

Occupation Report

Technical Writers

California

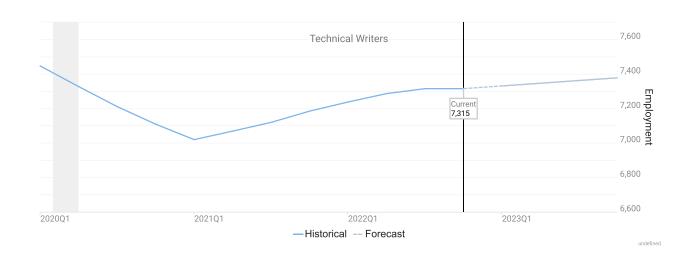


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Occupation Snapshot

		Avg		3-Year		Forecast
		Mean		Empl	Annual	Ann
6-Digit Occupation	Empl	Wages	LQ	Change	Demand	Growth
Technical Writers	7,315	\$106,400	1.12	-128	741	0.9%



"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

Industry Title	% of Occ Empl	Empl	10-Year Separations	10-Year Empl Growth	10-Year Total Demand
Computer Systems Design and Related Services	13.7%	1,003	975	173	1,148
Scientific Research and Development Services	9.0%	661	623	69	692
Management, Scientific, and Technical Consulting Services	8.5%	624	599	90	689
Independent Artists, Writers, and Performers	7.8%	567	543	78	621
Employment Services	6.8%	499	463	34	497
Software Publishers	5.7%	417	382	18	401
Architectural, Engineering, and Related Services	4.7%	342	308	1	309
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	3.9%	285	255	-3	251
Computer and Peripheral Equipment Manufacturing	3.5%	256	234	9	243
Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services	1.8%	133	129	22	151
Management of Companies and Enterprises	1.8%	129	117	4	121
Aerospace Product and Parts Manufacturing	1.7%	123	109	-4	105
Motion Picture and Video Industries	1.5%	112	108	17	125
Pharmaceutical and Medicine Manufacturing	1.5%	111	104	10	114
Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content Providers	1.5%	107	99	8	107
Newspaper, Periodical, Book, and Directory Publishers	1.4%	105	89	-12	77
Web Search Portals, Libraries, Archives, and Other Information Services	1.2%	85	86	22	107
Individual and Family Services	1.2%	85	87	24	111
Colleges, Universities, and Professional Schools	1.0%	75	70	6	76
Semiconductor and Other Electronic Component Manufacturing	1.0%	71	65	2	67
All Others	20.8%	1,524	1,404	84	1,488

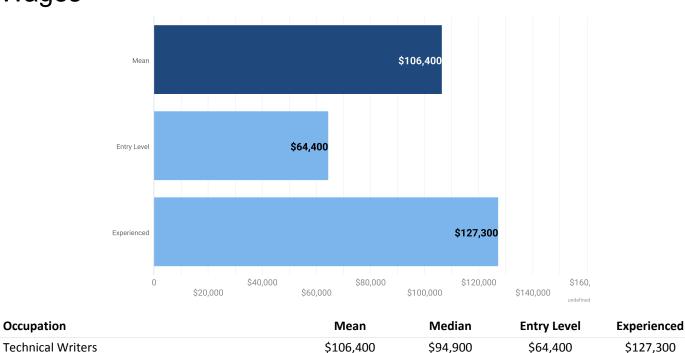
The industry distribution indicates the industries in which workers in the occupation(s) are primarily found.

"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



	Occupation wages here utilize BLS OEWS data, imputed and brought forward by Chmura.	
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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						
6.4%	18.7%		17.9%			
16 to 19 years (0.0%) 20 to 24 years (6.4%)		25 to 34 years (18.7%) 35 to 44 years (26.3%)		45 to 54 years (17.9%) 55 to 64 years (27.1%) 65 years and over (3.6%)		
Race						
		64.2%				5.5%
White (64.2%) Black (0.0%)		American Indian (0.3%) Asian (29.9%)		Pacific Islander (0.1%) Two or More Races (5.5%)		
Ethnicity						
		87.5%			12.	5%
Non-Hispanic/Latino	(87.5%)		Hispanic or Latino (of any race)	(12.5%)		
Gender						
	40.8%			59.2%		
Male (40.8%)			Female (59.2%)			
Education and Trai	ning Requirements					
		100.	0%			
Short-term OJT, no ex Moderate-term OJT, n	p, no award (0.0%) o exp, no award (0.0%)	Long-term training, no exp, no av Previous work experience, no av		2-year degree or certificate (0.0%) Bachelor's degree (100.0%) Postgraduate degree (0.0%)		



Education Profile

Educational Attainment

4.9% 4.6%	49.2%		27.2%	11.6%
High School (0.3%)High School (2.2%)	Some College (4.9%) Two-Year (4.6%)		ear (49.2%) 's (27.2%) 1.6%)	
Occupation		Typical Entry-Level Education	Previous Work Experience	Typical On-the- Job Training
Technical Writers		Bachelor's degree	Less than 5 years	Short-term on- the-job training

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 Technical Writers

Program	Awards
California State University-Fullerton	
English Language and Literature, General	180
California State University-Long Beach	
English Language and Literature, General	284
California State University-Northridge	
English Language and Literature, General	204
California State University-Sacramento	
English Language and Literature, General	181
San Francisco State University	
English Language and Literature, General	205
University of California-Berkeley	
English Language and Literature, General	254
University of California-Davis	
English Language and Literature, General	206
University of California-Los Angeles	
English Language and Literature, General	312
University of California-Riverside	
English Language and Literature, General	189
University of California-Santa Barbara	
English Language and Literature, General	176

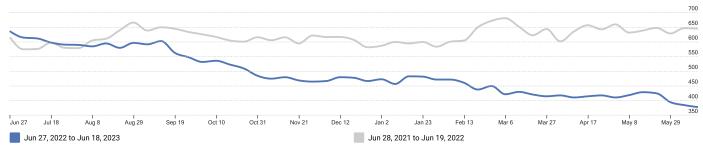
The number of graduates from postsecondary programs in the region identifies the pipeline of future workers as well as the training capacity to support industry demand.

Among postsecondary programs at schools located in California, the sampling above identifies those most linked to Technical Writers. For a complete list see JobsEQ®, <u>http://www.chmuraecon.com/jobseq</u>



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	
27-3042	.00 Technical Writers	2,748	



Locations

	Active	
	Job	
Location	Ads	
San Francisco, California	191	
Los Angeles, California	166	
San Diego, California	163	
San Jose, California	112	
Irvine, California	71	
Sacramento, California	63	
Mountain View, California	51	
Sunnyvale, California	49	
Santa Clara, California	45	
Palmdale, California	33	

Employers

	Active
Employer Name	Job Ads
Cynet Systems	51
NORTHROP GRUMMAN	41
General Dynamics - Information Technology	35
Robert Half	28
Google	27
Judge Group, Inc.	21
Aquent	20
Artech	20
Genesis 10	20
Accenture	19



Hard Skills

	Active Job
Skill Name	Ads
Technical Writing	1,053
Microsoft Office	638
Microsoft Excel	496
Microsoft Word	472
English	410
Microsoft PowerPoint	409
Adobe Acrobat	218
Microsoft SharePoint	205
Microsoft Visio	178
Atlassian JIRA	174

Job Titles

	Active
Job Title	dol
JOB TILLE	Ads
Technical Writer	481
Grant Writer	110
Senior Technical Writer	77
Technical Writer II	49
Proposal Writer	34
Technical Writer III	28
UX Writer	26
Medical Writer	21
Technical Writer I	20
Senior Specification Writer	16



Education Levels

	Active Job
Minimum Education Level	Ads
Bachelor's degree	1,512
High school diploma or equivalent	126
Associate's degree	123
Master's degree	60
Doctoral or professional degree	15
Unspecified/other	912

Programs

Program Name	Active Job Ads
English	470
Communications	360
Journalism	275
Computer Science	185
Technical Writing	179
Marketing	119
Engineering	118
Technical	98
Science	90
Business	75



Top Skill and Certification Gaps

Top 10 Skill Gaps in California			
Name	Candidates	Openings	Gap
Technical Writing	271	303	-32
Hypertext Markup Language (HTML)	32	52	-20
Adobe Photoshop	31	46	-15
CSS	25	36	-11
Adobe InDesign	24	32	-8
Microsoft Azure	6	13	-7
Adobe Illustrator	40	47	-7
Python	36	43	-7
Git	34	40	-6
Linux	19	25	-6

Top 10 Certification Gaps in California			
Name	Candidates	Openings	Gap
Certified ScrumMaster (CSM)	1	0	1
Secret Clearance	14	11	3

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

Technical Writers (\$98,400)

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 Technical Writers, 2022Q4

Region	Employment
Los Angeles County, California	1,689
Santa Clara County, California	1,024
San Diego County, California	714
Orange County, California	647
San Francisco County, California	567
Alameda County, California	414
San Mateo County, California	368
Sacramento County, California	191
San Bernardino County, California	165
Riverside County, California	124





Top Counties by Place of Residence for Technical Writers, 2022Q4

Region	Employment
Los Angeles County, California	1,707
Santa Clara County, California	898
Orange County, California	699
San Diego County, California	699
San Francisco County, California	574
Alameda County, California	471
San Mateo County, California	352
Contra Costa County, California	195
Sacramento County, California	168
San Bernardino County, California	131

"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.

