

Using Census Data to Measure Poverty

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U.S. Census Bureau

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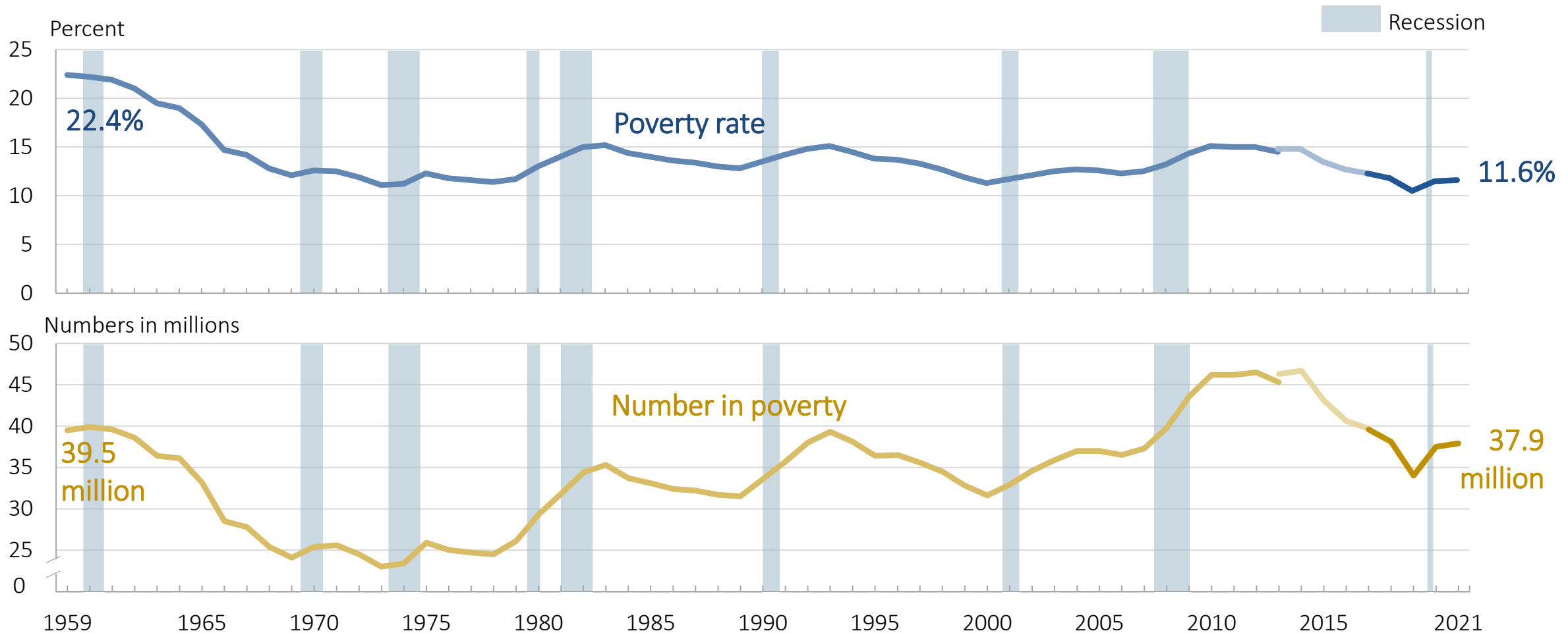
POVERTY MEASURE CONCEPTS: OFFICIAL AND SUPPLEMENTAL

Concept	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 recent expenditures of food, clothing, shelter, utilities, telephone, and internet (FCSUti).
Threshold Adjustments	Vary by family size, composition, and age of householder.	Vary by family size, composition, and tenure with geographic adjustments for differences in housing costs.
Updating Thresholds	Consumer Price Index for All Urban Consumers: all items.	Most recent 5-year moving average of expenditures on FCSUti, lagged 1 year.
Resource Measure	Gross before-tax cash income.	Sum of cash income, plus noncash benefits that resource units can use to meet their FCSUti needs, minus taxes (or plus tax credits), work expenses, medical expenses, and child support paid to another household.
Universe	Civilian noninstitutionalized population, excluding unrelated individuals under age 15 for whom poverty status cannot be determined.	Official poverty measure universe, plus unrelated individuals under age 15.
Time Series	1959–present.	2009–present.

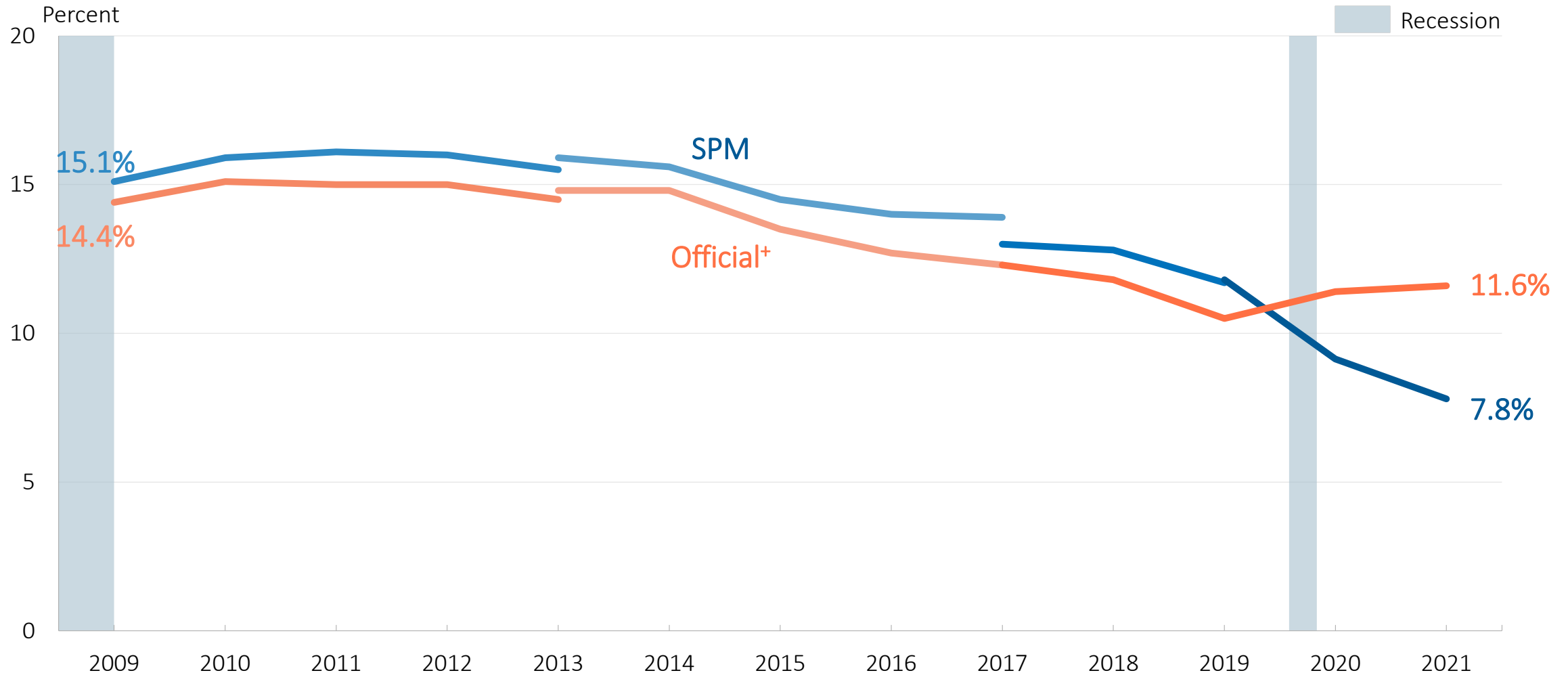
When to use each measure?

Official Poverty Measure	Supplemental Poverty Measure
Long term trends at national level: data available from 1959 using consistent method	More complete measure of resources: Includes tax credits, government assistance and key expenses
Program eligibility: Federal and State governments often use official poverty estimates to allocate funds to local communities.	Geographical variation in the poverty threshold.

Poverty Rate and Number in Poverty: 1959 to 2021



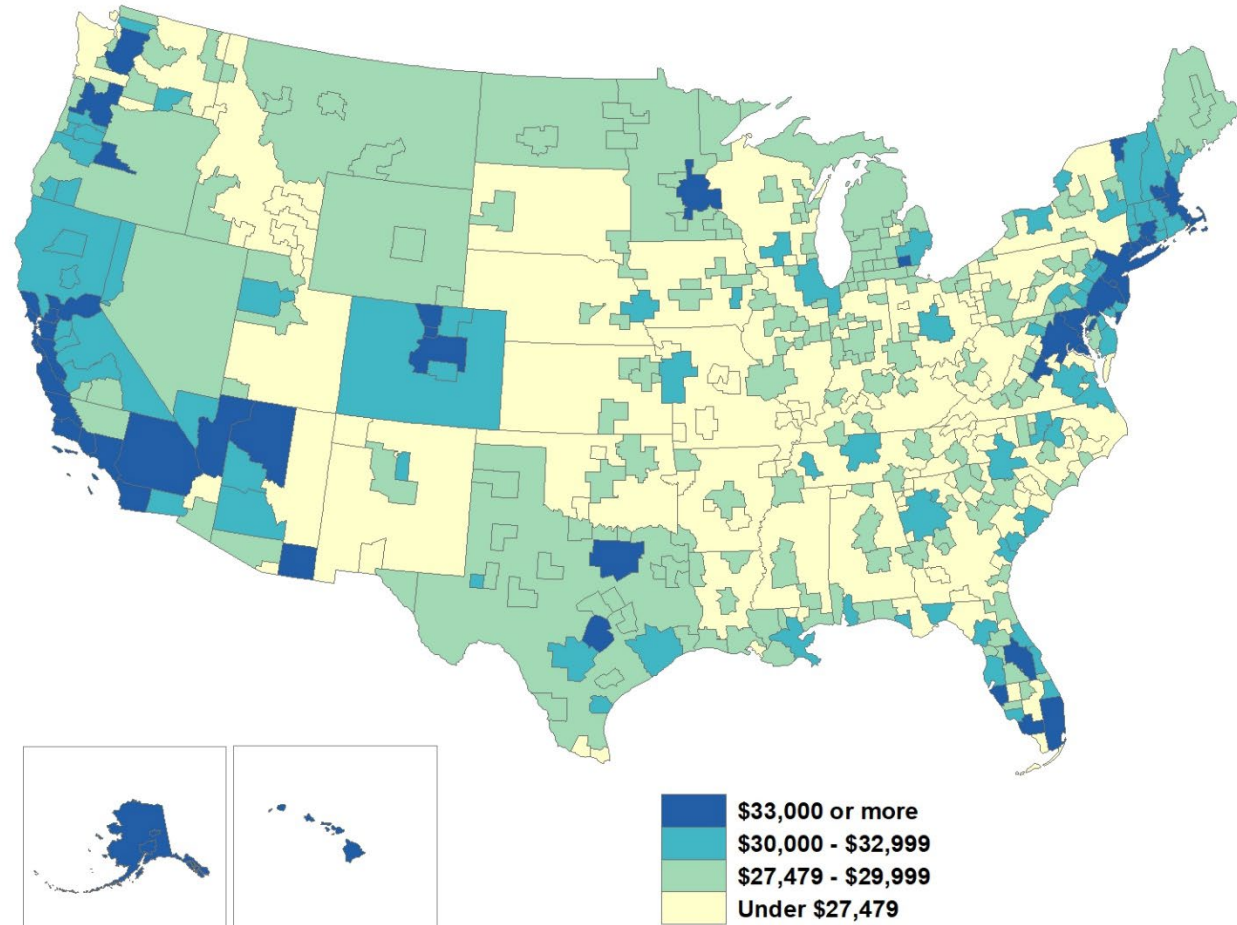
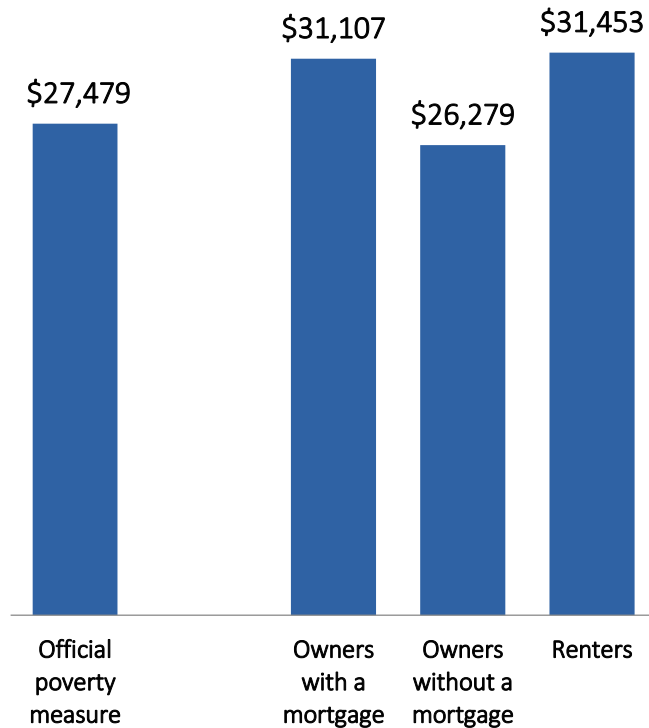
Poverty Rates Using Official+ and the SPM: 2009 to 2021



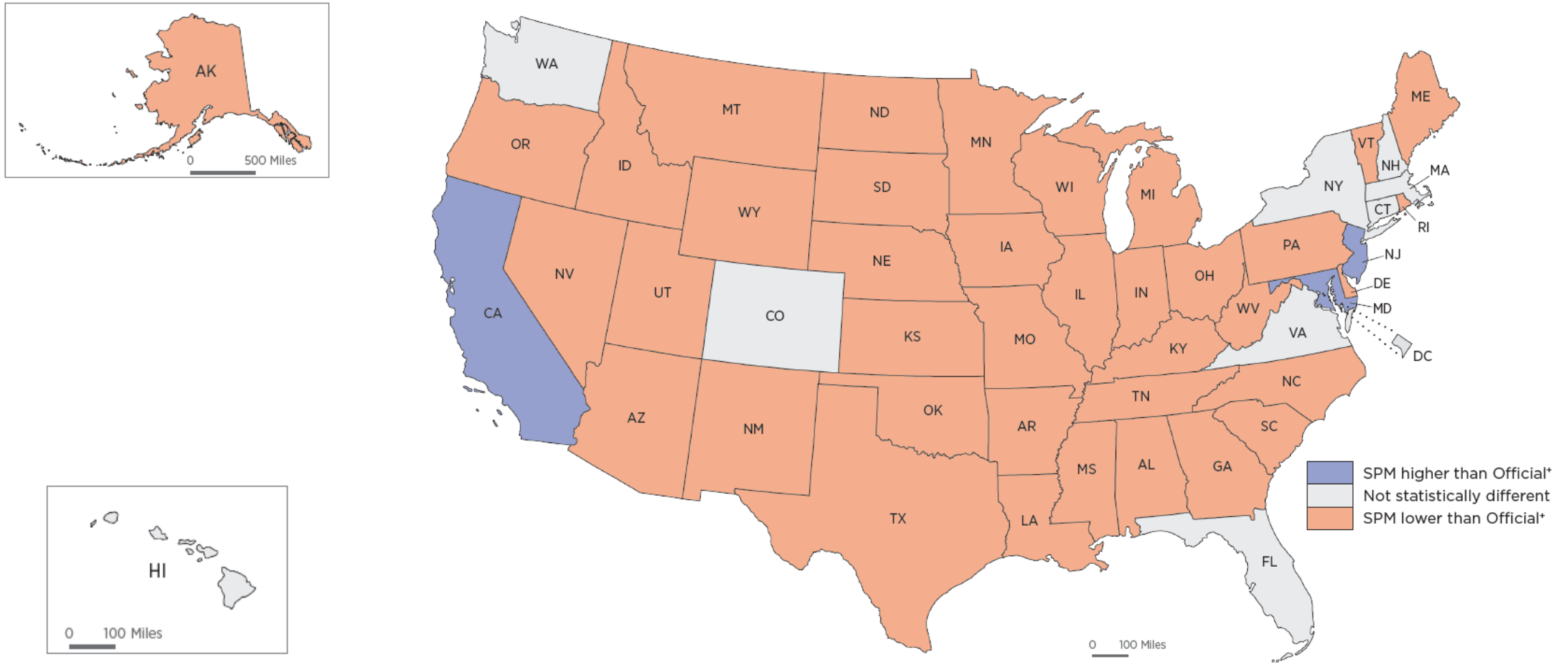
Official and SPM Thresholds for Units with Two Adults and Two Children

Supplemental Poverty Measure
Thresholds, 2021

Supplemental Poverty Measure Thresholds for Renters: 2021



Difference in Poverty Rates by State Using the Official⁺ and the SPM: 3-Year Average 2019 to 2021



Data Sources

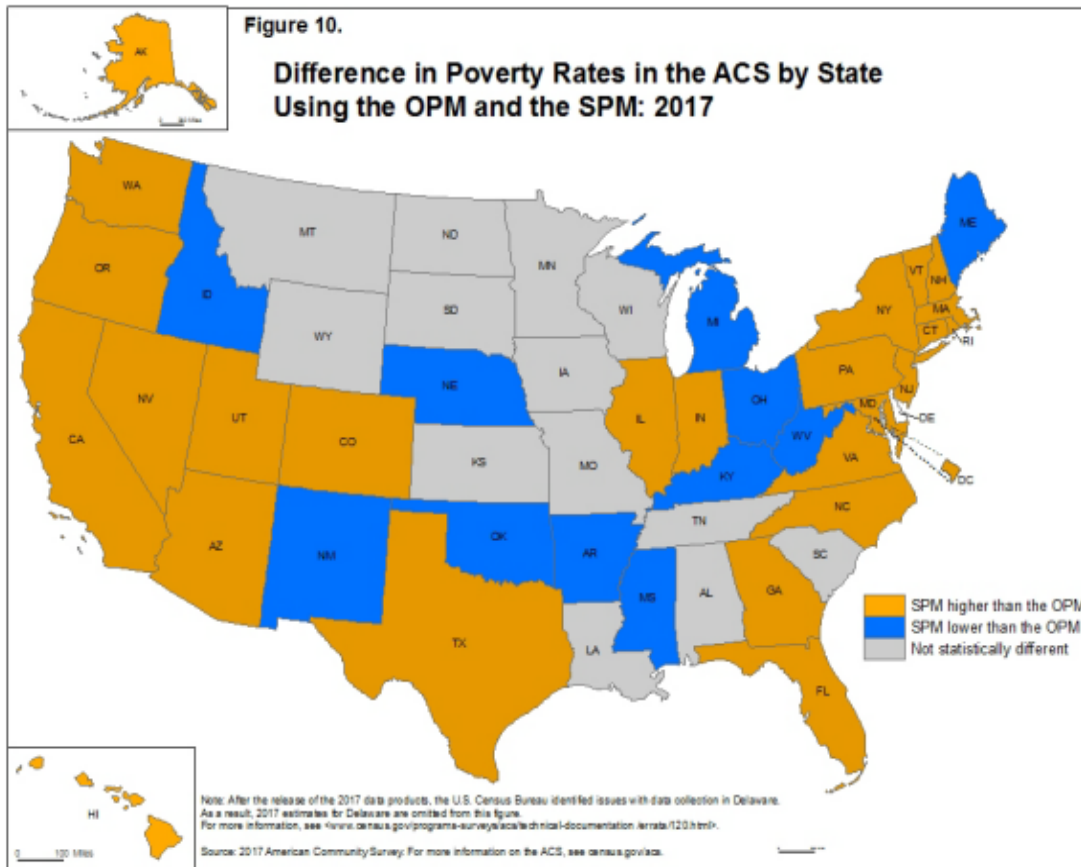
Current Population Survey Annual Social and Economic Supplement (CPS ASEC)

- The Current Population Survey is the longest running survey conducted by the Census Bureau.
- The Annual Social and Economic Supplement is collected annually in February, March, and April. The 2022 sample consisted of ~90,000 addresses.
 - Civilian noninstitutionalized population. Homeless population not in sample.
 - As a result of the sample size, 1-year estimates are accurate at the national level. 3-year averages are suggested for states.
- Survey contains key questions on income sources, program receipt, and expenses to generate official poverty and SPM estimates.

American Community Survey (ACS)

- The American Community Survey (ACS), is the largest and the most current nationwide survey since 2005.
 - Large sample enables granular estimates of poverty.
- Economic questions on ACS not as detailed as CPS ASEC.
 - CPS ASEC has more sources of income, and more questions about program participation and key expenses.
 - Reports only use official poverty.

SPM in the American Community Survey (research)



- CPS ASEC is used to model key benefits and expenses.
- Working paper describes the methodology
- Research includes data sets for 2010-2019
- Smallest geography: PUMA

<https://www.census.gov/library/working-papers/2020/demo/SEHSD-WP2020-09.html>

Survey of Income and Program Participation (SIPP)

- SIPP is a nationally representative survey that collects information on the short-term dynamics of economic well-being and other characteristics.
- SIPP is a longitudinal survey, allowing for information on monthly poverty and program participation. Also allows for measurement of chronic and episodic poverty.
- Can provide estimates for official poverty and SPM.

Survey of Income and Program Participation (SIPP)

Poverty Dynamics: 2017-2019

Current Population Reports

By Lewis Warren and Alexander Tettenhorst
P70BR-179
September 2022

INTRODUCTION

Historically, poverty status has most often been measured over the course of a year using annual income data. However, recent events like the COVID-19 pandemic have highlighted the need for subannual poverty estimates to capture large changes in poverty between months. To examine monthly poverty dynamics, this report uses data from the U.S. Census Bureau's 2018-2020 Survey of Income and Program Participation (SIPP).

Unlike other Census Bureau surveys (such as the Current Population Survey Annual Social and Economic Supplement [CPS ASEC] and the American Community Survey [ACS]) that provide annual measures, the SIPP captures both income and family dynamics on a monthly basis. Additionally, the SIPP is a longitudinal survey that follows respondents over multiple calendar years, allowing for the examination of individual monthly poverty dynamics across years. The 2018-2020 SIPP files provide poverty data for reference years 2017-2019 since each SIPP interview collects income and family dynamics over the previous calendar year.

This report provides monthly, annual, episodic, and chronic poverty rates for the 2017-2019 period.¹ Monthly poverty rates can provide insight into changes in poverty within a year or over multiple years, while annual poverty rates provide insight into changes in

¹ The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System [DMS] number: D-0000004561, Disclosure Review Board [DRB] approval number: CDRB-FY22-SEHSD003-025).

WHAT IS SIPP?

The Survey of Income and Program Participation (SIPP) is a nationally representative panel survey administered by the U.S. Census Bureau that collects information on the short-term dynamics of employment, income, household composition, and eligibility for and participation in government assistance programs. SIPP is a leading source of information on specific topics related to economic well-being, family dynamics, education, wealth and assets, health insurance, childcare, and food security. Each SIPP panel follows individuals for several years, providing monthly data that measure changes in household and family composition and economic circumstances over time. For more information, please visit the SIPP website at <www.census.gov/sipp>.

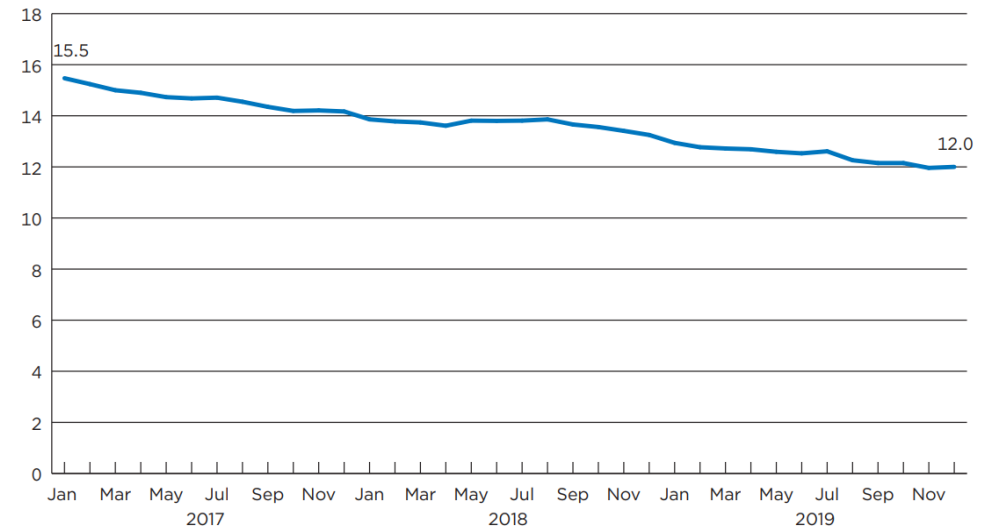
poverty over multiple years. Episodic measures utilize the longitudinal nature of SIPP to examine the share of individuals experiencing monthly poverty for at least 2 consecutive months over the 36-month reference period, while chronic poverty measures examine the share of individuals who were in poverty for each of the 36 months.

The poverty statistics used in this report are for the Official Poverty Measure and adhere to the standards specified by the Office of Management and Budget's Statistical Policy Directive 14. The Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty.

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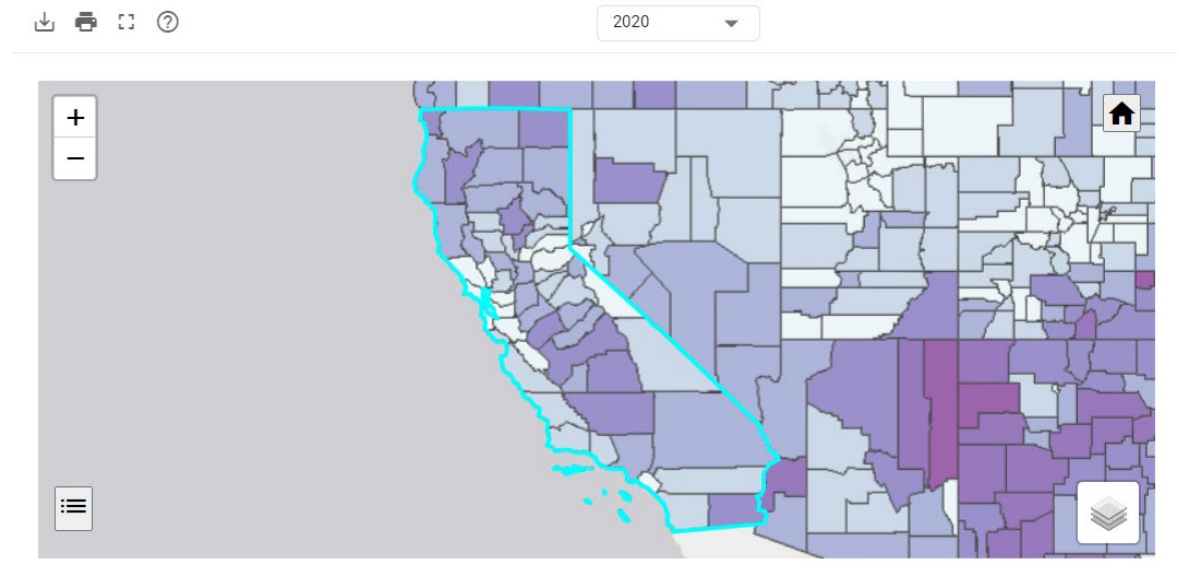
Figure 1.
Monthly Poverty Rate: 2017-2019
(In percent)



Source: U.S. Census Bureau, 2018-2020 Survey of Income and Program Participation.

Small Area Income and Poverty Estimates (SAIPE)

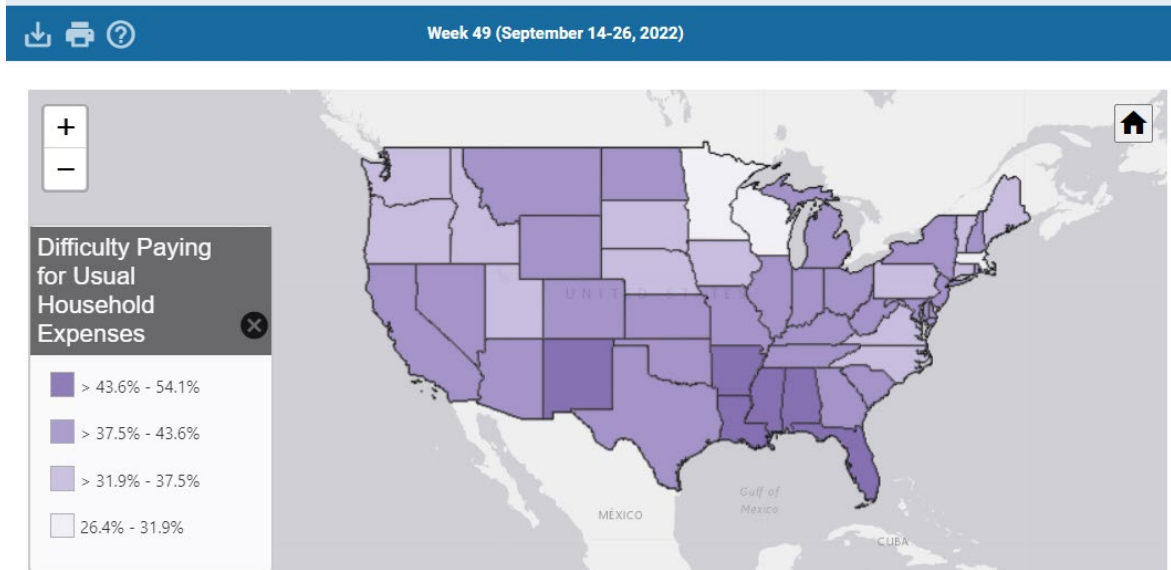
- SAIPE program provides model-based income and poverty estimates at county and school district level
- Models based on ACS and administrative data.
- The U.S. Department of Education uses SAIPE data to aid in determining annual Title I allocations of federal funds to states and school districts.
- Only official poverty measure.



What Data Source to Use When

Geographic Level	Cross-Sectional Estimates			Longitudinal Estimates
	Income/Poverty Rate	Detailed Characteristics	Year-to-Year Change	
United States	CPS ASEC	CPS ASEC/ ACS 1-year estimates for detailed race groups	CPS ASEC	SIPP
States	ACS 1-year estimates CPS ASEC 3-year averages	ACS 1-year estimates	ACS 1-year estimates	
Substate (areas with populations of 65,000 or more)	ACS 1-year estimates/ SAIPE for counties and school districts	ACS 1-year estimates	ACS 1-year estimates / SAIPE for counties and school districts	None
Substate (areas with populations less than 20,000)	SAIPE for counties and school districts/ ACS using 5-year period estimates for all other geographic entities/ Decennial Census 2000 and prior	ACS 5-year estimates/ Decennial Census 2000 and prior	SAIPE for counties and school districts/ ACS using 5-year period estimates for all other geographic entities	None

Household Pulse Survey



- The Household Pulse Survey is designed to deploy quickly and efficiently, collecting data to measure household experiences during the coronavirus pandemic.
- The survey is a 20-minute online survey studying the impact of the pandemic on households across the country.
- Contains a range of questions from education to food security, benefits and household spending.
- Most recently available data is from September 14 to September 26, 2022

Resources

- Census Poverty: <https://www.census.gov/topics/income-poverty/poverty.html>
- ACS Data Tool: <https://data.census.gov/cedsci/>
- Microdata access: <https://data.census.gov/mdat/#/>
- SAIPE estimates: <https://www.census.gov/data-tools/demo/saipe/#/>
- Household Pulse estimates: <https://www.census.gov/data-tools/demo/hhp/#/>

Thanks!

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