Census Bureau's Urban and Rural Classification and Overview of 2020 Urban Area Criteria

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The views expressed in this presentation are those of the author and not necessarily those of the U.S. Census Bureau.

Introduction

- The history of the Census Bureau's urban-rural classification since the late-19th century has been one of response to:
  - Changes to settlement patterns in and around cities.
  - Changes in theoretical approaches to interpreting and understanding the growth of urban areas.
  - Improved technology (i.e., GIS, digital databases) making it easier to manage large amounts of data.
  - Increased spatial resolution of statistical and geospatial data.

  - For information on the history of the Census Bureau's urban and rural classification, see: "A Century of Delineating a Changing Landscape," https://www2.census.gov/geo/pdfs/reference/ua/Century_of_Defining_Urban.pdf

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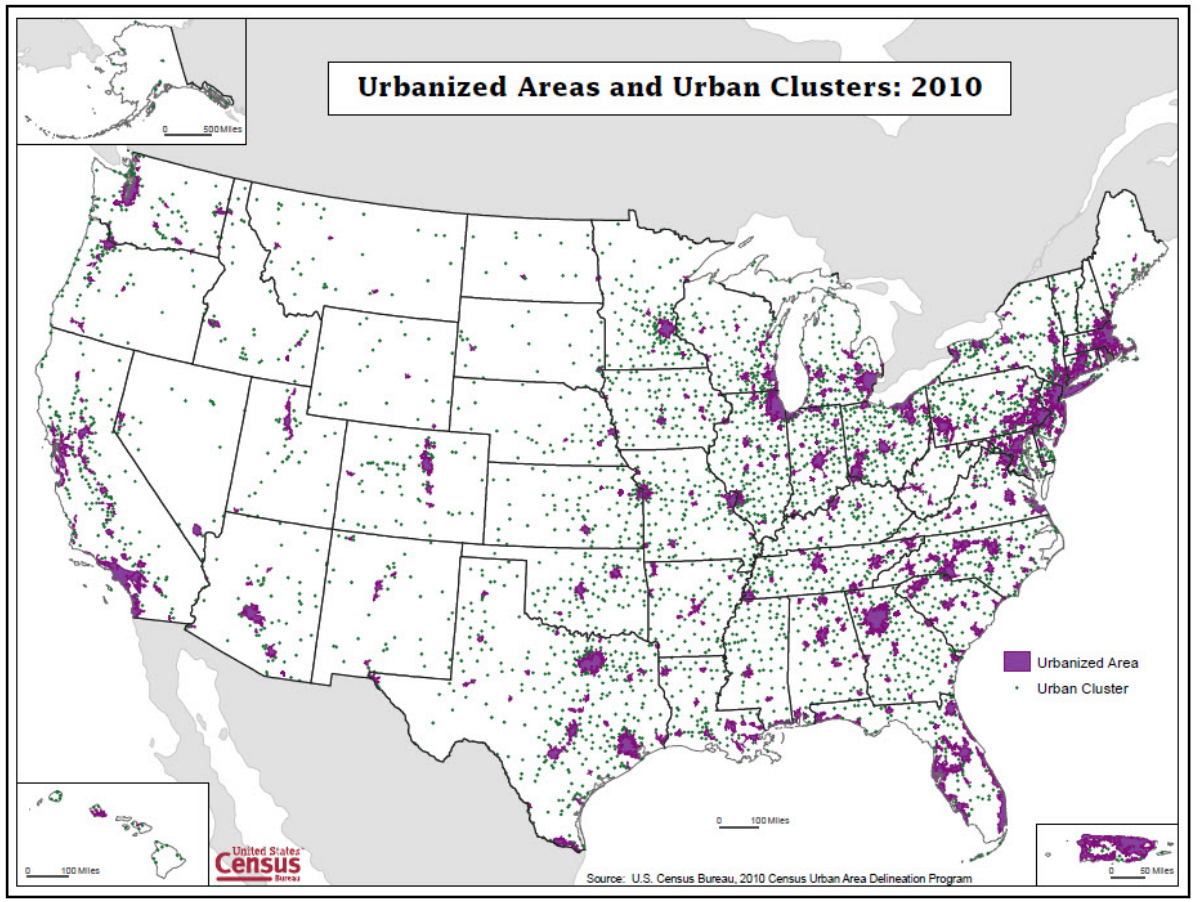
Census Bureau Urban Areas: 2010 Definition

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

	2010 Census Population	2010 Percent	2020 ACS 5-year Population Estimates*	2020 Percent
Total	308,745,538	100.0	326,569,308	100.00
Urban	249,253,271	80.7	263,366,402	80.7
Urbanized Area	219,922,123	71.2	233,777,857	71.6
Urban Cluster	29,331,148	9.5	29,588,545	9.1
Rural	59,492,267	19.3	63,202,906	19.3



*2020 ACS estimates for urban areas are based on urban area boundaries defined in 2010 and do not account for new urbanization that occurred outside those boundaries between 2010 and 2020.

Sources: 2010 Census; 2016-2020 ACS 5-year data.

Census Bureau Urban Areas (2020 Census criteria)

- Urban Areas of at least 2,000 housing units or at least 5,000 people.
- Defined primarily based on housing unit density measured at the census block level.
  - Initial urban core: at least 425 housing units per square mile
  - Remainder of urban area: at least 200 housing units per square mile
  - At least one high density nucleus of at least 1,275 housing units per square mile required for qualification.

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Key Changes to Urban Area Criteria

- Minimum threshold for qualification as urban: at least 2,000 housing units or at least 5,000 population. Increased from a minimum of 2,500 persons.
- Use of housing unit density at the census block level instead of population density.
- No longer distinguish between urbanized areas of 50,000 or more population and urban clusters of less than 50,000 persons.
- Maximum distance for “jumping” across low-density intervening territory reduced from 2.5 miles to 1.5 miles (return to the jump distance that was in effect from 1950 through 1990).
- Will not include the intervening low-density “hop” and “jump” corridors in the urban area. This results in noncontiguous urban areas.
- Splitting continuous urban agglomerations based on commuting patterns (using Longitudinal Employer-Household Dynamics [LEHD] data).

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Change to Thresholds for Qualifying as an Urban Area

- Minimum threshold for qualification as urban: at least 2,000 housing units or at least 5,000 population. Increased from a minimum of 2,500 persons.
  - 2,500-person threshold had been in use since 1910.
  - Census Bureau's threshold was the lowest in use in various agencies' urban/rural definitions.
  - Rural stakeholders and analysts have questioned the continued validity of the 2,500-person threshold and have routinely asked if we would consider an increase. Most recently, the Western Governors' Association asked us to consider raising the threshold to 10,000 persons.

- Impact:
  - Approximately 1,000 areas in the US would shift from urban to rural status (based on 2016-2020 ACS 5-year data). These areas contained an estimated 3.5 million people in 2020 (ACS 2016-2020 5-year estimates).

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Why 2,500 persons?

- The Census Bureau officially adopted the 2,500-person threshold as the minimum population for an urban place in 1910.
  - Truesdell, 1949: “For the census of 1910 the definition of urban population [2,500 persons] presented in the [1906] Statistical Analysis was adopted, again without any discussion of its merits as compared with those which had been used earlier; and this definition has been used, with minor modifications, in later censuses down to and including 1940.”
- From 1874 to 1900:
  - 1874: 8,000-person threshold was used to identify urban cities and towns.
  - 1880: 4,000-person threshold. “It seemed to be the opinion of the officials in charge of the census in 1880 that the 8,000 limit was too high to include all of the population that was really urban in character.” (Truesdell, 1949).
  - 1890: back to 8,000 persons.
  - 1900: 4,000-person threshold used in reports.

Source: Leon Truesdell, 1949. “The Development of the Urban-Rural Classification in the United States: 1874 to 1949.” Current Population Reports, P-23, Number 1.

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All other changes to criteria and population distribution aside, the change to the minimum threshold will result in an increase in rural population.

Urban and Rural Population
Based on 2010 Threshold

	2016-2020 ACS 5-year Population Estimates	2020 Percent
United States	326,569,308	100.0
Urban	263,366,402	80.7
Rural	63,202,906	19.3

Urban and Rural Populations
Based on 2020 Thresholds
Applied to Current Urban Areas

	2016-2020 ACS 5-year Population Estimates	2020 Percent
United States	326,569,308	100.0
Urban	259,850,930	79.6
Rural	66,718,378	20.4

Source: 2016-2020 ACS 5-year data.

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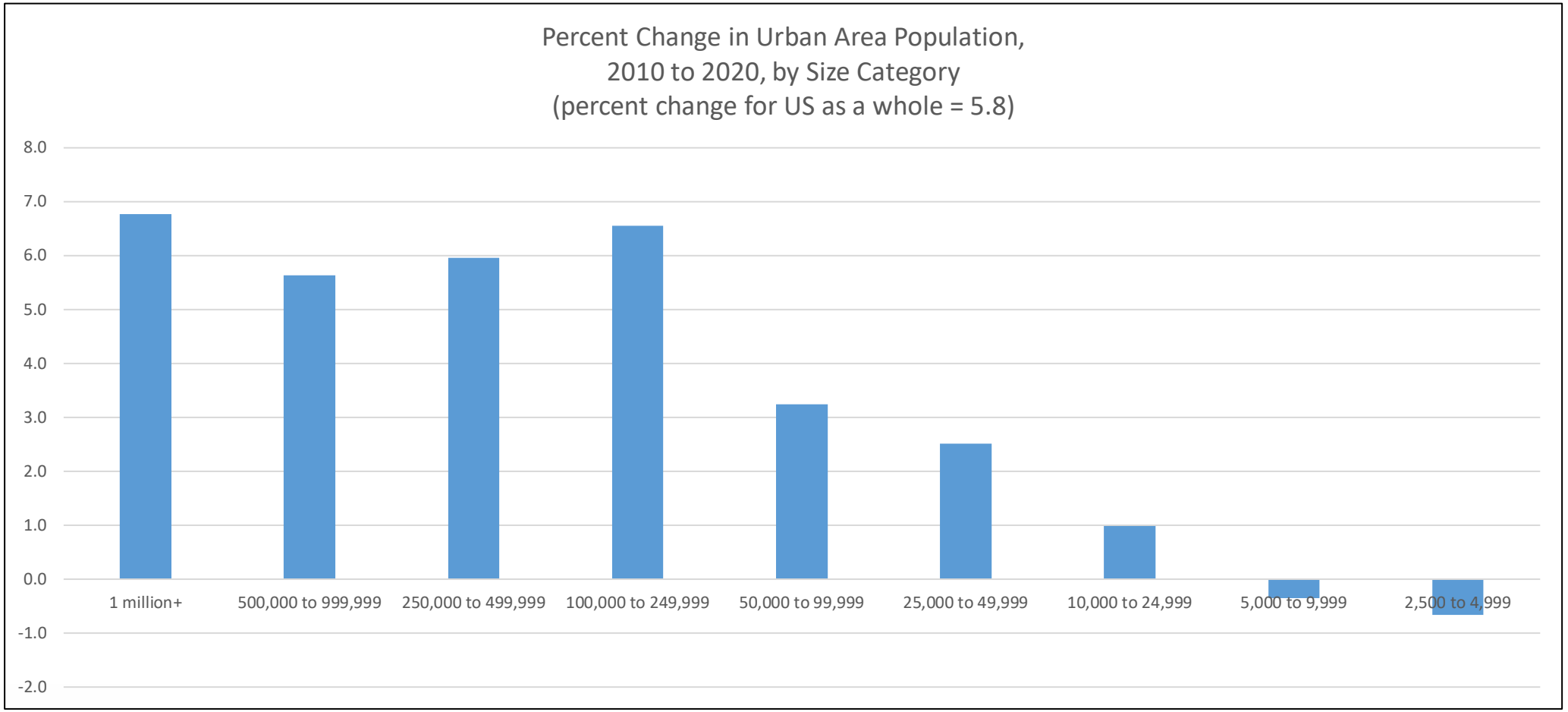
Urban areas that had 2010 Census populations of 2,500 up to 9,999, as a category, lost population between 2010 and 2020. All other size categories experienced population increases.



Sources: 2010 Census; 2016-2020 ACS 5-year data.

Housing Unit Density

More direct measure of developed landscape

Ability to update extent of Urban Areas between censuses

425 housing units per square mile (HPSM) for initial cores

200 HPSM to fill in extent of urban areas

1,275 HPSM to ensure each urban area has a high-density nucleus

Census block-level housing unit counts are invariant

200 HPSM = 500 persons per square mile (PPSM), based on national average of 2.5 persons per housing unit
425 HPSM = 1,062 PPSM
1,275 HPSM = 3,188 PPSM

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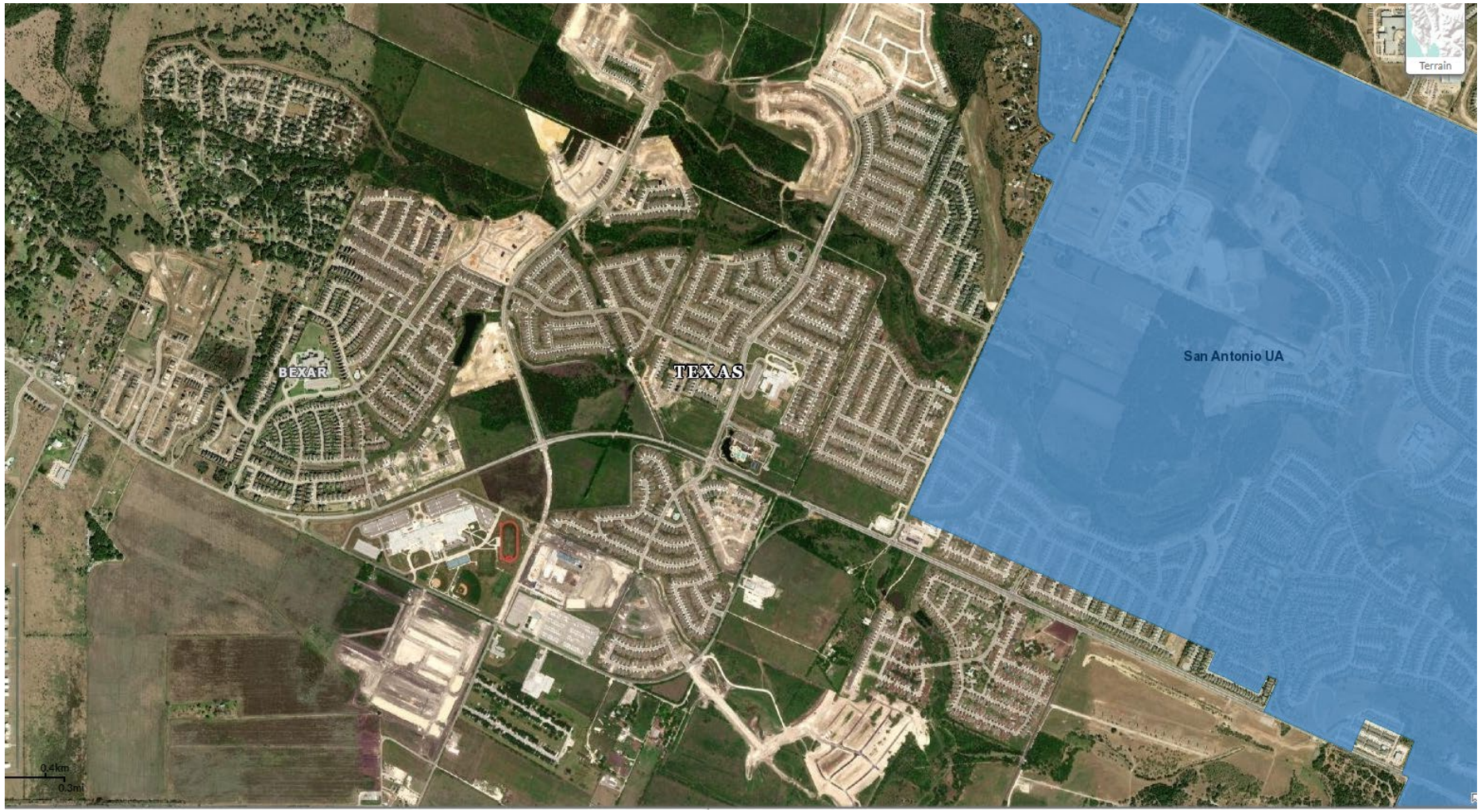
Use of housing unit density at the census block-level provides the ability to update urban area boundaries between censuses.

Post-2010 development on the west side of the San Antonio urban area. Because urban areas are not updated between censuses, the population and housing in this and similar areas was treated as rural in American Community Survey and other statistical data products.



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No Longer Distinguish Between Types of Urban Areas

No longer distinguish between urbanized areas of 50,000 or more population and urban clusters of less than 50,000 persons.

- No clear scientific basis for use of 50,000 as a threshold distinguishing different types of urban areas.
- The decision to adopt 50,000 as a threshold for urbanized areas starting in 1950 seems to have been based more on operational concerns and data availability than rooted in economic data or central place theory.
- Urban areas between 40,000 and 51,000 population are similar in terms of economic activity.
- Still possible for data users and agencies to identify areas based on various sizes of population.

Impact: The term “Census Bureau-defined urbanized areas” is used in legislation and program documentation without specific reference to population size since urbanized areas, by definition, had a minimum population of 50,000. These references will have to be revised to “… urban areas of 50,000 or more…” or interpreted to mean areas of 50,000 or more persons.

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Urban areas with populations just above or just below the 50,000-person threshold do not differ substantially in terms of economic activity, as measured by numbers of firms and retail sales.

Urban Area	2010 Census Population	Number of Firms	Population to Firm ratio	Retail Sales	Per capita retail sales
New Bern, NC	50,503	3,994	12.6	$880,434,000	$17,433.30
Grand Island, NE	50,440	4,366	11.6	$1,198,923,000	$23,769.29
Pascagoula, MS	50,428	4,083	12.4	$851,756,000	$16,890.54
Roswell, NM	49,727	3,317	15.0	$863,103,000	$17,356.83
Danville, VA-NC	49,344	3,314	14.9	$985,916,000	$19,980.46

2010 Census; 2012 Survey of Business Owners; 2012 Economic Census

Data for each urban area are based on the aggregation of data for places located within the urban area (Economic Census data are not tabulated for urban areas).

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Change to Jump Distance and Inclusion of Intervening Low-Density Territory

- Maximum distance for “jumping” across low-density intervening territory reduced from 2.5 miles to 1.5 miles (return to the jump distance that was in effect from 1950 through 1990).
- Will not include the intervening low-density “hop” and “jump” corridors in the urban area. This results in noncontiguous urban areas.

Impact:

- Will reduce the amount of land area within individual urban areas. This will have a positive impact on the measurement of the extent of urbanization and urban sprawl.
- Will affect the total population of individual urban areas. A small number of areas might drop below 50,000 persons as a result.
- Creation of noncontiguous areas adds complexity when using our areas.
    - Use of geographic information systems mitigates the complexity of working with complicated boundaries.

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By not including hop and jump corridors, low-density areas with typically rural land uses will not be included in the urban area, resulting in a more accurate delineation.

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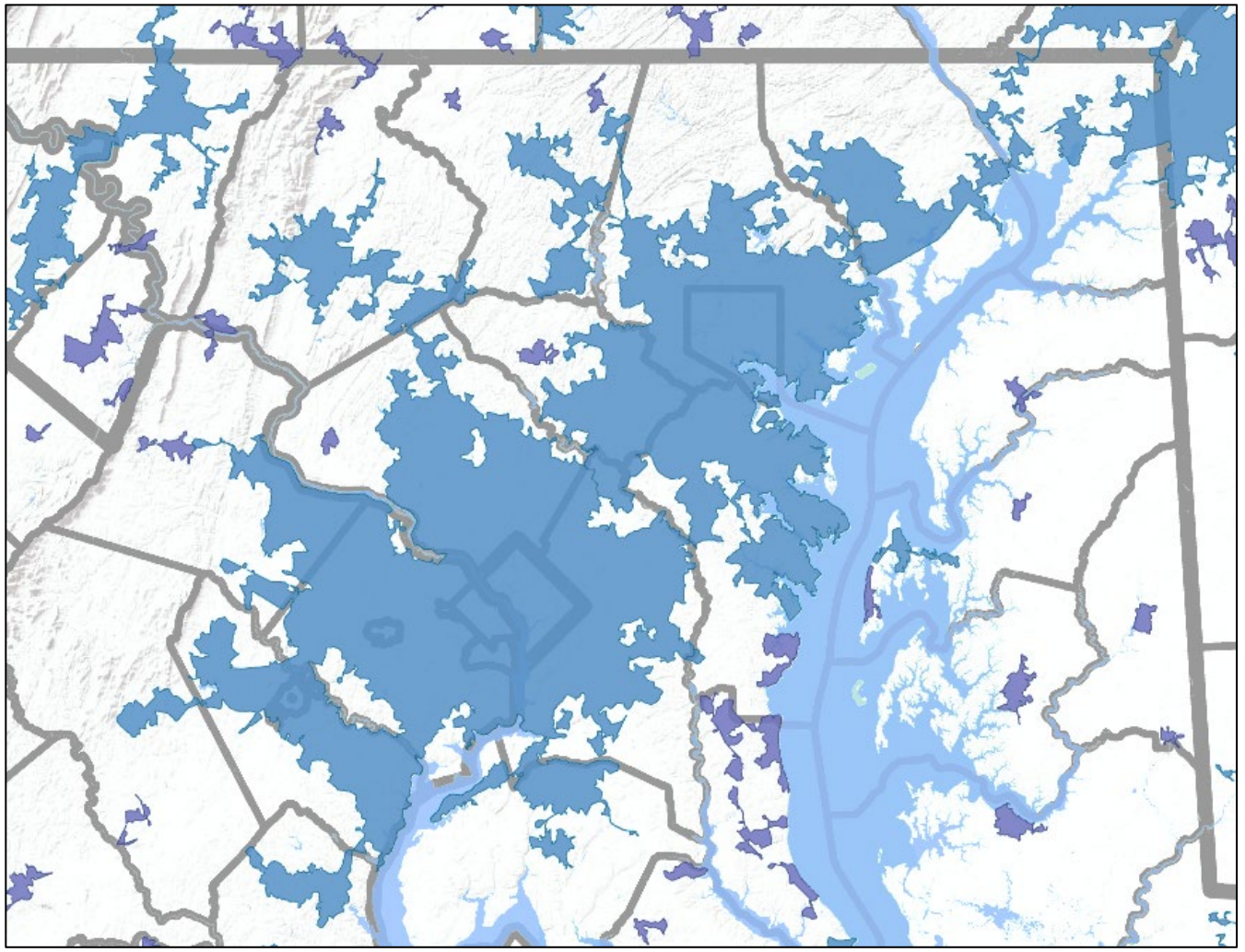
Splitting Urban Agglomerations

- The delineation process results in large agglomerations encompassing multiple, individual urban areas. The question each decade is how, and where, to split these large agglomerations to define more recognizable and meaningful areas for analysis.
    - Previous decades' delineations relied on metropolitan area definitions (which had been based on the previous decade's urban area boundaries) or where the connecting corridor was narrowest. None of these approaches were data driven.
- For 2020, we will use the Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination (LODES) dataset to analyze commuting patterns to determine whether to split agglomerations and, if so, where to draw the boundary.



Contiguous urban areas in the Baltimore and Washington areas.

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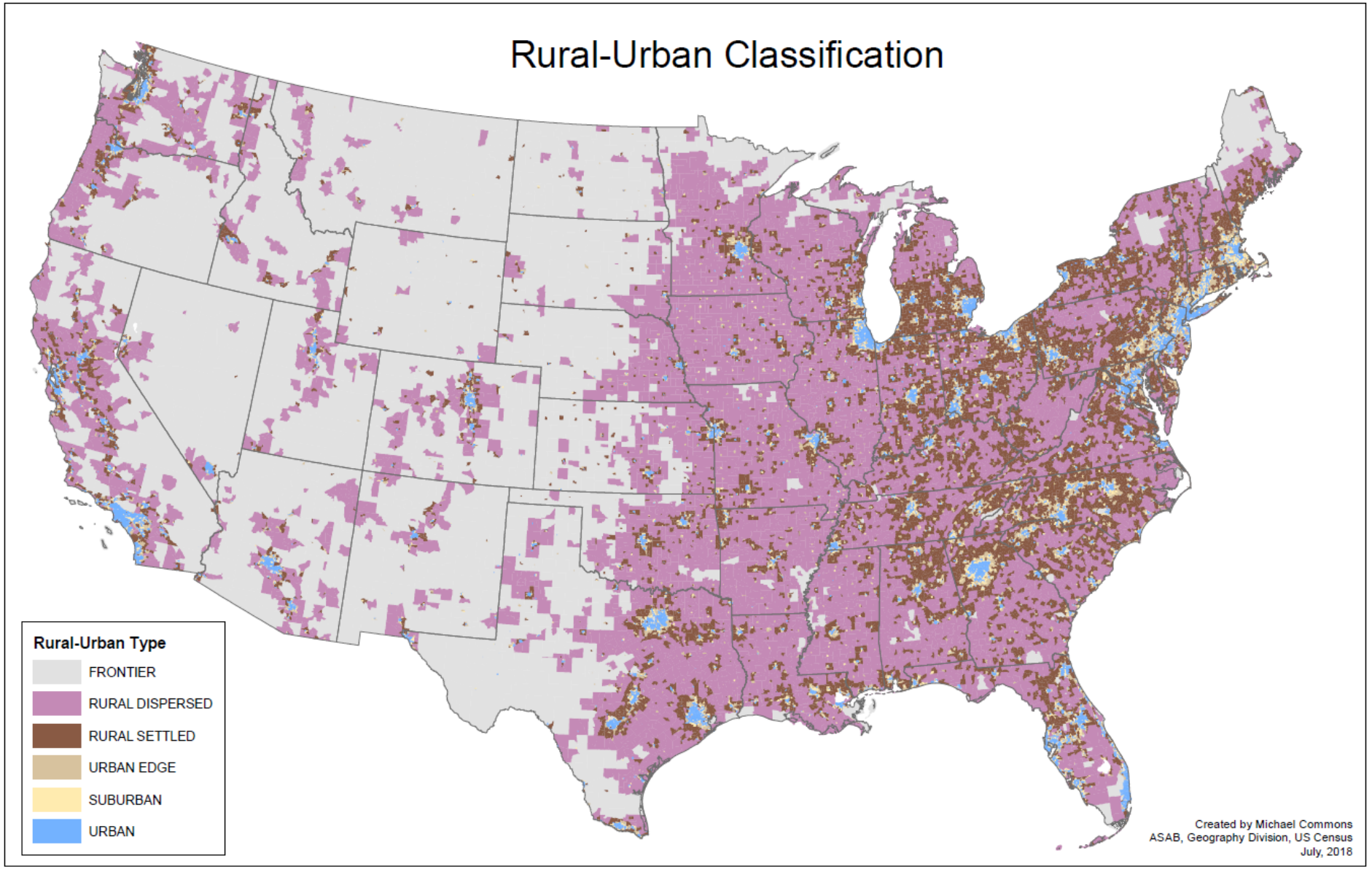
Is it time to consider a continuum of categories?



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For more information:

https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html

Urban and Rural

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The Census Bureau's urban-rural classification is a delineation of geographic areas, identifying both individual urban areas and the rural areas of the nation. The Census Bureau's urban areas represent densely developed territory, and encompass residential, commercial, and other non-residential urban land uses. The Census Bureau delineates urban areas after each decennial census by applying specified criteria to decennial census and other data. "Rural" encompasses all population, housing, and territory not included within an urban area.

2020 Census Urban and Rural Classification

Announcement of final urban areas: December 2022

The Census Bureau plans to announce final urban areas based on the 2020 Census in December 2022.

Release schedule for products:

1. Lists of urban areas with 2020 Census population, housing units, and land area – December 2022
2. Urban Areas Maps – December 2022
3. Shapefiles – December 2022
4. Geodatabases – January 2023
5. TIGERweb – January/February 2023
6. Relationship Files – January 2023
7. Cartographic Boundary Files – May 2023

2020 Urban Area Frequently Asked Questions

2020 Final Urban Area Criteria Federal Register Notice

Defining Census Urban Areas Video

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Thank You. Questions?

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