

2020 Demographic Analysis Experimental State and County Net Coverage Error Estimates for Young Children

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Measurement

UNECE
October 2-4, 2024

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The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release. CBDRB-FY24-0218.

2020 Demographic Analysis

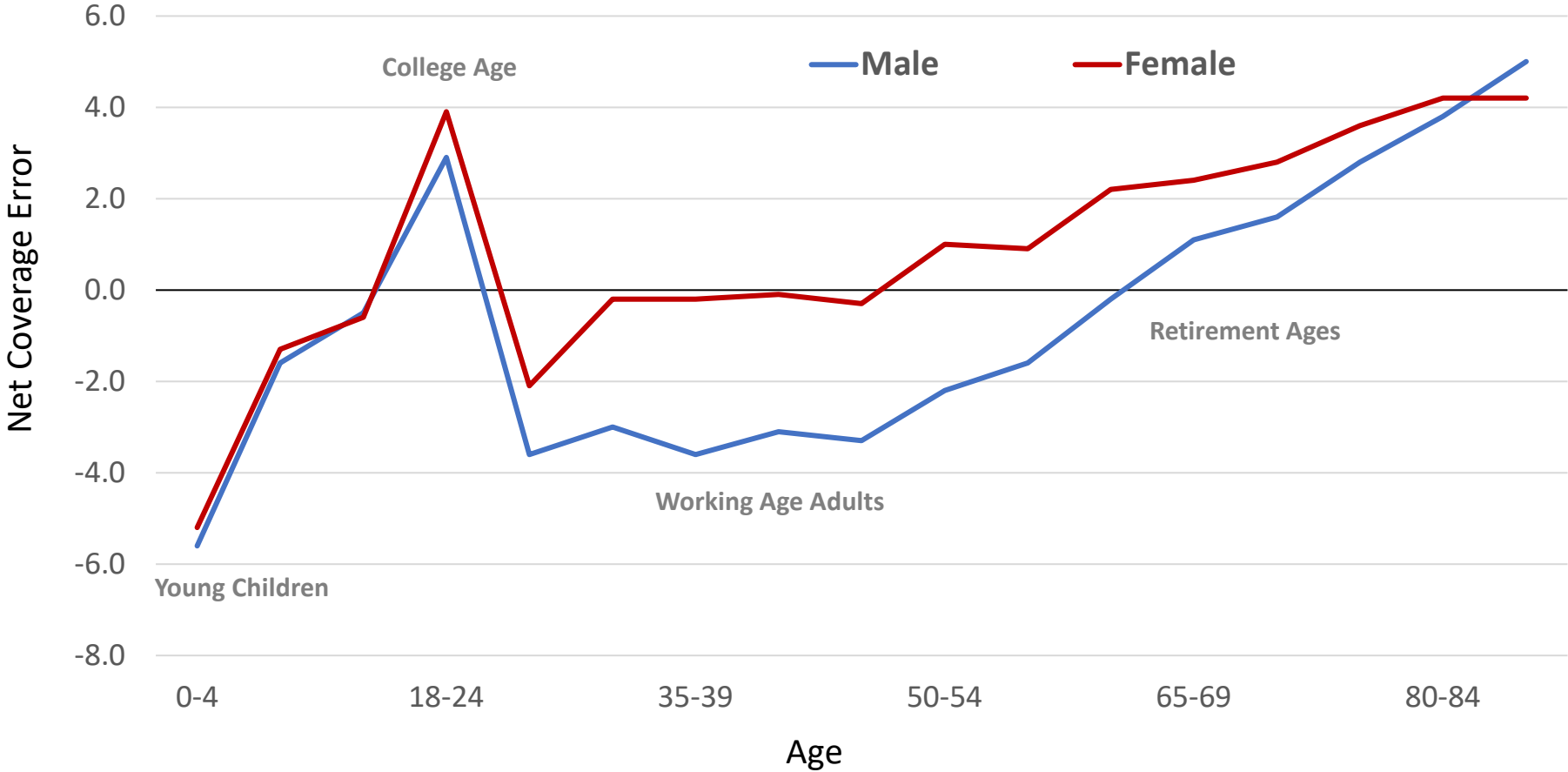
- Demographic Analysis (DA) is one of two official coverage measurement programs used for the 2020 Census
- DA population estimates are developed using historical and contemporary vital records, data on international migration and Medicare enrollment records
- Estimates for all ages can only be produced at the national level
- We have developed a series of *experimental* estimates at the state and county level for young children ages 0 to 4

Net Coverage Error

- Net Coverage Error is calculated as the percent difference between the census count and a benchmark estimate
 - DA Population Estimate
 - Vintage 2020 Population Estimate
 - Post Enumeration Survey (Dual-System Estimate)
- The benchmark estimate is considered the “true” estimate

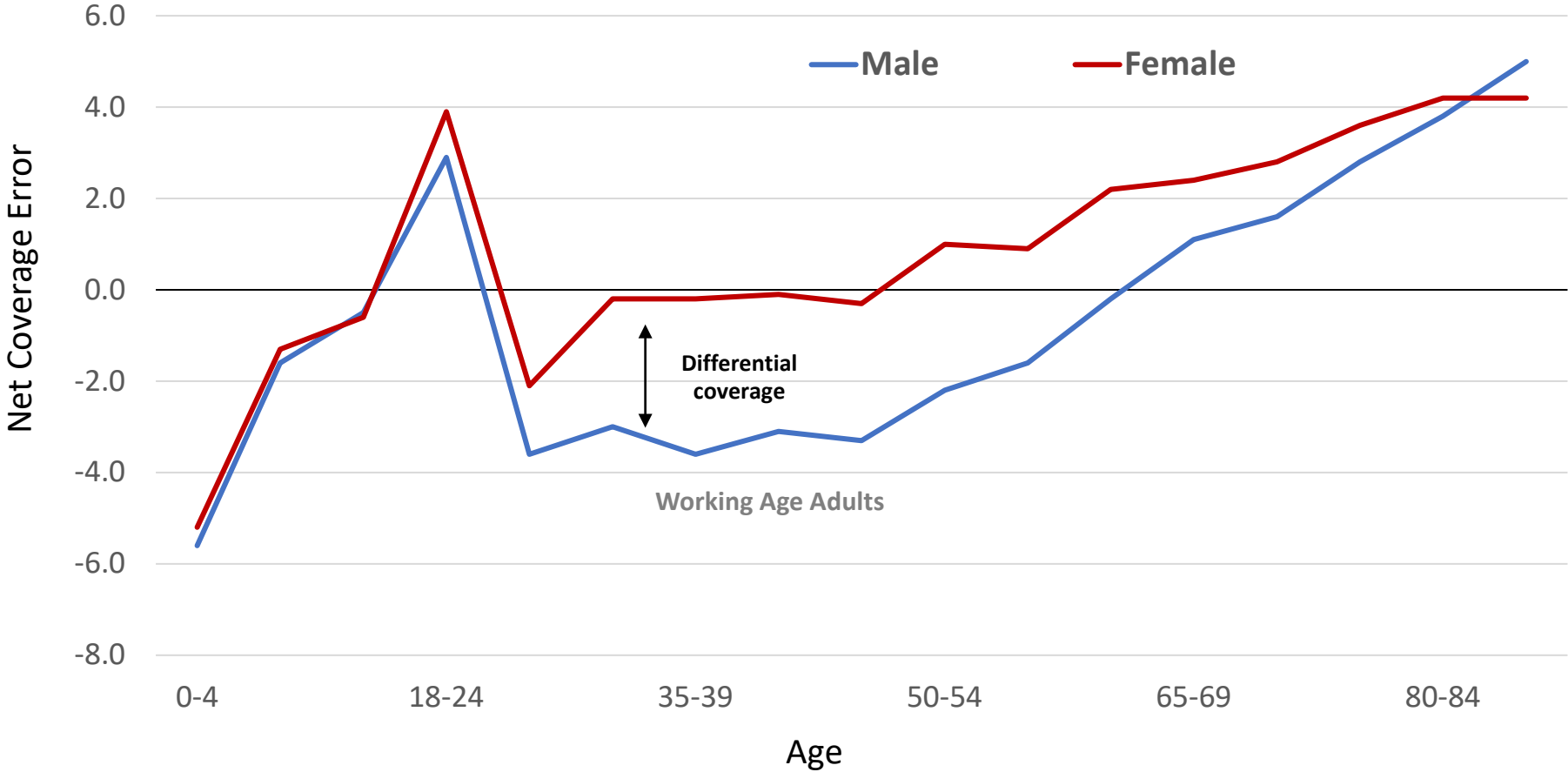
$$\text{Net Coverage Error} = \frac{\text{Census Count} - \text{DA Estimate}}{\text{DA Estimate}} \times 100$$

National 2020 Demographic Analysis Middle Series Net Coverage Error Estimates for Selected Age Groups by Sex: April 1, 2020



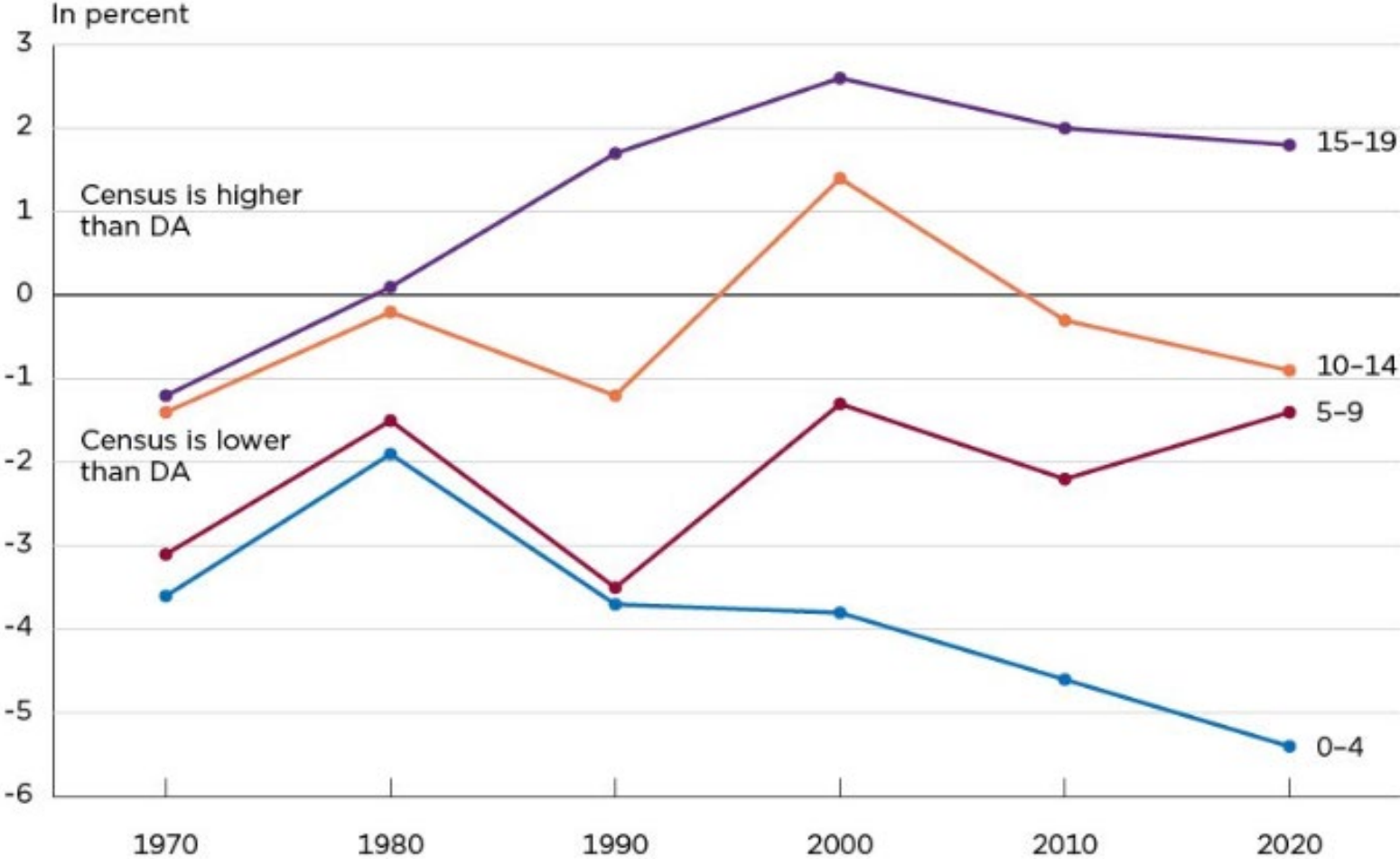
Source: U.S. Census Bureau, Population Division, 2020 Demographic Analysis (December 2020 release), and 2020 Census special tabulation (DRB Approval Number: CBDRB-FY22-DSEP-001).

National 2020 Demographic Analysis Middle Series Net Coverage Error Estimates for Selected Age Groups by Sex: April 1, 2020



Source: U.S. Census Bureau, Population Division, 2020 Demographic Analysis (December 2020 release), and 2020 Census special tabulation (DRB Approval Number: CBDRB-FY22-DSEP-001).

National Demographic Analysis Estimates of Net Coverage Error by Select Age Groups: 1970 to 2020



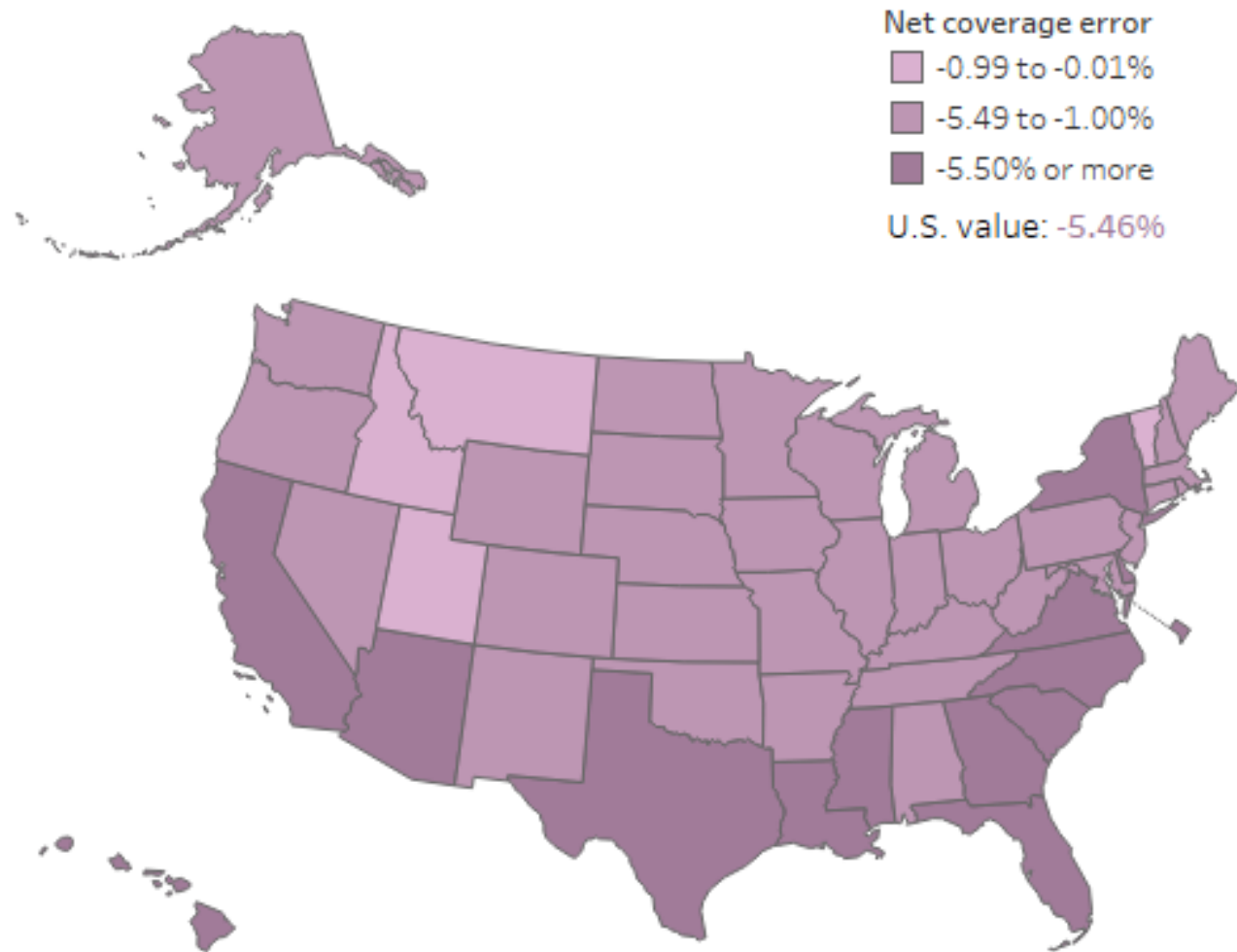
Note: The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied to this release. Demographic Analysis: CBDRB-FY22-DSEP-001.
Source: 1970, 1980, 1990, 2000, 2010, and 2020 Census and Demographic Analyses.

Net Coverage Error: 2020 Census

Results

State results

- All states had an undercount
- Ranged from a low in Vermont of -0.02 to a high in Washington D.C. of -15.85
- Births for Washington D.C. may be overstated due to births in Washington D.C. hospitals to parents from Maryland and Virginia

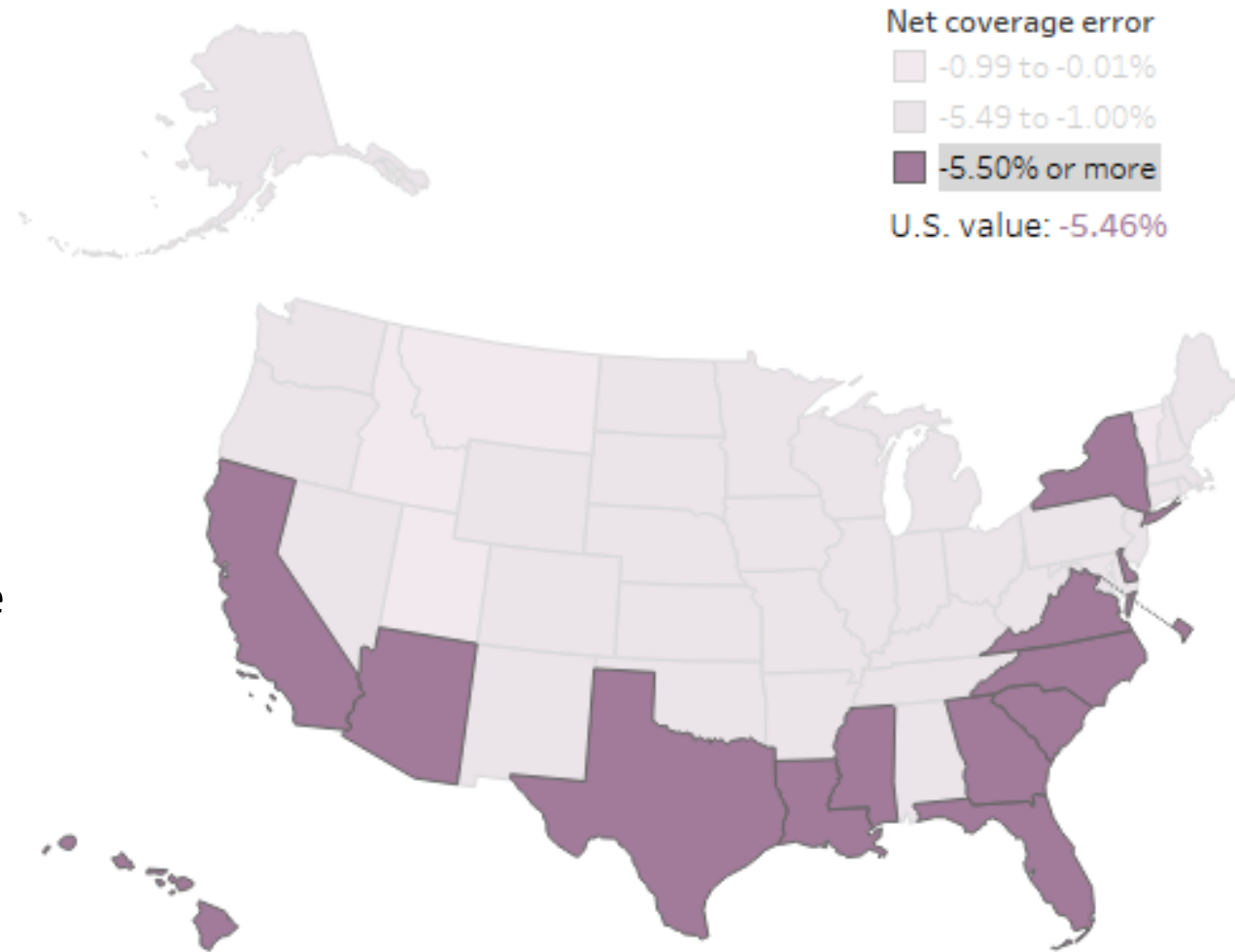


Net Coverage Error: 2020 Census

Results

State results (cont.)

- There were 15 states with an undercount greater than the national value of -5.46
- The largest undercounts were in the South, West, and Northeast
- Results for all states are available on the DA website:
- <https://www.census.gov/data/tables/2020/demo/popest/2020-state-county-da-tables.html>

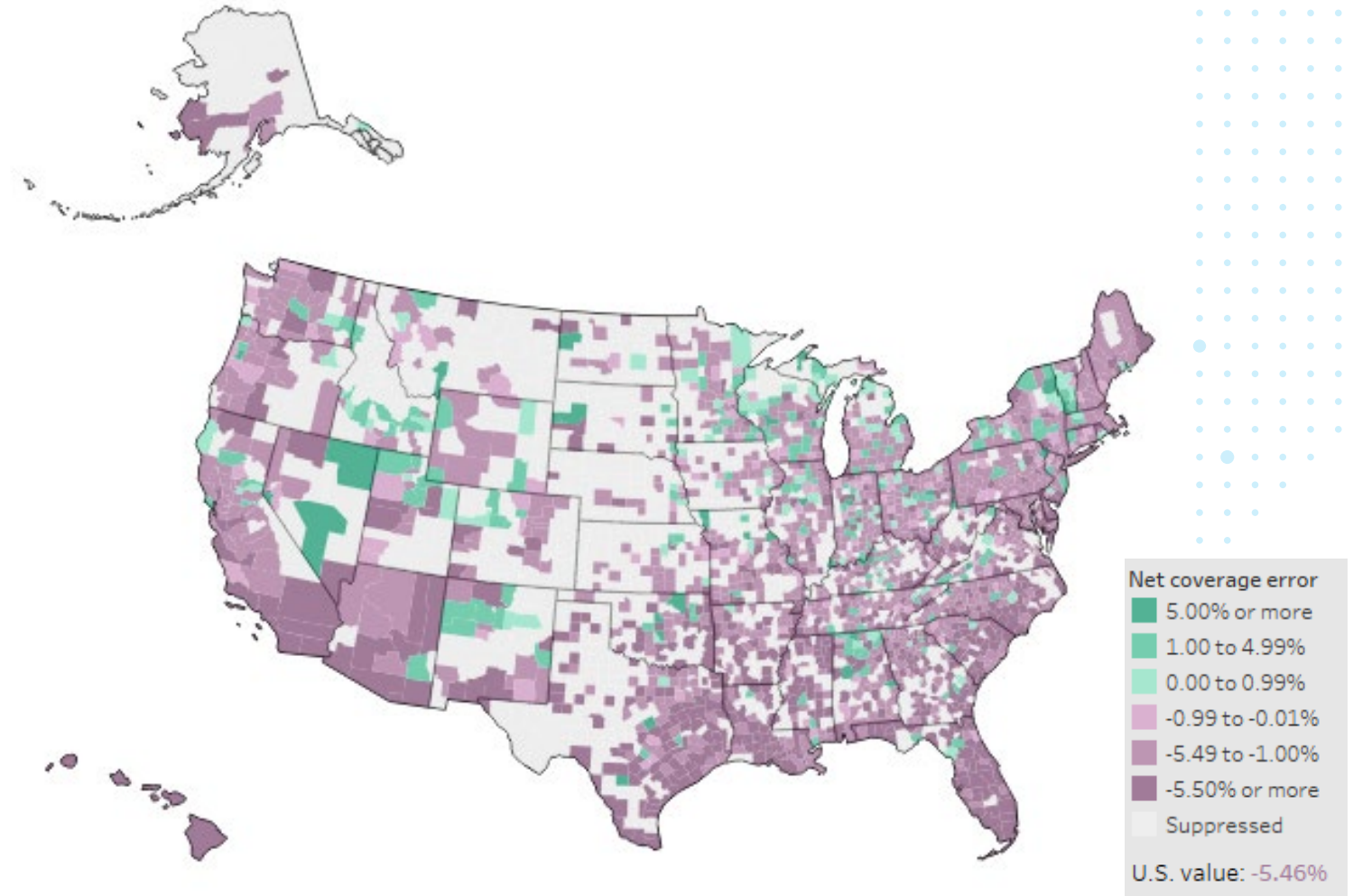


Net Coverage Errors for U.S. Counties

Results

County results

- We released data for 1,927 of 3,143 U.S. counties with a DA population estimate of 1,000 or more for ages 0 to 4
- Of these counties, 84% had an undercount and 16% had either no coverage error or an overcount

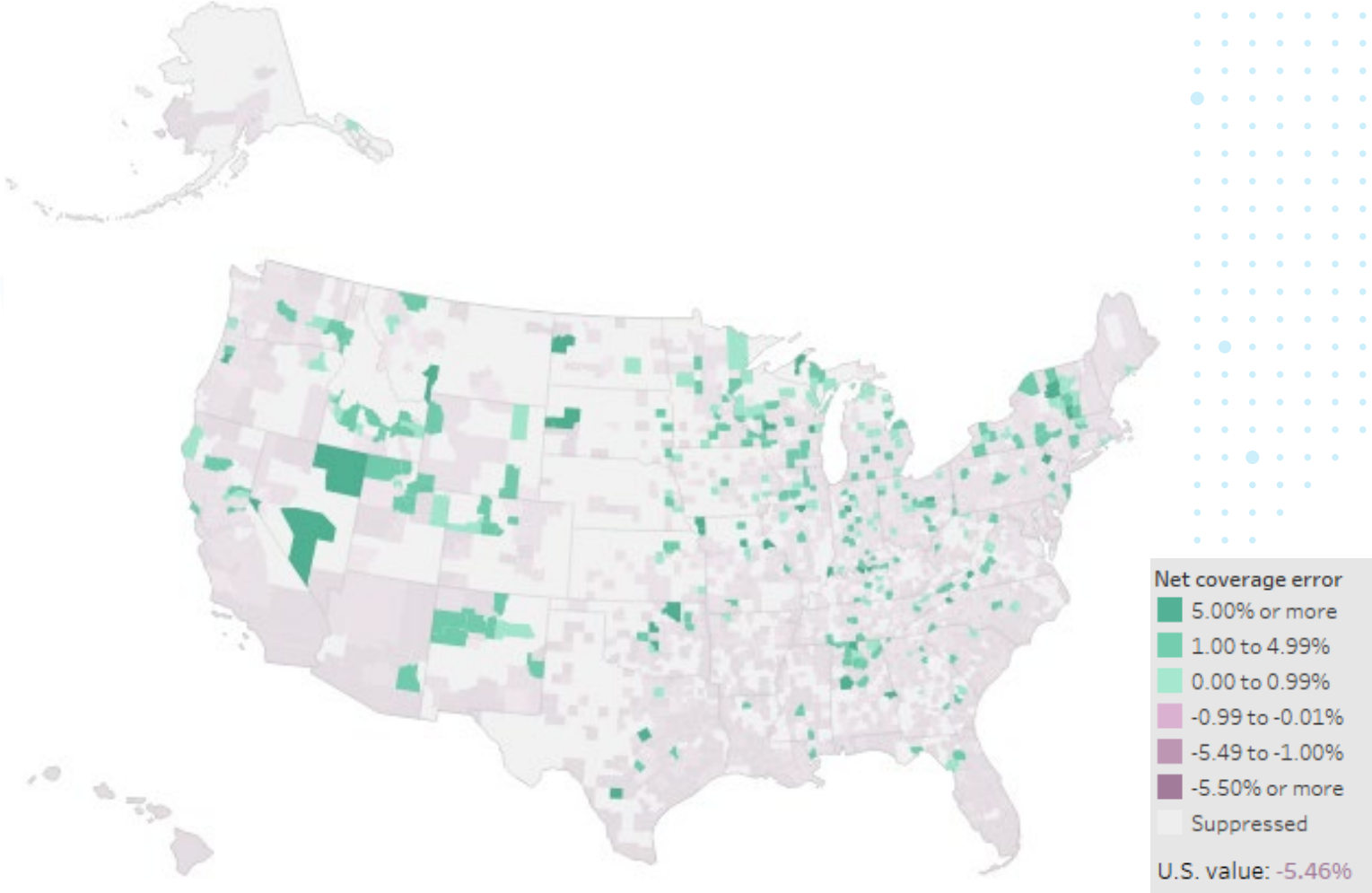


Net Coverage Errors for U.S. Counties

Results

County results (cont.)

- The overcount counties tended to be less spread out
- There is some clustering among these counties in states such as Vermont, New York, Wisconsin, Minnesota, Idaho and Utah

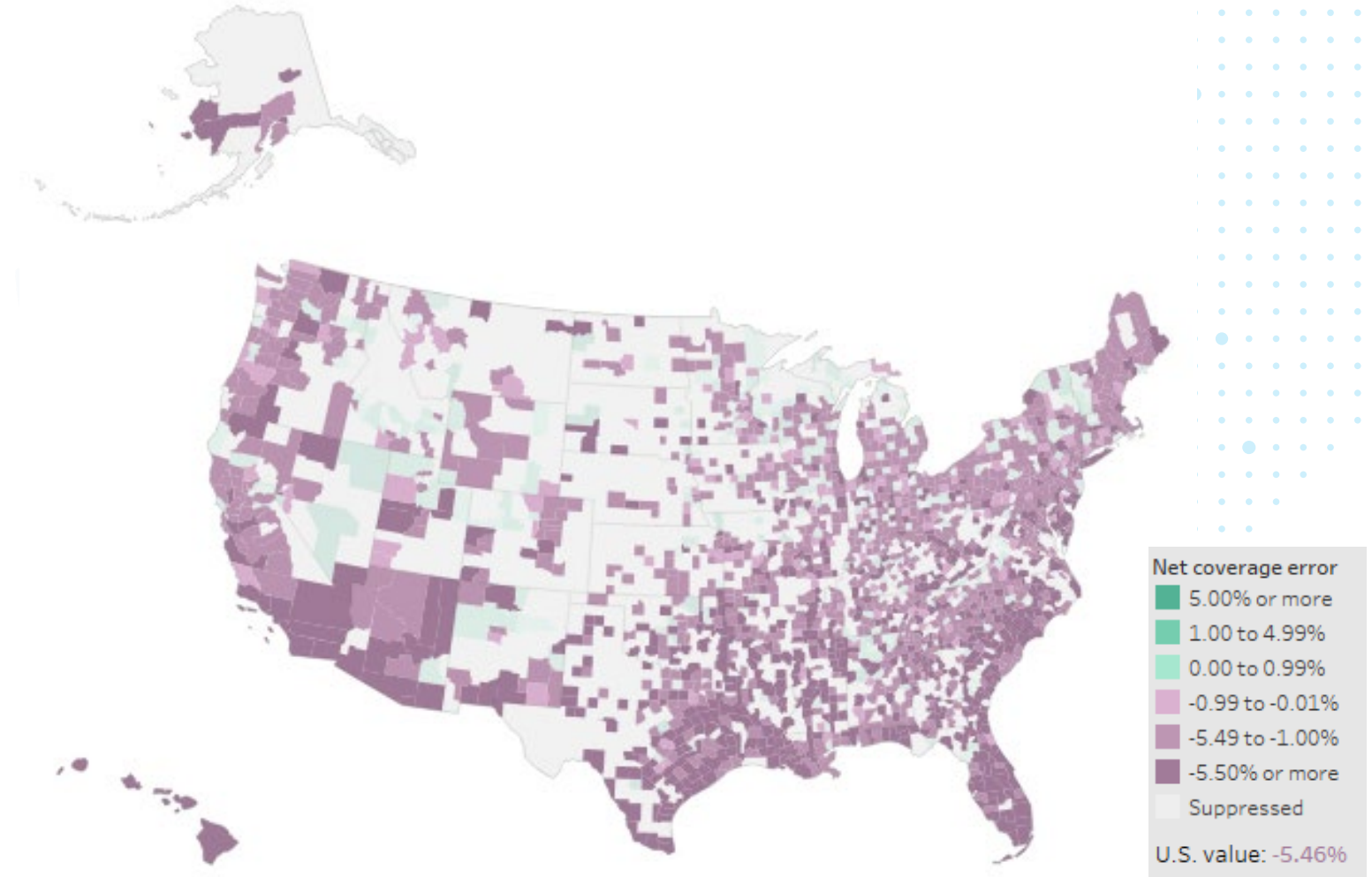


Net Coverage Errors for U.S. Counties

Results

County results (cont.)

- The undercount counties were widespread
- When we focus on the counties with an undercount greater than the national level, we see a shift toward the South and Southwest regions

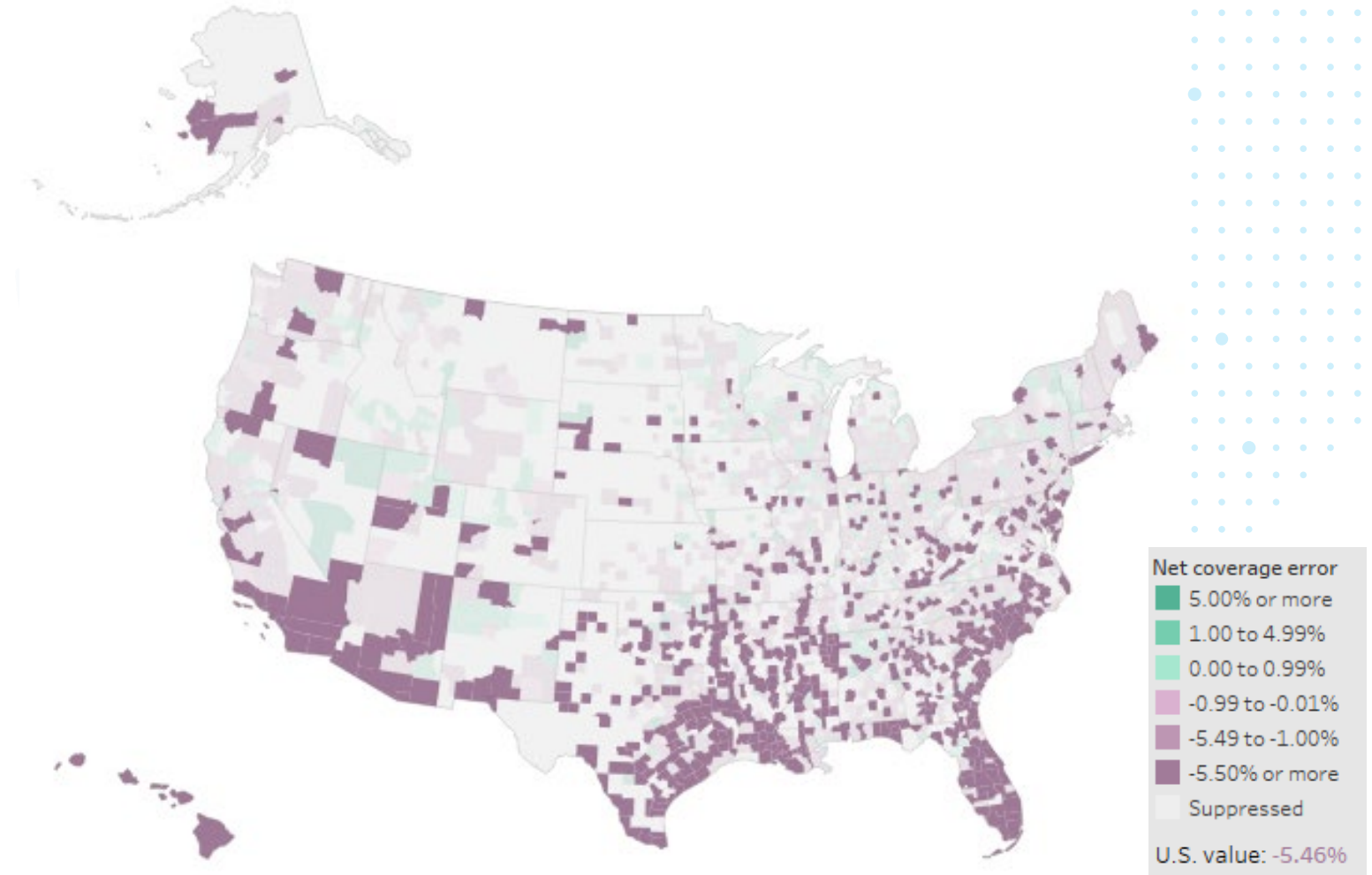


Net Coverage Errors for U.S. Counties

Results

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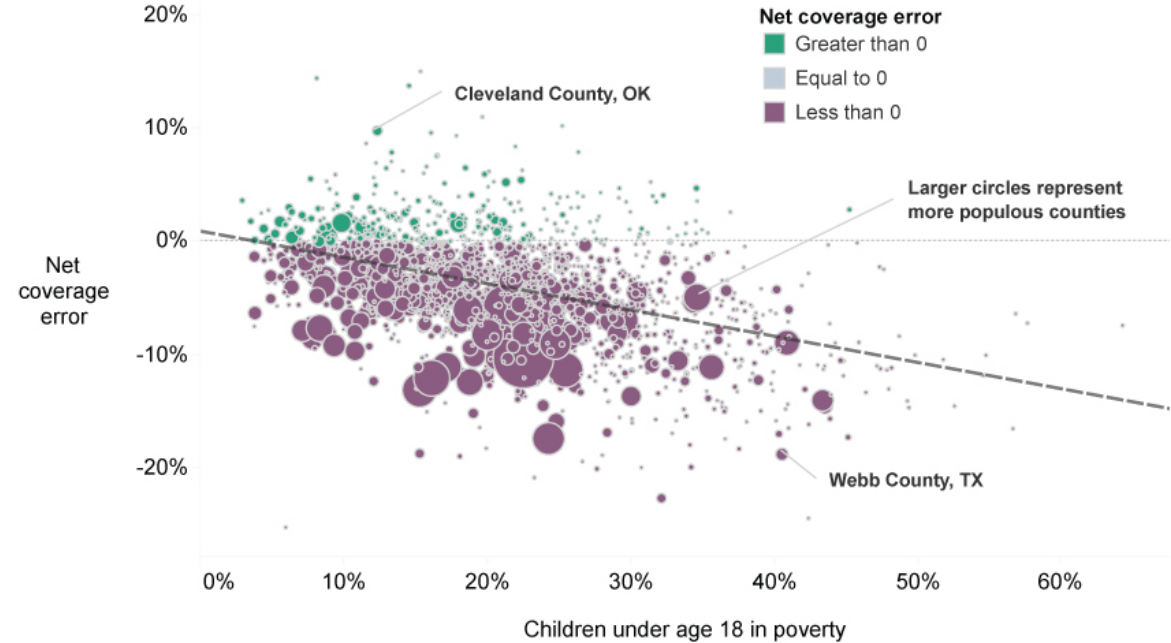
Results

Socioeconomic characteristics

- Percent of children under 18 in poverty
- Percent female-headed households
- Percent of adults without a high school degree
- Percent of renter-occupied housing units

Figure 2.

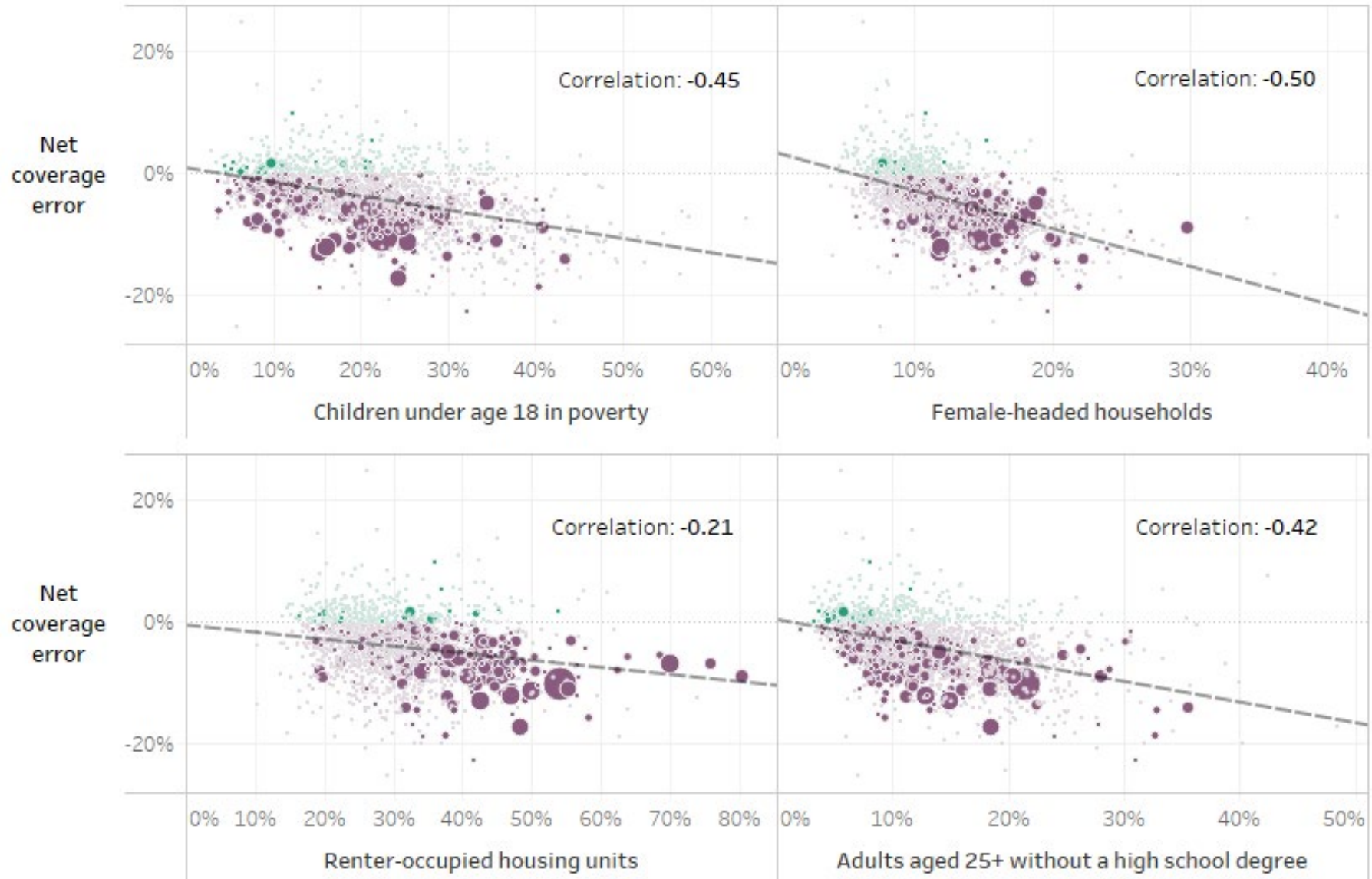
U.S. Counties by Percentage of Children Under Age 18 in Poverty and Net Coverage Error in the 2020 Census



Note: at the county level, the net coverage error calculation uses a special tabulation of the 2020 Census and is only produced for counties with a Demographic Analysis estimate of at least 1,000 children aged 0 to 4. This restricts analyses to 1,927 counties and excludes 1,216 counties.

Source: U.S. Census Bureau, Population Division, 2020 Demographic Analysis (April 2024 release), 2020 Planning Database Special Release State and County Data, and 2020 Census special tabulation (CBDRB-FY24-0218).

Results



Young Children Working Group

- This Young Children Working Group (YCWG) has an expanded focus from past efforts
- Team with experts from across the Census Bureau
- Subject matter experts in demography, survey methodology, census/survey operations, statistics, coverage measurement, and stakeholder engagement

Young Children Working Group Areas of Focus

Research

- Better understand why young children have higher undercounts than other age groups

Data Collection

- Making improvements to instructions, probes, and questions in surveys and the 2030 Census
- Administrative data

Data Products

- Improving Census Bureau data on young children

Outreach

- Draw on the experience and enthusiasm of the many stakeholder groups that we partnered with for 2020

Conclusion

- Despite improvement efforts, the undercount of young children grew to 5.4% in 2020
- The Young Children Working Group is dedicated to improving data on young children now and in future censuses

Research

**Data
Collection**

**Data
Products**

Outreach



QUESTIONS?



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