America at a Glance: An Update on Rural-Urban Difference in Disability Rates

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AMERICA AT A GLANCE:
AN UPDATE ON RURAL-URBAN
DIFFERENCES IN DISABILITY RATES

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INTRODUCTION

For over 30 years, The Research and Training Center on Disability in Rural Communities (RTC:Rural) has conducted research, training, and service to improve the lives of people with disabilities living in rural areas.

Our research examines the disparities that people with disabilities in rural communities experience in access to healthcare, housing, employment, transportation, and opportunities for social and community participation. For example, our research has found that people in rural areas report disabilities about 10 years earlier than people in urban areas (Sage et al. 2019). Additionally, disabled people in rural communities live further from community-based services (Johnson et al. 2021), struggle to access transportation options (Myers and Ravesloot 2016), and report lower rates of employment and higher rates of poverty than those in more urban areas (Paul, Rafal, and Houtenville 2020).

Since the release of the first ACS 5-year estimate in 2013, disability statistics collected by the ACS have been used to better understand disability in rural America. For this report we analyzed the most recent disability data from the American Community Survey (ACS 5-year estimates 2015-2019) to examine what has changed over the last decade. Our key findings are:

- The disability disparity between rural and urban persists, with higher rates of disability in rural counties
- Rates of disability across rural and urban have increased slightly
- Rates of disability are higher in rural counties across disability type, age, race, and ethnicity

WHAT IS RURAL?

There are many ways to define "rural." In fact, there are likely as many ways to define rural as there are rural communities and people across the United States. However, to analyze and understand trends in rural disability, we must define rural.

For this analysis we use a county level classification scheme developed by the Office of Management and Budget (OMB). Disability data is readily accessible and available from the Census Bureau at the county level, allowing us to analyze the intersection of disability and rurality across the US.

The OMB routinely publishes county level classifications based on residential and commuting patterns across US counties. Counties are classified as either metropolitan or nonmetropolitan based on these patterns. Metropolitan counties are counties with an urban core of at least 50,000 people. Nonmetropolitan counties are further divided into micropolitan counties with an urban core between 10,000 to 50,000 people and noncore counties encompassing all remaining counties ("Metropolitan and Micropolitan" 2021). Typically, we consider metropolitan counties to be more urban, and nonmetropolitan counties to be more rural.

The OMB releases updates to these classifications, as counties have experienced growing and declining populations. With the latest release of OMB classifications from March 2020, 1,251 counties are metropolitan, 665 counties are considered micropolitan, and 1,304 counties are considered noncore.
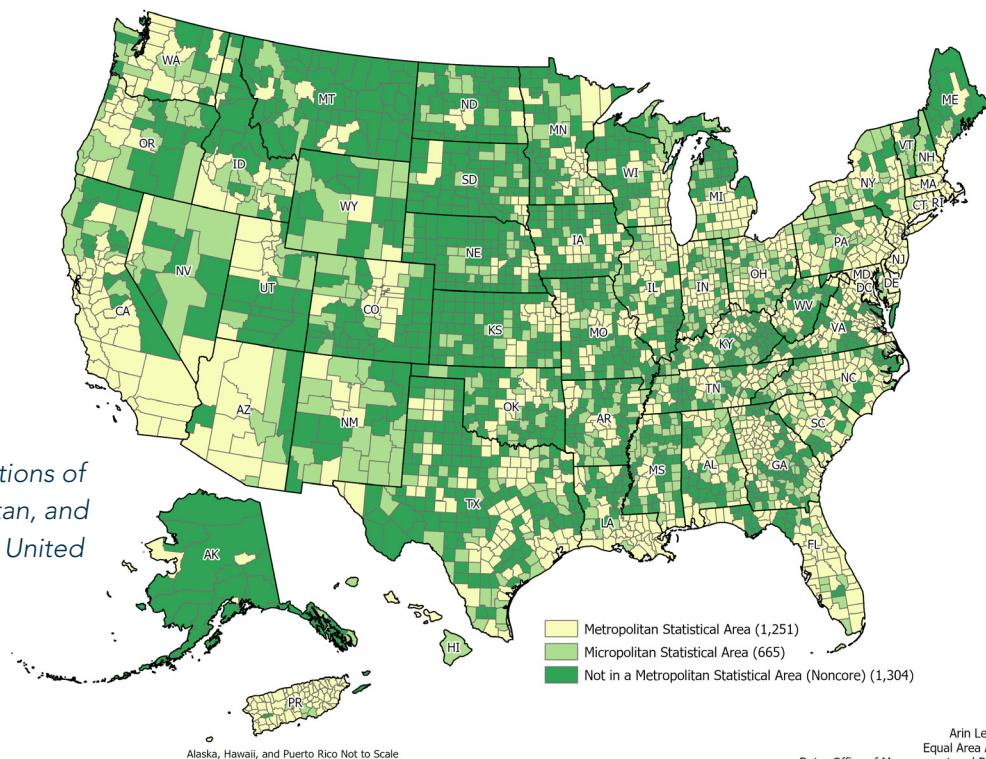
Figure 1: OMB classifications of metropolitan, micropolitan, and noncore throughout the United States.

Metropolitan Statistical Area (1,251)
Micropolitan Statistical Area (665)
Not in a Metropolitan Statistical Area (Noncore) (1,304)

Alaska, Hawaii, and Puerto Rico Not to Scale

Arin Leopold, 2022
Equal Area Albers Conic
Data: Office of Management and Budget, 2018
RTC:Rural
University of Montana

DEFINING DISABILITY

The American Community Survey (ACS) was designed to supplement the US Decennial Census. Data for the ACS collects a wider range of data, including data on disability, than the decennial census, and is collected and released annually providing the opportunity to analyze the US population on an ongoing basis. The ACS defines disability using six questions that ask about functional difficulty and supports. Individuals are classified as having a disability if they respond yes to at least one of the following questions:

1. Are you deaf, or do you have serious difficulty hearing?
2. Are you blind, or do you have serious difficulty seeing even when wearing glasses?
3. Because of a physical, mental or emotional problem do you have difficulty remembering, concentrating or making decisions?
4. Do you have serious difficulty walking or climbing stairs?
5. Because of a physical, mental, or emotional problem do you have difficulty dressing or bathing?
6. Because of a physical, mental, or emotional problem, do you have difficulty running errands alone, such as visiting a doctor's office or shopping?

OVERVIEW: DISABILITY RATES IN METROPOLITAN, MICROPOLITAN, AND NONCORE COUNTIES

Over the last decade, disability rates have increased across metropolitan, micropolitan and noncore counties. On average, rates have increased by 0.4 percentage points (Figure 2).
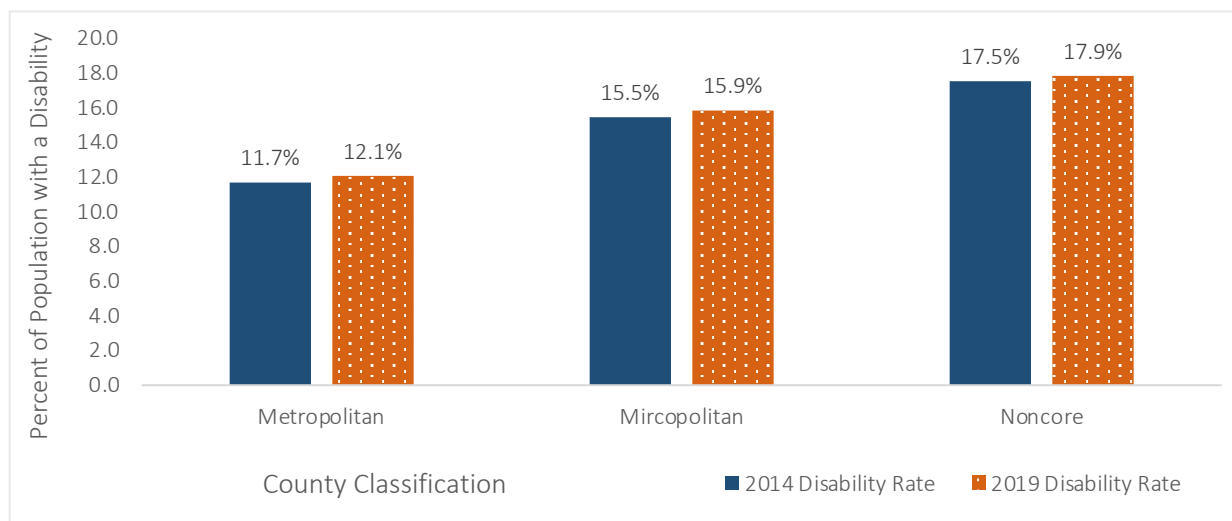

Figure 2: Disability Rate by County Type from 2010-2014 to 2015-2019. In metropolitan counties disability increased by 0.37 percentage points, in micropolitan counties it increased by 0.39 percentage points, and in noncore counties it increased by 0.35 percentage points. Data: ACS 5-year Estimates 2008-2012 Table S1810; ACS 5-year Estimates 2015-2019 Table S1810.

OMB Class.	Population (2014)	Rate (2014)	Population (2019)	Rate (2019)
Nation	38,629,760	12.4%	41,041,170	12.7%
Metropolitan	31,262,267	11.7%	33,504,379	12.1%
Micropolitan	4,124,819	15.5%	4,233,877	15.9%
Noncore	3,242,674	17.5%	3,302,914	17.9%

Table 1: Disability populations and rates by OMB county classification.

RATES BY DISABILITY TYPE

Examining the data by disability type can give us insight into how disability varies throughout the country. Disability rates are higher in rural areas across all disability types. Highest rates are for cognitive disability, with 5.9% in micropolitan and 6.3% in noncore, and mobility disability, with 8.2% in micropolitan and 9.6% in noncore.
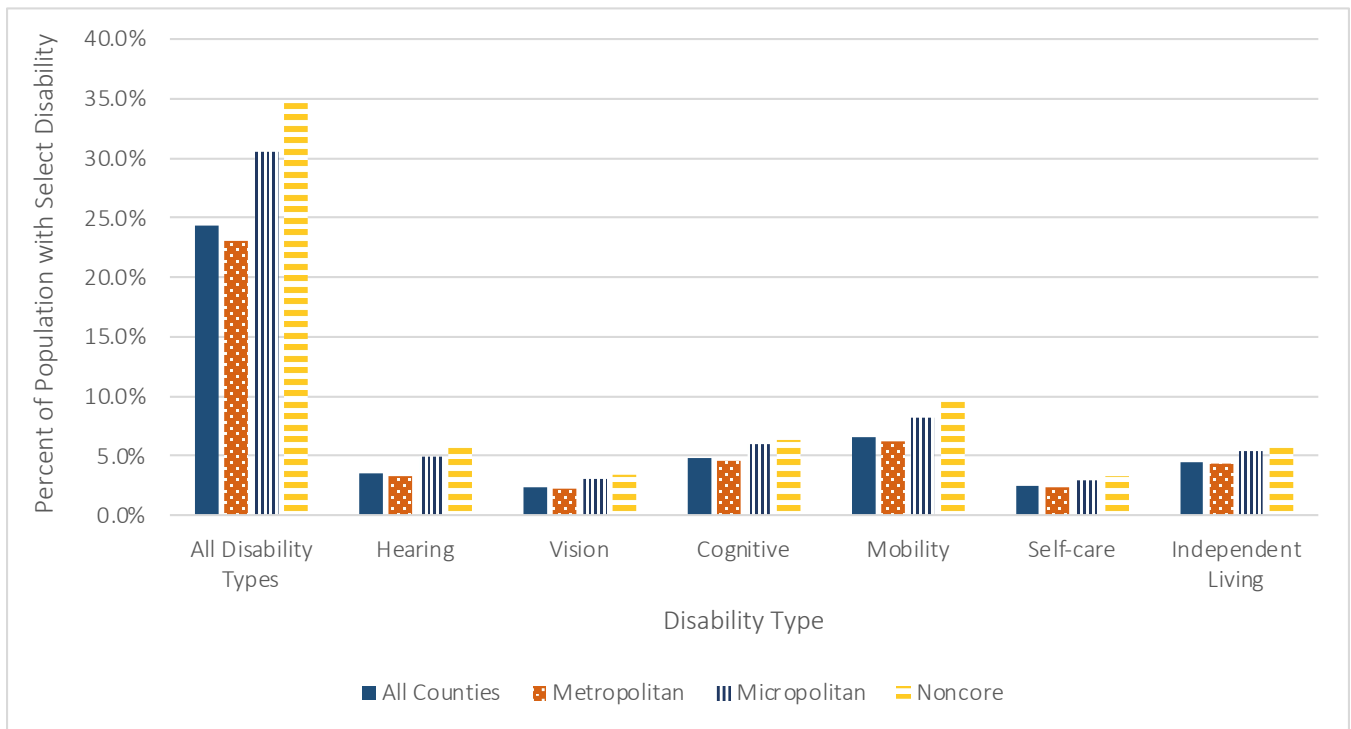

Figure 3: Disability Rates by County Classification across Disability Types. ACS 5-year Estimates 2014-2019.

DISABILITY BY AGE

Disability rates are higher in nonmetropolitan counties across all age groups as well. Highest rates are for ages 65+, with rates increasing from 34% in metropolitan to 37.5% in micropolitan and 39% in noncore. The largest increase from metropolitan to nonmetropolitan is found in the 18-65 age group, with rates jumping from 9.7% in metropolitan to 13.7% in micro and 15.3% in noncore.
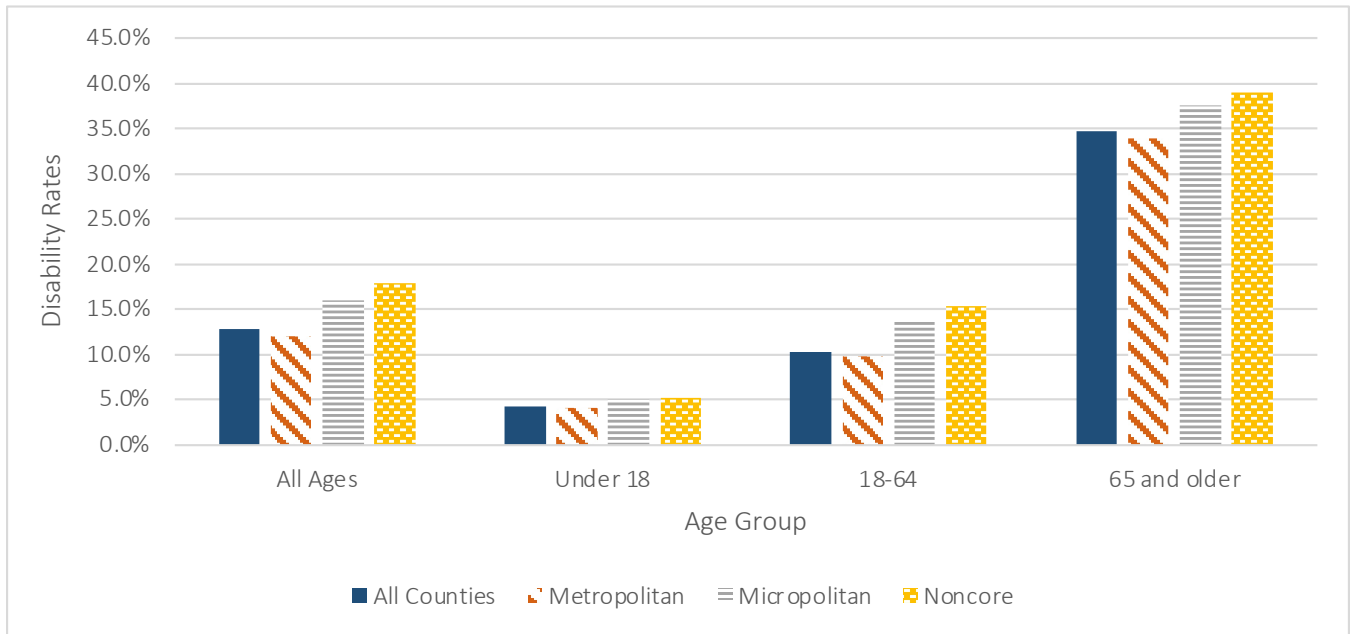

Figure 4: Disability Rates by County Classification and Age. ACS 5-year Estimates 2014-2019.

DISABILITY BY RACE

The trend continues with higher rates of disability in nonmetropolitan areas across all racial groups. In general, the lowest rates exist in metropolitan counties and increase to the highest in noncore, with the exception of American Indian/Alaskan Native (AI/AN) groups having the highest rates of disability in micropolitan areas (17.9%) and the lowest rates in noncore (16.4%). In general, rates of disability are highest for AI/AN (17%) and lowest for Asian (7%).
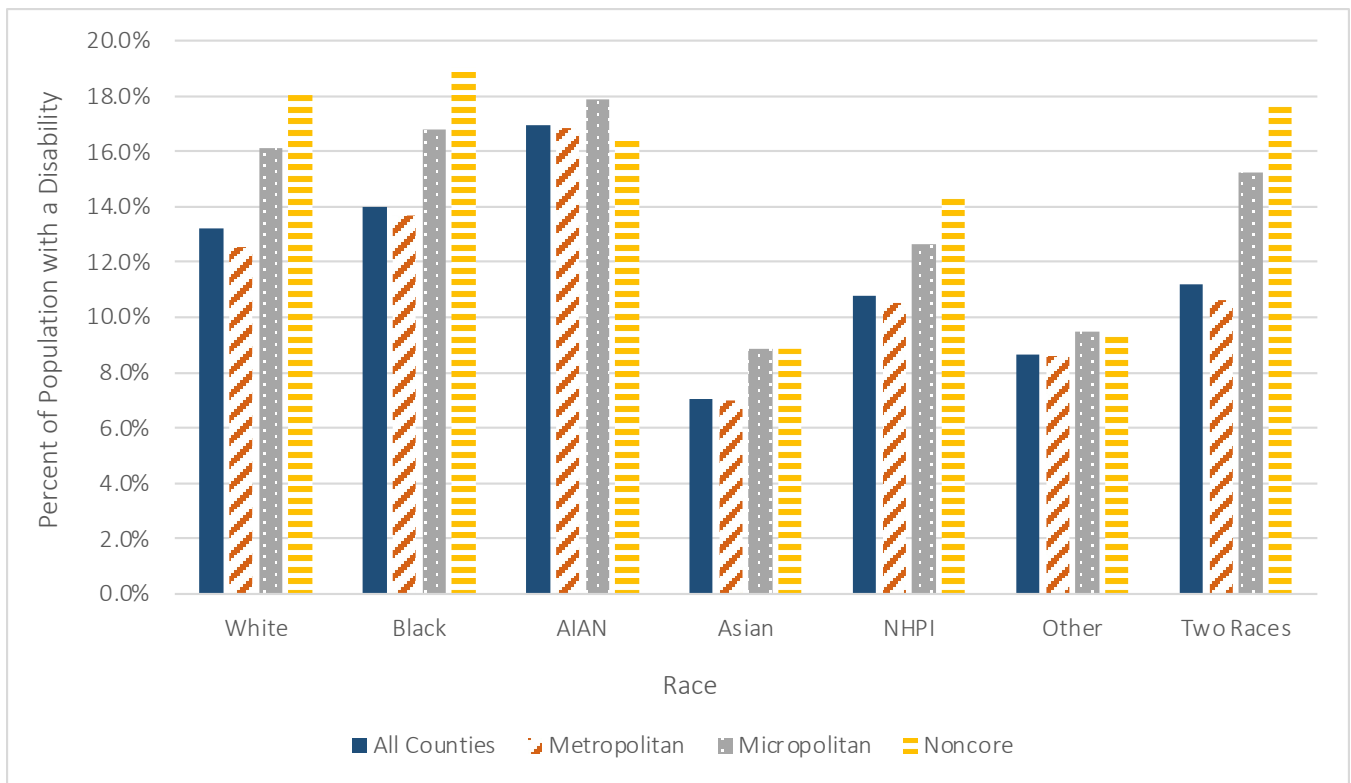
Figure 5: Disability by County Classification and Race.

LIMITATIONS

This analysis aggregates county level data up to larger rural-urban classifications. This type of analysis can mask underlying variations in the data. For example, there is considerable variation in disability rates across rural areas in the United States. Figure 3 illustrates the local level variation in disability rates across US counties.

In the same way that an aggregated analysis can conceal differences at the local level, county classifications fail to capture the full scope of rurality. For example, many counties that the OMB classifies as urban have substantial rural populations and areas.

In addition, racial and ethnic classifications can also be problematic. Like the classification systems mentioned above, racial and ethnic categories are broad generalizations that fail to capture individual and community level variation. For example, the racial classification "Asian" encompasses a wide range of individuals from different cultural backgrounds who often have vastly different experiences, resulting in a wide range of health, employment and education outcomes.
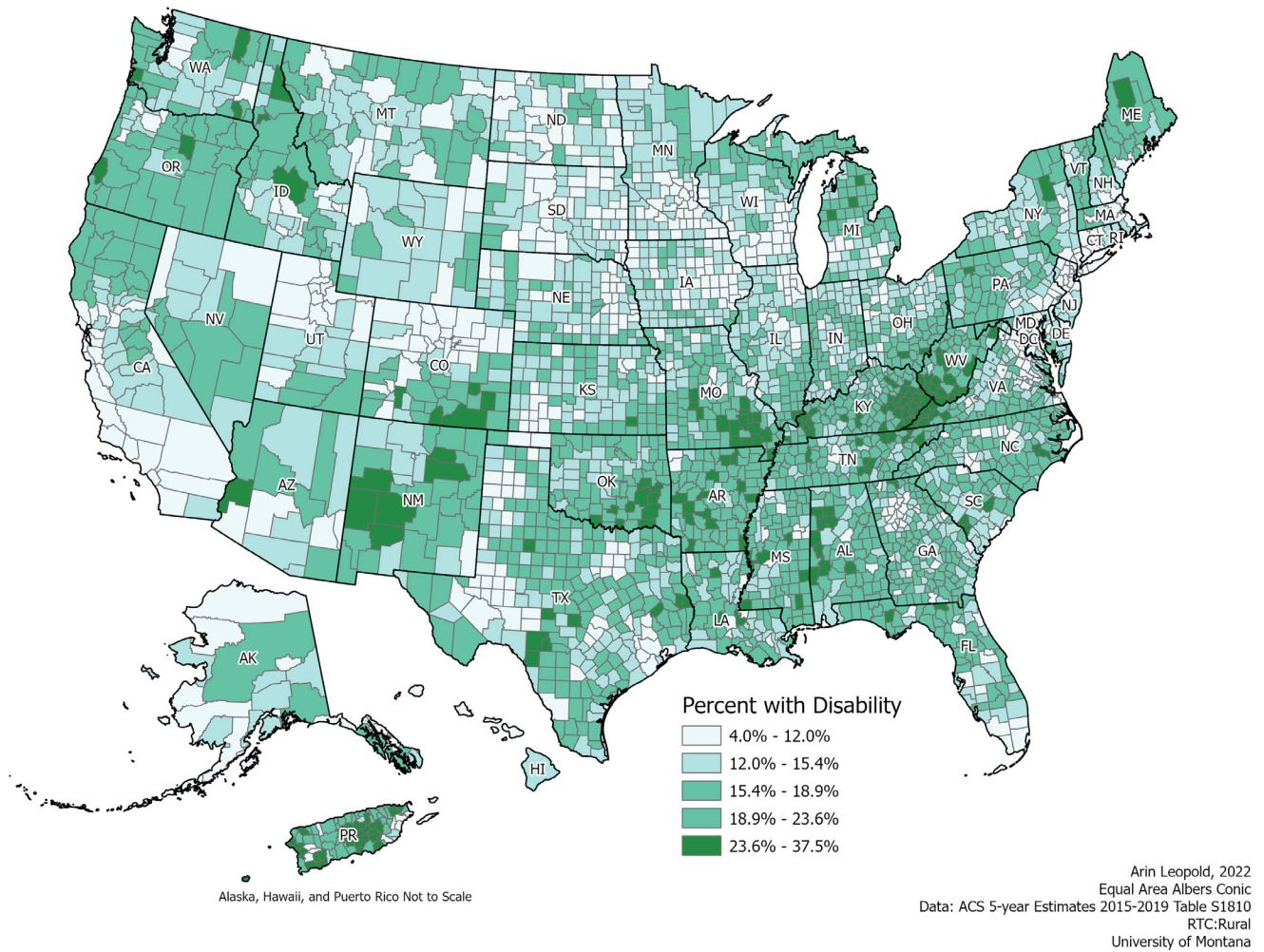
Figure 6: Percent of population with a disability throughout the United States. ACS 5-year Estimates 2014-2019.

Finally, margins of error (the range for which these data are considered accurate or reliable) for some data at the county level prevent robust and reliable rural analysis. This is particularly true for subgroup analysis examining disability by race. More on this limitation can be found in this factsheet.

SUMMARY AND OUTLOOK

Several disability disparities exist throughout the rural-urban continuum across age, disability type, race/ethnicity. In general, disability rates are highest in the most rural areas (i.e., noncore counties), except for American Indian/Alaskan Natives and "other" races, where disability rates are higher in micropolitan counties. Several factors may explain these trends, including underfunded rural health systems, inaccessible infrastructure, lack of employment opportunities, higher rates of disabling injuries, lack of health insurance, limited rehabilitation services, poverty, among others. Continued research into the upstream factors that contribute to these disparities is critical to understanding how to better serve people with disabilities living in rural communities across America.

Tables containing the data presented in this report can be found in the 2020 Disability Statistics Compendium, and specific county level disability data can be accessed using our Disability Counts data lookup tool.

SUGGESTED CITATION

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FOR ADDITIONAL INFORMATION

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