Quick Reference Guide

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Comparison: Census Bureau Demographic Programs

	Decennial Census	Population Estimates Program	American Community Survey
Purpose / Uses	Apportionment of seats in Congress Redistricting Allocation of Federal funding Planning at state and local levels	Survey controls Allocate Federal funding intercensal yrs Denominators for statistical rates Planning at state and local levels	Provide timely detailed demographic, social, economic, and housing data about the country's communities every year.
Temporal frame	Point-in-time	Point-in-time	Period estimate
Reference date	April 1 Year ending in zero	July 1 Intercensal years	None. Estimates describe entire period, which may be: 1-year (areas with 65,000 population plus) 3-year (areas with 20,000 population plus) 5-year period (all areas including ZCTAS, down to block group)
Periodicity	Every 10 years ("snapshot")	Annual	Ongoing survey Data collection every month ("video")
Burden on respondent	Mandatory	None	Mandatory
Authority	Article I, Section 2 Constitution U.S. Code Title 13, Sections 141 and 193	Title 13, Section 181	U.S. Code Title 13, Sections 141 and 193
Methodology	100% enumeration Every resident, every housing unit, and every group quarters	Vital records (from states) plus formulas for calculation of net migration	Random sample from Master Address File: 3.54 million HUs/year (295,000/month) Increase from 2.9 million--June 2011 mailout
Modes of Personal contact	Mail or drop off questionnaire; personal visit follow-up to non-responding addresses	No contact with residents. Census Bureau headquarters works with individual states	Mail Telephone Personal visit
Management hub(s)	Temporary Regional Census Centers	Census Headquarters	Census Regional Offices (6)
Data			
Output	Counts	Counts	Characteristics
Topics	Age Sex Race and ethnicity, Household relationships Tenure (own or rent home)	**U.S., state, county totals:** Age, sex, race, ethnicity, housing **Incorporated place totals:** Population only	See Quick Reference Guide : "American Community Survey Data Release Timetable, Topics Covered by the ACS"
Lowest level of release	Block	Incorporated place	Block group (FTP); census tract (AFF)

2010 Decennial Census
(100% count of population & housing)

Topics Covered

1. Age
2. Sex
3. Race
4. Hispanic origin
5. Relationship of each individual in household to first person listed on form
6. Tenure (home ownership with /without mortgage, rented, or occupied without rent)

Table Prefix Codes / Product Types
(table and profile formats)

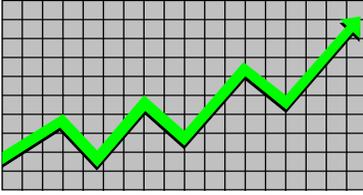| Data Product Type (Table Prefix)	Description
Demographic Profile (DP)	A profile includes tables that provide various demographic, social, economic, and housing characteristics for many geographic types. For the 2010 Census, it includes 100-percent data, and for Census 2000 it includes 100-percent and sample data from the decennial census.
Detailed Tables **(P)** **(H)** **(PCT)** **(HCT)** **(PCO)** **(HCO)** **(PL)**	The Detailed Tables provide the most detailed data from the decennial population and housing census. Tables often include totals and sub-totals. Table identification begins with a letter that refers to the type of data in the table: "P" are population tables "H" are housing tables "PCT" are population tables that cover geographies to the census tract level "HCT are housing tables that cover geographies to the census tract level "PCO" are population tables that cover geographies to the county level "HCO" are housing tables that cover geographies to the county level "PL" are tables derived from the Redistricting Data (P.L. 94-171) SF (2000 only)
Geographic Comparison Tables (GCT)	Users can compare data across predefined geographic areas in the same table, for example, all counties in a state.
Quick Tables (QT)	Predefined tables with frequently requested information for a single geographic area. The information includes numerical data and derived measures, for example, percent distributions, means, or medians. Users may choose more than one geographic area and more than one table that display and print in a scrolling list.

Race / Ethnicity Table ID Suffix Codes
(Note: These are not the same codes as the ACS suffixes)

A = White
B = Black or African American
C = American Indian or Alaska Native
D = Asian

E = Native Hawaiian or Other Pacific Islander
F = Some Other Race
G = Two or More Races
H = Hispanic or Latino

Topics
2010 Census -- American Community Survey

Demographic	Social	Economic	Housing
Sex	Families	Income	Tenure
Age	Education	Poverty	Occupancy
Race	Marital Status	Food Stamps / SNAP	Structure Housing
Ethnicity	Fertility	Employment Status	Value
Household	Grandparent Caregivers	Occupation	Taxes / Insurance
Relationship	Veterans	Industry	Utilities
Group	Disability Status	Journey to Work	Mortgage
Quarters	Language at Home	Place of Work	Monthly Rent
	Citizenship	Health Insurance	Vehicles
	Migration		

Items in red were also collected on the 2010 Census

American Community Survey (ACS)
(survey covering ~ 3.54 million housing units/year nationwide)

Data Release Timetable

Data Product *(next release)*	Population Threshold of Statistical Area	Year of Data Release							
		2006	2007	2008	2009	2010	2011	2012	2013
		Year(s) of Data Collection							
1-Year Estimates *(Sep 13)*	65,000 +	2005	2006	2007	2008	2009	2010	2011	2012
3-Year Estimates *(Oct 13)*	20,000 +			2005 - 2007	2006 - 2008	2007 - 2009	2008 - 2010	2009 - 2011	2010 - 2012
5-Year Estimates *(Dec 13)*	All Areas*					2005 - 2009	2006 - 2010	2007 - 2011	2008 - 2012

∗ **All Areas = All legal, administrative, and statistical geographic areas down to the block group level.**
∗ **Zip Code Tabulation Area (ZCTA) estimates first became available in 2012, with the 2007-2011 estimates.**

ACS Tips

> The ACS measures the *characteristics* of the population, not the *counts* of the population. The official counts of the population still come from the Decennial Census and the Population Estimates Program. The ACS estimates describe characteristics of a population over a *period*, while the Decennial Census and the Population Estimates Program are *point-in-time* (April 1 and July 1, respectively) estimates.
> The ACS generally does a better job estimating percent, rates, means, and medians than it does totals.

ACS data products released every year.
Population thresholds (all surveyed addresses are unique within any 5-year period)
- 1-year estimates: 65,000 or more
- 3-year estimates: 20,000 or more
- 5-year estimates: All geographic areas below 20,000, including all census tracts and all block groups. ZCTAS were first released in 2012, with the 5-year ACS 2007-2011 estimates.

Population controls are from the Population Estimates Program
- One-year ACS estimates are controlled to the PEP estimates as of July 1 of the tabulated year
- Multiyear ACS population and housing estimates are controlled to the average of the individual year's population and housing estimates (from the PEP)

Constructing ACS estimates
- Data are pooled across 12 months, 36 months, or 60 months (1-year, 3-year, 5-year)
- Appropriate weights are assigned for housing and population estimates (from the PEP)

Comparing ACS estimates with Census data
- Comparisons can be made for most population and housing subjects
- Global differences (residence rules, universes, and reference periods) exist between the ACS and the decennial census, and some items cannot be compared at all
- For more information, see http://www.census.gov/acs/www/guidance_for_data_users/comparing_data/

Comparing two or more ACS estimates across different geographic areas
- Use the same length time period (1-year ACS estimate to other 1-year ACS estimate, and so on)
- Use the same time period when making comparisons (2008-2010 to 2008-2010, for instance)

Comparing two or more ACS estimates for one geographic area across time
- Use the same length time period
- Try to compare non-overlapping periods; statistical testing is more straightforward (See Compass Guide)
- Use caution if geographic boundaries have changed over time

Dollar-valued (or dollar-denominated) estimates in multiyear estimates
- Income
- Rent
- Home values
- Energy costs

Estimates are adjusted for inflation to the most recent year, using inflation factors based on the Consumer Price Index (or CPI). A similar adjustment is also done for individual months within a one-year estimate. Inflation adjustment is designed to put the collected data into dollars of equal value.

Geographic boundaries in multiyear estimates
- Based on geographic boundaries as of January 1 of the last year in the multi-year period.
- Census Bureau's annual Boundary Annexation Survey (or BAS) collects information about the following legally defined geographic areas:
  - Counties or county-equivalents
  - Incorporated places
  - Federally-recognized American Indian areas
- Boundaries of other statistical areas (such as census tracts, block groups, urbanized areas, PUMAs) are updated every decade in conjunction with the decennial census

ACS 5-year estimates
- Released every year, dropping the oldest year and adding the most recent
- For most areas, no population thresholds; there are some disclosure-related release restrictions, most of which apply only to block groups
- Data user must look at the margins of error (MOEs)!
- Are not filtered based on the reliability of the estimates; many published estimates are unreliable - - decision to release these data driven by the need to provide building blocks for users to aggregate and to be certain even the smallest areas receive data (see Oklahoma Department of Commerce ACS calculator)
- Excluded data products: Comparison Profiles and Ranking Tables
- First releases: 5-year Selected Population Tables and 5-year AIAN Tables (with 2006-2010 estimates -- Dec 2011) and Zip Code Tabulation Areas (2007-2011 estimates - - Dec 2012)
- Census block group estimates:
  - Not displayed as tables in American FactFinder (AFF) for the casual data user
  - Released only in summary file format, accessible from the FTP site (AFF Main tab)

ACS Product Types
(table and profile formats)

Data Product Type (Table Prefix)	Description
American Indian and Alaska Native (AIAN) Tables	The four ACS Data Profiles and more than 250 Detailed Tables first produced for the AIAN population from the 5-year ACS 2006-2010 estimates. These will be updated every 5 years.
Comparison Profiles (CP) **Threshold: 65,000+**	Available for one-year estimates only. They currently compare data from 2007 through 2011, with an asterisk ("*") in the statistical significance column if one estimate is significantly different from the next. A "c" indicates both estimates are controlled and thus a test of statistical significance is not appropriate. There are four types of Comparison Profile: social, economic, housing, and demographic, and they display the same characteristics as the data profiles.
Data Profiles (DP)	Provide broad social, economic, housing, and demographic profiles.
Detailed Tables (B) or (C)	The Detailed Tables provide the most detailed data on all topics and geographic areas and are the foundation upon which other data products are built. Due to the level of specificity of the Detailed Tables, many of the Base (or "B") tables have a "collapsed" (or "C") version, with fewer categories.
Geographic Comparison Tables (GCT)	Compare geographic areas other than states, for example, counties or congressional districts, for key variables.
Narrative Profiles (NP)	Summarize the information in the data profiles using concise, nontechnical text (1- and 3-year estimates only). **These are due to be discontinued after 2013.**
Ranking Tables (R)	Provide state rankings of estimates across 86 key variables. Available only for the 1-year ACS estimates and only to the State level.
Selected Population Profiles (S) **Threshold: 20,000+**	Provide broad social, economic, and housing profiles for a large number of (1) race, ethnic, (2) ancestry, and (3) country/region of birth groups. There are two thresholds used for Selected Population Profiles. First, the total population size of the geographic area must be at least 500,000. Then we look at the size of the population group of interest, which must meet the thresholds for 1-year and 3-year ACS estimates, that is, 65,000 and 20,000 respectively. This product type is not available for the 5-year ACS estimates.
Subject Tables (S)	Similar to Data Profiles but include more detailed ACS data, classified by subject. For information about a particular topic, such as employment, education, and origins and language, users should start with the Subject Tables. Subject Tables provide pre-tabulated numbers and percentages for a wide variety of topics, often available separately by age, sex, race or ethnicity.

Topics Covered by the ACS
(with 2-digit table ID code)

01 = Age and Sex

02 = Race

03 = Hispanic or Latino Origin

04 = Ancestry

05 = Foreign Born, Citizenship; Year of Entry; Nativity

06 = Place of Birth

07 = Residence 1 Year Ago; Migration

08 = Journey to Work; Workers; Commuting

09 = Children; Household Relationship

10 = Grandparents; Grandchildren

11 = Household Type; Family Type; Subfamilies

12 = Marital Status and History

13 = Fertility

14 = School Enrollment

15 = Educational Attainment

16 = Language Spoken at Home and Ability to Speak English

17 = Poverty

18 = Disability

19 = Income (Households and Families)

20 = Earnings and Income (Individuals)

21 = Veteran Status

22 = Food Stamps

23 = Employment Status; Work Experience; Labor Force

24 = Industry & Occupation; Class of Worker

25 = Housing

26 = Group Quarters

27 = Health Insurance

99 = Imputation table for any topic

Wildcard Shortcut
(Finding ACS tables by entering topic ID code in American FactFinder)

Advanced Search tab: (left side—"topic or table name")

You may enter a wildcard ("*") designation before and after the ID code to display search results for a particular topic. For example,

14

displays all tables (in all available formats and ACS datasets) relating to School Enrollment

Content Updates to the 2013 ACS Questionnaire

- Computer ownership and internet usage -- NEW
- Food stamps (Supplemental Nutritional Assistance Program – SNAP)
- Veteran's status
- Wages, salary, and property income

Tips for Reducing the Margins of Error (MOEs)

- Expand geographic level, for example, from census tract to place or county
- Aggregate geographies and recalculate margin of error
- Expand population group, if possible (for example, Filipino to Asian)
- Use "C" (Collapsed) table instead of "B" (Base) table (if available)
- Use higher level multi-year ACS estimate
    - 3-year estimate instead of 1-year estimate
    - 5-year estimate instead of 3-year or 1-year estimate

ACS Table ID Numbers Deconstructed
Example: Table B14007B broken down into component parts . . .   B   14   007   B

The initial character(s) ("B" in the example above) is always a letter (or more than one letter), designating the "product type" (or table format) in American FactFinder:

- **B** is used for Base (Detailed) Tables, which provide the most detailed estimates
- **C** is used for a Collapsed version of a Base (Detailed) Table.   A C table is similar to a B table with the same number (e.g., C07001 and B07001), but two or more lines from the B table have been collapsed to a single line in the C table. Not every B table has a corresponding collapsed version
- **DP** is used for Data Profiles and **NP** for Narrative Profiles (1- and 3-year estimates only)
- **GCT** is used for Geographic Comparison Tables
- **R** is used for Ranking Tables (1-year estimates only, down to State level only)
- **S** is used for Selected Population Profiles (1- and 3-year estimates only) and Subject Tables

   Note: As of the 5-year 2006-2010 estimates release, Selected Population Tables and AIAN Tables are available as separate ACS 5-year datasets

The next two characters are numbers ("14" in the example) designating the table topic (see reverse side of page for complete list of topics), in this case, School Enrollment.

The next three characters are a sequential number ("007" in the example) that uniquely identifies the table within a given topic.

For select tables, an alphabetic suffix follows ("B" in the example above) to indicate that a table is repeated for the nine major race and Hispanic or Latino groups.

Race / Ethnicity Table ID Suffix Codes
(Note: These are not the same codes as the Decennial Census suffixes)

- A = White Alone
- B = Black of African American Alone
- C = American Indian and Alaska Native Alone
- D = Asian Alone
- E = Native Hawaiian and Other Pacific Islander Alone
- F = Some Other Race Alone
- G = Two or More Races
- H = White Alone, not Hispanic
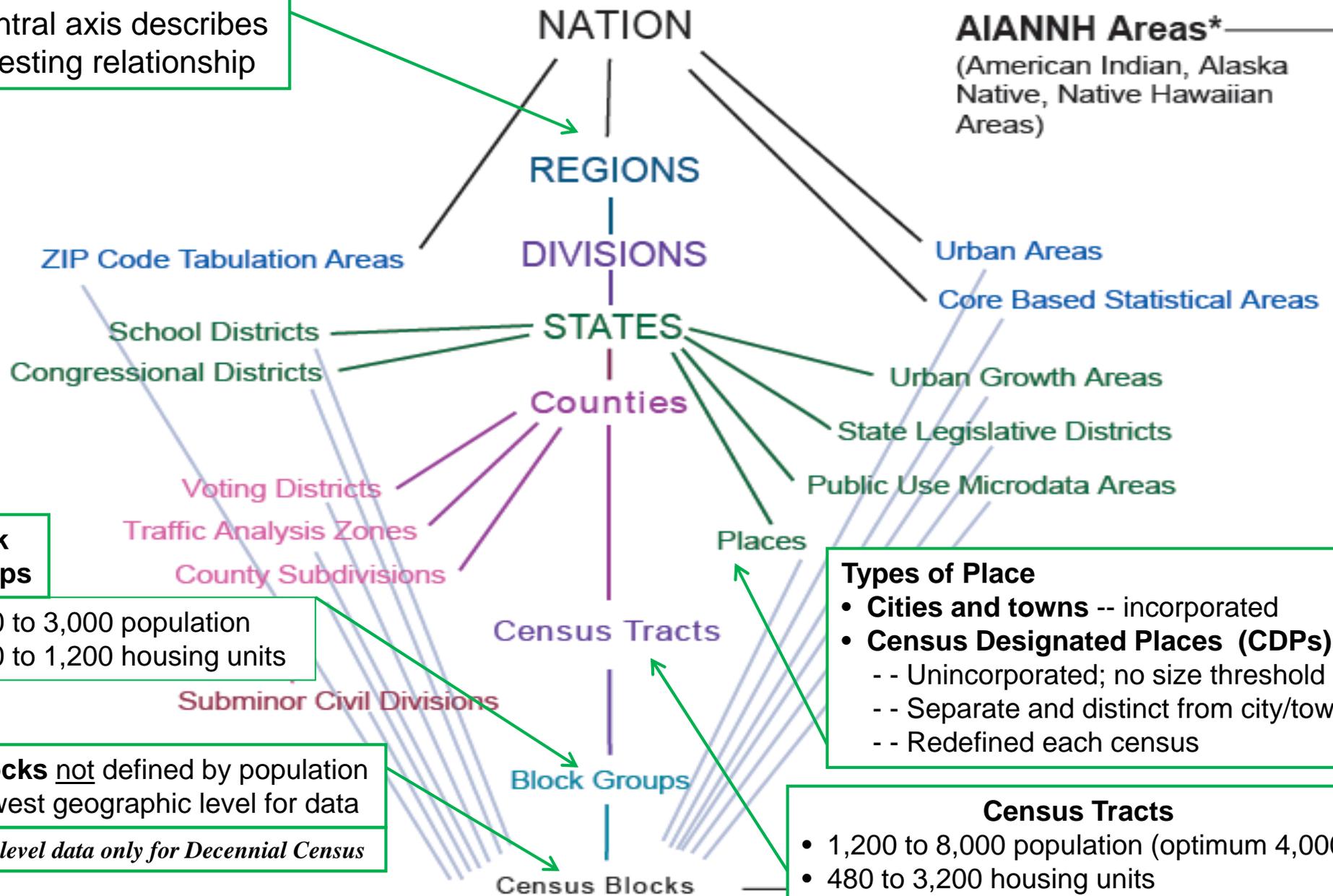- I = Hispanic or Latino

Census Geography Hierarchy
(with 2010 Statistical Area Criteria)
Revised 03-27-13

Central axis describes a nesting relationship

NATION

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

REGIONS

DIVISIONS

ZIP Code Tabulation Areas

Urban Areas

Core Based Statistical Areas

School Districts

STATES

Congressional Districts

Urban Growth Areas

Counties

State Legislative Districts

Public Use Microdata Areas

Voting Districts

Traffic Analysis Zones

County Subdivisions

Places

Block Groups

- 600 to 3,000 population
- 240 to 1,200 housing units

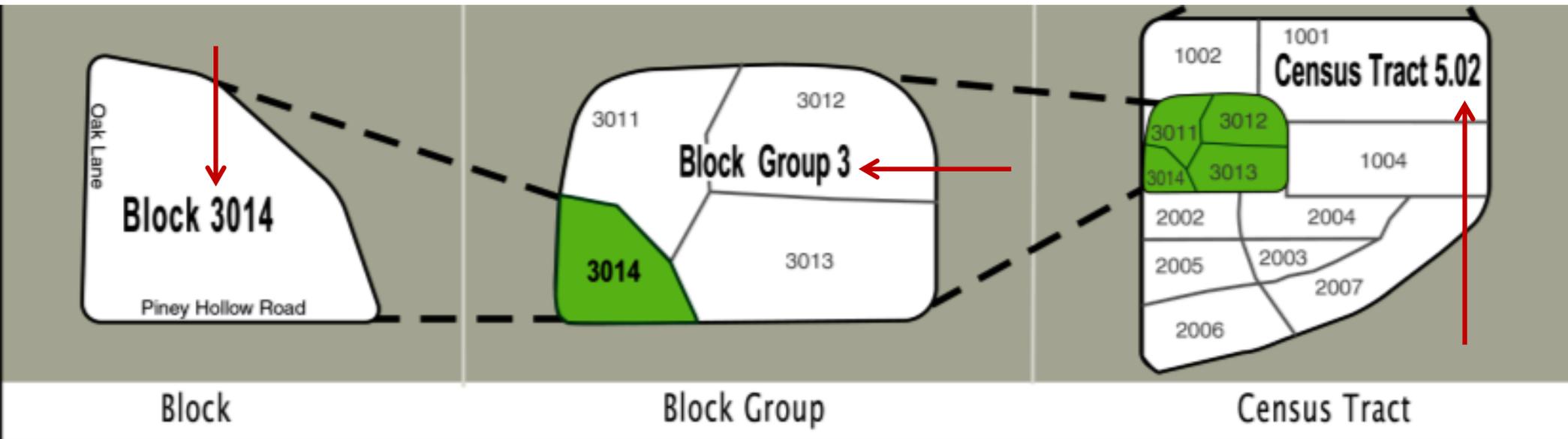**Census Tracts**

Subminor Civil Divisions

Types of Place
- **Cities and towns** -- incorporated
- **Census Designated Places (CDPs)**:
  - - Unincorporated; no size threshold
  - - Separate and distinct from city/town
  - - Redefined each census

- **Blocks** <u>not</u> defined by population
- Lowest geographic level for data

Block level data only for Decennial Census

Block Groups

Census Blocks

Census Tracts
- 1,200 to 8,000 population (optimum 4,000)
- 480 to 3,200 housing units

Small Area Geography Hierarchy

- **Block number:** Blocks have 4-digit numbers – their block group number ("3" in this illustration) is the first digit.
- **Block group number:** Always a single digit (1 to 9).
- **Census tract number:** A decimal indicates that a census tract has been split, usually because it has exceeded the optimum size (housing units or population). This enables comparability from census to census.

- **Decennial Census:** Lowest level of geography on American FactFinder (AFF) - - **block**.
- **American Community Survey:** Lowest level of geography on AFF - - **census tract**; on the FTP (download) site - - **block group**.