,493	71,812	(681)	(1%)	8,414			

Exhibit 7. Los Angeles and Orange Counties

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings
Tax Examiners and Collectors, and Revenue Agents (13-2081)	1,562	1,583	21	1%	135
Tax Preparers (13-2082)	6,861	7,039	178	3%	828
Bookkeeping, Accounting, and Auditing Clerks (43-3031)	81,342	80,614	(728)	(1%)	9,578
Payroll and Timekeeping Clerks (43-3051)	8,109	8,078	(31)	(0%)	904
Brokerage Clerks (43-4011)	2,463	2,510	47	2%	267
Total	100,337	99,824	(513)	(1%)	11,711

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)

For more information, please contact:

Jesse Crete, Ed. D, Director
Center of Excellence, Orange County
crete_jesse@rsccd.edu

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