# Changes in Poverty Rates and Poverty Areas Over Time: 2005 to 2019

American Community Survey Briefs

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### INTRODUCTION

The American Community Survey (ACS) is the nation's most current, reliable, and accessible data source for local statistics. Since 2010, the ACS has published estimates using 5 years of data for all geographic areas down to the census tract and block-group levels. For the first time ever, these 5-year estimates are available for three consecutive nonoverlapping periods (2005-2009, 2010-2014, and 2015-2019), thus providing trend data for small population groups and geographies covering a combined 15-year period.<sup>2</sup> This report uses the 2005-2009, the 2010-2014, and the 2015-2019 ACS 5-year estimates to study changes in county poverty rates and to examine the prevalence of poverty areas (defined as census tracts with poverty rates of 20 percent or higher) and the changes in their spatial distribution across this time period.<sup>3</sup>

# **HIGHLIGHTS**

• The overall U.S. 5-year ACS poverty rate, encompassing the years of 2015–2019, was 13.4 percent.

The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied to this release. CBDRB-FY21-POP001-0028.

<sup>2</sup> Estimates presented here do not reflect the COVID-19 pandemic and its potential impact. For more information about comparing 5-year estimates, please see "Understanding and Using American Community Survey Data: What All Data Users Need to Know," at <www.census.gov/programs-surveys/acs/guidance/handbooks/general.html>.

<sup>3</sup> To examine county poverty rates by Hispanic origin and race, see the interactive data visualization "Percentage of People in Poverty: 2015-2019" at <www.census.gov/library/visualizations/interactive/acs-percentage-poverty-2015-2019.html>.

This was a decrease from 15.6 percent in the 2010–2014 5-year period.<sup>4</sup>

- The difference in the overall poverty rate between 2005–2009 (13.5 percent) and 2015–2019 (13.4 percent) was not statistically significant.
- Poverty rates increased in 429 counties and decreased in 409 counties from 2005-2009 to 2015-2019. The change in poverty rates was not statistically significant in 2,300 counties.<sup>5</sup>
- Overall, from 2005-2009 to 2015-2019, the percentage of people in the United States living in poverty areas decreased by 0.2 percentage points.
- The percentage of people living in poverty areas increased in 25 states and decreased in 23 states and the District of Columbia from 2005–2009 to 2015–2019. The change was not statistically significant in two states.

#### **POVERTY MEASUREMENT IN THE ACS**

Poverty status is determined by comparing annual income to a set of poverty thresholds that vary by family size, number of children, and the age of the householder.<sup>6</sup> If a family's before-tax money income is less than the dollar value of its threshold, then that family and every individual in it are considered to be in poverty. For people not living in families, poverty status is determined by comparing the individual's



<sup>&</sup>lt;sup>4</sup> All estimates in the brief are statistically significant at the 90 percent confidence level, unless otherwise noted.

<sup>&</sup>lt;sup>5</sup> Due to county boundary changes that occurred within the 2005-2009 and 2010-2014 periods, the following county equivalents were excluded from comparison: Petersburg, Alaska; Prince of Wales-Hyder, Alaska; Hoonah-Angoon, Alaska; Bedford, Virginia; and Bedford City, Virginia.

<sup>&</sup>lt;sup>6</sup> The poverty universe in 2005 does not include those living in noninstitutional group quarters (GQs).

income to his or her poverty threshold. The ACS is a continuous survey and people respond throughout the year. Since income is reported for the previous 12 months, the appropriate poverty threshold for each family is determined by multiplying the base-year poverty threshold from 1982 by the average of monthly Consumer Price Index (CPI-U) values for the 12 months preceding the survey month. Thresholds do not vary geographically.

Census tracts with poverty rates greater than or equal to 20 percent (designated as "poverty areas" by the Census Bureau) are identified by state, and examined for change over the given periods.<sup>7</sup>

Researchers have found that low-income families living in communities with high poverty concentrations face a number of challenges. Problems such as poor housing conditions, limited job opportunities, and high crime rates are exacerbated when poor families live clustered in high-poverty neighborhoods. In recognition of these challenges, some government programs target resources to these high-poverty

## What Is the American Community Survey?

The American Community Survey (ACS) is an annual, nationwide survey designed to provide communities with reliable and timely social, economic, housing, and demographic data for the nation, states, congressional districts, counties, places, and other localities. It has an annual sample size of about 3.5 million addresses across the United States and Puerto Rico and includes both housing units and group quarters (e.g., nursing facilities and prisons). The ACS is conducted in every county throughout the nation and every municipio in Puerto Rico (the Puerto Rico Community Survey).

Beginning in 2006, ACS 1-year estimates have been released annually for geographic areas with populations of 65,000 and greater. Beginning in 2010, ACS 5-year estimates have been released annually for all geographies down to the block-group level. Beginning in 2015, ACS 1-year Supplemental Estimates have been released annually for geographic areas with populations of 20,000 and greater. The ACS 1-year and 5-year estimates are all period estimates that represent data collected within particular intervals of time—12 months and 60 months, respectively. For information on the ACS, visit <www.census.gov/acs>.

neighborhoods. Many of these programs use the Census Bureau's definition of "poverty areas" to identify such neighborhoods.<sup>9</sup>

### **RESULTS**

### **County Poverty Rates**

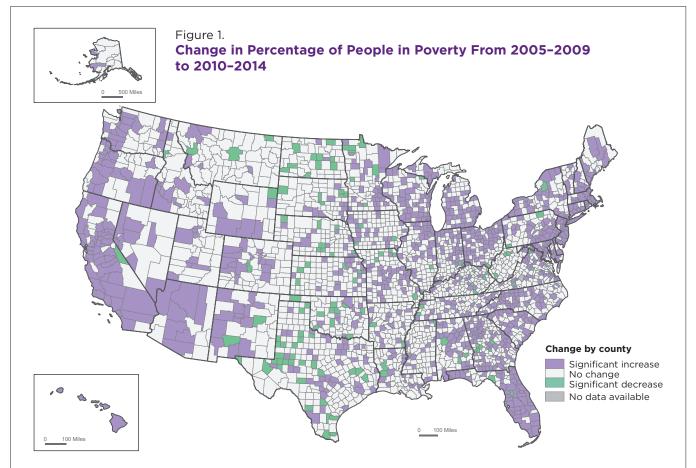
The maps in this brief show changes in 5-year ACS poverty rates for counties over different periods. Due to county boundary changes over time, changes in poverty are shown for 3,138 of the current 3,142 counties in the United States.

<sup>&</sup>lt;sup>7</sup> Census tracts are small, relatively permanent statistical subdivisions of a county or equivalent entity. Census tracts generally have a population size between 1,200 and 8,000 people. For more information, see <a href="https://www.census.gov/programs-surveys/geography/about/glossary.html#par\_textimage">https://www.census.gov/programs-surveys/geography/about/glossary.html#par\_textimage</a> 13>.

<sup>&</sup>lt;sup>8</sup> For example, see "The Enduring Challenge of Concentrated Poverty in America: Case Studies From Communities Across the U.S.A.," a joint project of the Community Affairs Offices of the Federal Reserve System and the Metropolitan Policy Program at the Brookings Institution. (Federal Reserve Bank of Cleveland, 2008).

<sup>&</sup>lt;sup>1</sup> Group quarters were added in 2006, the second year of full implementation. For more information, please see American Community Survey Design and Methodology located at <www.census.gov/programs-surveys/acs/methodology /design-and-methodology.html>. While people living in group quarters are sampled in the ACS, those living in institutional group quarters (e.g., nursing homes or correctional facilities) are not included in the poverty universe.

<sup>&</sup>lt;sup>9</sup> For example, see the Developmental Disabilities Assistance and Bill of Rights Act Section 103(a). This act allows Basic State Grants projects whose activities or products target poverty areas to receive as much as 90 percent in federal support. Also, see the New Market Tax Credit program, enacted in December 2000 as part of the Community Renewal Tax Relief Act, which defines eligibility as projects in census tracts with a poverty rate of at least 20 percent.



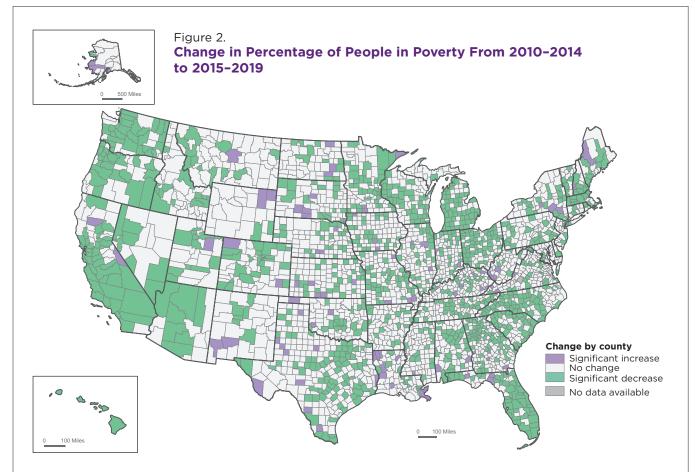
Notes: A significant change is statistically different from zero at the 90 percent confidence level. Due to the county boundary changes that occurred within the 2005–2009 and 2010–2014 time periods, the following county equivalents appear in the "No data available" category: Petersburg, Alaska; Prince of Wales-Hyder, Alaska; Hoonah-Angoon, Alaska; Bedford, Virginia; and Bedford City, Virginia. For more information, see <www.census.gov/acs>. Source: U.S. Census Bureau, 2005–2009 and 2010–2014 American Community Surveys, 5-Year Estimates.

Figure 1 shows counties that experienced an increase, decrease, or no statistically significant change in their poverty rates from the 2005–2009 to 2010–2014 periods. From 2005–2009 to 2010–2014, the overall poverty rate in the United States increased from 13.5 percent to 15.6 percent. During this time, the poverty rate

increased in 1,051 counties and decreased in 136 counties. The change was not statistically significant in 1,951 counties.

Figure 2 shows which counties experienced an increase, decrease, or no statistically significant change in their poverty rates from the 2010–2014 to 2015–2019

periods. From 2010–2014 to 2015–2019, the overall poverty rate in the United States decreased from 15.6 percent to 13.4 percent. During this time, the poverty rate increased in 99 counties and decreased in 1,072 counties. The change was not statistically significant in 1,967 counties.

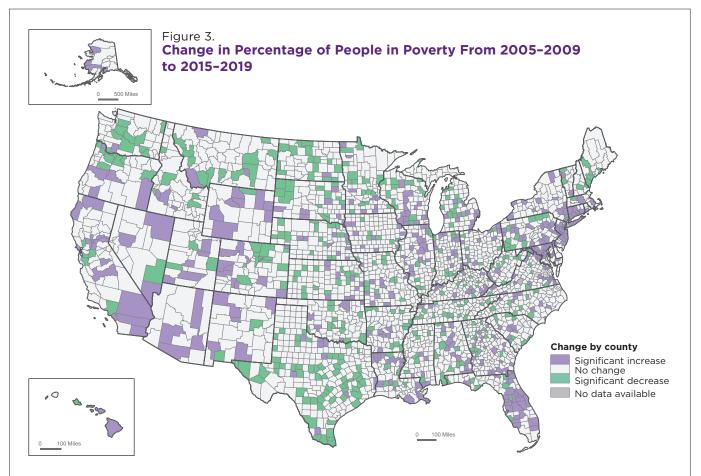


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Source: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys, 5-Year Estimates.

Figure 3 displays which counties experienced an increase, decrease, or no statistically significant change in their poverty rates from the 2005–2009 to 2015–2019 periods. From 2005–2009 to 2015–2019, the change in the

overall poverty rate in the United States was not statistically significant. During this time, the poverty rate increased in 429 counties and decreased in 409 counties. The change was not statistically significant in 2,300 counties. These estimates coincide with a dynamic period of economic contraction and expansion, spanning both the Great Recession (December 2007–June 2009) and the subsequent economic expansion.



Notes: A significant change is statistically different from zero at the 90 percent confidence level. Due to the county boundary changes that occurred within the 2005–2009 and 2010–2014 time periods, the following county equivalents appear in the "No data available" category: Petersburg, Alaska; Prince of Wales-Hyder, Alaska; Hoonah-Angoon, Alaska; Bedford, Virginia; and Bedford City, Virginia. For more information, see <www.census.gov/acs>.

Source: U.S. Census Bureau, 2005-2009 and 2015-2019 American Community Surveys, 5-Year Estimates.

## **Poverty Areas**

Table 1 shows the percentage of people in the poverty universe<sup>10</sup> living in poverty areas, defined as census tracts with a poverty rate of at least 20 percent, in the

United States and in each state and the District of Columbia for 2005-2009, 2010-2014, and 2015-2019. Table 1 also shows the percentage-point change in the share of people living in poverty areas between periods.

In the 2005-2009 period, 21.3 percent of the U.S. population lived in poverty areas. This share increased by 6.4 percentage points (to 27.7 percent) in the 2010-2014 period and declined

to 21.1 percent in the 2015–2019 period. From 2005–2009 to 2015–2019, the percentage of people in the United States living in poverty areas decreased by 0.2 percentage points.

From 2005-2009 to 2015-2019, the percentage of people living in poverty areas increased in 25 states and decreased in 23 states and the District of Columbia. The change was not statistically significant in two states.

<sup>&</sup>lt;sup>10</sup> Poverty status is determined for individuals in housing units and noninstitutional group quarters. The poverty universe excludes children under the age of 15 who are not related to the householder, people living in institutional group quarters (e.g., nursing homes or correctional facilities), and people living in college dormitories or military barracks.

Table 1.

# Percentage of People Living in Poverty Areas<sup>1</sup> by State: 2005–2019

(Universe: People for whom poverty status is determined. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <www.census.gov/programs-surveys/acs/technical-documentation/code-lists.html>)

	2005-2009		2010-2014		2015-2019		Percentage-point change					
							2010-2014 less 2005-2009		2015-2019 less 2010-2014		2015-2019 less 2005-2009	
Area		Margin		Margin		Margin		Margin		Margin		Margin
		of		of		of		of		of		of
	Daraant	error	Daraant	error	Darsont	error	Percent	error	Percent	error	Davaant	error
	Percent		Percent		Percent						Percent	(±) <sup>3</sup>
United States	21.3	Z	27.7	Z	21.1	Z	*6.4	Z	*-6.6	Z	*-0.2	Z
Alabama	30.6	0.1	38.9	0.1	31.2	0.1	*8.3	0.1	*-7.7	0.1	*0.6	0.1
Alaska	6.9	0.2	10.3	0.2	10.3	0.2	*3.4	0.3	Z	0.3	*3.4	0.3
Arizona	25.9	0.1	35.4	0.1	28.4	0.1	*9.5	0.1	*-7.0	0.1	*2.5	0.1
Arkansas	33.3 21.5	0.2 Z	39.9 31.3	0.2 Z	31.6 20.9	0.2 Z	*6.6 *9.8	0.3 Z	*-8.3 *-10.4	0.3 Z	*-1.7 *-0.6	0.3 Z
Colorado	18.1	0.1	20.2	0.1	11.8	0.1	*2.1	0.1	*-8.4	0.1	*-6.3	0.1
Connecticut	11.4	0.1	14.9	0.1	13.3	0.1	*3.5	0.1	*-1.6	0.1	*1.9	0.1
Delaware	7.6	0.2	12.1	0.2	15.0	0.2	*4.5	0.3	*2.9	0.3	*7.4	0.3
District of Columbia	35.6	0.5	35.6	0.4	30.1	0.5	Z	0.6	*-5.5	0.6	*-5.5	0.7
Florida	17.9	0.1	30.6	0.1	22.3	0.1	*12.7	0.1	*-8.3	0.1	*4.4	0.1
Georgia	26.3	0.1	38.1	0.1	27.5	0.1	*11.8	0.1	*-10.6	0.1	*1.2	0.1
Hawaii	9.3	0.2	13.0	0.2	7.7	0.2	*3.7	0.3	*-5.3	0.3	*-1.6	0.3
Idaho	12.7 18.1	0.2 0.1	21.5 23.2	0.2 0.1	16.4 18.8	0.2	*8.8 *5.1	0.3	*-5.1 *-4.4	0.3	*3.7 *0.7	0.3 0.1
Indiana	20.3	0.1	24.6	0.1	21.2	0.1	*4.3	0.1	*-3.4	0.1	*0.9	0.1
lowa	12.0	0.1	13.7	0.1	12.3	0.1	*1.7	0.1	*-1.4	0.1	*0.3	0.1
Kansas	16.1	0.1	22.9	0.1	16.2	0.1	*6.8	0.1	*-6.7	0.1	0.1	0.1
Kentucky	34.8	0.1	41.0	0.1	35.4	0.1	*6.2	0.1	*-5.6	0.1	*0.6	0.1
Louisiana	35.9	0.2	40.2	0.1	38.7	0.1	*4.3	0.2	*-1.5	0.1	*2.8	0.2
Maine	14.5	0.2	18.7	0.1	13.1	0.1	*4.2	0.2	*-5.6	0.1	*-1.4	0.2
Maryland	8.2 14.2	0.1 0.1	11.4 16.7	0.1 0.1	8.4 13.8	0.1	*3.2 *2.5	0.1	*-3.0 *-2.9	0.1	*0.2 *-0.4	0.1 0.1
Michigan	23.0	0.1	28.6	0.1	21.5	0.1	*5.6	0.1	*-7.1	0.1	*-1.5	0.1
Minnesota	10.9	0.1	13.0	0.1	10.5	0.1	*2.1	0.1	*-2.5	0.1	*-0.4	0.1
Mississippi	46.2	0.2	51.7	0.2	42.4	0.2	*5.5	0.3	*-9.3	0.3	*-3.8	0.3
Missouri	21.0	0.1	27.3	0.1	20.3	0.1	*6.3	0.1	*-7.0	0.1	*-0.7	0.1
Montana	19.9	0.2	24.0	0.2	18.1	0.2	*4.1	0.3	*-5.9	0.3	*-1.8	0.3
Nebraska	14.3	0.2	18.1	0.1	11.8	0.2	*3.8	0.2	*-6.3	0.2	*-2.5	0.3
Nevada	13.8 4.7	0.2 0.1	28.3 7.2	0.2 0.1	21.8	0.2	*14.5 *2.5	0.3	*-6.5 *-2.0	0.3	*8.0 *0.5	0.3 0.1
New Jersey	10.8	0.1	15.6	0.1	13.6	0.1	*4.8	0.1	*-2.0	0.1	*2.8	0.1
New Mexico	37.3	0.3	47.0	0.2	41.0	0.2	*9.7	0.4	*-6.0	0.3	*3.7	0.4
New York	23.4	0.1	28.2	0.1	23.2	0.1	*4.8	0.1	*-5.0	0.1	*-0.2	0.1
North Carolina	24.6	0.1	35.0	0.1	24.4	0.1	*10.4	0.1	*-10.6	0.1	*-0.2	0.1
North Dakota	15.5	0.2	12.9	0.2	9.4	0.2	*-2.6	0.3	*-3.5	0.3	*-6.1	0.3
Ohio	20.9	0.1	27.3	0.1	22.2	0.1	*6.4	0.1	*-5.1 *-5.2	0.1	*1.3	0.1
Oklahoma	29.7 18.1	0.2 0.1	32.2 31.3	0.1 0.1	27.0 15.8	0.1	*2.5 *13.2	0.2	*-15.5	0.1	*-2.7 *-2.3	0.2
Pennsylvania	17.1	0.1	19.7	0.1	17.6	0.1	*2.6	0.1	*-2.1	0.1	*0.5	0.1
Rhode Island	19.0	0.2	24.2	0.2	21.5	0.2	*5.2	0.3	*-2.7	0.3	*2.5	0.3
South Carolina	28.3	0.1	38.4	0.2	26.9	0.1	*10.1	0.2	*-11.5	0.2	*-1.4	0.1
South Dakota	15.3	0.2	19.4	0.2	16.8	0.2	*4.1	0.3	*-2.6	0.3	*1.5	0.3
Tennessee	29.9	0.1	34.7	0.1	26.6	0.1	*4.8	0.1	*-8.1	0.1	*-3.3	0.1
Texas	32.5	0.1	35.0	0.1	26.3	0.1	*2.5	0.1	*-8.7 *-9.4	0.1	*-6.2 *-1.4	0.1
Utah	11.2 8.7	0.1 0.2	19.2 10.5	0.1 0.1	9.8 7.9	0.1	*8.0 *1.8	0.1	*-2.6	0.1	*-0.8	0.1
Virginia	11.1	0.2	15.6	0.1	13.0	0.1	*4.5	0.2	*-2.6	0.1	*1.9	0.2
Washington	15.0	0.1	20.0	0.1	10.3	0.1	*5.0	0.1	*-9.7	0.1	*-4.7	0.1
West Virginia	33.2	0.2	32.1	0.2	33.4	0.2	*-1.1	0.3	*1.3	0.3	0.2	0.3
Wisconsin	12.2	0.1	17.1	0.1	12.4	0.1	*4.9	0.1	*-4.7	0.1	*0.2	0.1
Wyoming	7.7	0.2	13.0	0.2	9.8	0.3	*5.3	0.3	*-3.2	0.4	*2.1	0.4

 $<sup>^{\</sup>ast}$  Statistically different from zero at the 90 percent confidence level.

Z Represents or rounds to zero.

<sup>&</sup>lt;sup>1</sup> Census tracts with poverty rate of 20 percent or more are considered as poverty areas.

<sup>&</sup>lt;sup>2</sup> Poverty status is determined for individuals in housing units and noninstitutional group quarters. The poverty universe excludes children under the age of 15 who are not related to the householder, people living in institutional group quarters (e.g., nursing homes or correctional facilities), and people living in college dormitories or military barracks.

<sup>&</sup>lt;sup>3</sup> Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. This number when added to or subtracted from the estimate forms the 90 percent confidence interval.

Source: U.S. Census Bureau, 2005-2009, 2010-2014, and 2015-2019 American Community Surveys, 5-Year Estimates.

In the 2005–2009 period, the share of a state's population that lived in a poverty area ranged from a low of 4.7 percent in New Hampshire to a high of 46.2 percent in Mississippi. In eight states and the District of Columbia, the percentage of people living in poverty areas was at least 30 percent. In seven states, less than 10 percent of the population lived in poverty areas.

In the 2010-2014 period, 27.7 percent of the U.S. population lived in poverty areas, though this ranged from a low of 7.2 percent in New Hampshire to a high of 51.7 percent in Mississippi. The percentage of people living in poverty areas was at least 30 percent in 17 states and the District of Columbia; it was over 40 percent in four states. The percentage of the population living in poverty areas was under 10 percent in only one state (New Hampshire).

In the 2015-2019 period, 21.1 percent of the U.S. population lived in poverty areas. This percentage ranged from a low of 5.2 percent in New Hampshire to a high of 42.4 percent in Mississippi. In seven states and the District of Columbia, the percentage of people living in poverty areas was at least 30 percent, while the percentage of people living in poverty areas was at least 40 percent in two states. In seven states, the percentage of the population living in poverty areas was 10 percent or less.

#### CONCLUSION

This report uses the 2005-2009, the 2010-2014, and the 2015-2019 ACS 5-year estimates to examine the county poverty rates and the prevalence of poverty areas across this time period. From 2005-2009 to 2010-2014, the overall poverty rate in the United States increased from 13.5 percent to 15.6 percent. From 2010-2014 to 2015-2019 the overall poverty rate in the United States fell to 13.4 percent, not statistically different from the 13.5 percent rate in 2005-2009. From 2005-2009 to 2015-2019, a period that spanned both the Great Recession and the subsequent economic expansion. the poverty rate increased in 429 counties and decreased in 409 counties.

In the 2015–2019 ACS 5-year estimates, 21.1 percent of the population lived in census tracts with poverty rates of 20 percent or higher. From 2005–2009 to 2015–2019, the percentage of people living in poverty areas increased in 25 states and decreased in 23 states and the District of Columbia. The change was not statistically significant in two states.

The estimates presented in this report highlight the usefulness of ACS data. They demonstrate how data from three nonoverlapping periods can be compared to further the understanding of poverty during a period of economic change. While this brief examines

one element of change across this period, these data can be used to address many other questions about the economic and social nuances of the past 15 years. Instructions on how to access more ACS and poverty data to examine those questions appear at the end of this report.

## **SOURCE AND ACCURACY**

The data presented in this report are based on the ACS sample interviewed each year from January 2005 through December 2019. The estimates based on these samples describe the person, household, and housing unit characteristics over each 5-year period of data collection (2005-2009, 2010-2014, and 2015-2019). The ACS estimates are subject to both sampling and nonsampling error. Sampling error is the uncertainty between an estimate based on a sample and the corresponding value that would be obtained if the estimate were based on the entire population (as from a census). Measures of sampling error are provided in the form of margins of error for all estimates included in this report. All comparative statements in this report have undergone statistical testing, and comparisons are significant at the 90 percent confidence level unless otherwise noted.

In addition to sampling error, nonsampling error may be introduced during any of the operations used to collect and process survey data such as editing, reviewing,

or keying data from questionnaires. For more information on sampling and estimation methods, confidentiality protection, and sampling and nonsampling errors, please see the 2019 ACS Accuracy of the Data document located at <www.census.gov/programs -surveys/acs/technical -documentation/code-lists.html>.

When comparing ACS estimates over time, it is necessary to consider changes to content, methodology, or geographic definitions. For more information about comparing ACS data across years or with a decennial census, please see "Comparing ACS Data" at <www.census.gov/programs -surveys/acs/guidance /comparing-acs-data.html>.

# HOW TO ACCESS AMERICAN COMMUNITY SURVEY DATA

All ACS data products are released on the U.S. Census Bureau's primary data dissemination and digital content platform located at <a href="https://data.census.gov">https://data.census.gov</a>.

An additional method for obtaining ACS data is through the Census Bureau's application programming interface (API), visit <www.census.gov /developers/>. This tool provides the public with maximum flexibility to query data directly from Census Bureau servers.

# HOW TO ACCESS ADDITIONAL POVERTY DATA

Additional poverty estimates, publications, working papers, visualizations, and data from other surveys can be found at <www.census.gov/topics/income-poverty/poverty.html>.