U.S. Census Bureau
Geographic Entities and Concepts

Geography Division
Geographic Concepts

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

### Legal/Administrative
- States
- Counties
- Minor civil divisions
- Incorporated places
- Congressional districts
- School districts

### Statistical
- Census tracts
- Metropolitan/Micropolitan statistical areas
- Urban areas
- Census designated places
Hierarchy of Census Geographic Entities

- NATION
- REGIONS
- DIVISIONS
  - ZIP Code Tabulation Areas
  - School Districts
  - Congressional Districts
  - Voting Districts
  - Traffic Analysis Zones
  - County Subdivisions
- STATES
  - Counties
  - Census Tracts
  - Subminor Civil Divisions
  - Census Blocks
- Block Groups
- Places
- Urban Growth Areas
- State Legislative Districts
- Public Use Microdata Areas
- Core Based Statistical Areas
- Urban Areas
- AIANNH Areas* (American Indian, Alaska Native, Native Hawaiian Areas)
Small Geographic Areas

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

Block Groups

- Smallest units for tabulation of sample data
- Population ranges from 600 to 3,000
- Nest within census tracts
Small Geographic Areas

Census Tracts

- Small, relatively permanent, consistent statistical subdivisions of a county
- Size: optimally 4,000 people; range between 1,200 and 8,000
- About 65,000 census tracts Census 2000; a little over 74,000 for Census 2010
- Defined nationwide for the first time in Census 2000
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<th>Race</th>
<th>Count</th>
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</tr>
<tr>
<td>Population of one race:</td>
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</tr>
<tr>
<td>White alone</td>
<td>0</td>
</tr>
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<td>Black or African American alone</td>
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<td>American Indian and Alaska Native alone</td>
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<tr>
<td>Native Hawaiian and Other Pacific Islander alone</td>
<td>0</td>
</tr>
<tr>
<td>Some Other Race alone</td>
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</tbody>
</table>
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
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
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
Census 2010 Urban Areas

• Represent densely developed territory, the “urban footprint”
• Contain residential, commercial, and other nonresidential urban land uses.
• Cross all other geographic units within the nation
• Begin with a dense core of at least 1,000 people per square mile

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
Core Based Statistical Areas (CBSA)

- In 2003, CBSA replaced terms “Metropolitan/Micropolitan Areas”, and other related geographic terms.
- U.S. Office of Management and Budget (OMB) defines CBSAs to provide a nationally consistent set of geographic units.
- Built from county/counties associated with a dense urbanized area or urban cluster of at least 10,000 population.
- Represents an area with a high economic/social integration.
- Integration assessed through commuting flow between adjacent counties and the core.
- CBSAs include metropolitan divisions, combined statistical areas (CSAs), New England city and town areas (NECTAs), NECTA divisions, and combined NECTAs.
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
Core Based Statistical Area Examples

- **Bethesda-Frederick-Rockville** Metropolitan Division of Washington-Arlington-Alexandria Metropolitan Stat. Area
- **Seaford Micropolitan Statistical Area**
- **Richmond Metropolitan Statistical Area**
ZIP Code Tabulation Areas (ZCTAs)

- Approximate USPS ZIP Code distribution for housing units
- Represent the most frequently occurring ZIP Code within an area
- A calculated geography
- Composed of whole blocks
- ZCTAs do not nest cleanly within other geography
- 2010 ZCTAs exclude large water bodies and unpopulated areas
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
Exercise 1

Task 1

• From [www.census.gov](http://www.census.gov), navigate to the Geography Page ➔ 2010 Census Geographic Products

  Q: How many different reference maps are there?

Task 2

• Identify the link to Geographic Tallies by Entity Type.

  Q: How many 2010 census blocks are there in New York?

Task 3

• Navigate to block maps
• Find the block map that contains the GPO.

  Q: What is the number of the block of the GPO?
Exercise 2

Navigate to the Geographic Programs web page

Tasks

1. How many Geography programs are listed?
2. Navigate to the BAS web page
3. Open a BAS map
4. Download or open a map or shapefile
Exercise 3

- Go to the Census homepage (www.census.gov.)
- Click on Subjects A to Z
- Search for more information on Urban Areas (UAs)

Questions:

1. How many types of UAs are there?
2. Name them and list their population thresholds
3. Navigate to the Geography homepage, and then find the same Urban Areas page.
Exercise 4

- Navigate to Census tract info page from the main Geography web page

Questions:
1. Determine which 2000 census tract you live in.
2. Determine which 2010 census tract you live in.
3. Are the tract numbers the same?
4. Determine which census tract you are in right now (hint: the address is 732 North Capitol Street, NW, Washington, DC 20401)
5. “Map” one of the above selections (1-3)
Questions?

Geographic area concepts, criteria, codes, and attribute
Geographic Standards and Criteria Branch: 301-763-3056

Geographic products
Geographic Products Branch: 301-763-1128