

# **US Census Bureau Geographic Entities and Concepts**

Geography Division

# Geographic Concepts

- Legal/Administrative vs. Statistical
- Nesting relationships (or the lack of)
- Addresses vs. Geographic features and entities
- Small area geography (tracts, block groups, blocks)
- Dangers of definitions (boundaries vs. perceptions)
- Products and Resources - find more information

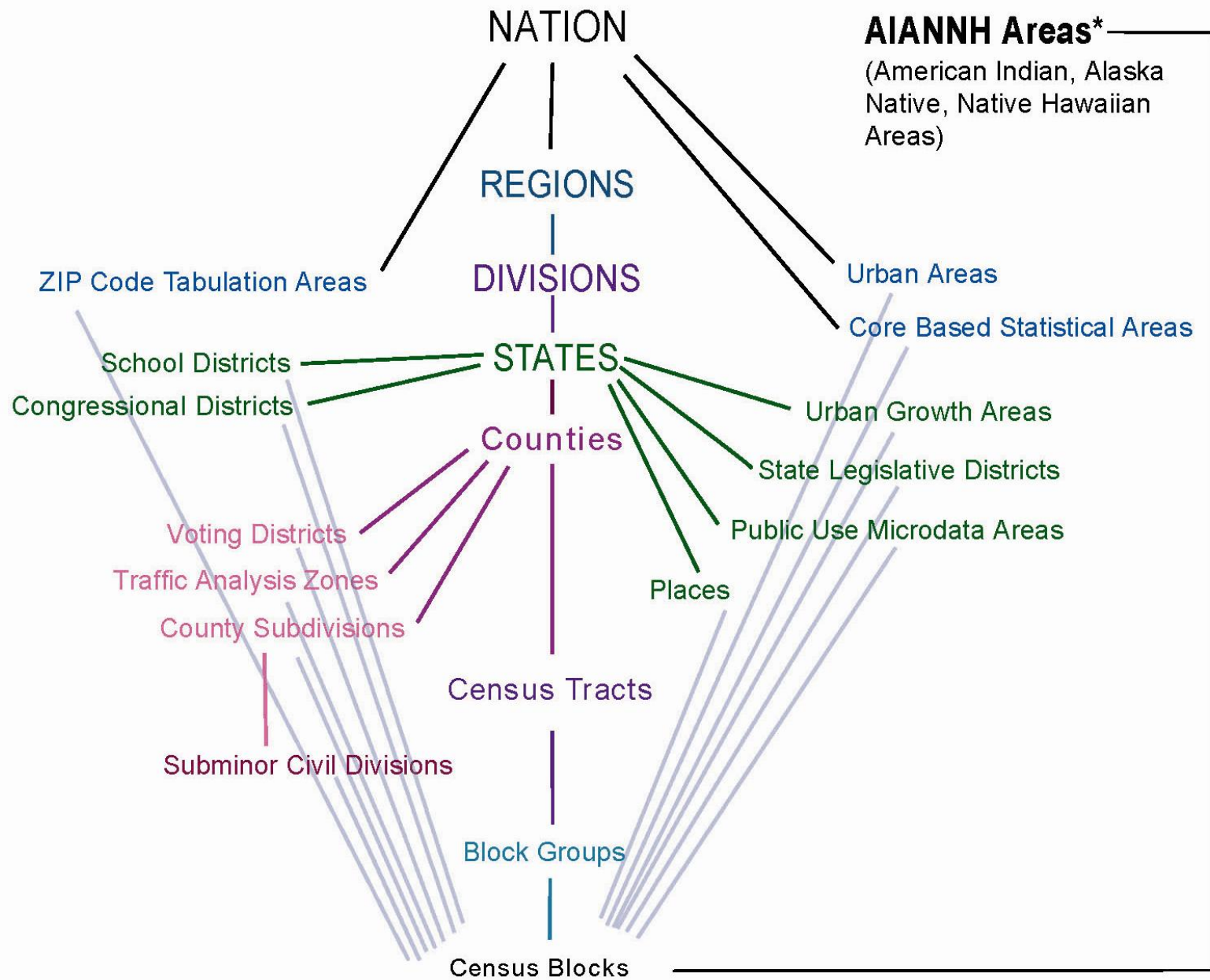
# Geographic Entities

## Legal/Administrative

- States
- Counties
- Minor civil divisions
- Congressional districts
- School districts
- Incorporated places

## Statistical

- Census tracts
- Metropolitan/Micropolitan statistical areas
- Urban areas
- Census designated places



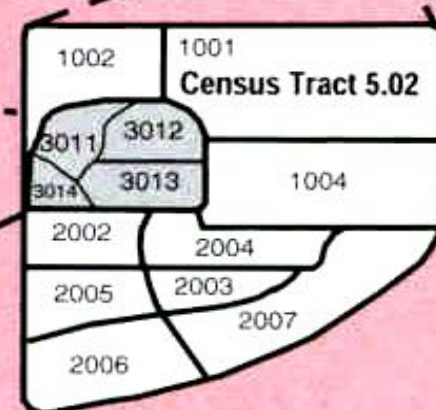
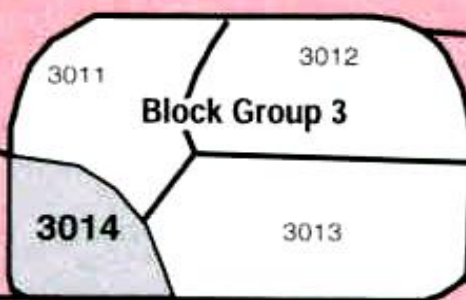
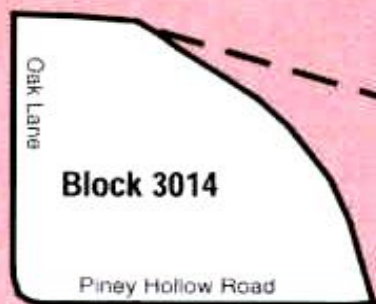
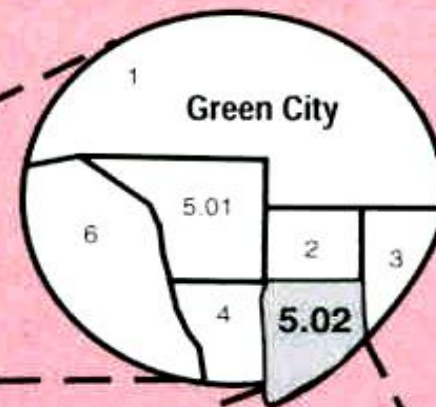
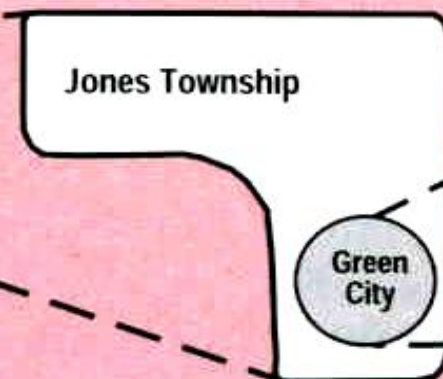
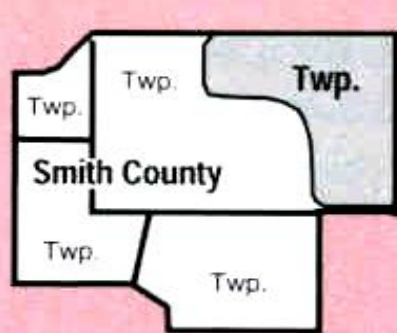
# Census Small-Area Geography

## Understanding the Relationships Among U.S. Census Bureau Geographic Entities

County

Minor Civil Division (MCD) or  
Census County Division (CCD)

Place



Block

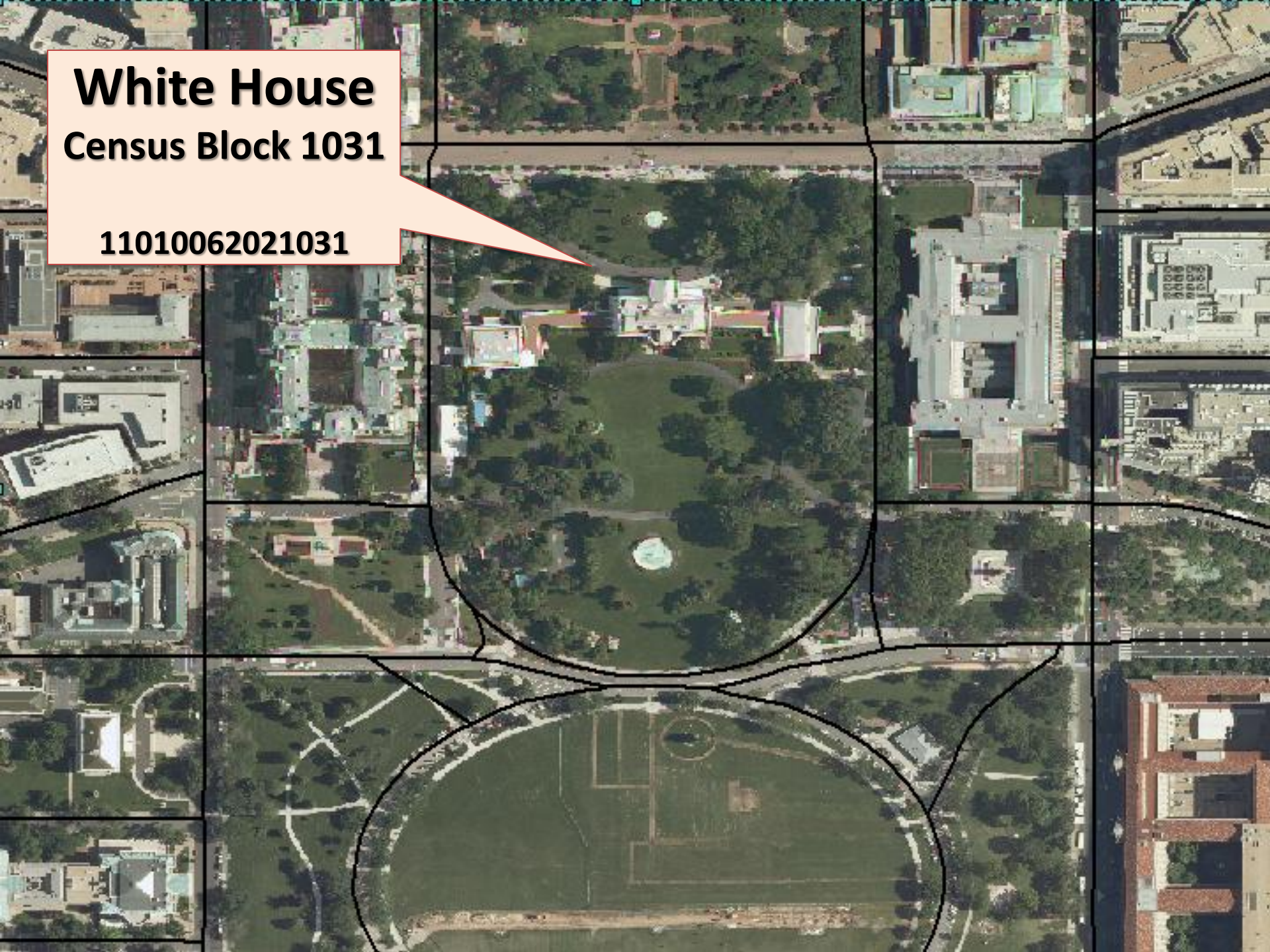
Block Group

Census Tract



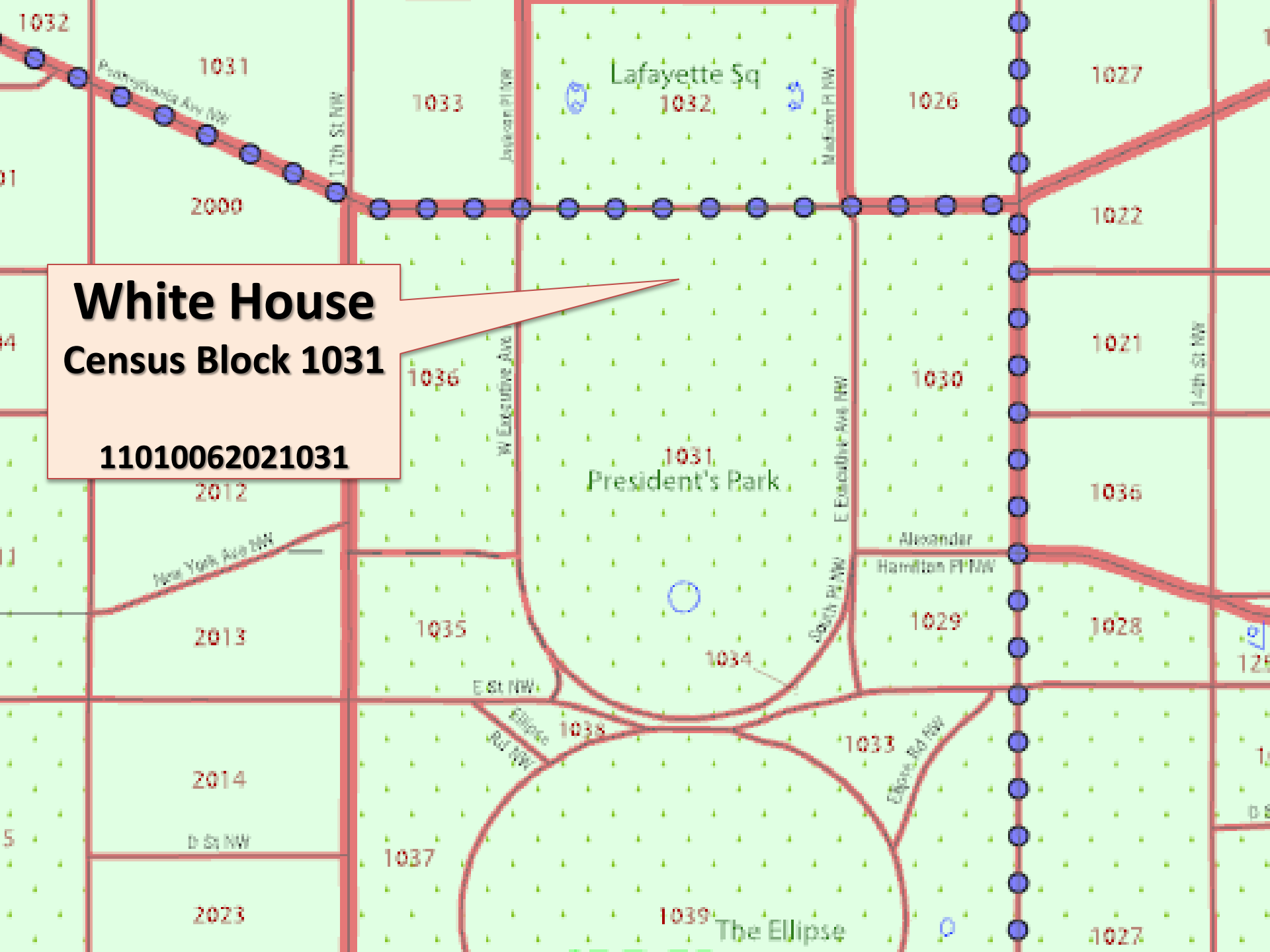
**White House  
Census Block 1031**

**11010062021031**



# White House Census Block 1031

11010062021031





## 2010 Census Redistricting Data (Public Law 94-171)

	Block 1031, Block Group 1, Census Tract 62.02
Total:	5
Population of one race:	5
White alone	0
Black or African American alone	5
American Indian and Alaska Native alone	0
Asian alone	0
Native Hawaiian and Other Pacific Islander alone	0
Some Other Race alone	0

# Small Geographic Areas

## Census Tracts

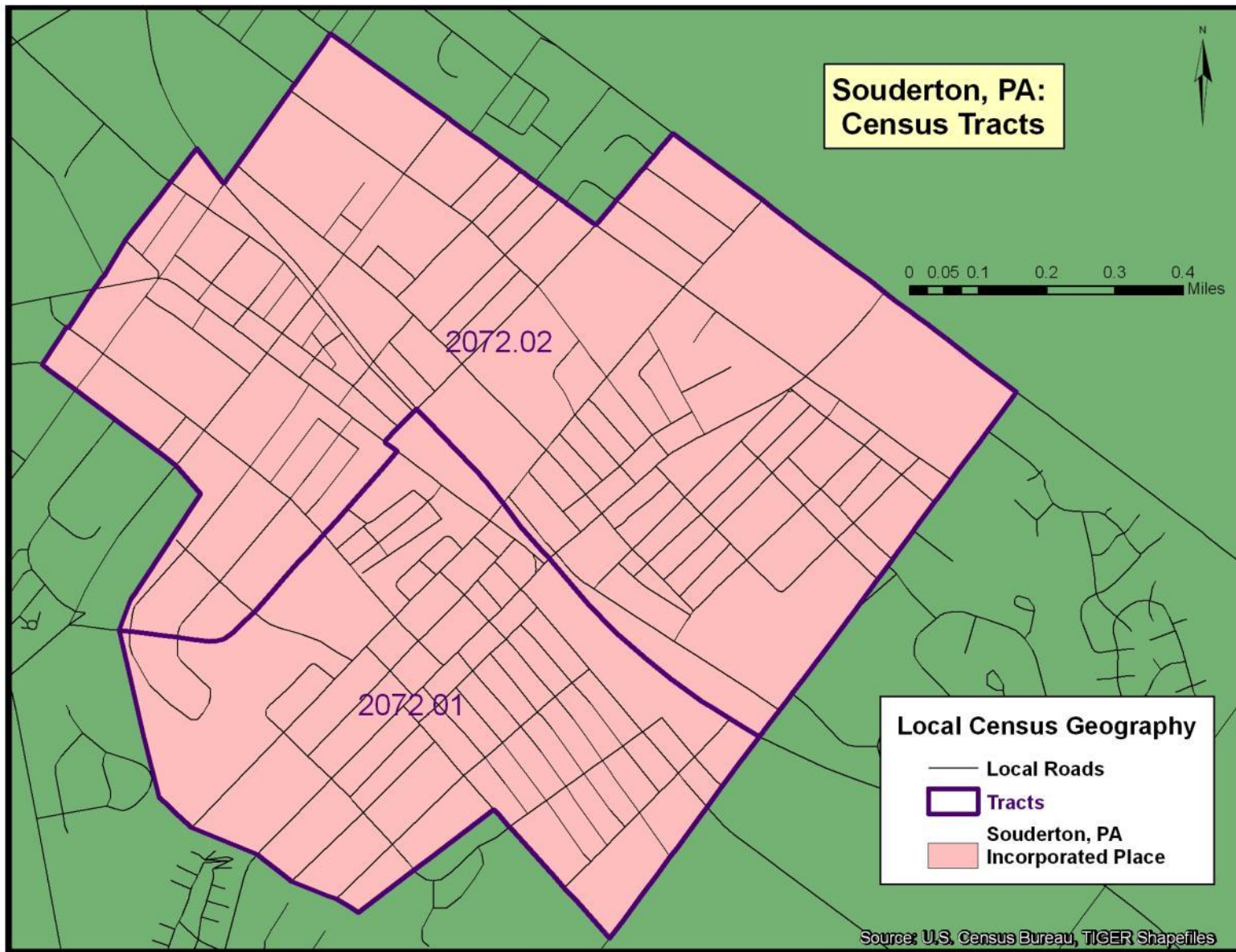
- Small, permanent, consistent statistical divisions of a county
- Optimally contains 4,000 people; range between 1,200 and 8,000

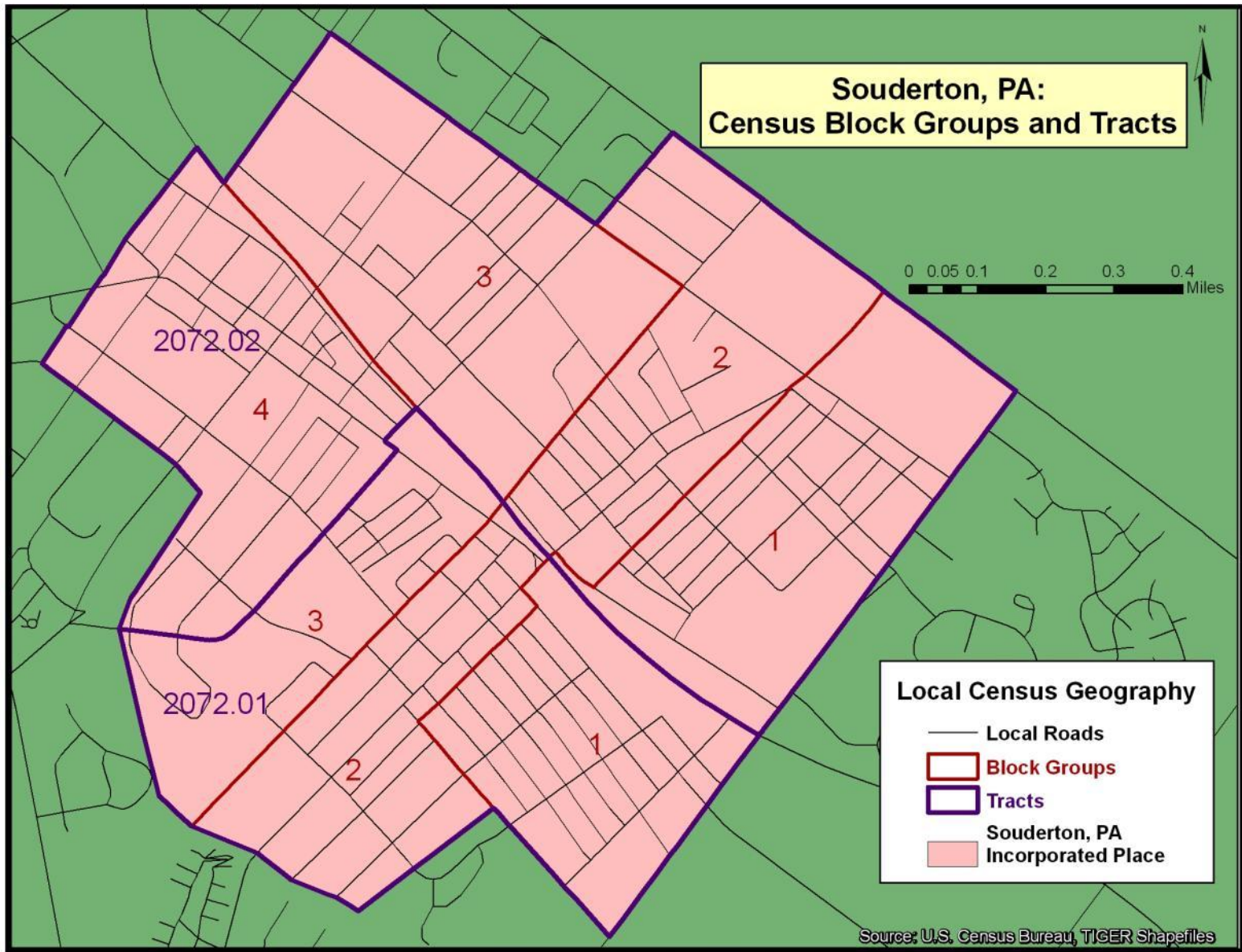
## Block Groups

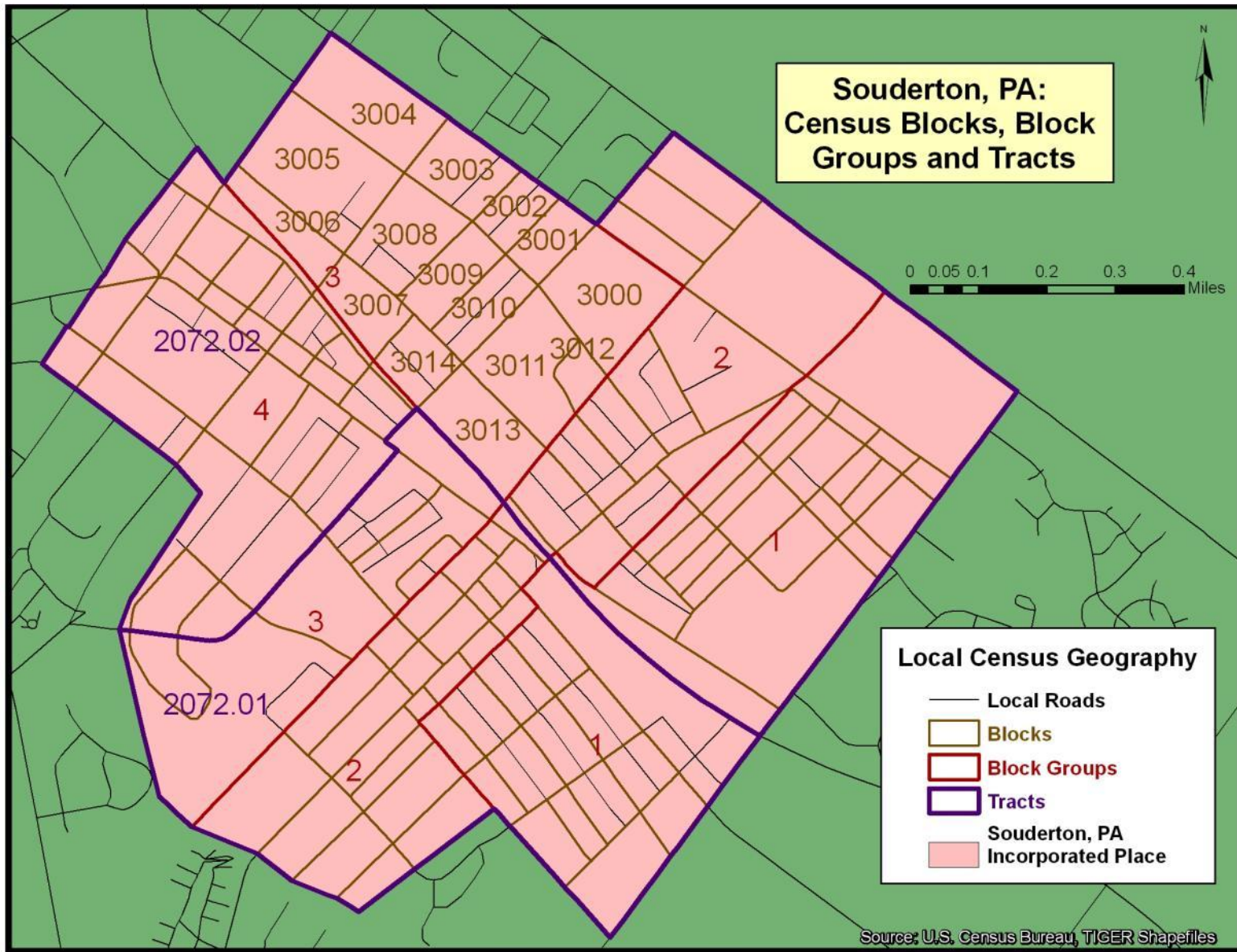
- Smallest units for tabulation of **sample data**
- Population ranges from 600 to 3,000

## Blocks

- Smallest units for **100% data tabulation**
- Cover entire nation
- **Nest within all other types of geographic areas**
- Generally bounded by visible features or boundaries







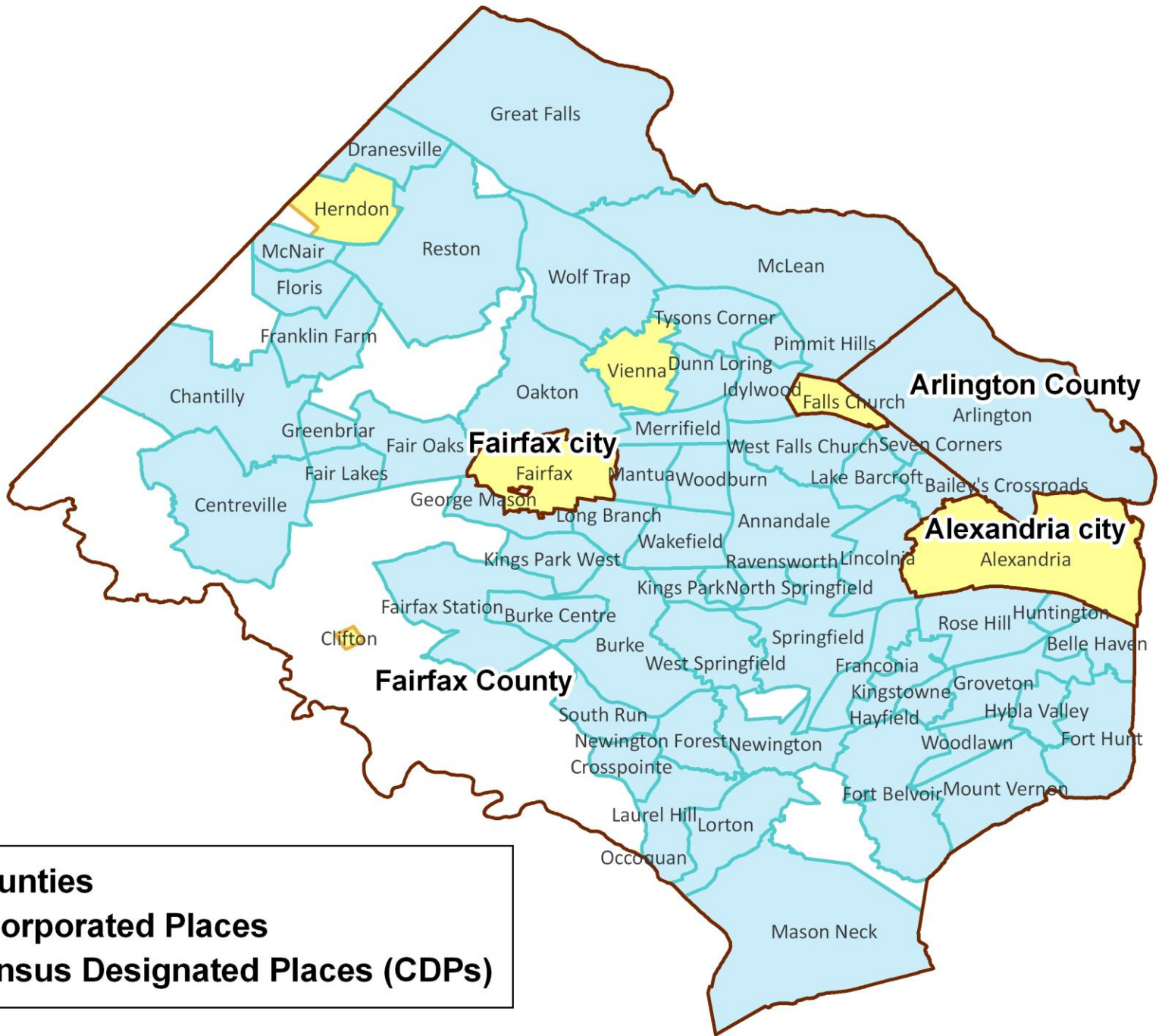
# Places

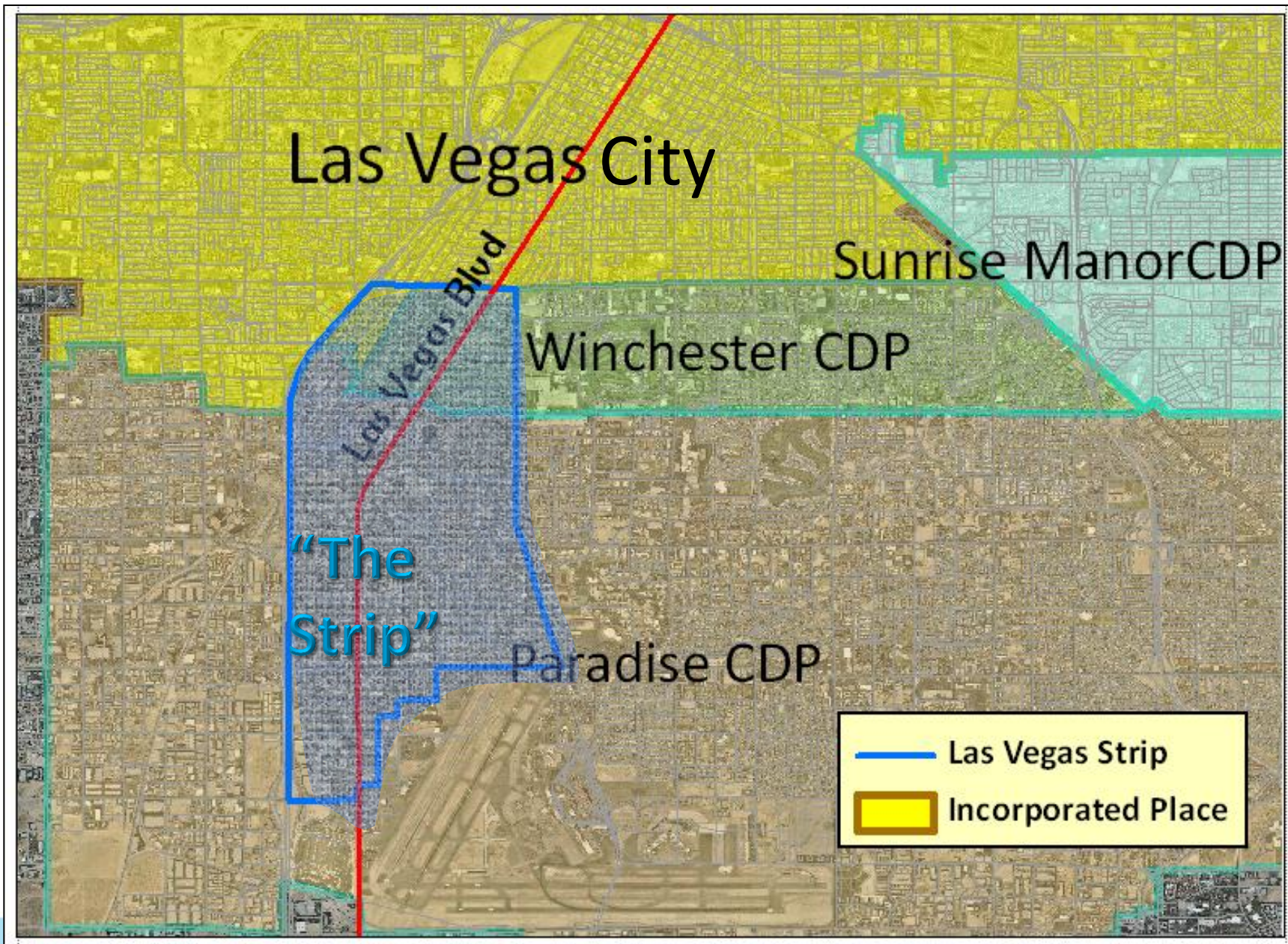
## Incorporated Places

- Legally bounded entity
- Referred to as cities, boroughs, towns, or villages, depending on the state
- Some form of local governance (city council, mayor, etc) recognized by the state

## Census Designated Places (CDPs)

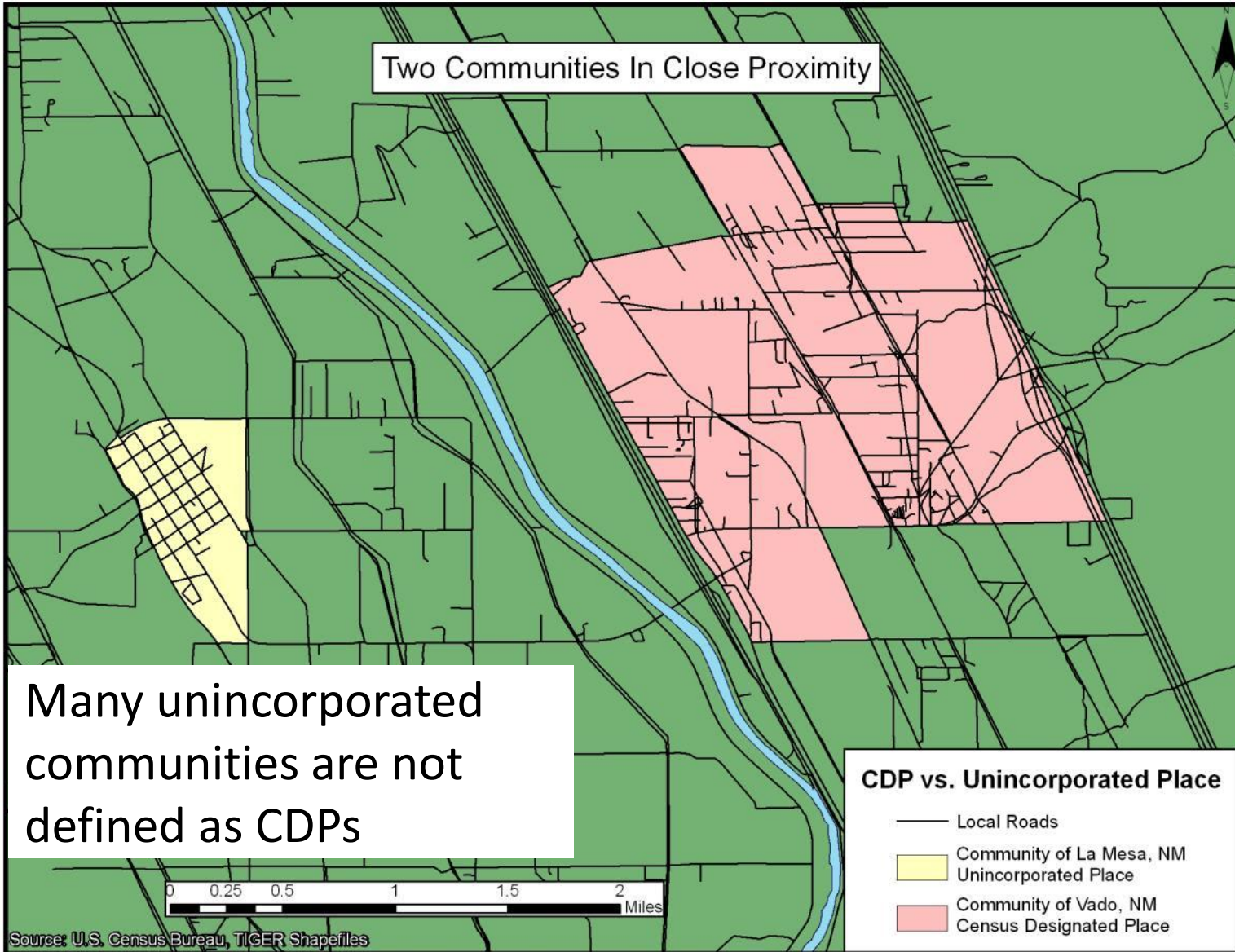
- Statistical entity
- Area with a concentration of population, housing, and commercial structures identifiable by name; not within an incorporated place







Two Communities In Close Proximity



Many unincorporated communities are not defined as CDPs

Source: U.S. Census Bureau, TIGER Shapefiles

# County Subdivisions

## Minor Civil Divisions (MCDs)

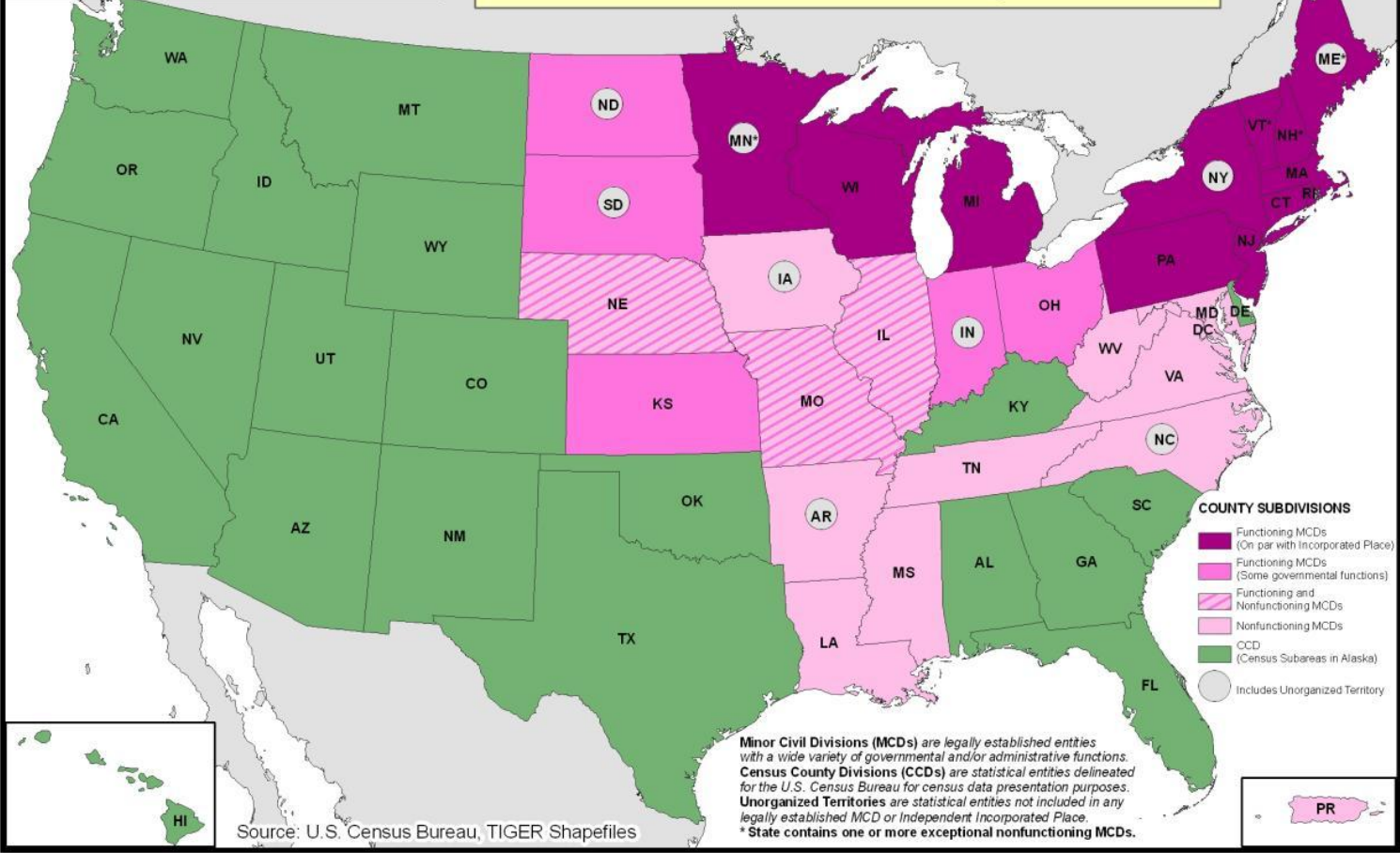
- Legally bounded entity
- Subcounty entities in 29 states, the District of Columbia, Puerto Rico, and the Island Areas
- May have a formal government with elected officials

## Census County Divisions (CCDs)

- Statistical entity
- Subcounty units that have stable boundaries and recognizable names in 21 states
- No minimum or maximum population guidelines



## Nationwide Classification of County Subdivisions



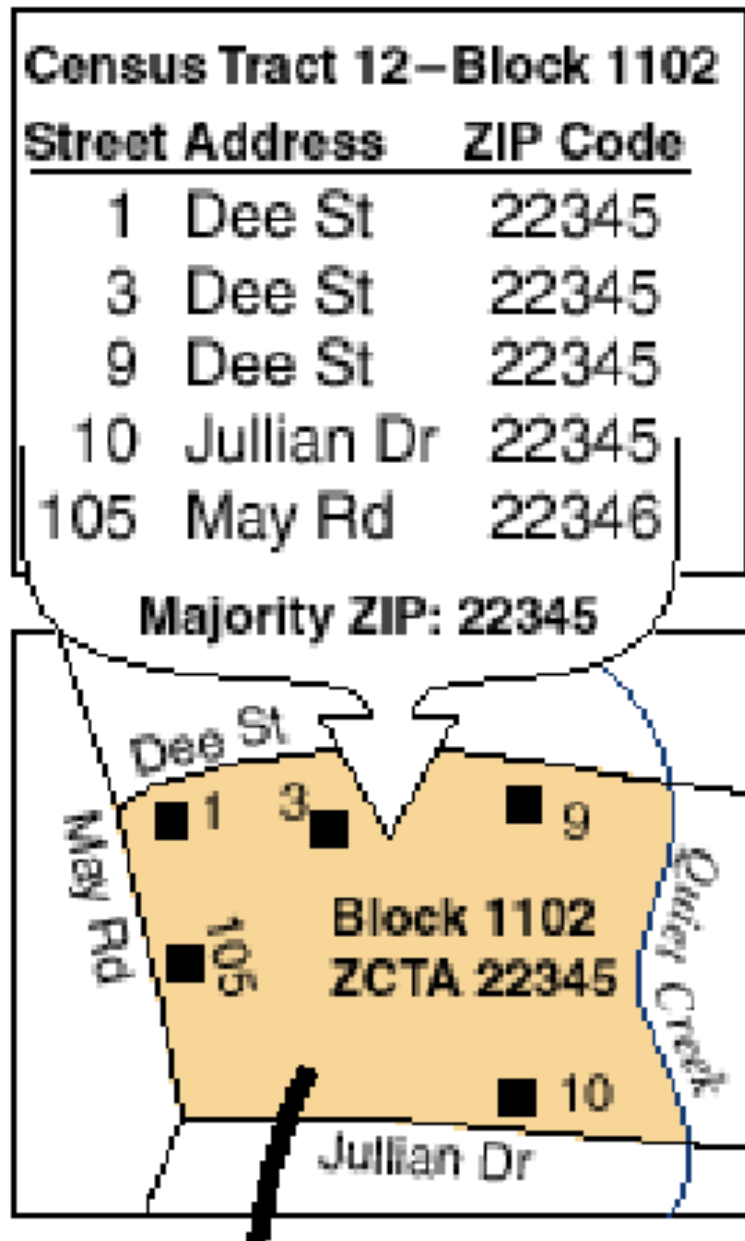
Source: U.S. Census Bureau, TIGER Shapefiles

# Counties and County Equivalents

- Counties in 48 states
- Independent Cities in MD, MO, NV, and VA
- Parishes in Louisiana
- Cities, Boroughs, Municipality, Census Areas in Alaska
- Municipios in Puerto Rico
- Islands and Districts in American Samoa
- Municipalities in the Northern Marianas
- Islands in the Virgin Islands
- District of Columbia and Guam each treated as a county equivalent

# Creating Zip Code Tabulation Areas (ZCTAs)

- Approximate ZIP Code distribution
- A “calculated” geography
- Composed of whole blocks
- ZCTAs do not nest cleanly within other geography



# Urban Area Classification: Census 2010

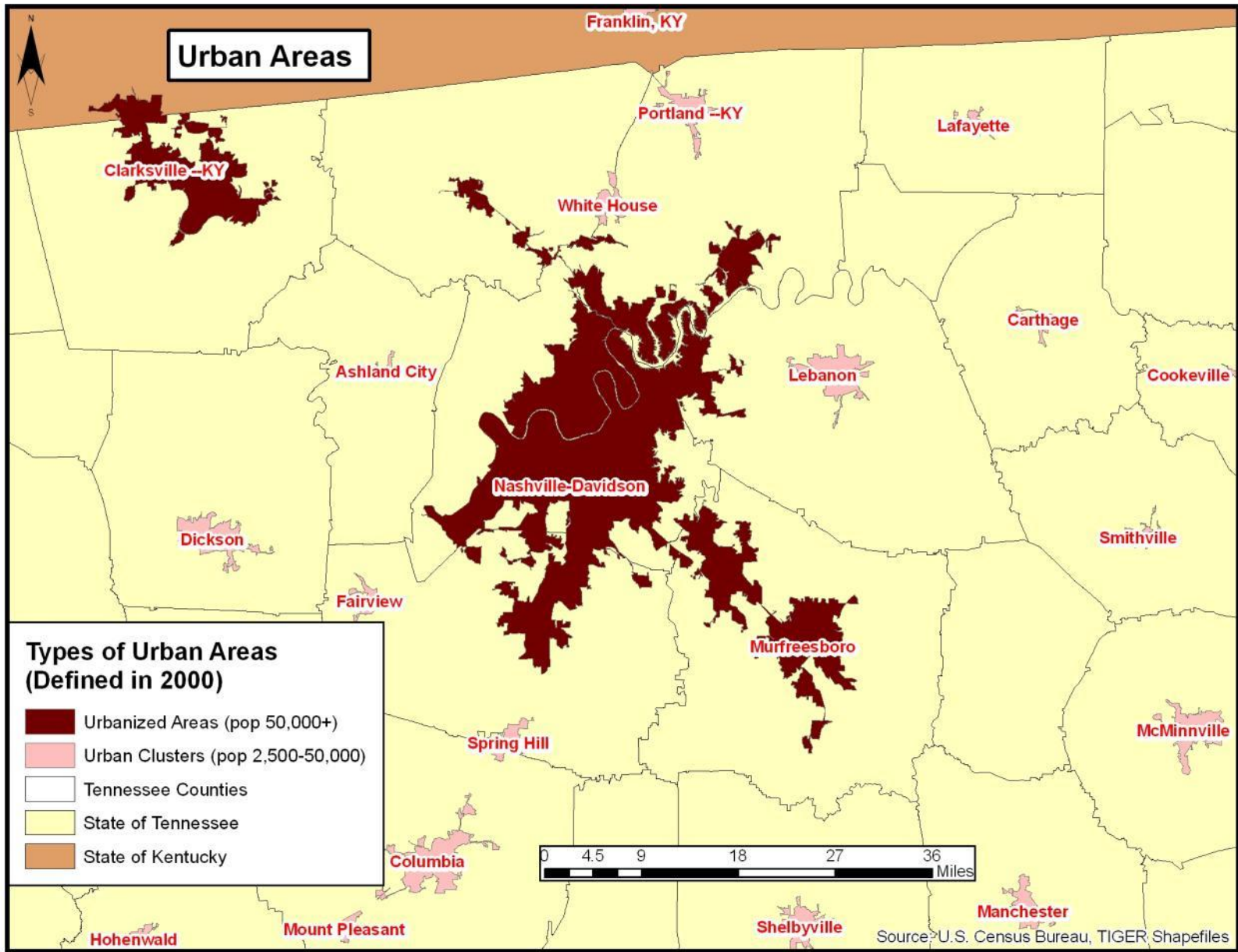
## Two types of Urban Areas:

1. Urbanized Areas of 50,000 or more people
2. Urban Clusters of 2,500 up to 50,000 people

## Classification Changes:

- Substantial changes to urban area concept and criteria adopted for Census 2000
- Both defined based on population density at the census block and block group levels
- Area definitions announced in March 2002 with updates in August and November 2002
- Urban areas will be redefined following the 2010 Census

[www.census.gov/geo/www/ua/ua\\_2k.html](http://www.census.gov/geo/www/ua/ua_2k.html)



# Core Based Statistical Area Classification

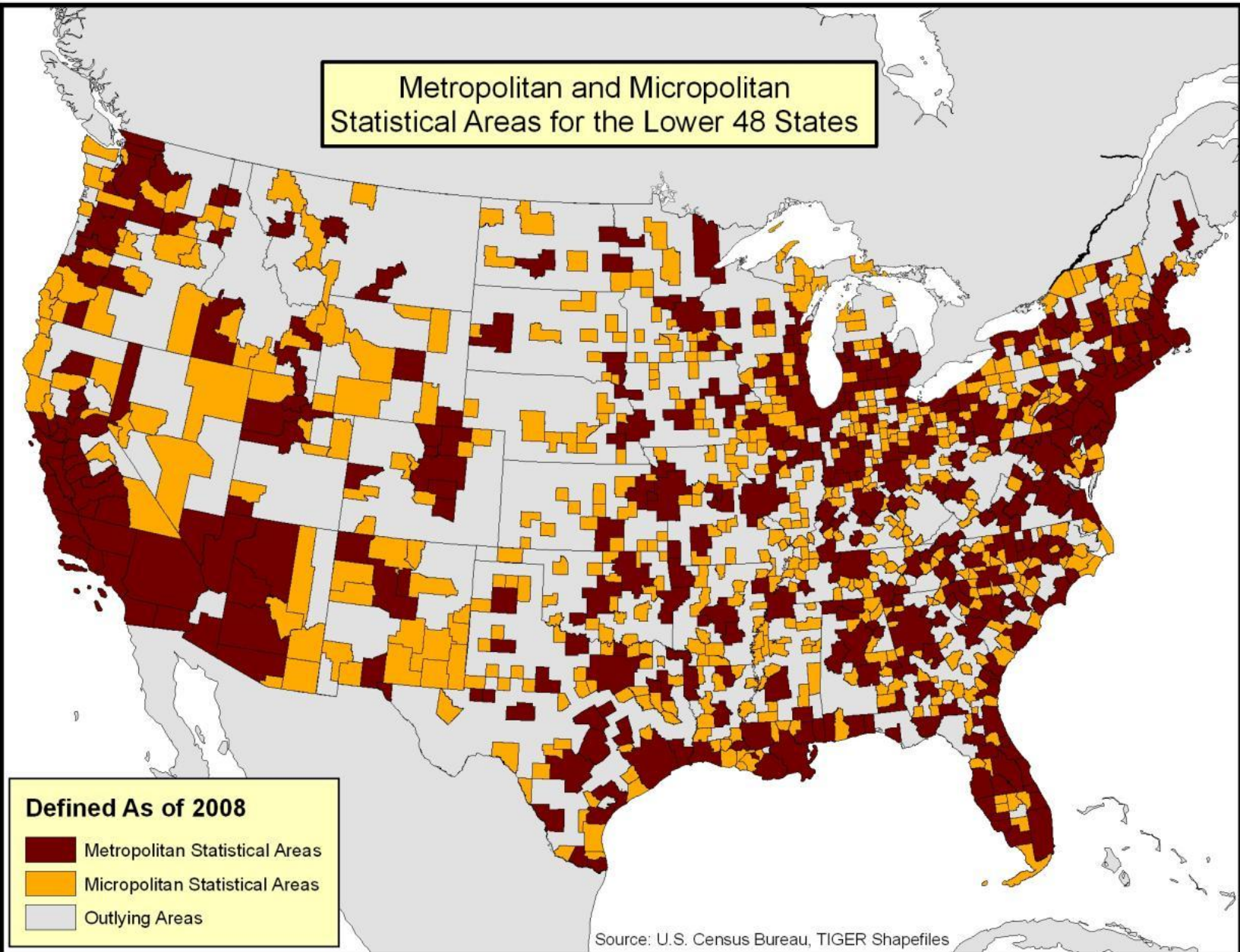
- Core Based Statistical Area (CBSA) – refers to both metropolitan and micropolitan statistical areas; county-based areas, defined based on commuting patterns
- Metropolitan Statistical Area - must have at least one UA
- Micropolitan Statistical Area - must have at least one UC with a population of at least 10,000
- Metropolitan Division – subdivision of a metropolitan statistical area



# Core Based Statistical Area Classification – continued

- Combined Statistical Area – represents a grouping of adjacent CBSAs
- New England City and Town Area – a city- and town-based equivalent to the county-based CBSAs
- Principal City – a place that occupies a more important social and economic

# Metropolitan and Micropolitan Statistical Areas for the Lower 48 States



**Defined As of 2008**

- Metropolitan Statistical Areas
- Micropolitan Statistical Areas
- Outlying Areas

Source: U.S. Census Bureau, TIGER Shapefiles

# Core Based Statistical Area Examples



Bethesda-Frederick-Rockville (Metropolitan Division)

Staunton-Waynesboro (Micropolitan Statistical Area)

Richmond (CBSA)

## 2010 Census Brief

On January 25, the U.S. Census Bureau will release a 2010 Census brief on the AIAN population at a forum held with the National Museum of the American Indian.

[See More](#)

- 2010 Census Geographic Products
- Topologically Integrated Geographic Encoding and Referencing System (TIGER®)
- Geographic Support System (GSS) Initiative
- Resources for Understanding Census Geography
- Geographic Programs
- Maps and Mapping Resources
- Census 2000 Geographic Products
- Census Tract Resources
- LandView® 6
- Contact Us

[PROFILE AMERICA FORUM](#)  
 on the  
 American Indian and Alaska Native Populations

[1](#) [2](#) [3](#) [4](#) [5](#) [6](#)

## Economic Indicators

Production	657,000	↓*	-4.1%
Housing starts		↓	10.4%
	\$-47.8 B	↑	0.3%
	\$1,550.1 B	↑*	0.1%

**Advance Monthly Retail Sales**  
 December 2011 Report  
 Released 8:30 AM EST, 1/12/12

[View All](#)

\* change not statistically significant

## QuickFacts

Quick, easy access to facts about people, business, and geography.

To begin, select a state from this list or [use the map](#).

Select a state to begin

## Interactive Map

## Census News

### Facts for Features: Irish-American Heritage Month (March) and St. Patrick's Day (March 17): 2012

Tuesday, January 24, 2012

Irish-American Heritage Month (March) and St. Patrick's Day (March 17): 2012 Originally a religious holiday to honor St. ... [Read More](#)

### Facts for Features: Super Bowl XLVI

Tuesday, January 24, 2012

Super Bowl XLVI Super Bowl XLVI will be played Feb. 5 at Lucas Oil

We changed our homepage  
 Tell us what you think

## Stat of the Day

### American Indian And Alaska Natives

As of the 2010 Census, the nation's population of American Indians and Alaska Natives was 5.2 million,

## 2010 Census Brief

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**PROFILE AMERICA FORUM**  
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### Advance Monthly Retail Sales

December 2011 Report  
Released 8:30 AM EST, 1/12/12

**\$400.6 B**

\*  
 0.1%

[View All](#)

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## Resources for Understanding Census Bureau Geography

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### Hierarchical Diagrams of Census Bureau Geography

- American Indian Area/Alaska Native Area/Hawaiian Home Lands diagram [\[PDF\]](#)
- Census Bureau Legal and Statistical Geographic Entities [\[PDF\]](#)

### Census Regions and Divisions of the United States

- [\[PDF\]](#) or [\[Text\]](#)

### Geographic Glossaries and Guides

- Geographic Terms and Concepts
  - 2010 [\[PDF\]](#) [\[HTML\]](#)
  - 2008 [\[PDF\]](#) [\[TXT\]](#)
  - 2000 [\[PDF\]](#) [\[HTML\]](#)
- [Guide to State and Local Census Geography](#)
- [2007 Economic Census Geography Definitions](#)
- [Geographic Changes for Census 2000 + Glossary](#)
- [Geographic Areas Reference Manual \(GARM\) \(1990 Census\)](#)

## Geography Related Census Blog Postings

- [Mapping the 2010 Census](#)
- [U.S. Census Bureau Releases 2010 Guide to State and Local Census Geography](#)
- [What Are Census Blocks?](#)
- [Why Geography Is Important](#)

## Geographic Area Criteria, Geographic Codes and Census Tract Resources

- [Urban and Rural Classification](#)
  - 2010, 2000 and 1990 Census Federal Register Notices; Urban Area Files; Urban Cluster Files; Major Airports
- [County Adjacency File](#)
- [2008 County Subdivision and Place Information](#)
- [Census Tract Locating Resources](#)
- [American National Standards Institute \(ANSI\) Codes](#) (formerly FIPS)
- [Metropolitan and Micropolitan Statistical Areas](#)
- [ZCTAs™ \(ZIP Code® Tabulation Areas\)](#)
  - Area representations of USPS ZIP Code service areas.
- [U.S. Postal Service ZIP Code data](#)
  - Information on the Census Bureau's position regarding ZIP Code data

# 2010 Census Geographic Terms and Concepts

This site provides definitions of geographic terms and concepts as well as a description of the different methods used to present information for geographic entities in U.S. Census Bureau data products. The site contains definitions for all geographic area terms and concepts recognized by the Census Bureau and that may appear in any Census Bureau product presenting demographic and housing data (geographic terms and concepts unique to the economic census and other specialized surveys and censuses are not included in this document).

**The inclusion of a particular term or concept on this site does not imply that data for that geographic entity or attribute appear in each data product.** For instance, data for tribal census tracts and tribal block groups will appear only in products providing data according to the American Indian Nation-based geographic hierarchy (see the [American Indian Area/Alaska Native Area/Hawaiian Home Lands Hierarchy Diagram](#) [PDF]). As another example, because urban areas are defined on the basis of decennial census population counts, data for urban areas do not appear in initial decennial census data products. In addition, the description of both the hierarchical and inventory approaches to presenting data for geographic entities does not imply that both formats are used in each data product.

The information contained in this site is also available in a [printer-friendly PDF version](#).

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[A](#) | [B](#) | [C](#) | [D](#) | [E](#) | [F](#) | [G](#) | [H](#) | [I](#) | [J](#) | [K](#) | [L](#) | [M](#) | [N](#) | [O](#) | [P](#) | [Q](#) | [R](#) | [S](#) | [T](#) | [U](#) | [V](#) | [W](#) | [X](#) | [Y](#) | [Z](#)

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## A

- Alaska Native Regional Corporation (ANRC) (see [American Indian, Alaska Native, Native Hawaiian Area](#))
- Alaska Native Village (ANV) (see [American Indian, Alaska Native, Native Hawaiian Area](#))



# Geographic Areas Reference Manual

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The Geographic Areas Reference Manual describes in great detail the basic geographic entities the Census Bureau uses in its various data tabulations and documents the purposes, definitions, standards, criteria, and procedures used to select, define, delineate, and revise these geographic entities.

Since the publication of the GARM in November 1994, there have been two major changes in geographic areas for Census 2000:

- The Census Bureau will no longer include the Republic of Palau in U. S. censuses because it is an independent state.
- All entities referred to as "block numbering areas" (BNAs) in 1990 will become census tracts.

If you have any questions about this or any other information on changes in geographic areas for Census 2000, please contact the Geographic Standards and Criteria Branch, Geography Division, U.S. Census Bureau, Washington, DC 20233-7400, telephone (301) 763-3056.

[PDF] or  denotes a file in Adobe's [Portable Document Format](#). To view the file, you will need the [Adobe® Reader®](#)  available **free** from Adobe.

## View or Download the Geographic Areas Reference Manual files:

- [Table of Contents](#) (500K)
- [Chapter 1](#) - Census Bureau Geography (473K)
- [Chapter 2](#) - Geographic Overview (623K)
- [Chapter 3](#) - Local Census Statistical Areas Committees and Other Local Assistance (406K)
- [Chapter 4](#) - States, Counties, and Statistically Equivalent Entities (2M)
- [Chapter 5](#) - American Indian and Alaska Native Areas (515K)
- [Chapter 6](#) - Statistical Groupings of States and Counties (2M)
- [Chapter 7](#) - Puerto Rico and the Outlying Areas (11M)
- [Chapter 8](#) - County Subdivisions (1M)

## TIGER Products

### Topologically Integrated Geographic Encoding and Referencing system

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The Census Bureau offers several file types for mapping census geographic data based on data found in our MAF/TIGER database.

#### [TIGER/Line Shapefiles & Files](#)

- Our most comprehensive dataset, including boundaries, roads, address information, water features, and more
- 2011, 2010, 2009, 2008, 2007, 2006, 2000, 1992

#### [Cartographic Boundary Files](#)

- Generalized (limited detail) boundary files designed for thematic mapping
- 2010, 2000, 1990

#### [KMLs](#)

- Boundary files for use with Google Earth, Google Maps, or other similar platforms
- Generalized and Detailed boundaries
- 2010

#### [Help Me Choose...](#)

# Accessing Shapefiles

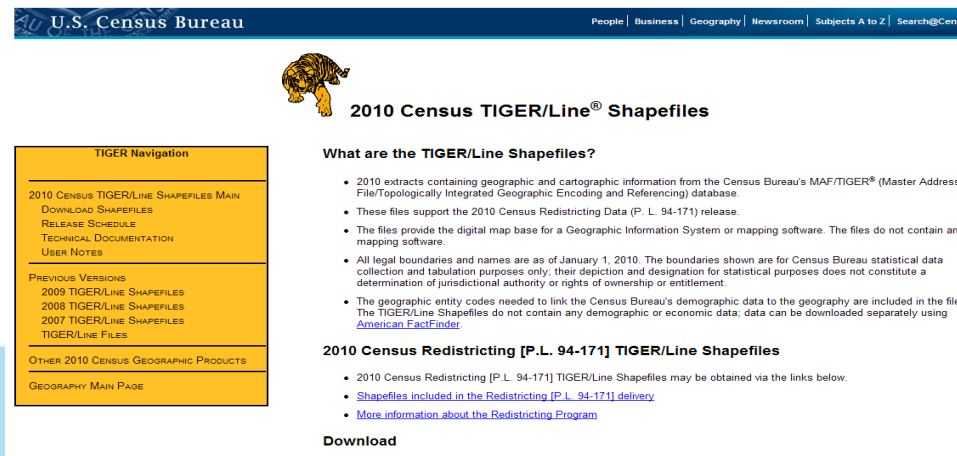
Public product created from the MAF/TIGER Data Base (MTDB)

Digital files containing geographic features, attributes, legal and statistical boundaries

Covers United States, Puerto Rico, and Island Areas

Future releases in shapefile format


[www.census.gov/geo/www/tiger/index.html](http://www.census.gov/geo/www/tiger/index.html)



The screenshot shows the U.S. Census Bureau website page for 2010 Census TIGER/Line Shapefiles. The page features a navigation menu, a tiger logo, and a main content area with a table of contents and a list of links.

U.S. Census Bureau

People | Business | Geography | Newsroom | Subjects A to Z | Search@Census

 **2010 Census TIGER/Line® Shapefiles**

TIGER Navigation
2010 CENSUS TIGER/LINE SHAPEFILES MAIN
DOWNLOAD SHAPEFILES
RELEASE SCHEDULE
TECHNICAL DOCUMENTATION
USER NOTES
PREVIOUS VERSIONS
2009 TIGER/LINE SHAPEFILES
2008 TIGER/LINE SHAPEFILES
2007 TIGER/LINE SHAPEFILES
TIGER/LINE FILES
OTHER 2010 CENSUS GEOGRAPHIC PRODUCTS
GEOGRAPHY MAIN PAGE

**What are the TIGER/Line Shapefiles?**

- 2010 extracts containing geographic and cartographic information from the Census Bureau's MAF/TIGER® (Master Address File/Topologically Integrated Geographic Encoding and Referencing) database.
- These files support the 2010 Census Redistricting Data (P. L. 94-171) release.
- The files provide the digital map base for a Geographic Information System or mapping software. The files do not contain any mapping software.
- All legal boundaries and names are as of January 1, 2010. The boundaries shown are for Census Bureau statistical data collection and tabulation purposes only; their depiction and designation for statistical purposes does not constitute a determination of jurisdictional authority or rights of ownership or entitlement.
- The geographic entity codes needed to link the Census Bureau's demographic data to the geography are included in the files. The TIGER/Line Shapefiles do not contain any demographic or economic data; data can be downloaded separately using [American FactFinder](#).

**2010 Census Redistricting [P.L. 94-171] TIGER/Line Shapefiles**

- 2010 Census Redistricting [P.L. 94-171] TIGER/Line Shapefiles may be obtained via the links below.
- [Shapefiles included in the Redistricting \[P.L. 94-171\] delivery](#)
- [More information about the Redistricting Program](#)

**Download**

## Geographic Programs

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### [2010 Census Local Update of Census Addresses \(LUCA\)](#)

The Local Update of Census Addresses program, also known as LUCA, is a decennial census geographic partnership program that will allow the Census Bureau to benefit from local knowledge in developing its Master Address File (MAF) for the 2010 Census. Tribal, state, and local governments can contribute to a more complete and accurate census for their community by reviewing and commenting on the list of housing unit and group quarters addresses that the Census Bureau will use to deliver questionnaires within their community.

### [2010 Census New Construction Program](#)

The 2010 Census New Construction program will help ensure that the U.S. Census Bureau's address list is as complete and accurate as possible by Census Day, April 1, 2010. The Census Bureau is updating its address list by field canvassing all blocks in the spring/summer of 2009. The New Construction program is the opportunity for Tribal and Local governments to submit city style mailing addresses for units constructed after the address canvassing operation. Addresses must have basic construction (closing the structure to the elements) completed by Census Day.

### [Boundary and Annexation Survey \(BAS\)](#)

Determining the inventory of legally defined entities and the correct names, legal descriptions and boundaries of counties and equivalent areas, minor civil divisions, incorporated places, American Indian reservations and American Indian off-reservation trust lands

<http://www.census.gov/geo/www/programs.html>

# Geographic Products and Information

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## Products at a Glance

- An overview of 2010 Census geographic and cartographic products, including planned release dates [\[PDF\]](#) [\[TXT\]](#)

## Reference Information

- Block Assignment Files
  - [Block Assignment Files](#)
  - [Name Look-Up Tables](#)
- [Geographic Terms and Concepts](#)
- Hierarchy Diagrams
  - American Indian Area/Alaska Native Area/Hawaiian Home Lands [\[PDF\]](#)
  - Census Bureau Legal and Statistical Geographic Entities [\[PDF\]](#)
- New Incorporations (2000 - 2010) [\[Excel\]](#) [\[TXT\]](#)
- [State Area Measurements and Internal Point Coordinates](#)
- [Urban Area Information](#)

## Maps

- **Reference**
  - [2010 Census Local Census Offices with Type of Enumeration Areas](#)
- **Thematic**
  - [2010 Census Total Population and Population Change Maps](#)

## Relationship Files

- [Block Relationship Files](#)

## Tallies of Geographic Entities

- [Gazetteer Files](#)
- [Geographic Tallies by Entity Type](#)
- [Geographic Tallies by State](#)
- [Tallies of Census Blocks by State or State Equivalent](#)
- Changes in Number of Census Blocks Between 2000 and 2010 [\[PDF\]](#) [\[TXT\]](#)

## TIGER/Line Shapefiles

- [2010 TIGER/Line Shapefiles](#)



Pan



Legend



Help



Map Content



- ▶  Labels
- ▶  Transportation (Roads and Railroads)
- ▶  Tribal Census Tracts and Block Groups
- ▶  Census Tracts and Blocks
- ▶  Military Installations
- ▶  School Districts
- ▶  Places and County Subdivisions
- ▶  American Indian, Alaska Native, and Native Hawaiian Areas
- ▶  Legislative Areas
- ▶  Census Regions and Divisions
- ▶  Urban Areas - Census 2000
- ▶  Metropolitan and Micropolitan Statistical Areas and Related Statistical Areas



United States Census 2010  
 TIGERweb (beta)  
 Geography Division

4005 1005 1006 1007 1001 1000 107 1032 2002 1031 1033 1032 1026 1017 101 1029 BG 1 1018 1028 1027 1026 BG 2 2007 1017 1029 BG 1 1028

1036 1030 1021 1020 1031 1036 1035 1029 1028 1034 1033 BG 1 1038 1033 1026 1037 1039 1040 1027 1042 1041 1079 1078 1046 2021 2022 1252 1251 1063

Map Content

- ▶  Tribal Census Tracts and Block Groups
- ▶  Census Tracts and Blocks
- ▶  Military Installations
- ▶  School Districts
- ▶  Places and County Subdivisions
- ▶  American Indian, Alaska Native, and Native Hawaiian Areas
- ▶  Legislative Areas
- ▶  Census Regions and Divisions
- ▶  Urban Areas - Census 2000
- ▶  Metropolitan and Micropolitan Statistical Areas and Related Statistical Areas
- ▶  Hydrography
- ▶  States and Counties

OF COLUMBIA

62.02

58

1027 Legend

# MTDB

## (MAF/TIGER Database)

**Geographic information** (roads, rivers, railroads, map spots, map features)

**Attributes** (names, addresses, codes)

**Legal and Statistical Boundaries** for data collection, processing and tabulation operations



# Questions?

**Geographic area concepts, criteria,  
codes, and attributes:**

Geographic Standards  
and Criteria Branch: 301-763-3056

**Geographic products:**

Geographic Products Branch: 301-763-1128