18 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

18 Occupations

13-1111	Management Analysts
15-2041	Statisticians
15-2051	Data Scientists
15-2021	Mathematicians
11-3021	Computer and Information Systems Managers

15-1255	Web and Digital Interface Designers
15-1211	Computer Systems Analysts
15-1221	Computer and Information Research Scientists
15-1241	Computer Network Architects

See Appendix A for all 18 Occupations

5 Counties

6001	Alameda County, CA
6013	Contra Costa County, CA
6075	San Francisco County, CA

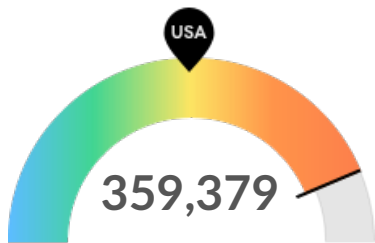|	
6081	San Mateo County, CA
6085	Santa Clara County, CA

Class of Worker

QCEW Employees

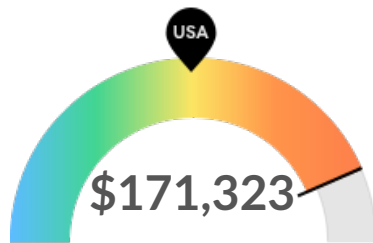The information in this report pertains to the chosen occupations and geographical areas.

Executive Summary

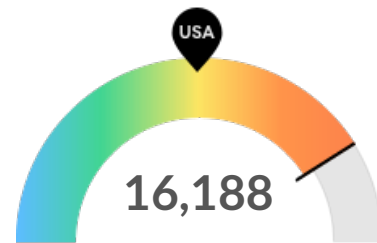## Aggressive Job Posting Demand Over a Deep Supply of Regional Jobs

359,379

Jobs (2022)

Your area is a hotspot for this kind of job. The national average for an area this size is 120,311* employees, while there are 359,379 here.

$171,323

Compensation

Earnings are high in your area. The national median salary for your occupations is $113,426, compared to $171,323 here.
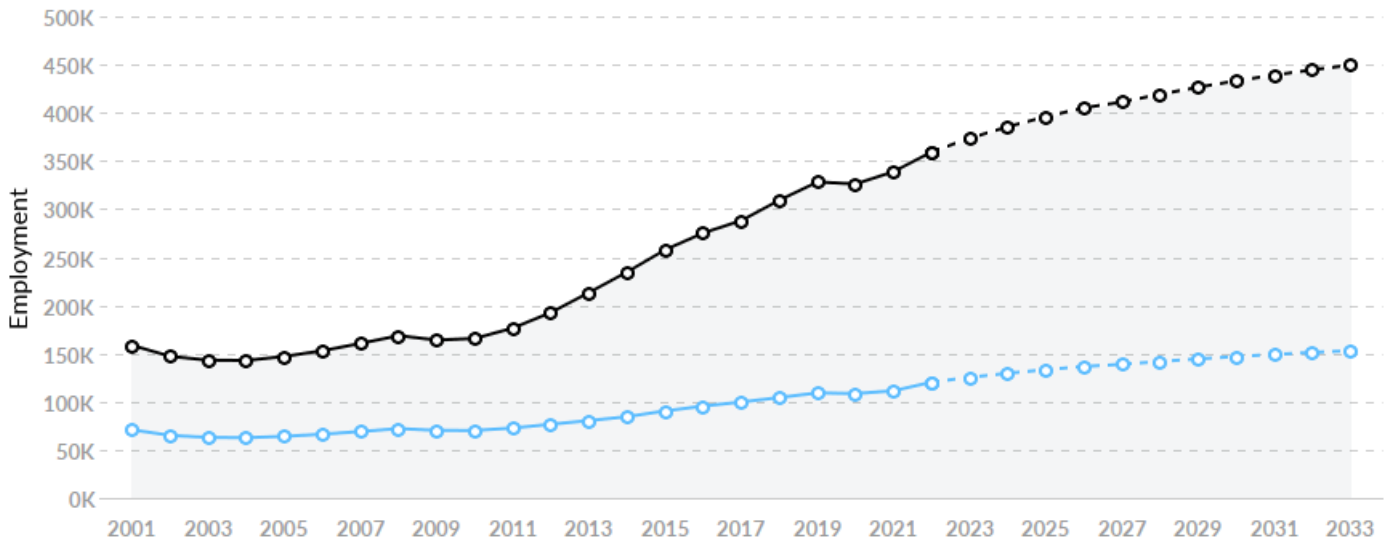
16,188

Job Posting Demand

Job posting activity is high in your area. The national average for an area this size is 6,515* job postings/mo, while there are 16,188 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

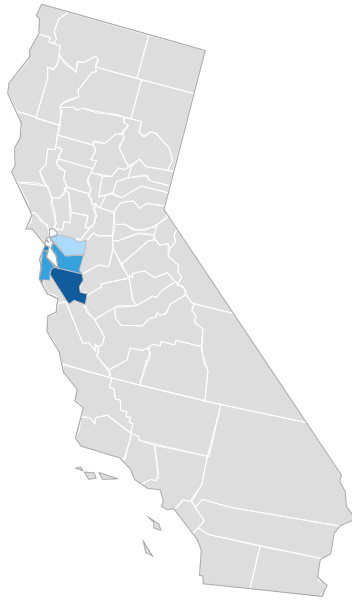## Regional Employment Is Higher Than the National Average

An average area of this size typically has 120,311* jobs, while there are 359,379 here. This higher than average supply of jobs may make it easier for workers in this field to find employment in your area.

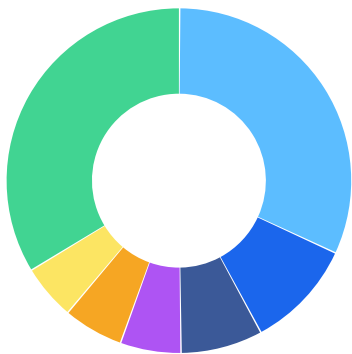|	Region	2022 Jobs	2029 Jobs	Change	% Change
●	5 California Counties	359,379	426,491	67,111	18.7%
●	National Average	120,311	144,424	24,113	20.0%

*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	168,864
San Francisco County, CA	89,834
Alameda County, CA	43,698
San Mateo County, CA	42,733
Contra Costa County, CA	14,251

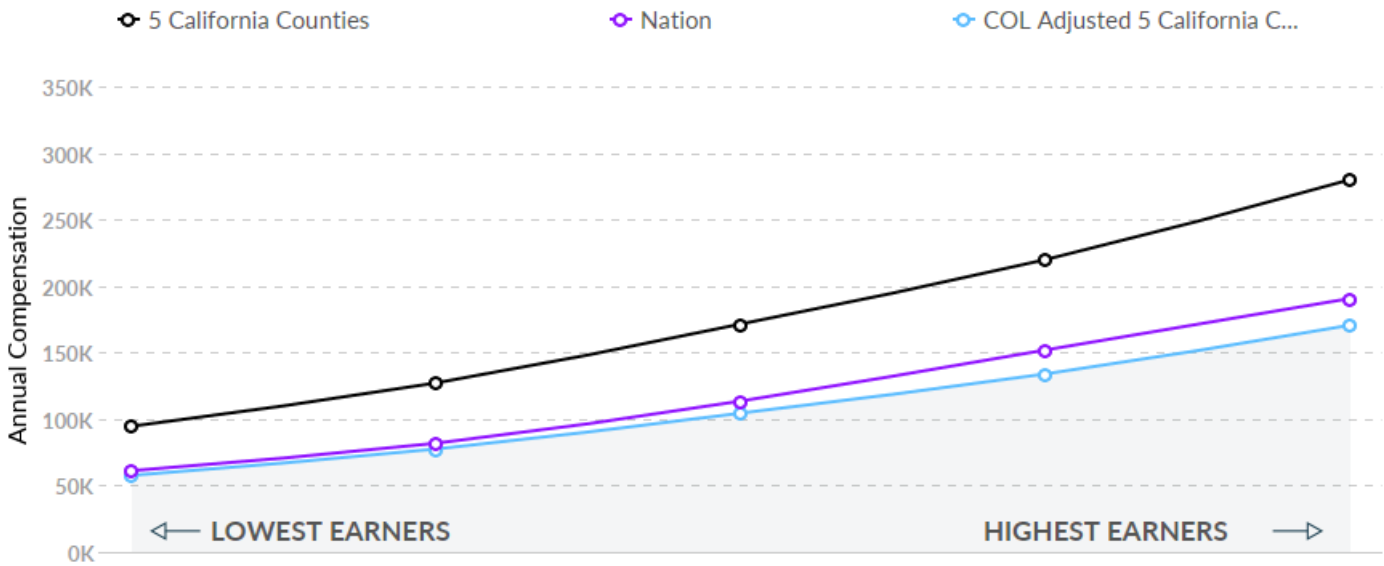## Most Jobs are Found in the Computer Systems Design and Related Services Industry Sector

Industry	% of Occupation in Industry (2022)
● Computer Systems Design and Related Services	31.8%
● Software Publishers	10.2%
● Web Search Portals, Libraries, Archives, and Other Information Services	7.7%
● Data Processing, Hosting, and Related Services	5.7%
● Scientific Research and Development Services	5.6%
● Computer and Peripheral Equipment Manufacturing	5.2%
● Other	33.7%

Compensation

Regional Compensation Is 51% Higher Than National Compensation

For your occupations, the 2022 median wage in your area is $171,323, while the national median wage is $113,426.

Job Posting Activity

307,573 Unique Job Postings

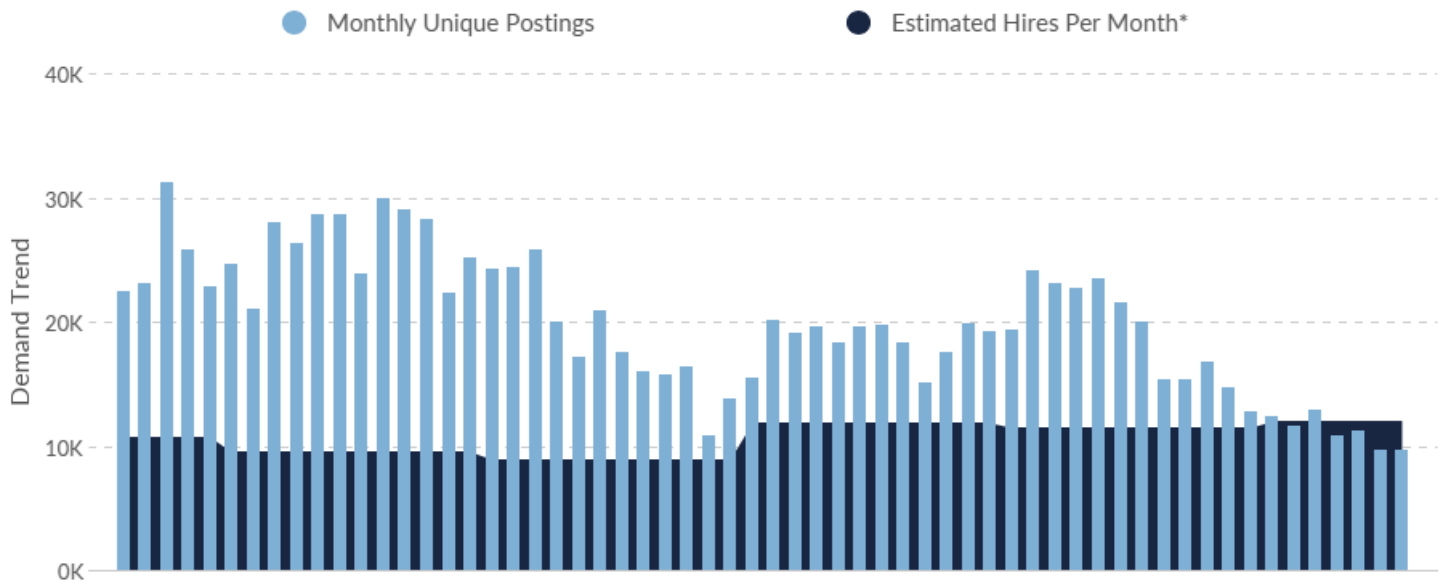The number of unique postings for this job from Jan 2022 to Jul 2023.

15,738 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.

● Monthly Unique Postings   ● Estimated Hires Per Month*

Occupation	Avg Monthly Postings (Jan 2022 - Jul 2023)	Avg Monthly Hires (Jan 2022 - Jul 2023)
Software Developers	6,352	4,479
Computer Occupations, All Other	2,644	997
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)
Computer Systems Analysts	825	673
Software Quality Assurance Analysts and Testers	670	546
Information Security Analysts	530	328
Database Architects	270	79
Computer Network Architects	315	224
Natural Sciences Managers	503	190
Computer Programmers	237	216
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
Mathematicians	2	1

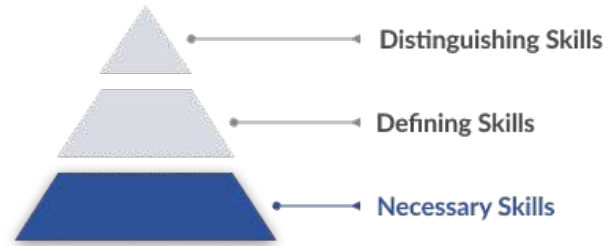| Top Companies	Unique Postings		Top Job Titles	Unique Postings	
Amazon	4,813	▬▬▬	Software Engineers	13,002	▬▬▬▬
Stanford University	4,786	▬▬▬	Data Scientists	3,955	▬
Apple	4,352	▬▬▬	DevOps Engineers	3,452	▬
CyberCoders	3,737	▬▬▬	Business Analysts	3,217	▬
Randstad	3,690	▬▬▬	Back End Software Engineers	3,012	▬
Google	3,645	▬▬▬	Full Stack Software Engineers	2,981	▬
Motion Recruitment	2,466	▬▬	Data Analysts	2,811	▬
Capital One	2,372	▬▬	Staff Software Engineers	2,746	▬
Meta	2,316	▬▬	Clinical Research Coordinators	2,634	▬
Deloitte	2,290	▬▬	Software Development Engineers	2,620	▬

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.
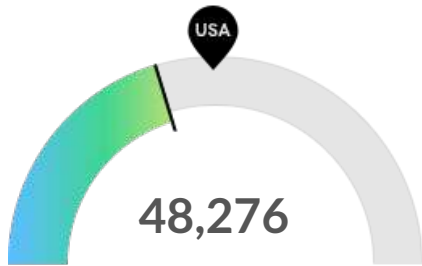
Top Necessary Skills by Demand

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

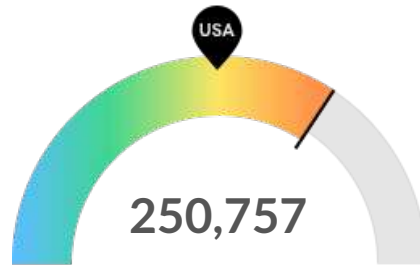| Skill	Salary Boosting	Job Postings Requesting
Computer Science	✅	97,396
Python (Programming Language)	✅	79,779
Software Engineering	✅	69,588
Java (Programming Language)	✅	55,777
Software Development	❌	55,413
Agile Methodology	✅	54,282
SQL (Programming Language)	❌	50,084
Amazon Web Services	✅	46,827
Automation	❌	46,480
Project Management	❌	43,767

Demographics

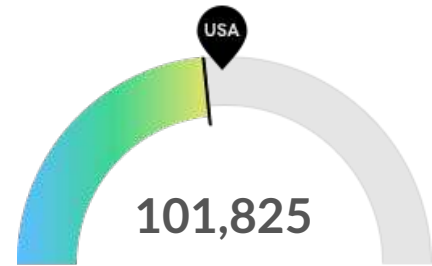## Retirement Risk Is Low, While Overall Diversity Is High

48,276

Retiring Soon

Retirement risk is low in your area. The national average for an area this size is 64,153* employees 55 or older, while there are 48,276 here.

250,757

Racial Diversity

Racial diversity is high in your area. The national average for an area this size is 149,744* racially diverse employees, while there are 250,757 here.
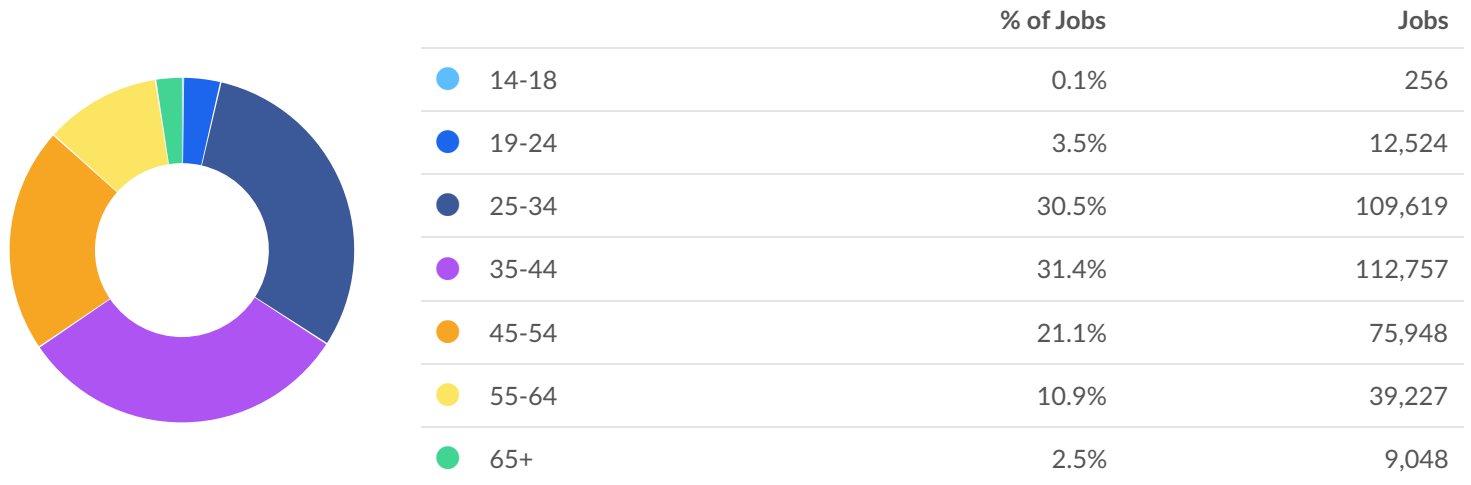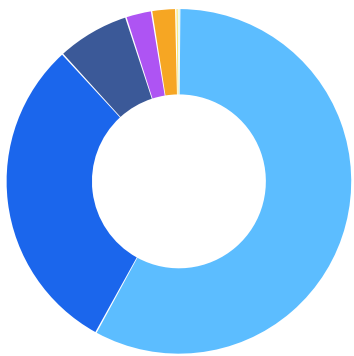
101,825

Gender Diversity

Gender diversity is about average in your area. The national average for an area this size is 111,862* female employees, while there are 101,825 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.
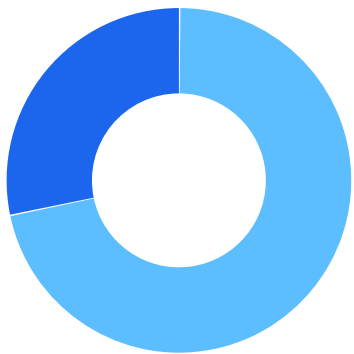
Occupation Age Breakdown

		% of Jobs	Jobs
●	14-18	0.1%	256
●	19-24	3.5%	12,524
●	25-34	30.5%	109,619
●	35-44	31.4%	112,757
●	45-54	21.1%	75,948
●	55-64	10.9%	39,227
●	65+	2.5%	9,048

Occupation Race/Ethnicity Breakdown

		% of Jobs	Jobs
●	Asian	57.9%	208,143
●	White	30.2%	108,622
●	Hispanic or Latino	6.8%	24,473
●	Black or African American	2.4%	8,765
●	Two or More Races	2.2%	8,085
●	Native Hawaiian or Other Pacific Islander	0.2%	869
●	American Indian or Alaska Native	0.1%	422

Occupation Gender Breakdown

		% of Jobs	Jobs
●	Males	71.7%	257,554
●	Females	28.3%	101,825

Occupational Programs

132 Programs

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

31,242 Completions (2021)

The completions from all regional institutions for all degree types.

51,421 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	
43.0104	Criminal Justice/Safety Studies	712	
14.0901	Computer Engineering, General	641	
11.0199	Computer and Information Sciences, Other	614	
14.0903	Computer Software Engineering	568	

Top Schools	Completions (2021)	
University of California-Berkeley	5,580	
San Jose State University	4,448	
San Francisco State University	3,047	
California State University-East Bay	2,012	
Stanford University	1,452	
De Anza College	1,218	
University of San Francisco	1,137	
Diablo Valley College	1,108	
City College of San Francisco	1,095	
Santa Clara University	991	

Appendix A (Occupations)

Code	Description
13-1111	Management Analysts
15-2041	Statisticians
15-2051	Data Scientists
15-2021	Mathematicians
11-3021	Computer and Information Systems Managers
15-1255	Web and Digital Interface Designers
15-1211	Computer Systems Analysts
15-1221	Computer and Information Research Scientists
15-1241	Computer Network Architects

Code	Description
15-1243	Database Architects
15-1253	Software Quality Assurance Analysts and Testers
15-1299	Computer Occupations, All Other
15-1212	Information Security Analysts
15-1231	Computer Network Support Specialists
15-1251	Computer Programmers
15-1252	Software Developers
15-1254	Web Developers
11-9121	Natural Sciences Managers