Whither Rural (and Urban): A Ramble through a Changing Conceptual Landscape

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United States Census Bureau
U.S. Department of Commerce
Economics and Statistics Administration
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What is “Rural?”

What is “rural?” What characterizes “rurality?”

- Low population density.
- Small numbers of people.
- Low levels of urbanization/urban population.
- Distance from/proximity to [larger] urban centers.
- Isolation and remoteness.

What is “Rural?”

- Rural often is defined as the residual. This could be “not urban” or “not metropolitan” in a dichotomous classification, or what remains after all other categories in a multi-category classification have been defined.

- “Rural” sometimes is defined as less than a specific population size threshold, such as, less than 2,500 or less than 10,000. This might be applied in an administrative unit-based definition. For example: incorporated places less than 10,000 people.

Urban and Rural in the United States

Classifications tend to be dichotomous:

- Urban and Rural;
- Metropolitan and Nonmetropolitan
- Rural/nonmetropolitan are residual categories

Classifications tend to describe:

- Form/Structural (settlement patterns); or
- Function (economic and social relationships)

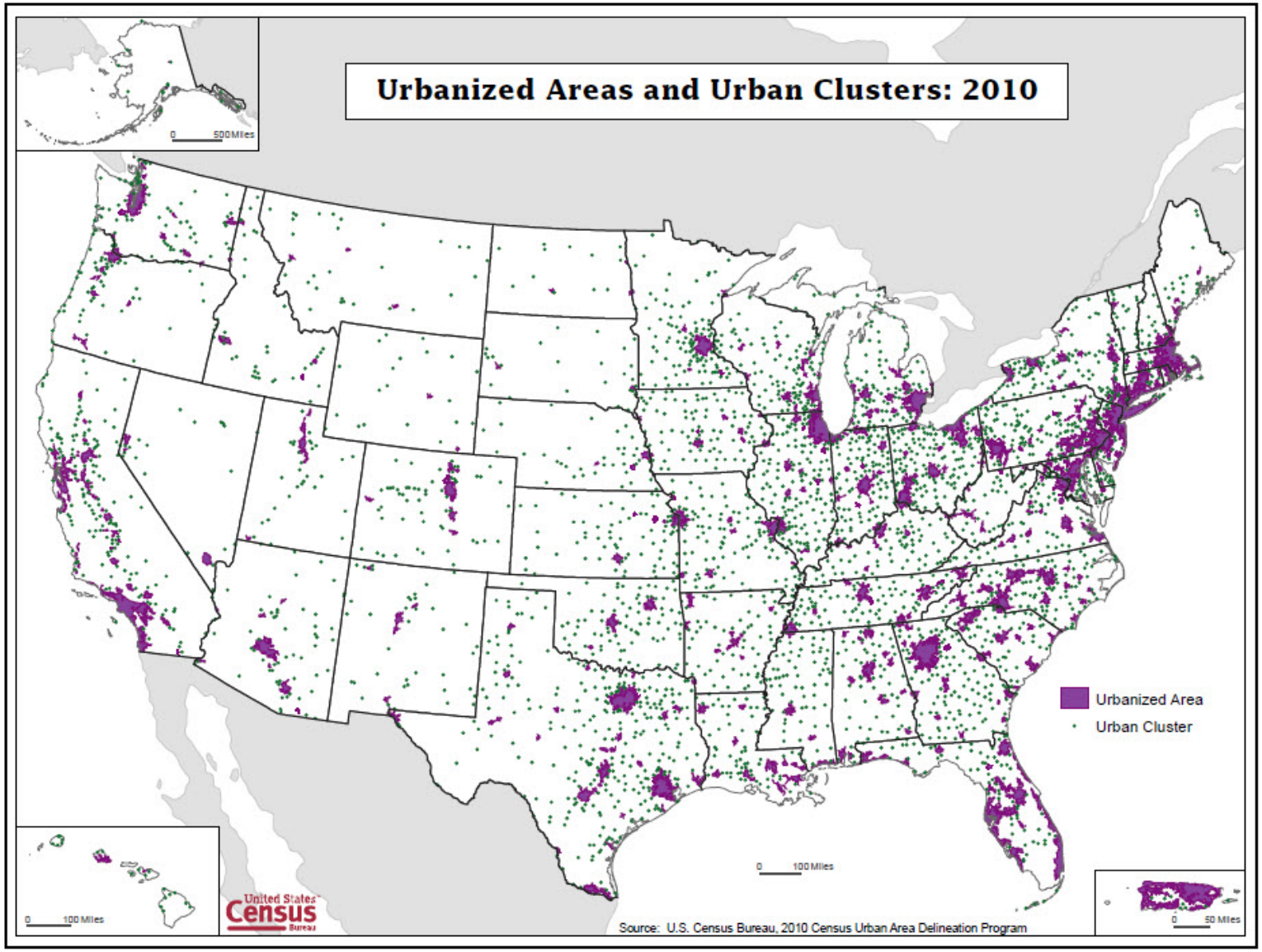
Census Bureau urban/rural = structural urban

Office of Management and Budget metropolitan and micropolitan statistical areas = functional urban

Census Bureau Urban Areas

- Urbanized areas: 50,000 or more population.
- Urban clusters: at least 2,500 and less than 50,000 population.
- Defined primarily based on residential population density measured at the census tract and census block levels.
  - Initial urban core: at least 1,000 per square mile (386 per km^2)
  - Remainder of urban area: at least 500 per square mile (193 per km^2)

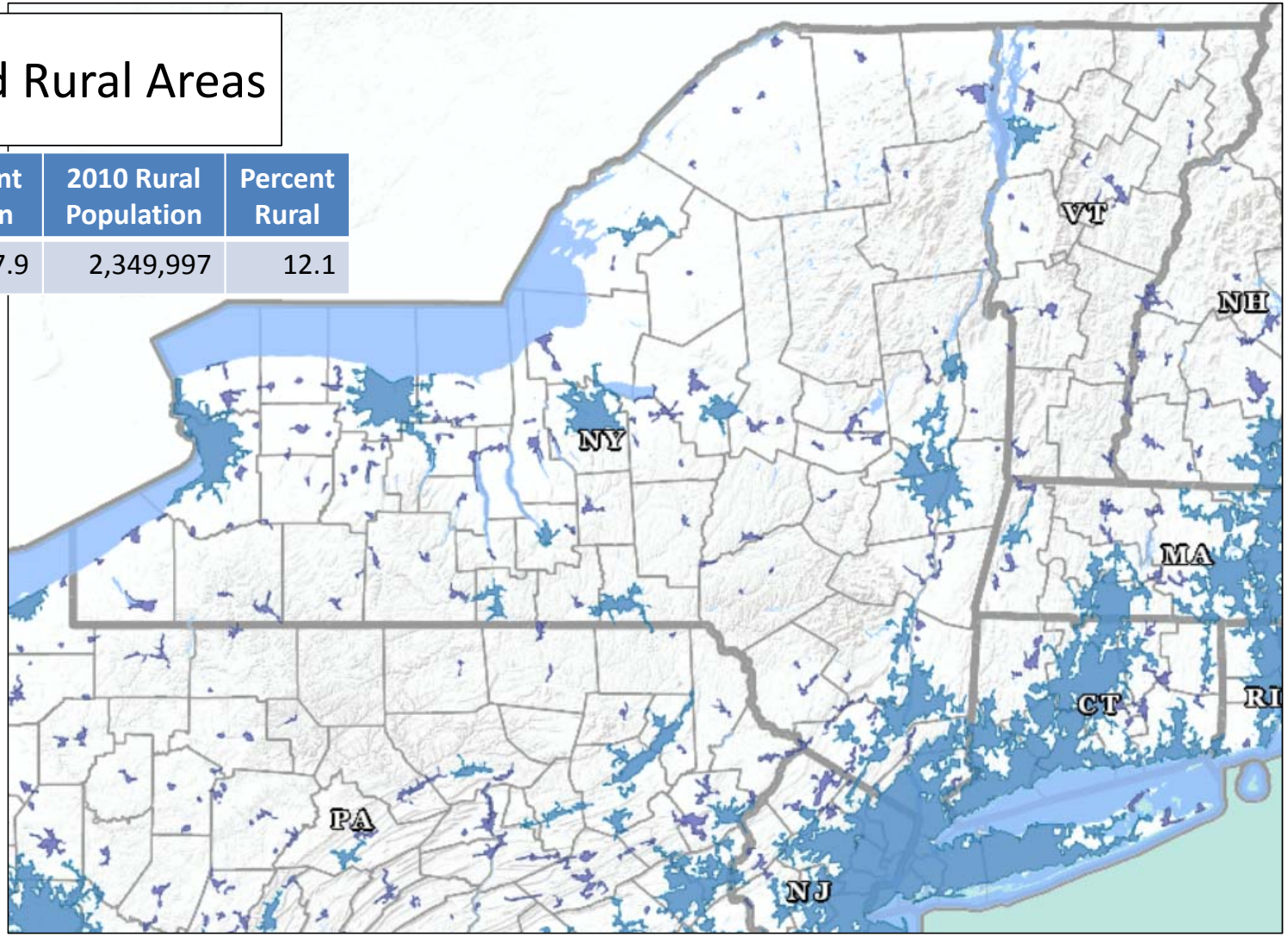
	2010 Census Population	2010 Percent
Total	308,745,538	100.0
Urban	249,253,271	80.7
Urbanized Area	219,922,123	71.2
Urban Cluster	29,331,148	9.5
Rural	59,492,267	19.3



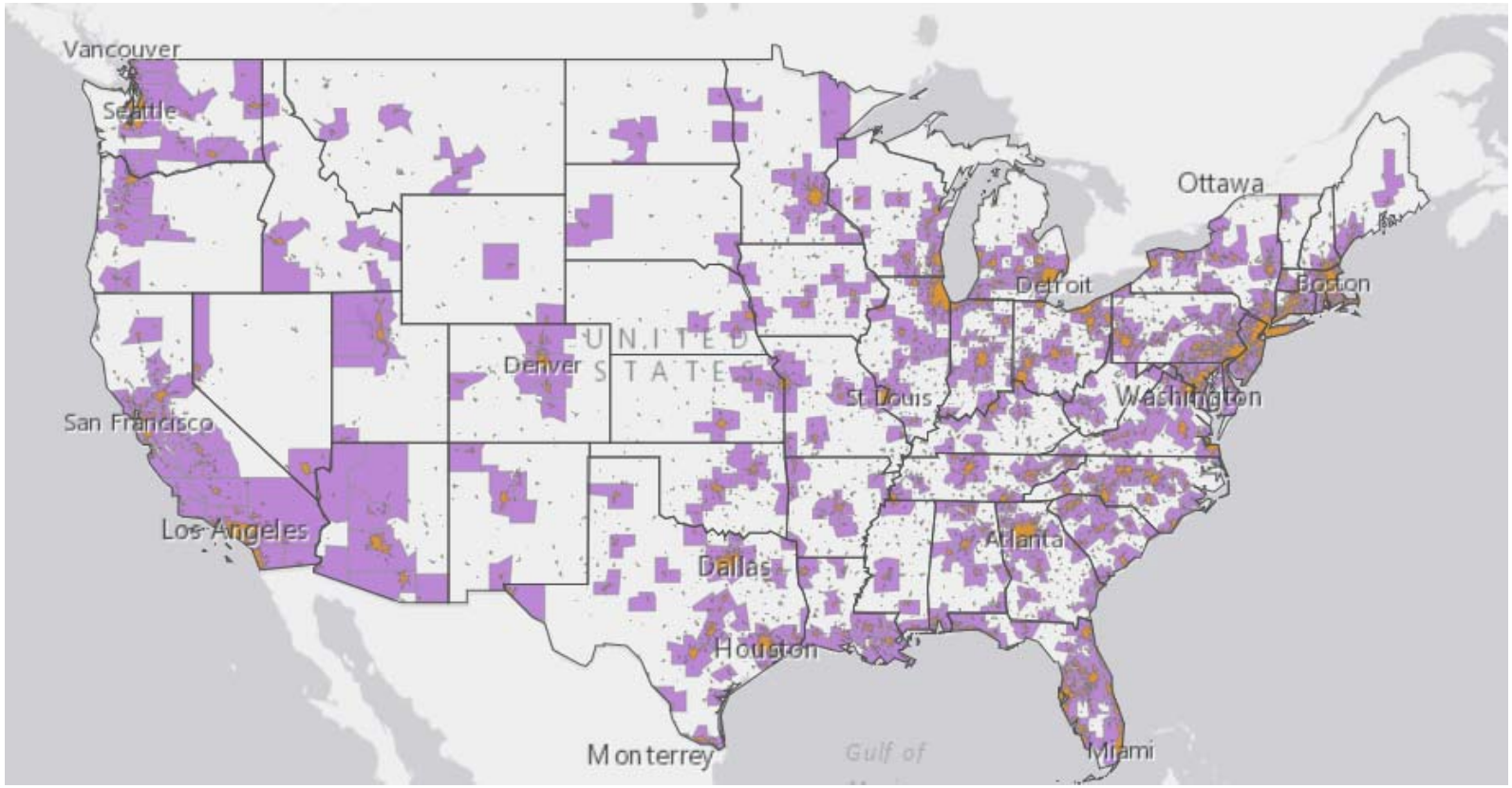
United States Census Bureau

New York Urban and Rural Areas

2010 Total Population	2010 Urban Population	Percent Urban	2010 Rural Population	Percent Rural
19,378,102	17,028,105	87.9	2,349,997	12.1

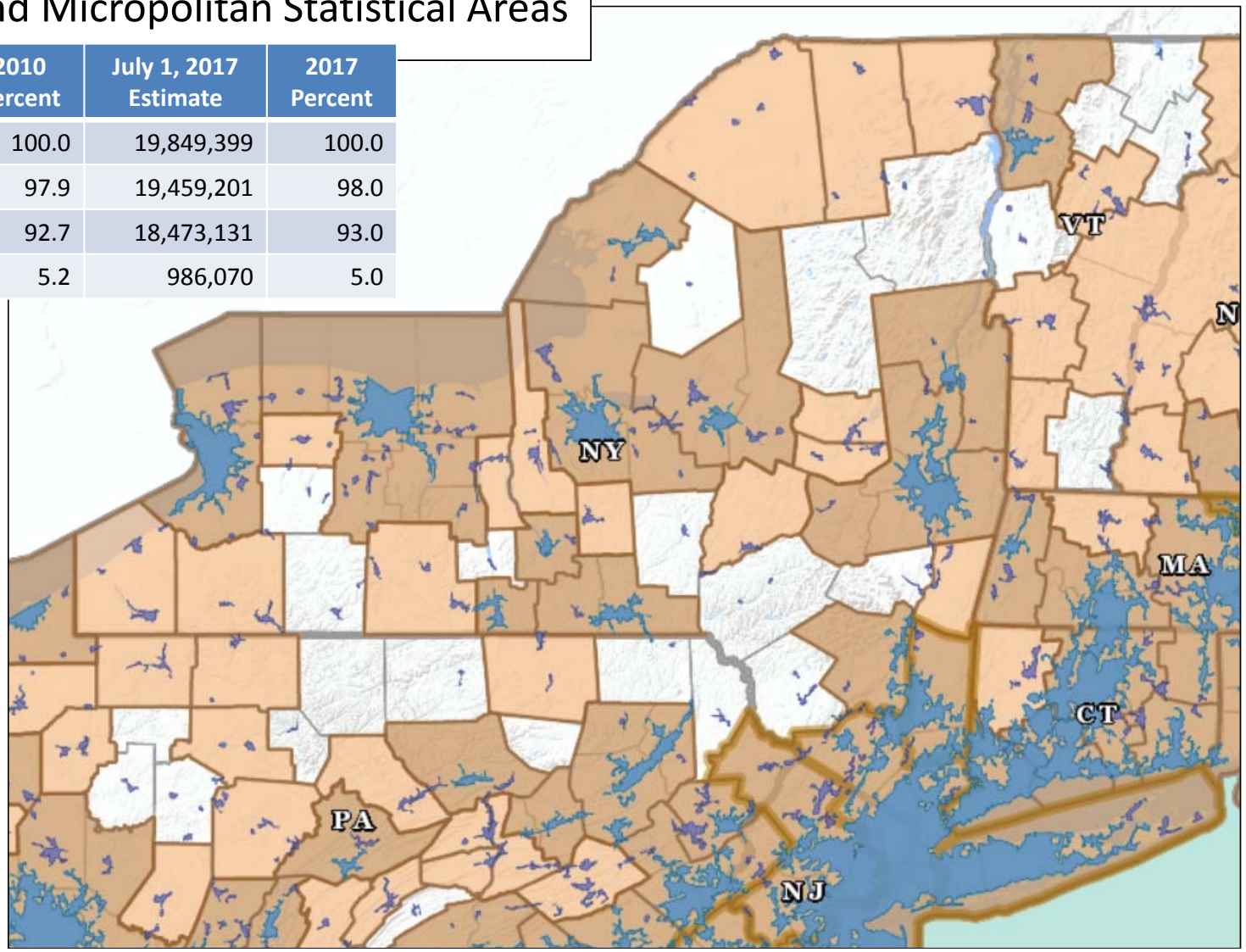


Urban Areas and Metropolitan Statistical Areas



New York Metropolitan and Micropolitan Statistical Areas

	2010 Population	2010 Percent	July 1, 2017 Estimate	2017 Percent
New York	19,378,102	100.0	19,849,399	100.0
Metro and Micro Areas	18,972,140	97.9	19,459,201	98.0
Metro Areas	17,956,460	92.7	18,473,131	93.0
Micro Areas	1,015,680	5.2	986,070	5.0



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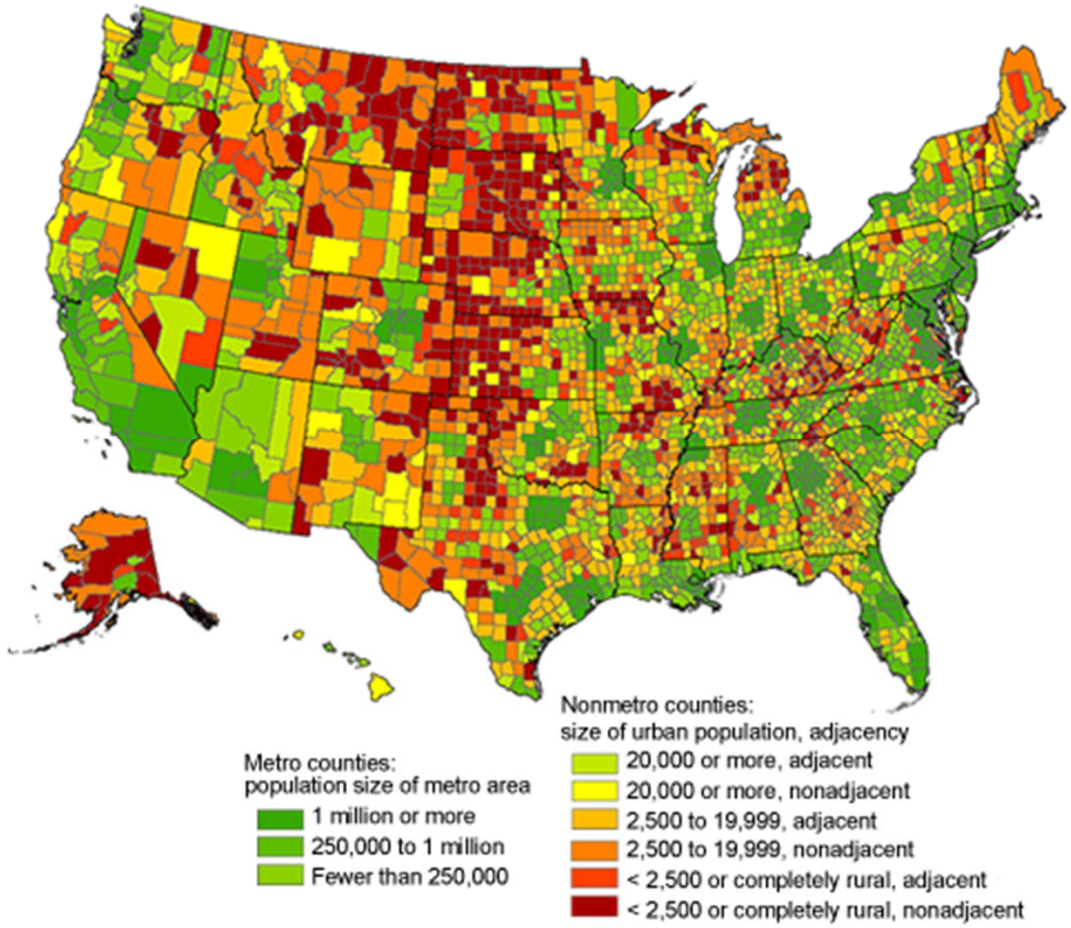
What is Rural?

USDA/Economic Research Service Rural-Urban Continuum Codes

- Nine-level classification commonly used with rural programs, research, and analysis.
- County-based.
- Classifies nonmetropolitan counties based on amount of urban population and adjacency or lack of adjacency to a metropolitan area.

Code	Description
Metropolitan Counties	
1	Counties in metro areas of 1 million population or more
2	Counties in metro areas of 250,000 to 1 million population
3	Counties in metro areas of fewer than 250,000 population
Nonmetropolitan Counties	
4	Urban population of 20,000 or more, adjacent to a metro area
5	Urban population of 20,000 or more, not adjacent to a metro area
6	Urban population of 2,500 to 19,999, adjacent to a metro area
7	Urban population of 2,500 to 19,999, not adjacent to a metro area
8	Completely rural or less than 2,500 urban population, adjacent to a metro area
9	Completely rural or less than 2,500 urban population, not adjacent to a metro area

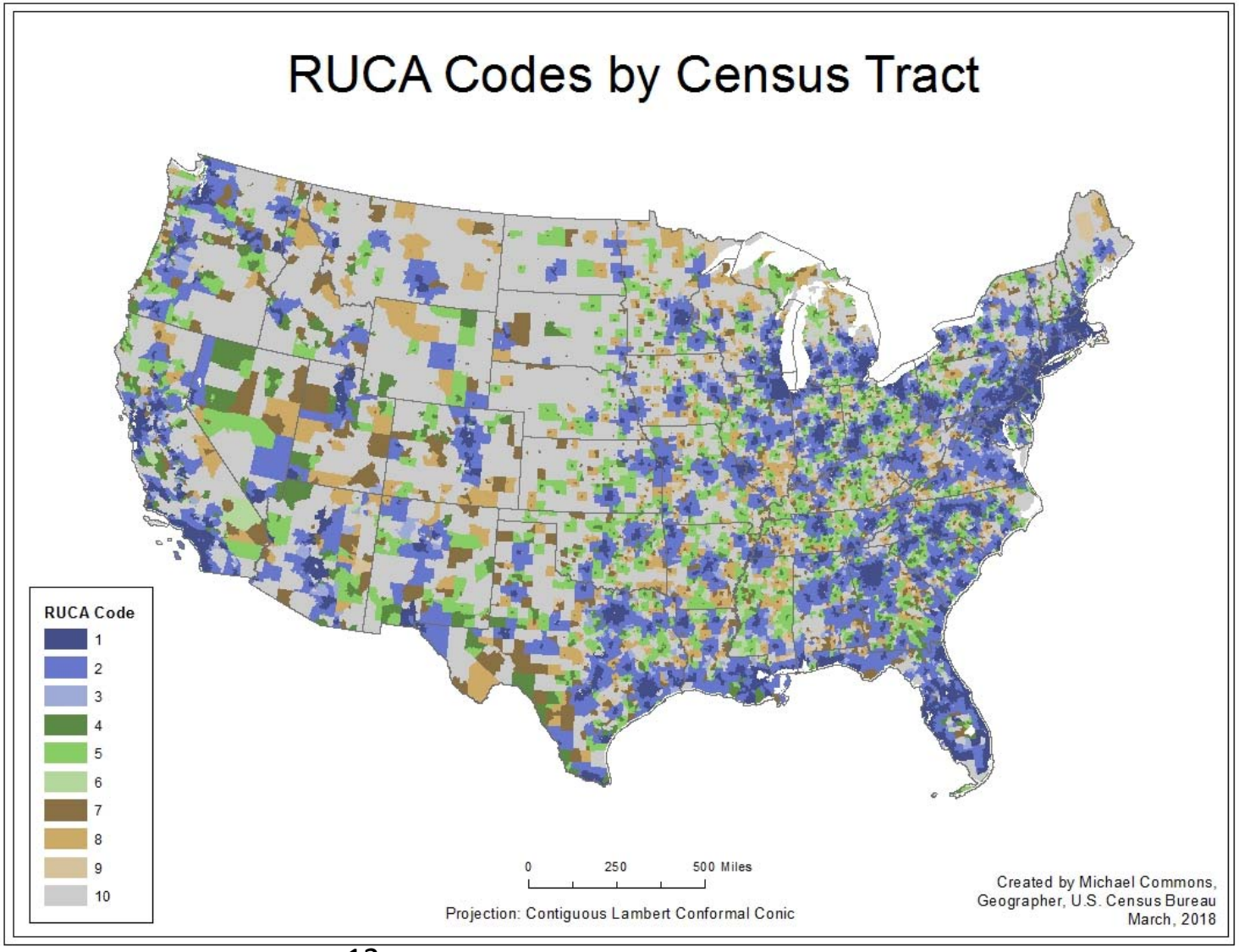
2013 Rural-Urban Continuum Codes



Source: USDA, Economic Research Service using data from the U.S. Census Bureau.

Rural-Urban Commuting Areas

USDA/Economic Research Service



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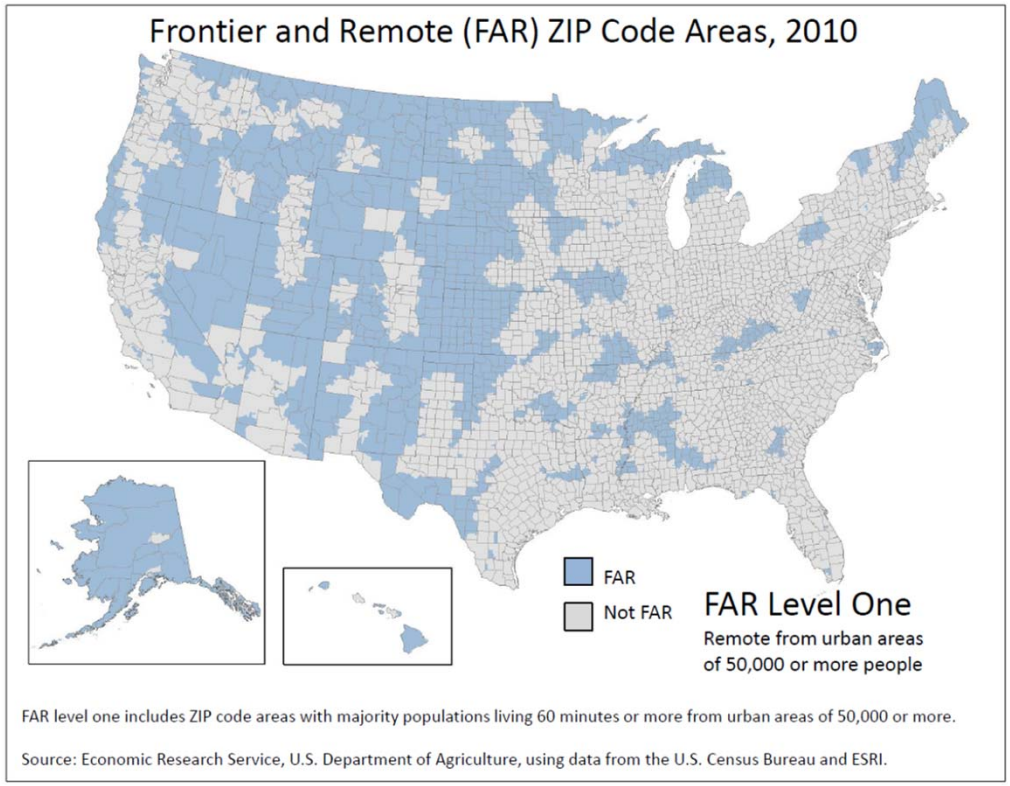
Rural-Urban Commuting Areas

USDA/Economic Research Service

1	Metropolitan area core: primary flow within an Urbanized Area (UA)
2	Metropolitan area high commuting: primary flow 30% or more to a UA
3	Metropolitan area low commuting: primary flow 10% to 30% to a UA
4	Micropolitan area core: primary flow within an Urban Cluster of 10,000 to 49,999 (large UC)
5	Micropolitan high commuting: primary flow 30% or more to a large UC
6	Micropolitan low commuting: primary flow 10% to 30% to a large UC
7	Small town core: primary flow within an Urban Cluster of 2,500 to 9,999 (small UC)
8	Small town high commuting: primary flow 30% or more to a small UC
9	Small town low commuting: primary flow 10% to 30% to a small UC
10	Rural areas: primary flow to a tract outside a UA or UC

Frontier and Remote Areas

Measuring Distance and Isolation



Frontier and Remote Areas

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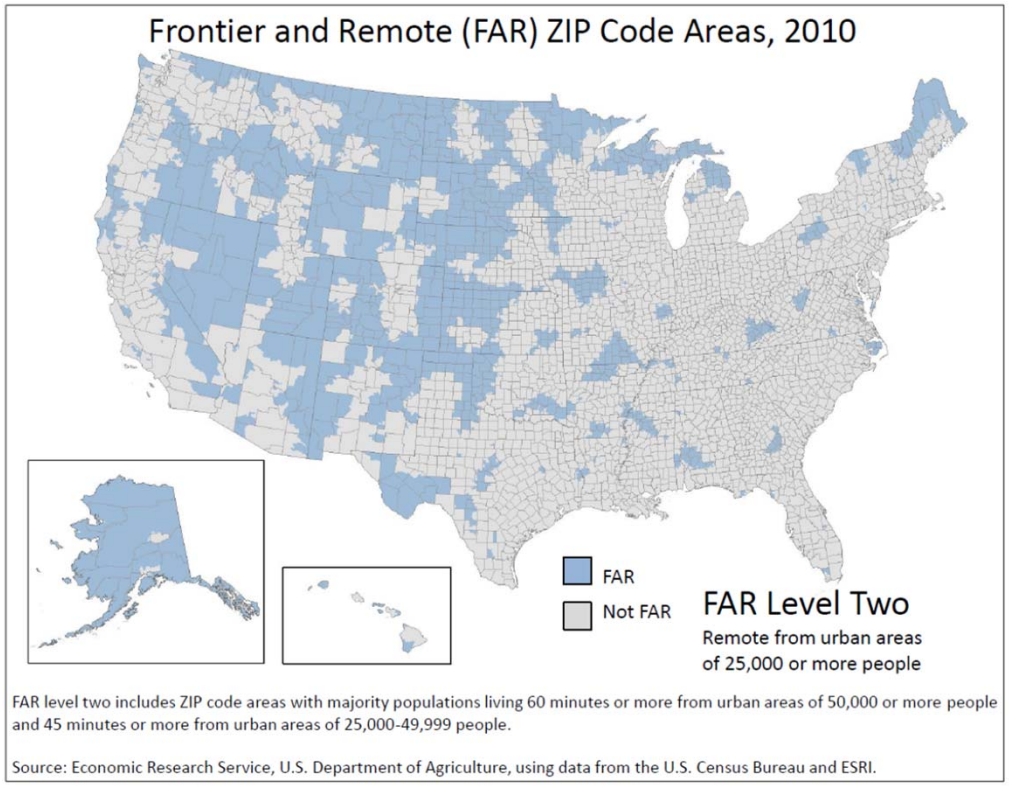

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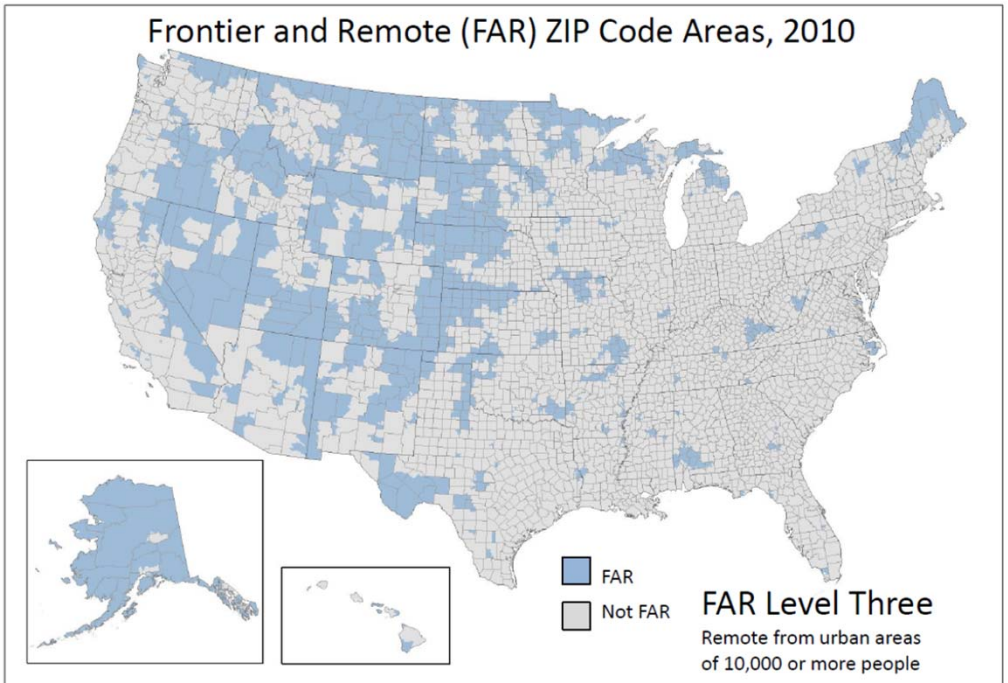
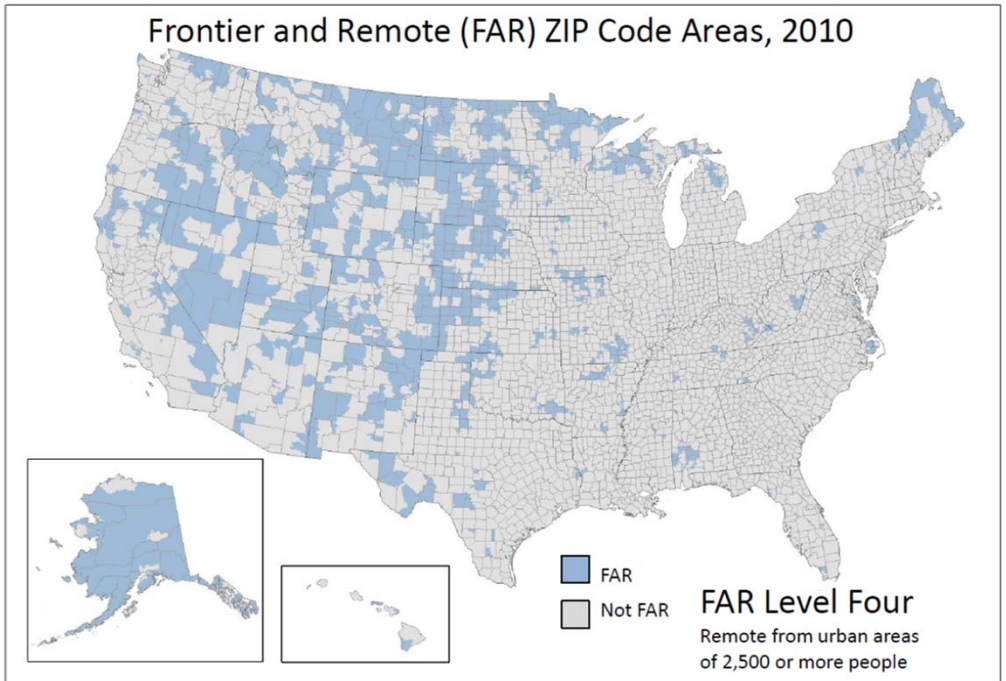


FAR level three includes ZIP code areas with majority populations living 60 minutes or more from urban areas of 50,000 or more people; and 45 minutes or more from urban areas of 25,000-49,999 people; and 30 minutes or more from urban areas of 10,000-24,999 people.
Source: Economic Research Service, U.S. Department of Agriculture, using data from the U.S. Census Bureau and ESRI.

Frontier and Remote Areas

Measuring Distance and Isolation



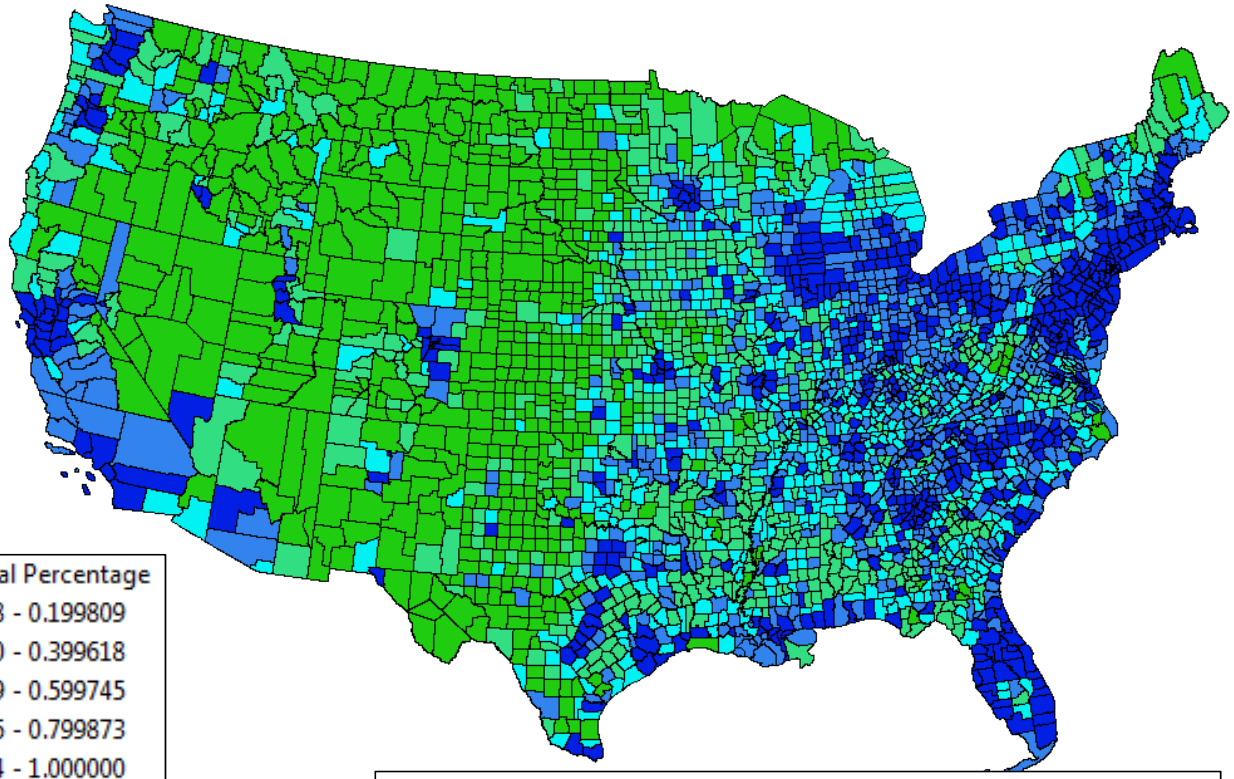
FAR level four includes ZIP code areas with majority populations living 60 minutes or more from urban areas of 50,000 or more people; and 45 minutes or more from urban areas of 25,000-49,999 people; and 30 minutes or more from urban areas of 10,000-24,999 people; and 15 minutes or more from urban areas of 2,500-9,999 people.
Source: Economic Research Service, U.S. Department of Agriculture, using data from the U.S. Census Bureau and ESRI.

What is Rural?

Comparative Density Approach

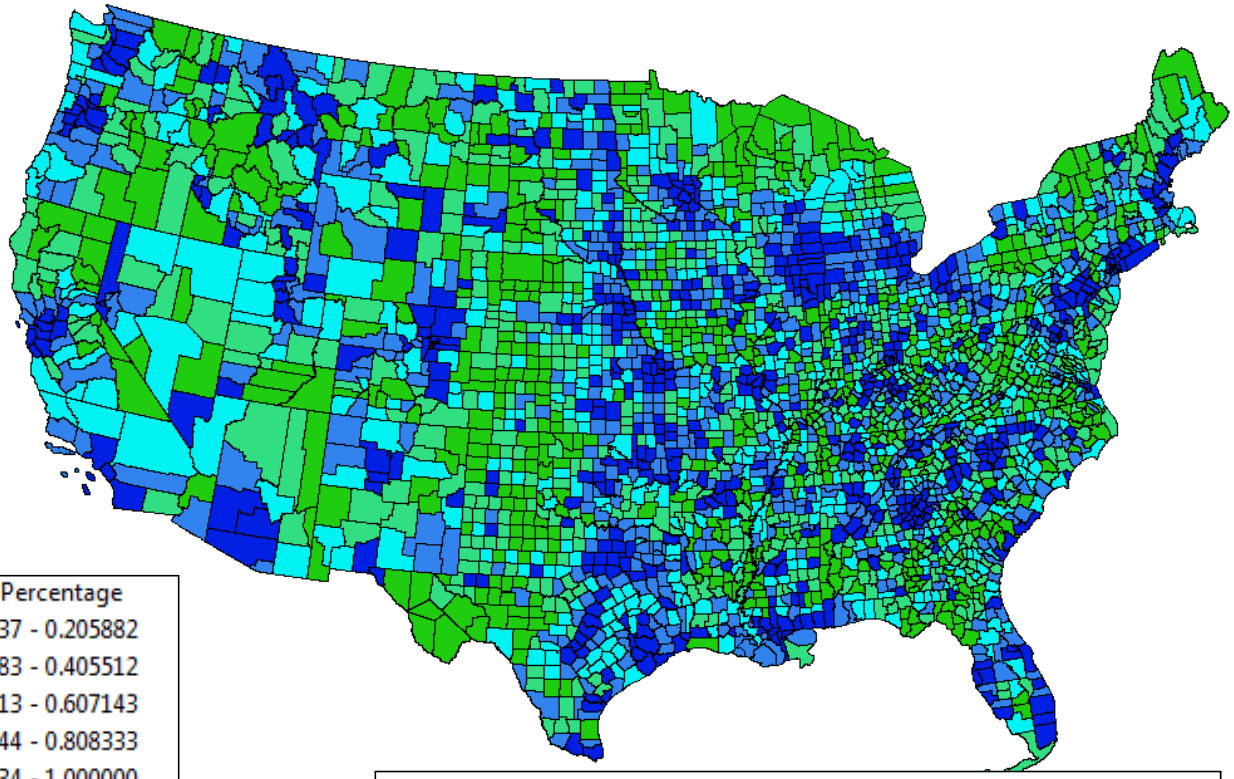
- In this approach, counties are ranked based on population density within state as well as nationally.
- Each county is assigned a percentile score based on its population density relative to other counties in the state and other counties in the nation. An overall score can be computed by combining the state and national scores.
  - Score = (# of counties – county rank from top)/# of counties
  - Overall Score = National Score x State Score
- Counties can be grouped based on similarity of scores.
- Proposed by John Adams (University of Minnesota) as part of research into new approaches to defining metropolitan areas commissioned by the Office of Management and Budget, 1995.

Comparative Density Approach: National Percentage Scores



Based on J. Adams, "Classifying Settled Areas of the United States: Conceptual Issues and Proposals for New Approaches," in D. Dahmann and J. Fitzsimmons (eds.), *Metropolitan and Nonmetropolitan Areas: New Approaches to Geographical Definition*. U.S. Census Bureau, Population Division, Working Paper Number 12, September 1995.

Comparative Density Approach: State Percentage Scores



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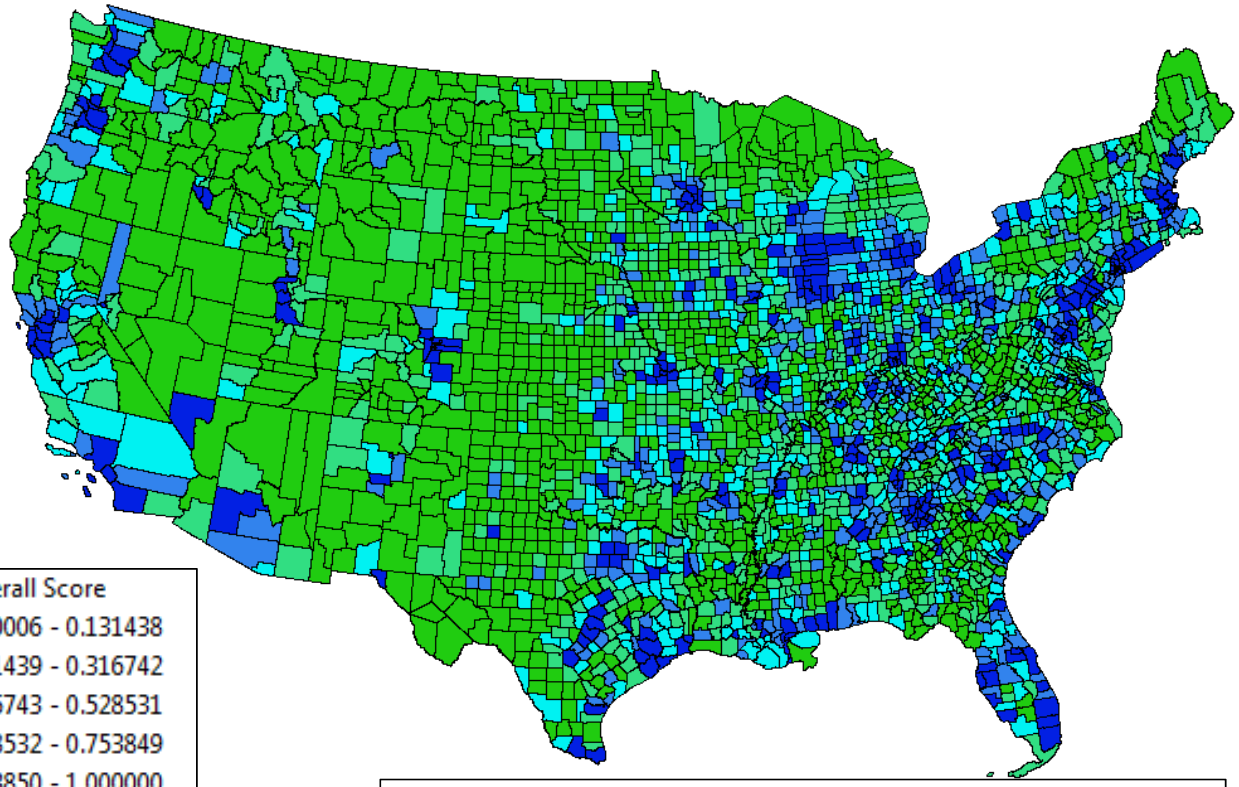
Comparative Density Approach: Overall Scores



Overall Score
- 0.000006 - 0.131438
- 0.131439 - 0.316742
- 0.316743 - 0.528531
- 0.528532 - 0.753849
- 0.753850 - 1.000000

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Is it time to consider a continuum of categories?

United States Census Bureau

Rural Statistical Areas

Project Goals

- Develop an objective process for identifying and grouping sub-state areas of 65,000 or more people for purposes of tabulating and disseminating ACS 1-year data.
- Focus on meeting need for annual data for rural areas.
  - However, if the classification includes all counties, then we cannot apply the term “rural.”
- Process should result in areas that are comparable from one state to another.
- Use counties as building blocks.
  - Counties are recognizable geographic units.
  - Greater availability of statistical and other data at the county-level.
  - But, large counties in the West pose challenges.

Rural Statistical Areas

Proposed Criteria and Concept

Each statistical area:

- Must have a population of 65,000 or more.
- Should encompass one or more contiguous counties (or other geographic unit).
- Should, to the extent possible, encompass areas with similar levels of rurality.

- Statistical areas should be comparable from one state to another.

Rural Statistical Areas

Thoughts and Items for Consideration

- Population density should be a primary factor considered when defining areas.
- Socio-economic integration, proximity to larger urban centers, and common regional ties should be considered.
- Delineation of areas should be rural-centric.
- The classification should encompass the entirety of the United States and Puerto Rico.

- Should areas be state-based? Or, should they be allowed to cross state lines?
- Should counties be the “building blocks?”

Thank you!

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