BU's BEST

Biomedical Workforce Data 2020

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Labor Insight^{TM}

About

Labor Insight^{TM} is software offered by Burning Glass® Technologies. This tool allows educational institutions and others to analyze the job market so as to identify demand for specific jobs as well as the skills and credentials employers are seeking to fill the jobs. The data also enable analysis of regional demand and job trends. The information allows educational institutions to plan programming to meet employer needs. Moreover, trainees can use the data to identify training opportunities that will best prepare them to achieve their career goals.

As the search engine is constantly updated, the trend data (job postings/year) reported here doesn't necessarily match the exact values reported in previous years. For the sake of consistency, each search was rerun for all the years reported (2011-2019) with the identical search terms so that the values can be compared with the most recent data.

Workflow

1. Craft a search based on various criteria: industry, job type, required credentials, skill demand, experience, location, etc.

2. View reports: top employers, top job titles, top job skills, education/credentials, job demand maps, job trends, etc.

Notes

All searches were performed such that the reported jobs require, prefer or suggest that the applicant earned a PhD.
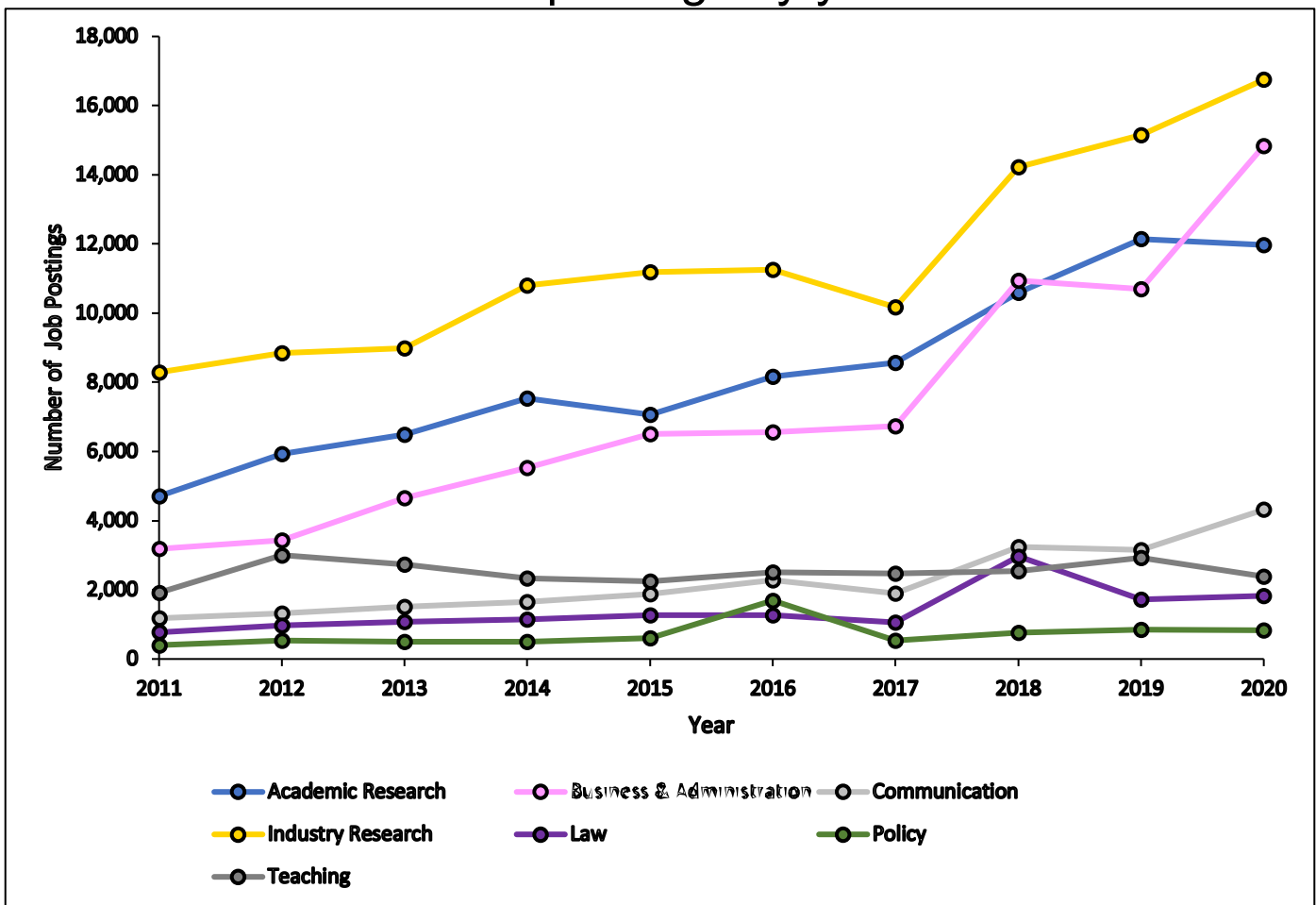
Caveats & Disclaimers

Date ranges are January 2020 – December 2020 for job searches.

As the data are generated through job advertisements, small and midsized companies hiring small numbers of employees might not be listed in "top employers" but should not be ruled out.

Career Paths:
Job Trends Summary

Job postings by year

Number of Job Postings

18,000

16,000

14,000

12,000

10,000

8,000

6,000

4,000

2,000

0

2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Year

- Academic Research
- Business & Administration
- Communication
- Industry Research
- Law
- Policy
- Teaching
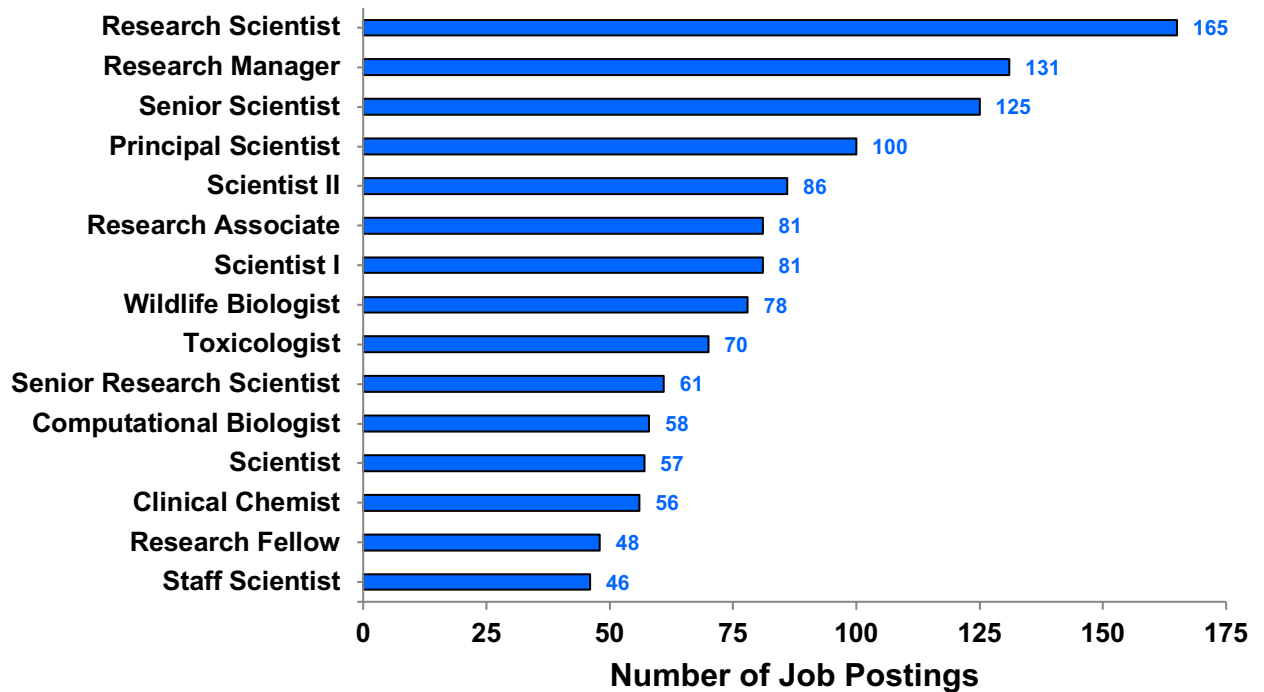
Industry Research

Number of job postings (nationwide): 16,748

Top Job Titles: Industry Research 2020

Job Title	Number of Job Postings
Research Scientist	165
Research Manager	131
Senior Scientist	125
Principal Scientist	100
Scientist II	86
Research Associate	81
Scientist I	81
Wildlife Biologist	78
Toxicologist	70
Senior Research Scientist	61
Computational Biologist	58
Scientist	57
Clinical Chemist	56
Research Fellow	48
Staff Scientist	46

Specialized (Hard) Skills: Industry Research 2020

Skill	Number of Job Postings
Biology	5,501
Experiments	5,395
Chemistry	4,941
Biochemistry	4,070
Molecular Biology	4,058
Data Analysis	3,438
Biotechnology	2,865
Immunology	2,695
Project Management	2,400
Drug Discovery	2,229
Experimental Design	2,206
Product Development	2,124
Cancer Knowledge	2,072
Cell Biology	2,046
Drug Development	1,852
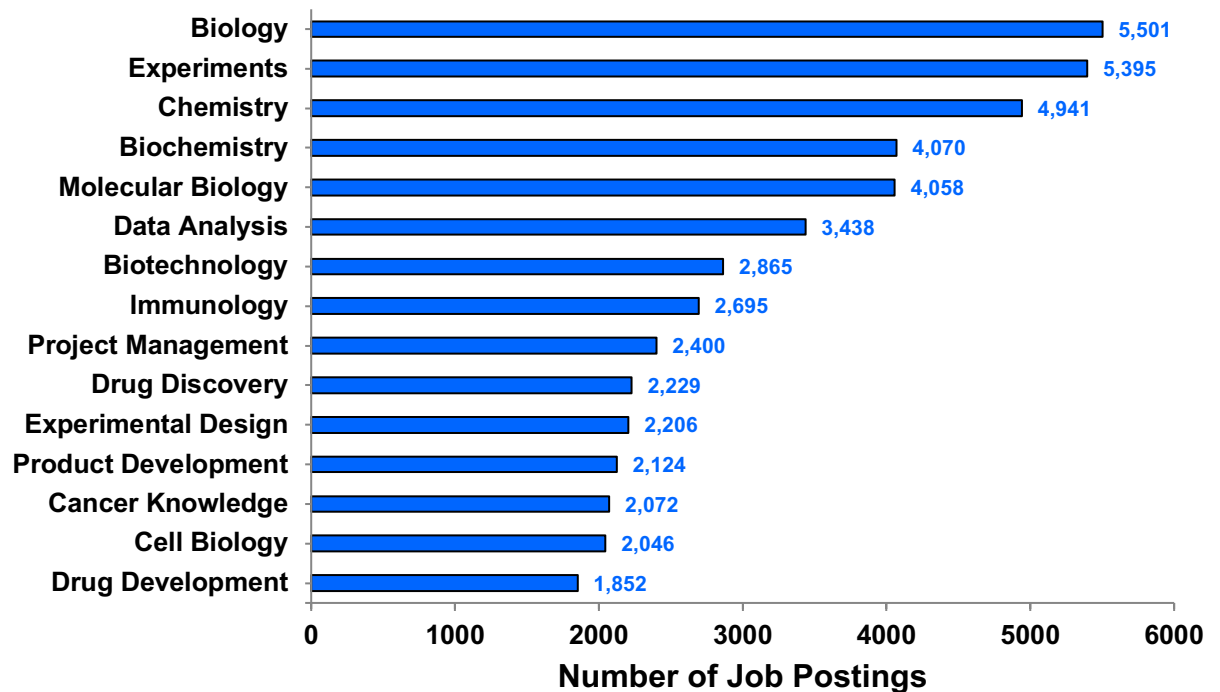
Baseline (Soft) Skills: Industry Research 2020

Skill	Number of Job Postings
Research	15,317
Communication Skills	8,985
Teamwork/Collaboration	7,352
Problem Solving	3,728
Writing/Written Communication	3,658
Troubleshooting	3,309
Organizational Skills	3,015
Creativity	2,867
Detail-Oriented	2,709
Planning	2,651
Presentation Skills	2,009
Multitasking	1,446
Mentoring	1,173
Oral Communication	1,165
English Proficiency	1,136

Number of Job Postings

Computer Skills: Industry Research 2020

Skill	Number of Job Postings
Microsoft Excel	1,635
Python	1,258
Microsoft Office	1,134
Microsoft PowerPoint	1,002
Microsoft Word	710
SAS	649
R	512
MATLAB	459
C++	350
SQL	282
Linux	274
Data Visualization	260
Statistical Programming	241
Java	228
PERL Scripting Language	215

Number of Job Postings
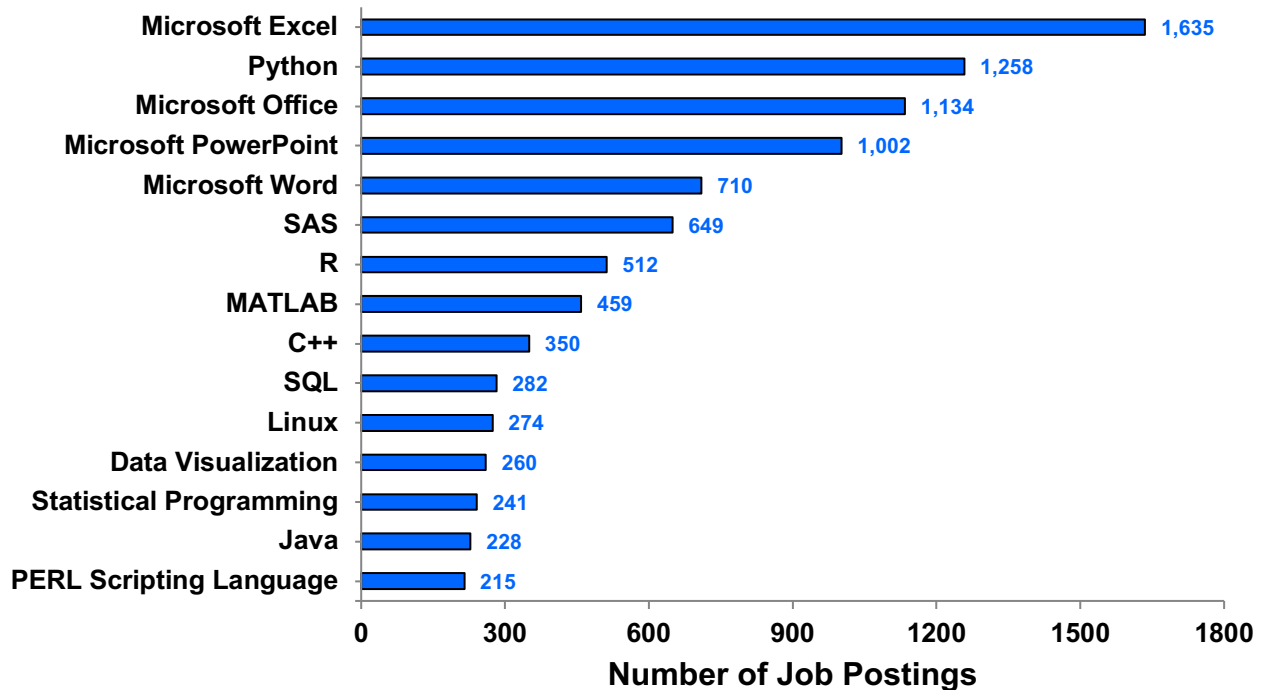
Top Employers: Industry Research 2020

Employer	Number of Job Postings
Thermo Fisher Scientific	553
Genentech	383
Pfizer	366
Johnson & Johnson	357
Bristol-Myers Squibb	327
Merck & Company	287
AstraZeneca	257
AbbVie	212
US Government	212
Anthem Blue Cross	171
Gilead Sciences	169
Bayer Corporation	152
Eurofins Scientific	148
Amgen	144
Takeda Pharmaceuticals NA, Inc.	143

Number of Job Postings
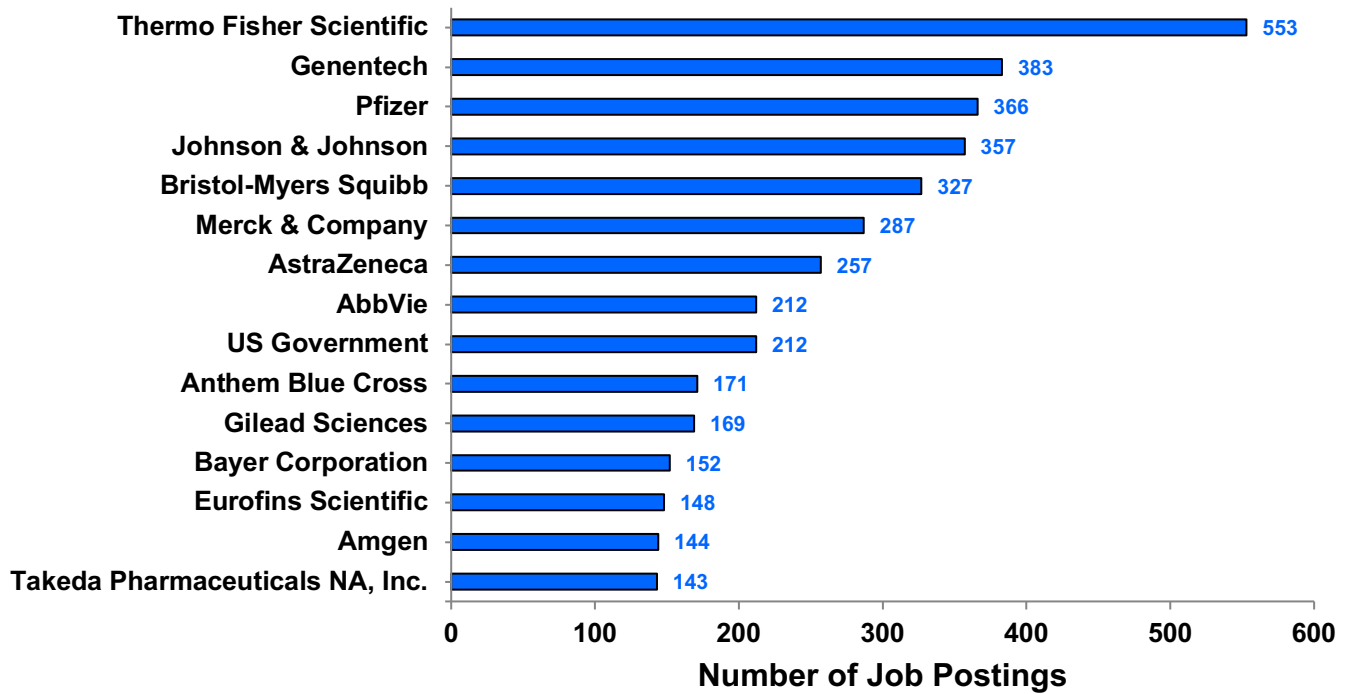
# Job Postings by Year: Industry Research 2011-2020
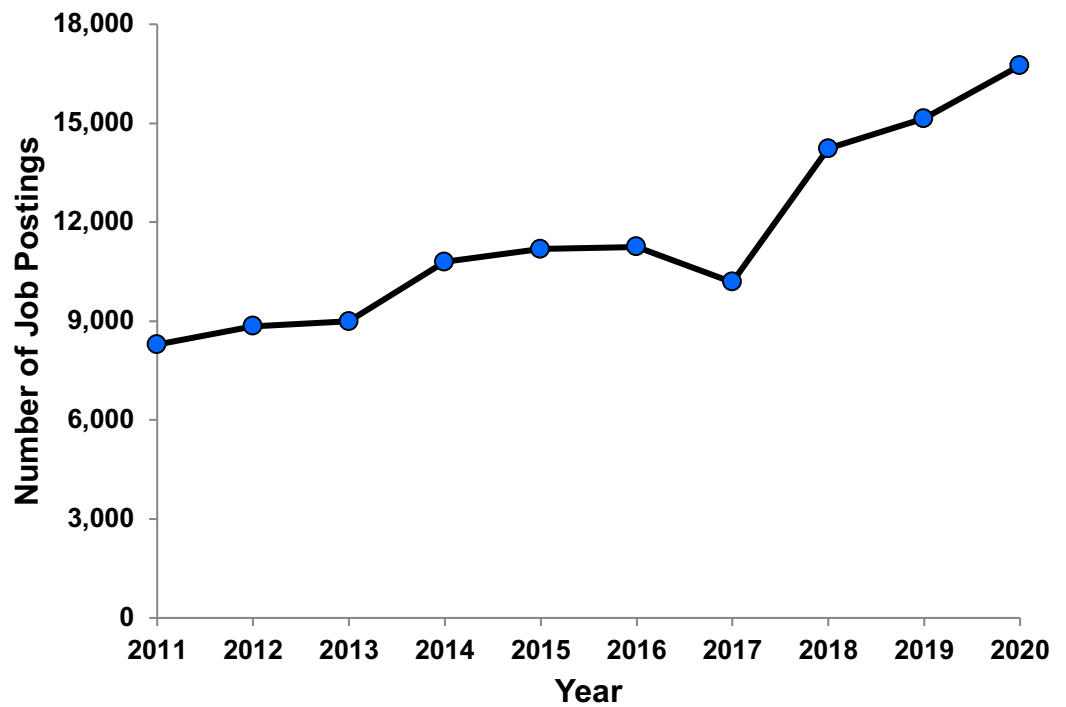
High Demand Areas by MSA: Industry Research 2020
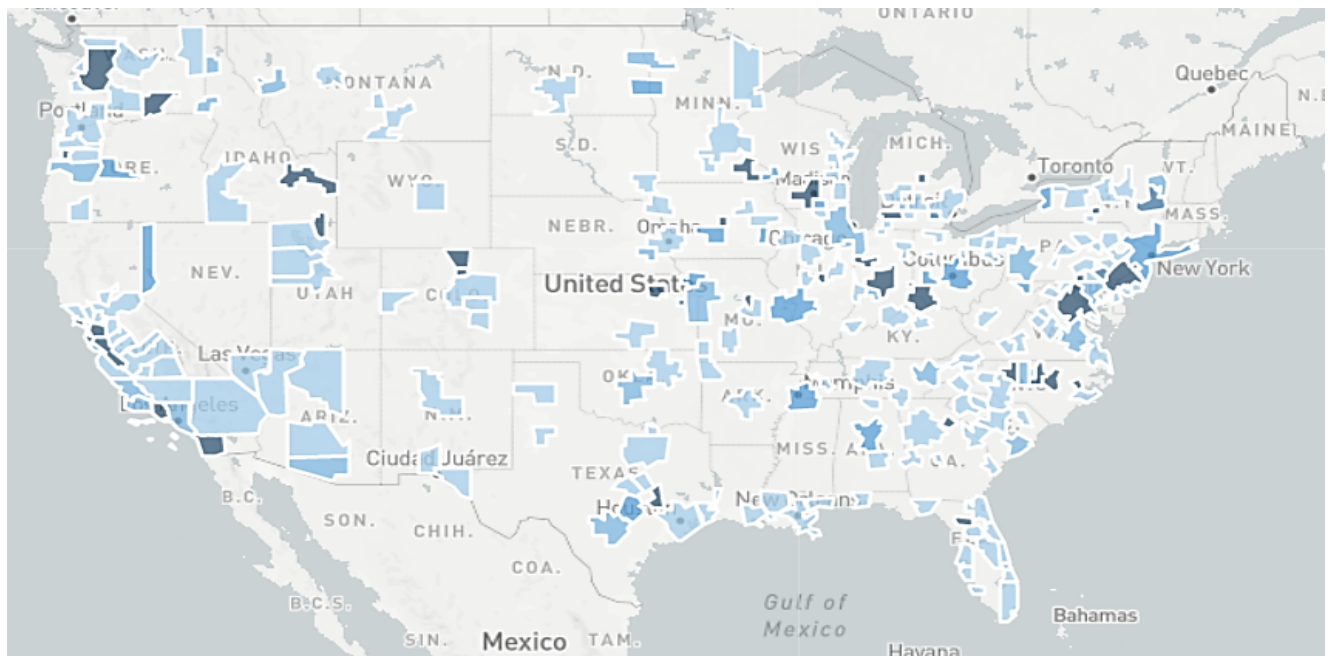
TOP 15 HIRING REGIONS

Metro Area	Job Postings
San Francisco-Oakland-Hayward, CA (Metropolitan Statistical Area)	2,421
Boston-Cambridge-Nashua, MA-NH (Metropolitan NECTA)	2,295
Washington-Arlington-Alexandria, DC-VA-MD-WV (Metropolitan Statistical Area)	1,247
San Diego-Carlsbad, CA (Metropolitan Statistical Area)	1,215
New York-Newark-Jersey City, NY-NJ-PA (Metropolitan Statistical Area)	1,124
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD (Metropolitan Statistical Area)	825
Los Angeles-Long Beach-Anaheim, CA (Metropolitan Statistical Area)	507
Seattle-Tacoma-Bellevue, WA (Metropolitan Statistical Area)	397
Chicago-Naperville-Elgin, IL-IN-WI (Metropolitan Statistical Area)	354
San Jose-Sunnyvale-Santa Clara, CA (Metropolitan Statistical Area)	285
Durham-Chapel Hill, NC (Metropolitan Statistical Area)	260
Indianapolis-Carmel-Anderson, IN (Metropolitan Statistical Area)	210
Cincinnati, OH-KY-IN (Metropolitan Statistical Area)	192
St. Louis, MO-IL (Metropolitan Statistical Area)	164
Trenton, NJ (Metropolitan Statistical Area)	154

High Demand Areas by State: Industry Research 2020
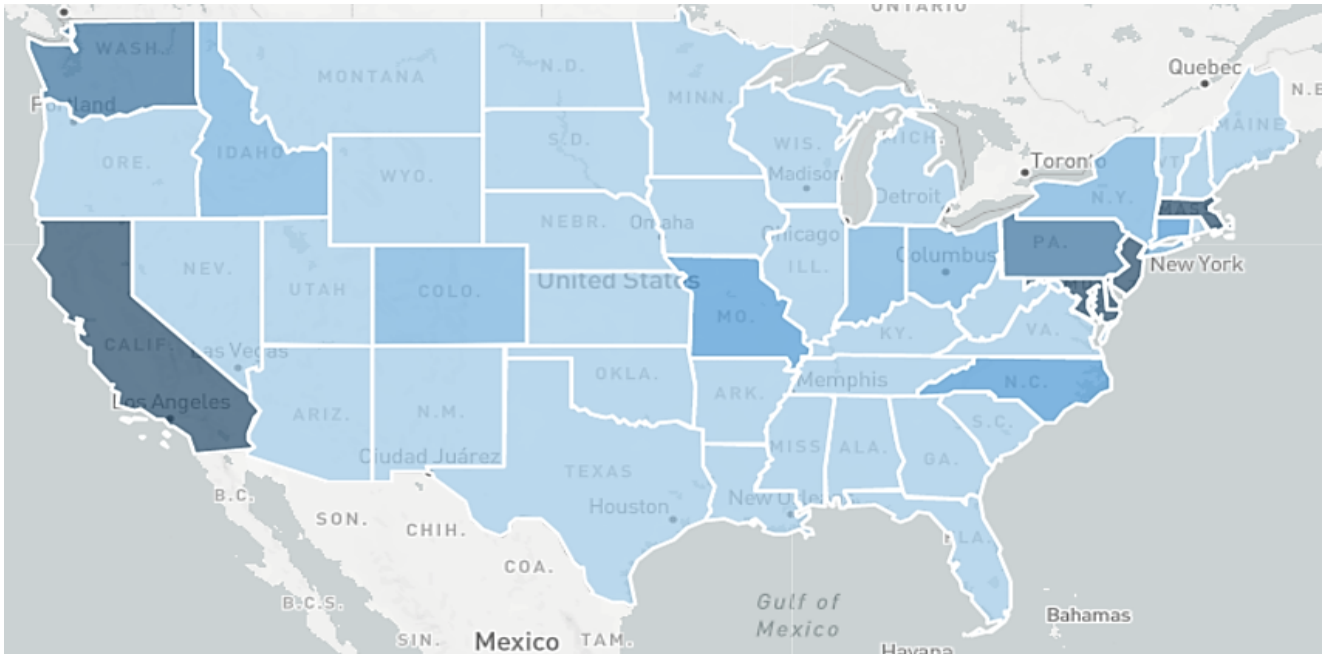
TOP 15 HIRING REGIONS

State	Job Postings
California	4,761
Massachusetts	2,425
Maryland	1,113
Pennsylvania	863
New Jersey	751
New York	738
North Carolina	578
Washington	504
Texas	496
Ohio	471
Illinois	403
Missouri	272
Indiana	260
Virginia	236
Florida	229