

The Supplemental Poverty Measure: 2017

Current Population Reports

Liana Fox

P60-265

September 2018

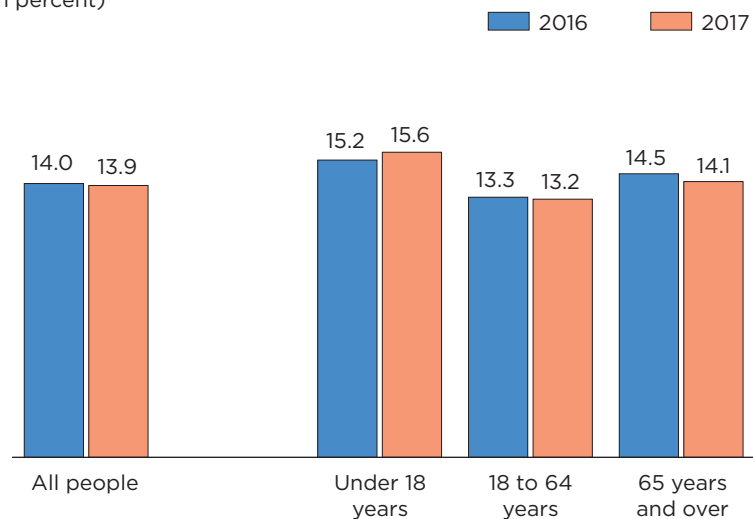
INTRODUCTION

Since the publication of the first official U.S. poverty estimates, researchers and policymakers have continued to discuss the best approach to measure income and poverty in the United States. Beginning in 2011, the U.S. Census Bureau began publishing the Supplemental Poverty Measure (SPM), which extends the official poverty measure by taking account of many of the government programs designed to assist low-income families and individuals that are not included in the official poverty measure. This is the eighth report describing the SPM, released by the Census Bureau, with support from the Bureau of Labor Statistics (BLS). This report presents updated estimates of the prevalence of poverty in the United States using the official measure and the SPM based on information collected in 2018 and earlier Current Population Survey Annual Social and Economic Supplements (CPS ASEC).

Figure 1.

SPM Poverty Rates for Total Population and by Age Group: 2016 and 2017

(In percent)



Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf>. Source: U.S. Census Bureau, Current Population Survey, 2017–2018 Annual Social and Economic Supplements.

HIGHLIGHTS

- In 2017, the overall SPM rate was 13.9 percent. This is not statistically different from the 2016 SPM rate of 14.0 (Figure 1).
- SPM rates were not statistically different for any of the

major age categories in 2017 compared with 2016. SPM rates for children under the age of 18 were 15.6 percent, which is not significantly different than 15.2 percent in 2016 (Figure 1 and Figure 2).

- The SPM rate for 2017 was 1.6 percentage points higher than the official poverty rate of 12.3 percent (Figure 3).
- The percentage of individuals aged 65 and older with SPM resources below half their SPM threshold was 4.9 percent in 2017 (Figure 6).
- There were 16 states plus the District of Columbia for which SPM rates were higher than official poverty rates, 18 states with lower rates, and 16 states for which the differences were

not statistically significant (Figure 7).

- Social Security continued to be the most important anti-poverty program, moving 27.0 million individuals out of poverty. Refundable tax credits moved 8.3 million people out of poverty (Figure 8).

This report presents estimates of the prevalence of poverty in the United States, overall and for selected demographic groups, using the official poverty measure

and the SPM.¹ The first section provides detailed information

¹ The estimates in this report (which may be shown in text, figures, and tables) are based on responses from a sample of the population and may differ from actual values because of sampling variability or other factors. As a result, apparent differences between the estimates for two or more groups may not be statistically significant. All comparative statements have undergone statistical testing and are significant at the 90 percent confidence level, unless otherwise noted. Standard errors were calculated using replicate weights. Further information about the source and accuracy of the estimates is available at <www2.census.gov/library/publications/2016/demo/p60-256sa.pdf>, <www2.census.gov/library/publications/2017/demo/p60-259sa.pdf>, and <www2.census.gov/library/publications/2018/demo/p60-263sa.pdf>.

POVERTY MEASURE CONCEPTS: OFFICIAL AND SUPPLEMENTAL

	Official Poverty Measure	Supplemental Poverty Measure
Measurement Units	Families (individuals related by birth, marriage, or adoption) or unrelated individuals	Resource units (official family definition plus any coresident unrelated children, foster children, 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 and composition, as well as geographic adjustments for differences in housing costs by tenure
Updating Thresholds	Consumer Price Index: 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 resource units can use to meet their FCSU needs, minus taxes (or plus tax credits), work expenses, medical expenses, and child support paid to another household

about changes in SPM rates from 2016 to 2017. The second section presents differences between the official poverty measure and the SPM, compares the distribution of income-to-poverty threshold ratios between the two, and presents poverty rates by state. In the third section, individual components of the SPM are subtracted from resources to assess the marginal impact of taxes, transfers, and necessary expenses on poverty rates.

BACKGROUND

After many years of research, analysis, and debate, an Interagency Technical Working Group on Developing a Supplemental Poverty Measure (ITWG) formed to review methods and data needed for poverty measurement. That group listed suggestions for a new measure that would supplement the current official measure of poverty (ITWG, 2010). The appendix to this report includes detailed descriptions of how these suggestions have been applied to the SPM.² The “Poverty Measure Concepts: Official and Supplemental” table summarizes the most important

² Thresholds for the SPM are produced by the BLS Division of Price and Index Number Research and presented for 2016 and 2017 in Appendix Table A-3.

differences between the official and supplemental measures.

The SPM does not replace the official poverty measure and is not designed to be used for program eligibility or funding distribution. The SPM is designed to provide information on aggregate levels of economic need at a national level or within large subpopulations or areas. As such, the SPM provides an additional macroeconomic statistic for further understanding economic conditions and trends.

CHANGES IN SPM RATES BETWEEN 2016 AND 2017

Figure 2 shows SPM rates for 2016 and 2017.³ In 2017, the percent poor using the SPM was 13.9 percent compared to 14.0 percent in 2016, not a statistically significant change. The poverty rate changed by a statistically significant amount for only one group in Figure 2, individuals with some college education, who experienced a 0.6 percentage point decline in poverty from 2016 to 2017.

³ Appendix Table A-1 contains rates for a more extensive list of demographic groups.

POVERTY ESTIMATES FOR 2017: OFFICIAL AND SPM

Figure 3 shows that 13.9 percent of people were poor using the SPM definition of poverty, higher than the 12.3 percent using the official definition of poverty with the comparable universe.^{4,5} While for most groups, SPM rates were higher than official poverty rates, the SPM shows lower poverty rates for children and individuals living in cohabiting partner units (Figure 3). Official and SPM poverty rates for individuals living in female reference person units and individuals who did not work were not statistically different. Note that poverty rates for those aged 65 and older were higher under the SPM compared with the official measure. This partially reflects that the official thresholds are set lower for units with householders in this age group, while the SPM thresholds do not vary by age.⁶

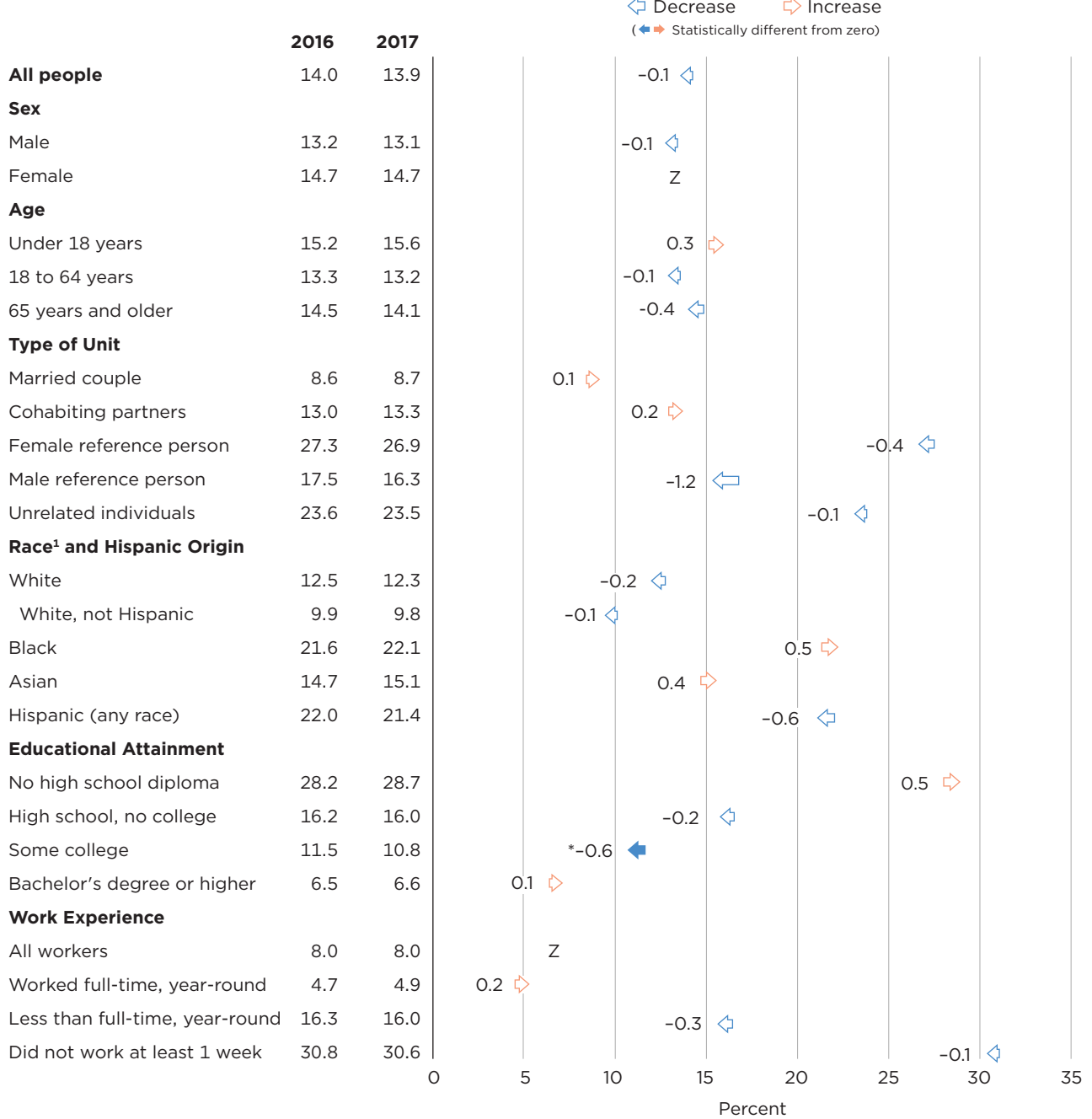
⁴ Since the CPS ASEC does not ask income questions for individuals under the age of 15, all unrelated individuals under the age of 15 are excluded from the universe for official poverty calculations in Fontenot, Semega, and Kollar (2018). However, these individuals are included in the official poverty universe for this report and are assigned the official poverty status of the householder. See the appendix for details.

⁵ Appendix Table A-2 contains rates for a more extensive list of demographic groups.

⁶ For more information about the SPM and those 65 years and older, see Bridges and Gesumaria (2013).

Figure 2.

Change in Percentage of People in Poverty Using the Supplemental Poverty Measure: 2016 to 2017



* An asterisk preceding an estimate indicates change is statistically different from zero at the 90 percent confidence level.

Z Represents or rounds to zero.

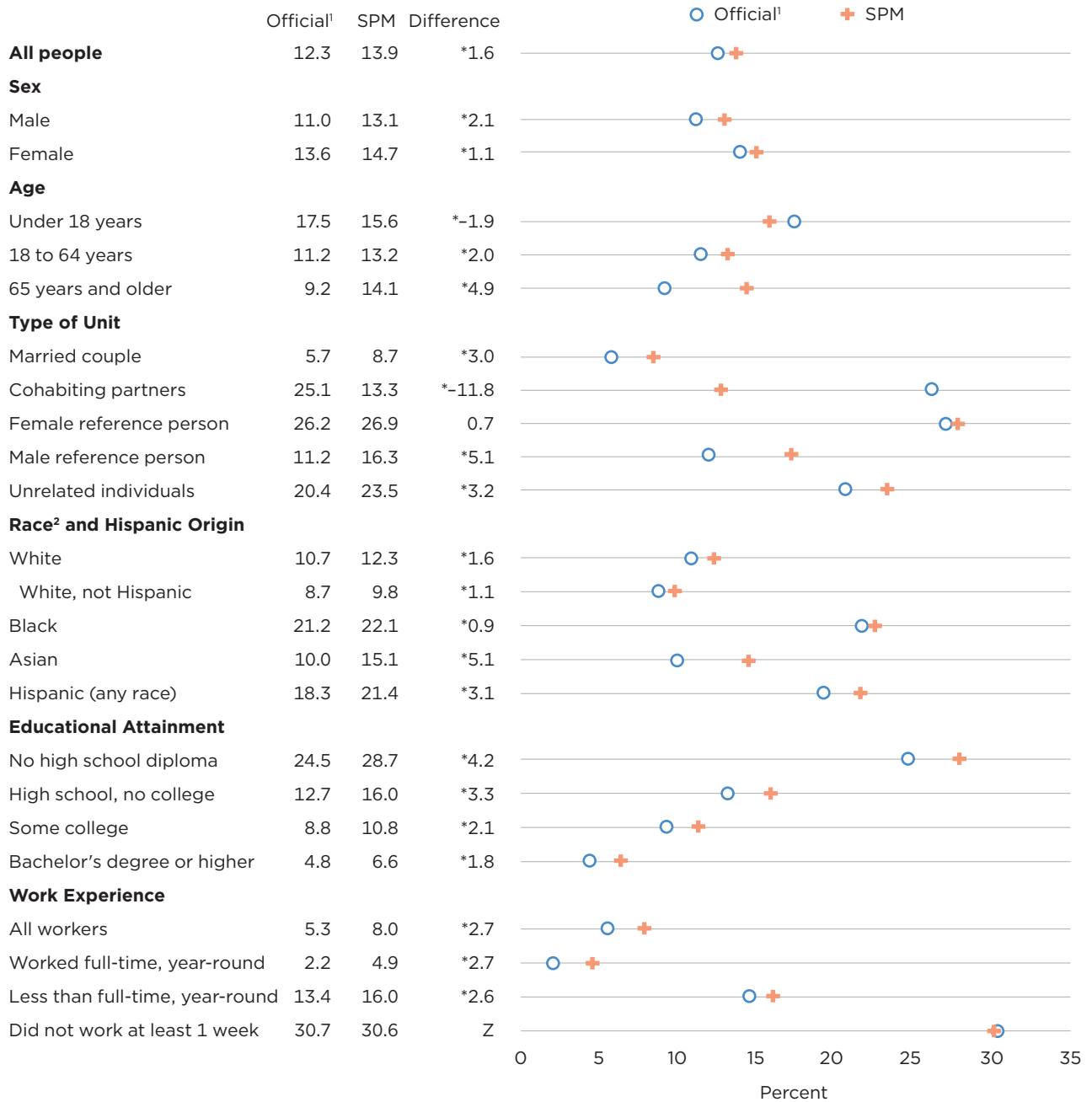
¹ Federal surveys give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White and American Indian and Alaska Native or Asian and Black or African American, is available from the 2010 Census through American FactFinder. About 2.9 percent of people reported more than one race in the 2010 Census. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

Note: Details may not sum to totals due to rounding.

Source: U.S. Census Bureau, Current Population Survey, 2017-2018 Annual Social and Economic Supplements.

Figure 3.

Percentage of People in Poverty by Different Poverty Measures: 2017



* An asterisk preceding an estimate indicates change is statistically different from zero at the 90 percent confidence level.

Z Represents or rounds to zero.

¹ Includes unrelated individuals under the age of 15.

² Federal surveys give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White and American Indian and Alaska Native or Asian and Black or African American, is available from the 2010 Census through American FactFinder. About 2.9 percent of people reported more than one race in the 2010 Census. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

Note: Details may not sum to totals due to rounding.

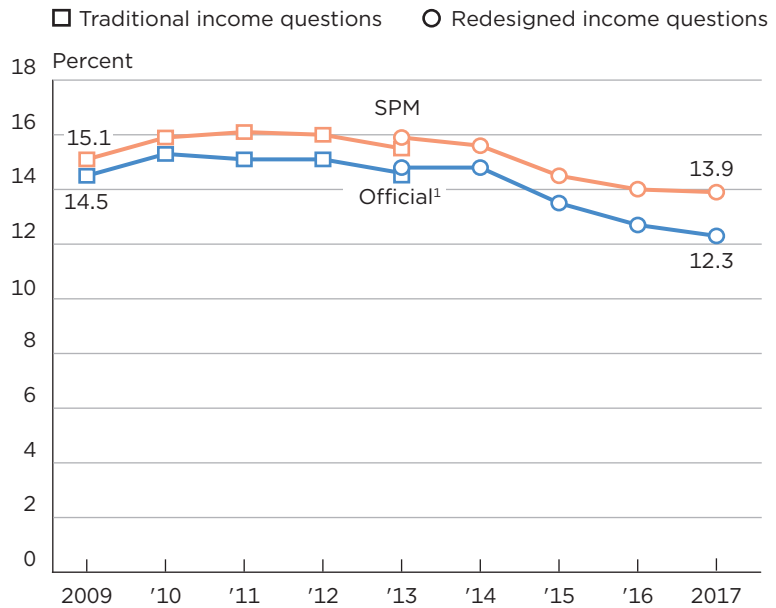
Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement.

Estimates for the SPM are available back to 2009. Since the SPM's initial production, the SPM rate has been higher than the official poverty rate. Figures 4 and 5 present estimates for the official measure and the SPM from 2009 to 2017. The charts show two values for 2013, one using the traditional income questions comparable to SPM estimates from 2009, and the second using the redesigned income questions used for this report and comparable to the 2014-2017 estimates presented here. Figure 4 shows the official measure (with the comparable universe) and the SPM across 9 years.⁷ The SPM has ranged from 0.6 to 1.6 percentage points higher than the official measure since 2009. In 2017, the gap between the SPM and the official measure was the largest since 2009.

Figure 5 shows the poverty rate using both measures for children and for those aged 65 and older. In 2017, the gap between the official poverty measure and the SPM for children narrowed to 1.9 percentage points, lower than all previous years.

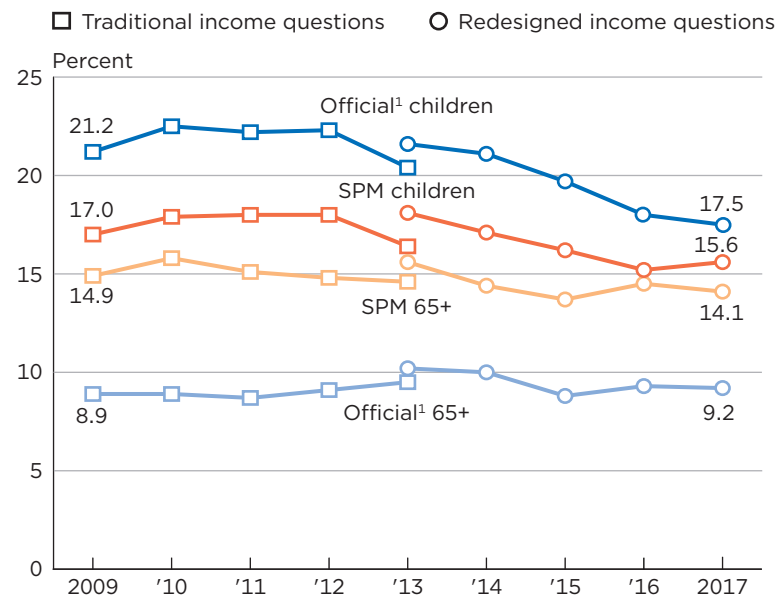
⁷ For SPM estimates from 1967 to 2012, see Fox et al. (2015).

Figure 4.
Poverty Rates Using the Official Measure and the SPM: 2009 to 2017



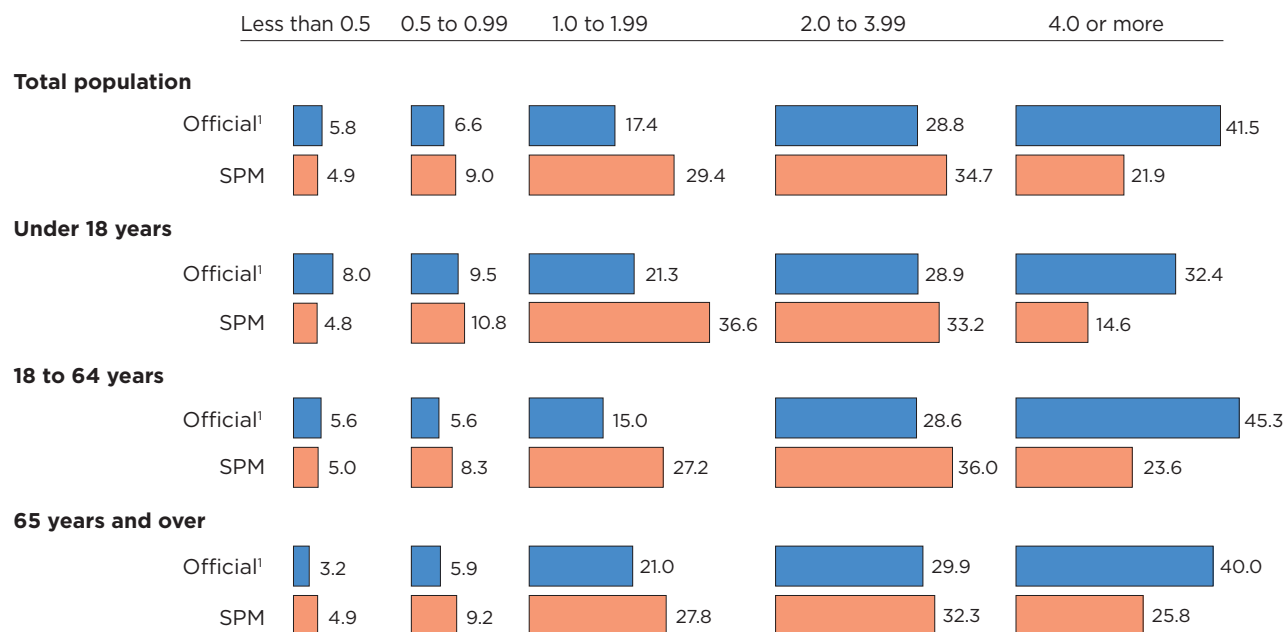
¹ Includes unrelated individuals under the age of 15.
Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions.
Source: U.S. Census Bureau, Current Population Survey, 2010-2018 Annual Social and Economic Supplements.

Figure 5.
Poverty Rates Using the Official Measure and the SPM for Two Age Groups: 2009 to 2017



¹ Includes unrelated individuals under the age of 15.
Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions. Children are defined as individuals under the age of 18.
Source: U.S. Census Bureau, Current Population Survey, 2010-2018 Annual Social and Economic Supplements.

Figure 6.
Distribution of People by Income-to-Threshold Ratios: 2017
(In percent)



¹ Includes unrelated individuals under the age of 15.

Note: Details may not sum to totals due to rounding. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement.

DISTRIBUTION OF INCOME-TO-THRESHOLD RATIOS: OFFICIAL AND SPM

Comparing the distribution of gross cash income with that of SPM resources also allows an examination of the effect of taxes and noncash transfers across the income/resource distribution. Figure 6 shows the percent distribution of income-to-threshold ratio categories for all people and broken down by major age category. Dividing income by the respective poverty threshold controls income by unit size and composition. Appendix Table A-4 shows the distribution of income-to-threshold ratios for various groups in 2016 and 2017.

Overall, the comparison shows that a smaller share of the population had incomes below half of their poverty threshold using the SPM compared to the official measure. Including targeted noncash benefits and subtracting necessary expenses reduced the percentage of the population in the lowest category for children under the age of 18 and adults aged 18–64. However, individuals aged 65 and older had a higher share below half of the poverty line with the SPM—4.9 percent compared with 3.2 percent with the official measure.

Many of the noncash benefits included in the SPM are not targeted toward the 65 and older population. Further, many

transfers received by this group are in cash, especially Social Security payments, and are captured in the official measure, as well as the SPM. Note that the percentage of the 65 and older age group with income below half their threshold was lower than that of other age groups using the official measure (3.2 percent), while the percentage for children was higher (8.0 percent). Subtracting necessary expenses and adding noncash benefits in the SPM narrowed the differences across the three age groups.⁸

⁸ The shares of each age group under half their official poverty measure are statistically different (ranging from 3.2 to 8.0 percent), while the differences in shares of each age group under half their SPM threshold are not statistically significant (ranging from 4.8 to 5.0 percent).

At the other end of the distribution, relative to the official measure, the SPM shows a smaller percentage of the population with income four or more times the poverty threshold. The SPM resource measure subtracts taxes—compared with the official measure, which does not—bringing down the percentage of people with income in the highest category.

Another notable difference between the distributions using these two measures was the larger number of individuals with income-to-threshold ratios in the middle categories, between 1.0 and 3.99, with the SPM. Since the effect of taxes and transfers is often to move income from the extremes of the distribution to the center of the distribution, that is, from the very bottom with targeted transfers or from the very top via taxes and other expenses, the increase in the size of these middle categories is to be expected.

Appendix Table A-4 shows similar calculations by race and ethnicity. For all groups, except Asians, smaller percentages had income below half of their poverty thresholds in the SPM compared with the official measure. Larger percentages of Asians had income below half of their poverty thresholds in the SPM than in the official measure.

POVERTY RATES BY STATE: OFFICIAL AND SPM

To create state-level estimates using the CPS ASEC, the Census Bureau recommends using 3-year averages for additional statistical reliability.⁹ Appendix Table A-5 shows 3-year averages of poverty rates by poverty measure for the United States and each state. The 3-year average poverty rate for the United States in 2015–2017 was 12.9 percent with the official measure and 14.1 percent using the SPM.

While the SPM national poverty rate was higher than the official, that difference varies by geographic area. Figure 7 shows the United States divided into three categories by state. States where the SPM rates were higher than official are shaded orange; states where SPM was lower than official are shaded blue; and states where the differences in the rates were not statistically significant are grey.

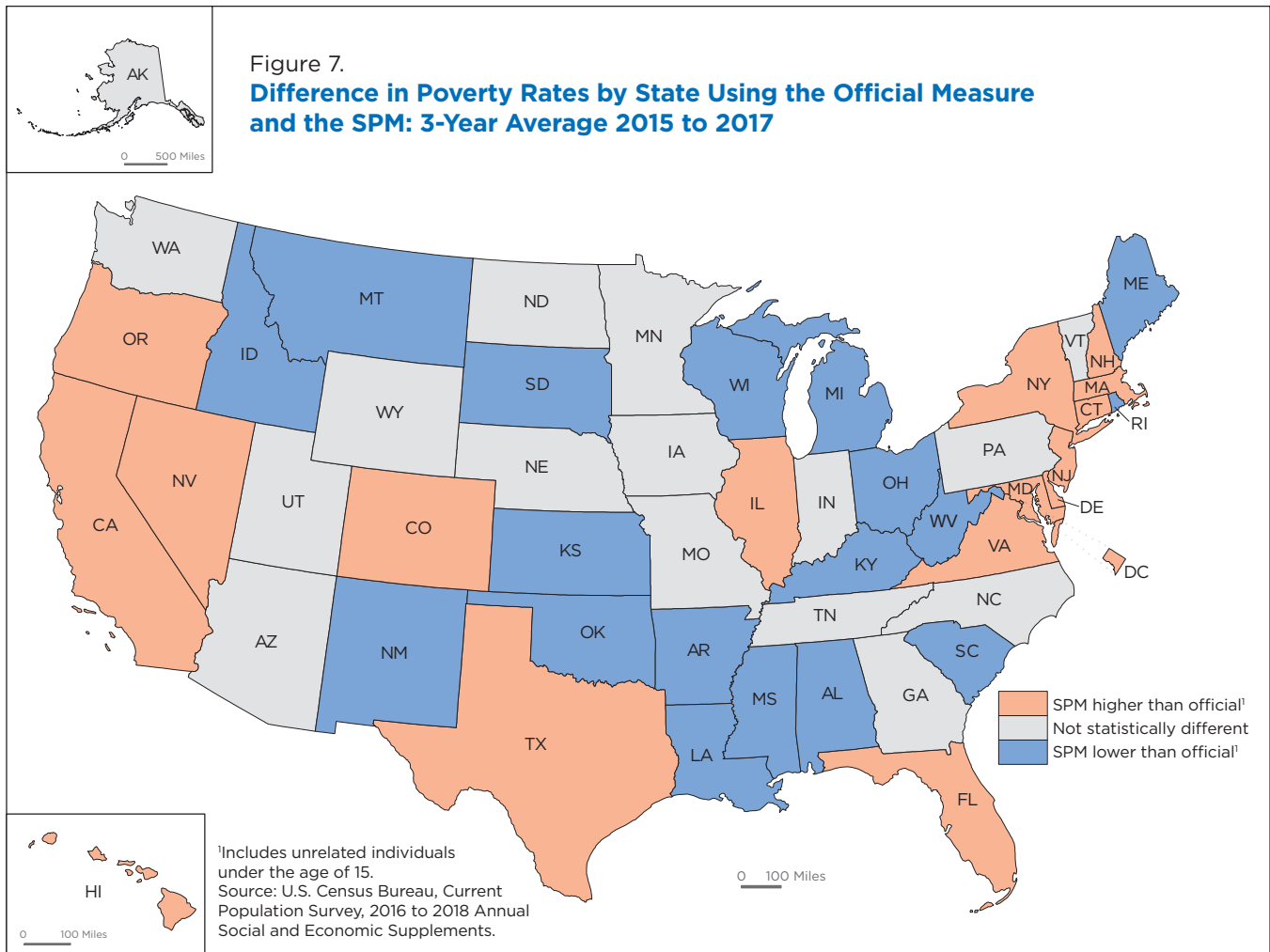
The 16 states for which the SPM rates were higher than the official poverty rates were California, Colorado, Connecticut, Delaware, Florida, Hawaii, Illinois, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New

York, Oregon, Texas, and Virginia. The SPM rate for the District of Columbia was also higher. Higher SPM rates by state may occur for many reasons. Geographic adjustments for housing costs and/or different mixes of housing tenure may result in higher SPM thresholds. Higher nondiscretionary expenses, such as taxes or medical expenses, may also drive higher SPM rates.

The 18 states where SPM rates were lower than the official poverty rates were Alabama, Arkansas, Idaho, Kansas, Kentucky, Louisiana, Maine, Michigan, Mississippi, Montana, New Mexico, Ohio, Oklahoma, Rhode Island, South Carolina, South Dakota, West Virginia, and Wisconsin. Lower SPM rates could occur due to lower thresholds reflecting lower housing costs, a different mix of housing tenure, or more generous noncash benefits.

The 16 states that were not statistically different under the two measures include Alaska, Arizona, Georgia, Indiana, Iowa, Minnesota, Missouri, Nebraska, North Carolina, North Dakota, Pennsylvania, Tennessee, Utah, Vermont, Washington, and Wyoming. Details are provided in Appendix Table A-5.

⁹ The Census Bureau recommends using the American Community Survey (ACS) for state-level poverty estimates; however, it is difficult to calculate the SPM with data from that survey. Ongoing research is exploring the use of the ACS for this purpose.



THE SPM AND THE EFFECT OF CASH AND NONCASH TRANSFERS, TAXES, AND OTHER NONDISCRETIONARY EXPENSES

This section moves away from comparing the SPM with the official measure and looks only at the SPM. This analysis allows one to gauge the effects of taxes and transfers and other necessary expenses using the SPM as a measure of economic well-being.

Income used for estimating the official poverty measure includes cash benefits from the government (e.g., Social Security, unemployment insurance benefits, public assistance benefits, and workers' compensation benefits), but does not take account of taxes or noncash benefits aimed at improving the economic situation of the poor. The SPM incorporates all of these elements, adding in cash benefits,

and noncash transfers, while subtracting necessary expenses, such as taxes, medical expenses, and expenses related to work. An important contribution of the SPM is that it allows us to gauge the potential magnitude of the effect of tax credits and transfers in alleviating poverty. We can also examine the effects of nondiscretionary expenses, such as work and medical expenses.

Figure 8 shows the effect that various additions and subtractions had on the number of people who would have been considered poor in 2017, holding all else the same and assuming no behavioral changes. Additions and subtractions are shown for the total population and by three age groups. Additions shown in the figure include cash benefits, also included in the official measure, as well as noncash benefits, included only in the SPM. This allows us to examine the effects of government transfers on poverty estimates. Since child support paid is subtracted from income, we also examine the effect of child support received on alleviating poverty. Child support payments

received are counted as income in both the official measure and the SPM.

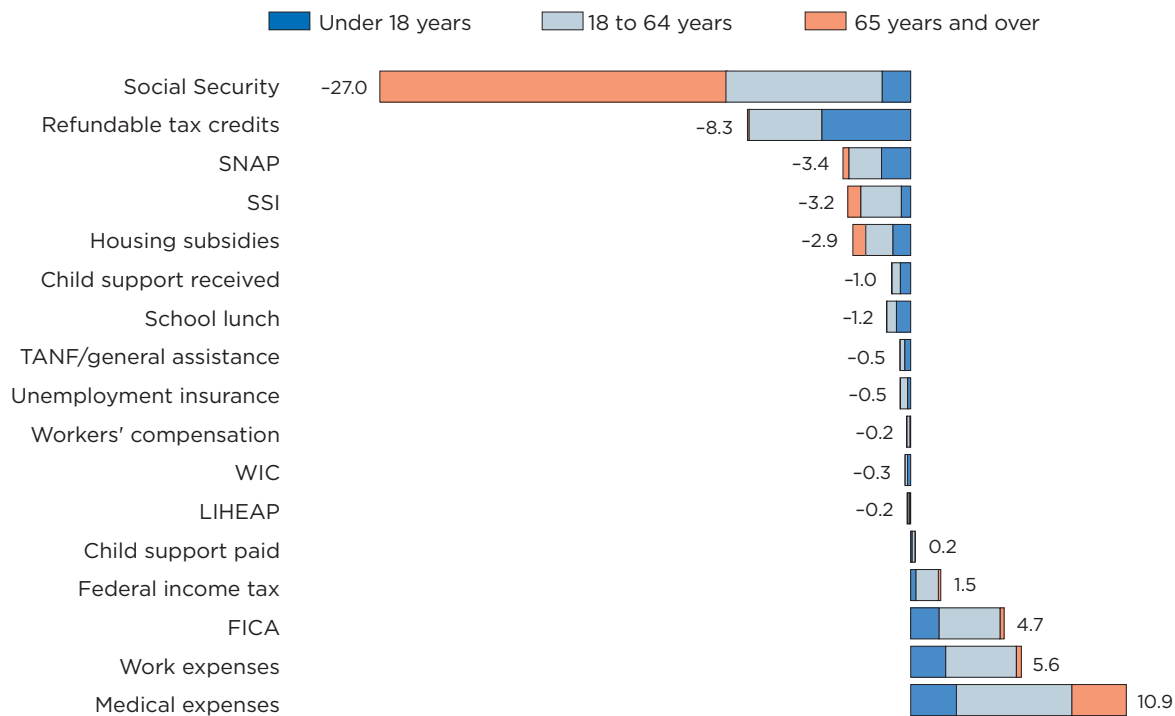
Figure 8 allows us to compare the effect of transfers, both cash and noncash, and nondiscretionary expenses on numbers of individuals in poverty, all else equal. Social Security transfers and refundable tax credits had the largest impacts, preventing 27.0 million and 8.3 million individuals, respectively, from falling into poverty. Medical expenses were the largest contributor to increasing the number of individuals in poverty.

Appendix Table A-6 shows the effect that various additions and subtractions had on the SPM

rate in 2016 and 2017, holding all else the same and assuming no behavioral changes. Appendix Table A-7 shows the same set of additions and subtractions but shows the number of people affected by removing each element from the SPM, rather than the change in the SPM rate.

Removing one item from the calculation of SPM resources and recalculating poverty rates shows, for example, that Social Security benefits decrease the SPM rate by 8.4 percentage points, from 22.3 percent to 13.9 percent. This means that with Social Security benefits, 27.0 million fewer people are living below the poverty line. When including refundable tax

Figure 8.
Change in Number of People in Poverty After Including Each Element: 2017
(In millions)



Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf>.
Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement.

credits (the Earned Income Tax Credit [EITC] and the refundable portion of the child tax credit) in resources, 8.3 million fewer people are considered poor, all else constant. On the other hand, when the SPM subtracts amounts paid for child support, income and payroll taxes, work-related expenses, and medical expenses, the number and percentage in poverty are higher. When subtracting medical expenses from income, the SPM rate is 3.4 percentage points higher. In numbers, 10.9 million more people are classified as poor.

In comparison to 2016, the 2017 anti-poverty impacts of Social Security and child support received increased, with Social Security lifting 0.9 million more individuals out of poverty and child support received lifting 0.2 million additional individuals out of poverty (Table A-7). Conversely, child support paid pushed 0.1 million fewer individuals into poverty in 2017 than in 2016.

Appendix Tables A-6 and A-7 also show effects of individual elements for different age groups. In 2017, accounting for refundable tax credits resulted in a 6.1 percentage point decrease in the child poverty rate, representing 4.5 million children prevented from falling into poverty by the inclusion of these credits. Subtracting medical expenses, such as contributions toward the cost of medical care and health insurance premiums, from the income of families with children resulted in a child poverty rate 3.1 percentage points higher. For the 65 and older group, SPM rates increased by about

5.4 percentage points with the subtraction of medical expenses from income, while Social Security benefits lowered poverty rates by 34.6 percentage points for the 65 and older group, lifting 17.7 million individuals above the poverty line.

SUMMARY

This report provides estimates of the SPM for the United States. The results shown illustrate differences between the official measure of poverty and a poverty measure that takes account of noncash benefits received by families and nondiscretionary expenses that they must pay. The SPM also employs a poverty threshold that is updated by the BLS with information on expenditures for food, clothing, shelter, and utilities. Results showed higher poverty rates using the SPM than the official measure for most groups, with children being an exception with lower poverty rates using the SPM.

The SPM allows us to examine the effect of taxes, noncash transfers, and necessary expenses on the poor and on important groups within the population in poverty. As such, there are lower percentages of the SPM poverty populations in the very high and very low resource categories than we find using the official measure. Since noncash benefits help those in extreme poverty, there were lower percentages of individuals with resources below half the SPM threshold for most groups. In addition, the effect of benefits received from each program and taxes and other nondiscretionary expenses on SPM rates were examined.

REFERENCES

Many of the working papers listed below are available at <www.census.gov/topics/income-poverty/supplemental-poverty-measure/library/working-papers.html> or <<https://stats.bls.gov/pir/spmhome.htm>>.

- Betson, David, "Is Everything Relative? The Role of Equivalence Scales in Poverty Measurement," University of Notre Dame, Poverty Measurement Working Paper, U.S. Census Bureau, 1996.
- Bridges, Benjamin and Robert V. Gesumaria, "The Supplemental Poverty Measure and the Aged: How and Why the SPM and Official Poverty Estimates Differ," *Social Security Bulletin*, Vol. 73, No. 4, 2013.
- Bureau of Labor Statistics (BLS), "2012 Supplemental Poverty Measure Thresholds Based on Consumer Expenditure Survey Data," Washington, DC, September 10, 2013, available at <www.bls.gov/pir/spm/spm_thresholds_2012.htm>.
- Caswell, Kyle and Kathleen Short, "Medical Out-of-Pocket Spending of the Uninsured: Differential Spending and the Supplemental Poverty Measure," presented at the Joint Statistical Meetings, Miami, FL, August 2011, Poverty Measurement Working Paper, U.S. Census Bureau.
- Citro, Constance F. and Robert T. Michael (eds.), *Measuring Poverty: A New Approach*, Washington, DC, National Academy Press, 1995.

- Edwards, Ashley, Brian McKenzie, and Kathleen Short, "Work-Related Expenses in the Supplemental Poverty Measure," January 2014, available at <www.census.gov/content/dam/Census/library/working-papers/2014/demo/sgeworkexpense.pdf>.
- Fontenot, Kayla, Jessica Semega, and Melissa Kollar, "Income and Poverty in the United States: 2017," *Current Population Reports*, P60-263, U.S. Census Bureau, U.S. Government Printing Office, Washington, DC, September 2018.
- Fox, Liana, "Revising Poverty Assignments of Unrelated Children under Age 15 in the Supplemental Poverty Measure Report," SEHSD Working Paper Number 2017-42, U.S. Census Bureau, 2017.
- Fox, Liana, "The Supplemental Poverty Measure: 2016," *Current Population Reports*, P60-261, U.S. Census Bureau, September 2017, available at <www.census.gov/content/dam/Census/library/publications/2017/demo/p60-261.pdf>.
- Fox, Liana, Christopher Wimer, Irwin Garfinkel, Neeraj Kaushal, and Jane Waldfogel, "Waging War on Poverty: Poverty Trends Using a Historical Supplemental Poverty Measure," *Journal of Policy Analysis and Management*, Vol. 34, 567-592, 2015.
- Fox, Liana and Thesia Garner, "Moving to the Median and Expanding the Estimation Sample: The Case for Changing the Expenditures Underlying SPM Thresholds," SEHSD Working Paper Number 2018-02, U.S. Census Bureau, 2018.
- Garner, Thesia I., Marisa Gudrais, and Kathleen Short, "Supplemental Poverty Measure Thresholds and Noncash Benefits," April 2016, available at <www.bls.gov/pir/spm/smp-thresholds-and-noncash-benefits-brookings-paper-4-16.pdf>.
- ITWG, "Observations From the Interagency Technical Working Group on Developing a Supplemental Poverty Measure," March 2010, available at <www.census.gov/content/dam/Census/topics/income/supplemental-poverty-measure/spm-twgobservations.pdf>.
- Janicki, Hubert, "Medical Out-of-Pocket Expenses in the 2013 and 2014 CPS ASEC," SEHSD Working Paper, U.S. Census Bureau, 2014.
- Johnson, Paul, Trudi Renwick, and Kathleen Short, "Estimating the Value of Federal Housing Assistance for the Supplemental Poverty Measure," Poverty Measurement Working Paper, U.S. Census Bureau, 2010.
- Mohanty, Abinash, Ashley Edwards, and Liana Fox, "Measuring the Cost of Employment: Work-Related Expenses in the Supplemental Poverty Measure," SEHSD Working Paper Number 2017-43, U.S. Census Bureau, 2017.
- Renwick, Trudi, "Geographic Adjustments of Supplemental Poverty Measure Thresholds: Using the American Community Survey 5-Year Data on Housing Costs," SEHSD Working Paper Number 2011-21, U.S. Census Bureau, 2011.
- Renwick, Trudi, "Estimating the Value of Federal Housing Assistance for the Supplemental Poverty Measure: Eliminating the Public Housing Adjustment," SEHSD Working Paper Number 2017-38, U.S. Census Bureau, 2017.

-
- Renwick, Trudi, Eric Figueroa, and Bettina Aten, "Supplemental Poverty Measure: A Comparison of Geographic Adjustments with Regional Price Parities vs. Median Rents From the American Community Survey: An Update," July 2017, available at <www.census.gov/library/working-papers/2017/demo/SEHSD-WP2017-36.pdf>.
- Renwick, Trudi and Liana Fox, "The Supplemental Poverty Measure: 2015," *Current Population Reports*, P60-258, U.S. Census Bureau, September 2016, available at <www.census.gov/content/dam/Census/library/publications/2016/demo/p60-258.pdf>.
- Short, Kathleen, "The Supplemental Poverty Measure in the Survey of Income and Program Participation," presented at APPAM Research Conference, October 2014a, available at <www.census.gov/content/dam/Census/library/working-papers/2014/demo/spm2009.pdf>.
- Short, Kathleen, "The Supplemental Poverty Measure: 2013," *Current Population Reports*, P60-251, U.S. Census Bureau, October 2014b, available at <www.census.gov/content/dam/Census/library/publications/2014/demo/p60-251.pdf>.
- Short, Kathleen, "The Research Supplemental Poverty Measure: 2012," *Current Population Reports*, P60-247, U.S. Census Bureau, November 2013, available at <www.census.gov/prod/2013pubs/p60-247.pdf>.
- Short, Kathleen, "The Research Supplemental Poverty Measure: 2011," *Current Population Reports*, P60-244, U.S. Census Bureau, November 2012, available at <www.census.gov/content/dam/Census/library/publications/2012/demo/p60-244.pdf>.
- Short, Kathleen, "The Research Supplemental Poverty Measure: 2010," *Current Population Reports*, P60-241, U.S. Census Bureau, November 2011, available at <www.census.gov/content/dam/Census/library/publications/2011/demo/p60-241.pdf>.
- Short, Kathleen, "Experimental Poverty Measures: 1999," *Current Population Reports*, P60-216, U.S. Census Bureau, U.S. Government Printing Office, Washington, DC, 2001.
- Short, Kathleen, Thesia Garner, David Johnson, and Patricia Doyle, "Experimental Poverty Measures: 1990 to 1997," *Current Population Reports*, P60-205, U.S. Census Bureau, U.S. Government Printing Office, Washington, DC, 1999.
- Smith, Jessica C. and Carla Medalia, "Health Insurance Coverage in the United States: 2013," *Current Population Reports*, P60-250, U.S. Census Bureau, U.S. Government Printing Office, Washington, DC, 2014.
- Wheaton, Laura and Kathryn Stevens, "The Effect of Different Tax Calculators on the Supplemental Poverty Measure," Urban Institute, April 2016, available at <www.census.gov/content/dam/Census/library/working-papers/2016/demo/Effect-of-Different-Tax-Calculators-on-the-SPM.pdf>.

APPENDIX

SPM HISTORY

This is the eighth report describing the Supplemental Poverty Measure (SPM) released by the U.S. Census Bureau, with support from the U.S. Bureau of Labor Statistics (BLS).

The SPM was developed following decades of research on poverty measurement. Concerns about the adequacy of the official measure culminated in a congressional appropriation in 1990 for an independent scientific study of the concepts, measurement methods, and information needed for a poverty measure. In response, the National Academy of Sciences (NAS) convened a Panel on Poverty and Family Assistance, which released its report, *Measuring Poverty: A New Approach in 1995* (Citro and Michael, 1995).

The Interagency Technical Working Group on Developing a Supplemental Poverty Measure (ITWG) was formed in 2009 and charged with developing a set of initial starting points to permit the Census Bureau, in cooperation with the BLS, to produce the SPM. In 2010, the ITWG (which included representatives from the BLS, the Census Bureau, the Economics and Statistics Administration, the Council of Economic Advisers, the U.S. Department of Health and Human Services, and the Office of Management and Budget) issued a series of suggestions to the Census Bureau and the BLS on how to develop the SPM.¹⁰ Their suggestions drew on the recommendations of

¹⁰ See <www.census.gov/content/dam/Census/topics/income/supplemental-poverty-measure/spm-twgobservations.pdf>.

the 1995 NAS report and the subsequent extensive research on poverty measurement. The ITWG suggestions were published in the Federal Register and the Census Bureau and the BLS reviewed comments from the public.¹¹

In November 2011, the Census Bureau released the first SPM report, providing SPM estimates for 2009 and 2010. This year will be the fourth year in which the SPM report is released the same day as the official income and poverty report.

In 2016, the Office of Management and Budget (OMB) convened a new interagency technical working group to provide advice on challenges and opportunities brought before it by the Census Bureau and the BLS concerning data sources, estimation, survey production, and processing activities for development, implementation, publication, and improvement of the SPM. The SPM Working Group is composed of career federal employees representing their respective agencies and chaired by the OMB. The agencies currently represented include the Bureau of Economic Analysis, the BLS, the Council of Economic Advisors, the Census Bureau, the Economic Research Service, the Food and Nutrition Service, the Department of Health and Human Services, the Department of Housing and Urban Development, the Internal Revenue Service, the National Center for Education Statistics, the National Center for Health Statistics, the OMB, and the Social Security Administration.

¹¹ Federal Register notice (Vol. 75, No. 101, p. 29513) was issued on May 26, 2010, soliciting public comments regarding specific methods and data sources in developing the SPM.

Currently the ITWG is reviewing potential changes to implement in 2021, the 10-year anniversary of the first SPM report. Among others, ideas under consideration include new estimation of work expenses, modifications to the thresholds, including updating equivalence scales, expanding the estimation sample, moving the base of the thresholds from the 33rd percentile to the median of the FCSU distribution (Fox and Garner, 2018), as well as incorporating additional noncash benefits in the threshold (for example, see Garner, Gudrais, and Short, 2016). Before adopting any major changes, researchers at the Census Bureau and the BLS will present results showing the need for and impact of such a change. Potential changes to the SPM will be presented and discussed at conferences, expert meetings, and posted on the Census Bureau's SPM Web site <www.census.gov/topics/income-poverty/supplemental-poverty-measure.html>. The ITWG will make the final decision on changes in September 2020 and these changes, if any, will be implemented in the September 2021 SPM report.

SPM METHODOLOGY

Poverty Thresholds

Consistent with the NAS panel recommendations and the suggestions of the ITWG, the SPM thresholds are based on out-of-pocket spending on a basic set of goods and services that includes FCSU, and a small additional amount to allow for other needs (e.g., household supplies, personal care, non-work-related transportation). 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) interview data for consumer units with exactly two children.¹² All individuals who share expenses with others in the household are included in the consumer unit.¹³ FCSU expenditures are converted to equivalized values using a three-parameter equivalence scale (see “Equivalence Scales” section). The three-parameter equivalence scale is used to convert the estimation sample FCSU expenditures to those of a reference consumer unit composed of two adults with two children.

SPM thresholds are produced for three housing tenure groups to account for differences in housing costs. The three groups are owners with mortgages, owners without mortgages, and renters. Thresholds reflect average 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, with adjustments for shelter and utilities for each housing group. See the BLS DPINR Research Experimental Poverty Measures Web page for specifics regarding the production of the SPM thresholds and related statistics.¹⁴

The ITWG recommended that adjustments to thresholds should be made over time to reflect

¹² See <<https://stats.bls.gov/cex/>> for information on the CE.

¹³ This includes unmarried partners and others making joint expenditure decisions. For full definition, see <<https://stats.bls.gov/cex/faq.htm#q3>>.

¹⁴ 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>>.

real changes in expenditures on the basic bundle of goods and services around the 33rd percentile of the expenditure distribution. The thresholds used here include the value of Supplemental Nutrition Assistance Program (SNAP) benefits in the measure of spending on food. As much as possible given available data, the calculation of the FCSU should include any noncash benefits that are counted on the resource side for FCSU. This is necessary for consistency of the threshold and resource definitions. Current research at the BLS is investigating the feasibility of incorporating additional noncash benefits in the threshold (for example, see Garner, Gudrais, and Short, 2016).

Equivalence Scales

The ITWG guidelines state that the “three-parameter equivalence scale” is to be used to adjust SPM reference thresholds for the number of adults and children.¹⁵ The three-parameter scale allows for a different adjustment for single parents (Betson, 1996). This scale has been used in several BLS and Census Bureau studies (Short et al., 1999; Short, 2001). The three-parameter scale is calculated in the following way:

One and two adults: scale = (adults)^{0.5}

Single parents: scale = (adults + 0.8 * first child + 0.5 * other children)^{0.7}

All other families: scale = (adults + 0.5 * children)^{0.7}

In the calculation used to produce thresholds for two adults, the

¹⁵ The official measure adjusts thresholds based on family size, number of children and adults, as well as whether or not the householder is aged 65 or older.

scale is set to 1.41. The economy of scale factor is set at 0.70 for other family types which is within the 0.65 to 0.75 range recommended by the NAS panel.

Geographic Adjustments

The American Community Survey (ACS) is used to adjust the FCSU thresholds for differences in prices across geographic areas. The geographic adjustments are based on 5-year ACS estimates of median gross rents for two-bedroom units with complete kitchen and plumbing facilities. Separate medians were estimated for each of 260 metropolitan statistical areas large enough to be identified on the public-use version of the CPS ASEC file. For each state, a median is estimated for all nonmetropolitan areas (47) and for a combination of all smaller metropolitan areas within a state (35). This results in 342 adjustment factors. For details, see Renwick (2011).¹⁶

Unit of Analysis

The ITWG suggested that the resource unit in the SPM include all related individuals who live at the same address, any coresident unrelated children who are cared for by the family (such as foster children), and any cohabiters and their children.^{17,18} This definition corresponds broadly with the unit of data collection (the consumer unit) that is employed for the CE data that are used to calculate

¹⁶ Renwick, Figueroa, and Aten (2017) examined an alternative method of calculation for the geographic indexes using Regional Price Parities from the U.S. Bureau of Economic Analysis.

¹⁷ Foster children up to the age of 22 are included in the new unit.

¹⁸ The official measure of poverty uses the census-defined family that includes all individuals residing together who are related by birth, marriage, or adoption and treats all unrelated individuals aged 15 and older independently.

poverty thresholds. They are referred to as SPM Resource Units. For all resource units that contain a set of male/female unmarried partners, the female partner's weight is used as the SPM family weight. For all other units, there is no change in family weight.¹⁹

Official Poverty Treatment of Unrelated Individuals Under the Age of 15

Unrelated children under the age of 15 are excluded from the official poverty measure universe but included in the SPM universe. To compare the two measures in the SPM report, unrelated individuals under the age of 15 are assigned an official poverty status to match that of the reference person of the household in which they reside. The official poverty status is not recalculated for anyone else in the household. See Fox (2017) for a comparison of official poverty estimates using different methods. Prior to the 2016 SPM report, all unrelated children under the age of 15 were considered poor in the official poverty estimates used in the SPM report. Since these children were not asked any income questions, they were assigned income of \$0 and a poverty threshold for a single person unit.

Noncash Benefits

Supplemental Nutrition Assistance Program (SNAP)

SNAP benefits (formerly known as food stamps) are designed to allow eligible low-income households to afford a nutritionally adequate diet. Households that participate in the SNAP program are assumed to devote 30 percent

of their countable monthly cash income to the purchase of food, and SNAP benefits make up the remaining cost of an adequate low-cost diet. This amount is set at the level of the U.S. Department of Agriculture's Thrifty Food Plan. In the CPS ASEC, respondents report if anyone in the household ever received SNAP benefits in the previous calendar year and, if so, the face value of those benefits. The annual household amount is prorated to the SPM Resource Units within each household.

National School Lunch Program

This program offers children free school lunches if family income is below 130 percent of federal poverty guidelines, reduced-price school meals if family income is between 130 and 185 percent of the federal poverty guidelines, and a subsidized school meal for all other children.²⁰ In the CPS ASEC, the reference person is asked how many children "usually" ate a complete lunch at school, and if so, if it was a free or reduced-price school lunch. The value of school meals is assigned based on the assumption that the children received the lunches every day during the last school year. Note that this method may overestimate the benefits received by each family. To value benefits, we obtain amounts on the cost per lunch from the U.S. Department of Agriculture Food and Nutrition Service, which administers the school lunch program. There is no value included for school breakfast.

²⁰ The poverty guidelines are issued each year by the Department of Health and Human Services. The guidelines are a simplified version of the Census Bureau's poverty thresholds used for administrative purposes—for instance, determining financial eligibility for certain federal programs. For more details and guidelines, see <<https://aspe.hhs.gov/poverty-guidelines>>.

Supplementary Nutrition Program for Women, Infants, and Children (WIC)

This program is designed to provide food assistance and nutritional screening to low-income pregnant and postpartum women and their infants and to low-income children up to the age of 5. Incomes must be at or below 185 percent of the poverty guidelines and participants must be nutritionally at-risk (having abnormal nutritional conditions, nutrition-related medical conditions, or dietary deficiencies). Benefits include supplemental foods in the form of food items or vouchers for purchases of specific food items. There are questions on current receipt of WIC in the CPS ASEC. Lacking additional information, we assume 12 months of participation and value the benefit using program information obtained from the Department of Agriculture. As with school lunch, assuming yearlong participation may overestimate the value of WIC benefits received by a given SPM unit. In these estimates, we assume that all children less than 5 years old in a household where someone reports receiving WIC are also assigned receipt of WIC. If the child is aged 0 or 1 year, then we assume that the mother also gets WIC. If there is no child in the family, but the household reference person said "yes" to the WIC question, we assume this is a pregnant woman receiving WIC.

Low-Income Home Energy Assistance Program (LIHEAP)

This program provides three types of energy assistance. Under this program, states may help pay heating or cooling bills, provide allotments for low-cost weatherization, or provide

¹⁹ Appropriate weighting of these new units is an area of additional research at the Census Bureau.

assistance during energy-related emergencies. States determine eligibility and can provide assistance in various ways, including cash payments, vendor payments, two-party checks, vouchers/coupons, and payments directly to landlords. In the CPS ASEC, the question on energy assistance asks for information about the entire previous year. Many households receive both a “regular” benefit and one or more crisis or emergency benefits. Since LIHEAP payments are often made directly to a utility company or fuel oil vendor, many households may have difficulty reporting the precise amount of the LIHEAP payment made on their behalf.

Housing Assistance

Households can receive housing assistance from a plethora of federal, state, and local programs. Federal housing assistance consists of a number of programs administered primarily by the U.S. Department of Housing and Urban Development (HUD). These programs traditionally take the form of rental subsidies and mortgage-interest subsidies targeted to very-low-income renters and are either project-based (public housing) or tenant-based (vouchers). The value of housing subsidies is estimated as the difference between the “market rent” for the housing unit and the total tenant payment. The “market rent” for the household is estimated using a statistical match with HUD administrative data from the Public and Indian Housing Information Center and the Tenant Rental Assistance Certification System. For each household identified in the CPS ASEC as receiving help with rent or living in public housing, an

attempt was made to match on state, Core-Based Statistical Area, and household size.²¹ The total tenant payment is estimated by applying HUD program rules to total household income reported in the CPS ASEC. Generally, participants in either public housing or tenant-based subsidy programs administered by HUD are expected to contribute the greater of one-third of their “adjusted” income or 10 percent of their gross income towards housing costs.²² See Johnson et al. (2010) for more details on this method. Initially, subsidies are estimated at the household level. If there is more than one SPM unit in a household, then the value of the subsidy is prorated based on the number of people in the SPM unit relative to the total number of people in the household.

Housing subsidies help families pay their rent and, as such, are added to income for the SPM. However, there is general agreement that, while the value of a housing subsidy can free up a family’s income to purchase food and other

²¹ HUD operates two major housing assistance programs: public housing and tenant-based or voucher programs. Previous research has found that households misreport whether they receive public housing or rental assistance in the CPS ASEC and that the value of public housing is not unambiguously worth less than the value of rental assistance (Renwick, 2017). Given these ambiguities and increasing challenges in the reporting of housing subsidy values across various types of housing assistance, beginning in the 2016 SPM report, we have eliminated the adjustment factor previously applied to public housing subsidy values.

²² HUD regulations define “adjusted household income” as cash income, excluding income from certain sources minus numerous deductions. Three of the income exclusions can be identified from the CPS ASEC: income from the employment of children, student financial assistance, and earnings in excess of \$480 for each full-time student 18 years or older. Deductions that can be modeled from the CPS ASEC include \$480 for each dependent, \$400 for any elderly or disabled family member, childcare, and medical expenses.

basic items, it will do so only to the extent that it meets the need for shelter. Thus, the values for housing subsidies included as income are limited to the proportion of the threshold that is allocated to housing costs. The subsidy is capped at the housing portion of the appropriate threshold MINUS the total tenant payment.

Necessary Expenses Subtracted From Resources

Taxes

The NAS panel and the ITWG recommended that the calculation of family resources for poverty measurement should subtract necessary expenses that must be paid by the family. The measure subtracts federal, state, and local income taxes and Social Security payroll taxes (FICA) before assessing the ability of a family to obtain basic necessities, such as FCSU. Taking account of taxes allows us to account for receipt of the federal or state EITC and other tax credits. The CPS ASEC does not collect information on taxes paid, but relies on a tax calculator to simulate taxes paid. These simulations include federal and state income taxes and FICA taxes.²³ These simulations also use a statistical match to the IRS Statistics of Income public-use microdata file of tax returns.

Work-Related Expenses

Going to work and earning a wage often entails incurring expenses, such as travel to work and purchase of uniforms or tools. For work-related expenses (other than childcare), the NAS panel

²³ Wheaton and Stevens (2016) compare the Census Bureau’s tax calculator to TAXSIM and the Bakija tax model and find consistency in tax estimates across the models.

recommended subtracting a fixed amount for each earner 18 years or older. Their calculation was based on 1987 SIPP data that collected information on work expenses in a set of supplementary questions. They calculated 85 percent of median weekly expenses—\$14.42 per week worked for anyone aged 18 or older in the family in 1992. Total expenses were obtained by multiplying this fixed amount by the number of weeks respondents reported working in the year. Each person in the SIPP reports their own expenditures on work-related items in a given week. The most recent available data are used to calculate median weekly expenses.²⁴ The number of weeks worked, reported in the CPS ASEC, is multiplied by 85 percent of median weekly work-related expenses for each person to arrive at annual work-related expenses.²⁵

Child Care Expenses

Another important part of work-related expenses is paying someone to care for children while parents work. These expenses have become important for families with young children in which both parents (or a single parent) work. To account for childcare expenses while parents worked, the CPS ASEC asks parents whether or not they pay for child care and how much they spent. The amounts paid for any type of child care while parents are at work are summed over all children. The ITWG, following the recommendations of the NAS report, suggested capping the amount subtracted from income, when combined with other work-related expenses, so that

²⁴ Median weekly work expenses were \$42.76 for 2017 using the 2014 SIPP Panel.

²⁵ Edwards et al. (2014) examined an alternative method of valuing work-related expenses using the ACS.

these do not exceed total reported earnings of the lowest earning reference person or spouse/partner of the reference person in the family. This capping procedure is applied before determining poverty status.²⁶

Child Support Paid

The NAS panel recommended that since child support received from other households is counted as income, child support paid out to those households should be deducted from the resources of those households that paid it. Without this subtraction, all child support is double counted in overall income statistics. Questions ascertaining amounts paid in child support are included in the CPS ASEC, and these reported amounts are subtracted in the estimates presented here.

Medical Expenses

The ITWG recommended subtracting medical expenses from income, following the NAS panel. The NAS panel was aware that expenditures for health care are a significant portion of a family budget and have become an increasingly larger budget item since the 1960s. These expenses include the payment of health insurance premiums plus other medically necessary items, such as prescription drugs and doctor copayments that are not covered or reimbursed by insurance. Subtracting these amounts from income, like taxes and work expenses, leaves the amount of income that the family has available to purchase the basic bundle of goods.

²⁶ Some analysts have suggested that this cap may be inappropriate in certain cases, such as if the parent is in school, looking for work, or receiving types of compensation other than earnings.

When reporting medical expenses, respondents are asked not to report Medicare Part B premiums. Instead, Medicare Part B premiums are estimated using other information collected in the CPS ASEC. If respondents received Social Security benefits, they may have reported Medicare premiums, and the reported amount is taken. For respondents who reported that their Social Security payment was after deduction, but did not report a deduction amount greater than \$0, the Medicare Part B premium is set at the standard amount per month and added to income and medical expenditures. For the remaining respondents who reported being covered by Medicare, Medicare Part B premiums are simulated using the rules for income and tax filing status for people aged 65 and older (see <www.medicare.gov/>).²⁷ For married respondents with a “spouse present,” combined reported income is used to determine the appropriate Medicare Part B premium assuming that these couples filed married-joint returns. Finally, the simulation model assumes two groups paid zero Part B premiums: (1) respondents enrolled in Medicare and Medicaid and (2) those with a family income less than 135 percent of the federal poverty level.²⁸ This strategy for estimating Medicare Part B premiums largely follows the methodology developed by Caswell and Short (2011).

²⁷ We make the simplifying assumption that respondents were insured by Medicare for the entire year.

²⁸ The family income assumption is based on a rough estimate of eligibility and participation in at least one of the following programs: Qualified Medicare Beneficiary, Specified Low-Income Medicare Beneficiary, or Qualified Individual or Qualified Disabled and Working Individuals. We do not take into account the possibility of (state-specific) asset requirements.

Table A-1.

Number and Percentage of People in Poverty Using the Supplemental Poverty Measure: 2016 and 2017

(Numbers in thousands, margin of error in thousands or percentage points as appropriate. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	SPM 2017				SPM 2016				Difference	
	Number		Percent		Number		Percent		Number	Percent
	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)		
All people	44,972	993	13.9	0.3	44,752	810	14.0	0.3	220	-0.1
Sex										
Male	20,717	501	13.1	0.3	20,693	438	13.2	0.3	23	-0.1
Female	24,255	570	14.7	0.3	24,059	476	14.7	0.3	196	Z
Age										
Under 18 years	11,521	399	15.6	0.5	11,281	349	15.2	0.5	240	0.3
18 to 64 years	26,244	628	13.2	0.3	26,303	571	13.3	0.3	-59	-0.1
65 years and older	7,207	274	14.1	0.5	7,168	235	14.5	0.5	39	-0.4
Type of Unit										
Married couple	16,879	663	8.7	0.3	16,516	601	8.6	0.3	363	0.1
Cohabiting partners	3,558	298	13.3	1.1	3,261	284	13.0	1.0	296	0.2
Female reference person	11,408	448	26.9	0.9	11,655	498	27.3	1.0	-246	-0.4
Male reference person	2,382	208	16.3	1.3	2,635	258	17.5	1.6	-253	-1.2
Unrelated individuals	10,745	375	23.5	0.7	10,685	343	23.6	0.6	60	-0.1
Race¹ and Hispanic Origin										
White	30,433	780	12.3	0.3	30,717	617	12.5	0.3	-284	-0.2
White, not Hispanic	19,249	594	9.8	0.3	19,446	564	9.9	0.3	-197	-0.1
Black	9,394	410	22.1	1.0	9,086	390	21.6	0.9	308	0.5
Asian	2,948	204	15.1	1.0	2,774	204	14.7	1.1	174	0.4
Hispanic (any race)	12,654	488	21.4	0.8	12,670	432	22.0	0.7	-16	-0.6
Nativity										
Native born	35,538	864	12.8	0.3	35,515	728	12.8	0.3	22	Z
Foreign born	9,435	367	20.8	0.7	9,237	325	21.1	0.7	198	-0.3
Naturalized citizen	3,513	195	16.1	0.8	3,205	171	15.7	0.8	*308	0.4
Not a citizen	5,921	297	25.1	1.1	6,032	263	25.7	1.0	-110	-0.6
Educational Attainment										
Total aged 25 and older	27,801	635	12.6	0.3	27,929	503	12.9	0.2	-127	-0.2
No high school diploma	6,429	259	28.7	1.0	6,356	227	28.2	0.8	73	0.5
High school, no college	10,038	350	16.0	0.5	10,139	317	16.2	0.5	-101	-0.2
Some college	6,263	247	10.8	0.4	6,615	251	11.5	0.4	*-351	*-0.6
Bachelor's degree or higher	5,072	207	6.6	0.3	4,819	225	6.5	0.3	253	0.1
Tenure										
Owner	19,764	612	9.2	0.3	19,149	611	9.1	0.3	615	0.1
Owner/mortgage	10,492	478	7.6	0.3	10,122	461	7.4	0.3	370	0.1
Owner/no mortgage/rent free ..	9,886	444	12.5	0.5	9,825	417	12.7	0.5	62	-0.2
Renter	24,594	706	23.5	0.6	24,806	703	23.3	0.6	-211	0.1
Residence²										
Inside metropolitan statistical areas	39,472	955	14.1	0.3	39,120	843	14.1	0.3	353	Z
Inside principal cities	18,216	687	17.5	0.5	17,971	663	17.4	0.5	244	0.1
Outside principal cities	21,257	666	12.1	0.4	21,148	652	12.2	0.3	109	-0.1
Outside metropolitan statistical areas	5,500	463	12.8	0.6	5,633	500	12.9	0.7	-133	-0.1

See footnotes at end of table.

Table A-1.

Number and Percentage of People in Poverty Using the Supplemental Poverty Measure: 2016 and 2017—Con.

(Numbers in thousands, margin of error in thousands or percentage points as appropriate. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	SPM 2017				SPM 2016				Difference	
	Number		Percent		Number		Percent		Number	Percent
	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)		
Region										
Northeast	7,976	396	14.2	0.7	6,874	320	12.4	0.6	*1,101	*1.9
Midwest	7,198	372	10.7	0.6	7,424	361	11.1	0.5	-226	-0.4
South	18,147	651	14.8	0.5	17,966	616	14.8	0.5	181	Z
West	11,652	404	15.1	0.5	12,489	452	16.3	0.6	*-837	*-1.2
Health Insurance Coverage										
With private insurance	17,872	602	8.2	0.3	17,898	545	8.3	0.3	-27	Z
With public, no private insurance.	19,851	579	25.6	0.7	19,646	510	25.8	0.6	205	-0.2
Not insured	7,249	343	25.4	1.0	7,208	268	25.7	0.9	42	-0.3
Work Experience										
Total 18 to 64 years	26,244	628	13.2	0.3	26,303	571	13.3	0.3	-59	-0.1
All workers	12,172	362	8.0	0.2	12,111	361	8.0	0.2	61	Z
Worked full-time, year-round	5,368	205	4.9	0.2	5,099	207	4.7	0.2	269	0.2
Less than full-time, year-round.	6,804	270	16.0	0.6	7,012	258	16.3	0.6	-208	-0.3
Did not work at least 1 week	14,072	434	30.6	0.7	14,193	395	30.8	0.7	-120	-0.1
Disability Status³										
Total 18 to 64 years	26,244	628	13.2	0.3	26,303	571	13.3	0.3	-59	-0.1
With a disability	3,550	163	23.5	1.0	3,905	182	25.4	1.0	*-355	*-1.9
With no disability.	22,656	576	12.4	0.3	22,350	533	12.4	0.3	307	0.1

* An asterisk preceding an estimate indicates change is statistically different from zero at the 90 percent confidence level.

¹ The margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. The MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at www2.census.gov/library/publications/2018/demo/p60-263sa.pdf.

Z Represents or rounds to zero.

¹ Federal surveys give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White and American Indian and Alaska Native or Asian and Black or African American, is available from the 2010 Census through American FactFinder. About 2.9 percent of people reported more than one race in the 2010 Census. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

² The 2016 estimates presented for residence may not match the previously published estimates due to a correction in the assignment of principal city status for a small number of households. For the definition of metropolitan statistical areas and principal cities, see www.census.gov/programs-surveys/metro-micro/about/glossary.html.

³ The sum of those with and without a disability does not equal the total because disability status is not defined for individuals in the U.S. Armed Forces.

Note: Details may not sum due to rounding.

Source: U.S. Census Bureau, Current Population Survey, 2017-2018 Annual Social and Economic Supplements.

Table A-2.

Number and Percentage of People in Poverty by Different Poverty Measures: 2017

(Numbers in thousands, margin of error in thousands or percentage points as appropriate. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Number** (in thou- sands)	Official**				SPM				Difference	
		Number		Percent		Number		Percent		Num- ber	Per- cent
		Esti- mate	Mar- gin of error ¹ (±)	Esti- mate	Mar- gin of error ¹ (±)	Esti- mate	Mar- gin of error ¹ (±)	Esti- mate	Mar- gin of error ¹ (±)		
All people	323,156	39,804	924	12.3	0.3	44,972	993	13.9	0.3	*5,168	*1.6
Sex											
Male	158,426	17,427	486	11.0	0.3	20,717	501	13.1	0.3	*3,289	*2.1
Female	164,730	22,377	530	13.6	0.3	24,255	570	14.7	0.3	*1,878	*1.1
Age											
Under 18 years	73,963	12,914	434	17.5	0.6	11,521	399	15.6	0.5	*-1,393	*-1.9
18 to 64 years	198,113	22,209	564	11.2	0.3	26,244	628	13.2	0.3	*4,035	*2.0
65 years and older	51,080	4,681	190	9.2	0.4	7,207	274	14.1	0.5	*2,526	*4.9
Type of Unit											
Married couple	193,567	11,020	491	5.7	0.3	16,879	663	8.7	0.3	*5,859	*3.0
Cohabiting partners	26,833	6,729	332	25.1	1.0	3,558	298	13.3	1.1	*-3,171	*-11.8
Female reference person	42,454	11,111	458	26.2	0.9	11,408	448	26.9	0.9	297	0.7
Male reference person	14,626	1,641	193	11.2	1.2	2,382	208	16.3	1.3	*741	*5.1
Unrelated individuals	45,676	9,303	340	20.4	0.6	10,745	375	23.5	0.7	*1,441	*3.2
Race¹ and Hispanic Origin											
White	247,695	26,522	719	10.7	0.3	30,433	780	12.3	0.3	*3,911	*1.6
White, not Hispanic	195,530	17,037	574	8.7	0.3	19,249	594	9.8	0.3	*2,212	*1.1
Black	42,564	9,007	372	21.2	0.9	9,394	410	22.1	1.0	*387	*0.9
Asian	19,484	1,953	190	10.0	1.0	2,948	204	15.1	1.0	*995	*5.1
Hispanic (any race)	59,227	10,835	425	18.3	0.7	12,654	488	21.4	0.8	*1,819	*3.1
Nativity											
Native born	277,748	33,198	858	12.0	0.3	35,538	864	12.8	0.3	*2,340	*0.8
Foreign born	45,408	6,607	295	14.5	0.6	9,435	367	20.8	0.7	*2,828	*6.2
Naturalized citizen	21,854	2,213	146	10.1	0.6	3,513	195	16.1	0.8	*1,300	*6.0
Not a citizen	23,554	4,394	238	18.7	0.9	5,921	297	25.1	1.1	*1,527	*6.5
Educational Attainment											
Total aged 25 and older	219,830	22,163	516	10.1	0.2	27,801	635	12.6	0.3	*5,638	*2.6
No high school diploma	22,411	5,485	217	24.5	0.9	6,429	259	28.7	1.0	*943	*4.2
High school, no college	62,685	7,942	285	12.7	0.4	10,038	350	16.0	0.5	*2,095	*3.3
Some college	57,810	5,075	206	8.8	0.4	6,263	247	10.8	0.4	*1,189	*2.1
Bachelor's degree or higher	76,924	3,661	181	4.8	0.2	5,072	207	6.6	0.3	*1,411	*1.8
Tenure											
Owner	214,924	15,185	534	7.1	0.2	19,764	612	9.2	0.3	*4,579	*2.1
Owner/mortgage	138,946	7,152	365	5.1	0.3	10,492	478	7.6	0.3	*3,340	*2.4
Owner/no mortgage/ rent free	79,339	8,718	435	11.0	0.5	9,886	444	12.5	0.5	*1,168	*1.5
Renter	104,871	23,934	691	22.8	0.6	24,594	706	23.5	0.6	*660	*0.6
Residence²											
Inside metropolitan statistical areas	280,048	33,408	866	11.9	0.3	39,472	955	14.1	0.3	*6,064	*2.2
Inside principal cities	104,068	16,241	635	15.6	0.5	18,216	687	17.5	0.5	*1,974	*1.9
Outside principal cities	175,980	17,167	584	9.8	0.3	21,257	666	12.1	0.4	*4,090	*2.3
Outside metropolitan statistical areas	43,108	6,396	526	14.8	0.7	5,500	463	12.8	0.6	*-897	*-2.1

See footnotes at end of table.

Table A-2.

Number and Percentage of People in Poverty by Different Poverty Measures: 2017—Con.

(Numbers in thousands, margin of error in thousands or percentage points as appropriate. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Number** (in thousands)	Official**				SPM				Difference	
		Number		Percent		Number		Percent		Number	Percent
		Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)		
Region											
Northeast	56,065	6,381	340	11.4	0.6	7,976	396	14.2	0.7	*1,594	*2.8
Midwest	67,481	7,661	397	11.4	0.6	7,198	372	10.7	0.6	*-463	*-0.7
South	122,480	16,662	593	13.6	0.5	18,147	651	14.8	0.5	*1,485	*1.2
West	77,130	9,100	400	11.8	0.5	11,652	404	15.1	0.5	*2,552	*3.3
Health Insurance Coverage											
With private insurance	217,007	11,219	493	5.2	0.2	17,872	602	8.2	0.3	*6,653	*3.1
With public, no private insurance	77,606	21,838	584	28.1	0.7	19,851	579	25.6	0.7	*-1,987	*-2.6
Not insured	28,543	6,748	311	23.6	0.9	7,249	343	25.4	1.0	*502	*1.8
Work Experience											
Total 18 to 64 years	198,113	22,209	564	11.2	0.3	26,244	628	13.2	0.3	*4,035	*2.0
All workers	152,199	8,135	259	5.3	0.2	12,172	362	8.0	0.2	*4,037	*2.7
Worked full-time, year-round	109,700	2,422	128	2.2	0.1	5,368	205	4.9	0.2	*2,946	*2.7
Less than full-time, year-round	42,499	5,714	224	13.4	0.5	6,804	270	16.0	0.6	*1,090	*2.6
Did not work at least 1 week	45,914	14,073	440	30.7	0.7	14,072	434	30.6	0.7	-1	Z
Disability Status³											
Total 18 to 64 years	198,113	22,209	564	11.2	0.3	26,244	628	13.2	0.3	*4,035	*2.0
With a disability	15,116	3,764	170	24.9	1.0	3,550	163	23.5	1.0	*-213	*-1.4
With no disability	182,042	18,412	504	10.1	0.3	22,656	576	12.4	0.3	*4,244	*2.3

* An asterisk preceding an estimate indicates change is statistically different from zero at the 90 percent confidence level.

** Includes unrelated individuals under the age of 15.

¹ The margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. The MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at www2.census.gov/library/publications/2018/demo/p60-263sa.pdf.

Z Represents or rounds to zero.

¹ Federal surveys give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White and American Indian and Alaska Native or Asian and Black or African American, is available from the 2010 Census through American FactFinder. About 2.9 percent of people reported more than one race in the 2010 Census. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

² For information on metropolitan statistical areas and principal cities, see www.census.gov/programs-surveys/metro-micro/about/glossary.html.

³ The sum of those with and without a disability does not equal the total because disability status is not defined for individuals in the U.S. Armed Forces.

Note: Details may not sum due to rounding.

Source: U.S. Census Bureau, Current Population Survey, 2018 Annual Social and Economic Supplement.

Table A-3.

Two-Adult-Two-Child Poverty Thresholds: 2016 and 2017

(In nominal dollars)

Measure	2016	Standard error	2017	Standard error
Official poverty measure	24,339	N	24,858	N
Research supplemental poverty measure				
Owners with mortgages	26,336	280	27,085	276
Owners without mortgages	22,298	390	23,261	471
Renters	26,104	302	27,005	263

N Not available

Source: The thresholds, shares, and means were produced by Juan D. Munoz under the guidance of Thesia I. Garner. Munoz and Garner work in the Division of Price and Index Number Research, Bureau of Labor Statistics (BLS). These thresholds and statistics are produced for research purposes only using the U.S. Consumer Expenditure Interview Survey. The thresholds are not BLS production quality. This work is solely that of the authors and does not necessarily reflect the official positions or policies of the BLS, or the views of other staff members within this agency. For methodological details and related research regarding the SPM thresholds, see <<https://stats.bls.gov/pir/spmhome.htm>>.

Table A-4.

Percentage of People by Ratio of Income/Resources to Poverty Threshold: 2016 and 2017(Margin of error in percentage points. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Less than 0.5	Margin of error ¹ (±)	0.5 to 0.99	Margin of error ¹ (±)	1.0 to 1.49	Margin of error ¹ (±)	1.5 to 1.99	Margin of error ¹ (±)	2.0 to 3.99	Margin of error ¹ (±)	4.0 or more	Margin of error ¹ (±)
2017												
OFFICIAL*												
All people	5.8	0.2	6.6	0.2	8.7	0.2	8.7	0.2	28.8	0.4	41.5	0.4
Age												
Under 18 years	8.0	0.4	9.5	0.4	11.4	0.4	9.9	0.4	28.9	0.5	32.4	0.5
18 to 64 years	5.6	0.2	5.6	0.2	7.2	0.2	7.8	0.2	28.6	0.4	45.3	0.5
65 years and older	3.2	0.3	5.9	0.3	10.4	0.5	10.5	0.4	29.9	0.7	40.0	0.8
Race¹ and Hispanic Origin												
White	4.9	0.2	5.8	0.2	8.0	0.2	8.4	0.2	29.0	0.4	44.0	0.5
White, not Hispanic	4.2	0.2	4.5	0.2	6.5	0.2	7.4	0.2	28.1	0.5	49.3	0.6
Black	10.4	0.7	10.8	0.6	12.5	0.7	11.0	0.7	29.2	1.0	26.2	1.0
Asian	5.3	0.7	4.8	0.6	6.7	0.8	7.1	0.8	25.1	1.3	51.2	1.5
Hispanic (any race)	7.6	0.5	10.7	0.5	13.4	0.7	11.9	0.6	32.5	0.9	24.0	0.8
SPM												
All people	4.9	0.2	9.0	0.2	15.5	0.3	13.9	0.3	34.7	0.4	21.9	0.3
Age												
Under 18 years	4.8	0.3	10.8	0.5	19.9	0.6	16.7	0.5	33.2	0.6	14.6	0.4
18 to 64 years	5.0	0.2	8.3	0.2	13.8	0.3	13.3	0.3	36.0	0.4	23.6	0.4
65 years and older	4.9	0.3	9.2	0.4	15.7	0.5	12.1	0.5	32.3	0.8	25.8	0.7
Race¹ and Hispanic Origin												
White	4.4	0.2	7.9	0.2	14.3	0.3	13.4	0.3	35.8	0.4	24.2	0.4
White, not Hispanic	3.9	0.2	5.9	0.2	11.4	0.3	12.3	0.3	38.2	0.5	28.3	0.5
Black	7.6	0.6	14.5	0.9	21.6	0.9	16.7	0.8	28.7	1.0	11.0	0.7
Asian	6.1	0.7	9.0	0.9	14.7	1.2	11.0	1.0	36.2	1.6	23.0	1.3
Hispanic (any race)	6.0	0.4	15.3	0.7	25.0	0.9	17.8	0.8	27.2	0.8	8.7	0.5

See footnotes at end of table.

Table A-4.

Percentage of People by Ratio of Income/Resources to Poverty Threshold: 2016 and 2017—Con.

(Margin of error in percentage points. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Characteristic	Less than 0.5	Margin of error ¹ (±)	0.5 to 0.99	Margin of error ¹ (±)	1.0 to 1.49	Margin of error ¹ (±)	1.5 to 1.99	Margin of error ¹ (±)	2.0 to 3.99	Margin of error ¹ (±)	4.0 or more	Margin of error ¹ (±)
2016												
OFFICIAL*												
All people	5.8	0.2	6.9	0.2	8.5	0.2	8.6	0.2	29.5	0.3	40.8	0.4
Age												
Under 18 years	8.2	0.4	9.8	0.4	10.9	0.4	10.1	0.4	29.1	0.6	31.9	0.6
18 to 64 years	5.5	0.2	6.1	0.2	7.0	0.2	7.6	0.2	29.1	0.4	44.8	0.4
65 years and older	3.3	0.3	6.0	0.3	10.8	0.4	10.4	0.4	31.4	0.7	38.1	0.8
Race¹ and Hispanic Origin												
White	4.9	0.2	6.2	0.2	8.0	0.2	8.2	0.2	29.7	0.4	43.0	0.5
White, not Hispanic	4.1	0.2	4.7	0.2	6.5	0.2	7.2	0.2	29.0	0.5	48.3	0.6
Black	10.8	0.8	11.2	0.6	11.8	0.7	10.8	0.7	29.7	0.9	25.6	1.0
Asian	5.3	0.7	4.9	0.6	5.6	0.7	7.3	0.8	25.6	1.4	51.4	1.5
Hispanic (any race)	7.6	0.4	11.7	0.6	13.7	0.6	11.8	0.6	32.5	0.8	22.7	0.8
SPM												
All people	4.9	0.2	9.0	0.2	15.4	0.3	14.1	0.3	35.5	0.4	21.0	0.3
Age												
Under 18 years	4.4	0.3	10.8	0.4	19.8	0.5	16.9	0.5	34.4	0.6	13.7	0.4
18 to 64 years	5.1	0.2	8.3	0.2	13.8	0.3	13.5	0.3	36.7	0.4	22.6	0.4
65 years and older	5.2	0.3	9.4	0.4	15.1	0.5	12.8	0.5	32.3	0.6	25.2	0.7
Race¹ and Hispanic Origin												
White	4.4	0.2	8.1	0.2	14.1	0.3	13.7	0.3	36.6	0.4	23.1	0.4
White, not Hispanic	4.0	0.2	6.0	0.2	11.3	0.3	12.6	0.3	39.2	0.5	27.0	0.4
Black	7.4	0.6	14.2	0.8	22.9	1.0	15.8	0.8	29.5	1.0	10.2	0.6
Asian	5.9	0.7	8.7	0.9	13.2	1.1	13.3	1.1	36.9	1.5	21.9	1.3
Hispanic (any race)	5.9	0.5	16.0	0.7	24.9	0.9	18.3	0.7	26.5	0.8	8.2	0.4

* Includes unrelated individuals under the age of 15.

¹ The margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. The MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at www2.census.gov/library/publications/2018/demo/p60-263sa.pdf.

¹ Federal surveys give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This table shows data using the first approach (race alone). The use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. Information on people who reported more than one race, such as White and American Indian and Alaska Native or Asian and Black or African American, is available from the 2010 Census through American FactFinder. About 2.9 percent of people reported more than one race in the 2010 Census. Data for American Indians and Alaska Natives, Native Hawaiians and Other Pacific Islanders, and those reporting two or more races are not shown separately.

Note: Details may not sum to totals due to rounding.

Source: U.S. Census Bureau, Current Population Survey, 2017–2018 Annual Social and Economic Supplements.

Table A-5.

Number and Percentage of People in Poverty by State Using 3-Year Average Over: 2015, 2016, and 2017

(Numbers in thousands, margin of error in thousands or percentage points as appropriate. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

State	Official**				SPM				Difference	
	Number		Percent		Number		Percent		Number	Percent
	Estimate	Margin of error [†] (±)	Estimate	Margin of error [†] (±)	Estimate	Margin of error [†] (±)	Estimate	Margin of error [†] (±)		
United States	41,234	554	12.9	0.2	45,325	583	14.1	0.2	*4,090	*1.3
Alabama	766	79	15.9	1.7	678	72	14.0	1.5	*-88	*-1.8
Alaska	86	11	12.1	1.5	86	10	12.1	1.3	Z	Z
Arizona	1,066	104	15.5	1.5	1,069	85	15.6	1.2	4	0.1
Arkansas	460	26	15.6	0.9	417	27	14.2	0.9	*-43	*-1.5
California	5,263	198	13.4	0.5	7,462	214	19.0	0.5	*2,199	*5.6
Colorado	480	52	8.7	1.0	597	62	10.9	1.1	*117	*2.1
Connecticut	354	47	9.9	1.3	445	54	12.5	1.5	*91	*2.6
Delaware	102	10	10.6	1.1	110	10	11.5	1.1	*9	*0.9
District of Columbia . .	106	7	15.5	1.0	138	8	20.2	1.2	*32	*4.7
Florida	2,933	179	14.3	0.9	3,705	196	18.1	0.9	*772	*3.8
Georgia	1,594	110	15.6	1.1	1,598	104	15.6	1.0	5	Z
Hawaii	142	16	10.2	1.2	210	18	15.0	1.3	*68	*4.9
Idaho	198	16	11.7	0.9	164	20	9.7	1.2	*-34	*-2.0
Illinois	1,428	112	11.3	0.9	1,586	110	12.5	0.9	*158	*1.3
Indiana	801	61	12.3	1.0	787	68	12.1	1.0	-14	-0.2
Iowa	301	37	9.8	1.2	264	27	8.6	0.9	-37	-1.2
Kansas	382	39	13.3	1.4	287	27	10.0	0.9	*-95	*-3.3
Kentucky	717	59	16.3	1.4	602	47	13.7	1.1	*-116	*-2.6
Louisiana	916	61	20.0	1.3	811	76	17.7	1.6	*-106	*-2.3
Maine	164	23	12.4	1.7	138	19	10.4	1.5	*-26	*-2.0
Maryland	486	59	8.2	1.0	806	74	13.6	1.3	*320	*5.4
Massachusetts	719	62	10.6	0.9	889	74	13.1	1.1	*170	*2.5
Michigan	1,204	87	12.2	0.9	1,118	97	11.3	1.0	*-86	*-0.9
Minnesota	472	71	8.6	1.3	446	71	8.1	1.3	-27	-0.5
Mississippi	575	33	19.5	1.1	468	24	15.9	0.8	*-107	*-3.6
Missouri	674	96	11.3	1.6	670	79	11.3	1.3	-4	-0.1
Montana	115	13	11.1	1.3	104	10	10.1	1.1	*-11	*-1.1
Nebraska	189	18	10.1	1.0	182	20	9.7	1.2	-6	-0.3
Nevada	361	33	12.3	1.1	399	37	13.6	1.3	*38	*1.3
New Hampshire	89	13	6.8	0.9	114	14	8.7	1.0	*25	*1.9
New Jersey	869	86	9.7	1.0	1,349	101	15.1	1.1	*480	*5.4
New Mexico	382	41	18.7	2.1	311	24	15.2	1.2	*-71	*-3.5
New York	2,586	143	13.2	0.7	3,038	142	15.5	0.7	*452	*2.3
North Carolina	1,458	102	14.4	1.0	1,442	90	14.3	0.9	-16	-0.2
North Dakota	83	12	11.0	1.7	81	7	10.7	1.0	-2	-0.3
Ohio	1,533	95	13.4	0.8	1,314	99	11.4	0.9	*-219	*-1.9
Oklahoma	536	68	13.8	1.7	459	63	11.8	1.6	*-77	*-2.0
Oregon	466	76	11.3	1.9	517	53	12.5	1.3	*51	*1.2
Pennsylvania	1,456	103	11.6	0.8	1,485	113	11.8	0.9	29	0.2
Rhode Island	123	15	11.8	1.4	106	14	10.1	1.4	*-17	*-1.7
South Carolina	716	60	14.6	1.3	668	56	13.7	1.1	*-48	*-1.0
South Dakota	111	14	12.9	1.7	91	10	10.6	1.2	*-20	*-2.4
Tennessee	915	72	13.7	1.1	873	70	13.1	1.1	-43	-0.6
Texas	3,874	204	14.0	0.7	4,071	200	14.7	0.7	*197	*0.7
Utah	271	33	8.8	1.1	286	34	9.3	1.1	15	0.5

See footnotes at end of table.

Table A-5.

Number and Percentage of People in Poverty by State Using 3-Year Average Over: 2015, 2016, and 2017—Con.

(Numbers in thousands, margin of error in thousands or percentage points as appropriate. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

State	Official**				SPM				Difference	
	Number		Percent		Number		Percent		Number	Percent
	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)		
Vermont.....	63	7	10.2	1.1	63	7	10.2	1.1	Z	0.1
Virginia.....	893	87	10.9	1.1	1,205	101	14.7	1.2	*313	*3.8
Washington.....	786	56	10.8	0.8	783	68	10.7	0.9	-3	Z
West Virginia.....	300	54	16.6	3.0	258	24	14.3	1.3	*-42	*-2.3
Wisconsin.....	608	56	10.5	1.0	516	62	8.9	1.1	*-93	*-1.6
Wyoming.....	63	10	11.0	1.7	59	7	10.4	1.3	-3	-0.6

* An asterisk preceding an estimate indicates change is statistically different from zero at the 90 percent confidence level.

** Includes unrelated individuals under the age of 15.

¹ The margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. The MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at www2.census.gov/library/publications/2018/demo/p60-263sa.pdf.

Z Represents or rounds to zero.

Note: Details may not sum to totals due to rounding.

Source: U.S. Census Bureau, Current Population Survey, 2016–2018 Annual Social and Economic Supplements.

Table A-6.

Effect of Individual Elements on SPM Rates: 2016 and 2017

(Margin of error in percentage points. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Element	All people		Under 18 years		18 to 64 years		65 years and over	
	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)	Estimate	Margin of error ¹ (±)
2017								
All people	13.92	0.31	15.58	0.53	13.25	0.32	14.11	0.54
ADDITIONS								
Social Security	-8.36	0.19	-1.95	0.18	-4.00	0.17	-34.56	0.73
Refundable tax credits	-2.56	0.12	-6.08	0.33	-1.86	0.09	-0.17	0.06
SNAP	-1.06	0.08	-1.99	0.21	-0.83	0.07	-0.60	0.10
SSI	-0.99	0.08	-0.64	0.11	-1.04	0.09	-1.30	0.17
Housing subsidies	-0.91	0.08	-1.21	0.17	-0.70	0.07	-1.28	0.13
Child support received	-0.30	0.05	-0.71	0.12	-0.21	0.04	-0.04	0.02
School lunch	-0.38	0.05	-0.98	0.14	-0.24	0.04	-0.03	0.02
TANF/general assistance	-0.17	0.03	-0.40	0.09	-0.12	0.02	-0.03	0.03
Unemployment insurance	-0.17	0.03	-0.20	0.06	-0.18	0.04	-0.05	0.02
LIHEAP	-0.06	0.02	-0.06	0.03	-0.05	0.02	-0.09	0.03
Workers' compensation	-0.06	0.02	-0.04	0.02	-0.08	0.03	-0.03	0.03
WIC	-0.09	0.02	-0.21	0.07	-0.06	0.02	-0.01	0.01
SUBTRACTIONS								
Child support paid	0.07	0.02	0.09	0.04	0.07	0.02	0.01	0.01
Federal income tax	0.47	0.05	0.35	0.09	0.58	0.06	0.24	0.07
FICA	1.47	0.10	1.94	0.20	1.56	0.10	0.41	0.09
Work expenses	1.74	0.11	2.40	0.22	1.81	0.11	0.50	0.09
Medical expenses	3.38	0.13	3.13	0.23	2.95	0.13	5.42	0.37
2016								
All people	13.97	0.25	15.24	0.47	13.35	0.29	14.55	0.47
ADDITIONS								
Social Security	-8.15	0.17	-2.03	0.18	-3.79	0.15	-34.77	0.73
Refundable tax credits	-2.54	0.13	-5.92	0.33	-1.86	0.10	-0.20	0.05
SNAP	-1.12	0.09	-2.04	0.21	-0.89	0.07	-0.64	0.10
SSI	-1.05	0.08	-0.67	0.10	-1.15	0.09	-1.23	0.13
Housing subsidies	-0.98	0.07	-1.41	0.17	-0.74	0.06	-1.27	0.15
Child support received	-0.24	0.04	-0.57	0.11	-0.16	0.03	-0.02	0.01
School lunch	-0.41	0.06	-1.03	0.16	-0.27	0.04	-0.02	0.02
TANF/general assistance	-0.19	0.04	-0.41	0.10	-0.15	0.03	-0.04	0.02
Unemployment insurance	-0.21	0.04	-0.28	0.07	-0.23	0.04	-0.04	0.02
LIHEAP	-0.05	0.01	-0.07	0.04	-0.04	0.01	-0.07	0.03
Workers' compensation	-0.08	0.02	-0.08	0.03	-0.08	0.03	-0.05	0.03
WIC	-0.09	0.03	-0.20	0.07	-0.07	0.02	-0.01	0.01
SUBTRACTIONS								
Child support paid	0.11	0.02	0.11	0.04	0.13	0.03	0.01	0.02
Federal income tax	0.46	0.05	0.31	0.08	0.59	0.07	0.14	0.05
FICA	1.48	0.10	1.99	0.18	1.57	0.11	0.34	0.07
Work expenses	1.86	0.12	2.61	0.21	1.94	0.12	0.42	0.08
Medical expenses	3.29	0.15	2.91	0.24	2.81	0.15	5.76	0.35

¹ The margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. The MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at www2.census.gov/library/publications/2018/demo/p60-263sa.pdf.

Note: Details may not sum to totals due to rounding.

Source: U.S. Census Bureau, Current Population Survey, 2017–2018 Annual Social and Economic Supplements.

Table A-7.

Effect of Individual Elements on the Number of Individuals in Poverty: 2016 and 2017

(Numbers and margin of error in thousands. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)

Element	All people		Under 18 years		18 to 64 years		65 years and over	
	Number	Margin of error ¹ (±)	Number	Margin of error ¹ (±)	Number	Margin of error ¹ (±)	Number	Margin of error ¹ (±)
2017								
All people	44,972	993	11,521	399	26,244	628	7,207	274
ADDITIONS								
Social Security	-27,027	603	-1,442	130	-7,931	339	-17,653	380
Refundable tax credits	-8,271	402	-4,496	247	-3,688	181	-87	29
SNAP	-3,424	268	-1,473	157	-1,646	134	-306	52
SSI	-3,190	254	-472	80	-2,054	169	-664	87
Housing subsidies	-2,934	242	-897	125	-1,381	134	-656	68
Child support received	-961	160	-522	90	-420	76	-18	12
School lunch	-1,221	169	-722	107	-483	73	-16	10
TANF/general assistance	-544	109	-296	66	-231	47	-16	15
Unemployment insurance	-542	102	-151	48	-366	71	-25	12
LIHEAP	-185	52	-47	25	-90	30	-47	18
Workers' compensation	-202	70	-29	17	-156	59	-17	13
WIC	-279	79	-156	49	-120	36	-3	4
SUBTRACTIONS								
Child support paid	218	60	67	26	148	40	3	4
Federal income tax	1,527	172	260	66	1,144	119	123	35
FICA	4,739	312	1,435	145	3,096	195	207	44
Work expenses	5,613	354	1,773	166	3,584	218	257	44
Medical expenses	10,938	434	2,318	171	5,852	262	2,768	190
2016								
All people	44,752	810	11,281	349	26,303	571	7,168	235
ADDITIONS								
Social Security	-26,110	549	-1,500	136	-7,476	301	-17,133	374
Refundable tax credits	-8,148	430	-4,384	245	-3,667	206	-97	26
SNAP	-3,585	281	-1,514	153	-1,753	138	-318	49
SSI	-3,356	254	-494	75	-2,257	182	-605	67
Housing subsidies	-3,125	239	-1,046	125	-1,454	126	-626	73
Child support received	-757	131	-426	81	-322	57	-9	6
School lunch	-1,311	190	-762	117	-538	82	-12	8
TANF/general assistance	-617	120	-305	73	-293	57	-19	9
Unemployment insurance	-680	119	-208	53	-454	76	-18	10
LIHEAP	-157	44	-48	26	-72	24	-36	15
Workers' compensation	-242	70	-58	24	-158	50	-26	17
WIC	-284	94	-148	52	-133	46	-3	4
SUBTRACTIONS								
Child support paid	350	80	80	33	263	57	7	9
Federal income tax	1,469	167	233	56	1,166	131	70	22
FICA	4,726	314	1,473	133	3,087	213	167	36
Work expenses	5,971	369	1,929	159	3,832	243	209	38
Medical expenses	10,542	483	2,157	175	5,546	301	2,839	176

¹ The margin of error (MOE) is a measure of an estimate's variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval. The MOEs shown in this table are based on standard errors calculated using replicate weights. For more information, see "Standard Errors and Their Use" at www2.census.gov/library/publications/2018/demo/p60-263sa.pdf.

Note: Details may not sum to totals due to rounding.

Source: U.S. Census Bureau, Current Population Survey, 2017–2018 Annual Social and Economic Supplements.