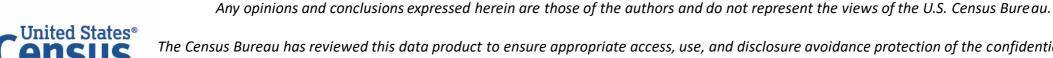


#### On the Outs: Rethinking Outlier Detection in the Economic Census

#### Sarah Scott

Supervised by Clayton Knappenberger, Angelina Peck, and Emily Wiley **Economy-Wide Statistics Division** 





The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7504847, subproject P-7514952, Disclosure Review Board (DRB) approval number: CBDRB-FY22-EWD001-003).

# 1 The Problems

## Varied Approaches to Outlier Review

- Decentralized tools and workflow across trade teams
- Existing tools lead to duplication of analysts' efforts

## Timing of Micro and Geographic Review

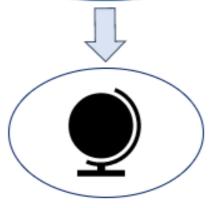
- Prioritization of microrecord review
- Limited resources allocated to state and sub-state review based on existing timelines



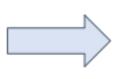


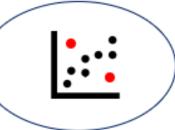
Allows analysts to filter by NAICS, state, county, and other important metrics





Uses state and county-level maps for a geographic-centered approach



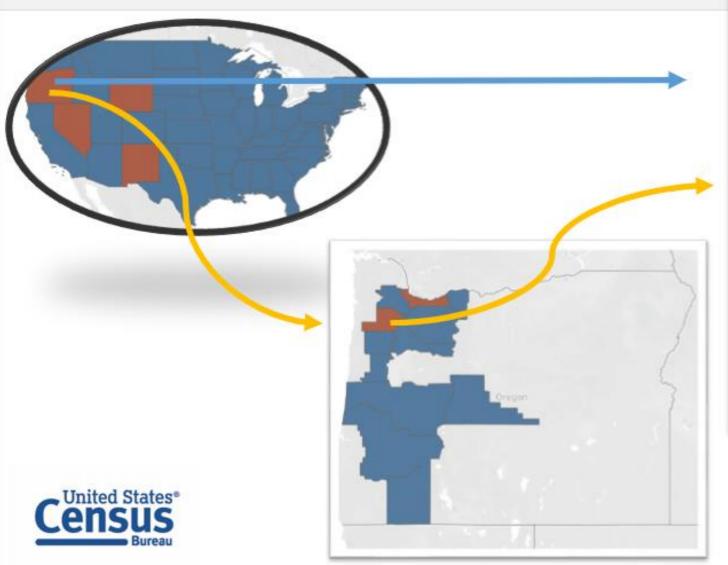


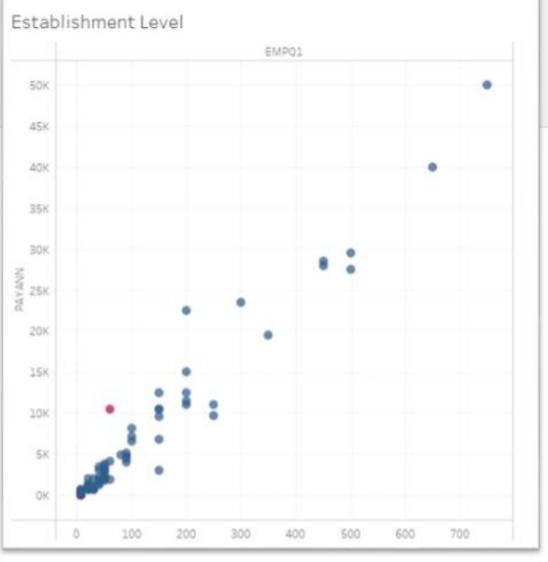
Graphs
establishments on
scatter plots to
visually highlight
outliers



## 3

### **Dashboard Walkthrough**





# 3

### **Dashboard Walkthrough**

