



Using Census Data to Create Data-Driven Narratives

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A Collaboration Between Datawheel, Deloitte & Macro Connections

Overview

- Motivation
- Approach
- Scope
- Example Narratives
- Site Notes
- Demo

Motivation

- Rich data is publicly available
- Making sense of available data can be challenging
- Warehouse vs. Showroom



Image by Jeroen van Luin <https://flic.kr/p/kWTrR5>



Image by Terry Lawford <https://flic.kr/p/7tBEfM>

Approach

Create an integrated tool that showcases data from a variety of public sources into coherent stories.

We call this tool a “data visualization engine”

Scope

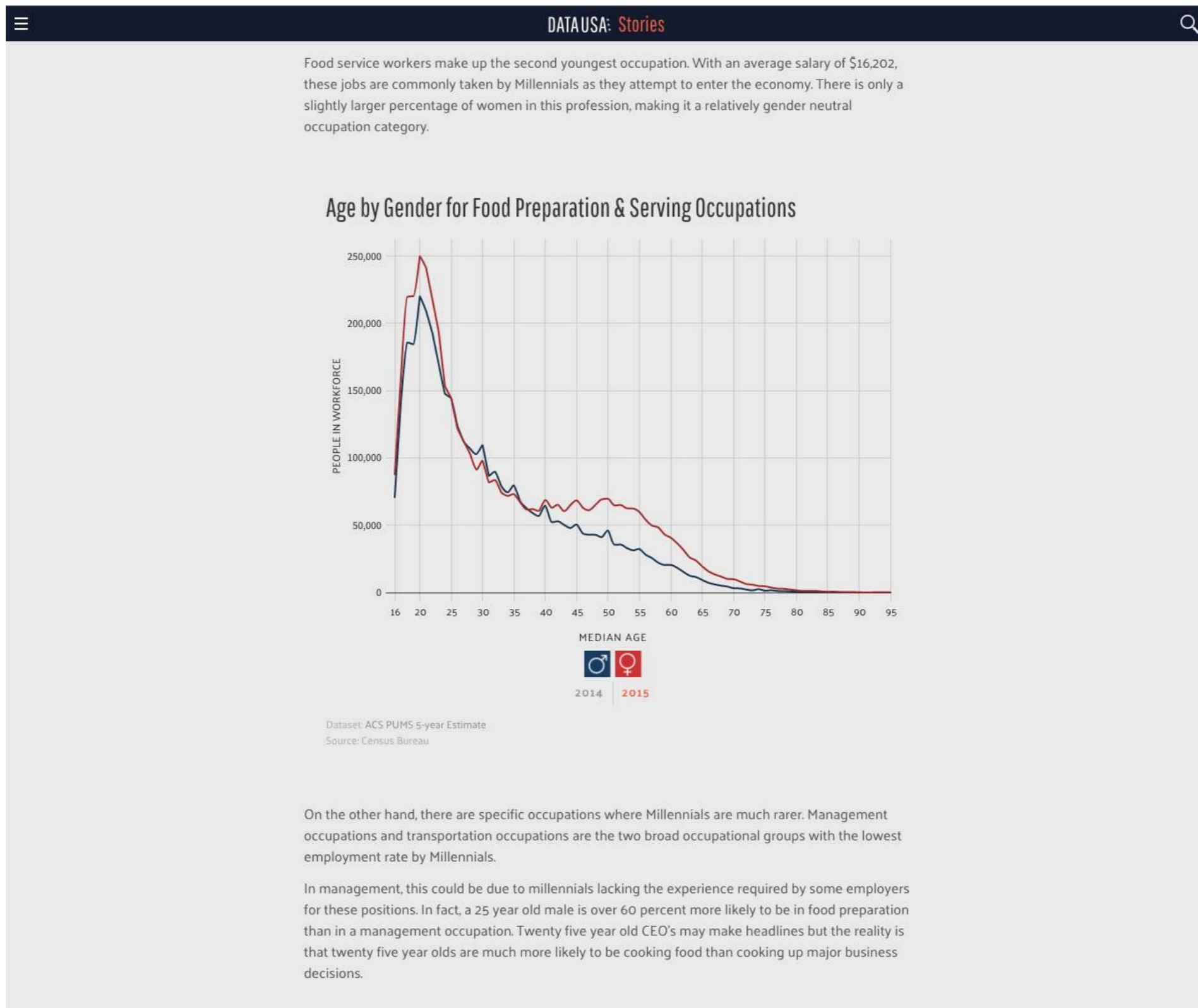
Three basic ways to explore:

1. Narrative Profiles
2. Stories
3. Map Explorer

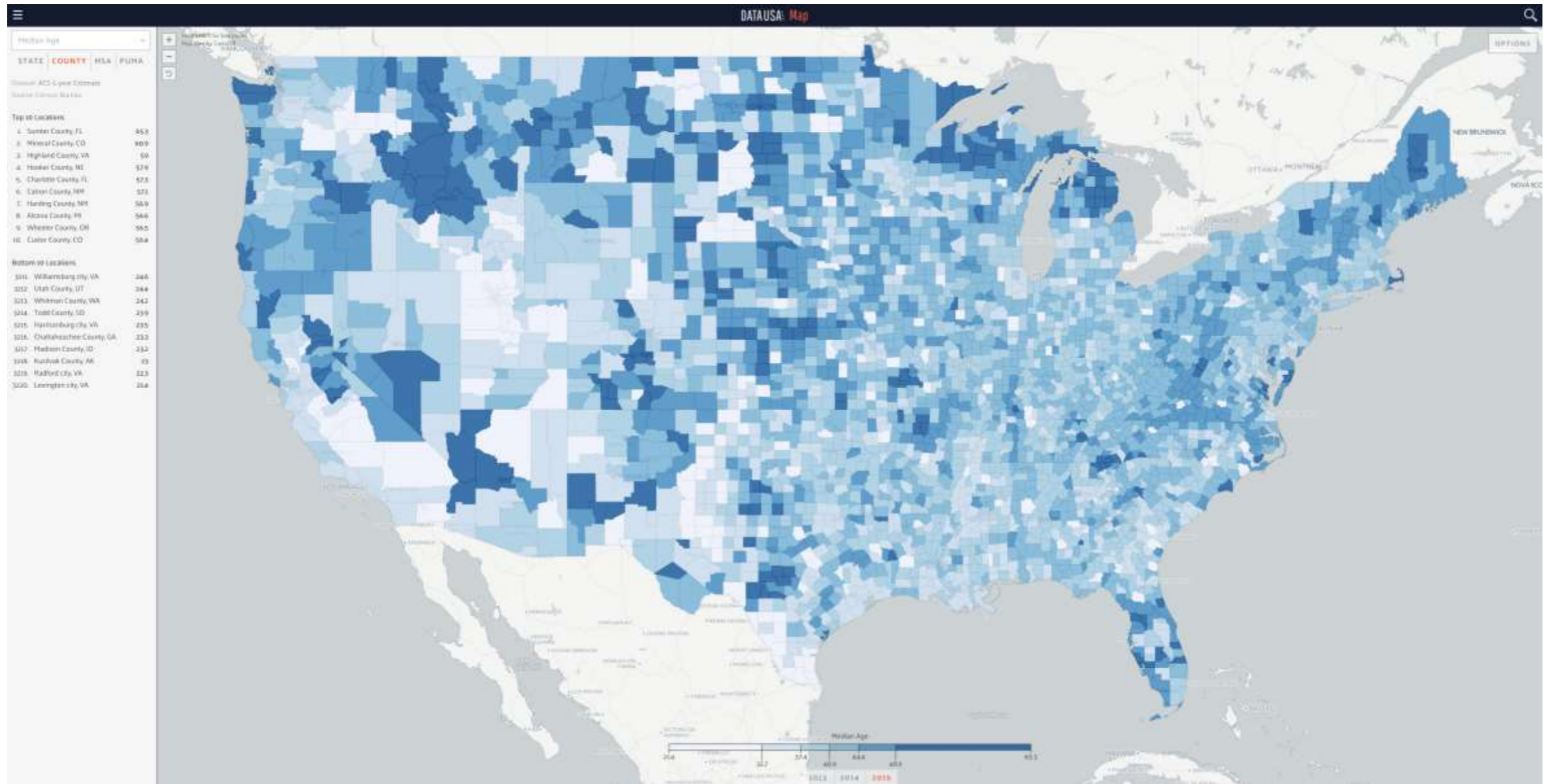
Scope: Key Themes



Scope: Stories



Scope: Map Explorer



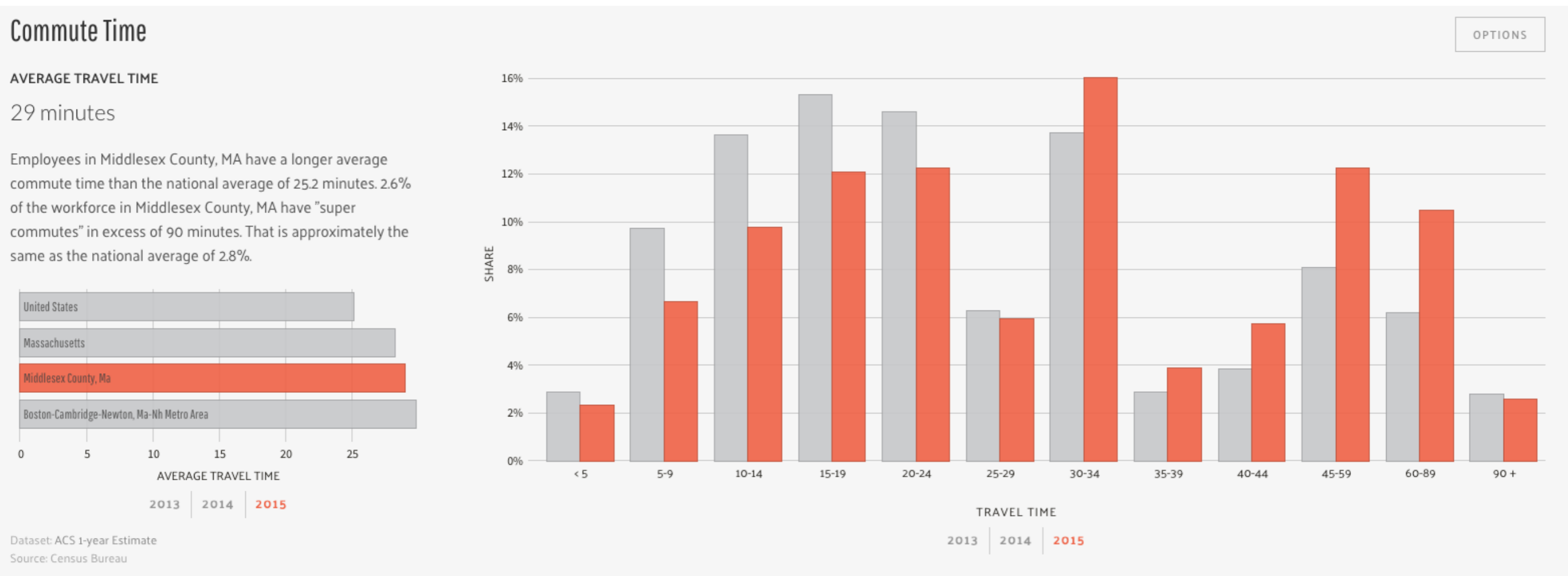
Scope: Data Sources

The American Community Survey (ACS) is the primary source of data for the site. Other sources include:

- Integrated Postsecondary Education Data System (Department of Education)
- County Health Rankings (compiled by University of Wisconsin)
- Make/Use Tables (Bureau of Economic Analysis)
- O*NET (Department of Labor)
- Current Employment Statistics (Bureau of Labor Statistics)
- Dartmouth Atlas of Health (coming soon in expanded detail)
- Freight Analysis Framework (coming soon from the Department of Transportation)

Narrative Examples

Suffolk County, MA is the 4th largest county in Massachusetts by population and contains 4 Census places. The largest places in Suffolk County, MA by population are Boston, MA; Revere, MA; and Chelsea, MA. Suffolk County, MA borders Essex County, MA; Middlesex County, MA; Norfolk County, MA; and Plymouth County, MA



Site Notes

- The site is open-source, and the code is available on Github.
- Using the site's Application Programming Interface (API) users can download data in CSV or JSON format.
- Since launching April 4, 2016 Data USA has received over 2.5 million page views.
- Winner of the 2017 Webby Award for Government & Civil Innovation.
- Based on the feedback we receive, we see a wide range of users from students, researchers, real estate professionals, business owners, analysts, education professionals, epidemiologists and more.
- Interestingly, we see more than 30% of our traffic from mobile users and we hope to improve the site's mobile features in future iterations.

Demo

<https://datausa.io>

Questions?

hello@datausa.io


jonathan@datawheel.us





Backup Slides

- PROFILES
- LOCATIONS
- INDUSTRIES
- OCCUPATIONS
- EDUCATION
- STORIES
- MAPS
- DATA
- ABOUT

DATA USA

THE MOST COMPREHENSIVE
VISUALIZATION OF U.S. PUBLIC DATA

 San Diego All Search

-  San Diego, CA
PLACE
-  San Diego County, CA
COUNTY
-  San Diego, TX
PLACE
-  San Diego-Carlsbad, CA Metro Area

SHOW ALL RESULTS (10 MORE)



WAGES

Median Household Income

OPTIONS

2015 VALUE

\$67,871

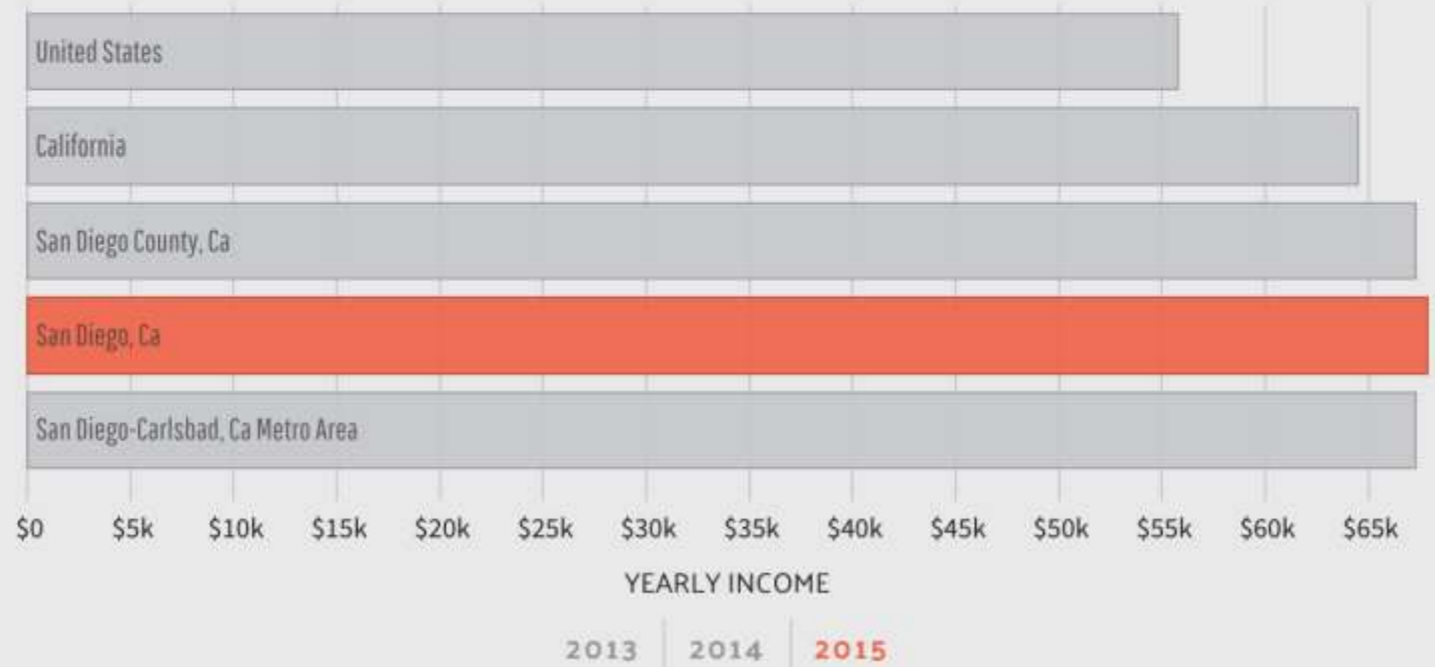
± \$1,873

Households in San Diego, CA have a median income of \$67,871.

This chart shows the median household income of San Diego, CA compared to its parent locations.

Dataset: ACS 1-year Estimate

Source: Census Bureau



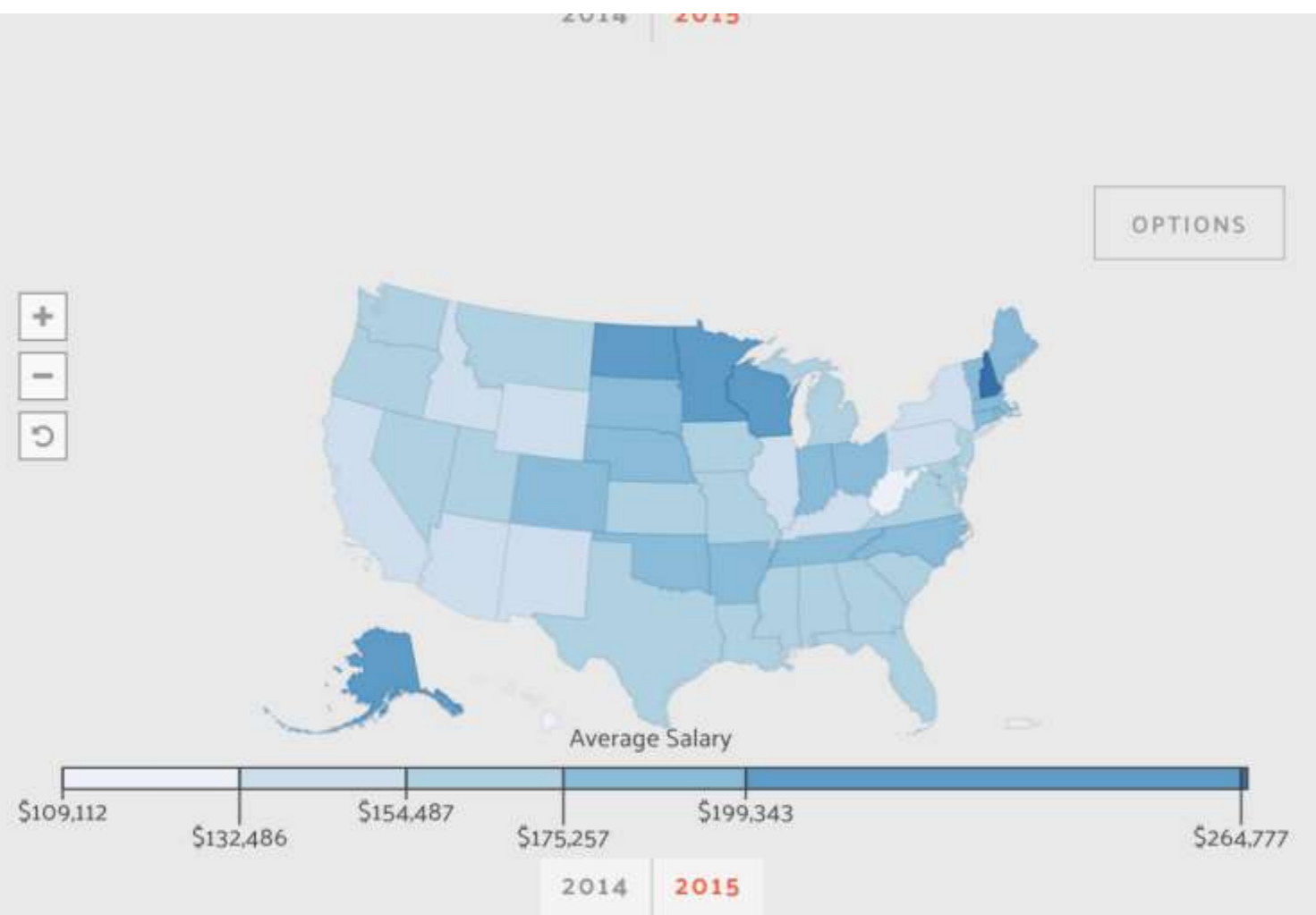
Wage by Location

THE STATES WHERE DENTISTS ARE PAID THE HIGHEST ARE

1. New Hampshire
2. Alaska
3. North Dakota

This map shows the states in the United States shaded by wage for Dentists.

Dataset: ACS PUMS 5-year Estimate
Source: Census Bureau



DENTISTS

&

DOCTORS

✕ REMOVE COMPARISON

TOTAL EMPLOYEES

133,941

202ND OF 478 DETAILED OCCUPATIONS

AVERAGE WAGE

\$165,731

2ND OF 478 DETAILED OCCUPATIONS

AVERAGE AGE

47.3

TOTAL EMPLOYEES

868,476

44TH OF 478 DETAILED OCCUPATIONS

AVERAGE WAGE

\$216,097

1ST OF 478 DETAILED OCCUPATIONS

AVERAGE AGE

46.7



ABOUT



EMPLOYMENT



DEMOGRAPHICS



EDUCATION



SKILLS



GROWTH PROJECTIONS



READ MORE

Wage Distribution

WAGE GINI
0.413

DOCTORS
0.409

Dentists had a wage GINI coefficient of 0.413 in 2015, which is lower than the national average of 0.486. In other words, wages are more evenly distributed for Dentists than the overall labor force.

Dataset: ACS PUMS 1-year Estimate
Source: Census Bureau



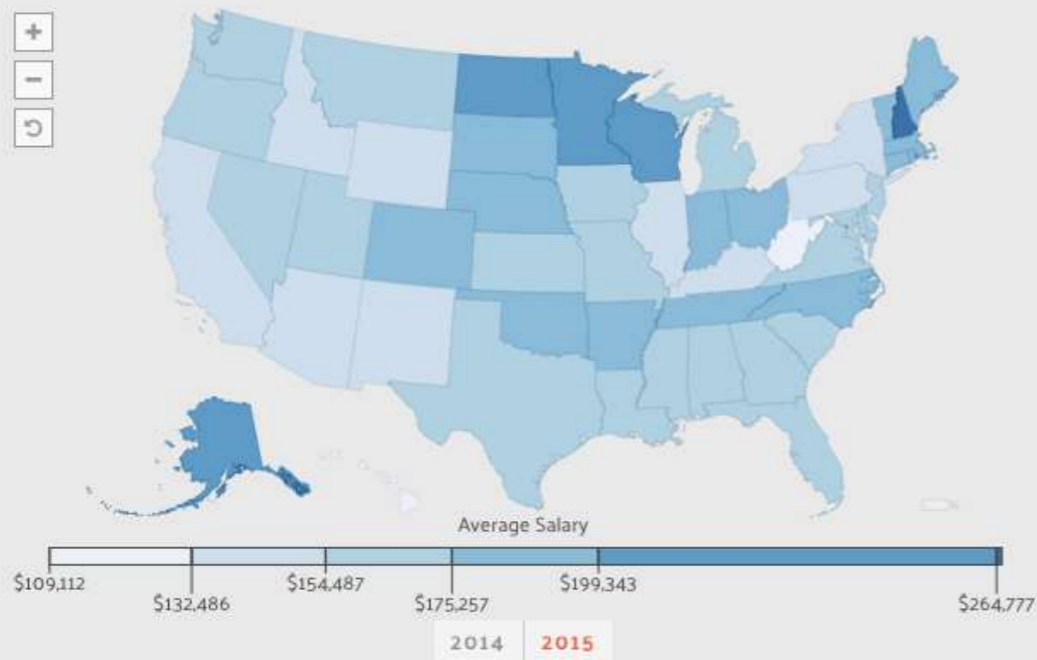
Wage by Location for Dentists

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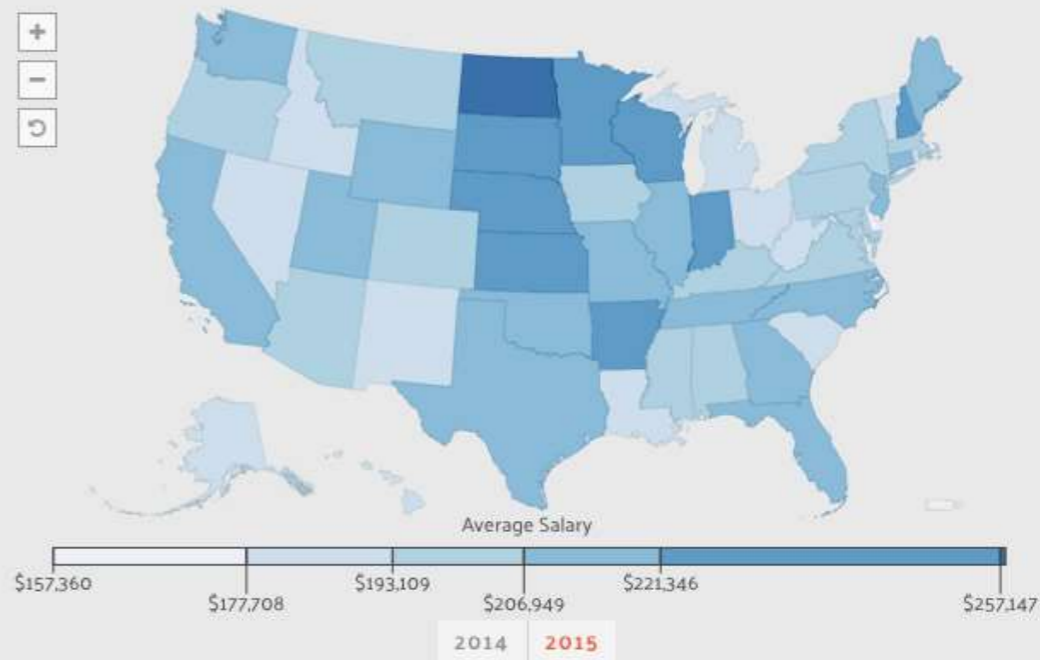
Wage by Location for Doctors

THE STATES WHERE PHYSICIANS & SURGEONS ARE PAID THE HIGHEST ARE

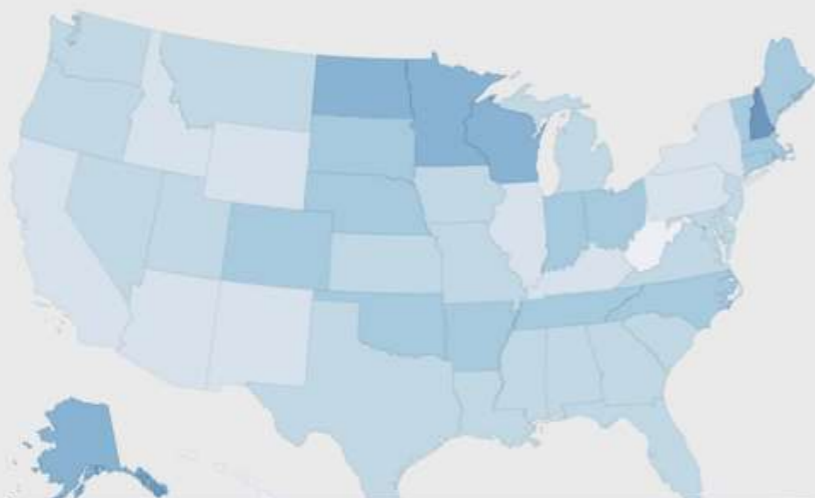
1. North Dakota
2. South Dakota
3. Wisconsin

This map shows the states in the United States shaded by wage for Physicians & surgeons.

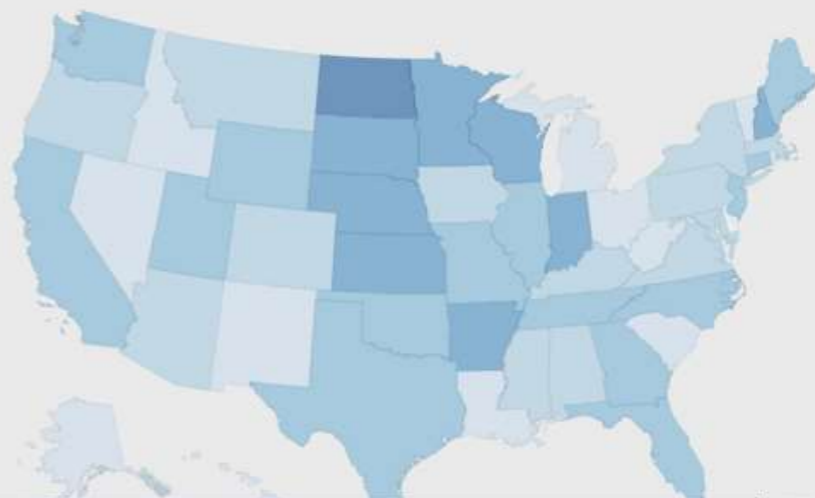
Dataset: ACS PUMS 5-year Estimate
Source: Census Bureau



Dataset: ACS PUMS 5-year Estimate
Source: Census Bureau



Dataset: ACS PUMS 5-year Estimate
Source: Census Bureau



\$109,112

OPTIONS



\$257,147

SHARE EMBED DOWNLOAD DATA API



SVG



PDF



Image



CSV

Most Comm

The most com
dentists ; Hos

OPTIONS

employees, are

Offices of Dentists

