

# Potential Improvements to the Supplemental Poverty Measure

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# Acknowledgements

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- All errors are my own
- Preliminary work, please do not cite

# Supplemental Poverty Measure (SPM)

## The Supplemental Poverty Measure: 2018

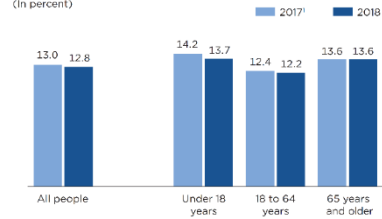
### Current Population Reports

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#### INTRODUCTION

Since the publication of the first official U.S. poverty estimates, researchers and policy-makers 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 ninth 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 2019 and earlier Current Population Survey Annual Social and Economic Supplements (CPS ASEC).

Figure 1.  
Supplemental Poverty Measure Rates for Total Population and by Age Group: 2017 and 2018  
(In percent)



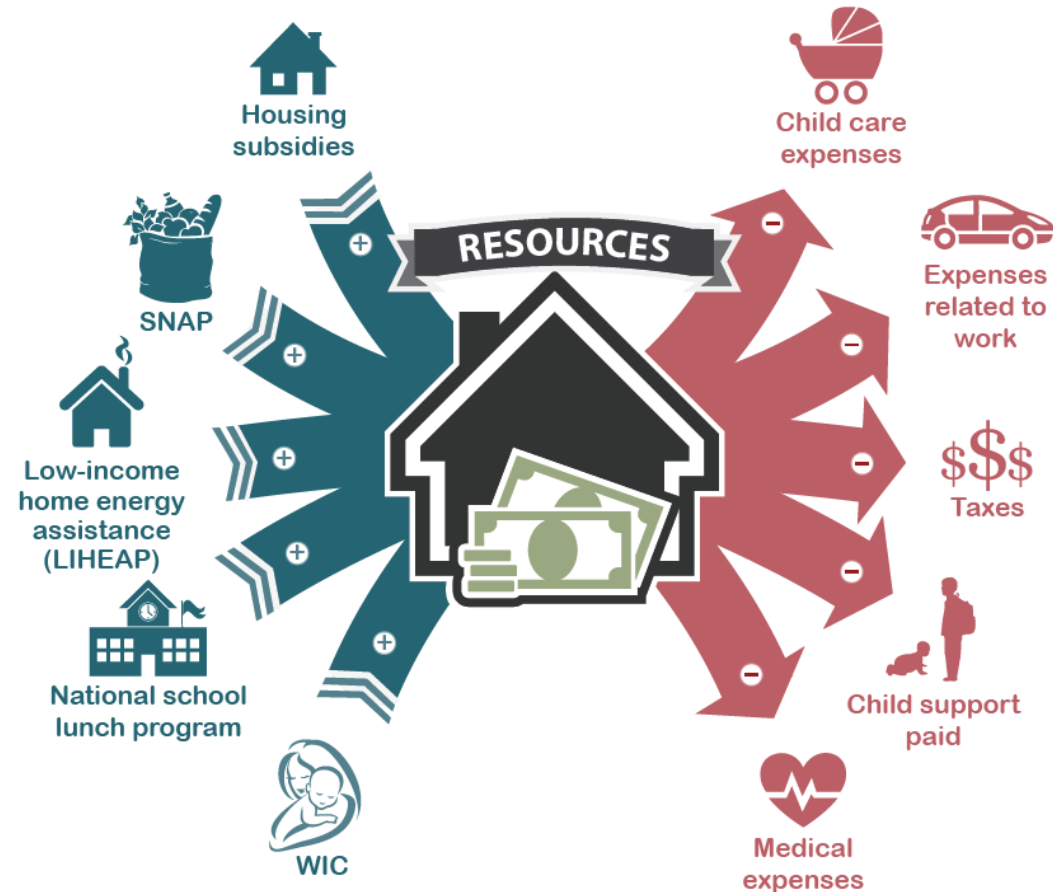
<sup>1</sup> The 2017 data reflect the implementation of an updated processing system. For more details, see appendix.  
Note: For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar19.pdf>.  
Source: U.S. Census Bureau, Current Population Survey, 2018-2019 Annual Social and Economic Supplements.

#### HIGHLIGHTS

- In 2018, the overall SPM rate was 12.8 percent. This is not statistically different from the 2017 SPM rate of 13.0 (Figure 1).
- SPM rates were not statistically different for any of the major age categories in 2018 compared with 2017. SPM rates for children under the age of 18 were 13.7 percent, which is not significantly different than 14.2 percent in 2017 (Figure 1 and Figure 2).

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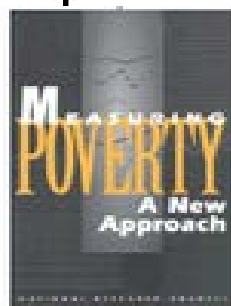
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# Poverty: The History of a Measure



**National Academy of Sciences** convenes a panel of experts to conduct a study of statistical issues in the measurement and understanding of poverty, *June 1992*.

An **Interagency** Technical Working Group on Developing a Supplemental Poverty Measure is formed by Commerce Under Secretary Rebecca Blank and Office of Management and Budget Chief Statistician Katherine Wallman and charged with developing a set of initial starting points to permit the U.S. Census Bureau, in cooperation with the Bureau of Labor Statistics, to produce a Supplemental Poverty Measure, *December 2009*



The Panel on Poverty and Family Assistance publishes a report proposing a new approach for measuring poverty.

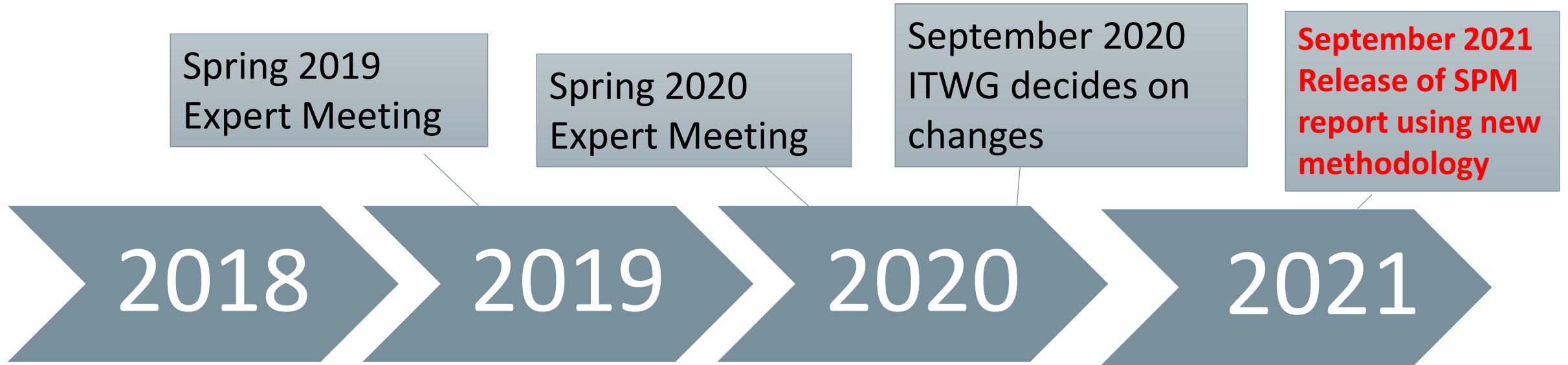
Constance F. Citro and Robert T. Michael (editors), *Measuring*

*Poverty: A New Approach*, Washington, D.C., National Academy Press, 1995.

# ITWG Guidance

- According to the ITWG recommendations, SPM should be seen as a research measure, improving due to changes in data, methodology or research
- Priority should be placed on “consistency between threshold and resource definitions, data availability, simplicity in estimation, stability of the measure over time, and ease in explaining methodology (ITWG, 2010)”

# Timeline for SPM Changes



February 2018 – September 2021

Working papers and conference presentations discussing potential changes to the measure

September 2020 – September 2021

Research showing the impact of the changes on 2019 SPM rates - including research file.

# Changes under Consideration-Resources

	SPM	Potential Changes
Resource measure	<p>Sum of cash income,            PLUS: in-kind benefits (SNAP, LIHEAP, WIC, Housing subsidies)            MINUS: Taxes, child support paid, work expenses (including child care), medical out-of-pocket expenses</p>	<ul style="list-style-type: none"> <li>• Use state data to set WIC benefits</li> <li>• Impute school breakfast value</li> <li>• Cap nutritional assistance and non-premium medical expenses</li> <li>• <i>Correct survey reports for underreports</i></li> <li>• <i>Incorporate health insurance value</i></li> </ul>

# Current SPM Threshold Construction

- Produced by Bureau of Labor Statistics-Division of Price and Index Number Research (BLS-DPINR) using 5 years of Consumer Expenditure Survey Interview (CE) data
- 30<sup>th</sup>-36<sup>th</sup> percentile of expenditures of food, clothing, shelter, and utilities (FCSU) plus additional 20%
- Based on estimation sample of resource units with *exactly* 2 kids
- Separate thresholds by housing tenure: Owners with mortgage, owners without mortgage and renters
- Adjust for unit size/composition and geography



# Changes under Consideration-Threshold

	SPM	Potential Changes
Poverty threshold	30 <sup>th</sup> -36 <sup>th</sup> percentile of expenditures on food, clothing, shelter and utilities (+ 20%)	<ul style="list-style-type: none"> <li>• Move to the median</li> <li>• Expand the reference sample</li> <li>• Impute the value of in-kind benefits</li> <li>• Move telephone + internet out of utilities</li> <li>• Modify geographic adjustment</li> <li>• <i>Drop 20% multiplier and explicitly include expenditures for personal care and ½ transportation</i></li> <li>• <i>Incorporate health care needs</i></li> </ul>

# Contact

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<https://www.census.gov/topics/income-poverty/supplemental-poverty-measure.html>

# Extra Slides

# Summary/Recommendations-Resources

- WIC modification adds complication without changing our understanding poverty rates or distributions, but could be useful for assessing future state changes
- Would like feedback on school breakfast imputation
- Additional research is needed on correcting for SNAP underreporting across states and years

# Summary/Recommendations-Thresholds

- We recommend expanding the estimation sample
  - 1+ kids would nearly triple sample size, and keep similar attributes.
  - All CU's would increase sample size 9-fold, but concern that families without children spend differently than families with children.
- We recommend moving the base of the threshold from 33<sup>rd</sup> to some percentage of median.
  - In 2016, 75.5% of median would match 33<sup>rd</sup>/2 kids overall SPM rate.
  - In 2011, 77% of median would match 33<sup>rd</sup>/2 kids overall SPM rate.

# Potential Changes to Resources—for 2021

- Special Supplemental Nutrition Program for Woman, Infants and Children (WIC)
  - Allow assigned value to vary by state instead of using national average WIC benefit value for all
- National School Lunch Program
  - We consider imputing incidence of school breakfast as well, which isn't included in CPS ASEC
- Capping nutritional assistance and non-premium medical expenses
  - Restrict maximum value of combined nutritional assistance programs not to exceed food portion of thresholds.
  - Cap non-premium medical expenses at share of income.

# Potential Changes to Resources—in the future

- Correcting Survey Reports for Mis-reporting
  - Ongoing research using administrative records to correct for SNAP underreporting
- Incorporate Health Insurance Value
  - Explore feasibility of health-inclusive poverty measure

# Potential Changes to Thresholds—for 2021

- Expand estimation sample from CU's with exactly 2 children
  - Increase sample size
  - Reflect spending patterns of a larger share of the population
- Move base from 30-36<sup>th</sup> percentile to median of FCSU dist.
  - Reduce impact of imputed benefits
  - Allow for future incorporation of medical expenses



# Potential Changes to Thresholds—for 2021 (cont.)

- Impute the value of in-kind benefits
- Move telephone + internet out of utilities
  - Don't geographically adjust
- Modify geographic adjustment
  - Consider alternative adjustment methods such as RPPs

# Potential Changes to Thresholds—in the future

- Drop 20% Multiplier
  - Explicitly include expenditures for personal care items and ½ of transportation
- Incorporate Health Care Needs
  - Explore feasibility of health-inclusive poverty measure