



Mathematicians in San Diego-Chula Vista-Carlsbad, CA

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What is Emsi Data?

Emsi 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.

Emsi 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

1 Occupation

15-2020 Mathematicians

1 MSA

41740 San Diego-Chula Vista-Carlsbad, CA

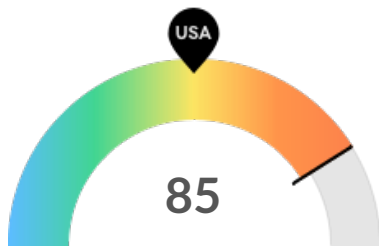
Class of Worker

QCEW Employees, Non-QCEW Employees, and Self-Employed

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

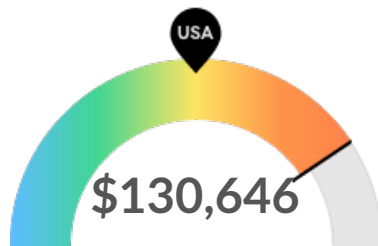
Executive Summary

Light Job Posting Demand Over a Deep Supply of Regional Jobs



Jobs (2018)

San Diego-Chula Vista-Carlsbad, CA is a hotspot for this kind of job. The national average for an area this size is 34* employees, while there are 85 here.



Compensation

Earnings are high in San Diego-Chula Vista-Carlsbad, CA. The national median salary for Mathematicians is \$101,785, compared to \$130,646 here.



Job Posting Demand

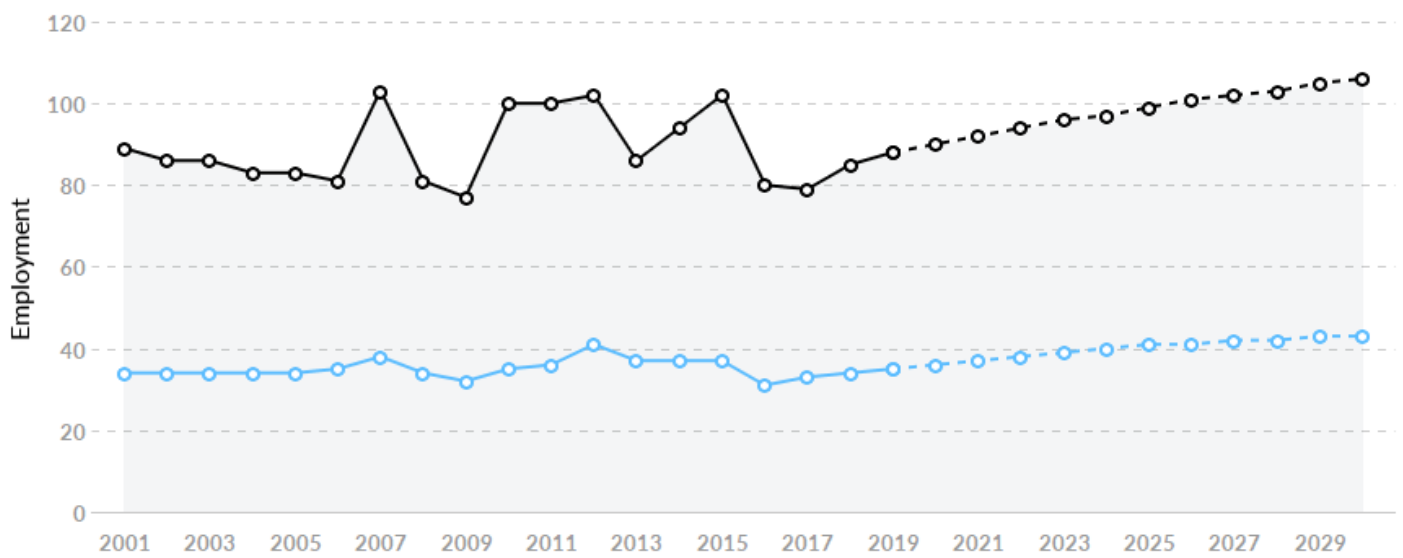
Reliable competition information is not available in San Diego-Chula Vista-Carlsbad, CA because there are too few postings.

*National average values are derived by taking the national value for Mathematicians 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 Higher Than the National Average

An average area of this size typically has 34* jobs, while there are 85 here. This higher than average supply of jobs may make it easier for workers in this field to find employment in your area.



| Region | 2018 Jobs | 2028 Jobs | Change | % Change |
|--------------------------------------|-----------|-----------|--------|----------|
| ● San Diego-Chula Vista-Carlsbad, CA | 85 | 103 | 18 | 21.6% |
| ● National Average | 34 | 42 | 8 | 24.3% |

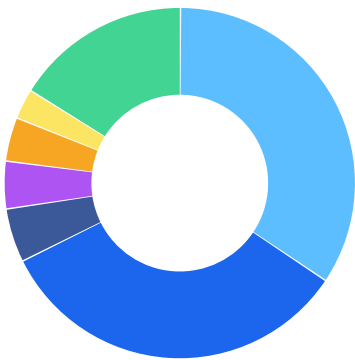
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Regional Breakdown



| County | 2018 Jobs |
|----------------------|-----------|
| San Diego County, CA | 85 |

Most Jobs are Found in the Federal Government, Civilian Industry Sector

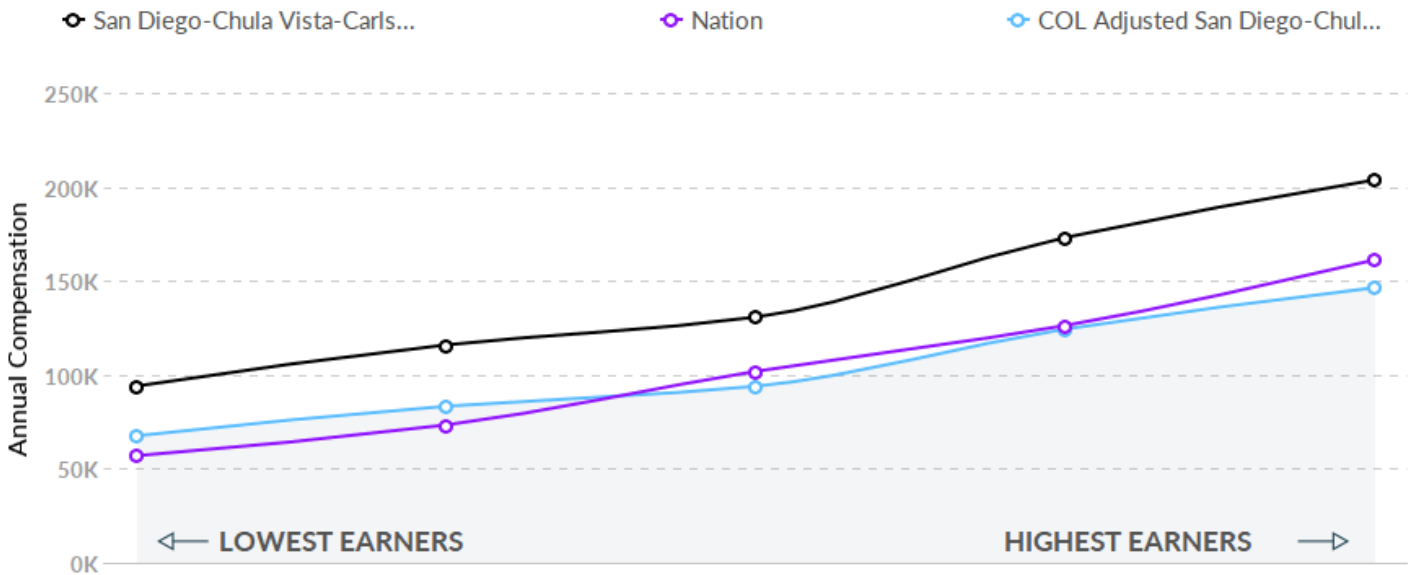


| Industry | % of Occupation in Industry (2018) |
|---|------------------------------------|
| Federal Government, Civilian | 34.3% |
| Scientific Research and Development Services | 33.3% |
| Education and Hospitals (State Government) | 5.0% |
| Management, Scientific, and Technical Consulting Services | 4.4% |
| Architectural, Engineering, and Related Services | 4.0% |
| Other Miscellaneous Manufacturing | 2.8% |
| Other | 16.2% |

Compensation

Regional Compensation Is 28% Higher Than National Compensation

For Mathematicians, the 2018 median wage in San Diego-Chula Vista-Carlsbad, CA is \$130,646, while the national median wage is \$101,785.



Job Posting Activity



7 Unique Job Postings

The number of unique postings for this job from Jan 2018 to May 2020.



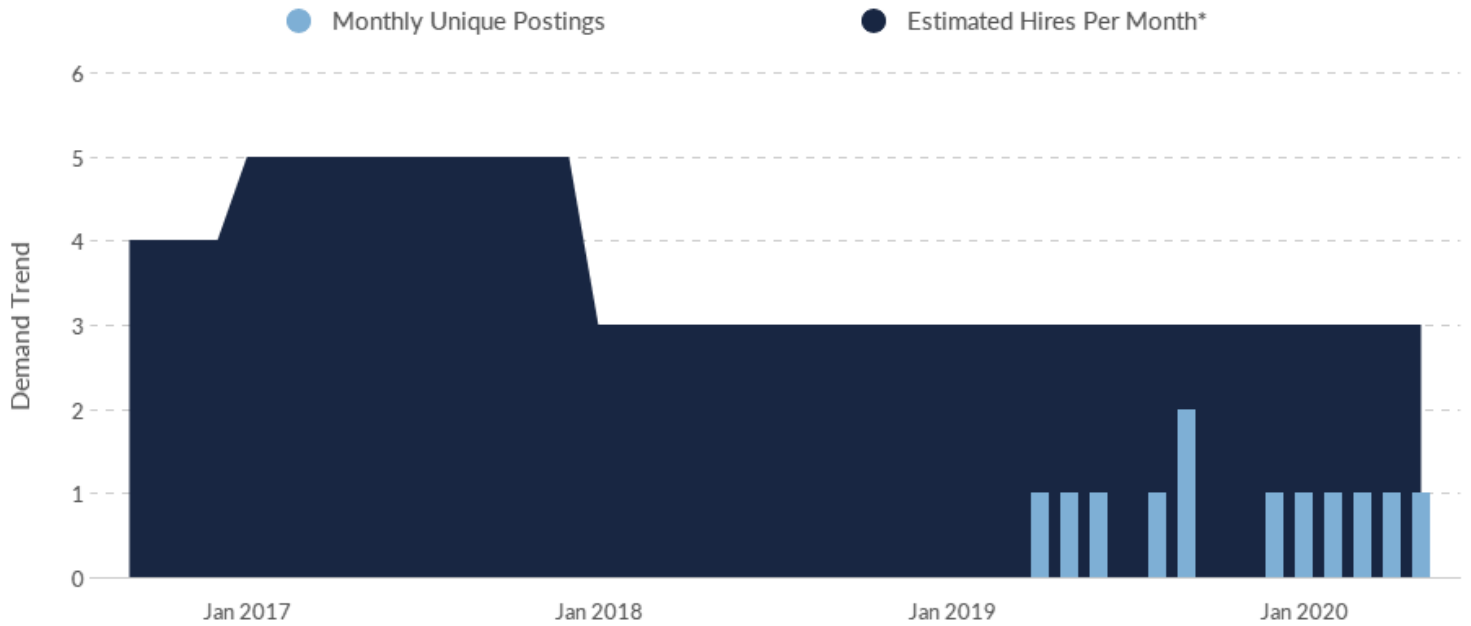
3 Employers Competing

All employers in the region who posted for this job from Jan 2018 to May 2020.







20 Day Median Duration

Posting duration is 13 days shorter than what's typical in the region.

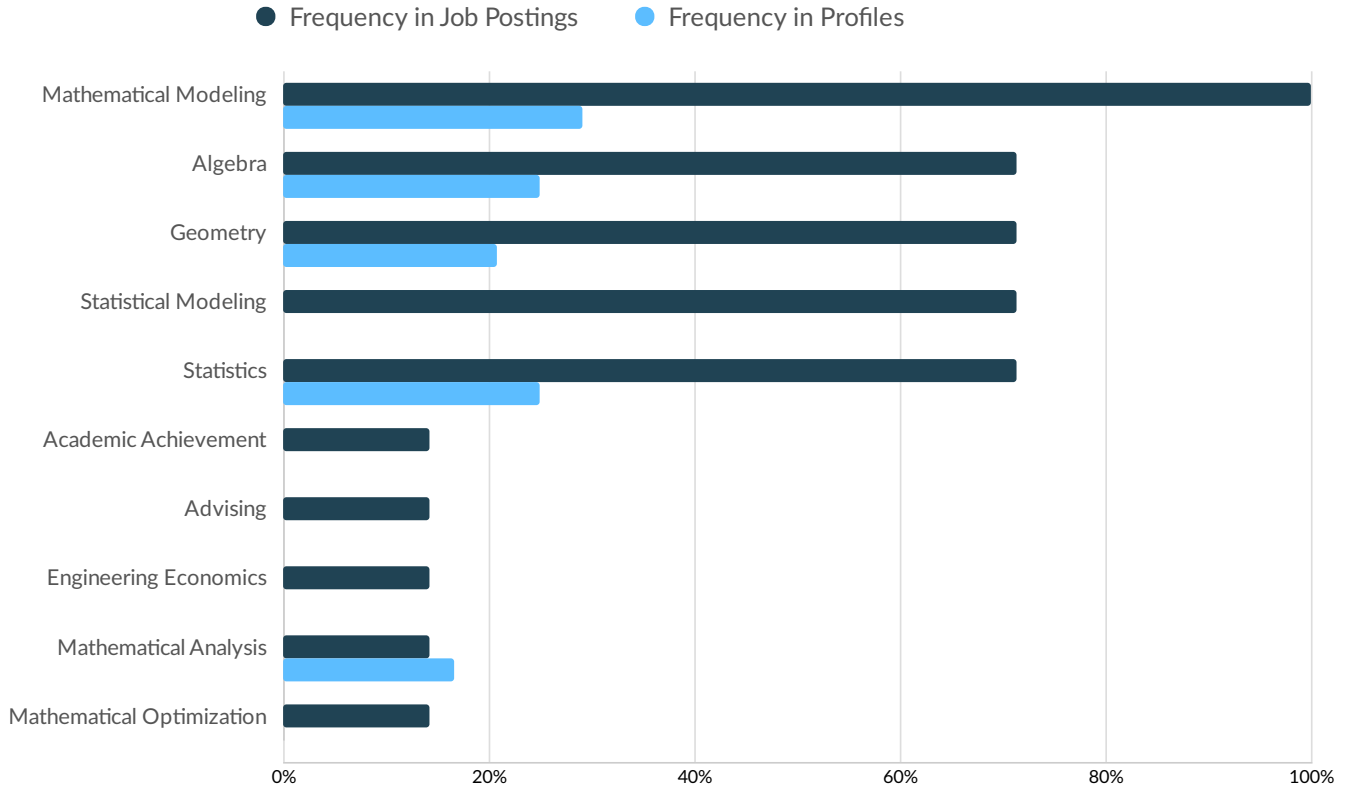


| Occupation | Avg Monthly Postings (Jan 2018 - May 2020) | Avg Monthly Hires (Jan 2018 - May 2020) |
|----------------|--|---|
| Mathematicians | 0 | 3 |

*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. Emsi hires are calculated using a combination of Emsi jobs data, information on separation rates from the Bureau of Labor Statistics (BLS), and industry-based hires data from the Census Bureau.

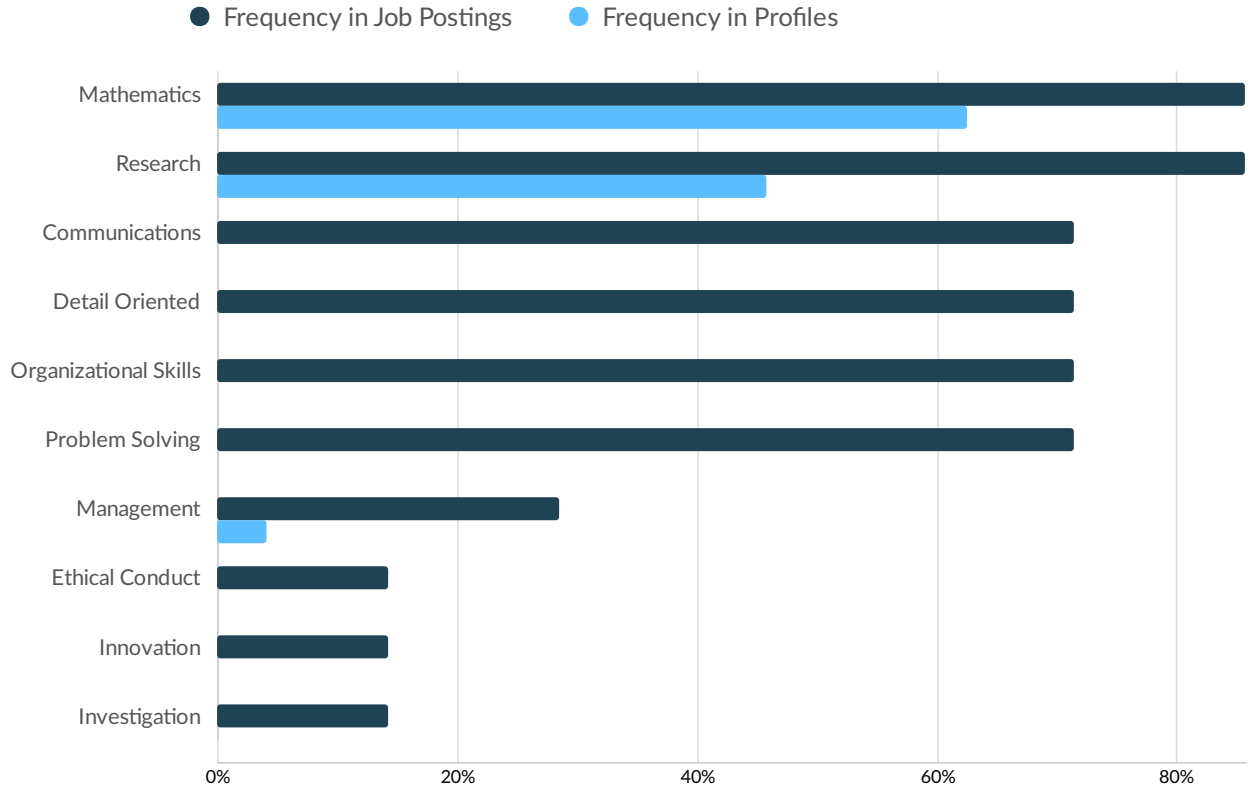
| Top Companies | Unique Postings | Top Job Titles | Unique Postings |
|-----------------------------------|---|----------------|---|
| Callaway Golf Company | 1  | Mathematicians | 6  |
| United States Department of th... | 1  | Golf Caddies | 1  |

Top Hard Skills



| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|---------------------------|----------|---------------------|----------|---------------------|
| Mathematical Modeling | 7 | 100% | 7 | 29% |
| Algebra | 5 | 71% | 6 | 25% |
| Geometry | 5 | 71% | 5 | 21% |
| Statistical Modeling | 5 | 71% | 0 | 0% |
| Statistics | 5 | 71% | 6 | 25% |
| Academic Achievement | 1 | 14% | 0 | 0% |
| Advising | 1 | 14% | 0 | 0% |
| Engineering Economics | 1 | 14% | 0 | 0% |
| Mathematical Analysis | 1 | 14% | 4 | 17% |
| Mathematical Optimization | 1 | 14% | 0 | 0% |

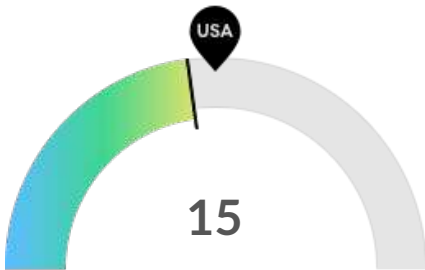
Top Common Skills



| Skills | Postings | % of Total Postings | Profiles | % of Total Profiles |
|-----------------------|----------|---------------------|----------|---------------------|
| Mathematics | 6 | 86% | 15 | 63% |
| Research | 6 | 86% | 11 | 46% |
| Communications | 5 | 71% | 0 | 0% |
| Detail Oriented | 5 | 71% | 0 | 0% |
| Organizational Skills | 5 | 71% | 0 | 0% |
| Problem Solving | 5 | 71% | 0 | 0% |
| Management | 2 | 29% | 1 | 4% |
| Ethical Conduct | 1 | 14% | 0 | 0% |
| Innovation | 1 | 14% | 0 | 0% |
| Investigation | 1 | 14% | 0 | 0% |

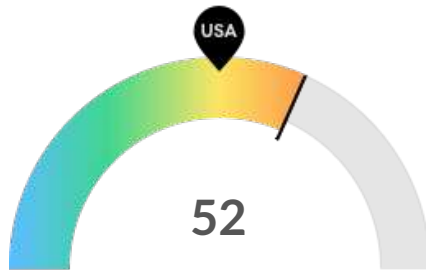
Demographics

Retirement Risk Is Low, While Overall Diversity Is High



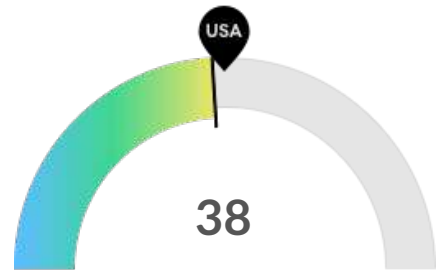
Retiring Soon

Retirement risk is low in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 17* employees 55 or older, while there are 15 here.



Racial Diversity

Racial diversity is high in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 36* racially diverse employees, while there are 52 here.

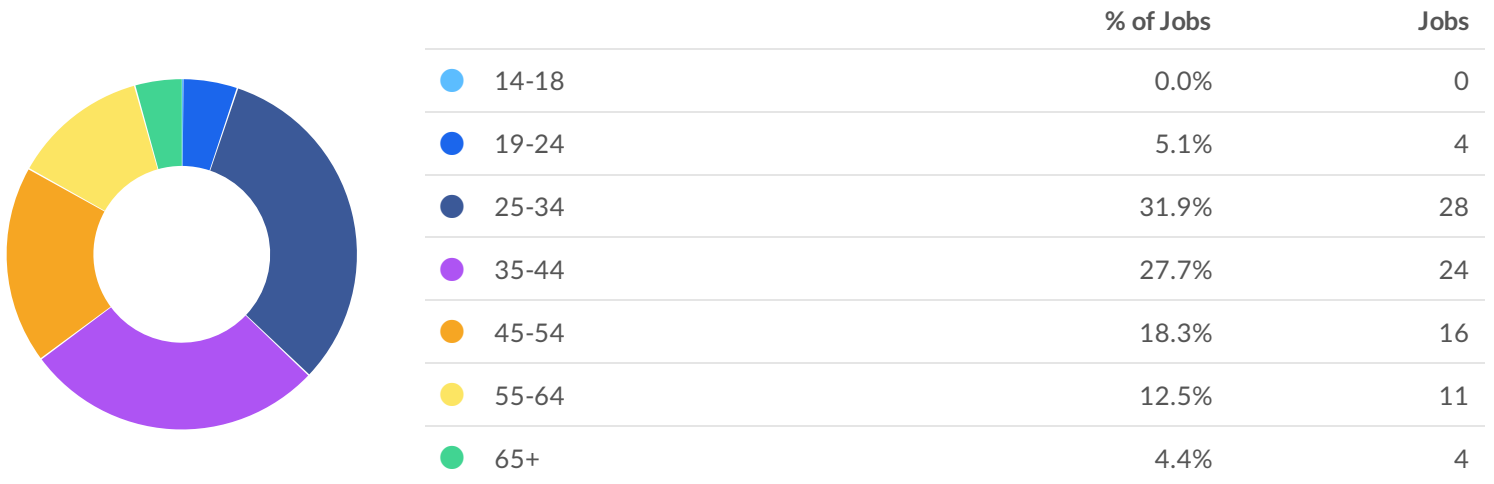


Gender Diversity

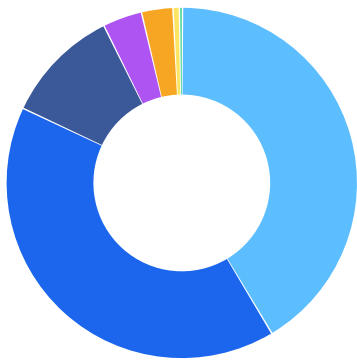
Gender diversity is about average in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 40* female employees, while there are 38 here.

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Occupation Age Breakdown

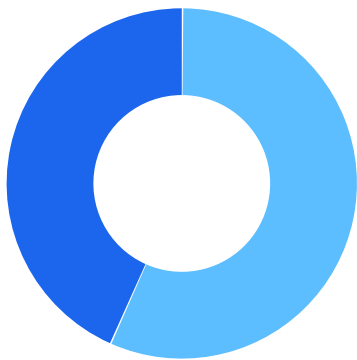


Occupation Race/Ethnicity Breakdown



| | % of Jobs | Jobs |
|---|-----------|------|
| White | 41.3% | 36 |
| Asian | 40.6% | 36 |
| Hispanic or Latino | 10.7% | 9 |
| Black or African American | 3.6% | 3 |
| Two or More Races | 2.9% | 3 |
| Native Hawaiian or Other Pacific Islander | 0.6% | 1 |
| American Indian or Alaska Native | 0.3% | 0 |

Occupation Gender Breakdown



| | % of Jobs | Jobs |
|---------|-----------|------|
| Males | 56.6% | 50 |
| Females | 43.4% | 38 |

Occupational Programs



5 Programs

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



972 Completions (2018)

The completions from all regional institutions for all degree types.



9 Openings (2018)

The average number of openings for an occupation in the region is 288.

| CIP Code | Top Programs | Completions (2018) |
|----------|------------------------------|--------------------|
| 27.0101 | Mathematics, General | 467 |
| 27.0301 | Applied Mathematics, General | 197 |
| 27.0199 | Mathematics, Other | 172 |
| 27.0305 | Financial Mathematics | 136 |

| Top Schools | Completions (2018) |
|--|--------------------|
| University of California-San Diego | 542 |
| San Diego State University | 87 |
| Grossmont College | 82 |
| Cuyamaca College | 58 |
| San Diego Miramar College | 54 |
| San Diego Mesa College | 33 |
| Palomar College | 28 |
| Southwestern College | 27 |
| California State University-San Marcos | 18 |
| National University | 12 |

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

Emsi 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.