

# Poverty Measures for the U.S.

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California State Data Center Meeting  
Sacramento, California



The views expressed in this research, including those related to statistical, methodological, technical, or operational issues, are solely those of the authors and do not necessarily reflect the official positions or policies of the Census Bureau. The author accepts responsibility for all errors.

This paper is released to inform interested parties of ongoing research and to encourage discussion of work in progress. This paper reports the results of research and analysis undertaken by Census Bureau staff. It has undergone more limited review than official publications.



# Outline of presentation

- Official poverty measure
  - CPS ASEC
  - Official Thresholds
  - Poverty Statistics
  - Poverty Guidelines/FPL
- Other sources of “official” estimates
  - ACS, SIPP, SAIPE
- Other poverty measures
  - SPM



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## Poverty

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### Poverty Main

The Census Bureau reports poverty data from several major household surveys and programs. The Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS) is the source of official national poverty estimates. The American Community Survey (ACS) provides single and multi-year estimates for smaller areas. The Survey of Income and Program Participation (SIPP) provides longitudinal estimates. The Small Area Income and Poverty Estimates (SAIPE) program provides model-based poverty estimates for counties and school districts. See [Description of Income and Poverty Data Sources](#) to determine which survey or program meets your specific needs.

#### Latest Releases

- [Income, Poverty, and Health Insurance Coverage in the United States: 2011](#) (P19-243)
- [Poverty Rates for Selected Detailed Race and Hispanic Groups by State and Place, 2007-2011](#) (ACSBRI1-17)
- [Poverty and Shared Households by State, 2011](#) (ACSBRI11-05)
- [Poverty, 2010 and 2011: American Community Survey](#) (ACSBRI11-01)
- [Sharing a Household: Household Composition and Economic Well-Being, 2007-2013](#) (P19-242)
- [Area 10th Concentrated Poverty, 2005-2010](#) (ACSBRI10-17) (PDF - 754K)
- [Child Poverty, 2003 and 2010: Rates by Race & Hispanic Origin by State](#) (ACSBRI10-05) (PDF - 1.3M)
- [Duration of Economic Well-Being: Poverty, 2004-2006](#)
- [Latest Research - Supplemental Poverty Measure](#)
- [Tables of NAS-based Experimental Poverty Estimates: 2011](#)
- [Effect of Benefits and Taxes on Income and Poverty, 2002](#) (P40)
- [Model-based Small Area Income & Poverty Estimates \(SAIPE\) for School Districts, Counties, and States for 2011](#)

### Related Sites

- [Health Insurance](#)
- [Income](#)
- [Small Area Income and Poverty Estimates \(SAIPE\)](#)
- [Experimental Poverty Measures](#)

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## Poverty - Experimental Measures

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### OMB Statistical Policy Directive No. 14

OFFICE OF MANAGEMENT AND BUDGET  
STATISTICAL POLICY DIRECTIVE NO. 14  
DEFINITION OF POVERTY FOR STATISTICAL PURPOSES  
MAY 1978

For the years 1955-1969 the statistics on poverty contained in the Census Bureau's Current Population Reports, Series P-40, No. 48, shall be used by all executive departments and establishments for statistical purposes. For the years 1969 and thereafter, the statistics contained in subsequent applicable reports in this series shall be used.

A number of Federal agencies have been using statistical series on the number of persons and families in poverty, and their characteristics, in analytical and program planning work. The basis for these series has been the classification of income data collected by the Bureau of the Census in accordance with a definition of poverty developed by the Social Security Administration and revised by a Federal Interagency Committee in 1969. This definition provides a range of income cutoffs adjusted by such factors as family size, size of family head, number of children under 18 years of age, and farm-nonfarm residences.

The Bureau of the Census series continues the Social Security Administration definition for the base year, 1963, except that the differential between poverty levels for farm and nonfarm families is reduced from 30 percent to 15 percent. Annual adjustments in Census series are based on changes in the average annual total Consumer Price Index (CPI) instead of changes in the cost of the U.S. Department of Agriculture's Economy Food Plan.

The establishment of this standard data series does not preclude departments and agencies from more detailed analyses or from publication of tabulations for specialized needs although, where applicable, totals must agree with totals published by the Bureau of the Census. Other measures of poverty may be developed for particular research purposes, and published, so long as they are clearly distinguished from the standard data series.

The poverty levels used by the Bureau of the Census were developed as rough statistical measures to record changes in the number of persons and families in poverty and their characteristics, over time. While they have relevance to a concept of poverty, these levels were not developed for administrative use in any specific program and nothing in this Directive should be construed as requiring that they should be applied for such a purpose.

(After this Directive was given, another federal interagency committee met in 1980-1981 to revise the poverty definition. These modifications affected the number of poor and poverty rate only slightly, and were documented in P50-133, Characteristics of the Population Below the Poverty Level, 1980. See also the entry for "Poverty" in Current Population Survey [Definitions and Explanations](#).)

Go to [Poverty Statistics](#)

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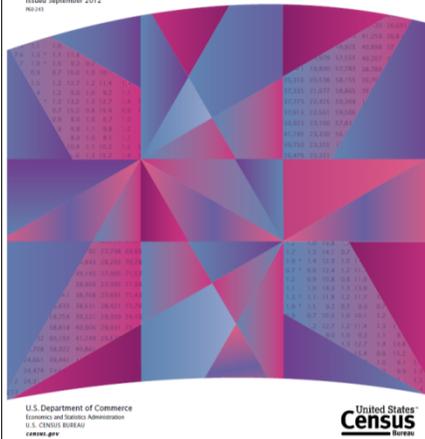
## Official Poverty Measure

- First adopted in 1969
- Continues under OMB Statistical Directive 14
- The 2011 official poverty rate for the nation was 15.0 percent
- Not changed from 2010
- 46.2 million people in poverty

## Income, Poverty, and Health Insurance Coverage in the United States: 2011

Current Population Reports

By Carmen DeNavas-Walt, Bernadette D. Proctor, Jessica C. Smith  
Issued September 2012  
HC-033



## Current Population Survey (CPS)

- Produce monthly employment estimates for the United States and states for selected characteristics and subpopulations.
- With the Annual Social Economic Supplement provide timely estimates of income and health insurance, as well as official poverty estimates, March Supplement
- Annual sample size is about 100,000 addresses.
- Telephone and personal-visit interviews for the 50 states and the District of Columbia. The CPS is a voluntary survey.
- Includes people at their usual place of residence (where they spend most of the time during the year).



## CPS ASEC (Cont'd)

- CPS asks about more than 50 sources of income, including questions about the amount of several noncash benefits such as food stamps and employment-related health insurance, during the previous calendar year.
- Interviews conducted February-April, asks about last calendar year income.
- Unrelated subfamilies are identified and poverty status is determined as a family
- State-representative sample; state data are published using 3-year average to reduce standard errors
- Rich historical data
  - For characteristics of U.S. population – since 1959
  - For state level – since 1980



Poverty Thresholds for 2012 by Size of Family and Number of Related Children Under 18 Years

Size of family unit	Related children under 18 years								
	None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual).....									
Under 65 years.....	11,945								
65 years and over.....	11,011								
Two people.....									
Householder under 65 years.....	15,374	15,825							
Householder 65 years and over....	13,878	15,765							
Three people.....	17,959	18,480	18,498						
Four people.....	23,681	24,069	23,283	23,364					
Five people.....	28,558	28,974	28,087	27,400	26,981				
Six people.....	32,847	32,978	32,298	31,647	30,678	30,104			
Seven people.....	37,795	38,031	37,217	36,651	35,594	34,362	33,009		
Eight people.....	42,271	42,644	41,876	41,204	40,249	39,038	37,777	37,457	
Nine people or more.....	50,849	51,095	50,416	49,845	48,908	47,620	46,454	46,165	44,387

Source: U.S. Census Bureau.



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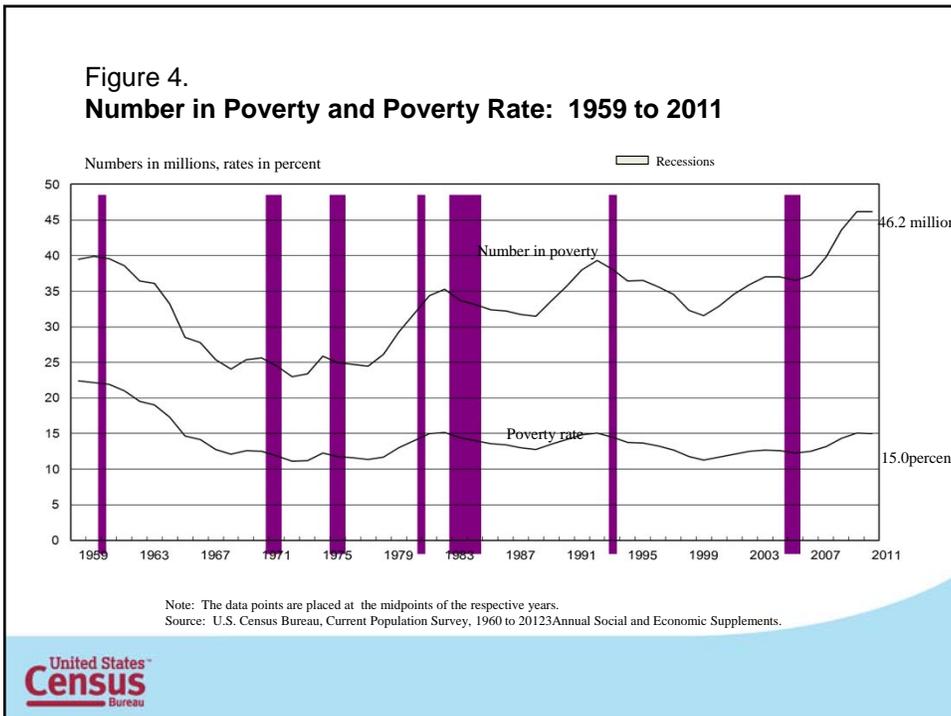
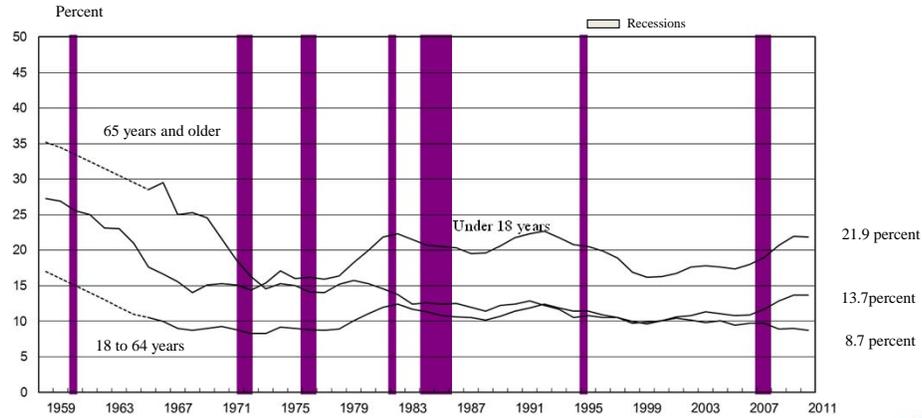


Figure 5.  
Poverty Rates by Age: 1959 to 2011



Note: The data points are placed at the midpoints of the respective years.  
Data for people 18 to 64 and 65 and older are not available from 1960 to 1965.

Source: U.S. Census Bureau, Current Population Survey, 1960 to 2012 Annual Social and Economic Supplements.



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**Census Bureau Resources**

- [Experimental Poverty Measures](#)
- [The American Community Survey \(ACS\)](#)
- [Small Area Income and Poverty Estimates \(SAIPE\)](#)
- [Income](#)
- [Health Insurance](#)

**Other Related Sites (Governmental)**

- [Experimental Poverty Measures, Bureau of Labor Statistics](#)
- [Poverty Guidelines, Research and Measurement](#) from the Department of Health and Human Services

**Other Related Sites (Non-Governmental)**

- [The Institute for Research on Poverty](#) at the University of Wisconsin
- [The Joint Center for Poverty Research](#) of Northwestern University and the University of Chicago
- [The Kentucky Center for Poverty Research](#) at the University of Kentucky
- [The National Poverty Center](#) at the University of Michigan
- [The Rural Poverty Research Center \(RUPRC\)](#) at the University of Missouri
- [United Nations Statistics Division's Handbook on Poverty Statistics](#)
- [West Coast Poverty Center](#) at the University of Washington

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## Further Resources on Poverty Measurement, Poverty Lines, and Their History

[\[ Poverty Guidelines, Research, and Measurement main page \]](#)

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- [Background Paper on the Poverty Guidelines](#)
- [Programs That Do — and Don't — Use the Poverty Guidelines](#)
- [The Official Federal Statistical Definition of Poverty](#)
- [Mollie Orshansky's Development of the Poverty Thresholds](#)
- [Research on Alternative Approaches to Poverty Measurement](#)
- [Papers by ASPE Staff Relating to the History of Poverty Lines](#)
- [For Further Questions](#)

**Introduction**

This page includes resources on the two slightly different versions of the U.S. (federal) poverty measure: the poverty **thresholds** and the poverty **guidelines**.

- The **poverty thresholds** are the **original version** of the federal poverty measure. They are updated each year by the **Census Bureau**.
- The thresholds are used mainly for **statistical purposes** — e.g., preparing estimates of the number of Americans in poverty each year.
- The **poverty guidelines** are the other version of the federal poverty measure. They are issued each year in the *Federal Register* by the **Department of Health and Human Services**. The guidelines are a simplification of the poverty thresholds for use for **administrative purposes** — e.g., determining financial eligibility for certain federal programs.

Key differences between the poverty thresholds and the poverty guidelines are [outlined](#) on our Frequently Asked Questions ([FAQs](#)) page. See also the [discussion of this topic](#) on the Institute for Research on Poverty's web site.

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**Background Paper on the Poverty Guidelines**

Gordon M. Fisher, "Poverty Guidelines for 1992," *Social Security Bulletin*, Vol. 55, No. 1, Spring 1992, pp. 43-46 [\[PDF Format\]](#)

Besides presenting the guidelines for a particular year, this article is a background paper on the poverty guidelines. It describes the differences between the poverty guidelines and poverty thresholds, lists a number of federal programs that use the guidelines as an eligibility criterion, and shows how the guidelines are calculated from the thresholds each year.



## Poverty Guidelines

- The *other* version of the federal poverty measure
- Issued each year in the *Federal Register* by the **Department of Health and Human Services** (HHS).
- A simplification of the poverty thresholds for use for **administrative purposes**
- Loosely referred to as the “federal poverty level” (FPL)
- The 2013 HHS poverty guidelines only reflect price changes through calendar year 2012; accordingly, they are approximately equal to the Census Bureau poverty thresholds for calendar year 2012.

# FPL for 2013

The following figures are the 2013 HHS poverty guidelines which are scheduled to be published in the [Federal Register](#) on January 24, 2013. (Additional information will be posted after the guidelines are published.)

## 2013 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA

Persons in family/household	Poverty guideline
1	\$11,490
2	15,510
3	19,530
4	23,550
5	27,570
6	31,590
7	35,610
8	39,630

For families/households with more than 8 persons, add \$4,020 for each additional person.



# Administrative Purposes

- Programs using the guidelines (or percentage multiples of the guidelines — for instance, 125 percent or 185 percent of the guidelines) in determining eligibility include
- Head Start, the Food Stamp Program, the National School Lunch Program, the Low-Income Home Energy Assistance Program, and the Children’s Health Insurance Program.
- Note that in general, cash public assistance programs (Temporary Assistance for Needy Families and Supplemental Security Income) do NOT use the poverty guidelines in determining eligibility.
- The Earned Income Tax Credit program also does NOT use the poverty guidelines to determine eligibility



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## Survey of Income and Program Participation (SIPP)

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- Data Products Schedules

- User Notes/Lists/Server/News
- SIPP Users' Guide
- SIPP Tutorial
- Technical Documentation
- SIPP Help
- re-engineered SIPP
- Contact re-engineered SIPP (Formerly, DEWS)

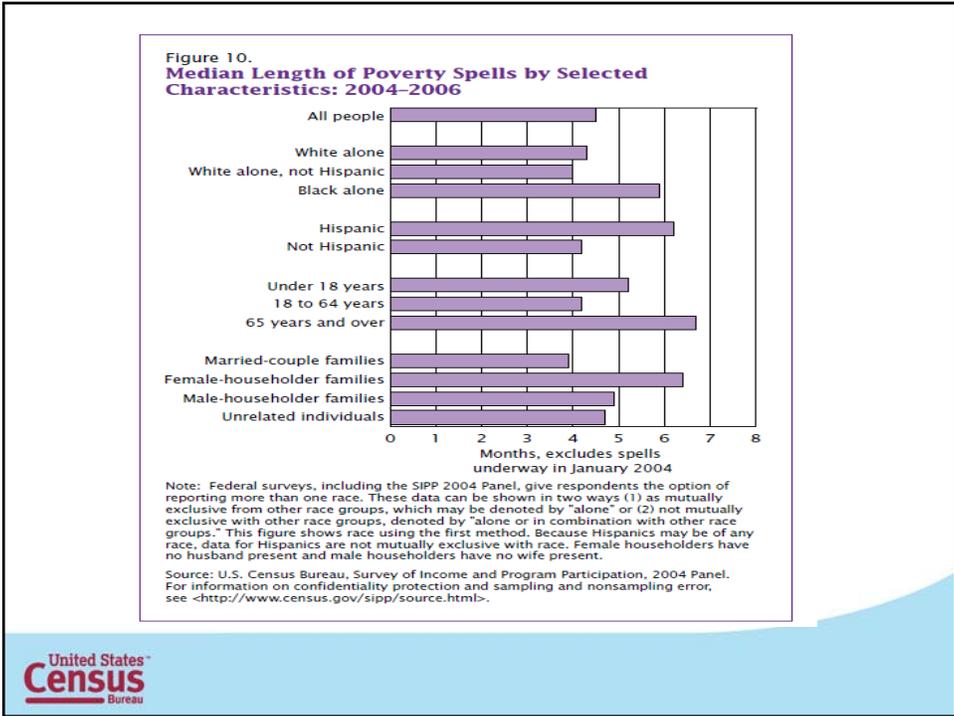
URL: <http://www.census.gov/sipp/>

Source: U.S. Census Bureau, Demographics Survey Division  
Survey of Income and Program Participation Branch  
Created: February 14, 2002  
Last revised: June 8, 2012

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## Survey of Income and Program Participation (SIPP)

- A longitudinal survey designed to track changes (income) over time for the same households.
- The SIPP is conducted in 4-month intervals, or waves, using CAI (Computer Assisted Interviews) either in person or via telephone.
- Interviewers return to the same household (not housing unit) and attempt to follow people interviewed in the first wave even if they move.
- Each wave contains the same set of core questions about the last 4 months, or reference period, and a set of topical questions that vary from wave to wave. **Most detail about income.**
- About 65,500 addresses were in the initial sample for the SIPP 2008 Panel.



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American Community Survey

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**Question Corner for Survey Respondents**  
 Why do you ask what time I leave for work?  
 We ask about what time you leave for work to develop statistics on commuting patterns. Commuting data are essential for planning highway improvements and developing public transportation services. View.

**Language Brochures**  
 Questions and Answers about the American Community Survey in 11 languages. [pdf format]

- العربية Arabic
- 中文 Chinese
- English English
- Français French
- Korel Koreyan
- 한국어 Korean
- Polski Polish
- Português Portuguese
- русский Russian
- En español Spanish
- Українська Ukrainian

**What is the American Community Survey?**  
 The American Community Survey (ACS) is an ongoing statistical survey that samples a small percentage of the population every year – giving communities the information they need to plan investments and services. Learn more

**How do I respond to the survey?**  
 Learn ways to respond to the ACS or get help with the survey. Learn more about how we protect your privacy, why you were selected, why it's important to participate, why we ask specific questions and more in About the Survey.

**How do I get started using ACS data?**  
 Start learning about the ACS with three tips about the data. Find additional information about geography in the ACS, comparison guidance, and user specific handbooks. Learn more in Guidance for Data Users.

**Respond Online**

- It's confidential & secure
- It's economical
- It's greener
- It's user-friendly

Find out more about responding online

Watch How to Respond Online

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 Social, Economic, Housing and Demographic Characteristics  
 United States

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- Income and Earnings
- Language
- Origin
- Population Change
- Poverty
- Race and Ethnicity
- Veterans

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## American Community Survey (ACS)

- The American Community Survey (ACS), is a nationwide survey that collects essentially the same information on people and housing that was collected on the short and the long-form questionnaires used in Census 2000 and earlier censuses.
- Three modes of data collection methods are used
  - Mail out/mail back
  - Telephone (CATI) (for those with telephone numbers)
  - Personal visit (CAPI) (for those sampled non responding addresses)
- The ACS is a continuous survey,
  - in which each month a sample of about 290,000 housing unit addresses receive a questionnaire.
  - Nearly, 3.5 million addresses are surveyed each year.

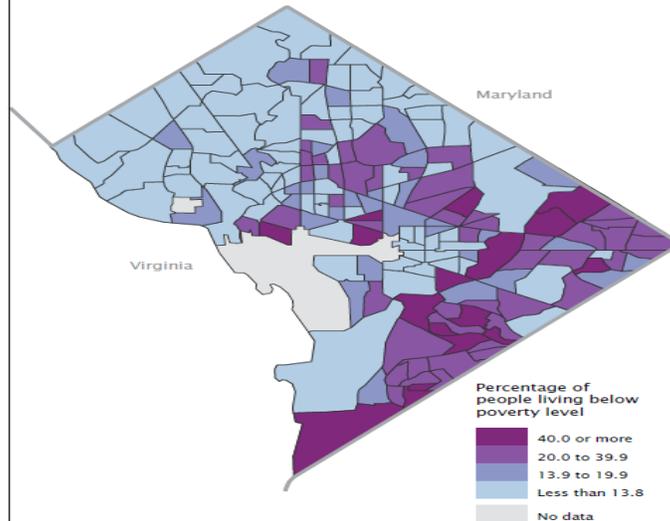
## ACS (cont'd)

- Reference period is the 12-month period prior to the interview month.
- Includes resident population of the United States and Puerto Rico living in housing units and group quarters
- Current residents at the selected address using the “Two month” rule, whether or not they have ‘usual residence elsewhere’
- Asks about money income using a series of eight questions during the past 12 months

## ACS - CPS Comparison

- In general national level estimates from both surveys are consistent and comparable, most of the differences are not statistically significant
- It is recommended to use the CPS estimates at the national level
- State level estimates in general are similar and no systematic differences observed,
- For use at state and lower geographic levels ACS estimates are recommended

Figure 3.  
**Percentage of People in Poverty in the Past 12 Months for the District of Columbia by Census Tract: 2006–2010**



Source: U.S. Census Bureau, 2006–2010 American Community Survey. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <[www.census.gov/acs/www](http://www.census.gov/acs/www)>.

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Find popular facts (population, income, etc.) and frequently requested data about your community

Enter a state, county, city, town, or zip code  
e.g. ALABAMA, GA

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Advanced Search

Download Options

American FactFinder provides access to data about the United States, Puerto Rico and the Island Areas. The data in American FactFinder come from several censuses and surveys. For more information see [Using FactFinder](#) and [What We Provide](#).

Using American FactFinder  
Learn about American FactFinder's functions and features.

What We Provide  
The following data are available on American FactFinder:

### News and Notes

May 16, 2013  
The 2010 Census demographic profile, quick tables, and geographic comparison tables are now available.

[view all news, release schedules, and more »](#)

### Address Search

Find Census data by entering a street address.

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# American Fact Finder

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The following data are available on American FactFinder:

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- American Housing Survey [more »](#) | [get data »](#)
- Annual Surveys of Governments [more »](#) | [get data »](#)
- Census of Governments [more »](#) | [get data »](#)
- Annual Economic Surveys [more »](#)
- Decennial Census [more »](#) | [get data »](#)
- Economic Census [more »](#) | [get data »](#)
- Equal Employment Opportunity (EEO) Tabulation [more »](#) | [get data »](#)
- Population Estimates Program [more »](#) | [get data »](#)
- Puerto Rico Community Survey [more »](#) | [get data »](#)

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## Small Area Income and Poverty Estimates

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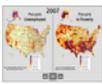
**SAIGE Interactive Data Tool**



**2011 SAIGE Highlights**



**Visualization - Unemployment and Poverty**



### Model-based Small Area Income & Poverty Estimates (SAIGE) for School Districts, Counties, and States

The U.S. Census Bureau, with support from other Federal agencies, created the Small Area Income and Poverty Estimates (SAIGE) program to provide more current estimates of selected income and poverty statistics than those from the most recent decennial census.

Estimates are produced for school districts, counties, and states. The main objective of this program is to provide updated estimates of income and poverty statistics for the administration of federal programs and the allocation of federal funds to local jurisdictions. Estimates for 2011 were released in December 2012. These estimates combine data from administrative records, postcensal population estimates, and the decennial census with direct estimates from the American Community Survey to provide consistent and reliable single-year estimates. These model-based single-year estimates are more reflective of current conditions than multi-year survey estimates.

**Latest SAIGE Release**

The 2011 school district, county and state estimates were released in December 2012.

- [Release highlights of 2011](#)
- [SAIGE Interactive Data Tools](#)
- [More Data Access Options](#)
- [View state and county maps for 2011](#)

The challenge period for SAIGE 2011 estimates has ended.

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## Small Area Income and Poverty Estimates (SAIGE)

- SAIGE poverty estimates for children in families ages 5-17 is a key input for the Dept. of Education's Title I allocation process.
- SAIGE provides this estimate to Dept. of Education, who combines it with additional information.

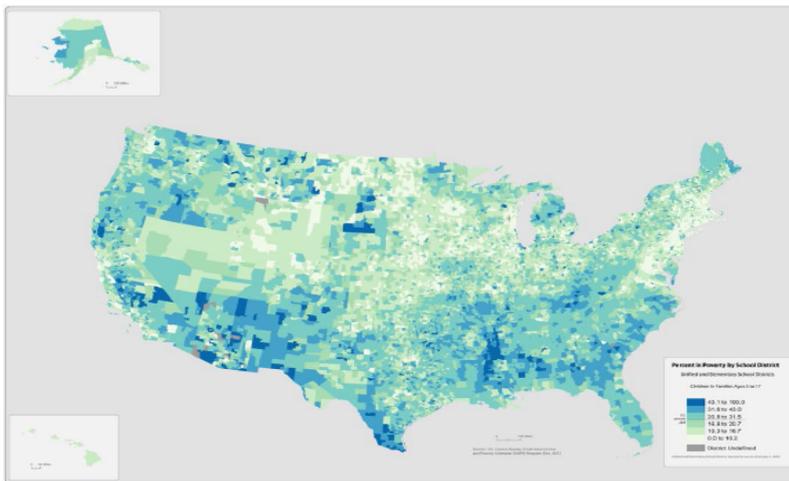
## Small Area Income and Poverty Estimates (SAIPE)

- Model-based estimates—poverty model uses census and CPS data, IRS individual tax return data, and food stamp data
- State/County data available for these statistics:
  - Number of people in poverty
  - Number of people under 5 in poverty (state only)
  - Number of related children 5-17 in poverty
  - Number of persons under 18 in poverty
  - Median household income

## Input Variables

- American Community Survey (ACS) 1-year estimates
- ACS 5-year estimates (SD model)
- Federal Tax Information (FTI)
- Supplemental Nutrition Assistant Program (SNAP, formerly Food Stamp) participation records
- Population estimates based on the decennial 2010 counts
- Supplemental Security Income (SSI) participation (state only)

Figure 19. Percentage of School-Age Children in Families in Poverty by School District: 2011



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Small Area Income and Poverty Estimates (SAIPE): 2011 Highlights

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**Related Sites**

- Income
- Expenditures

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**Poverty - Experimental Measures**

Since the development of the current official poverty measure in the 1950's by Mollie Orshansky there has been a series of studies and reviews of the conceptual and technical elements that make up the measure. These studies produced a large number of technical working papers and reports, including a National Academy of Sciences (NAS) 1995 report Measuring Poverty, that address the important measurement issues that are still being discussed by researchers and policy makers today.

For many years, the Census Bureau has estimated a number of experimental poverty measures based on recommendations of the 1995 NAS report (NAS-based measures).

An Interagency Technical Working Group on Developing a Supplemental Poverty Measure was formed in 2009 and charged with developing a set of initial starting points to permit the U.S. Census Bureau, in cooperation with the Bureau of Labor Statistics, to produce a Supplemental Poverty Measure. The Supplemental Poverty Measure will not replace the official poverty measure and will not be used to determine eligibility for government programs. Instead, the Supplemental Poverty Measure is designed as an experimental poverty measure that defines income thresholds and resources in a manner different from the official poverty measure.

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**Latest Releases**

- [The Research Supplemental Poverty Measure, 2011 \(PDF - 475K\)](#)  
Katherine S. Street (U.S. Census Bureau)
- [Supplemental Poverty Measure Public Use Research Files](#)
- [Experimental Poverty Measures Public Use Research Files \(NAS\)](#)
- [Tables of NAS-based Experimental Poverty Estimates - 2011](#)
- [Supplemental Poverty Measure - Federal Register Notice and Solicitation of Comments](#)
- [Observations from the Interagency Technical Working Group on Developing a Supplemental Poverty Measure \(PDF - 33K\)](#)
- [Latest Research - Supplemental Poverty Measure](#)
- [Update on the Supplemental Poverty Measure](#)

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PDF icon: Requires a file in Adobe® Acrobat® format. To view the file, you will need the [Adobe Reader](#)®. This symbol icon indicates a link to a non-government web site. Our linking to these sites does not constitute an endorsement of any products, services or the information found on them. Check you link to another site are subject to the policies of the new site.

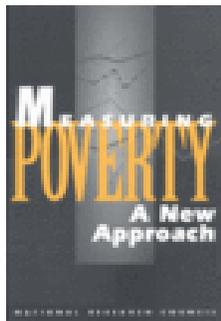
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Measuring America—People, Places, and Our Economy

<b>ABOUT US</b>	<b>THIS DATA</b>	<b>BUSINESS &amp; INDUSTRY</b>	<b>PEOPLE &amp; HOUSEHOLDS</b>	<b>GEOGRAPHY</b>	<b>NEWSROOM</b>
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**United States Census Bureau**



## National Academy of Sciences Panel on Poverty and Family Assistance

May 1995 report, *Measuring Poverty: A New Approach*

The official measure does not account for

- Provision of in-kind benefits
- Necessary expenses (taxes, health care, work)
- Changes in family or household structure
- Higher standards and levels of living since 1965
- Geographic price differences among regions

Recommended Changes to Improve the Measure of Poverty in the U.S.

<http://www.census.gov/hhes/povmeas/methodology/nas/report.html>



## Supplemental Poverty Measure (SPM)

Observations from the Interagency Technical Working Group - March 2, 2010

- Will not replace the official poverty measure
- Will not be used for resource allocation or program eligibility
- Census Bureau and BLS responsible for improving and updating the measure
- Continued research and improvement
- Based on National Academy of Sciences expert panel recommendations *Measuring Poverty: A New Approach* (Citro and Michael, 1995)



[http://www.census.gov/hhes/povmeas/methodology/supplemental/research/Short\\_ResearchSPM2011.pdf](http://www.census.gov/hhes/povmeas/methodology/supplemental/research/Short_ResearchSPM2011.pdf)

## Economic Unit of Analysis

### Official

- Families or unrelated individuals

### Supplemental

- All related individuals who live at the same address, any co-resident unrelated children who are cared for by the family (such as foster children), and any co-habitators and their relatives

## Method: Cohabiting Partners

- Cohabiting couple: Two unrelated individuals who live in the same household, are over the age of 14, and identify each other as a boyfriend, girlfriend, or partner.
- The Current Population Survey (CPS) began collecting data on cohabiting partners of the householder in 1996; and recently expanded collection to any unrelated, unmarried adults in 2007.

### Official measure

- Cohabiting partners are divided into separate units

### SPM measure

- Cohabiting partners are included in the same unit

## Method: UIs Under Age 15

- Unrelated individual (UI): A household member who is unrelated to the householder and not the spouse or child (under age 18) of any other household member.
- The CPS does not ask income questions to persons under age 15

### Official measure

- UIs under age 15 are excluded from the poverty universe

### SPM measure

- UIs under age 15 are included in the householder's unit

## Method: UIs Age 15 to 21

- Under the Fostering Connections to Success and Increasing Adoptions Act of 2008, guardians of foster children are eligible to receive foster payments until the child is age 21.

### Official measure

- Foster children age 15 or older are single-person units of analysis

### SPM measure

- Foster children under age 22 are included in the householder's unit

## Method: Related Individuals Age 18 or Older

- The official definition of a subfamily groups parents, spouses and their children who are under age 18 into a family unit.
- Since 1989, only children under age 18 who were never married and have a parent present in the household have been included in a subfamily.

### Official measure

- Children 18 years old or older who are unrelated to the primary family are treated as UIs

### SPM measure

- Children 18 years old or older are included in the same unit as their parent(s)

## Method: Unmarried Parents

- In some households, a child lives with both parents but the parents are not married and do not identify as a cohabiting couple.

### Official measure

- A child will only be included in the unit of one parent.

### SPM measure

- Children and their parents are included in the same unit regardless of the relationship between the parents.

## Example of a Household

**SPM**

Albert  
Bernice  
Christopher  
Daniel  
Elizabeth  
Frank

Name	Relationship	Age
Albert	Householder	45
Bernice	Cohabiting partner of householder	47
Christopher	Child of householder	13
Daniel	Child of householder's cohabiting partner	19
Elizabeth	Foster child of householder	12
Frank	Foster child of householder	19


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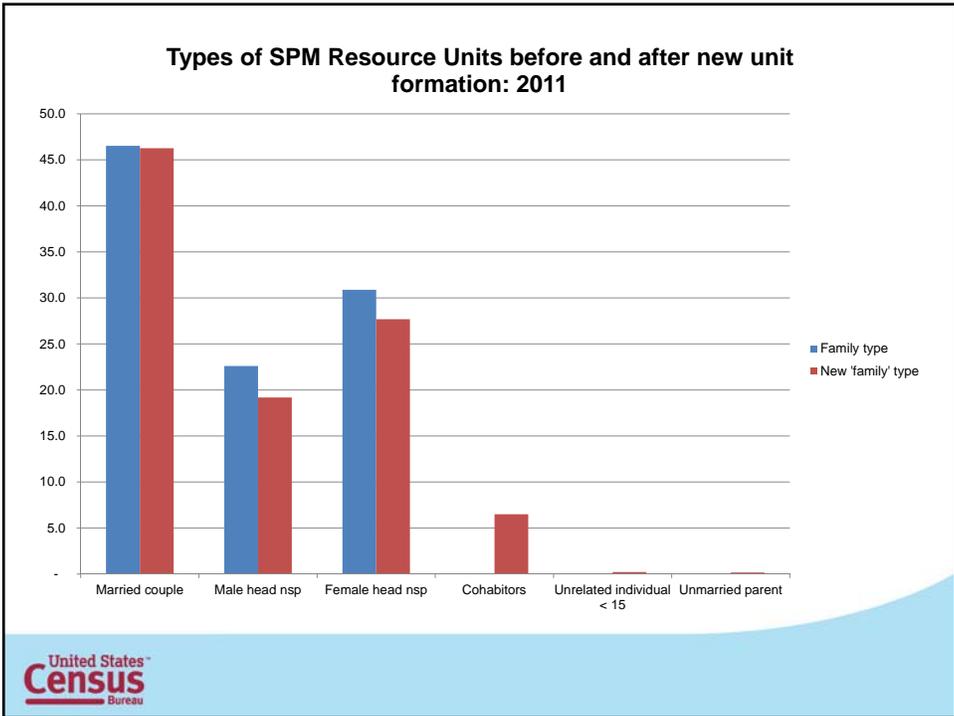
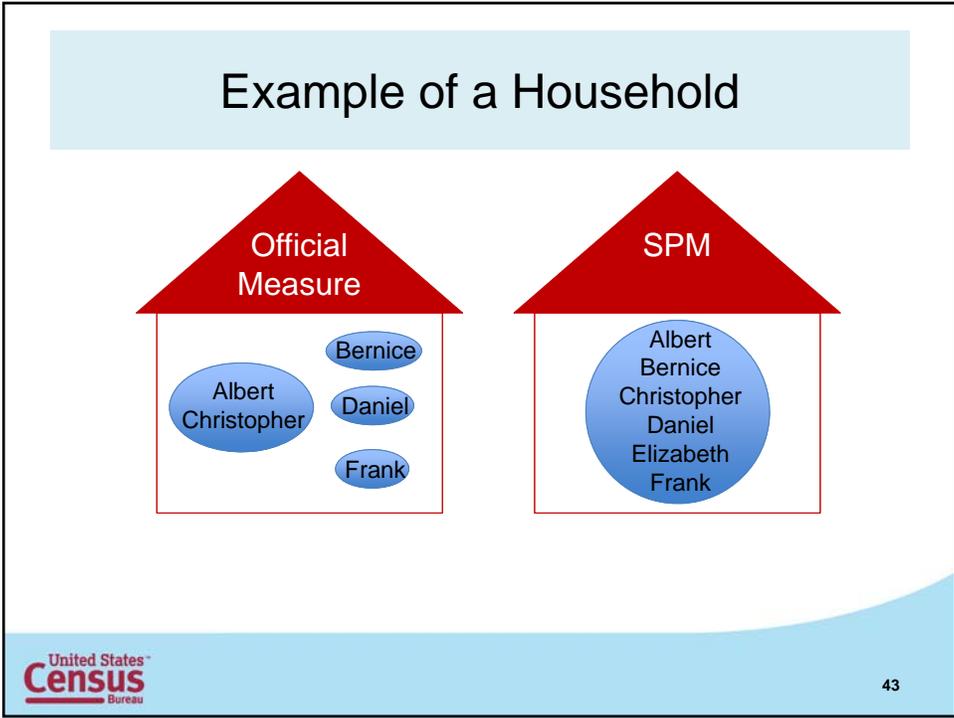
## Example of a Household

**Official Measure**

Albert  
Christopher  
Bernice  
Daniel  
Frank

Name	Relationship	Age
Albert	Householder	45
Bernice	Cohabiting partner of householder	47
Christopher	Child of householder	13
Daniel	Child of householder's cohabiting partner	19
Elizabeth	Foster child of householder	12
Frank	Foster child of householder	19


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## Comparing the Official measure and SPM Threshold Concept

### Official Measure

- Cost of minimum food diet for a two adult/two child family in 1963 times three to cover all other expenses

### Supplemental Measure

- Expenditures over the most recent 5 years on food, clothing, and shelter (including utilities and all mortgage expenses) (FCSU) from the Consumer Expenditure Surveys
  - Range around 33<sup>rd</sup> percentile
  - all family units with exactly 2 children (adjusted, when needed, to be equivalent to 2 adult/2 child family unit)
  - plus 20 percent to cover all other expenses.

## Threshold Adjustments: by shelter type

### Official

- No adjustments

### Supplemental

- Adjust by distinguishing differences in shelter expenditures by renters, owners with a mortgage, and owners without a mortgage

## Accounting for Housing in SPM Thresholds

- NAS Panel acknowledged the differing spending but similar consumption needs of owners and renters
- “An alternative [to a consumption-based measure] would be to develop separate thresholds for owners with low or no housing costs and other owners and renters (Citro and Michael 1995, p. 345).
- Results for CE and SPM estimation sample using FCSU distribution

CE Weighted Sample:  
2004Q2-2009Q1



United States  
**Census**  
Bureau

## ITWG Accounting for Housing Needs in the SPM

- Within the 30<sup>th</sup> to 36<sup>th</sup> percentile of FCSU adult equivalent spending, weighted by persons
- One approach to start
- Threshold equations:

$$SPM_i = (FCSU_{aeq_{all}} - (S + U)_{aeq_{all}} + (S + U)_{aeq_i}) * 1.2 * 3^{0.7}$$

- *i* housing groups:
  - Owners with mortgages
  - Owners without mortgages
  - Renters
- *all* is the full reference sample

United States  
**Census**  
Bureau

## Threshold Adjustments: family size and composition

### Official

- Separately developed thresholds by family type; lower thresholds for elderly singles and couples

### Supplemental

- Reference family threshold adjusted by use of a three parameter equivalence scale, which assumes children need less than adults and economies of scale for larger families

## Equivalence Scales

- Needs of adults and children
- Economies of scale of FCSU within reference units

### ➤ 3-parameter scale

$$\text{couples with no children} = (A)^{0.5} = 1.41$$

$$\text{single parent} = (A + 0.8 * (1_{\text{first child}}) + 0.5 * (C - 1))^{0.7}$$

$$\text{more than 1 adult} = (A + 0.5 * C)^{0.7}$$

## Threshold Adjustments: by geographic area

### Official

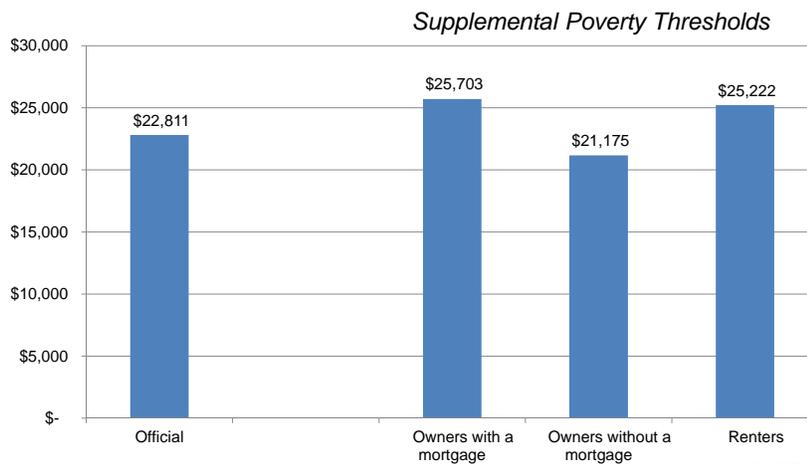
- No adjustments

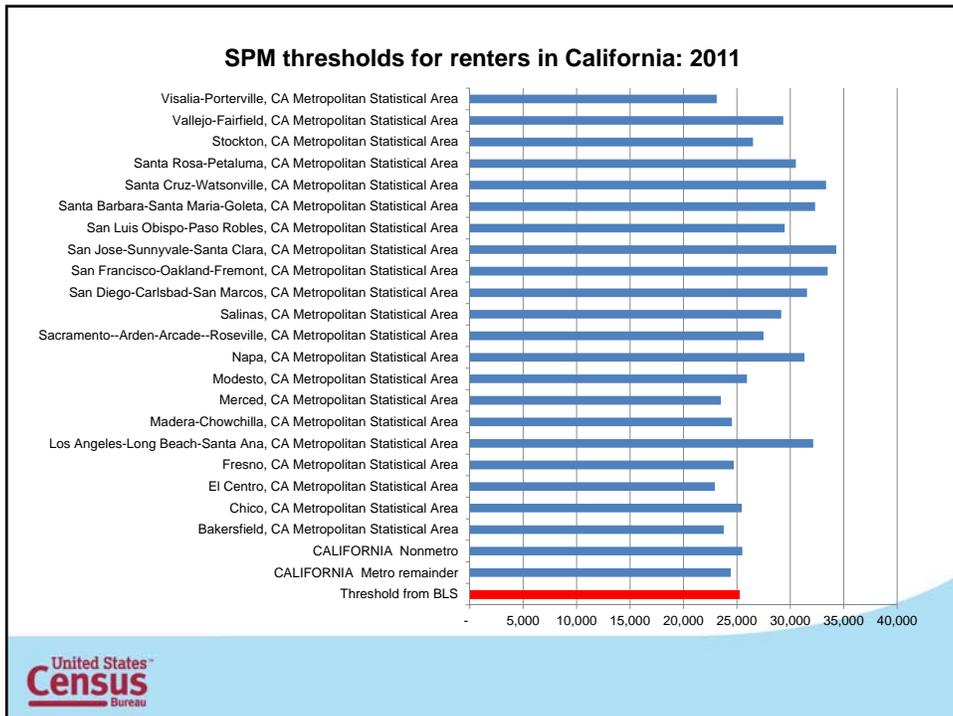
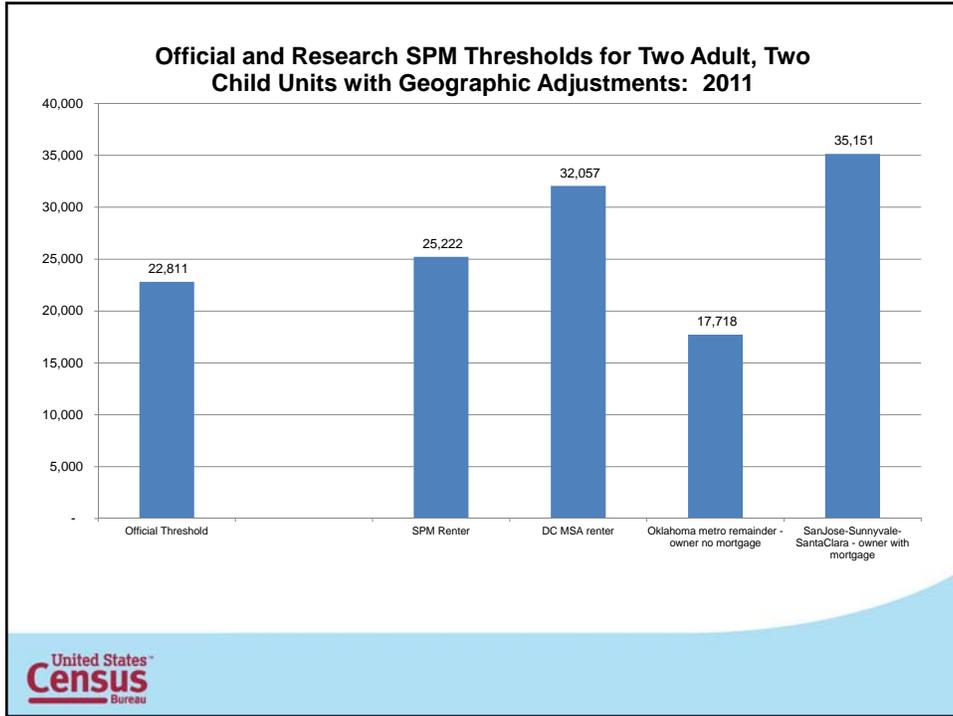
### Supplemental

- Adjust for housing cost differences using five years of ACS data on rental costs
- Make adjustments by MSA and non-MSAs in each state
- **Continue to research inter-area price indices**



## Official and SPM Thresholds for 2 Adults and 2 Children Economic Units: 2011





## Family Resource Definition

### **Official**

- Gross (before-tax) money income from all sources

### **Supplemental**

- Gross (before-tax) money income from all sources
- **PLUS** value of near-money federal in-kind benefits for FCSU (e.g., SNAP, housing subsidies) and tax credits (EITC).
- **MINUS** income and payroll taxes and other nondiscretionary expenses
  - child care, work-related expenses;
  - child support payments;
  - out-of-pocket medical care expenses, including health insurance premiums)

## Nondiscretionary Expenses

### **Payroll and state and federal income taxes**

- Use current methods, incorporate CPS ASEC questions

### **Child care and other work related expenses**

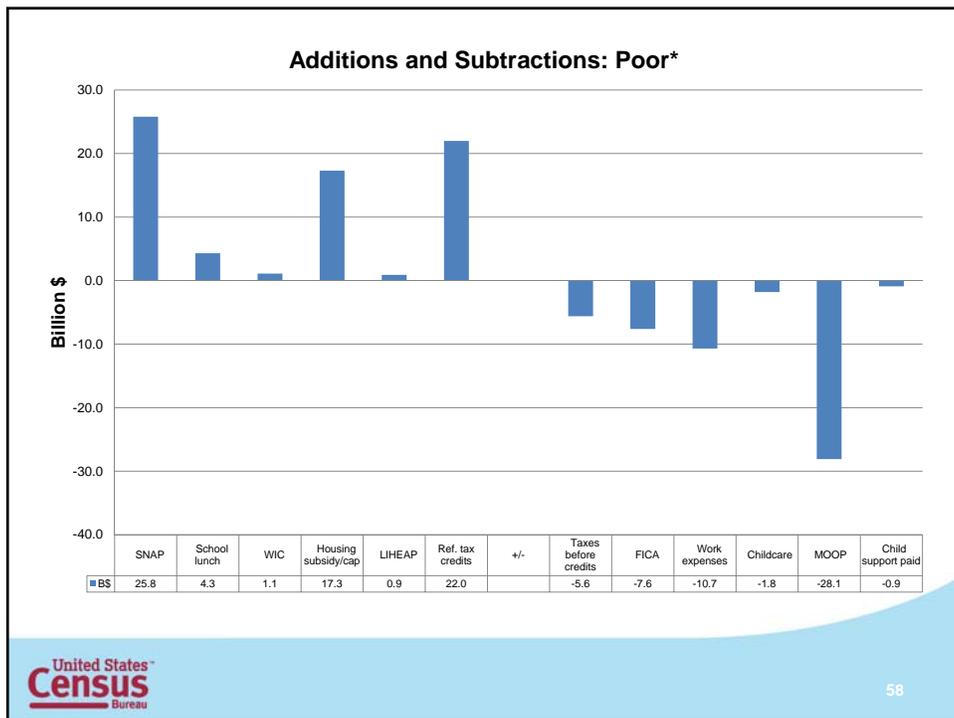
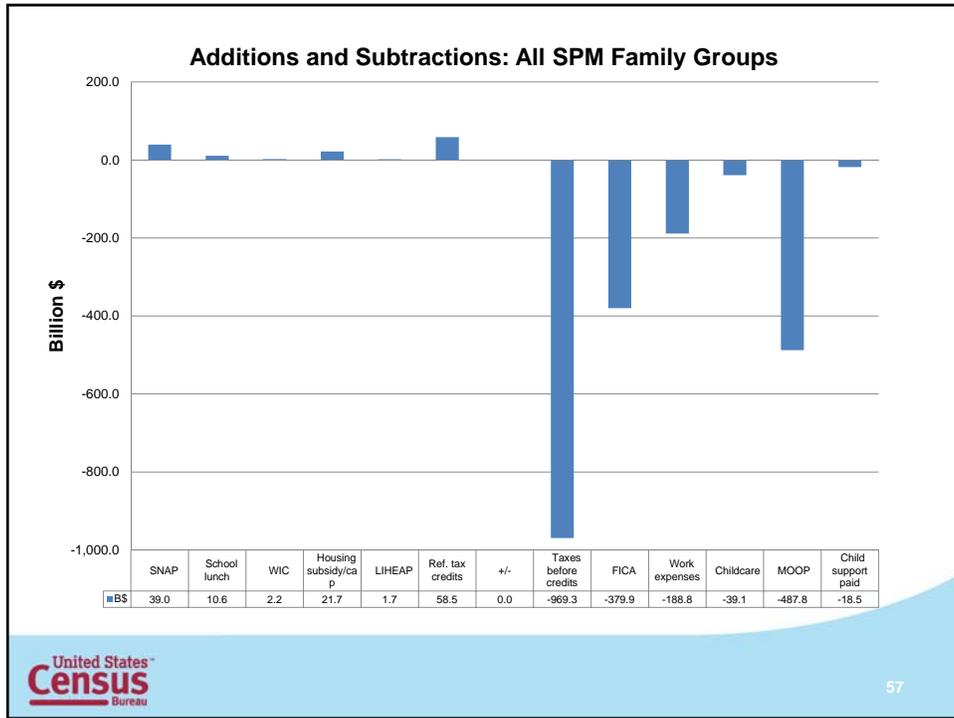
- Use data from CPS ASEC questions on child care expenses paid
- SIPP for other work expenses

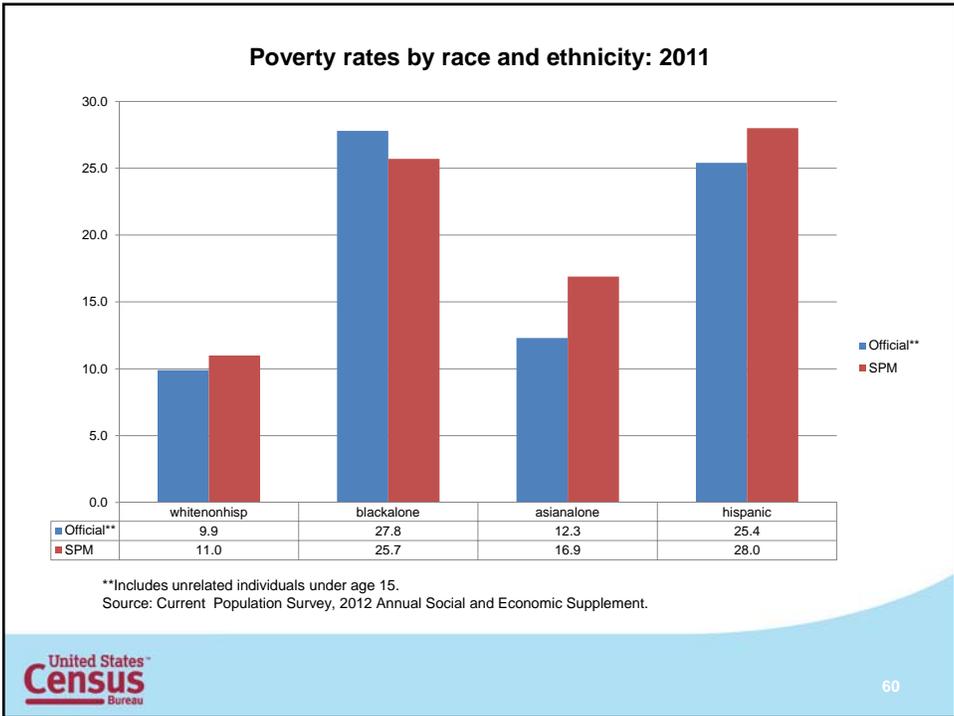
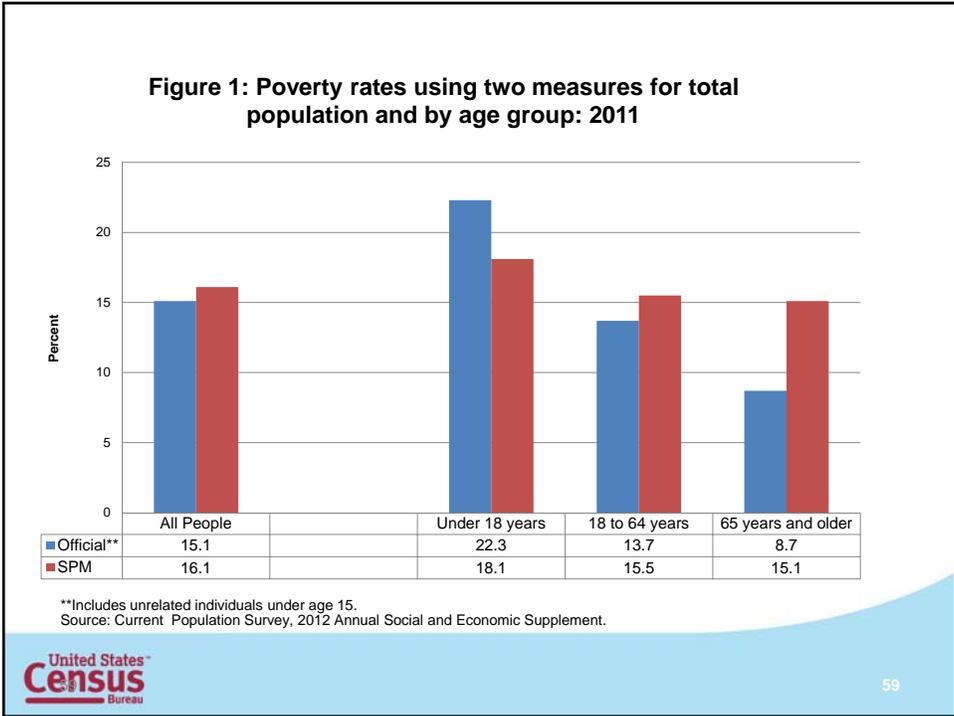
### **Medical Out of Pocket Expenditures (MOOP)**

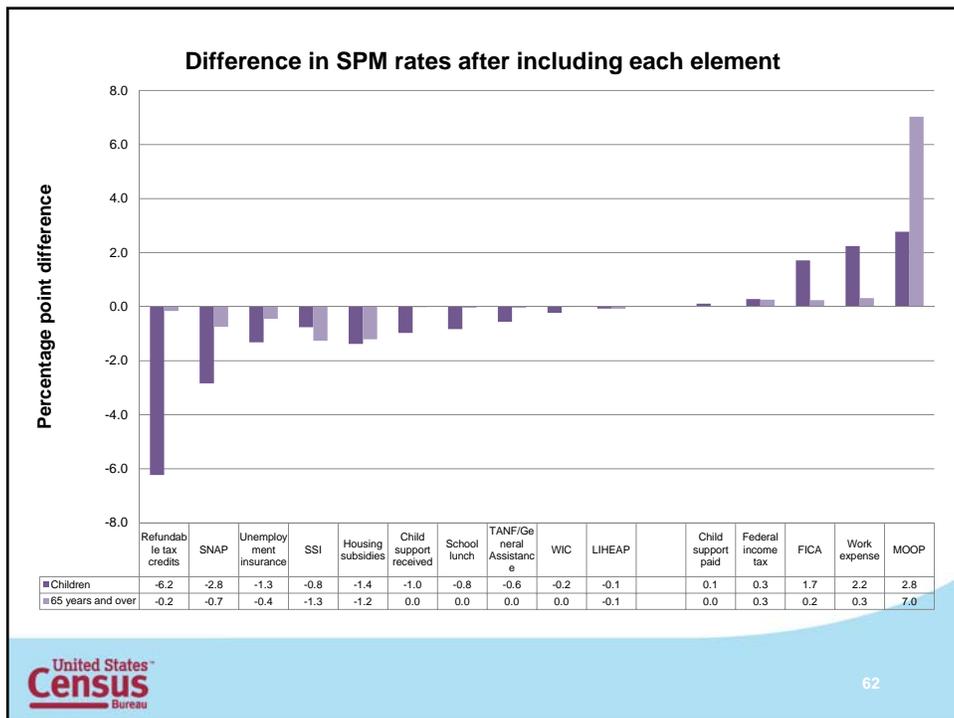
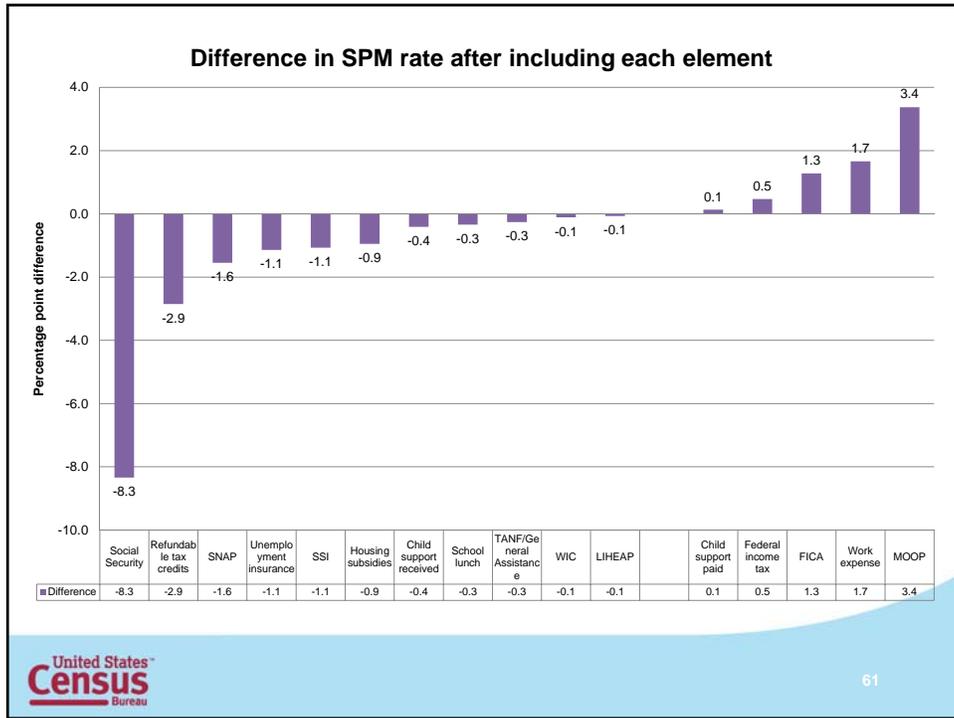
- Use data from CPS ASEC questions
- investigate the pros and cons of making an adjustment for the uninsured

### **Child Support Paid**

- Use data from CPS ASEC questions to subtract child support paid from income



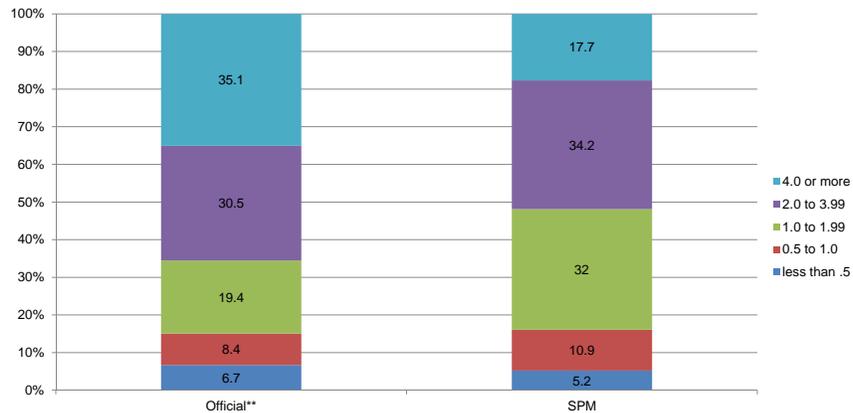




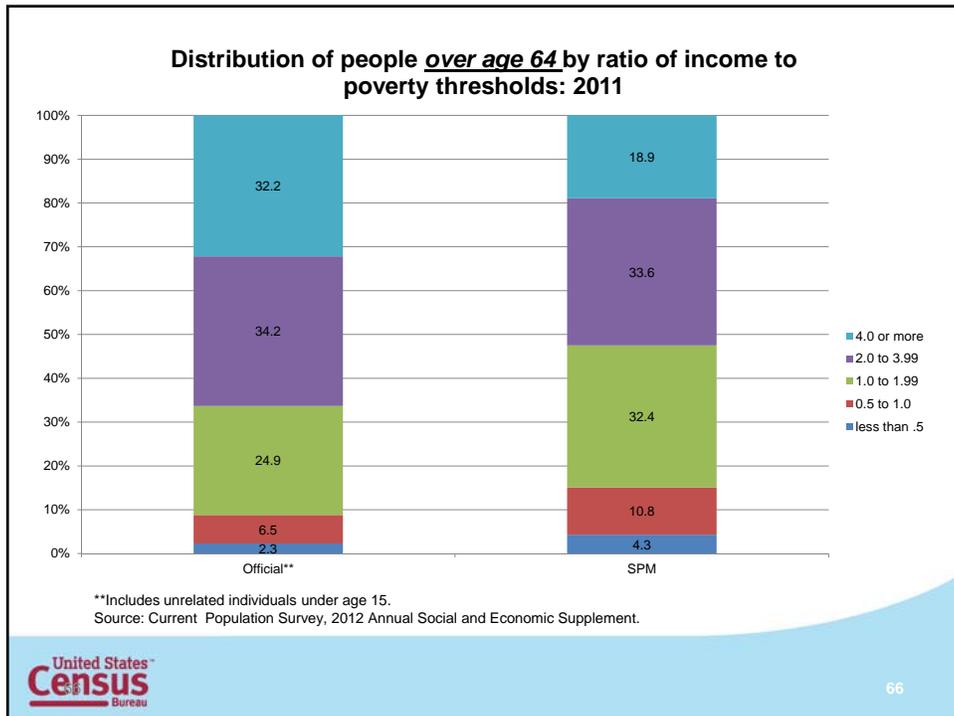
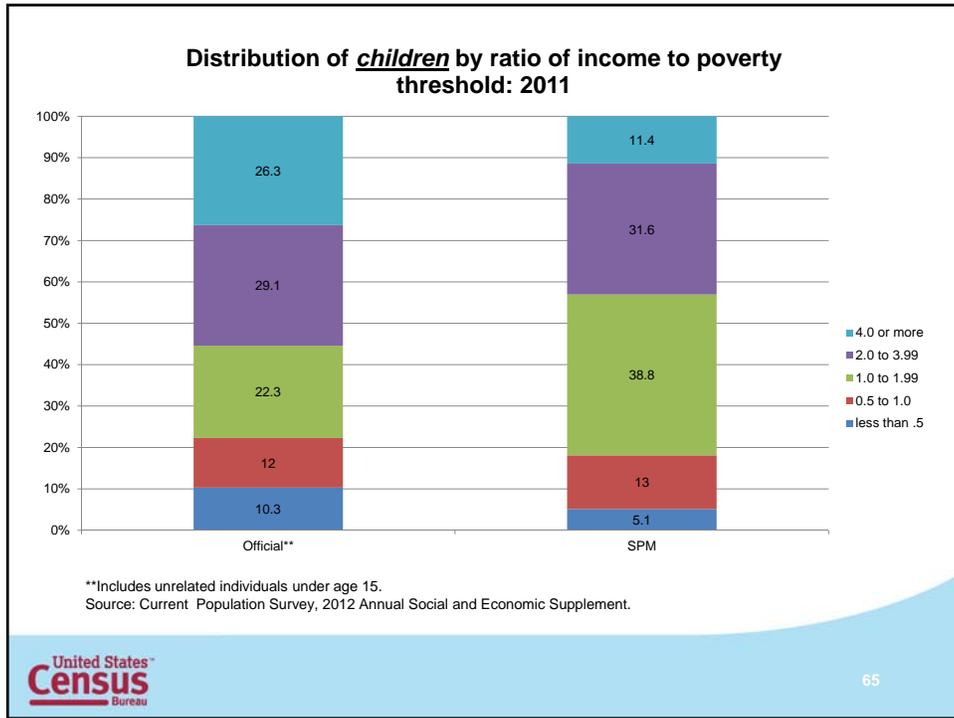
# Poverty Rates 2011

- For most groups, SPM rates are higher than official poverty rates
- The SPM shows lower poverty rates for
  - Children
  - Individuals included in new SPM resource units
  - Blacks
  - Individuals living outside metropolitan areas
  - Individuals living in the Midwest
  - Individuals covered by only public health insurance
  - Those with a disability
- Official and SPM poverty rates for people in female householder units, the native born, renters, and those living in the South are not statistically different

Figure 4: Distribution of people by income-to-threshold ratios: 2011

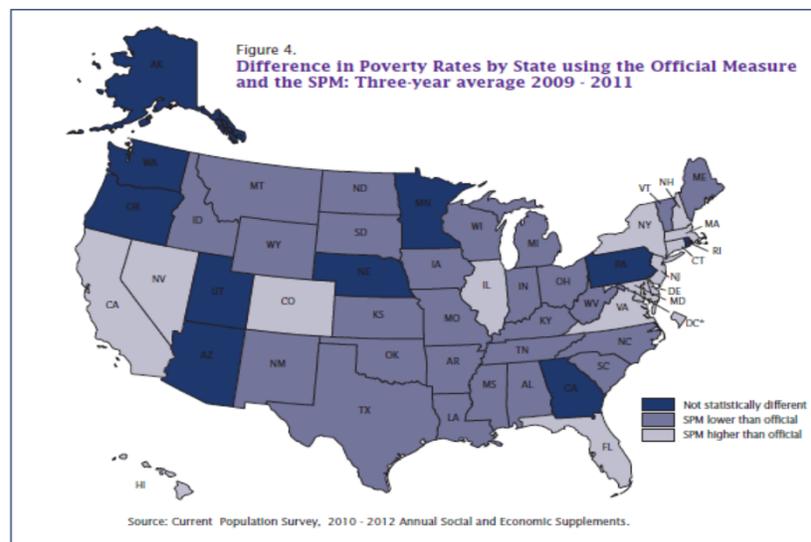


\*\* Includes unrelated individuals under age 15.  
Source: Current Population Survey, 2012 Annual Social and Economic Supplement.



## State level estimates

- Use the ACS or ...
- Three year averages from CPS
- SPM estimates for 2009-2011 available
- Compare OPM to SPM for states
  - 14 states higher with SPM
  - 26 states lower
  - 10 not statistically different
- California higher 7.3 percentage points – from OPM 16.3 % to SPM 23.5 %



## Ongoing improvements

### Suggested by ITWG

1. Geographic adjustments
2. Medical out-of-pocket expenses for uninsured
3. Work-related expenses
4. In-kind benefits in the SPM thresholds
5. Housing tenure adjustments

### Other work at the Census Bureau

- Taxes
- Investigate under-reporting of benefits and sources of cash income
- Estimate SPM in other data sets such as ACS and SIPP

## Contact:

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