14 Occupations
in 5 California Counties

Contents

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*.

Report Parameters

14 Occupations

17-3029 Engineering Technologists and Technicians, Except Drafters, All Other	15-1255 Web and Digital Interface Designers
13-1111 Management Analysts	15-1221 Computer and Information Research Scientists
15-2041 Statisticians	15-1243 Database Architects
15-2051 Data Scientists	15-1253 Software Quality Assurance Analysts and Testers
11-3021 Computer and Information Systems Managers	*See Appendix A for all 14 Occupations*

5 Counties

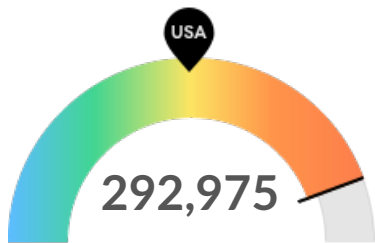|	
6001 Alameda County, CA	6081 San Mateo County, CA
6013 Contra Costa County, CA	6085 Santa Clara County, CA
6075 San Francisco County, CA	

Class of Worker

QCEW Employees

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

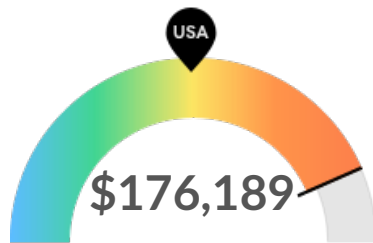# Executive Summary

Aggressive Job Posting Demand Over a Deep Supply of Regional Jobs
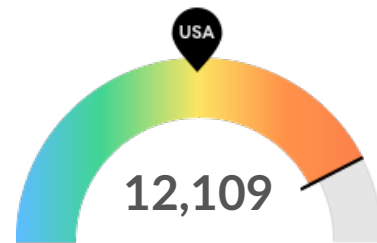
292,975

Jobs (2022)

Your area is a hotspot for this kind of job. The national average for an area this size is 92,788* employees, while there are 292,975 here.

$176,189

Compensation

Earnings are high in your area. The national median salary for your occupations is $115,252, compared to $176,189 here.

12,109

Job Posting Demand

Job posting activity is high in your area. The national average for an area this size is 4,429* job postings/mo, while there are 12,109 here.

*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 92,788* jobs, while there are 292,975 here. This higher than average supply of jobs may make it easier for workers in this field to find employment in your area.
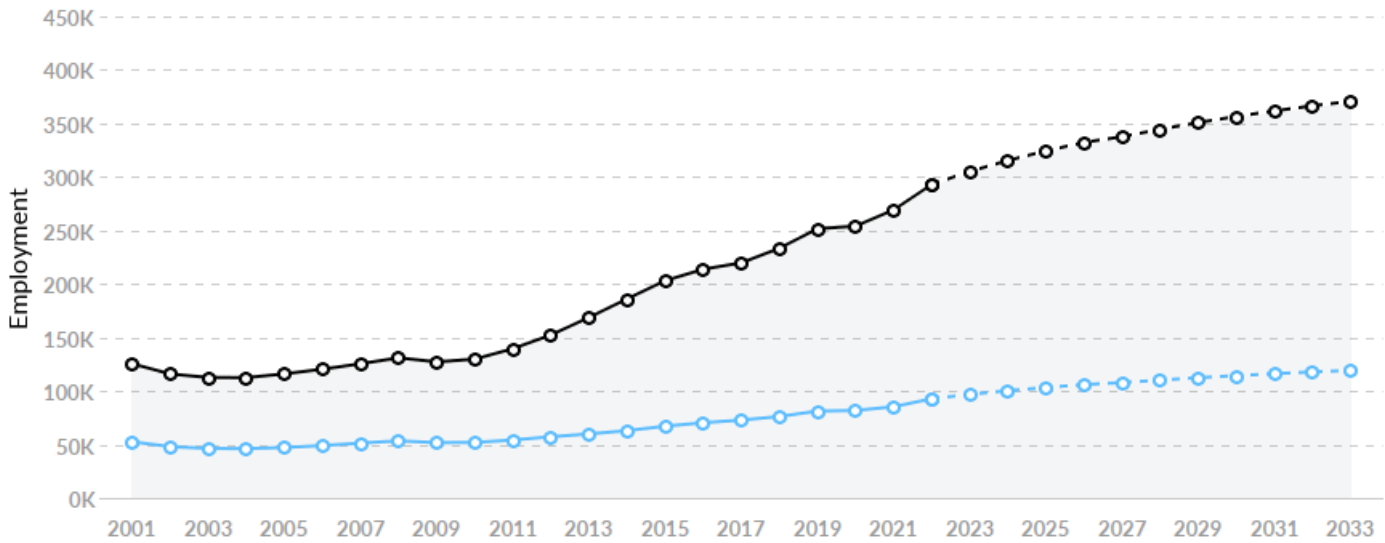
	Region	2022 Jobs	2029 Jobs	Change	% Change
●	5 California Counties	292,975	350,803	57,829	19.7%
●	National Average	92,788	112,359	19,572	21.1%

*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.

Regional Breakdown
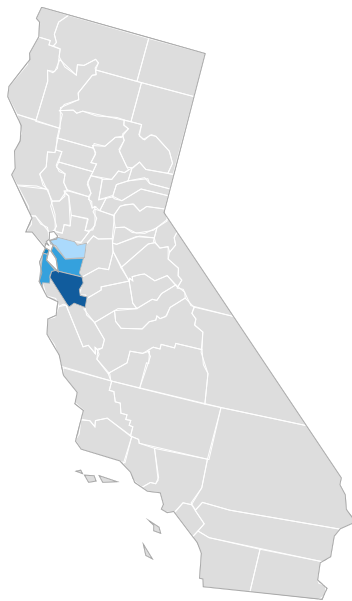
County	2022 Jobs
Santa Clara County, CA	139,035
San Francisco County, CA	72,047
San Mateo County, CA	35,674
Alameda County, CA	35,096
Contra Costa County, CA	11,123

## Most Jobs are Found in the Computer Systems Design and Related Services Industry Sector

Industry	% of Occupation in Industry (2022)
● Computer Systems Design and Related Services	30.8%
● Software Publishers	11.2%
● Web Search Portals, Libraries, Archives, and Other Information Services	8.4%
● Scientific Research and Development Services	6.1%
● Data Processing, Hosting, and Related Services	5.5%
● Computer and Peripheral Equipment Manufacturing	5.3%
● Other	32.6%

Compensation

Regional Compensation Is 53% Higher Than National Compensation

For your occupations, the 2022 median wage in your area is $176,189, while the national median wage is $115,252.
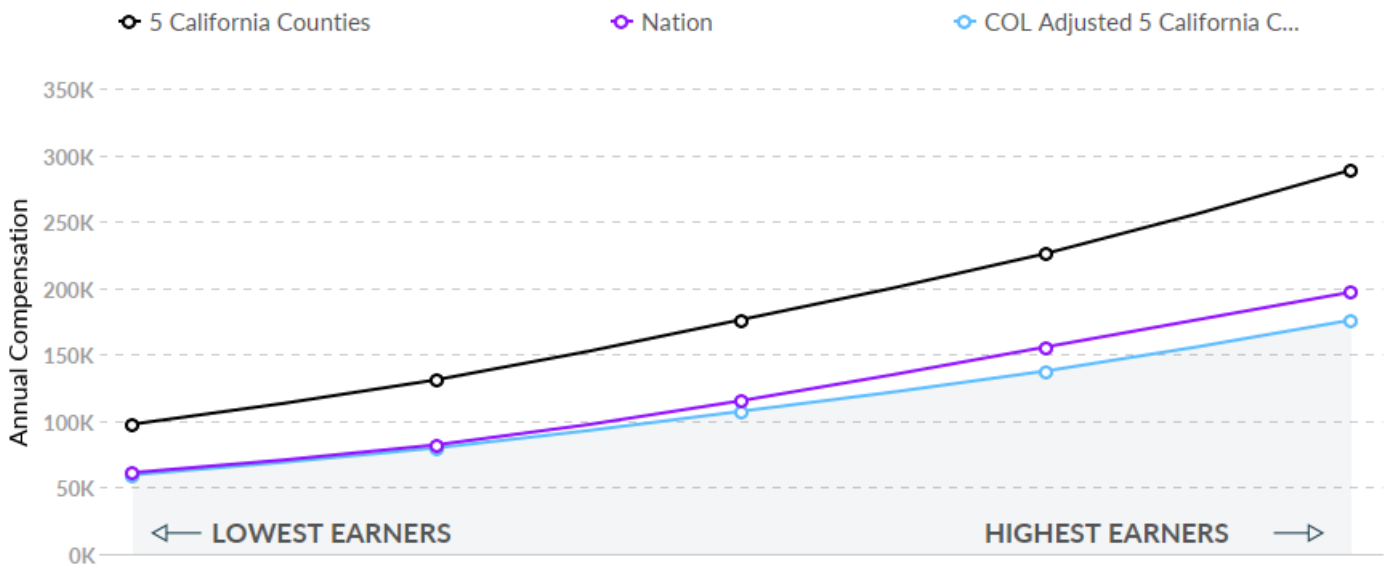
Job Posting Activity

230,078 Unique Job Postings

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

14,031 Employers Competing

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

27 Day Median Duration

Posting duration is 3 days shorter than what's typical in the region.
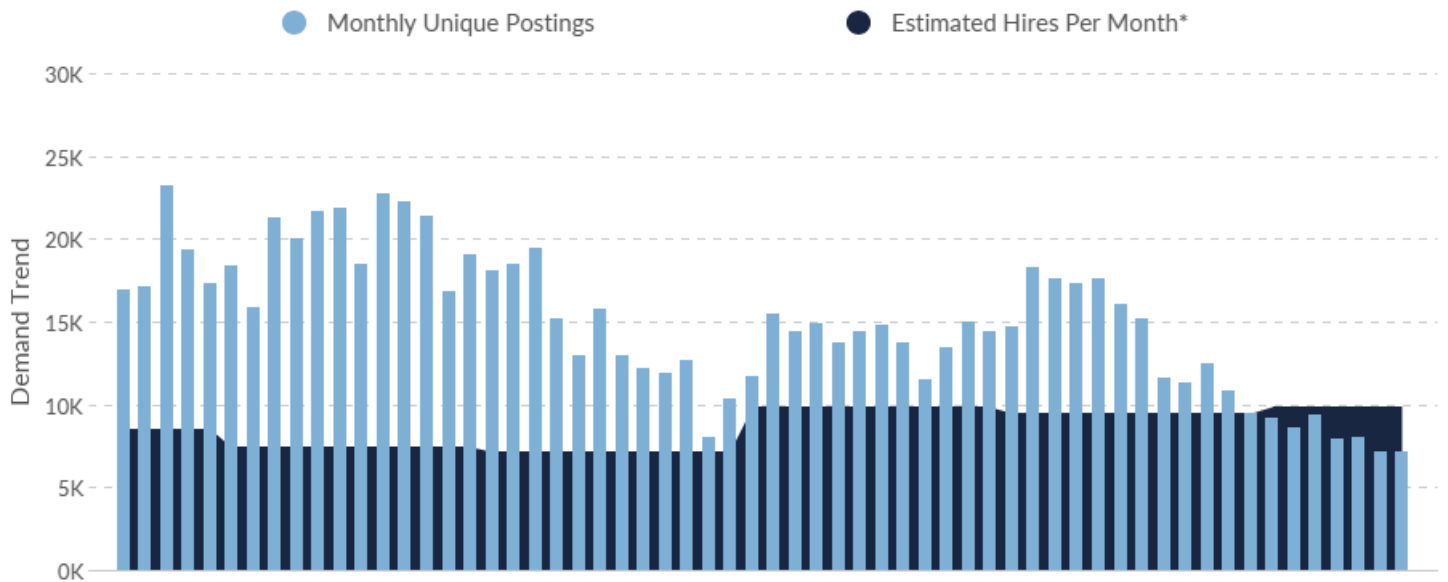
Occupation	Avg Monthly Postings (Jan 2022 - Jul 2023)	Avg Monthly Hires (Jan 2022 - Jul 2023)
Software Developers	6,352	4,479
Web Developers	1,095	126
Data Scientists	1,227	505
Management Analysts	920	1,266

*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.

Occupation	Avg Monthly Postings (Jan 2022 - Jul 2023)	Avg Monthly Hires (Jan 2022 - Jul 2023)
Software Quality Assurance Analysts and Testers	670	546
Database Architects	270	79
Natural Sciences Managers	503	190
Computer Programmers	237	216
Engineering Technologists and Technicians, Except Drafters, All Other	237	101
Computer and Information Systems Managers	180	1,367
Statisticians	147	51
Computer and Information Research Scientists	116	124
Web and Digital Interface Designers	81	375
Computer Network Support Specialists	75	162

Top Companies	Unique Postings	
Stanford University	4,494	
Amazon	4,051	
Apple	3,217	
CyberCoders	3,163	
Randstad	3,031	
Google	2,792	
Motion Recruitment	2,262	
Capital One	1,881	
Meta	1,659	
University of California	1,649	

Top Job Titles	Unique Postings	
Software Engineers	12,988	
Data Scientists	3,952	
DevOps Engineers	3,422	
Business Analysts	3,207	
Back End Software Engineers	2,947	
Full Stack Software Engineers	2,921	
Data Analysts	2,808	
Staff Software Engineers	2,695	
Clinical Research Coordinators	2,634	
Software Development Engineers	2,591	

## Top Distinguishing Skills by Demand

Not enough data to display Distinguishing Skills for this occupation.

Top Defining Skills by Demand

Not enough data to display Defining Skills for this occupation.

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.

Distinguishing Skills

Defining Skills

Necessary Skills
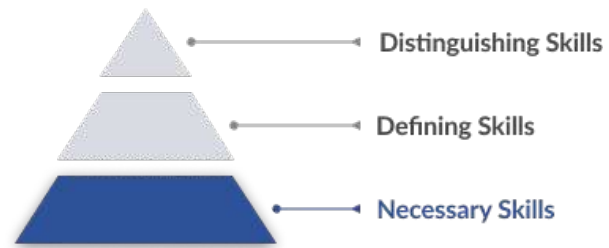
| Skill	Salary Boosting	Job Postings Requesting
Computer Science	✅	76,506
Python (Programming Language)	✅	65,026
Software Engineering	✅	61,996
Java (Programming Language)	✅	48,547
Software Development	❌	46,553
SQL (Programming Language)	❌	42,430
Agile Methodology	✅	40,652
Amazon Web Services	✅	36,661
JavaScript (Programming Language)	❌	35,338
Scalability	❌	35,251

Demographics

Retirement Risk Is Low, While Overall Diversity Is High
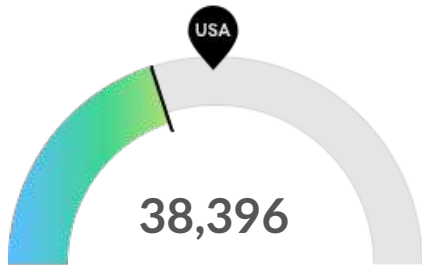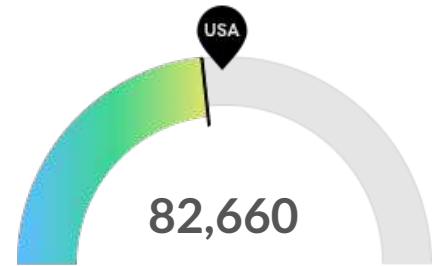
38,396

Retiring Soon

Retirement risk is low in your area. The national average for an area this size is 52,157* employees 55 or older, while there are 38,396 here.
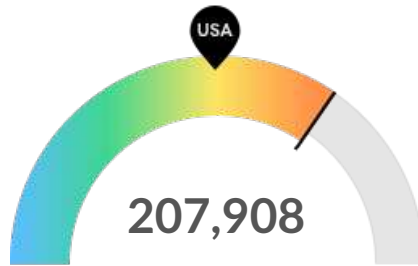
207,908

Racial Diversity

Racial diversity is high in your area. The national average for an area this size is 122,336* racially diverse employees, while there are 207,908 here.
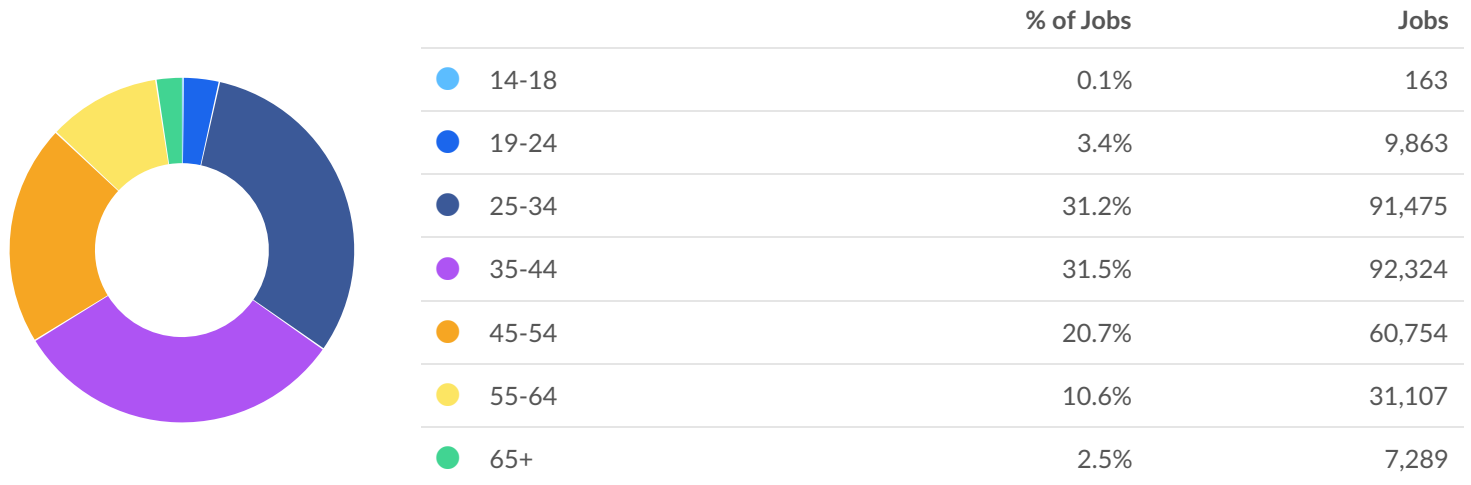
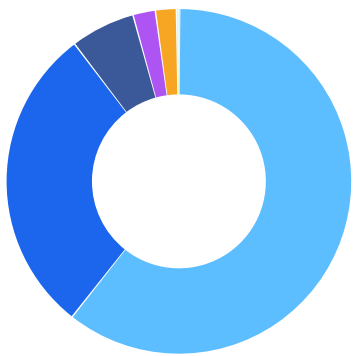### 82,660

Gender Diversity

Gender diversity is about average in your area. The national average for an area this size is 91,477* female employees, while there are 82,660 here.

*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.

Occupation Age Breakdown

	% of Jobs	Jobs
14-18	0.1%	163
19-24	3.4%	9,863
25-34	31.2%	91,475
35-44	31.5%	92,324
45-54	20.7%	60,754
55-64	10.6%	31,107
65+	2.5%	7,289

Occupation Race/Ethnicity Breakdown

	% of Jobs	Jobs
● Asian	60.6%	177,411
● White	29.0%	85,067
● Hispanic or Latino	6.0%	17,721
● Two or More Races	2.1%	6,160
● Black or African American	2.0%	5,737
● Native Hawaiian or Other Pacific Islander	0.2%	566
● American Indian or Alaska Native	0.1%	312

Occupation Gender Breakdown
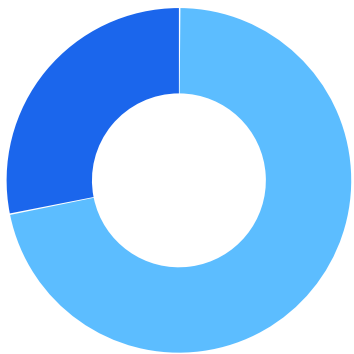
	% of Jobs	Jobs
● Males	71.8%	210,314
● Females	28.2%	82,660

Occupational Programs

132 Programs

Of the programs that can train for this job, 132 have produced completions in the last 5 years.

29,646 Completions (2021)

The completions from all regional institutions for all degree types.

46,278 Openings (2021)

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

CIP Code	Top Programs	Completions (2021)	
52.0201	Business Administration and Management, General	9,194	
11.0701	Computer Science	2,858	
26.0101	Biology/Biological Sciences, General	2,119	
30.0101	Biological and Physical Sciences	2,083	
27.0101	Mathematics, General	1,056	
51.2201	Public Health, General	910	
14.0901	Computer Engineering, General	641	
11.0199	Computer and Information Sciences, Other	614	
14.0903	Computer Software Engineering	568	
11.0201	Computer Programming/Programmer, General	560	

Top Schools	Completions (2021)	
University of California-Berkeley	5,580	▬▬▬
San Jose State University	4,203	▬▬▬
San Francisco State University	2,821	▬▬
California State University-East Bay	1,761	▬
Stanford University	1,452	▬
De Anza College	1,204	▪
City College of San Francisco	1,131	▪
Diablo Valley College	1,012	▪
Santa Clara University	874	▪
University of San Francisco	863	▪

Appendix A (Occupations)

Code	Description
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other
13-1111	Management Analysts
15-2041	Statisticians
15-2051	Data Scientists
11-3021	Computer and Information Systems Managers
15-1255	Web and Digital Interface Designers
15-1221	Computer and Information Research Scientists

Code	Description
15-1243	Database Architects
15-1253	Software Quality Assurance Analysts and Testers
15-1231	Computer Network Support Specialists
15-1251	Computer Programmers
15-1252	Software Developers
15-1254	Web Developers
11-9121	Natural Sciences Managers