



Bookkeeping

January 2018

Prepared by the Los Angeles/Orange County Center of Excellence for Labor Market Research

Program Recommendation

This report was compiled by the Los Angeles/Orange County Center of Excellence to provide regional labor market data for the program recommendation of bookkeeping. This report is to help determine whether there is demand in the local labor market that is not being met by the supply from programs of study (CCC and non-CCC) that align with this occupation group.

Based on the data, the COE has determined that there is a need for an additional bookkeeping program in Los Angeles County. Reasons include:

- More than 9,000 job opportunities will be available annually for bookkeeping-related occupation through 2022 due to job replacement need (e.g., retirements).
- There were over 7,000 job ads in 2017 related to bookkeeping, and an annual average of 718 awards conferred each year for the Accounting program in Los Angeles County
- While the majority of employers seek candidates with a bachelor’s degree, approximately half of bookkeeping, accounting, and auditing clerks, and billing and posting clerks have completed some postsecondary courses, signaling relevance for community college students

Occupation Codes and Descriptions

Currently, there are two middle-skill occupations in the standard occupational classification (SOC) system related to bookkeeping. The occupation titles and descriptions, as well as reported job titles are included in Exhibit 1.

Exhibit 1 – Occupations, descriptions, and sample job titles

SOC Code	Title	Description	Sample of Reported Job Titles
43-3031	Bookkeeping, Accounting, and Auditing Clerks	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.	Account Clerk, Accounting Assistant, Accounting Associate, Accounting Clerk, Accounting Specialist, Accounting Technician, Accounts Payable Clerk, Accounts Payable Specialist, Accounts Payables Clerk, Accounts Receivable Clerk

43-3021	Billing and Posting Clerks	Compile, compute, and record billing, accounting, statistical, and other numerical data for billing purposes. Prepare billing invoices for services rendered or for delivery or shipment of goods.	Accounts Payable Associate, Accounts Payable Clerk, Accounts Payable Coordinator, Accounts Receivable Coordinator, Administrative Assistant, Bookkeeper, Cost Accounting Clerk, Credit Analyst
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Source: O*NET Online

Current and Future Employment

In Los Angeles County, the number of new jobs related to bookkeeping is expected to decrease by a bit over the next five years. However, more than 9,000 job opportunities will be available annually for this group of occupations through 2022 due to job replacement need (e.g., retirements). Exhibit 2 contains detailed employment projections data for these occupations.

Exhibit 2 – Five-year projections for occupations related to bookkeeping in Los Angeles County

SOC	Occupation	2017 Jobs	2022 Jobs	2017 - 2022 Change	2017 - 2022 % Change	Annual Openings
43-3031	Bookkeeping, Accounting, and Auditing Clerks	63,382	61,656	(1,726)	(3%)	6,947
43-3021	Billing and Posting Clerks	19,241	20,243	1,002	5%	2,130
		82,623	81,899	(724)	(1%)	9,077

Source: Economic Modeling Specialists International (EMSI)

Earnings

In Los Angeles County, the entry-level average wage for bookkeeping-related occupations is approximately \$12 per hour, which is below the MIT Living Wage¹ estimate of \$13.08 per hour for a single adult. The average annual earnings for these occupations is between \$40,289 and \$44,974 per year, assuming full-time employment.

¹ MIT Living Wage Calculator. <http://livingwage.mit.edu/>

Exhibit 3 contains hourly wages and annual average earnings. Entry-level hourly earnings is represented by the 10th percentile of wages, median hourly earnings is represented by the 50th percentile of wages, and experienced hourly earnings is represented by the 90th percentile of wages, demonstrating various levels of employment.

Exhibit 3 – Earnings for occupations related to bookkeeping in Los Angeles County

SOC	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings	Average Annual Earnings
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$12.35	\$20.61	\$31.97	\$44,974
43-3021	Billing and Posting Clerks	\$12.25	\$18.31	\$28.60	\$40,289

Source: Economic Modeling Specialists International (EMSI)

Employer Job Postings

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for occupations relevant to the field of study. Employer job postings are consulted to understand who is employing in the field of bookkeeping and what they are looking for in potential candidates. To identify job postings related to this occupation, the following SOC Codes were used: bookkeeping, accounting, and auditing clerks (43-3031), and billing and posting clerks (43-3021). The search also included the following keywords to find jobs with an emphasis in computer programs: SAP, Excel, **computerized bookkeeping**, and QuickBooks.

Top Occupations

In 2017, there were 7,275 job ads for jobs related to bookkeeping. The majority of the postings (91%) were for bookkeeping, accounting, and auditing clerks (6,653 job postings). There were 6,593 job postings for the same cluster of occupations in 2016, and 5,331 job postings in 2015.

Exhibit 4 – Top occupations in job postings (n=7,275)

SOC Code	Occupation	Job Postings, Full Year 2017
43-3031	Bookkeeping, Accounting, and Auditing Clerks (43-3031)	6,653
43-3021	Billing and Posting Clerks (43-3021)	622

Source: Labor Insight/Jobs (Burning Glass)

Top Titles

The titles most frequently found in job ads related to bookkeeping are listed in Exhibit 5. Bookkeeper is mentioned as the job title in 20% of all relevant job postings (1,436 postings).

Exhibit 5 –Job titles (n=7,275)

Title	Job Postings, Full Year 2017
Bookkeeper	1,436
Accounting Clerk	1,062
Accounts Payable Clerk	793
Accounts Payable Specialist	548
Accounts Receivable Clerk	402
Accounts Payable	283
Accounts Receivable Specialist	253
Accounting Assistant	200
Billing Clerk	193
Billing Specialist	108

Source: Labor Insight/Jobs (Burning Glass)

Top Employers

Exhibit 6 lists the major employers hiring bookkeeping workers. Top employers postings job ads included UCLA, UnitedHealth Group, California State University, and Navigant. The top worksite cities in the region for these occupations were Los Angeles, Torrance, Long Beach, Burbank, and Pasadena.

Exhibit 6 – Top employers (n=1,734)

Employer	Job Postings, Full Year 2017
UCLA Health	49
UnitedHealth Group	36
California State University	34
Navigant	30
UCLA	22

Source: Labor Insight/Jobs (Burning Glass)

Job Skills

Accounting is the most sought after skill for this occupational group, and it was included on 77% of the postings that specified a specialized skill. Other job-specific skills desired by employers include Microsoft Excel, accounts payable/accounts receivable, data entry, QuickBooks, customer billing, account reconciliation, and Microsoft Office.

Exhibit 7 –Job skills (n=6,813)

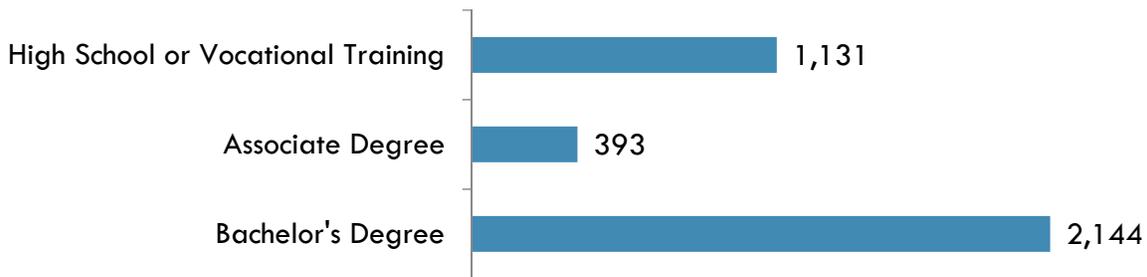
Skills	Job Postings, Full Year 2017	Skills	Job Postings, Full Year 2017
Accounting	5,222	QuickBooks	1,606
Microsoft Excel	4,464	Customer Billing	1,519
Accounts Payable/Receivable	2,794	Account Reconciliation	1,390
Data Entry	1,765	Microsoft Office	1,374

Source: Labor Insight/Jobs (Burning Glass)

Advertised Education Levels

Exhibit 8 displays the education level requested by employers in online job ads. The majority of employers were looking for a candidate with a bachelor’s degree. Approximately 50% of job postings did not specify a level of education.

Exhibit 8 – Education requirements for jobs related to bookkeeping (n=3,668)



Source: Labor Insight/Jobs (Burning Glass)

Industry Concentration

Bookkeeping jobs in Los Angeles County are most often found in the other accounting services industry (19% of total jobs in the industry). Exhibit 9 shows the industries that are the largest employers of these occupations.

Exhibit 9 – Industries employing the most bookkeeping workers

NAICS (6-Digit)	Industry	Number of jobs in industry	% of total jobs in industry
541219	Other Accounting Services	2,696	19%
541213	Tax Preparation Services	1,209	18%
541211	Offices of Certified Public Accountants	2,639	15%
541214	Payroll Services	2,025	14%

Source: Economic Modeling Specialists International (EMSI)

Education and Training

Exhibit 10 shows the typical entry-level education requirement for the occupations of interest, along with the typical on-the-job training, and percentage of workers in the field who hold a community college award or have completed some postsecondary courses. About half of the workforce in each occupation has completed some community college education as their highest level of education.

Exhibit 10 – Education and training requirements

SOC	Occupation	Typical entry-level education	Typical on-the-job training	% of Community College Award Holders or Some Postsecondary Coursework
43-3021	Billing and Posting Clerks	HS diploma/ equivalent	Moderate	50%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	Some college, no degree	Moderate	49%

Source: Economic Modeling Specialists International, Bureau of Labor Statistics Employment Projections (Educational Attainment)

Currently, all 19 community colleges in Los Angeles County train students in accounting, which includes bookkeeping. Exhibit 11 displays the headcount and annual average community college awards for each of the colleges training in this field. Headcount is the actual number of students enrolled, regardless of credit hours. It is also important to note that an award is not equivalent to a single person in search of a job opening, since a student may earn more than one award (e.g. an associate degree and a certificate).

Between 2012-2015, the total annual average community college awards conferred was 718 (206 associate degrees and 512 certificates) across one program: Accounting (TOP Code: 0502.00)

Exhibit 11 – CCC Student Awards (by TOP and College)

TOP Code	Program	College	2012 – 2015 Annual Average			
			CCC Headcount	CCC Associate Degrees	CCC Certificates	Total Average CC Awards
0502.00	Accounting	Cerritos	1,948	9	8	17
		Citrus	955	N/A	17	17
		Compton	371	1	1	2
		East LA	1,889	17	266	283
		El Camino	1,843	14	11	25
		Glendale	1,662	36	50	86
		LA City	779	10	4	14
		LA Harbor	659	3	3	6
		LA Mission	284	5	N/A	5
		LA Pierce	1,409	6	6	12
		LA Southwest	199	N/A	N/A	N/A
		LA Trade	394	7	7	14
		LA Valley	1,225	16	17	33
		Long Beach	1,377	20	22	42
		Mt San Antonio	1,627	22	45	67
		Pasadena	1,772	5	27	32
		Rio Hondo	985	4	2	6
		Santa Monica	3,216	24	22	46
		West LA	988	7	4	11
			23,582	206	512	718

Source: California Community Colleges Chancellor's Office MIS Data Mart

Student Outcomes

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of the Accounting program (TOP Code: 0502.00) in Los Angeles County for the 2014-2015 academic year.

- The median annual wage after program completion is \$21,738
- 51% of students are earning a living wage
- 62% of students are employed within six months after completing a program

Source: CTE LaunchBoard

Sources

O*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

Notes

Data included in this analysis represents the labor market demand for positions most closely related to bookkeeping. Standard occupational classification (SOC) codes were chosen based on the national education level required for employment (associate degree and postsecondary certificate) as well as the proportion of current workers who hold a community college award or have had some community college training. This selection process narrows the labor market analysis to the most relevant employment opportunities for students with community college education and/or training.

Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and should not be used to establish current job openings, because the numbers may include duplicate job postings or postings intended to gather a pool of applicants. Real-time labor market information can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions.