Just the Facts, Ma’am
Getting Started with the U.S. Census & American FactFinder

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Objectives

• Introduction to Census and American Community Survey
• Approaches for navigating American FactFinder
What languages do the people in my community speak at home?
What are the top occupations of first-generation Americans?
Research Questions

How has the area around the Staples Center in Los Angeles been affected by its development and expansion?
Key: Census data allow us to describe a population or place at a specific time.

Research Questions
Article 1, Section 2

Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other Persons. The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct. The Number of Representatives shall not exceed one for every thirty Thousand, but each State shall have at Least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to chuse three, Massachusetts eight, Rhode-Island and Providence Plantations one, Connecticut five, New-York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

U.S. Census Bureau & the Decennial Census
“10 Questions in 10 Minutes”

Census 2010

Source: http://www.census.gov/2010census/about/interactive-form.php
Source: http://www.socialexplorer.com/
Population vs. Sample

Source: 1940 Census
• The American Community Survey (ACS) is a **nationwide, continuous survey** of social, economic & housing characteristics

**Key:** More timely data but limitations
• Education
• Marital Status
• Veterans
• Place of Birth
• Citizenship
• Year of Entry to U.S.
• Language Spoken at Home
• Grandparent Caregivers
• Income
• Benefits
• Employment Status
• Occupation
• Industry
• Commuting to Work
• Place of Work

American Community Survey

Economic Characteristics
• Tenure
• Occupancy & Structure
• Housing Value
• Taxes & Insurance
• Utilities
• Mortgage & Monthly Rent

American Community Survey

Housing Characteristics
• Sex
• Age
• Race
• Hispanic Origin

American Community Survey

Demographics
• The ACS is continuously given to a sample of the population.
• Statistics calculated from the ACS are considered estimates and include a margin of error.
• The Census Bureau claims a confidence interval of 90% for the ACS estimates.
### Margin of Errors

<table>
<thead>
<tr>
<th>Age by Language Spoken at Home</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
</tr>
<tr>
<td>Total:</td>
<td>291,524,091</td>
</tr>
<tr>
<td>5 to 17 years:</td>
<td>53,842,873</td>
</tr>
<tr>
<td>Speak only English</td>
<td>42,005,224</td>
</tr>
<tr>
<td>Speak Spanish</td>
<td>8,470,505</td>
</tr>
<tr>
<td>Speak other Indo-European languages</td>
<td>1,557,090</td>
</tr>
<tr>
<td>Speak Asian and Pacific Island languages</td>
<td>1,325,053</td>
</tr>
<tr>
<td>Speak other languages</td>
<td>485,001</td>
</tr>
<tr>
<td>18 to 64 years:</td>
<td>196,296,192</td>
</tr>
<tr>
<td>Speak only English</td>
<td>153,532,515</td>
</tr>
<tr>
<td>Speak Spanish</td>
<td>26,399,097</td>
</tr>
<tr>
<td>Speak other Indo-European languages</td>
<td>7,396,350</td>
</tr>
<tr>
<td>Speak Asian and Pacific Island languages</td>
<td>7,024,203</td>
</tr>
<tr>
<td>Speak other languages</td>
<td>1,944,027</td>
</tr>
<tr>
<td>65 years and over:</td>
<td>41,385,026</td>
</tr>
<tr>
<td>Speak only English</td>
<td>35,409,332</td>
</tr>
<tr>
<td>Speak Spanish</td>
<td>2,710,185</td>
</tr>
<tr>
<td>Speak other Indo-European languages</td>
<td>1,893,972</td>
</tr>
<tr>
<td>Speak Asian and Pacific Island languages</td>
<td>1,136,208</td>
</tr>
<tr>
<td>Speak other languages</td>
<td>235,329</td>
</tr>
</tbody>
</table>
### Table: Distinguishing features of ACS 1-year, 3-year, and 5-year estimates

<table>
<thead>
<tr>
<th></th>
<th>1-year estimates</th>
<th>3-year estimates</th>
<th>5-year estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data collected</td>
<td>12 months of collected data</td>
<td>36 months of collected data</td>
<td>60 months of collected data</td>
</tr>
<tr>
<td>For areas</td>
<td>Data for areas with populations of</td>
<td>Data for areas with populations of</td>
<td>Data for all areas</td>
</tr>
<tr>
<td>populations of</td>
<td>65,000+</td>
<td>20,000+</td>
<td></td>
</tr>
<tr>
<td>Smallest sample size</td>
<td>Largest sample size than 1-year</td>
<td>Largest sample size</td>
<td></td>
</tr>
<tr>
<td>More reliable</td>
<td>More reliable than 1-year; less</td>
<td>Most reliable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>reliable than 5-year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most current data</td>
<td>Less current than 1-year estimates;</td>
<td>Least current</td>
<td></td>
</tr>
<tr>
<td></td>
<td>more current than 5-year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best used when</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currency is more</td>
<td>More precise than 1-year, more</td>
<td>Precision is more important than</td>
<td></td>
</tr>
<tr>
<td>important than</td>
<td>current than 5-year</td>
<td>currency</td>
<td></td>
</tr>
<tr>
<td>precision</td>
<td></td>
<td>Analyzing very small populations</td>
<td></td>
</tr>
<tr>
<td>Analyzing large</td>
<td>Analyzing smaller populations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>populations</td>
<td>Examining smaller geographies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>because 1-year estimates are not</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>available</td>
<td></td>
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<td></td>
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<td>Examining tracts and other smaller</td>
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<td></td>
<td>geographies because 1-year estimates</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>are not available</td>
<td></td>
</tr>
</tbody>
</table>

**Multi-Year Estimates**

### OCCUPANCY STATUS
Universe: Housing units  
2007-2011 American Community Survey 5-Year Estimates

<table>
<thead>
<tr>
<th>ZCTA5 90027</th>
<th>Estimate</th>
<th>Margin of Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>23,572</td>
<td>+/-290</td>
</tr>
<tr>
<td>Occupied</td>
<td>21,702</td>
<td>+/-341</td>
</tr>
<tr>
<td>Vacant</td>
<td>1,870</td>
<td>+/-353</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Explanation of Symbols:
- An "***" in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
- An "**" in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
- An "*" following a median estimate means the median falls in the lowest interval of an open-ended distribution.
- An "***" in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
- An "****" entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
- An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
- An '(X)' means that the estimate is not applicable or not available.
Census Geographies

Source: http://www.census.gov/acs/www/guidance_for_data_users/geography/
American FactFinder

Access: http://factfinder2.census.gov/
SCHOOL ENROLLMENT BY TYPE OF SCHOOL BY AGE FOR THE POPULATION 3 YEARS AND OVER

Universe: Population 3 years and over
2011 American Community Survey 1-Year Estimates

Thematic Map of Estimate: Enrolled in public school: 3 and 4 years
Geography: by County

Source: U.S. Census Bureau, 2011 American Community Survey
American FactFinder
But wait...

Source: U.S. National Archives, Local Identifier: 412-DA-13597
http://research.archives.gov/description/556049
Questions, Boundaries & Timeframe

2000 Census

16. Does this person have any of the following long-lasting conditions:
   a. Blindness, deafness, or a severe vision or hearing impairment? Yes ☐ No ☐
   b. A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying? Yes ☐ No ☐

2013 ACS

17. a. Is this person deaf or does he/she have serious difficulty hearing? Yes ☐ No ☐
   b. Is this person blind or does he/she have serious difficulty seeing even when wearing glasses? Yes ☐ No ☐

Making Comparisons
Understanding Measurement of
Race & Ethnicity
Census Data is Spatial Data

Selecting Geographies

Source: SimplyMap
Census Data is Spatial Data

Selecting Geographies

Source: SimplyMap
Census Data is Spatial Data

Selecting Geographies

Source: Google Maps
• American Community Survey
  http://www.census.gov/acs/www/
• 2010 Census
  http://www.census.gov/2010census/

Digging Into the Data
Beyond the Census Bureau

- **Social Explorer** Interactive mapping database that can be used to view current and historical Census and ACS data in map or table ("report") format. Available by subscription and with limited data freely available. [http://www.socialexplorer.com](http://www.socialexplorer.com)

- **National Historical Geographic Information System (NHGIS)** Aggregate census data and GIS-compatible boundary files for the United States, 1790 to present: [https://www.nhgis.org/](https://www.nhgis.org/)

- **IPUMS-USA** Public-use Census and ACS microdata: [http://usa.ipums.org/usa/](http://usa.ipums.org/usa/)
August 7: Congressional research with Rosalind Tedford

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Thank You! Questions?