US Census Bureau Geographic Entities and Concepts

Geography Division

United States Census Bureau

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

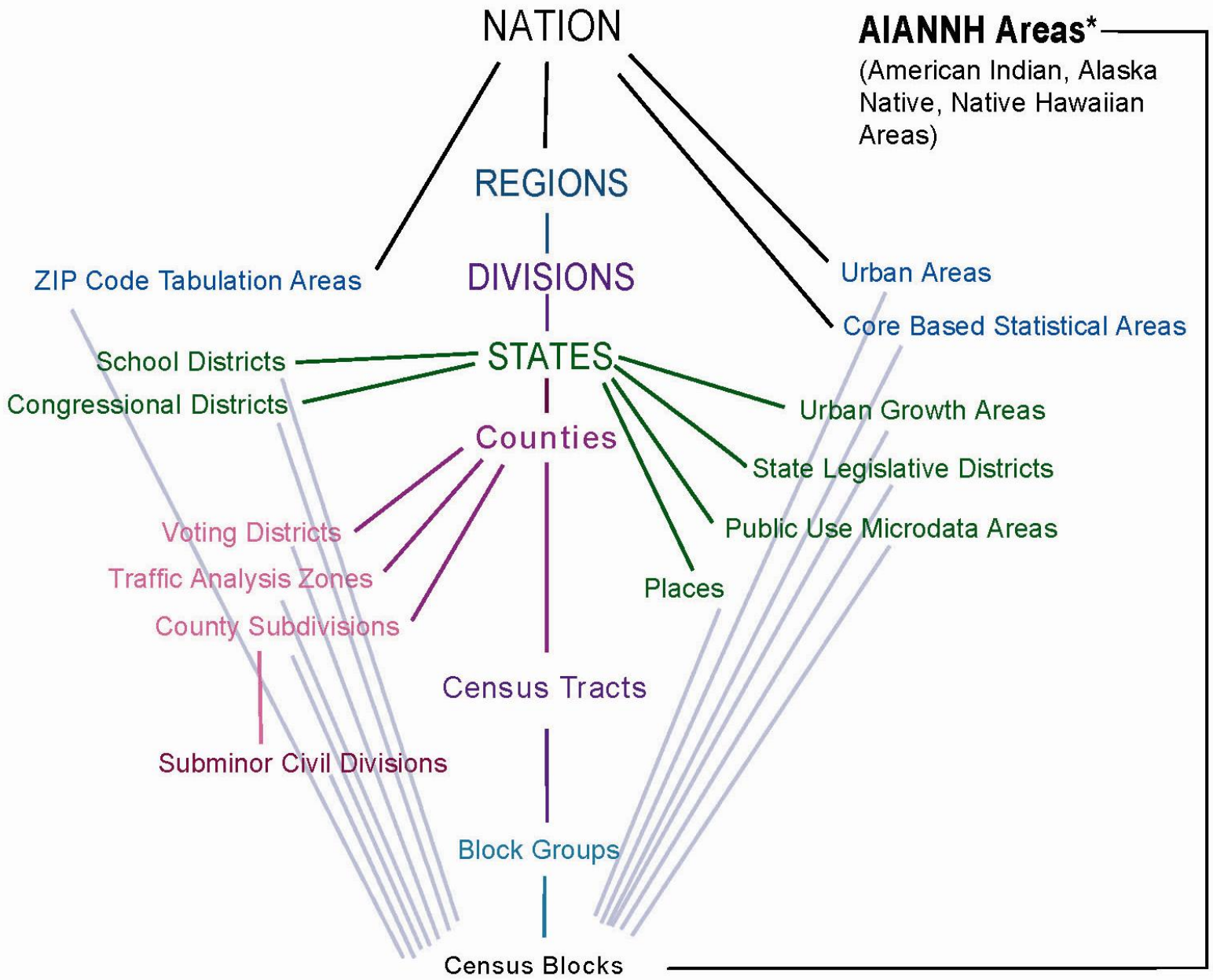
Geographic Entities

Legal/Administrative

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

Statistical

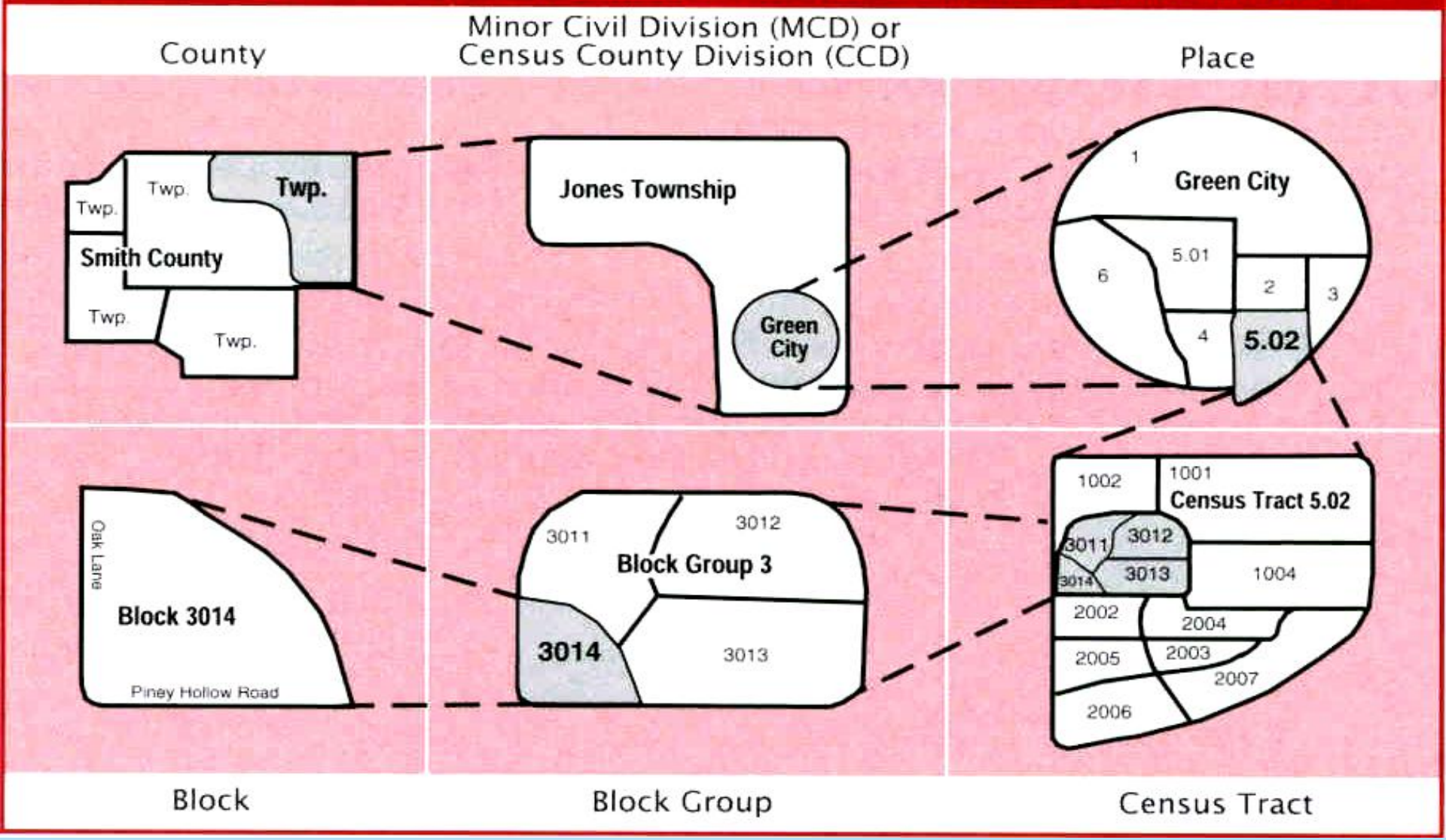
- Census tracts
- Metropolitan/Micropolitan statistical areas
- Urban areas
- Census designated places



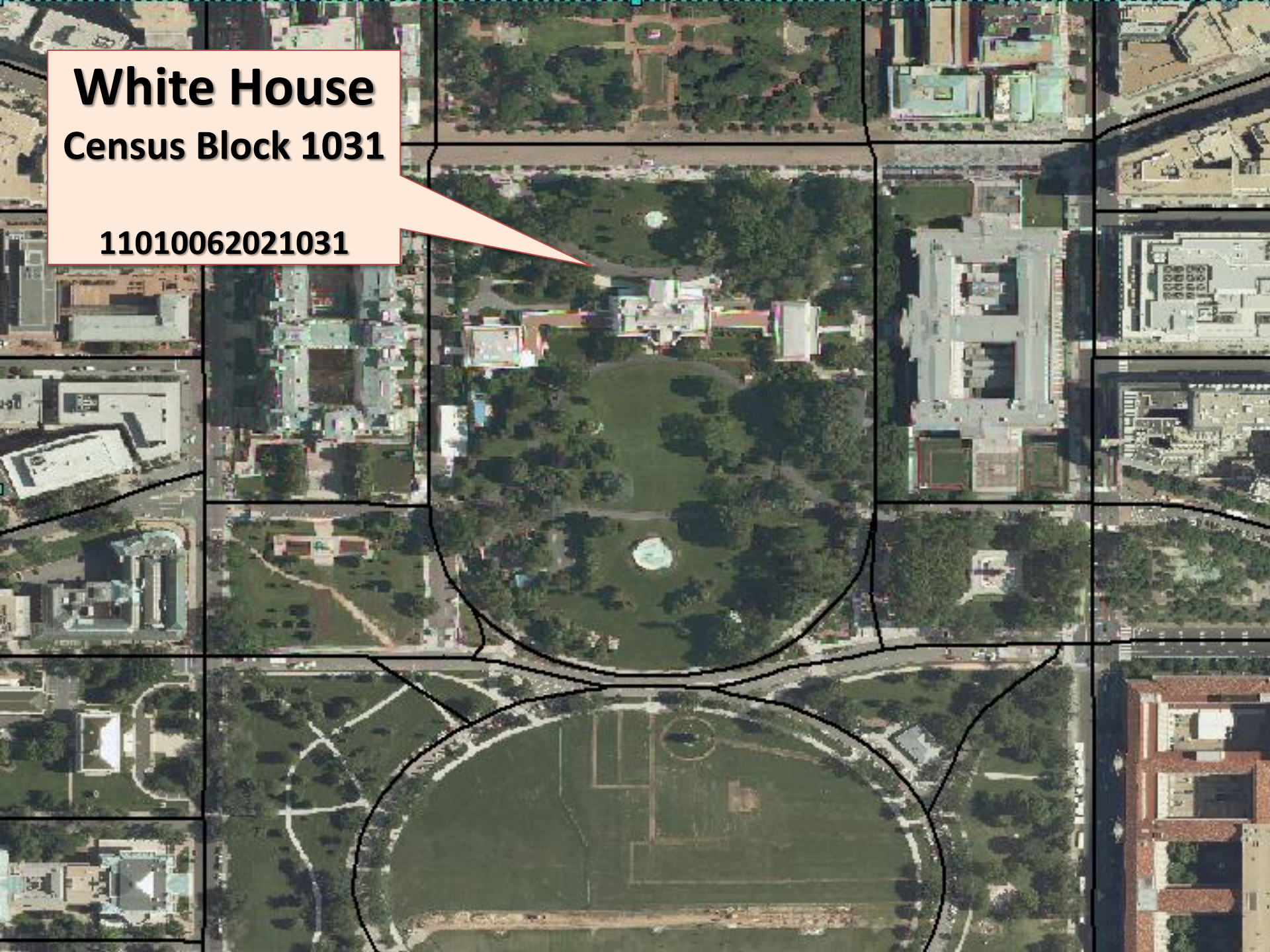
Hierarchy of Census Geographic Entities

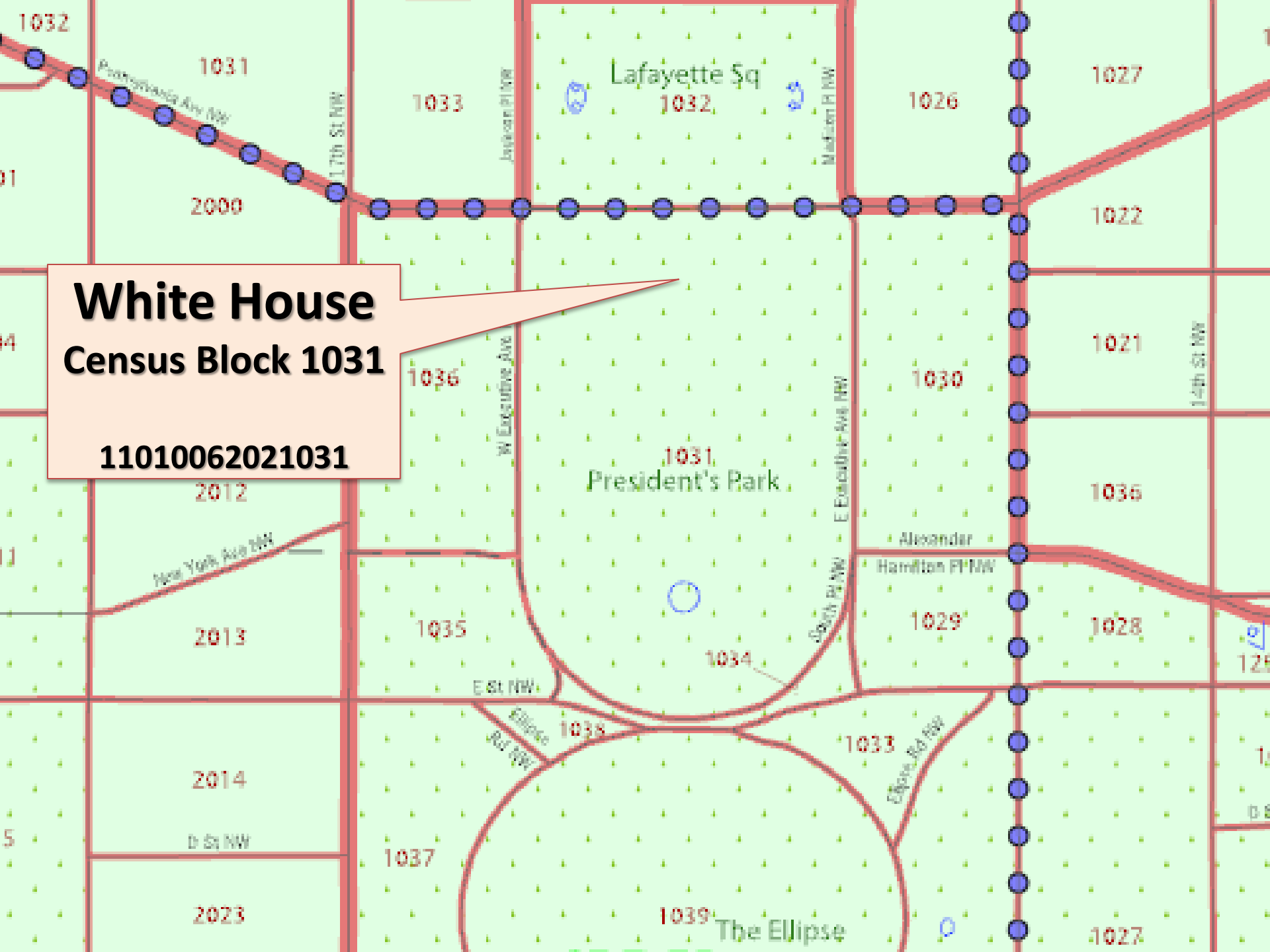
Census Small-Area Geography

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



United States Census Bureau


White House
Census Block 1031
11010062021031


White House
Census Block 1031
11010062021031
Lafayette Sq
1032
1031
President's Park
1034
1035
1036
1037
1038
1039
The Ellipse
1033
1026
1027
1022
1021
1030
1029
1028
2000
2012
2013
2014
2023
Pennsylvania Ave NW
17th St NW
Jackson Pl NW
Madison Pl NW
W Executive Ave
E Executive Ave NW
14th St NW
New York Ave NW
Alexander Hamilton Pl NW
South Pl NW
E St NW
Ellipse Rd NW
D St NW

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

United States Census Bureau

Small Geographic Areas

Census Tracts

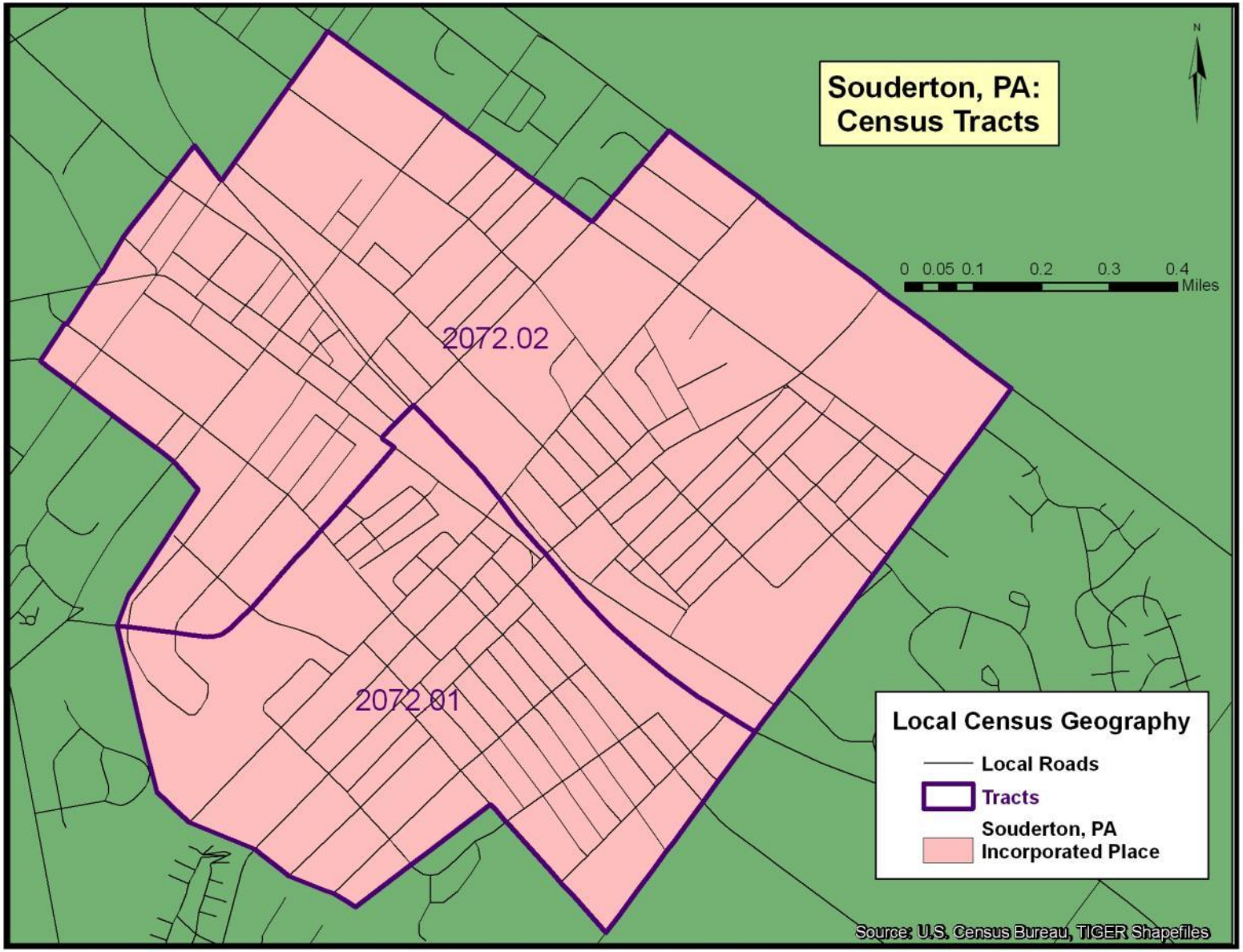
- Small, permanent, consistent statistical divisions of a county
- Optimally contains 4,000 people; range between 1,200 and 8,000

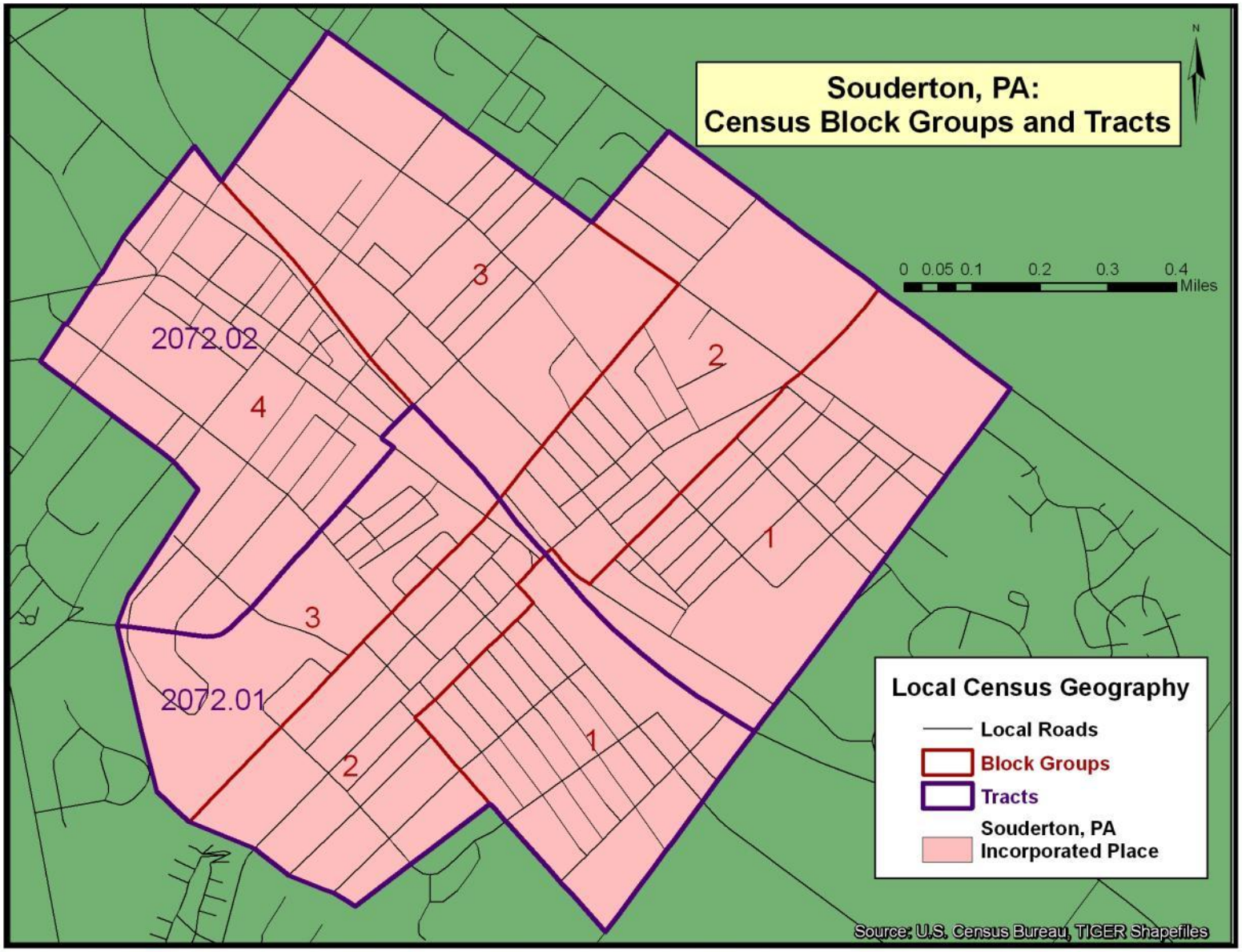
Block Groups

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

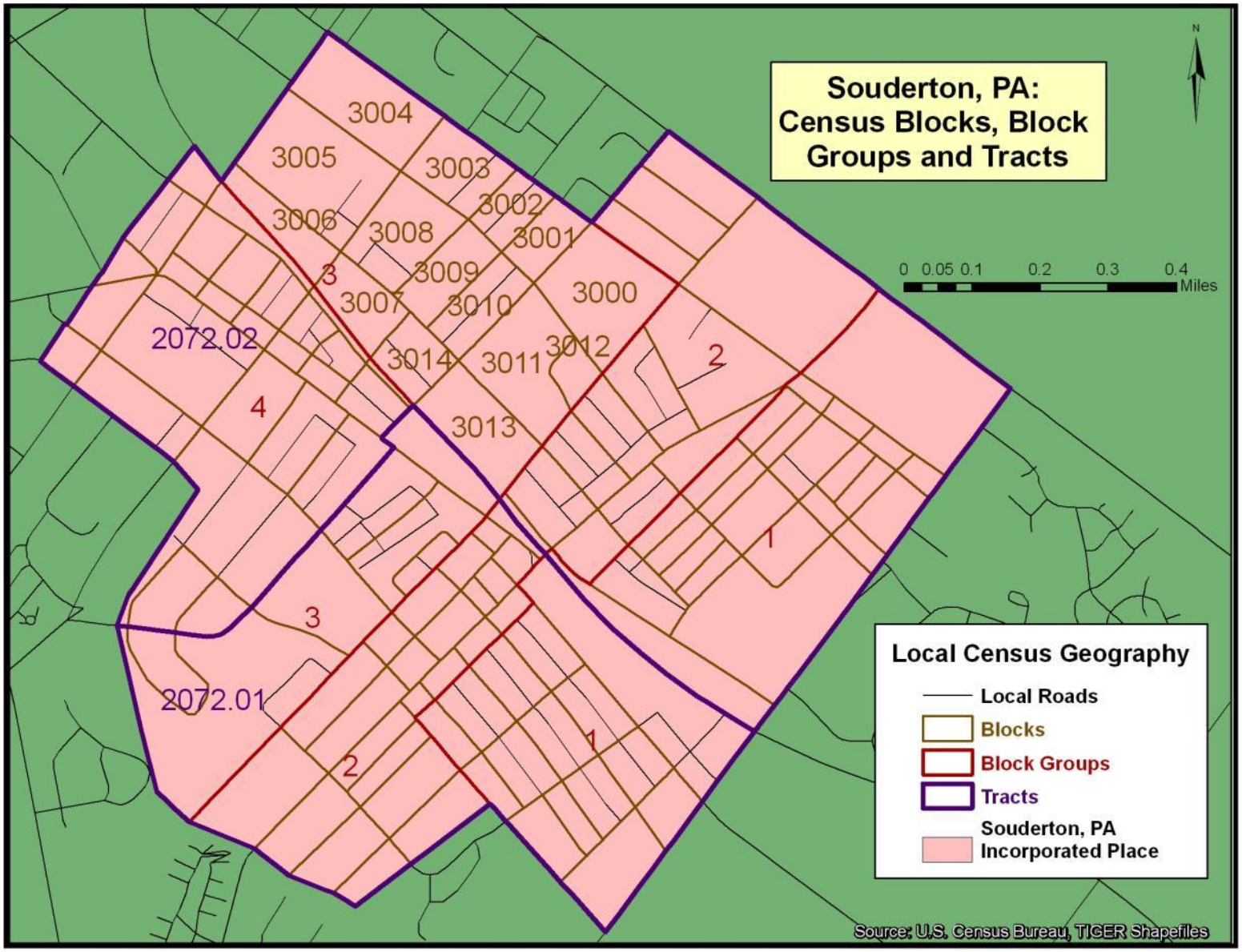
Blocks

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


Souderton, PA:
Census Tracts
N
0 0.05 0.1 0.2 0.3 0.4
Miles
2072.02
2072.01
Local Census Geography
Local Roads
Tracts
Souderton, PA
Incorporated Place
Source: U.S. Census Bureau, TIGER Shapefiles



United States Census Bureau


Souderton, PA:
Census Blocks, Block Groups and Tracts
N
0 0.05 0.1 0.2 0.3 0.4
Miles
3004
3005
3003
3002
3006
3008
3001
3
3009
3000
3007
3010
2072.02
3014
3011
3012
2
4
3013
1
3
2072.01
2
1
Local Census Geography
Local Roads
Blocks
Block Groups
Tracts
Souderton, PA
Incorporated Place
Source: U.S. Census Bureau, TIGER Shapefiles

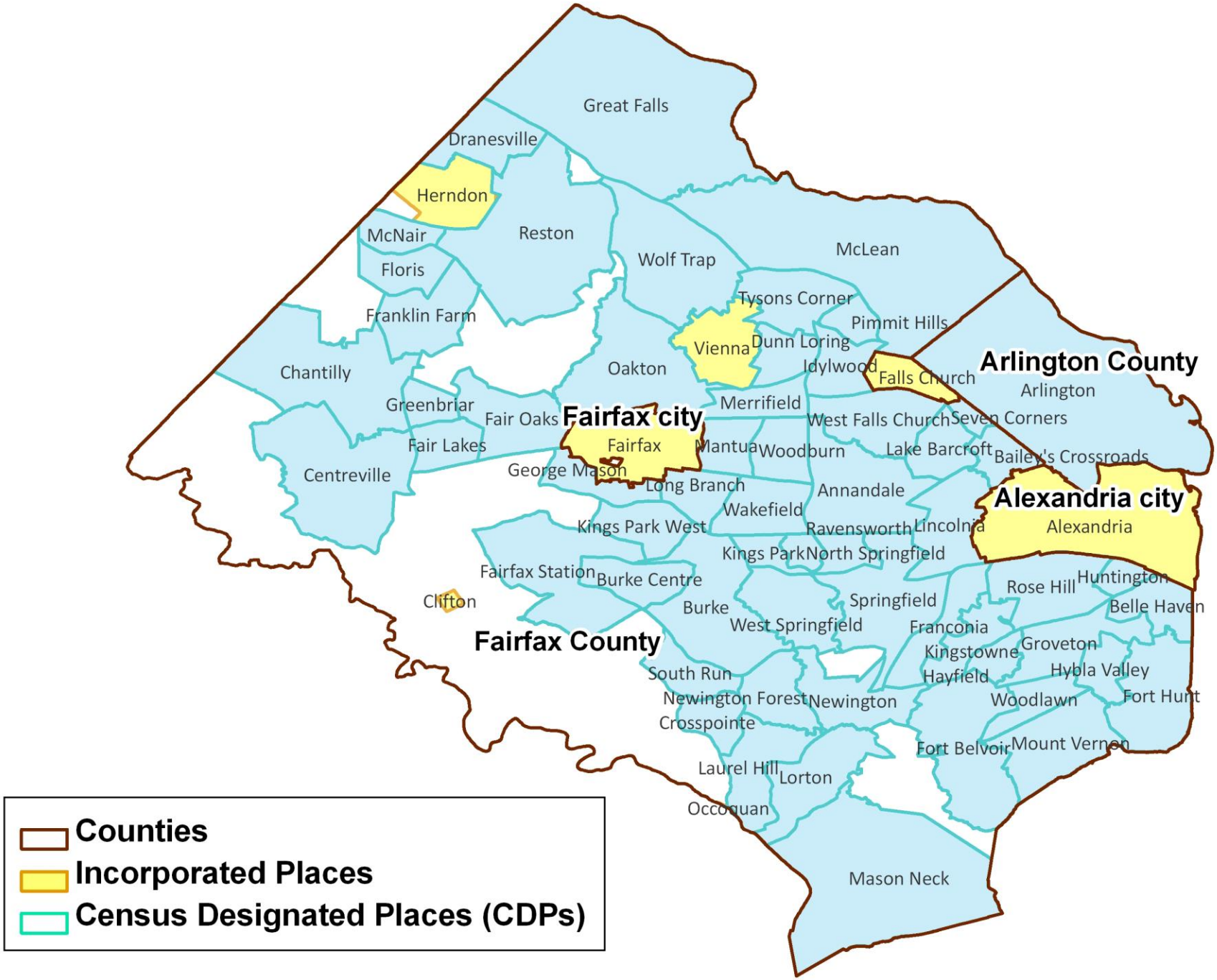
Places

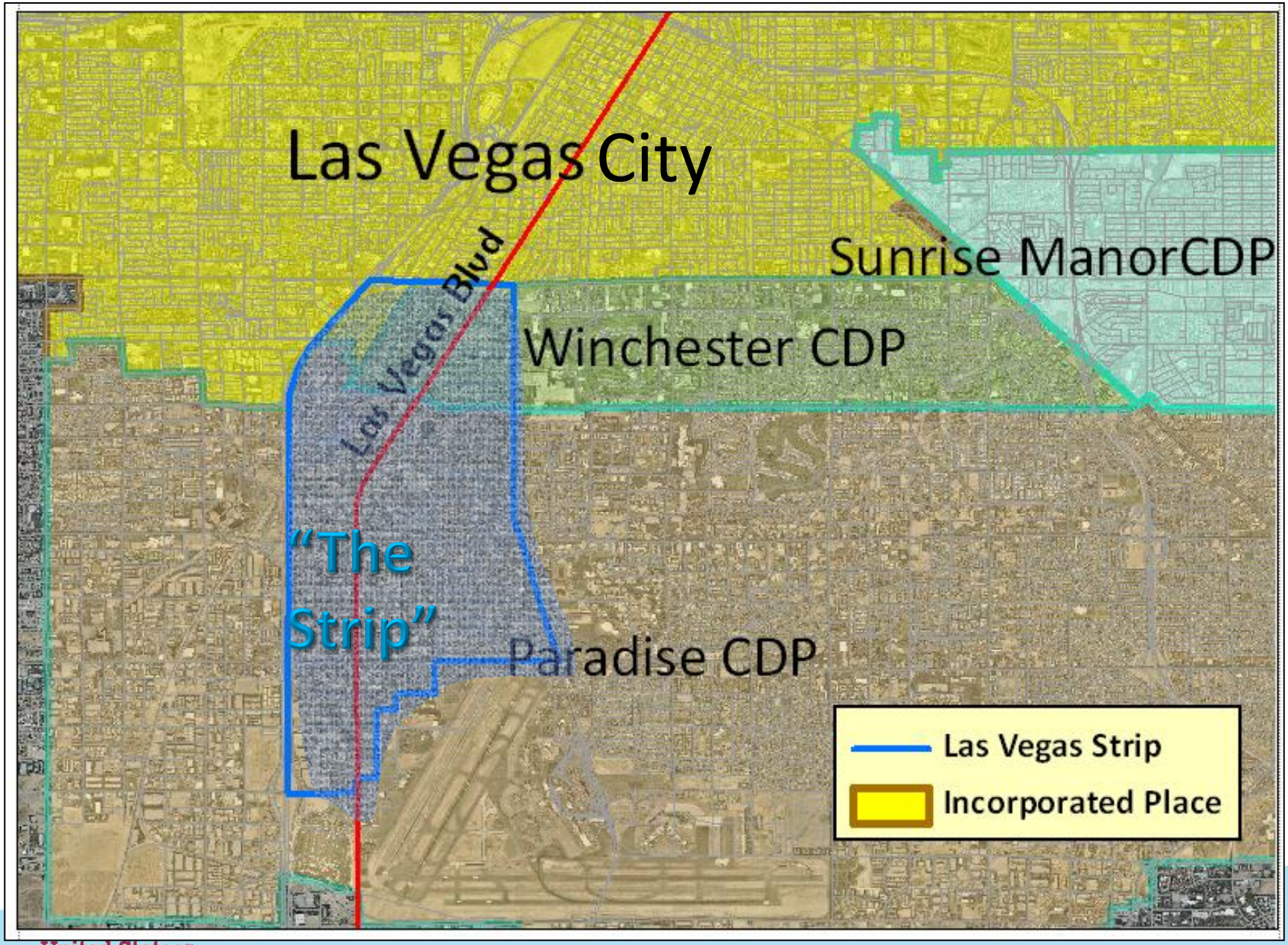
Incorporated Places

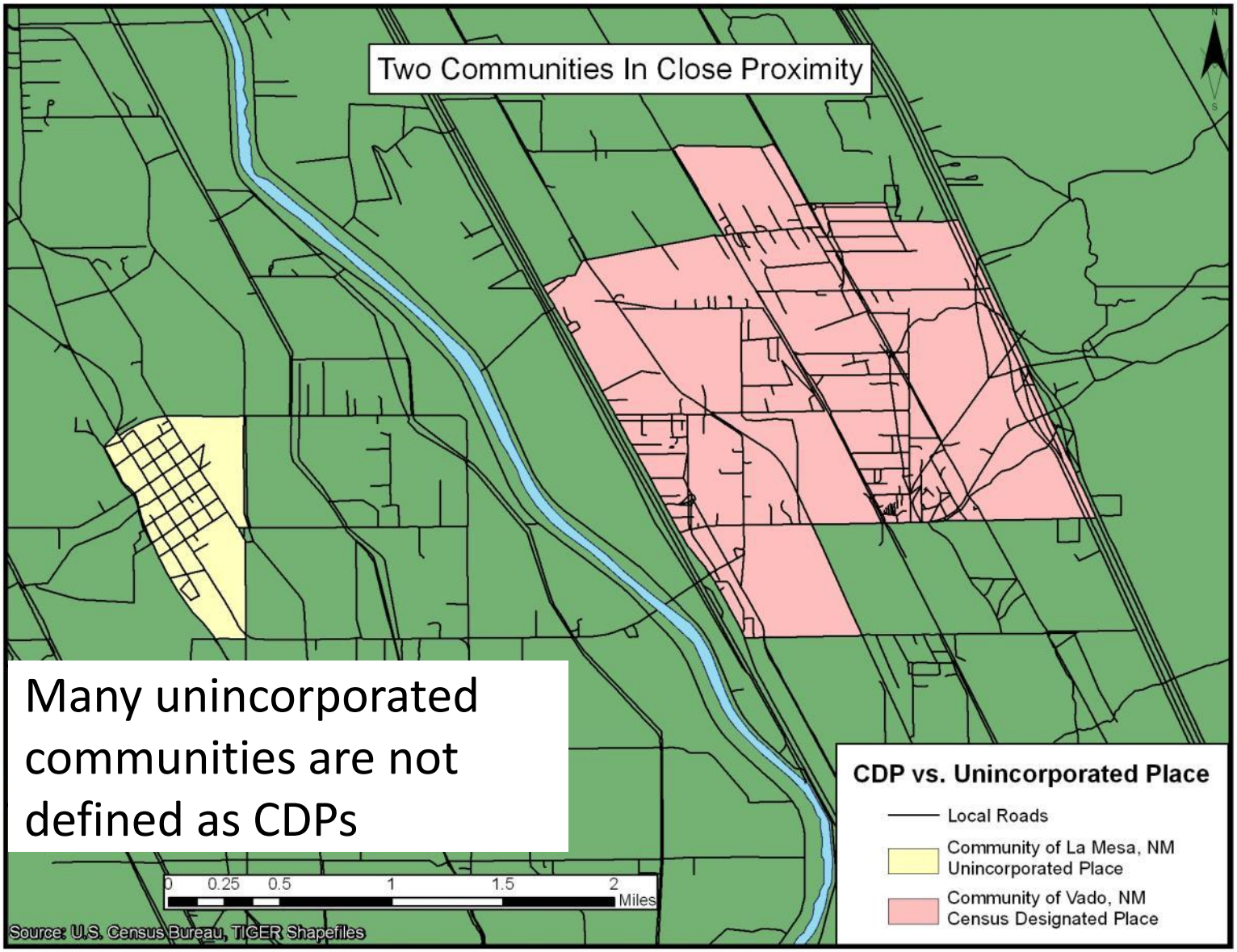
- Legally bounded entity
- Referred to as cities, boroughs, towns, or villages, depending on the state
- Some form of local governance (city council, mayor, etc) recognized by the state

Census Designated Places (CDPs)

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


Great Falls
Dranesville
Herndon
McNair
Reston
Floris
Wolf Trap
McLean
Tysons Corner
Franklin Farm
Pimmit Hills
Vienna
Dunn Loring
Idylwood
Falls Church
Arlington County
Arlington
Chantilly
Oakton
Greenbriar
Merrifield
Fair Oaks
Fairfax city
West Falls Church
Seven Corners
Fair Lakes
Fairfax
Mantua
Woodburn
Lake Barcroft
Bailey's Crossroads
Centreville
George Mason
Long Branch
Annandale
Alexandria city
Wakefield
Alexandria
Kings Park West
Ravensworth
Lincolnia
Kings Park
North Springfield
Fairfax Station
Burke Centre
Rose Hill
Huntington
Clifton
Burke
Springfield
Belle Haven
West Springfield
Franconia
Fairfax County
Kingstowne
Groveton
Hayfield
Hybla Valley
South Run
Newington Forest
Newington
Woodlawn
Fort Hunt
Crosspointe
Fort Belvoir
Mount Vernon
Laurel Hill
Lorton
Occoquan
Mason Neck
Counties
Incorporated Places
Census Designated Places (CDPs)


Las Vegas City
Sunrise ManorCDP
Winchester CDP
Las Vegas Blvd
"The Strip"
Paradise CDP
Las Vegas Strip
Incorporated Place



Many unincorporated communities are not defined as CDPs

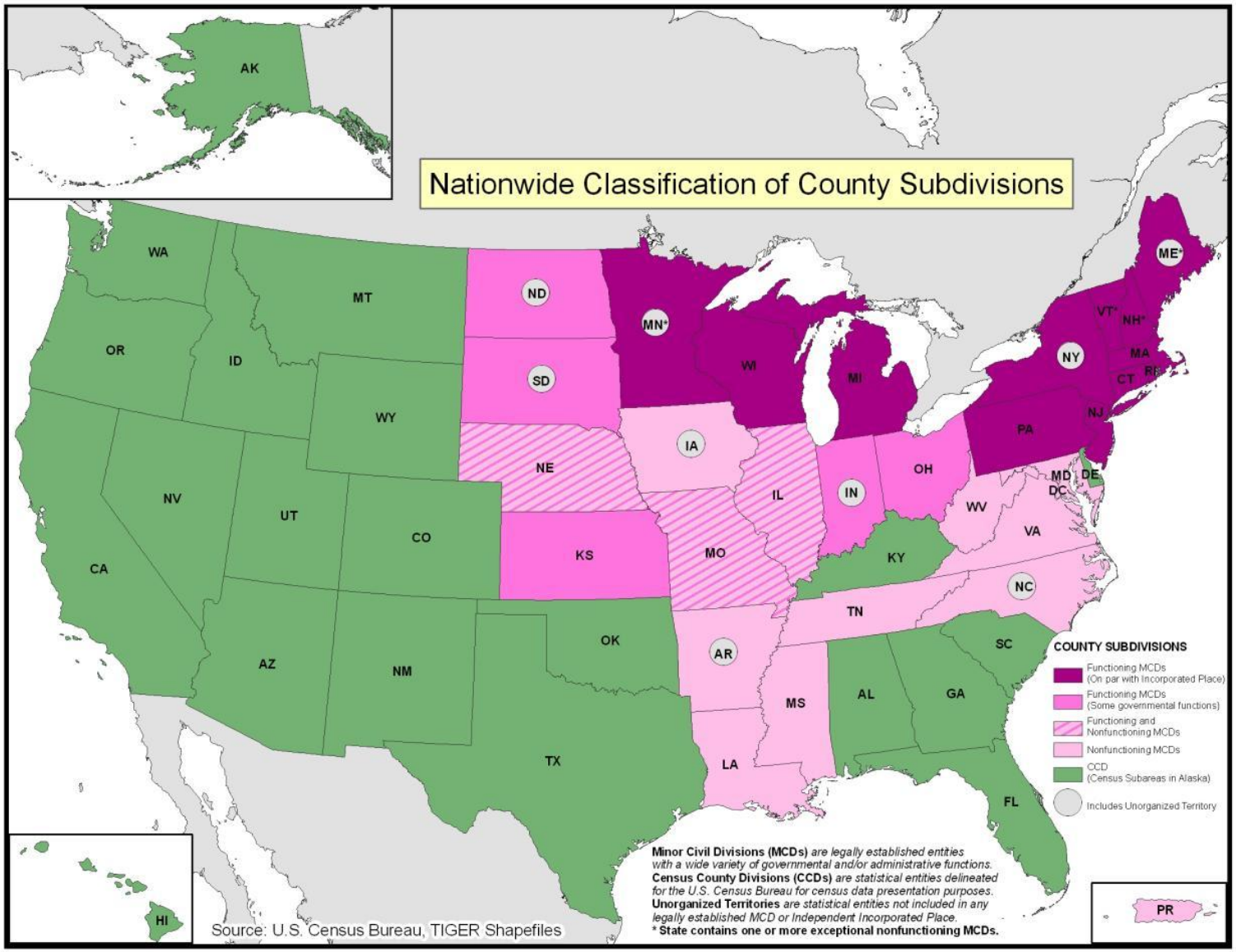
County Subdivisions

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)

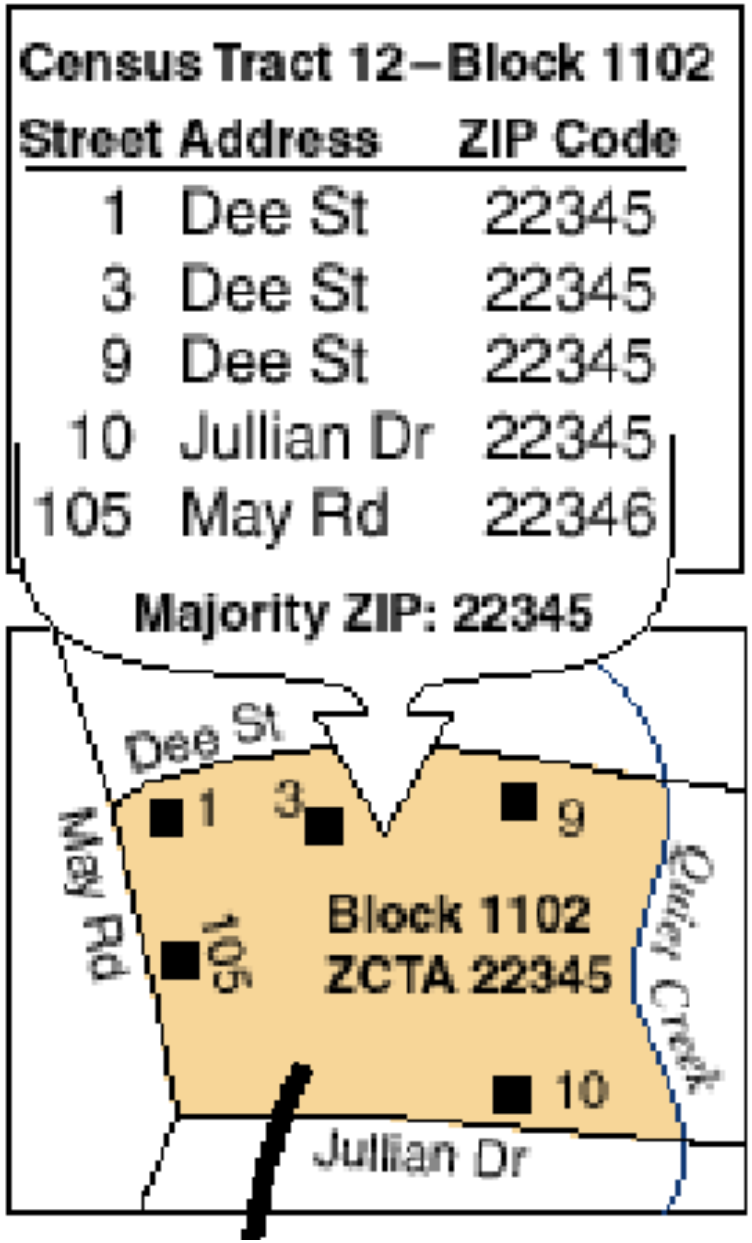
- Statistical entity
- Subcounty units that have stable boundaries and recognizable names in 21 states
- No minimum or maximum population guidelines


Nationwide Classification of County Subdivisions
AK
WA
OR
CA
ID
NV
MT
WY
UT
AZ
CO
NM
ND
SD
NE
KS
OK
TX
MN*
IA
MO
AR
LA
WI
IL
MS
MI
IN
KY
TN
AL
OH
WV
GA
FL
SC
NC
VA
PA
NY
MD
DC
DE
NJ
CT
RI
MA
VT*
NH*
ME*
HI
PR
COUNTY SUBDIVISIONS
Functioning MCDs (On par with Incorporated Place)
Functioning MCDs (Some governmental functions)
Functioning and Nonfunctioning MCDs
Nonfunctioning MCDs
CCD (Census Subareas in Alaska)
Includes Unorganized Territory
Minor Civil Divisions (MCDs) are legally established entities with a wide variety of governmental and/or administrative functions.
Census County Divisions (CCDs) are statistical entities delineated for the U.S. Census Bureau for census data presentation purposes.
Unorganized Territories are statistical entities not included in any legally established MCD or Independent Incorporated Place.
* State contains one or more exceptional nonfunctioning MCDs.
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

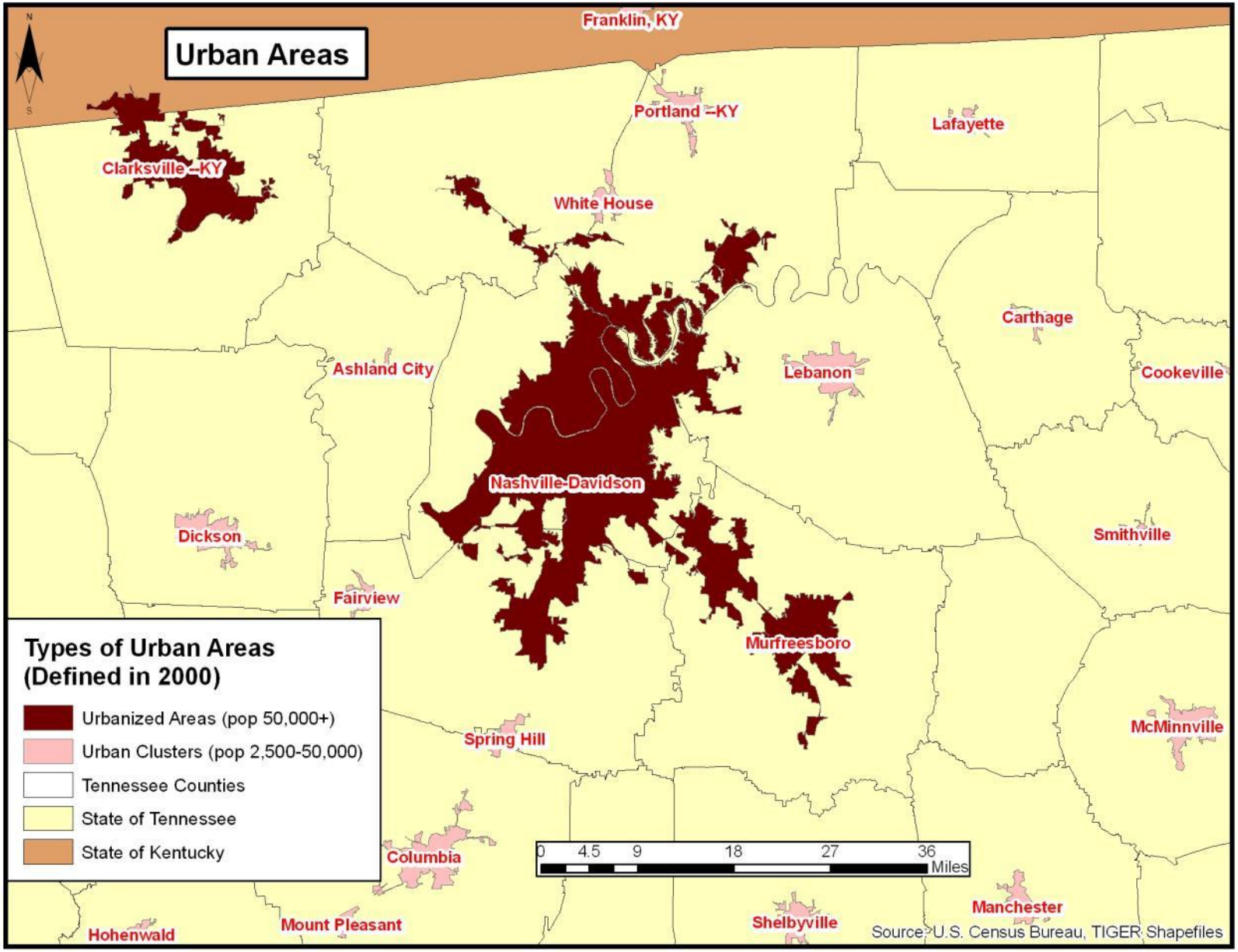
Two types of Urban Areas:

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


Urban Areas
Franklin, KY
Portland --KY
Lafayette
Clarksville --KY
White House
Carthage
Ashland City
Lebanon
Cookeville
Nashville-Davidson
Dickson
Smithville
Fairview
Murfreesboro
Types of Urban Areas
(Defined in 2000)
Urbanized Areas (pop 50,000+)
Urban Clusters (pop 2,500-50,000)
Tennessee Counties
State of Tennessee
State of Kentucky
Spring Hill
McMinnville
Columbia
0 4.5 9 18 27 36
Miles
Manchester
Hohenwald
Mount Pleasant
Shelbyville
Source: U.S. Census Bureau, TIGER Shapefiles

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

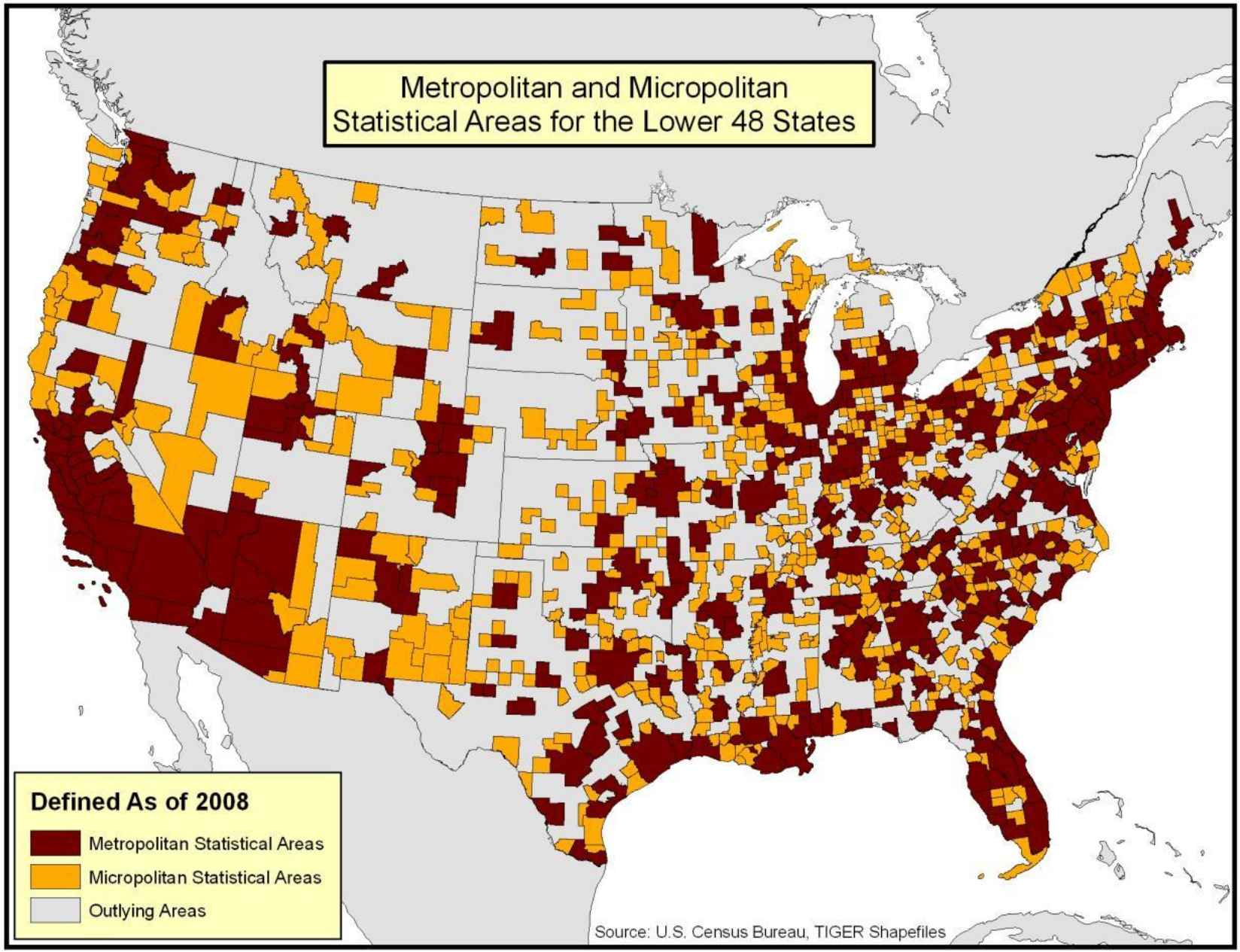
- Metropolitan Statistical Area - must have at least one UA

- Micropolitan Statistical Area - must have at least one UC with a population of at least 10,000

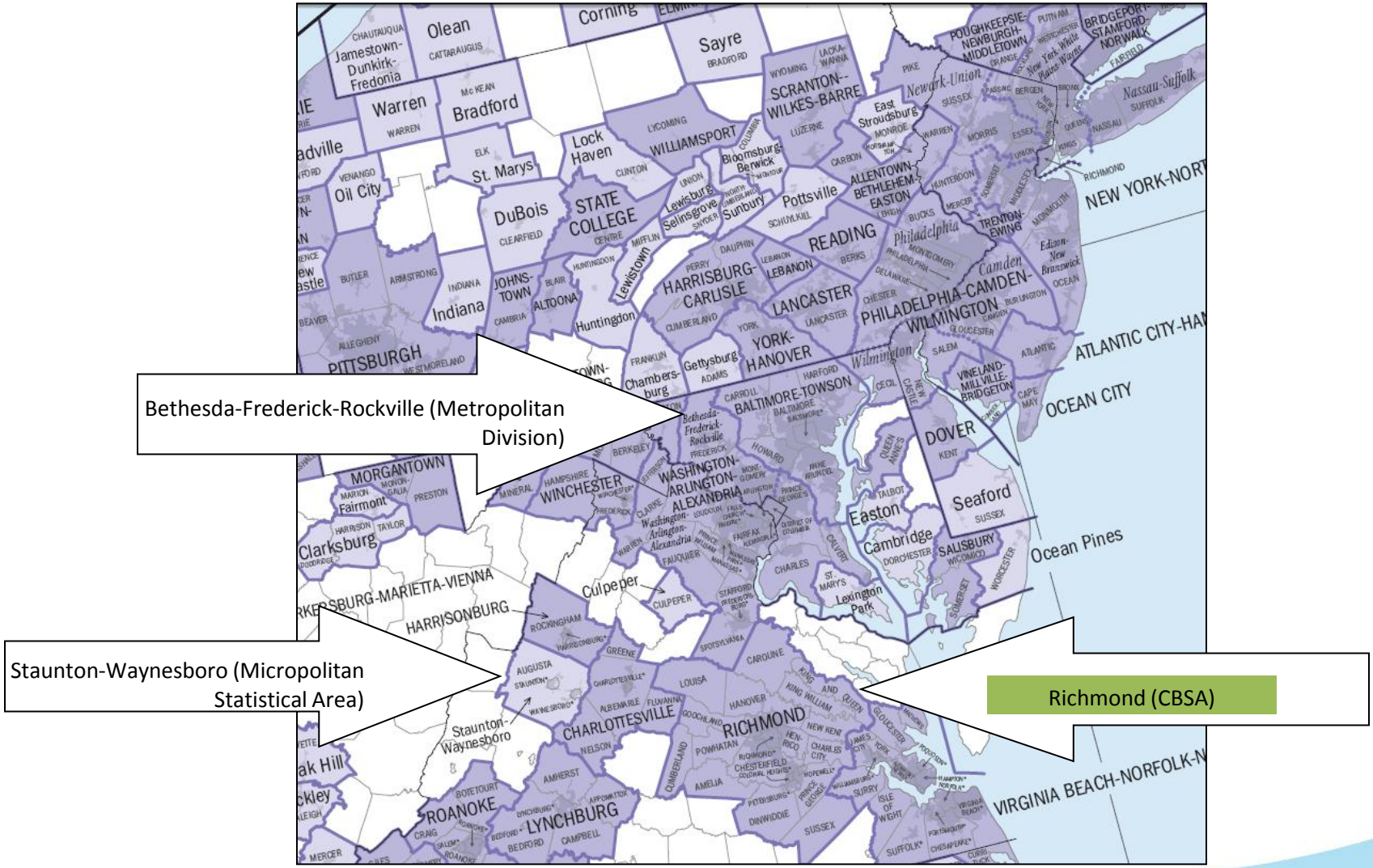
- Metropolitan Division – subdivision of a metropolitan statistical area

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



- 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

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

< 1 2 3 4 5 6 >

Economic Indicators

uction 12	657,000 Housing starts	-4.1% *
12	$-47.8 B	10.4%
2/12	$1,550.1 B	0.3%
Advance Monthly Retail Sales December 2011 Report *Released 8:30 AM EST, 1/12/12*	$400.6 B	0.1% *

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 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

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

< 1 2 3 4 5 6 >

Economic Indicators

uction 12	657,000 Housing starts	-4.1% *
12	$-47.8 B	10.4%
2/12	$1,550.1 B	0.3%
Advance Monthly Retail Sales December 2011 Report *Released 8:30 AM EST, 1/12/12*	$400.6 B	0.1% *

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,

Resources for Understanding Census Bureau Geography

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)

http://www.census.gov/geo/www/reference.html

Most Visited | Getting Started | Latest Headlines

Resources for Understanding 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

United States Census Bureau

http://www.census.gov/geo/www/reference.html

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.

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

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

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

---

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

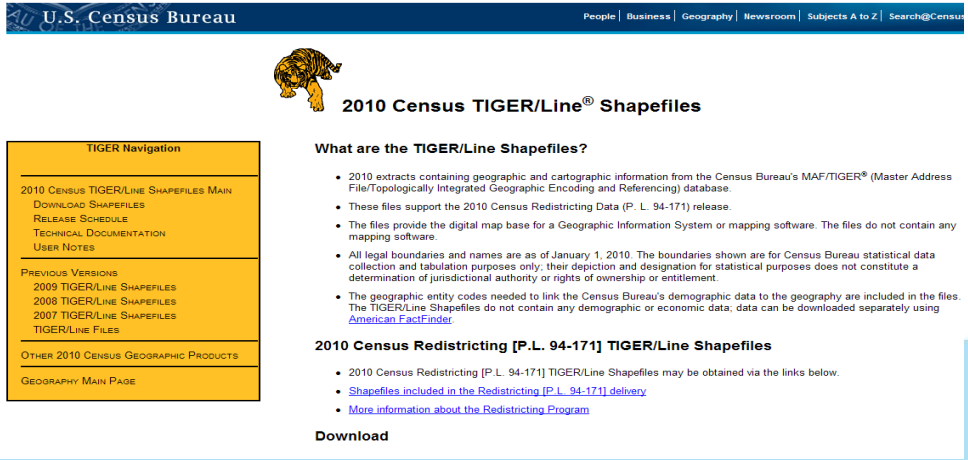
Public product created from the MAF/TIGER Data Base (MTDB)

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



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

United States Census Bureau

Geographic Programs

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

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

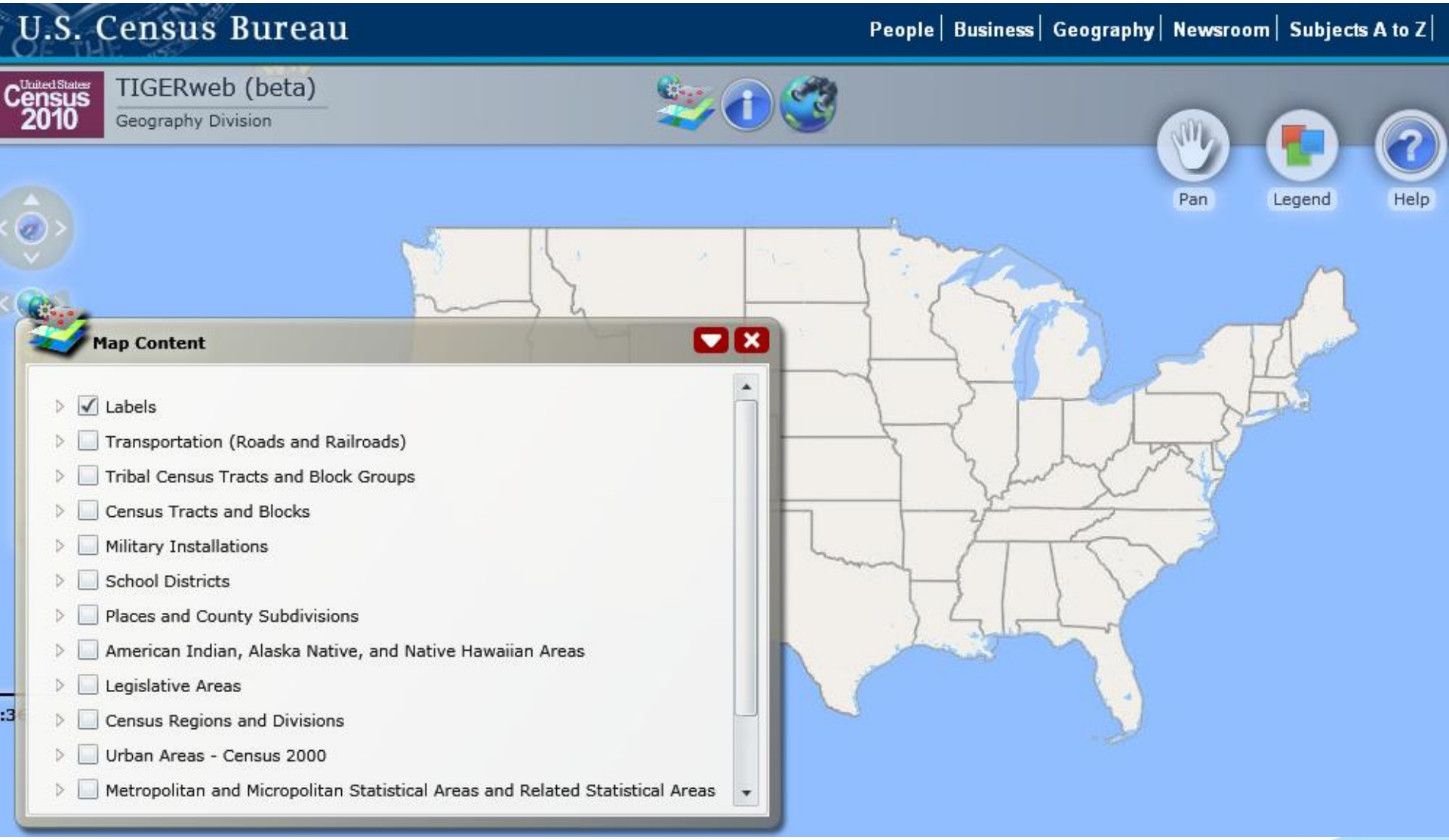
Tallies of Geographic Entities

- 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

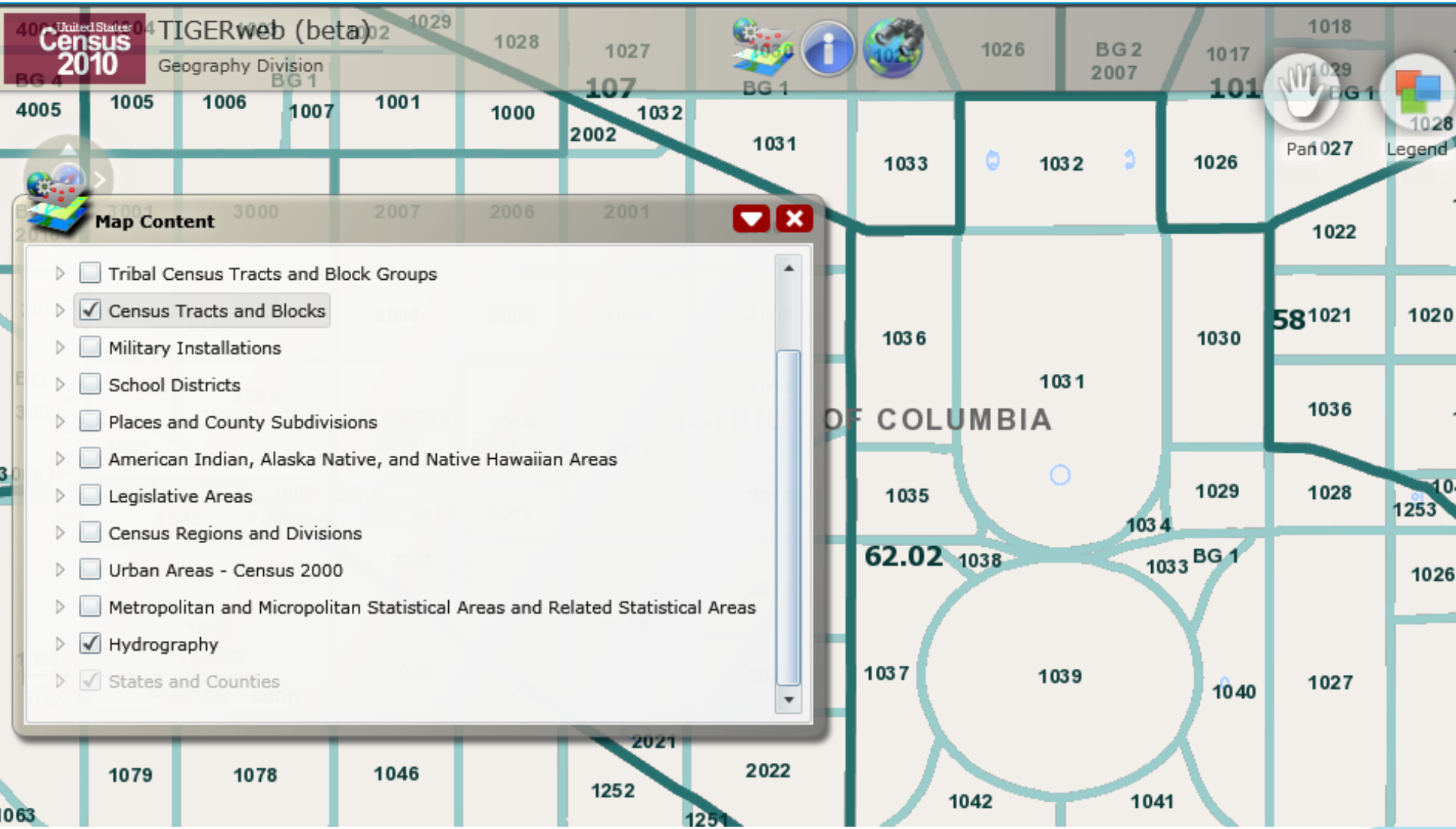
- 2010 TIGER/Line Shapefiles

http://www.census.gov/geo/www/



United States Census Bureau

http://tigerweb.geo.census.gov/tigerweb/default.htm



United States Census Bureau

http://tigerweb.geo.census.gov/tigerweb/default.htm

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