*NCLA Government Resources Section's*
*Help! I'm an Accidental Government Information Librarian Series*

# Brave New World

## Using the

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

Michele Hayslett
May 4, 2012

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

# Why?

## CB says ACS provides

- Better quality data
- More frequently (every year)
- Better knowledge of local areas
- Cost savings ($1 billion)

# Better Quality Data Over Decennial Because

- **Field representatives in every county will have local knowledge**

  More highly trained, greater longevity
  - How to reach hard to enumerate populations
  - If a language barrier exists
  - How to handle local situations

- **More extensive follow-up**

  Computer-assisted telephone interviews

  as well as in-person visits

# Every year means more flexible content

- http://www.census.gov/acs/www/methodology/questionnaire_archive/

- Link on the left side of the page for **Summary of Questionnaire Changes**

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

# New Variables in 2005

- Whether the household received food stamps in the previous 12 months and their value
- The length of time and main reason for staying at the address (for example, permanent home, vacation home, to attend school or college)
- For women ages 15-50, whether they gave birth to any children in the past 12 months.

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

# New Variables in 2008

- Health insurance coverage & through what provider (employer, military, purchased directly, etc.)
- Marital history
- VA service-connected disability rating
- DROPPED the length of time and main reason for staying at the address (for example, permanent home, vacation home, to attend school or college)

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

# New Variables in 2009

- Bachelor's degree field of study

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

# Like Census

- Still operating under Title 13
  - Universe is residents, not citizens
  - Response is required by law

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

**Goal is not to produce a population count but rather to produce the characteristics of the population.**

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

# Effect on Decennial Census

No more long form —

In 2010, only 100% data

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

# However…

**Smaller sample size – initially 12.5% instead of 17%**

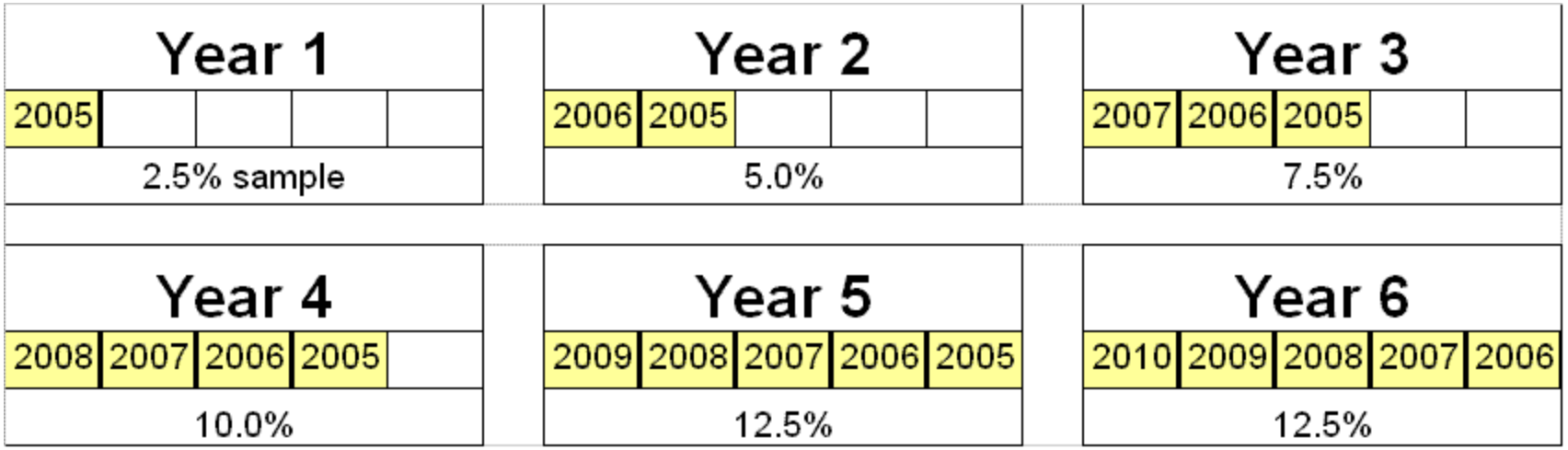
- **12.5% over 5 years; about 2.5% per year**
  - **Oversampling in smallest governmental units & rural areas so "about 2.5%" actually ranges from 1.7% to 10%**
  - ***Many* tables suppressed in first five-year estimates (Appendix E 2005-2009 ACS 5-year estimates)**
- **Increased in 2011 to about 13.5% but the data for the smallest geographies using that sample (2011-2015 five-year estimates) won't be available until 2016.**

# How can they do it every year?

## Rolling sample on a five-year cycle

### Huh?

(*Years reflect data collection; data is released about 9-12 months after year's end*)



AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

# Release Schedule

| Type of Data | Population Size of Area | Data For The Previous Year Released In The Summer Of: | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010+ |
| Annual estimates | 250,000+ | | | | | | | | |
| Annual estimates | 65,000+ | | | | | | | | |
| 3-year averages | 20,000+ | | | | | | | | |
| 5-year averages | Census Tract and Block Group* | | | | | | | | |

Data reflect American Community Survey testing through 2004

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

# Obvious Differences

- **Data for smaller communities (<65k) in 3- and 5-year averages**
  - Use larger communities' 3- and 5-year averages to compare with smaller communities
- **Margin of error more transparent**
  - All estimates presented with lower and upper bounds of 90% confidence interval
  - Can be very large compared to the estimate

# Median Value of Owner Occupied Units by Year Built

| | Franklin County, Pennsylvania | | Lancaster County, Pennsylvania | | York County, Pennsylvania | |
|---|---|---|---|---|---|---|
| | Estimate | Margin of Error | Estimate | Margin of Error | Estimate | Margin of Error |
| Median value -- | | | | | | |
| Total: | 143,500 | +/-4,491 | 158,700 | +/-2,939 | 140,000 | +/-3,373 |
| Built 2005 or later | 108,900 | +/-148,426 | 199,000 | +/-140,113 | 188,700 | +/-67,244 |
| Built 2000 to 2004 | 192,900 | +/-30,777 | 214,100 | +/-15,202 | 192,100 | +/-20,061 |
| Built 1990 to 1999 | 167,600 | +/-12,139 | 188,000 | +/-9,157 | 183,400 | +/-11,284 |
| Built 1980 to 1989 | 149,200 | +/-12,492 | 166,700 | +/-5,312 | 153,200 | +/-11,041 |
| Built 1970 to 1979 | 138,100 | +/-15,103 | 157,400 | +/-4,641 | 144,400 | +/-7,601 |
| Built 1960 to 1969 | 132,000 | +/-9,088 | 157,600 | +/-6,955 | 134,600 | +/-5,901 |
| Built 1950 to 1959 | 136,000 | +/-9,941 | 134,800 | +/-6,689 | 119,900 | +/-5,208 |
| Built 1940 to 1949 | 134,800 | +/-22,649 | 124,200 | +/-11,488 | 103,000 | +/-9,565 |
| Built 1939 or earlier | 130,100 | +/-12,370 | 139,000 | +/-9,779 | 103,300 | +/-6,818 |

Source: U.S. Census Bureau, 2005 American Community Survey

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

# Statistics Break!

Median

78
32
25
24
23
23
5

24

Mean

78
32
25
24
23
23
5

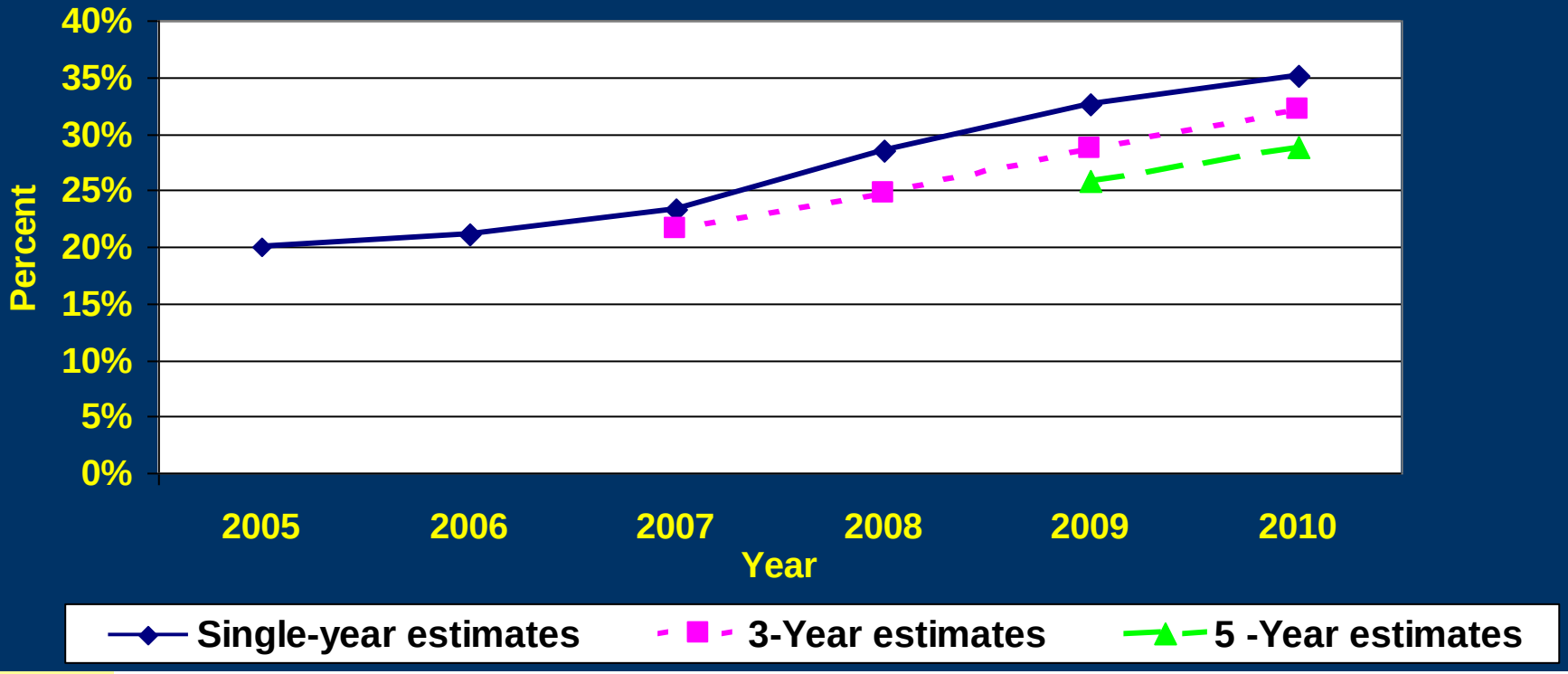
210/7 = 30

# Implications with Multi-year Averaged Data

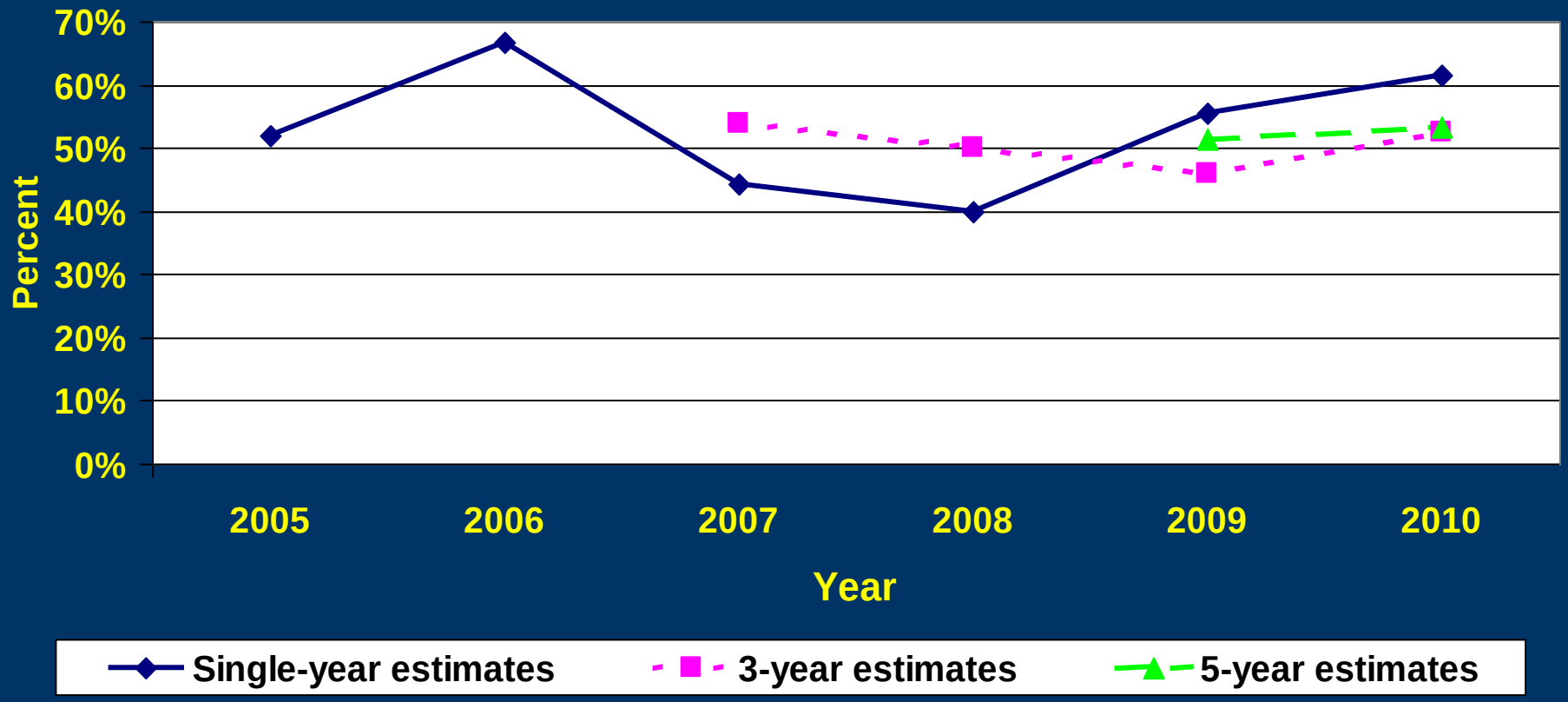
Estimates lag behind the actual trend

- Handicap (in beginning, especially)
- Fluctuating figures harder to track

## Example 1: Item with year-to-year increases (Percent Foreign Born Population)



## Example 2: Item with year-to-year increases and decreases (Homeownership rates)



# Implications with Multi-year Averaged Data

- What geographic boundary applies?
  - most recent within the average (will result in more TIGER updates)
- Which year's dollar value applies?
  - most recent within the average (others inflation-adjusted)

# So What's Really Different?

- 2005 ACS is Household Universe, not Total Pop (excludes Group Quarters)

- Questions dependent on point in time survey is administered
  - Age
  - School enrollment

# So What's Really Different?

- Anything to do with income
  - DC: "last year" asked on April 1st
  - ACS: "in the last 12 months"

- Residence rules
  - DC: where someone lives most of the year
  - ACS: where someone lived most of the time in the last TWO MONTHS

# How American FactFinder Fits In

- Each choice affects what you can get
  - prevents pulling data from two surveys at once
  - If choose 2000 geography, won't have option to choose 2010 variables

# How American FactFinder Fits In

- Does NOT include BG-level ACS data
  - Use Summary File Retrieval Tool or flat file dwnld

    SFRT & its User Guide:
    http://www.census.gov/acs/www/data_documentation/summary_file/

    FFD: http://www.census.gov/acs/www/data_documentation/data_via_ftp/

  - Technical Documentation Appendix E provides list of available BG tables—*many are suppressed*

    Linked from right side of each year tab at
    http://www.census.gov/acs/www/data_documentation/summary_file/
    (2005-2009 on 2009 tab; 2006-2010 on 2010 tab)

# How American FactFinder Fits In

- Presents Margins of Error for all ACS data
  - Check out Compass Guides for tips on particular communities and figuring out whether data are accurate enough for the users' needs

    http://www.census.gov/acs/www/guidance_for_data_users/handbooks/

  - Helpful CB PowerPoint at

    http://www.census.gov/acs/www/Downloads/library/2009/2009_Griffin_01.pdf

    >>How to Deal with Estimates with Low Reliability

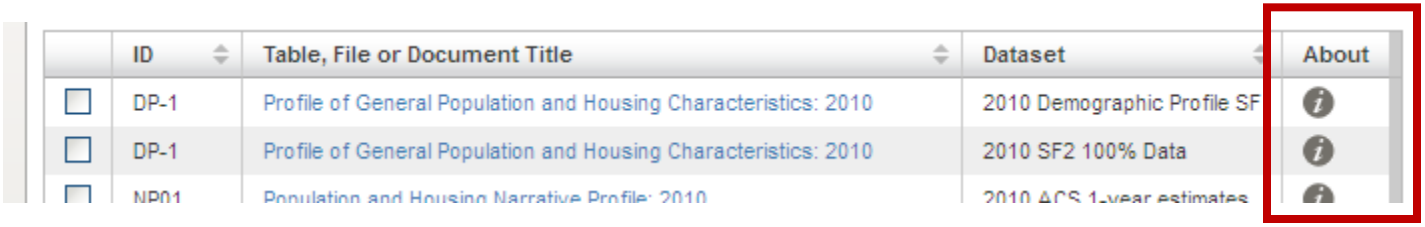
# American FactFinder Quirks

- Doesn’t always provide %s
- Easy to identify what survey data are from but not always easy to understand what that means

# Best Way to Tell the Difference

- Read the Technical Documentation
  - Get familiar with these web sites
  1. http://www.census.gov/acs/www/guidance_for_data_users/comparing_data/
  2. http://www.census.gov/acs/www/data_documentation/documentation_main/

  - Use the About button in AFF



# Best Way to Keep Current

- Get to know the folks at your State Data Center
- http://www.census.gov/sdc/network.html

- Sign up for Alerts

>>ACS Main page>>right side

# Questions?

Michele Hayslett
Data Services Librarian
UNC at Chapel Hill
michele_hayslett@unc.edu