The Supplemental Poverty Measure using the American Community Survey

Liana Fox[1], Brian Glassman[1] and José Pacas[2]

U.S. Census Bureau[1]

Minnesota Population Center[2]

SEHSD Working Paper #2020-09

Abstract

The Census Bureau annually releases Supplemental Poverty Measure (SPM) estimates using data from the Annual Social and Economic Supplement of the Current Population Survey (CPS ASEC). However, since the Census Bureau recommends the use of the American Community Survey (ACS) for poverty estimates for sub-national geographic units, it is important to explore how the SPM can be estimated from ACS data. The challenge in this endeavor is that the ACS is missing a number of key data elements required to produce SPM estimates, including some program participation data, the value of Supplemental Nutritional Assistance Program (SNAP) benefits, taxes paid and credits received, child care expenses, medical out of pocket expenditures and detailed relationship data. This paper explores how these data limitations might be overcome and extends previous research at the Census Bureau on a methodology to produce SPM estimates using ACS data. This analysis provides the first set of national and state level estimates of the SPM derived from the ACS for the years 2014 to 2017. This paper has two main purposes. The first is to lay out in detail the methodology used to create the ACS SPM and how this methodology differs from the CPS ASEC SPM. The second is to present and discuss ACS SPM results by state and over time, evaluate how individual elements affect the ACS SPM, and compare the ACS SPM to the ACS OPM and the CPS ASEC SPM.

[1] This paper is released to inform interested parties of ongoing research and to encourage discussion of work in progress. Any views expressed are those of the authors and not necessarily of the U.S. Census Bureau. The Census Bureau reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied to this release. CDDRB-FY20-POP001-0134.

Introduction

The official poverty measure (OPM) compares an individual's or family's pretax cash income to a set of thresholds that vary by the size of the family and ages of the family members, but do not vary by regional differences in living costs. The supplemental poverty measure (SPM) takes into account family resources and expenses not included in the OPM as well as geographic variation in housing costs. The SPM does not replace the OPM and is not used for program eligibility or funding distribution. The SPM is a research measure designed to provide information about the economic well-being of American families and enhance our ability to measure the effect of federal policies on those living in poverty.[2]

The Census Bureau, with support from the Bureau of Labor Statistics (BLS), has been publishing the SPM using the Current Population Survey Annual Social and Economic Supplement (CPS ASEC) since 2011.[3] The CPS ASEC is representative at the national level, but the Census Bureau recommends the use of three year averages to calculate state poverty estimates when using the CPS ASEC. The sample size of the American Community Survey (ACS) is much larger than the CPS ASEC, about 3.5 million addresses in the ACS compared to about 95,000 addresses for the CPS ASEC. This larger sample size allows for the production of single-year state and sub-state level estimates (for areas with 65,000 people or more).

An important goal of this paper was to release SPM public use micro-datasets so that researchers would be able to explore the SPM and its components at different geographic levels and by different demographic groups. In order to do this, the public use ACS was used rather than an internal version of the ACS. The public use ACS is smaller than the internal ACS[4] and is representative at the state and public use microdata area (PUMA) level. PUMAs are areas within a state that contain at least 100,000 people.[5]

Researchers for cities (New York City and San Francisco), states (California, New York, Wisconsin, and Virginia), and organizations (Urban Institute) have been using the ACS to estimate SPM-like measures using various methods. Researchers have expressed interest in a single Census Bureau produced ACS SPM to allow for comparisons across jurisdictions.[6] Previous work at the Census Bureau has demonstrated the feasibility and validity of creating an ACS SPM. This paper extends that work for 2014-2017 (Renwick, 2015; Renwick et al. 2012).

The Census Bureau releases OPM estimates each year using both the CPS ASEC and ACS. Poverty estimates using the official definition can be created relatively easily using the ACS. However, unlike the OPM, the SPM is not as easily calculated in the ACS as the ACS lacks a number of key data elements

[2] For more information on the SPM, see https://www.census.gov/topics/income-poverty/supplemental-poverty-measure.html.
[3] The latest SPM report is available at https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-268.pdf.
[4] The public use ACS is a sample of the internal ACS. The public use ACS also top-codes variables and limits geographies to PUMAs, states, and regions for disclosure avoidance purposes.
[5] For more information about PUMAs, see https://www.census.gov/programs-surveys/geography/guidance/geo-areas/pumas.html.
[6] See the Urban Institute Report on State Poverty Measurement Using the American Community Survey: https://www.urban.org/research/publication/workshop-state-poverty-measurement-using-american-community-survey.

required to produce SPM estimates. Over the last few years, the Census Bureau has been developing a methodology to overcome the data limitations of the ACS and produce an ACS SPM.

In order to understand the challenges inherent in calculating an SPM in the ACS, it is important to understand the differences between OPM and the SPM and between the CPS ASEC and the ACS. The first section of this paper explores the differences between the OPM and SPM methodology in general and then between the CPS SPM[7] and ACS SPM methodology more specifically.

Methodology

Official vs. Supplemental Poverty

Any measurement of poverty has to compare resources of a resource unit, however that unit is defined, to a threshold value to determine who is and who is not in poverty. The OPM and SPM both perform this function, but differ in what makes up the resources, how thresholds are measured and assigned, and how resource units are defined. The main differences between the OPM and the SPM are summarized in Table 1 and discussed below and in more detail in Fox 2019.

Table 1: Poverty Measure Concepts: Official and Supplemental

	Official Poverty Measure (OPM)	Supplemental Poverty Measure (SPM)
Measurement Units	Families (individuals related by birth, marriage, or adoption) or unrelated individuals	Resource units (official family definition plus any co-resident unrelated children under age 15, foster children under age 22, and unmarried partners and their relatives) or unrelated individuals (who are not otherwise included in the family definition)
Poverty Threshold	Three times the cost of a minimum food diet in 1963	Based on expenditures of food, clothing, shelter, and utilities (FCSU)
Threshold Adjustments	Vary by family size, composition, and age of householder	Vary by family size, composition, and tenure, with geographic adjustments for differences in housing costs
Updating Thresholds	Consumer Price Index for all Urban Consumers: all items	5-year moving average of expenditures on FCSU
Resource Measure	Gross before-tax cash income	Sum of cash income, plus noncash benefits that families can use to meet their FCSU needs, minus taxes (or plus tax credits), work expenses, medical expenses, and child support paid to another household

The SPM unit of analysis is different than the family unit used by the OPM in three main ways. First, the SPM unit expands the family definition by including cohabiting partners and their relatives. Second, unrelated children under the age of 15 are assigned to the SPM unit of the household reference person. These children are excluded from the poverty universe for the OPM. Third, all foster children under the age of 22 are included in the SPM unit of the household reference person. For the OPM, foster children under the age of 15 are excluded from the poverty universe while foster children

[7] The SPM produced using the CPS ASEC is referred to as the CPS SPM throughout this paper.

between the ages of 15 and 21 (inclusive) are considered unrelated individuals, unless they have a spouse or own child present in the household.[8]

The determination of thresholds differ between the OPM and SPM methodology in three ways. First, OPM thresholds are based on three times the cost of a minimum food diet in 1963, adjusted annually for inflation using the Consumer Price Index for Urban Consumers (CPI-U). In the SPM, thresholds are based on spending on a basic set of food, clothing, shelter, and utilities (FCSU), as well as a small additional amount to allow for other household needs. More specifically, thresholds reflect spending within the 30th to 36th percentile range of FCSU expenditures for the estimation sample multiplied by 1.2 to account for additional basic needs.[9] SPM thresholds are produced by the Bureau of Labor Statistics Division of Price and Index Number Research (BLS DPINR) using 5 years of quarterly Consumer Expenditure Survey (CE) data for consumer units with exactly two children. FCSU expenditures are converted to a reference consumer unit composed of two adults and two children using a three-parameter equivalence scale (see Fox 2019).

Second, OPM thresholds vary by family size, composition, and the age of the householder. SPM thresholds similarly vary by family size and composition, but also vary by geography based on differences in housing costs by three housing tenure groups: owners with mortgages, owners without mortgages, and renters. SPM thresholds do not vary by the age of the householder and use a three-parameter equivalence scale to adjust for family size and composition.

Third, OPM thresholds are updated annually using the current year's CPI-U for all items, while SPM thresholds are updated annually based on a 5 year moving average of expenditures on FCSU in the CE. In 2017, the OPM threshold for a two adult, two child family was $24,858, while the SPM thresholds ranged from $19,583 to $39,750 for a two adult, two child family.

The determination of resources also differs between the OPM and the SPM. Resources are measured in the OPM using gross before-tax cash income.[10] For the SPM, after-tax income is used, the value of noncash benefits are included, and necessary expenses are subtracted from resources.

- Taxes are included for two reasons. First, it makes sense to assess the ability of a family to obtain basic necessities only after federal and state taxes and Federal Insurance Contributions Act (FICA) tax are removed from available resources. Second, taking account of taxes allows federal and state tax credits to be included as available resources.

- Noncash benefits that help a family meet the needs reflected in the thresholds (food, clothing, shelter, and utilities) are included in resources. The noncash benefits added to resources are the Supplemental Nutrition Assistance Program (SNAP), the National School Lunch Program, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Low-Income Home Energy Assistance Program (LIHEAP), and housing assistance.

[8] In this paper, unrelated children under age 15 are assigned the official poverty status of the household reference person in order to facilitate comparisons to the SPM using the same poverty universe.
[9] These are referred to as BLS-DPINR Research Experimental Supplemental Poverty Measure (SPM) Thresholds. For further information, see https://stats.bls.gov/pir/spmhome.htm.
[10] Income sources in the ACS: wages and salary; self-employment income; interests, dividends, net rental income, royalty income, or income from estates and trusts; Social Security; Supplemental Security Income; public assistance; retirement income, pensions, survivor, or disability; any other income received regularly.

- Necessary expenses a household faces are subtracted from resources, covering work-related expenses (e.g., travel to work), child-care expenses, child support paid (child support received is included as a resource), and out-of-pocket medical expenses. These are subtracted in order to estimate resources available to purchase the items in the thresholds: food, clothing, shelter, and utilities.

CPS ASEC vs. ACS: Overview of Differences

Before beginning a discussion of the difference in the SPM methodology between the two surveys, it is important to understand the differences between the two surveys.[11] First, the surveys use different reference periods. The CPS ASEC interviews respondents from February through April and asks them questions about the previous calendar year. In the ACS, respondents are interviewed on an on-going basis throughout the year and they are asked about the 12-month period prior to the interview.

Second, the ACS has less detailed income reporting. The CPS ASEC asks about 18 sources of income while the ACS asks about 8 sources of income. The CPS ASEC asks about several sources of noncash benefits while the ACS asks only about receipt of SNAP. The CPS ASEC asks about medical expenses, child care expenses, and child support paid while the ACS does not.

Third, the sample size of the surveys are different. The CPS ASEC includes approximately 95,000 addresses while the internal ACS includes approximately 3.5 million addresses in their sample. The importance of the difference in sample size is that the CPS ASEC is representative at the national and regional level while the internal single-year ACS is representative at the national, regional, state, metropolitan, and congressional district level as well as counties and places with populations greater than 65,000.[12]

Fourth, the CPS ASEC asks much more detailed questions about relationships than the ACS. The ACS asks only about each person's relationship to the household reference person. The more detailed questions in the CPAS ASEC help identify parents and children within a household and therefore identify subfamilies.

As mentioned previously, the ACS Public Use Microdata Sample (PUMS) is used in place of the internal ACS in order to facilitate the release of micro-data. The ACS PUMS is a sample of the internal ACS, which means approximately 1.5 million households are included each year.[13] Furthermore, the only identifiable geographies are regions, states, and PUMAs. After the release of the 2017 data products, the U.S. Census Bureau identified issues with data collection in Delaware. As a result, 2017 estimates for Delaware are omitted in this paper. For more information, see <www.census.gov/programs-surveys/acs/technical-documentation/errata/120.html>.

Table 2 summarizes the reasons we would expect that CPS and ACS SPM poverty estimates to differ. Some of the key reasons are: OPM estimates differ between the two surveys, there is a lack of

[11] For more information on survey differences, see https://census.gov/topics/income-poverty/poverty/guidance/survey-data-collection.html.
[12] Use of the 5-year ACS allows for estimates at the Census tract and block group level.
[13] For more information about the ACS PUMS, see https://www.census.gov/programs-surveys/acs/technical-documentation/pums.html.

relationship identifiers among people in the household in the ACS which exist in the CPS ASEC, the receipt and amount of noncash benefits and medical expenses are imputed in the ACS SPM, and child support paid is not included nor imputed in the construction of the ACS SPM.

Table 2: Comparison of CPS and ACS SPM Methodology		
	CPS SPM	ACS SPM
Poverty universe	Resident civilian noninstitutionalized population	Resident civilian population living in a household (no group quarters)
Family identification	Detailed information about relationships among household members	Relationships only to the household reference person; relationship pointers are assigned where possible
SNAP	Survey asks if person receives the benefit and the amount they receive	Survey asks if household receives benefit; amount of benefit is imputed
LIHEAP	Survey asks if household receives the benefit and the amount they receive	Receipt of the benefit is imputed and amount of benefit is estimated
WIC, school lunch, and housing assistance	Survey asks if person receives the benefit; the amount they receive is estimated	Receipt of the benefit is imputed and amount of benefit is estimated
Tax obligations and credits	Uses Census Bureau created tax model	Modeled using TAXSIM
Child care	Survey asks respondents whether they pay for child care and how much they spent	Whether a family pays for childcare and how much they pay was imputed
Work expenses	Assigned using number of weeks worked by 85% of median weekly work-related expenses which are calculated from the SIPP	Same method but weeks worked is categorical; weeks worked is the midpoint of ranges
Medical out of pocket expenditures (MOOP)	Survey asks respondents about MOOP spending	MOOP spending is imputed
Geographic adjustments	Thresholds are adjusted using median gross rents for two-bedroom units from 5 year ACS by MSAs, metro areas of a state, and nonmetro areas of a state	Thresholds are adjusted using median gross rents for two-bedroom units from 5 year ACS by MSAs, metro areas of a state, and nonmetro areas of a state
Child support received and paid, unemployment insurance, and workers compensation	Survey asks respondents if they receive each of these and, if so, the amount they receive	The ACS does not ask about the receipt or amount of these separately; child support paid is not included in SPM calculations

The poverty universes differ between the two surveys in that all people living in group quarters are excluded in the ACS SPM, while people living in noninstitutionalized group quarters are included in the CPS SPM. This is done because CPS ASEC universe excludes the institutionalized population, while the noninstitutionalized population, such as homeless people living in shelters and military personnel living with civilians, are included in the CPS ASEC universe.[14] Since there is no way to distinguish these

[14] As of 2017, college dorms are excluded from the CPS ASEC sample.

groups from other group quarters residents in the ACS PUMS, the ACS sample is limited to people living in households.

Family identification is much more difficult in the ACS because while there is detailed information about relationships among household members in the CPS ASEC, the ACS only has information about people's relationship to the household reference person. For instance, individuals in unrelated subfamilies[15] in the CPS ASEC are assumed to pool resources while in the ACS anyone not related to the household reference person is treated as an unrelated individual.

For this project, the Census Bureau developed a method to assign parent and spouse identifiers based on rules used by the University of Minnesota's IPUMS project.[16] Whenever family relationships are unclear, the method uses age, marital status, and the order in which individuals are listed on the ACS form to assign family relationships. These identifiers allow for the creation of some unrelated subfamilies. All individuals aged 15 or older who are unrelated to the household reference person, are not a cohabiting partner of the reference person, are not a foster child under the age of 22, and who are not assigned an identifier based on IPUMs criteria are considered unrelated individuals.

The value of five noncash benefits are added to cash income in order to compute the SPM. The CPS ASEC asks questions about whether or not people received each of these benefits and asks about the amount received from SNAP and LIHEAP. However, the ACS only asks about whether the household received SNAP benefits in the past year and does not ask about the amount of SNAP benefits received or any questions about the other four noncash benefits. Therefore, receipt of four of the noncash benefits as well as the amounts of all five noncash benefits have to be imputed or estimated in the ACS.

CPS ASEC vs. ACS: Differences in Resources

Data from the CPS ASEC are used to model ACS program participation in WIC, school lunch, housing assistance, and LIHEAP using a logistic regression model. Data from the CPS ASEC is also used to model the benefit amount for SNAP and LIHEAP using a predictive means match. All amounts are imputed at the SPM resource unit level. Values for WIC, school lunch, and housing assistance are then allocated based on programmatic data on benefit levels in the same way that values are assigned in the CPS ASEC (see appendix of Fox 2019 for details). [17]

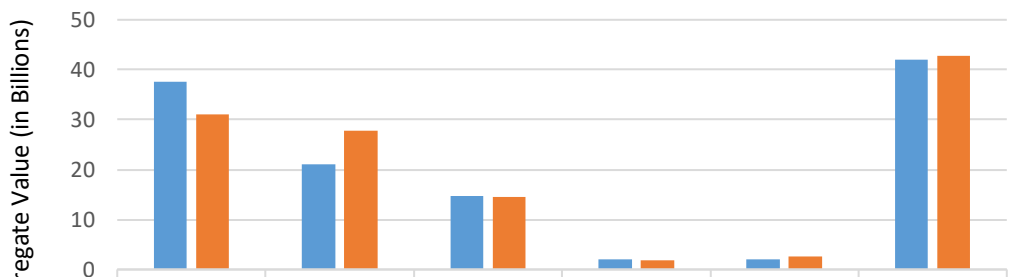
In Table 3, average income for SPM units with income greater than zero is presented for four different types of income. Public assistance income, Social Security income and total income is lower and Supplemental Security Income (SSI) is higher in the ACS than in the CPS ASEC.[18]

[15] Unrelated subfamilies are families in a household who are not related to the household reference person.
[16] Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020. https://doi.org/10.18128/D010.V10.0
[17] For more details on the imputation and the predictive means match, see https://www.census.gov/content/dam/Census/library/working-papers/2015/demo/SEHSD-WP2015-09.pdf.
[18] Previous work done at Census has shown that income is lower in the ACS than in the CPS ASEC: https://www.census.gov/content/dam/Census/library/working-papers/2015/demo/SEHSD-WP2015-01.pdf.

Table 3: Comparison of Conditional Mean Annual Benefit Amounts and Total Income for SPM units between the ACS and CPS ASEC: 2017 (in thousands of dollars)			
	CPS ASEC	ACS	Difference (ACS – CPS ASEC)
Public Assistance Income	3,403	2,930	*-473
Social Security Income	19,970	18,470	*-1,500
Supplemental Security Income	8,553	9,281	*728
Total Income	85,090	79,310	*-5,780
Note: Total income includes public assistance, Social Security, SSI, and other income sources. * Differences are statistically significant at the 90 percent confidence level. Source: U.S. Census Bureau, 2018 Current Population Survey Annual Social and Economic Supplement and 2017 American Community Survey.			

In Figure 1, the amount of income added to resources by different programs is presented for the ACS and the CPS ASEC for 2017. In aggregate, SNAP added more to resources in the ACS than in the CPS ASEC, while housing subsidies and WIC added more to resources in the CPS ASEC than in the ACS. The differences in total resources added for school lunch, LIHEAP, and the Earned Income Tax Credit (EITC) were not statistically significant.

Figure 1: Aggregate Amounts Added to Resources - 2017



	SNAP*	Housing subsidies*	School lunch	LIHEAP	WIC*	EITC
ACS	37.6	21.0	14.7	2.0	2.1	42.0
CPS	31.0	27.7	14.6	1.9	2.6	42.7

* Differences are statistically significant at 90 percent confidence level.
Source: U.S. Census Bureau, 2017 American Community Survey and 2018 Current Population Survey Annual Social and Economic Supplement.

For the CPS SPM, tax obligations and credits are modeled using a tax calculator developed by the Census Bureau that uses CPS ASEC data enhanced with data from a statistical match to Internal Revenue Service data. Since this model does not exist for the ACS, the NBER's TAXSIM program is used.[19] TAXSIM calculates federal and state tax liability from survey data. The version used in this paper, TAXSIM 27, requires 27 inputs including state of residence, year of filing, marital status, ages of the primary taxpayer and spouse, number of dependents, and wages and income. A 2016 Urban Institute

[19] TAXSIM is a program that calculates federal and state tax liabilities from survey data. See http://users.nber.org/~taxsim/ for more information.

report found that using the Census tax model or TAXSIM to model taxes has little effect on the SPM rate.[20]

There are several issues which make running TAXSIM using ACS data challenging:

- Tax filing units need to be formed. This is challenging in the ACS due to the minimal relationship data available in the survey. Using relationship criteria developed by IPUMS, parental and spousal identifiers were created in order to identify the detailed familial relationships needed to form tax units.
- There is no information in the ACS about whether or not the respondent filed taxes.
- There are a number of income variables that TAXSIM asks for which are not available in the ACS. These are set to zero: mortgage deductions, dividends, capital gains, unemployment, other miscellaneous items, non-property income, and interest received.

In the CPS ASEC, respondents were asked if they paid for child care while working and how much they spent. Since there are no questions about child care in the ACS, a logistic method is used to determine which units pay for childcare and a predicted means matching method is used to impute a weekly child care amount to each unit paying for child care using the CPS ASEC. This is then multiplied by the number of weeks worked by the reference person, spouse, or cohabiting partner who has the least number of weeks worked.[21]

Similar methods are used in the CPS ASEC and the ACS to calculate work expenses. First, median weekly work expenses are derived from the Survey of Income and Program Participation (SIPP). The number of weeks worked is multiplied by 85 percent of median weekly expenses to calculate annual individual work expenses. Individual work expenses are capped at individual earnings. Once again, due to the categorical nature of weeks worked in the ACS, work expenses are measured less precisely in the ACS than in the CPS ASEC. Combined child care and work expenses are capped following the same procedure as the CPS ASEC. They are not allowed to exceed the earnings of the household reference person, spouse, or cohabiting partner with the lowest earnings.

The CPS ASEC has specific questions about medical out of pocket expenditures (MOOP). There are no questions about medical expenses in the ACS so CPS ASEC data on MOOP are used to model expenditures of health insurance premiums and other medical expenses in the ACS.[22]

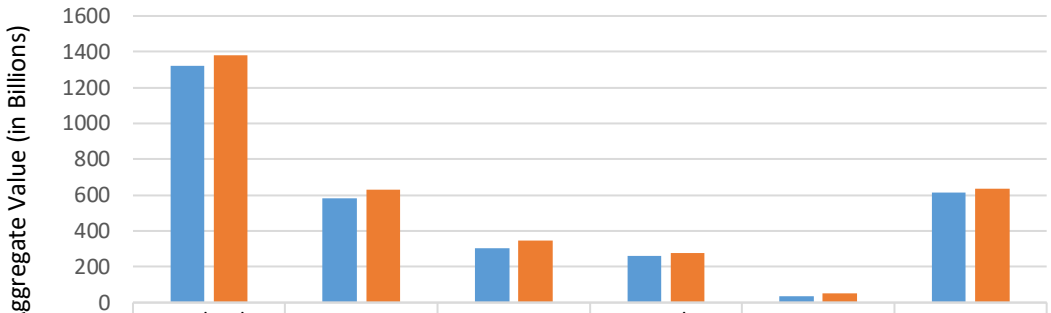
In Figure 2, the amount subtracted from resources in 2017 by different components is presented for the ACS and the CPS ASEC. Each one of these components subtracted more from resources in the CPS ASEC than in the ACS. Given that the CPS ASEC collects a larger amount of aggregate income than the ACS, it is expected that aggregate payroll and income taxes would also be higher in the CPS ASEC than in the ACS.

[20] See https://www.urban.org/research/publication/effect-different-tax-calculators-supplemental-poverty-measure for more information.

[21] The ACS PUMS data only provides categorical responses for weeks worked so people are assigned the midpoint of the range of weeks worked in each category.

[22] For more information on the imputation of non-cash benefits, program participation and child-care expenses using the logistic model and predictive means match, and the modeling of MOOP, see Renwick 2015.

Figure 2: Aggregate Amounts Subtracted from Resources - 2017



	Federal taxes*	FICA*	State taxes*	Work expenses*	Child care*	Medical*
ACS	1322.0	583.4	301.3	262.7	35.4	616.7
CPS	1382.4	628.1	343.9	275.9	51.6	635.3

* Differences are statistically significant at 90 percent confidence level.
Source: U.S. Census Bureau, 2017 American Community Survey and 2018 Current Population Survey Annual Social and Economic Supplement.

The CPS ASEC asks respondents about child support paid and received, unemployment insurance payments, and workers compensation payments. The ACS does not ask questions about child support paid; and income from unemployment, workers compensation, and child support received are reported in broader aggregated income categories that cannot be disentangled individually, but are included in overall resources.

While these additions and subtractions are included in the resource side of the ACS SPM, corresponding modifications are made to the threshold side as well. Despite differences in reference periods, base thresholds for the ACS SPM are identical to the CPS SPM, using the same base threshold for all respondents in a given year, regardless of interview month.[23] Similar to the CPS SPM, the housing portion of the SPM thresholds are adjusted for geographic differences in housing costs. The adjustments are based on 5-year ACS estimates of median gross rents for two-bedroom units with complete kitchen and plumbing facilities. For the CPS ASEC, medians were calculated for the metropolitan areas large enough to be identified on the public-use CPS ASEC file, for nonmetropolitan areas of each state, and for a combination of all smaller metropolitan areas within a state. Since the ACS PUMS identifies PUMAs[24] but does not identify metropolitan statistical areas, a PUMA-MSA crosswalk was used to create MSAs and nonmetropolitan areas of each state in the ACS in order to calculate the geographic adjustments.

Results

In the remainder of the paper, the results of the ACS SPM are presented in a number of different ways. First, the ACS SPM results are displayed over time, for the years 2014 through 2017, and

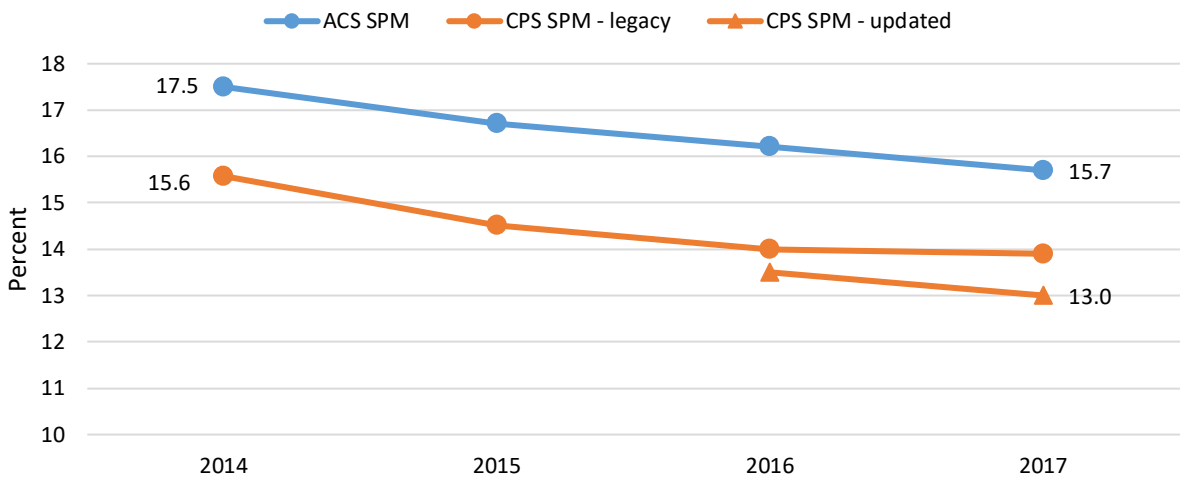
[23] Future research could examine a linearly-interpolated threshold that varies depending on which month the ACS respondent was interviewed.
[24] PUMAs are geographic areas of 100,000 or more people located within a state. These may be smaller than MSAs which means there may be multiple PUMAs within a single MSA.

compared to the CPS SPM.[25] Second, the ACS SPM estimates are compared to the ACS OPM estimates. Third, ACS SPM estimates are shown by population subgroups and marginal impacts are shown for various programs.

ACS SPM vs. CPS SPM

In this section of the paper, we compare the ACS SPM results to the CPS SPM results. As shown in Figure 3, both measures of poverty decreased each year over the time period[26] and the difference between the two poverty measures was higher in 2017 than it was in 2014 (2.7 percentage points and 1.9 percentage points, respectively).[27]

Figure 3: ACS vs. CPS SPM Poverty Rates Over Time

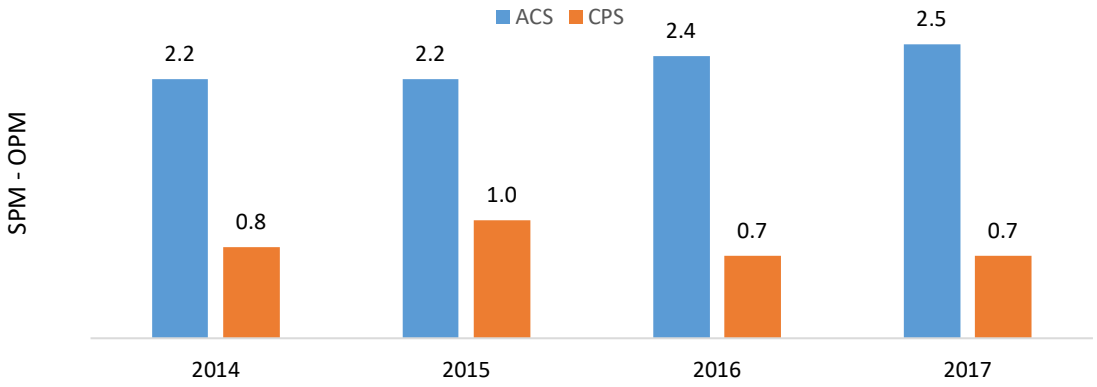


Note: The CPS SPM rates for 2016 and beyond reflect the implementation of an updated processing system. The CPS SPM for the other years reflect the legacy processing system.
Source: U.S. Census Bureau, 2014-2017 American Community Surveys and 2015-2018 Current Population Survey Annual Social and Economic Supplements.

In Figure 4, the difference between the OPM and SPM are shown for each survey. [28] There are two important points in this figure. First, the SPM is higher than the OPM in both surveys across all years. Second, there are consistently larger differences between the SPM and OPM in the ACS than in the CPS ASEC.

[25] While this paper focuses on 2014 through 2017, research datasets have been made available for the years 2009 through 2018. These files will be available for download at: <https://www.census.gov/topics/income-poverty/supplemental-poverty-measure/data/datasets.html>.
[26] This is the case for the CPS ASEC when using the updated processing system for 2016 and 2017. There is no significant change in SPM rates from 2016 to 2017 when using the legacy processing system.
[27] Throughout this paper, when comparing the CPS ASEC estimates to ACS estimates, the updated CPS ASEC processing system is used when producing estimates for 2016 and 2017. For more information on this new processing system, see https://www.census.gov/newsroom/blogs/research-matters/2019/09/cps-asec.html.
[28] OPM estimates differ from published estimates due to the inclusion of unrelated individuals under the age of 15. This is done in order to make comparisons to the SPM.

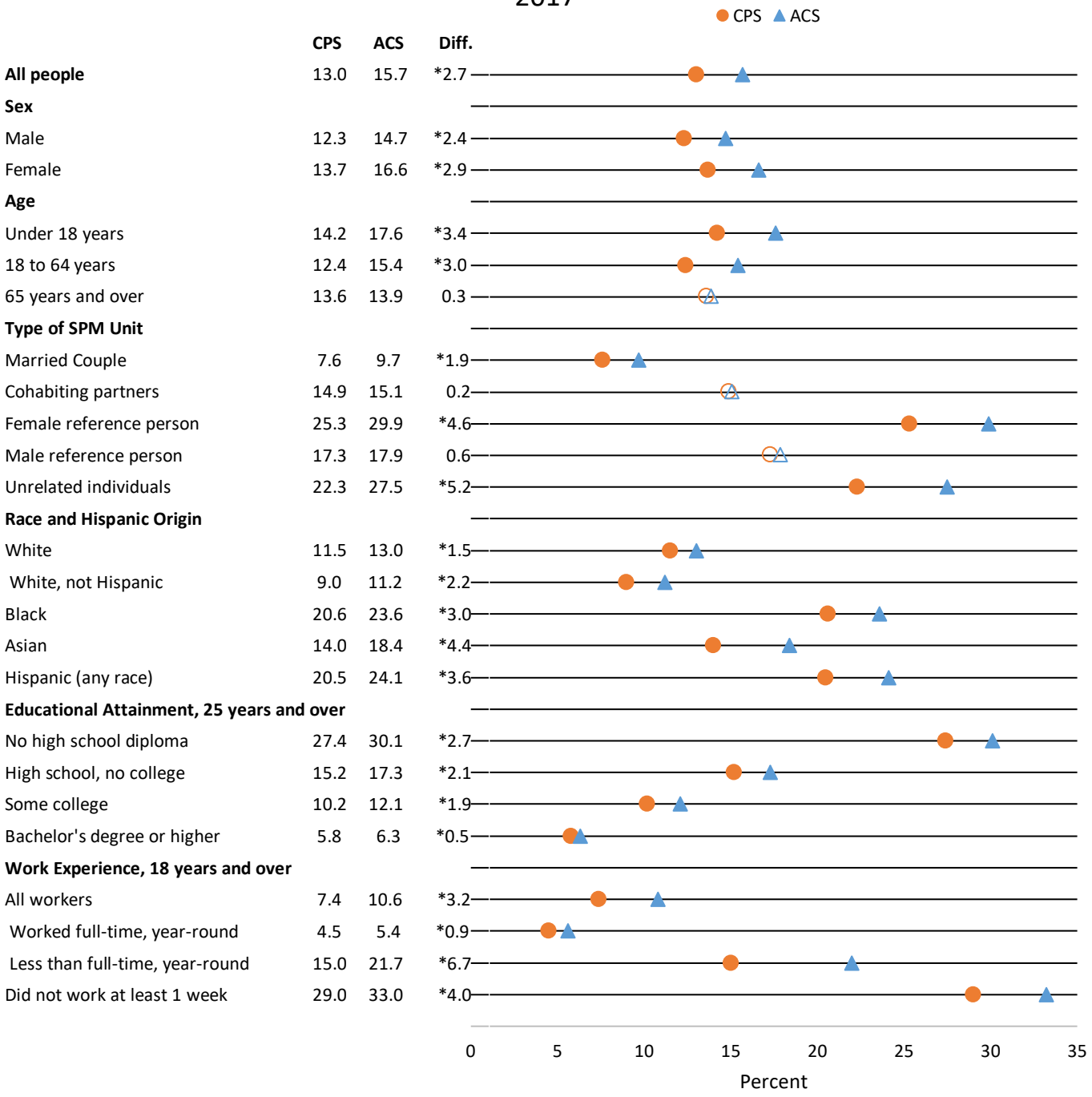
Figure 4: Percentage Point Difference Between SPM and OPM Poverty Rates by Year



Source: U.S. Census Bureau, 2014-2017 American Comunity Surveys and 2015-2018 Current Population Survey Annual Social and Economic Supplements.

In Figure 5, the difference between ACS SPM and CPS SPM are shown for different demographic groups in 2017. The ACS SPM is either higher or not statistically different from the CPS SPM for all demographic groups shown in Figure 5. By age category, the SPM is higher in the ACS than in the CPS ASEC for the under age 18 years category and age 18 to 64 years category, but the difference between the ACS SPM and CPS SPM is not statistically significant for the age 65 years and over category. Similarly, the difference in SPM rates between the ACS and the CPS ASEC is not statistically significant for cohabiting partners and male reference person SPM units, while the ACS SPM is higher than the CPS SPM for all other SPM unit types. Finally, the ACS SPM is higher than CPS SPM for all people age 25 years and over for each education category, though the difference is significantly less for people with a college degree than for people without a college degree.

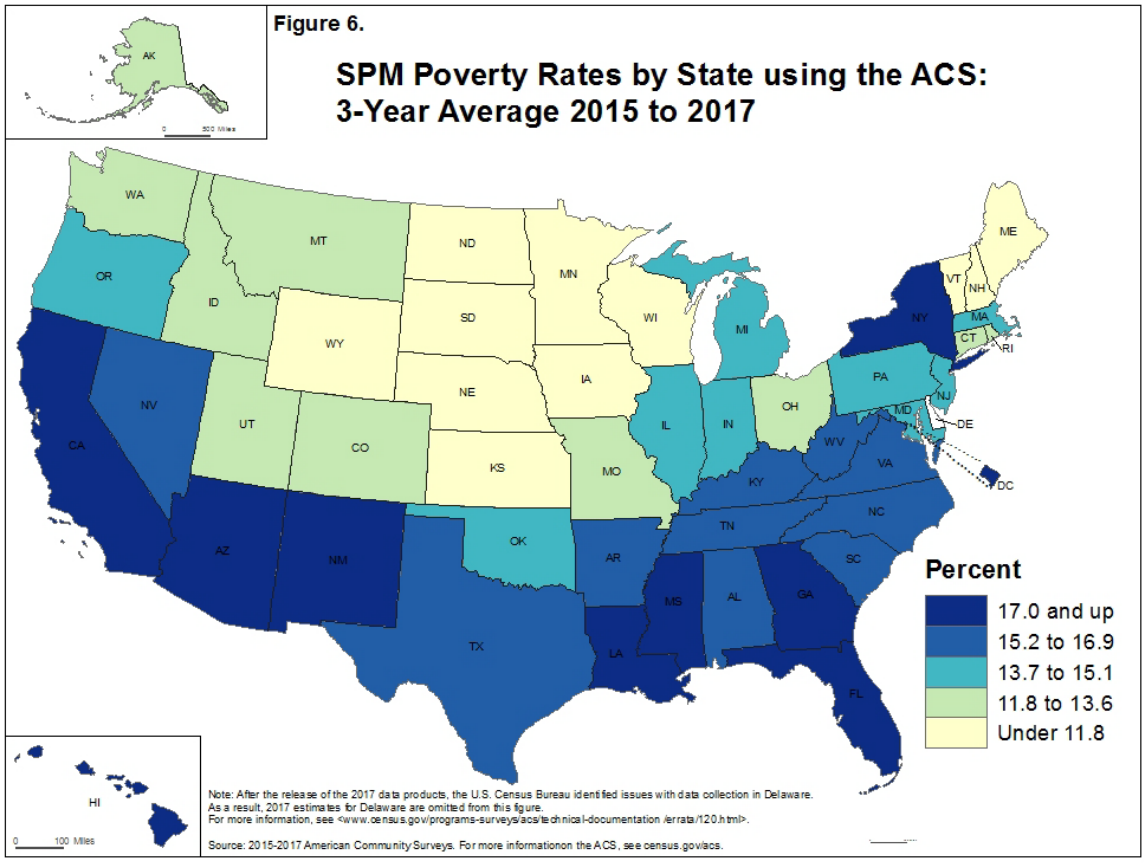
Figure 5: Percentage of People in Poverty Using the SPM: ACS vs. CPS 2017



	CPS	ACS	Diff.
All people	13.0	15.7	*2.7
Sex			
Male	12.3	14.7	*2.4
Female	13.7	16.6	*2.9
Age			
Under 18 years	14.2	17.6	*3.4
18 to 64 years	12.4	15.4	*3.0
65 years and over	13.6	13.9	0.3
Type of SPM Unit			
Married Couple	7.6	9.7	*1.9
Cohabiting partners	14.9	15.1	0.2
Female reference person	25.3	29.9	*4.6
Male reference person	17.3	17.9	0.6
Unrelated individuals	22.3	27.5	*5.2
Race and Hispanic Origin			
White	11.5	13.0	*1.5
White, not Hispanic	9.0	11.2	*2.2
Black	20.6	23.6	*3.0
Asian	14.0	18.4	*4.4
Hispanic (any race)	20.5	24.1	*3.6
Educational Attainment, 25 years and over			
No high school diploma	27.4	30.1	*2.7
High school, no college	15.2	17.3	*2.1
Some college	10.2	12.1	*1.9
Bachelor's degree or higher	5.8	6.3	*0.5
Work Experience, 18 years and over			
All workers	7.4	10.6	*3.2
Worked full-time, year-round	4.5	5.4	*0.9
Less than full-time, year-round	15.0	21.7	*6.7
Did not work at least 1 week	29.0	33.0	*4.0

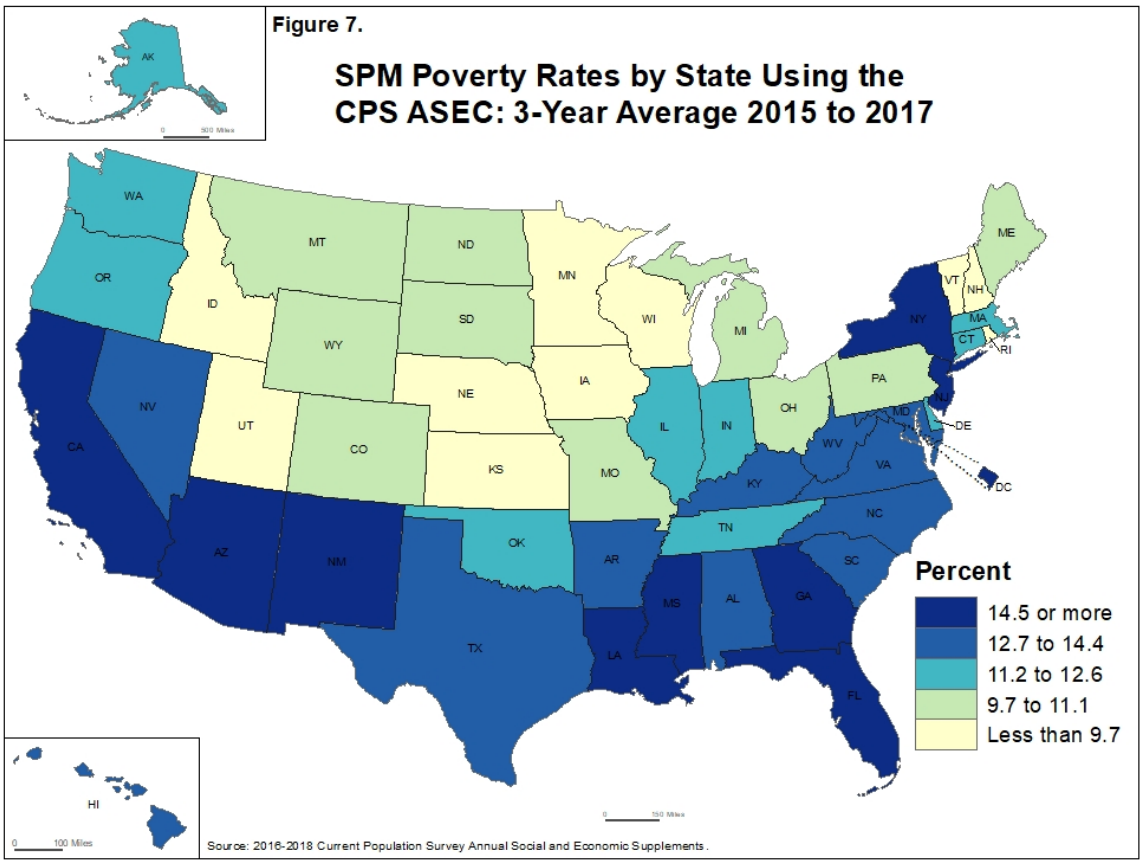
* An asterisk preceding an estimate indicates that the difference between ACS and CPS ASEC estimate is statistically different from zero at the 90 percent confidence level.
Note: Hollow markers signify that the ACS and CPS ASEC estimates are not statistically different at the 90 percent confidence level.
Source: U.S. Census Bureau, 2017 American Community Survey and 2018 Current Population Survey Annual Social and Economic Supplement.

In Figure 6 and Figure 7, states are broken up into quintiles by SPM poverty rate.[29] This is done separately for the ACS in Figure 6, and the CPS ASEC in Figure 7, so the bottom quintile and top quintile of states can be compared between the two surveys more readily.[30] There are seven states in the bottom quintile for SPM rates in common for both surveys: Iowa, Kansas, Minnesota, Nebraska, New Hampshire, Vermont, and Wisconsin. Similarly, there are eight states, Arizona, California, Florida, Georgia, Louisiana, Mississippi, New Mexico, and New York, and the District of Columbia in the top quintile for SPM rates in common for both sets of estimates. While the magnitudes of the SPM rates differ, the South has relatively higher poverty rates and the Midwest and parts of the West have relatively low SPM rates using both surveys.



[29] Three-year averages are used because while a single year of the ACS is representative at the state and sub-state level, the Census Bureau recommends the use of three-year averages when calculating state-level poverty rates using the CPS ASEC.

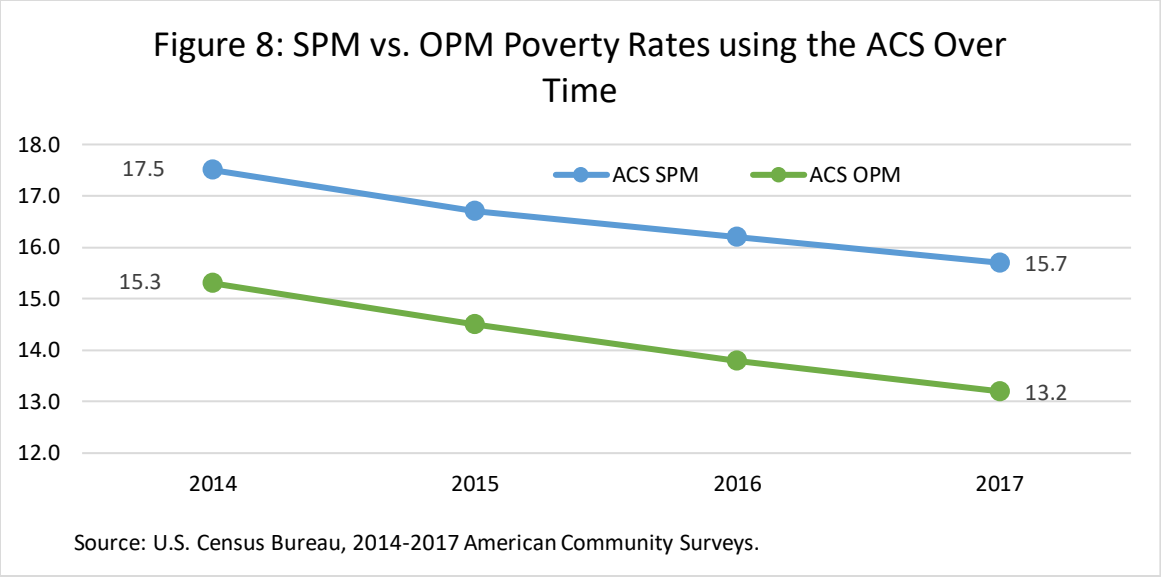
[30] In the appendix, SPM poverty rates using the ACS and CPS ASEC by state are shown in Table A-4.



Similar to the difference between the two surveys nationally, the three-year average ACS SPM is higher than the three-year average CPS SPM in 40 states. In three of those states (California, New York, and Rhode Island), the difference in SPM rates between the two surveys is significantly larger than the 3-year average national difference in SPM rates. The difference in SPM rates is not statistically significant in 9 states and the District of Columbia.

OPM vs. SPM (ACS)

In this section of the paper, we compare the ACS SPM results to the ACS OPM. As shown in Figure 8, both measures of poverty decrease each year over the time period and the difference between the two poverty measures is relatively stable, with the SPM between 2.2 and 2.5 percentage points higher than the OPM.

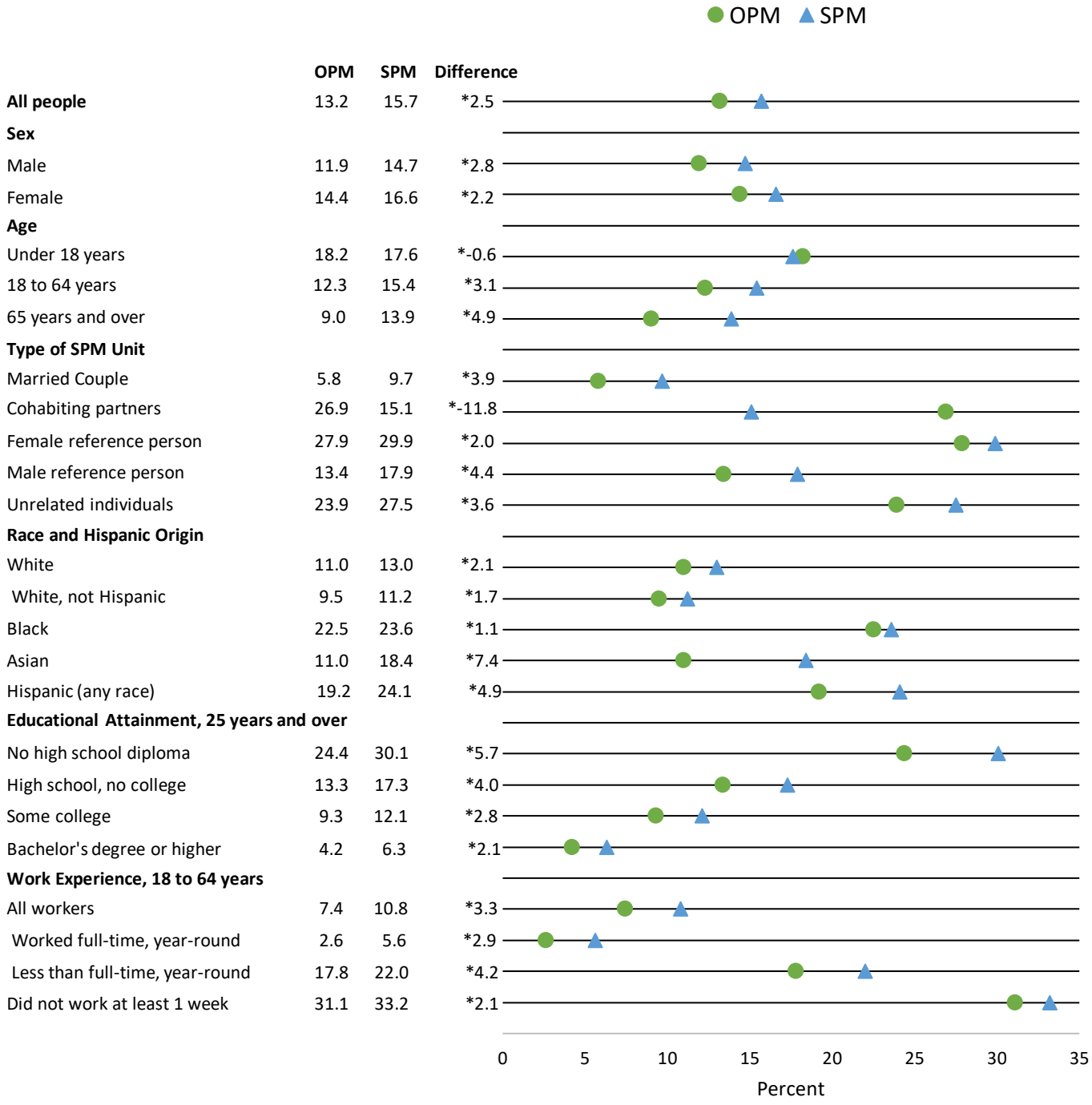


In Figure 9, differences between the ACS OPM and the ACS SPM are shown by different demographic groups for the year 2017. The SPM is higher than the OPM for both males and females but the difference in the two rates is larger for males. The SPM rate is higher than the OPM for people aged 18 years and over while the OPM rate is higher than the SPM for people under age 18. Furthermore, there is a larger difference in poverty rates across the two measures for the 65 years and over population than for the 18 to 64 year old population.

The SPM rate is higher than the OPM rate for all types of SPM units except for cohabiting partners. When the SPM is higher than the OPM, the largest difference in rates is for SPM units with a male reference person while the smallest difference is for SPM units with a female reference person. By race, SPM rates are higher than OPM rates across all groups, with the largest difference in poverty rates for Asians and the smallest difference for Blacks.

By educational attainment, SPM rates are higher than OPM rates across all groups, and the difference between the SPM rate and the OPM rate decreases as the level of education increases. For work experience among 18 to 64 year olds, SPM rates were consistently higher than OPM rates, with the largest difference in poverty rates for people who worked less than full-time, year-round while the smallest difference for people who did not work at least one week.

Figure 9: Percentage of People in Poverty by Different Poverty Measures in the ACS: 2017

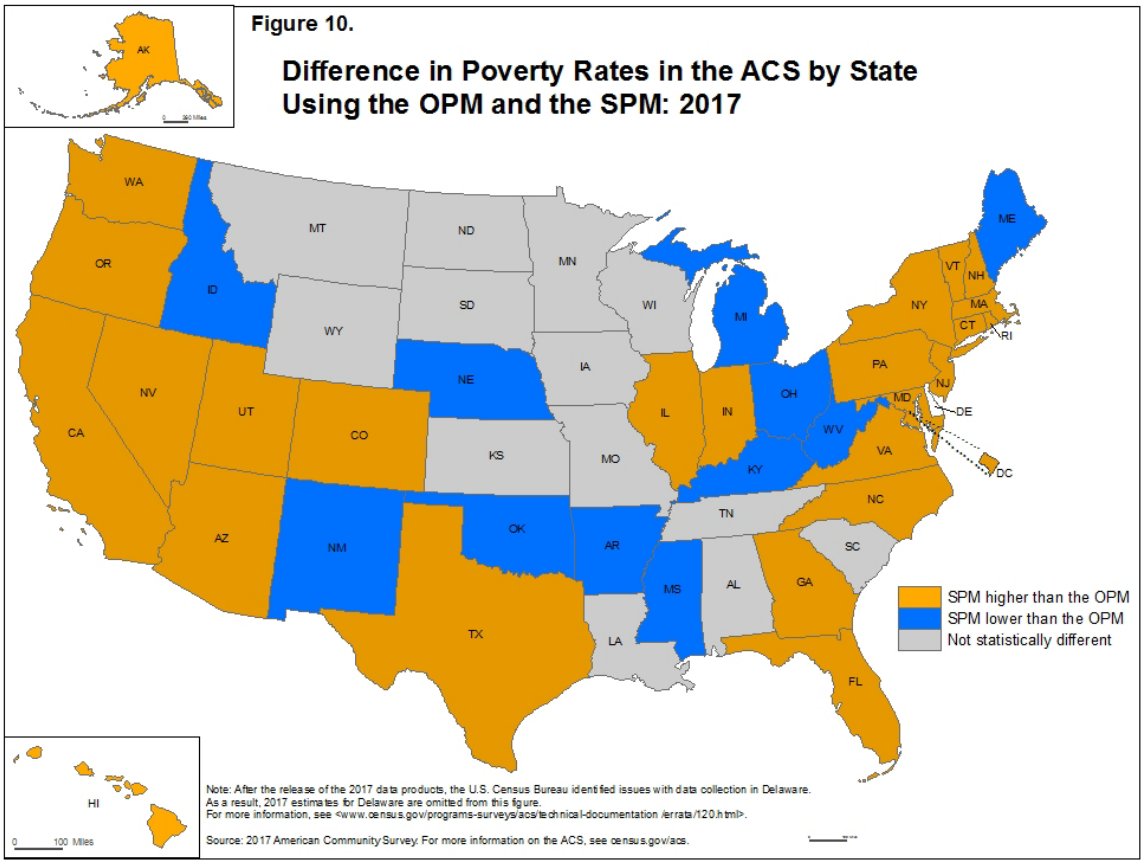


	OPM	SPM	Difference
All people	13.2	15.7	*2.5
Sex			
Male	11.9	14.7	*2.8
Female	14.4	16.6	*2.2
Age			
Under 18 years	18.2	17.6	*-0.6
18 to 64 years	12.3	15.4	*3.1
65 years and over	9.0	13.9	*4.9
Type of SPM Unit			
Married Couple	5.8	9.7	*3.9
Cohabiting partners	26.9	15.1	*-11.8
Female reference person	27.9	29.9	*2.0
Male reference person	13.4	17.9	*4.4
Unrelated individuals	23.9	27.5	*3.6
Race and Hispanic Origin			
White	11.0	13.0	*2.1
White, not Hispanic	9.5	11.2	*1.7
Black	22.5	23.6	*1.1
Asian	11.0	18.4	*7.4
Hispanic (any race)	19.2	24.1	*4.9
Educational Attainment, 25 years and over			
No high school diploma	24.4	30.1	*5.7
High school, no college	13.3	17.3	*4.0
Some college	9.3	12.1	*2.8
Bachelor's degree or higher	4.2	6.3	*2.1
Work Experience, 18 to 64 years			
All workers	7.4	10.8	*3.3
Worked full-time, year-round	2.6	5.6	*2.9
Less than full-time, year-round	17.8	22.0	*4.2
Did not work at least 1 week	31.1	33.2	*2.1

* An asterisk preceding an estimate indicates difference between SPM and OPM is statistically different from zero at the 90 percent confidence level.

Source: U.S. Census Bureau, 2017 American Community Survey.

In Figure 10, the difference between the ACS SPM and ACS OPM are shown by state.[31] In 25 states and the District of Columbia, the SPM rate was higher than the OPM rate. The SPM rate was lower than the OPM rate in 11 states and the difference between the SPM rate and the OPM rate was not statistically significant in 13 states.

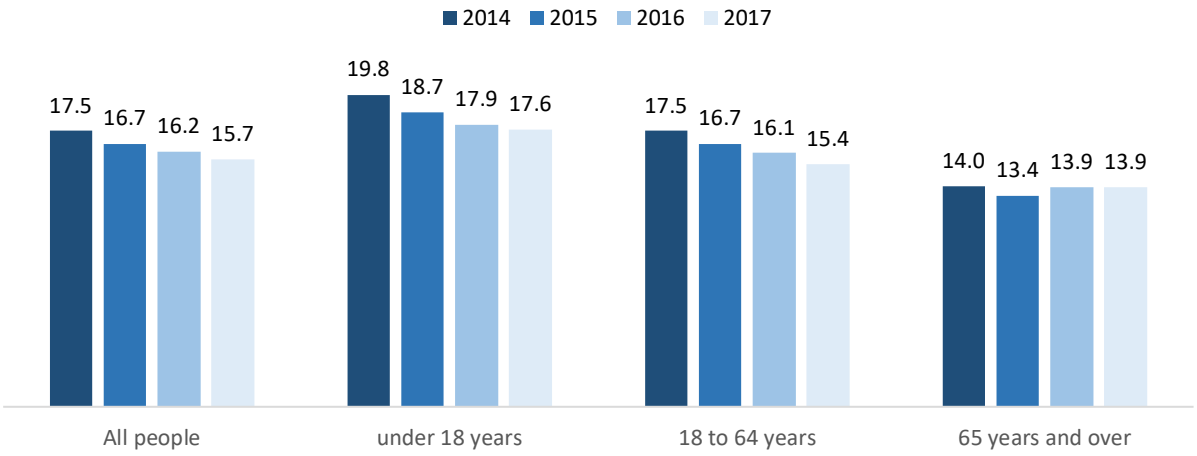


ACS SPM

The SPM decreased each year from 2014 to 2017. By age category, this same decline was only observed for people ages 18 to 64. SPM rates for people under age 18 declined each year from 2014 to 2016,[32] while for people ages 65 and over, the SPM does not move in a consistent direction. For each year, the SPM was highest for people under age 18 and lowest for people age 65 and older.

[31] A table showing ACS OPM and ACS SPM estimates by state for 2017 is in the appendix (Table A-1).
[32] The change from 2016 to 2017 was not statistically significant.

Figure 11: ACS SPM Poverty Rates Over Time



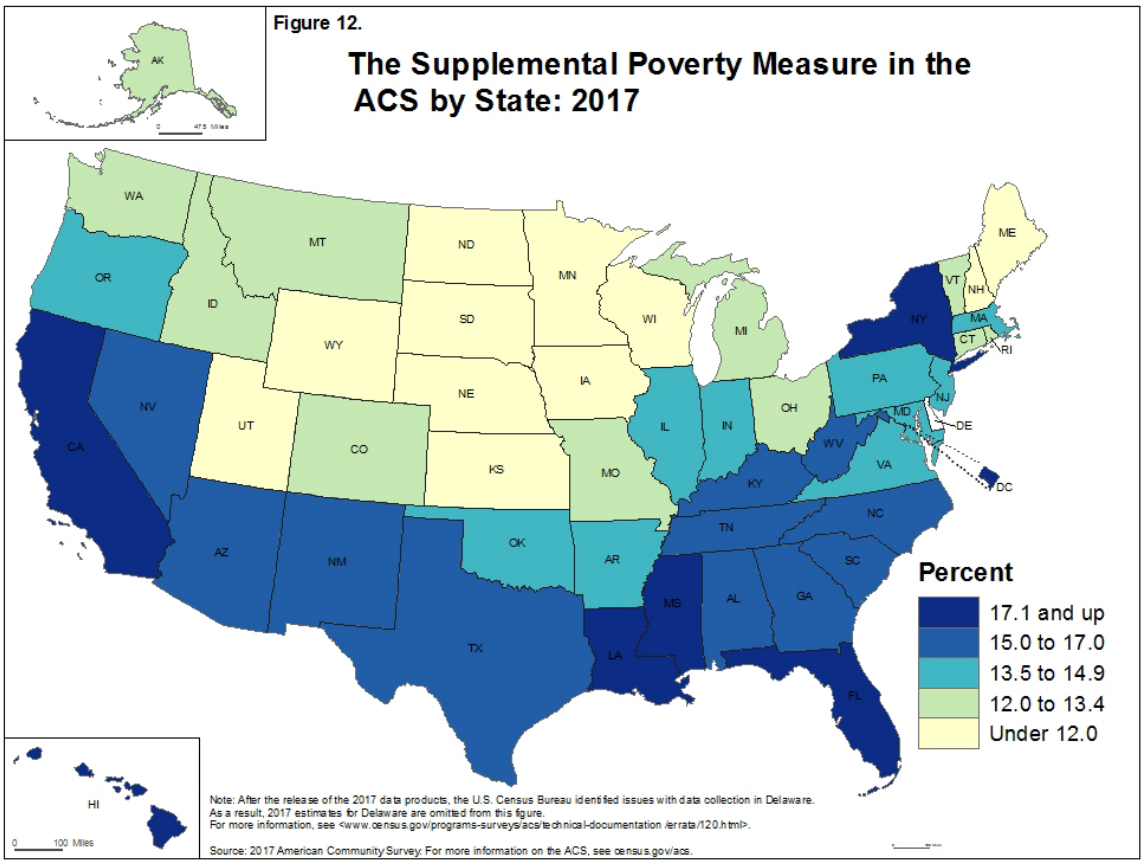
Source: U.S. Census Bureau, 2014-2017 American Community Surveys.

In Figure 12, the ACS SPM is shown by state for 2017.[33] In the appendix to this paper, there is a table showing state level SPM estimates for 2014 to 2017 (Appendix Table A-2). There are also tables showing state level SPM estimates by age group for 2014 to 2017 (Appendix Tables A-3A, A-3B, A-3C, and A-3D).

In 2017, 12 states and the District of Columbia had ACS SPM rates higher than the national ACS SPM rate of 15.7 percent, 33 states had ACS SPM rates lower than the national rate, and four states[34] had ACS SPM rates not significantly different than the national rate. The lowest ACS SPM rates are in the Midwest and New England, while the highest ACS SPM rates are concentrated in the South and Southwest.

[33] Census guidance recommends using three-year averages when generating state-level estimates in the CPS ASEC due to sample size. As such, the CPS SPM can only be produced for states using 3 years of data since one year of CPS ASEC data is only representative at the national level. However, one year of ACS data is representative at both the state level and the national level.

[34] Kentucky, Nevada, North Carolina, and South Carolina.



One benefit of the SPM is that it allows an examination of the impact of policies and programs on poverty rates. We can individually subtract the value of programs or cost of expenses one at a time and determine the marginal impact of each on the ACS SPM. This counterfactual exercise assumes no behavioral changes and does not attempt to estimate the causal impact of each element. This is done in Table 4 for all people and for different age categories and in Figure 13 by state. The estimates in the table are the percentage point difference in SPM rates, holding all else equal, when excluding the element in question. A negative value means the SPM rate would have been higher without the benefit and a positive value means the SPM rate would have been lower without the expense.

Social Security had the largest effect on the overall SPM rate, reducing poverty by 7.38 percentage points. All other resource additions reduced the SPM rate by less than 2.0 percentage points. Most of this is due to the targeting of Social Security benefits to people age 65 and over. Social Security reduced poverty for this group by 31.18 percentage points. In other words, approximately 45 percent of those ages 65 and older would have been in poverty without Social Security. However, Social Security only reduced the child SPM rate by 1.70 percentage points. Tax credits and SNAP were more important programs for reducing child poverty.

The element that increased overall SPM rates the most was medical expenses. This was true for all age categories but was the highest for those ages 65 and older, followed by children, and then those

ages 18 to 64. Work expenses and FICA had a larger effect on children than on the other two age groups while federal income tax had a larger effect on those ages 18 to 64 than on the other two age group.

Table 4: Effect of Individual Elements on SPM Rates: 2017

Element	All People		Under 18 years		18 to 64 years		65 years and over	
	Estimate	Margin of error	Estimate	Margin of error	Estimate	Margin of error	Estimate	Margin of error
Total SPM rate	**15.69**	**0.09**	**17.63**	**0.15**	**15.40**	**0.09**	**13.94**	**0.12**
ADDITIONS								
Social Security	-7.38	0.04	-1.70	0.05	-3.51	0.03	-31.18	0.15
Refundable tax credits (EITC)	-1.92	0.03	-4.24	0.08	-1.49	0.03	-0.15	0.01
SNAP	-1.21	0.03	-2.24	0.06	-0.97	0.02	-0.64	0.02
SSI	-1.09	0.02	-0.76	0.03	-1.15	0.02	-1.36	0.04
Housing subsidies	-0.66	0.02	-0.93	0.04	-0.52	0.02	-0.82	0.03
School lunch	-0.41	0.01	-1.02	0.04	-0.28	0.01	-0.04	0.01
TANF/general assistance	-0.20	0.01	-0.35	0.02	-0.17	0.01	-0.11	0.01
LIHEAP	-0.05	0.005	-0.07	0.01	-0.04	0.004	-0.05	0.01
WIC	-0.08	0.01	-0.20	0.02	-0.06	0.01	-0.005	0.002
SUBTRACTIONS								
Federal income tax	0.68	0.02	0.69	0.03	0.79	0.02	0.20	0.01
FICA	1.74	0.03	2.38	0.06	1.85	0.03	0.39	0.02
Work expenses	2.19	0.03	3.09	0.07	2.28	0.04	0.51	0.02
Medical expenses	3.70	0.04	3.90	0.08	3.30	0.04	5.01	0.07

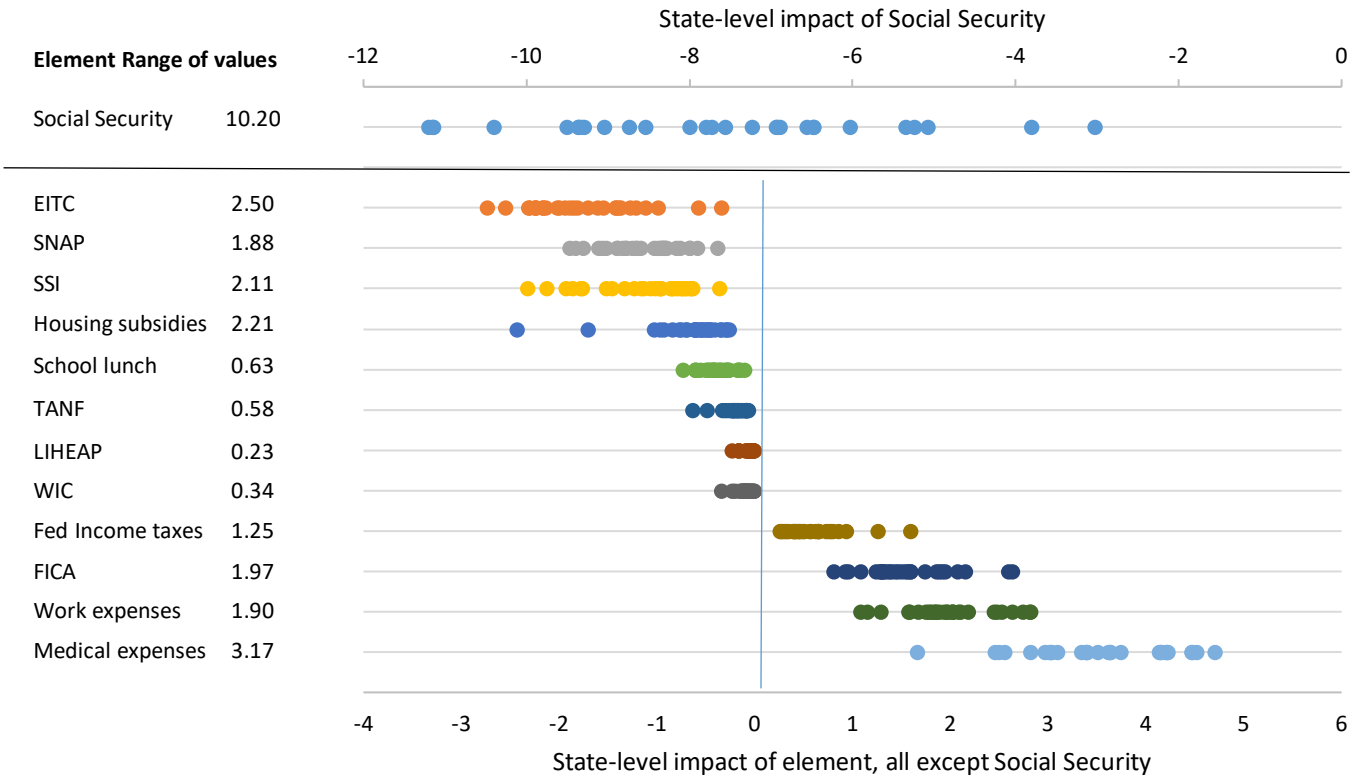
Note: All estimates statistically different from zero t the 90 percent confidence level. Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.
Source: U.S. Census Bureau, 2017 American Community Survey.

In Figure 13, the effects of the individual elements on the SPM rate are shown for each state and the District of Columbia. Each state and the District of Columbia are represented as a separate dot in order to show the range of effects these elements have on the SPM rate in different states.[35]

West Virginia was among the states most impacted by Social Security and Alaska was among the states least impacted by Social Security. For the other elements, there is a spread among the states, but the lack of precision makes it difficult to truly rank the state estimate in any meaningful way. The values for the individual effects by state are displayed in appendix tables (Tables A-5A and A-5B).

[35] Since the impact of Social Security is so much larger than the other elements, the impact of Social Security is shown on a different axis: Social Security is measured on the top axis and the other elements are measured on the bottom axis.

Figure 13: The Effect of Individual Elements on SPM Rates by State: 2017



Note: Each dot represents one of the 49 states and the District of Columbia. The U.S. Census Bureau identified issues with data collection in Delaware. As a result, estimates for Delaware are omitted from this figure. For more information, see <www.census.gov/programs-surveys/acs/technical-documentation/errata/120.html>. Social Security follows the axis at the top of the figure while other elements follow the axis at the bottom of the figure.
Source: U.S. Census Bureau, 2017 American Community Survey

Conclusion

The main purpose of this paper was to lay out a methodology for creating the SPM using the ACS and to compare this methodology with how the SPM is calculated using the CPS ASEC. A secondary purpose was to provide state-level SPM estimates for the first time using single-year data for the period from 2014 to 2017. We have also released research datasets for 2009 through 2018 for researchers to use.[36]

[36] ACS SPM rates by state and ACS SPM microdata files are located at https://www.census.gov/topics/income-poverty/supplemental-poverty-measure.html.

References

Bohn, S., Danielson, C., Kimberlin, S., Mattingly, M., and Wimer, C., The California Poverty Measure 2012 Technical Appendices, Stanford Center on Poverty and Inequality. 2015, https://inequality.stanford.edu/sites/default/files/CPM_2012_appendices.pdf.

Chung, Y., Isaacs, J.B., Smeeding, T.M., Thornton, K.A., May 2012. Wisconsin Poverty Report: Policy Context, Methodology, and Results for 2010, Part of the Wisconsin Poverty Project's Fourth Annual Report Series. Institute for Research on Poverty University of Wisconsin Madison. https://www.irp.wisc.edu/wp/wp-content/uploads/2018/05/WIPovPolicyContextMethodologyResults_May2012.pdf.

Fox, Liana, "The Supplemental Poverty Measure: 2018," *Current Population Reports,* P60-268, U.S. Census Bureau, October 2019, available at < https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-268.pdf>

Fox, Liana, Jose Pacas, and Brian Glassman, "Using the American Community Survey (ACS) to Implement a Supplemental Poverty Measure (SPM)", Presented at ACS Data Users Conference, May 11, 2017.

New York City Center for Economic Opportunity (NYC-CEO), April 2019a, New York City Government Poverty Measure 2017, An Annual Report. Appendix B Deriving a Poverty Threshold for New York City https://www1.nyc.gov/assets/opportunity/pdf/NYCgovPoverty2019_Appendix_B.pdf

Renwick, Trudi, "Using the American Community Survey (ACS) to Implement a Supplemental Poverty Measure (SPM)", SEHSD Working Paper Number 2015-09, U.S. Census Bureau, 2015.

Renwick, Trudi, Kathleen Short, Ale Bishaw, and Charles Hokayem, "Using the American Community Survey (ACS) to implement a Supplemental Poverty Measure, SEHSD Working Paper Number 2012-10, U.S. Census Bureau, 2012.

Ruggles, Steven, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020. https://doi.org/10.18128/D010.V10.0

Appendix

Table A-1: Number (in thousands) and Percentage of People in Poverty by State using the ACS: 2017

		ACS OPM[1]				ACS SPM				Difference (SPM less OPM)			
		Number		Percent		Number		Percent		Number		Percent	
	Total	Est	M.O.E. (+/-)[2]	Est	M.O.E. (+/-)[2]	Est	M.O.E. (+/-)[2]	Est	M.O.E. (+/-)[2]	Est	M.O.E. (+/-)[2]	Est	M.O.E. (+/-)[2]
United States	317,632	41,831	292	13.2	0.1	49,830	291	15.7	0.1	*7,999	187	*2.5	0.1
Alabama	4,756	790	28	16.6	0.6	777	26	16.3	0.5	-13	23	-0.3	0.5
Alaska	712	81	11	11.3	1.6	91	11	12.7	1.6	*10	9	*1.4	1.3
Arizona	6,861	1,002	31	14.6	0.4	1,141	34	16.6	0.5	*139	28	*2.0	0.4
Arkansas	2,919	467	21	16.0	0.7	424	22	14.5	0.8	*-43	18	*-1.5	0.6
California	38,719	5,025	90	13.0	0.2	8,154	84	21.1	0.2	*3,129	80	*8.1	0.2
Colorado	5,488	558	23	10.2	0.4	735	27	13.4	0.5	*177	19	*3.2	0.4
Connecticut	3,474	316	19	9.1	0.5	423	25	12.2	0.7	*107	18	*3.1	0.5
Delaware	N	N	N	N	N	N	N	N	N	N	N	N	N
District of Columbia	654	103	8	15.7	1.2	121	10	18.5	1.6	*18	8	*2.8	1.3
Florida	20,556	2,838	63	13.8	0.3	3,855	60	18.8	0.3	*1,017	52	*4.9	0.3
Georgia	10,171	1,528	51	15.0	0.5	1,684	51	16.6	0.5	*155	31	*1.5	0.3
Hawaii	1,383	138	12	10.0	0.8	252	18	18.2	1.3	*114	16	*8.2	1.1
Idaho	1,687	219	16	13.0	1.0	205	15	12.2	0.9	*-14	13	*-0.8	0.8
Illinois	12,501	1,561	43	12.5	0.3	1,778	50	14.2	0.4	*217	40	*1.7	0.3
Indiana	6,480	866	33	13.4	0.5	894	30	13.8	0.5	*27	24	*0.4	0.4
Iowa	3,046	302	18	9.9	0.6	304	19	10.0	0.6	1	14	0.0	0.4
Kansas	2,833	334	17	11.8	0.6	327	17	11.5	0.6	-8	14	-0.3	0.5
Kentucky	4,322	742	26	17.2	0.6	701	24	16.2	0.6	*-40	17	*-0.9	0.4
Louisiana	4,555	900	34	19.8	0.7	897	32	19.7	0.7	-3	27	-0.1	0.6
Maine	1,300	145	12	11.1	0.9	134	11	10.3	0.8	*-11	9	*-0.9	0.7
Maryland	5,912	544	26	9.2	0.4	863	27	14.6	0.5	*319	23	*5.4	0.4
Massachusetts	6,609	668	27	10.1	0.4	896	27	13.6	0.4	*229	22	*3.5	0.3
Michigan	9,732	1,364	38	14.0	0.4	1,296	35	13.3	0.4	*-69	34	*-0.7	0.4
Minnesota	5,445	518	23	9.5	0.4	505	24	9.3	0.4	-13	19	-0.2	0.3
Mississippi	2,891	565	18	19.6	0.6	543	19	18.8	0.6	*-22	15	*-0.8	0.5
Missouri	5,939	778	25	13.1	0.4	778	25	13.1	0.4	0	22	0.0	0.4
Montana	1,022	126	10	12.3	1.0	125	10	12.2	1.0	-1	9	-0.1	0.8
Nebraska	1,868	196	15	10.5	0.8	183	14	9.8	0.7	*-13	12	*-0.7	0.6
Nevada	2,960	386	22	13.0	0.7	460	25	15.6	0.9	*75	20	*2.5	0.7
New Hampshire	1,300	95	9	7.3	0.7	127	11	9.7	0.9	*31	7	*2.4	0.5
New Jersey	8,823	842	30	9.5	0.3	1,271	32	14.4	0.4	*428	29	*4.9	0.3
New Mexico	2,045	397	17	19.4	0.9	347	16	17.0	0.8	*-50	14	*-2.4	0.7
New York	19,273	2,632	54	13.7	0.3	3,565	63	18.5	0.3	*933	54	*4.8	0.3
North Carolina	10,007	1,468	41	14.7	0.4	1,546	41	15.4	0.4	*78	33	*0.8	0.3
North Dakota	729	69	7	9.5	1.0	74	8	10.1	1.1	5	5	0.6	0.7
Ohio	11,341	1,550	38	13.7	0.3	1,378	36	12.2	0.3	*-171	34	*-1.5	0.3
Oklahoma	3,821	582	28	15.2	0.7	558	28	14.6	0.7	*-24	22	*-0.6	0.6
Oregon	4,053	522	23	12.9	0.6	597	25	14.7	0.6	*75	20	*1.8	0.5
Pennsylvania	12,382	1,527	43	12.3	0.3	1,699	47	13.7	0.4	*172	36	*1.4	0.3
Rhode Island	1,018	118	10	11.6	1.0	129	10	12.7	1.0	*12	9	*1.1	0.9
South Carolina	4,888	747	24	15.3	0.5	758	25	15.5	0.5	11	20	0.2	0.4
South Dakota	836	97	9	11.6	1.1	94	8	11.2	1.0	-3	7	-0.4	0.8
Tennessee	6,561	980	32	14.9	0.5	987	31	15.0	0.5	7	26	0.1	0.4
Texas	27,698	4,016	66	14.5	0.2	4,529	72	16.3	0.3	*513	49	*1.9	0.2
Utah	3,054	290	20	9.5	0.7	357	17	11.7	0.6	*67	17	*2.2	0.6
Vermont	599	65	9	10.9	1.4	74	11	12.4	1.8	*9	8	*1.5	1.3
Virginia	8,228	846	32	10.3	0.4	1,221	36	14.8	0.4	*375	25	*4.6	0.3
Washington	7,263	798	28	11.0	0.4	890	30	12.3	0.4	*93	25	*1.3	0.4
West Virginia	1,768	337	16	19.0	0.9	296	15	16.8	0.8	*-40	11	*-2.3	0.6
Wisconsin	5,650	608	28	10.8	0.5	586	27	10.4	0.5	-22	24	-0.4	0.4
Wyoming	565	67	8	11.8	1.4	65	8	11.5	1.3	-2	6	-0.3	1.0

* Difference is statistically different from zero at the 90 percent confidence level.

[1] Differs from published estimates. Includes unrelated individuals under the age of 15.

[2] Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.

Z Represents or rounds to zero.

N Not available or not comparable. After the release of the 2017 data products, the U.S. Census Bureau identified issues with data collection in Delaware. As a result, 2017 estimates for Delaware are omitted from this table. For more information, see <www.census.gov/programs-surveys/acs/technical-documentation/errata/120.html>.

Source: U.S. Census Bureau, 2017 American Community Survey PUMS.

Table A-2: Number (in thousands) and Percentage of People in ACS SPM Poverty by State: 2014 to 2017

	2017				2016				2015				2014			
	Number		Percent		Number		Percent		Number		Percent		Number		Percent	
	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]
United States	49,830	291	15.7	0.1	50,950	302	16.2	0.1	52,324	321	16.7	0.1	54,477	327	17.5	0.1
Alabama	777	26	16.3	0.5	794	27	16.7	0.6	841	28	17.7	0.6	858	29	18.1	0.6
Alaska	91	11	12.7	1.6	84	10	11.8	1.4	87	12	12.2	1.7	88	14	12.4	2.0
Arizona	1,141	34	16.6	0.5	1,206	33	17.8	0.5	1,210	39	18.1	0.6	1,282	35	19.5	0.5
Arkansas	424	22	14.5	0.8	495	23	17.1	0.8	483	20	16.7	0.7	475	21	16.5	0.7
California	8,154	84	21.1	0.2	8,553	98	22.3	0.3	8,942	104	23.3	0.3	9,589	109	25.2	0.3
Colorado	735	27	13.4	0.5	732	26	13.5	0.5	739	27	13.8	0.5	744	28	14.2	0.5
Connecticut	423	25	12.2	0.7	409	21	11.8	0.6	437	22	12.6	0.6	418	20	12.0	0.6
Delaware	N	N	N	N	130	12	14.0	1.3	129	14	14.0	1.5	130	11	14.2	1.2
District of Columbia	121	10	18.5	1.6	129	10	20.1	1.5	116	9	18.4	1.4	113	10	18.3	1.7
Florida	3,855	60	18.8	0.3	3,943	55	19.5	0.3	3,991	58	20.1	0.3	4,122	75	21.2	0.4
Georgia	1,684	51	16.6	0.5	1,702	41	16.9	0.4	1,805	45	18.1	0.4	1,887	46	19.2	0.5
Hawaii	252	18	18.2	1.3	218	16	15.8	1.2	242	15	17.4	1.1	244	17	17.7	1.2
Idaho	205	15	12.2	0.9	207	15	12.5	0.9	227	16	14.0	1.0	239	16	14.9	1.0
Illinois	1,778	50	14.2	0.4	1,817	47	14.5	0.4	1,936	48	15.4	0.4	2,042	48	16.2	0.4
Indiana	894	30	13.8	0.5	880	26	13.6	0.4	929	30	14.4	0.5	943	32	14.7	0.5
Iowa	304	19	10.0	0.6	319	17	10.5	0.6	361	20	11.9	0.6	344	23	11.4	0.8
Kansas	327	17	11.5	0.6	335	18	11.9	0.6	331	20	11.7	0.7	362	20	12.8	0.7
Kentucky	701	24	16.2	0.6	742	29	17.2	0.7	684	27	15.9	0.6	697	23	16.3	0.5
Louisiana	897	32	19.7	0.7	870	29	19.1	0.6	882	34	19.4	0.7	872	28	19.3	0.6
Maine	134	11	10.3	0.8	156	15	12.0	1.2	164	12	12.7	0.9	162	12	12.5	0.9
Maryland	863	27	14.6	0.5	792	28	13.5	0.5	847	32	14.4	0.5	842	34	14.4	0.6
Massachusetts	896	27	13.6	0.4	882	28	13.5	0.4	968	30	14.8	0.5	933	32	14.4	0.5
Michigan	1,296	35	13.3	0.4	1,385	42	14.3	0.4	1,446	40	14.9	0.4	1,488	37	15.4	0.4
Minnesota	505	24	9.3	0.4	473	25	8.8	0.5	525	25	9.8	0.5	537	29	10.1	0.5
Mississippi	543	19	18.8	0.6	521	23	18.0	0.8	576	24	19.9	0.8	584	25	20.2	0.9
Missouri	778	25	13.1	0.4	790	29	13.3	0.5	808	30	13.7	0.5	877	30	14.9	0.5
Montana	125	10	12.2	1.0	133	9	13.2	0.9	148	13	14.7	1.3	156	14	15.7	1.4
Nebraska	183	14	9.8	0.7	213	14	11.5	0.8	217	13	11.8	0.7	202	12	11.1	0.7
Nevada	460	25	15.6	0.9	472	23	16.3	0.8	485	22	17.0	0.8	481	22	17.2	0.8
New Hampshire	127	11	9.7	0.9	119	11	9.2	0.9	117	11	9.1	0.8	130	11	10.1	0.9
New Jersey	1,271	32	14.4	0.4	1,320	44	15.1	0.5	1,398	43	15.9	0.5	1,428	35	16.3	0.4
New Mexico	347	16	17.0	0.8	357	19	17.5	1.0	384	23	18.8	1.1	389	21	19.0	1.0
New York	3,565	63	18.5	0.3	3,536	54	18.4	0.3	3,648	62	19.0	0.3	3,664	66	19.1	0.3
North Carolina	1,546	41	15.4	0.4	1,623	40	16.4	0.4	1,668	39	17.0	0.4	1,723	40	17.8	0.4
North Dakota	74	8	10.1	1.1	76	9	10.4	1.2	77	8	10.6	1.1	84	9	11.8	1.2
Ohio	1,378	36	12.2	0.3	1,483	41	13.1	0.4	1,527	43	13.5	0.4	1,651	41	14.6	0.4
Oklahoma	558	28	14.6	0.7	563	22	14.8	0.6	570	21	15.0	0.6	559	23	14.8	0.6
Oregon	597	25	14.7	0.6	591	23	14.8	0.6	626	23	15.9	0.6	679	28	17.5	0.7
Pennsylvania	1,699	47	13.7	0.4	1,735	46	14.0	0.4	1,701	48	13.7	0.4	1,822	44	14.7	0.4
Rhode Island	129	10	12.7	1.0	136	11	13.5	1.1	147	12	14.5	1.1	156	12	15.4	1.1
South Carolina	758	25	15.5	0.5	737	24	15.3	0.5	788	27	16.5	0.6	832	28	17.7	0.6
South Dakota	94	8	11.2	1.0	98	10	11.8	1.2	96	10	11.6	1.2	99	9	12.1	1.0
Tennessee	987	31	15.0	0.5	1,014	30	15.6	0.5	1,017	35	15.8	0.5	1,118	32	17.5	0.5
Texas	4,529	72	16.3	0.3	4,621	76	17.0	0.3	4,413	72	16.4	0.3	4,651	63	17.6	0.2
Utah	357	17	11.7	0.6	374	18	12.5	0.6	365	22	12.4	0.8	387	22	13.3	0.8
Vermont	74	11	12.4	1.8	69	8	11.5	1.3	61	8	10.2	1.3	74	8	12.4	1.3
Virginia	1,221	36	14.8	0.4	1,249	36	15.3	0.4	1,266	40	15.6	0.5	1,293	37	16.0	0.5
Washington	890	30	12.3	0.4	919	31	12.9	0.4	954	33	13.6	0.5	1,016	30	14.7	0.4
West Virginia	296	15	16.8	0.8	283	16	15.9	0.9	293	18	16.3	1.0	282	17	15.7	0.9
Wisconsin	586	27	10.4	0.5	598	26	10.6	0.5	599	28	10.7	0.5	661	29	11.8	0.5
Wyoming	65	8	11.5	1.3	64	7	11.2	1.1	54	7	9.4	1.2	68	8	11.9	1.4

[1] Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.

N Not available or not comparable. After the release of the 2017 data products, the U.S. Census Bureau identified issues with data collection in Delaware. As a result, 2017 estimates for Delaware are omitted from this table. For more information, see <www.census.gov/programs-surveys/acs/technical-documentation/errata/120.html>.

Source: U.S. Census Bureau, 2014-2017 American Community Survey PUMS.

Table A-3A: Number (in thousands) and Percentage of People in SPM Poverty by Age Groups by State: 2017												
	Under age 18				Age 18 to 64				Age 65 and over			
	Number		Percent		Number		Percent		Number		Percent	
	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]
United States	12,933	116	17.6	0.2	30,030	178	15.4	0.1	6,867	56	13.9	0.1
Alabama	206	11	18.9	1.0	472	18	16.3	0.6	99	6	12.7	0.8
Alaska	26	5	14.0	2.9	55	8	12.3	1.7	10	2	12.0	3.0
Arizona	314	14	19.3	0.9	678	23	16.7	0.6	148	8	12.6	0.7
Arkansas	108	11	15.3	1.6	258	12	14.9	0.7	58	5	12.0	1.0
California	2,172	36	24.1	0.4	4,902	56	20.2	0.2	1,080	19	20.1	0.4
Colorado	180	12	14.3	1.0	460	18	13.2	0.5	96	6	12.6	0.7
Connecticut	101	10	13.6	1.3	260	16	12.1	0.7	62	5	10.8	0.8
Delaware	N	N	N	N	N	N	N	N	N	N	N	N
District of Columbia	31	6	24.8	4.5	76	7	17.0	1.5	14	2	17.3	2.7
Florida	910	28	21.7	0.7	2,269	39	18.5	0.3	676	18	16.4	0.4
Georgia	467	25	18.6	1.0	1,020	29	16.2	0.5	197	9	14.4	0.6
Hawaii	66	7	21.9	2.4	143	11	17.2	1.3	42	5	17.1	1.9
Idaho	48	8	10.9	1.8	128	9	13.0	0.9	29	4	11.2	1.4
Illinois	456	22	15.8	0.8	1,084	30	14.0	0.4	238	10	12.7	0.6
Indiana	230	14	14.7	0.9	552	18	14.1	0.5	112	7	11.4	0.8
Iowa	68	9	9.3	1.2	189	12	10.4	0.7	47	4	9.4	0.9
Kansas	79	8	11.2	1.1	206	11	12.1	0.6	42	4	9.7	1.0
Kentucky	182	12	18.1	1.1	433	17	16.5	0.7	86	5	12.6	0.8
Louisiana	251	15	22.7	1.3	538	20	19.4	0.7	108	6	16.0	0.9
Maine	23	4	8.9	1.5	86	8	10.9	1.0	25	3	9.9	1.3
Maryland	228	14	17.0	1.1	517	16	14.0	0.4	118	7	13.6	0.8
Massachusetts	212	13	15.5	0.9	533	18	12.8	0.4	151	8	14.1	0.7
Michigan	319	16	14.7	0.7	808	25	13.6	0.4	169	7	10.5	0.5
Minnesota	120	12	9.3	0.9	301	16	9.0	0.5	84	7	10.2	0.9
Mississippi	154	10	21.7	1.4	319	12	18.5	0.7	70	5	15.5	1.1
Missouri	205	11	14.8	0.8	474	16	13.2	0.4	99	7	10.2	0.7
Montana	27	5	11.7	2.0	82	8	13.5	1.2	16	2	8.7	1.2
Nebraska	45	7	9.6	1.4	110	8	9.9	0.7	28	3	10.0	1.1
Nevada	116	11	17.0	1.6	280	16	15.4	0.9	64	5	14.1	1.1
New Hampshire	28	5	10.8	2.1	73	7	9.0	0.9	26	3	11.3	1.5
New Jersey	339	14	17.2	0.7	737	22	13.4	0.4	195	9	14.2	0.7
New Mexico	88	8	18.0	1.6	209	10	17.2	0.8	50	5	14.7	1.4
New York	904	26	21.9	0.6	2,147	43	17.7	0.4	513	15	16.8	0.5
North Carolina	412	20	17.9	0.9	929	26	15.2	0.4	205	9	12.9	0.6
North Dakota	14	3	8.0	1.7	44	5	9.8	1.1	16	3	14.9	2.7
Ohio	349	17	13.5	0.6	841	24	12.2	0.3	189	8	10.1	0.4
Oklahoma	150	14	15.7	1.5	341	16	14.9	0.7	67	6	11.6	1.0
Oregon	124	11	14.3	1.3	388	16	15.6	0.6	85	6	12.3	0.9
Pennsylvania	415	21	15.7	0.8	1,013	29	13.4	0.4	271	12	12.4	0.5
Rhode Island	28	5	13.8	2.3	79	7	12.3	1.1	22	2	12.9	1.5
South Carolina	190	10	17.3	0.9	465	17	15.8	0.6	103	6	12.2	0.7
South Dakota	22	4	10.3	1.7	57	6	11.7	1.2	15	3	11.2	2.1
Tennessee	268	15	17.8	1.0	590	19	14.7	0.5	129	7	12.5	0.6
Texas	1,365	40	18.6	0.5	2,657	39	15.6	0.2	507	15	15.1	0.4
Utah	99	8	10.7	0.9	221	11	12.3	0.6	38	4	11.4	1.2
Vermont	13	4	11.0	3.1	48	7	12.9	1.9	14	3	12.0	2.6
Virginia	325	18	17.5	1.0	743	22	14.5	0.4	153	8	12.3	0.6
Washington	218	13	13.3	0.8	540	19	11.9	0.4	132	8	12.2	0.8
West Virginia	69	6	18.6	1.7	183	10	17.3	0.9	44	4	13.0	1.3
Wisconsin	120	12	9.4	0.9	367	18	10.6	0.5	98	8	10.7	0.9
Wyoming	16	4	11.9	2.6	40	5	11.8	1.4	9	2	9.9	2.0

[1] Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.

N Not available or not comparable. After the release of the 2017 data products, the U.S. Census Bureau identified issues with data collection in Delaware. As a result, 2017 estimates for Delaware are omitted from this table. For more information, see <www.census.gov/programs-surveys/acs/technical-documentation/errata/120.html>.

Source: U.S. Census Bureau, 2017 American Community Survey PUMS.

Table A-3B: Number (in thousands) and Percentage of People in SPM Poverty by Age Groups by State: 2016												
	Under age 18				Age 18 to 64				Age 65 and over			
	Number		Percent		Number		Percent		Number		Percent	
	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]
United States	13,105	143	17.9	0.2	31,191	184	16.1	0.1	6,654	47	13.9	0.1
Alabama	200	14	18.2	1.3	497	20	17.2	0.7	97	5	12.8	0.7
Alaska	30	7	15.8	3.6	50	6	11.0	1.3	5	2	6.4	2.3
Arizona	337	17	20.7	1.1	717	19	18.0	0.5	151	7	13.1	0.6
Arkansas	136	12	19.3	1.6	297	13	17.2	0.8	62	5	13.2	1.2
California	2,287	47	25.2	0.5	5,214	57	21.6	0.2	1,052	21	20.2	0.4
Colorado	167	13	13.3	1.0	477	17	13.9	0.5	89	6	12.2	0.8
Connecticut	98	9	13.2	1.2	252	13	11.6	0.6	59	5	10.7	0.9
Delaware	29	6	14.5	2.7	79	8	14.1	1.5	21	3	12.9	1.9
District of Columbia	29	4	24.3	3.6	86	7	19.4	1.7	13	2	17.6	2.7
Florida	906	26	21.9	0.6	2,369	36	19.7	0.3	668	16	16.6	0.4
Georgia	482	20	19.2	0.8	1,033	27	16.6	0.4	187	9	14.1	0.7
Hawaii	53	7	17.4	2.3	129	10	15.3	1.1	36	4	15.4	1.6
Idaho	45	7	10.3	1.6	132	10	13.7	1.0	30	4	12.0	1.5
Illinois	444	22	15.2	0.8	1,125	30	14.5	0.4	249	10	13.8	0.5
Indiana	235	13	14.9	0.9	536	18	13.7	0.5	109	7	11.4	0.7
Iowa	62	8	8.6	1.1	207	11	11.4	0.6	49	5	10.0	0.9
Kansas	77	9	10.8	1.2	217	12	12.8	0.7	41	4	9.9	0.9
Kentucky	192	12	19.0	1.2	464	20	17.6	0.8	87	5	13.1	0.8
Louisiana	241	14	21.6	1.2	525	20	18.8	0.7	104	6	16.0	0.9
Maine	34	7	13.3	2.5	95	9	12.0	1.2	27	4	10.7	1.6
Maryland	197	14	14.6	1.1	477	17	12.9	0.5	119	6	14.0	0.7
Massachusetts	203	13	14.8	1.0	542	19	13.0	0.4	138	6	13.3	0.6
Michigan	336	17	15.4	0.8	883	28	14.8	0.5	166	9	10.7	0.5
Minnesota	108	12	8.4	0.9	292	15	8.8	0.4	74	6	9.3	0.7
Mississippi	146	11	20.3	1.5	314	15	18.0	0.8	61	4	13.9	1.0
Missouri	201	13	14.5	1.0	496	18	13.8	0.5	93	7	10.0	0.7
Montana	29	5	12.6	2.1	84	7	13.9	1.2	21	3	11.4	1.6
Nebraska	53	7	11.2	1.4	131	10	11.8	0.9	29	4	10.7	1.4
Nevada	116	10	17.1	1.5	296	15	16.5	0.9	61	4	14.0	1.0
New Hampshire	21	3	8.1	1.3	79	9	9.7	1.1	19	3	8.8	1.3
New Jersey	338	19	17.1	1.0	780	26	14.3	0.5	202	10	15.2	0.7
New Mexico	94	9	19.5	1.8	216	13	17.7	1.1	46	5	13.8	1.4
New York	880	26	21.2	0.6	2,176	36	18.0	0.3	479	13	16.4	0.5
North Carolina	417	19	18.2	0.8	1,003	26	16.5	0.4	203	9	13.4	0.6
North Dakota	16	4	9.5	2.2	47	6	10.3	1.3	13	3	12.8	2.6
Ohio	372	18	14.3	0.7	912	27	13.2	0.4	198	9	10.9	0.5
Oklahoma	148	12	15.4	1.2	346	15	15.1	0.7	69	5	12.2	0.9
Oregon	122	10	14.1	1.1	393	15	15.9	0.6	77	6	11.4	0.9
Pennsylvania	412	20	15.5	0.7	1,057	31	14.0	0.4	266	11	12.5	0.5
Rhode Island	31	5	15.1	2.4	83	7	13.0	1.2	22	3	13.3	1.7
South Carolina	191	11	17.4	1.0	449	16	15.4	0.5	97	6	12.0	0.7
South Dakota	27	5	12.8	2.1	57	6	11.5	1.3	15	3	11.5	2.1
Tennessee	271	15	18.1	1.0	617	18	15.5	0.5	126	7	12.4	0.7
Texas	1,427	39	19.6	0.5	2,724	49	16.3	0.3	470	13	14.5	0.4
Utah	105	11	11.4	1.1	236	12	13.3	0.7	34	4	10.7	1.3
Vermont	10	3	8.1	2.4	42	5	11.5	1.4	17	3	15.3	2.7
Virginia	330	18	17.7	0.9	768	23	15.0	0.5	150	8	12.5	0.7
Washington	219	15	13.5	0.9	581	19	13.0	0.4	119	7	11.3	0.6
West Virginia	61	7	16.3	1.8	186	11	17.3	1.0	36	4	10.7	1.2
Wisconsin	130	12	10.1	1.0	380	16	11.0	0.5	88	6	9.9	0.7
Wyoming	12	3	8.9	2.1	41	5	11.8	1.3	11	2	12.5	2.4

[1] Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.
Source: U.S. Census Bureau, 2016 American Community Survey PUMS.

Table A-3C: Number (in thousands) and Percentage of People in SPM Poverty by Age Groups by State: 2015												
	Under age 18				Age 18 to 64				Age 65 and over			
	Number		Percent		Number		Number		Percent		Number	
	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E . (+/-)[1]
United States	13,725	136	18.7	0.2	32,394	195	16.7	0.1	6,205	56	13.4	0.1
Alabama	210	11	19.0	1.0	534	20	18.5	0.7	97	6	13.0	0.9
Alaska	26	5	14.1	2.8	55	8	12.2	1.8	5	1	7.1	2.0
Arizona	334	17	20.7	1.0	734	26	18.6	0.7	141	7	12.8	0.7
Arkansas	118	10	16.7	1.3	309	14	17.8	0.8	56	4	12.2	1.0
California	2,430	46	26.7	0.5	5,517	64	22.8	0.3	995	19	19.7	0.4
Colorado	177	13	14.1	1.0	485	16	14.3	0.5	77	5	11.1	0.8
Connecticut	104	9	13.7	1.2	269	12	12.4	0.6	64	6	11.8	1.0
Delaware	31	5	15.3	2.7	81	9	14.5	1.7	16	3	10.5	1.7
District of Columbia	27	4	23.0	3.3	78	7	17.6	1.5	12	2	16.4	3.0
Florida	947	26	23.2	0.6	2,420	41	20.4	0.3	624	13	16.1	0.3
Georgia	522	24	20.9	1.0	1,117	27	18.0	0.4	166	7	13.2	0.6
Hawaii	61	7	19.5	2.2	147	9	17.4	1.1	34	4	14.7	1.6
Idaho	49	8	11.4	1.9	153	11	16.0	1.1	26	4	10.8	1.6
Illinois	511	22	17.3	0.8	1,198	31	15.3	0.4	227	9	12.9	0.5
Indiana	250	14	15.9	0.9	583	19	14.8	0.5	96	5	10.4	0.6
Iowa	74	8	10.3	1.1	239	15	13.1	0.8	48	4	10.1	0.9
Kansas	86	11	12.0	1.5	208	12	12.2	0.7	37	4	9.2	0.9
Kentucky	179	12	17.7	1.2	427	18	16.2	0.7	79	5	12.2	0.8
Louisiana	255	16	22.9	1.4	527	20	18.8	0.7	100	6	15.9	0.9
Maine	27	4	10.6	1.7	108	10	13.6	1.2	29	4	11.9	1.5
Maryland	230	14	17.1	1.0	513	20	13.8	0.6	104	4	12.7	0.5
Massachusetts	227	12	16.4	0.8	604	21	14.5	0.5	137	7	13.7	0.7
Michigan	376	19	17.1	0.9	923	26	15.5	0.4	148	8	9.6	0.5
Minnesota	121	12	9.5	0.9	325	16	9.8	0.5	79	6	10.3	0.7
Mississippi	166	11	22.9	1.5	349	15	20.0	0.9	61	5	14.2	1.1
Missouri	203	14	14.7	1.0	523	19	14.5	0.5	82	6	9.0	0.6
Montana	32	6	14.2	2.5	100	9	16.5	1.5	16	3	9.2	1.6
Nebraska	48	6	10.4	1.4	138	9	12.4	0.9	31	4	11.7	1.4
Nevada	122	11	18.3	1.7	305	14	17.2	0.8	57	4	13.7	1.1
New Hampshire	22	5	8.4	2.0	73	7	8.9	0.9	22	3	10.7	1.3
New Jersey	373	19	18.8	1.0	841	26	15.3	0.5	184	9	14.2	0.7
New Mexico	107	10	21.4	2.1	233	15	19.1	1.2	44	4	13.7	1.2
New York	930	26	22.3	0.6	2,257	42	18.5	0.3	460	14	16.1	0.5
North Carolina	448	18	19.7	0.8	1,034	25	17.1	0.4	186	8	12.7	0.6
North Dakota	14	3	7.9	1.9	49	6	10.8	1.4	14	2	14.0	2.4
Ohio	405	21	15.5	0.8	947	26	13.7	0.4	175	7	9.9	0.4
Oklahoma	152	10	15.9	1.1	358	15	15.6	0.7	60	5	10.7	0.9
Oregon	144	12	16.8	1.4	413	15	16.9	0.6	69	5	10.7	0.8
Pennsylvania	418	19	15.6	0.7	1,041	30	13.7	0.4	242	12	11.5	0.6
Rhode Island	33	5	15.8	2.6	94	8	14.6	1.2	20	3	12.2	1.8
South Carolina	202	12	18.6	1.1	492	18	17.0	0.6	94	6	12.1	0.7
South Dakota	24	5	11.6	2.3	59	6	12.0	1.3	13	3	10.0	2.0
Tennessee	264	16	17.7	1.1	633	21	15.9	0.5	120	6	12.2	0.6
Texas	1,348	36	18.7	0.5	2,632	43	15.9	0.3	433	12	13.8	0.4
Utah	102	10	11.2	1.1	231	14	13.3	0.8	31	4	10.3	1.3
Vermont	11	3	9.3	2.8	39	6	10.4	1.6	11	2	10.3	2.2
Virginia	341	17	18.3	0.9	785	25	15.4	0.5	139	8	12.0	0.7
Washington	226	16	14.1	1.0	606	20	13.7	0.5	121	7	12.1	0.7
West Virginia	71	9	18.8	2.3	187	12	17.1	1.1	35	4	10.7	1.1
Wisconsin	137	13	10.7	1.0	381	19	11.0	0.5	81	6	9.3	0.6
Wyoming	11	3	8.0	2.2	35	4	9.9	1.3	8	2	9.4	2.2

[1] Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.
Source: U.S. Census Bureau, 2015 American Community Survey PUMS.

Table A-3D: Number (in thousands) and Percentage of People in SPM Poverty by Age Groups by State: 2014												
	Under age 18				Age 18 to 64				Age 65 and over			
	Number		Percent		Number		Percent		Number		Percent	
	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]
United States	14,512	135	19.8	0.2	33,701	203	17.5	0.1	6,264	49	14.0	0.1
Alabama	234	14	21.2	1.3	531	19	18.3	0.7	94	6	12.9	0.8
Alaska	24	6	12.9	3.3	59	9	12.8	2.0	6	2	8.3	2.7
Arizona	359	18	22.2	1.1	777	20	19.9	0.5	147	8	13.9	0.7
Arkansas	125	10	17.7	1.4	295	14	17.0	0.8	55	4	12.3	1.0
California	2,654	47	29.1	0.5	5,926	65	24.7	0.3	1,009	19	20.7	0.4
Colorado	186	12	14.9	0.9	480	18	14.4	0.5	78	6	11.8	0.9
Connecticut	103	9	13.3	1.2	253	13	11.6	0.6	62	5	11.6	0.9
Delaware	33	5	16.4	2.6	78	7	13.9	1.3	18	3	12.4	1.9
District of Columbia	26	5	22.7	4.2	75	6	17.3	1.5	12	2	17.5	2.6
Florida	1,001	30	24.8	0.7	2,507	49	21.4	0.4	613	18	16.5	0.5
Georgia	548	19	22.0	0.8	1,170	30	19.1	0.5	169	7	13.9	0.6
Hawaii	60	7	19.6	2.2	149	11	17.6	1.3	35	4	15.8	1.9
Idaho	58	8	13.4	1.9	150	11	15.9	1.2	31	3	13.2	1.5
Illinois	542	23	18.2	0.8	1,274	29	16.1	0.4	226	9	13.2	0.5
Indiana	253	16	16.0	1.0	596	19	15.2	0.5	95	5	10.5	0.6
Iowa	78	10	10.8	1.4	216	16	11.9	0.9	49	4	10.6	0.8
Kansas	97	10	13.5	1.4	227	13	13.3	0.8	38	4	9.6	0.9
Kentucky	177	12	17.5	1.1	440	16	16.6	0.6	81	6	12.9	0.9
Louisiana	246	13	22.1	1.2	536	17	19.2	0.6	90	5	14.7	0.8
Maine	31	5	12.0	1.9	104	9	13.0	1.1	27	3	11.5	1.4
Maryland	218	15	16.2	1.1	522	22	14.1	0.6	102	6	12.9	0.7
Massachusetts	212	12	15.3	0.9	586	23	14.1	0.6	136	6	13.9	0.6
Michigan	379	17	17.1	0.8	955	25	15.9	0.4	154	9	10.4	0.6
Minnesota	117	15	9.2	1.1	348	18	10.5	0.6	72	5	9.7	0.6
Mississippi	168	12	23.1	1.6	354	16	20.2	0.9	62	5	15.0	1.2
Missouri	227	14	16.4	1.0	556	20	15.4	0.5	93	6	10.5	0.7
Montana	37	6	16.4	2.8	101	9	16.7	1.6	18	3	10.9	1.7
Nebraska	46	6	9.9	1.2	128	9	11.7	0.9	28	3	10.7	1.3
Nevada	131	10	19.9	1.5	300	14	17.2	0.8	49	4	12.3	1.0
New Hampshire	29	5	11.0	1.7	79	7	9.6	0.8	22	3	10.9	1.5
New Jersey	402	17	20.0	0.8	838	26	15.3	0.5	188	7	14.8	0.6
New Mexico	107	11	21.5	2.2	239	13	19.3	1.0	44	4	14.1	1.3
New York	938	26	22.4	0.6	2,278	43	18.7	0.4	448	13	16.1	0.5
North Carolina	454	19	19.9	0.8	1,086	25	18.1	0.4	184	7	13.0	0.5
North Dakota	20	4	12.1	2.6	51	5	11.5	1.2	13	3	12.8	2.8
Ohio	440	21	16.7	0.8	1,027	25	14.8	0.4	185	9	10.7	0.5
Oklahoma	150	12	15.9	1.3	347	13	15.3	0.6	61	5	11.3	1.0
Oregon	146	11	17.0	1.3	453	20	18.8	0.8	80	6	12.9	0.9
Pennsylvania	434	20	16.2	0.8	1,126	27	14.8	0.3	261	12	12.8	0.6
Rhode Island	39	5	18.2	2.3	98	8	15.3	1.3	19	3	12.1	1.6
South Carolina	233	15	21.6	1.3	509	17	17.7	0.6	89	5	12.0	0.7
South Dakota	26	4	12.5	1.8	56	6	11.5	1.2	16	3	13.5	2.4
Tennessee	297	14	19.9	1.0	694	21	17.6	0.5	127	7	13.3	0.7
Texas	1,464	33	20.6	0.5	2,741	37	16.9	0.2	446	14	14.9	0.5
Utah	110	11	12.2	1.3	245	12	14.4	0.7	32	4	10.9	1.3
Vermont	14	4	11.8	3.1	48	5	12.6	1.4	12	3	12.1	2.5
Virginia	349	17	18.7	0.9	797	23	15.6	0.4	147	7	13.2	0.6
Washington	255	14	16.0	0.9	644	20	14.8	0.5	116	7	12.1	0.7
West Virginia	65	7	17.1	1.8	185	11	16.8	1.0	32	3	10.0	1.0
Wisconsin	153	14	11.8	1.1	422	20	12.2	0.6	85	6	10.1	0.7
Wyoming	16	4	11.9	2.7	44	5	12.4	1.4	8	2	9.9	2.2

[1] Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.

Source: U.S. Census Bureau, 2014 American Community Survey PUMS.

Table A-4: Number (in thousands) and Percentage of People in Poverty by State Using 3-Year Average: 2015, 2016, and 2017

	CPS SPM				ACS SPM				Difference (SPM less OPM)			
	Number		Percent		Number		Percent		Number		Percent	
	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]
United States	43,895	588	13.7	0.2	51,034	245	16.2	0.1	*7,139	637	*2.5	0.2
Alabama	656	66	13.6	1.4	804	16	16.9	0.3	*148	68	*3.3	1.5
Alaska	80	11	11.2	1.5	87	6	12.2	0.8	7	12	1.0	1.7
Arizona	1,062	85	15.5	1.2	1,186	18	17.5	0.3	*124	87	*2.1	1.3
Arkansas	393	34	13.3	1.1	467	14	16.1	0.5	*74	37	*2.7	1.2
California	7,268	223	18.5	0.6	8,533	53	22.2	0.1	*1,265	229	*3.7	0.6
Colorado	550	57	10.0	1.0	735	16	13.6	0.3	*185	60	*3.5	1.1
Connecticut	423	52	11.9	1.5	423	13	12.2	0.4	0	54	0.3	1.5
Delaware	115	11	12.0	1.2	N	N	N	N	N	N	N	N
District of Columbia	130	8	19.0	1.2	122	5	19.0	0.8	-8	10	0.0	1.5
Florida	3,535	185	17.2	0.9	3,933	32	19.5	0.2	*399	188	*2.2	0.9
Georgia	1,577	115	15.4	1.1	1,731	28	17.2	0.3	*153	119	*1.8	1.2
Hawaii	198	17	14.2	1.2	237	8	17.1	0.6	*39	19	*2.9	1.3
Idaho	160	14	9.4	0.8	213	10	12.9	0.6	*54	17	*3.4	1.0
Illinois	1,541	103	12.2	0.8	1,844	29	14.7	0.2	*303	107	*2.5	0.9
Indiana	779	69	11.9	1.1	901	17	14.0	0.3	*121	72	*2.0	1.1
Iowa	236	26	7.7	0.9	328	12	10.8	0.4	*92	29	*3.2	0.9
Kansas	271	28	9.5	1.0	331	10	11.7	0.4	*60	30	*2.2	1.0
Kentucky	609	53	13.9	1.2	709	16	16.5	0.4	*100	55	*2.6	1.3
Louisiana	781	70	17.1	1.5	883	19	19.4	0.4	*102	72	*2.3	1.6
Maine	137	24	10.3	1.9	151	8	11.7	0.6	14	25	1.3	2.0
Maryland	775	71	13.0	1.2	834	15	14.2	0.3	59	72	1.1	1.2
Massachusetts	855	70	12.6	1.0	916	16	13.9	0.2	61	72	*1.3	1.1
Michigan	1,064	91	10.8	0.9	1,376	23	14.2	0.2	*311	94	*3.4	1.0
Minnesota	444	84	8.1	1.5	501	14	9.3	0.3	57	85	1.2	1.6
Mississippi	475	25	16.1	0.9	547	14	18.9	0.5	*72	29	*2.8	1.0
Missouri	658	70	11.1	1.2	792	18	13.4	0.3	*134	72	*2.3	1.2
Montana	100	11	9.7	1.1	135	7	13.4	0.7	*35	13	*3.7	1.3
Nebraska	172	18	9.2	1.0	204	8	11.0	0.4	*33	20	*1.8	1.1
Nevada	393	36	13.4	1.2	472	12	16.3	0.4	*79	38	*2.8	1.3
New Hampshire	109	13	8.3	1.0	121	7	9.4	0.5	12	15	*1.1	1.1
New Jersey	1,337	98	15.0	1.1	1,330	23	15.1	0.3	-7	101	0.2	1.1
New Mexico	313	23	15.3	1.1	363	11	17.8	0.6	*50	25	*2.4	1.3
New York	2,906	144	14.8	0.7	3,567	39	18.6	0.2	*661	149	*3.8	0.8
North Carolina	1,363	80	13.5	0.8	1,612	26	16.3	0.3	*250	84	*2.8	0.8
North Dakota	76	7	10.1	1.0	76	5	10.4	0.7	-1	9	0.2	1.2
Ohio	1,278	105	11.1	0.9	1,463	26	12.9	0.2	*185	108	*1.8	0.9
Oklahoma	449	58	11.6	1.5	563	13	14.8	0.3	*114	59	*3.2	1.5
Oregon	484	67	11.7	1.6	605	15	15.1	0.4	*121	69	*3.4	1.6
Pennsylvania	1,394	108	11.1	0.9	1,712	32	13.8	0.3	*317	113	*2.8	0.9
Rhode Island	100	14	9.5	1.3	138	7	13.5	0.6	*38	15	*4.0	1.5
South Carolina	657	53	13.4	1.1	761	15	15.8	0.3	*104	55	*2.3	1.1
South Dakota	84	10	9.8	1.1	96	5	11.6	0.6	*12	11	*1.7	1.3
Tennessee	839	77	12.6	1.2	1,006	18	15.5	0.3	*167	79	*2.9	1.2
Texas	3,952	208	14.2	0.7	4,533	46	16.6	0.2	*581	213	*2.3	0.8
Utah	276	34	9.0	1.1	365	13	12.2	0.4	*89	36	*3.2	1.2
Vermont	58	7	9.4	1.2	68	5	11.4	0.9	*10	9	*1.9	1.5
Virginia	1,149	87	14.0	1.1	1,245	23	15.2	0.3	*96	90	*1.2	1.1
Washington	826	72	11.3	1.0	921	18	12.9	0.3	*95	74	*1.6	1.0
West Virginia	259	25	14.4	1.4	291	9	16.3	0.5	*31	27	*1.9	1.5
Wisconsin	489	67	8.5	1.2	594	18	10.5	0.3	*106	70	*2.1	1.2
Wyoming	57	8	10.0	1.4	61	4	10.7	0.7	4	9	0.7	1.6

* difference is statistically different from zero at the 90 percent confidence level.

[1] Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.

N Not available or not comparable. After the release of the 2017 data products, the U.S. Census Bureau identified issues with data collection in Delaware. As a result, 2017 estimates for Delaware are omitted from this table. For more information, see <www.census.gov/programs-surveys/acs/technical-documentation/errata/120.html>.

Source: U.S. Census Bureau, 2015-2017 American Community Survey PUMS and 2016-2018 Current Population Survey Annual Social and Economic Supplements.

Table A-5A: Percentage Point Decrease in SPM Poverty Rate by Inclusion of Individual Elements by State: 2017

	Social Security		Tax credits		SNAP		SSI		Housing subsidies		School lunch		TANF		LIHEAP		WIC	
	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]
United States	7.38	0.04	1.92	0.03	1.21	0.03	1.09	0.02	0.66	0.02	0.41	0.01	0.20	0.01	0.05	0.005	0.08	0.01
Alabama	11.14	0.62	2.24	0.58	1.32	0.56	1.86	0.59	0.54	0.54	0.46	0.57	0.15	0.56	0.03	0.55	0.07	0.55
Alaska	3.03	1.65	1.27	1.76	1.41	1.72	0.66	1.73	0.75	1.72	0.26	1.70	0.63	1.75	0.06	1.70	0.03	1.70
Arizona	8.00	1.72	2.24	1.68	0.99	1.68	0.64	1.70	0.29	1.69	0.49	1.68	0.08	1.69	0.00	1.69	0.08	1.68
Arkansas	11.15	0.98	2.73	0.95	1.21	0.93	1.76	0.99	0.69	0.92	0.60	0.92	0.21	0.93	0.08	0.91	0.11	0.91
California	5.07	0.80	1.81	0.79	0.92	0.79	1.02	0.80	0.84	0.80	0.50	0.79	0.33	0.79	0.03	0.79	0.08	0.79
Colorado	5.34	0.60	1.37	0.51	0.58	0.55	0.63	0.56	0.46	0.54	0.17	0.53	0.09	0.54	0.02	0.54	0.00	0.54
Connecticut	6.89	0.90	0.99	0.88	0.76	0.87	0.75	0.89	0.93	0.88	0.29	0.87	0.30	0.87	0.03	0.86	0.01	0.86
Delaware	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
District of Columbia	3.80	2.14	1.39	2.08	1.83	2.03	2.32	2.23	2.43	2.10	0.73	2.05	0.49	2.04	0.16	2.07	0.34	2.04
Florida	9.29	1.61	2.16	1.60	1.31	1.60	0.98	1.60	0.53	1.60	0.42	1.60	0.17	1.60	0.03	1.60	0.08	1.60
Georgia	7.23	0.61	2.55	0.62	1.40	0.61	1.16	0.57	0.45	0.59	0.55	0.60	0.12	0.58	0.01	0.58	0.13	0.59
Hawaii	6.03	1.42	0.57	1.41	1.16	1.44	0.36	1.38	0.50	1.39	0.15	1.39	0.23	1.39	0.00	1.39	0.02	1.39
Idaho	8.74	1.65	2.16	1.63	0.92	1.59	1.13	1.56	0.29	1.58	0.37	1.61	0.22	1.57	0.01	1.58	0.15	1.57
Illinois	6.92	0.98	1.89	0.99	1.56	0.98	0.96	0.98	0.59	0.98	0.44	0.98	0.17	0.99	0.05	0.98	0.08	0.98
Indiana	9.04	0.64	1.70	0.63	0.94	0.62	1.06	0.61	0.58	0.63	0.43	0.62	0.18	0.61	0.03	0.61	0.11	0.62
Iowa	7.80	0.81	1.60	0.78	0.95	0.75	0.79	0.74	0.26	0.77	0.27	0.75	0.16	0.77	0.06	0.76	0.11	0.76
Kansas	7.56	0.93	2.00	0.91	0.66	0.85	0.85	0.86	0.34	0.86	0.42	0.87	0.07	0.86	0.01	0.85	0.07	0.86
Kentucky	10.40	0.91	2.13	0.81	1.25	0.82	1.52	0.83	0.61	0.82	0.47	0.80	0.13	0.81	0.06	0.81	0.20	0.80
Louisiana	8.54	0.93	2.30	0.92	1.89	0.95	1.93	0.89	1.03	0.93	0.60	0.90	0.23	0.90	0.04	0.89	0.10	0.89
Maine	11.20	1.23	1.42	1.14	1.52	1.16	1.78	1.19	0.97	1.12	0.17	1.10	0.20	1.08	0.16	1.08	0.23	1.10
Maryland	5.24	0.96	1.42	0.95	0.96	0.94	0.71	0.94	0.60	0.95	0.30	0.94	0.13	0.95	0.07	0.94	0.03	0.95
Massachusetts	6.56	0.63	1.11	0.64	1.03	0.63	1.46	0.61	1.70	0.62	0.28	0.61	0.27	0.62	0.07	0.61	0.05	0.62
Michigan	9.50	0.58	1.94	0.54	1.59	0.55	1.33	0.55	0.70	0.54	0.40	0.54	0.19	0.54	0.09	0.54	0.12	0.54
Minnesota	6.48	0.61	1.21	0.60	0.66	0.56	0.83	0.57	0.77	0.61	0.15	0.57	0.24	0.58	0.06	0.58	0.11	0.58
Mississippi	9.36	0.90	2.31	0.79	1.75	0.78	2.12	0.77	0.50	0.80	0.60	0.76	0.08	0.78	0.01	0.79	0.07	0.79
Missouri	9.36	0.82	1.85	0.80	1.20	0.76	1.23	0.80	0.41	0.76	0.33	0.78	0.21	0.77	0.03	0.77	0.05	0.77
Montana	9.33	1.30	1.55	1.15	0.80	1.13	0.96	1.13	0.47	1.11	0.36	1.13	0.06	1.09	0.23	1.09	0.00	1.09
Nebraska	6.94	1.27	2.02	1.33	0.90	1.26	0.70	1.25	0.61	1.24	0.35	1.25	0.09	1.24	0.16	1.25	0.13	1.24
Nevada	6.47	1.15	2.23	1.14	1.35	1.10	0.74	1.13	0.35	1.13	0.41	1.15	0.08	1.14	0.05	1.13	0.10	1.14
New Hampshire	7.72	1.35	0.34	1.25	0.38	1.22	0.86	1.27	0.54	1.23	0.10	1.23	0.10	1.22	0.04	1.23	0.04	1.22
New Jersey	5.89	0.96	1.43	0.96	0.94	0.96	0.80	0.95	0.80	0.95	0.19	0.95	0.11	0.95	0.03	0.95	0.01	0.95
New Mexico	8.29	0.96	1.86	0.86	2.11	0.91	1.16	0.86	0.63	0.88	0.19	0.90	0.22	0.88	0.01	0.88	0.09	0.87
New York	6.45	0.86	1.75	0.85	1.55	0.86	1.26	0.86	1.27	0.87	0.40	0.86	0.30	0.86	0.05	0.86	0.07	0.86
North Carolina	8.62	0.56	2.38	0.55	1.34	0.55	1.06	0.52	0.40	0.53	0.42	0.53	0.15	0.53	0.04	0.53	0.07	0.52
North Dakota	5.32	1.18	1.24	1.16	0.24	1.13	0.22	1.16	0.29	1.13	0.14	1.14	0.08	1.14	0.02	1.14	0.03	1.15
Ohio	8.67	1.12	1.90	1.12	1.40	1.12	1.45	1.11	0.82	1.11	0.37	1.11	0.31	1.11	0.12	1.11	0.08	1.11
Oklahoma	8.56	0.87	2.29	0.80	1.48	0.82	1.51	0.84	0.62	0.78	0.51	0.81	0.18	0.79	0.03	0.79	0.06	0.79
Oregon	8.27	1.00	2.07	1.02	1.50	0.95	1.02	0.96	0.48	0.94	0.32	0.97	0.29	0.96	0.05	0.96	0.18	0.96
Pennsylvania	9.18	0.74	1.37	0.73	1.45	0.74	1.28	0.73	0.51	0.73	0.35	0.74	0.17	0.73	0.08	0.73	0.09	0.73
Rhode Island	7.30	1.19	1.72	1.11	1.29	1.11	2.19	1.13	1.57	1.11	0.34	1.08	0.39	1.05	0.02	1.09	0.03	1.08
South Carolina	10.00	1.18	2.35	1.16	1.36	1.14	1.11	1.13	0.64	1.14	0.52	1.13	0.13	1.14	0.03	1.13	0.03	1.14
South Dakota	7.14	1.21	1.20	1.26	0.58	1.17	0.85	1.17	0.34	1.16	0.12	1.13	0.06	1.12	0.03	1.13	0.09	1.12
Tennessee	9.03	1.16	2.18	1.15	1.35	1.12	1.28	1.12	0.43	1.12	0.44	1.12	0.22	1.12	0.03	1.12	0.16	1.12
Texas	5.56	0.56	2.83	0.56	1.33	0.56	0.91	0.54	0.42	0.55	0.58	0.55	0.11	0.54	0.04	0.54	0.08	0.55
Utah	4.69	0.68	2.08	0.65	0.65	0.62	0.45	0.64	0.20	0.62	0.38	0.63	0.05	0.62	0.02	0.62	0.07	0.62
Vermont	8.81	2.18	1.23	1.89	1.68	1.97	1.68	1.87	0.97	1.98	0.63	1.94	0.39	1.90	0.07	1.89	0.03	1.88
Virginia	6.18	1.85	1.33	1.85	0.83	1.86	0.78	1.85	0.47	1.85	0.27	1.85	0.17	1.85	0.02	1.85	0.06	1.85
Washington	6.44	0.64	1.41	0.63	1.05	0.61	0.77	0.61	0.64	0.58	0.38	0.60	0.20	0.60	0.04	0.60	0.04	0.60
West Virginia	13.22	1.09	1.56	0.98	1.79	1.03	2.35	1.04	0.53	0.92	0.21	0.94	0.40	0.97	0.09	0.92	0.06	0.93
Wisconsin	8.44	0.98	1.47	0.98	0.93	0.96	1.10	0.96	0.50	0.95	0.37	0.96	0.21	0.95	0.17	0.95	0.08	0.95
Wyoming	6.93	1.55	1.80	1.62	0.65	1.47	0.65	1.46	0.42	1.45	0.29	1.45	0.38	1.44	0.04	1.43	0.19	1.43

[1]Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.

N Not available or not comparable. After the release of the 2017 data products, the U.S. Census Bureau identified issues with data collection in Delaware. As a result, 2017 estimates for Delaware are omitted from this table. For more information, see <www.census.gov/programs-surveys/acs/technical-documentation/errata/120.html>.

Source: U.S. Census Bureau, 2017 American Community Survey PUMS.

Table A-5B: Percentage Point Increase in SPM Poverty Rate by Inclusion of Individual Elements by State: 2017

	Federal Income tax		FICA		Work expenses		Medical expenses	
	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]	Est	M.O.E. (+/-)[1]
United States	0.68	0.02	1.74	0.03	2.19	0.03	3.70	0.04
Alabama	0.46	0.56	1.32	0.57	1.94	0.53	4.23	0.52
Alaska	0.65	1.77	1.44	1.72	1.59	1.73	2.56	1.75
Arizona	0.65	1.68	1.89	1.67	2.45	1.67	3.64	1.67
Arkansas	0.42	0.88	1.40	0.89	2.09	0.89	4.21	0.79
California	1.26	0.79	2.60	0.80	2.81	0.80	4.15	0.80
Colorado	0.56	0.53	1.57	0.50	2.03	0.48	3.10	0.50
Connecticut	0.86	0.83	1.74	0.80	1.86	0.78	3.02	0.79
Delaware	N	N	N	N	N	N	N	N
District of Columbia	0.76	2.07	1.60	2.06	1.97	1.99	1.66	2.05
Florida	0.78	1.60	2.15	1.60	2.64	1.59	4.52	1.59
Georgia	0.62	0.57	1.95	0.57	2.53	0.56	4.22	0.55
Hawaii	1.60	1.36	2.64	1.27	2.74	1.25	4.47	1.19
Idaho	0.40	1.56	1.08	1.56	1.58	1.54	3.64	1.50
Illinois	0.57	0.98	1.60	0.97	2.03	0.97	3.39	0.96
Indiana	0.45	0.61	1.24	0.59	1.67	0.60	3.51	0.59
Iowa	0.51	0.73	1.28	0.73	1.75	0.71	3.34	0.66
Kansas	0.47	0.83	1.31	0.83	1.80	0.84	3.03	0.82
Kentucky	0.26	0.81	1.35	0.79	1.89	0.80	4.14	0.77
Louisiana	0.65	0.86	1.92	0.86	2.82	0.85	4.47	0.86
Maine	0.29	1.07	0.81	1.06	1.15	1.04	3.04	1.01
Maryland	0.94	0.95	1.86	0.95	2.18	0.95	3.39	0.96
Massachusetts	0.80	0.61	1.51	0.61	1.78	0.61	2.97	0.62
Michigan	0.42	0.54	1.29	0.53	1.85	0.53	3.40	0.53
Minnesota	0.33	0.58	0.96	0.56	1.29	0.55	2.46	0.57
Mississippi	0.40	0.80	1.47	0.84	2.11	0.83	4.71	0.75
Missouri	0.50	0.78	1.38	0.78	1.83	0.78	3.74	0.76
Montana	0.31	1.06	1.55	1.01	2.02	0.95	3.62	0.99
Nebraska	0.27	1.24	1.30	1.24	1.97	1.22	2.82	1.20
Nevada	0.73	1.12	2.08	1.06	2.48	1.08	4.16	1.08
New Hampshire	0.35	1.22	0.93	1.21	1.08	1.19	2.50	1.14
New Jersey	0.80	0.94	1.79	0.94	2.07	0.94	3.38	0.93
New Mexico	0.38	0.89	0.99	0.87	1.88	0.89	3.38	0.96
New York	0.88	0.85	2.00	0.85	2.40	0.85	3.66	0.85
North Carolina	0.53	0.51	1.62	0.49	2.27	0.48	4.16	0.47
North Dakota	0.22	1.16	0.85	1.05	1.12	1.01	2.23	1.02
Ohio	0.36	1.11	1.03	1.11	1.50	1.10	2.79	1.10
Oklahoma	0.45	0.77	1.64	0.75	1.99	0.75	4.30	0.69
Oregon	0.64	0.94	1.78	0.94	2.15	0.93	3.95	0.91
Pennsylvania	0.45	0.72	1.28	0.71	1.75	0.71	3.39	0.70
Rhode Island	0.44	1.11	1.31	1.11	1.89	1.08	3.27	1.07
South Carolina	0.51	1.13	1.57	1.12	2.30	1.11	3.91	1.10
South Dakota	0.19	1.13	0.79	1.13	1.43	1.02	3.07	1.04
Tennessee	0.44	1.12	1.55	1.12	2.05	1.10	4.11	1.10
Texas	0.60	0.54	1.95	0.54	2.56	0.53	3.87	0.54
Utah	0.43	0.62	1.54	0.62	2.21	0.63	3.55	0.62
Vermont	1.04	1.83	1.71	1.83	2.13	1.77	4.31	1.40
Virginia	0.96	1.85	1.86	1.85	2.07	1.85	3.73	1.85
Washington	0.47	0.59	1.32	0.58	1.57	0.58	2.84	0.57
West Virginia	0.33	0.91	0.94	0.90	1.80	0.85	3.77	0.84
Wisconsin	0.49	0.95	1.24	0.94	1.66	0.93	2.82	0.91
Wyoming	0.69	1.34	1.10	1.39	1.95	1.29	2.56	1.33

[1]Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.

N Not available or not comparable. After the release of the 2017 data products, the U.S. Census Bureau identified issues with data collection in Delaware. As a result, 2017 estimates for Delaware are omitted from this table. For more information, see <www.census.gov/programs-surveys/acs/technical-documentation/errata/120.html>.

Source: U.S. Census Bureau, 2017 American Community Survey PUMS.