



# ***Everything You've Always Wanted to Know About Rural ?***

## **STATE OFFICES OF RURAL HEALTH ORIENTATION MEETING**

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Health Resources and Services Administration  
Office of Rural Health Policy**

# Who Defines Rural?

- The Census Bureau
- The Office of Management and Budget (OMB)
- United States Department of Agriculture's Economic Research Service (ERS)
- Office of Rural Health Policy (ORHP)

# The Census Bureau

The Census Bureau identifies 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.



# The Census Bureau

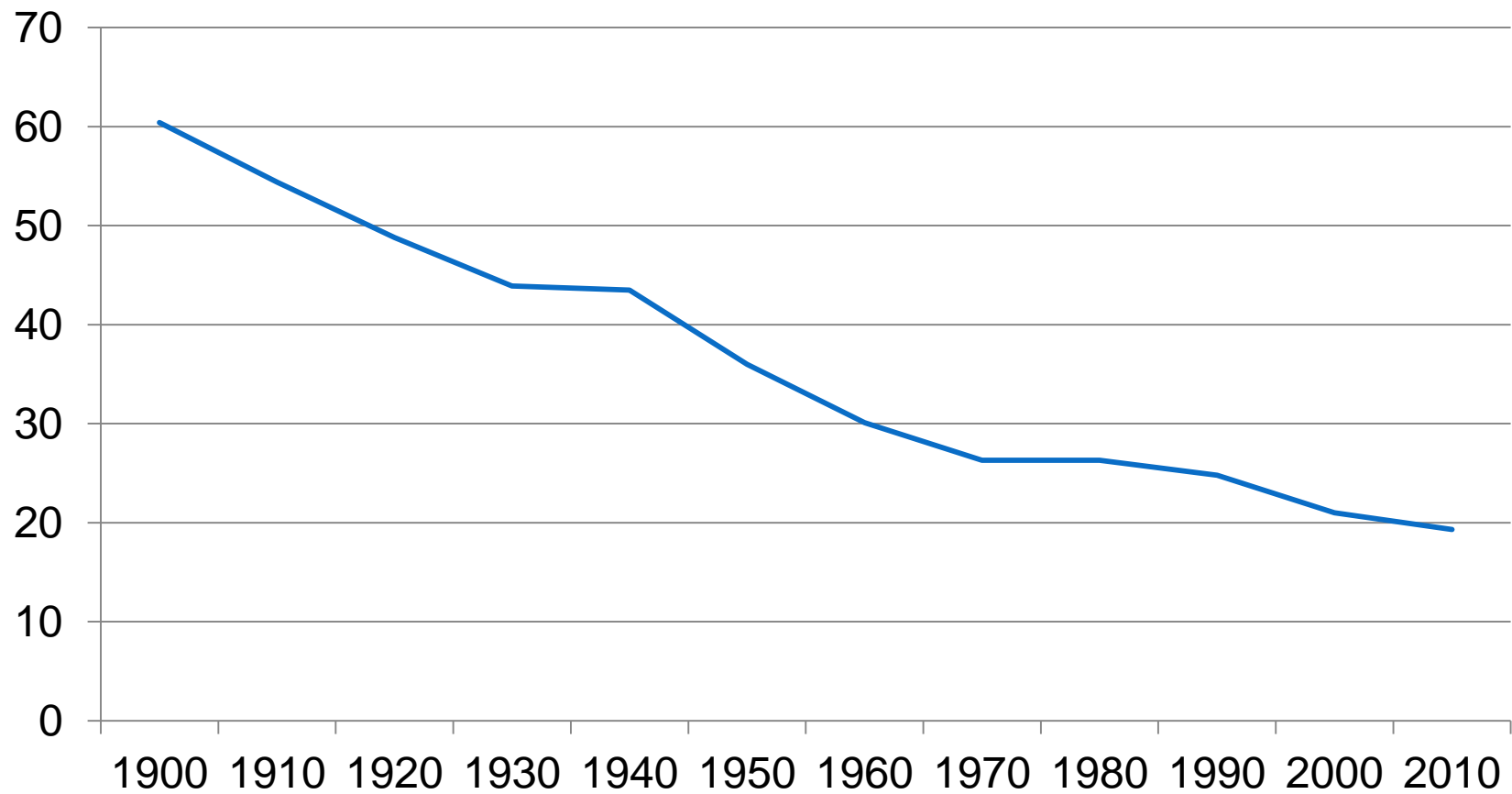
For the 2010 Census, an urban area will comprise a densely settled core of census tracts and/or census blocks that meet minimum population density requirements, along with adjacent territory containing non-residential urban land uses as well as territory with low population density included to link outlying densely settled territory with the densely settled core. To qualify as an urban area, the territory identified according to criteria must encompass at least 2,500 people, at least 1,500 of which reside outside institutional group quarters.



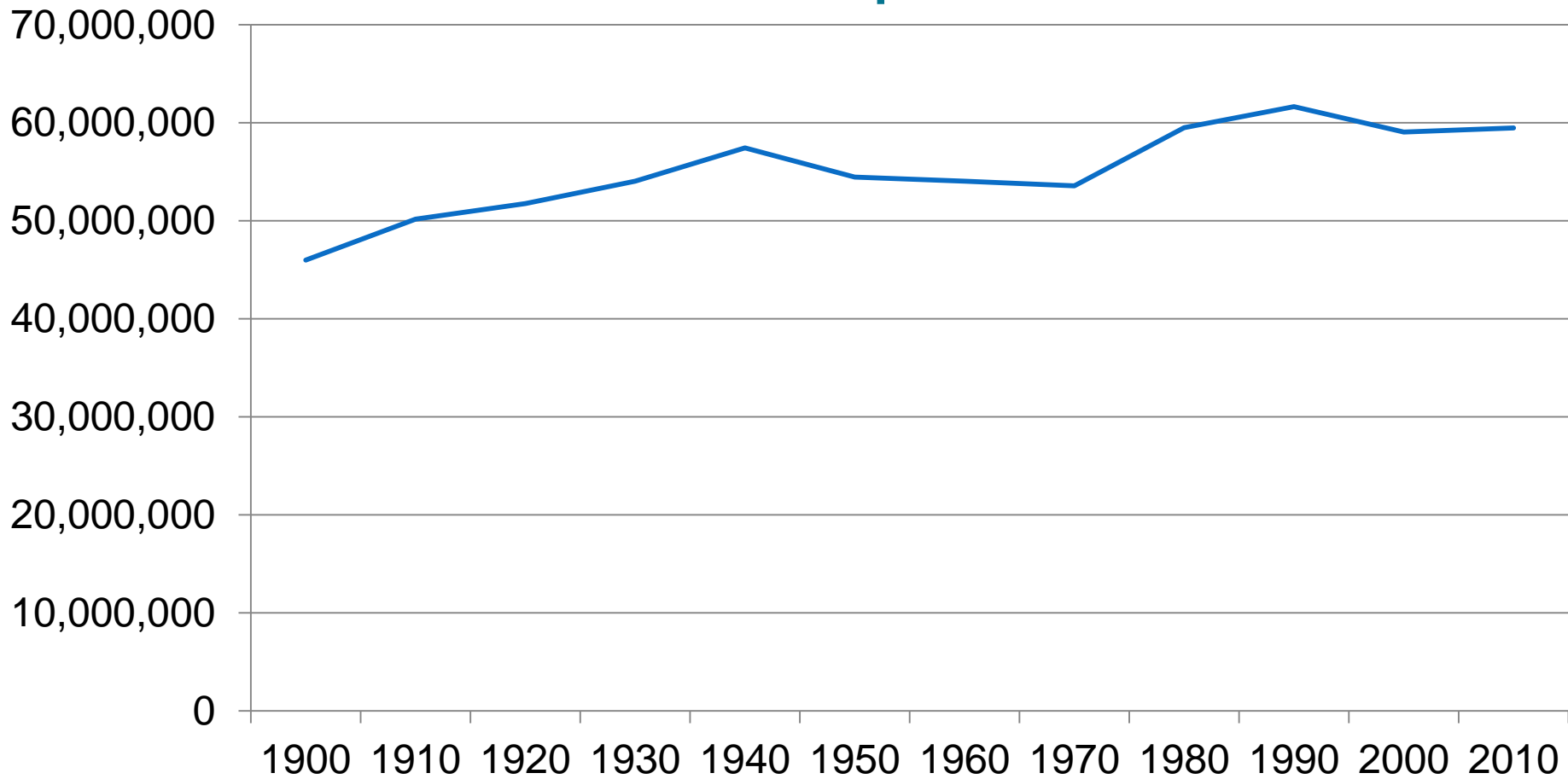
# Urban/Rural Population

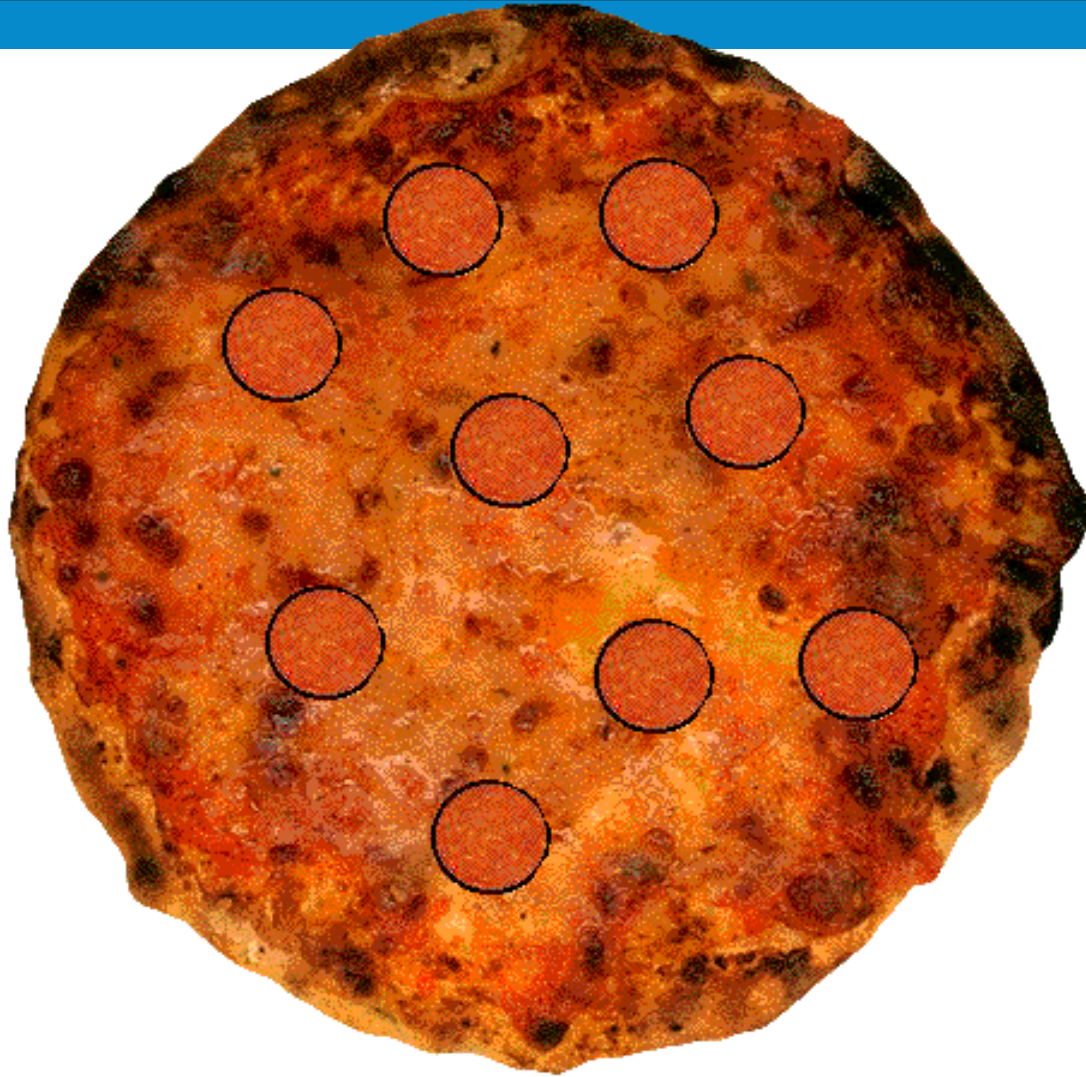
Area	Population		Percentage of Population	
	2010	2000	2010	2000
United States	308.7 million	281.4 million		
Urban	249.2 million	222.3 million	80.7%	79%
Urbanized Areas	219.9 million	192.3 million	71.2%	68.3%
Urban Clusters	29.3 million	30 million	9.5%	10.7%
Rural	59.5 million	59 million	19.3%	21%

# Rural % of US Population



# Rural US Population



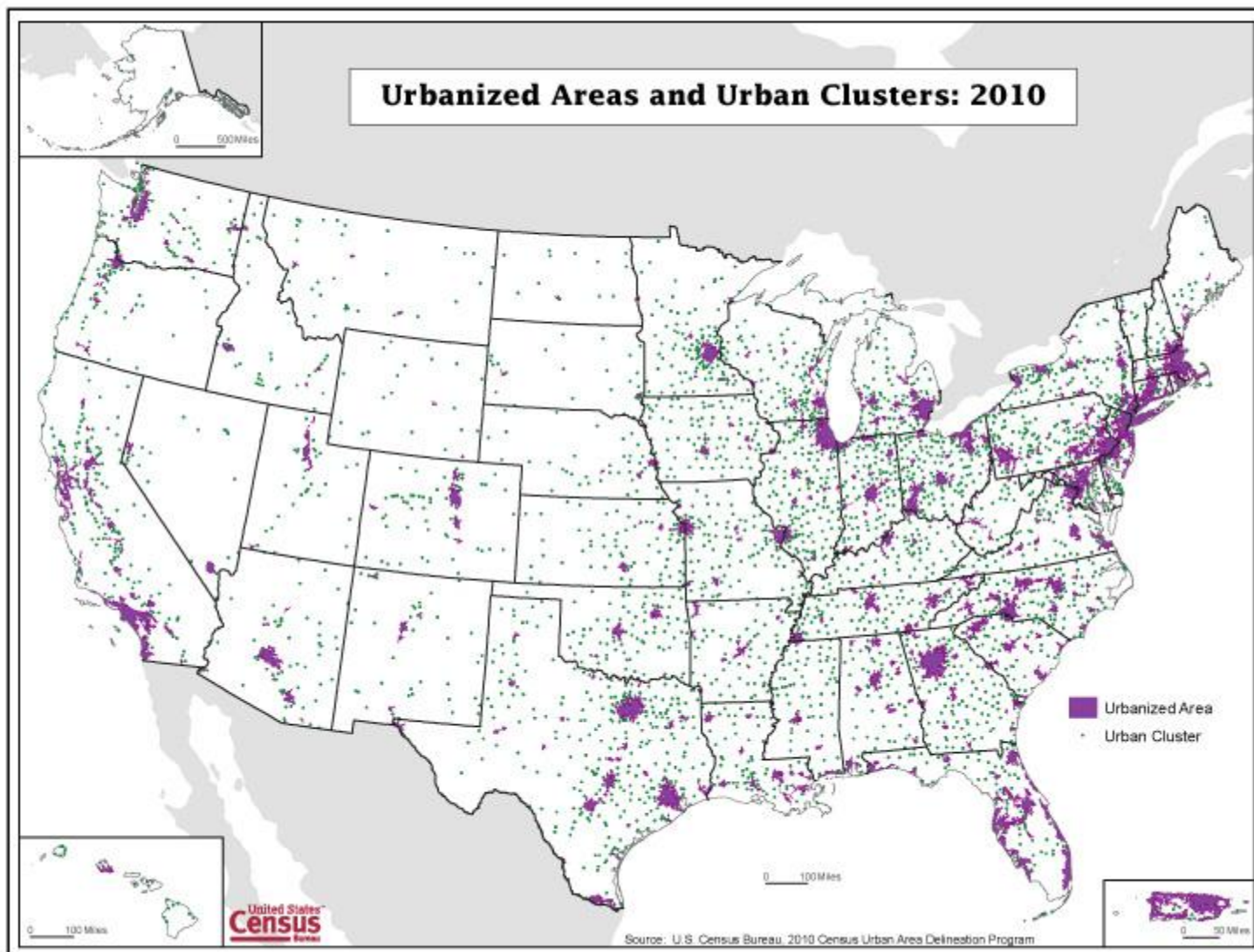


# Population Density in the US

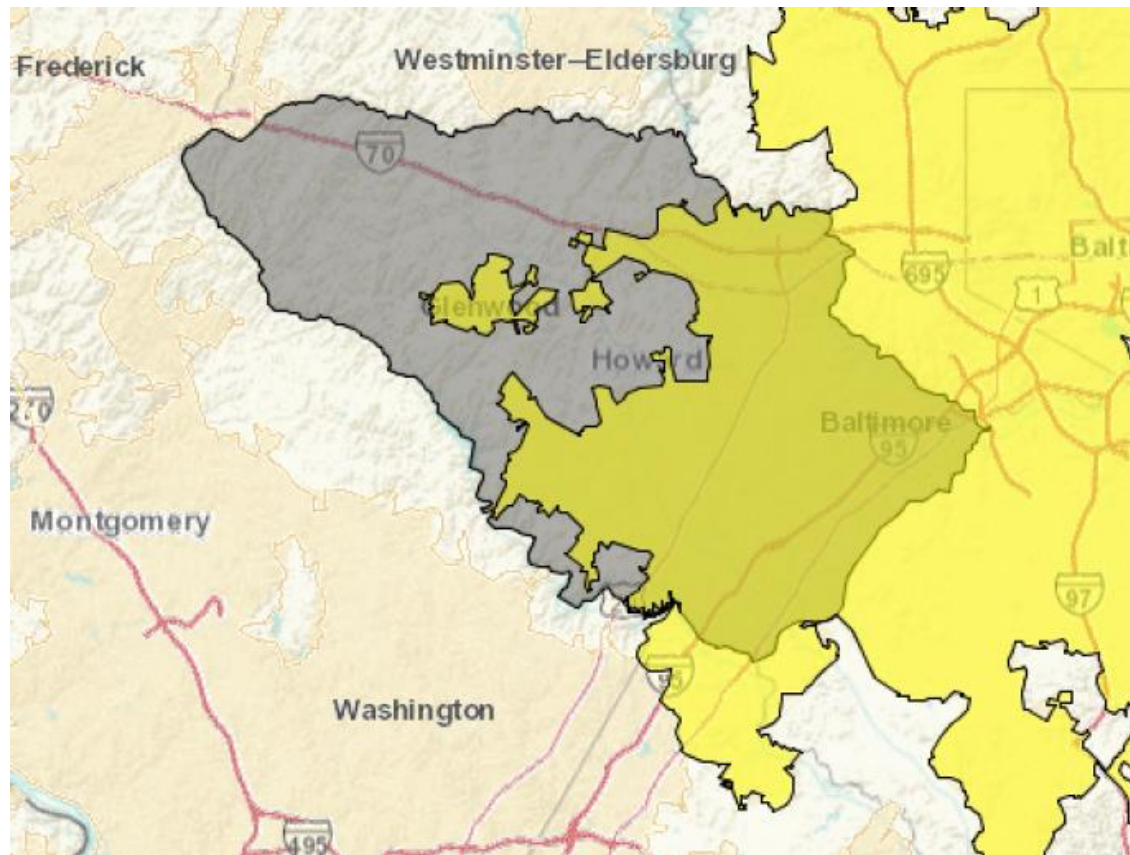
	Population Census 2010	Density per Square Mile
U.S. Total	308,745,538	87.2
New Jersey	8,791,894	1,195.5
Alaska	710,231	1.2

# Population Density in Urban Areas

	Population Census 2010	Density per Square Mile
U.S. Total	308,745,538	87.2
U.S. Urban Areas	249,253,271	2,534.4
The Netherlands	16,730,632	1,276.7



# Howard County, Maryland



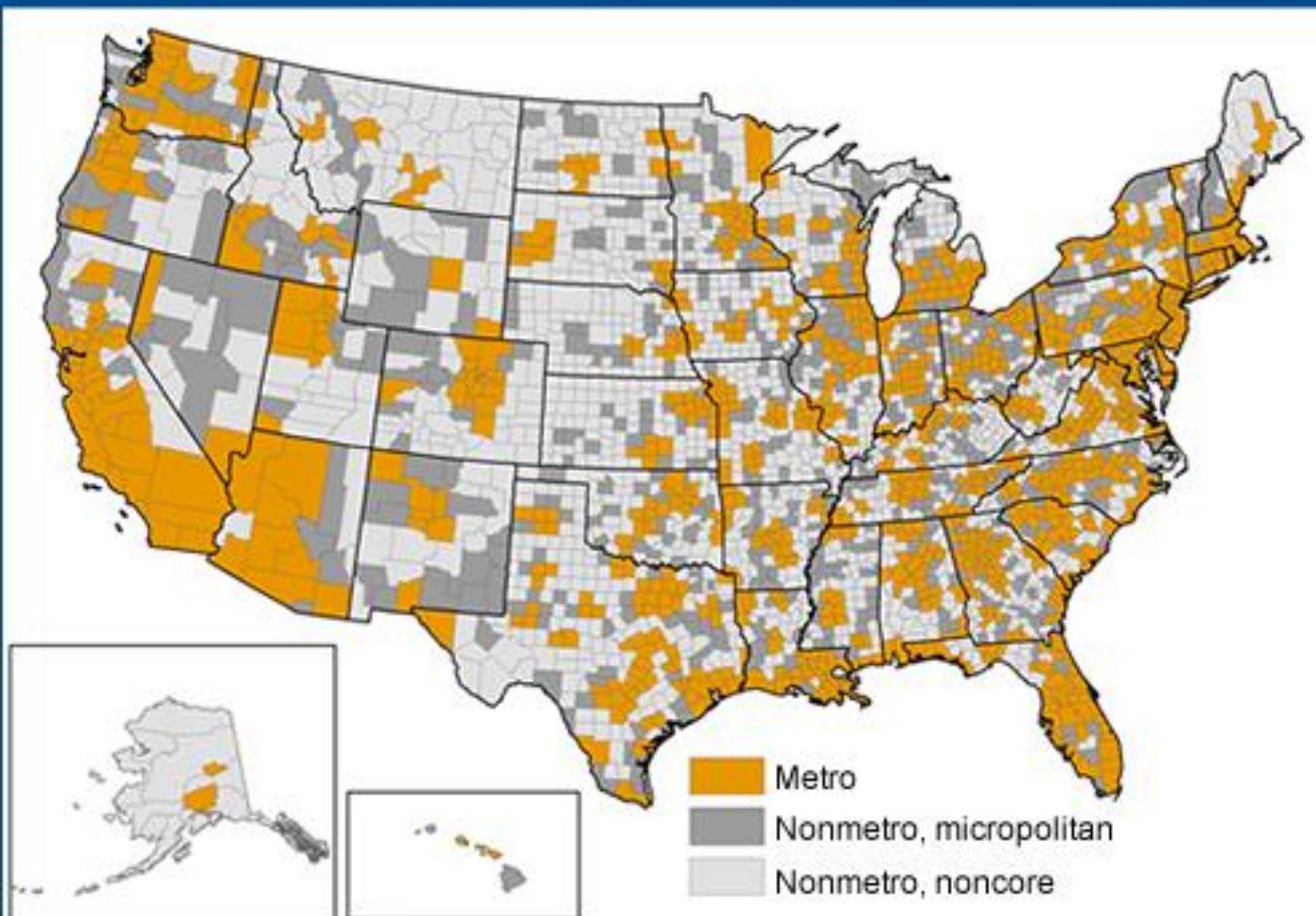
## OMB

- OMB defines Metropolitan and Micropolitan Statistical Areas
  - Metro Areas contain a core urban area of 50,000 or more population
  - Micro Areas contains an urban core of at least 10,000 (but less than 50,000) population.
- Known as Core Based Statistical Areas (CBSAs)

# OMB

Each metro or micro area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core.

## Metro, nonmetro micropolitan, and nonmetro noncore counties, 2013



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



# OMB County Designations

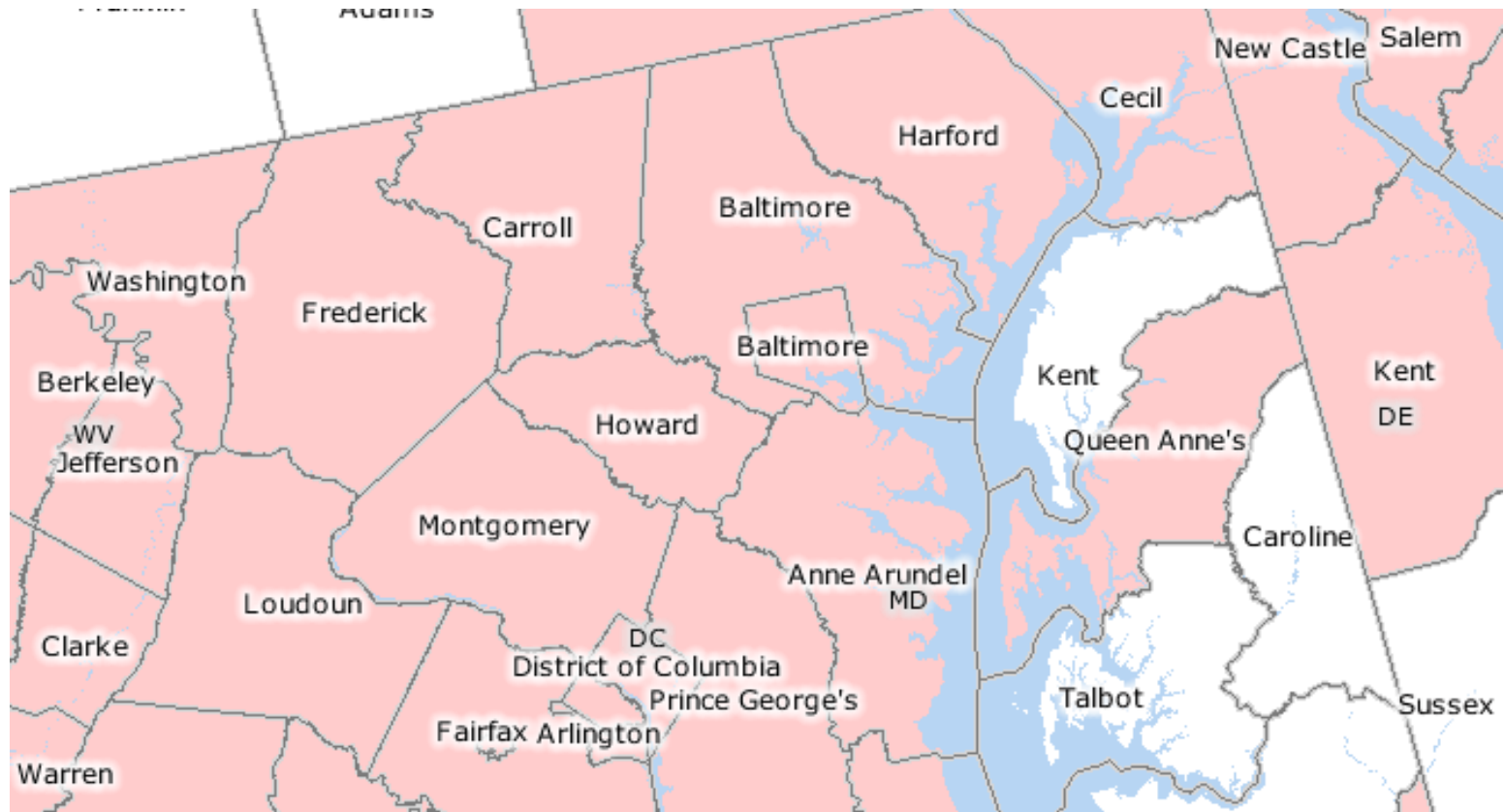
	Metro	Micro	Neither	Non-Metro (Total Neither and Micro)
1999 OMB	870 (27.7%)			2270 (72.3%)
2009 OMB	1100 (35.1%)	688 (21.8%)	1353 (43.1%)	2041 (66.9%)
2013 OMB	1167 (37.1%)	641 (20.4%)	1335 (42.4%)	1976 (62.8%)



# OMB Counties, 2010 Census

	Population (%) (2009 OMB)	Population (%) (2013 OMB)
Metro	258,317,763 (83.7)	262,452,132 (85)
Micro	30,943,552 (10)	27,154,213 (8.8)
Neither	19,484,223 (6.3)	19,139,193 (6.2)
Total Non-metro	50,427,775 (16.3)	46,293,406 (15)

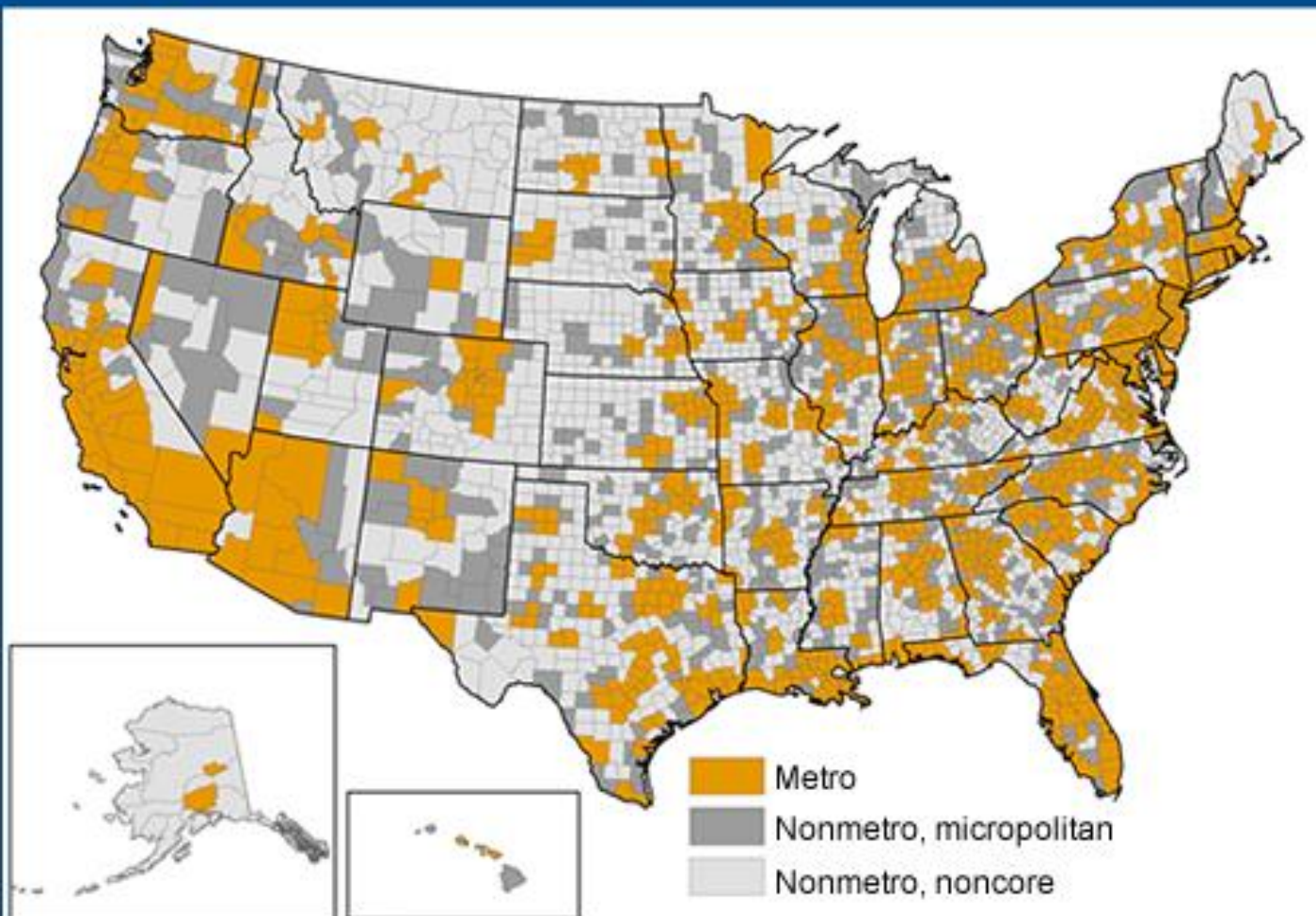
# Metro Counties in Maryland







## Metro, nonmetro micropolitan, and nonmetro noncore counties, 2013



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

## USDA - ERS

- Most counties, whether metropolitan or nonmetropolitan, contain a combination of urban and rural populations.
- ERS has developed several classifications to measure rurality and assess the economic and social diversity of rural America.



# 2013 Rural-Urban Continuum Codes

Code	Description
Metro 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
Nonmetro 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

# ORHP and ERS

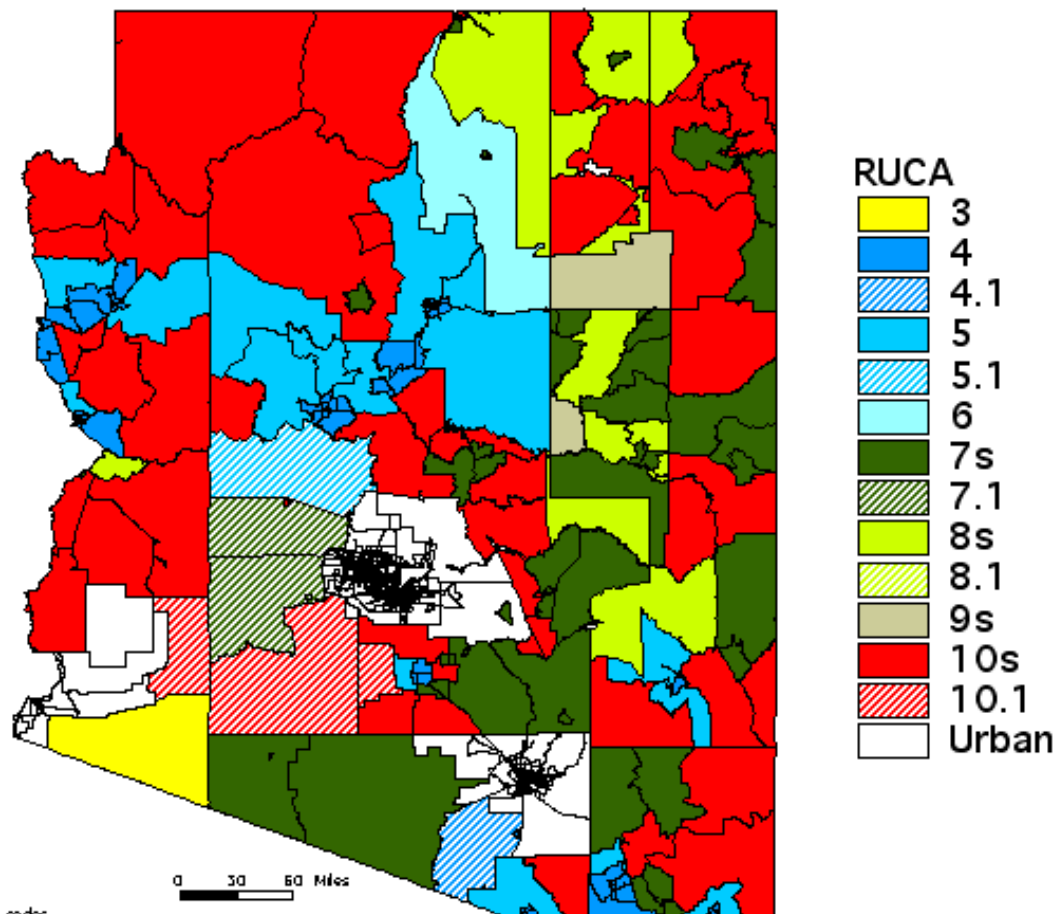
- Rural-Urban commuting area (RUCA) codes
  - Provides sub county alternative
  - Takes functional relationships, population, & population density into account
  - Taxonomy is adjustable to fit unique needs
  - Scheme allows better targeting

# RUCAs

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 through 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 through 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% through 29% to a small UC
10. Rural areas: primary flow to a tract outside a UA or UC (including self)

# Arizona Rural Census Tracts

## Rural-Urban Commuting Areas



This map is based on Version 1.0 RUCA codes  
 Director L. Gary Hart PhD  
 Cartographer: Joseph Miller  
 WWHI Rural Health Research Center  
 University of Washington 7/2000

# ZIP Code RUCA Approximation

Because the smallest geographic identifiers available for most health care data sets are ZIP codes, a ZIP code approximation of the Census tract-based RUCA codes was developed. The ZIP code approximation is based on the Census tract codes and are not based on commuting data unique to the ZIP code geographic unit.

# ORHP's Definition

- All Non-Metro Counties
- All RUCA Tracts 4-10 in Metro Counties
- Certain RUCA Tracts (over 400 sq. miles, fewer than 35 people per sq. mile and RUCA 2-3) in Metro Counties
- Around 57 million people
- Around 91% of the area of the USA

# Pros/Cons

	Pros	Cons
Census	Large # of People	Doesn't Follow Administrative Borders
OMB	Easy to Use, Whole Counties	Rural and Frontier Areas are Misclassified
USDA	Easy to Use, Whole Counties, Finer Grain	Still Misclassifies Areas Within Counties
ORHP	Sub-County Units	Must Have Addresses or ZIPs

# Where to Get More Details

- Census
  - <http://www.census.gov/geo/www/ua/urbanruralclass.html>
- Metro Areas
  - <http://www.census.gov/population/metro/>
- USDA
  - <http://www.ers.usda.gov/data-products/county-typology-codes>
- ORHP
  - <http://datawarehouse.hrsa.gov/RuralAdvisor/>

# Frontier Criteria

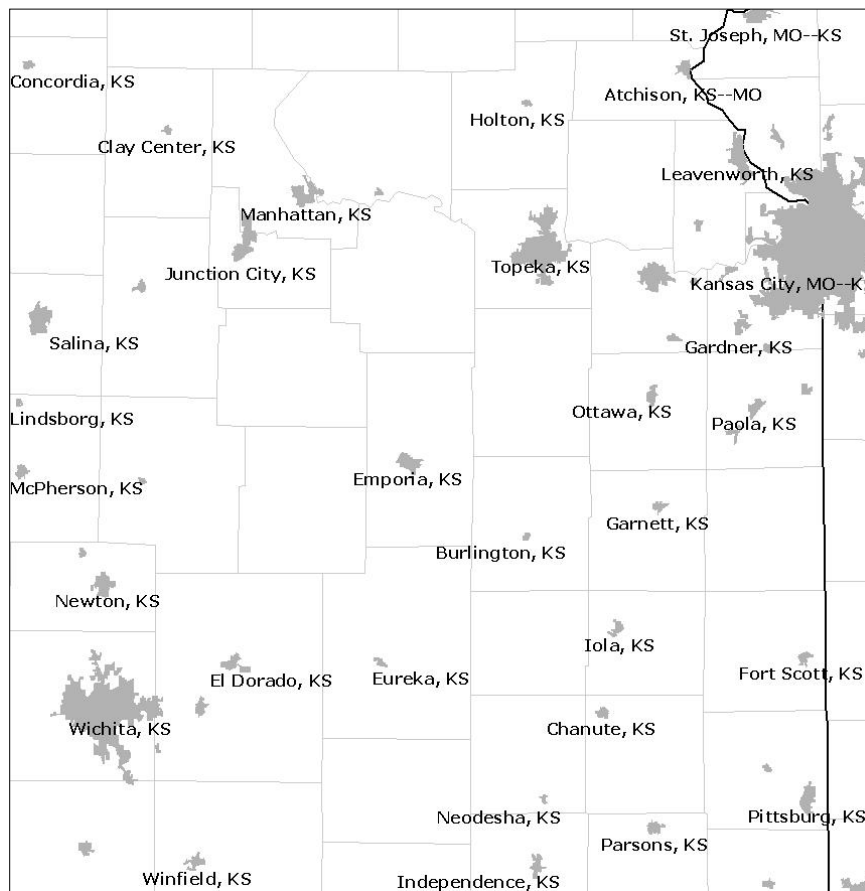
- The frontier population consists of people living in rural areas, or in small urban entities, that are relatively isolated from larger urban populations. Frontier areas may be defined—and may be adjusted—along two dimensions:
  1. A population size (and, indirectly, density) dimension: Frontier areas will only include urban entities (densely-settled territory) up to a certain size.
  2. A distance dimension: rural areas and smaller urban entities will be counted as frontier only if they are located beyond defined bands of proximity to larger urban entities.
- In other words, defining frontier areas involves answering two qualifying questions:
  1. What is the maximum population size for an urban entity to qualify as frontier?
  2. What are the qualifying distance bands around larger (non-qualifying) urban entities, beyond which areas qualify frontier?

## Data and Methods—Urban Areas (UA's)

- This method uses the most recent set of Census-defined Urban Areas (from the 2010 Census) to represent urban entities around which frontier areas will be identified.
- Urban Areas (UA's) range in size from 2,501 up to 18 million people.

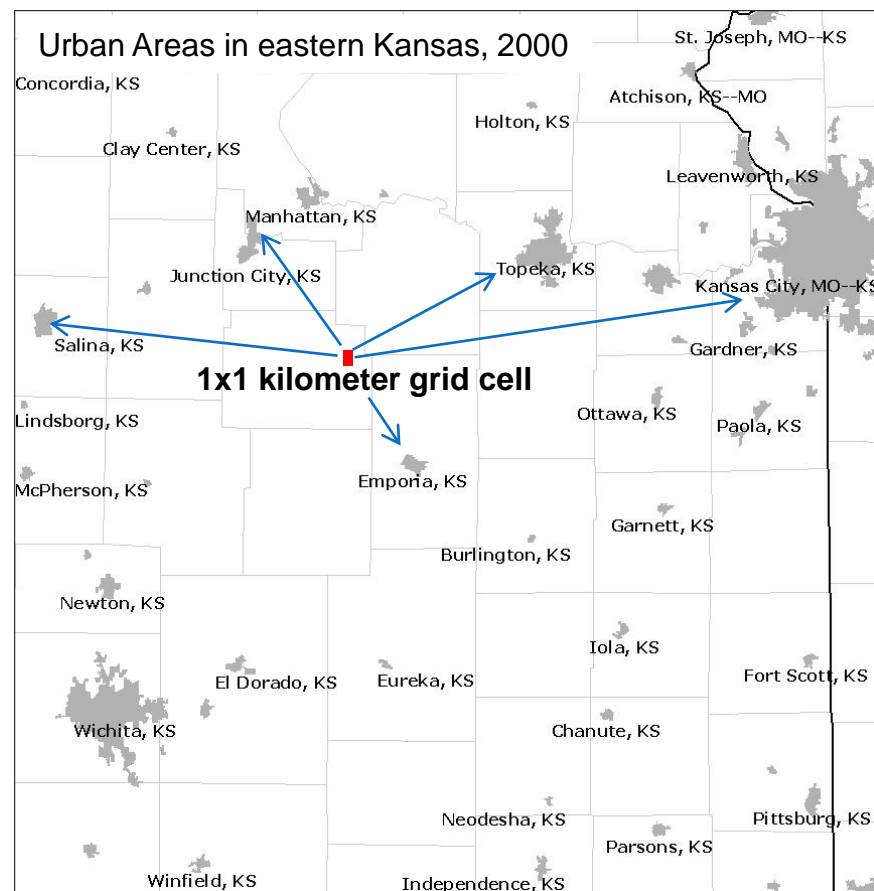
# Data and Methods

- In this analysis, frontier areas are defined in relation to the time it takes to travel by car to the edges of nearby UA's that are above the chosen population-size category. Walking time to the nearest road is included for grid cells located in roadless areas.



# Data and Methods

- This study uses travel time by car (and by foot) as the basic measure of distance. Travel time to the edge of UA's was measured at the 1x1 kilometer grid level.
- For each of 11.9 million grid cells covering the lower 48 States, travel times to nearby UA's were examined



# Distance thresholds measured as travel time

- A key methodological innovation allowed with this approach is the ability to apply longer travel-time bands around larger UAs. The qualifying travel time (beyond which areas are considered to be frontier and remote) should be longer around larger UAs, because larger cities provide access to jobs and services to broader regions.



# Differential Travel Times

Urban size category	Travel time band for defining FAR area
2,500-10,000	15 minutes
10,000-24,999	30 minutes
25,000-49,999	45 minutes
50,000 or more	60 minutes



## Criteria for defining frontier and remote area levels

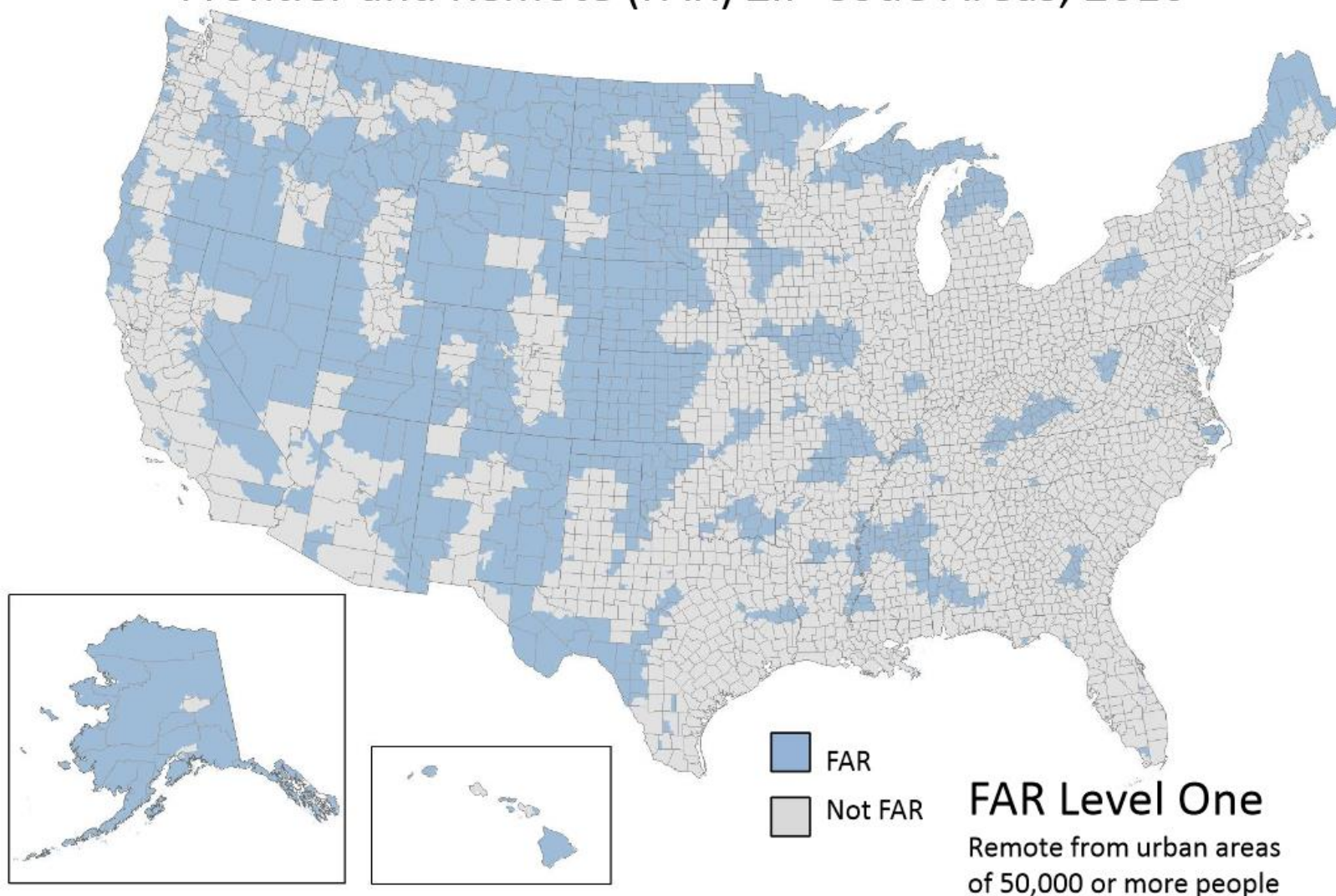
Level 1—FAR areas consist of rural areas and urban areas up to 50,000 people that are 60 minutes or more from an urban area of 50,000 or more people.

Level 2—FAR areas consist of rural areas and urban areas up to 25,000 people that are: 45 minutes or more from an urban area of 25,000-49,999 people; and 60 minutes or more from an urban area of 50,000 or more people.

Level 3—FAR areas consist of rural areas and urban areas up to 10,000 people that are: 30 minutes or more from an urban area of 10,000-24,999; 45 minutes or more from an urban area of 25,000-49,999 people; and 60 minutes or more from an urban area of 50,000 or more people.

Level 4—FAR areas consist of rural areas that are: 15 minutes or more from an urban area of 2,500-9,999 people; 30 minutes or more from an urban area of 10,000-24,999 people; 45 minutes or more from an urban area of 25,000-49,999 people; and 60 minutes or more from an urban area of 50,000-249,999 people.

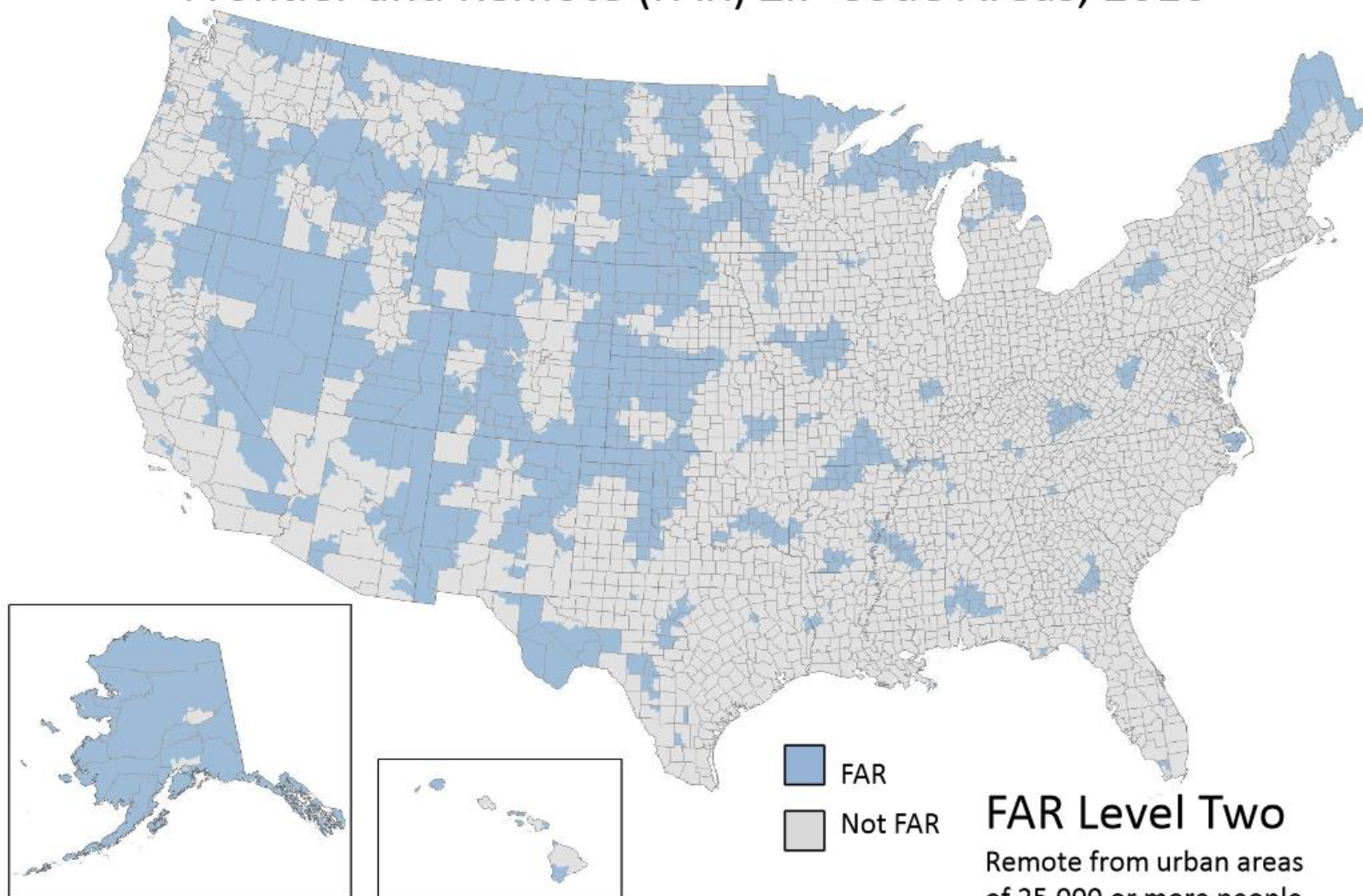
# Frontier and Remote (FAR) ZIP Code Areas, 2010



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.

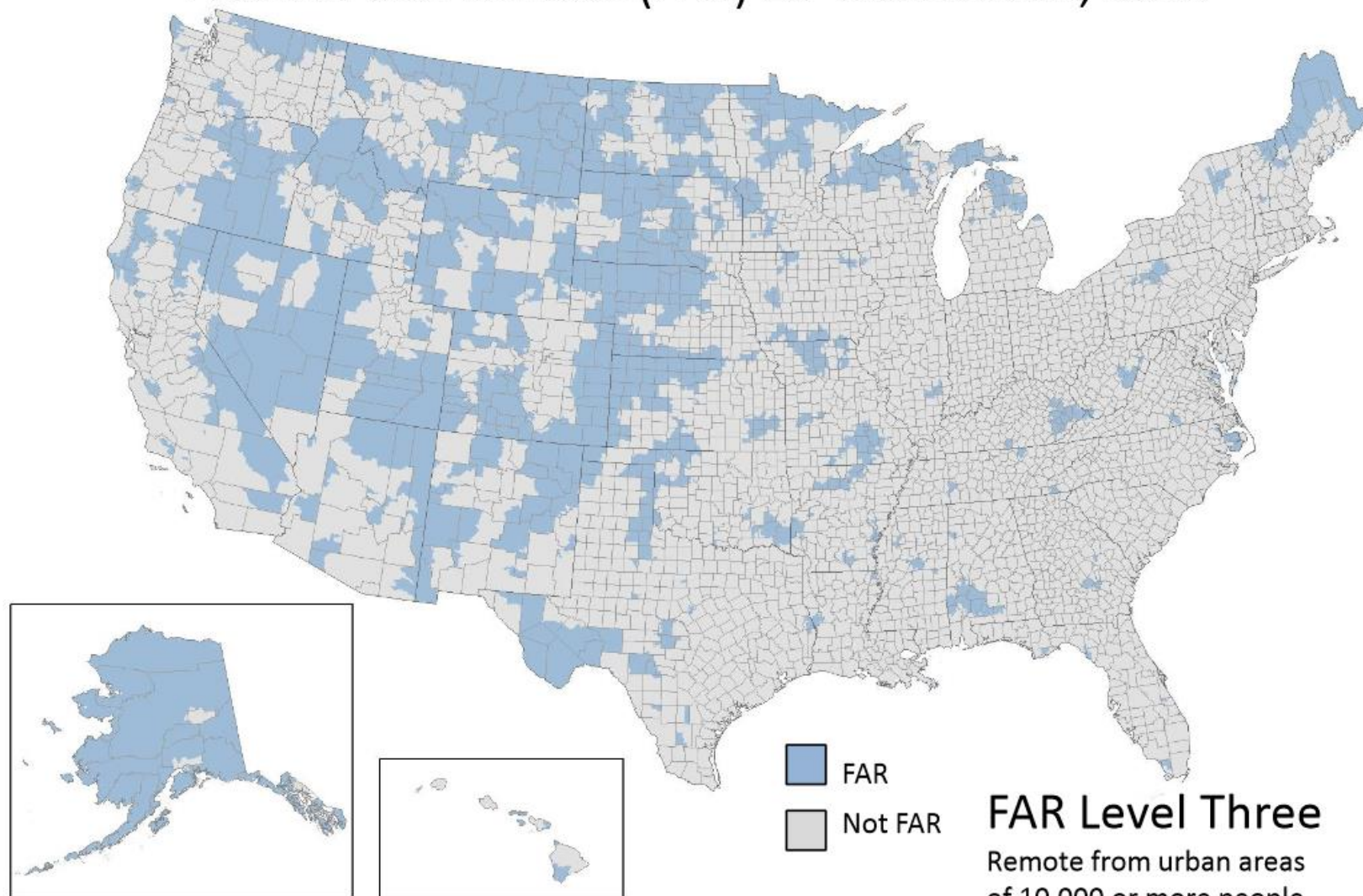
# Frontier and Remote (FAR) ZIP Code Areas, 2010



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.

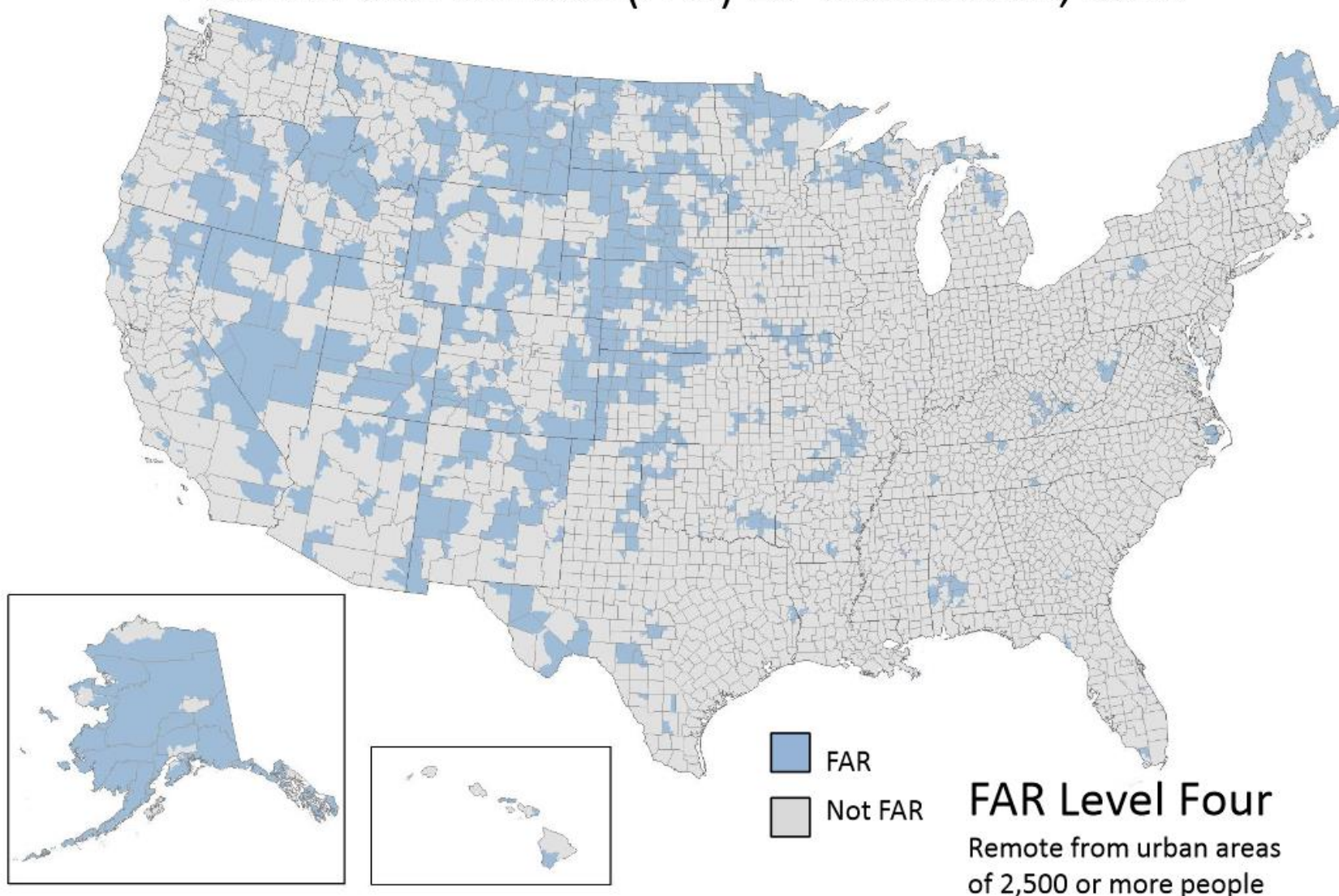
# Frontier and Remote (FAR) ZIP Code Areas, 2010



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 (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.

# States With No Frontier Population

- Connecticut
- Delaware
- DC
- New Jersey
- Ohio
- Rhode Island

## States With Over 30% Pop. In Frontier

- Wyoming (57.3%)
- Montana (53.4%)
- North Dakota (39.9%)
- South Dakota (35.0%)
- Alaska (31.0%)



# Contact Information

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