THE AMERICAN COMMUNITY SURVEY: A NEW ERA FOR DEMOGRAPHIC DATA

Wisconsin Land Information Association Workshop February 24, 2010

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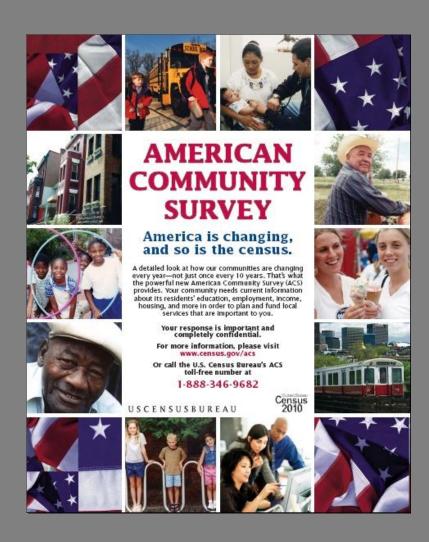


A New Era for Demographic Data?

"Fresh" community data every year

Detailed Data for small areas

Makes 2010 Census easier to administer



Decennial Census

Previously, decennial census collected:

- A count of the population (short form)
- Economic, social, and housing information about communities and population groups (long form)

American Community Survey

It is NOT:

- A population count
- A tool or a measurement for apportionment of Congress

American Community Survey

It IS: A large (3 million addresses), continuous survey that produces

Implementation

- Annual and multiple-year estimates of the characteristics of the population and housing (not counts!)
- Information for small areas including tracts, block groups and population subgroups

2010 Census and the ACS

2010 Census

- U.S. population count
- Short form <u>only</u>
- Only long form is for U.S. territories, except Puerto Rico
- Usual residence

ACS

- U.S. population <u>characteristics</u>
- Includes short form questions
- Conducted in Puerto Rico
- Current residence

Goal = produce data comparable to Census 2000 long form

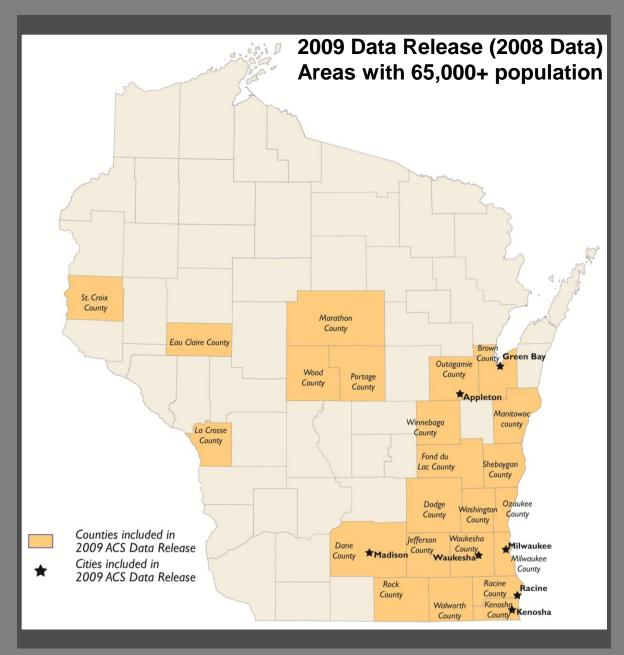
Every County Nationwide

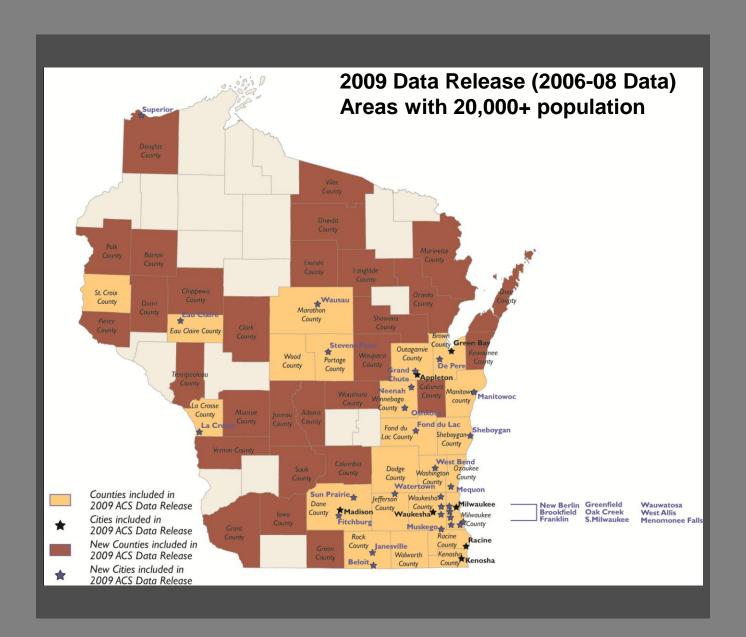
- 3 million addresses every year throughout the U.S. and in Puerto Rico
- Provided single-year period estimates for communities of 65,000 or more starting in 2006
- Provided 3-year period estimates for communities with populations of 20,000 or more starting in 2008
- Will provide 5-year period estimates starting in 2010

Timetable for Data Releases

Data Product	Population Size		Data released in:					
	of Area	2006	2007	2008	2009	2010	2011	2012
1-Year Estimates for Data Collected in:	65,000+	2005	2006	2007	2008	2009	2010	2011
3-Year Estimates for Data Collected in:	20,000+			2005-2007	2006-2008	2007-2009	2008-2010	2009-2011
5-Year Estimates for Data Collected in:	All Areas*					2005-2009	2006-2010	2007-2011
Hypothetical: Census 2010 Long Form	All Areas							Х
* Five-year estimates will be available for areas as small as census tracts and block groups. Source: US Census Bureau								

- 2008 single-year estimates: Jan 2008 Dec 2008 interviews (12 months)
- o 2006-2008 3-year estimates: Jan 2006 Dec 2008 interviews (36 months)
- 2005-2009 5-year estimates: Jan 2005 Dec 2009 interviews (60 months)





Period Estimates

- They describe the characteristics of an area over a specific time period
- Contrast with point-in-time estimates that describe the characteristics of an area on a specific date
 - Not population counts

ACS Data Topics

- Age, gender, race/ethnicity
- Families, children, the elderly
- Income, poverty
- Education
- Work, unemployment
- Commuting patterns
- Housing
- And much more...

Recent Content Changes

New Content

2008

- 1. Health Insurance Coverage
- Veteran's Service-connected Disability
- 3. Marital History

2009

- 1. Field of Undergraduate Degree
- Wording and format changes in 2008 to match Census 2010 questions

ACS Data Products

- Detailed Tables and collapsed tables
- Data Profiles
- Narrative Profiles
- Subject Tables
- Selected Population Profiles

- Geographic Ranking Tables
- Thematic Maps
- Geographic Comparison Tables
- Public Use Microdata Sample (PUMS) Files

Using ACS Data

- Different residence rules than decennial census
- Note margin of error (MOE) and confidence intervals
- Period estimates not population counts how to compare and what about multiyear period estimates?
- Should not be used as population estimates

Current Residence Rule

Is a resident if:

- Lives there year round
- Lives there >2 months but not year round
- Is living there now with no other place to live
- Is away now for 2 months or less

Not a resident if:

- Lives there 2 months or less with another residence
- Is away now for >2 months

Margin of Error (MOE)

Definition:

- A measure of the precision of an estimate at a given level of confidence (90%, 95%, 99%)
- Confidence level of a MOE
- MOEs at the 90% confidence level for all published ACS estimates

Margin of Error (MOE)

Interpretation:

- Indicates that a data user can be 90 percent certain that the estimate and the population value differ by no more than the value of the MOE
- MOE can help data users assess the reliability of an estimate
- MOE can help data users avoid misinterpreting small differences between estimates as significant

Error Example

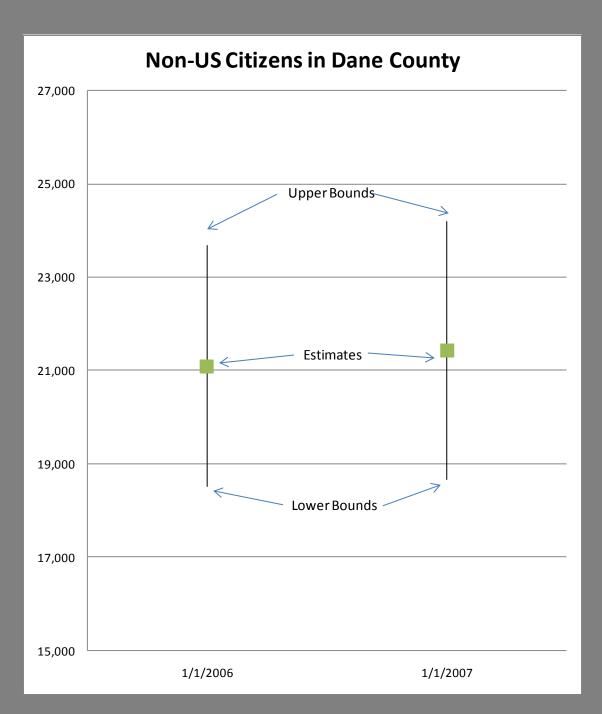
To demonstrate: U.S. Citizen, born in the United States (Dane County):

- Estimate: 427,612
- MOE: +,- 3,109
- Lower bound: 427,612 3,109 = 424,503
- Upper bound: 427,612 + 3,109 = 430,721
- We can be 90% confident that the estimate of US.
 Citizens in Dane County is between 424,503 and 430,721.

Comparisons

Could compare the same geography over time or could compare different geographies in the same time period

- For example, the 2006 estimate of non-US citizens in Dane County was 21,098
- In 2007, it was 21,430
- It would seem like there were 332 more non-US citizens in 2007, but...



The estimates fall within the other year's margins of error.

Multiyear Estimates

- Definition: A period estimate that encompasses more than one calendar year
- Multiyear estimates should be interpreted and labeled as period estimates
 - Multiyear estimates do not represent any one year or the midpoint of a period
 - Correct labeling for multiyear estimate: "The child poverty rate for the 2005-2007 period was X percent."

More on Multiyear Estimates

 Rule of thumb: use ACS data from same time period when comparing geographies. Do not mix and match

 But, with 1, 3 and 5 year estimates for same geography, consider the tradeoffs of currency versus reliability

Currency vs. Reliability

Currency	Reliability
1-year estimates provide information based on the last year	Larger sample sizes produce estimates that are more statistically reliable
3-year estimates provide information based on the last year and the 2 years before that	3-year estimates are based on 3 times as many sample cases as 1-year estimates
5-year estimates provide information based on the last year and the 4 years before that	5-year estimates are based on 5 times as many sample cases as 1-year estimates

Geographic Boundaries

 Multiyear estimates are based on geographic boundaries as of January 1 of the last year in the multiyear period

Example:

2005-2007 ACS estimates use boundaries as of Jan 1, 2007

- Boundaries of other statistical areas will be updated every decade in conjunction with the decennial census
- 2010 Census boundaries will be used for data released in 2011

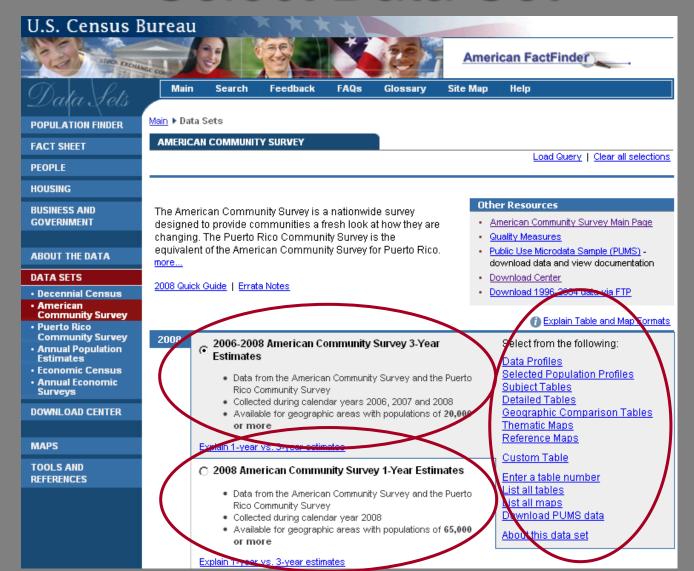
1-year estimates	3-year estimates	5-year estimates		
2010	2008-2010	2006-2010		

Accessing ACS Data

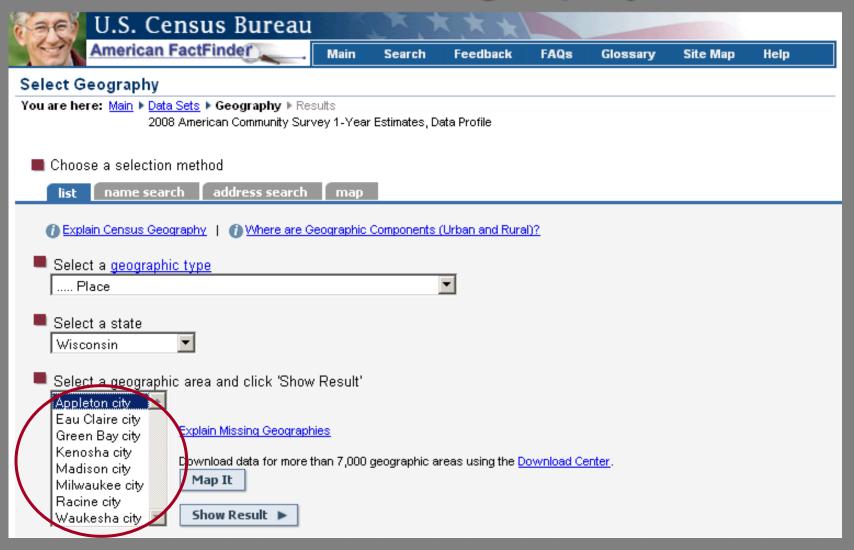
http://factfinder.census/gov



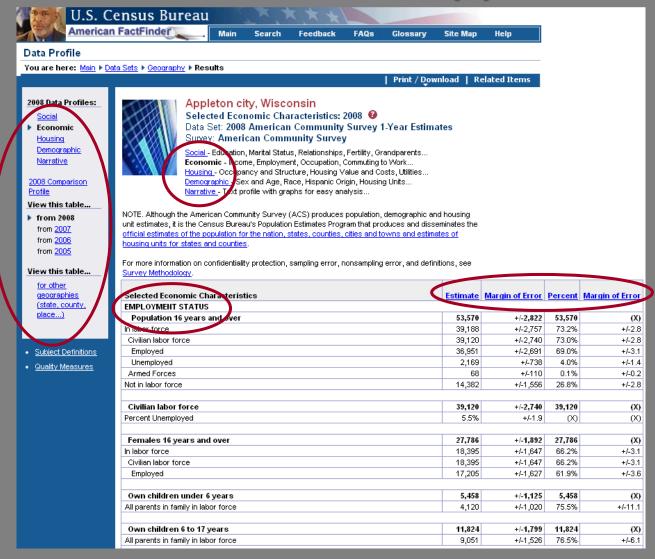
Select Data Set



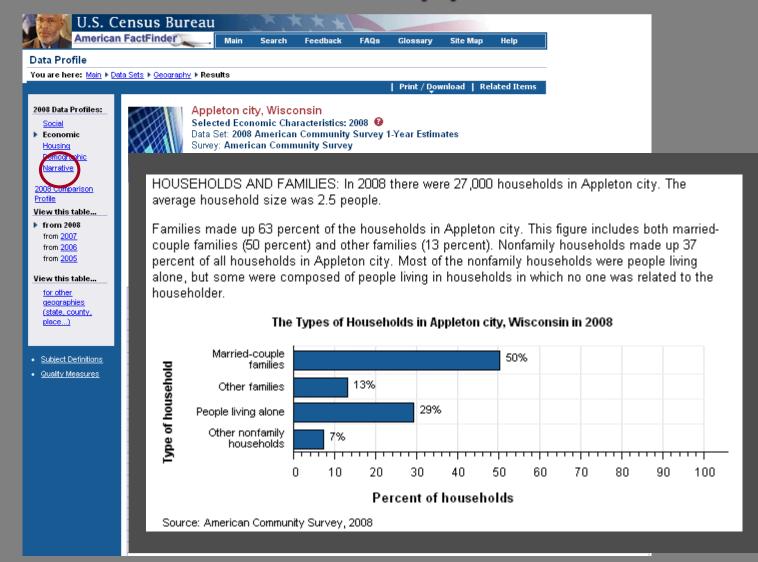
Select Geography



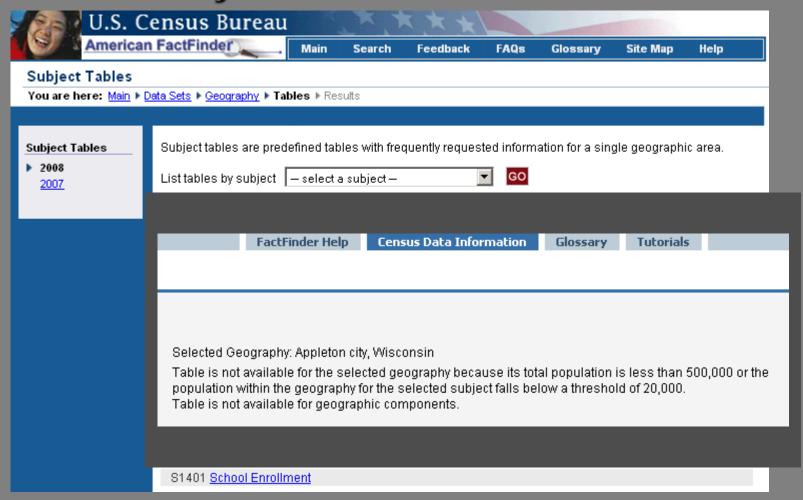
Data Profile for Appleton



Data Profile for Appleton



Subject Table List



Subject Table: Poverty Status



Subject Tables

You are here: <u>Main</u> ▶ <u>Data</u>:

View this table...

▶ from 2008 from 2007

Change...

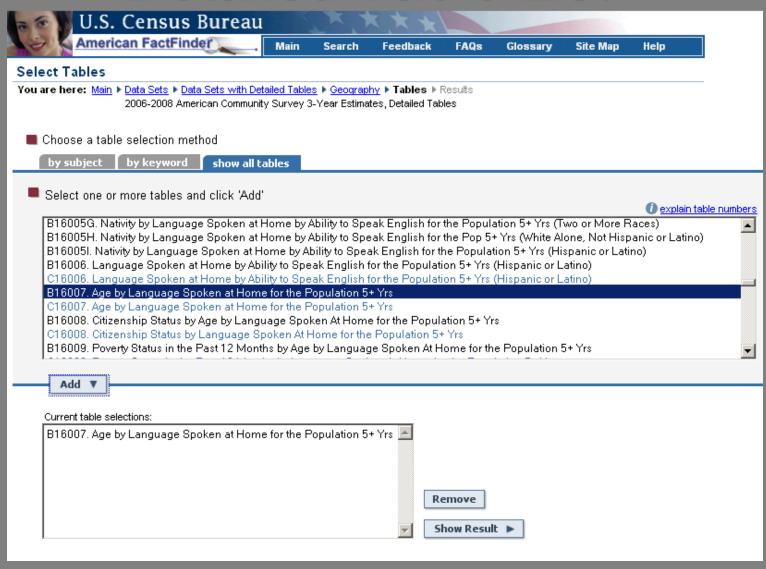
geography (state, county, place...)

<u>table</u>

- Subject Definitions
- Quality Measures

Subject	Total	Margin of Error	Below poverty level	Margin of Error
Population for whom poverty status is determined	68,521	+/-1,387	6,625	+/-1,220
AGE				
Under 18 years	16,987	+/-695	2,432	+/-667
Related children under 18 years	16,987	+/-695	2,432	+/-667
18 to 64 years	44,306	+/-995	3,648	+/-576
65 years and over	7,228	+/-392	545	+/-200
SEX				
Male	33,578	+/-1,041	2,918	+/-694
Female	34,943	+/-847	3,707	+/-743
RACE AND HISPANIC OR LATINO ORIGIN				
One race	N	N	N	N
White	62,203	+/-1,425	5,248	+/-1,067
Black or African American	N	N	N	N
American Indian and Alaska Native	N	N	N	N
Asian	3,779	+/-428	794	+/-456
Native Hawaiian and Other Pacific Islander	N	N	N	N
Some other race	N	N	N	N
Two or more races	N	N	N	N
Two or more races N N N N				
Hispanic or Latino origin (of any race)	N	N	N	N
White alone, not Hispanic or Latino	60,389	+/-1,390	4,824	+/-945

Detailed Table List



Detailed Table on Language

Table Name

Table Number

B16007, AGE BY LANGUAGE SPOKEN AT HOME FOR THE POPULATION 5 YEARS AND OVER -

Universe: POPULATION 5 YEARS AND OVER

Universe

Data Set: 2006-2008 American Community Survey 3-Year Estimates

Survey: American Community Survey:

Data Source

NOTE. Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

For information on confidentiality protection, sampling error, nonsampling error, and definitions, see Survey Methodology.

Collapsed Version

View the collapsed version of this table. Geographies missing from this table are listed below the table.

	Appleton city, Wiscons	
	Estimate	Margin of Error
Total:	66,079	+/-1,538
5 to 17 years:	12,304	+/-689
Speak only English	9,857	+/-655
Speak Spanish	957	+/-285
Speak other Indo-European languages	348	+/-213
Speak Asian and Pacific Island languages	1,142	+/-266
Speak other languages	0	+/-123
18 to 64 years:	46,082	+/-1,154
Speak only English	42,306	+/-1,199
Speak Spanish	1,556	+/-380
Speak other Indo-European languages	651	+/-267
Speak Asian and Pacific Island languages	1,518	+/-284
Speak other languages	51	+/-49
65 years and over:	7,693	+/-534
Speak only English	7,357	+/-540
Speak Spanish	39	+/-47
Speak other Indo-European languages	154	+/-107
Speak Asian and Pacific Island languages	143	+/-111
Speak other languages	0	+/-123

Source: U.S. Census Bureau, 2006-2008 American Community Survey



Definition

Implementation Interpretation Application Resources Detailed Table — Collapsed Version

View the noncollapsed version of this table.

	Appleton city, Wisconsin		
	Estimate	Margin of Error	
Total:	66,079	+/-1,538	
5 to 17 years:	12,304	+/-689	
Speak only English	9,857	+/-655	
Speak Spanish	957	+/-285	
Speak all other languages	1,490	+/-320	
18 to 64 years:	46,082	+/-1,154	
Speak only English	42,306	+/-1,199	
Speak Spanish	1,556	+/-380	
Speak all other languages	2,220	+/-404	
65 years and over:	7,693	+/-534	
Speak only English	7,357	+/-540	
Speak Spanish	39	+/-47	
Speak all other languages	297	+/-157	

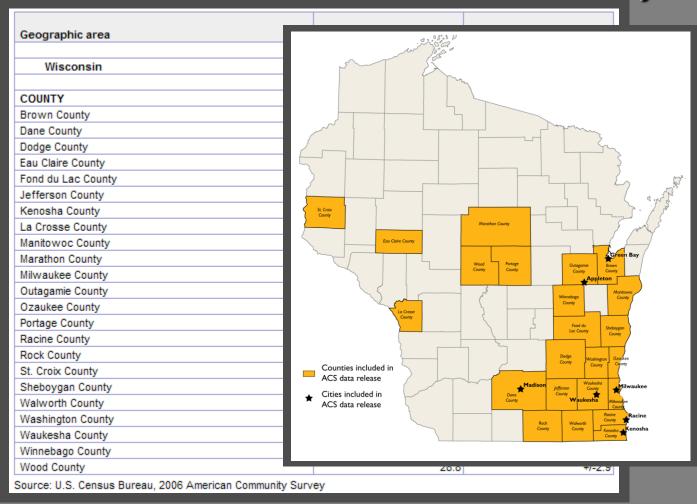
Total:
5 to 17 years:
Speak only English
Speak Spanish
Speak other Indo-European languages
Speak Asian and Pacific Island languages
Speak other languages

Source: U.S. Census Bureau, 2006-2008 American Community Survey

Geographic Comparison Tables



Geographic Comparison: Households with Children by County



ACS Pop Quiz!

How is the ACS different from the Decennial Census?

- ACS is a large, continuous survey; DC is a snapshot of the population taken every ten years
- ACS describes characteristics of an area over a period of time; DC gives point-in-time estimates that describe the characteristics of an area on a specific date
- ACS produces annual and multi-year estimates of the characteristics of population and housing; DC produces population counts every ten years

ACS Pop Quiz!

When are/were data available for places of 65,000+? 20,000+? All areas?

- 65,000+ places: 2006 (annual)
- 20,000+ places: 2008 (3-year estimates)
- All areas: 2010 (5-year estimates)
- Data released in waves around August-October

ACS Pop Quiz!

Where do I go for more information on or assistance with the ACS?

Definition Implementation Interpretation Application Resources

From the Census Bureau

- Handbooks
 http://www.census.gov/acs/www/UseData/Compass/handbook_def.html
- Data: http://factfinder.census.gov
- Guidance on Using data: http://www.census.gov/acs/www/UseData/

From the APL

- Dan Veroff (Director): dlveroff@wisc.edu
- Website: http://www.apl.wisc.edu
- Newsletter on ACS: http://www.apl.wisc.edu/reports/population_notes_sept2006.pdf

Compass Handbooks

- General Data Users
- Businesses
- High School Teachers
- Congress
- Federal Agencies
- Media
- PUMS
- State and Local Governments

- Researchers
- Rural Areas
- American Indian and Alaska Native Populations

http://www.census.gov/acs/www/UseData/Compass/handbook_def.html