STEM Occupations
in Chicago-Naperville-Elgin, IL-IN-WI

Contents

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

8 Occupations

15-1200	Computer Occupations
15-2000	Mathematical Science Occupations
17-2000	Engineers
17-3000	Drafters, Engineering Technicians, and Mapping Technicians

19-1000	Life Scientists
19-2000	Physical Scientists
19-3000	Social Scientists and Related Workers
19-4000	Life, Physical, and Social Science Technicians

1 MSA

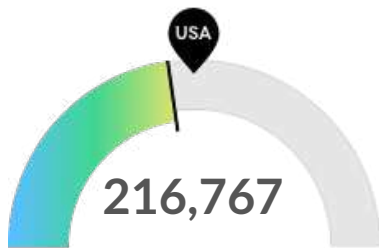|	
16980	Chicago-Naperville-Elgin, IL-IN-WI

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 a Thin Supply of Regional Jobs

216,767
Jobs (2021)

Chicago-Naperville-Elgin, IL-IN-WI is not a hotspot for this kind of job. The national average for an area this size is 247,958* employees, while there are 216,767 here.

$86,953
Compensation

Earnings are about average in Chicago-Naperville-Elgin, IL-IN-WI. The national median salary for your occupations is $85,894, compared to $86,953 here.
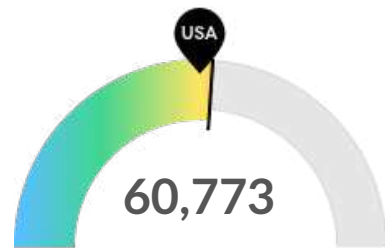
60,773
Job Posting Demand

Job posting activity is about average in Chicago-Naperville-Elgin, IL-IN-WI. The national average for an area this size is 57,101* job postings/mo, while there are 60,773 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 Chicago-Naperville-Elgin, IL-IN-WI. In other words, the values represent the national average adjusted for region size.

Jobs

Regional Employment Is Lower Than the National Average

An average area of this size typically has 247,958* jobs, while there are 216,767 here. This lower than average supply of jobs may make it more difficult for workers in this field to find employment in your area.
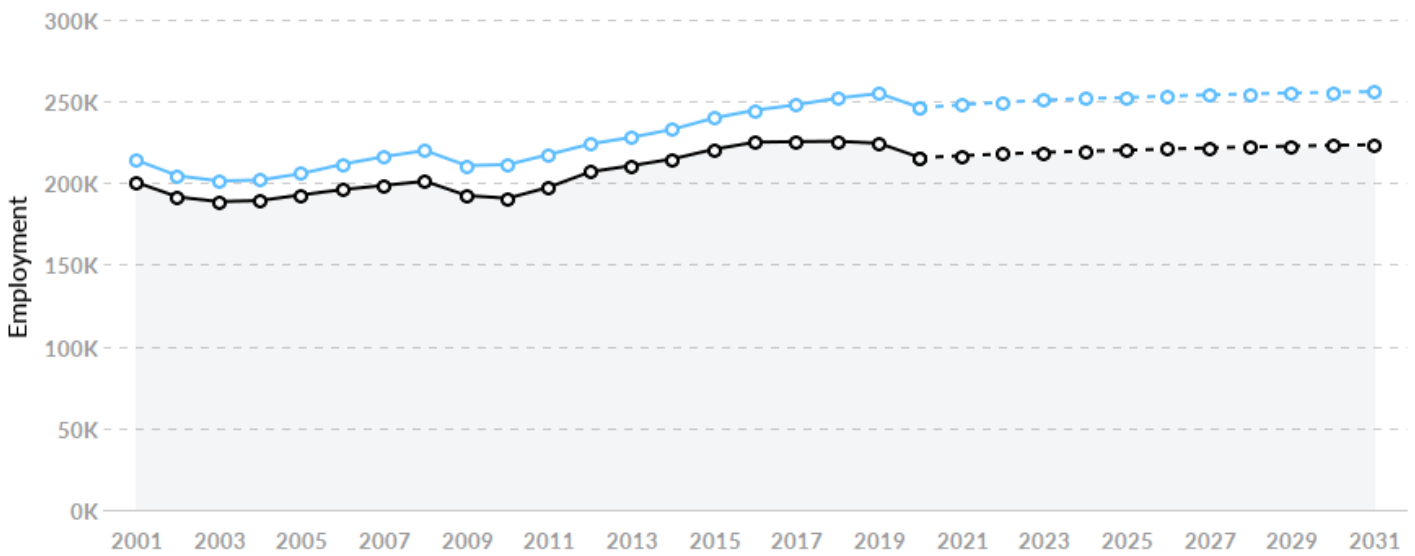
|	Region	2021 Jobs	2026 Jobs	Change	% Change
●	Chicago-Naperville-Elgin, IL-IN-WI	216,767	220,870	4,103	1.9%
●	National Average	247,958	253,220	5,263	2.1%

*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 Chicago-Naperville-Elgin, IL-IN-WI. In other words, the values represent the national average adjusted for region size.

Regional Breakdown

County	2021 Jobs
Cook County, IL	125,638
DuPage County, IL	38,996
Lake County, IL	20,526
Kane County, IL	8,553
Will County, IL	8,175

## Most Jobs are Found in the Computer Systems Design and Related Services Industry Sector
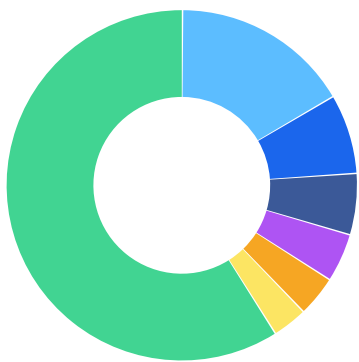
Industry	% of Occupation in Industry (2021)
Computer Systems Design and Related Services	16.5%
Architectural, Engineering, and Related Services	7.4%
Management, Scientific, and Technical Consulting Services	5.6%
Management of Companies and Enterprises	4.5%
Employment Services	3.8%
Scientific Research and Development Services	3.2%
Other	59.0%

Compensation

Regional Compensation Is 1% Higher Than National Compensation

For your occupations, the 2020 median wage in Chicago-Naperville-Elgin, IL-IN-WI is $86,953, while the national median wage is $85,894.
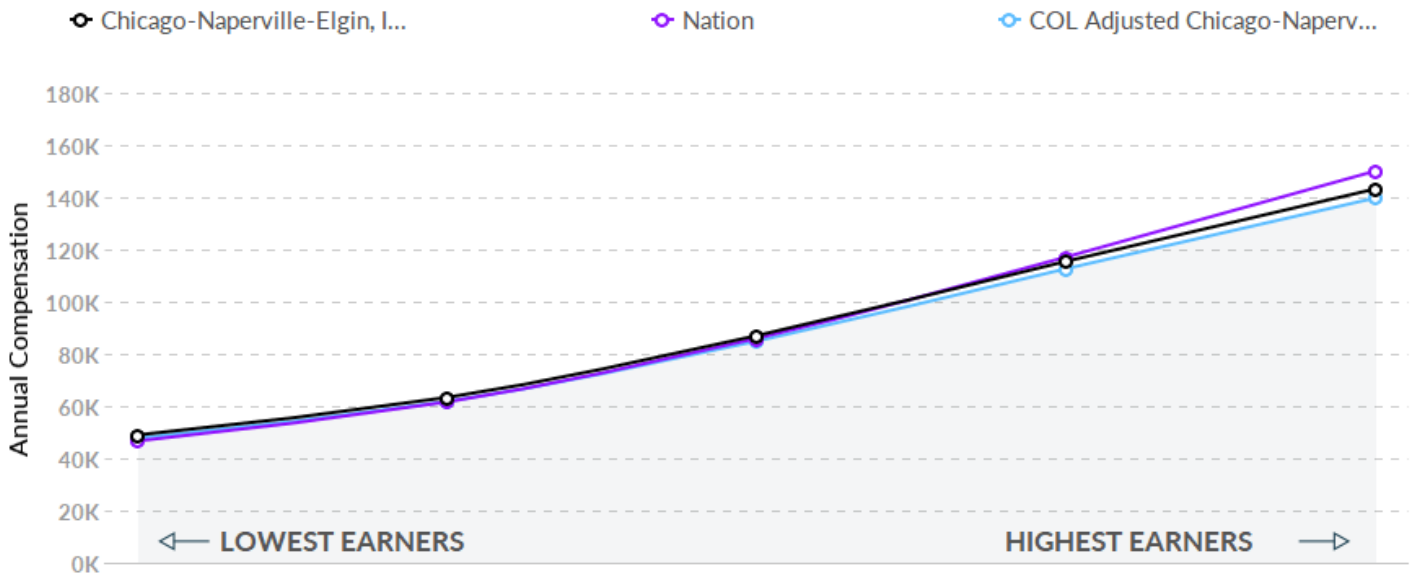
Job Posting Activity

215,894 Unique Job Postings

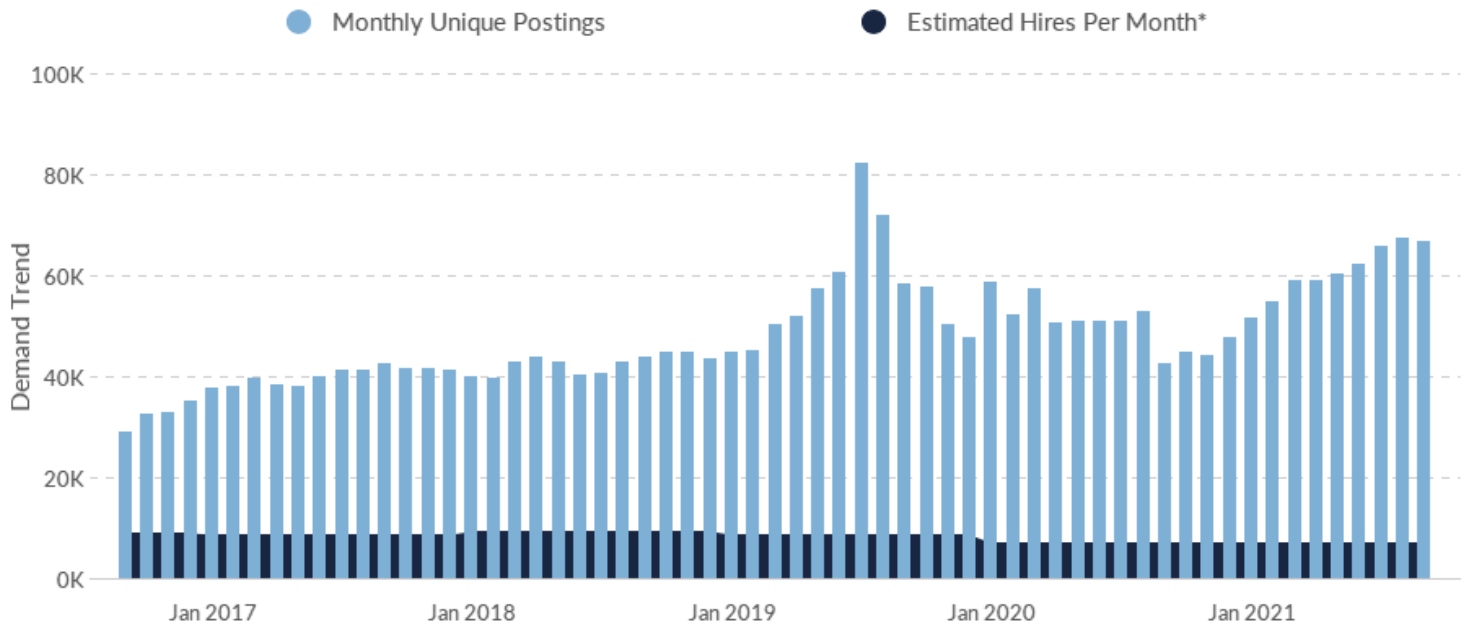The number of unique postings for this job from Jan 2021 to Sep 2021.

14,922 Employers Competing

All employers in the region who posted for this job from Jan 2021 to Sep 2021.

31 Day Median Duration

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

Occupation	Avg Monthly Postings (Jan 2021 - Sep 2021)	Avg Monthly Hires (Jan 2021 - Sep 2021)
Computer Occupations	43,236	4,282
Engineers	8,422	973
Social Scientists and Related Workers	2,274	259
Drafters, Engineering Technicians, and Mapping Technicians	1,504	571
Mathematical Science Occupations	1,470	305
Life Scientists	1,788	242
Life, Physical, and Social Science Technicians	1,449	424
Physical Scientists	630	190

*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.

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Top Companies	Unique Postings		Top Job Titles	Unique Postings	
Oracle Corporation	5,563	▰▰▰	School Psychologists	5,675	▰▰▰
The Judge Group Inc	2,205	▰	Software Engineers	3,817	▰▰
Capital One Financial Corporation	2,136	▰	DevOps Engineers	1,571	▰
AbbVie Inc.	2,101	▰	Software Developers	1,338	▰
Procare Therapy , Inc.	2,075	▰	Full Stack Software Engineers	1,299	▰
Hired	2,067	▰	Solutions Architects	1,201	▰
Sunbelt Staffing, LLC	1,964	▰	Java Developers	1,152	▰
Accenture PLC	1,962	▰	Project Managers	1,077	▰
Deloitte LLP	1,627	▰	Systems Engineers	1,045	▰
Abbott Laboratories	1,561	▰	.NET Developers	974	▰

Top Hard Skills

● Frequency in Job Postings   ● Frequency in Profiles
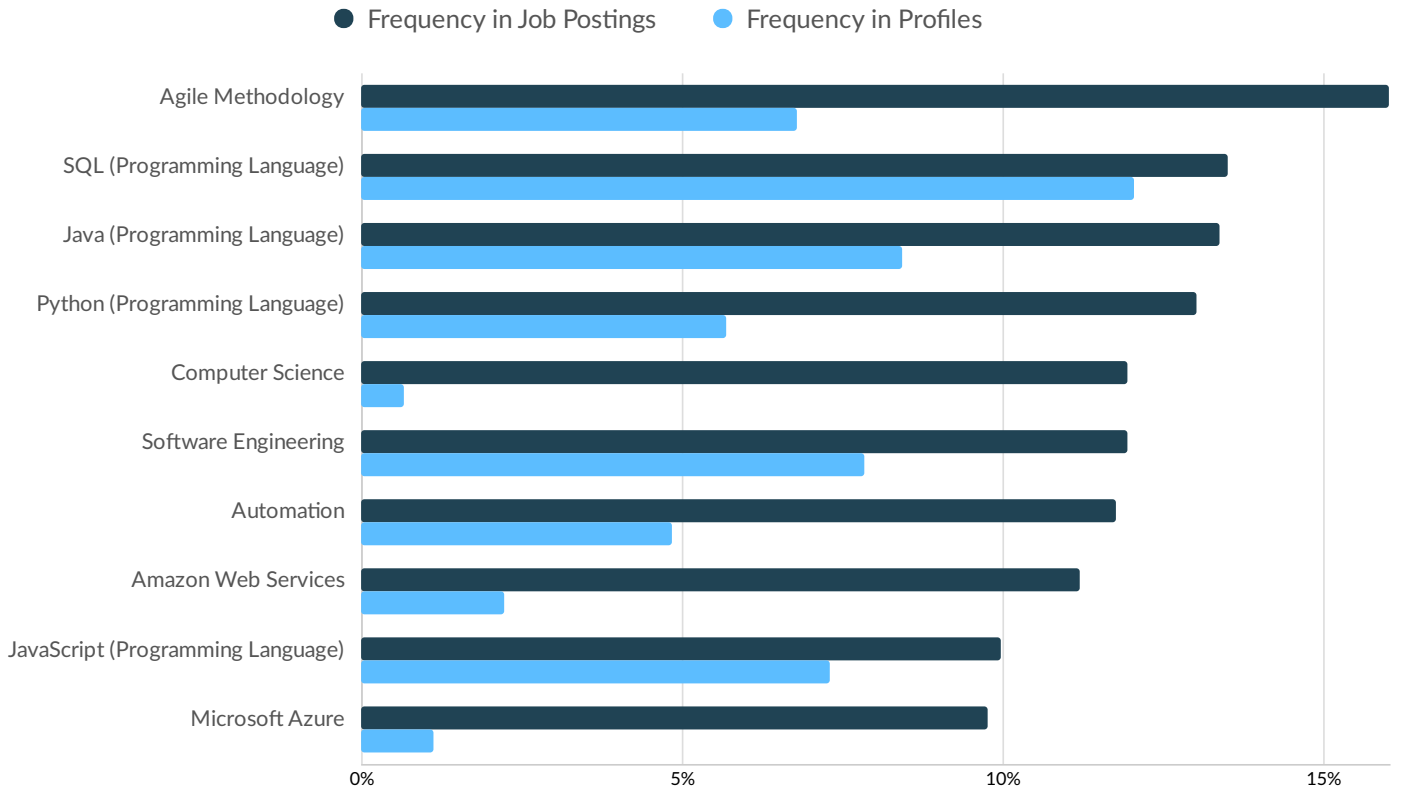
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Agile Methodology	34,575	16%	22,867	7%
SQL (Programming Language)	29,156	14%	40,474	12%
Java (Programming Language)	28,853	13%	28,332	8%
Python (Programming Language)	28,113	13%	19,102	6%
Computer Science	25,761	12%	2,198	1%
Software Engineering	25,756	12%	26,339	8%
Automation	25,379	12%	16,291	5%
Amazon Web Services	24,184	11%	7,460	2%
JavaScript (Programming Language)	21,518	10%	24,561	7%
Microsoft Azure	21,090	10%	3,802	1%

Top Common Skills

● Frequency in Job Postings   ● Frequency in Profiles
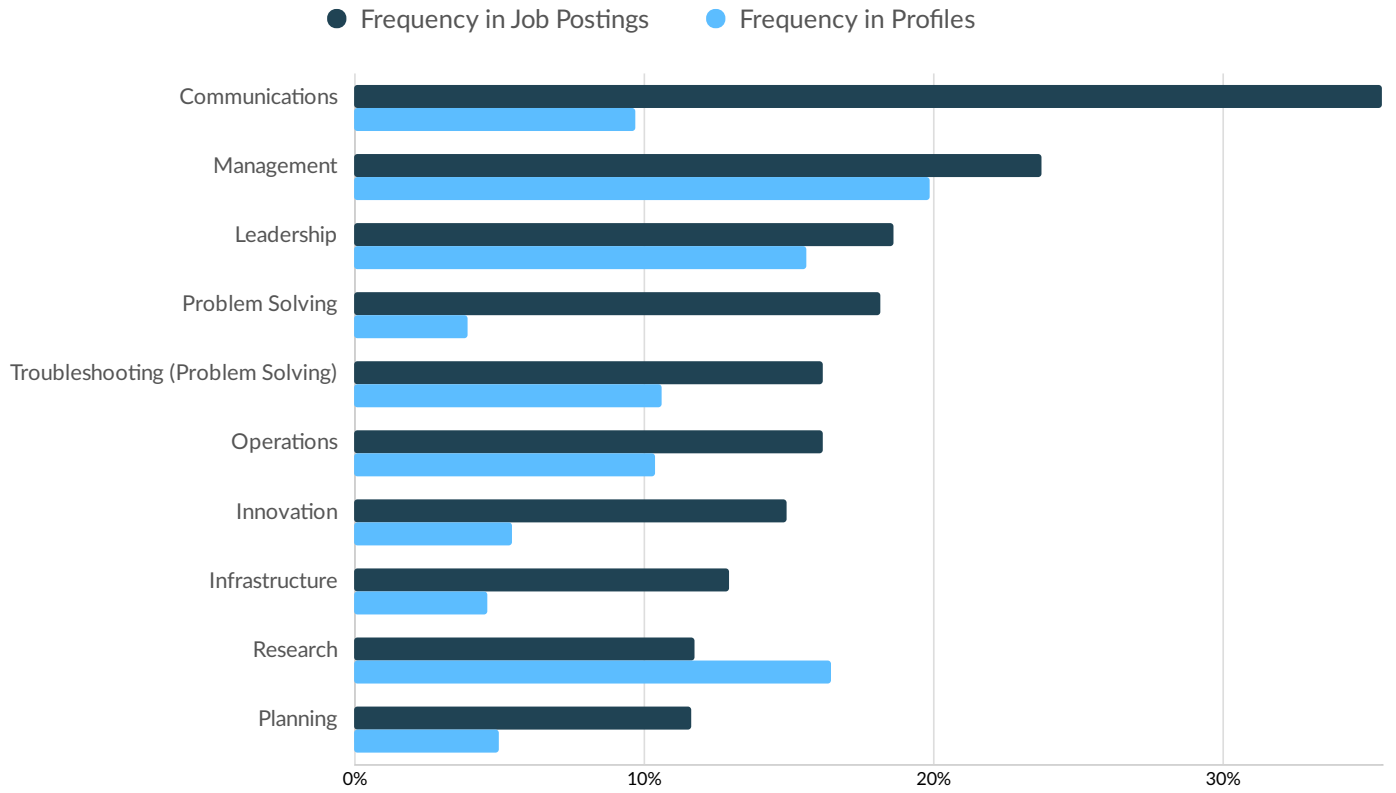
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Communications	76,598	35%	32,672	10%
Management	51,198	24%	66,893	20%
Leadership	40,187	19%	52,466	16%
Problem Solving	39,215	18%	13,113	4%
Troubleshooting (Problem Solving)	34,942	16%	35,685	11%
Operations	34,923	16%	34,911	10%
Innovation	32,281	15%	18,254	5%
Infrastructure	27,953	13%	15,541	5%
Research	25,421	12%	55,279	16%
Planning	25,099	12%	16,872	5%

Demographics

Retirement Risk Is About Average, While Overall Diversity Is About Average
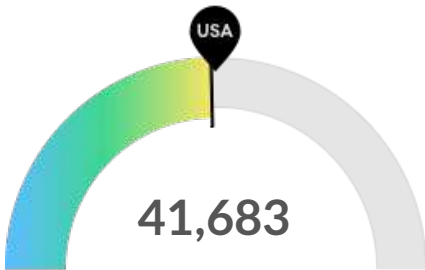
41,683

Retiring Soon

Retirement risk is about average in Chicago-Naperville-Elgin, IL-IN-WI. The national average for an area this size is 42,565* employees 55 or older, while there are 41,683 here.

82,215

Racial Diversity

Racial diversity is about average in Chicago-Naperville-Elgin, IL-IN-WI. The national average for an area this size is 76,709* racially diverse employees, while there are 82,215 here.
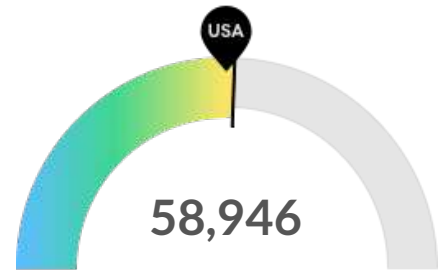
58,946

Gender Diversity

Gender diversity is about average in Chicago-Naperville-Elgin, IL-IN-WI. The national average for an area this size is 56,885* female employees, while there are 58,946 here.
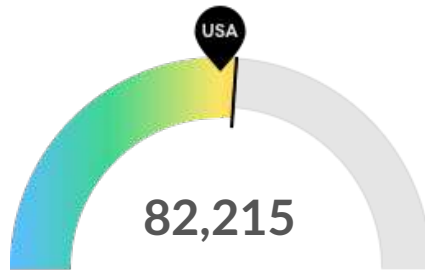
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Occupation Age Breakdown

	% of Jobs	Jobs
14-18	0.2%	331
19-24	5.7%	12,188
25-34	27.9%	60,128
35-44	26.0%	55,948
45-54	21.0%	45,228
55-64	15.3%	32,914
65+	4.1%	8,769
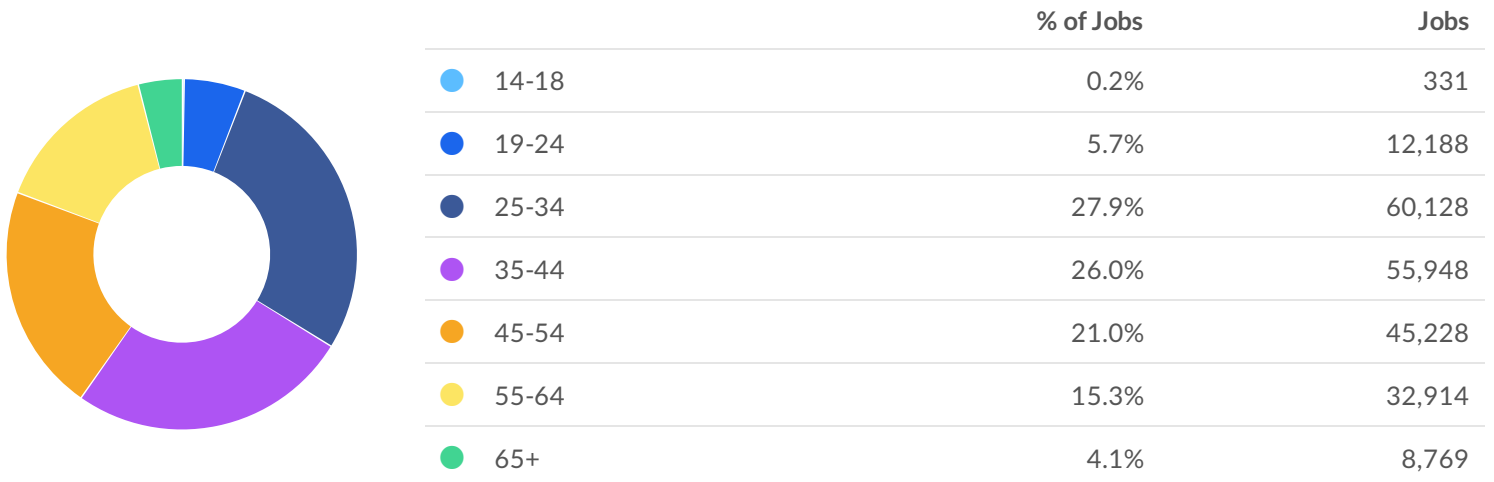
Occupation Race/Ethnicity Breakdown
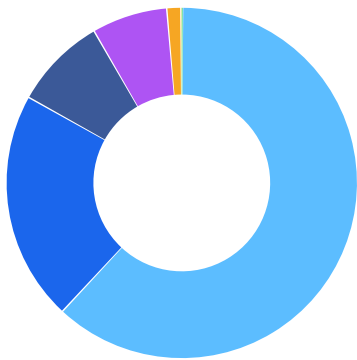
		% of Jobs	Jobs
●	White	61.9%	133,291
●	Asian	21.2%	45,672
●	Hispanic or Latino	8.6%	18,427
●	Black or African American	7.0%	15,008
●	Two or More Races	1.3%	2,790
●	American Indian or Alaska Native	0.1%	205
●	Native Hawaiian or Other Pacific Islander	0.1%	115

Occupation Gender Breakdown
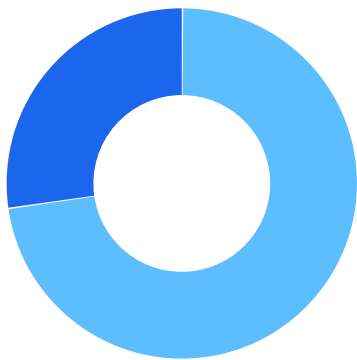
		% of Jobs	Jobs
●	Males	72.6%	156,561
●	Females	27.4%	58,946

Occupational Programs

358 Programs

Of the programs that can train for this job, 358 have produced completions in the last 5 years.

75,785 Completions (2020)

The completions from all regional institutions for all degree types.

16,362 Openings (2020)

The average number of openings for an occupation in the region is 593.

CIP Code	Top Programs	Completions (2020)	
24.0101	Liberal Arts and Sciences/Liberal Studies	15,849	
52.0201	Business Administration and Management, General	6,005	
30.0101	Biological and Physical Sciences	3,306	
42.0101	Psychology, General	2,796	
52.1301	Management Science	2,310	
26.0101	Biology/Biological Sciences, General	1,994	
11.0701	Computer Science	1,936	
24.0102	General Studies	1,822	
52.0101	Business/Commerce, General	1,775	
51.0707	Health Information/Medical Records Technology/Technician	1,672	

Top Schools	Completions (2020)
Northwestern University	5,905
University of Illinois Chicago	5,421
University of Chicago	5,123
DeVry University-Illinois	4,832
DePaul University	3,357
Loyola University Chicago	2,926
College of Lake County	2,850
William Rainey Harper College	2,526
Northern Illinois University	2,364
Moraine Valley Community College	2,351

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).

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.