

2020 Census Urban Areas Overview Update



Urban Areas Team
Geography Division
U.S. Census Bureau

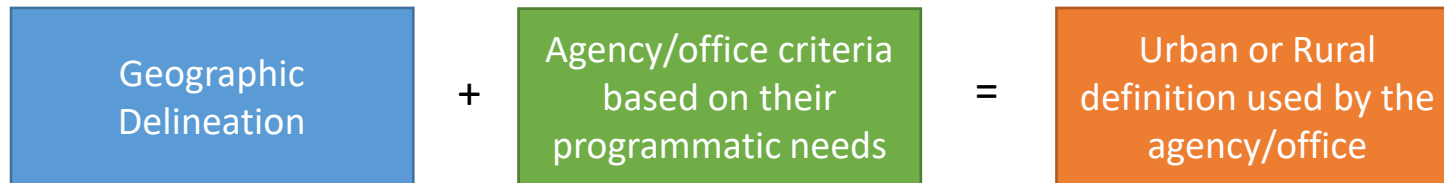
How does the Federal Government Define Urban and Rural?



It varies. There is no single “urban” or “rural” definition.

Tribal, federal, state, and local agencies and offices develop different urban and rural definitions depending on their programmatic needs and uses, including:

- allocating program funds,
- setting program standards, and
- implementing and measuring aspects of their programs.



How does the Federal Government Define Urban and Rural?



U.S. Small Business Administration






U.S. Department of Transportation



How does the Federal Government Define Urban and Rural?

Commonly used federal geographic delineation sources used by federal agencies in defining urban and rural:

Geographic Delineation	Unit of Geography	Primarily based on...
Census UAs and Rural Territory 	Census Blocks	<ul style="list-style-type: none"> • Housing unit and population counts and densities. • Land use. • Commuting.
Metropolitan and Micropolitan Statistical Areas (Core Based Statistical Areas) 	Counties	<ul style="list-style-type: none"> • Census UAs. • Commuting.
Rural-Urban Commuting Areas (RUCA) 	Census Tracts	<ul style="list-style-type: none"> • Census UAs. • Commuting.

What are Census UAs?

- Census Bureau UAs:
 - Represent densely developed territory.
 - Encompass residential, commercial, and other non-residential urban land uses.



Why does the Census Bureau delineate UAs?



The Census Bureau delineates UAs for statistical data tabulation, publication, and analysis.

However, the Census Bureau recognizes that many tribal, federal, state, and local governments define their program requirements based on the urban and rural delineation.

For this reason, the Census Bureau:

- Invites all stakeholders to actively participate in reviewing and commenting on proposed updates to the UA criteria via the *Federal Register* Notice leading up to the Decennial Census.
- Invites all stakeholders to ask questions. The Census Bureau works with tribal, federal, state, and local agencies as well as other stakeholders to ensure understanding of our classification.

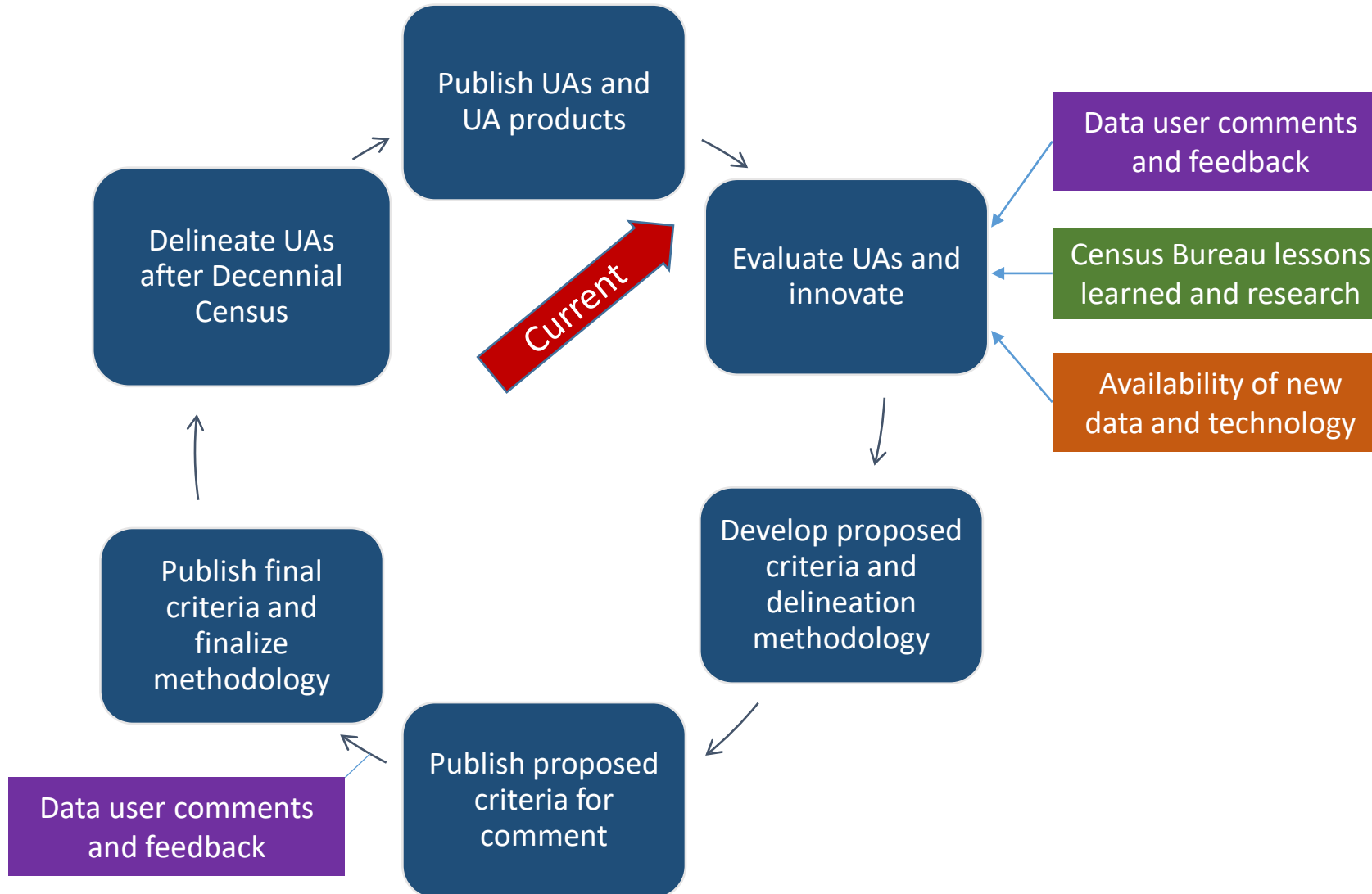
How are UAs Delineated?

The Census Bureau uses a nationally-consistent, objective approach, to create UAs and rural territory. These areas are designed to meet the needs of a broad range of analysts and users interested in the definition of and data for urban and rural communities for statistical purposes.

In 2020, the final delineation criteria were implemented using:

- Python-based delineation software.
- Census blocks and Decennial Census block-level housing unit and population data.
- Impervious surface, hydrography, and wetlands data.
 - Sources: Census MAF/TIGER System, National Land Cover Dataset, and Coastal Change Analysis Program.
- Commuting data.
 - Source: Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics (LODES).

UA Program Cycle



2020 Census UA Delineation Key Criteria Changes

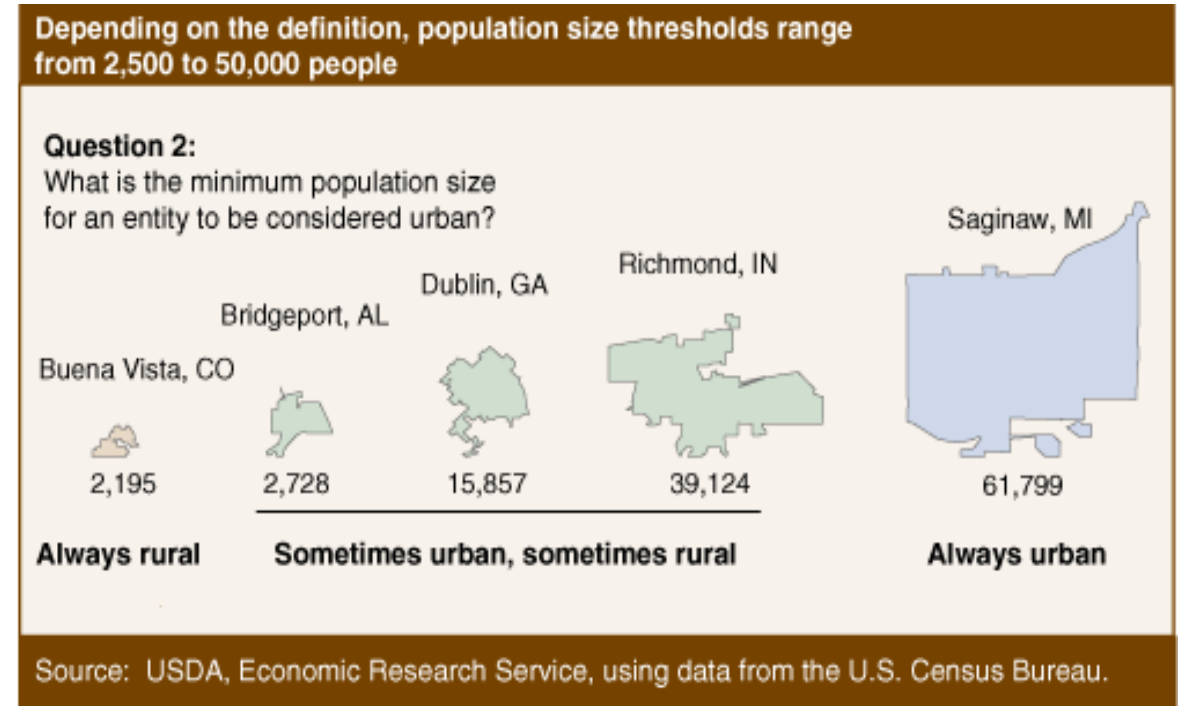
1. Minimum threshold for qualification as urban raised from at least 2,500 people in 2010 to **at least 2,000 housing units or at least 5,000 people in 2020.**
2. Delineation based primarily on **housing unit data** at only the census block level instead of only population data at various geographic levels.
3. Maximum jump distance reduced from 2.5 miles to **1.5 miles.**
4. Introduced the use of **commuter data** to determine where to split large urban agglomerations.
5. No longer distinguish “**urban areas**” as “urbanized areas” or “urban clusters”.



2020 Census UA Criteria Changes

Minimum threshold for qualification as urban raised from at least 2,500 people in 2010 to at least 2,000 housing units or at least 5,000 people in 2020.

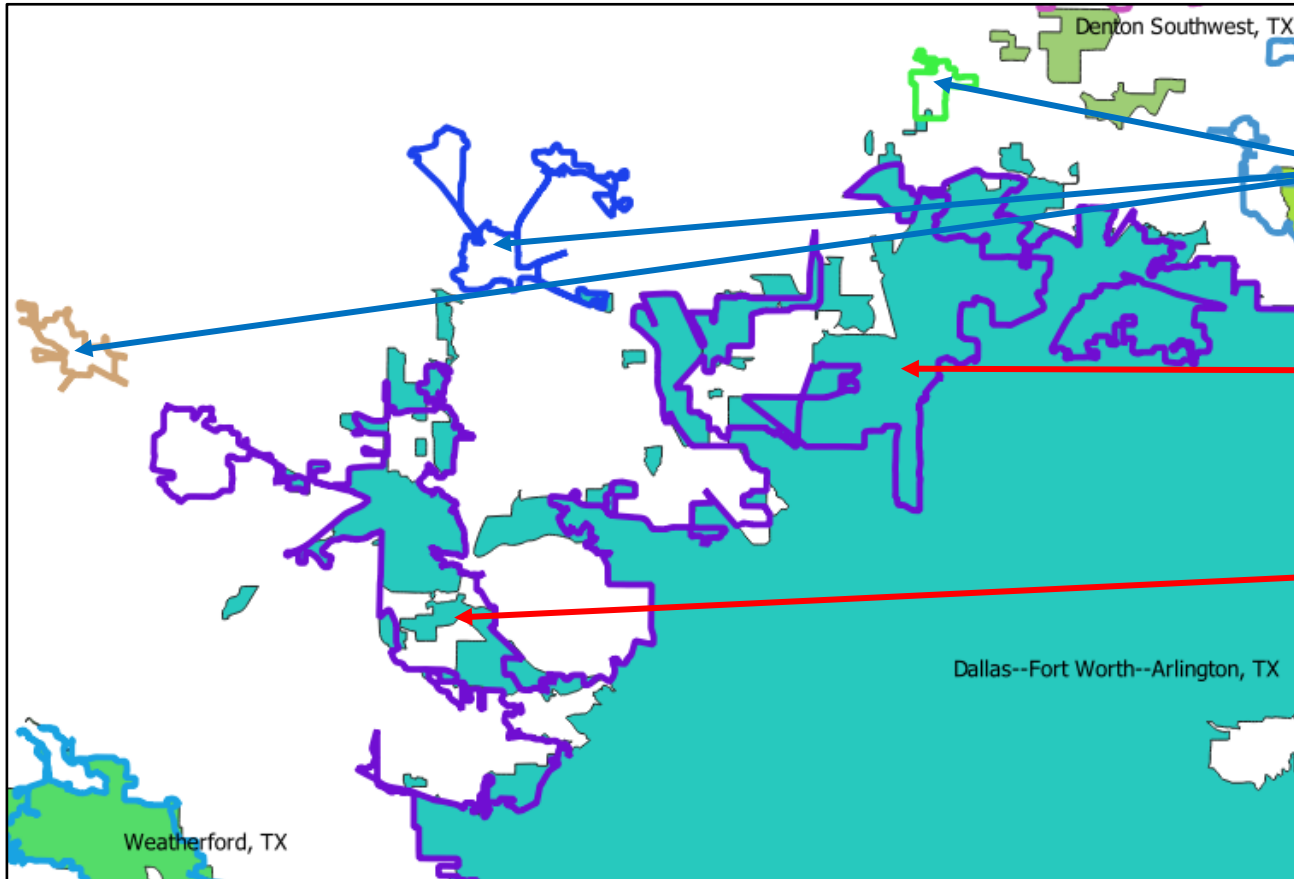
- 2,500-person threshold had been in use since 1910.
 - Prior to 1910 the thresholds fluctuated from 2,500 to 8,000.
- Census Bureau's threshold was the lowest in use in various agencies' urban/rural definitions.
- Rural stakeholders and analysts have questioned the continued validity of the 2,500-person threshold and have routinely asked if we would consider an increase.



Source: Cromartie and Bucholtz (2008), "Defining the 'Rural' in Rural America."
[USDA ERS - Defining the "Rural" in Rural America](#)

2020 Census UA Criteria Changes

Qualification Threshold Increase Example



2010 Census Urban Clusters of Springtown, TX, Pecan Acres, TX, and Justin, TX no longer qualify as 2020 Census UAs.

2020 Census UA Dallas--Fort Worth--Arlington, TX has expanded to a larger footprint.

Increase in noncontiguous portions of UAs.

Legend:

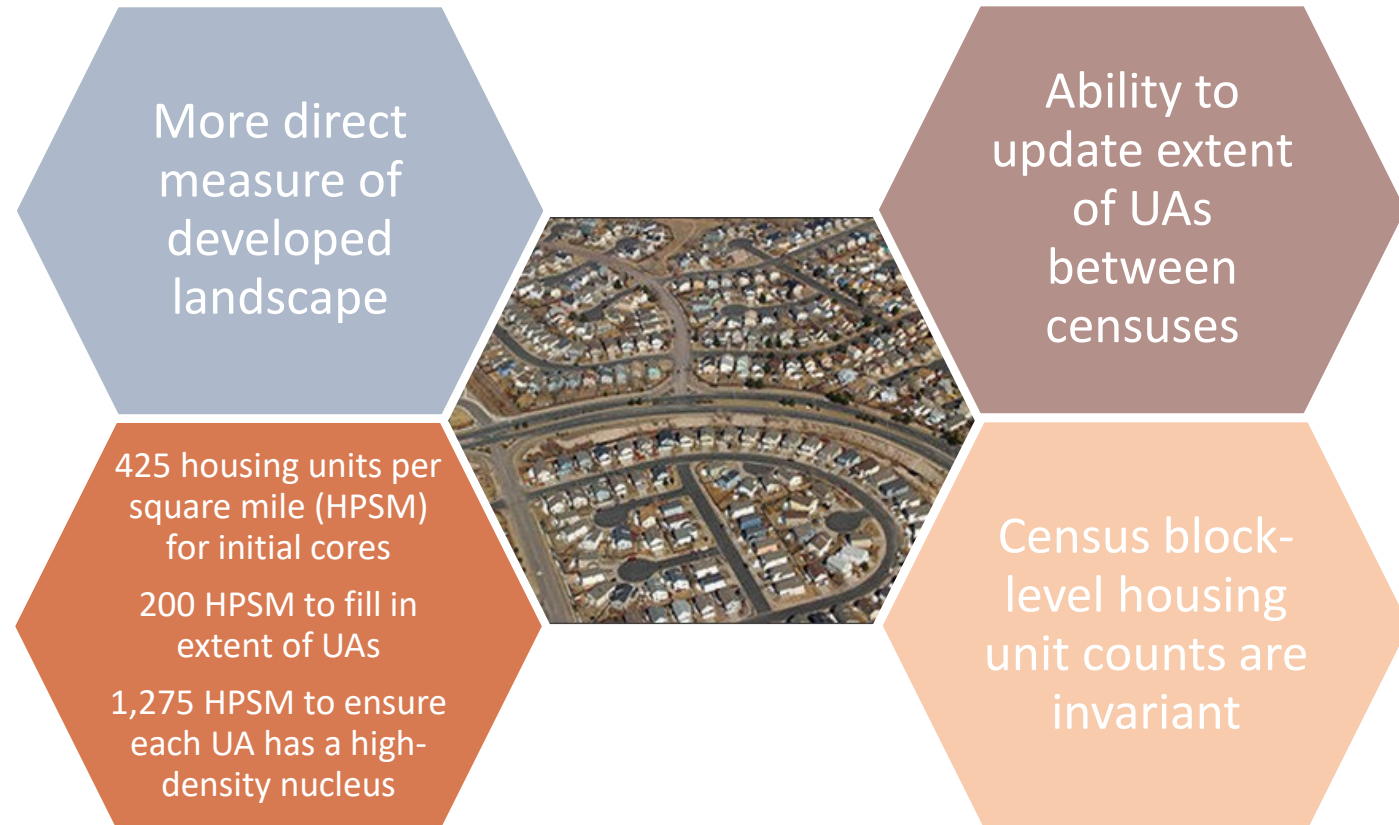
 2020 UA (*shaded and labeled*)

 2010 UA (*outlined*)

2020 Census UA Criteria Changes

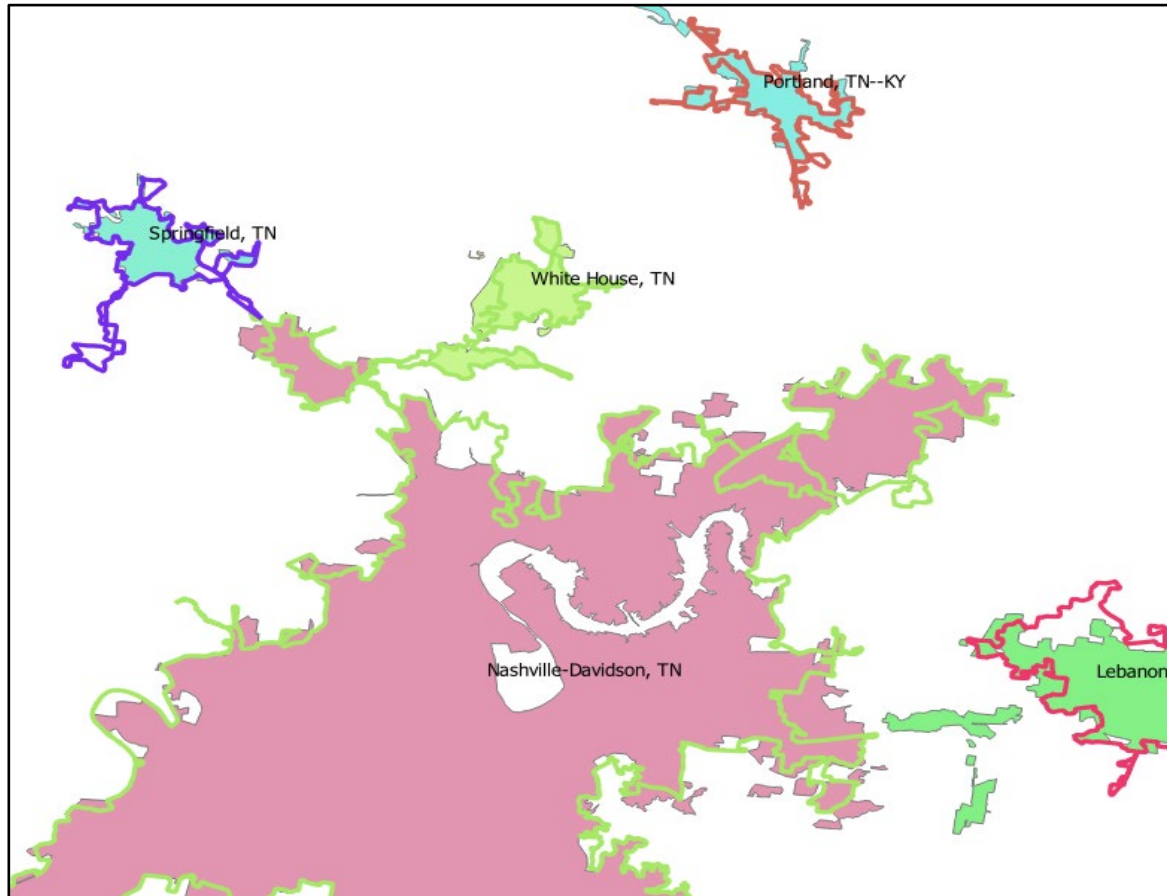
Delineation based primarily on housing unit data at the census block level instead of population data.

National Average:
200 housing units per square mile (HPSM) = 500 people per square mile (PPSM).





2020 Census UA Criteria Changes

2010 and 2020 UA Changes Example



Most 2020 Census UAs maintained a similar footprint to 2010 Census UAs with changes around the edges.

Legend:

-  2020 UA (*shaded and labeled*)
-  2010 UA (*outlined*)

2020 Census UA Criteria Changes

Max jump distance to noncontiguous territory reduced from 2.5 miles to 1.5 miles.

Criteria:

- 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).
- Does not include the intervening low-density “hop” and “jump” corridor blocks in the UA.

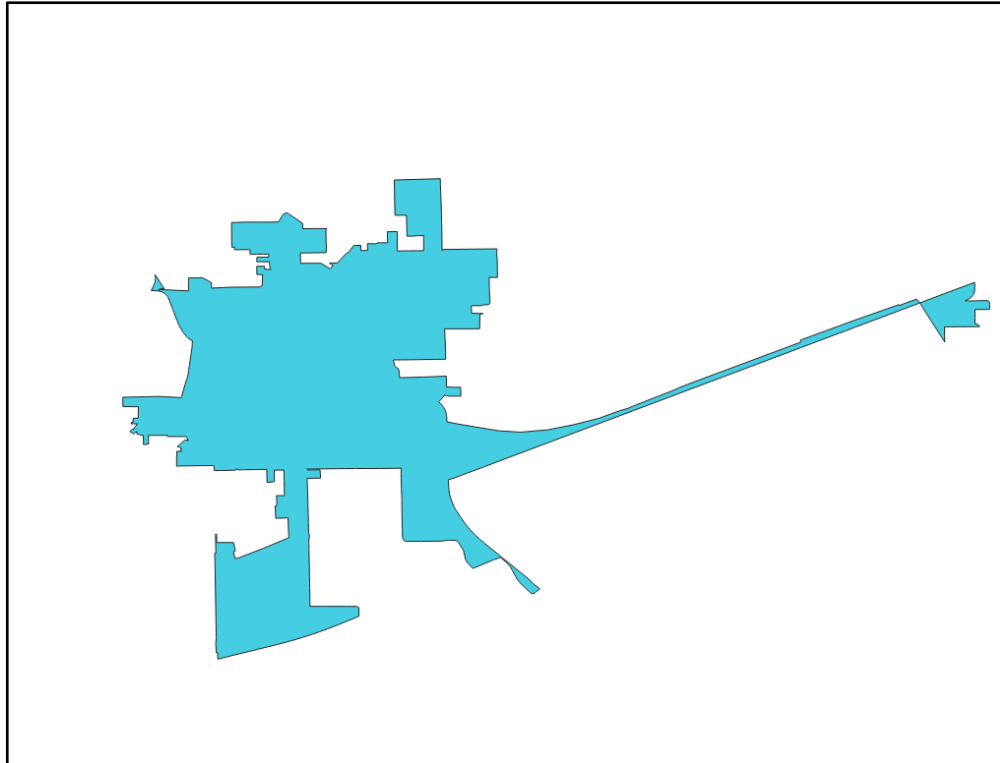
Impact:

- Minimizes over-bounding caused by addition of impervious surface landcover in 2010.
- Reduces the amount of land area within individual UAs. Provides a truer measurement of the extent of urbanization and urban sprawl.
- More discrete UAs. Fewer connections to other UAs.
- More noncontiguous UAs.

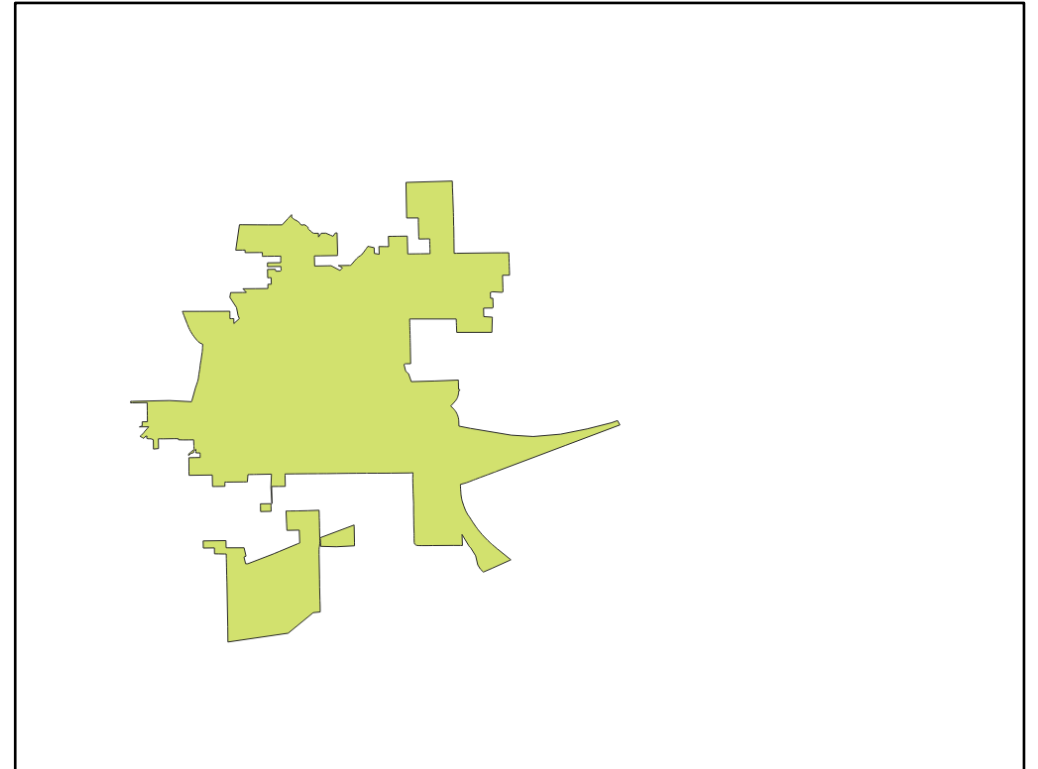
2020 Census UA Criteria Changes

Jump Distance and Intervening Low-Density Territory Example

2010 Census UA



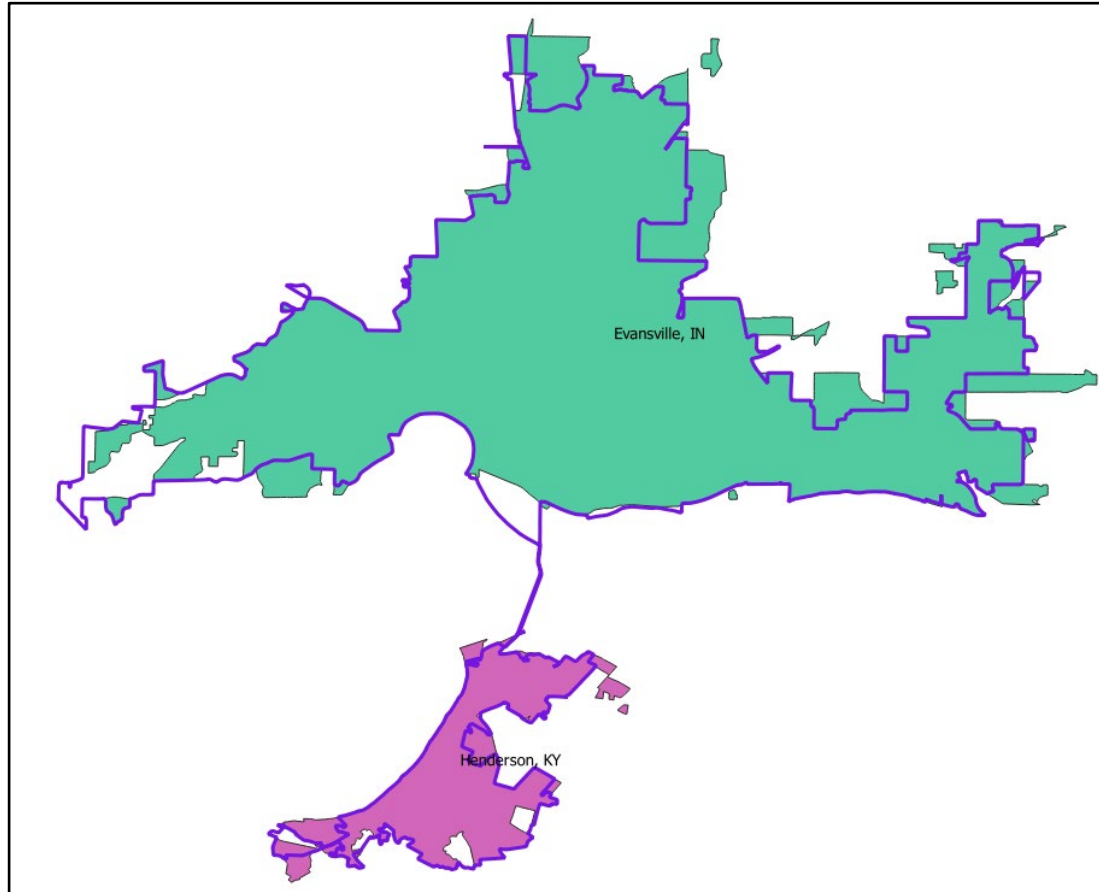
2020 Census UA



Greenville, IL



2020 Census UA Criteria Changes

Jump Distance Example



2010 Evansville, IN--KY UA became
2020 Evansville, IN UA and Henderson,
KY UA.

Legend:

-  2020 UA (*shaded and labeled*)
-  2010 UA (*outlined*)

2020 Census UA Criteria Changes

Introduced the use of commuter data to determine where to split large urban agglomerations.

- The delineation process results in large urban agglomerations encompassing multiple, individual UAs.
- For 2020 we introduced commuting data (LODES dataset) to better determine where to split the urban agglomerations.



2020 Census UA Changes

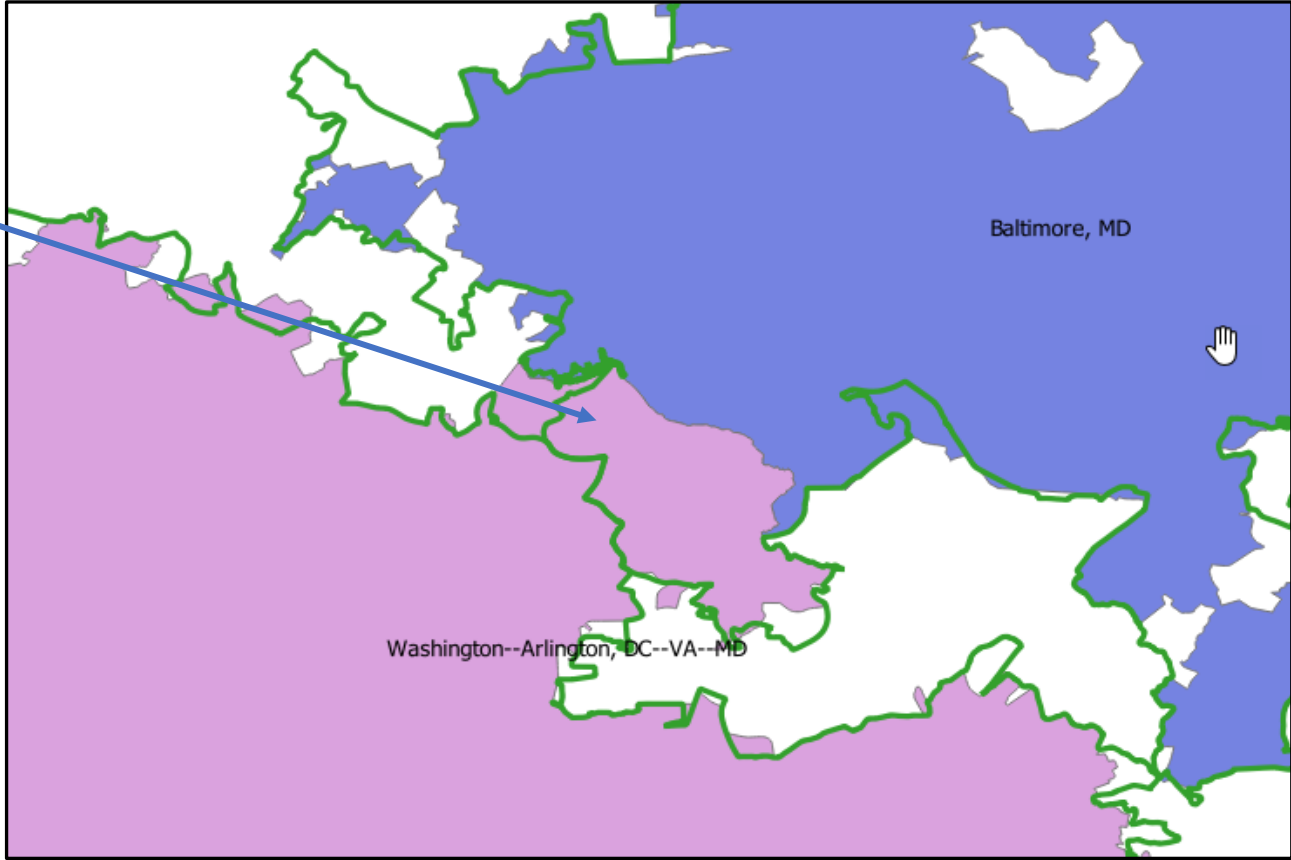
Splitting Urban Agglomerations Example

Implementing the LODES commuter data shifts the Washington--Arlington, DC--VA--MD UA northeast.

Legend:

- 2020 UA (shaded and labeled)
- 2010 UA (outlined)

2010 and 2020 Washington D.C. and Baltimore area UAs



2020 Census UA Changes

No longer distinguish between “urbanized areas” and “urban clusters”. All qualifying territory will be considered “urban” by the Census Bureau.

The Census Bureau no longer distinguishes between urbanized areas of 50,000 or more population and urban clusters of less than 50,000 population.

- No clear scientific basis for use of 50,000 population as a threshold distinguishing different types of UAs.
- The decision to adopt 50,000 population as a threshold for urbanized areas starting for the 1950 Census seems to have been based primarily on operational concerns and data availability than rooted in economic data, central place theory, or the importance of a place in a particular area.
- UAs above or below 50,000 population can be similar in terms of economic activity.
- Still possible for data users and agencies to identify areas based on population.

Key 2020 UA Trends, As Compared to 2010 UAs

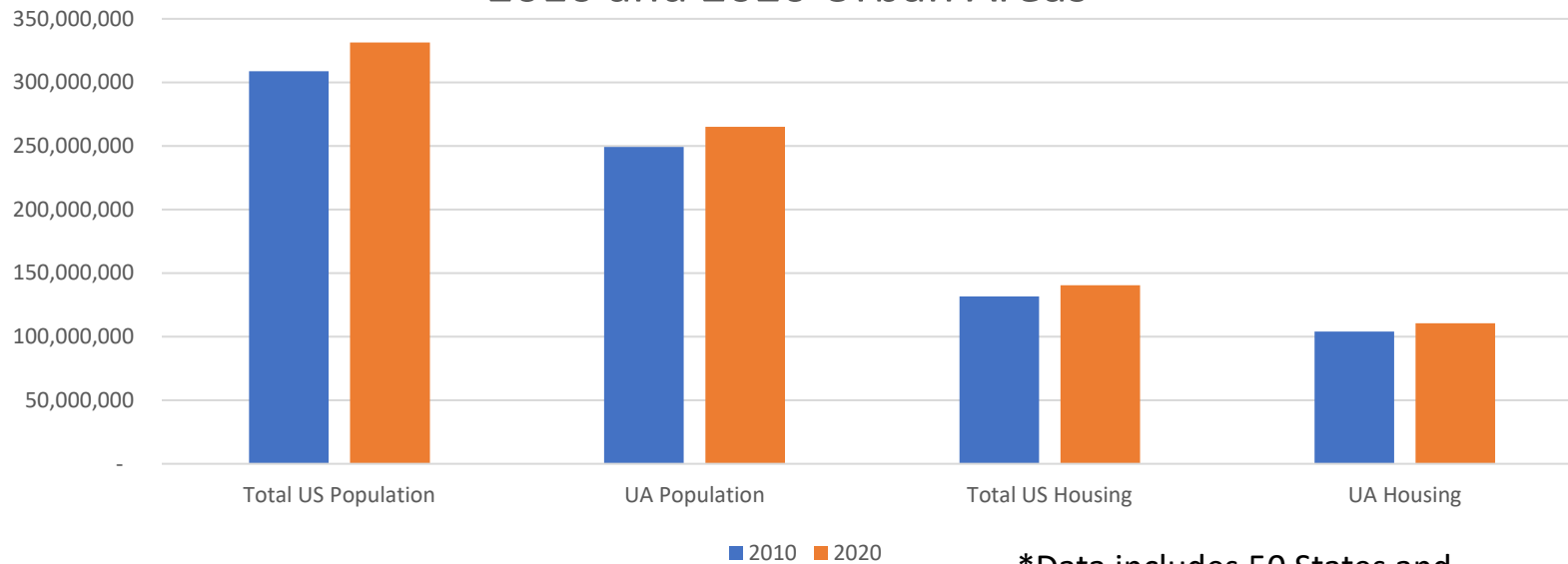
- Similar percent of population and housing units urban vs. rural.
- Decrease in total number of UAs; but an increase in the number of UAs $\geq 5,000$ population.
- Decrease in many UAs' size/land area; increase in population and housing density of UAs.
- Some 2010 UAs became two UAs in 2020.
- Some 2020 UAs include areas with of densely developed seasonal housing.

Note: These are national-level trends, and trends vary by region and state.

2010 and 2020 Census UAs

	2010				2020			
	Total Population	UA Population Percent	Total Housing	UA Housing Percent	Total Population	UA Population Percent	Total Housing	UA Housing Percent
Total*	308,745,538		131,704,730		331,449,281		140,498,763	
Urban	249,253,271	81%	104,019,731	79%	265,149,027	80%	110,692,318	79%
Rural	59,492,267	19%	27,684,999	21%	43,596,511	20%	29,806,418	21%

2010 and 2020 Urban Areas



Percent Population and Housing Units

		2010		2020	
		Percent Population	Percent Housing	Percent Population	Percent Housing
U.S.*	Urban	81%	79%	80%	79%
	Rural	19%	21%	20%	21%

Sources: 2010 and 2020 Tabulation Block TIGER/Line Shapefiles

2010 and 2020 Census UAs - Oregon

	2010		2020	
	Total Population	UA Population Percent	Total Population	UA Population Percent
Total	3,831,074		4,237,256	
Urban	3,104,382	81%	3,410,984	81%
Rural	726,692	19%	826,272	19%

Urban Area Count

2010	2020
71	62

2010 and 2020 Census UAs – Washington

	2010		2020	
	Total Population	UA Population Percent	Total Population	UA Population Percent
Total	6,724,540		7,705,281	
Urban	5,651,869	84%	6,424,035	83%
Rural	1,072,671	16%	1,281,246	17%

Urban Area Count

2010	2020
81	61

Decrease in Number of Discrete UAs?

		All UAs			UAs ≥ 5,000 Population		
		2010 Urban Areas	2020 Urban Areas	Percent Change	2010 Urban Areas	2020 Urban Areas	Percent Change
U.S.*	Urban	3,573	2,611	-27%	2,282	2,386	5%
	Urbanized Area	486	NA		486	NA	
	Urban Cluster	3,087	NA		1,796	NA	

Sources: 2010 and 2020 state-sorted lists of urban areas on [Urban and Rural \(census.gov\)](https://www.census.gov/urban-rural/)

Primarily resulting from criteria changes: Minimum threshold for qualification as urban raised from at least 2,500 people in 2010 to **at least 2,000 housing units or at least 5,000 people in 2020.**

Decrease in UA Size/Land Area; Increase in Population Density

		2010 Urban Areas	2020 Urban Areas	Percent Change
U.S.*	Land Area (mi ²)	106,386	103,872	-2%
	Pop Density (people/mi ²)	2,343	2,552	9%

Sources: 2010 and 2020 state-sorted lists of urban areas on [Urban and Rural \(census.gov\)](https://www.census.gov/urban-and-rural/)

Primarily resulting from criteria changes:

- Max jump distance to noncontiguous territory reduced from 2.5 miles to **1.5 miles**.
- Move from tract-based to only block-based delineation.

New 2020 UAs

36 new 2020 UAs

Heartland, TX



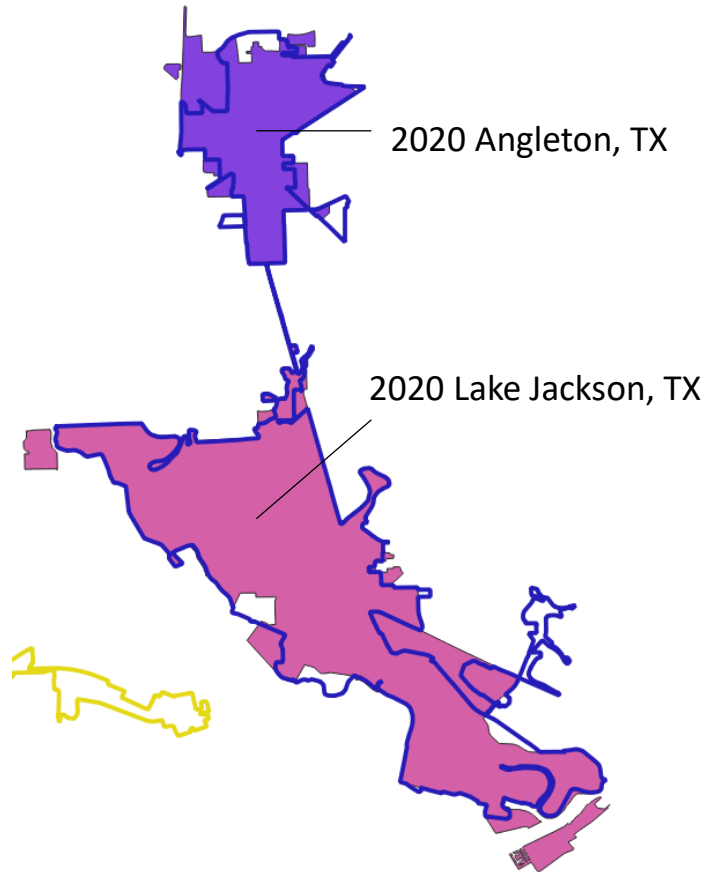
Sonterra, TX



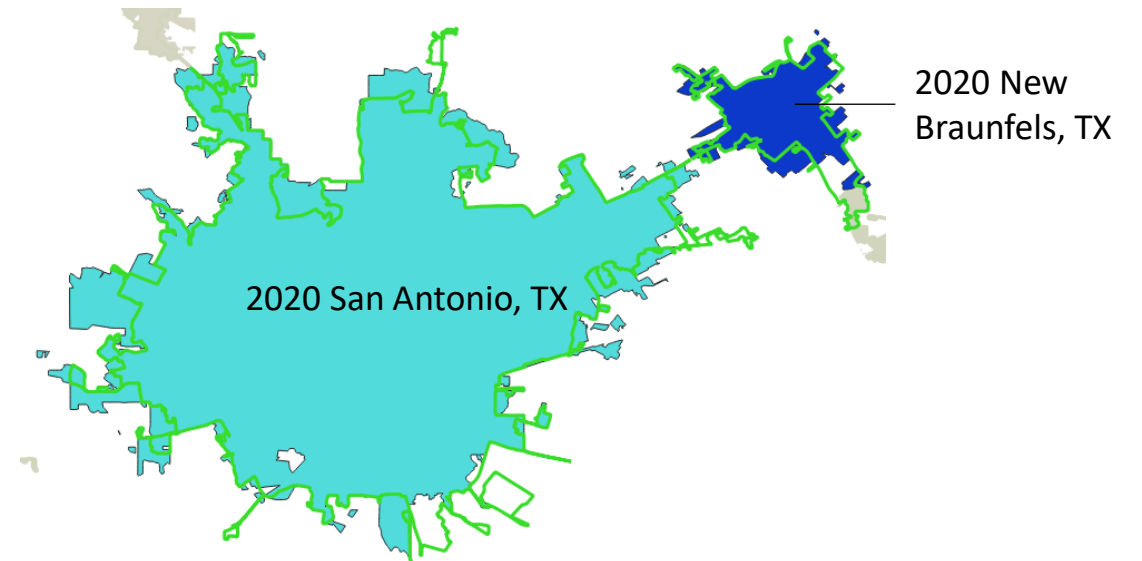
One 2010 UA Became Two 2020 UAs

2,030 2020 UAs were part of a different or larger 2010 UA



2010 Lake Jackson--Angleton, TX



2010 San Antonio, TX

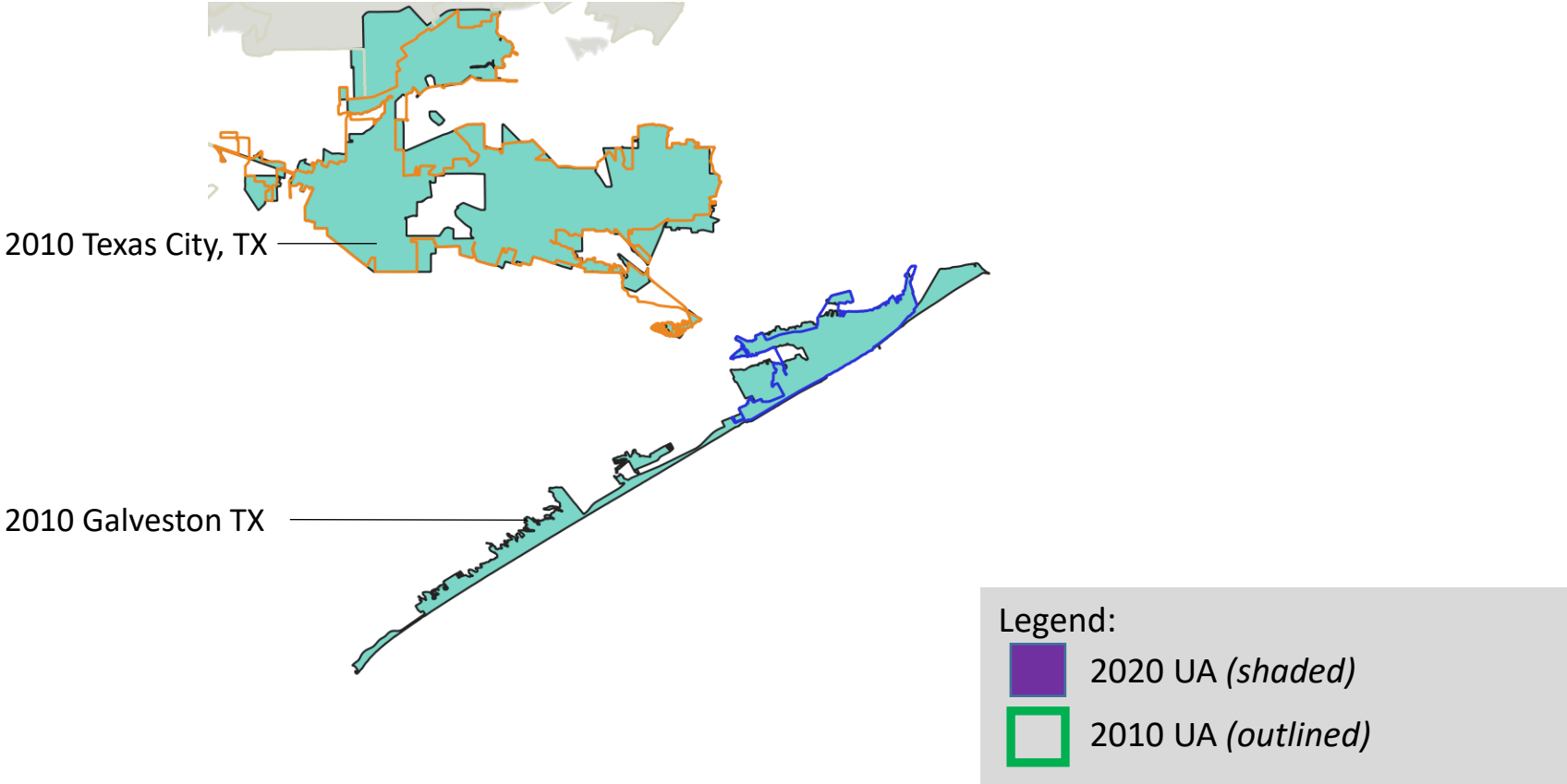


Legend:

-  2020 UA (*shaded*)
-  2010 UA (*outlined*)

Two 2010 UAs Became one 2020 UA

2020 Galveston--Texas City, TX



2020 Census UA Highlights

10 Most Populated 2020 UAs compared to 2010

	2010 UA Name	2010 Population	2020 UA Name	2020 Population
1	New York--Newark, NY--NJ--CT	18,351,295	New York--Jersey City--Newark, NY--NJ	19,426,449
2	Los Angeles--Long Beach--Anaheim, CA	12,150,996	Los Angeles--Long Beach--Anaheim, CA	12,237,376
3	Chicago, IL--IN	8,608,208	Chicago, IL--IN	8,671,746
4	Miami, FL	5,502,379	Miami--Fort Lauderdale, FL	6,077,522
5	Philadelphia, PA--NJ--DE--MD	5,441,567	Houston, TX	5,853,575
6	Dallas--Fort Worth--Arlington, TX	5,121,892	Dallas--Fort Worth--Arlington, TX	5,732,354
7	Houston, TX	4,944,332	Philadelphia, PA--NJ--DE--MD	5,696,125
8	Washington, DC--VA--MD	4,586,770	Washington--Arlington, DC--VA--MD	5,174,759
9	Atlanta, GA	4,515,419	Atlanta, GA	5,100,112
10	Boston, MA--NH--RI	4,181,019	Boston, MA--NH	4,382,009

2020 Census UA Highlights

Most Densely Populated UAs with 200,000 or More Population

	2010 UA Name	2010 People/ SQ MI	2020 UA Name	2020 People/ SQ MI
1	Los Angeles--Long Beach--Anaheim, CA	6,999	Los Angeles--Long Beach--Anaheim, CA	7,476
2	San Francisco--Oakland, CA	6,266	San Francisco--Oakland, CA	6,843
3	San Jose, CA	5,820	San Jose, CA	6,436
4	New York--Newark, NY--NJ--CT	5,319	New York--Jersey City--Newark, NY--NJ	5,981
5	Urban Honolulu, HI	4,716	Honolulu, HI	5,886
6	Las Vegas--Henderson, NV	4,525	Modesto, CA	5,077
7	Miami, FL	4,442	Las Vegas--Henderson--Paradise, NV	5,046
8	Oxnard, CA	4,352	Oxnard--San Buenaventura (Ventura), CA	4,910
9	San Diego, CA	4,037	Miami--Fort Lauderdale, FL	4,888
10	Stockton, CA	4,005	San Diego, CA	4,551

2020 Census UA Highlights

UAs with the Densest Housing with 80,000 or more Housing Units

	2010 UA Name	2010 Housing Units / SQ MI	2020 UA Name	2020 Housing Units / SQ MI
1	San Francisco--Oakland, CA	2,556	San Francisco--Oakland, CA	2,709
2	Los Angeles--Long Beach--Anaheim, CA	2,429	Los Angeles--Long Beach--Anaheim, CA	2,660
3	New York--Newark, NY--NJ--CT	2,105	New York--Jersey City--Newark, NY--NJ	2,358
4	San Jose, CA	2,075	San Jose, CA	2,307
5	Miami, FL	1,973	Honolulu, HI	2,178
6	Las Vegas--Henderson, NV	1,935	Miami--Fort Lauderdale, FL	2,108
7	New Orleans, LA	1,697	Las Vegas--Henderson--Paradise, NV	2,031
8	Urban Honolulu, HI	1,694	Denver--Aurora, CO	1,745
9	Boulder, CO	1,579	Lexington-Fayette, KY	1,703
10	Mission Viejo--Lake Forest--San Clemente, CA	1,527	San Diego, CA	1,703

2020 Census UAs: 50k Threshold Changes

Above 50,000 people in 2010; Below 50,000 people in 2020

2010 UA Name	2010 Population	2020 UA Name	2020 Population
Delano, CA	54,372	Delano, CA	44,410
East Stroudsburg, PA--NJ	54,316	East Stroudsburg, PA--NJ	47,891
Bloomsburg--Berwick, PA	53,618	Bloomsburg--Berwick, PA	39,212
Pine Bluff, AR	53,495	Pine Bluff, AR	46,683
Cumberland, MD--WV--PA	51,899	Cumberland, MD--WV--PA	46,296
Danville, IL	50,996	Danville, IL	40,044
New Bern, NC	50,503	New Bern, NC	47,988

Questions?

U.S. Census Bureau
Geography Division

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

2020 Census UA Team: geo.urban@census.gov