US Census Bureau
Geographic Entities and Concepts

Geography Division
Presented in Cornell INFO7470
March 11, 2013
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

STATES

Counties

Census Tracts

Subminor Civil Divisions

Census Blocks

Block Groups

Places

Public Use Microdata Areas

State Legislative Districts

Urban Growth Areas

Core Based Statistical Areas

Urban Areas

AIANNH Areas* (American Indian, Alaska Native, Native Hawaiian Areas)

ZIP Code Tabulation Areas

School Districts

Congressional Districts

Voting Districts

Traffic Analysis Zones

County Subdivisions
Small Statistical 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
White House
Census Block 1031
11010062021031
<table>
<thead>
<tr>
<th>Race</th>
<th>Count</th>
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<tr>
<td>Total:</td>
<td>5</td>
</tr>
<tr>
<td>Population of one race:</td>
<td>5</td>
</tr>
<tr>
<td>White alone</td>
<td>0</td>
</tr>
<tr>
<td>Black or African American alone</td>
<td>5</td>
</tr>
<tr>
<td>American Indian and Alaska Native alone</td>
<td>0</td>
</tr>
<tr>
<td>Asian alone</td>
<td>0</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>
<td>0</td>
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Places and County Subdivisions
Census Bureau Place Concept

- Places are “organic”—they expand (or contract) over time as population and commercial activity increases (or decreases)
Towns/townships are administrative areas; boundaries remain relatively constant as population changes.
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
2010 Census
Distribution of Places

- Incorporated Place (19,540)
- Census Designated Place (9,974)
Incorporated Places

Includes:
- Cities
- Towns (except in the six New England states, New York, and Wisconsin)
- Villages
- Boroughs (except in New York and Alaska)

Does not include:
- Towns/townships in the Northeast and Midwest
Consolidated Cities

• Within each consolidated city, a “balance” entity is defined, encompassing the area of the original city and the area outside the “dependent” incorporated places

• Augusta-Richmond County consolidated government
  – Augusta-Richmond County (balance)
  – Blythe city
  – Hephzibah city
Augusta-Richmond County consolidated city
CDPs encompass a variety of places:

- Places with same range of social and economic activities as incorporated places, but lack governments: Silver Spring, MD; Tyson’s Corner, VA; King of Prussia, PA
- Special taxation areas: Paradise, NV and other “unincorporated towns” in Nevada
- Towns/townships in the Northeast and Midwest that were defined as “whole town” CDPs: Upper St. Clair, PA; South Park Township, PA
- Village centers within towns/townships: Amherst Centre, MA
- Administrative centers/county seats
- Communities with unique characteristics and needs for data: colonias in TX, NM, AZ, and CA
The distinction between “legal” and “statistical” as well as incorporated and unincorporated can be fuzzy for some CDPs:

- Nevada’s unincorporated towns have legal status, legally defined boundaries, and have a mayor and town council.
- “Whole town” CDPs in the Northeast and Midwest are coextensive with towns/townships, which are recognized as municipalities, have legal boundaries and governments.
- Some CDPs (for example, Columbia, MD; Reston, VA) are defined around large associations, incorporated under state law.
New Jersey Places (Census Bureau definition)

Census Bureau places—cities and boroughs (in red) and CDPs (in blue)—cover only a portion of New Jersey
Minor civil divisions, which include all townships, cities, and boroughs, more closely relate to the perception of “place” in New Jersey.
New Jersey places and MCDs

Analyzing data for both places and MCDs, however, will result in duplication since cities and boroughs are represented as “false MCDs” and CDPs cover portions or the entirety of some towns.
Economic Place Concept

Includes:

• Incorporated places
• Towns/townships in the Northeast as well as Michigan, Minnesota, and Wisconsin (the 12 “strong-MCD” states)
• Census designated places (except in the 12 “strong-MCD” states)
• Balance of county
• Balance of town

Places must encompass either

– 5,000 or more people, or
– 5,000 or more jobs
Economic Census Places (2007):
5,000 or more people, or
5,000 or more jobs
## Data for Places and County Subdivisions

<table>
<thead>
<tr>
<th></th>
<th>Decennial Census</th>
<th>American Community Survey</th>
<th>Population Estimates Program</th>
<th>Economic Census</th>
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<tr>
<td>Incorporated Places</td>
<td>All</td>
<td>All, in 5-year estimates</td>
<td>All</td>
<td>5,000 or more persons/jobs</td>
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<tr>
<td>Census Designated Places</td>
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<td>All, in 5-year estimates</td>
<td>Not included</td>
<td>5,000 or more persons/jobs</td>
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<td>MCDs</td>
<td>All</td>
<td>All, in 5-year estimates</td>
<td>20 states only</td>
<td>12 states only</td>
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<tr>
<td>CCDs</td>
<td>All</td>
<td>All, in 5-year estimates</td>
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<td>Not included</td>
</tr>
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</table>
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
Counties and Statistically Equivalent Areas of the United States
Including Puerto Rico and Island Areas
Urban and Rural
Metropolitan and Micropolitan
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
# Urban and Rural Populations in the United States in 2010 and 2000

<table>
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<td>Urban</td>
<td>249,253,271</td>
<td>80.7</td>
<td>222,360,539</td>
<td>79.0</td>
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<tr>
<td>Urbanized Area</td>
<td>219,922,123</td>
<td>71.2</td>
<td>192,323,824</td>
<td>68.3</td>
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<tr>
<td>Urban Cluster</td>
<td>29,331,148</td>
<td>9.5</td>
<td>30,036,715</td>
<td>10.7</td>
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<tr>
<td>Rural</td>
<td>59,492,267</td>
<td>19.3</td>
<td>59,061,367</td>
<td>21.0</td>
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</tbody>
</table>

Puerto Rico: 93.8% urban, 90.7% urbanized
Core Based Statistical Areas (CBSA)

- Defined by U.S. Office of Management and Budget (OMB)
- National county based set of geographic units
- “CBSA” replaced the terms “Metropolitan/Micropolitan Areas” in 2003.
- 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.
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

Census Tract 12, Block 1102

<table>
<thead>
<tr>
<th>Street Address</th>
<th>ZIP Code</th>
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<tbody>
<tr>
<td>1 May Road</td>
<td>22345</td>
</tr>
<tr>
<td>12 Julian Drive</td>
<td>22345</td>
</tr>
<tr>
<td>3 May Road</td>
<td>22345</td>
</tr>
<tr>
<td>14 Julian Drive</td>
<td>22345</td>
</tr>
<tr>
<td>5 Dee Lane</td>
<td>22346</td>
</tr>
</tbody>
</table>

Most frequently occurring ZIP Code: **22345**
Bringing it all together: When we say “Somerset, PA” what do we really mean?
Partnerships

We foster partnerships with federal, state, local, and tribal governments as well as commercial partners. Find information about specific partnership programs and learn more about our partnerships with other organizations.

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**American Indian and Alaska Native Programs**

Programs with tribal officials to maintain a current inventory of all legally defined tribal lands, their boundaries and status.

**Boundary and Annexation Survey**

Annual survey to collect information from state and local officials about select legally defined geographic areas. Basic information about the program as well as participant materials.

**Federal Register Notices**

*Federal Register* notices that relate to geographic concepts, programs, and procedures. Notices from Geography Division only.

**School District Review Program**

Program to collect current school district boundary information from state and local school officials. Basic information about the program as well as participant materials.

**2010 Partnership Programs**

Programs that were used to prepare address lists and statistical geographic boundaries prior to the 2010 Census.

**2000 Participant Programs**

Programs used to prepare address lists and statistical geographic boundaries prior to Census 2000.

http://www.census.gov/geo/partnerships/
Questions?

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

Geographic products
Geographic Products Branch: 301-763-1128