

Occupation Report

Bookkeeping, Accounting, and Auditing Clerks

California

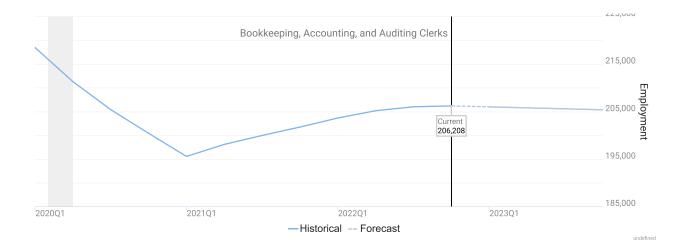


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Occupation Snapshot

		Avg		3-Year		Forecast
		Mean		Empl	Annual	Ann
6-Digit Occupation	Empl	Wages	LQ	Change	Demand	Growth
Bookkeeping, Accounting, and Auditing Clerks	206,208	\$55,200	0.97	-12,811	24,209	-0.4%
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"Annual Demand" is the projected need for new entrants into an occupation. New entrants are needed due to expected growth and to replace workers who left the occupation due to factors such as retirement or switching careers.

"Forecast Ann Growth" is the expected change in jobs due to national, long-term trend projections (per the BLS) as well as local factors such as industry mix and population growth (as computed and modeled by Chmura).



Employment by Industry

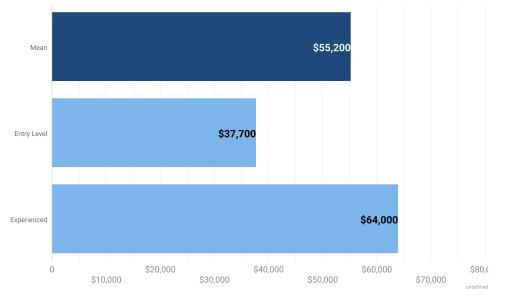
to do other with a	% of Occ	E	10-Year	10-Year Empl	10-Year Total
Industry Title	Empl	Empl	Separations	Growth	Demand
Accounting, Tax Preparation, Bookkeeping, and Payroll Services	8.2%	16,821	20,012	-1,174	18,838
Management of Companies and Enterprises	3.7%	7,672	9,101	-578	8,524
Taxi and Limousine Service	3.3%	6,842	8,151	-460	7,691
Religious Organizations	2.6%	5,290	6,391	-211	6,179
Building Equipment Contractors	2.3%	4,846	5,714	-420	5,294
Employment Services	2.2%	4,526	5,487	-149	5,338
Management, Scientific, and Technical Consulting Services	2.1%	4,342	5,427	128	5,554
Elementary and Secondary Schools	2.1%	4,243	5,040	-308	4,732
Residential Building Construction	2.0%	4,031	4,836	-214	4,622
Office Administrative Services	1.8%	3,750	4,774	259	5,033
Activities Related to Real Estate	1.7%	3,464	4,101	-275	3,827
Individual and Family Services	1.4%	2,977	3,924	436	4,361
Computer Systems Design and Related Services	1.4%	2,898	3,664	157	3,821
Traveler Accommodation	1.4%	2,886	3,841	488	4,329
Legal Services	1.3%	2,725	3,291	-111	3,180
Building Finishing Contractors	1.3%	2,639	3,157	-156	3,001
Automobile Dealers	1.2%	2,524	3,037	-119	2,918
Justice, Public Order, and Safety Activities	1.2%	2,510	2,965	-209	2,756
Automotive Repair and Maintenance	1.2%	2,504	3,019	-110	2,910
Services to Buildings and Dwellings	1.2%	2,447	2,908	-174	2,734
All Others	56.4%	116,271	140,241	-4,837	135,404

The industry distribution indicates the industries in which workers in the occupation(s) are primarily found.

"10-Year Empl Growth" may show industries with positive as well as negative growth; this would indicate that the occupation(s) being examined are expected to expand within some industries while contracting in others.



Wages



Occupation	Mean	Median	Entry Level	Experienced
Bookkeeping, Accounting, and Auditing Clerks	\$55,200	\$52,400	\$37,700	\$64,000

Occupation wages here utilize BLS OEWS data, imputed and brought forward by Chmura.

When this report is run for an occupation group, the table above displays up to the top ten detailed occupations which have the highest average wages within the occupation group.



Occupation Demographics

Age					
5.0% 16.6%	18.2%	26.1%		24.1%	9.7%
16 to 19 years (0.4%) 20 to 24 years (5.0%)		ears (16.6%) ears (18.2%)	45 to 54 yea 55 to 64 yea 65 years and	rs (24.1%)	
Race					
	70.1%		4.5%	17.7%	6.4%
White (70.1%) Black (4.5%)	American Asian (17.	Indian (0.5%) 7%)	Pacific Islan Two or More	der (0.6%) Races (6.4%)	
Ethnicity					
	66.4%			33.6%	
Non-Hispanic/Latino (66.4%)		Hispanic or La	tino (of any race) (33.6%)		
Gender					
17.3%		82.	7%		
Male (17.3%)		Female (82.7%	6)		
Education and Training Requiren	nents				
		100.0%			
Short-term OJT, no exp, no award (0.0%) Moderate-term OJT, no exp, no award (1		n training, no exp, no award (0.0%) work experience, no award (0.0%)	Bachelor's d	e or certificate (0.0%) egree (0.0%) e degree (0.0%)	



Education Profile

Educational Attainment

20.7%	30.0%	13.1%	26.4%	5.2%
< High School (3.6%) High School (20.7%)	Some College (30.0%) Two-Year (13.1%)	Four-Year Master's (PhD (1.0%	5.2%)	
Occupation		Typical Entry-Level Education	Previous Work Experience	Typical On-the Job Training
Bookkeeping, Accounting, and	Auditing Clerks	Some college, no degree	None	Moderate-tern on-the-job

) The stacked bar chart here illustrates the estimated mix of educational attainment of the workers in this occupation(s) in aggregate.

) The table indicates typical education and training requirements rather than the mix of attainment of workers in such positions.



Postsecondary Programs Linked to Bookkeeping, Accounting, and Auditing Clerks

Program	Awards
College of the Canyons	
Accounting Technology/Technician and Bookkeeping	305
East Los Angeles College	
Accounting Technology/Technician and Bookkeeping	331
Irvine Valley College	
Accounting Technology/Technician and Bookkeeping	204
MiraCosta College	
Accounting Technology/Technician and Bookkeeping	107
Mt San Antonio College	
Accounting Technology/Technician and Bookkeeping	123
Palomar College	
Accounting Technology/Technician and Bookkeeping	99
Santa Ana College	
Accounting Technology/Technician and Bookkeeping	104
Santa Monica College	
Accounting Technology/Technician and Bookkeeping	194
Sierra College	
Accounting Technology/Technician and Bookkeeping	168
Ventura College	
Accounting Technology/Technician and Bookkeeping	125

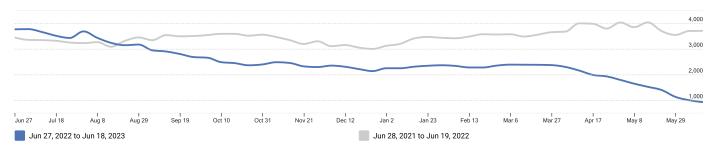
The number of graduates from postsecondary programs in the region identifies the pipeline of future workers as well as the training capacity to support industry demand.

Among postsecondary programs at schools located in California, the sampling above identifies those most linked to Bookkeeping, Accounting, and Auditing Clerks. For a complete list see JobsEQ®, http://www.chmuraecon.com/jobseq



RTI (Job Postings)

Active Job Ads by Date



Online job ads are a timely indicator of local demand. Occupation assignments shown below are made by Chmura based upon analysis of job titles and job descriptions. Top employers and listed job requirements are shown on the following pages.

	Occupations		
		Active	
		Job	
SOC	Occupation	Ads	
43-3031	.00 Bookkeeping, Accounting, and Auditing Clerks	18,636	



Locations

	Active
	Job
Location	Ads
Los Angeles, California	645
San Diego, California	513
San Francisco, California	317
Irvine, California	315
Sacramento, California	272
San Jose, California	199
Fresno, California	168
Anaheim, California	127
Oakland, California	119
Carlsbad, California	98

Employers

	Active Job
Employer Name	Ads
Robert Half	1,798
Appleone	1,341
Advantex Professional Services	518
LHH	453
Express Employment Professionals	414
Vaco	399
Roth Staffing Companies	323
PrideStaff	230
Don Roberto Jewelers	145
Century Group	139



Hard Skills

	Active Job
Skill Name	Ads
Microsoft Excel	8,290
Microsoft Office	4,094
Accounting	3,058
Intuit QuickBooks	2,948
Reconciliation	2,338
Microsoft Outlook	2,146
Microsoft Word	1,973
Bookkeeping	1,952
Accounting Software	1,847
Accounts Receivable	1,342

Job Titles

	Active Job
Job Title	Ads
Accounts Payable Specialist	1,254
Accounting Clerk	1,212
Bookkeeper	998
Accounts Payable Clerk	875
Accounting Assistant	661
Accounting Specialist	510
Accounts Payable	381
Accounts Receivable Clerk	357
Full Charge Bookkeeper	355
Accounting Technician	267



Education Levels

Minimum Education Level	Active Job Ads
High school diploma or equivalent	3,558
Bachelor's degree	2,662
Associate's degree	1,851
Master's degree	21
Unspecified/other	10,544

Programs

	Active	
	Job	
Program Name	Ads	
Accounting	3,457	
Finance	1,362	
Business	761	
Business Administration	545	
Economics	127	
Mathematics	44	
Business Management	37	
Healthcare	35	
Management	17	
Public Administration	16	



Top Skill and Certification Gaps

Name Spanish	Candidates 1,374	Openings 1,739	Gap
Spanish	1,374	1 720	
		1,739	-365
Microsoft Word	2,480	2,664	-184
Intuit QuickBooks	4,864	5,037	-173
Telemarketing	34	187	-153
Bilingual	249	382	-132
Keyboarding/Typing	296	428	-132
Vendor Management	307	426	-119
Mandarin	100	205	-105
Microsoft Applications	63	159	-95
Vlookups	379	471	-92

Top 10 Certification Gaps in California				
Name	Candidates	Openings	Gap	
Certified Accounts Payable Professional (CAPP)	6	11	-6	
Property and Casualty License	5	11	-6	
Commercial Driver's License (CDL)	2	6	-4	
Certified Management Accountant (CMA)	7	11	-4	
Certified Bookkeeper (CB)	13	16	-3	
Certified Insurance Service Representatives (CISR)	0	2	-1	
Certified Medical Coder (CMC)	0	2	-1	
Associate in Insurance Services (AIS)	1	2	-1	
Six Sigma Green Belt Certification (SSGB)	0	1	-1	
Payroll Certification	1	1	0	

Skill and certifications gaps can help inform employee development programs, as well as provide a comparison of the needs of regional employers to the supply.



Occupation Gaps

Supply Deficit

Supply Surplus

Bookkeeping, Accounting, and Auditing Clerks (\$53,100)

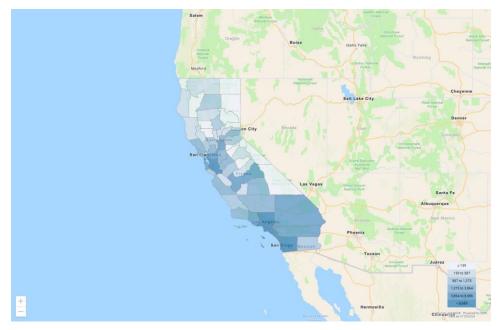
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The above are the potential average annual gaps over 10 years. Many variables go into this analysis, but at its core it is based on a forecast comparing occupation demand growth to the local population growth and the projected educational attainment of those residents. When an area, for example, has an occupation expected to grow quickly but the educational requirement for the occupation does not match well with the educational attainment of its residents, there is a high potential for an occupation shortfall in the region. Alternatively, slow-growing or contracting occupations often represent potential supply surpluses.

The potential supply shortfall is an underlying force that the market needs to resolve one way or another, such as by employers recruiting from further distances for these occupations, wages going up to attract more candidates, and/or increased demand and wages enticing more local residents to get training for these occupations. While this an important analysis for determining local occupation needs, the occupation gap should be considered along with other regional data including growth and separation forecasts, unemployment rates, wage trends, and award and skill gap analyses.



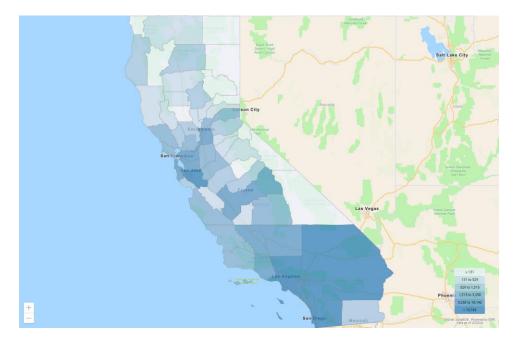
Geographic Distribution



Top Counties by Place of Work for Bookkeeping, Accounting, and Auditing Clerks, 2022Q4

Region	Employment
Los Angeles County, California	54,004
Orange County, California	21,015
San Diego County, California	17,306
Santa Clara County, California	11,659
San Francisco County, California	9,279
Alameda County, California	8,687
San Bernardino County, California	8,609
Riverside County, California	8,477
Sacramento County, California	7,868
San Mateo County, California	4,787





Top Counties by Place of Residence for Bookkeeping, Accounting, and Auditing Clerks, 2022Q4

Region	Employment
Los Angeles County, California	51,471
Orange County, California	19,004
San Diego County, California	16,957
Riverside County, California	11,045
Santa Clara County, California	10,398
San Bernardino County, California	10,143
Alameda County, California	8,503
Sacramento County, California	7,631
San Francisco County, California	7,203
Contra Costa County, California	5,449

"Place of work" employment is based upon the location of employers for these workers. "Place of residence" data refers to the home locations of the workforce, which is typically the preferred data set to use when calculating labor availability within a drive-time or radius of a potential worksite.



California Regional Map





Data Notes

- Occupation employment by default indicates employment by place of work. Occupation employment is as of 2022Q4 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OEWS data. Employment forecasts are modeled by Chmura and are consistent with BLS national-level 10-year forecasts. Wages by occupation are as of 2022Q4, utilizing BLS OEWS data, imputed and brought forward by Chmura. Entry-level and experienced wages are derived from these source data, computed by Chmura.
- Industry employment is as of 2022Q4 and is based upon BLS QCEW data, imputed by Chmura where necessary, and supplemented by additional sources including Census ZBP data.
- Education and training requirements are from the BLS. Educational attainment mix and other occupation demographics data are modeled by Chmura for 2022Q4 using regional occupation employment from JobsEQ, ZCTA-level demographics data from the Census Bureau, and national occupation-demographics patterns from the BLS.
- Postsecondary awards are per the NCES and are for the 2020-2021 academic year. Any programs shown are linked with the occupation(s) being analyzed via the program-occupation crosswalk, which may not be comprehensive. Any programs shown reflect only data reported to the NCES; reporting is required of all Title IV schools. Training providers that do not report data to the NCES are not reflected.
- Job ads data are online job posts from the Real-Time Intelligence (RTI) data set, produced wholly by Chmura and gleaned from over 40,000 websites. Data reflect ads active during the last twelve month period ending 06/28/2023 and advertised for any Zip Code Tabulation Area in or intersecting with the region for which this report was produced. Historical ad volume is revised as additional data are made available and processed. Since many extraneous factors can affect short-term volume of online job postings, time-series data can be volatile and should be used with caution. All ad counts represent deduplicated figures.
- For skill and certification gaps, openings and candidates are based upon regional occupation demand (growth plus separations) and the percent of skill demand and supply. Skill demand mix data are per a one-year sample of RTI data; skill supply data are estimated using a five-year sample of resumes data; both data sets compiled as of August 2021. Data may be based, at least in part, on data from broader geographies; see the Skill Gaps analytic export for more details.
- Occupation gaps are modeled by Chmura, indicating long-term potential supply and demand mismatches in a region due, in part, to job demand and labor pool dyanamics, including educational attainment and projected growth.
- Occupation employment by place of residence is as of 2022Q4 and modeled by Chmura based upon occuaption employment by place of work and commuting patterns. Commuting patterns are derived from source data from the Census Bureau, occupation-specific commuting tendancies, and updated to reflect more recent population and employment estimates.
- Figures may not sum due to rounding.



What is (LQ) location quotient?

Location quotient is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

What is annual demand?

Annual demand is a of the sum of the annual projected growth demand and separation demand. Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. Growth demand is the increase or decrease of jobs expected due to expansion or contraction of the overall number of jobs.

