

Occupation Report

Arts, Design, Entertainment, Sports, and Media Occupations

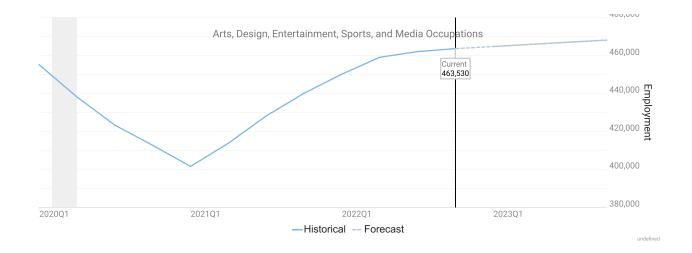
California



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Occupation Snapshot

6-Digit Occupation	Empl	Avg Mean Wages	LQ	3-Year Empl Change	Annual Demand	Forecast Ann Growth
Producers and Directors	57,231	\$143,800	2.65	10,430	6,444	1.4%
Graphic Designers	39,251	\$73,500	1.19	-1,216	3,549	0.0%
Public Relations Specialists	31,367	\$85,400	0.94	-1,004	3,085	0.9%
Writers and Authors	29,083	\$116,200	1.52	793	3,196	0.7%
Coaches and Scouts	24,285	\$60,700	0.83	-2,203	3,880	2.0%
Merchandise Displayers and Window Trimmers	21,748	\$41,000	1.10	2,299	2,685	0.5%
Art Directors	19,248	\$149,900	1.48	1,317	2,238	0.9%
Musicians and Singers	17,940	\$77,000	1.00	-1,897	2,691	1.3%
Film and Video Editors	16,840	\$87,400	3.02	2,842	2,110	2.1%
Photographers	16,349	\$56,600	1.19	-1,167	1,754	1.5%
Remaining Component Occupations	190,191	\$76,800	1.47	-4	21,404	0.8%
Arts, Design, Entertainment, Sports, and Media Occupations	463,530	\$88,100	1.37	10,188	53,150	1.0%





"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
Motion Picture and Video Industries	21.6%	100,081	106,622	16,695	123,316
Independent Artists, Writers, and Performers	13.3%	61,493	65,857	5,573	71,430
Specialized Design Services	5.6%	25,729	23,304	-466	22,838
Advertising, Public Relations, and Related Services	4.8%	22,281	22,578	1,631	24,209
Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content Providers	4.7%	21,904	22,356	1,850	24,207
Other Professional, Scientific, and Technical Services	4.4%	20,506	20,622	3,832	24,454
Religious Organizations	3.1%	14,289	16,384	1,098	17,482
Colleges, Universities, and Professional Schools	2.3%	10,555	12,000	892	12,892
Performing Arts Companies	2.2%	10,253	13,589	2,996	16,585
Other Schools and Instruction	1.9%	8,993	13,564	3,420	16,984
Radio and Television Broadcasting Stations	1.8%	8,185	7,730	-674	7,056
Newspaper, Periodical, Book, and Directory Publishers	1.7%	7,892	7,504	-1,053	6,451
Web Search Portals, Libraries, Archives, and Other Information Services	1.5%	7,001	7,754	1,789	9,543
Elementary and Secondary Schools	1.4%	6,654	7,865	320	8,185
Management, Scientific, and Technical Consulting Services	1.3%	6,002	6,041	879	6,920
Spectator Sports	1.2%	5,645	8,556	2,335	10,891
Grocery and Related Product Merchant Wholesalers	1.2%	5,496	6,474	248	6,722
Building Material and Supplies Dealers	1.1%	5,294	6,196	204	6,400
Other Amusement and Recreation Industries	1.1%	4,895	6,594	542	7,136
Management of Companies and Enterprises	1.0%	4,709	4,523	134	4,656
All Others	22.8%	105,672	105,449	4,985	110,434

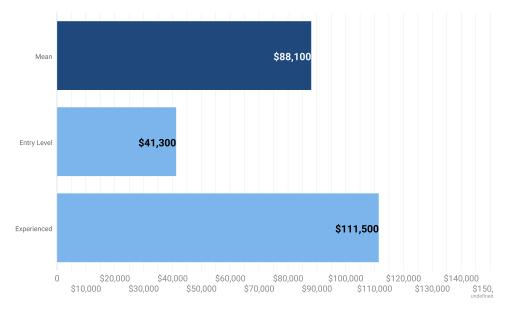


The industry distribution indicates the industries in which workers in the occupation(s) are primarily found.



"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
Art Directors	\$149,900	\$133,300	\$84,300	\$182,700
Producers and Directors	\$143,800	\$125,900	\$65,200	\$183,100
Writers and Authors	\$116,200	\$116,000	\$62,700	\$142,900
Athletes and Sports Competitors	\$115,100	\$65,500	\$34,700	\$155,300
Designers, All Other	\$110,200	\$100,600	\$58,800	\$135,900
Technical Writers	\$106,400	\$94,900	\$64,400	\$127,300
Special Effects Artists and Animators	\$103,300	\$91,500	\$58,100	\$126,000
Commercial and Industrial Designers	\$99,300	\$94,900	\$58,000	\$120,000
Fashion Designers	\$96,600	\$83,600	\$57,200	\$116,400
Film and Video Editors	\$87,400	\$67,500	\$44,700	\$108,700

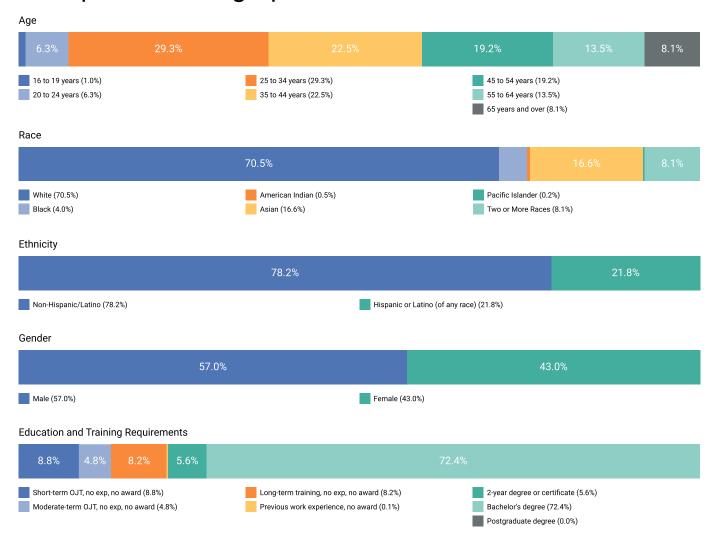


Occupation wages here utilize BLS OEWS data, imputed and brought forward by Chmura.



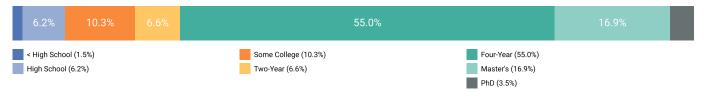
When this report is run for an occupation group, the table above displays up to the top ten detailed occupations which have the highest average wages within the occupation group.

Occupation Demographics



Education Profile

Educational Attainment



Occupation	Typical Entry-Level Education	Previous Work Experience	Typical On-the- Job Training
Producers and Directors	Bachelor's degree	Less than 5 years	None
Graphic Designers	Bachelor's degree	None	None
Public Relations Specialists	Bachelor's degree	None	None
Writers and Authors	Bachelor's degree	None	Long-term on- the-job training
Coaches and Scouts	Bachelor's degree	None	None
Merchandise Displayers and Window Trimmers	High school diploma or equivalent	None	Short-term on- the-job training
Art Directors	Bachelor's degree	5 years or more	None
Musicians and Singers	None	None	Long-term on- the-job training
Film and Video Editors	Bachelor's degree	None	None
Photographers	High school diploma or equivalent	None	Moderate-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 Arts, Design, Entertainment, Sports, and Media Occupations

Program	Awards
California State University-Fullerton	
Speech Communication and Rhetoric	777
Sports, Kinesiology, and Physical Education/Fitness, General	581
California State University-Northridge	
Radio and Television	427
Sports, Kinesiology, and Physical Education/Fitness, General	494
FIDM-Fashion Institute of Design & Merchandising-Los Angeles	
Fashion/Apparel Design	143
Los Angeles Film School	
Cinematography and Film/Video Production	255
Music Technology	524
New York Film Academy	
Cinematography and Film/Video Production	315
Poway Adult School	
Court Reporting and Captioning/Court Reporter	60
University of Southern California	
Cinematography and Film/Video Production	216



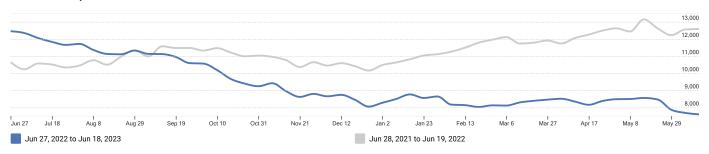
The number of graduates from postsecondary programs in the region identifies the pipeline of future workers as well as the training capacity to support industry demand.



Among postsecondary programs at schools located in California, the sampling above identifies those most linked to Arts, Design, Entertainment, Sports, and Media Occupations. 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	
27-3031.00	Public Relations Specialists	12,440	
27- 1024.00	Graphic Designers	4,874	
27-1026.00	Merchandise Displayers and Window Trimmers	4,592	
27-2022.00	Coaches and Scouts	4,522	
27-3043.00	Writers and Authors	3,052	
27-3042.00	Technical Writers	2,748	
27-2012.00	Producers and Directors	2,625	
27-4011.00	Audio and Video Technicians	2,590	
27-1014.00	Special Effects Artists and Animators	2,556	
27-3091.00	Interpreters and Translators	2,388	

Locations

	Active Job
Location	Ads
Los Angeles, California	4,658
San Francisco, California	2,895
San Diego, California	1,440
Sacramento, California	1,094
Irvine, California	869
San Jose, California	845
Culver City, California	733
Burbank, California	576
Santa Monica, California	569
Oakland, California	443

Employers

	Active Job
Employer Name	Ads
CROSSMARK, Inc.	827
Disney	824
PSAV	630
Apple	569
Aquent	517
SAS Retail Services	461
NBC Universal	439
American Greetings	398
24 Seven Talent	396
Oakland Unified School District	354

Hard Skills

	Active	
Skill Name	Job Ads	
Adobe Photoshop	8,133	
Microsoft Office	6,700	
Microsoft Excel	5,547	
Adobe Illustrator	5,544	
Marketing	4,795	
Graphic Design	4,710	
Social Media	4,241	
Microsoft PowerPoint	4,055	
Adobe Creative Suite	3,991	
Adobe InDesign	3,507	

Job Titles

	Active
Job Title	Job Ads
Graphic Designer	638
Marketing Coordinator	517
Retail Merchandiser	489
Technical Writer	481
Part-Time Merchandiser	338
Retail Merchandiser PT - Flexible Hours	338
Merchandiser	225
Production Assistant	200
Communications Specialist	194
Designer	183

Education Levels

	Active Job
Minimum Education Level	Ads
Bachelor's degree	15,990
High school diploma or equivalent	4,905
Associate's degree	1,455
Master's degree	476
Doctoral or professional degree	69
Unspecified/other	31,417

Programs

	Active Job
Program Name	Ads
Communications	4,348
Journalism	3,224
Marketing	2,937
English	1,856
Graphic Design	1,502
Public Relations	1,134
Business	902
Design	768
Computer Science	697
Advertising	476

Top Skill and Certification Gaps

Top 10 Skill Gaps in California

Name	Candidates	Openings	Gap
Sports Coaching	1,950	2,693	-743
Piano	410	1,015	-605
Acting	391	777	-386
Atlassian JIRA	625	976	-350
Music	1,218	1,534	-316
Psychology	35	322	-287
Microsoft Office	3,900	4,141	-241
Working With Children	306	536	-230
Autodesk Maya	1,337	1,493	-156
Production Management	364	512	-147

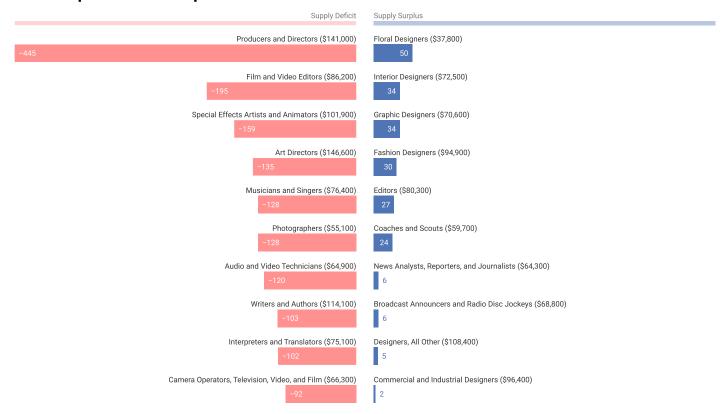
Top 10 Certification Gaps in California

Name	Candidates	Openings	Gap
Certification in Cardiopulmonary Resuscitation (CPR)	460	1,056	-596
First Aid Certification	425	959	-534
Registry of Interpreters for the Deaf (RID) Certification	70	109	-39
Certified Technology Specialist (CTS)	85	119	-34
Group Exercise Instructor	1	21	-20
Certified Personal Trainer (CPT)	4	24	-20
Certified Strength and Conditioning Specialist (CSCS)	27	46	-20
National Interpreter Certification (NIC)	4	18	-14
Strength and Conditioning Coach Certified (SCCC)	6	17	-11
Certified Technology Specialist-Installation (CTS-I)	19	29	-10



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



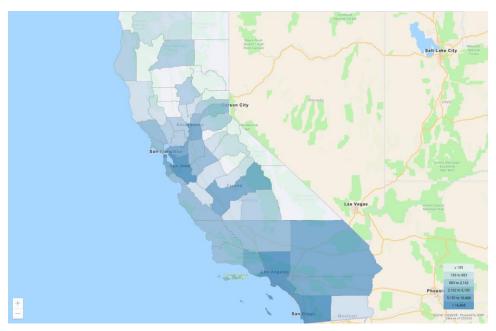


The above are the potential average annual gaps over 10 years. Many variables go into this analysis, but at its core it is based on a forecast comparing occupation demand growth to the local population growth and the projected educational attainment of those residents. When an area, for example, has 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.



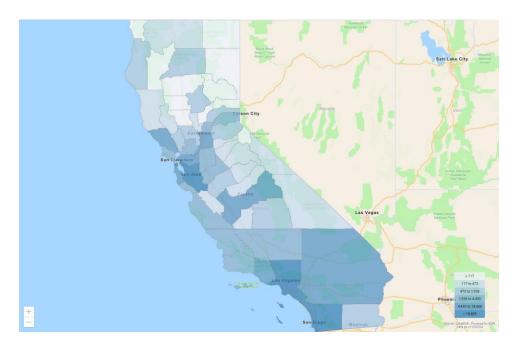
The potential supply shortfall is an underlying force that the market needs to resolve one way or another, such as by employers recruiting from further distances for these occupations, wages going up to attract more candidates, and/or increased demand and wages enticing more local residents to get training 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 Arts, Design, Entertainment, Sports, and Media Occupations, 2022Q4

Region	Employment
Los Angeles County, California	217,184
Orange County, California	31,701
San Diego County, California	28,515
San Francisco County, California	22,556
Santa Clara County, California	21,316
Alameda County, California	16,468
San Mateo County, California	16,344
Riverside County, California	11,686
Sacramento County, California	10,327
San Bernardino County, California	10,132



Top Counties by Place of Residence for Arts, Design, Entertainment, Sports, and Media Occupations, 2022Q4

Region	Employment
Los Angeles County, California	211,542
Orange County, California	35,393
San Diego County, California	28,229
San Francisco County, California	20,822
Santa Clara County, California	19,278
Alameda County, California	18,409
San Mateo County, California	15,342
Riverside County, California	12,172
Sacramento County, California	10,190
San Bernardino County, California	9,782



"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.

FAC

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.