Introduction to

Census Geographies

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Fundamentals

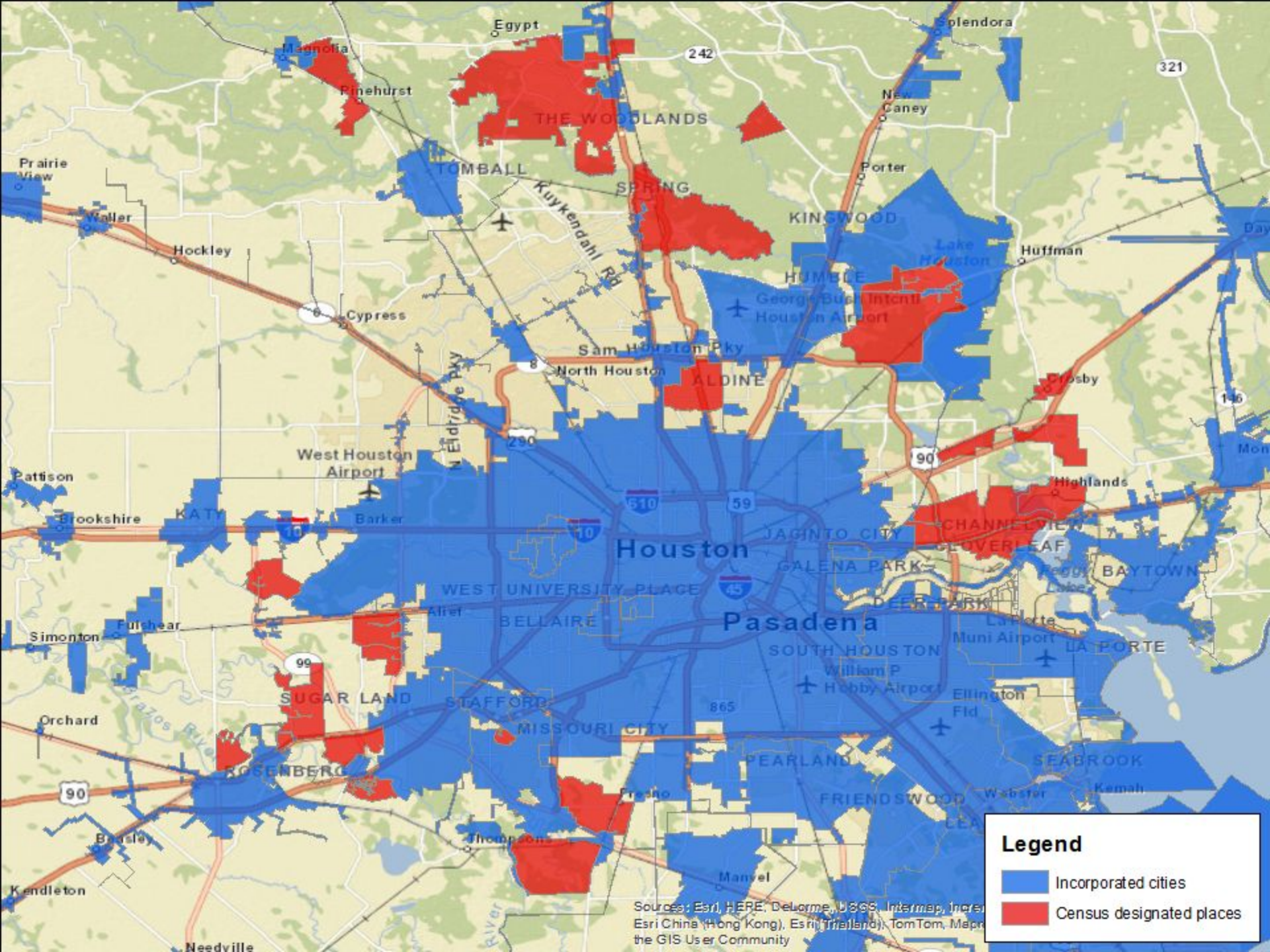
Entity Types

Legal/Administrative Areas

- Existence and boundaries officially prescribed through legal means to manage various programs
- Census Bureau generally accepts boundaries provided by official local entities

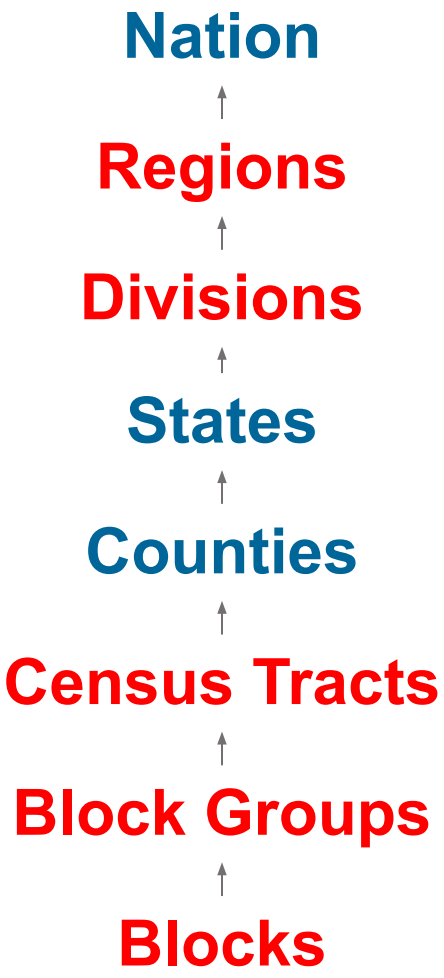
Statistical Entities

- Created based on the programmatic and analytical needs of data users for situations when geographic coverage of legal entities is inadequate
- Census Bureau cooperates with local entities to establish


Egypt
Magnolia
Pinehurst
242
THE WOODLANDS
Splendora
321
New Caney
Porter
Prairie View
TOMBALL
SPRING
Kuykendahl Rd
KINGWOOD
Waller
Hockley
Huffman
Lake Houston
HUMBLE
George Bush Intcntl Houston Airport
Cypress
Sam Houston Pky
North Houston
ALDINE
Crosby
N Eldridge Pky
290
West Houston Airport
90
Pattison
Highlands
Brookshire
KATY
Barker
610
59
10
JACINTO CITY
CHANNELVIEW
CLOVERLEAF
Houston
GALENA PARK
BAYTOWN
WEST UNIVERSITY PLACE
45
Alief
BELLAIRE
Pasadena
Fulshear
Simonton
SOUTH HOUSTON
La Porte Muni Airport
LA PORTE
William P Hobby Airport
99
SUGAR LAND
STAFFORD
Ellington Fld
865
Orchard
MISSOURI CITY
Brazos River
ROSENBERG
PEARLAND
SEABROOK
90
Fresno
Webster
Kemah
FRIENDSWOOD
Beasley
Thompsons
Manvel
Kendleton
Needville
Legend
Incorporated cities
Census designated places
Sources: Esri, HERE, DeLorme, USGS, Intermap, Incre
Esri China (Hong Kong), Esri (Thailand), TomTom, Mapr
the GIS User Community

Geographic Area	Type	Number
Nation	Legal	1
Regions	Statistical	4
Divisions	Statistical	9
States and Equivalent	Legal	57
Metropolitan Areas	Statistical	362
Urbanized Areas	Statistical	405
Counties and Equivalent	Legal	3248
County Subdivisions and Places	Mixed	60,228
Census Tracts	Statistical	62,276
Block Groups	Statistical	229,192
Blocks	Statistical	7,017,427
Special-Purpose Entities	Legal/Administrative	404,583

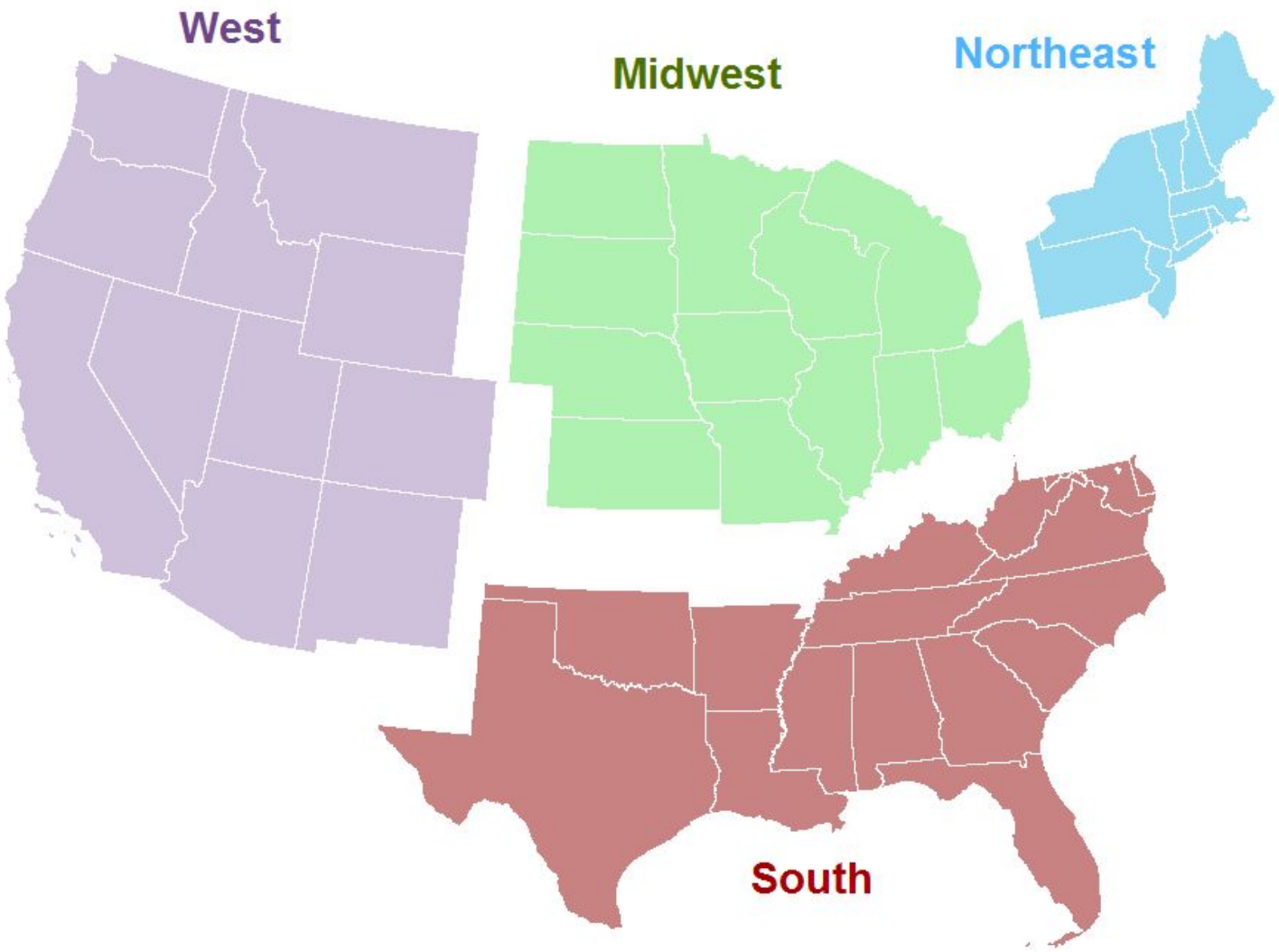
Census Geographic Entities



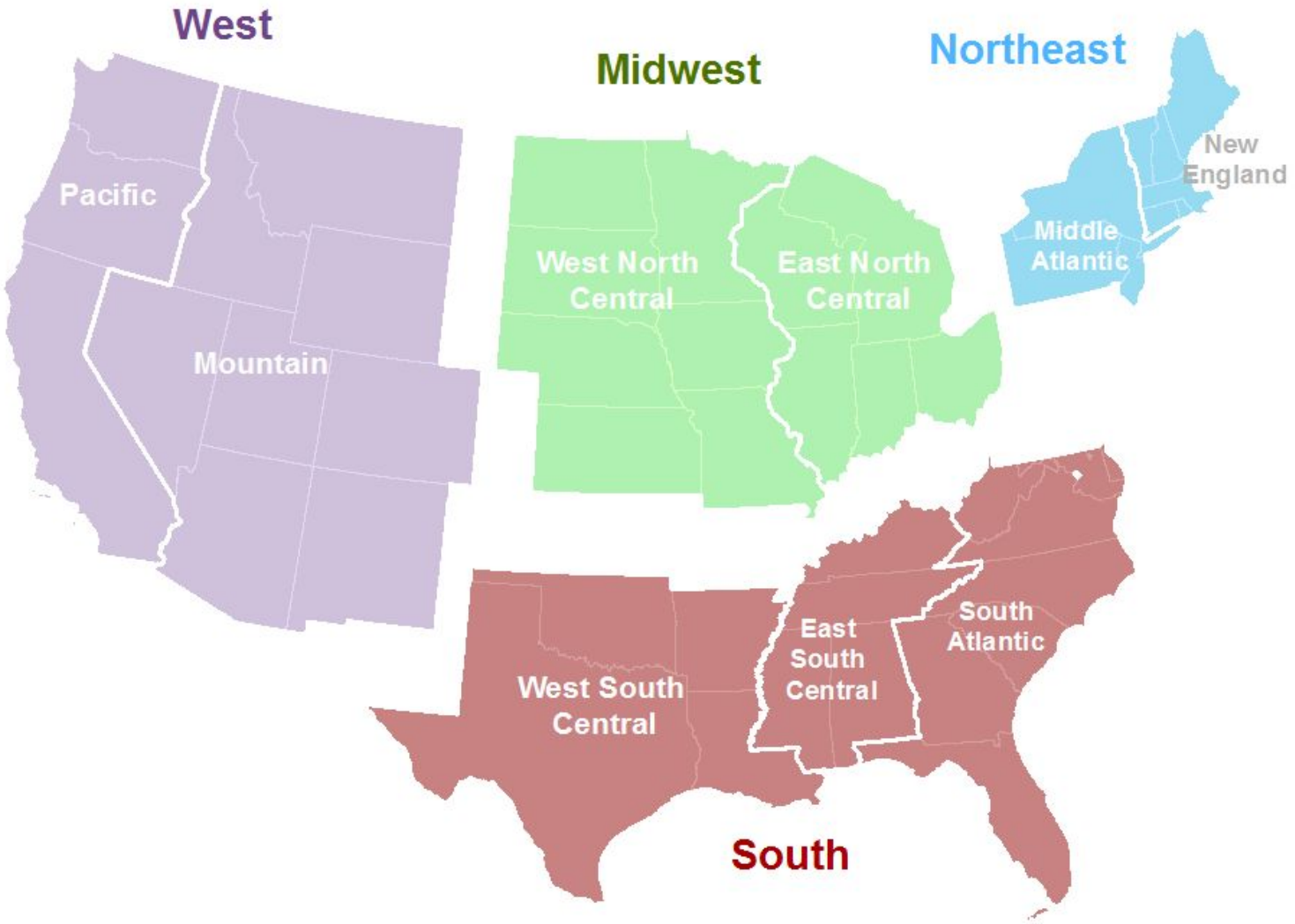
Legal

Statistical

Regions



Regions and Divisions



FIPS and ANSI

Unique Geographic Entity Codes

GIS/Data Center | **Email** gisdata@rice.edu | **Lab** (713) 348-2599 | **library.rice.edu/gdc**

States and Equivalents

Assigned a unique 2-digit code in alphabetical order

(Texas = 48)

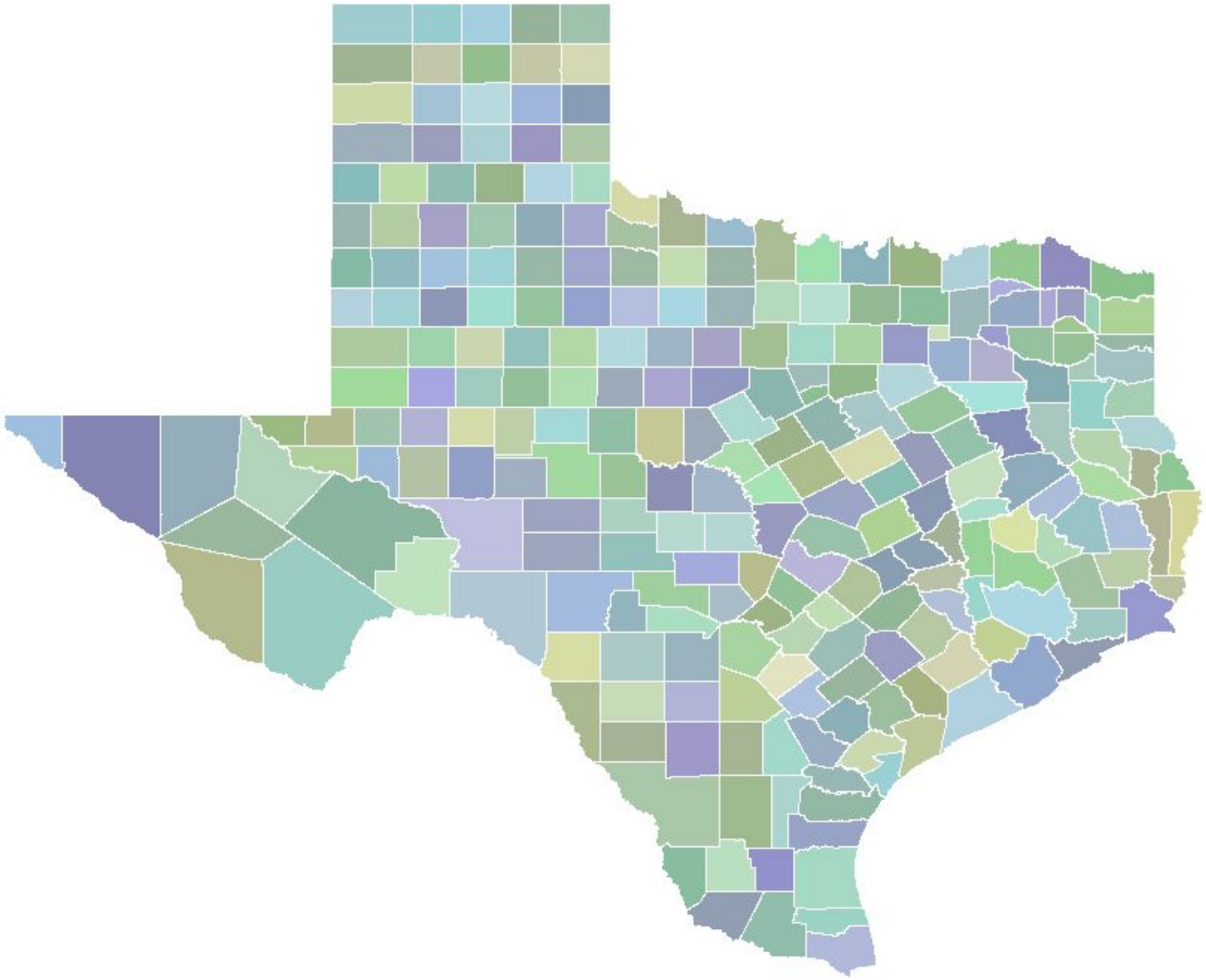
Statistical Equivalent Entities

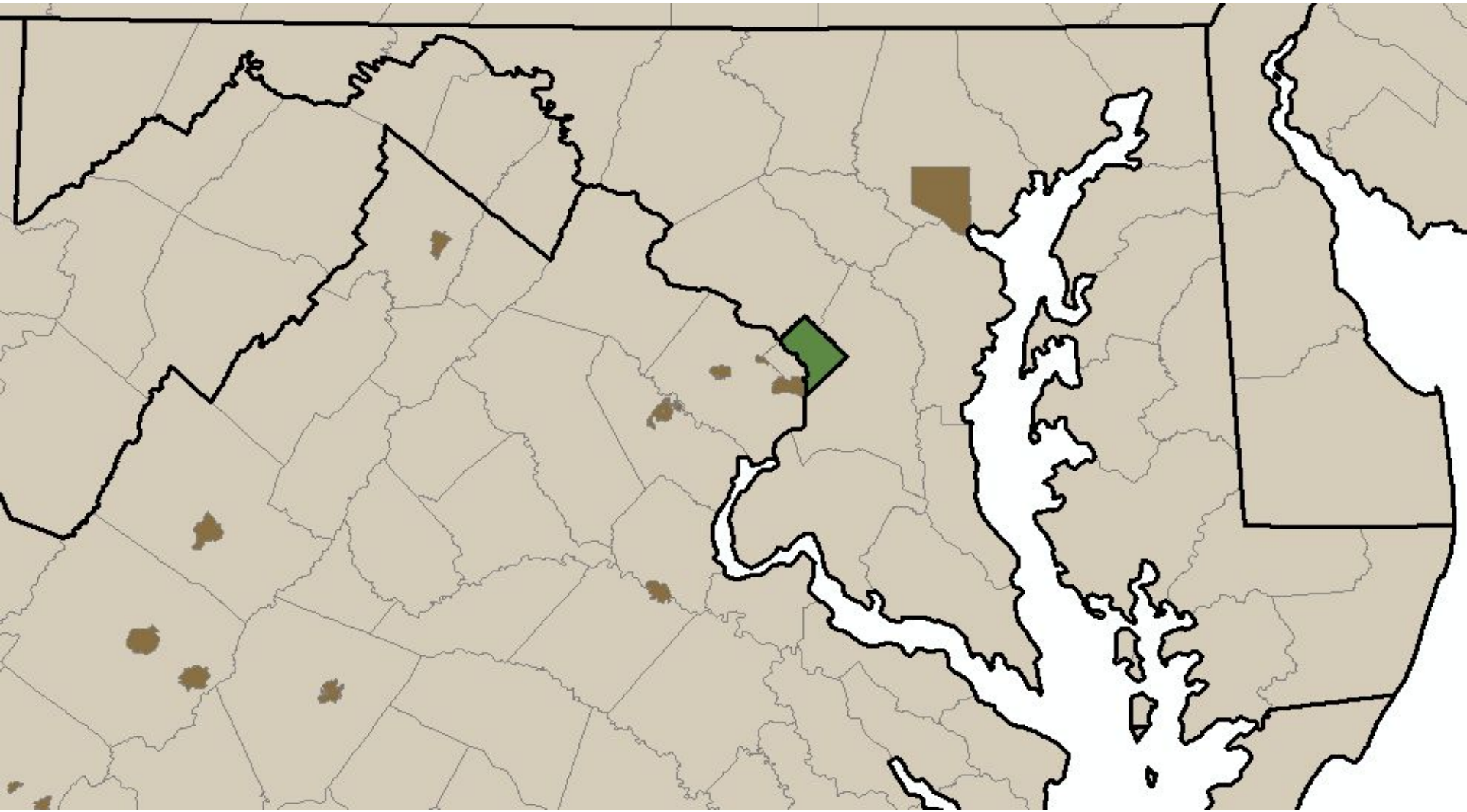
- District of Columbia
- Puerto Rico
- American Samoa
- Commonwealth of the Northern Mariana Islands
- Guam
- U.S. Virgin Islands

Counties and Equivalents

- **Assigned a unique 3-digit code in alphabetical order within each state (Harris County = 201)**

Geographic Entity	Type
Counties	48 states
Parishes	Louisiana
Cities, Boroughs, Municipalities, and Census Areas	Alaska
Incorporated Places	MD, MO, NV, VA
District of Columbia and Guam	No subdivisions
Municipios	Puerto Rico
Islands and Districts	American Samoa
Municipalities	Northern Marianas
Islands	U.S. Virgin Islands





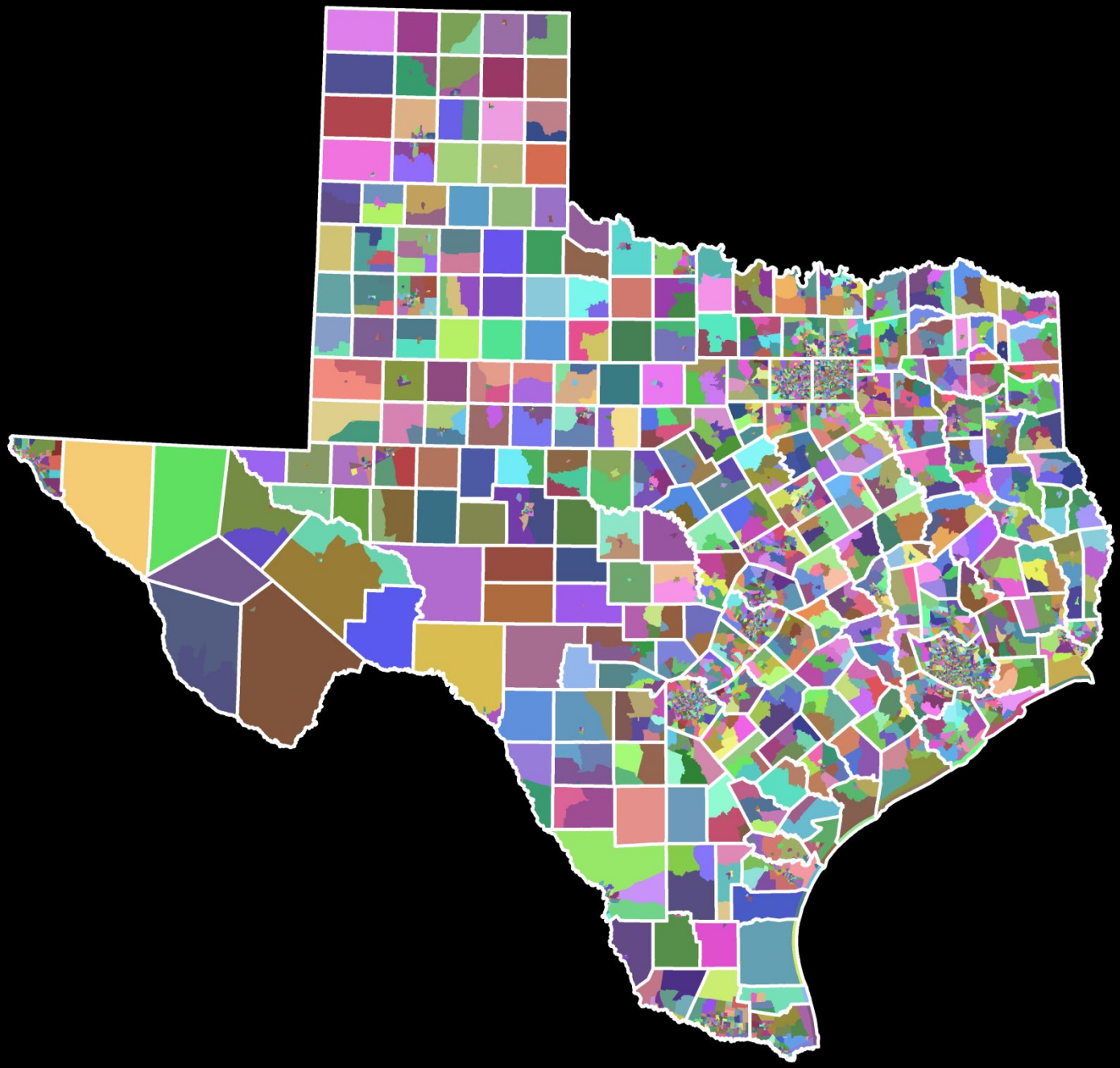
Census Tracts

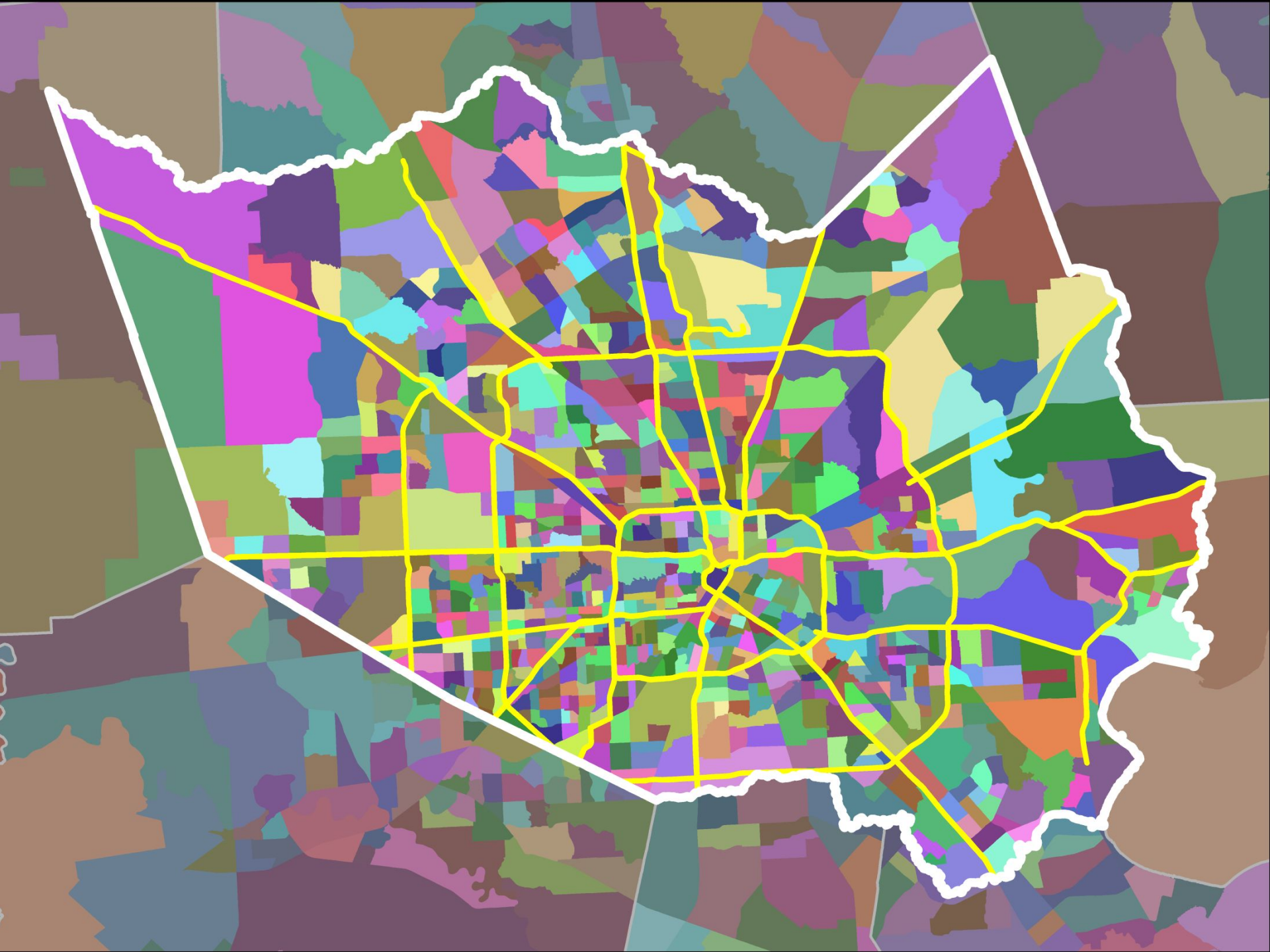
Census Tracts

- Small, relatively permanent statistical subdivisions of a county
- Uniquely numbered in each county with a 6-digit numeric code, e.g. **4121.00**

Target Population

- Optimum population = 4,000
- Minimum population = 1,200
- Maximum population = 8,000

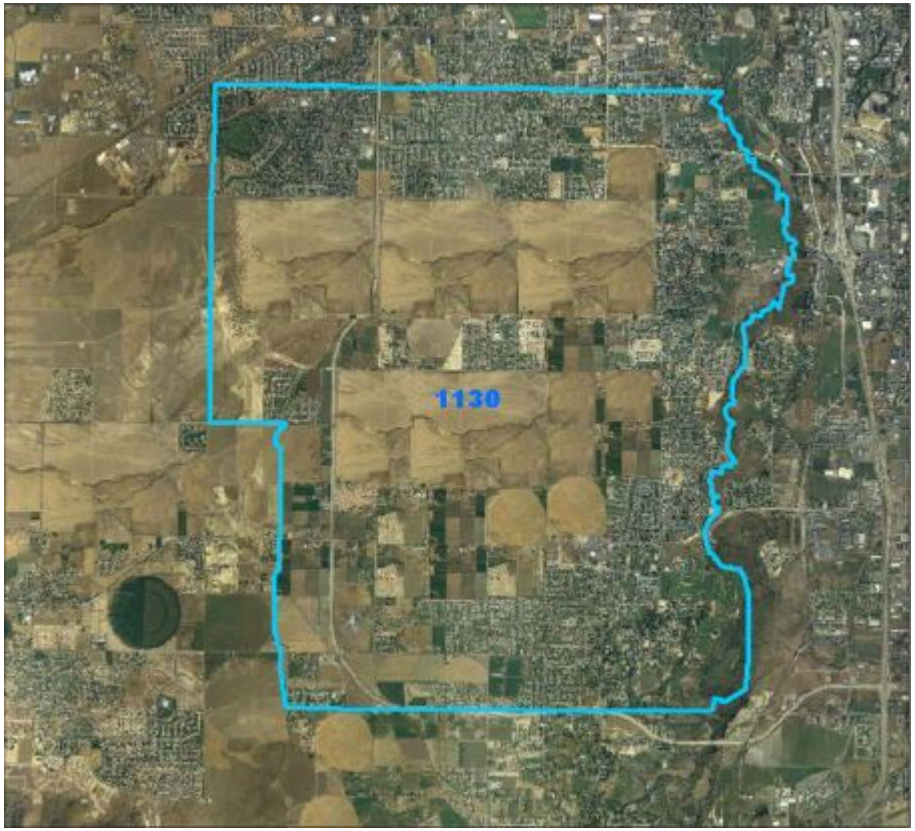




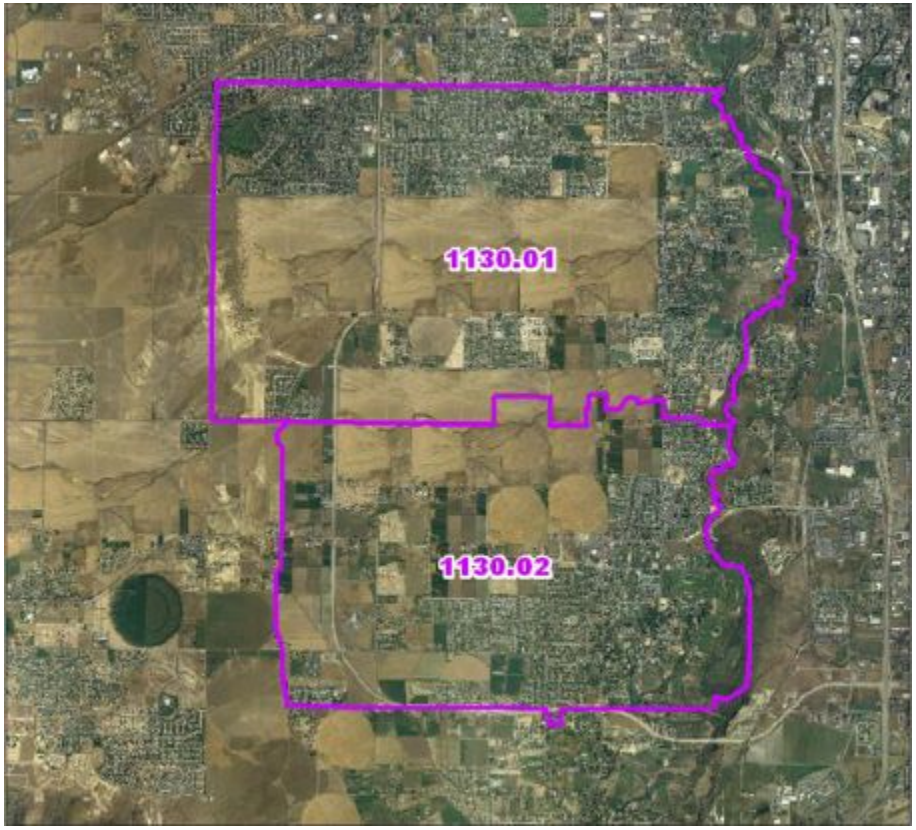
Updating Census Tracts

- Updated decennially through the Participant Statistical Areas Program (PSAP)
- Census tracts > 8,000 are split
- Census tracts < 1,200 are merged
- Small boundary revisions allowed as long as a large amount of the population in the tracts is not affected.
- All changes documented in Census Tract Relationship Files so data can be compared between decades.

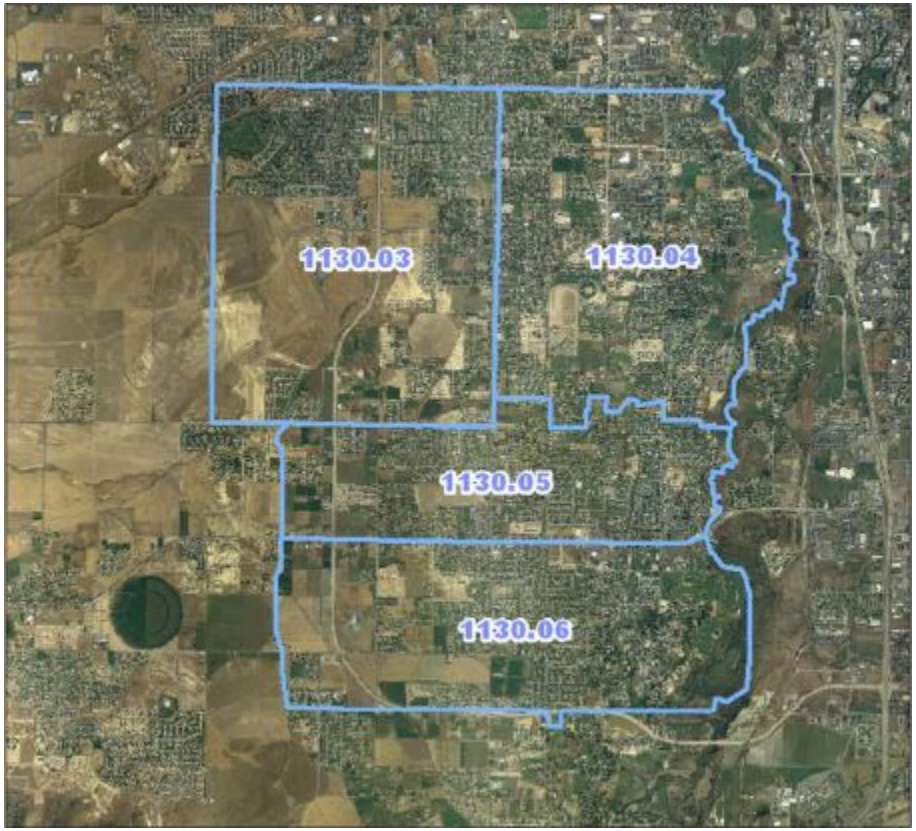
1970 Census Tracts



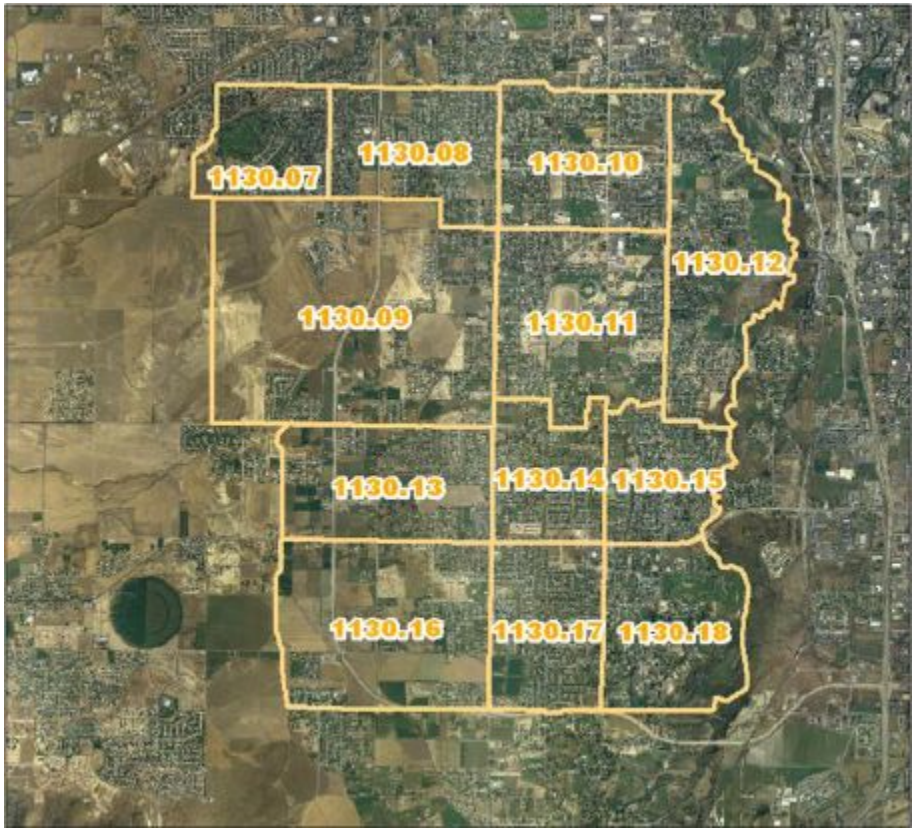
1980 Census Tracts



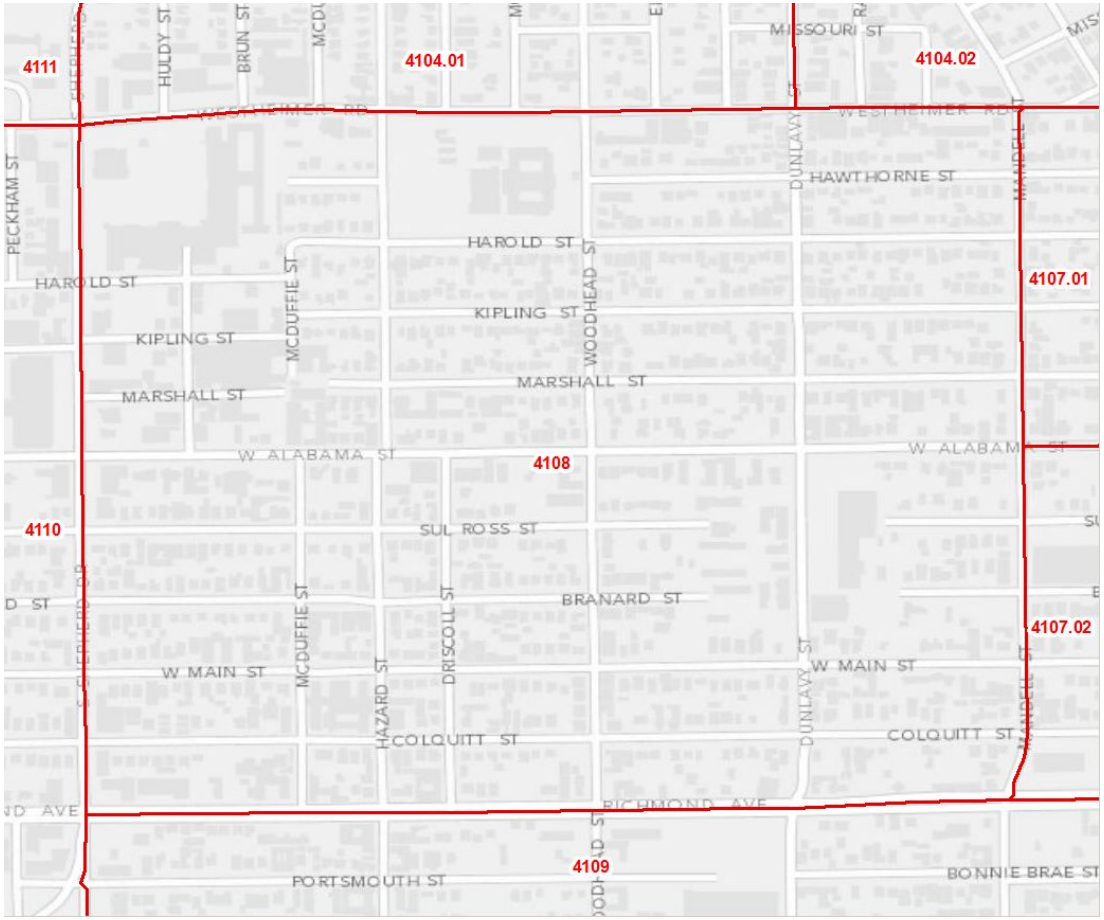
1990 Census Tracts



2000 Census Tracts



Montrose Census Tracts



Census Block Groups

Census Block Groups

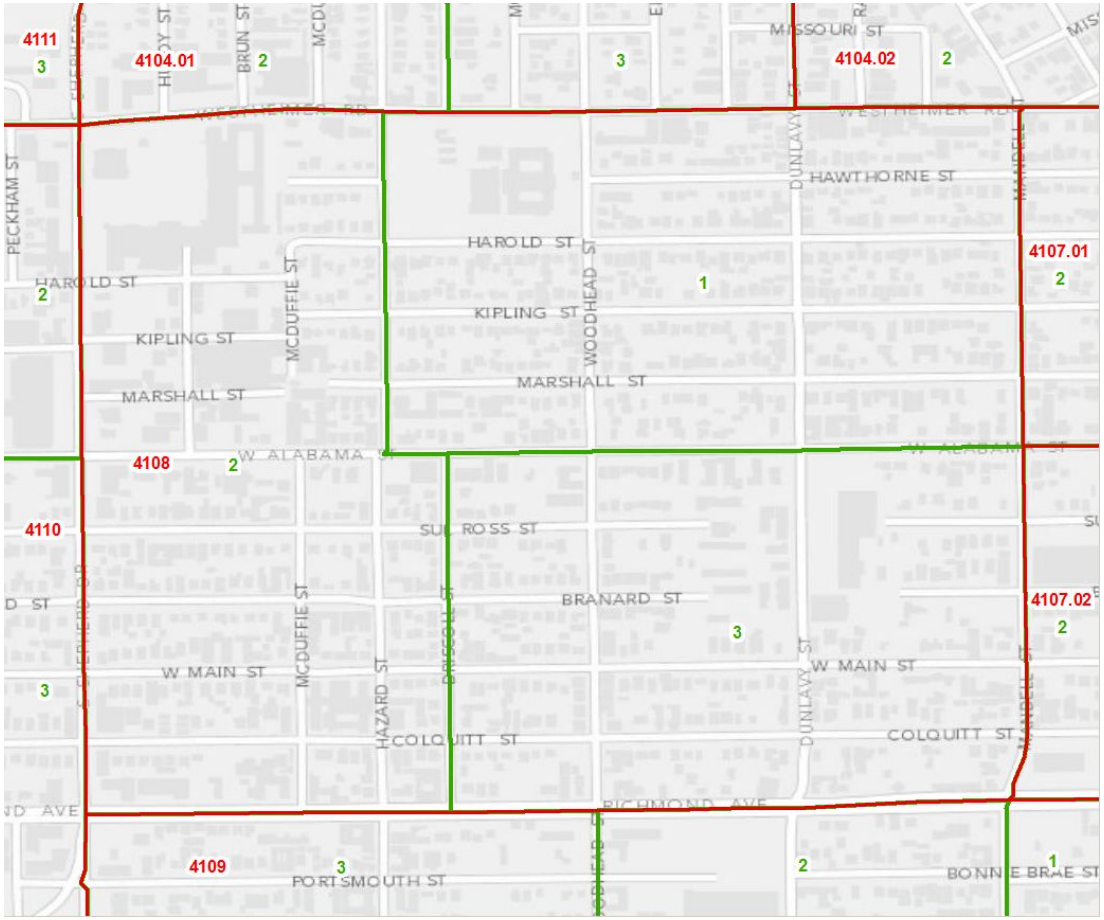
- **Statistical subdivisions of a census tract**

- **Uniquely numbered 0-9 in each census tract (e.g. 1)**

Target Population

- Optimum population = 1,500
- Minimum population = 600
- Maximum population = 3,000

Montrose Census Block Groups

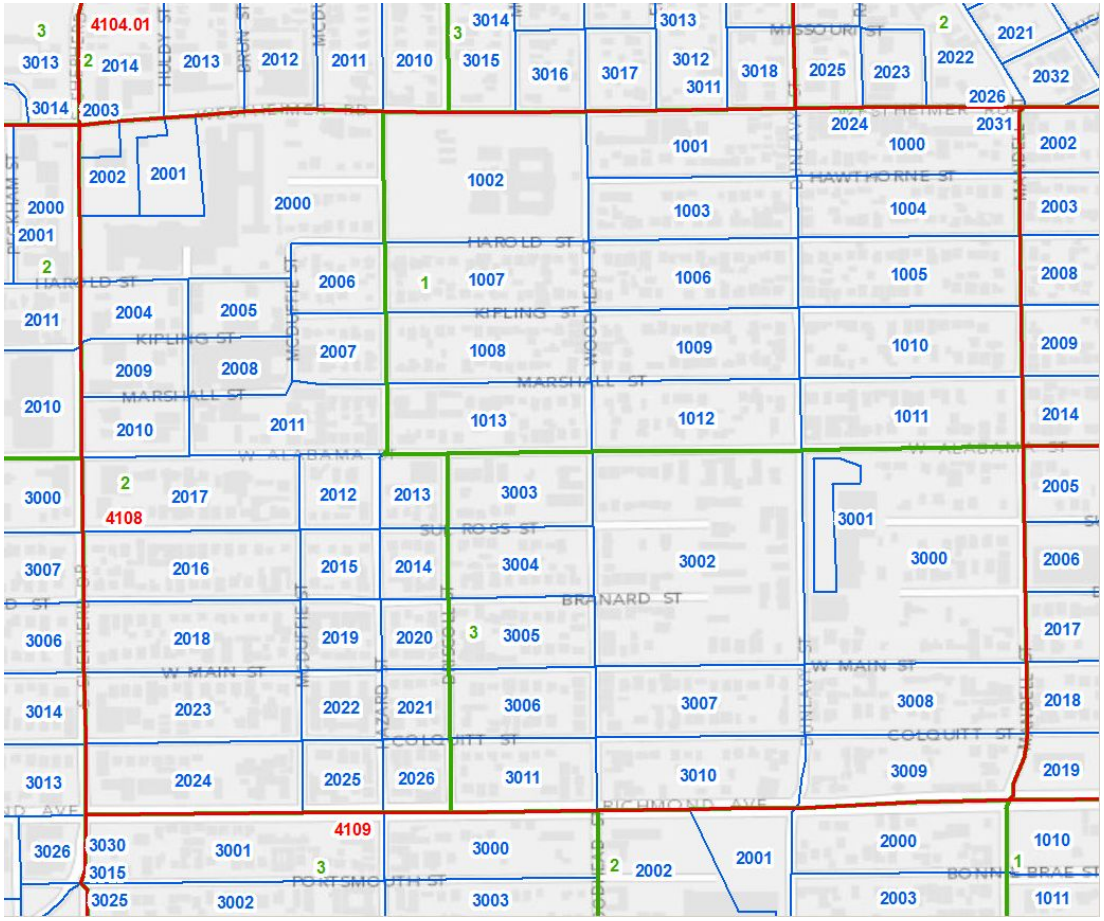


Census Blocks

Census Blocks

- Smallest statistical subdivision
- Bounded by visible features and non-visible boundaries
- Uniquely numbered 0000-9999 in each census tract
- No population requirements

Montrose Census Blocks

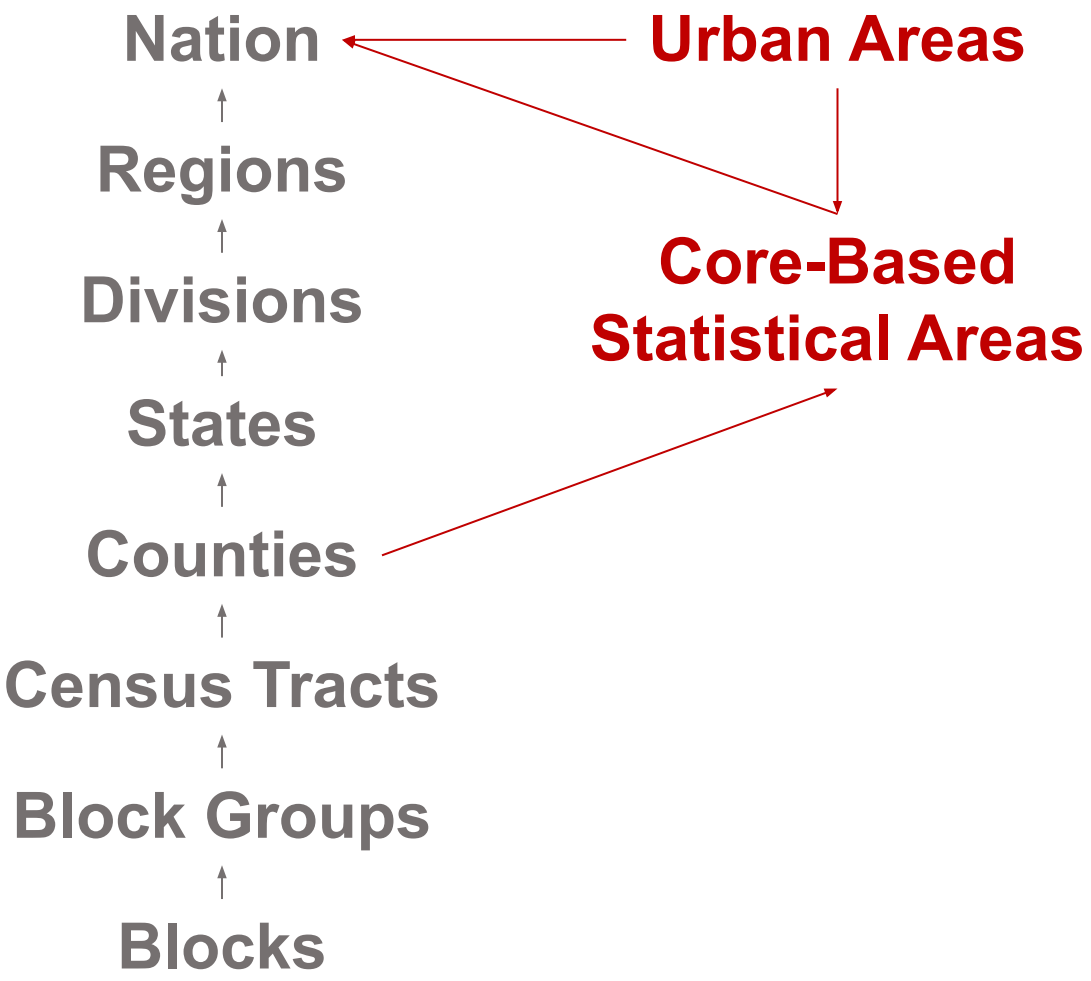


482014121001030

State County Tract Block Group Block

National Subdivisions

Census Geographic Entities



Urban Areas (UAs)

Urbanized Areas (UAs)

- Densely developed territory with 50,000 people or more

Urban Clusters

- Densely developed territory with 2,500 to 50,000 people

- **Titles may contain up to 3 place names**

Core-Based Statistical Areas

2010 Geographic Entities	Type
Core Based Statistical Areas (CBSAs)	Administrative
Metropolitan Statistical Areas	Administrative
Micropolitan Statistical Areas	Administrative
Combined Statistical Area (CSAs)	Administrative
Metropolitan Division	Administrative

Historic Geographic Entities	Type
Primary Metropolitan Statistical Areas (PMSAs)	Administrative
Consolidated Metropolitan Statistical Areas (CMSAs)	Administrative

Core-Based Statistical Areas (CBSAs)

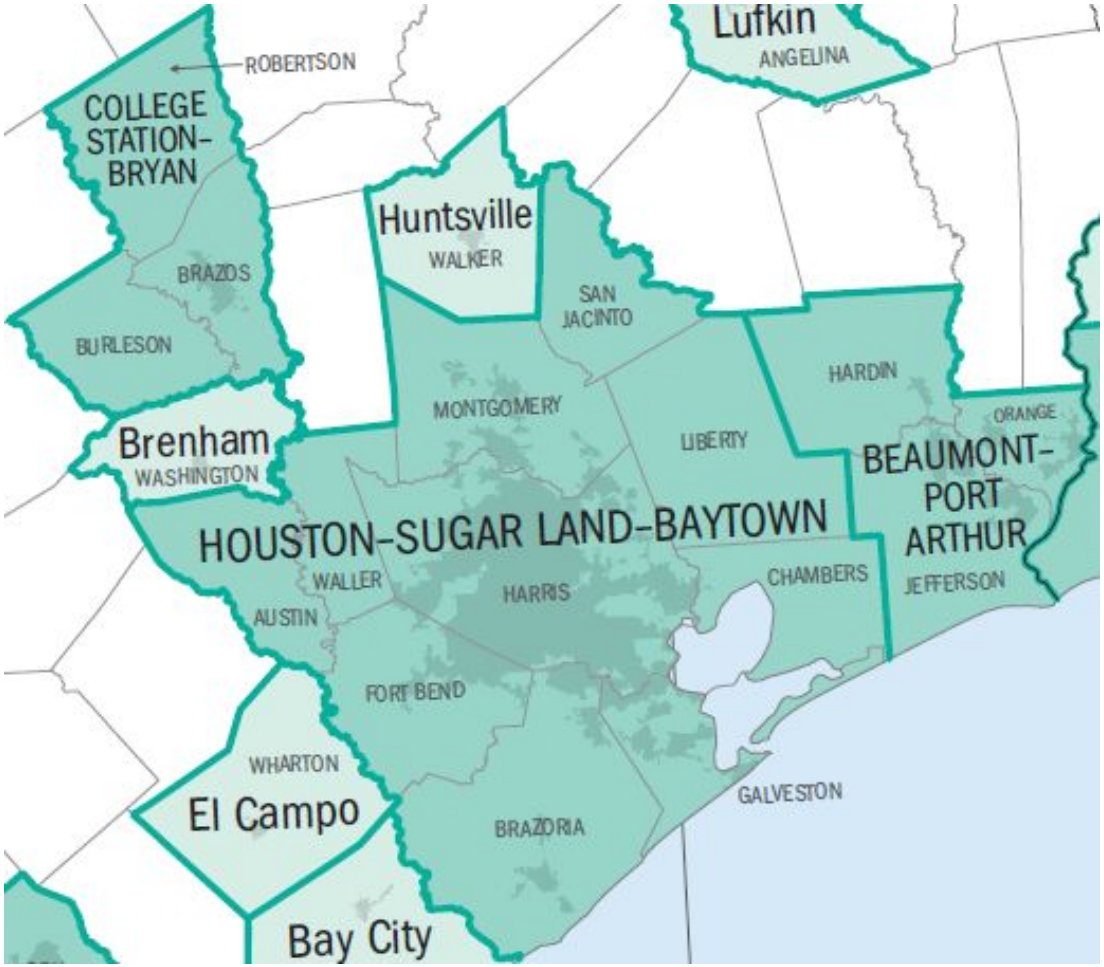
Metropolitan Statistical Area

- Contains at least one UA and > 50,000 people

Micropolitan Statistical Area

- Contains at least one UC and > 10,000

Core-Based Statistical Areas



Combined Statistical Areas (CSAs)

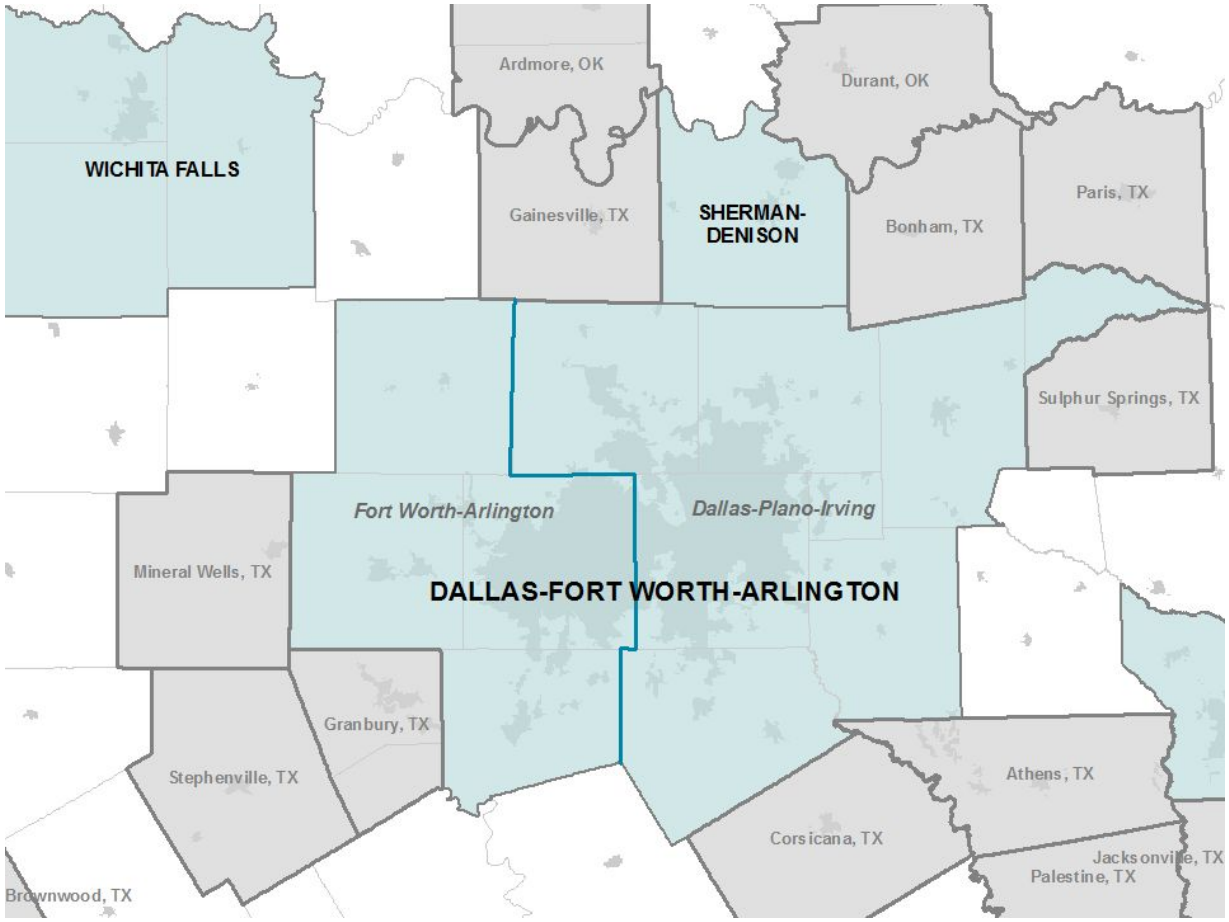
- Two or more adjacent CBSAs with substantial employment interchange

Combined Statistical Areas

Metropolitan Divisions

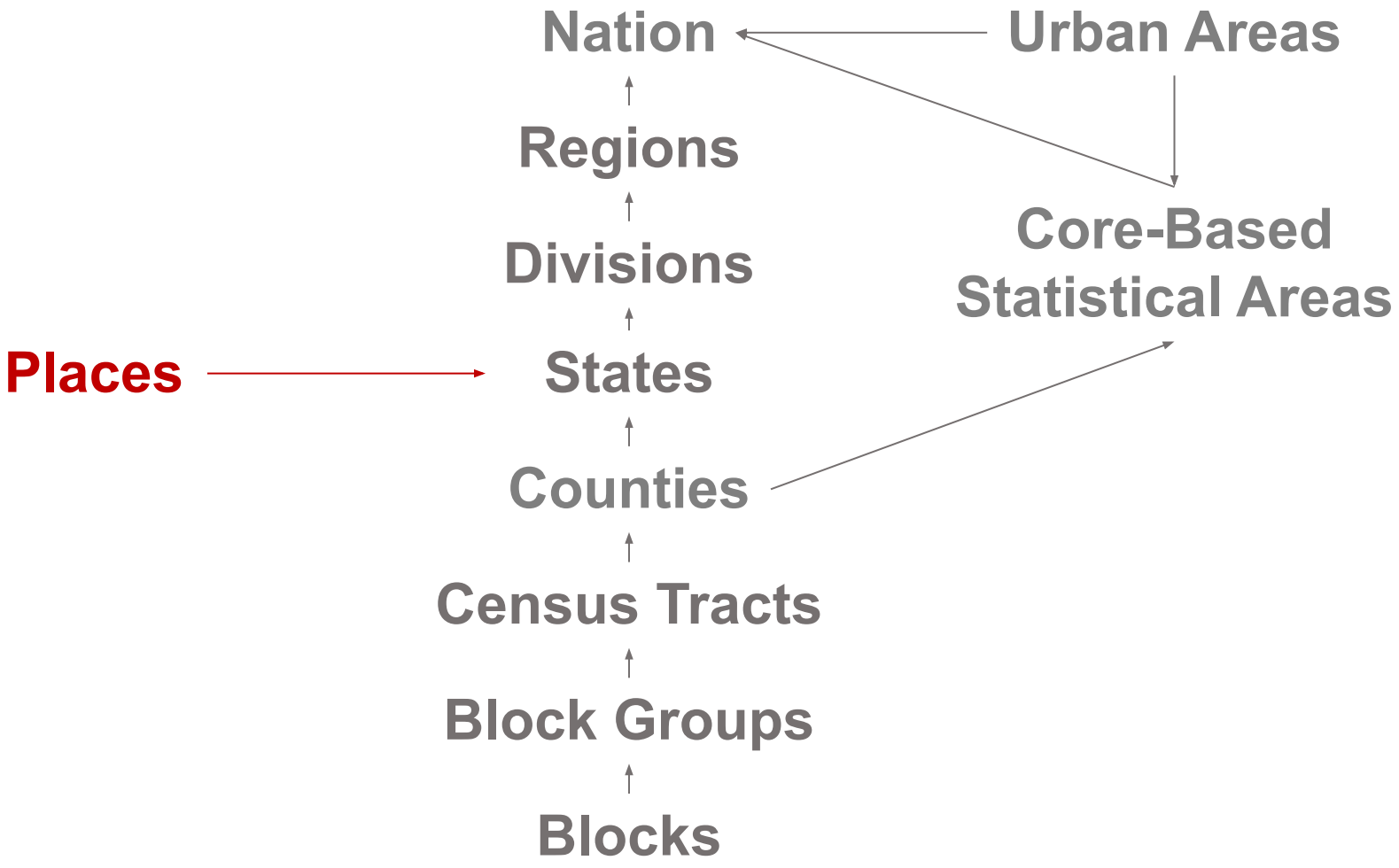
- Subdivisions of metropolitan statistical areas
- Population greater than 2.5 million

Metropolitan Divisions



State Subdivisions

Census Geographic Entities



Places

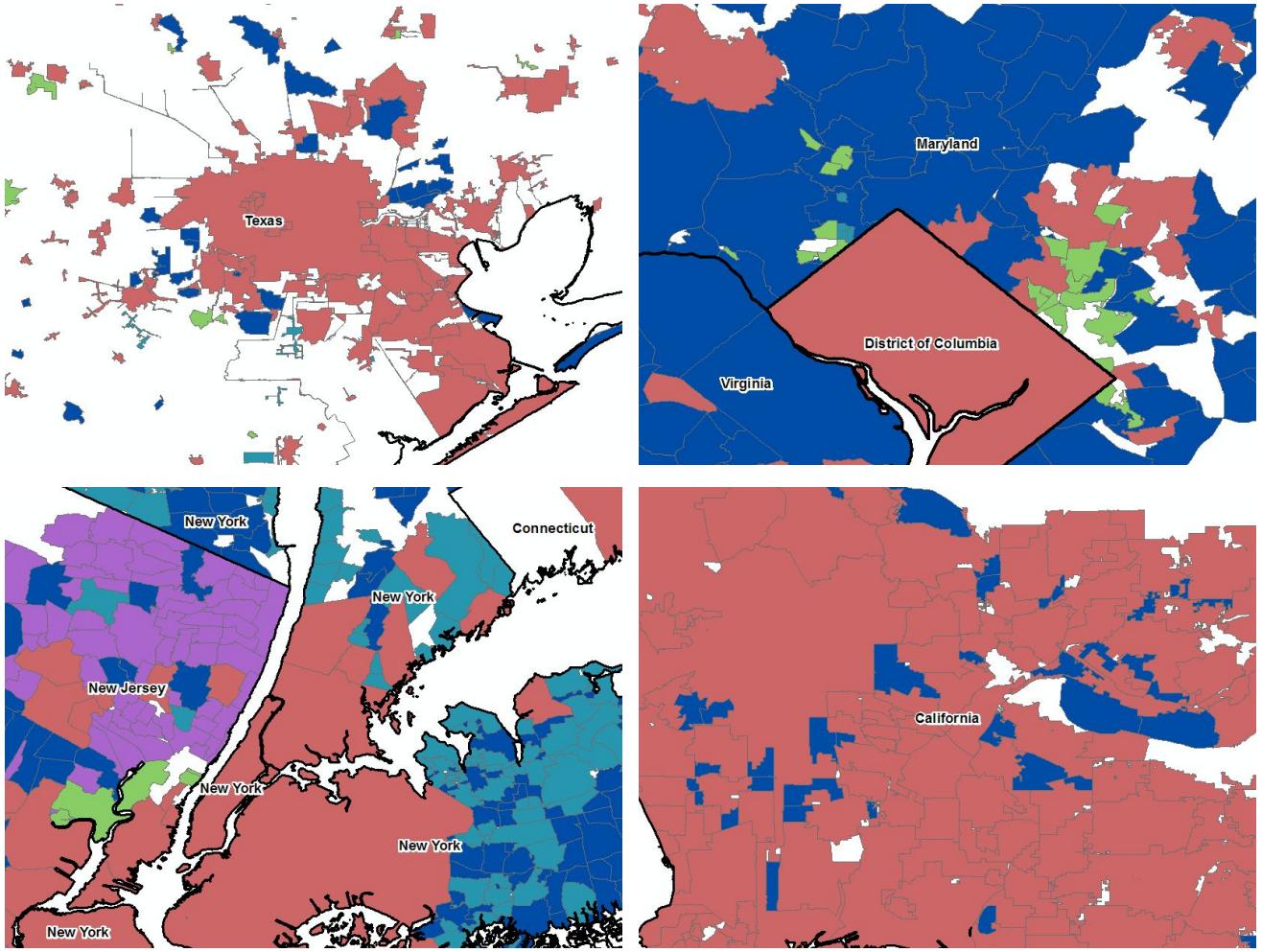
Incorporated Places

- Legally bounded entities established to provide governmental functions for a concentration of people
- Usually city, town, village, or borough

Census Designated Places (CDPs)

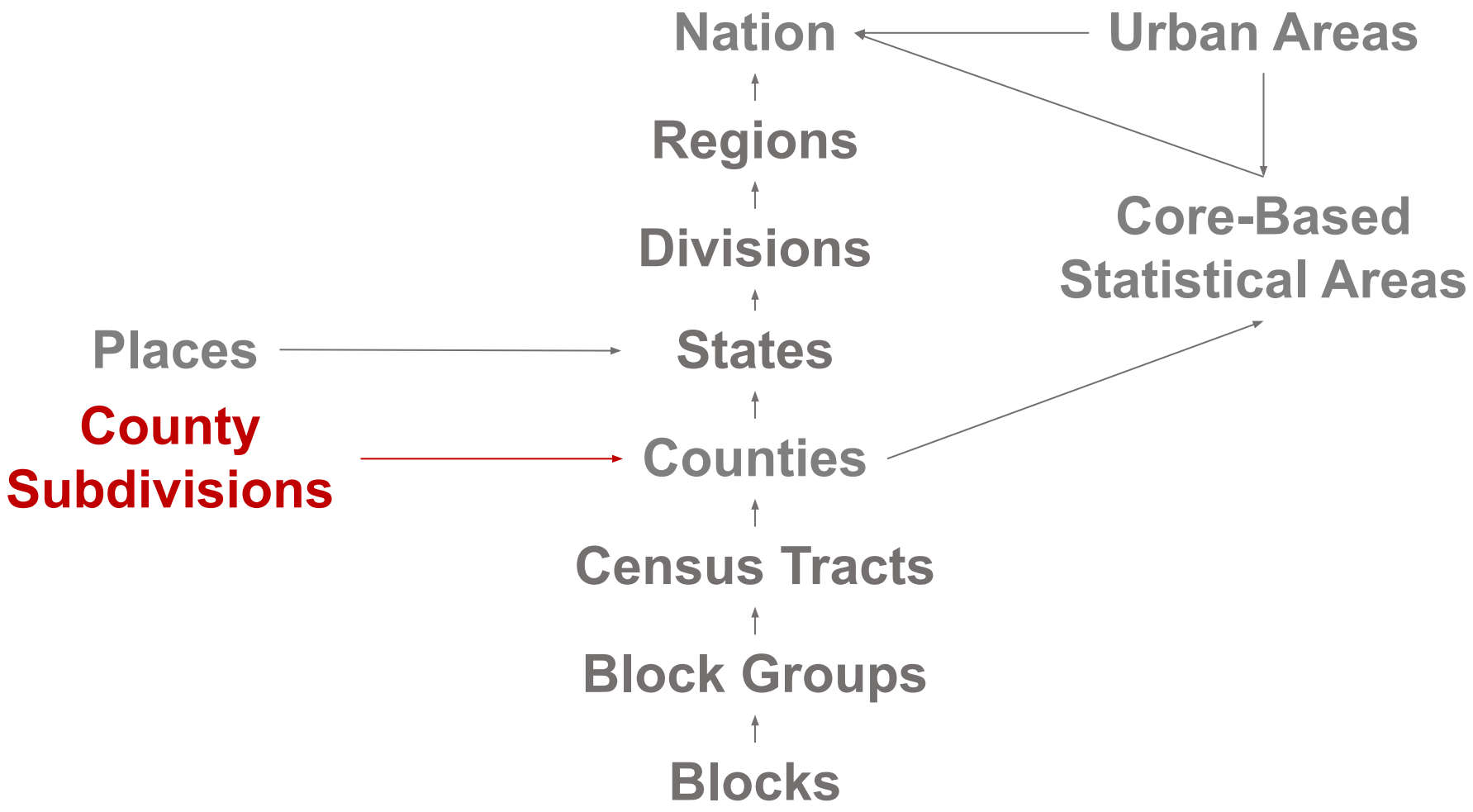
- Statistical entities derived by the Census Bureau
- Not legal boundaries
- Usually coincide with visible feature or adjacent legal boundaries

Places


Texas
Maryland
District of Columbia
Virginia
New York
Connecticut
New York
New Jersey
New York
New York
New York
California
Legend
CDP
borough
city
town
village

County Subdivisions

Census Geographic Entities



County Subdivisions

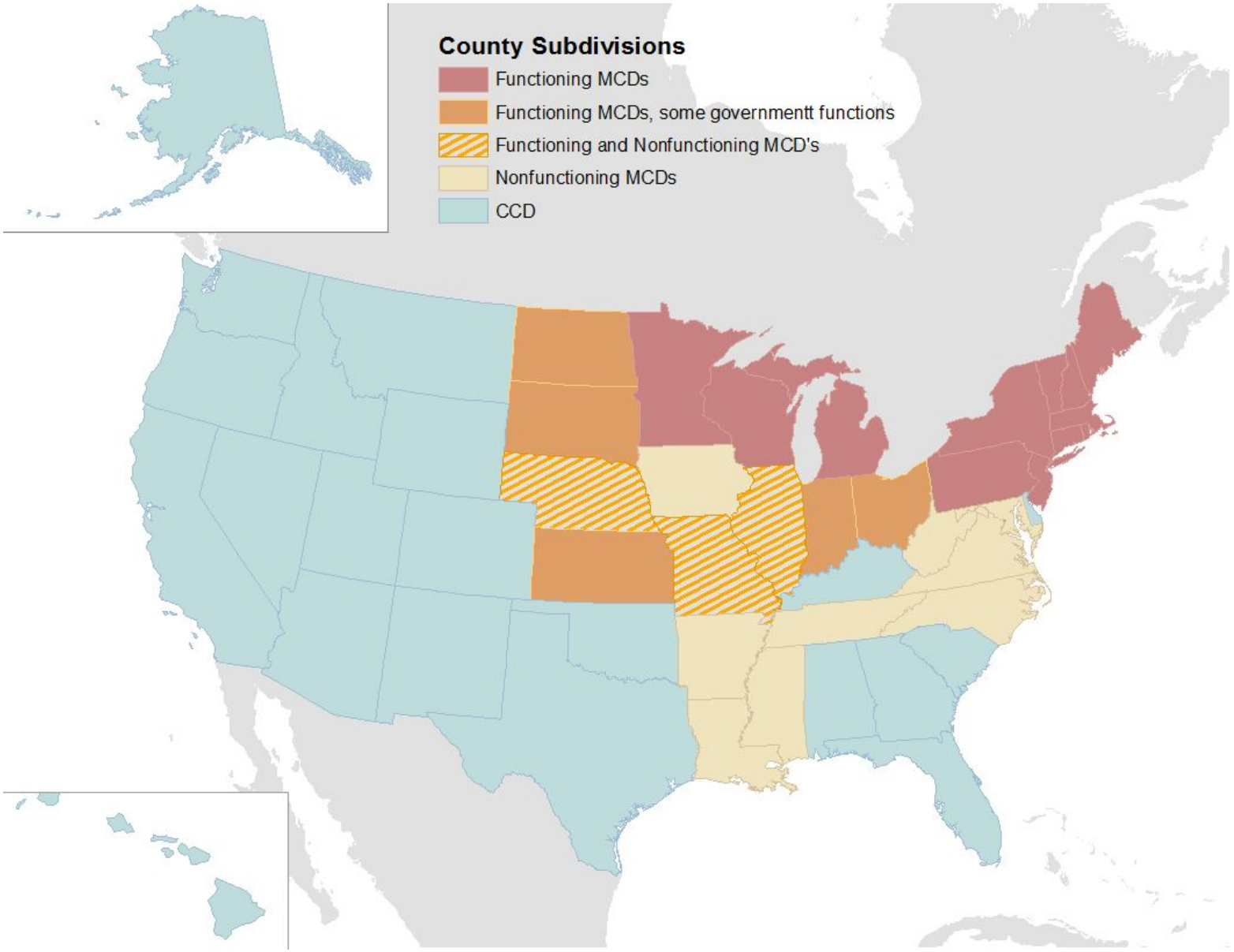
Minor Civil Divisions (MCDs)

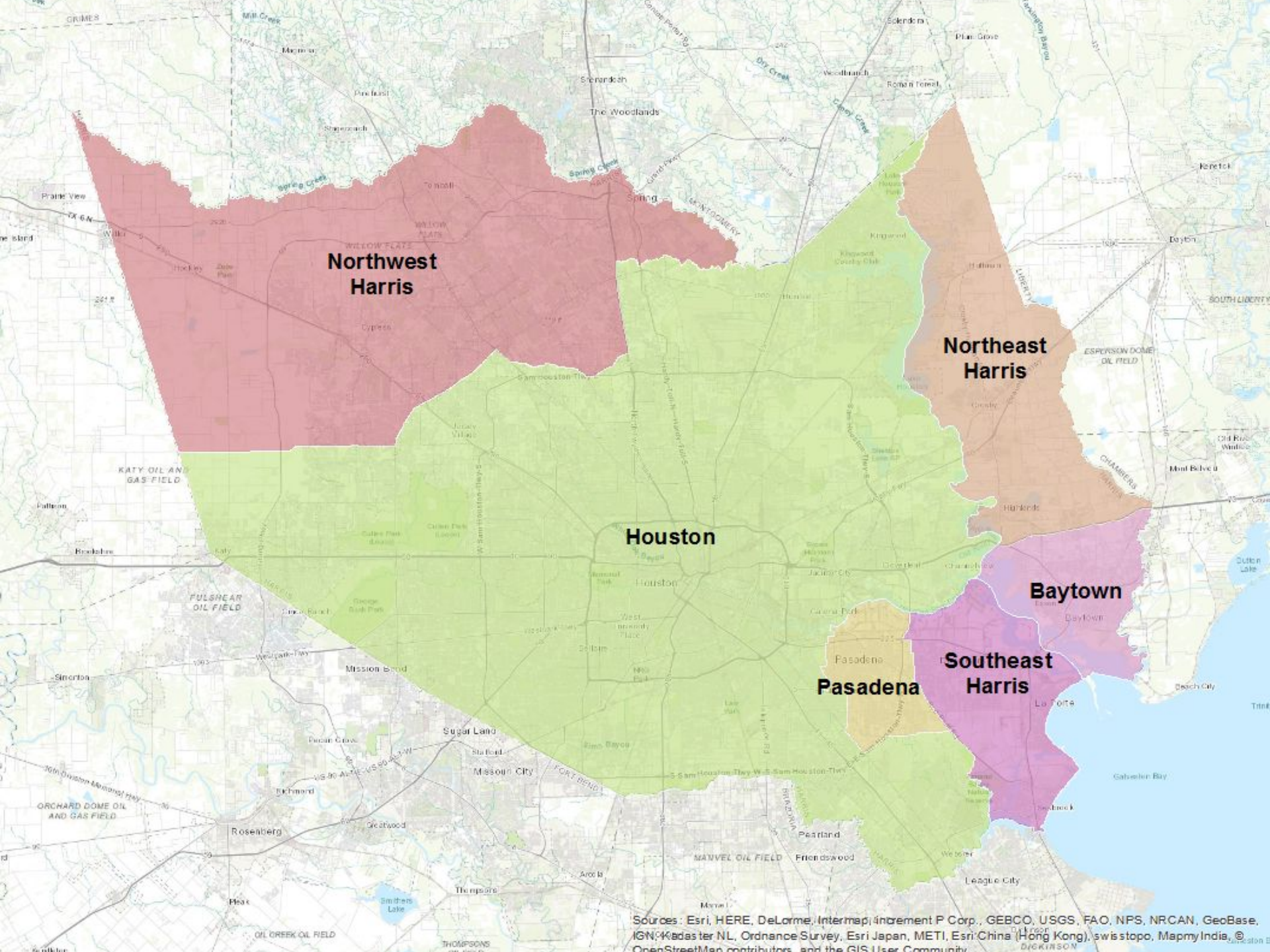
- Legally bounded entities
- In 29 states
- May have a formal government with elected officials

Census County Divisions (CCDs)

- Statistical entities derived by the Census Bureau
- Not legal boundaries

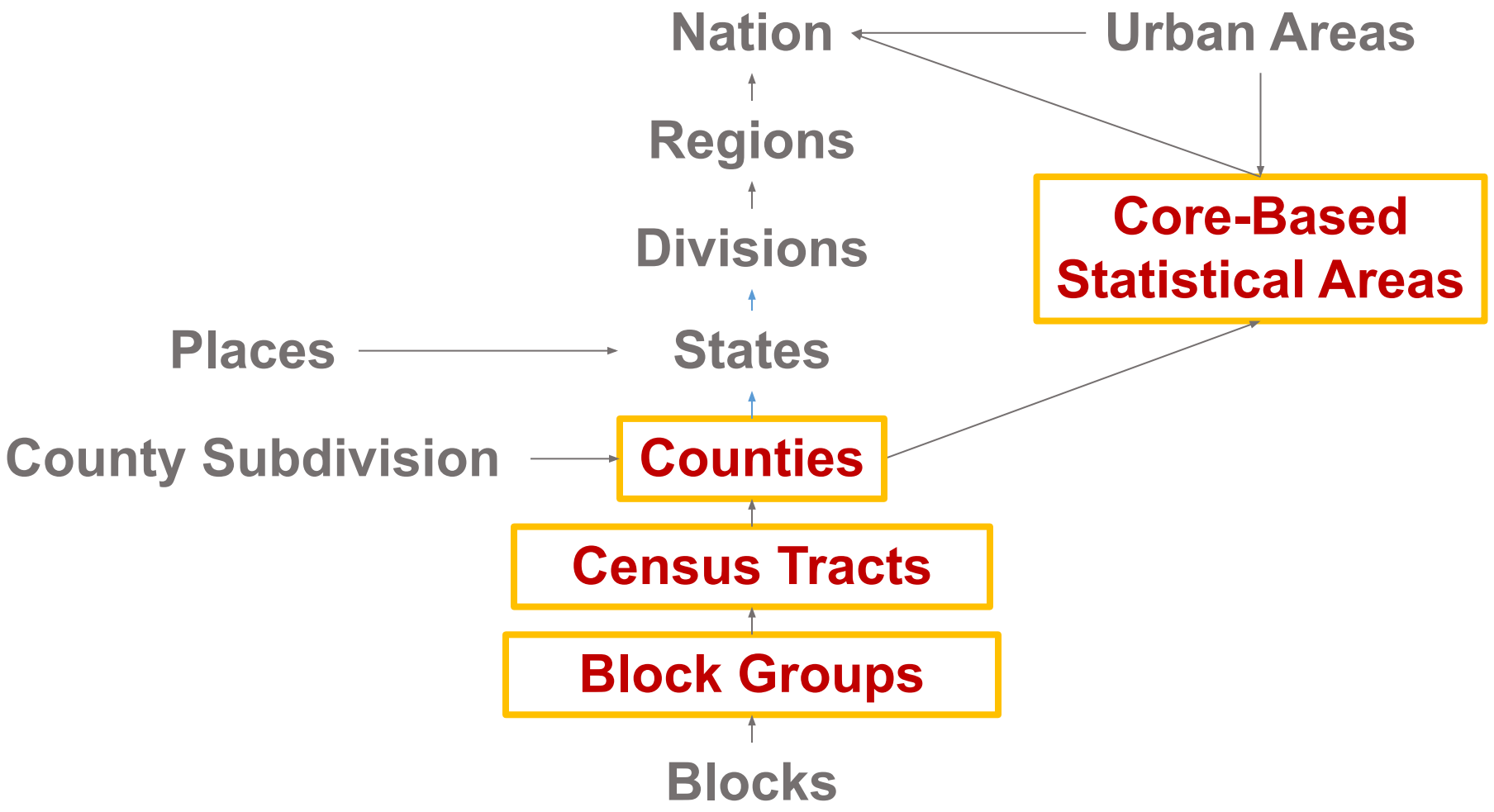
County Subdivision Classification




Northwest Harris
Northeast Harris
Houston
Baytown
Southeast Harris
Pasadena
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special-Purpose Entities

Special-Purpose Entities

Geographic Area	Type	Number
Congressional Districts	Legal	435
Voting Districts (VTDs)	Legal	148,872
School Districts	Administrative	15,274
ZIP Code Tabulation Areas (ZCTAs)	Administrative	40,000

Census Geographic Entities