The Supplemental Poverty Measure: 2015

Current Population Reports

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INTRODUCTION

This is the sixth report describing the Supplemental Poverty Measure (SPM) released by the U.S. Census Bureau, with support from the Bureau of Labor Statistics (BLS). The SPM 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 current official poverty measure.

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) established the Panel on Poverty and Family Assistance, which released its report, *Measuring Poverty: A New Approach*, in the spring of 1995 (Citro and Michael, 1995). In March of 2010, an Interagency Technical Working Group on Developing a Supplemental Poverty Measure (ITWG) listed suggestions for a new measure that would supplement the current official measure of poverty.[1] The ITWG developed a set of initial starting points to permit the Census Bureau, in cooperation with the BLS, to produce the SPM that would be released along with the official measure each year. Their suggestions included:

- The *SPM thresholds* should represent a dollar amount spent on a basic set of goods that includes food, clothing, shelter, and utilities (FCSU), and a small additional amount to allow for other needs (e.g., household supplies, personal care, nonwork-related transportation). This threshold should be calculated with 5 years of expenditure data for family units with exactly two children using Consumer Expenditure Survey (CE) data, and it should be adjusted (using a specified equivalence scale) to reflect the needs of different family types and geographic differences in housing costs. Adjustments to thresholds should be made over time to reflect real change in expenditures on this basic bundle of goods around the 33rd percentile of the expenditure distribution. So far as possible with available data, the calculation of FCSU should include any non-cash benefits that are counted on the resource side for FCSU. This is necessary for consistency of the threshold and resource definitions.

- The *SPM family unit* resources should be defined as the value of cash income from all sources, plus the value of noncash benefits that are available to buy the basic bundle of goods (FCSU) minus necessary expenses for critical goods and services not included in the thresholds. Noncash benefits include nutritional assistance, subsidized housing, and home energy assistance. Necessary expenses that must be subtracted include income taxes, Social Security payroll taxes, childcare and other work-related expenses, child support payments to another household, and contributions toward the cost of medical care, health insurance premiums, and other medical out-of-pocket expenditures.

[1] For information, see ITWG, "Observations From the Interagency Technical Working Group on Developing a Supplemental Poverty Measure," March 2010, available at <www.census.gov/hhes/povmeas/methodology/supplemental/research/SPM_TWGObservations.pdf>.

Poverty Measure Concepts: Official and Supplemental		
	Official Poverty Measure	Supplemental Poverty Measure
Measurement Units	Families or unrelated individuals	Families (including any coresident unrelated children, foster children, 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	The mean of expenditures on food, clothing, shelter, and utilities (FCSU) over all two-child consumer units in the 30th to 36th percentile range multiplied by 1.2
Threshold Adjustments	Vary by family size, composition, and age of householder	Geographic adjustments for differences in housing costs by tenure and a three-parameter equivalence scale for family size and composition
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 families can use to meet their FCSU needs, minus taxes (or plus tax credits), minus work expenses, out-of-pocket medical expenses, and child support paid to another household

The ITWG stated that the official poverty measure, as defined in Office of Management and Budget Statistical Policy Directive No. 14, will not be replaced by the SPM. They noted that the official measure is sometimes identified in legislation regarding program eligibility and funding distribution, while the SPM will not be used in this way. The SPM is designed to provide information on aggregate levels of economic need at a national level or within large subpopulations or areas and, as such, the SPM will be an additional macroeconomic statistic providing further understanding of economic conditions and trends.

This report presents updated estimates of the prevalence of poverty in the United States, overall and for selected demographic groups, using the official measure and the SPM. The first section presents differences between the official poverty measure and the SPM. Comparing the two measures sheds light on the effects of noncash benefits, taxes, and other nondiscretionary expenses on measured economic well-being. The distribution of income-to-poverty threshold ratios and poverty rates by state are estimated and compared for the two measures. The second section of the report examines the SPM itself. Effects of benefits and expenses on SPM rates are explicitly examined, and SPM estimates for 2015 are compared with the 2014 figures to assess changes in SPM rates from the previous year. SPM rates for the 7 years for which there are estimates, 2009 to 2015, are shown.

POVERTY ESTIMATES FOR 2015: OFFICIAL AND SPM

The measures presented in this study use the 2016 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) income information that refers to calendar year 2015 to estimate SPM resources.[2] These are the same data used for the preparation of official poverty statistics and reported in Proctor, Semega, and Kollar (2016).[3]

[2] The data in this report are from the 2014 to 2016 CPS ASEC. 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 <ftp://ftp2.census.gov/library/publications/2014/demo/p60-249sa.pdf>, <www2.census.gov/library/publications/2015/demo/p60-252sa.pdf>, and <www2.census.gov/library/publications/2016/demo/p60-256sa.pdf>.

[3] The official thresholds are used for the official poverty estimates presented here, however, unlike the official estimates, unrelated individuals under the age of 15 are included in the universe. Since the CPS ASEC does not ask income questions for individuals under age 15, they are excluded from the universe for official poverty calculations. For the official poverty estimates shown in this report, all unrelated individuals under age 15 are included and presumed to be in poverty. For the SPM, they are assumed to share resources with the household reference person.

Table 1.
Two-Adult-Two-Child Poverty Thresholds: 2014 and 2015
(In dollars)

Measure	2014	Standard error	2015	Standard error
Official poverty measure.	24,008	N	24,036	N
Research supplemental poverty measure				
Owners with a mortgage	25,844	345	25,930	297
Owners without a mortgage	21,380	470	21,806	417
Renters	25,460	363	25,583	282

N Not available.

Note: The thresholds, shares, and means were produced by Marisa Gudrais with assistance from Juan D. Munoz, and under the guidance of Thesia I. Garner. Gudrais, 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 BLS, or the views of other staff members within this agency. For methodological details and related research regarding the SPM thresholds, see <http://stats.bls.gov/pir/spmhome.htm>.

Source: Bureau of Labor Statistics, Division of Price and Index Number Research, September 2016, <http://stats.bls.gov/pir/spmhome.htm>..

The SPM thresholds for 2015 are based on out-of-pocket spending on basic needs (FCSU).[4] Thresholds use 5 years of quarterly data from the CE; the thresholds are produced by the BLS Division of Price and Index Number Research (DPINR).[5, 6] Expenditures on shelter and utilities are determined for three housing tenure groups. The three groups include owners with mortgages, owners without mortgages, and renters. The thresholds used here include the value of Supplemental Nutrition Assistance Program (SNAP) benefits in the measure of spending on food.[7] Thresholds for 2014 and 2015 are in Table 1. The American Community Survey (ACS) data on rents paid are used to adjust the SPM thresholds for differences in spending on housing across geographic areas.[8]

The two measures use different units of analysis. The official measure of poverty uses the Census Bureau-defined family that includes all individuals residing together who are related by birth, marriage, or adoption and treats all unrelated individuals over age 14 independently. For the SPM, the family unit includes all related individuals who live at the same address, as well as any coresident unrelated children who are cared for by the family (such as foster children), and any unmarried partners and their children.[9] These units are referred to as *SPM Resource Units*. Selection of the unit of analysis for poverty measurement implies that members of that unit share income or resources with one another.

SPM thresholds are adjusted for the size and composition of the SPM Resource Unit relative to the two-adult-two-child threshold using an equivalence scale.[10] The official measure adjusts thresholds based on family size, number

[4] See appendix for description of threshold calculation.

[5] BLS-DPINR, Research Experimental Poverty Thresholds Web site, <http://stats.bls.gov/pir/spmhome.htm>.

[6] See <http://stats.bls.gov/cex/> for information on the CE.

[7] For consistency in measurement with the resource measure, the thresholds should include the value of noncash benefits. Additional research continues at BLS on appropriate methods to do this.

[8] See appendix for description of the geographic adjustments.

[9] This definition corresponds broadly with the unit of data collection (the consumer unit) that BLS uses to calculate poverty thresholds from the CE data.

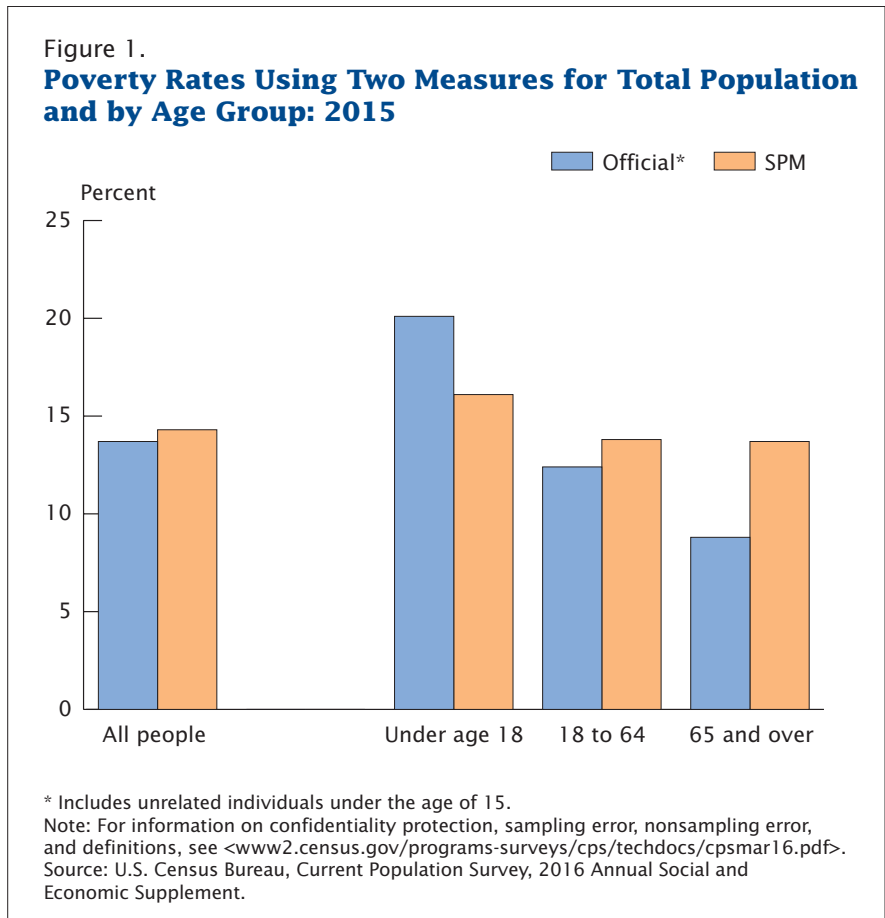[10] See appendix for description of the three-parameter scale.

Resource Estimates SPM Resources = Money Income From All Sources	
Plus:	**Minus:**
Supplemental Nutritional Assistance Program (SNAP)	Taxes (plus credits such as the Earned Income Tax Credit [EITC])
National School Lunch Program	Expenses related to work
Supplementary Nutrition Program for Women Infants and Children (WIC)	Child care expenses
Housing subsidies	Medical Out-of-Pocket (MOOP) expenses
Low Income Home Energy Assistance Program (LIHEAP)	Child support paid

of children and adults, as well as whether or not the householder is aged 65 or over. The official poverty threshold for a two-adult-two-child family was $24,036 in 2015. The SPM thresholds vary by housing tenure and are higher for owners with mortgages and renters than the official threshold. These two groups comprise about 76 percent of the total population. The official threshold increased by $28 between 2014 and 2015. The changes in the SPM thresholds between 2014 and 2015 were not statistically significant.

SPM resources are estimated as the sum of cash income plus any federal government noncash benefits that families can use to meet their FCSU needs minus taxes (plus tax credits), work expenses, and out-of-pocket medical expenses. The text box summarizes the additions and subtractions for the SPM; descriptions are in the appendix.

POVERTY RATES: OFFICIAL AND SPM

Figure 1 shows poverty rates using the two measures for the total population and for three age groups: under 18 years, 18 to 64 years, and 65 years and over. Table 2 shows poverty rates for selected demographic groups. The percentage of the population that was poor using the official measure for

Figure 1.
Poverty Rates Using Two Measures for Total Population and by Age Group: 2015

* Includes unrelated individuals under the age of 15.
Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar16.pdf>.
Source: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement.

2015 was 13.5 percent (Proctor, Semega, and Kollar, 2016). For this study, including unrelated individuals under age 15 in the universe, the poverty rate was 13.7 percent. The SPM rate was 14.3 percent for 2015, significantly higher than the official rate. While, as noted, SPM poverty thresholds are generally

higher than official thresholds, other parts of the measure also contribute to differences in the estimated prevalence of poverty in the United States.

In 2015, 45.7 million people were poor using the SPM definition of poverty, more than the 43.5 million using the official definition of

Table 2.
Number and Percentage of People in Poverty by Different Poverty Measures: 2015

(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/cpsmar16.pdf*)

Characteristic	Number** (in thousands)	Official** Number Estimate	Official** Number Margin of error† (±)	Official** Percent Estimate	Official** Percent Margin of error† (±)	SPM Number Estimate	SPM Number Margin of error† (±)	SPM Percent Estimate	SPM Percent Margin of error† (±)	Difference Number	Difference Percent
All people.	**318,868**	**43,538**	**919**	**13.7**	**0.3**	**45,651**	**901**	**14.3**	**0.3**	***2,113**	***0.7**
Sex											
Male.	156,205	19,233	467	12.3	0.3	21,385	480	13.7	0.3	*2,152	*1.4
Female.	162,664	24,305	542	14.9	0.3	24,266	516	14.9	0.3	−39	Z
Age											
Under 18 years	74,062	14,923	443	20.1	0.6	11,929	375	16.1	0.5	*−2,994	*−4.0
18 to 64 years	197,260	24,414	566	12.4	0.3	27,222	588	13.8	0.3	*2,808	*1.4
65 years and older.	47,547	4,201	203	8.8	0.4	6,500	236	13.7	0.5	*2,299	*4.8
Type of Unit											
Married couple.	190,108	12,120	534	6.4	0.3	16,920	611	8.9	0.3	*4,800	*2.5
Female householder	65,634	17,373	539	26.5	0.7	16,984	492	25.9	0.7	*−389	*−0.6
Male householder	35,103	5,957	298	17.0	0.8	7,330	333	20.9	0.8	*1,373	*3.9
New SPM unit	28,023	8,088	356	28.9	1.0	4,417	347	15.8	1.2	*−3,670	*−13.1
Race[1] and Hispanic Origin											
White	245,805	28,835	707	11.7	0.3	30,852	711	12.6	0.3	*2,018	*0.8
White, not Hispanic	195,646	17,981	546	9.2	0.3	19,638	555	10.0	0.3	*1,657	*0.8
Black	41,703	10,099	417	24.2	1.0	9,575	421	23.0	1.0	*−524	*−1.3
Asian	18,249	2,086	190	11.4	1.0	2,921	226	16.0	1.2	*836	*4.6
Hispanic (any race)	56,873	12,226	446	21.5	0.8	12,719	479	22.4	0.8	*493	*0.9
Nativity											
Native born	275,798	36,373	805	13.2	0.3	36,328	736	13.2	0.3	−45	Z
Foreign born	43,070	7,165	330	16.6	0.7	9,323	382	21.6	0.8	*2,158	*5.0
Naturalized citizen	20,086	2,258	152	11.2	0.7	3,347	181	16.7	0.9	*1,089	*5.4
Not a citizen.	22,984	4,907	285	21.3	1.0	5,976	305	26.0	1.0	*1,069	*4.7
Tenure											
Owner	208,768	15,385	552	7.4	0.3	19,016	605	9.1	0.3	*3,631	*1.7
Owner/mortgage	134,299	6,935	388	5.2	0.3	10,009	467	7.5	0.3	*3,073	*2.3
Owner/no mortgage/rent free. . .	77,815	9,375	417	12.0	0.5	9,853	414	12.7	0.5	*478	*0.6
Renter	106,754	27,227	695	25.5	0.6	25,789	677	24.2	0.6	*−1,438	*−1.3
Residence											
Inside metropolitan statistical areas	274,392	36,065	938	13.1	0.3	39,798	918	14.5	0.3	*3,733	*1.4
Inside principal cities	103,740	17,492	650	16.9	0.6	18,534	701	17.9	0.6	*1,042	*1.0
Outside principal cities.	170,652	18,573	701	10.9	0.4	21,264	733	12.5	0.4	*2,691	*1.6
Outside metropolitan statistical areas[2]	44,477	7,473	639	16.8	0.8	5,853	528	13.2	0.7	*−1,620	*−3.6
Region											
Northeast.	55,879	6,991	391	12.5	0.7	8,004	396	14.3	0.7	*1,012	*1.8
Midwest	67,115	7,934	378	11.8	0.6	7,210	374	10.7	0.6	*−724	*−1.1
South	120,115	18,464	598	15.4	0.5	18,552	602	15.4	0.5	87	0.1
West	75,759	10,148	420	13.4	0.6	11,886	471	15.7	0.6	*1,738	*2.3
Health Insurance Coverage											
With private insurance	214,238	12,462	466	5.8	0.2	18,350	548	8.6	0.3	*5,888	*2.7
With public, no private insurance. .	75,664	23,552	673	31.1	0.8	19,687	562	26.0	0.6	*−3,864	*−5.1
Not insured	28,966	7,524	318	26.0	0.9	7,614	332	26.3	1.0	90	0.3

See footnotes at end of table.

Table 2.
Number and Percentage of People in Poverty by Different Poverty Measures: 2015—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/cpsmar16.pdf*)

Characteristic	Number** (in thousands)	Official**				SPM				Difference	
		Number		Percent		Number		Percent			
		Esti-mate	Margin of error† (±)	Esti-mate	Margin of error† (±)	Esti-mate	Margin of error† (±)	Esti-mate	Margin of error† (±)	Number	Percent
Work Experience											
Total, 18 to 64 years	197,260	24,414	566	12.4	0.3	27,222	588	13.8	0.3	*2,808	*1.4
All workers.	150,229	9,457	297	6.3	0.2	12,478	333	8.3	0.2	*3,021	*2.0
Worked full-time, year-round	105,695	2,537	136	2.4	0.1	4,999	186	4.7	0.2	*2,462	*2.3
Less than full-time, year-round . . .	44,534	6,920	263	15.5	0.6	7,479	273	16.8	0.6	*559	*1.3
Did not work at least 1 week	47,031	14,957	399	31.8	0.7	14,744	404	31.4	0.7	−213	−0.5
Disability Status[3]											
Total, 18 to 64 years	197,260	24,414	566	12.4	0.3	27,222	588	13.8	0.3	*2,808	*1.4
With a disability	15,276	4,358	191	28.5	1.1	4,042	184	26.5	1.0	*−316	*−2.1
With no disability	181,069	20,000	526	11.0	0.3	23,101	532	12.8	0.3	*3,101	*1.7

* 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.

† 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. The MOE is the estimated 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/2016/demo/p60-256sa.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 2010 Census through American FactFinder. About 2.9 percent of people reported more than one race in 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 "Outside metropolitan statistical areas" category includes both micropolitan statistical areas and territory outside of metropolitan and micropolitan statistical areas. For more information, see "About Metropolitan and Micropolitan Statistical Areas" at <www.census.gov/population/metro>.

[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 Armed Forces.

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

poverty with the adjusted universe. While for most groups, SPM rates were higher than official poverty rates, the SPM shows lower poverty rates for children, individuals living in female householder units, individuals included in new SPM Resource Units, Blacks, renters, those living outside metropolitan areas, residents of the Midwest, those covered by only public health insurance, and individuals with a disability. Most other groups had higher poverty rates using the SPM, rather than the official measure. Official and SPM poverty rates for females, individuals born in the United States, residents of the South, the uninsured, and individuals who did not work were not statistically different. Note that poverty rates for those 65 years

and over were higher under the SPM compared with the official measure. This partially reflects that the official thresholds are set lower for individuals with householders in this age group, while the SPM thresholds do not vary by age.[11]

Distribution of Income-to-Poverty 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 on SPM rates. Table 3 shows the distribution of income-to-poverty threshold ratios for various groups. Dividing income by the respective poverty threshold

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

controls income by unit size and composition. Figure 2 shows the percent distribution of income-to-threshold ratio categories for all people, individuals under 18 years old and individuals 65 years old and over.

In general, the comparison suggests that a smaller percentage of the population was in the lowest category of the distribution using the SPM. For most groups, including targeted noncash benefits reduced the percentage of the population in the lowest category—those with income below half their poverty threshold. This was true for the age groups shown in Table 3, except for those over age 64. They showed a higher percentage below half of the poverty line with the SPM—4.5 percent compared to 2.8 percent

Table 3.

Percentage of People by Ratio of Income/Resources to Poverty Threshold: 2015

(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/cpsmar16.pdf*)

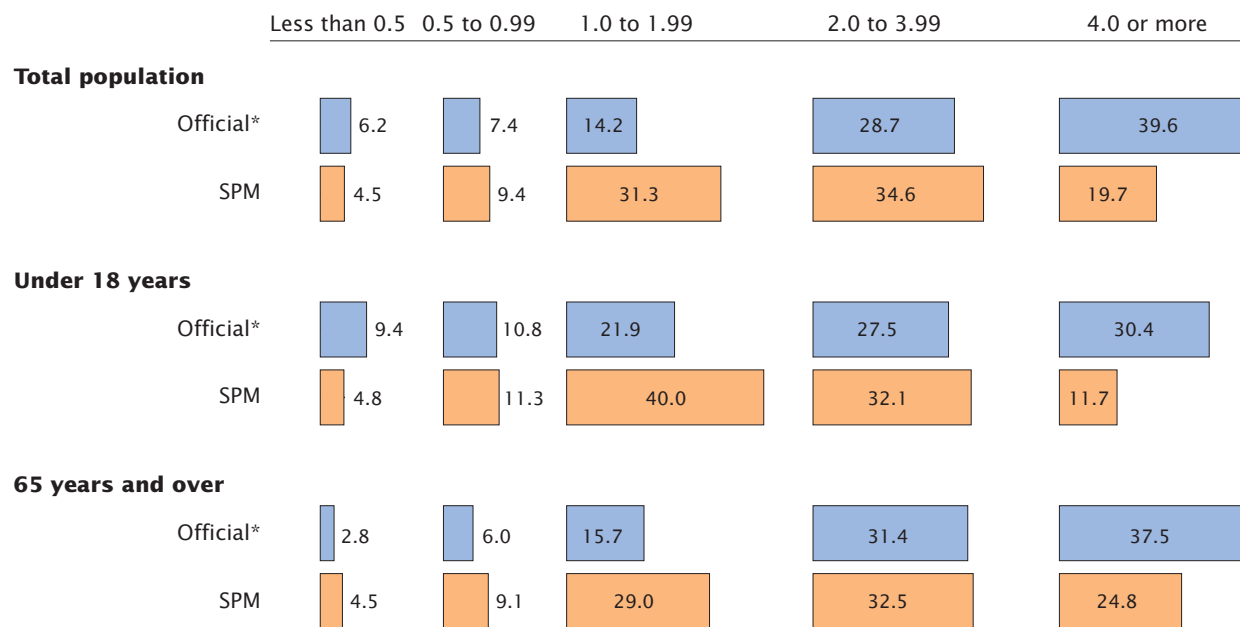| Characteristic	Less than 0.5	Margin of error[†] (±)	0.5 to 0.99	Margin of error[†] (±)	1.0 to 1.49	Margin of error[†] (±)	1.5 to 1.99	Margin of error[†] (±)	2.0 to 3.99	Margin of error[†] (±)	4.0 or more	Margin of error[†] (±)
OFFICIAL*												
All people.	**6.2**	**0.2**	**7.4**	**0.2**	**9.0**	**0.2**	**9.2**	**0.2**	**28.7**	**0.3**	**39.6**	**0.4**
Age												
Under 18 years	9.4	0.4	10.8	0.4	11.6	0.4	10.3	0.4	27.5	0.6	30.4	0.5
18 to 64 years	5.9	0.2	6.5	0.2	7.5	0.2	8.2	0.2	28.4	0.4	43.5	0.4
65 years and older.	2.8	0.3	6.0	0.3	10.8	0.4	11.5	0.5	31.4	0.8	37.5	0.9
Race[1] and Hispanic Origin												
White	5.2	0.2	6.5	0.2	8.4	0.2	8.9	0.2	28.9	0.4	42.1	0.4
White, not Hispanic	4.4	0.2	4.8	0.2	6.9	0.2	7.8	0.3	28.7	0.4	47.4	0.5
Black	11.1	0.7	13.1	0.7	12.4	0.7	11.2	0.7	27.6	0.9	24.6	0.9
Asian	6.3	0.8	5.2	0.6	6.6	0.8	6.5	0.9	26.9	1.4	48.6	1.6
Hispanic (any race)	8.7	0.5	12.8	0.6	14.3	0.7	13.4	0.7	29.6	0.8	21.1	0.7
SPM												
All people.	**4.9**	**0.2**	**9.4**	**0.2**	**16.3**	**0.3**	**15.0**	**0.3**	**34.6**	**0.4**	**19.7**	**0.3**
Age												
Under 18 years	4.8	0.3	11.3	0.5	21.4	0.5	18.6	0.5	32.1	0.6	11.7	0.4
18 to 64 years	5.0	0.2	8.8	0.2	14.5	0.3	14.1	0.3	36.1	0.5	21.5	0.4
65 years and older.	4.5	0.3	9.1	0.4	15.8	0.5	13.2	0.5	32.5	0.7	24.8	0.7
Race[1] and Hispanic Origin												
White	4.3	0.2	8.3	0.3	15.0	0.3	14.7	0.3	36.0	0.5	21.8	0.4
White, not Hispanic	3.8	0.2	6.3	0.2	11.9	0.3	13.7	0.3	39.0	0.5	25.3	0.5
Black	7.5	0.5	15.5	0.9	22.8	0.9	16.6	0.8	28.1	0.9	9.5	0.6
Asian	6.7	0.8	9.3	0.9	15.2	1.4	13.7	1.1	33.9	1.7	21.2	1.2
Hispanic (any race)	6.3	0.4	16.1	0.7	27.2	0.7	18.6	0.7	24.2	0.8	7.7	0.4

* Includes unrelated individuals under the age of 15.

[†] 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. The MOE is the estimated 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/2016/demo/p60-256sa.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 2010 Census through American FactFinder. About 2.9 percent of people reported more than one race in 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.

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

Figure 2.
Distribution of People by Income-to-Threshold Ratios: 2015
(In percent)

	Less than 0.5	0.5 to 0.99	1.0 to 1.99	2.0 to 3.99	4.0 or more
Total population					
Official*	6.2	7.4	14.2	28.7	39.6
SPM	4.5	9.4	31.3	34.6	19.7
Under 18 years					
Official*	9.4	10.8	21.9	27.5	30.4
SPM	4.8	11.3	40.0	32.1	11.7
65 years and over					
Official*	2.8	6.0	15.7	31.4	37.5
SPM	4.5	9.1	29.0	32.5	24.8

* Includes unrelated individuals under the age of 15.
Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions,
see <www2.census.gov/programs-surveys/cps/techdocs/cpsmar16.pdf>.
Source: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement.

with the official measure. Many of the noncash benefits included in the SPM are not targeted to this 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 years and over age group with cash income below half their threshold was lower than that of other age groups using the official measure (2.8 percent), while the percentage for children was higher (9.4 percent). Subtracting Medical Out-of-Pocket (MOOP) and other expenses and adding noncash benefits in the SPM

narrowed the differences across the three age groups.[12]

On the other hand, the SPM shows a smaller percentage with income or resources in the highest category—four or more times the thresholds. 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.

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[12] The differences in the percentage of children with SPM resources under half their threshold and the percentage of individuals in the other age groups under half their threshold were not statistically significant. There was a lower percentage of individuals aged 65 and over below half their threshold than the percentage of individuals 18 to 64 years of age in this range.

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 family 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.

Table 3 shows similar calculations by race and ethnicity. Using the SPM, smaller percentages had

Table 4.
Number and Percentage of People in Poverty by State Using 3-Year Average Over 2013, 2014, and 2015

(Numbers in thousands, margin of error in thousands or percentage points as appropriate. Data for 2013 are based on the CPS ASEC sample of 30,000 addresses.[1] For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www2.census.gov/programs-surveys/cps/techdocs/cpsmar16.pdf*)

Characteristic	Official**				SPM				Difference	
	Number		Percent		Number		Percent			
	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Number	Percent
United States	**45,725**	**703**	**14.5**	**0.2**	**47,823**	**686**	**15.1**	**0.2**	***2,098**	***0.7**
Alabama	847	60	17.6	1.3	665	63	13.8	1.3	*−182	*−3.8
Alaska	73	10	10.4	1.4	81	11	11.7	1.6	*9	*1.3
Arizona	1,246	94	18.8	1.4	1,163	84	17.5	1.3	−83	−1.3
Arkansas	472	39	16.3	1.4	418	47	14.4	1.7	*−54	*−1.9
California	5,803	285	15.0	0.7	7,959	298	20.6	0.8	*2,157	*5.6
Colorado	591	69	11.0	1.3	601	63	11.2	1.2	10	0.2
Connecticut	344	49	9.6	1.4	460	51	12.8	1.4	*116	*3.2
Delaware	105	13	11.2	1.4	113	15	12.1	1.6	8	0.9
District of Columbia	130	11	19.6	1.7	147	13	22.2	2.0	*17	*2.6
Florida	3,172	187	16.0	1.0	3,766	221	19.0	1.1	*594	*3.0
Georgia	1,788	131	17.9	1.3	1,678	127	16.8	1.3	−109	−1.1
Hawaii	149	19	10.9	1.4	229	23	16.8	1.7	*81	*5.9
Idaho	204	25	12.5	1.6	176	25	10.8	1.6	*−28	*−1.7
Illinois.	1,636	121	12.9	0.9	1,747	135	13.7	1.1	*111	*0.9
Indiana.	978	111	15.0	1.7	806	88	12.4	1.4	*−171	*−2.6
Iowa.	351	38	11.4	1.3	325	40	10.5	1.3	−26	−0.8
Kansas.	356	48	12.6	1.7	281	38	9.9	1.3	*−76	*−2.7
Kentucky	913	73	20.7	1.7	706	78	16.0	1.8	*−207	*−4.7
Louisiana	961	82	21.0	1.8	816	64	17.9	1.4	*−145	*−3.2
Maine.	171	21	12.9	1.6	135	17	10.2	1.2	*−36	*−2.7
Maryland	599	79	10.1	1.3	847	81	14.3	1.4	*249	*4.2
Massachusetts.	839	108	12.5	1.6	1,013	115	15.1	1.7	*174	*2.6
Michigan	1,340	118	13.5	1.2	1,189	107	12.0	1.1	*−151	*−1.5
Minnesota	492	66	9.1	1.2	492	63	9.1	1.2	Z	Z
Mississippi.	593	61	20.2	2.0	498	54	17.0	1.9	*−95	*−3.2
Missouri.	757	98	12.7	1.6	692	77	11.6	1.3	−65	−1.1
Montana.	116	19	11.5	1.9	99	16	9.8	1.5	*−17	*−1.7
Nebraska.	207	25	11.0	1.3	171	24	9.1	1.3	*−36	*−1.9
Nevada	422	49	14.9	1.8	479	50	17.0	1.8	*57	*2.0
New Hampshire.	87	12	6.7	0.9	113	15	8.7	1.1	*26	*2.0
New Jersey	962	109	10.8	1.2	1,342	122	15.1	1.4	*380	*4.3
New Mexico.	451	51	22.0	2.5	352	42	17.1	2.0	*−99	*−4.8
New York	3,010	195	15.4	1.0	3,502	216	17.9	1.1	*492	*2.5
North Carolina	1,547	139	15.8	1.4	1,365	116	13.9	1.2	*−182	*−1.9
North Dakota	84	11	11.4	1.5	76	10	10.3	1.3	−8	−1.1
Ohio.	1,697	133	14.8	1.2	1,392	129	12.2	1.1	*−305	*−2.7
Oklahoma	671	80	17.8	2.2	523	53	13.8	1.4	*−149	*−3.9
Oregon.	542	67	13.6	1.6	535	66	13.4	1.6	−7	−0.2
Pennsylvania	1,535	132	12.1	1.0	1,594	135	12.6	1.1	59	0.5
Rhode Island	115	17	11.0	1.6	122	19	11.7	1.8	7	0.7
South Carolina.	793	80	16.7	1.7	773	71	16.3	1.5	−20	−0.4
South Dakota.	113	17	13.4	2.1	86	12	10.2	1.5	*−26	*−3.2
Tennessee.	1,030	92	15.9	1.4	1,003	108	15.5	1.7	−27	−0.4
Texas	4,299	234	16.1	0.9	4,001	222	14.9	0.8	*−298	*−1.1
Utah.	312	42	10.6	1.4	301	40	10.2	1.4	−11	−0.4

See footnotes at end of table.

Table 4.
Number and Percentage of People in Poverty by State Using 3-Year Average Over 2013, 2014, and 2015—Con.

(Numbers in thousands, margin of error in thousands or percentage points as appropriate. Data for 2013 are based on the CPS ASEC sample of 30,000 addresses.[1] For information on confidentiality protection, sampling error, nonsampling error, and definitions, see *www2.census.gov/programs-surveys/cps/techdocs/cpsmar16.pdf*)

Characteristic	Official**				SPM				Difference	
	Number		Percent		Number		Percent			
	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Number	Percent
Vermont.	56	8	9.1	1.3	54	9	8.8	1.4	−2	−0.3
Virginia.	852	90	10.3	1.1	1,100	95	13.3	1.2	*248	*3.0
Washington	838	82	11.9	1.2	836	94	11.8	1.3	−3	Z
West Virginia	336	45	18.6	2.6	268	33	14.8	1.8	*−69	*−3.8
Wisconsin	683	75	12.0	1.3	673	76	11.8	1.3	−10	−0.2
Wyoming	61	9	10.5	1.5	58	8	10.1	1.4	−2	−0.4

* 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.

[†] 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. The MOE is the estimated 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/2016/demo/p60-256sa.pdf>.

Z Represents or rounds to zero.

[1] The 2014 CPS ASEC included redesigned questions for income and health insurance coverage. All of the approximately 98,000 addresses were eligible to receive the redesigned set of health insurance coverage questions. The redesigned income questions were implemented to a subsample of these 98,000 addresses using a probability split-panel design. Approximately 68,000 addresses were eligible to receive a set of income questions similar to those used in the 2013 CPS ASEC and the remaining 30,000 addresses were eligible to receive the redesigned income questions. The source of the 2013 data for this table is the portion of the CPS ASEC sample which received the redesigned income questions, approximately 30,000 addresses.

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

income below half of their poverty thresholds, compared with the official measure for the race and ethnicity groups shown, except for Asians. For Blacks, the percentage in this lowest category was 11.1 percent with the official measure and 7.5 percent with the SPM. Percentages of Whites and Hispanics in the lowest category were also lower using the SPM.

Poverty Rates by State: Official and SPM

The Census Bureau recommends using the 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.) With CPS data, the Census Bureau recommends the use of 3-year averages to compare estimates across states. Table 4 shows 3-year averages of

poverty rates for the two measures for the U.S. total and for each state. The 3-year average poverty rates for the United States for the years 2013, 2014, and 2015 were 14.5 percent with the official measure and 15.1 percent using the SPM.[13]

Figure 3 shows the United States divided into three categories by

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[13] The 2014 CPS ASEC included redesigned questions for income and health insurance coverage. All of the approximately 98,000 addresses were eligible to receive the improved set of health insurance coverage items. The redesigned income questions were implemented using a split-panel design. Approximately 68,000 addresses were selected to receive a set of income questions similar to those used in the 2013 CPS ASEC. The remaining 30,000 addresses were selected to receive the redesigned income questions. Therefore, two estimates are available for 2013. The 2013 income and poverty estimates used in these 3-year averages in this report are based on the 2014 CPS ASEC sample of 30,000 addresses eligible to complete the questionnaire that included redesigned questions for income. These 2013 estimates differ from those released in Short (2014) using traditional income questions.

state: states where the rates are higher or lower using the SPM compared with using the official measure and states where the rates are not statistically different. The 13 states for which the SPM rates were higher than the official poverty rates are those with the orange shades. These states were Alaska, California, Connecticut, Florida, Hawaii, Illinois, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New York, 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 or metropolitan status may result in higher SPM thresholds. Higher nondiscretionary expenses, such as taxes or medical expenses, may also drive higher SPM rates.

Figure 3.
Difference in Poverty Rates by State Using the Official Measure and the SPM: 3-Year Average 2013 to 2015

SPM higher than official
Not statistically different
SPM lower than official

Source: U.S. Census Bureau, Current Population Survey, 2013 to 2015 Annual Social and Economic Supplements.
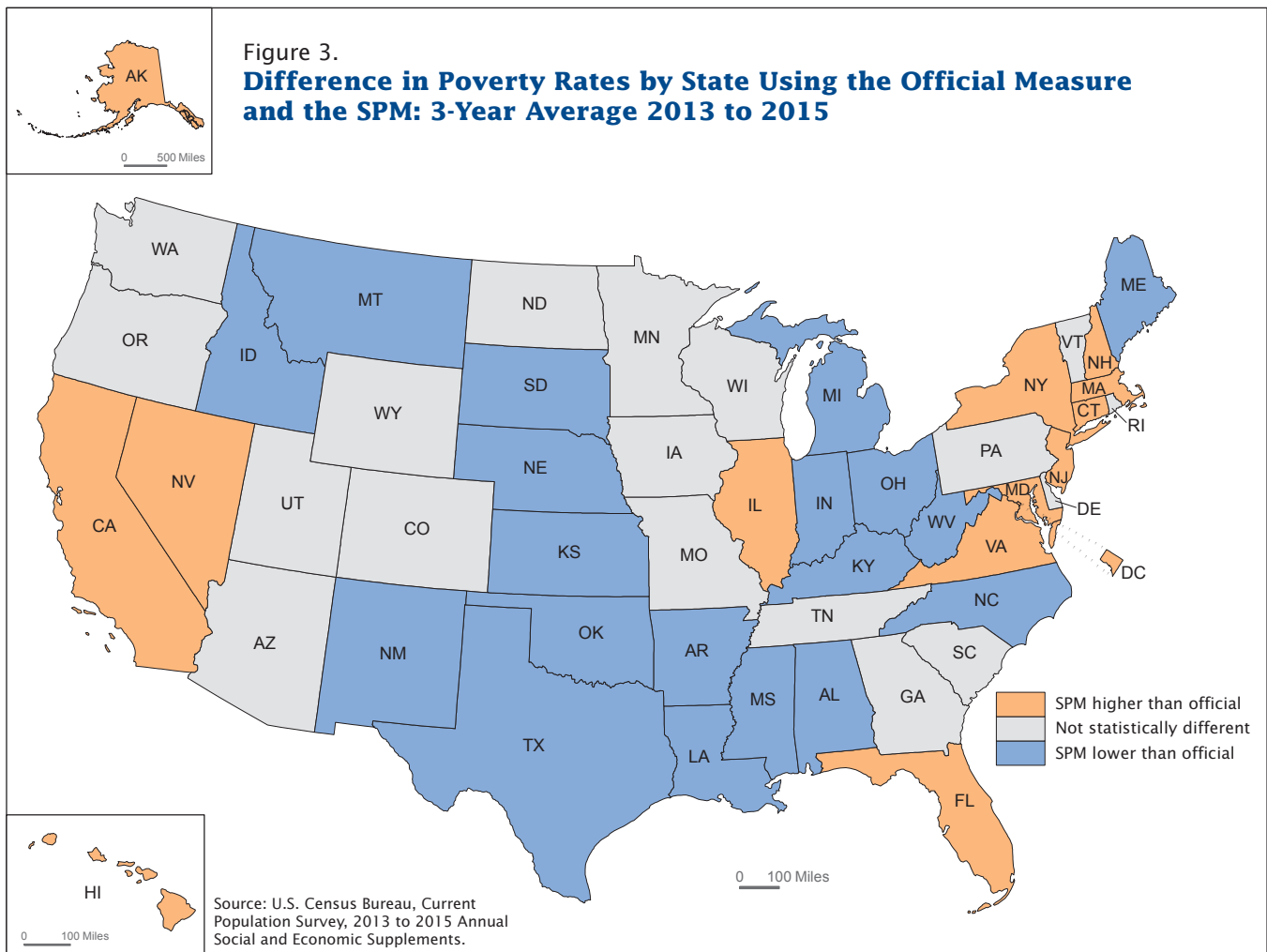
Blue shades represent the 19 states where SPM rates were lower than the official poverty rates. These states were Alabama, Arkansas, Idaho, Indiana, Kansas, Kentucky, Louisiana, Maine, Michigan, Mississippi, Montana, Nebraska, New Mexico, North Carolina, Ohio, Oklahoma, South Dakota, Texas, and West Virginia. Lower SPM rates would occur due to lower thresholds reflecting lower housing costs, a different mix of housing tenure or metropolitan status, or more generous noncash benefits. Gray shades are those 18 states that were not statistically different under the two measures and include Arizona, Colorado, Delaware, Georgia, Iowa, Minnesota, Missouri, North Dakota,

Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Vermont, Washington, Wisconsin, and Wyoming. Details are in Table 4.

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 the measure of economic well-being.

The official poverty measure takes account of cash benefits from the

government, such as Social Security and Unemployment Insurance benefits, Supplemental Security Income (SSI), public assistance benefits, such as Temporary Assistance for Needy Families (TANF), and workers' compensation benefits, but does not take account of taxes or noncash benefits aimed at improving the economic situation of the poor. Besides taking account of cash benefits and necessary expenses, such as MOOP expenses and expenses related to work, the SPM also accounts for taxes and noncash transfers. An important contribution of the SPM is that it allows us to gauge the potential magnitude of the effect of tax credits and transfers

Table 5a.
Effect of Individual Elements on SPM Rates: 2015

(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/cpsmar16.pdf*)

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[†] (±)
All people	**14.32**	**0.28**	**16.11**	**0.50**	**13.80**	**0.30**	**13.67**	**0.50**
ADDITIONS								
Social Security.	−8.34	0.19	−2.12	0.18	−3.99	0.16	−36.04	0.79
Refundable tax credits.	−2.88	0.13	−6.52	0.34	−2.16	0.10	−0.19	0.05
SNAP.	−1.44	0.09	−2.70	0.21	−1.13	0.08	−0.77	0.11
SSI.	−1.04	0.08	−0.79	0.12	−1.07	0.09	−1.30	0.16
Housing subsidies	−0.80	0.06	−1.16	0.14	−0.61	0.06	−0.99	0.14
Child support received.	−0.43	0.05	−1.07	0.13	−0.29	0.04	−0.03	0.02
School lunch	−0.40	0.05	−0.96	0.14	−0.27	0.03	−0.03	0.02
TANF/general assistance.	−0.21	0.04	−0.47	0.10	−0.15	0.03	−0.02	0.02
Unemployment insurance	−0.20	0.03	−0.26	0.06	−0.23	0.04	−0.02	0.01
LIHEAP	−0.08	0.02	−0.10	0.04	−0.06	0.02	−0.10	0.04
Workers' compensation	−0.12	0.03	−0.15	0.07	−0.13	0.03	−0.03	0.02
WIC	−0.12	0.04	−0.29	0.09	−0.08	0.02	Z	Z
SUBTRACTIONS								
Child support paid	0.08	0.02	0.07	0.03	0.10	0.02	0.02	0.02
Federal income tax	0.44	0.05	0.37	0.07	0.54	0.06	0.11	0.05
FICA	1.52	0.10	2.07	0.19	1.58	0.10	0.41	0.09
Work expenses	1.75	0.10	2.44	0.22	1.80	0.10	0.47	0.09
MOOP	3.52	0.14	3.41	0.21	3.05	0.16	5.65	0.30

[†] 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. The MOE is the estimated 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/2016/demo/p60-256sa.pdf>.
  Z Represents or rounds to zero.
  Source: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement.

on alleviating poverty. We can also examine the effects of nondiscretionary expenses, such as work and MOOP expenses.

Table 5a shows the effect that various additions and subtractions had on the SPM rate in 2015, 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 table include cash benefits, also accounted for

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. Table 5b 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 without Social Security benefits the SPM rate would have been 8.3 percentage points higher (22.7 percent), rather than 14.3 percent. This means that, without Social Security benefits, an additional 26.6 million people

Table 5b.
Effect of Individual Elements on the Number of Individuals in Poverty: 2015

(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/cpsmar16.pdf*)

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[†] (±)
All people	**45,651**	**901**	**11,929**	**375**	**27,222**	**588**	**6,500**	**236**
ADDITIONS								
Social Security.	−26,585	600	−1,571	130	−7,878	315	−17,137	376
Refundable tax credits.	−9,172	428	−4,829	249	−4,254	203	−89	23
SNAP.	−4,595	296	−2,001	153	−2,228	164	−366	54
SSI.	−3,313	248	−587	86	−2,107	169	−619	78
Housing subsidies	−2,537	197	−861	104	−1,203	111	−473	67
Child support received.	−1,383	162	−790	100	−577	76	−16	10
School lunch	−1,262	167	−714	106	−534	68	−13	11
TANF/general assistance.	−664	124	−351	77	−304	62	−9	9
Unemployment insurance	−649	109	−191	48	−446	73	−12	7
LIHEAP	−242	61	−71	33	−124	35	−46	21
Workers' compensation	−376	105	−114	52	−249	68	−14	11
WIC	−371	113	−215	69	−156	48	Z	Z
SUBTRACTIONS								
Child support paid	254	66	49	22	194	49	10	10
Federal income tax	1,389	148	276	51	1,061	111	53	24
FICA	4,843	310	1,537	139	3,109	195	197	42
Work expenses	5,587	316	1,808	161	3,557	188	222	43
MOOP	11,226	460	2,522	160	6,016	315	2,687	143

[†] 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. The MOE is the estimated 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/2016/demo/p60-256sa.pdf>.

Z Represents or rounds to zero.

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

would be living below the poverty line, beyond the 45.7 million people classified as poor with the SPM. Not including refundable tax credits (the EITC and the refundable portion of the child tax credit) in resources, an additional 9.2 million people would have been considered poor, all else constant. On the other hand, removing amounts paid for child support, income and payroll taxes, work-related expenses, and MOOP expenses from the calculation resulted in lower poverty rates.

Without subtracting MOOP expenses from income, the SPM rate would have been 3.5 percentage points lower. In numbers, 11.2 million fewer people would have been classified as poor.

Tables 5a and 5b also show effects for different age groups. In 2015, not accounting for refundable tax credits would have resulted in a 6.5 percentage point increase in the child poverty rate, representing 4.8 million children precluded

from poverty by the inclusion of these credits. Not subtracting MOOP expenses from the income of families with children would have resulted in a child poverty rate 3.4 percentage points lower. For the 65 years and over group, SPM rates increased by about 5.7 percentage points with the subtraction of MOOP expenses from income, while Social Security benefits lowered poverty rates by 36.0 percentage points, lifting 17.1 million individuals above the poverty line.

Figure 4 shows the change in the number of people who would have been considered poor by excluding each element in the SPM separately, allowing 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 26.6 million and 9.2 million individuals, respectively, from falling into poverty. MOOP expenditures contributed the most to increasing the number of individuals in poverty.

Changes in SPM Rates Between 2014 and 2015

Table 6 shows SPM rates for 2014 and 2015. In 2015, the percent poor using the SPM was 14.3 percent compared to 15.3 percent in 2014, a statistically significant decrease. The poverty rate declined for many groups and no major group experienced a statistically significant increase. The changes in SPM rates across the 2 years were not statistically significant for children, individuals in male householder units, individuals in newly-formed SPM Resource Units, Blacks, Asians, naturalized citizens, owners without mortgages, individuals living

outside metropolitan statistical areas, those living in the Northeast or South, individuals with private health insurance, individuals working less than full-time year-round, and individuals with disabilities.

Finally, we show the official measure and the SPM over the 7 years for which we have estimates.[14] Figure 5 shows the official measure (with the adjusted universe—see footnote 3) and the SPM for the total population. Figure 6 shows the poverty rate using both measures for children and for those over 64 years. The charts show two values

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

Figure 4.
Change in Number of People in Poverty After Including Each Element: 2015
(In millions)
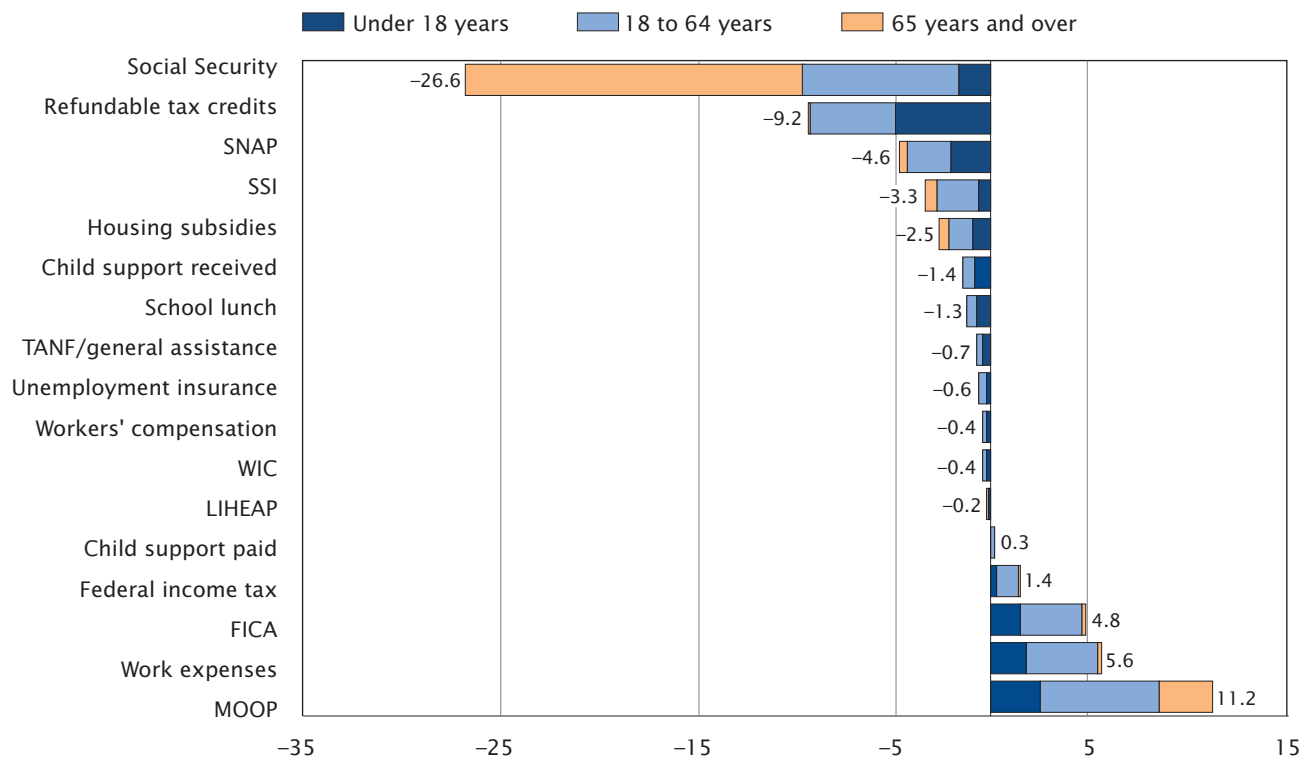
* Includes unrelated individuals under the age of 15.
Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions,
see: <www2.census.gov/programs-surveys/cps/techdocs/cpsmar16.pdf>.
Source: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement.

Table 6.
Percentage of People in Poverty by Different Poverty Measures: 2015 and 2014
(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/cpsmar16.pdf*)

Characteristic	SPM 2015				SPM 2014[1]				Difference	
	Number		Percent		Number		Percent			
	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Number	Percent
All people.	**45,651**	**901**	**14.3**	**0.3**	**48,390**	**868**	**15.3**	**0.3**	***–2,739**	***–1.0**
Sex										
Male.	21,385	480	13.7	0.3	22,497	438	14.5	0.3	*–1,112	*–0.8
Female.	24,266	516	14.9	0.3	25,893	517	16.0	0.3	*–1,627	*–1.1
Age										
Under 18 years	11,929	375	16.1	0.5	12,360	369	16.7	0.5	–431	–0.6
18 to 64 years	27,222	588	13.8	0.3	29,401	570	15.0	0.3	*–2,179	*–1.2
65 years and older.	6,500	236	13.7	0.5	6,629	223	14.4	0.5	–129	*–0.7
Type of Unit										
Married couple.	16,920	611	8.9	0.3	17,878	575	9.4	0.3	*–958	*–0.5
Female householder	16,984	492	25.9	0.7	18,366	537	28.7	0.7	*–1,382	*–2.8
Male householder	7,330	333	20.9	0.8	7,420	292	21.8	0.7	–90	–0.9
New SPM unit	4,417	347	15.8	1.2	4,726	305	16.6	1.0	–309	–0.8
Race[2] and Hispanic Origin										
White	30,852	711	12.6	0.3	33,346	683	13.6	0.3	*–2,494	*–1.1
White, not Hispanic	19,638	555	10.0	0.3	20,943	568	10.7	0.3	*–1,305	*–0.7
Black	9,575	421	23.0	1.0	9,662	346	23.4	0.8	–87	–0.5
Asian	2,921	226	16.0	1.2	2,999	247	16.8	1.3	–77	–0.8
Hispanic (any race)	12,719	479	22.4	0.8	14,129	442	25.4	0.8	*–1,410	*–3.0
Nativity										
Native born	36,328	736	13.2	0.3	38,379	762	14.0	0.3	*–2,051	*–0.8
Foreign born	9,323	382	21.6	0.8	10,011	355	23.7	0.7	*–688	*–2.1
Naturalized citizen	3,347	181	16.7	0.9	3,467	184	17.6	0.8	–120	–0.9
Not a citizen.	5,976	305	26.0	1.0	6,544	282	29.1	1.0	*–568	*–3.1
Tenure										
Owner	19,016	605	9.1	0.3	19,846	568	9.6	0.3	*–830	*–0.5
Owner/mortgage	10,009	467	7.5	0.3	10,688	419	8.1	0.3	*–680	*–0.6
Owner/no mortgage/rent free.	9,853	414	12.7	0.5	10,098	401	13.0	0.5	–245	–0.4
Renter	25,789	677	24.2	0.6	27,604	713	26.1	0.6	*–1,814	*–1.9
Residence										
Inside metropolitan statistical areas.	39,798	918	14.5	0.3	41,997	919	15.8	0.3	*–2,199	*–1.3
Inside principal cities	18,534	701	17.9	0.6	20,078	699	20.2	0.6	*–1,545	*–2.4
Outside principal cities.	21,264	733	12.5	0.4	21,919	668	13.1	0.4	–654	*–0.7
Outside metropolitan statistical areas[2]	5,853	528	13.2	0.7	6,393	421	12.8	0.6	–540	0.4
Region										
Northeast.	8,004	396	14.3	0.7	8,215	358	14.7	0.7	–212	–0.4
Midwest.	7,210	374	10.7	0.6	7,934	322	11.8	0.5	*–724	*–1.1
South.	18,552	602	15.4	0.5	18,509	507	15.6	0.4	42	–0.2
West	11,886	471	15.7	0.6	13,732	479	18.4	0.6	*–1,846	*–2.7
Health Insurance Coverage										
With private insurance.	18,350	548	8.6	0.3	18,143	541	8.7	0.3	207	–0.1
With public, no private insurance.	19,687	562	26.0	0.6	21,128	550	28.3	0.6	*–1,440	*–2.3
Not insured	7,614	332	26.3	1.0	9,119	357	27.7	0.9	*–1,505	*–1.4

See footnotes at end of table.

Table 6.
Percentage of People in Poverty by Different Poverty Measures: 2015 and 2014—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/cpsmar16.pdf*)

Characteristic	SPM 2015				SPM 2014[1]				Difference	
	Number		Percent		Number		Percent			
	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Estimate	Margin of error[†] (±)	Number	Percent
Work Experience										
Total, 18 to 64 years	27,222	588	13.8	0.3	29,401	570	15.0	0.3	*–2,179	*–1.2
All workers.	12,478	333	8.3	0.2	13,318	330	9.0	0.2	*–840	*–0.7
Worked full-time, year-round	4,999	186	4.7	0.2	5,679	213	5.5	0.2	*–680	*–0.8
Less than full-time, year-round	7,479	273	16.8	0.6	7,639	238	17.2	0.5	–160	–0.4
Did not work at least 1 week	14,744	404	31.4	0.7	16,083	404	33.1	0.7	*–1,339	*–1.8
Disability Status[4]										
Total, 18 to 64 years	27,222	588	13.8	0.3	29,401	570	15.0	0.3	*–2,179	*–1.2
With a disability	4,042	184	26.5	1.0	3,997	189	25.9	1.0	46	0.6
With no disability	23,101	532	12.8	0.3	25,319	527	14.1	0.3	*–2,218	*–1.3

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

[†] 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. The MOE is the estimated 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/2016/demo/p60-256sa.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 2010 Census through American FactFinder. About 2.9 percent of people reported more than one race in 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 "Outside metropolitan statistical areas" category includes both micropolitan statistical areas and territory outside of metropolitan and micropolitan statistical areas. For more information, see "About Metropolitan and Micropolitan Statistical Areas" at <www.census.gov/population/metro/>.

[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 Armed Forces.

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

for 2013, one using the traditional income questions comparable to SPM estimates from 2009 through 2012, and the second using the redesigned income questions used for this report and comparable to the 2014 through 2015 estimates presented here.

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 new poverty threshold that is updated with information on expenditures for FCSU by the BLS. Results showed higher poverty rates using the SPM than the official measure for most groups, with the exception of children who have lower poverty rates using the SPM.

The SPM allows us to examine the effect of taxes and noncash transfers on the poor and on important groups within the poverty population. 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.

RESEARCH FOR THE SPM

The ITWG was charged with developing a set of initial starting points to permit the Census Bureau, in cooperation with the BLS, to produce the SPM that would be released

Figure 5.
Poverty Rates Using the Official Measure and the SPM: 2009 to 2015
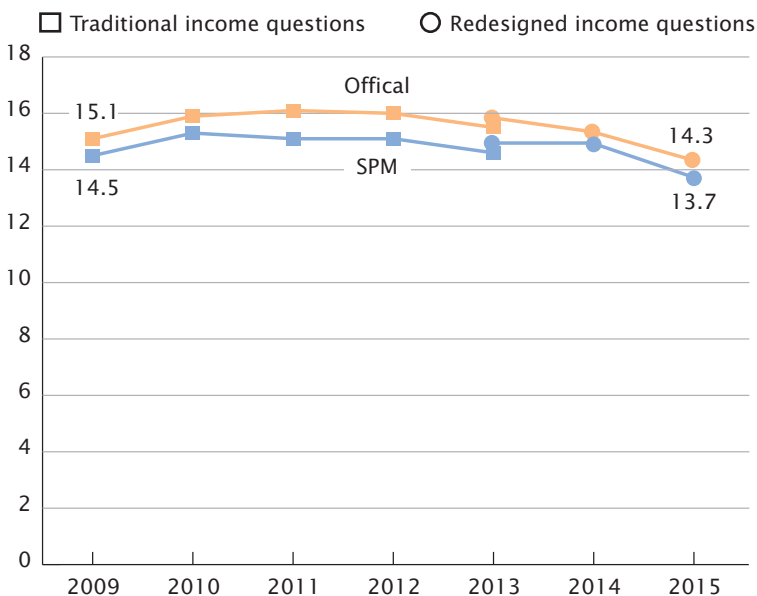
Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions.
Source: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement.

Figure 6.
Poverty Rates Using the Official Measure and the SPM for Two Age Groups: 2009 to 2015
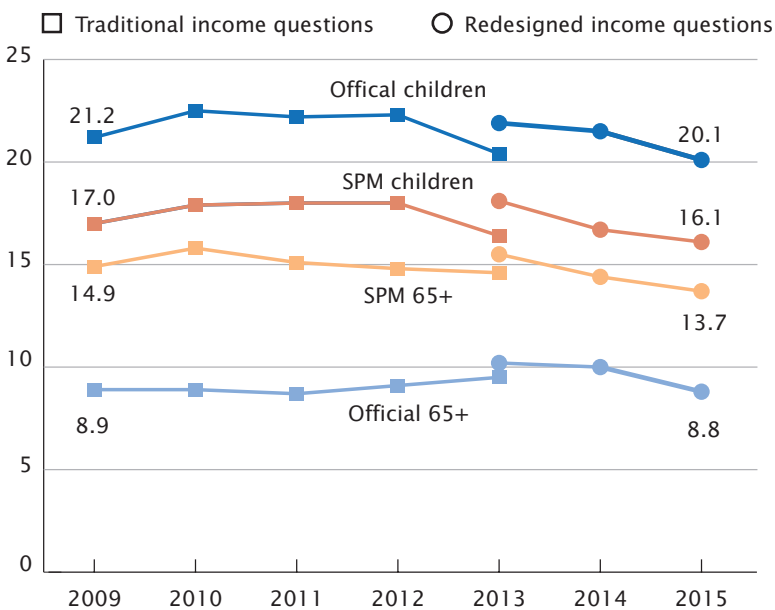
Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions.
Source: U.S. Census Bureau, Current Population Survey, 2016 Annual Social and Economic Supplement.

along with the official measure each year. In addition to specifying the nature and use of the SPM, the ITWG laid out a research agenda for many of the elements of this new measure. They stated:

As with any statistic regularly published by a federal statistical agency, the Working Group expects that changes in this measure over time will be decided upon in a process led by research methodologists and statisticians within the Census Bureau in consultation with BLS and with other appropriate data agencies and outside experts, and will be based on solid analytical evidence.

Among the elements designated by the ITWG for further development were methods to include noncash benefits in the thresholds, improving geographic adjustments for price differences across areas, improving methods to estimate work-related expenses (commuting costs), and improving methods for collecting MOOP. Research is ongoing to improve the valuation of housing subsidies and tax simulations.

ACKNOWLEDGEMENTS

The Social, Economic, and Housing Statistics Division of the Census Bureau recognizes Dr. Kathleen Short for her 30-plus years of service with the Census Bureau. Dr. Short retired in 2016. Since the publication of the NAS report in 1995, Dr. Short wrote dozens of reports and working papers on alternative poverty measures. Without her careful research and analysis, the development of the SPM would not have been possible. Since its inception, Dr. Short served as the lead analyst for the SPM.

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APPENDIX—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 FCSU. For consumer units with exactly two children (regardless of relationship to the family), 5 years of CE data are used to create the estimation sample. Unmarried partners and those who share expenses with others in the household are included in the consumer unit. FCSU expenditures are converted to adult-equivalent values using a three-parameter equivalence scale (see below for description). The mean of expenditures on FCSU over all two-child consumer units in the 30th to 36th percentile range is multiplied by 1.2 to account for additional basic needs. The three-parameter equivalence scale is applied to this amount to produce an overall threshold for a unit composed of two adults and two children.

To account for differences in housing costs, a base threshold for all consumer units with two children was calculated, and then the overall shelter and utilities portion was replaced by what consumer units with different housing statuses spend on shelter and utilities. Three housing status groups were determined and their expenditures on shelter and utilities produced within the 30th to 36th percentiles of FCSU expenditures. The three groups are owners with mortgages, owners without mortgages, and renters.[15]

Equivalence Scales

The ITWG guidelines state that the *three-parameter equivalence scale* is to be used to adjust reference thresholds for the number of adults and children. 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).

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[15] The thresholds, shares, and means were produced by Marisa Gudrais with assistance from Juan D. Munoz, and under the guidance of Thesia I. Garner. Gudrais, Munoz, and Garner work in the BLS-DPINR. 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 BLS, or the views of other staff members within this agency. For methodological details and related research regarding the SPM thresholds, see <http://stats.bls.gov/pir/spmhome.htm>.

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

Geographic Adjustments

The 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 298 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 (40). This results in 385 adjustment factors. For details, see Renwick (2011).[16]

Unit of Analysis

The ITWG suggested that the "family unit" 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 unmarried partners and their children.[17] 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 poverty thresholds. They are referred to as SPM Resource Units and include units that added an unmarried partner, an unrelated individual under 15 years, a foster child aged 15 to 21, or an unmarried parent of a child in the family. Note that some units change for more than one of these reasons. Further, sample weights differ due to forming these units of analysis. For all new family units that have a set of male/female partners, the female partner's weight is used as the SPM family weight. For all other new units, there is no change.[18]

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 Current Population Survey (CPS), 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 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. In the CPS, the reference person is asked how many children "usually" ate a complete lunch at school, and if it was a free or reduced-price school lunch. Since we have no further information, the value of school meals is 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 Department of Agriculture Food and Nutrition Service, which administers the school lunch program. There is no value included for school breakfast.[19]

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 age 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. Lacking additional information, we assume

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[16] Renwick et al. (2014) examined an alternative method of calculation for the geographic indexes using Regional Price Parities from the Bureau of Economic Analysis.

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

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

[19] In the Survey of Income and Program Participation (SIPP), respondents report the number of breakfasts eaten by the children per week, similar to the report of school lunches. Calculating a value for this subsidy in the same way as was done for the school lunch program yielded an amount of approximately $4.6 billion for all families in the SIPP for the year 2009 (Short, 2014a). For information on confidentiality protection, sampling error, non-sampling error, and definitions, for the 2004 SIPP, see <www.census.gov/sipp/>.

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 family. In these estimates, we assume that all children less than 5 years 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 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 year and captures assistance for cooling paid in the summer months or emergency benefits paid after the February/March/April survey date. Many households receive both a regular benefit and one or more crisis or emergency benefits. Additionally, 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.[20] The total tenant payment is estimated using the total income reported by the household on the CPS ASEC and HUD program rules. 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.[21] 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 family in a household, then the value of the subsidy is prorated based on the number of people in the SPM family 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 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

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[20] There are two major housing assistance programs operated by HUD: public housing and tenant-based or voucher programs. Since HUD administrative data include only estimates of gross or contract rent for tenant-based housing assistance programs, the contract rents assigned to CPS ASEC households living in public housing are adjusted by a factor derived from data published in the "Picture of Subsidized Households" that estimates the average tenant payment and the average subsidy by type of assistance. The average contract rent would be the sum of these two estimates, see <www.huduser.gov/portal/datasets/picture/yearlydata.html>. This year's adjustment factor uses the weighted average of the contract rents for two programs: Housing Choice Vouchers and Project-Based Section 8.

[21] Adjusted household income is defined by HUD regulations 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.

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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.[22] These simulations also use a statistical match to the Statistics of Income 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 recommended subtracting a fixed amount for each earner 18 years or over. 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 over 18 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.[23] The number of weeks worked, reported in the CPS ASEC, is multiplied by the 85 percent of median weekly work-related expenses for each person to arrive at annual work-related expenses.[24]

Childcare 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, in the CPS parents are asked whether or not they pay for childcare and how much they spent. The amounts paid for any type of childcare while parents are at work are summed over all children. The NAS report recommended capping the amount subtracted from income, when combined with other work-related expenses, so that these do not exceed reported earnings of the lowest earner in the family. The ITWG also made this recommendation. This capping procedure is applied before determining poverty status.[25]

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. New 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 Out-of-Pocket (MOOP) Expenses

The ITWG recommended subtracting MOOP 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 paid for by insurance. Subtracting these actual 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.

While many individuals and families have health insurance that covers most of the very large expenses, the typical family pays the costs of health insurance premiums and other small fees out-of-pocket. In these questions, respondents report expenditures on health insurance premiums that do not include Medicare Part B premiums. Medicare Part B premiums pose a particular problem for these estimates. The CPS ASEC instrument identifies when a respondent reported Social Security Retirement (SSR) benefits net of Medicare Part B premiums. For these respondents, a Part B premium is automatically added to income. Corrections for these applied amounts are discussed in Caswell and Short (2011) and applied here. To be consistent with what is added to the SSR income in these cases, the same amount is added to reported premium expenditures.[26] For the remaining respondents that report Medicare status, Medicare Part B premiums are simulated using the rules for income and tax filing

[22] Wheaton and Stevens (2016) compare the Census tax calculator to TAXSIM and the Bakija tax model and find consistency in tax estimates across the models.

[23] Median weekly work expenses from the SIPP were $40.25 for 2015.

[24] Edwards (2016) examined an alternative measure of valuing work-related expenses using the redesigned 2014 SIPP.

[25] 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.

[26] In these cases, it is important to assign an amount for Medicare Part B premiums that is equal to what is added to the resource side, i.e., SSR income, of the poverty calculation. Note that the instrument calculation is done irrespective of Medicaid status, and therefore dual-enrollees who report net SSR income receive an estimate for Medicare Part B that is added to reported premiums.

status (<www.Medicare.gov>).[27] The simplifying assumption is made that married respondents with spouse present file married-joint returns. For these cases, the combined reported income of both spouses is used to determine the appropriate Part B premium. Finally, it is assumed that the following two groups pay zero Part B premiums: (1) dual-eligible respondents (i.e., Medicare and Medicaid) and (2) those with a family income less than 135 percent of the federal poverty level. The latter 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, Qualified Individual, or Qualified Disabled and Working Individuals. We abstract from the possibility of (state-specific) asset requirements. Changes were made to the questions about health insurance coverage and MOOP in the 2014 CPS ASEC. Details about those changes can be found in Janicki (2014).

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[27] The CPS ASEC does not collect the number of months that a person was on Medicare; therefore, we make the simplifying assumption that respondents were insured for the entire year. Given this data limitation, this assumption is appropriate, as few individuals on Medicare transition out of Medicare.