Defining Rurality

Michael Commons
Geography Division
US Census Bureau

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Standard Hierarchy of Census Geographic Entities

NATION

REGIONS

DIVISIONS

ZIP Code Tabulation Areas
School Districts
Congressional Districts
Voting Districts
Traffic Analysis Zones
County Subdivisions
Subminor Civil Divisions
Census Tracts
Block Groups
Census Blocks

STATES

Counties
Places

Urban Areas
Core Based Statistical Areas
Urban Growth Areas
State Legislative Districts
Public Use Microdata Areas

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov
Urban Population as a Percentage of Total US Population, 1790-2010

1950: urbanized areas of 50,000+ adopted.
Census Bureau designated Urban Areas

• Delineated decennially

• Two types of urban areas:
  – Urbanized Areas (UAs) of 50,000 or more people
  – Urban Clusters (UCs) of at least 2,500 and less than 50,000 people
### Urban and Rural Population in the United States: 2010 and 2000

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>222,360,539</td>
<td>79.0</td>
<td>249,253,271</td>
<td>80.7</td>
</tr>
<tr>
<td>Urbanized Area</td>
<td>192,323,824</td>
<td>68.3</td>
<td>219,922,123</td>
<td>71.2</td>
</tr>
<tr>
<td>Urban Cluster</td>
<td>30,036,715</td>
<td>10.7</td>
<td>29,331,148</td>
<td>9.5</td>
</tr>
<tr>
<td>Rural</td>
<td>59,061,367</td>
<td>21.0</td>
<td>59,492,267</td>
<td>19.3</td>
</tr>
</tbody>
</table>
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.
For any given urban entity, where is the boundary?

Three ways to define Peoria

- Peoria Metro Area
- Illinois
- Administrative concept: Peoria City, population 112,936
- Land-use concept: Peoria Urban Area, population 247,172
- Economic concept: Peoria Metro Area, population 366,899

What is the minimum population size for an entity to be considered urban?
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’s Urban and Rural Classification

- The Census Bureau identifies and classifies urban and rural areas after each decennial census.
- Urban areas of at least 2,500 people have been identified since 1906.
- Urbanized areas of 50,000 or more people were first defined for the 1950 Census. Urban places of at least 2,500 people were identified outside urbanized areas. Urban clusters of 2,500 - 49,999 were first defined after Census 2000.
- The Census Bureau identifies urban and rural areas solely for the purpose of tabulating and presenting statistical data.
- More information: [https://www.census.gov/geo/reference/ua/urban-rural-2010.html](https://www.census.gov/geo/reference/ua/urban-rural-2010.html)
Urban Areas and Metropolitan Statistical Areas
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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metropolitan Counties</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Counties in metro areas of 1 million population or more</td>
</tr>
<tr>
<td>2</td>
<td>Counties in metro areas of 250,000 to 1 million population</td>
</tr>
<tr>
<td>3</td>
<td>Counties in metro areas of fewer than 250,000 population</td>
</tr>
<tr>
<td><strong>Nonmetropolitan Counties</strong></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Urban population of 20,000 or more, adjacent to a metro area</td>
</tr>
<tr>
<td>5</td>
<td>Urban population of 20,000 or more, not adjacent to a metro area</td>
</tr>
<tr>
<td>6</td>
<td>Urban population of 2,500 to 19,999, adjacent to a metro area</td>
</tr>
<tr>
<td>7</td>
<td>Urban population of 2,500 to 19,999, not adjacent to a metro area</td>
</tr>
<tr>
<td>8</td>
<td>Completely rural or less than 2,500 urban population, adjacent to a metro area</td>
</tr>
<tr>
<td>9</td>
<td>Completely rural or less than 2,500 urban population, not adjacent to a metro area</td>
</tr>
</tbody>
</table>
Rural-Urban Continuum Codes
USDA/Economic Research Service

Metro Counties:
- **CODE** population size of metro area
  - 1 1 million or more
  - 2 250,000 to 1 million
  - 3 fewer than 250,000

Nonmetro Counties:
- **CODE** size of urban population, adjacency
  - 4 20,000 or more, adjacent
  - 5 20,000 or more, nonadjacent
  - 6 2,500 to 19,999, adjacent
  - 7 2,500 to 19,999, nonadjacent
  - 8 < 2,500 or completely rural, adjacent
  - 9 < 2,500 or completely rural, nonadjacent

Created by Michael Commer, Geographer, U.S. Census Bureau
May, 2018
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<tr>
<td>1</td>
<td>Metropolitan area core: primary flow within an Urbanized Area (UA)</td>
</tr>
<tr>
<td>2</td>
<td>Metropolitan area high commuting: primary flow 30% or more to a UA</td>
</tr>
<tr>
<td>3</td>
<td>Metropolitan area low commuting: primary flow 10% to 30% to a UA</td>
</tr>
<tr>
<td>4</td>
<td>Micropolitan area core: primary flow within an Urban Cluster of 10,000 to 49,999 (large UC)</td>
</tr>
<tr>
<td>5</td>
<td>Micropolitan high commuting: primary flow 30% or more to a large UC</td>
</tr>
<tr>
<td>6</td>
<td>Micropolitan low commuting: primary flow 10% to 30% to a large UC</td>
</tr>
<tr>
<td>7</td>
<td>Small town core: primary flow within an Urban Cluster of 2,500 to 9,999 (small UC)</td>
</tr>
<tr>
<td>8</td>
<td>Small town high commuting: primary flow 30% or more to a small UC</td>
</tr>
<tr>
<td>9</td>
<td>Small town low commuting: primary flow 10% to 30% to a small UC</td>
</tr>
<tr>
<td>10</td>
<td>Rural areas: primary flow to a tract outside a UA or UC</td>
</tr>
</tbody>
</table>
Frontier and Remote Areas

Measuring Distance and Isolation

Frontier and Remote (FAR) ZIP Code Areas, 2010

FAR level one includes ZIP code areas with majority populations living 60 minutes or more from urban areas of 50,000 or more.

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

Frontier and Remote (FAR) ZIP Code Areas, 2010

FAR Level Two 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.

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

Frontier and Remote (FAR) ZIP Code Areas, 2010

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

Frontier and Remote (FAR) ZIP Code Areas, 2010

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

Comparative Density Approach: State Percentage Scores

Comparative Density Approach: Overall Scores

Urban Areas

Urban Population: 8,394,909
Rural Population: 396,985
RUCA

Urban Population: 8,782,309
Rural Population: 9,585
Tract Density

Urban Population: 8,398,466
Rural Population: 393,428
Weighted Model

Urban Population: 8,394,909
Rural Population: 396,985
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!

Contact information for the Urban/Rural Team:
Michael Commons: michael.commons@census.gov

Additional team members:
Michael Ratcliffe: michael.r.ratcliffe@census.gov
Vincent Osier: Vincent.osier@census.gov
Jennifer Zanoni: Jennifer.zanoni@census.gov