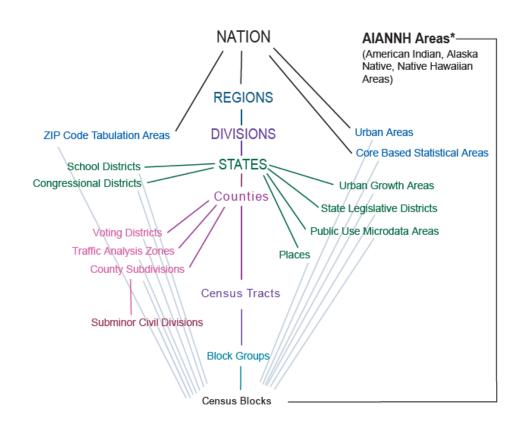
# The Participant Statistical Areas Program



#### Overview of Census Geography

#### Two main types:

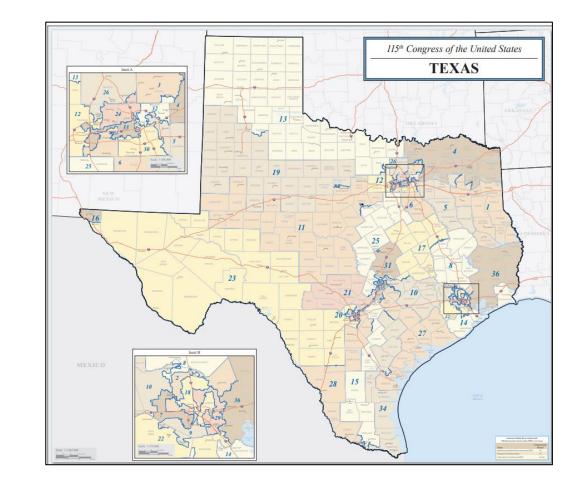
- Political
- Statistical





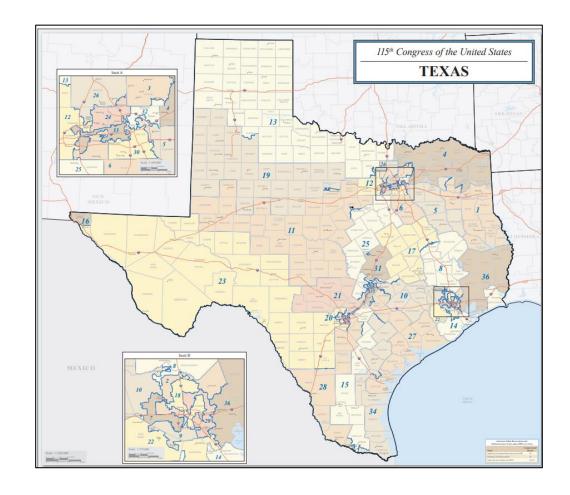
#### **Examples of Political Geography**

- State
- County
- Place
- Congressional District
- School District
- Voting District



#### Basics of Political Geography

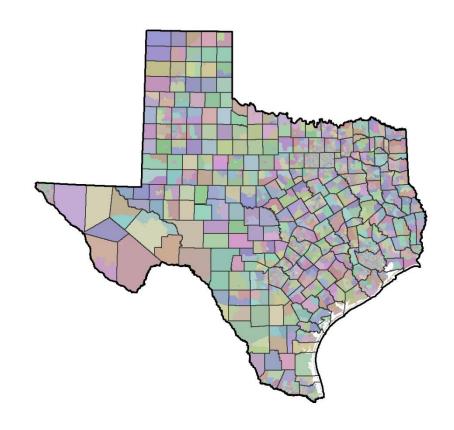
- Have a Highest Elected Official.
- Boundaries change at the will of the governing body.
- New geographies can be formed by a new incorporation.





#### **Examples of Statistical Geography**

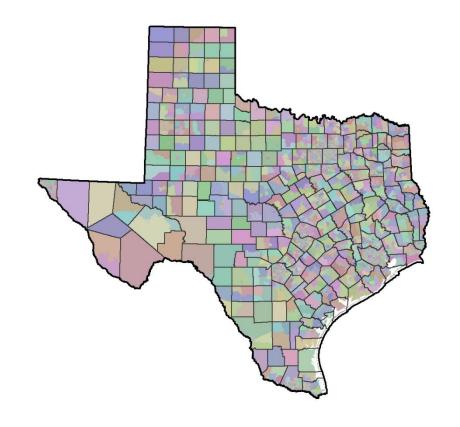
- State
- County
- Census Tract
- Census Block Group
- Census Block
- Census Designated Places (CDPs)



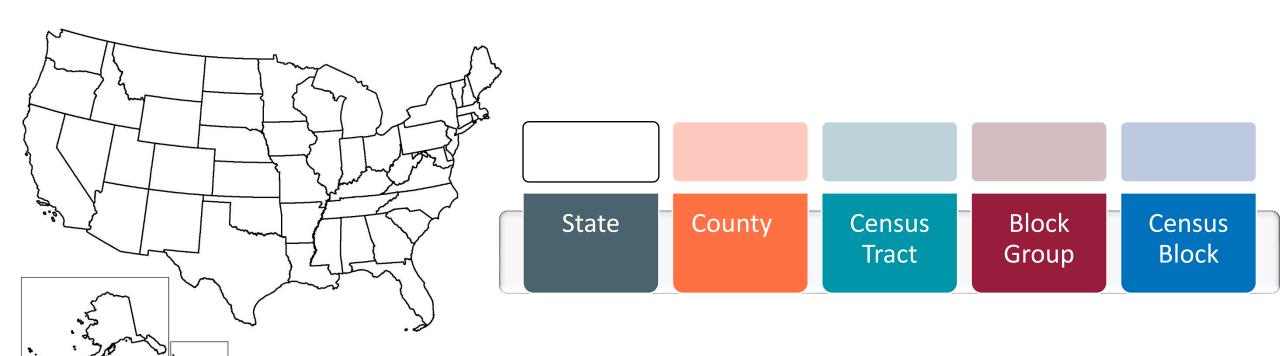


#### Basics of Statistical Geography

- The United States is covered in its entirety by unique statistical geography.
- There are no gaps and no overlaps.
- The U.S. Census Bureau is the geographical data steward for the U.S. Government.

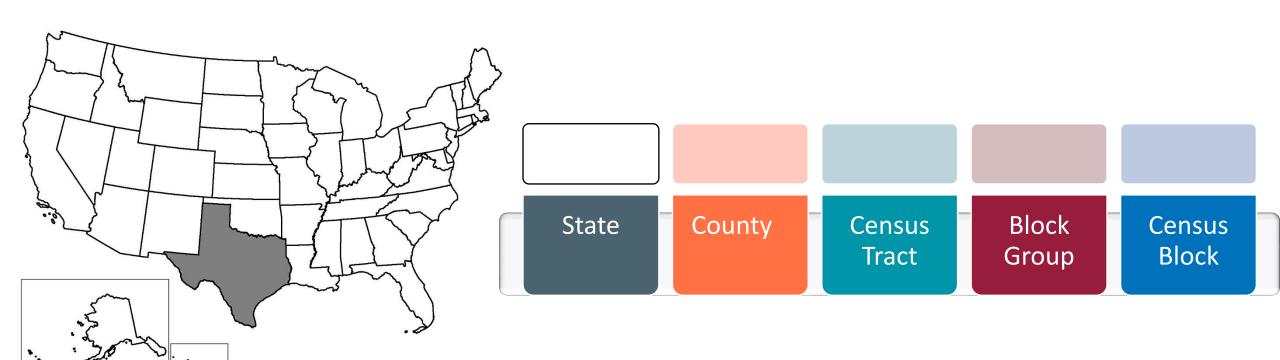


### Country



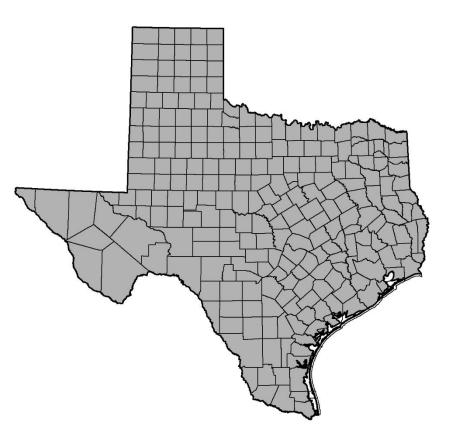


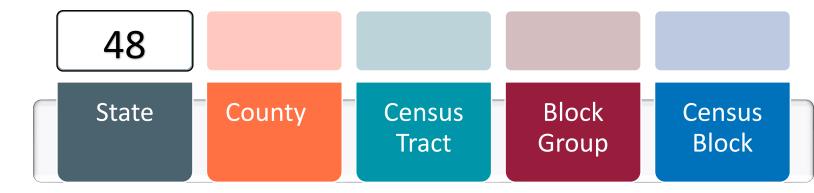
## State within the Country





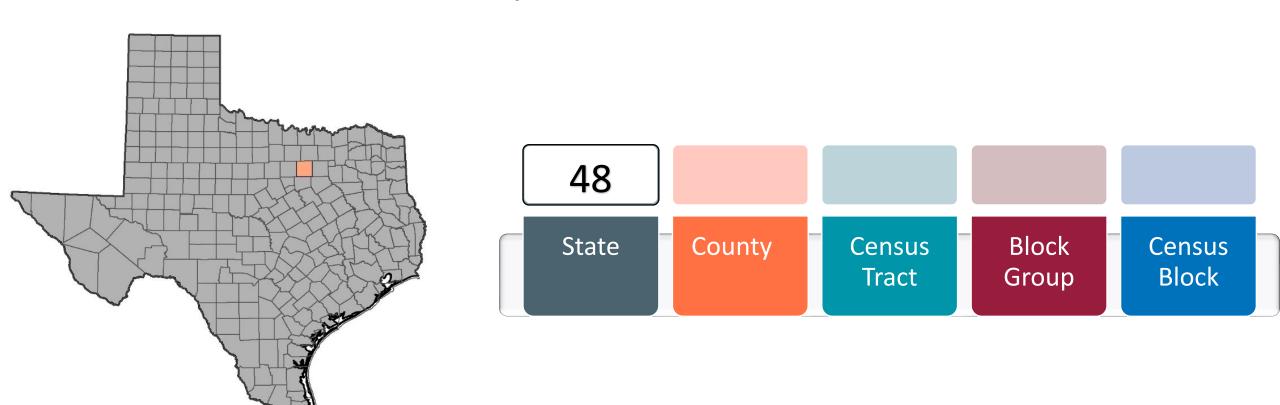
#### State





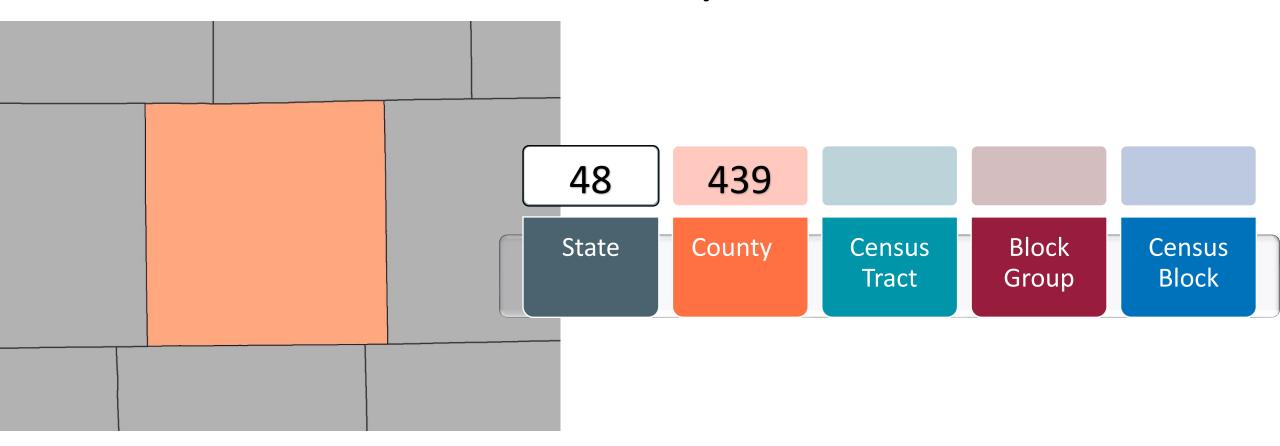


## County within the State



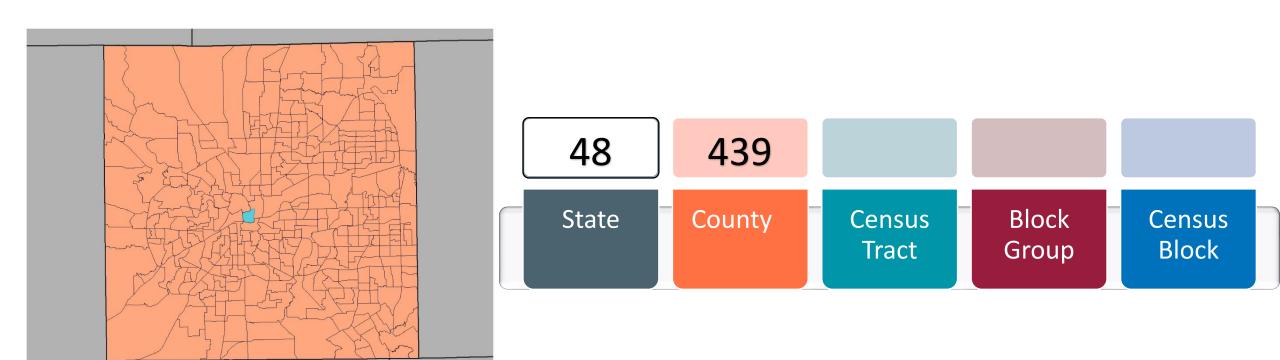


### County



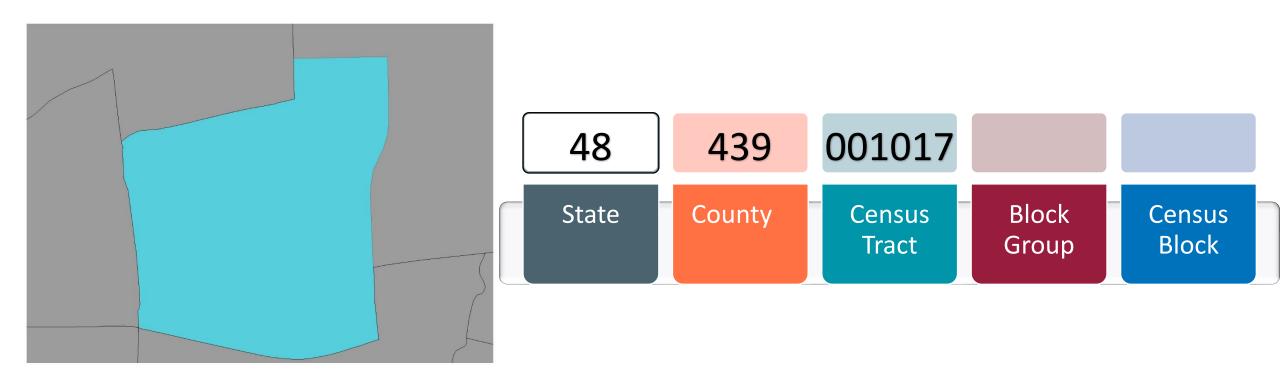


#### Census Tract within the County



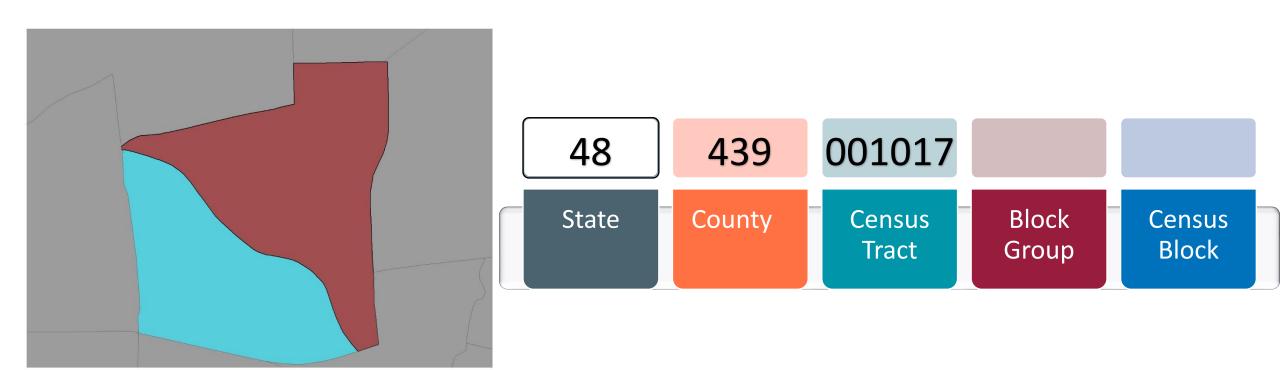


#### **Census Tract**



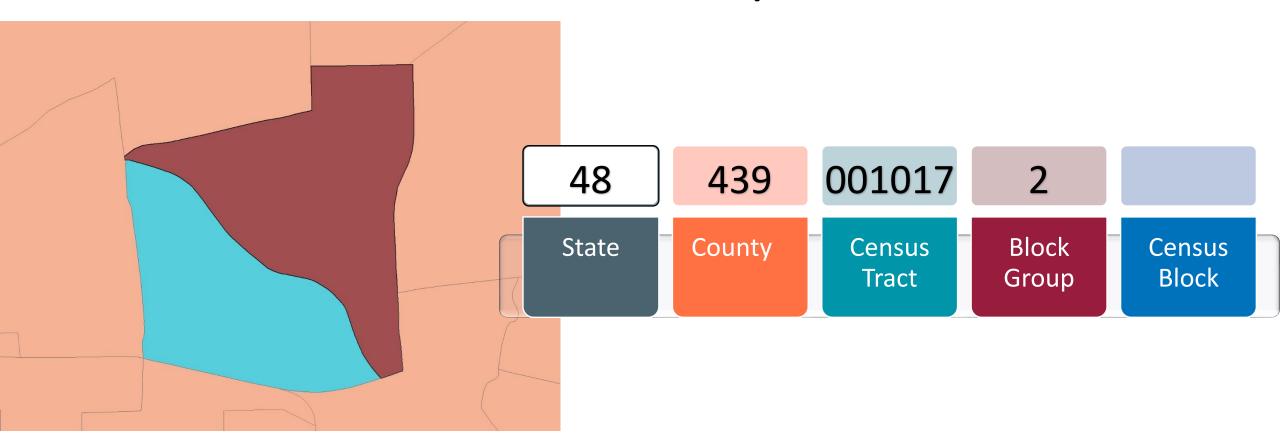


#### Block Group within the Census Tract



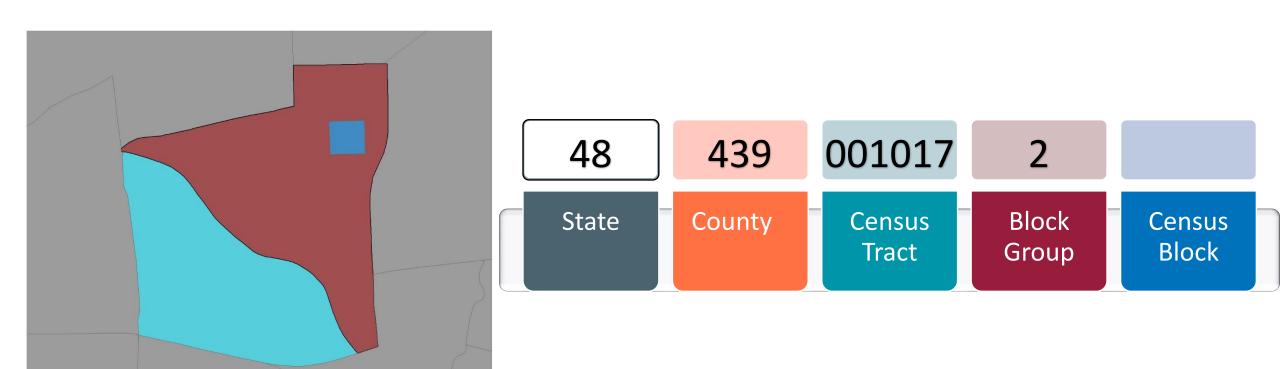


#### **Block Group**



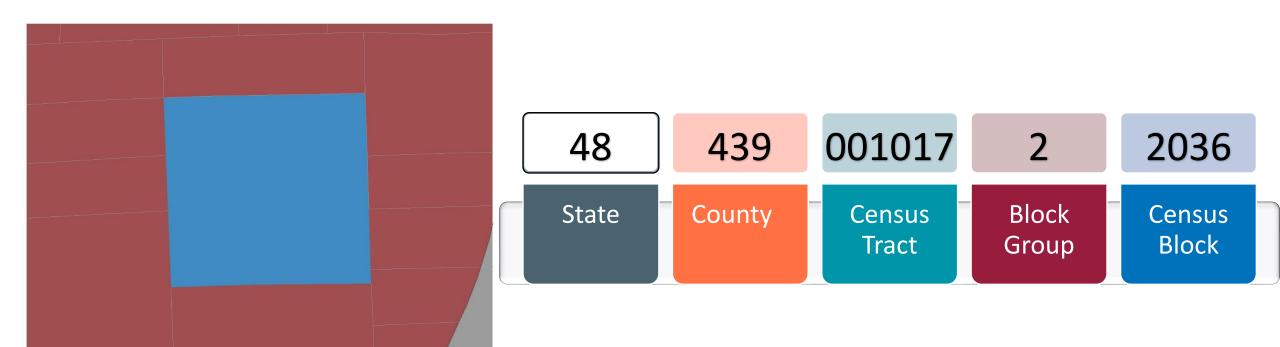


#### Census Block within the Block Group





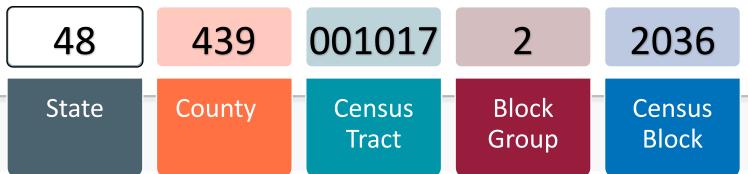
#### Census Block





#### Census Block





#### What is the 2020 Participant Statistical Areas Program?

- Allows participants to review and update selected statistical area boundaries. These areas include:
  - Census Tracts
  - Census Block Groups
  - Census Designated Places
  - Census County Divisions
- The Census Bureau will use these boundaries to distribute data for:
  - 2020 Census
  - American Community Survey (ACS)
  - Economic Census



#### Standard Statistical Geographies for PSAP

- Census Tracts.
- Census Block Groups.
- Census Designated Places (CDPs).
- Census County Divisions (CCDs), in selected states.

Lets look at each type...



## 2020 PSAP Statistical Areas Criteria Census Designated Places

Statistical area	Primary purpose	Nationwide wall-to-wall coverage	Geography nests within	2020 Census population criteria	2020 Census housing unit criteria
Census designated places (CDPs)	Place-level statistics for well-known, closely settled named localities that are not part of an incorporated place. Mix of residential and commercial areas.	No, CDPs capture distinct communities.	State	Should have population during at least one entire season (at least 3 consecutive months) of the year.	Should have higher housing unit (or population) density than surrounding area.  If less than 10 housing units, Census Bureau will ask for an explanation.



## 2020 PSAP Statistical Areas Criteria Census Tracts

Statistical area	Primary purpose	Nationwide wall-to-wall coverage	Geography nests within	2020 Census population criteria	2020 Census housing unit criteria	
CENSUS TRACTS						
Standard census tract	Boundary continuity.  Data comparability.	Yes	County	Optimum: 4,000 Minimum: 1,200 Maximum: 8,000	Optimum: 1,600 Minimum: 480 Maximum: 3,200	
Special use	Distinguish areas of little or no population that have a specific type of land use.  Large water bodies.	No	County	Population Threshold = Little/None or must be within the standard census tract threshold.  Area Measurement Thresholds:  Within Urban Area = 1 sq. mile  Outside Urban Area = 10 sq. miles.  Inland water body = 100 sq. miles.  Water body not coextensive with a water only census trace		



## 2020 PSAP Statistical Areas Criteria Block Groups

Statistical area	Primary purpose	Nationwide wall-to-wall coverage	Geography nests within	2020 Census population criteria	2020 Census housing unit criteria	
BLOCK GROUPS						
Standard block group	Form the geographic framework within which census blocks are numbered.  Smallest area for which demographic characteristics are produced from the American Community Survey (ACS).	Yes	Census Tract	Minimum: 600 Maximum: 3,000	Minimum: 240 Maximum: 1,200	



## 2020 PSAP Statistical Areas Criteria Census County Divisions

Statistical area	Primary purpose	Nationwide wall-to-wall coverage	Geography nests within	2020 Census population criteria	2020 Census housing unit criteria
Census county divisions (CCDs)	Provide data for sub- county units that have stable boundaries and recognizable names.  Usually represents one or more communities, economic centers, or major land uses.	Partial— CCDs and minor civil divisions (MCDs) together pro- vide national coverage. CCDs exist in 21 states. <sup>2</sup>	County	None	None



#### **CENSUS TRACTS - 1990**

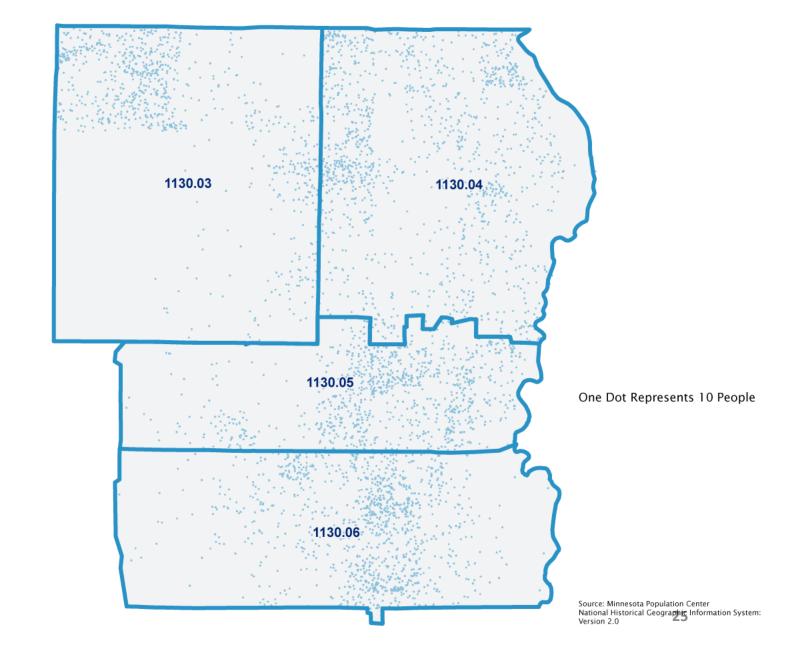
South Jordan, UT Vicinity

#### Salt Lake County, Utah



Total Population: 725,956

Number of Tracts: 156





#### **CENSUS TRACTS - 2000**

South Jordan, UT Vicinity

#### Salt Lake County, Utah



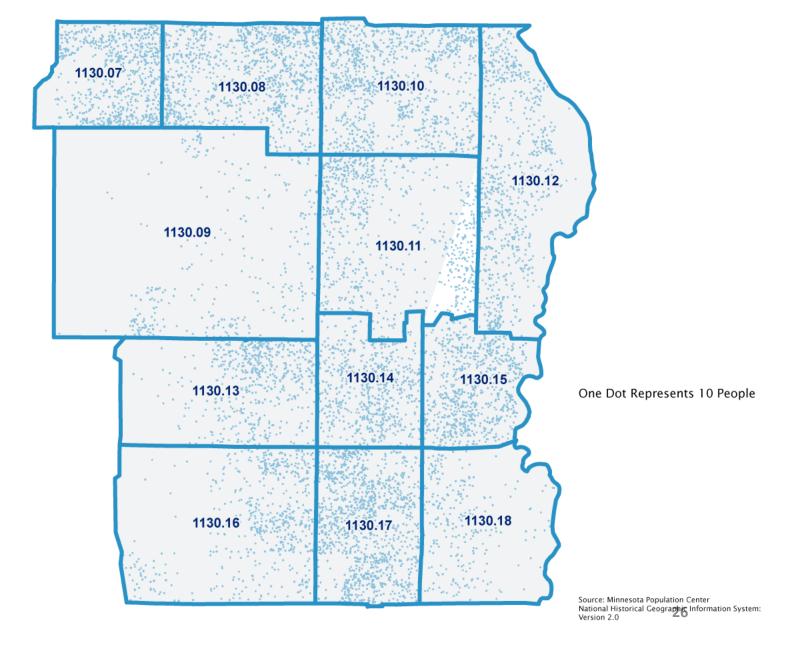
Total Population: 898,387

Number of Tracts: 193



Total Population: 725,956

Number of Tracts: 156





#### **CENSUS TRACTS - 2010**

South Jordan, UT Vicinity

#### Salt Lake County, Utah



Total Population: 1,029,655

Number of Tracts: 212



Total Population: 898,387

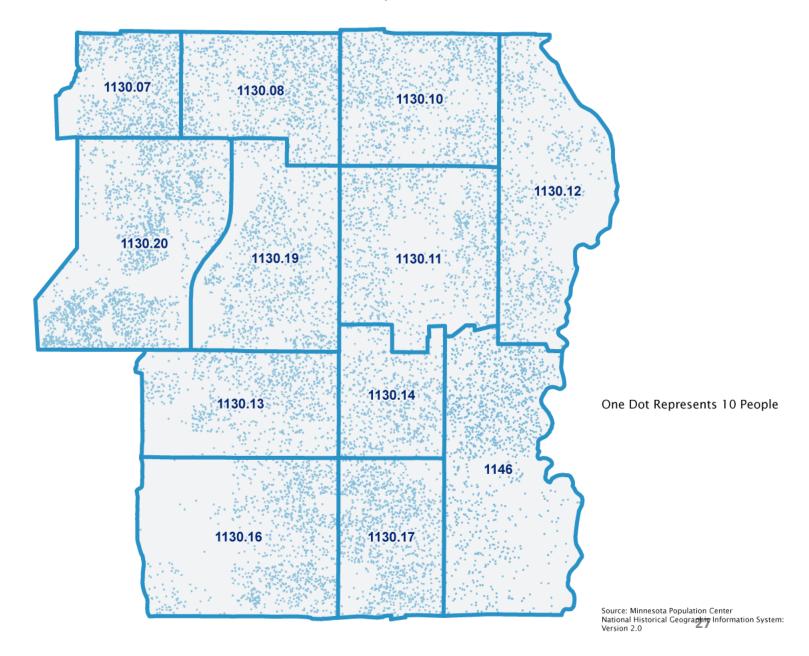
Number of Tracts: 193



Total Population: 725,956

Number of Tracts: 156





#### How Splits & Merges are Made

- TIGER, the Census Bureau's geographic database, consists of a "flattened" layer of all maintained geographies
- In GIS terms, imagine a union of all census geography tribal, city, county, state, and statistical boundaries in addition to linear roads and hydro.
- This creates nodes (points/0-cell), edges (lines/1-cell), and faces (polygons/2-cell)
- GUPS allows for splitting by block group or faces. Faces provide the most precision in modifying geographies.



#### Acceptable Boundaries

- State and county boundaries must always be census tract boundaries
- AIR and ORTL boundaries
- Visible, perennial, stable, relatively permanent natural and constructed features
- Conjoint legal boundaries
- Boundaries of large parks, forests, airports, prisons, and/or military installations provided they are clearly marked and/or easily recognized in the field
- Nonstandard boundaries, only when the above is not available for use



### Geographic Update Partnership Software (GUPS)

- Tool for PSAP response.
- Allows participants to review and modify the statistical geographies in an efficient manner.
- Integrates the standardized PSAP requirements and thresholds that define statistical geographies.
- Runs on desktop PC or network environment.
- Runs in QGIS.
- Available by DVD or online download.

#### GUPS – System Requirements

• Disk space needed to run: 3.3GB.

• RAM: 4GB minimum.

Operating system:
 Windows 7,8, or 10.





#### **GUPS** Installation

- Administrator privileges may be required.
- Direct Download.

<https://www2.census.gov/geo/pvs/gups/>

- Install from DVD (GUPS disc).
  - Data disc.
- Accessing shapefiles.
  - 'Census Web' option within GUPS.
    - Recommended for participants with internet connectivity.
  - DVD data disc.
    - May load directly from disc or to where participant saved shapefiles.





#### Resources and Assistance

- TIGERWeb both a web application and WMS/REST layers (https://tigerweb.geo.census.gov/tigerweb/)
- PSAP Website all materials, documentation, and program updates posted here (https://www.census.gov/programs-surveys/decennialcensus/about/psap.html)
- PSAP Help
  - Email: <u>geo.psap@census.gov</u>
  - PSAP Help Line: (844) 788-4921
  - Dallas Geography: (972) 510-1550



#### Webinars

- Webinars hosted every week through February 28<sup>th</sup>
- Cover PSAP process, from splits to submission
- Include GUPS training
- Can find the current schedule and registration instructions on the PSAP website

#### The Big Picture

- Census Bureau statistical areas are a "shared resource" that are most relevant when they reflect the needs of a variety of data users.
- As the primary participant, NCTCOG is responsible for:
  - Coordinating review and update of statistical area boundaries.
  - Ensuring that the areas submitted to the Census Bureau meet the needs of a variety of data users in the local area.
  - Returning updates to the Census Bureau.
- For more regionally specific questions NCTCOG should be your go-to resource.