

# Concentrated Disadvantage by State, American Community Survey 2013-2017

Kristin Shaw MPH, Laura Houghtaling, MPH, Alexia Málaga, MPH, Sarah Milder, MPH, and Thomas Eckstein, MBA

Arundel Metrics, Incorporated, Saint Paul, MN

## Background

Concentrated disadvantage is a Life Course Indicator from the Association of Maternal and Child Health Programs.

It provides a community-level look at geographically concentrated poverty and economic segregation – factors that affect health and well-being throughout the lifespan.

Communities with high concentrated disadvantage are at greater risk of poor birth and educational outcomes, child maltreatment, teen pregnancy, higher rates of violent crime, and lack of access to healthy foods and recreational areas.

## Methodology

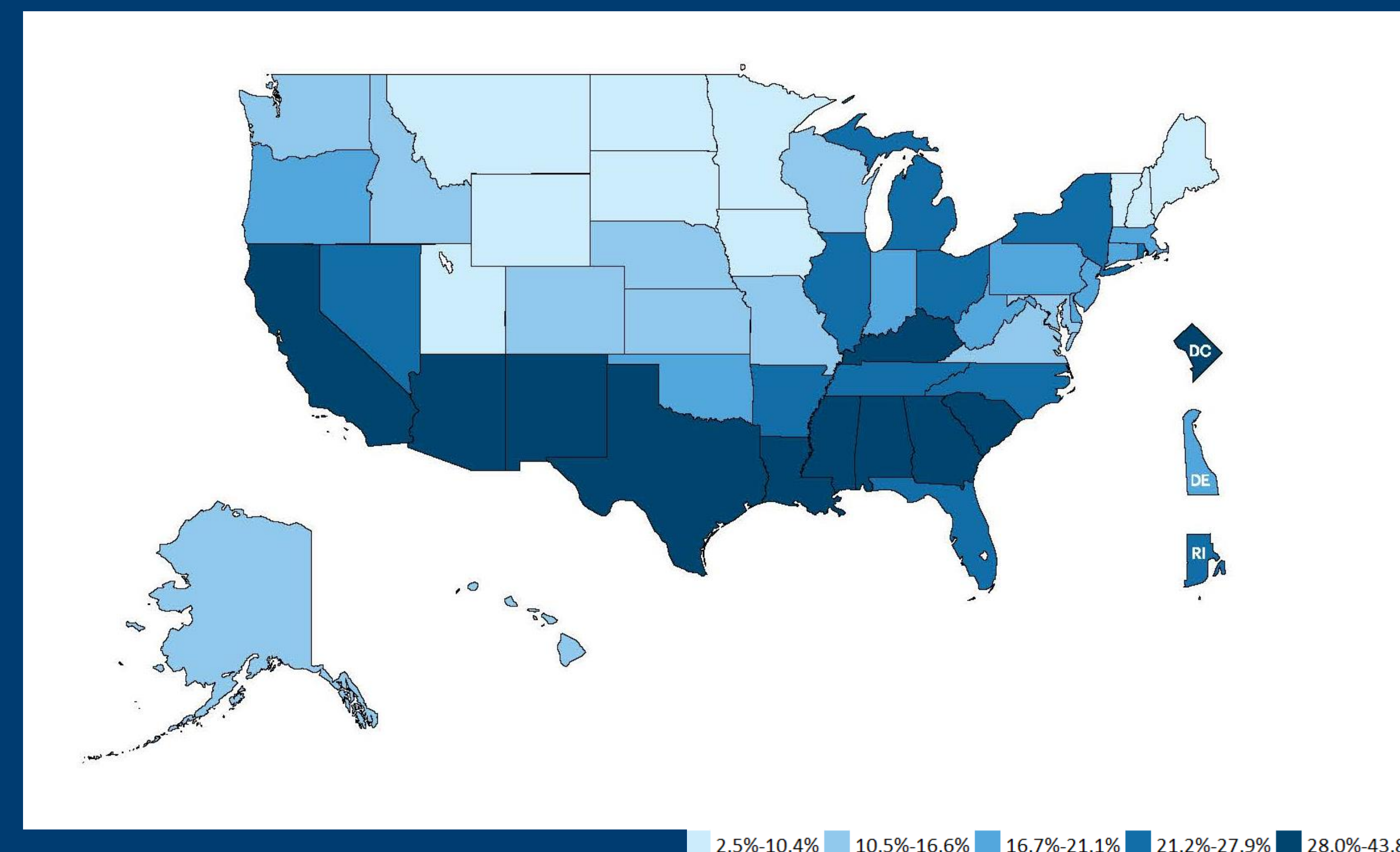
Concentrated disadvantage is the proportion of households located in census tracts with a high level of concentrated disadvantage, calculated using five variables from the 2013-2017 American Community Survey & IPUMS National Historical Geographic Information System:

- 1) Percent below poverty threshold (family households)
- 2) Percent on public assistance (population)
- 3) Percent female-headed households
- 4) Percent less than age 18
- 5) Percent unemployed (ages 16 and older)

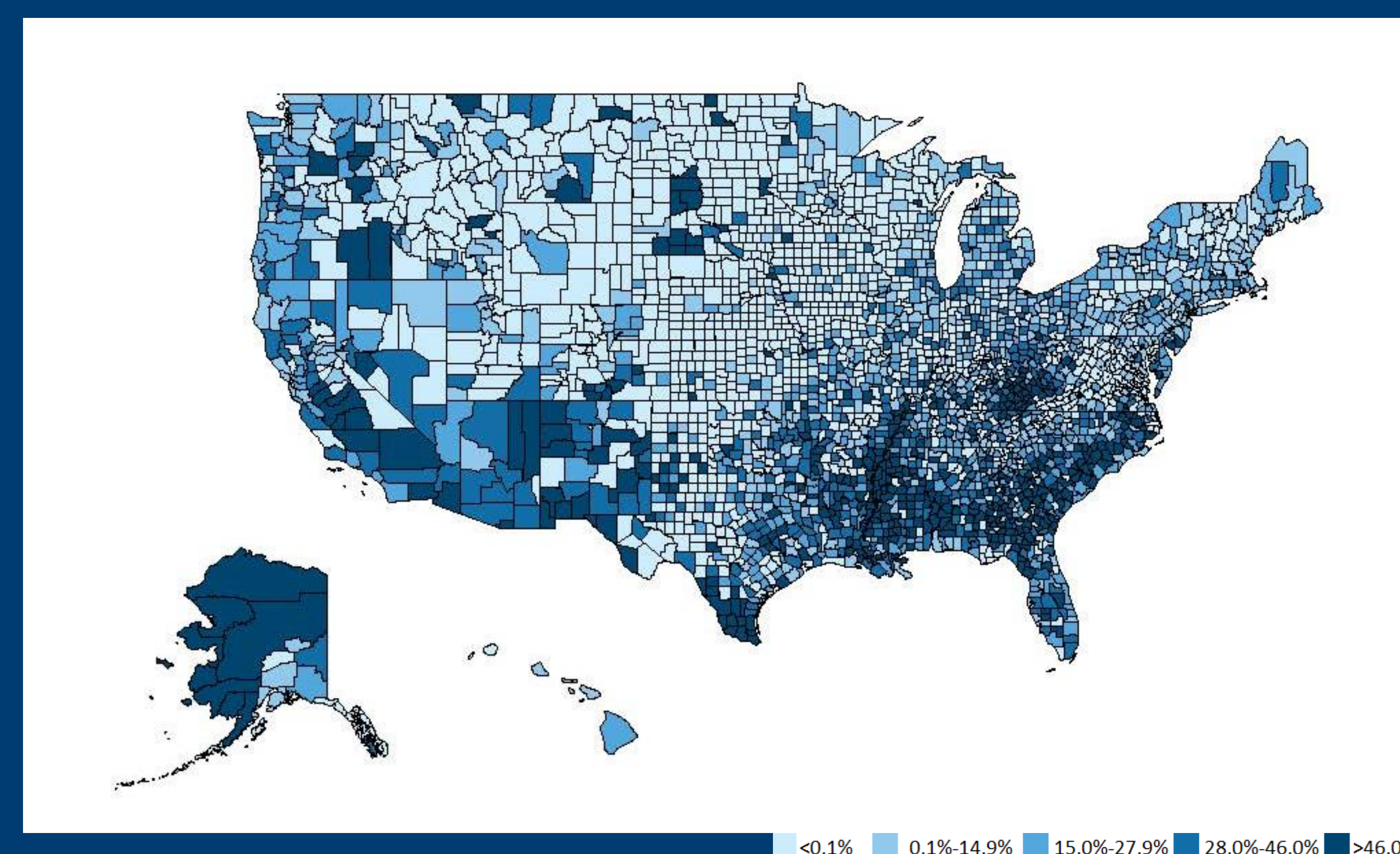
Census tracts were labeled disadvantaged if their averaged z-scores fell within the 75th percentile of values in the nation. Data were aggregated to county and state levels by summing the population of disadvantaged census tracts and dividing by the population of all census tracts for each state.

Statistical analyses performed using STATA v15.1. Maps created using Tableau.

## Concentrated Disadvantage by State



## Concentrated Disadvantage by County



## Results

Nationally, 20.2% of households are located in a census tract with a high level of concentrated disadvantage.

The percentage of households located in an area of high concentrated disadvantage varies widely by state from 2.5% in Vermont to 43.8% in Mississippi.

Concentrated disadvantage is highest in Southern states and lowest in Northeast and Midwest states.

Counties with the highest levels of concentrated disadvantage (relative to the U.S.) are in Southern states and Alaska.

## Conclusions

Identifying communities with high concentrated disadvantage can provide local and state stakeholders with information to improve social capital and ultimately the health and well-being of people living in disadvantaged neighborhoods.

The data may be helpful in addressing health outcomes such as infant mortality, low birthweight and teen pregnancy.

## Limitations

- County-level map calculated relative to the U.S.
- Requires five years of data to calculate, limiting trend analysis
- Uses female-headed household (vs single-parent household); this may introduce bias based on demographic composition of an area, such as areas with more same-sex households
- Percentage of black residents not included and thus this measure does not capture confounding of segregation and poverty

### Acknowledgments

We thank the advisory committee, who provided guidance in the development of the *America's Health Rankings® Health of Women and Children Report*, and United Health Foundation for their continued support of this project.

### Disclosure

Arundel Metrics receives funding from United Health Foundation to produce America's Health Rankings. Arundel Metrics ([arundelmetrics.com](http://arundelmetrics.com)) is a data-driven consulting firm specializing in public health measurement and index generation.