6 Occupations in 5 California Counties



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What is Lightcast Data?

Lightcast data is a hybrid dataset derived from official government sources such as the US Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics. Leveraging the unique strengths of each source, our data modeling team creates an authoritative dataset that captures more than 99% of all workers in the United States. This core offering is then enriched with data from online social profiles, resumés, and job postings to give you a complete view of the workforce.

Lightcast data is frequently cited in major publications such as *The Atlantic, Forbes, Harvard Business Review, The New York Times, The Wall Street Journal,* and USA Today.

"Atlantic



Harvard Business Review The New York Times







Report Parameters

6 Occupations

11-9041	Architectural and Engineering Managers
17-1011	Architects, Except Landscape and Naval
17-1012	Landscape Architects

17-3011	Architectural and Civil Drafters		
17-3022	Civil Engineering Technologists and		
Technicians			
17-3029	Engineering Technologists and Technicians,		
Except Drafters, All Other			

5 Counties

6001	Alameda County, CA	6081	San Mateo County, CA	
6013	Contra Costa County, CA	6085	Santa Clara County, CA	
6075	San Francisco County, CA			

Class of Worker

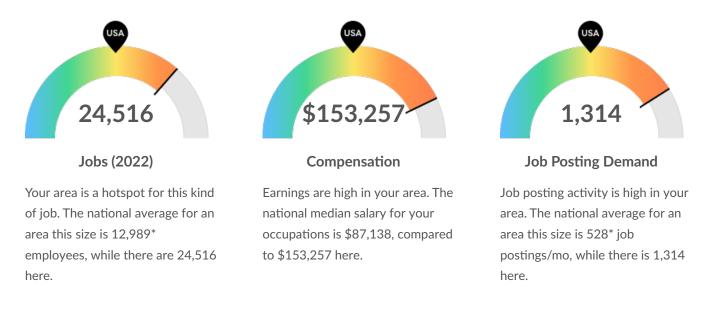
QCEW Employees

The information in this report pertains to the chosen occupations and geographical areas.



Executive Summary

Aggressive Job Posting Demand Over a Deep Supply of Regional Jobs

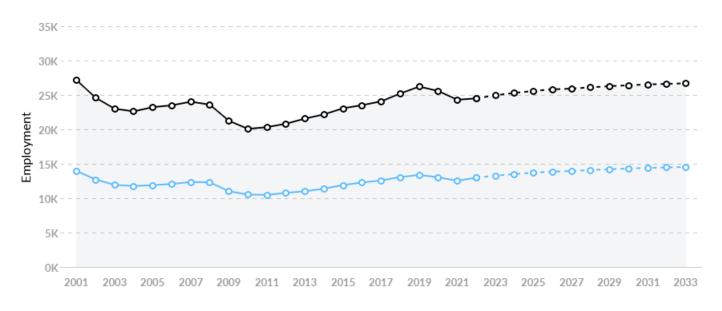


*National average values are derived by taking the national value for your occupations and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Jobs

Regional Employment Is Higher Than the National Average

An average area of this size typically has 12,989* jobs, while there are 24,516 here. This higher than average supply of jobs may make it easier for workers in this field to find employment in your area.



R	Region	2022 Jobs	2029 Jobs	Change	% Change
• 5	california Counties	24,516	26,283	1,767	7.2%
• N	National Average	12,989	14,211	1,221	9.4%

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Regional Breakdown



County	2022 Jobs
Santa Clara County, CA	9,153
Alameda County, CA	5,864
San Francisco County, CA	5,486
San Mateo County, CA	2,177
Contra Costa County, CA	1,836



Most Jobs are Found in the Architectural, Engineering, and Related Services Industry Sector

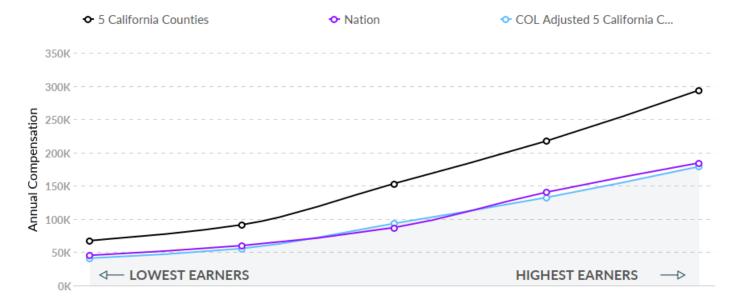


	Industry	% of Occupation in Industry (2022)
	Architectural, Engineering, and Related Services	42.9%
	Scientific Research and Development Services	9.3%
	Semiconductor and Other Electronic Component Manufacturing	6.8%
	Computer and Peripheral Equipment Manufacturing	5.8%
•	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	5.1%
	Computer Systems Design and Related Services	2.5%
	Other	27.8%



Compensation

Regional Compensation Is 76% Higher Than National Compensation



For your occupations, the 2022 median wage in your area is \$153,257, while the national median wage is \$87,138.



Job Posting Activity



24,962 Unique Job Postings

The number of unique postings for this job from Jan 2022 to Jul 2023.



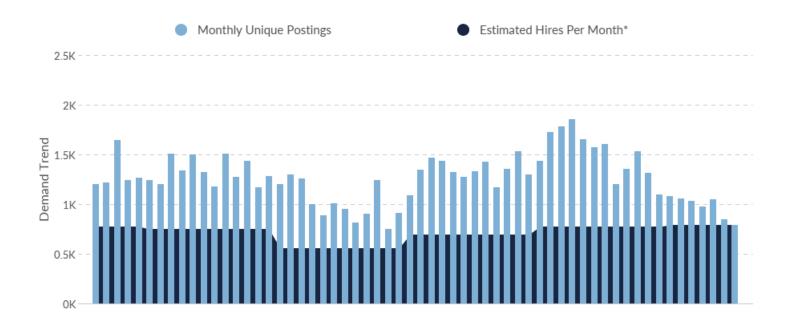
4,561 Employers Competing

All employers in the region who posted for this job from Jan 2022 to Jul 2023.



29 Day Median Duration

Posting duration is 1 day shorter than what's typical in the region.



Occupation	- Avg Monthly Postings (Jan 2022 Jul 2023)	- Avg Monthly Hires (Jan 2022 Jul 2023)
Architectural and Engineering Managers	871	302
Engineering Technologists and Technicians, Except Drafters, All Other	237	101
Architects, Except Landscape and Naval	150	161
Civil Engineering Technologists and Technicians	27	54
Architectural and Civil Drafters	15	136
Landscape Architects	12	23

*A hire is reported by the Quarterly Workforce Indicators when an individual's Social Security Number appears on a company's payroll and was not there the quarter before. Lightcast hires are calculated using a combination of Lightcast jobs data, information on separation rates from the Bureau of Labor Statistics (BLS), and industry-based hires data from the Census Bureau.

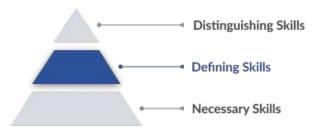
Top Companies	Unique Postings	Top Job Titles	Unique Postings
Apple	1,062	Engineering Managers	1,726
Google	614	Engineering Technicians	1,167
Tesla	409	Engineering Program Managers	660
Meta	303	Directors of Engineering	585
CyberCoders	251	Project Architects	450
Cisco	236	Project Engineers	419
Actalent	211	Chief Engineers	410
GPAC	194	Platform Engineering Managers	346
Randstad	183	Vice Presidents of Engineering	303
Capital One	169	Architectural Designers	287

Top Distinguishing Skills by Demand

Not enough data to display Distinguishing Skills for this occupation.

Top Defining Skills by Demand

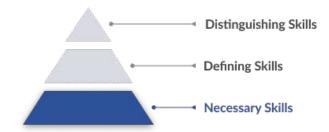
An occupation's Defining Skills represent the day-to-day tasks and responsibilities of the job. An employee needs these skills to qualify for and perform successfully in this occupation.



Skill	Salary Boosting	Job Postings Requesting
Project Management	8	5,882
Engineering Management	8	5,698
AutoCAD	\bigcirc	1,673
Construction	8	1,624
Autodesk Revit	•	1,464
Construction Management	8	1,067
Project Engineering	8	976
Valid Driver's License	8	833
Computer-Aided Design	\bigcirc	817
SketchUp (3D Modeling Software)	8	687

Top Necessary Skills by Demand

An occupation's Necessary Skills are the specialized skills required for that job and relevant across other similar jobs. An employee needs these skills as building blocks to perform the more complex Defining Skills.

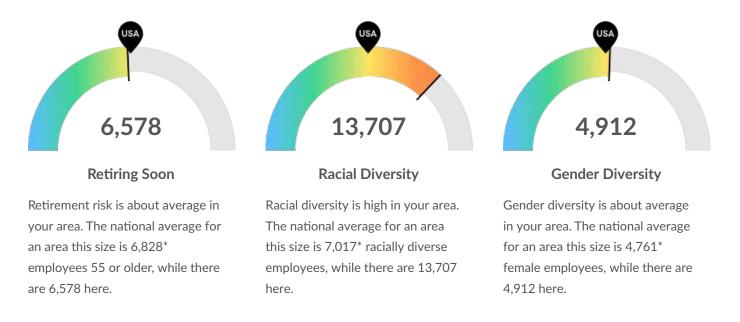


Skill	Salary Boosting	Job Postings Requesting
Project Management	8	5,882
Computer Science	8	4,420
Software Engineering	8	3,509
New Product Development	8	2,830
Agile Methodology	8	2,663
Automation	8	2,279
Amazon Web Services	8	2,254
Electrical Engineering	8	1,951
Marketing	8	1,625
Construction	8	1,624



Demographics

Retirement Risk Is About Average, While Overall Diversity Is High



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Occupation Age Breakdown

		% of Jobs	Jobs
	• 14-18	0.1%	30
	• 19-24	2.8%	692
	• 25-34	17.6%	4,325
	35-44	25.8%	6,317
	4 5-54	26.8%	6,574
	55-64	20.7%	5,064
	65+	6.2%	1,514



Occupation Race/Ethnicity Breakdown

		% of Jobs	Jobs
	White	44.1%	10,809
	Asian	38.6%	9,455
•	Hispanic or Latino	12.3%	3,023
	Two or More Races	2.4%	592
	Black or African American	2.1%	525
	Native Hawaiian or Other Pacific Islander	0.3%	74
٠	American Indian or Alaska Native	0.2%	39

Occupation Gender Breakdown

	% of Jobs	Jobs
Males	80.0%	19,604
Females	20.0%	4,912



Occupational Programs



56 Programs

Of the programs that can train for this job, 56 have produced completions in the last 5 years.



7,697 Completions (2021)

The completions from all regional institutions for all degree types.



2,718 Openings (2021)

The average number of openings for an occupation in the region is 735.

CIP Code	Top Programs	Completions (2021)
14.1001	Electrical and Electronics Engineering	1,341
14.1901	Mechanical Engineering	955
14.0801	Civil Engineering, General	733
14.0901	Computer Engineering, General	641
14.0903	Computer Software Engineering	568
14.0501	Bioengineering and Biomedical Engineering	408
15.1501	Engineering/Industrial Management	341
14.0701	Chemical Engineering	289
15.1301	Drafting and Design Technology/Technician, General	187
14.0201	Aerospace, Aeronautical, and Astronautical/Space Engineer	165

Top Schools	Completions (2021)
San Jose State University	2,164
University of California-Berkeley	2,122
Stanford University	1,321
Santa Clara University	468
San Francisco State University	437
Academy of Art University	256
San Jose City College	143
California College of the Arts	85
University of San Francisco	84
City College of San Francisco	78



Appendix A - Data Sources and Calculations

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Occupation Data

Emsi occupation employment data are based on final Emsi industry data and final Emsi staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates are also affected by county-level Emsi earnings by industry.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

Cost of Living Data

Emsi's cost of living data is based on the Cost of Living Index published by the Council for Community and Economic Research (C2ER).

Lightcast Job Postings

Job postings are collected from various sources and processed/enriched to provide information such as standardized company name, occupation, skills, and geography.

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.