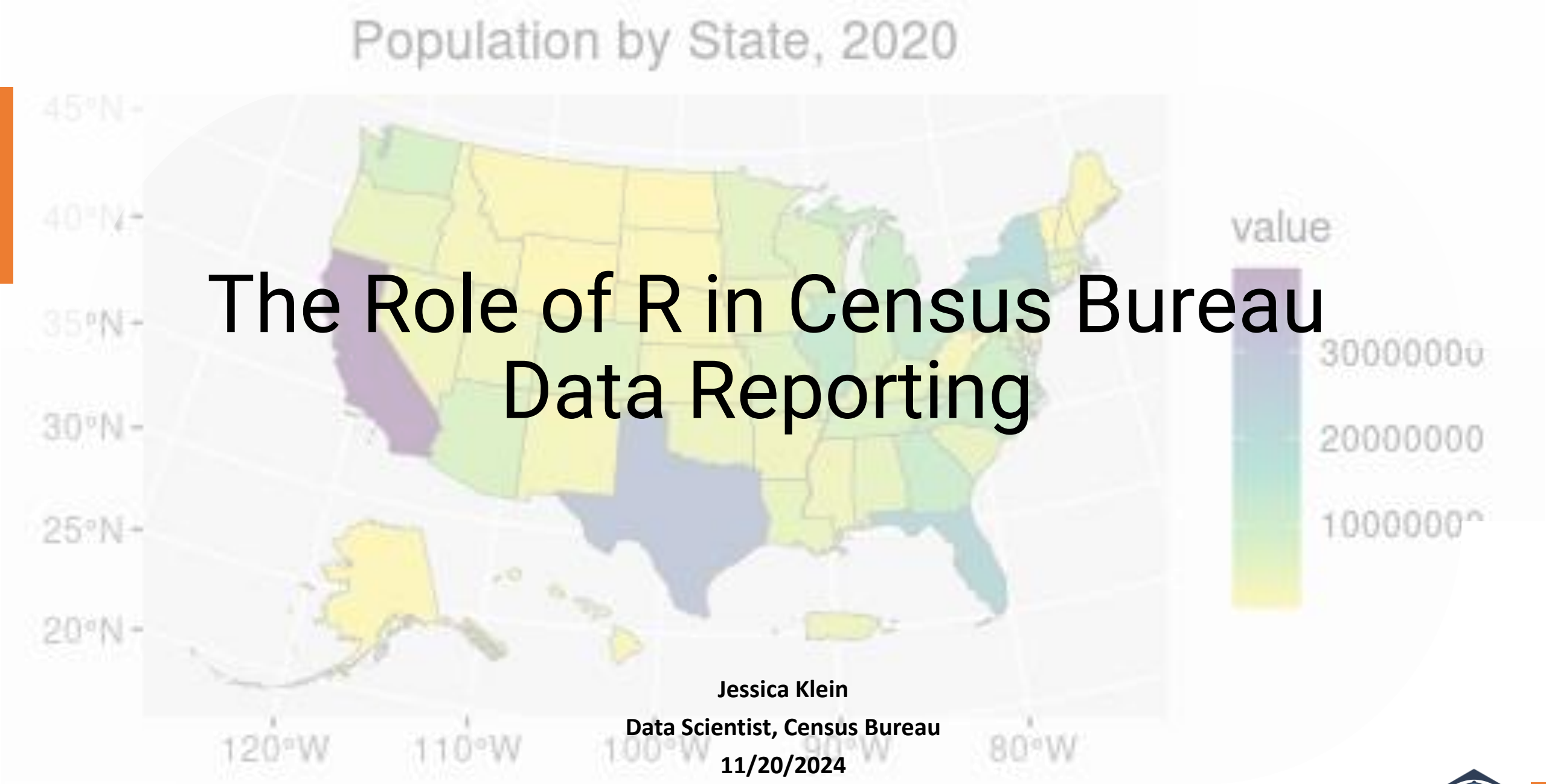


The Role of R in Census Bureau Data Reporting

Jessica Klein

Data Scientist, Census Bureau

11/20/2024

Any opinions and expressed herein are those of the author and do not reflect the views of the U.S. Census Bureau.



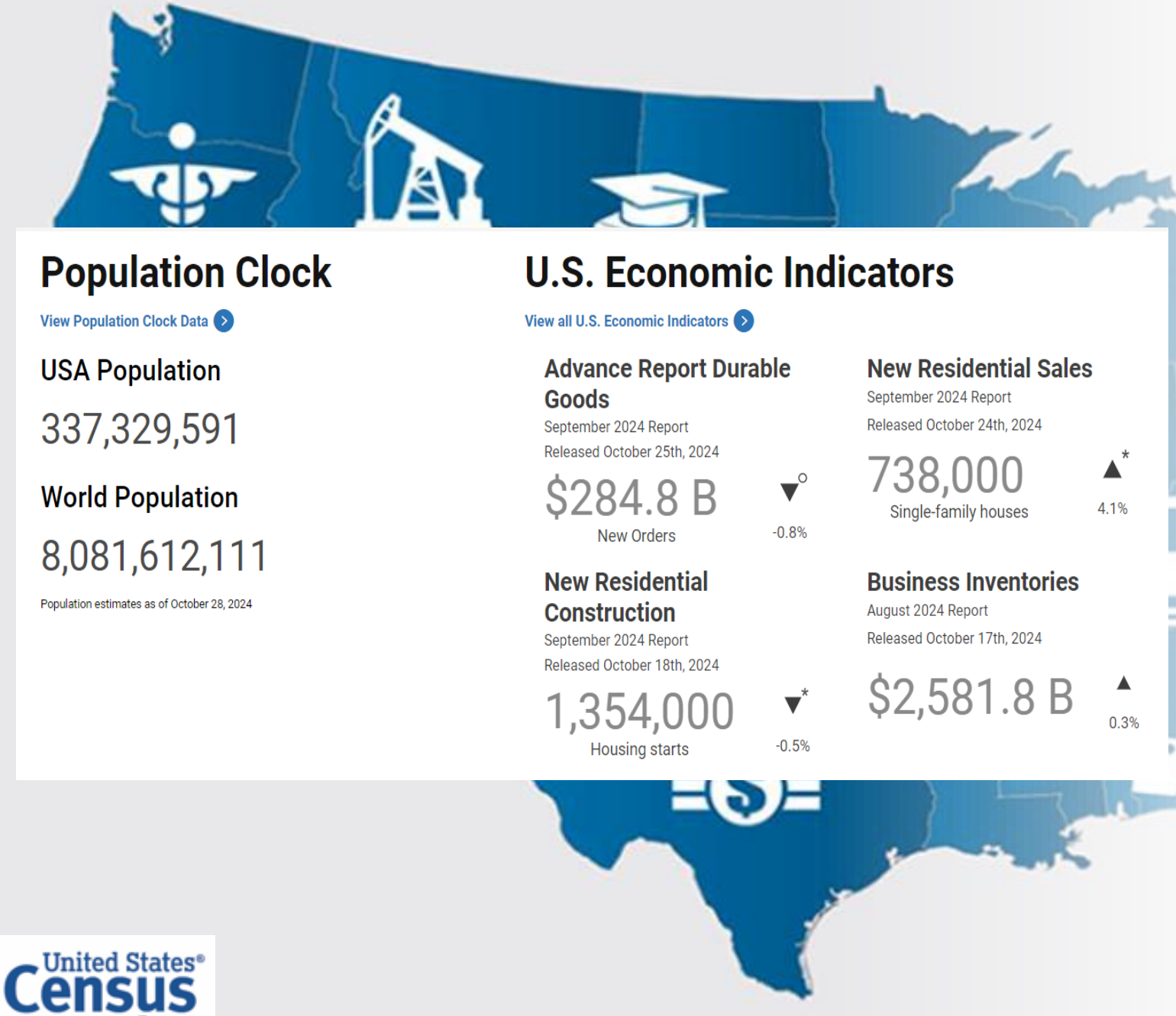
Census 101

- **Mission**: to serve as the nation's leading provider of quality data about its people and economy.
- **Goal**: to provide the best mix of timeliness, relevancy, quality and cost for the data we collect and services we provide.

Source: [About the Bureau (census.gov)]

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Census 101



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Source: [About the Bureau (census.gov)]

Topics and Data Collected

Business and Economy	Education	Emergency Management	Employment
Families and Living Arrangements	Health	Housing	Income and Poverty
International Trade	Population	Public Sector Statistics	Research in Survey Innovation

Source: Topics (census.gov)

- American Community Survey (ACS)
- Decennial Census
- Economic Census
- Population Estimates and Projections
- Annual Business Survey (ABS)
- Annual Survey of Entrepreneurs (ASE)
- Annual Survey of Manufactures (ASM)
- Business Dynamics Statistics (BDS)
- Census Microdata API
- County Business Patterns (CBP) and ZIP Codes Business Patterns (ZBP)
- Commodity Flow Survey (CFS)
- Community Resilience Estimates (CRE)

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sus.gov)

Census Data Lifecycle

- Survey Design
- Frame Development
- Instrument Development
- Sample Design & Implementation
- Data Collection
- Data Editing, Imputation, & Estimation
- Data Review, Analysis, & Correction
- Data Products & Dissemination

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Census Bureau R User Group



500+ members



Monthly presentations



Workshops and training



Special guests



Community outreach & engagement

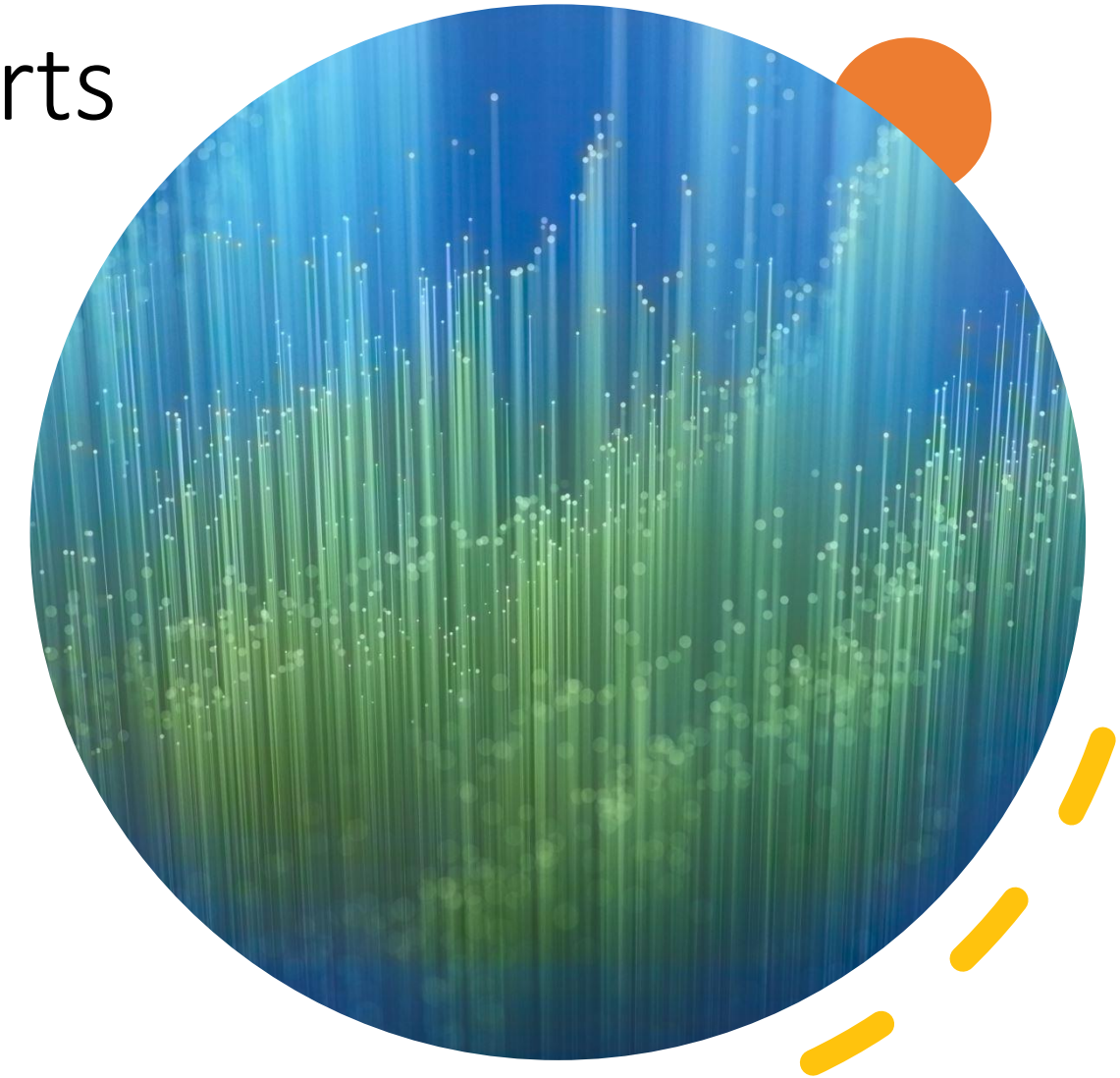
Data Science Training Efforts

Self-led

Instructor-led

R Workshop

Coming soon:
R Snacks



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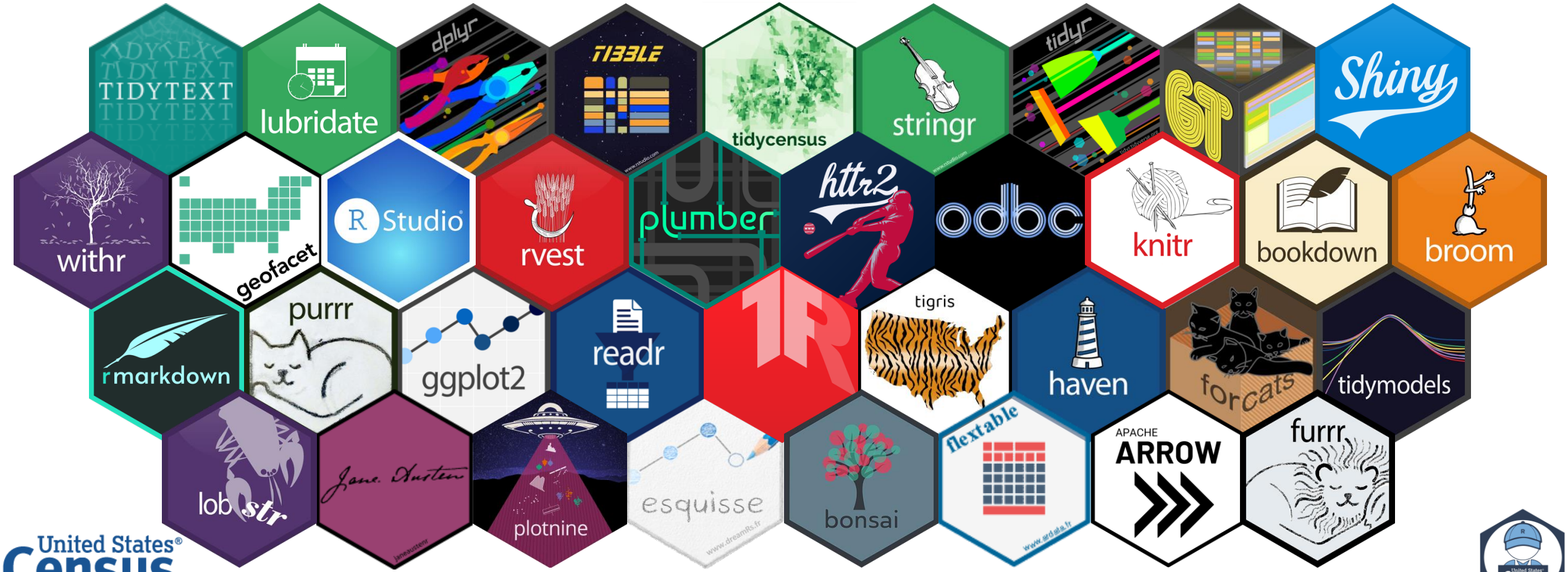
Training Concepts Covered

Introduction to R	Tidycensus & Tigris	Tidyverse ecosystem	Mapping	Creating visualizations
Data manipulation	Linear Modeling	Working with text	Joins and pivots	Connecting to databases & API's
CARET	Deliverables in R Markdown	Working with Big Data	Shiny development	Capstone presentations

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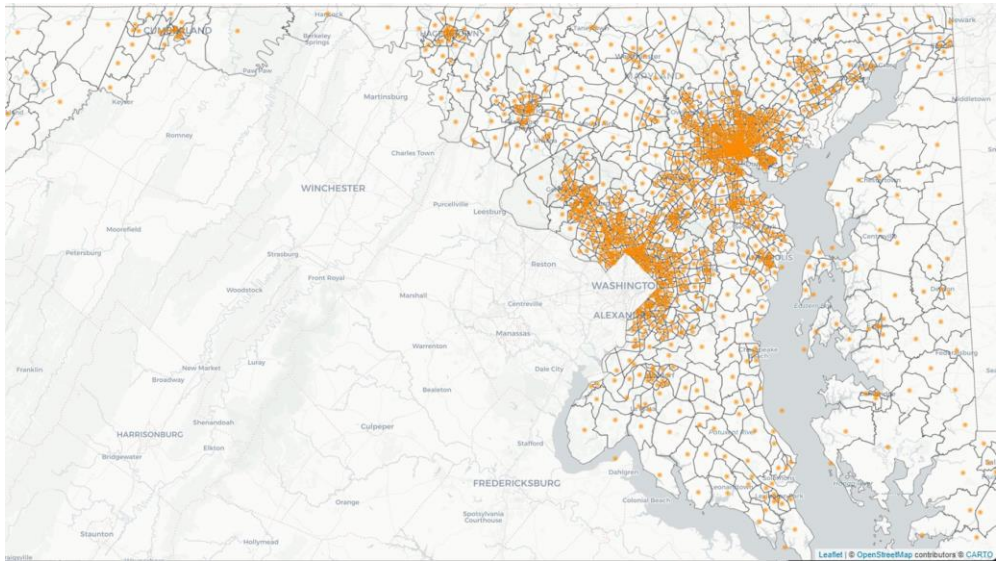
How is R used across Census?

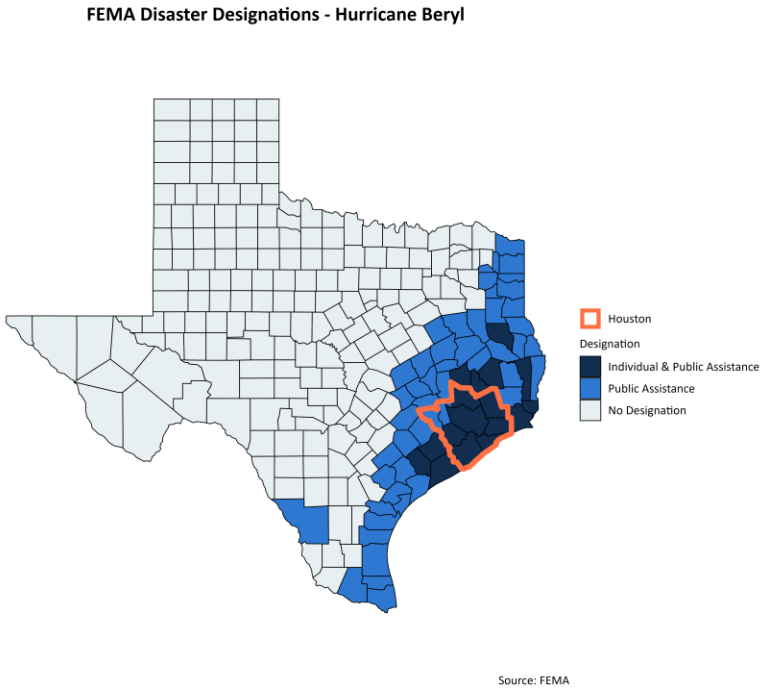
A variety of use cases, a variety of solutions to meet every need

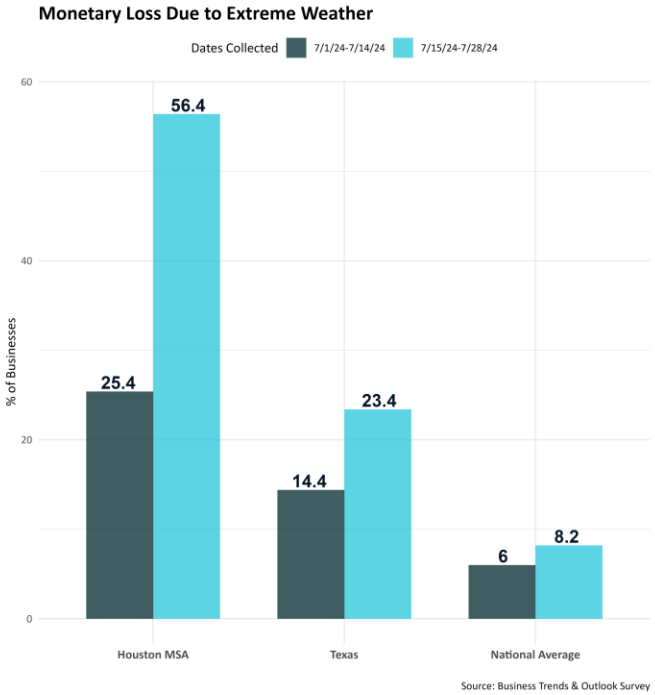


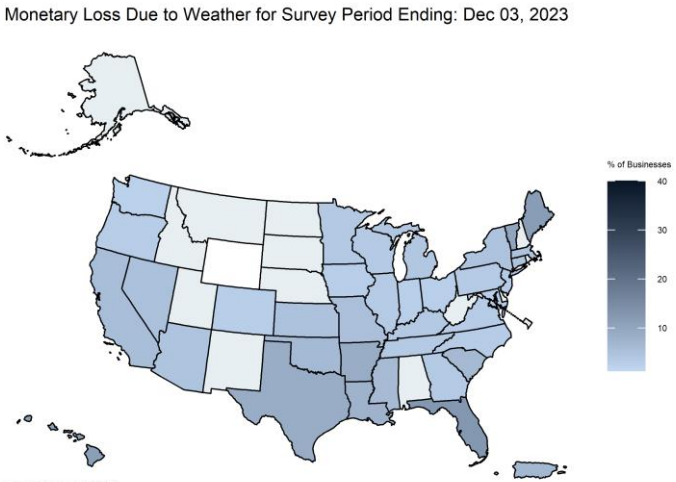
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R at Census, demonstration









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Looking towards the future

Visualization options

Cloud-based computing

Collaboration & assistance

Open-source skeptics

R Snacks

Python User Group (PUG)

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