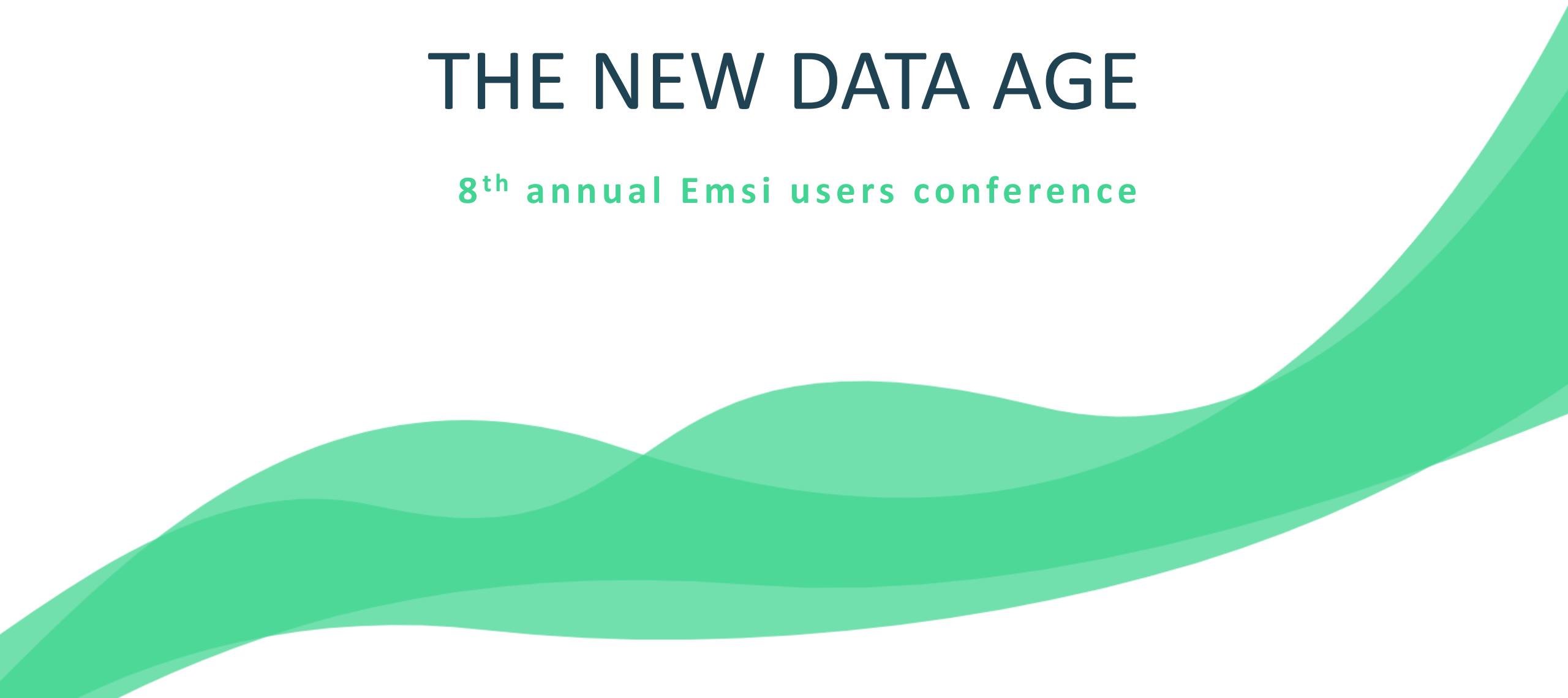




THE NEW DATA AGE

8th annual Emsi users conference



Current economic conditions

News: September 7, 2018



Strong Job Growth Continues

The [August jobs report shows continued, strong job growth](#) with 201,000 jobs created and an unemployment rate holding at 3.9%. More than 4 million jobs have been created since November 2016.



Economy Overview

325,401,909

Population (2017)

Population grew by 11,403,565 over the last 5 years and is projected to grow by 8,789,675 over the next 5 years.

159,180,936

Jobs (2017)

Jobs grew by 10,716,674 over the last 5 years and are projected to grow by 9,492,023 over the next 5 years.

\$53.9K

Median Household Income (2015)

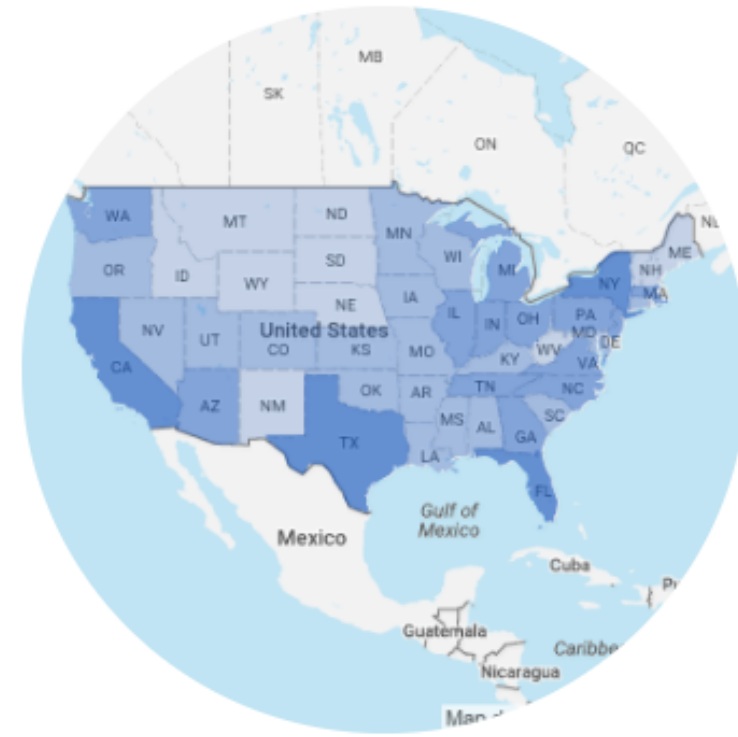
The national median household income is \$53.9K. [?](#)

As of 2017 the region's population increased by 3.6% since 2012, growing by 11,403,565. Population is expected to increase by 2.7% between 2017 and 2022, adding 8,789,675.

From 2012 to 2017, jobs increased by 7.2% in the United States from 148,464,262 to 159,180,936. As the number of jobs increased, the labor force participation rate decreased from 61.5% to 61.3% between 2012 and 2017.

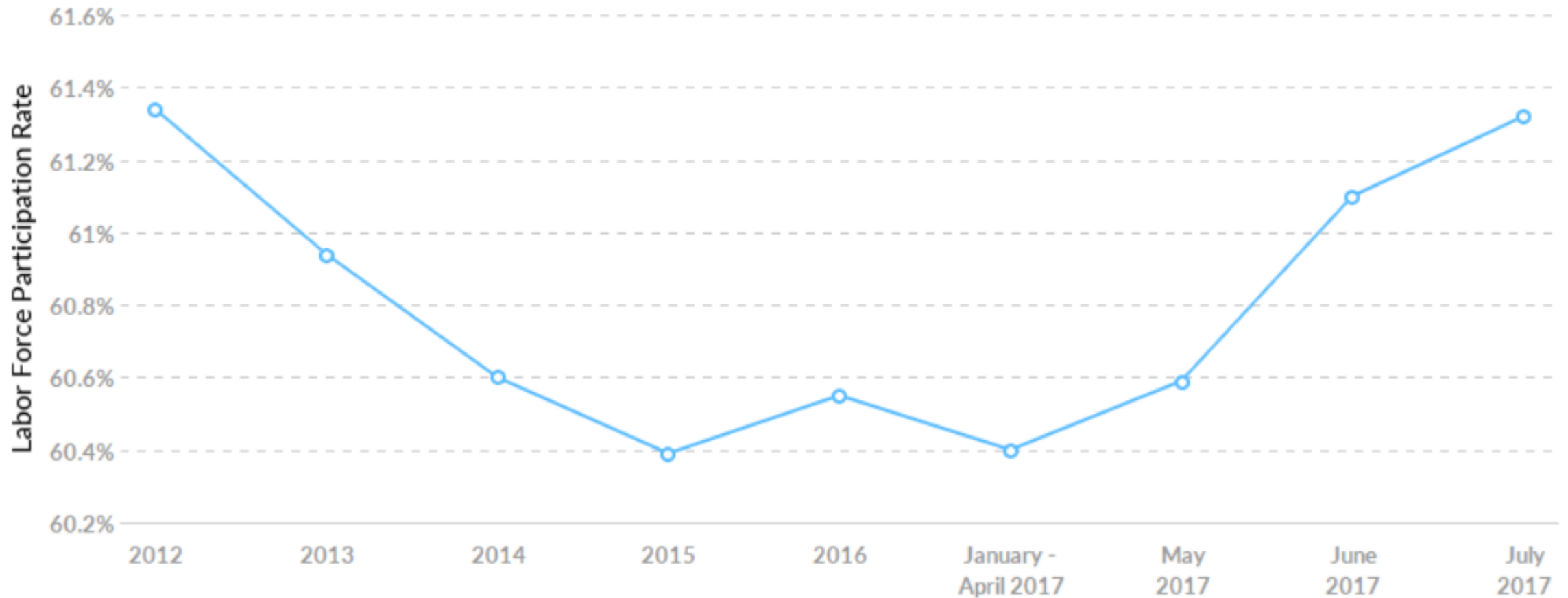
Concerning educational attainment, 18.4% of United States residents possess a Bachelor's Degree, and 7.9% hold an Associate's Degree.

The top three industries in 2017 are Restaurants and Other Eating Places, Education and Hospitals (Local Government), and Local Government, Excluding Education and Hospitals.

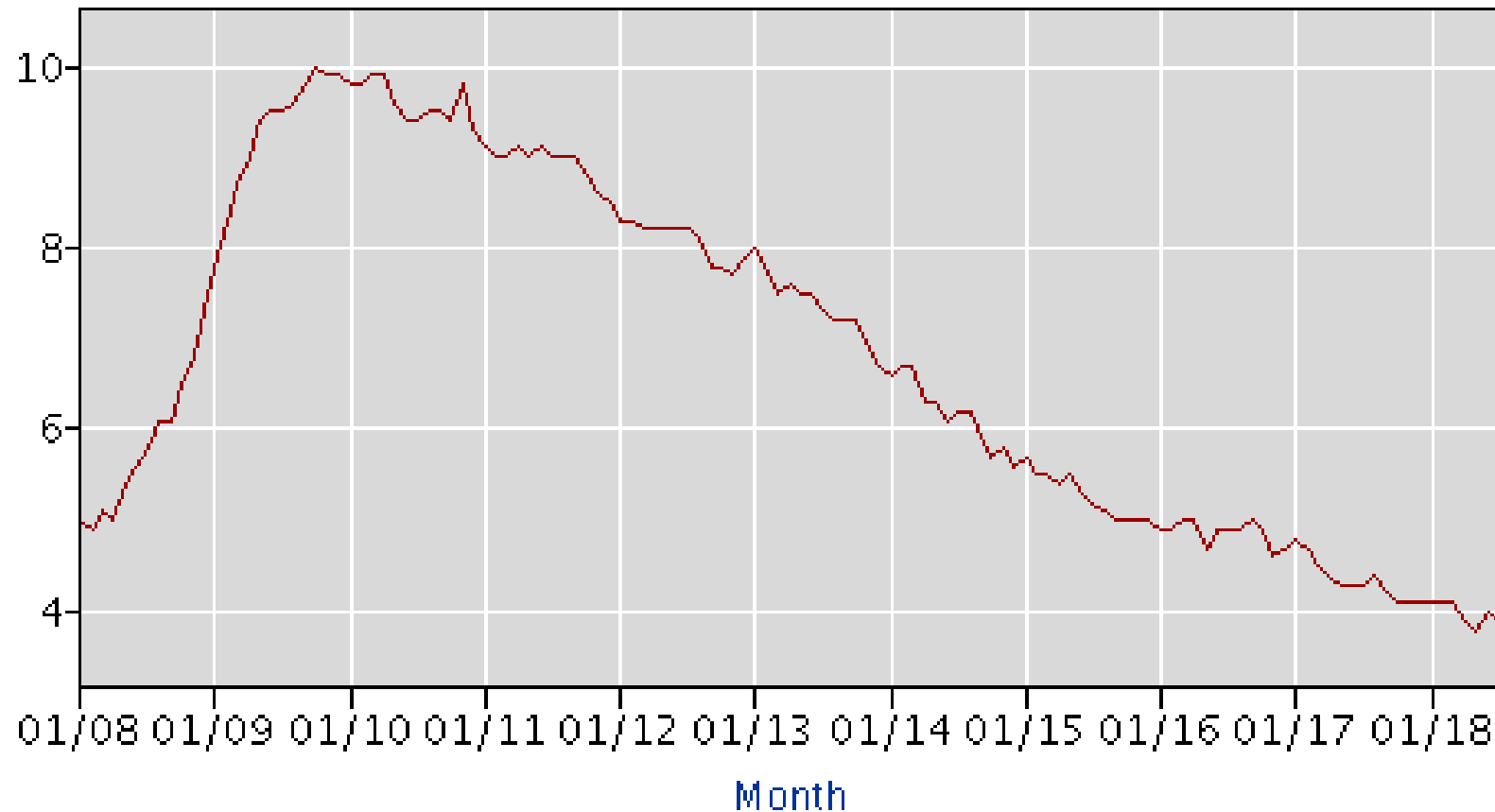


US labor participation rate

Labor Force Participation Rate Trends



Unemployment and underemployment



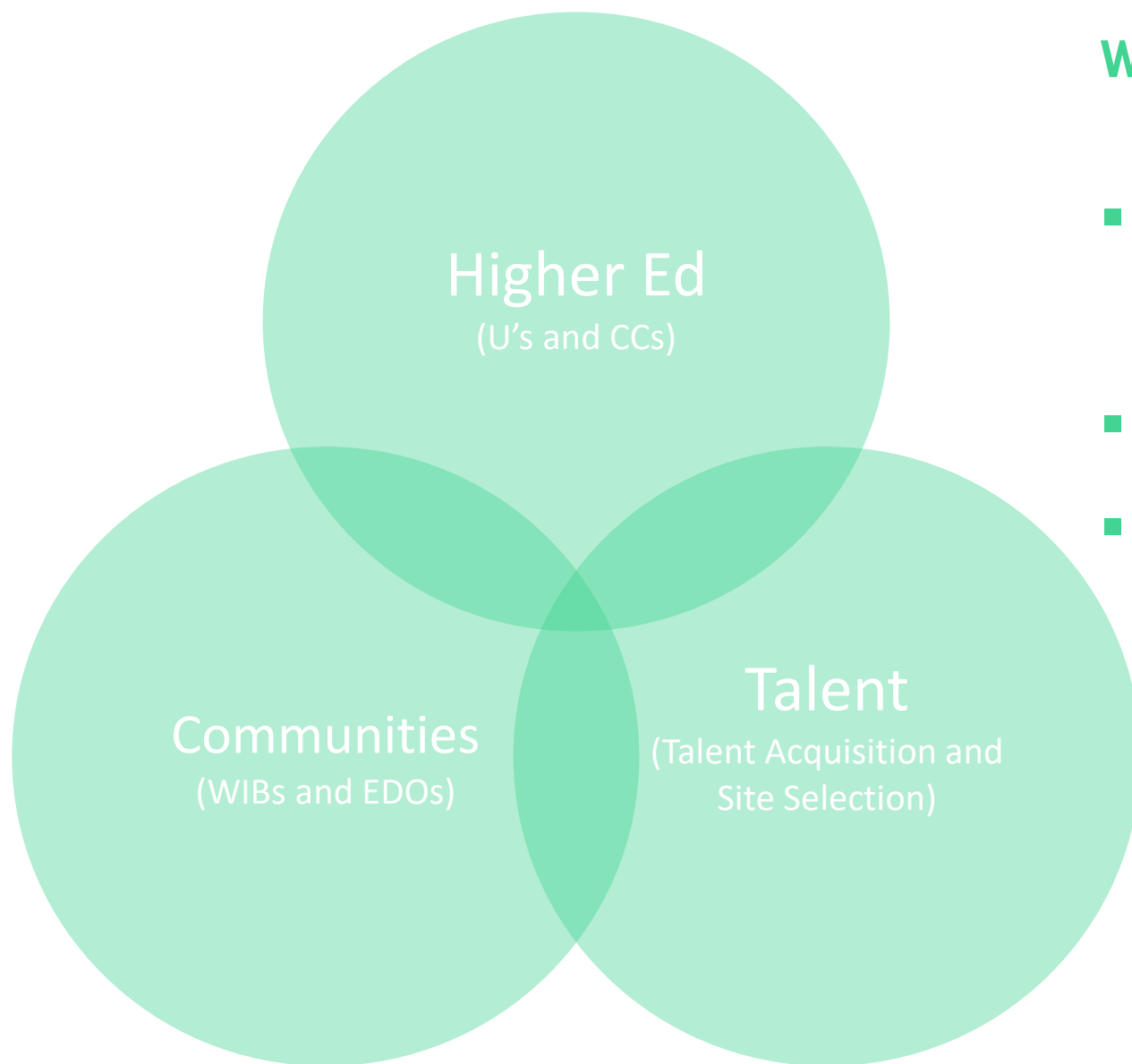
Wages are even starting to grow

US WAGES AND SALARIES GROWTH



SOURCE: TRADINGECONOMICS.COM | U.S. BUREAU OF ECONOMIC ANALYSIS



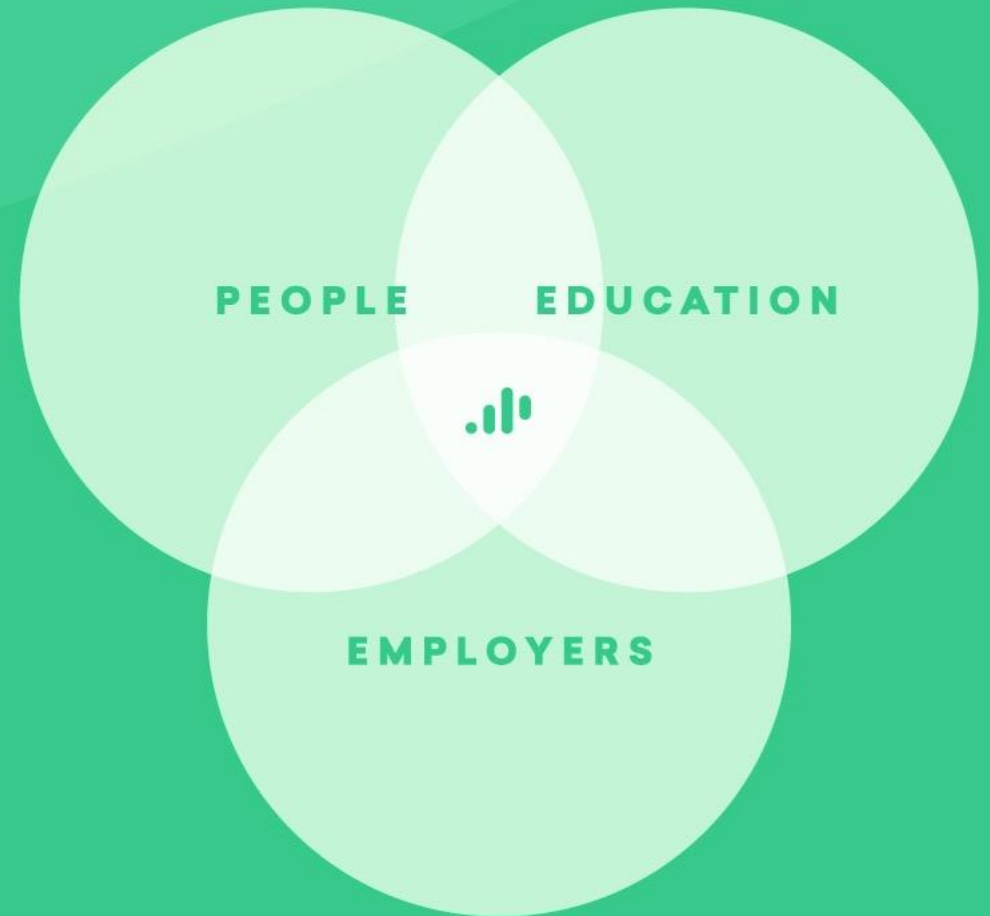


WHY ALL OF YOU ARE HERE

- “The war for talent is over, and talent won”
– Carl Camden, CEO, Kelly Services
- Tight economies require collaboration
- The need is greater than ever to give students and employees the right skills to be successful so that business has the talent it needs



Emsi's mission is to use
labor market data
to inform and connect
people, education,
and employers.



Core Values



Bless the Customer

We provide data and services that help people promote economic prosperity in their organizations and communities.



Bless the Employee

We strive to have a culture in which our employees become better people by working here and subsequently bless others financially and otherwise.



Bless the Shareholder

We believe that blessing customers and employees is the best way to drive profitability and long-term stability for the shareholders.

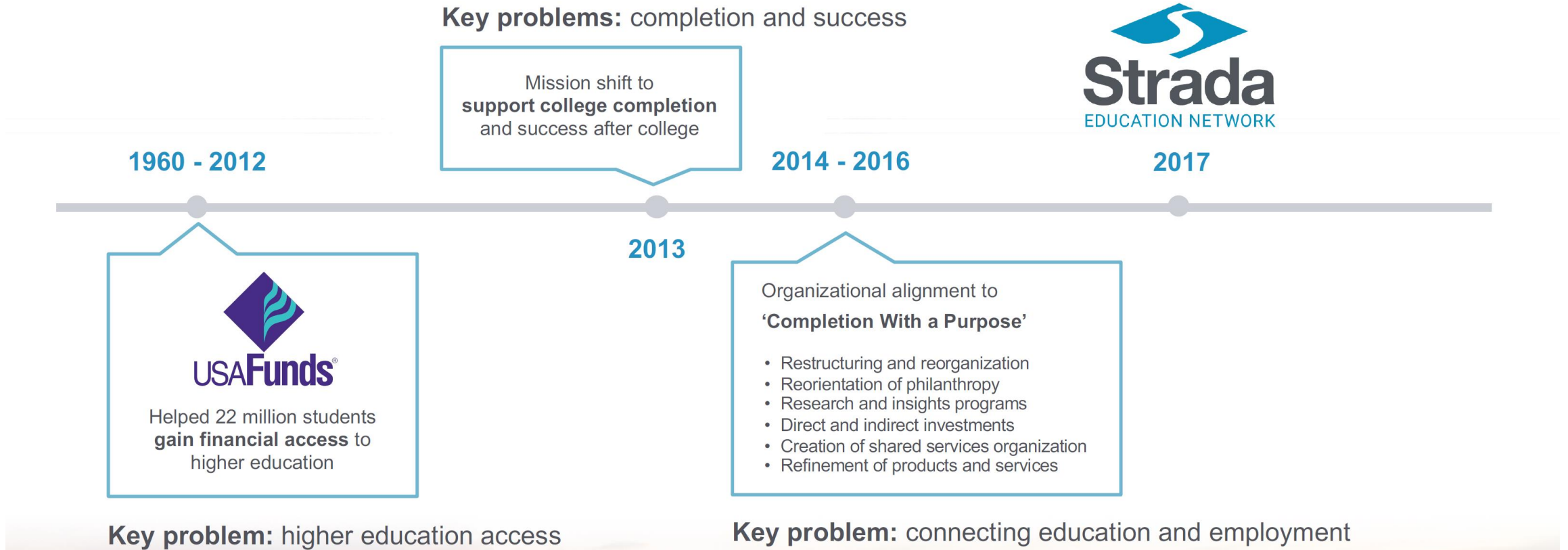


OUR MISSION

Strada Education Network is a national nonprofit dedicated to improving lives by catalyzing more direct and promising pathways between education and employment. We engage with partners across education, nonprofits, business and government to focus relentlessly on students' success throughout all phases of their working lives.



Our Pathways to Impact



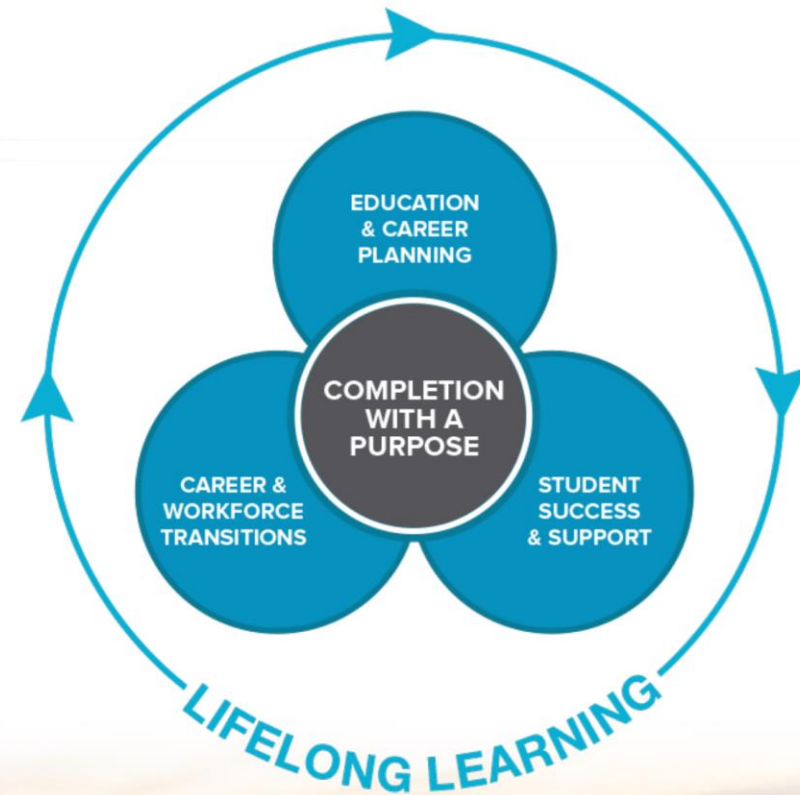
Strengthening Education to Employment Pathways Across the Student Lifecycle

Our Theories of Change:

Improving **Education & Career Planning** by providing tools and guidance to students, so they can choose the best education path that leads to a meaningful career.

Bolstering **Student Success & Support** systems to provide students the resources they need to succeed in the classroom despite obstacles to learning.

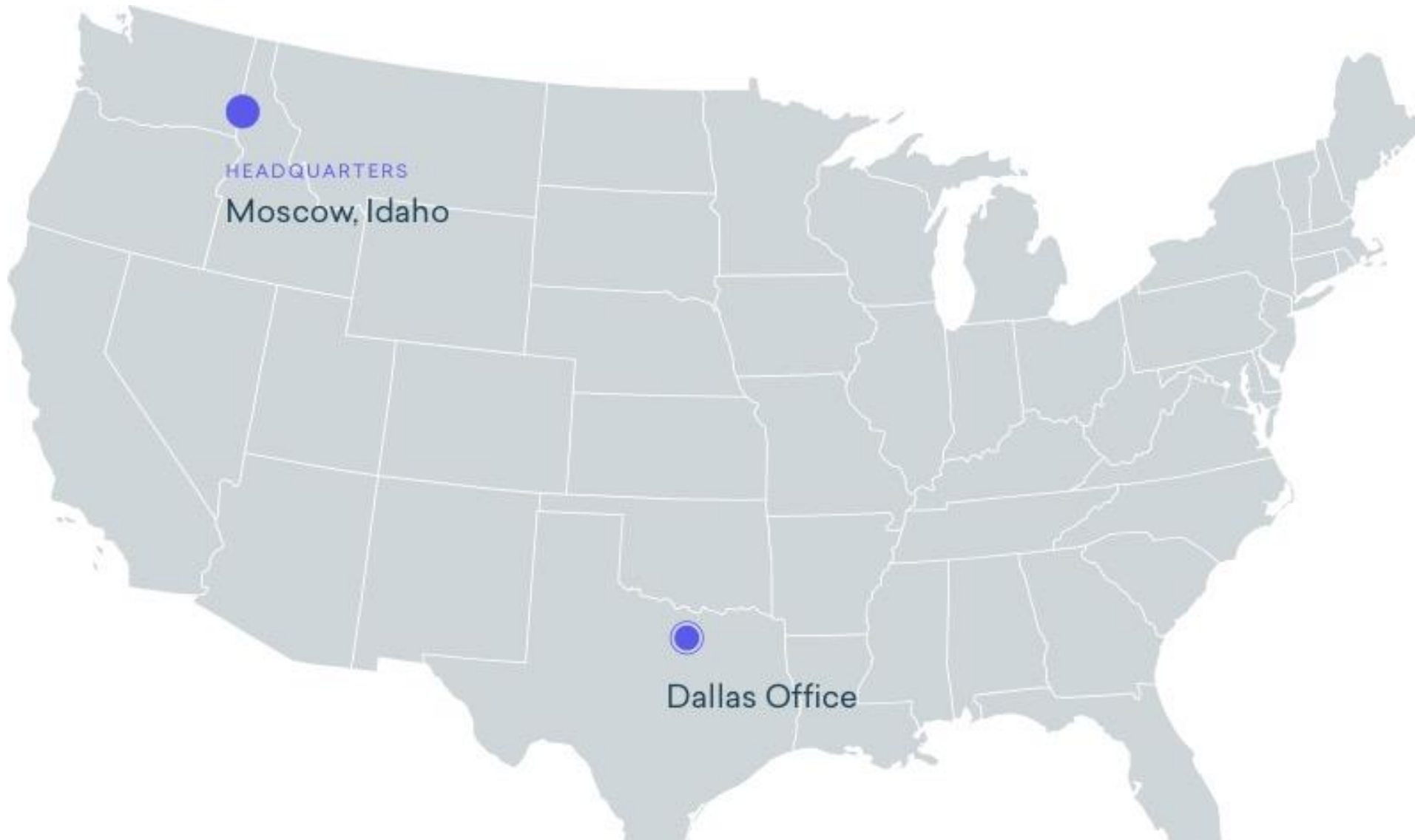
Supporting **Career & Workforce Transitions** by strengthening institution-employer connections, so students graduate with the knowledge and skills needed to succeed in the workplace, and adult learners develop and maintain the skills they need throughout their career.



Since the last Emsi conference

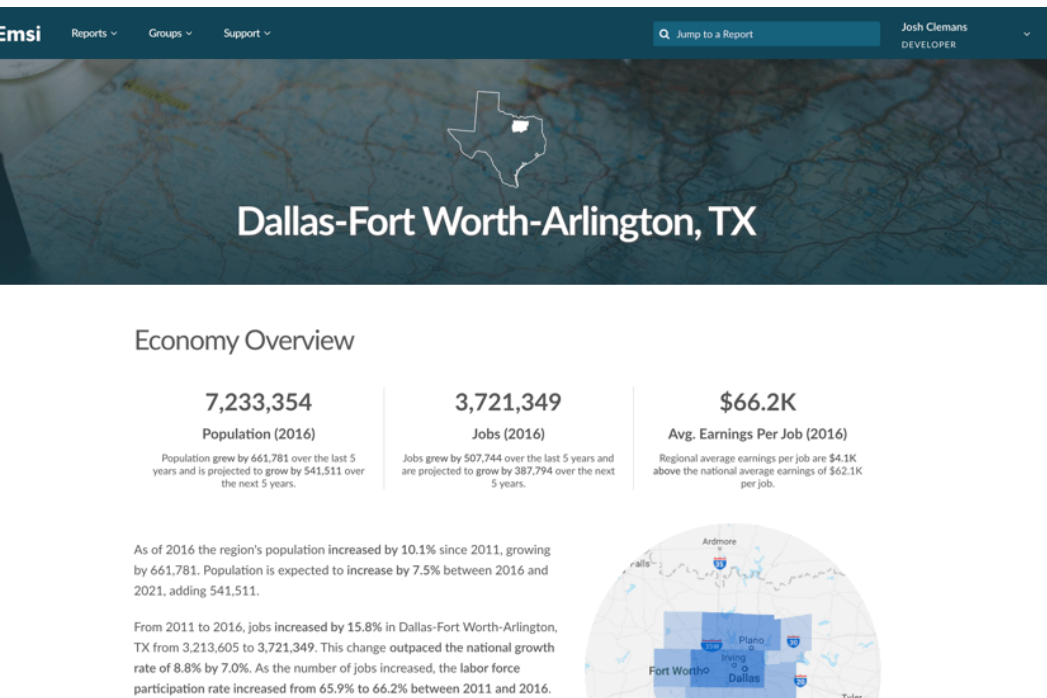


Emsi Offices



ENTERPRISE

Location Economics

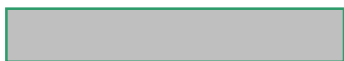


We track labor trends, determine client-specific growth metrics and scientifically uncover the hidden geographies of opportunity.



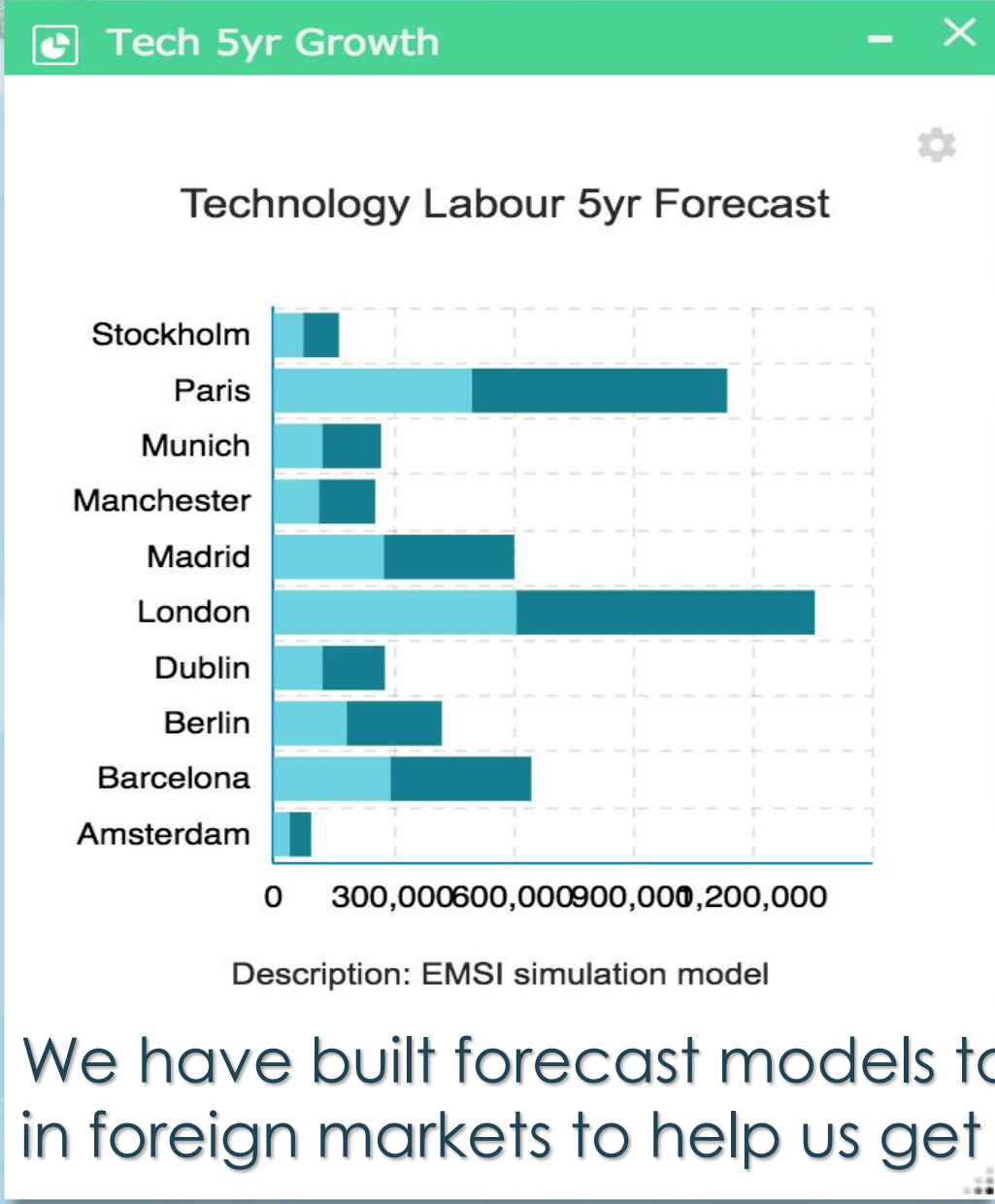
We are building global analytics that cross country boundaries to compare market to market for talent

Legend

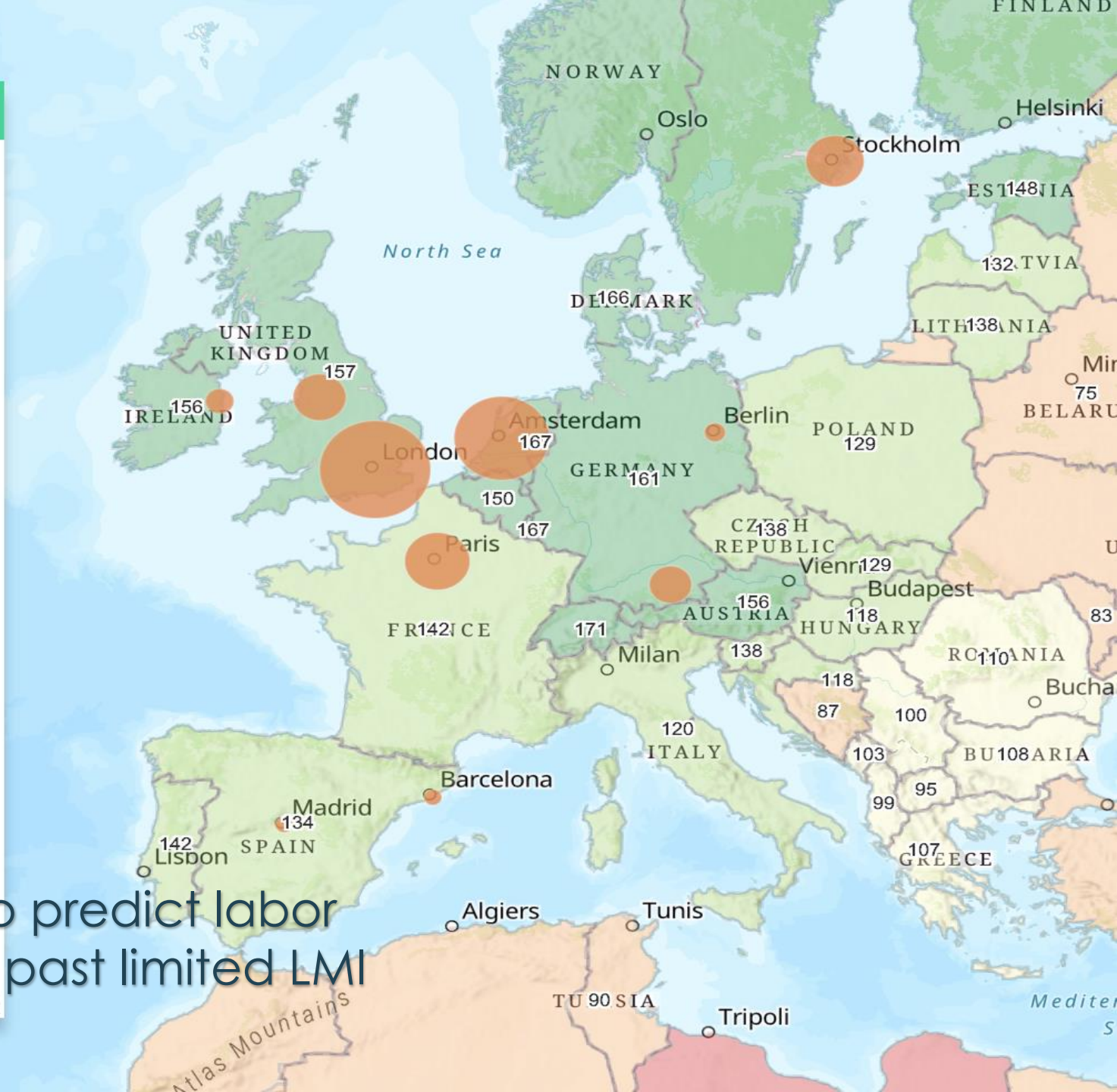


Game Design Opportunity Index

- > 122.8
- 110
- 100
- 90
- < 80.5



We have built forecast models to predict labor in foreign markets to help us get past limited LMI



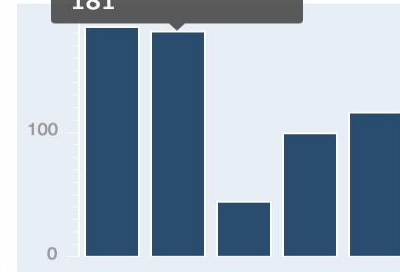


We've built a monitoring tool to help companies see best markets for growth of specific talent and are connecting that to real time data and competitive insights.

Competitive Effect 802
Cost of Living Index 99
Diversity Index 116

Breakdown of Opportunity Index

The opportunity index in Kansas City, MO-KS is 125, which ranks 25 out of 917. The index is the **Job Growth Index** (weighted equally) in the chart below.

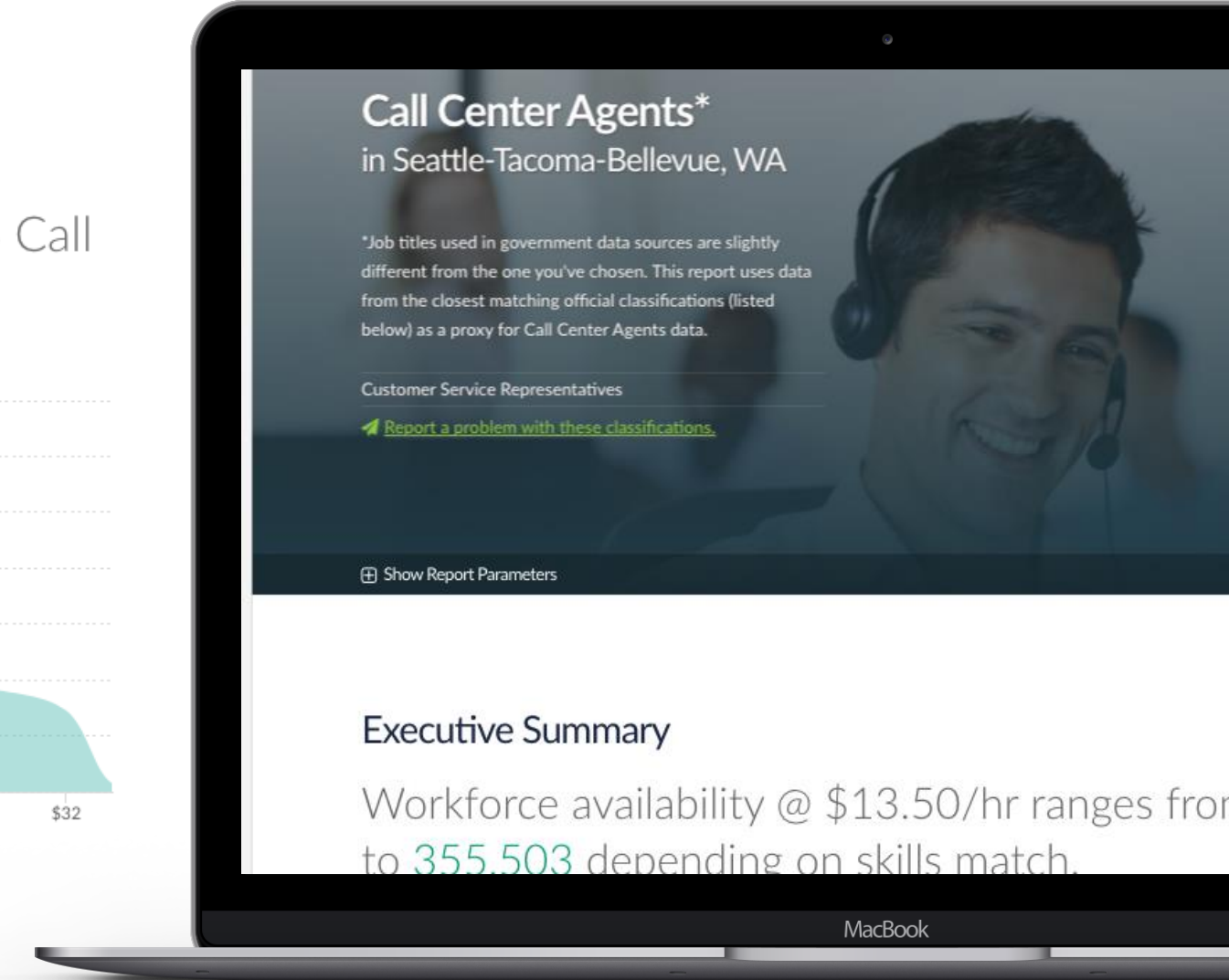
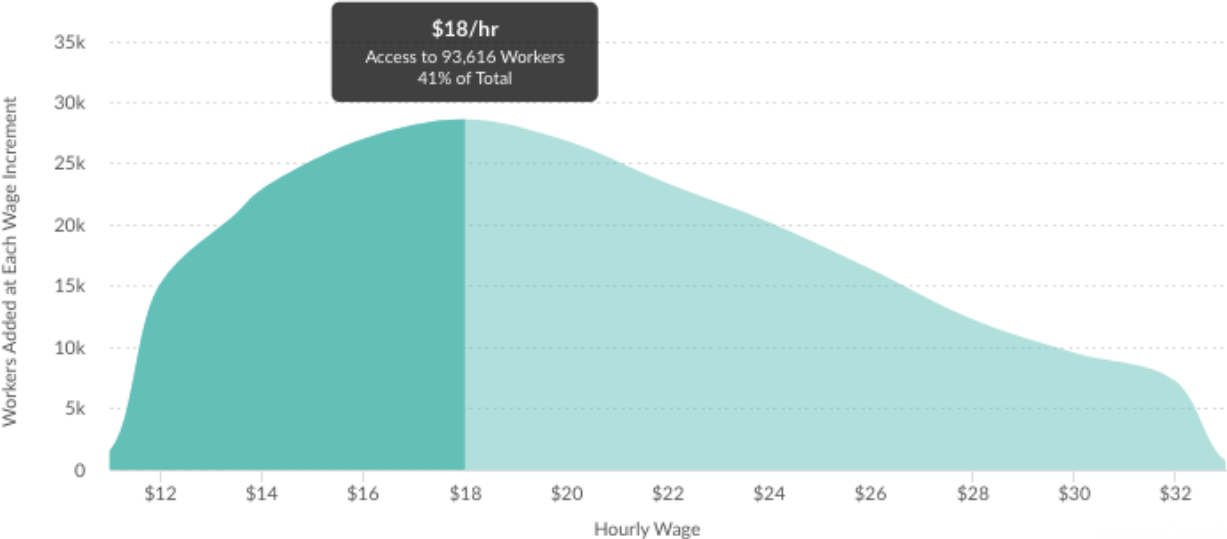


[Zoom to](#)



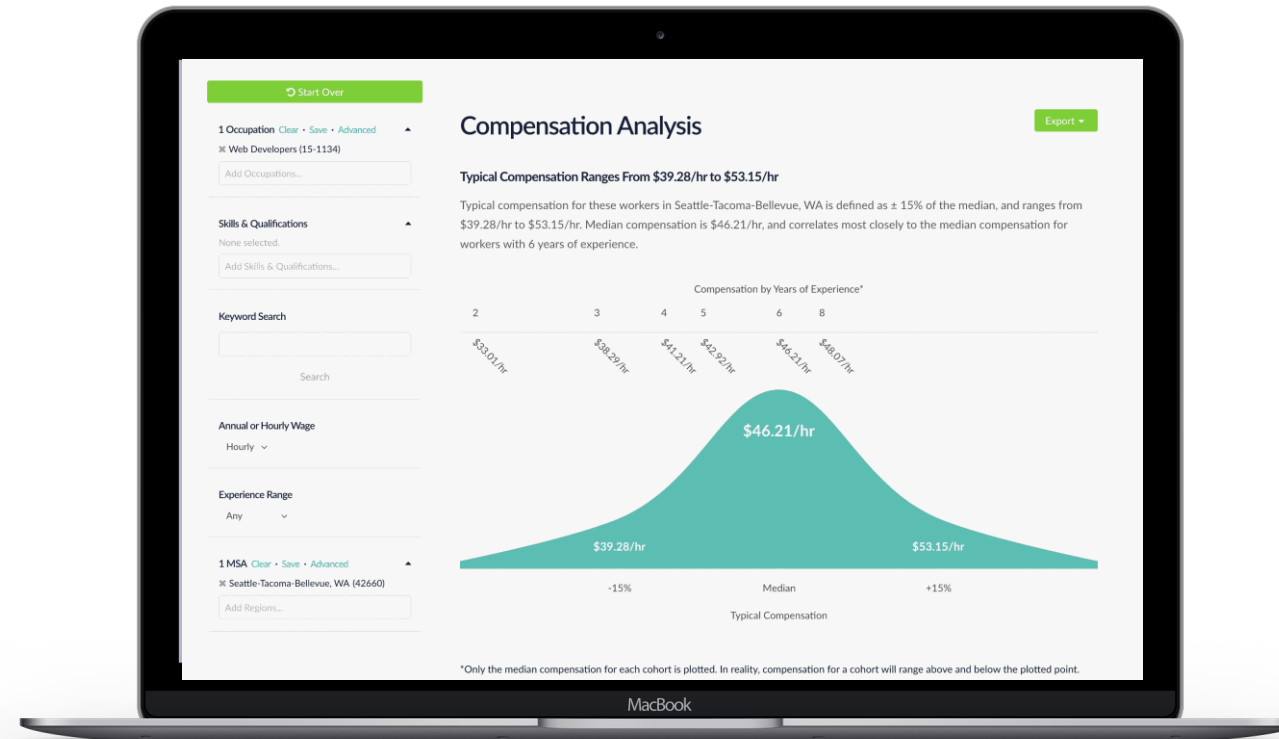
Availability by Wage

At \$13.50/hr, your available workforce is 31,686 Call Center Agents & similar workers.

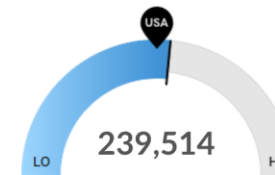
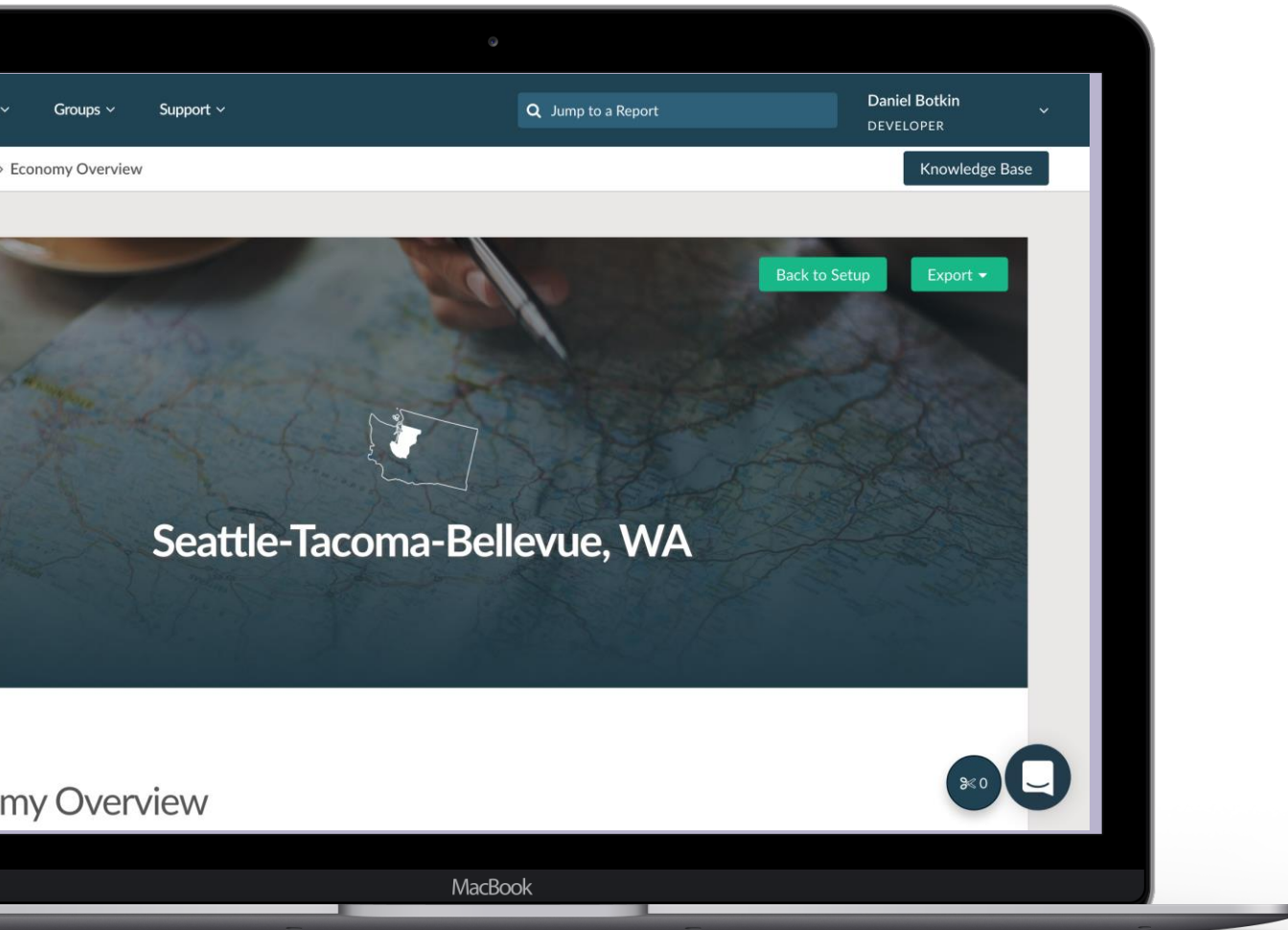


Deeper Compensation

Combining the best of structural government data with millions of observations from job postings

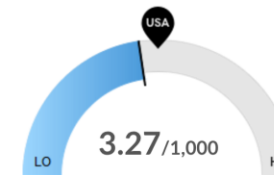


New, customer-requested data



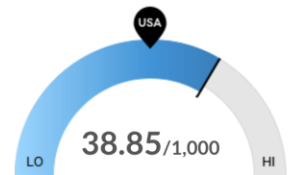
Veterans

Seattle-Tacoma-Bellevue, WA has 239,514 veterans. The national average for an area this size is 218,711.



Violent Crime

Seattle-Tacoma-Bellevue, WA has 3.27 violent crimes per 1,000 people. The national rate is 3.75 per 1,000 people.

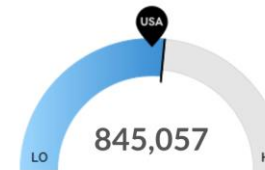


Property Crime

Seattle-Tacoma-Bellevue, WA has 38.85 property crimes per 1,000 people. The national rate is 24.22 per 1,000 people.

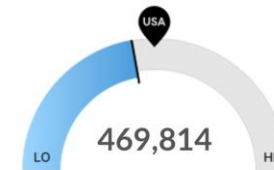
[Jump to Detailed Table with Age, Gender, and Diversity Data](#)

Population Characteristics



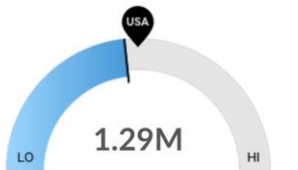
Millennials

Seattle-Tacoma-Bellevue, WA has 845,057 millennials (ages 20-34). The national average for an area this size is 774,840.



Retiring Soon


Retirement risk is low in Seattle-Tacoma-Bellevue, WA. The national average for an area this size is 554,422 people 65 or older, while there are 469,814 here.



Racial Diversity

Racial diversity is about average in Seattle-Tacoma-Bellevue, WA. The national average for an area this size is 1,427,827 racially diverse people, while there are 1,294,422 here.

Company Talent Profile

 Emsi Company Talent Profile

Back to Setup

Remove from My Reports

Export

General Electric Company

All Job Types in All Regions

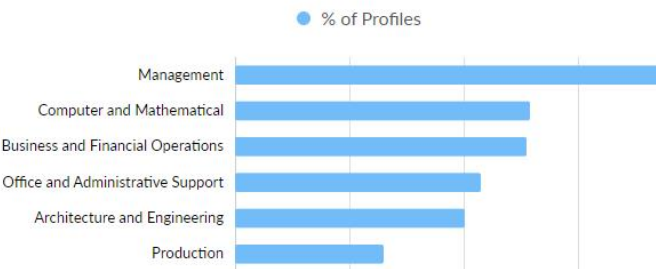
Companies:

General Electric Company

What jobs do they employ currently?

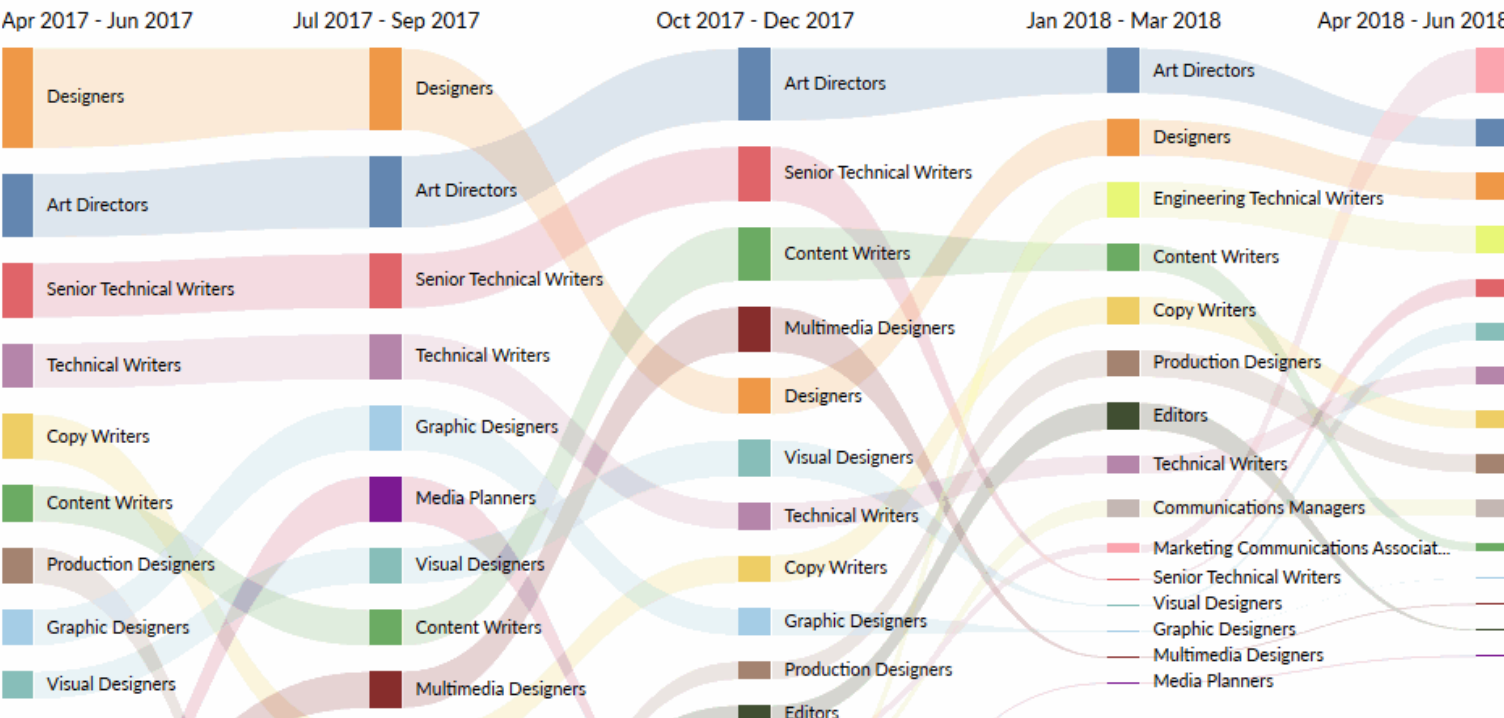
Top 15 Job Types Currently Employed at General Electric Company

By analyzing the online profiles of people who work at General Electric Company, we can estimate the structure within the company. This helps us understand how the company is currently structured.

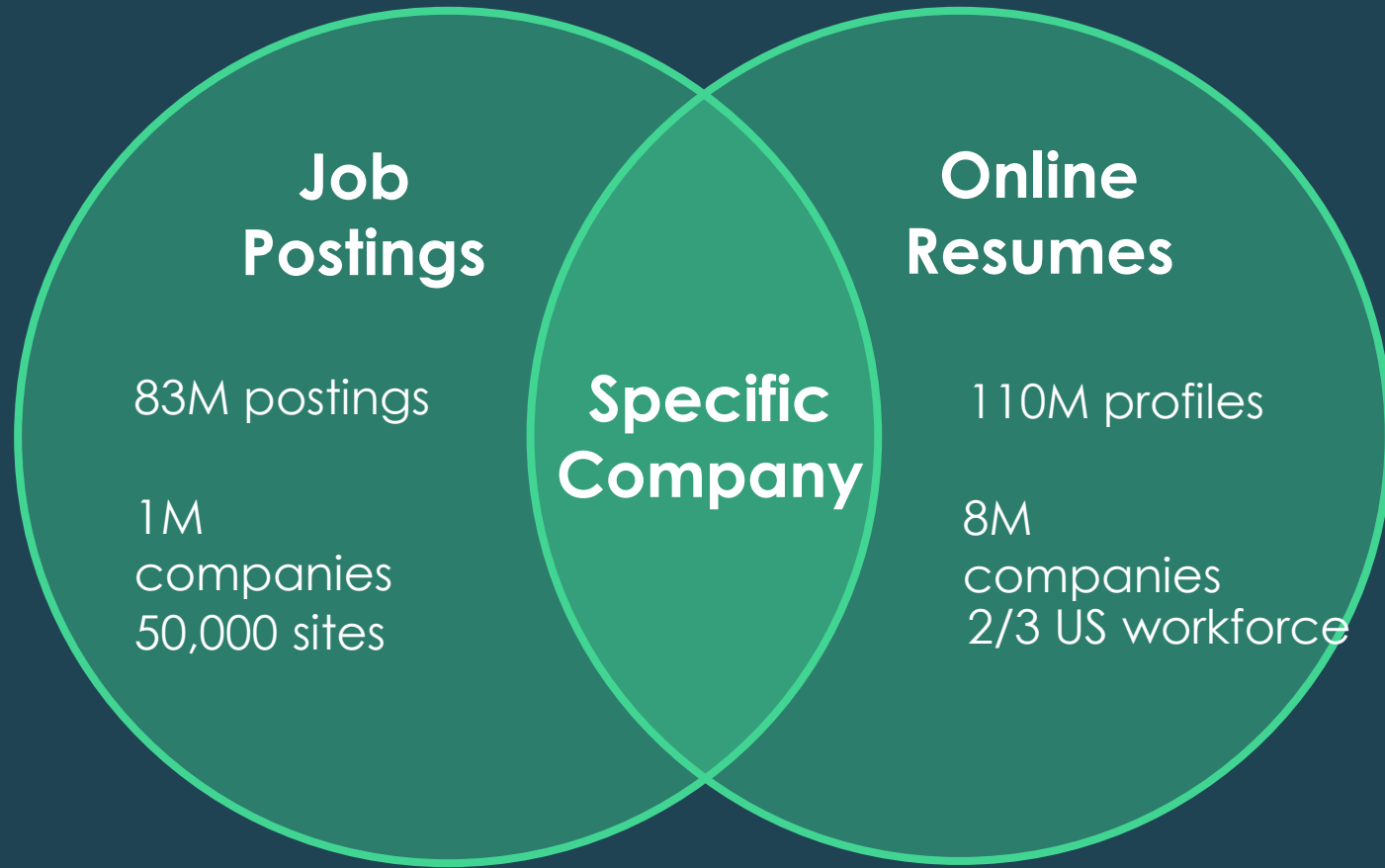


Job Postings Trend by Quarter

The chart below captures the postings trend for the top 15 job titles for your selected job types sought by Capital One Financial Corporation. Unlike profiles which represent the status quo within a company, postings are more aspirational and help us understand where an employer wants to be in the future.



Data Sources



How to Apply the Report

Economic/Workforce



Businesses



Colleges



Results and Feedback

- 275 Users
- 1,300 run reports
- 125 Exports

”

“Our business development reps will use the heck out of this.”

”

“Company Talent Profile highlights company attributes in an entirely new way.”

”

“When we meet with businesses, this will help us feel and sound smart.”

”

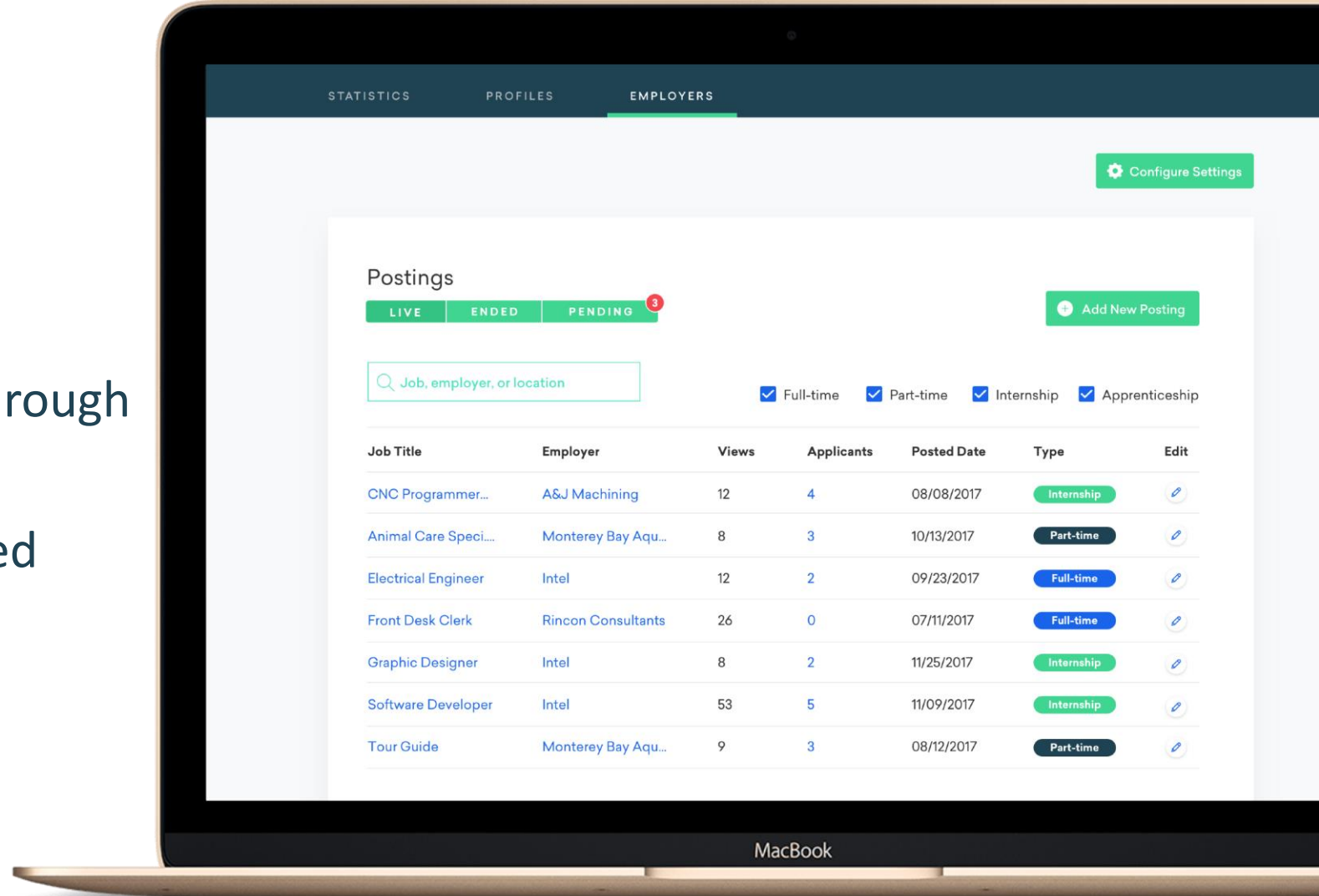
“This is a completely creative and unique way of looking at companies that no one else is doing.”

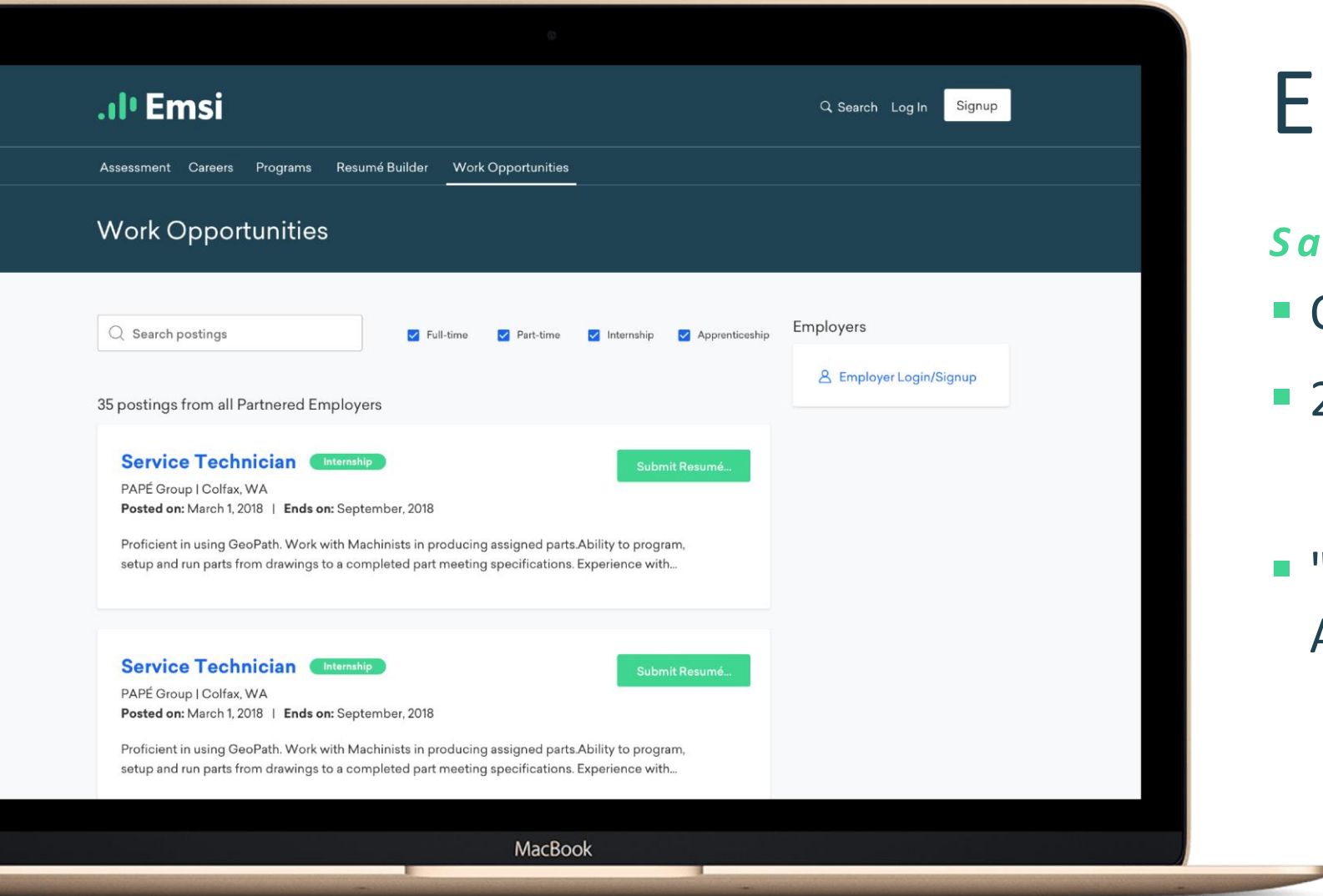


Employer Portal

Part of Career Coach

- Released June 4, 2018
- Over 170 employers using through colleges in the first month
- Several colleges have dropped other providers





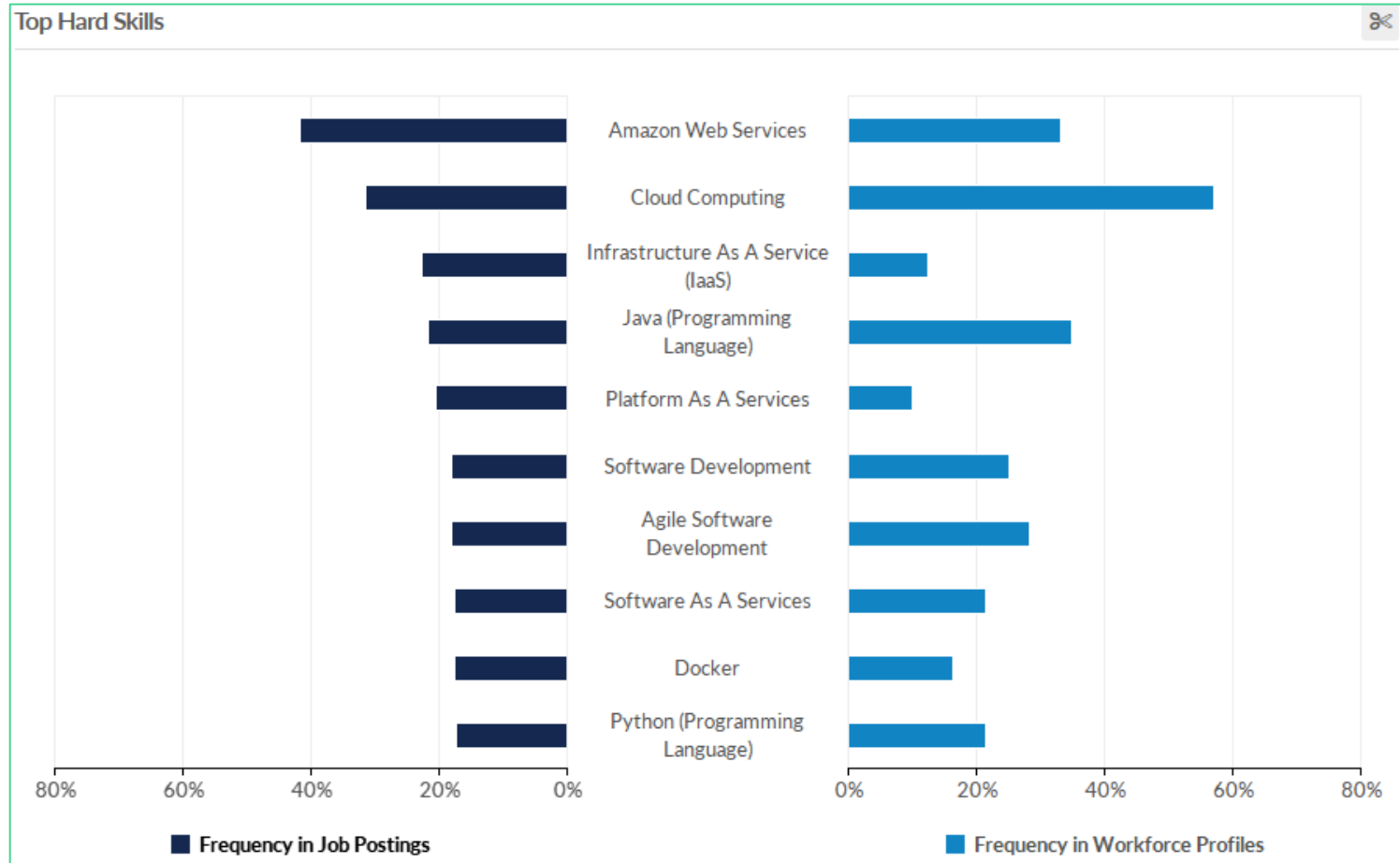
Employer portal

Santa Fe College

- Over 100 postings
- 23 resumes submitted to jobs
- "We need this yesterday!" - Ashley Ruby, Garrett College



Skills taxonomy update



- Produces significantly more value for customers
- Leap-frogged other providers for relevance



Industry Diversity Map and Report

[Reports](#) ▾[Groups](#) ▾[Support](#) ▾

Josh Wright
DEVELOPER

 ▾[Industry](#) > [Industry Diversity Map](#)[Knowledge Base](#)[Start Over](#)

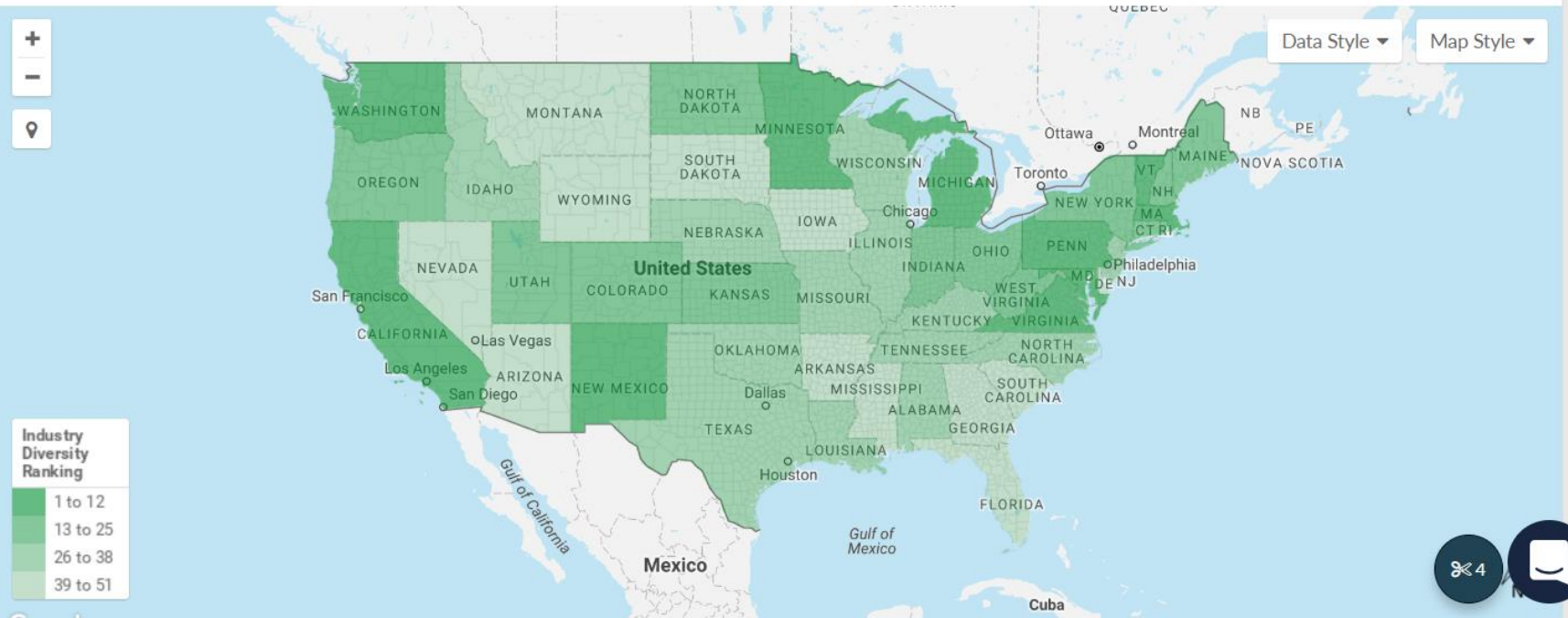
All Regions [Browse](#)

No limit. Showing all available.

Breakdown Region by

State ▾

Industry Diversity Map

[Add to My Reports](#)[Export](#) ▾

Industry Diversity Map and Report

State Name	^	Industry Diversity Ranking	Industry Diversity Percentile	Agriculture & Natural Resource Extraction Share	Typical Agriculture & Natural Resource Extraction Share	
Massachusetts		1	100.0%	0.4%	1.6%	
District of Columbia		2	98.0%	0.0%	1.6%	
Maryland		3	96.1%	0.4%	1.6%	
New Mexico		4	94.1%	3.9%	1.6%	
Washington		5	92.2%	3.3%	1.6%	
Vermont		6	90.2%	1.9%	1.6%	
Alaska		7	88.2%	4.7%	1.6%	

New Report for Systematic Program Development & Review

- 1-stop-shop for using data to evaluate programs
- Designed for non-data users
- New focal point of Analyst for Higher Education

The screenshot shows the Emsi web application interface for the 'Program Development & Review' report. The top navigation bar includes the Emsi logo, links for Reports, Groups, and Support, a search bar labeled 'Jump to a Report', and a user profile for Matthew Hyndman, ANALYST. Below the navigation bar, the breadcrumb trail shows 'Programs > Program Development & Review', and a 'Knowledge Base' button is visible on the right. The main content area is titled 'Program Development & Review' and features a progress bar with five steps: 'Define Your Program' (active), 'Competitive Landscape', 'Labor Market Demand', 'Relevant Skills', and 'Export Report'. A 'Remove from My Reports' button is located in the top right corner of the main content area. Below the progress bar, a welcome message states: 'Welcome! This report is here to help answer the question, "Should our institution offer this program?" with the application of relevant data. To ensure the report is tailored to the needs of your institution, you'll interact with a few questions to define various elements of the report.' The first question is 'Which institution is this program associated with?'. It includes a 'Select an Institution' dropdown menu with 'Clear' and 'Save' buttons, and a 'Radius From Address · Browse · Groups' link. The selected institution is 'University of Idaho (Moscow, ID)'. The second question is 'What is your objective?', with a dropdown menu showing 'Developing a new program'.

Emsi Reports Groups Support Jump to a Report Matthew Hyndman ANALYST

Programs > Program Development & Review Knowledge Base

Program Development & Review

Remove from My Reports

Define Your Program Competitive Landscape Labor Market Demand Relevant Skills Export Report

Welcome!

i This report is here to help answer the question, "Should our institution offer this program?" with the application of relevant data. To ensure the report is tailored to the needs of your institution, you'll interact with a few questions to define various elements of the report.

Which institution is this program associated with?

Select an Institution Clear Save Radius From Address · Browse · Groups

University of Idaho (Moscow, ID) ✕

What is your objective?

Developing a new program

Easily Define Programs

- Quickly go from skills to programs
- Adjust your own occupation to program mapping

Search By Program (CIP)	Search By Keyword or Skill
<div><div>Q</div><div>cyber security</div><div>Search</div></div>	
<div><div>i</div><div>Below are the top relevant occupations associated with your keyword search based on Emsi's Job Posting Analytics. Select the occupations that best represent your program and we'll help you map them to a corresponding program.</div></div>	
Target Occupations	Related Programs - <i>Select One</i>
<div><div>✕</div><div>Information Security Analysts</div></div>	<div><div><input type="radio"/></div><div>Computer and Information Sciences, General - 11.0101</div><div>0 YOUR INSTITUTION'S 2017 COMPLETIONS</div></div>
<div><div>+</div><div>Software Developers, Applications</div></div>	<div><div><input checked="" type="radio"/></div><div>Computer and Information Systems Security/Information Assurance - 11.1003</div><div>0 YOUR INSTITUTION'S 2017 COMPLETIONS</div></div>
<div><div>✕</div><div>Network and Computer Systems Administrators</div></div>	<div><div><input type="radio"/></div><div>Network and System Administration/Administrator - 11.1001</div><div>0 YOUR INSTITUTION'S 2017 COMPLETIONS</div></div>
<div><div>+</div><div>Computer Occupations, All Other</div></div>	<div><div><input type="radio"/></div><div>Computer Science - 11.0701</div><div>35 YOUR INSTITUTION'S 2017 COMPLETIONS</div></div>
<div><div>✕</div><div>Computer and Information Systems Managers</div></div>	<div><div><input type="radio"/></div><div>Information Technology - 11.0103</div><div>0 YOUR INSTITUTION'S 2017 COMPLETIONS</div></div>
<div><div>+</div><div>Computer User Support Specialists</div></div>	

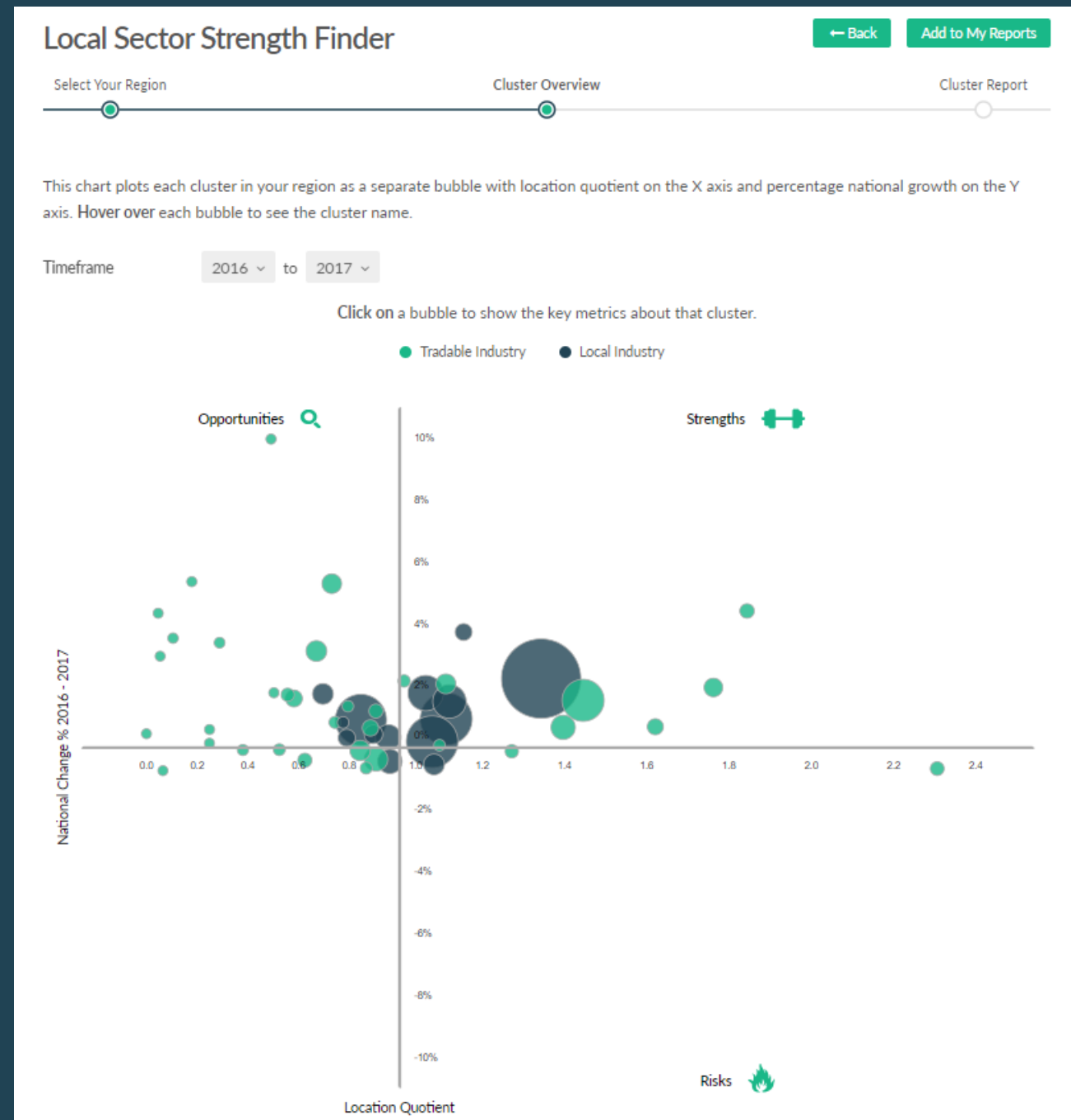
Rapid Adoption & User Excitement

- 2nd Most Popular Report
- In the two months since its release:
 - 400 users
 - 300 orgs
 - 800 exports
- Drexel University scrapped their old program review process in favor of this new report, which they said provides all the data they need much more easily than before.



Strengths Finder

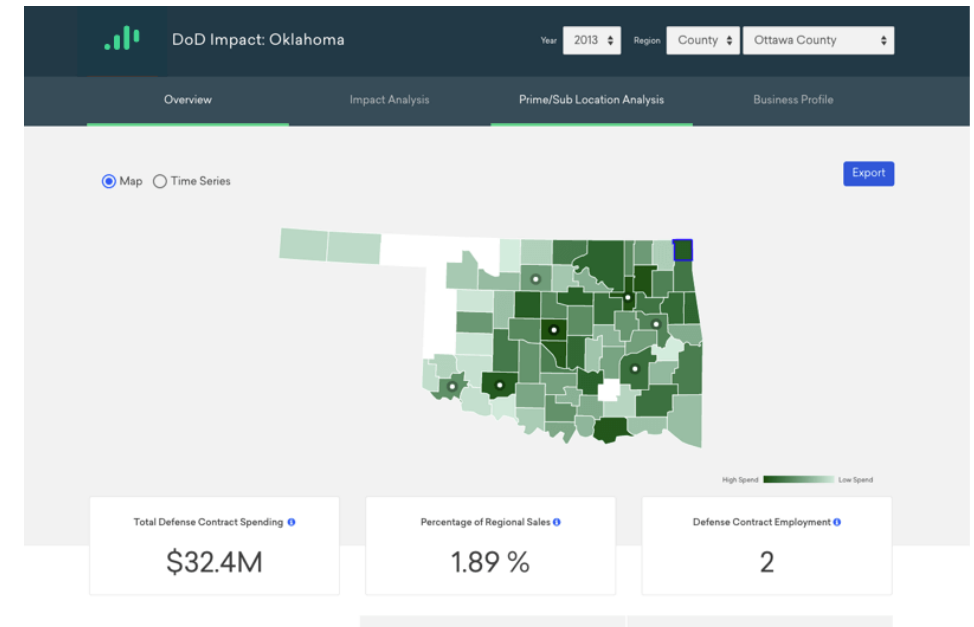
- Proprietary methodology developed by the UK team, for UK customers
- Allows local authorities to rapidly assess the strengths and weaknesses of their economies



COMMUNITY INSIGHTS

Defense Supply Chain Mapping and Impacts

Defense-dependent communities could experience major shocks as their regions react to budget fluctuations, sequestration, or base realignment or closure.



API Portal



Search

[GUIDES](#) [REFERENCE](#)

Documentation

Welcome to Emsi's API documentation! Get familiar with the Emsi API products and explore available features or dive into our comprehensive reference documentation.

Reference

Comprehensive documentation for all endpoints and code examples.

Guides

Get up and running with quick start guides and additional Emsi API content.

Featured Guides

Core LMI Explorer

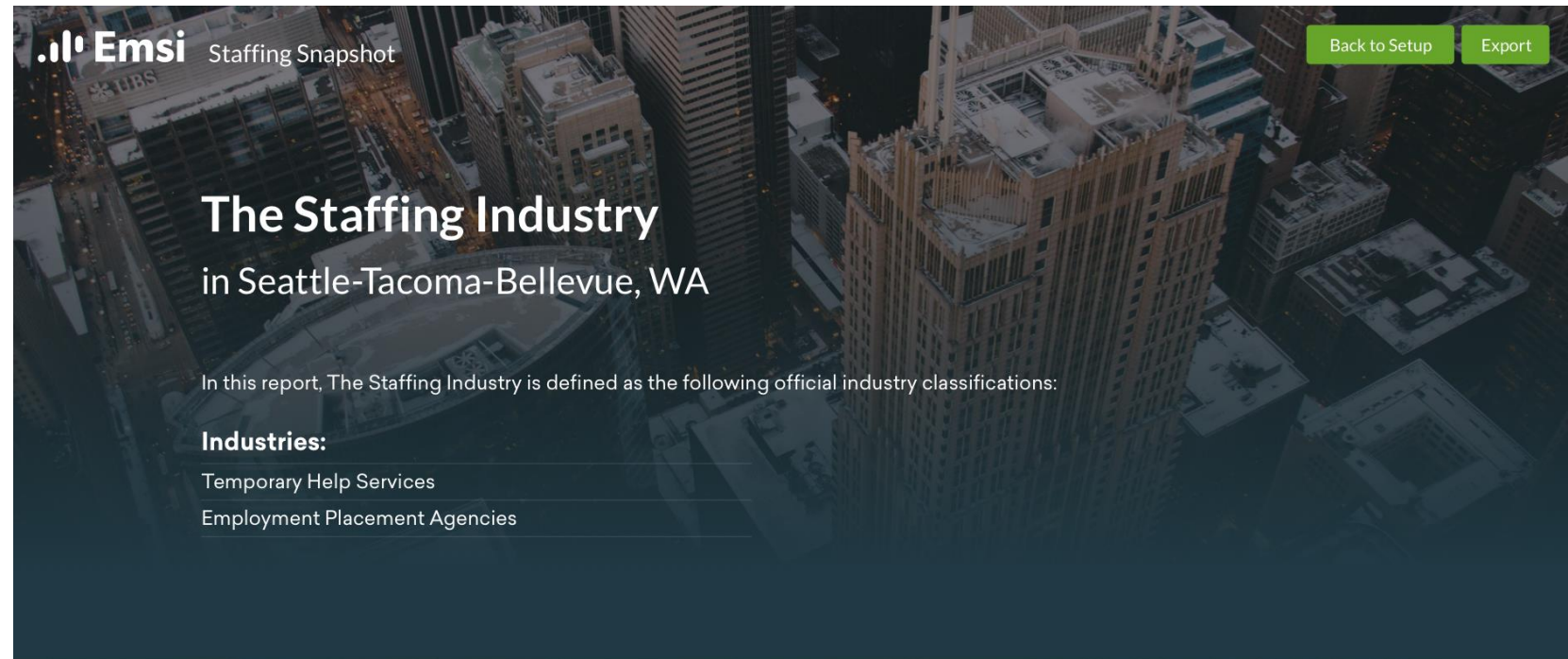
Explore the datasets, versions, and metrics available in the Core LMI API.

Job Postings Changes

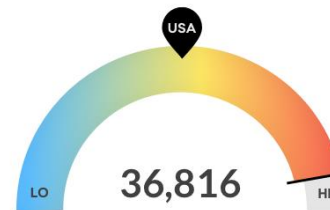
Read about new job postings features and some breaking changes.

Staffing report

- Quickly see how much is spent on staffing by region by industry
- Identify opportunities to help fill companies needs



Executive Summary



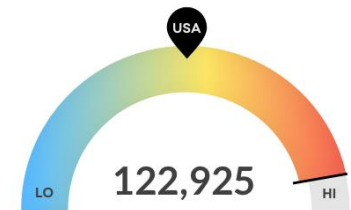
Jobs Filled by Staffing

A higher than average number of jobs are filled by staffing in Seattle-Tacoma-Bellevue, WA. The national average for an area this size is 31,697* placements, while there are 49,232 here.



Staffing Spend

A large amount of money is spent on staffing in Seattle-Tacoma-Bellevue, WA. The average annual spend for an area this size is \$707M*, while there is an annual spend of \$903M here.



Postings Competition

Job posting competition from staffing firms is high in Seattle-Tacoma-Bellevue, WA. The national average for an area this size is 98,393 job postings annually, while there are 122,925 here.

Mapping the labor market at the competency level

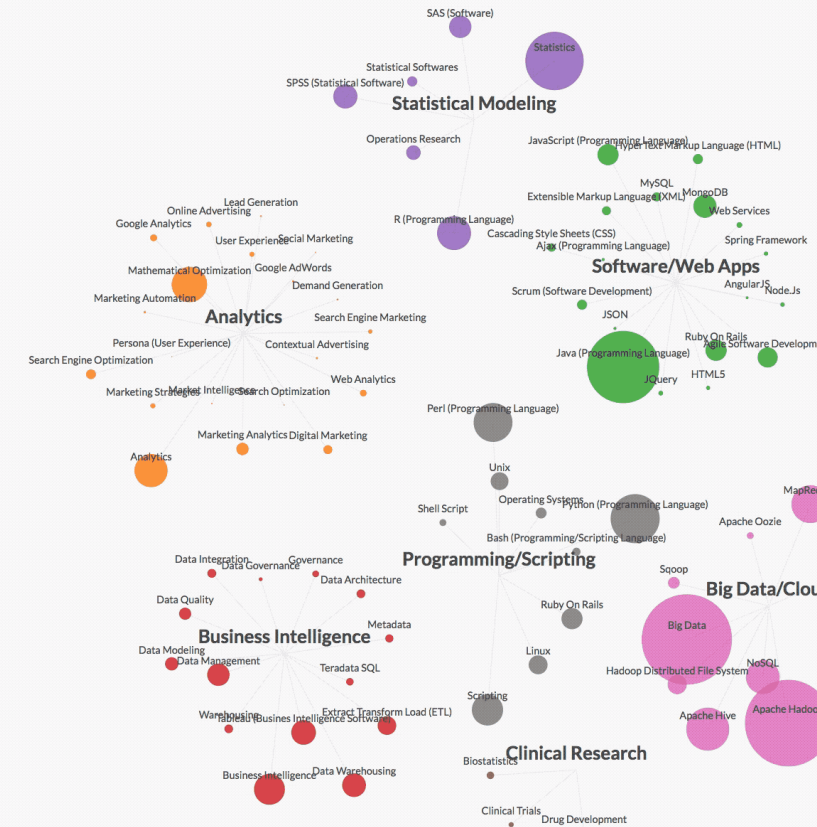
Data Science Concentrations

📍 National

NATIONAL

Data science comes in many flavors/concentrations.

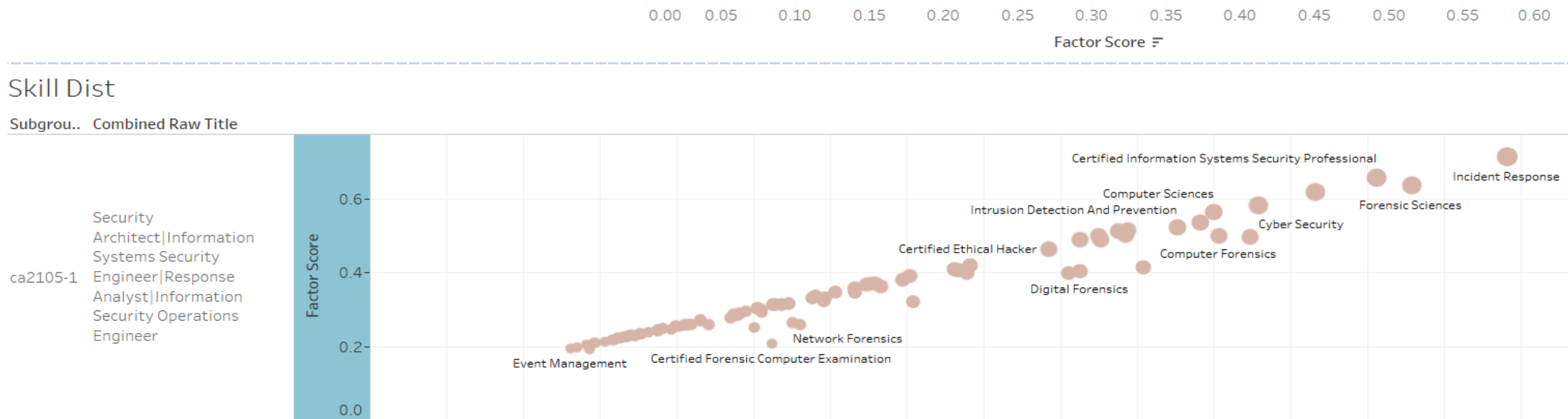
While most data scientists will need to have familiarity with a few of the areas above (software apps, analytics, business intelligence, statistical modeling, big data, scripting), the doses of the concentrations will vary by industry sector, region, even seniority. The distance between clusters show the similarity or overlap between the two.



MacBook

Titles are not enough anymore

- From employers to educators, more details are needed
- The economy is more complex than job titles
- The wealth of an economy is based on the skills imbedded in its workforce
- Job posting and profile level data, combined with traditional LMI, get us there



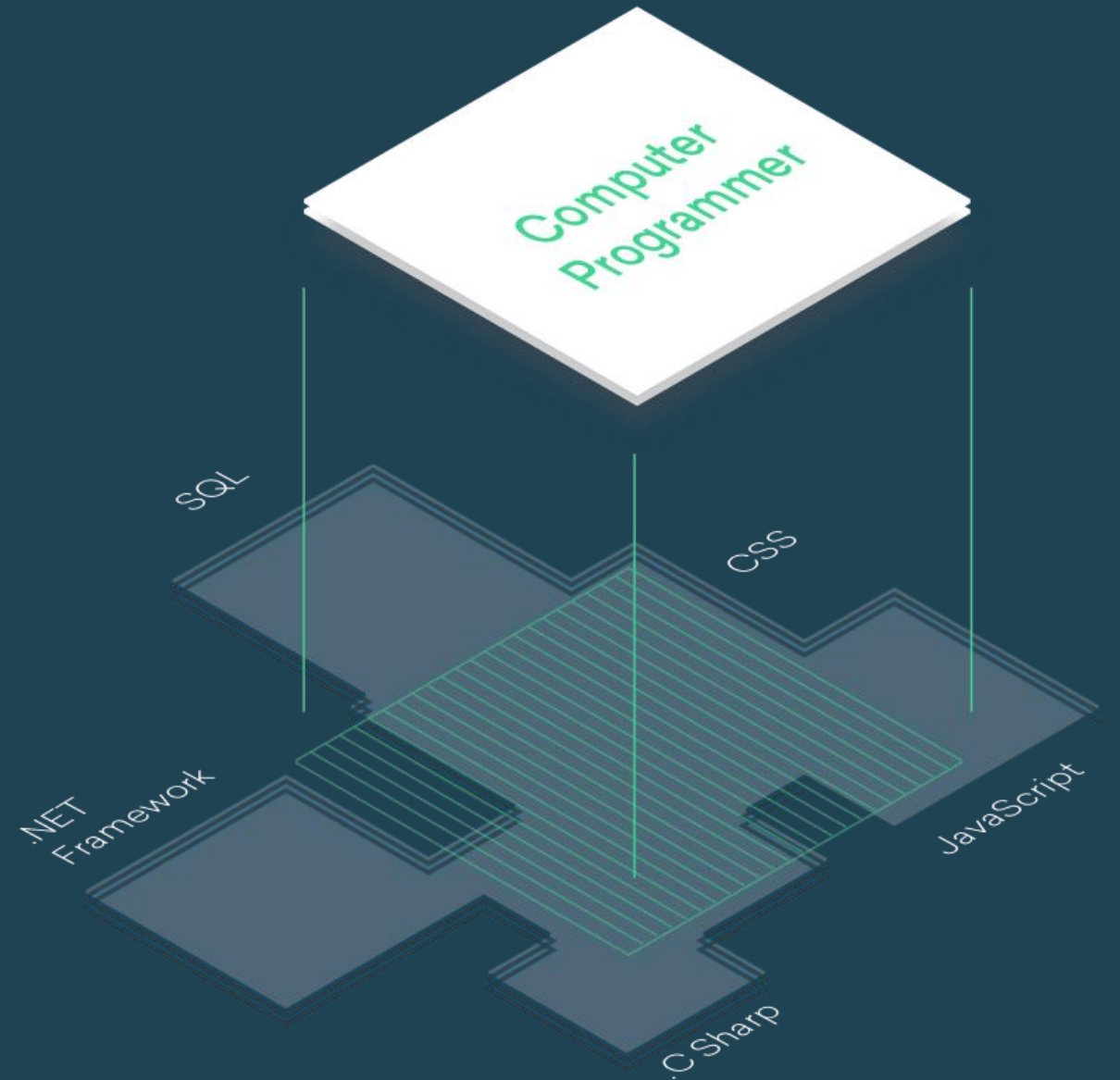
Traditional Taxonomies

- Put everyone in the same box
- Not how the real world works



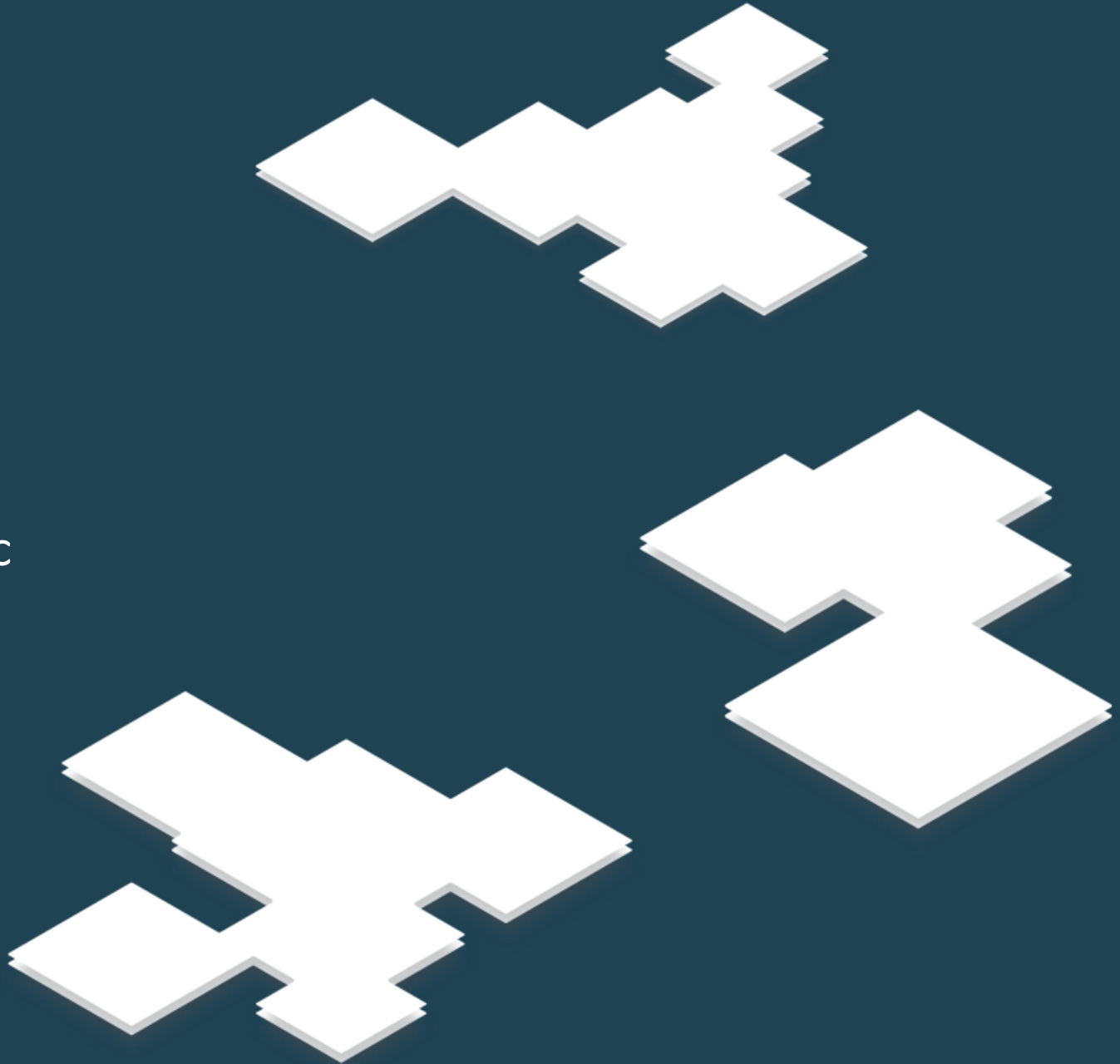
Traditional Taxonomies

- Amazon, GM, and Emsi are all looking for a Software Engineer I; are we all looking for the same person?
- Traditional taxonomies are wooden in their shape
- People and jobs don't generally fit nicely within those boundaries



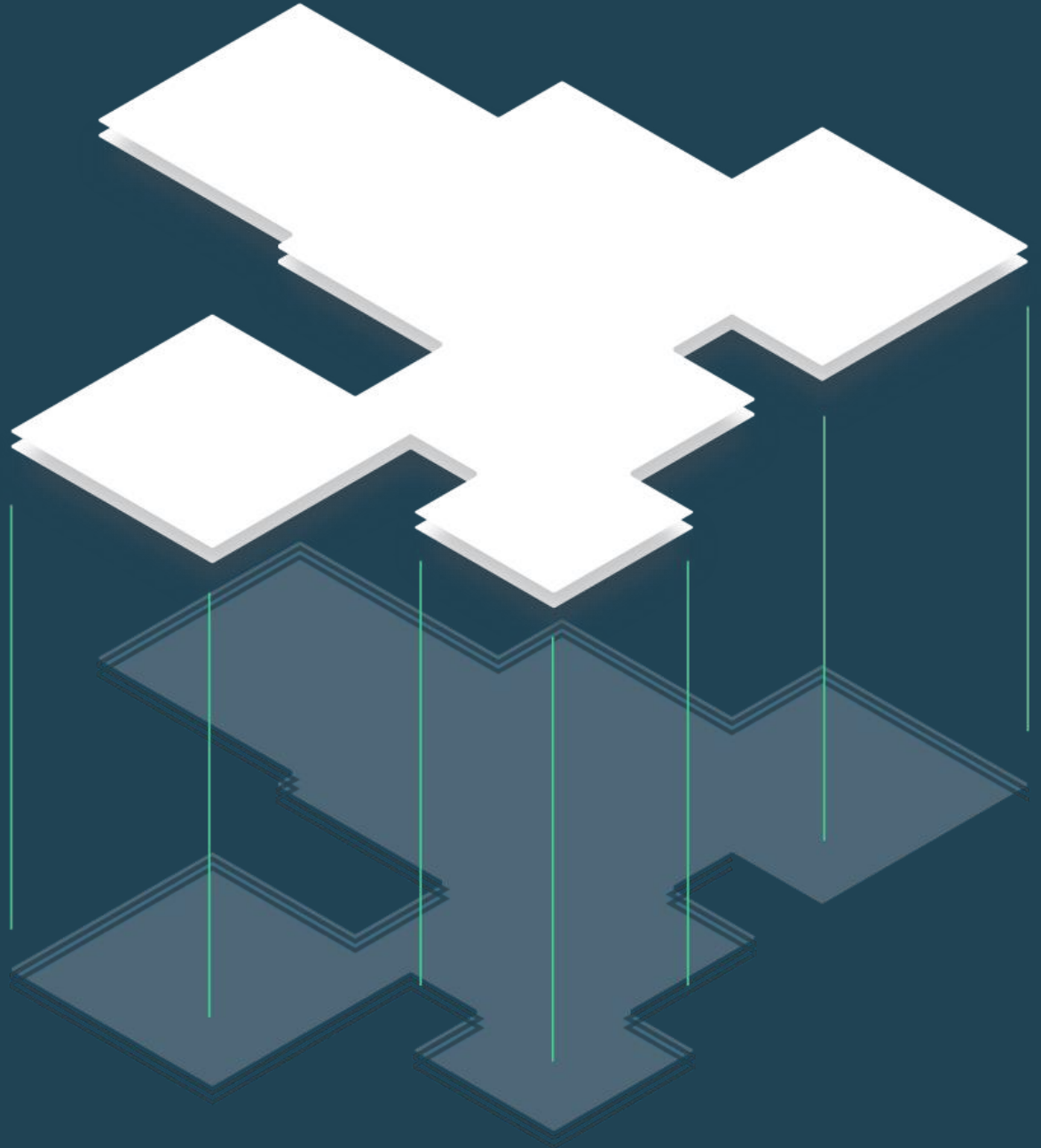
People

- Have unique skillsets; everyone of us has a different “skill shape”
- Most jobs also have a specific shape as well
- Understanding this is the center of the three circles in Emsi mission



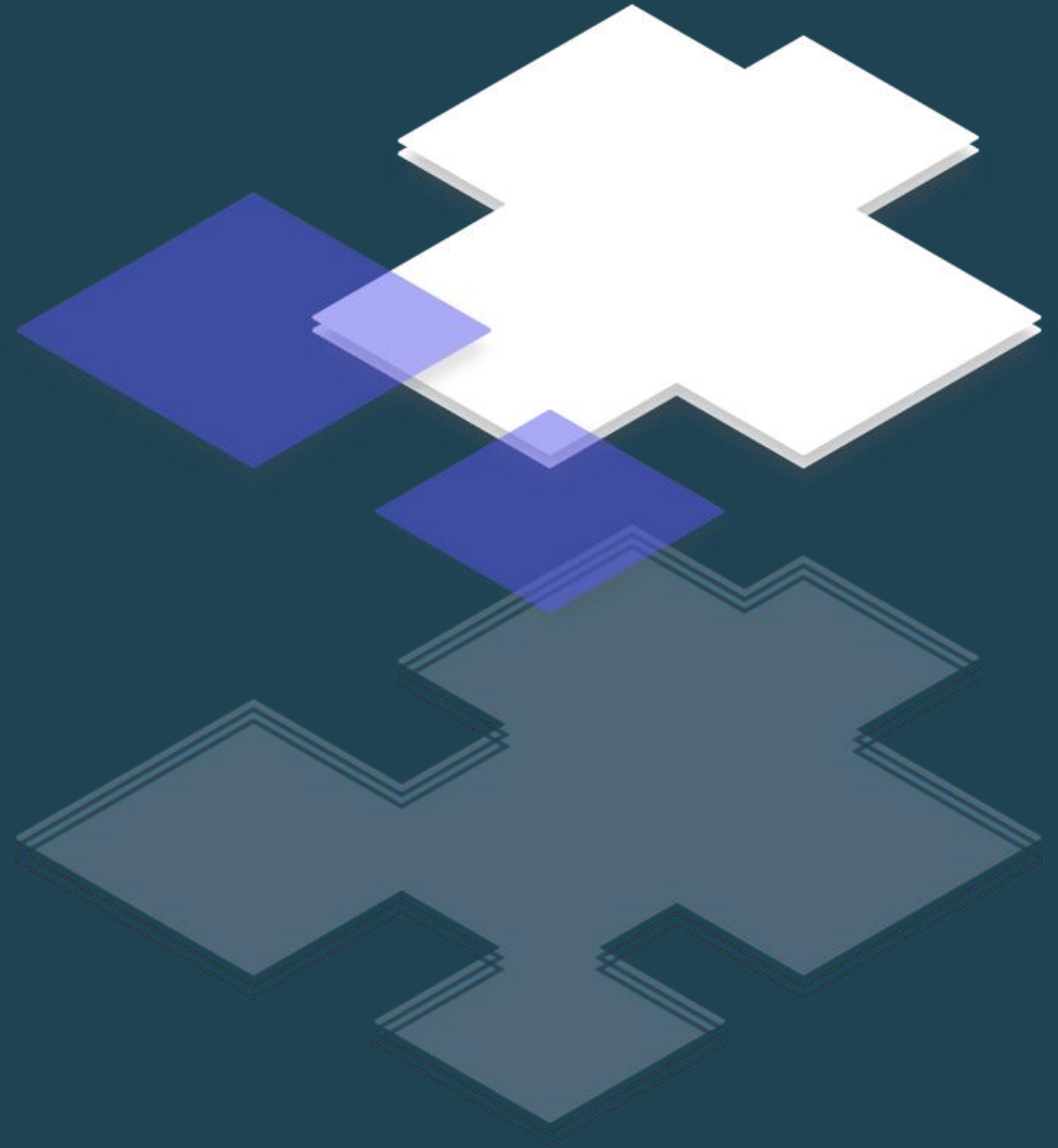
The right job today

- How can we connect people to where they should be today?
- Understand what jobs, either within the company or without, that match each person's competencies



Advancing Careers

- Determine what skills a person needs to achieve their career goals
- Help **colleges** inform the enrollment and program development process
- Help **employers** inform the career transition process
- Help **people** know what to do next



A decorative graphic consisting of a grid of small, light gray dots. The dots are arranged in a pattern that tapers from left to right, with some dots colored in blue, green, and orange. This pattern is positioned on the left side of the page, behind the main text.

Should We Offer a Data Science Program?

A NEW WAY TO DISCOVER PROGRAM NICHES



THE NATIONAL DATA SCIENCE SKILLS CLUSTER

The skills that characterize data science

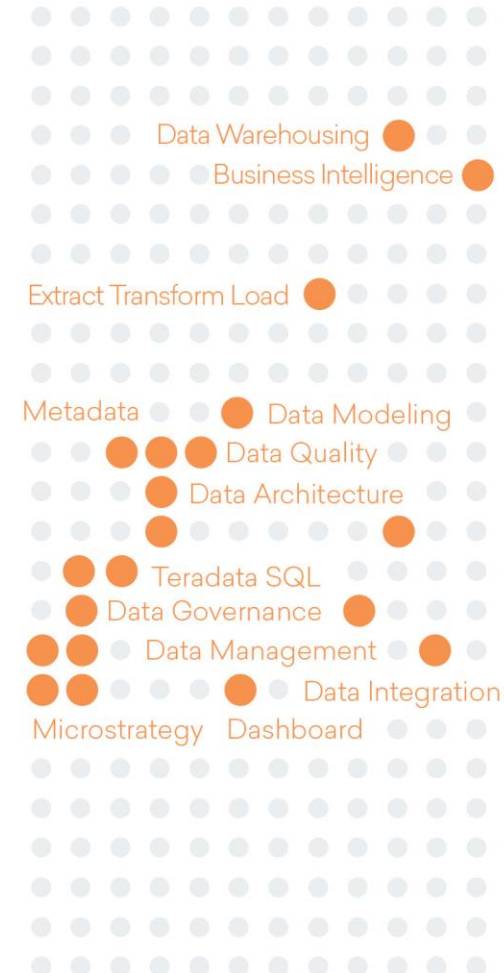
1. Analytics



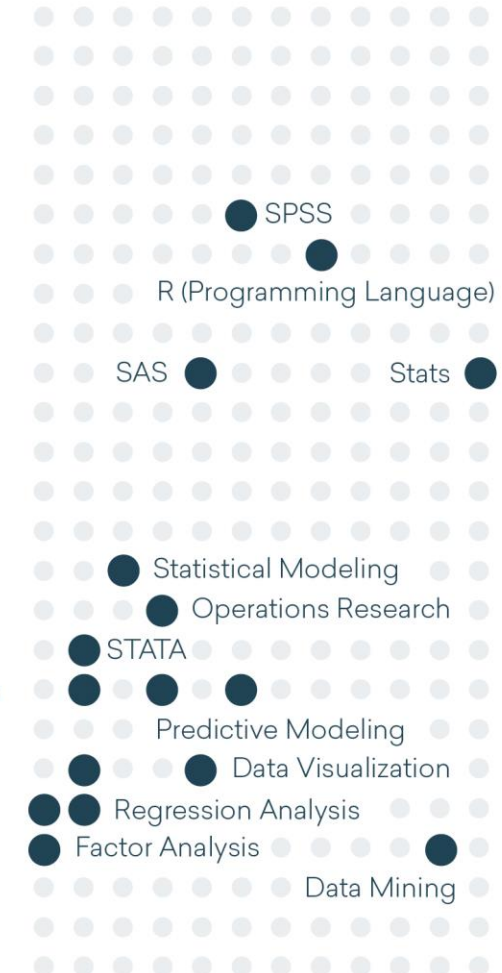
2. Software / Web Apps



3. Business Intelligence



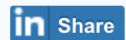
4. Statistical Modeling



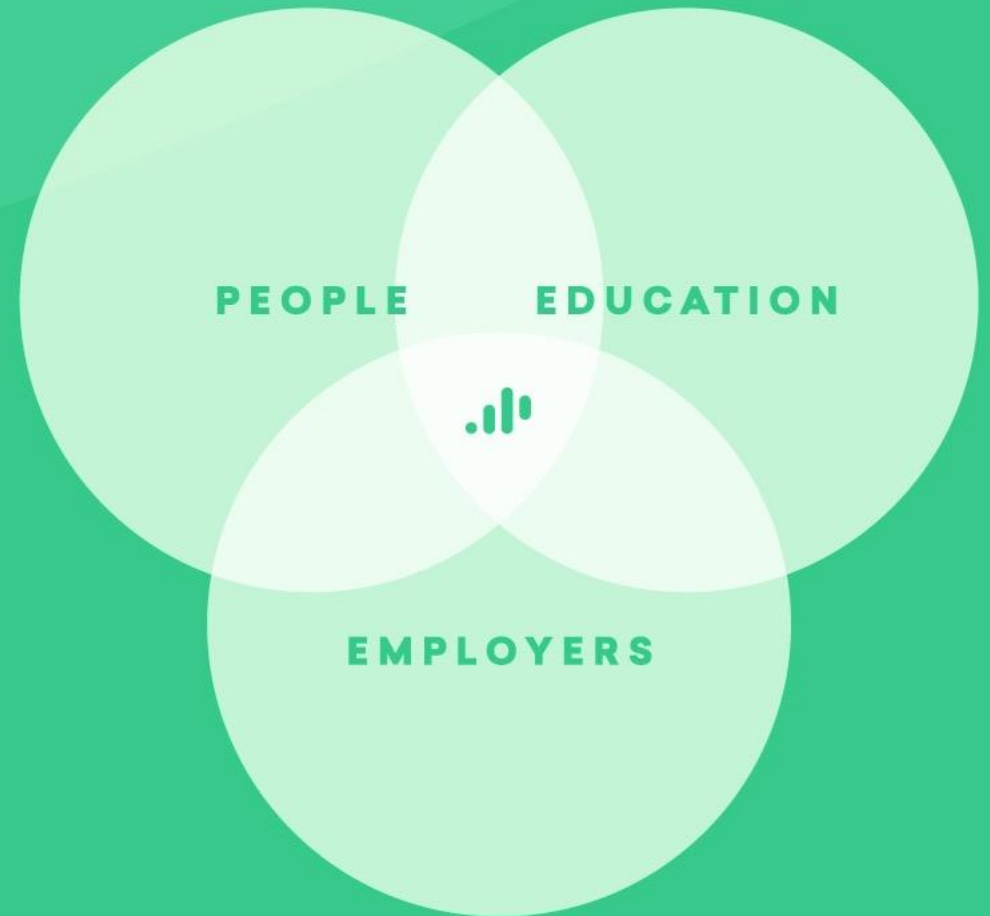
The background of the hero section is a light blue isometric illustration of a modern manufacturing facility. It shows a large factory building on the left with several semi-trucks parked outside. Inside the factory, there are robotic arms, conveyor belts, and various pieces of industrial equipment. The style is clean and technical, using white and light blue lines and shapes to represent the machinery and structures.

MANUFACTURING IS NOT DEAD

The Rise of High-Skill, High-Wage Production Jobs



Emsi's mission is to use
labor market data
to inform and connect
people, education,
and employers.



Thank you and have fun!

