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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*.



Forbes

Harvard Business Review The New York Times

WSJ





Report Parameters

2 Occupations

11-9041 Architectural and Engineering Managers 17-2199 Engineers, All Other

4 Counties

4003	Cochise County, AZ	4019	Pima County, AZ
4009	Graham County, AZ	4023	Santa Cruz County, AZ

Class of Worker

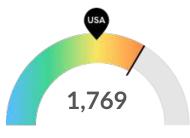
QCEW Employees and Non-QCEW Employees

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



Executive Summary

Light Job Posting Demand Over a Deep Supply of Regional Jobs



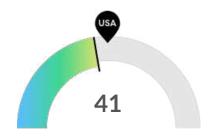
Jobs (2023)

Your area is a hotspot for this kind of job. The national average for an area this size is 1,105* employees, while there are 1.769 here.



Compensation

Earnings are about average in your area. The national median salary for your occupations is \$135,250, compared to \$132,544 here.



Job Posting Demand

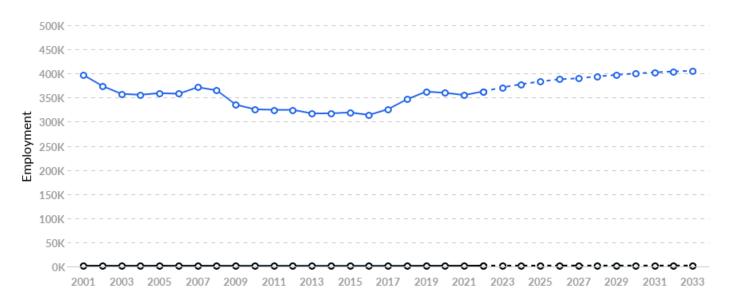
Job posting activity is low in your area. The national average for an area this size is 48* job postings/mo, while there are 41 here.

^{*}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 1,105* jobs, while there are 1,769 here. This higher than average supply of jobs may make it easier for workers in this field to find employment in your area.

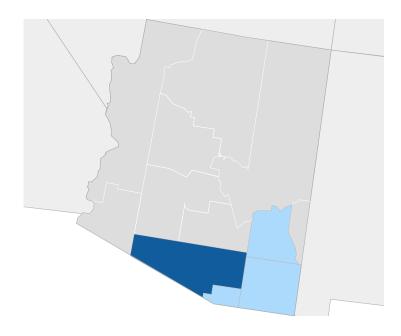


Region	2023 Jobs	2033 Jobs	Change	% Change
Region	1,769	1,921	152	8.6%
National Average	1,105	1,182	77	7.0%
 United States 	371,197	405,709	34,512	9.3%

^{*}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.



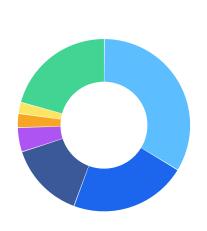
Regional Breakdown



County	2023 Jobs
Pima County, AZ	1,626
Cochise County, AZ	123
Santa Cruz County, AZ	13
Graham County, AZ	<10



Most Jobs are Found in the Aerospace Product and Parts Manufacturing Industry Sector



Industry	% of Occupation in Industry (2023)
Aerospace Product and Parts Manufacturing	33.6%
Federal Government, Civilian	22.0%
Architectural, Engineering, and Related Services	14.3%
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	4.6%
Scientific Research and Development Services	2.6%
Semiconductor and Other Electronic Component Manufacturing	2.1%
Other	20.8%



Compensation

Regional Compensation Is 2% Lower Than National Compensation

For your occupations, the 2022 median wage in your area is \$132,544, while the national median wage is \$135,250.





Job Posting Activity



455 Unique Job Postings

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



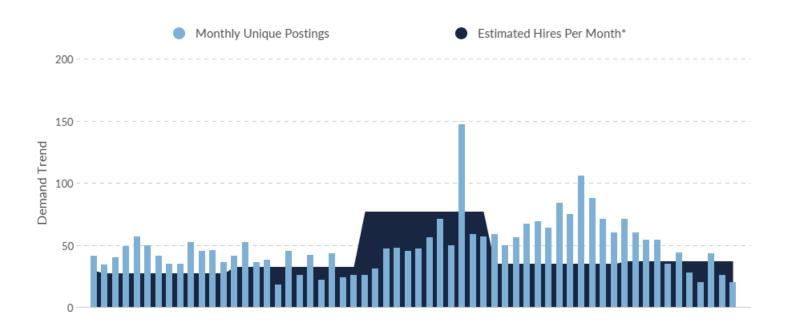
138 Employers Competing

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



30 Day Median Duration

Posting duration is 2 days longer than what's typical in the region.



Occupation	Avg Monthly Postings (Jan 2023 - Nov 2023)	Avg Monthly Hires (Jan 2023 - Nov 2023)
Engineers, All Other	19	19
Architectural and Engineering Managers	23	19

^{*}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
Raytheon Technologies	133	Chief Engineers	35
Canonical Group	17	Electro-Optical Engineers	21
Caterpillar	15	Optical Engineers	14
Sargent Aerospace	11	Engineering Managers	10
University of Arizona	10	Project Engineers	9
City of Tucson	6	Graduate Engineers	7
HEI Hotels & Resorts	6	Optical Systems Engineers	7
Jacobs Engineering Group	6	Principal Engineers	7
Leonardo Electronics Us	6	Process Engineering Managers	7
Rain Bird	6	Test Engineers	7

Top Distinguishing Skills by Demand

Not enough data to display Distinguishing Skills for this occupation.

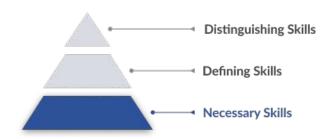
Top Defining Skills by Demand

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.

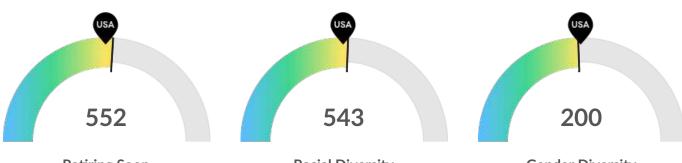


Skill	Salary Boosting	Job Postings Requesting
Project Management	8	92
Electrical Engineering	8	91
Systems Engineering	8	74
Python (Programming Language)	8	65
New Product Development	8	51
Mechanical Engineering	8	43
Construction	8	40
Computer Science	8	38
Scripting	8	31
Automation	8	30



Demographics

Retirement Risk Is About Average, While Overall Diversity Is About Average



Retiring Soon

Retirement risk is about average in your area. The national average for an area this size is 521* employees 55 or older, while there are 552 here.

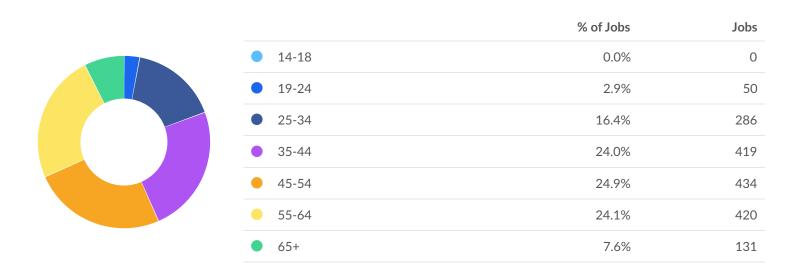
Racial Diversity

Racial diversity is about average in your area. The national average for an area this size is 523* racially diverse employees, while there are 543 here.

Gender Diversity

Gender diversity is about average in your area. The national average for an area this size is 206* female employees, while there are 200 here.

Occupation Age Breakdown



^{*}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 Race/Ethnicity Breakdown



Occupation Gender Breakdown





Occupational Programs



33 Programs

Of the programs that can train for this job, 33 have produced completions in the last 5 years.



1,127 Completions (2022)

The completions from all regional institutions for all degree types.



132 Openings (2022)

The average number of openings for an occupation in the region is 77.

CIP Code	Top Programs	Completions (2022)
14.1099	Electrical, Electronics, and Communications Engineering, Ot	209
14.1901	Mechanical Engineering	121
14.0501	Bioengineering and Biomedical Engineering	75
14.2701	Systems Engineering	73
04.0902	Architectural and Building Sciences/Technology	71
26.0202	Biochemistry	68
14.0701	Chemical Engineering	62
04.0301	City/Urban, Community, and Regional Planning	61
14.0201	Aerospace, Aeronautical, and Astronautical/Space Engineer	51
40.0501	Chemistry, General	50

Top Schools	Completions (2022)
University of Arizona	1,122
Cochise County Community College District	5



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.