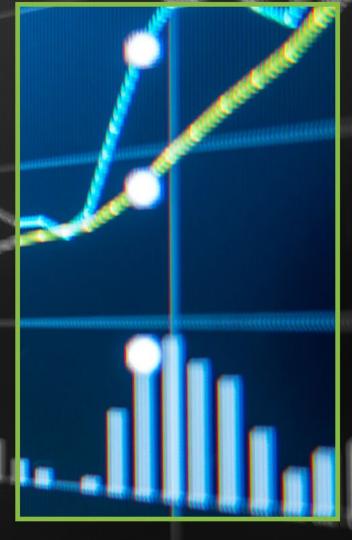






In Search of Rural: How Varying Definitions Shape Housing Research

Alexander Hermann and Whitney Airgood-Obrycki Harvard University



#RuralResearchSymposium





Roadmap

- Introduction, data, and methods
- Defining rural areas
- Mapping rural areas
- Key findings
 - Size of the rural housing market
 - Race/ethnicity
 - Demographics
 - Rural housing stock
- Future work and conclusions





Introduction

- Researching housing challenges and characteristics in rural areas is often complicated by the lack of "good data"
- Researchers often define rural based on practical considerations like data availability and geography
- We hope to show: the choice of rural definition matters significantly and requires careful consideration

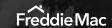




Data and Methods

- Replicate common definitions of rural at the county, zip code, census tract, and urban area/cluster geographies
- Use 2019 American Community Survey 5-Year Estimates to show how population, housing unit, and household counts, as well as other common housing, demographic, and economic characteristics vary depending on the rural definition used
 - What do these different definitions of rural tell us about the size of the rural housing market?
 - What do they tell us about the scope and extent of rural housing, demographic, and economic challenges and realities?







Common Ways to Define Rural

- "Not urban"
- Population
- Housing and population density
- Accessibility to cities and economic interdependence
- Commuting times and adjacency
- Perceptions
- Typologies of rural





Four Categories

- Residual
- Character
- Perceptual
- Policy





Rural Definitions

Residual

- Office of Management and Budget (OMB)
- Census Urban and Rural Classification (Census)

Character

- Housing Assistance Council (HAC)
- USDA Rural-Urban Commuting Area (RUCA)
- USDA Rural-Urban Continuum Codes (RUCC)

Perceptual

- HUD Urban Perceptions Small Area Index (HUD)
- Trulia Perception-Based Indicator (Trulia)

Policy

- USDA Eligibility (USDA)
- FHFA Duty to Serve (FHFA)







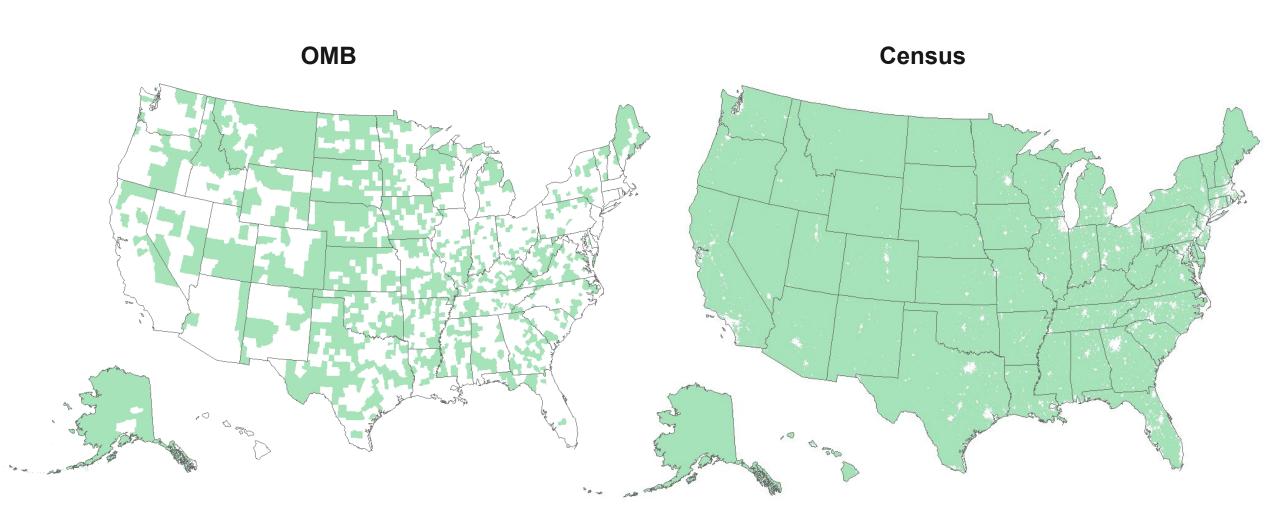
Rural Definitions

Definition	Year	Updates	Geo.	Defining Rural
OMB	2018	Periodic	County	Define MSAs that have at least one urbanized area of 50,000 people or more and adjacent territory with a high degree of integration. Everything else is categorized as non-metropolitan, a common proxy for rural.
Census	2010	Decennial	UA/UC	Define UAs and UCs by population density and adjacency. Everything else is categorized as rural.
HAC	2019	One-time	Tract	Under 16 housing units per square mile; small-town tracts also have a commuting component
RUCA	2010	Decennial	Tract	Primary commuting flows to a tract outside an UA or UC
RUCC	2013	Decennial	County	In non-metro counties, an urban population with under 2,500 people
HUD	2017	One-time	Tract	AHS (2017) asked respondents to define their neighborhood as urban, suburban, or rural; neighborhood characteristics associated with these perceptions were then used to predict the likelihood any given tract would be seen as rural
Trulia	2015	One-time	Zip	Trulia asked respondents to define their neighborhood as urban, suburban, or rural; neighborhood characteristics associated with these perceptions were then used to predict the likelihood of any given tract would be seen as rural
FHFA	2021	Annual	Tract	All tracts outside MSAs; tracts within MSAs that are outside a UA and have under 64 housing units per square mile
USDA	2021	Annual	Tract	Determined by population, MSA status, mortgage credit availability, and previous rural designation



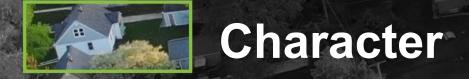


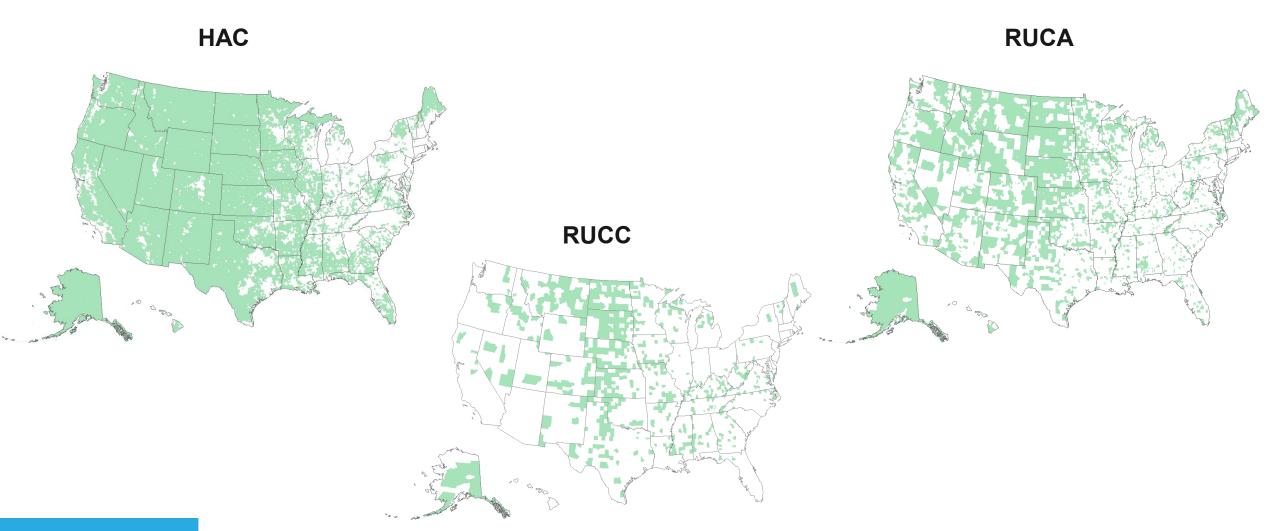
Residual





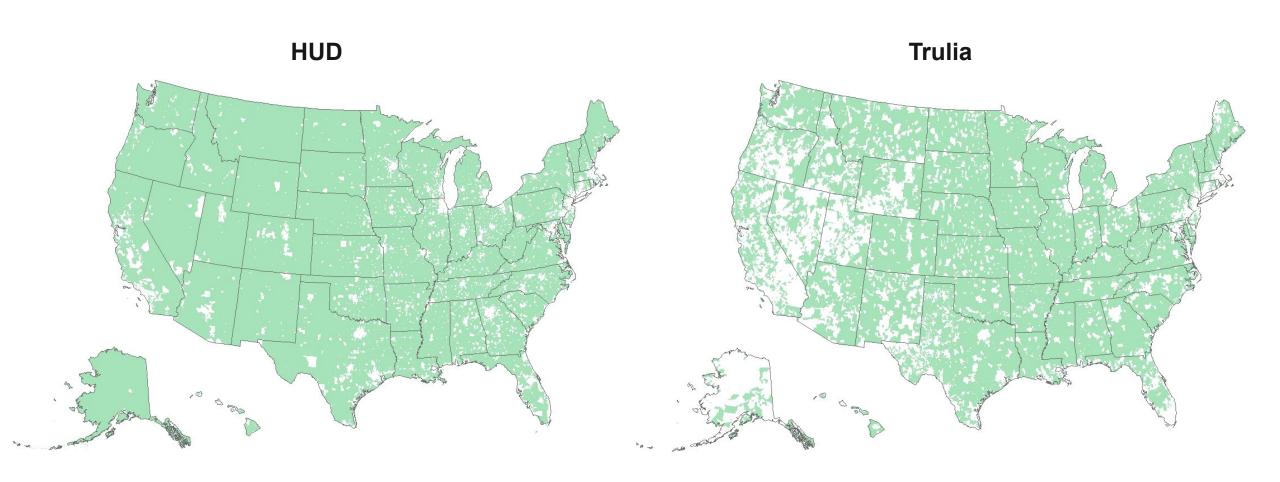




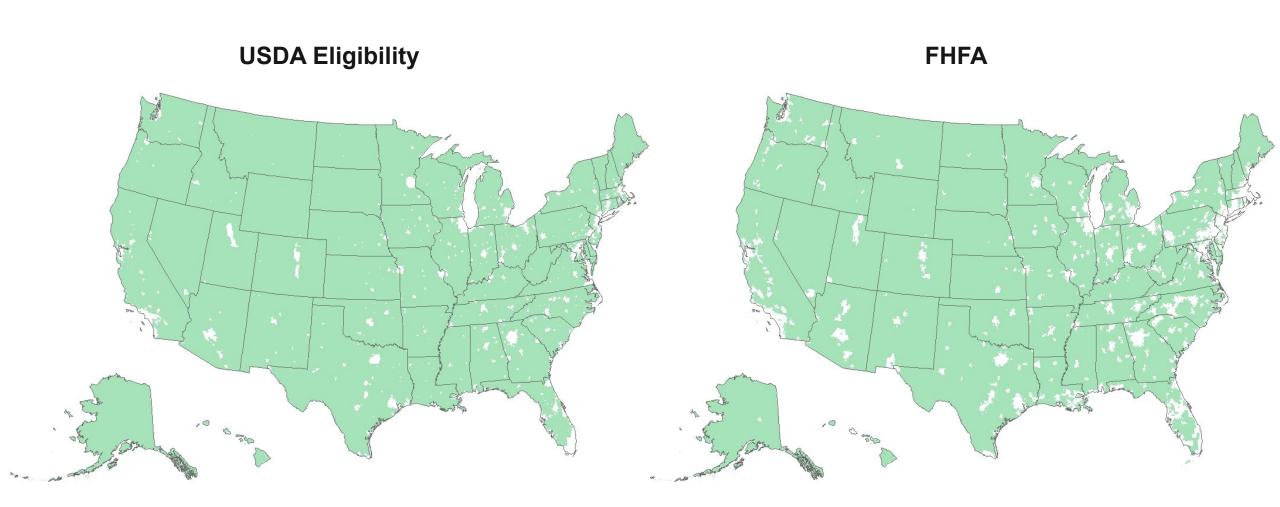




Perceptual











Key Findings

- Choice of rural definition matters greatly for the size of the rural housing market
- For the most part, rural challenges are directionally similar regardless of definition used
 - But even then, magnitudes can still vary considerably
- In other cases, choice of definition matters directionally for rural challenges and realities







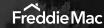
Size of the Rural Housing Market

	Residual		Character			Perceptual		Policy				Summary	,
	ОМВ	Census	HAC	RUCA	RUCC	HUD	Trulia	FHFA	USDA	US Overall	Min	Max	Avg
Millions													
Land Area (Sq. miles)	1.8	3.4	2.8	1.7	0.9	3.2	2.3	3.3	3.4		0.9	3.4	2.5
Housing Units	9.6	29.2	8.8	5.5	2.7	31.0	33.3	35.1	49.3	137.4	2.7	49.3	22.7
Households	7.2	23.5	6.7	3.8	1.9	25.2	27.1	28.3	41.1	120.8	1.9	41.1	18.3
Total Population	18.2	62.2	18.3	9.7	4.7	67.0	71.5	74.2	109.5	324.7	4.7	109.5	48.4
Per Sq. Mile													
Population Density	10	18	7	6	5	21	31	22	32	92	5	32	17
Housing Unit Density	5	9	3	3	3	10	14	11	14	39	3	14	8

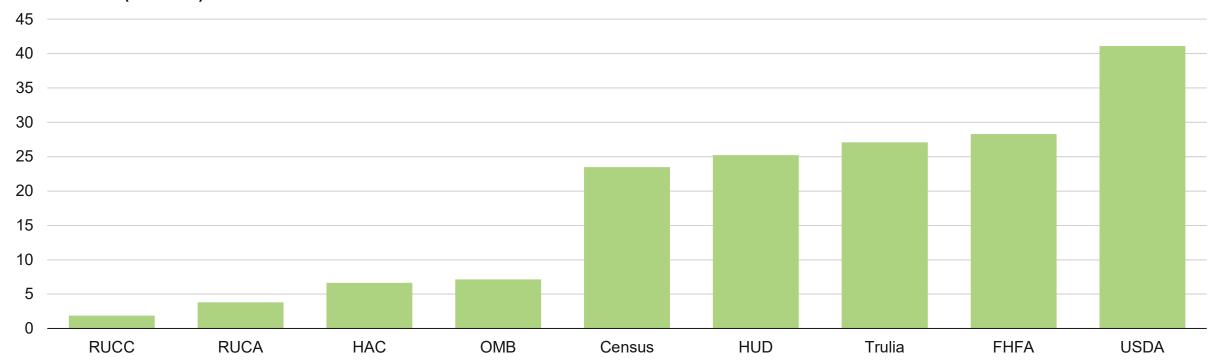




Household Counts Vary Considerably by Definition



Households (Millions)

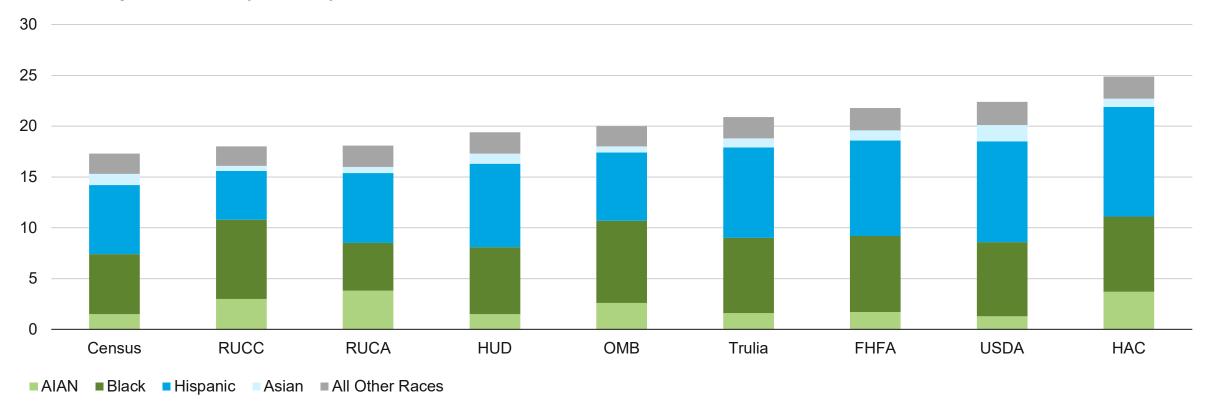






The Share of the Population Who Are People of Color Varies Considerably...

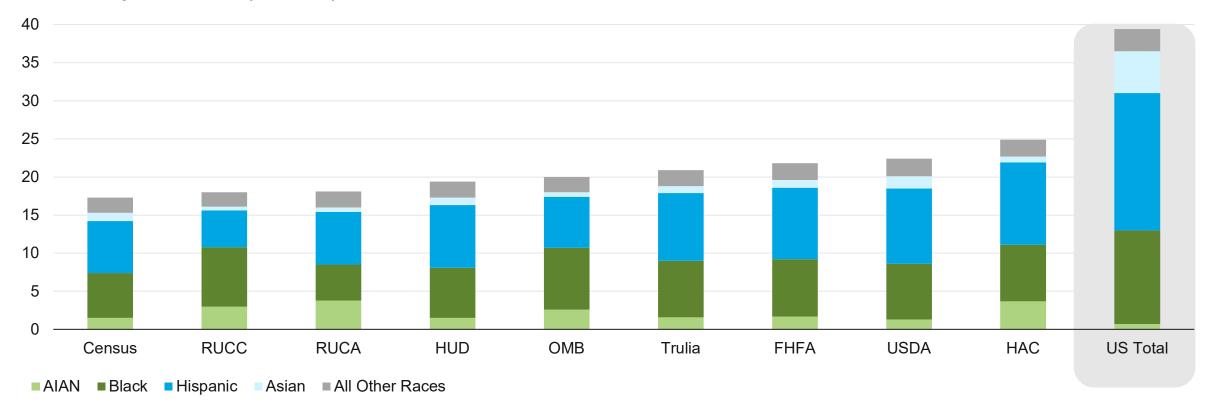
Share People of Color (Percent)



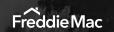


... But in All Cases, Rural Areas are Less Diverse than the Country Overall

Share People of Color (Percent)









Rural Demographic Realities

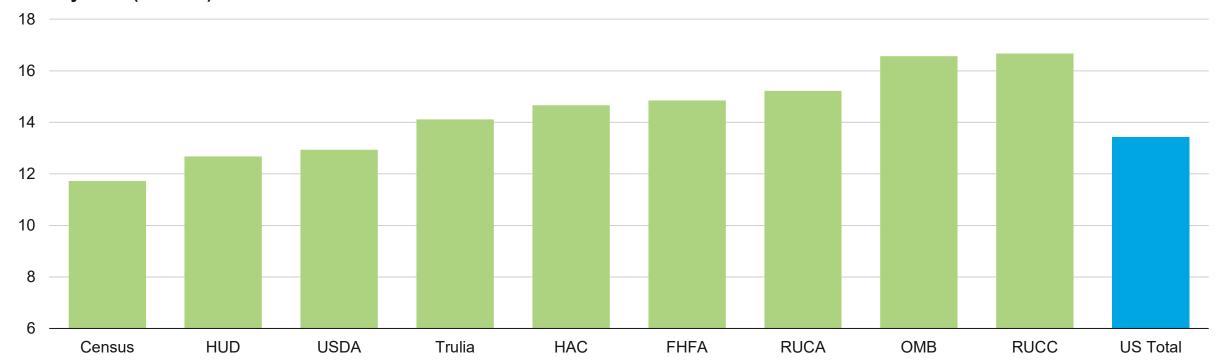
	Residual		Character			Perceptual		Policy			Summary		
	ОМВ	Census	HAC	RUCA	RUCC	HUD	Trulia	FHFA	USDA	US Overall	Min	Max	Avg
Percent													
Age 65 and Older	20.4	18.9	18.7	21.3	21.9	18.6	18.4	18.5	17.9	15.6	17.9	21.9	19.4
Poverty Rate	16.6	11.7	14.7	15.2	16.7	12.7	14.1	14.8	12.9	13.4	11.7	16.7	14.4
Bachelor's Degree	17.8	23.5	18.2	19.4	17.9	22.1	20.9	20.8	24.4	32.1	17.8	24.4	20.6
Dollars													
Median Household Income	47,400		52,905	50,549	46,052	57,717	53,350	52,675	57,668	61,705	46,052	57,717	52,290





Depending on Rural Definition, Poverty Rates Can Be **Either Below or Above the Overall US Rate**

Poverty Rate (Percent)







Rural Housing Stock

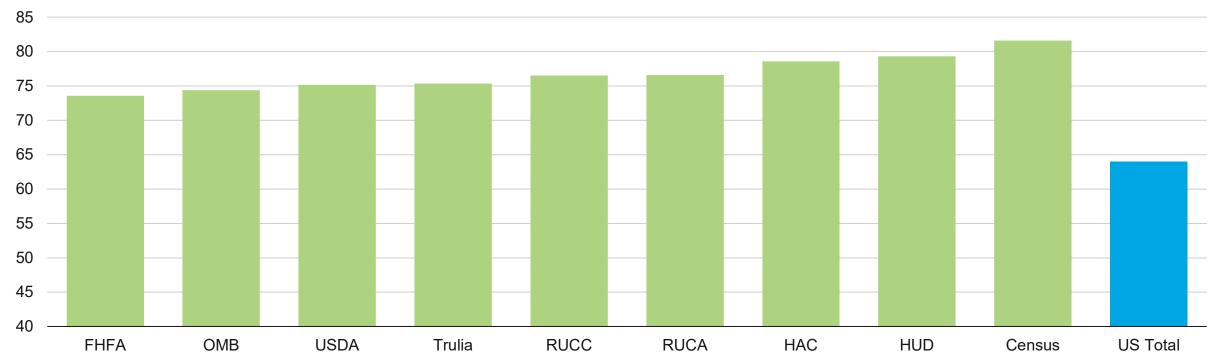
	Residual		Character			Perceptual		Policy				Summary	,
	ОМВ	Census	HAC	RUCA	RUCC	HUD	Trulia	FHFA	USDA	US Overall	Min	Max	Avg
Percent													
Homeownership Rate	74.4	81.6	78.6	76.6	76.5	79.3	75.4	73.6	75.2	64.0	73.6	81.6	76.8
Share Single-Family Units	75.3	78.6	76.8	78.2	76.5	77.1	75.6	74.7	76.1	67.4	74.7	78.6	76.5
Share Mobile Homes Share Structures Built	15.9	16.3	18.2	14.3	16.9	16.5	15.0	14.3	13.0	6.2	13.0	18.2	15.6
Before 1990	68.5	58.3	64.2	68.9	67.6	60.0	63.0	65.0	60.5	66.6	58.3	68.9	64.0
Share without Internet Access	32.7	23.3	31.5	31.0	35.3	23.7	25.6	26.0	21.6	16.8	21.6	35.3	27.9
Dollars													
Median Home Value	113,400		127,000	124,000	106,700	156,600	143,100	142,000	162,400	201,200	106,700	162,400	134,400
Median Gross Rent	663		697	670	622	773	735	736	789	1,078	622	789	711





Homeownership Rates Vary Considerably with Rural Definition, but are All Above the National Rate

Homeownership Rate (Percent)

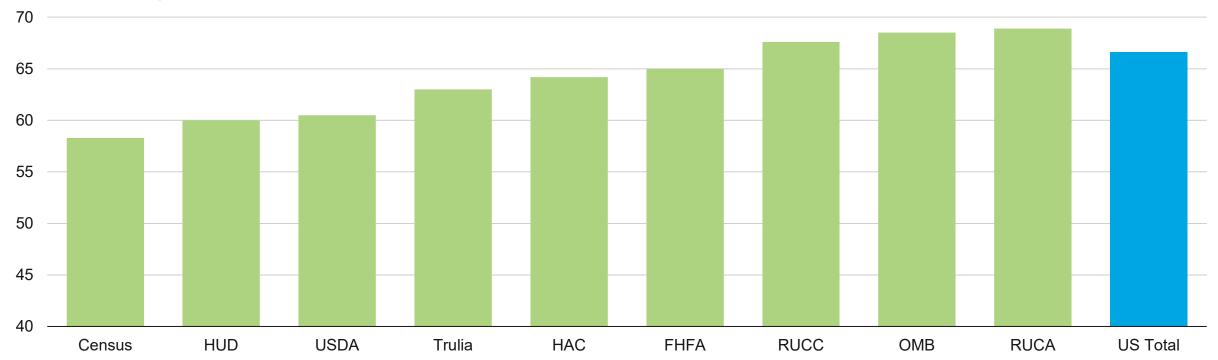






Extent of Older Housing Varies Considerably Depending on Rural Definition Chosen

Share of Housing Units Built Before 1990 (Percent)







Additional Research

- Areas of future inquiry
 - Housing costs/affordability
 - Racial equity
 - Commuting times
 - Measures of spatial isolation
- Regional and state differences
- Further explore commonalities and differences across measures
- Policy implications





Preliminary Conclusions

- No single definition of rural is "correct," but choice matters significantly
- For the most part, key rural challenges are directionally similar regardless of definition used but even then magnitudes can vary greatly. However, this isn't always the case either
- Perceptual definitions tend to be more broadly encompassing; use of narrower definitions might seem exclusionary as a result
- Defining rural has implications for how resources are distributed and our understanding of the severity of rural housing challenges







Concentrated Poverty in the Rural Southeast

Keith Wiley Housing Assistance Council



#RuralResearchSymposium





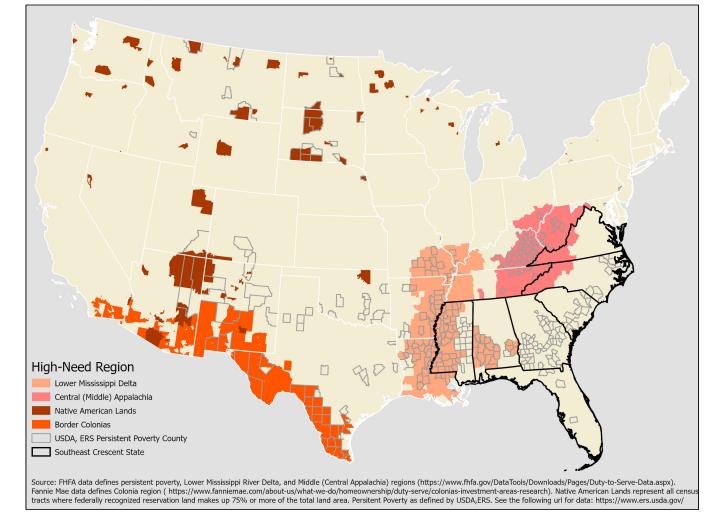




Persistent Poverty Counties

- Total 353
- Outside metropolitan area 298 (84%)
- High need regions 213 (60%)
- Southeast Crescent 83 (24%)

High-Need Regions & Persistent Poverty





Background

- Research defines as the Black Belt, counties in the South (Virginia to Texas), with an above average percent Black or African American population.
- In 2000 Congress authorized the Delta Regional Authority (Lower Mississippi Delta Region).
- In 2008 Congress created the Southeast Crescent Regional Commission.
- The Southeast Crescent region includes counties in Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Virginia.



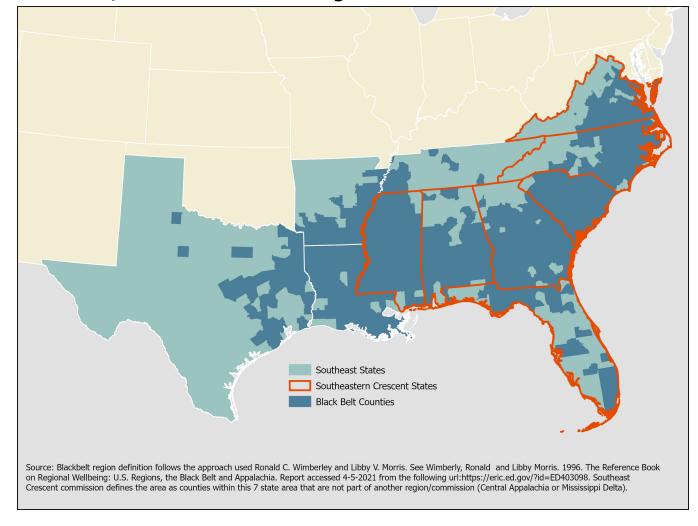




Black Belt Region

- Total 592
- Persistent Poverty 189 (32%)
- Lower Mississippi Delta 150 (25%)
- Entire Appalachia Region 54 (9%)
- Central Appalachia Region 5 (1%)

Black Belt/Southeast Crescent Region





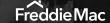


Defining High Poverty Southeast

- Use framework from Southeast Crescent Regional Commission
 - Seven state region of Southeast
 - Exclude counties already part of the Appalachian Regional Commission or Delta Authority service area

- Focus on rural geography and high poverty areas
 - Use census tract geography
 - Rurality measured based on housing unit density and commuting patterns
 - High poverty defined as census tracts with poverty rates of 20% or more

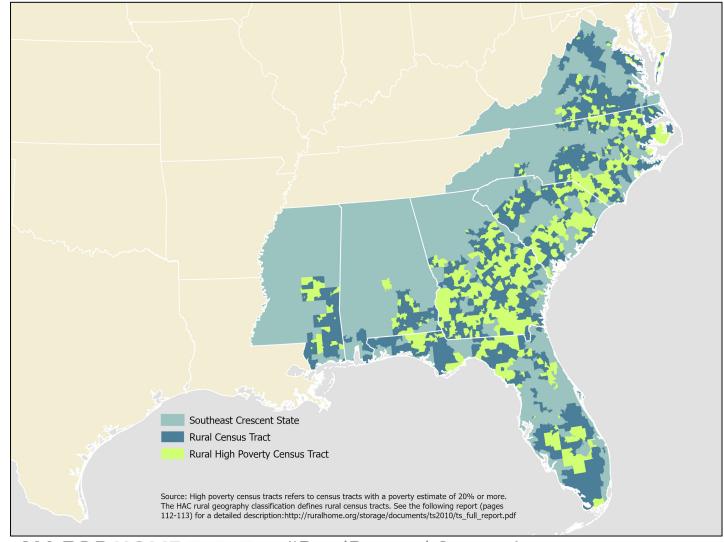






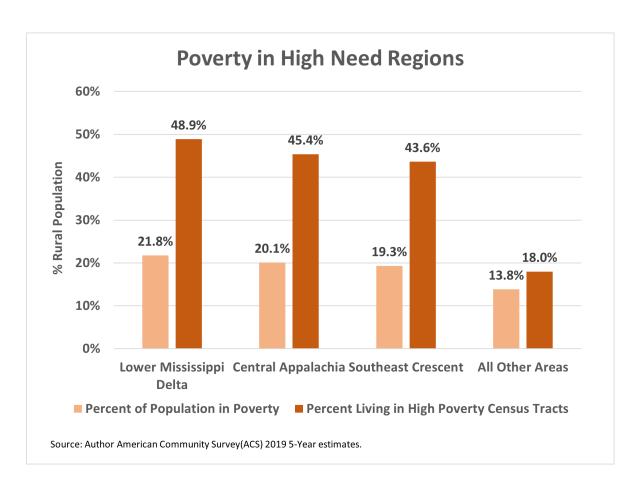
High Poverty Southeast

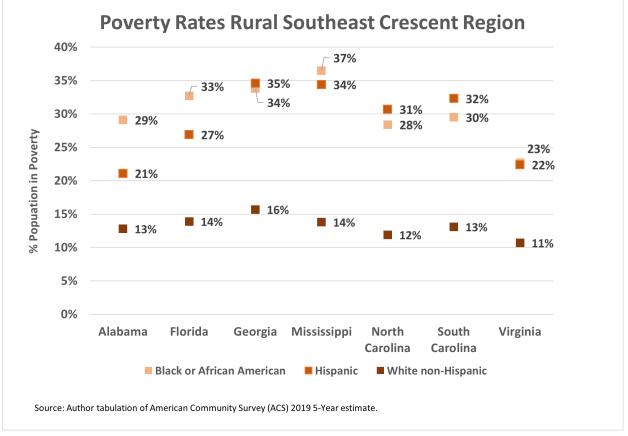
Rural Southeast





Poverty Rates



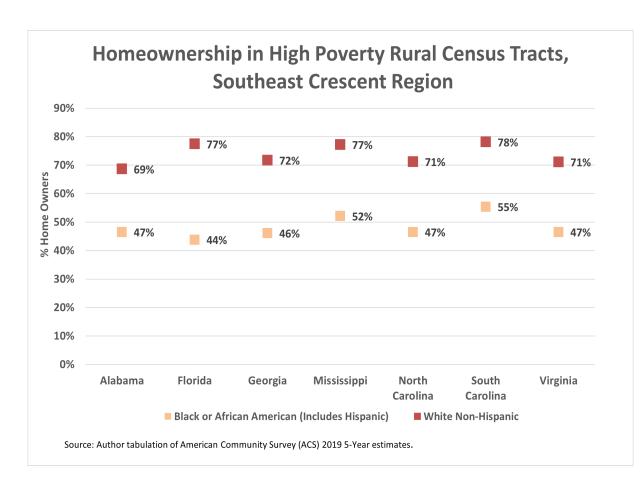


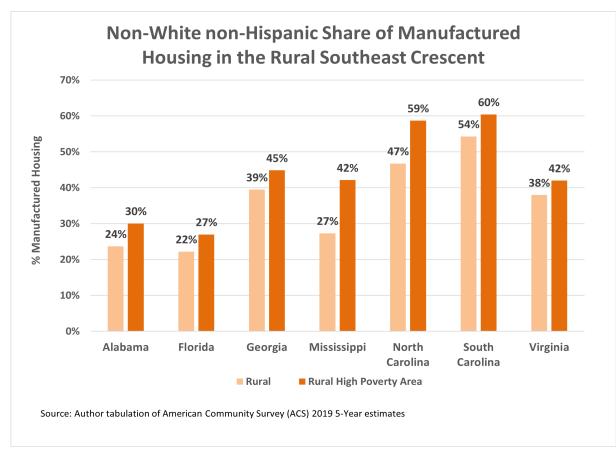






Housing Characteristics

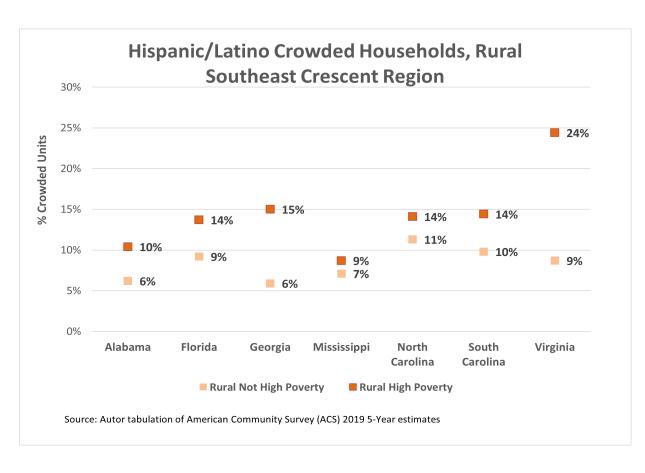


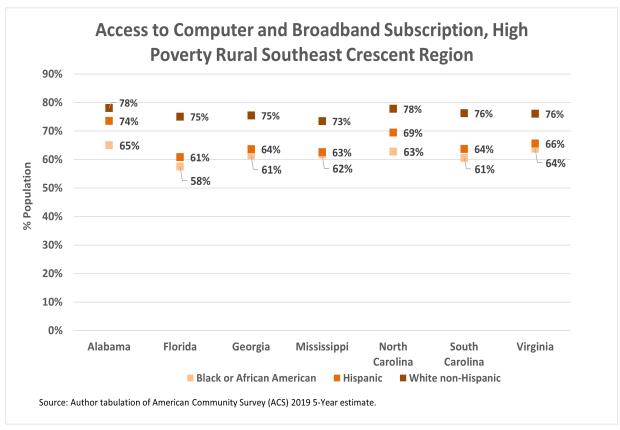






Housing Characteristics



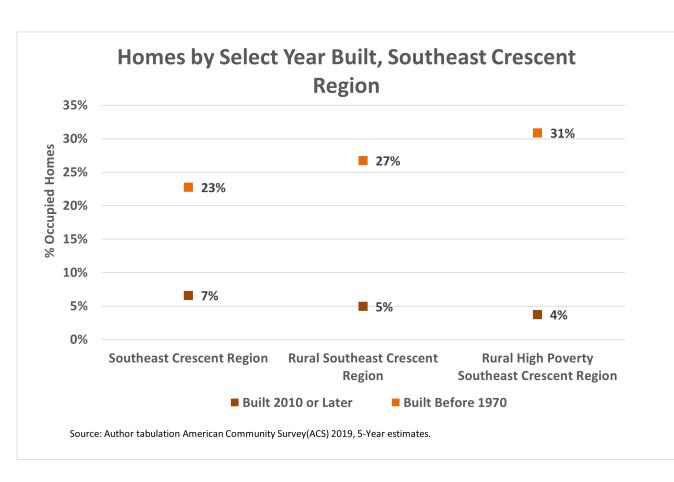


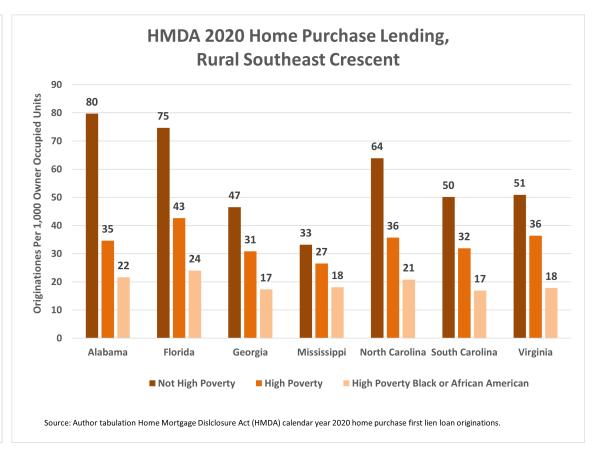






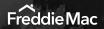
Housing Characteristics







Southeast Region Commission



- Commission has been inactive since its creation no federal co-chair appointed
- Calls to activate the commission
- President Biden has nominated a federal co-chair



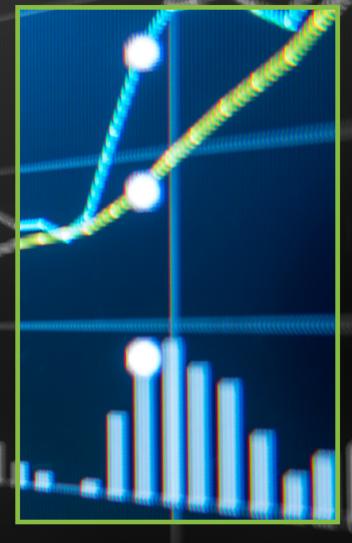




Household Financial Profiles

Lower Rio Grande Valley Colonias and Rural Areas

Zoraima Diaz-Pineda cdcb | come dream. come build.

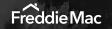


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Demographic Profile

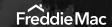


()	Age	Metro	Colonia/Rural
H	Average	35	45
	Under 30	35%	21%
	Over 60	4%	20%
	Household Size	3.3	3.2





Financial Pulse



Area Media Income

CoRu

Average

78% 63%

Under 80%

59% 75%

Under 50%

23% 44% **Household Income**

CoRu

Avg. Annual HH

\$37,714 \$30,129

Avg. Annual HH MP

\$33,149 \$27,263

MP < Poverty Line

36% 56%





Financial Immune System





No Savings

50% 52%



< \$3,000



Avg. Savings

70% 74% \$2,189 \$1,702



Financial Cholesterol





Debt to Income Ratio

28% 21%



DTI > 13%



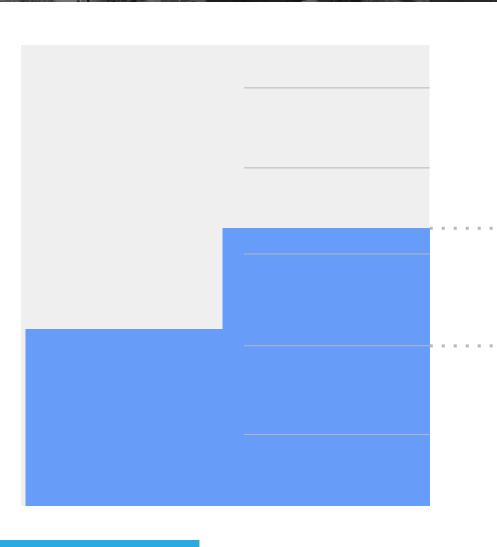
Avg. Monthly Debt Payments

70% 56% \$628 \$489



Financial Blood Sugar





607

560

Credit Challenged 57% Metro

67% CoRu

Credit Invisible
4% Metro
9% CoRu



Financial Blood Sugar

_		 _
	ounts	

59%

59%

More than 3 Past Due

39%

39%

AFSP

23%

36%







Client Cohorts

Co	ho	rts

Characteristics

Elderly



Elderly, low-income, low assets, middle school education

Deep Debtors



Low income, high DTI and negative net worth

Fixed Income



Low-income, low net-worth, lower debt, SSI/SSDI

High Earners



Higher Income, low assets and net worth

Savers



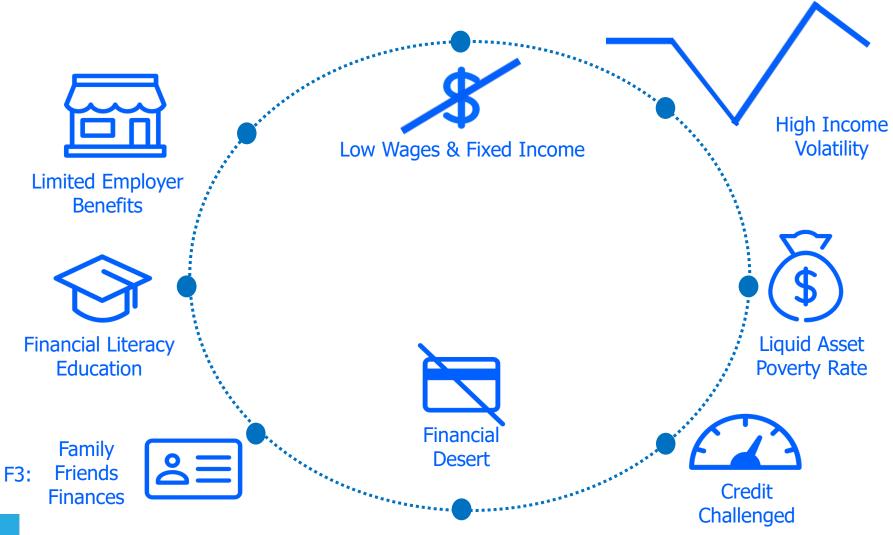
Middle income, higher savings, total assets and net worth







Cycle of Chronic Financial Illness







Quantifying Dreams



5%

\$\$\$ Monthly Debt Payments \$106



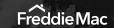
Credit Score

82



\$4,898







Existing Housing Stock



Photo Credit: Brenda Bazán





Existing Housing Stock



Photo Credit: Brenda Bazán





MiCasita



bc Workshop





Community Capital

FINANCIALLY UNHEALTHY HOUSEHOLDS

CAUGHT IN A CYCLE OF CHRONIC FINANICAL ILLNESS

OPERATE OUTSIDE THE FINANCIAL MAINSTREAM

HOPEFUL
PERSISTENT
ENTRPRENUERIAL
RESOURCEFUL
CREATIVE
RESILIENT

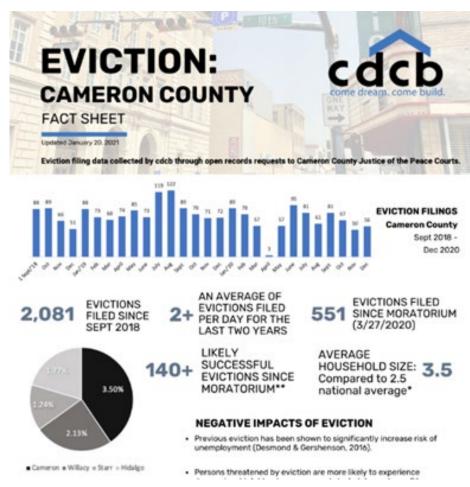






p3: people, policy, power







In Search of Rural: How Varying Definitions Shape Housing Research



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Alexander Hermann is a senior research analyst, working on projects related to housing markets, demographics, and housing policy. Prior to joining the Center, he worked as a grant writer at a Detroit nonprofit providing housing and treatment services to homeless populations. Alex received a master's in Public Policy and a master's in Urban Planning from the University of Michigan.



Concentrated Poverty in the Rural Southeast



KEITH WILEY

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Keith Wiley is a research associate at the Housing Assistance Council. He specializes in data management and analysis, particularly working with large datasets. His areas of interest include rural housing and development, federal housing and financial oversight policies, smart growth planning and policies, and environmental economics. Keith holds a Ph.D. in Public Policy from the University of Maryland, Baltimore County and a master of Public Policy degree from American University.



Household Financial Profiles



ZORAIMA DIAZ-PINEDA

Director of Policy, Impact, and Innovation, cdcb | come dream. come build.

Zoraima Díaz-Pineda serves as the director of policy, impact, and innovation at cdcb | come dream. come build., in the southernmost stretch of the U.S.-Mexico frontera. As a practitioner, researcher, policy analyst, collaborative thought partner and advocate, Zoraima is committed to creating opportunities for low- and moderate-income households and women of color in small communities and rural areas to build financial health and wealth. She applies a gender and racial equity solution-focused approach to develop innovative financial products, services, and policies and drive investment into Community Development Financial Institutions working in long-standing persistent poverty counties, small cities, rural areas and colonias.





Discussant



JAYA DEY

Senior Economist, Freddie Mac

Jaya Dey is senior economist and quantitative analytics director in the Single-Family Client and Community Engagement division. Her area of research is housing policy issues with a focus on affordability, access to credit, understanding barriers to minority homeownership and housing supply. She has contributed to various peer-reviewed academic journal publications, white papers and research reports. Prior to Freddie Mac, she was a faculty member at Oklahoma State University and Saint Louis University. She holds a doctorate in economics from The Ohio State University and a master's degree in economics from Indian Statistical Institute, New Delhi.