

From Snapshots to Collage: Exploring Continuity and Change in Rural Mississippi

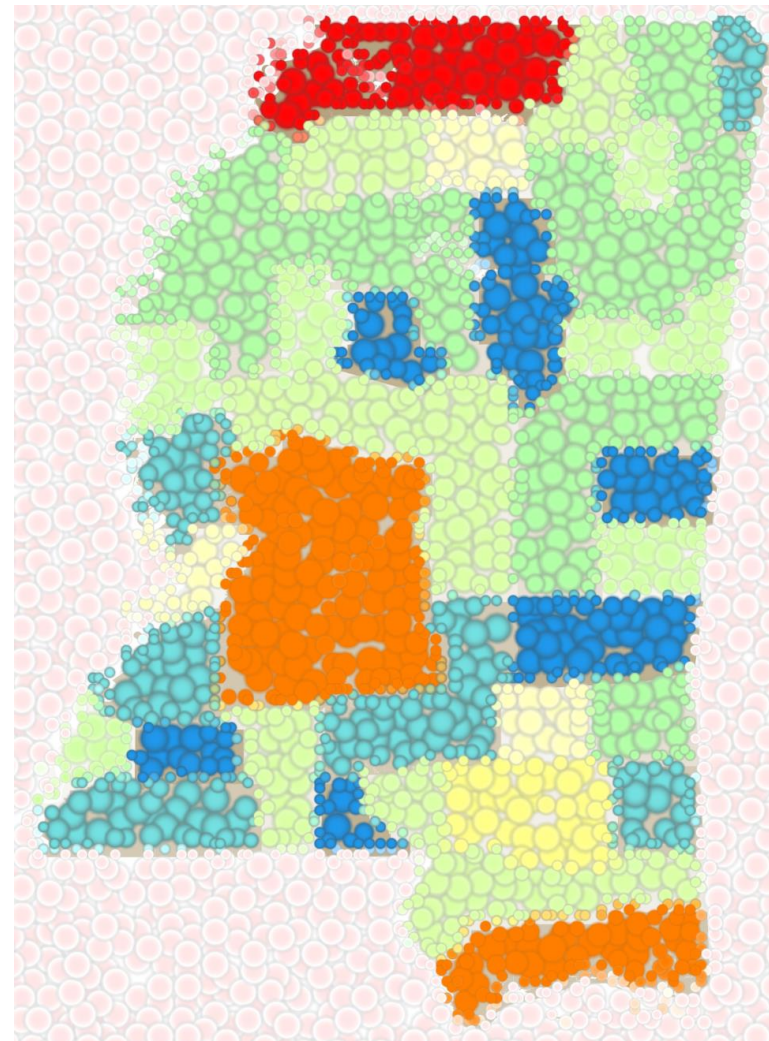
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Prepared for
Crossroads: Change in Rural America

Mississippi Humanities Council
Museum on Main Street Program
Smithsonian Institute
Waveland's Ground Zero Hurricane Museum

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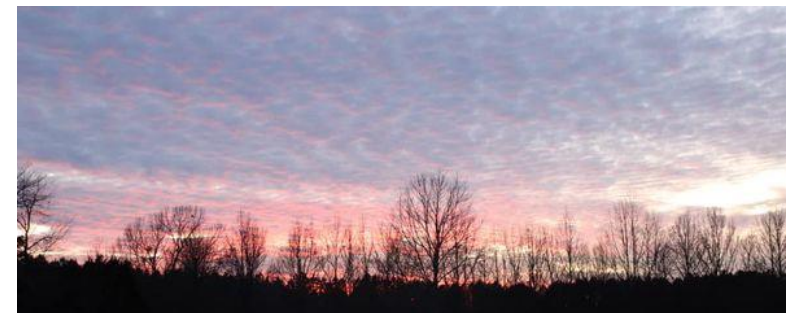


Outline

- Introduce concepts of population “snapshots” and “collage”
- Explore Mississippi through data visualizations
 - ✓ Population numbers
 - ✓ Components of population change
 - ✓ Definitions of rural
 - ✓ Migration and age
- Discuss population, development, and resilience



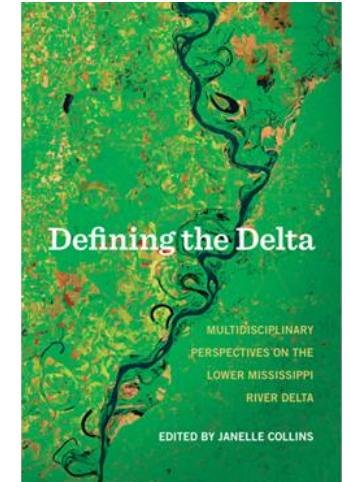
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From Population “Snapshots” to “Collage”

- Population data provide “snapshots” of people in places*
- They tell us about who the people are, what they do, and the challenges and opportunities they might face
- They are used to group people and places into categories
- Snapshots are useful, but any one of them on its own presents just one perspective captured through a particular “lens”
- What if we look at multiple snapshots taken with different lenses and arrange them to form a collage?



CHAPTER 7

Sociodemographic Snapshots of the Mississippi Delta

JOHN J. GREEN, TRACY GREEVER-RICE, AND GARY D. GLASS JR.

*Expanding from – Green, John, Tracy Greever-Rice, and Gary Glass. 2015. Sociodemographic snapshots of the Mississippi Delta. In Janelle Collins (ed.), *Defining the Delta: Multidisciplinary perspectives on the Lower Mississippi River Delta*. Fayetteville, AR: The University of Arkansas Press.

A Few Snapshots to Start

Population Estimates for Coastal and Adjacent Counties in Mississippi, 2010-2019

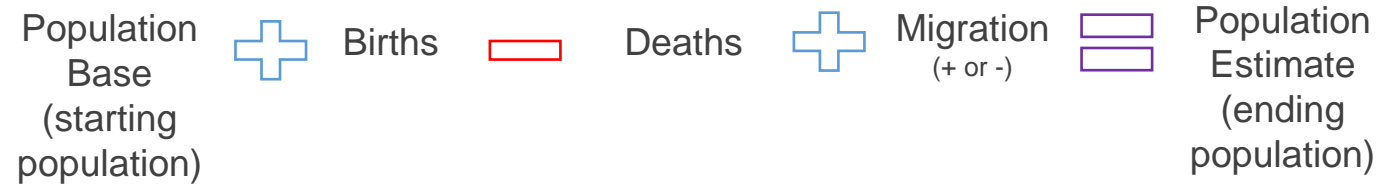
Geography	Population Estimate Base, April 1, 2010	Population Estimate, July 1, 2019	Percent Change
<u>Coastal Counties</u>			
Hancock	44,023	47,632	8.2
Harrison	187,109	208,080	11.2
Jackson	139,669	143,617	2.8
<u>Adjacent Counties</u>			
George	22,583	24,500	8.5
Pearl River	55,739	55,535	-0.4
Stone	17,790	18,336	3.1
<u>Total State</u>			
Mississippi	2,968,130	2,976,149	0.3

Source: U.S. Census Bureau Vintage 2019 Population Estimates. Note that 2010 estimate base is adjusted from 2010 Census release. Additional table formatting by John J. Green.

Readers should be advised that recent 2020 Census apportionment data suggest population loss in the state of Mississippi over the past decade.

Exploring Mississippi through Population Characteristics and Change

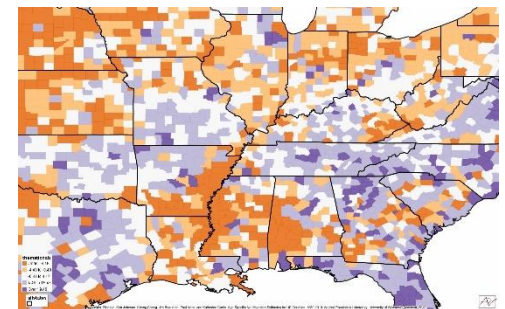
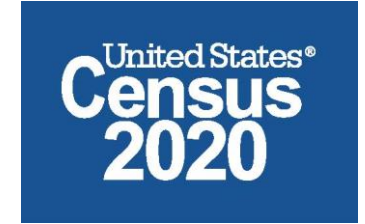
- Population change is measured through the demographic balancing equation



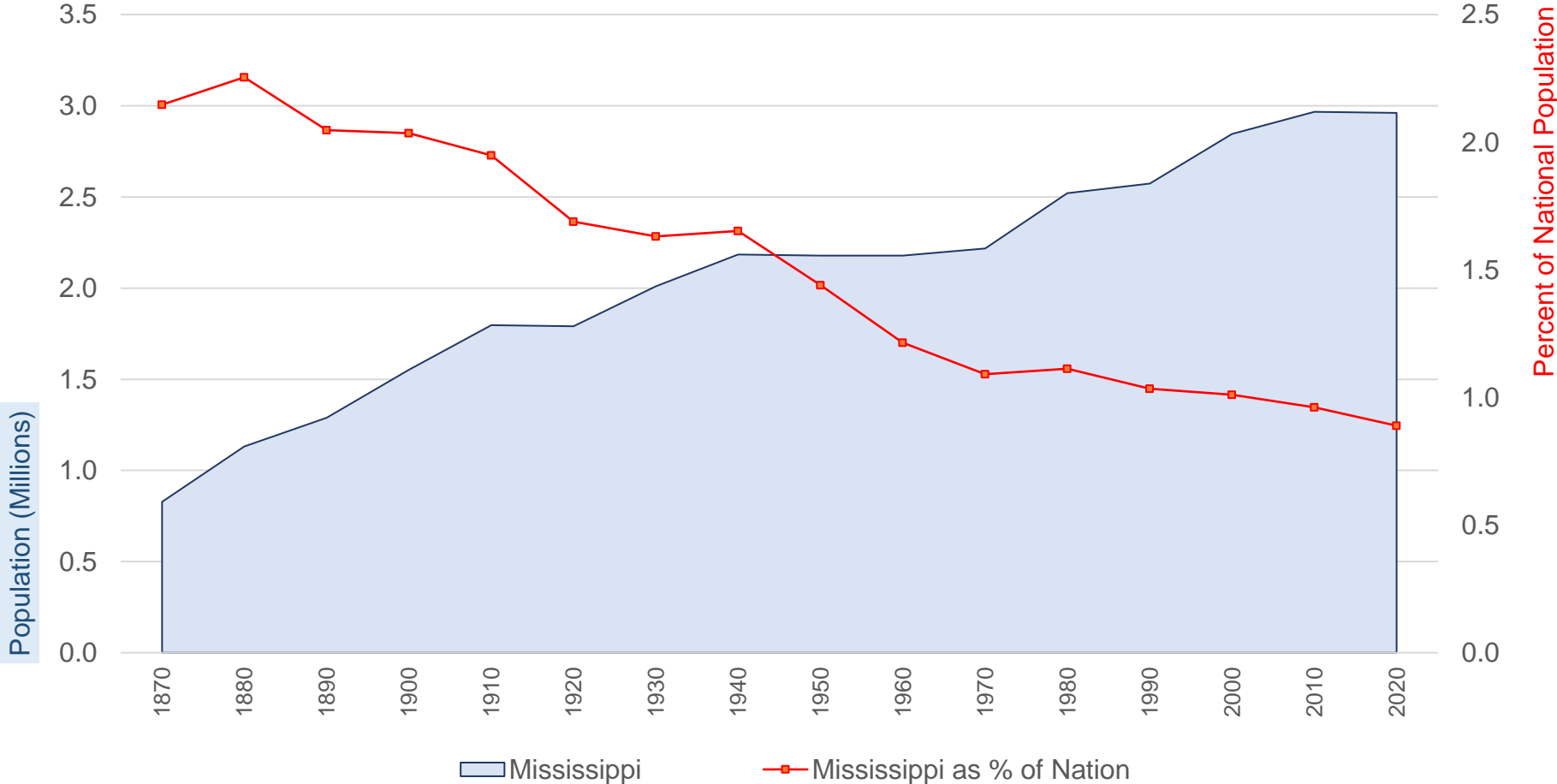
- Migration includes domestic and international dimensions
- Net migration is the balance of an area in a particular time period
 - ✓ Number of in-migrants minus the number of out-migrants

Data Sources

- Decennial Census
 - Census Bureau, <https://data.census.gov/cedsci/>
- Net Migration Patterns for U.S. Counties
 - University of Wisconsin Applied Population Laboratory, <http://www.netmigration.wisc.edu/>
- Population Estimates
 - U.S. Census Bureau, <https://www.census.gov/programs-surveys/popest.html>
 - Involves the Federal-State Cooperative for Population Estimates
- American Community Survey
 - U.S. Census Bureau, <https://data.census.gov/cedsci/>
- Census of Agriculture
 - National Agricultural Statistics Service, U.S. Department of Agriculture, <https://www.nass.usda.gov/AgCensus/>



Mississippi Population Relative to the Nation, 1870 to 2020



Sources: U.S. Census Bureau Decennial Censuses 1870 to 2020. Additional calculations and figure by John J. Green.

What is Rural?



Delta State University Archives and Museum



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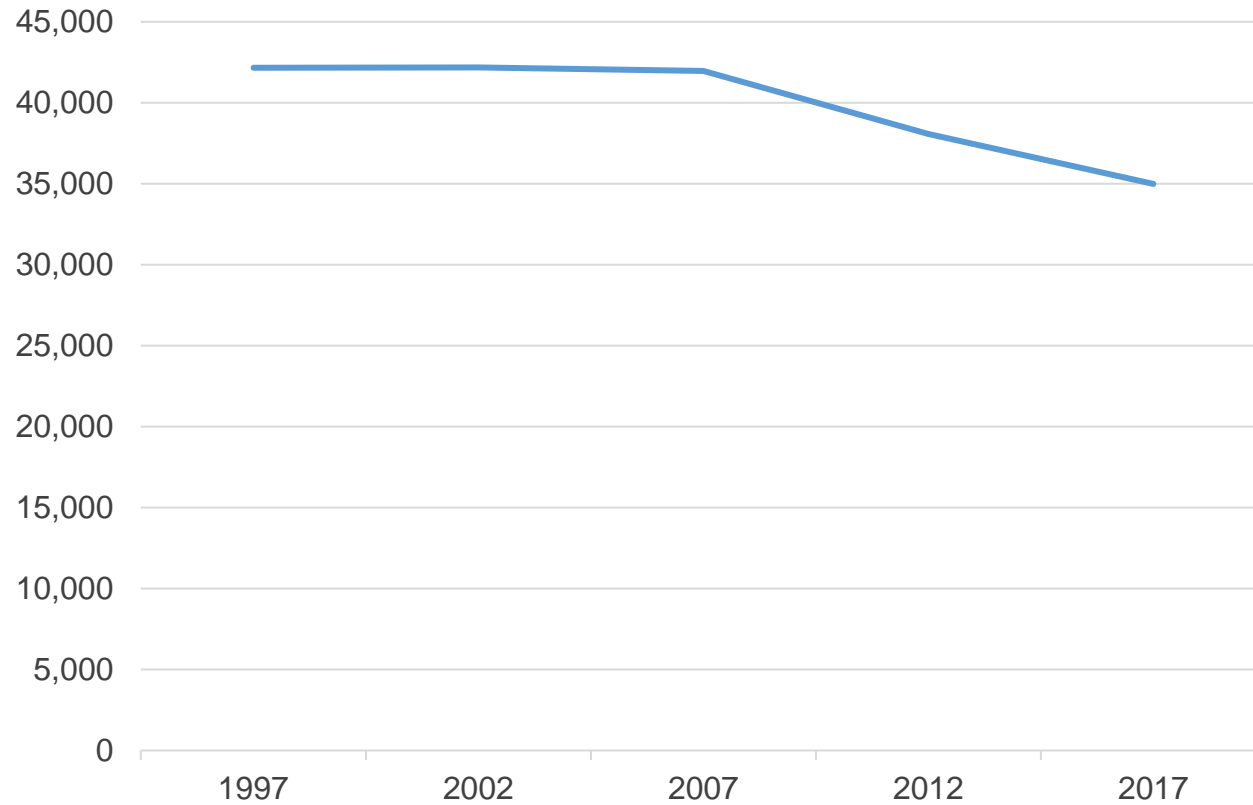


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Number of Farms in Mississippi, 1997 to 2017



Source: U.S. Department of Agriculture 2017 Census of Agriculture. Figure by John J. Green.

Characteristics of Agricultural Producers in Mississippi, 2017

Characteristics	All Producers	Producers with Day to Day Decision Making
Number of Producers	54,997	47,401
Average Age of Producers	58.9	59.1
Number of Persons in Households	105,271	94,663

Source: U.S. Department of Agriculture 2017 Census of Agriculture. Table by John J. Green.

Employment by Industry in Coastal and Adjacent Counties in Mississippi (2019 Five-Year Estimates)

Industries	Percent of Civilians Employed 16 Years and Older			
	Hancock County	Average Coastal*	Average Adjacent ⁺	Mississippi
Agriculture, forestry, fishing and hunting, and mining	1.4	1.1	3.8	2.5
Construction	10.3	8.2	12.0	6.6
Manufacturing	10.8	11.4	10.7	13.4
Wholesale trade	1.5	1.7	1.7	2.5
Retail trade	11.3	11.4	12.4	11.4
Transportation and warehousing, and utilities	5.1	5.0	6.3	6.2
Information	1.3	1.2	0.7	1.2
Finance and insurance, and real estate and rental and leasing	4.6	4.7	2.7	4.6
Professional, scientific, and management, and administrative and waste management services	10.7	8.4	6.7	6.8
Educational services, and health care and social assistance	20.0	20.7	23.9	25.0
Arts, entertainment, and recreation, and accommodation and food services	13.9	15.9	10.0	9.7
Other services, except public administration	3.8	4.3	4.8	4.7
Public administration	5.2	6.1	4.3	5.3

Source: U.S. Census Bureau 2019 American Community Survey Five-Year Estimates. Table by John J. Green. Note: 90 margins of error not shown here.

*Average of Hancock, Harrison, & Jackson Counties; ⁺Average of George, Pearl River, & Stone Counties.

What is Rural in the Statistical Sense?

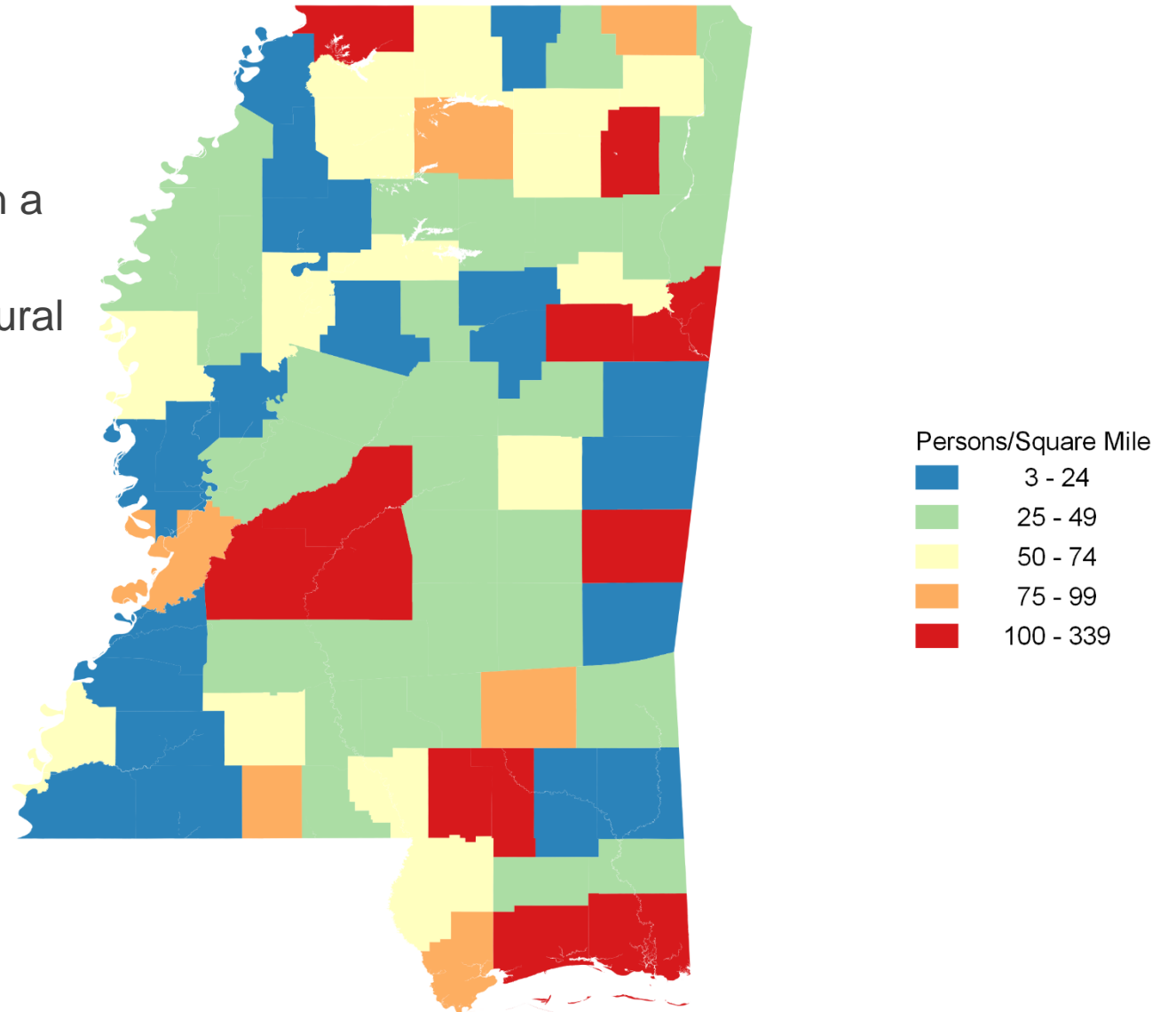
- Typically, statistical designations of rural places are based on Decennial Census data and are then held generally constant for the next decade
 - ✓ This is important for policy decisions and resource allocation, and it allows for tracking change
- Rural designations are still in place from 2010 data (some with minor tweaks), but new ones will be released on the basis of 2020 Census data

What is Rural in the Statistical Sense?

- We might start by thinking most intuitively of population density
 - ✓ The number of persons per square mile in a county
 - ✓ Lower densities may look and feel more rural

Geography	Population Density (Persons/Square Mile), 2010
<u>Coastal Counties</u>	
Hancock	93
Harrison	326
Jackson	193
<u>Adjacent Counties</u>	
George	47
Pearl River	69
Stone	40
<u>Total State</u>	
Mississippi	63

Population Density in Mississippi, 2010



Source: U.S. Census Bureau 2010 Census. Map by John J. Green.

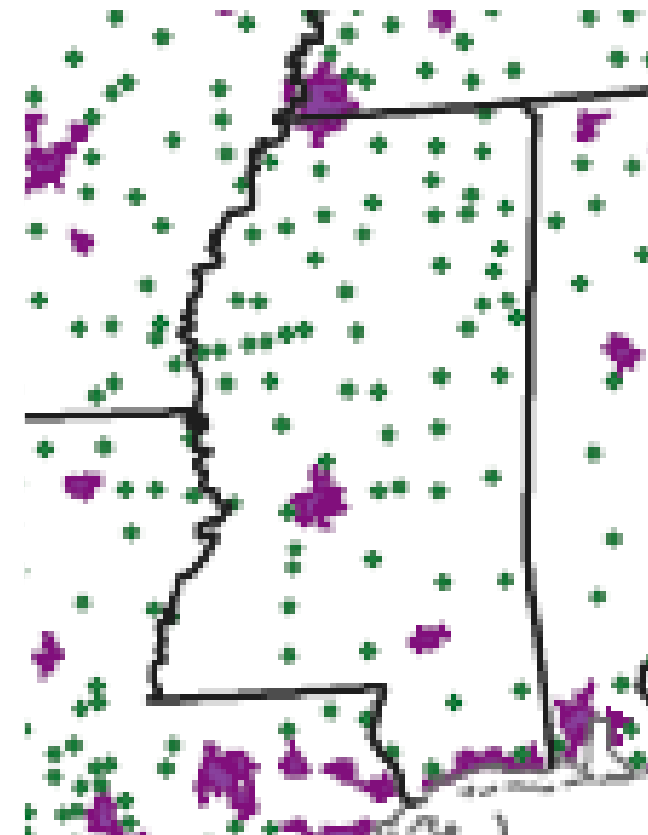
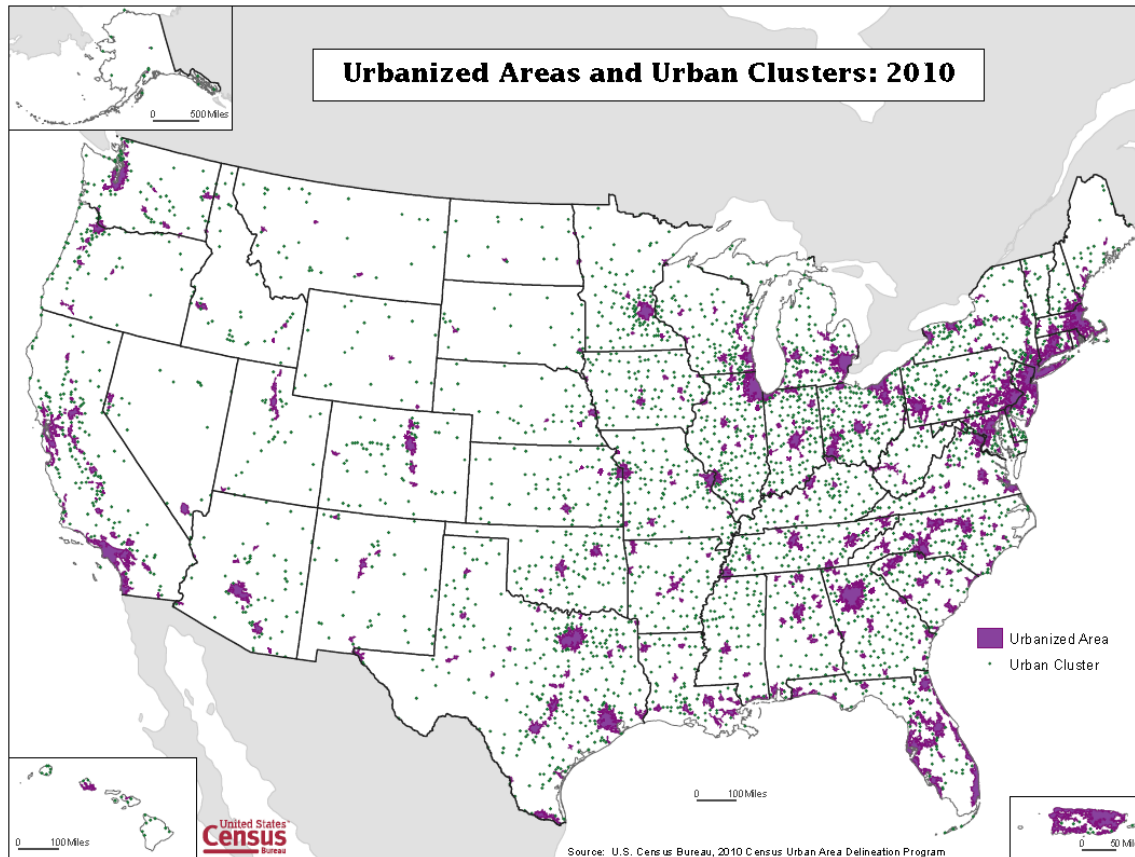
What is Rural in the Statistical Sense?

Census Bureau definition of rural areas: Whatever is not urban

- Based on census blocks as starting place
- What is urban? The thresholds can change, but include population, land use, and distance
- Current thresholds:
 - Urbanized area: 50,000 or more people
 - Urban cluster: 2,500 to 49,999 people
 - Rural: All other areas

(There are contested proposals to change these thresholds)
- Characteristics of rural areas: less dense, sparse population, not built up, more distant

Urbanized Areas and Urban Clusters in the U.S. and Mississippi, 2010

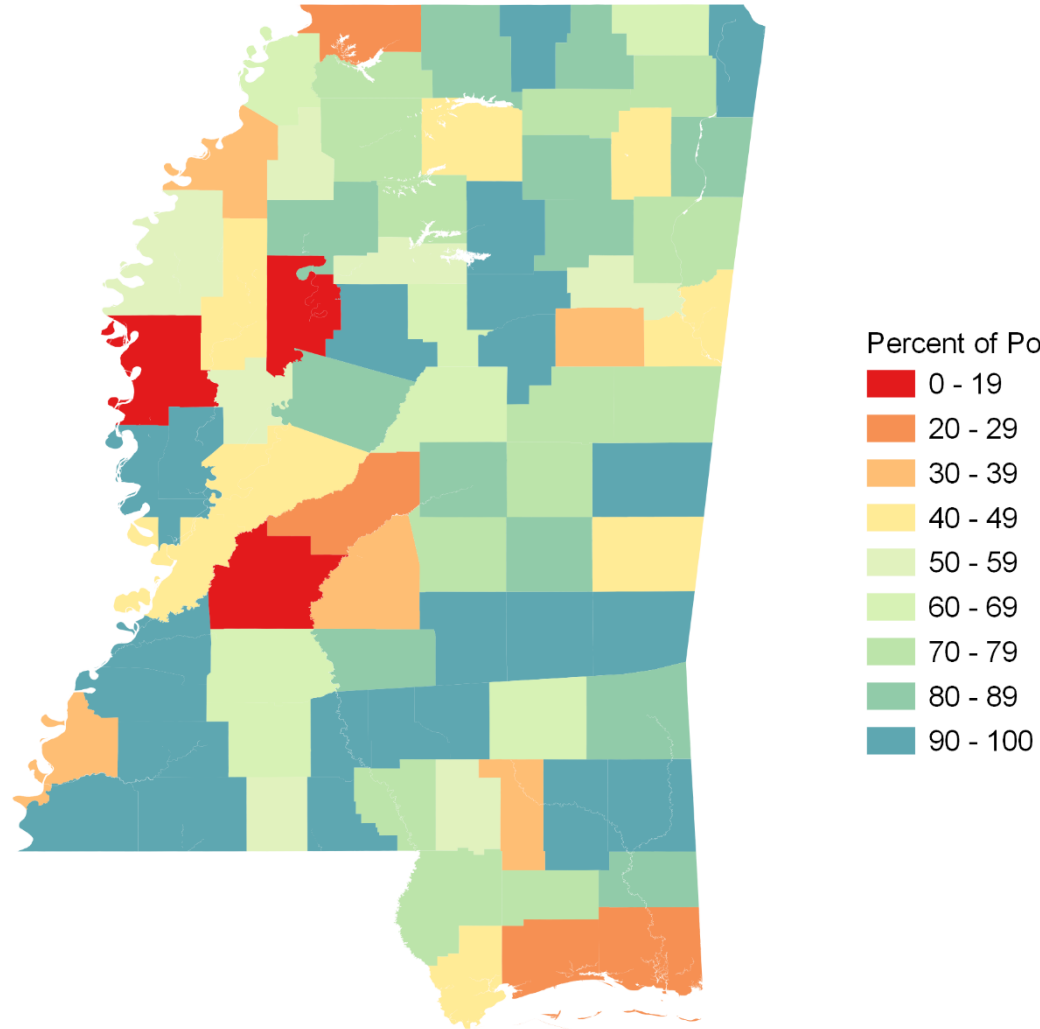


Urbanized Area
Urban Cluster

Source: U.S. Census Bureau 2010 Census.

Percent of Population Living in Rural Areas in Mississippi, 2010

Geography	Percent of Population Living in Rural Areas, 2010
<u>Coastal Counties</u>	
Hancock	43
Harrison	23
Jackson	27
<u>Adjacent Counties</u>	
George	88
Pearl River	70
Stone	79
<u>Total State</u>	
Mississippi	51



What is Rural in the Statistical Sense?

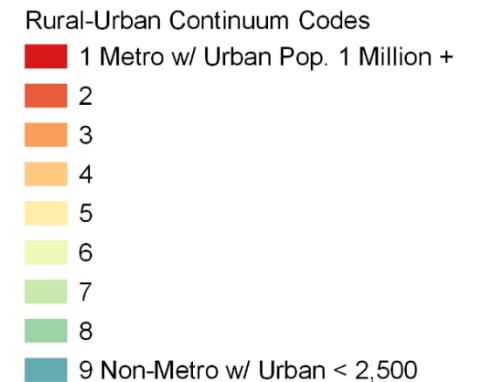
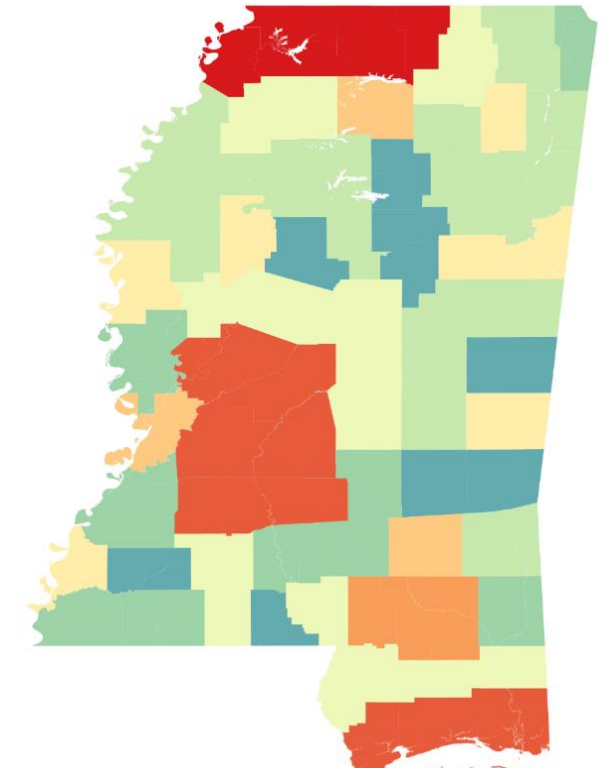
Rural-Urban Continuum Codes (U.S. Department of Agriculture's Economic Research Service)

- Based on counties and county equivalents
- Drawn from the U.S. Office of Management and Budget's "metropolitan" and "nonmetropolitan" classifications
- Further divided into nine categories ranging from:
 - ✓ Metro and in a metro area of 1 million population or more
 - ✓ Nonmetro, completely rural or less than 2,500 urban population, and not adjacent to a metro area

Rural-Urban Continuum Codes in Mississippi, 2010

Rural-Urban Continuum Codes and Descriptions for Select Coastal Counties

Code	County Descriptions	Select Coastal & Adjacent Counties
<u>1-3</u>	<u>Metropolitan</u>	
1	Metro county in metro area with 1 million population or more	Hancock, Harrison, Jackson
2	Metro county in metro area of 250,000 to 1 million population	
3	Metro county in metro area of fewer than 250,000 population	
<u>4-9</u>	<u>Nonmetropolitan</u>	
4	Nonmetro county with urban population of 20,000 or more, adjacent to a metro area	George, Pearl River, Stone
5	Nonmetro county with urban population of 20,000 or more, not adjacent to a metro area	
6	Nonmetro county with urban population of 2,500-19,999, adjacent to a metro area	
7	Nonmetro county with urban population of 2,500-19,999, not adjacent to a metro area	
8	Nonmetro county completely rural or less than 2,500 urban population, adj. to metro area	
9	Nonmetro county completely rural or less than 2,500 urban population, not adj. to metro area	



What is Rural in the Statistical Sense?

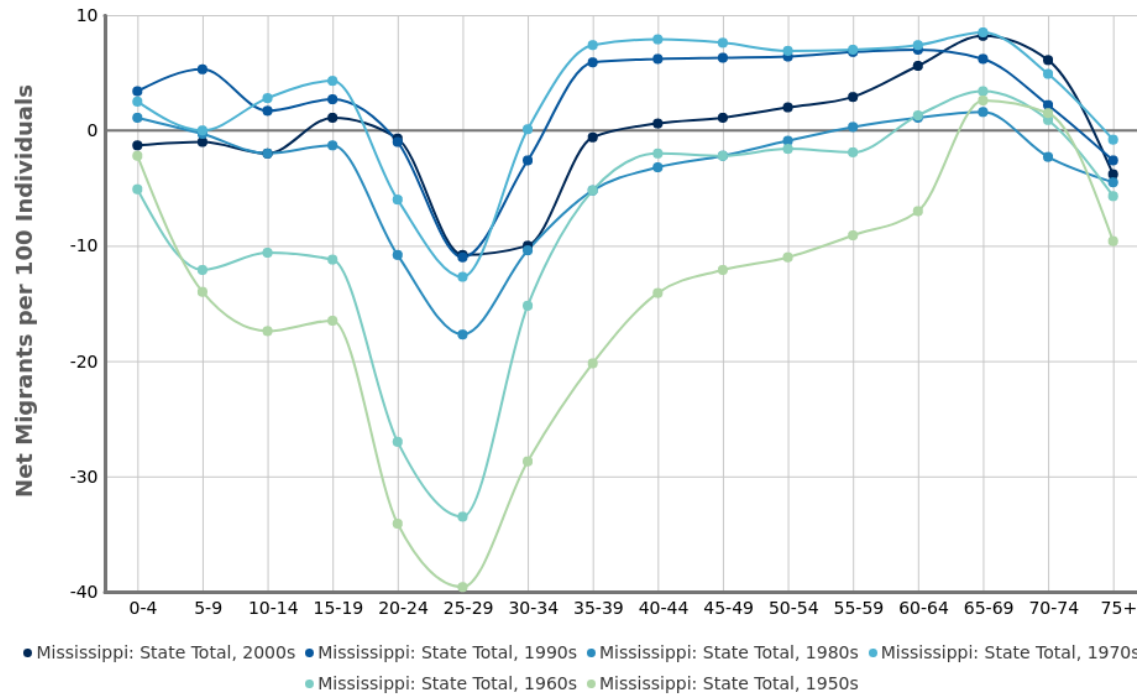
- As a final example among the many we could choose, what about small towns and cities?
 - ✓ Of 298 “incorporated places” in Mississippi in 2019
 - 211 had population estimates of $< 2,500$
 - 84 had population estimates from 2,500 to 49,999
 - 3 had population estimates of $\geq 50,000$

Migration and Age

Net Migration by Age from the 1950s through 2000s

Mississippi

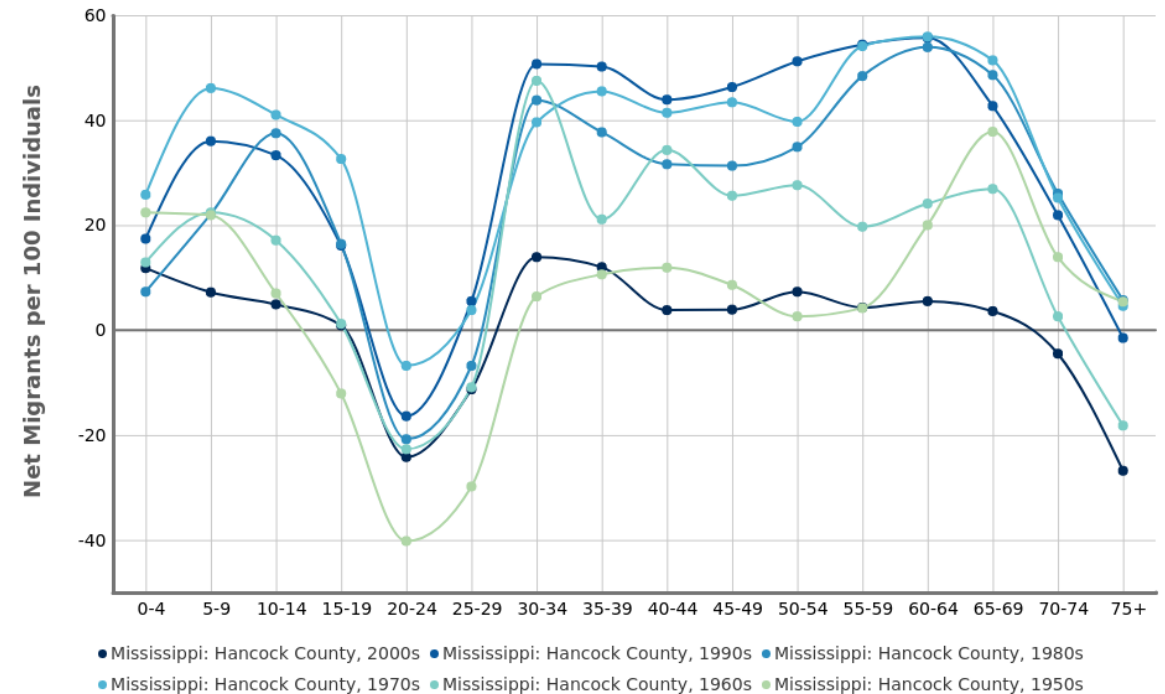
Net Migration by Age



Winkler, Richelle, Kenneth M. Johnson, Cheng Cheng, Jim Beaudoin, Paul R. Voss, and Katherine J. Curtis. Age-Specific Net Migration Estimates for US Counties, 1950-2010. Applied Population Laboratory, University of Wisconsin - Madison, 2013. Web.

Hancock County

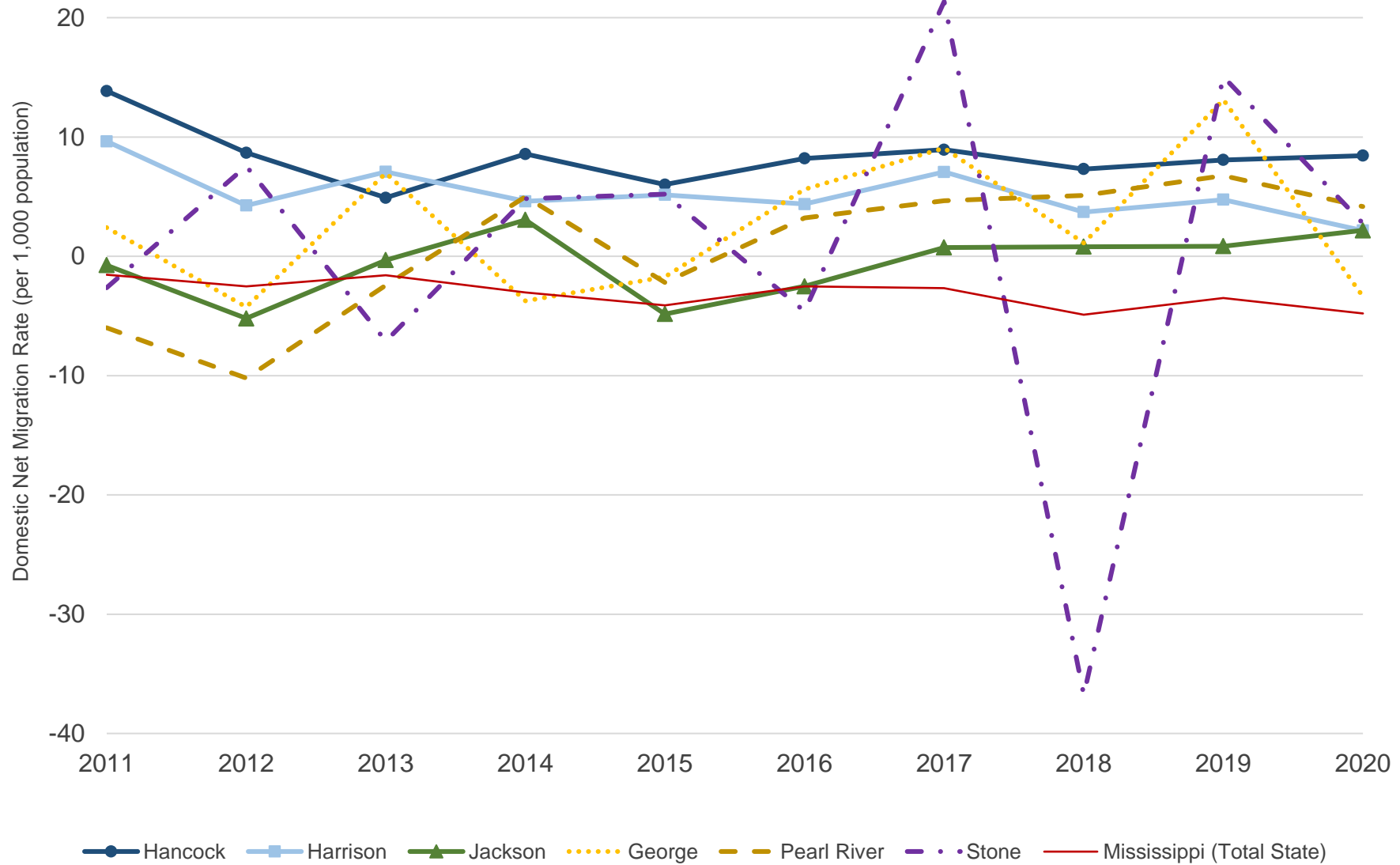
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Note: The range of the y axis is different between the two charts.
They are shown together to compare general patterns.

Domestic Net Migration Rates in Coastal & Adjacent Mississippi Counties, 2011 to 2020



Source: U.S. Census Bureau Vintage 2020 Population Estimates. Additional analysis and figure by John J. Green.

Estimated Population Change and Components of Change in Select Southern States, 2010 to 2019

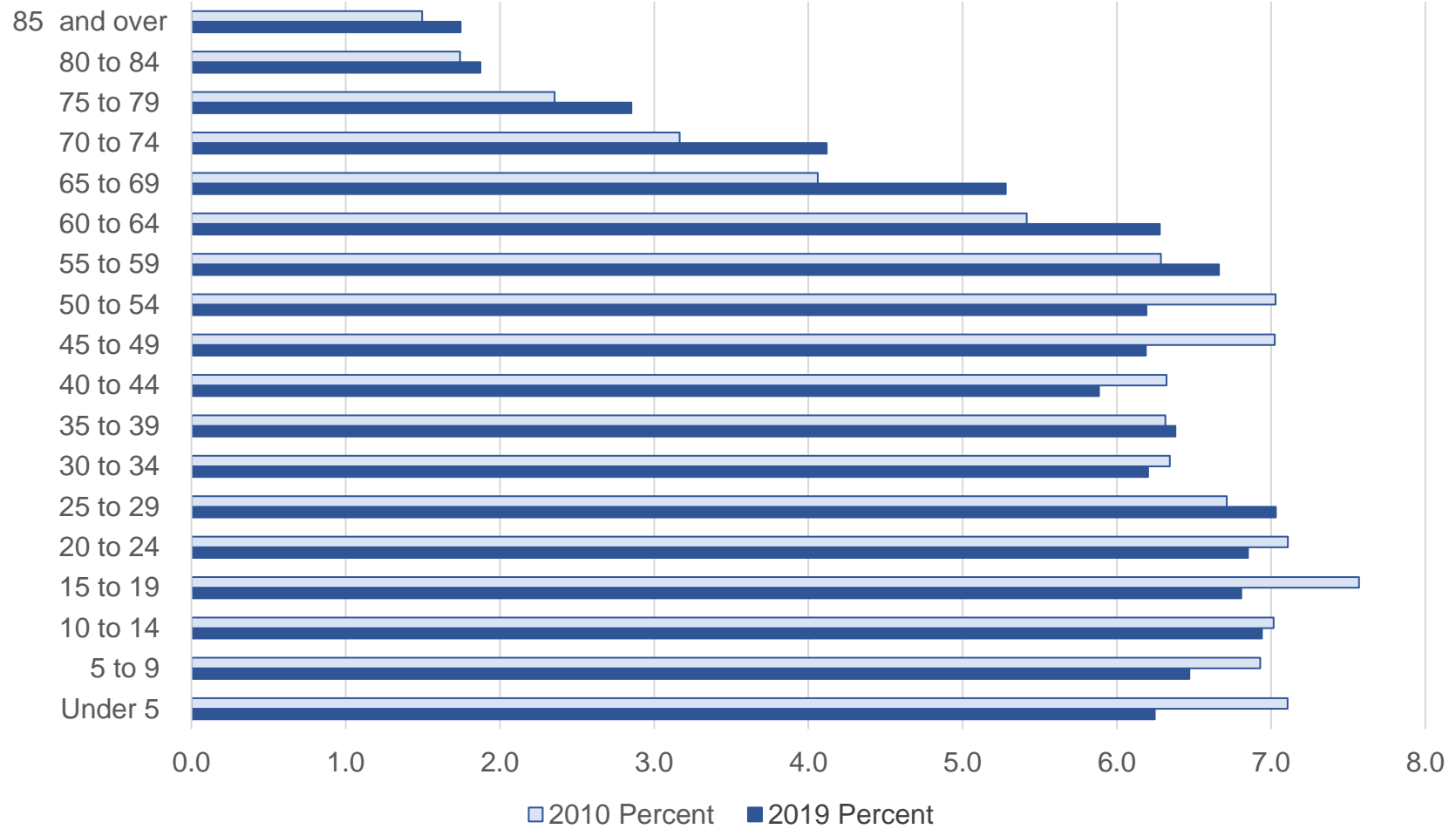
Geographic Area	April 1, 2010 to July 1, 2019						
	Total Population Change*	Natural Increase	Vital Events		Net Migration		
			Births	Deaths	Total	International**	Domestic
Southern Region	11,017,418	4,384,770	13,996,064	9,611,294	6,596,570	3,156,088	3,440,482
Selected Southern States							
Alabama	123,060	70,234	543,396	473,162	53,493	39,655	13,838
Arkansas	101,773	66,688	351,712	285,024	34,584	23,180	11,404
Louisiana	115,307	171,756	575,059	403,303	-57,242	44,961	-102,203
Tennessee	482,898	143,253	744,274	601,021	338,428	79,086	259,342
Mississippi	8,019	68,667	352,877	284,210	-61,248	18,949	-80,197

*Total population change includes a residual, representing change in population that cannot be attributed to any specific demographic component.

**Net international migration includes the international migration of both native and foreign-born populations.

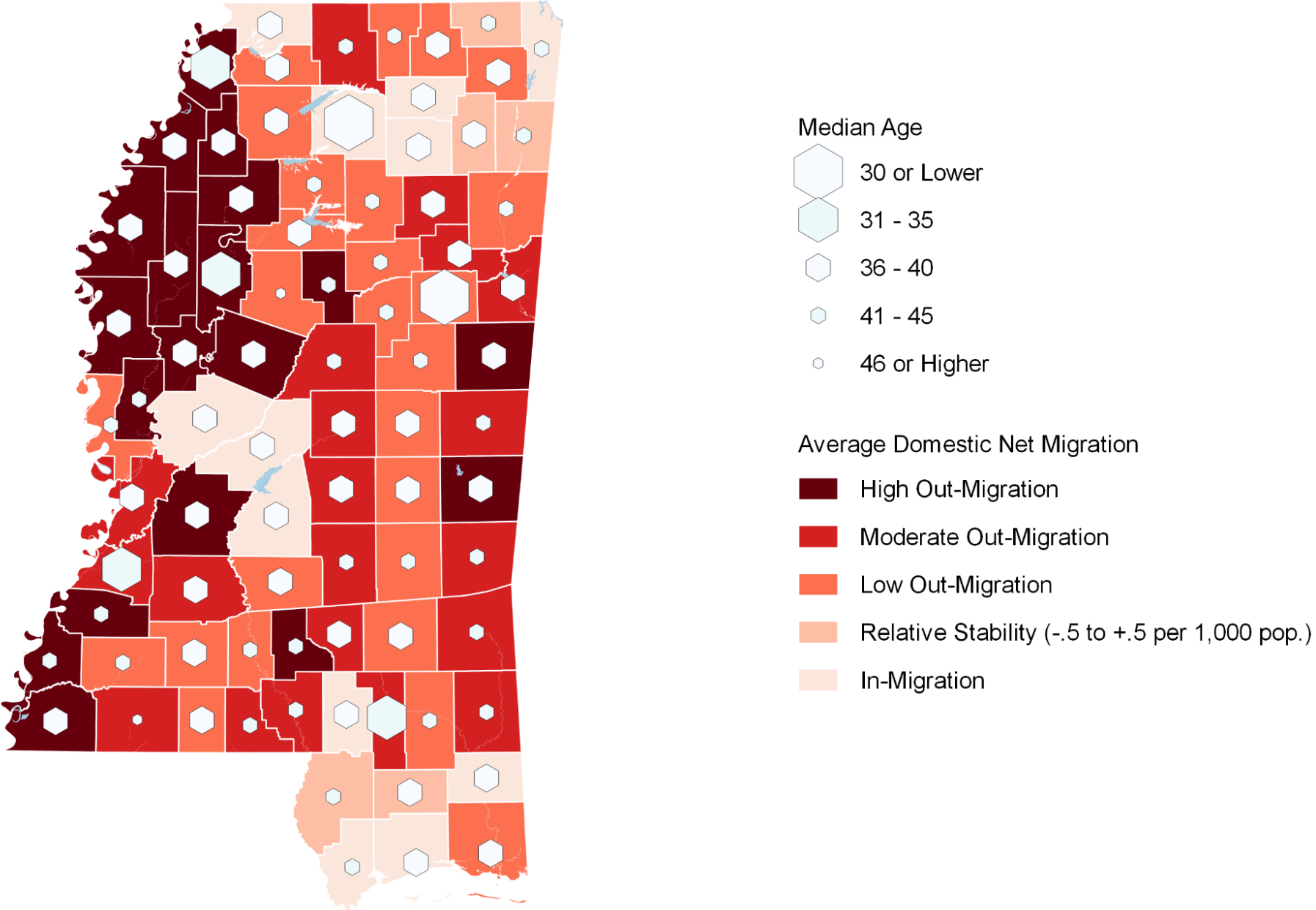
Source: U.S. Census Bureau Vintage 2019 Population Estimates. Additional table formatting by John J. Green.

Mississippi Population Estimates by Age, 2010 and 2019



Source: U.S. Census Bureau Vintage 2019 Population Estimates. Figure by John J. Green.

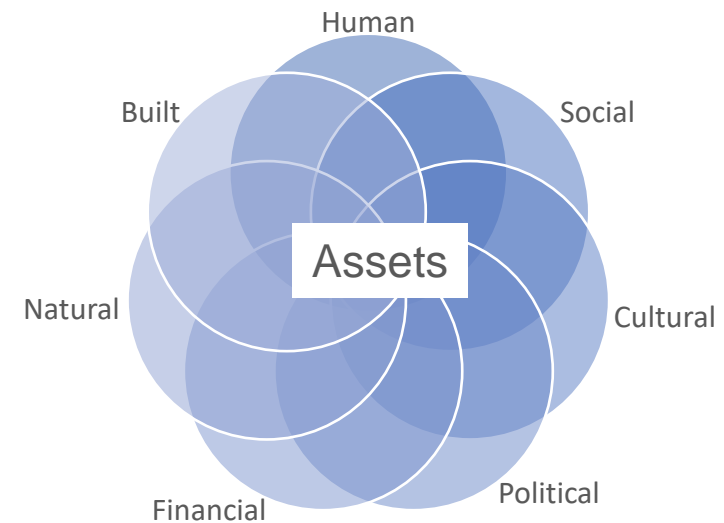
Median Age in MS Counties by Average Annual Domestic Net Migration



Sources: U.S. Census Bureau Vintage 2020 Population Estimates; American Community Survey 2019 Five-Year Estimates. Additional analysis and figure by John J. Green.

Population and Rural Development through the Community Capitals Framework

- The lens we use to “see” rural influences what we see
 - ✓ Definitions matter
- People (as individuals, groups, and populations) are important to what constitutes “rural”
- Change is more than just increases or decreases in population
- Instead of thinking about rural places and rural people as simply “not urban”, perhaps we should think about diverse combinations of assets and how they vary by context



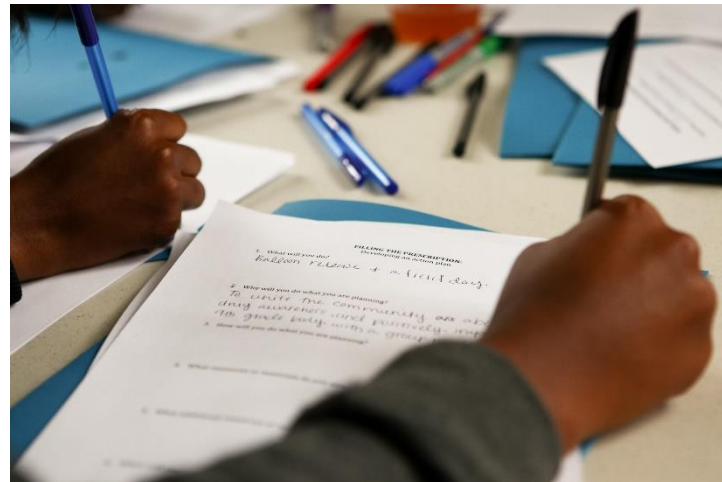


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Building Community Resilience by Investing in Diverse Forms of Community Capital



Emma Willoughby

Thank you!

I would like to acknowledge support from:

- Southern Rural Development Center
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- Center for Population Studies & State Data Center of Mississippi
- Mississippi Humanities Council
- Museum on Main Street Program, Smithsonian Institute
- Waveland's Ground Zero Hurricane Museum



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The ideas expressed during this presentation are not necessarily shared by the partner organizations.

I apologize for any errors or omissions.

Please feel free to contact me: john.green@msstate.edu