



# Physicists in San Diego-Chula Vista-Carlsbad, CA

**Physicists (SOC 19-2012):**

Conduct research into physical phenomena, develop theories on the basis of observation and experiments, and devise methods to apply physical laws and theories. Excludes 'Biochemists and Biophysicists' (19-1021).

**Sample of Reported Job Titles:**

Health Physicist  
Research Physicist  
Physicist  
Scientist  
Research Scientist  
Research Consultant  
Biophysics Scientist  
Thermodynamicist  
Thermodynamic Physicist  
Space Physicist

**Related O\*NET Occupation:**

Physicists (19-2012.00)

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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

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19-2012 Physicists

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### 1 MSA

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41740 San Diego-Chula Vista-Carlsbad, CA

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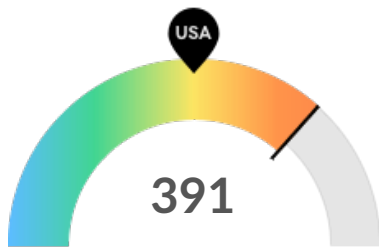
### Class of Worker

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

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

## Executive Summary

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



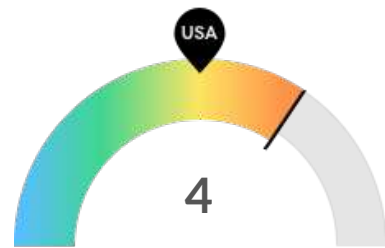
**Jobs (2018)**

San Diego-Chula Vista-Carlsbad, CA is a hotspot for this kind of job. The national average for an area this size is 206\* employees, while there are 391 here.



**Compensation**

Earnings are low in San Diego-Chula Vista-Carlsbad, CA. The national median salary for Physicists is \$120,952, compared to \$112,736 here.



**Job Posting Demand**

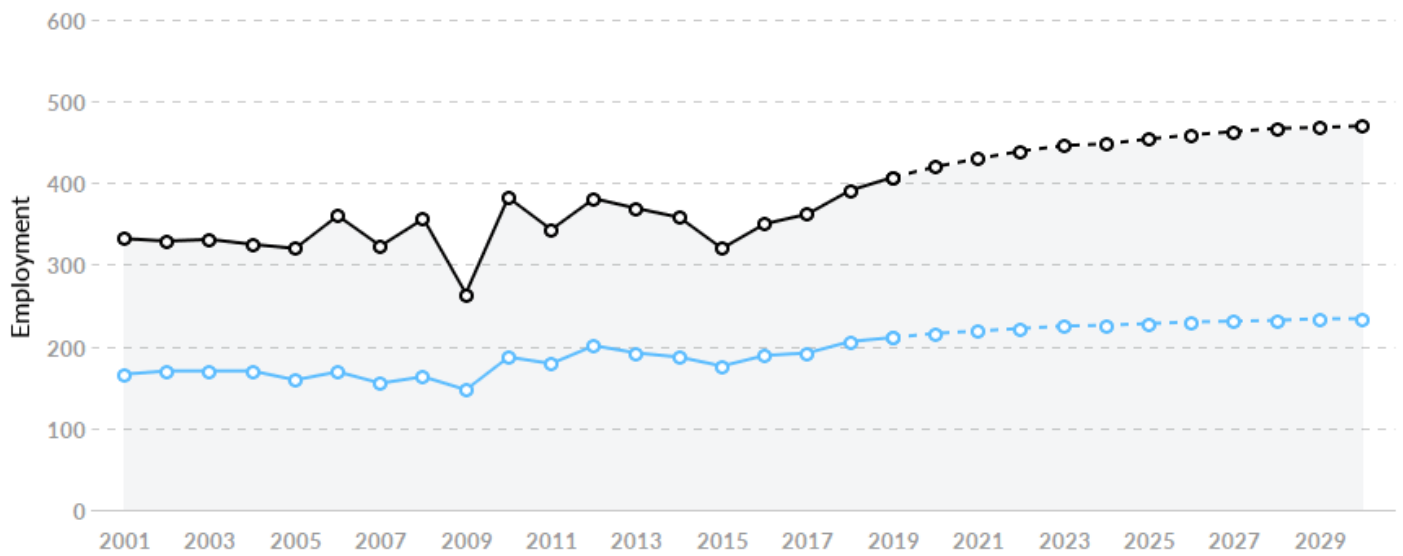
Job posting activity is high in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 2\* job postings/mo, while there are 4 here.

\*National average values are derived by taking the national value for Physicists 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 206\* jobs, while there are 391 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	391	467	75	19.2%
● National Average	206	232	27	12.9%

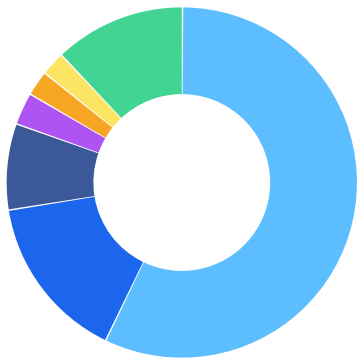
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## Regional Breakdown



County	2018 Jobs
San Diego County, CA	391

## Most Jobs are Found in the Scientific Research and Development Services Industry Sector



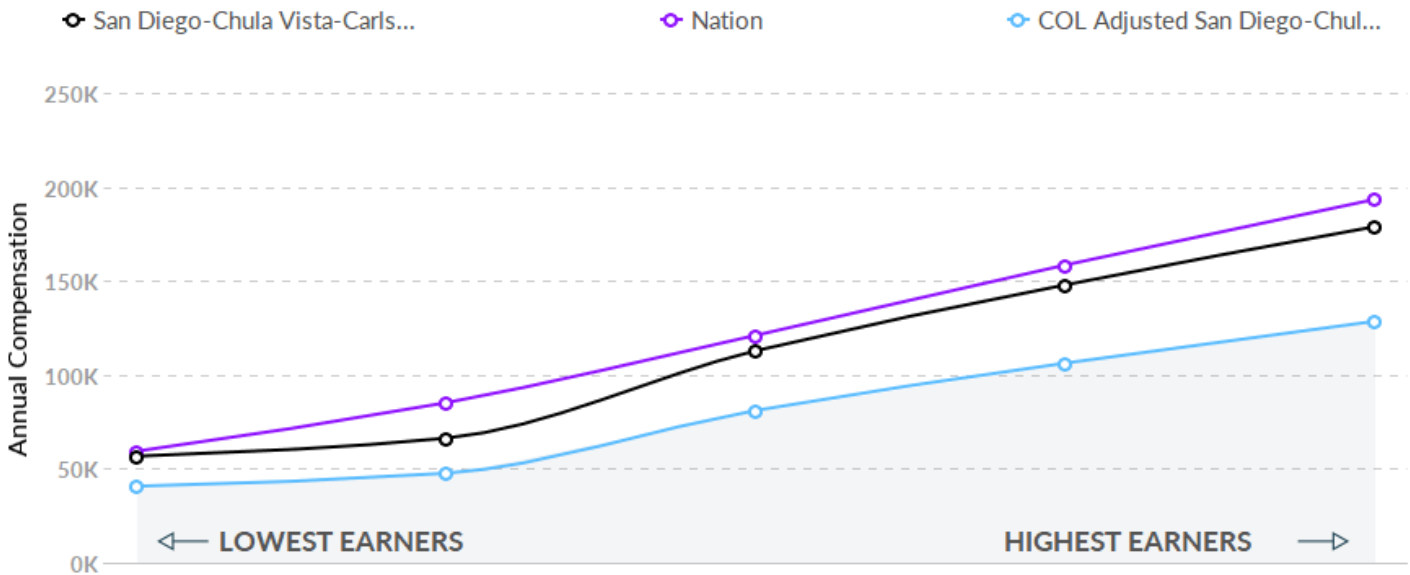
Industry	% of Occupation in Industry (2018)
Scientific Research and Development Services	57.1%
Federal Government, Civilian	15.3%
Education and Hospitals (State Government)	7.9%
Colleges, Universities, and Professional Schools	3.0%
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	2.3%
Offices of Physicians	2.2%
Other	12.1%



# Compensation

## Regional Compensation Is 7% Lower Than National Compensation

For Physicists, the 2018 median wage in San Diego-Chula Vista-Carlsbad, CA is \$112,736, while the national median wage is \$120,952.



# Job Posting Activity



## 116 Unique Job Postings

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



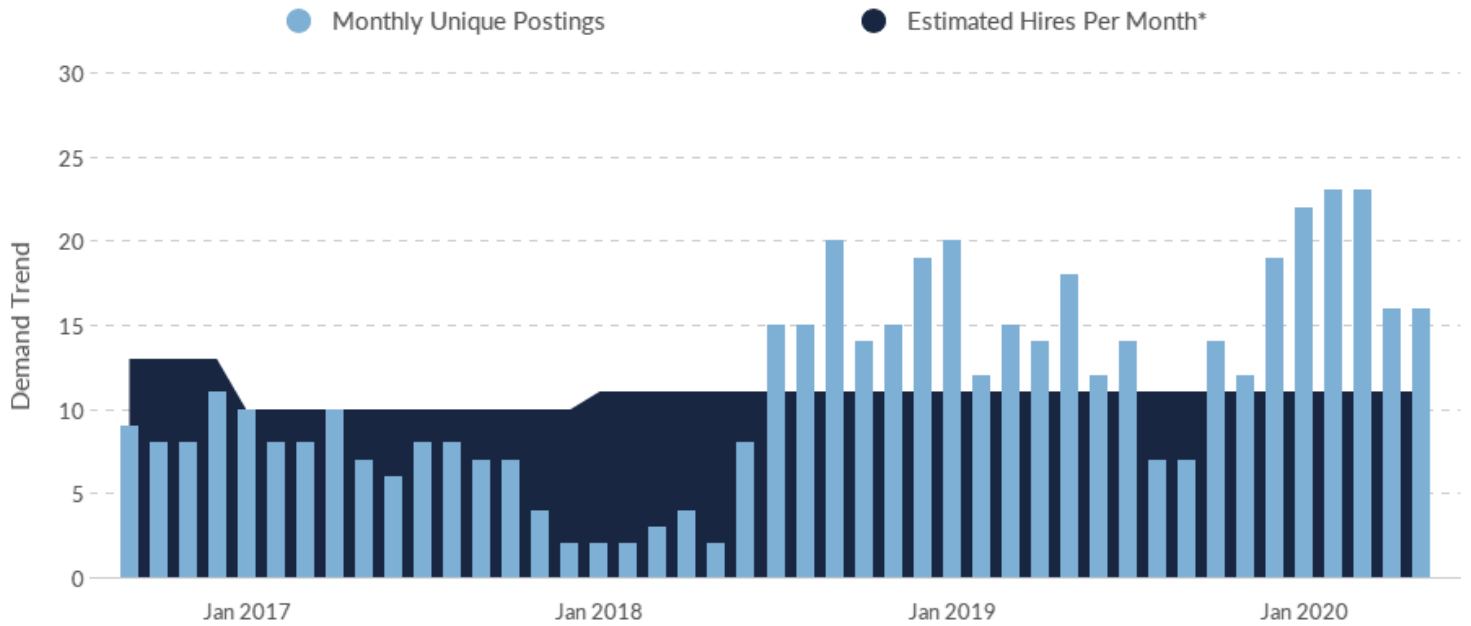
## 38 Employers Competing

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













## 45 Day Median Duration











Posting duration is 12 days longer than what's typical in the region.



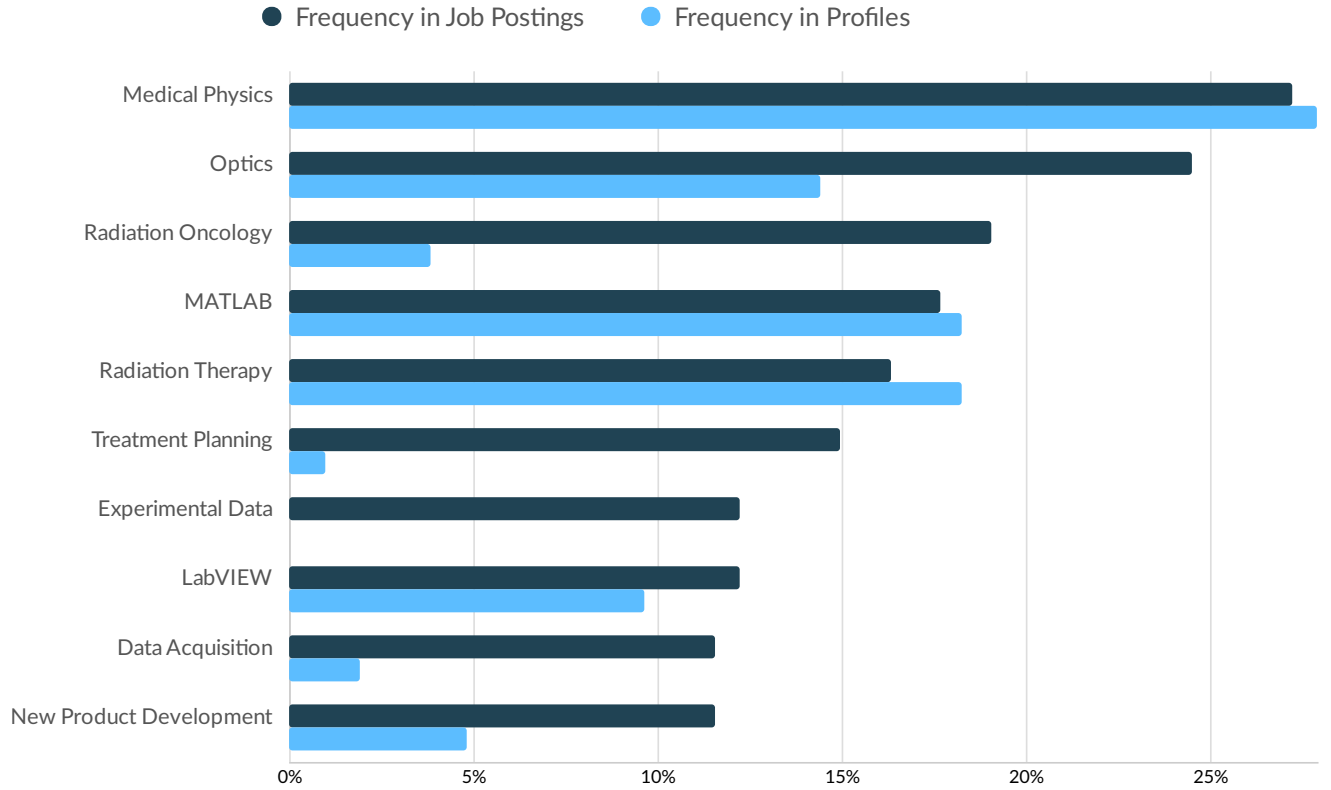
Occupation	Avg Monthly Postings (Jan 2018 - May 2020)	Avg Monthly Hires (Jan 2018 - May 2020)
Physicists	13	11

\*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
General Atomics	17 
Scripps Health	11 
Princeton University	9 
Asml Us, Inc.	8 
Cymer, LLC	7 
University of California	7 
Scripps Memorial Hospital	5 
Sharp Healthcare	5 
CyberCoders, Inc.	3 
Cynet Systems Inc.	3 

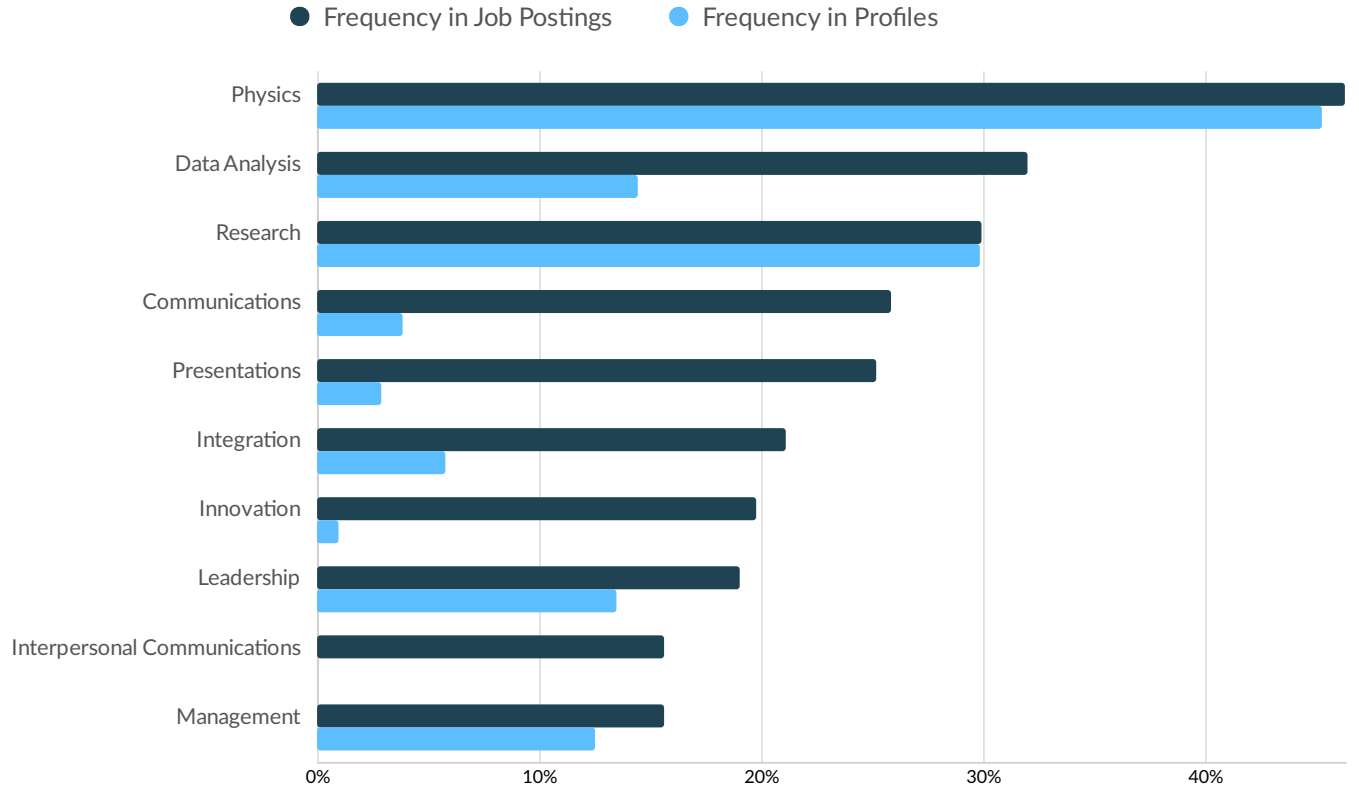
Top Job Titles	Unique Postings
Physicists	36 
Scientists	10 
Optical Engineers	9 
Systems Engineers (Architecture...	8 
Engineer Scientists	7 
Project Scientists	7 
Laboratory Technicians (Life, Ph...	4 
Registered Nurses	4 
Clinical Laboratory Scientists	3 
Safety Directors (Architecture a...	3 

## Top Hard Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Medical Physics	40	27%	29	28%
Optics	36	24%	15	14%
Radiation Oncology	28	19%	4	4%
MATLAB	26	18%	19	18%
Radiation Therapy	24	16%	19	18%
Treatment Planning	22	15%	1	1%
Experimental Data	18	12%	0	0%
LabVIEW	18	12%	10	10%
Data Acquisition	17	12%	2	2%
New Product Development	17	12%	5	5%

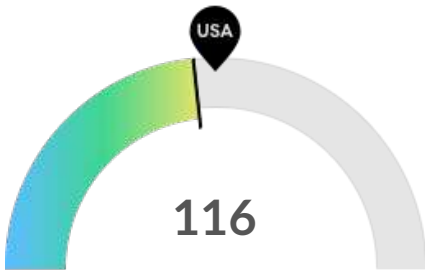
## Top Common Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Physics	68	46%	47	45%
Data Analysis	47	32%	15	14%
Research	44	30%	31	30%
Communications	38	26%	4	4%
Presentations	37	25%	3	3%
Integration	31	21%	6	6%
Innovation	29	20%	1	1%
Leadership	28	19%	14	13%
Interpersonal Communications	23	16%	0	0%
Management	23	16%	13	13%

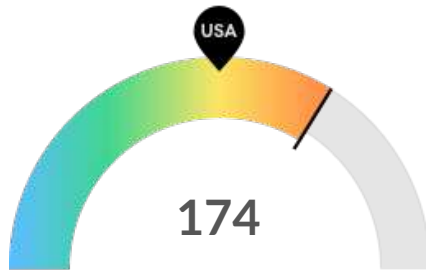
# Demographics

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



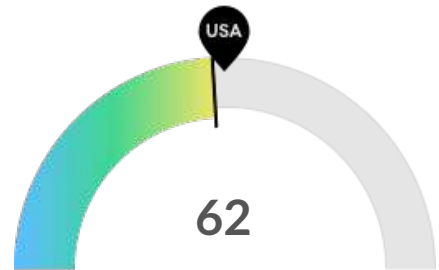
**Retiring Soon**

Retirement risk is about average in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 128\* employees 55 or older, while there are 116 here.



**Racial Diversity**

Racial diversity is high in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 107\* racially diverse employees, while there are 174 here.

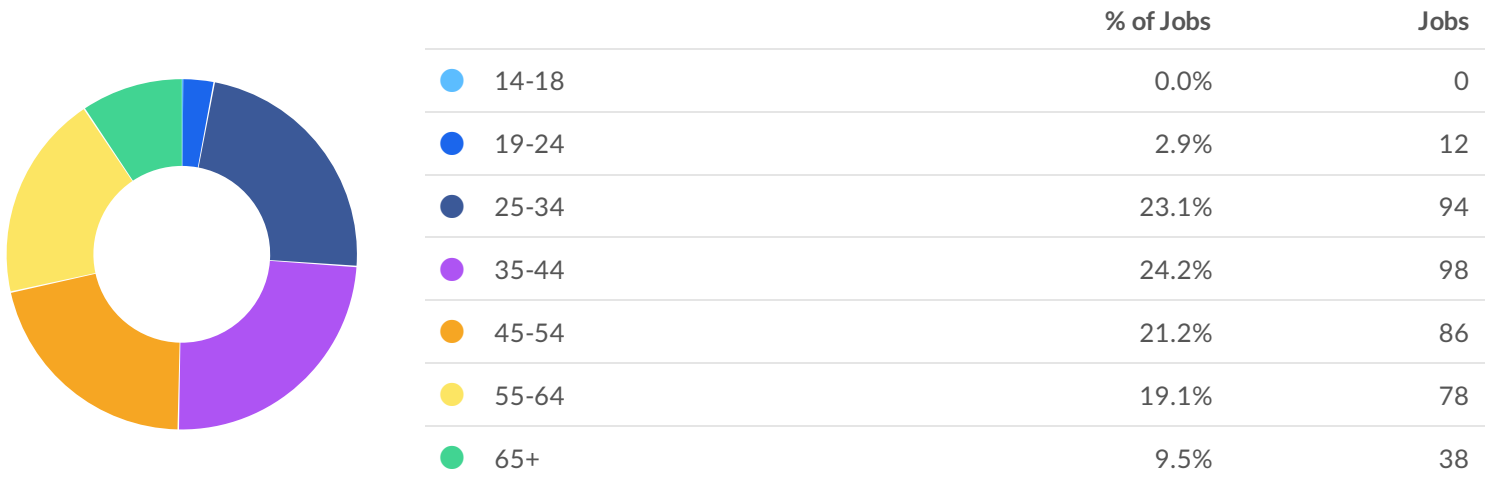


**Gender Diversity**

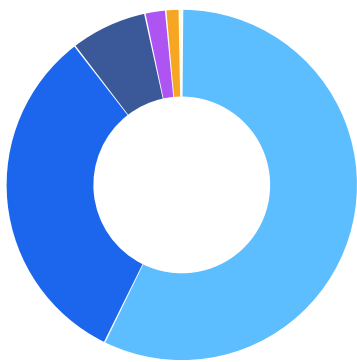
Gender diversity is about average in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 65\* female employees, while there are 62 here.

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## Occupation Age Breakdown

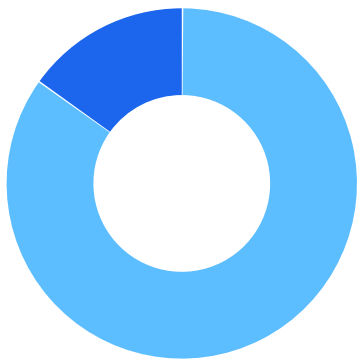


### Occupation Race/Ethnicity Breakdown



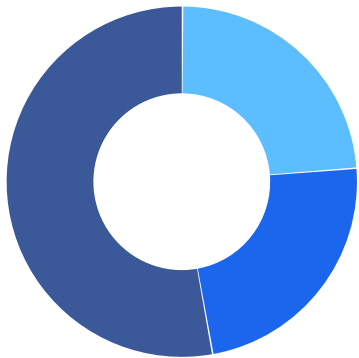
	% of Jobs	Jobs
White	57.2%	233
Asian	32.3%	131
Hispanic or Latino	7.1%	29
Two or More Races	1.9%	8
Black or African American	1.2%	5
Native Hawaiian or Other Pacific Islander	0.2%	1
American Indian or Alaska Native	0.1%	1

### Occupation Gender Breakdown



	% of Jobs	Jobs
Males	84.8%	345
Females	15.2%	62

## National Educational Attainment



	% of Jobs
<span style="color: #00AEEF;">●</span> Bachelor's degree	23.7%
<span style="color: #0070C0;">●</span> Master's degree	23.4%
<span style="color: #003366;">●</span> Doctoral or professional degree	52.9%



# Occupational Programs



**5 Programs**

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



**254 Completions (2018)**

The completions from all regional institutions for all degree types.



**47 Openings (2018)**

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

CIP Code	Top Programs	Completions (2018)
40.0801	Physics, General	171
40.0899	Physics, Other	38
14.1201	Engineering Physics/Applied Physics	36
51.2205	Health/Medical Physics	7
40.0802	Atomic/Molecular Physics	2

Top Schools	Completions (2018)
University of California-San Diego	122
Grossmont College	32
San Diego State University	29
Point Loma Nazarene University	18
San Diego Miramar College	12
California State University-San Marcos	10
San Diego Mesa College	9
Cuyamaca College	7
University of San Diego	6
Southwestern College	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 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.