5 Architecture and Engineering Occupations in San Diego-Chula Vista-Carlsbad, CA



Contents

What is Lightcast Data?	1
Report Parameters	2
Executive Summary	3
Jobs	4
Compensation	7
Job Posting Activity	8
Demographics	14
Occupational Programs	16



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

5 Occupations

17-1022 Surveyors 17-1021 Cartographers and Photogrammetrists 17-3022 Civil Engineering Technologists and Technicians	17-3031	Surveying and Mapping Technicians	17-3019	Drafters, All Other
	17-1022	Surveyors	17-1021	Cartographers and Photogrammetrists
Technicians	17-3022	Civil Engineering Technologists and		
	Techniciar	15		

1 MSA

41740 San Diego-Chula Vista-Carlsbad, CA

Class of Worker

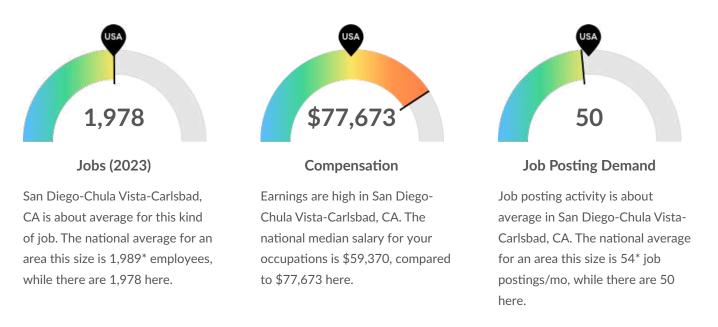
QCEW Employees

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



Executive Summary

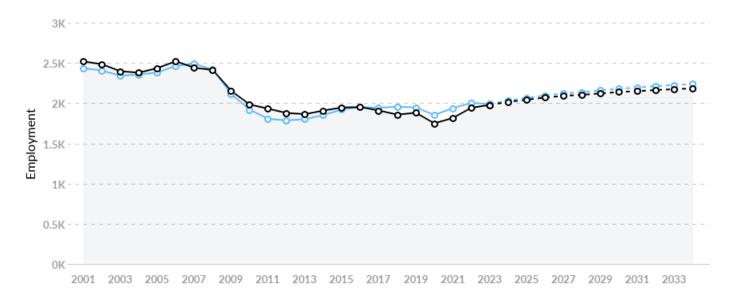
Average Job Posting Demand Over an Average Supply of Regional Jobs



*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 San Diego-Chula Vista-Carlsbad, CA. In other words, the values represent the national average adjusted for region size.

Jobs

Regional Employment Is About Equal to the National Average



An average area of this size typically has 1,989* jobs, while there are 1,978 here.

Region	2023 Jobs	2024 Jobs	Change	% Change
• San Diego-C Vista-Carlsba	hula 1,978 ad, CA	2,015	37	1.9%
 National Ave 	rage 1,989	2,031	42	2.1%

*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 San Diego-Chula Vista-Carlsbad, CA. In other words, the values represent the national average adjusted for region size.



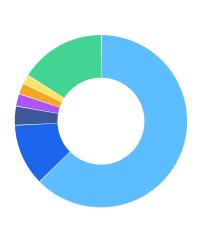
Regional Breakdown



County	2023 Jobs
San Diego County, CA	1,978



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



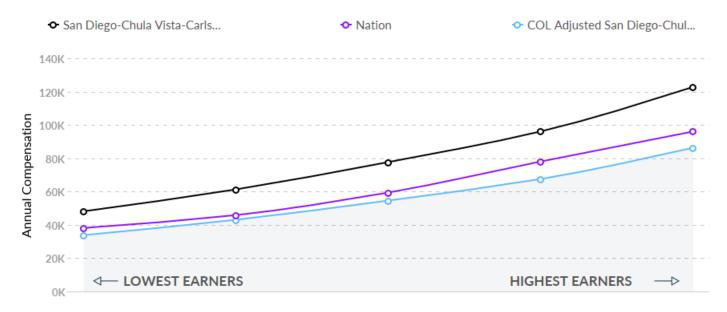
	Industry	% of Occupation in Industry (2023)
	Architectural, Engineering, and Related Services	62.5%
	Local Government, Excluding Education and Hospitals	11.6%
	State Government, Excluding Education and Hospitals	3.6%
	Natural Gas Distribution	2.3%
•	Management, Scientific, and Technical Consulting Services	2.1%
	Scientific Research and Development Services	1.7%
	Other	16.1%



Compensation

Regional Compensation Is 31% Higher Than National Compensation

For your occupations, the 2023 median wage in San Diego-Chula Vista-Carlsbad, CA is \$77,673, while the national median wage is \$59,370.





Job Posting Activity



901 Unique Job Postings

The number of unique postings for this job from Jan 2023 to Jun 2024.



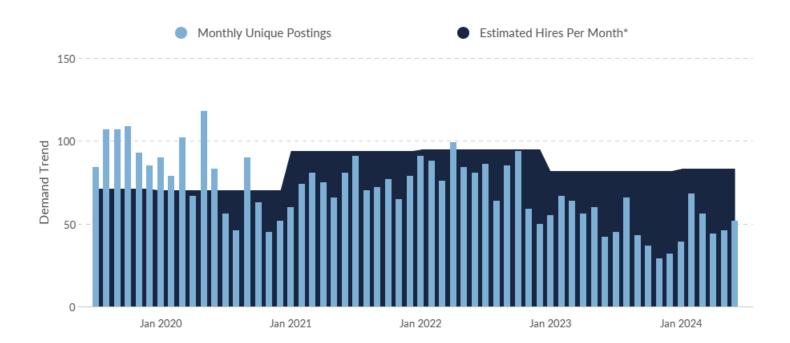
310 Employers Competing

All employers in the region who posted for this job from Jan 2023 to Jun 2024.



28 Day Median Duration

Posting duration is the same as what's typical in the region.



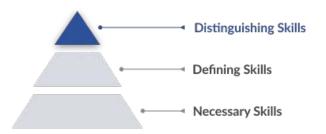
Occupation	Avg Monthly Postings (Jan 2023 - Jun 2024)	Avg Monthly Hires (Jan 2023 - Jun 2024)
Drafters, All Other	24	7
Surveyors	16	16
Surveying and Mapping Technicians	8	26
Civil Engineering Technologists and Technicians	2	31
Cartographers and Photogrammetrists	0	3

*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
Actalent	60	Drafters	47
GPAC	36	Land Surveyors	42
City Of San Diego	15 💼	Surveyors	41
General Atomics	14	CAD Drafters	35
Boston Scientific	12	CAD Drafters/Designers	35
Fuscoe Engineering	12	CAD Designers	29
NV5	11 🗖	Project Surveyors	29
American Bureau Of Shipping	9	Survey Technicians	29
Insight Global	9	Site Surveyors	23
Dudek	8	Survey Party Chiefs	20

Top Distinguishing Skills by Demand

An occupation's Distinguishing Skills are the advanced skills that are called for occasionally. An employee with these skills is likely more specialized and able to differentiate themselves from others in the same role.



Skill	Salary Boosting	Job Postings Requesting	Projected Growth	Growth Relative to Market
Land Surveyor In Training	8	58	+13.1%	Growing
CAD Standards	8	27	+13.2%	Growing
Laser Scanning	8	22	+19.3%	Growing
Total Station	•	22	+8.3%	Stable
Mechanical Drafting	S	15	+5.7%	Stable
Radiofrequency Ablation	S	12	+27.2%	Rapidly Growing
International Board Of Heart Rhythm Examiners (IBHRE) Certification	8	9	+11.3%	Growing
Rough Sketches	S	5	+4.7%	Stable
Autodesk Inventor	•	4	+3.2%	Lagging
Geospatial Analysis	<	3	+22.1%	Rapidly Growing

Top Defining Skills by Demand

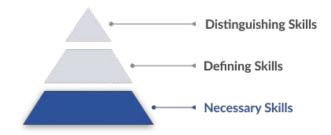
An occupation's Defining Skills represent the day-to-day tasks and responsibilities of the job. An employee needs these skills to qualify for and perform successfully in this occupation.



Skill	Salary Boosting	Job Postings Requesting	Projected Growth	Growth Relative to Market
AutoCAD	8	312	+16.9%	Growing
Computer-Aided Design	8	294	+17.2%	Growing
Surveying	S	239	+19.8%	Rapidly Growing
Project Management	8	164	+19.8%	Rapidly Growing
Construction	8	139	+10.5%	Growing
Autodesk Revit	8	136	+18.3%	Growing
Valid Driver's License	8	120	+7.5%	Stable
Topography	O	119	+5.7%	Stable
Legal Land Description	8	100	+9.2%	Growing
Geographic Information Systems	8	92	+10.8%	Growing

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.

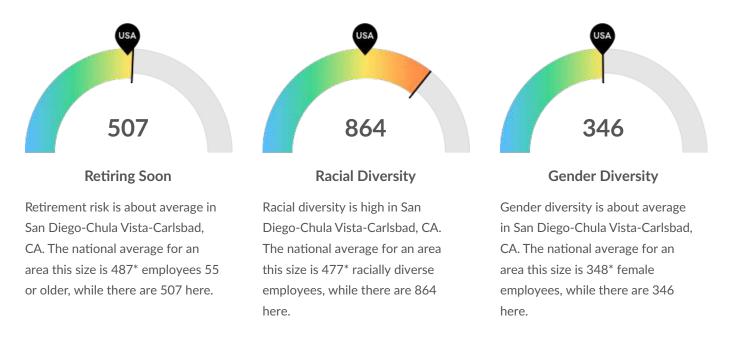


Skill	Salary Boosting	Job Postings Requesting	Projected Growth	Growth Relative to Market
AutoCAD	8	312	+16.9%	Growing
Computer-Aided Design	8	294	+17.2%	Growing
Surveying	S	239	+19.8%	Rapidly Growing
Project Management	8	164	+19.8%	Rapidly Growing
Construction	8	139	+10.5%	Growing
AutoCAD Civil 3D	8	120	+7.5%	Stable
Valid Driver's License	8	120	+7.5%	Stable
Topography	S	119	+5.7%	Stable
Legal Land Description	8	100	+9.2%	Growing
3D Modeling	8	94	+19.1%	Growing



Demographics

Retirement Risk Is About Average, While Overall Diversity Is High



*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 San Diego-Chula Vista-Carlsbad, CA. In other words, the values represent the national average adjusted for region size.

Occupation Age Breakdown

		% of Jobs	Jobs
	• 14-18	0.3%	6
	• 19-24	7.4%	146
	• 25-34	23.5%	464
	35-44	23.2%	458
	45-54	20.1%	397
	55-64	18.4%	364
	65+	7.2%	143



Occupation Race/Ethnicity Breakdown

		% of Jobs	Jobs
	• White	56.3%	1,114
	Hispanic or Latino	26.6%	526
	Asian	9.7%	191
	Black or African American	3.7%	74
	Two or More Races	2.8%	56
	American Indian or Alaska Native	0.4%	9
	Native Hawaiian or Other Pacific Islander	0.4%	8

Occupation Gender Breakdown

	% of Jobs	Jobs
 Males 	82.5%	1,632
Females	17.5%	346



Occupational Programs



10 Programs

Of the programs that can train for this job, 10 have produced completions in the last 5 years.



314 Completions (2023)

The completions from all regional institutions for all degree types.



207 Openings (2023)

The average number of openings for an occupation in the region is 257.

CIP Code	Top Programs	Completions (2023)
45.0701	Geography	68
46.0415	Building Construction Technology/Technician	63
40.0601	Geology/Earth Science, General	57
15.1301	Drafting and Design Technology/Technician, General	46
45.0702	Geographic Information Science and Cartography	32
15.1302	CAD/CADD Drafting and/or Design Technology/Technician	24
15.1001	Construction Engineering Technology/Technician	16
15.1102	Surveying Technology/Surveying	6
15.9999	Engineering/Engineering-Related Technologies/Technicians,	2

Top Schools	Completions (2023)
San Diego State University	83
CET-San Diego	63
University of California-San Diego	43
Palomar College	40
MiraCosta College	21
Escondido Adult School	20
San Diego Mesa College	12
Southwestern College	12
Cuyamaca College	10
Grossmont College	6



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

Lightcast'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.