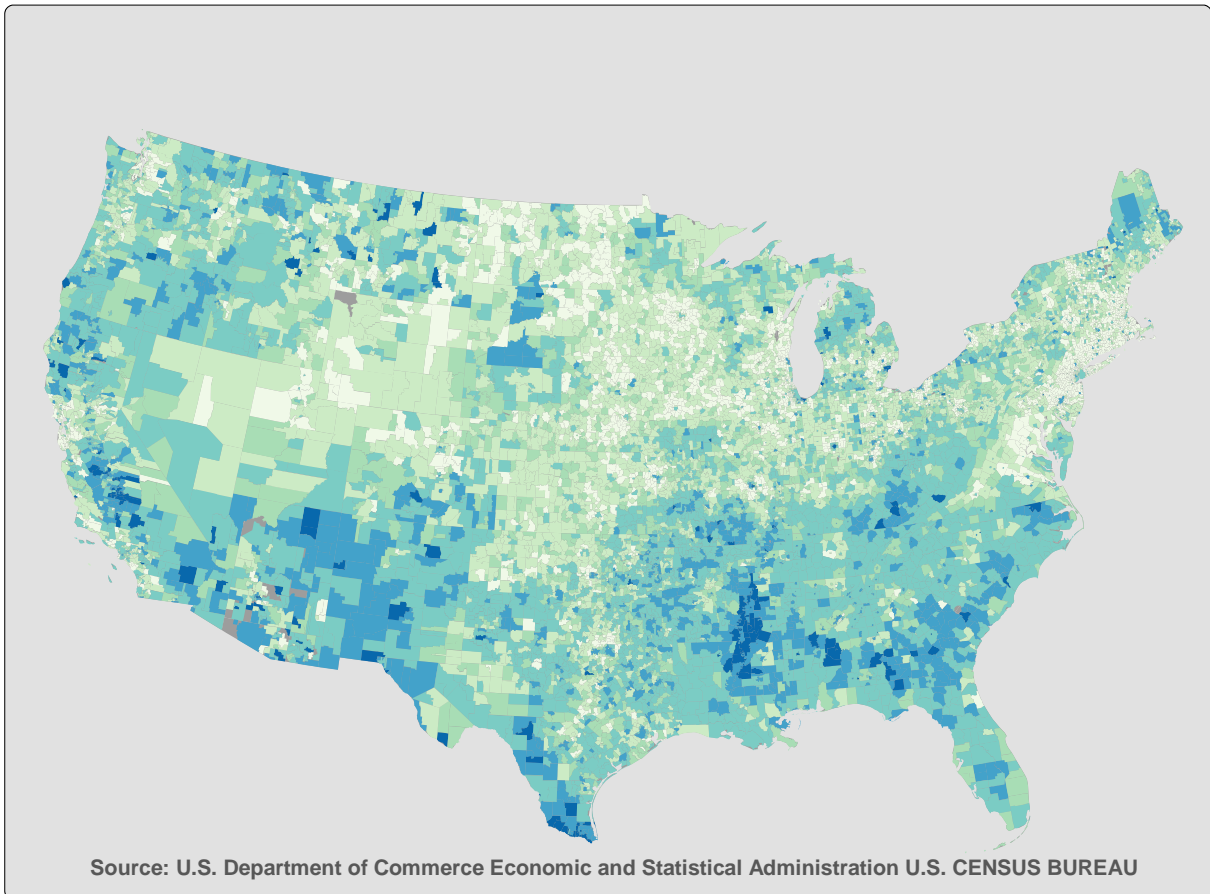


Small Area Income and Poverty Estimates (SAIPE): 2012 Highlights



MAP: School-Age Children in Families in Poverty by School District (p.23)

U.S. Census Bureau
Social, Economic and Housing Statistics Division (SEHSD)
Small Area Estimates Branch (SAEB)
Issued December 2013

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Small Area Income and Poverty Estimates (SAIPE): 2012 Highlights

I. Introduction

This document presents 2012 data released by the Small Area Income and Poverty Estimates (SAIPE) program of the U.S. Census Bureau in December of 2013. The SAIPE program produces single-year poverty statistics for all school districts, counties and states in the United States.

The main objective of the SAIPE program is to provide timely, reliable estimates of income and poverty for the administration of federal programs and the allocation of federal funds to local jurisdictions. Some state and local programs also use SAIPE income and poverty estimates to distribute funds and manage programs.

Specifically, the SAIPE program produces county and state estimates of the total number of people in poverty, children under age 5 in poverty (for states only), related children ages 5 to 17 in families in poverty, children under age 18 in poverty, and median household income. Additionally, school district estimates are generated for the total population, number of children ages 5 to 17 and number of related children ages 5 to 17 in families in poverty.

Due to the comprehensive geographic coverage and one-year focus, SAIPE data can be used to analyze geographic variation in poverty and income, as well as changes over time. The purpose of this document is to highlight several key aspects of such analysis.

Highlights

- County-level median household income ranged from \$22,126 to \$121,250 with a middle value of \$43,020.^{1 2}
- Based on poverty rate estimates for all ages, 1,029 counties, or 33 percent of all counties, had a statistically significant increase in poverty between 2007 and 2012.³ Slightly more than one percent of counties had a statistically significant decrease in poverty during that time period.
- In 2012, there were 13,529 school districts. Of these, 15 percent had poverty rates greater than 30 percent, for the population of school-age children in families.

Small Area Income and Poverty Estimates (SAIPE)

SAIPE estimates improve upon survey estimates by borrowing strength from administrative records, postcensal population estimates, and decennial census data. Modeling techniques allow SAIPE to annually publish single-year estimates for all school districts and counties. SAIPE estimates are broadly consistent with the direct survey estimates, but with the help of other timely information, SAIPE estimates are more precise than the one-year survey estimates for most counties and school districts. One-year American Community Survey (ACS) estimates are not available for most of these areas (see A.4). Nonetheless, SAIPE estimates are subject to several types of uncertainty. Further information on SAIPE methodology is available at: <http://www.census.gov/did/www/saipe/methods/index.html>.

A related program to SAIPE is the Small Area Health Insurance Estimates (SAHIE) program, which produces estimates of health insurance coverage for all counties and states. Information about the SAHIE program is available at:

<http://www.census.gov/did/www/sahie/index.html>.

¹ All data shown are estimates containing uncertainty. Apparent differences among the estimates may not be statistically significant, unless specifically noted. All direct comparisons cited in the text have been statistically tested at the 90% significance level.

² \$43,020 is the middle value among the distribution of counties, not the U.S. median. The legend in Figure 1 shows the U.S. median (\$51,371) which is the median household income for the nation.

³ 2007 was chosen in this time series because it was the year before the most recent recession. The National Bureau of Economic Research (NBER) is the official source for recession timing with the most recent recession beginning in December 2007 and ending in June 2009.

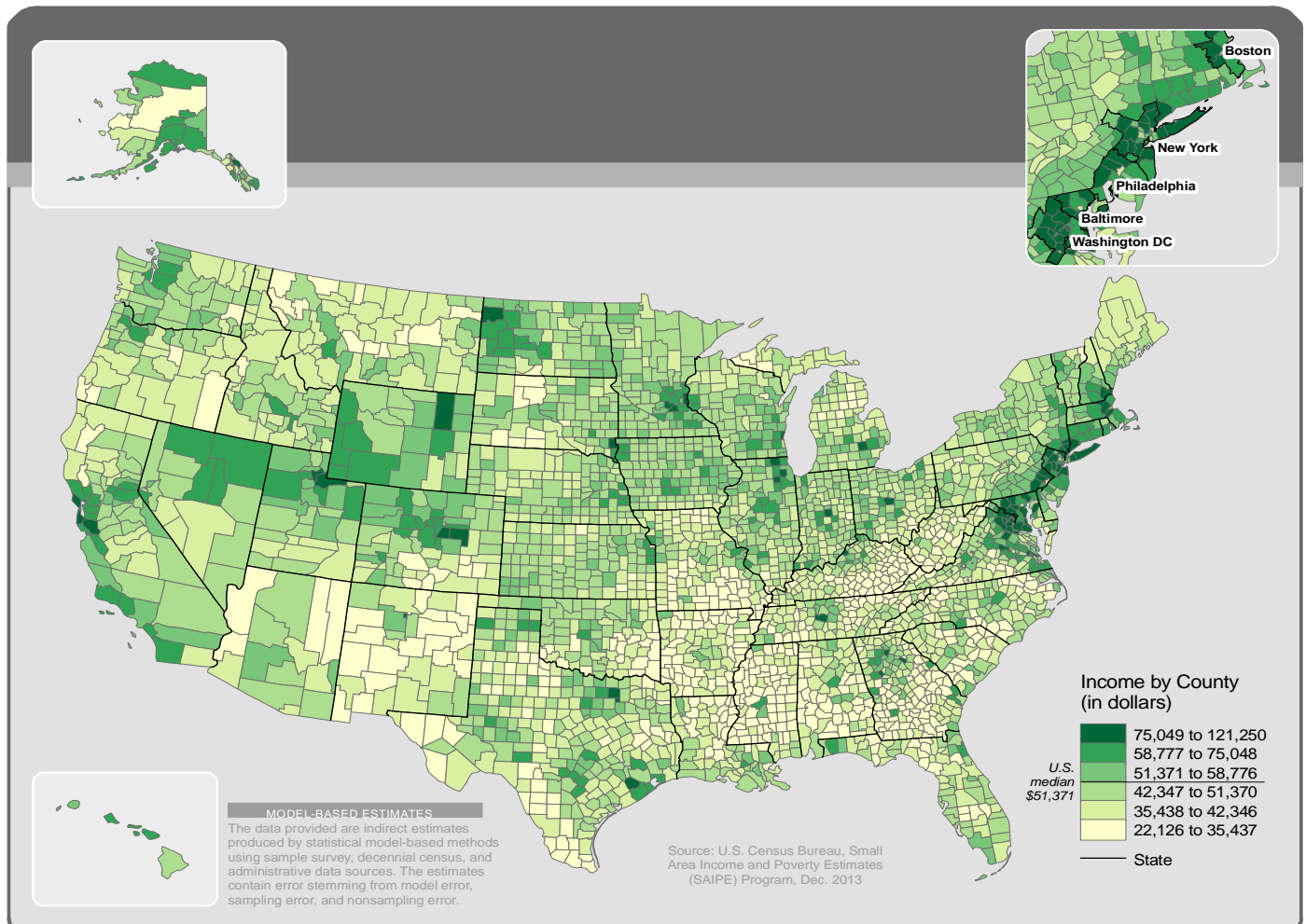
II. County-Level Estimates

Median Household Income

The 2012 SAIPE data provide estimates for nearly all counties in the U.S (3,142 counties).⁴ According to the data, median household income estimates at the county-level ranged from \$22,126 to \$121,250 with a middle value of \$43,020.⁵

Figure 1 highlights the range of median household income throughout the United States. Of the 75 counties with estimates within the highest range (\$75,049 to \$121,250), 44 were located in the Northeast, Maryland and Virginia. The corridor of metropolitan statistical areas (MSA) extending from the Boston MSA to the Washington DC MSA contains more than 37 such high-income counties. Seventy-nine percent of counties in the lowest income range (\$22,126 to \$35,437) were located in the South.

Figure 1. Median Household Income by County: 2012



⁴ Kalawao County, Hawaii was omitted from the estimates due to a lack of children ages 5 to 17.

⁵ \$43,020 is the middle value among the distribution of counties, not the U.S. median. The legend in Figure 1 shows the U.S. median (\$51,371) which is the median household income for the nation.

Metropolitan and Micropolitan Statistical Areas

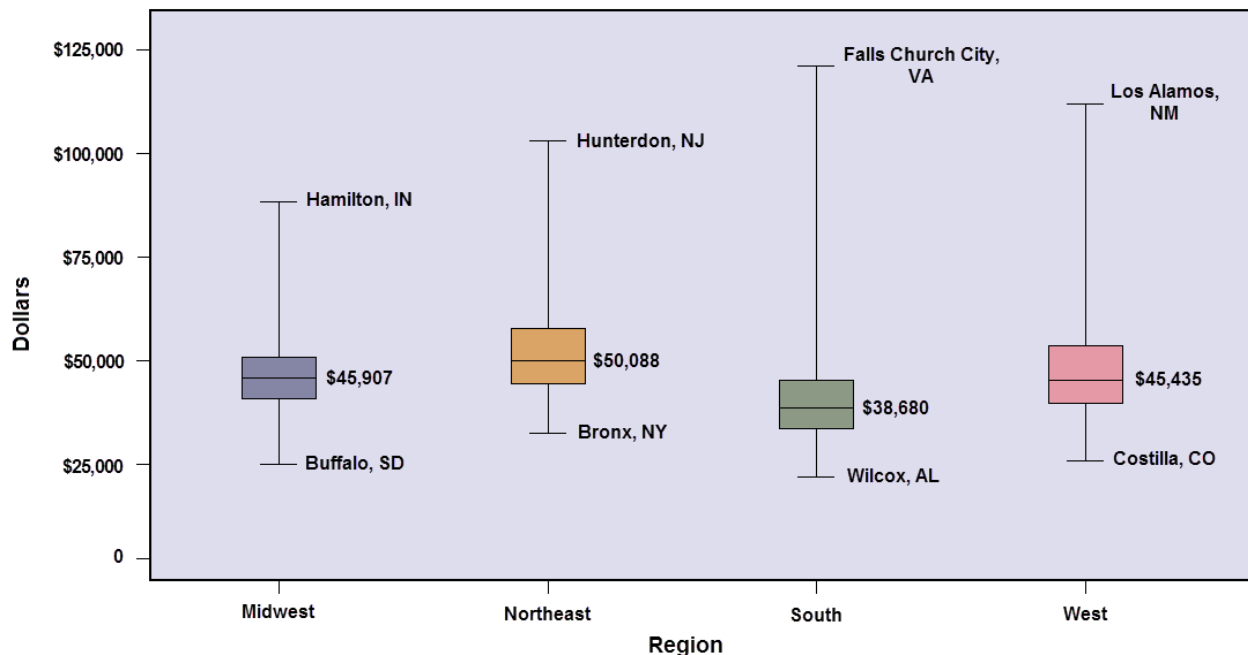
Metropolitan and micropolitan statistical areas are geographical entities defined by the U.S. Office of Management and Budget (OMB) and used by federal statistical agencies for collecting, tabulating, and publishing federal statistics. They are the result of the application of published OMB standards to Census Bureau data. A metropolitan area contains an urban core population of 50,000 or more, and a micropolitan area contains an urban core population of at least 10,000 (but less than 50,000). Each metropolitan and micropolitan area consists of one or more counties and includes the counties containing the urban core area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core.

Appendix 2 is a map depicting metropolitan and micropolitan area status by county. Information about metropolitan and micropolitan areas, which are also known as "Core Based Statistical Areas", is available at:

<http://www.census.gov/population/www/metroareas/metroarea.html>.

Highlighting the range of median household income by region, Figure 2 displays the highest and lowest county estimates for each region throughout the United States.⁶ Looking at the range of median household income throughout the regions, ordered alphabetically, the Midwest had a middle value of \$45,907, the Northeast (\$50,088), the South (\$38,680), and the West (\$45,435).

Figure 2. Range of Median Household Income at the County-Level by Region: 2012

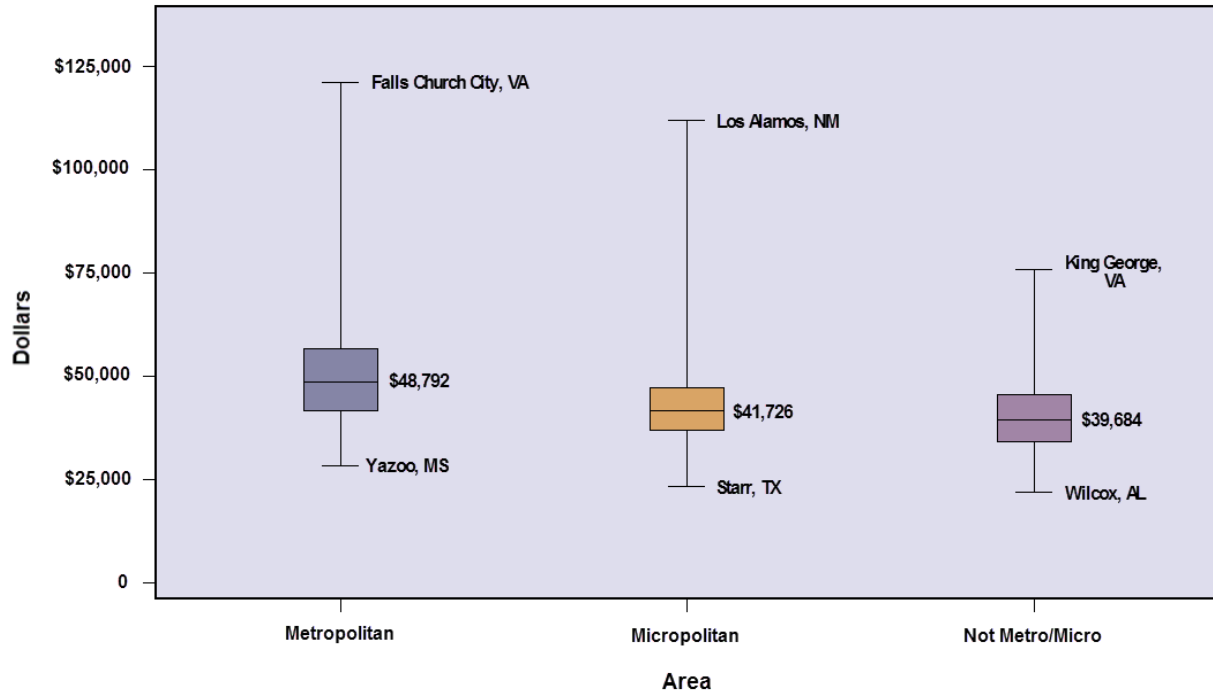


Notes: The data shown are estimates containing uncertainty. Apparent differences among the estimates may not be statistically significant. In particular, counties identified as minimum and maximum may have several other counties that are statistically indistinguishable. The box and whisker plot shows median household income by county. The whiskers indicate the minimum and maximum values, while the lower and upper borders of the box represent the interquartile range (25th and 75th percentile). The line inside the box indicates the location of the 50th percentile (middle value).
Source: U.S. Census Bureau, 2012 Small Area Income and Poverty Estimates

⁶ Census regions are defined as Midwest, Northeast, South, and West. For a map of the regions, see Appendix 1.

It is also possible to view median household income at the county-level by metro status, as shown in Figure 3.⁷ The estimates for median household income in metropolitan areas ranged from \$28,499 to \$121,250, with a middle value of \$48,792. The estimates for median household income in micropolitan areas ranged from \$23,358 to \$112,115, with a middle value of \$41,726. The median household income in the non-metropolitan/micropolitan areas ranged from \$22,126 to \$75,861 with a middle value of \$39,684.

Figure 3. Range of Median Household Income Estimates at the County-Level by Metro Status: 2012



Notes: The data shown are estimates containing uncertainty. Apparent differences among the estimates may not be statistically significant. In particular, counties identified as minimum and maximum may have several other counties that are statistically indistinguishable. The box and whisker plot shows median household income by county. The whiskers indicate the minimum and maximum values, while the lower and upper borders of the box represent the interquartile range (25th and 75th percentile). The line inside the box indicates the location of the 50th percentile (middle value).
 Source: U.S. Census Bureau, 2012 Small Area Income and Poverty Estimates

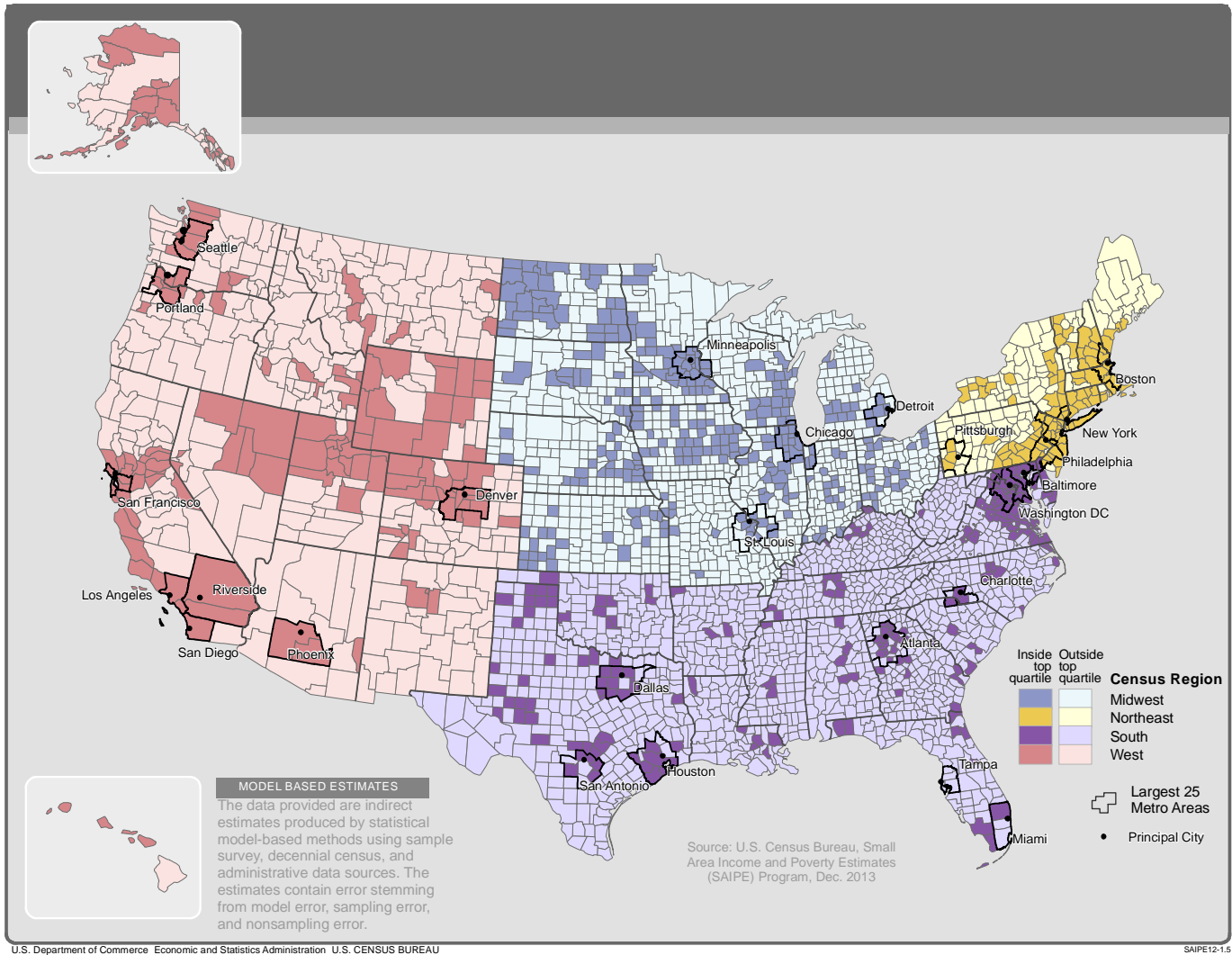
Top National Quartile

Figure 4 presents the 786 counties in the top quartile (above the national 75th percentile) by median household income. All counties in the top quartile had a median household income greater than \$50,080. Sixty-seven percent of the counties (523 counties) in the top quartile were located in metropolitan areas. Ninety-six percent of the populations living in the top quartile counties were also concentrated in these metro areas.⁸ Median household incomes in 186 of the 240 counties that comprise the 25 largest metropolitan areas (77.5 percent) were in the top quartile.

⁷ For place of residence, we use metropolitan and micropolitan statistical areas for county-level data. Metropolitan and micropolitan area status is described in the text box on page 6 and is shown by map in Appendix 2.

⁸ Many of the other counties in the top quartile were located around smaller metropolitan and micropolitan areas.

Figure 4. Top National Quartile Based on Median Household Income by County: 2012



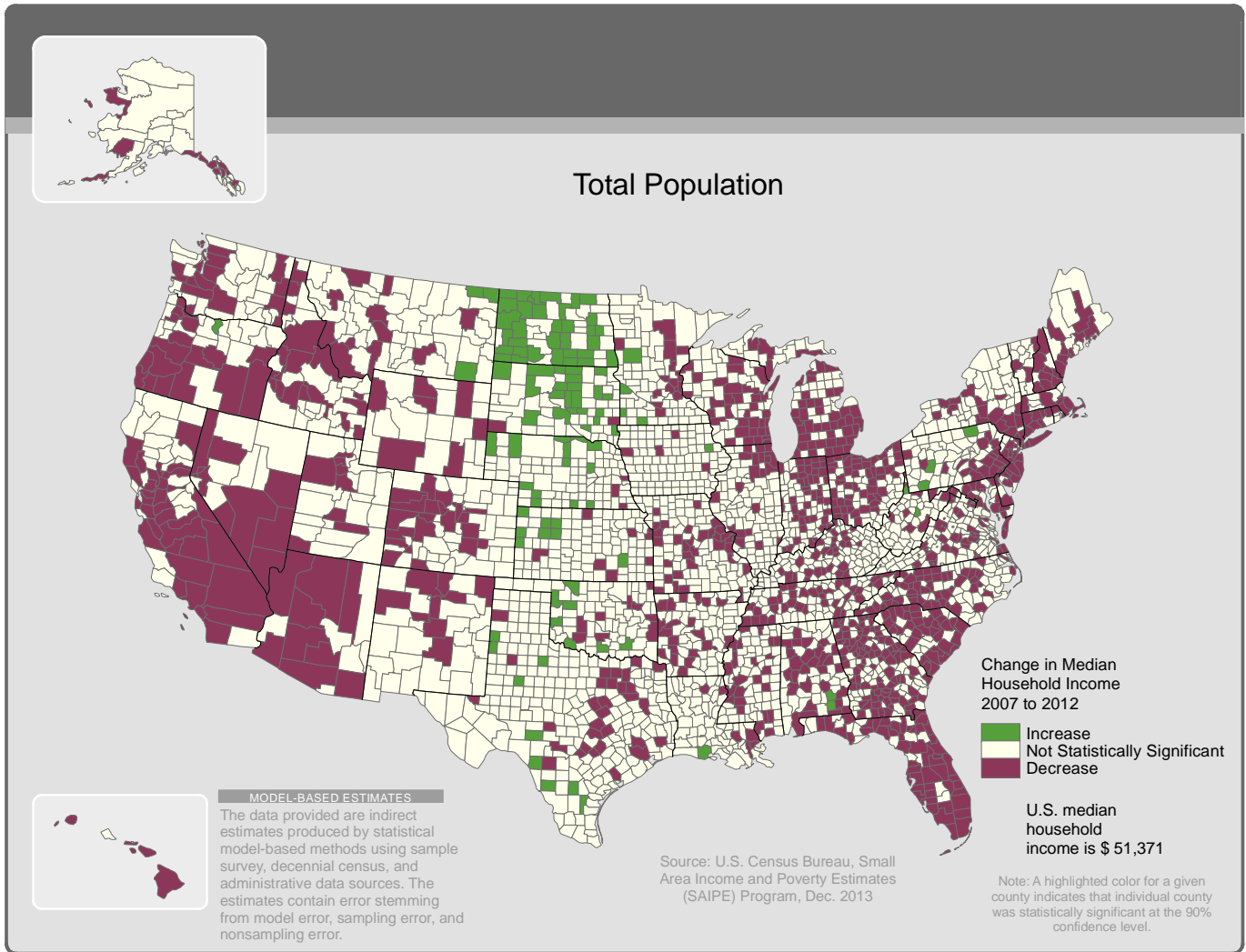
Change in Median Household Income

The analysis and statistical testing of SAIPE county trends are conducted at the 90 percent confidence level.⁹ Figure 5 shows the statistically significant change in median household income for the period between 2007, the year before the most recent recession, and 2012, the third year after the recession ended. The changes were adjusted for inflation using the national Consumer Price Index before testing. Of the 3,142 counties in the U.S., 1108 counties, or 35.3 percent, had a statistically significant change over the five-year period. Of the counties with statistically significant changes, 90 percent (997 counties) had decreases in median household income. Clusters of counties with significant decreases in median household income exist

⁹ A methodology for counties has been developed for use in analyzing trends in median household income and poverty over time. These methods cannot be applied directly to published estimates since changes to survey coverage, geographic definitions, and SAIPE methodology create breaks in the published time series. For more information, see the SAIPE methodology page at: <http://www.census.gov/did/www/saipe/methods/index.html>. Additionally, there is a published paper available on the comparisons methodology: Basel, Wesley, Sam Hawala, and David Powers. "Serial Comparisons in Small Domain Models: A Residual-Based Approach," 2010. *JSM Proceedings, Section on Government Statistics*. Alexandria, VA: American Statistical Association. The paper is located at: <http://www.census.gov/did/www/saipe/publications/files/BaselHawalaPowers2010asa.pdf>.

throughout all regions and virtually all states. Only 111 or 10 percent of the counties with significant change had an increase in median household income between 2007 and 2012. North and South Dakota contained the highest proportions of counties with median household income gains: 33 counties or 62 percent and 22 counties or 33 percent, respectively. Alternatively, one could say that these two states represented nearly 50 percent of all counties which showed a statistically significant increase in median household income.¹⁰

Figure 5. **Changes in Median Household Income by County: 2007 to 2012**



U.S. Department of Commerce Economic and Statistics Administration U.S. CENSUS BUREAU

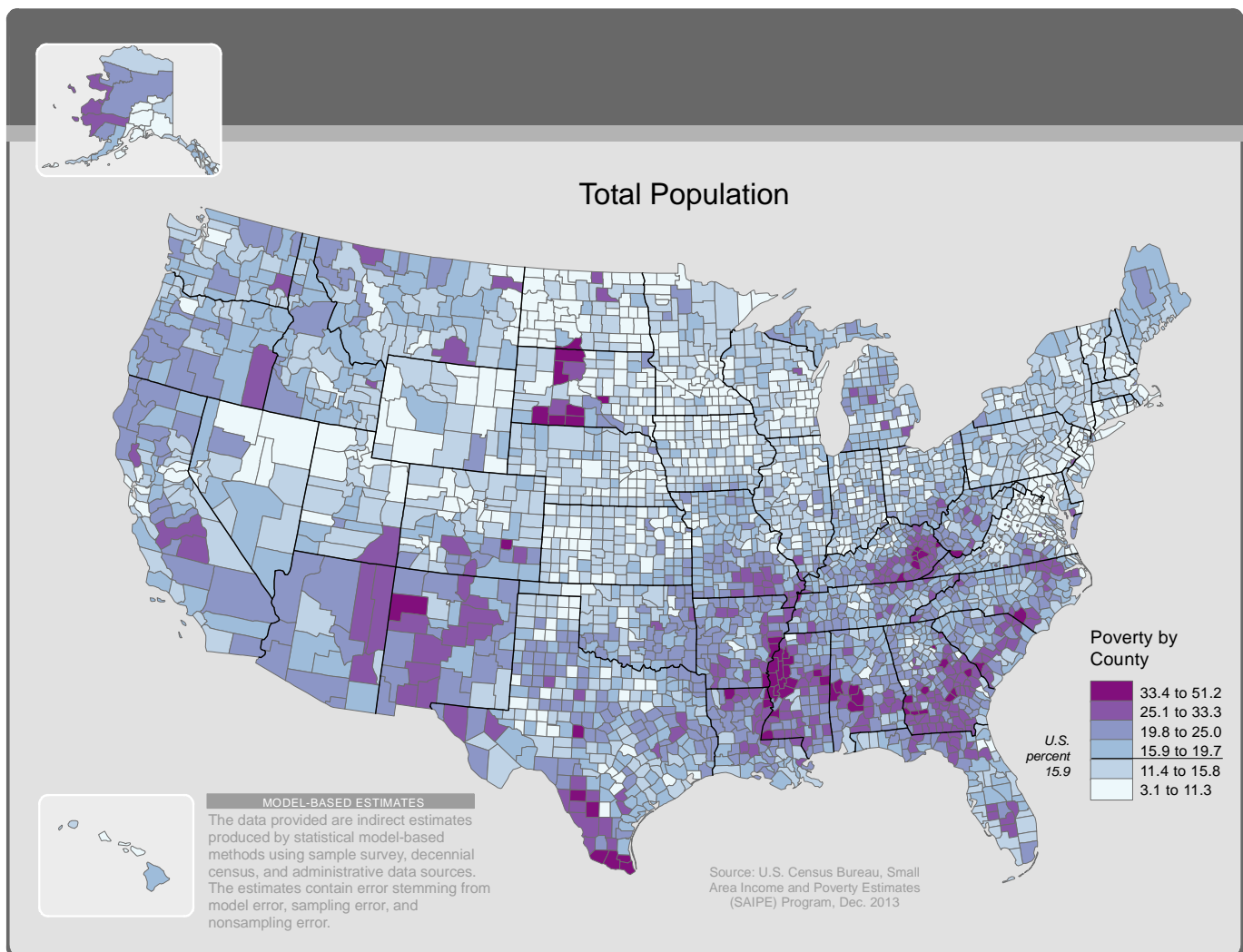
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¹⁰ Although the District of Columbia had a statistically significant increase it has been excluded.

Poverty

2012 SAIPE provides poverty estimates for all counties. According to these estimates, county poverty rates for all ages ranged from 3.1 percent to 51.2 percent.¹¹ Figure 6 indicates how poverty rates varied among counties throughout the United States. Counties with higher poverty rate estimates were concentrated predominately in the South. Over 20 percent of counties within the South had poverty rate estimates in the top ranges (25.1 to 33.3 and 33.4 to 51.2), while the other three regions (West, Midwest, and Northeast) had no more than 7 percent of their counties with poverty rate estimates in the top ranges.

Figure 6. **Poverty Rates by County: 2012**



¹¹ Information on poverty, including how it is defined is located in the text box on page 11. Further information on poverty is available at: <http://www.census.gov/hhes/www/poverty/poverty.html>.

How Poverty is Measured?

Poverty status is determined by comparing total annual income to a set of dollar values called thresholds that vary by family size, number of related children, and age of householder. If a family's before tax money income is less than the dollar value of their 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 total income to his or her threshold.

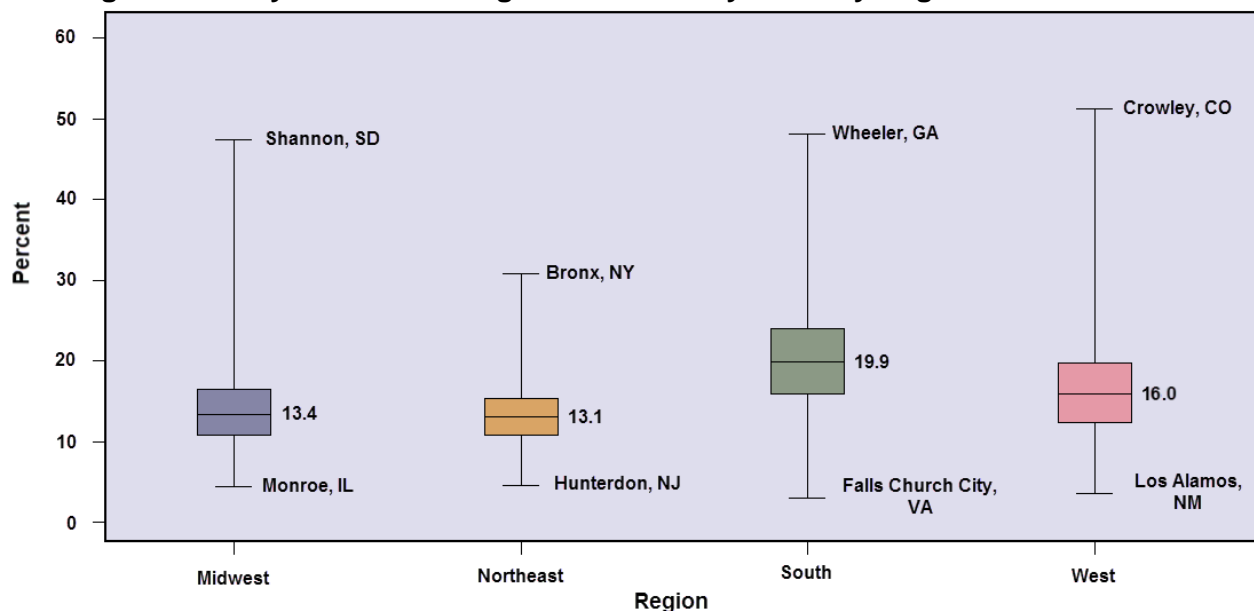
The poverty thresholds are updated annually to allow for changes in the cost of living using the Consumer Price Index (CPI-U). They do not vary geographically.

SAIPE's dependent variable is the estimates of poverty from the American Community Survey (ACS), a continuous survey with people responding 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 (1982) by the average of the monthly CPI values for the 12 months preceding the survey.

For more information, see "How Poverty is Calculated in the American Community Survey" at: <http://www.census.gov/hhes/www/poverty/about/overview/measure.html>.

Figures 7 and 8 show the distribution of poverty rates at the county-level by region and metro status. According to Figure 7, the median estimates for poverty rates in the four regions were 13.4 percent (Midwest), 13.1 percent (Northeast), 19.9 percent (South), and 16.0 percent (West). Looking at metro status, metropolitan areas had a median estimated county level poverty rate of 14.8 percent, in micropolitan areas 17.4 percent, and in non-metropolitan/micropolitan areas 17.2 percent (Figure 8).

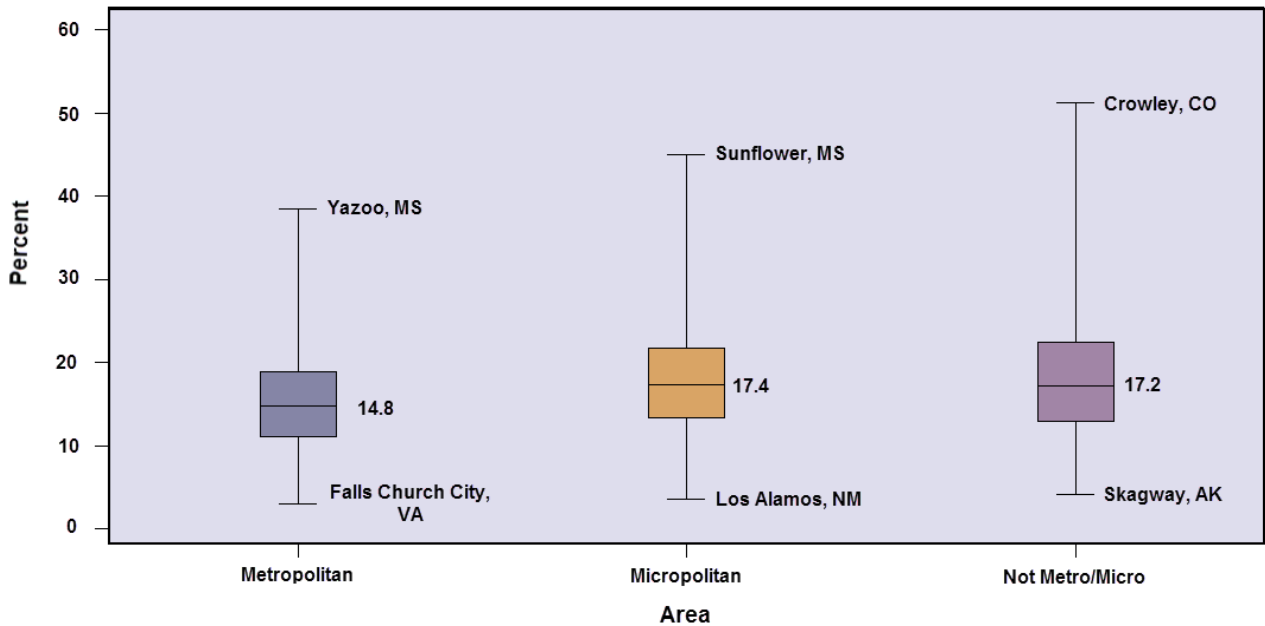
Figure 7. Range of Poverty Rates for All Ages at the County-Level by Region: 2012



Notes: The data shown are estimates containing uncertainty. Apparent differences among the estimates may not be statistically significant. In particular, counties identified as minimum and maximum may have several other counties that are statistically indistinguishable. The box and whisker plot shows the distribution of poverty by county. The whiskers indicate the minimum and maximum values, while the lower and upper borders of the box represent the interquartile range (25th and 75th percentile). The line inside the box indicates the location of the 50th percentile (middle value).

Source: U.S. Census Bureau, 2012 Small Area Income and Poverty Estimates

Figure 8. Range of Poverty Rates for All Ages at the County-Level by Metro Status: 2012

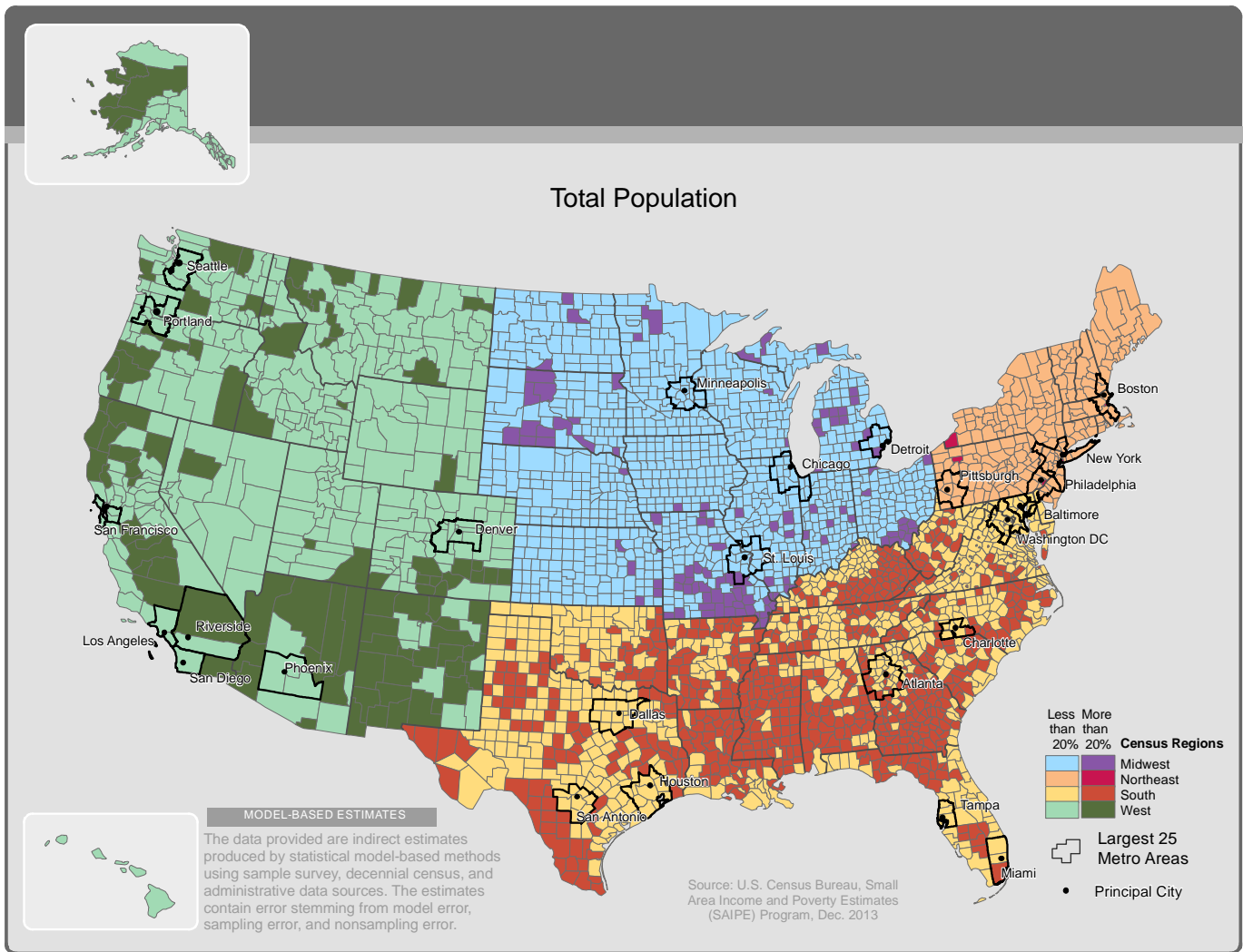


Notes: The data shown are estimates containing uncertainty. Apparent differences among the estimates may not be statistically significant. In particular, counties identified as minimum and maximum may have several other counties that are statistically indistinguishable. The box and whisker plot shows the distribution of poverty by county. The whiskers indicate the minimum and maximum values, while the lower and upper borders of the box represent the interquartile range (25th and 75th percentile). The line inside the box indicates the location of the 50th percentile (middle value).
 Source: U.S. Census Bureau, 2012 Small Area Income and Poverty Estimates

Where is Poverty Concentrated?

In addition to the percent of people in poverty, it is possible to analyze the concentration of county-level poverty at the national level. Figure 9 depicts county poverty data for all ages by region and the largest 25 metropolitan areas. In the Midwest, Northeast, West, and South, 11, 3, 23 and 49 percent of their respective counties had poverty rates of 20 percent or more.

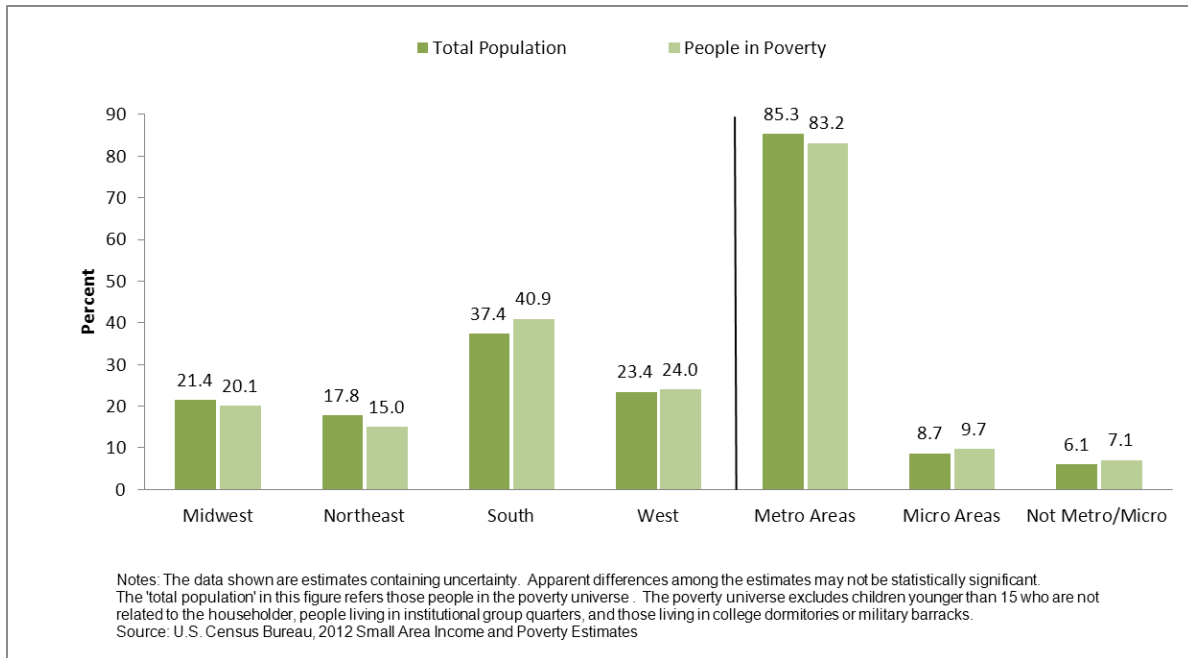
Figure 9. Counties with Poverty Rates Above or Below 20 Percent by Region: 2012



Share of People in Poverty

Figure 10 shows a comparative picture of the share of the total population with the proportion of people in poverty by region and metro status.

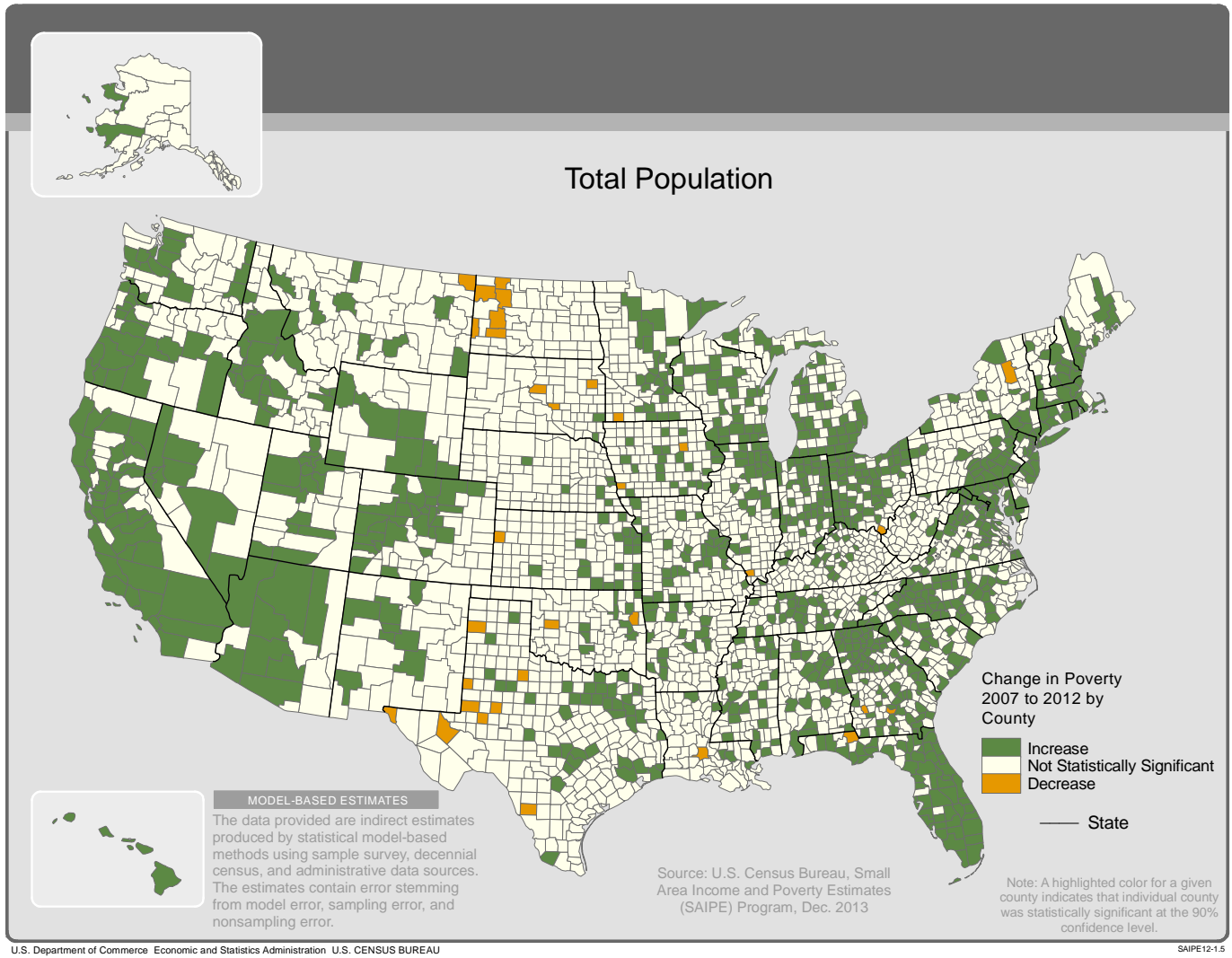
Figure 10. **Percentage of Total Population and People in Poverty at the County-Level by Region and Metro Status: 2012**



Change in Poverty Rates

Figure 11 shows the change in poverty rates at the county-level for the total population between 2007 and 2012. Of the 3,142 counties in the United States, 1,061 counties, or 34 percent, had statistically significant changes during the five year period. Of the counties with statistically significant changes, 1,029 counties, or 97 percent, showed an increase in poverty rate. Only 32 counties, or approximately 3 percent, had a statistically significant decrease in poverty rate between 2007 and 2012.

Figure 11. **Changes in Poverty Rates by County: 2007 to 2012**

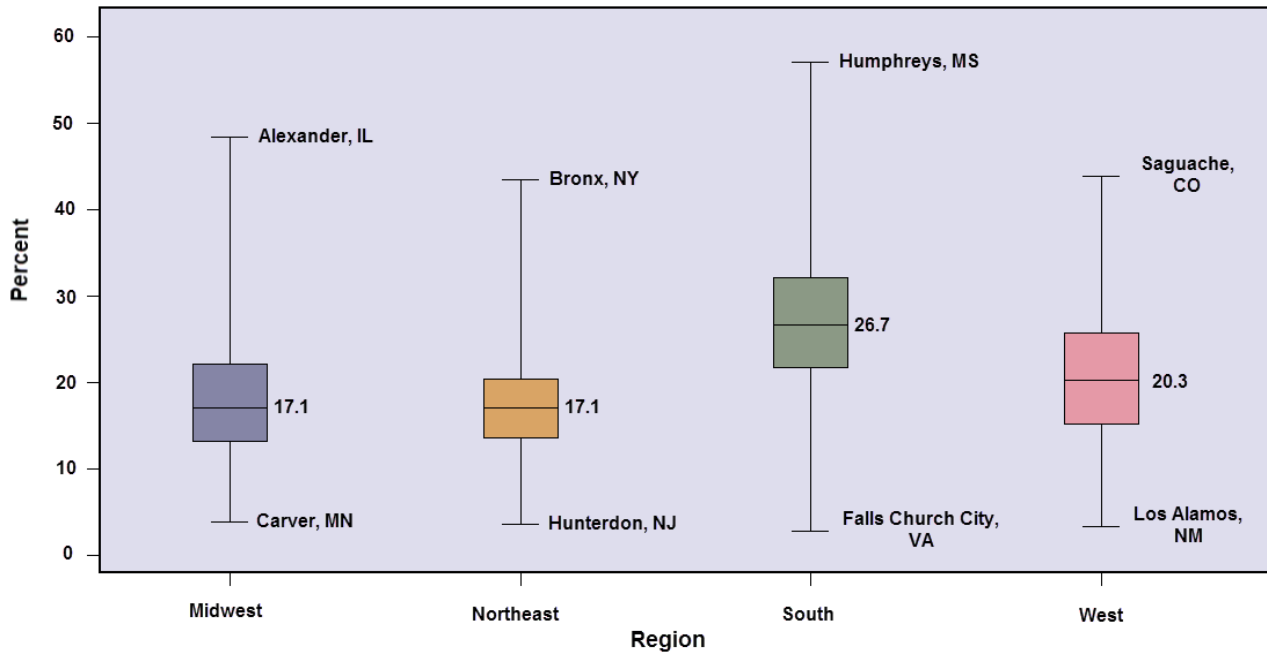


Poverty of School-Age Children

SAIPE publishes annual poverty estimates for school-age children in families¹² for all counties. ‘School-age children’ refers to the population of children ages 5 to 17. By region (Figure 12), the school-age median poverty rate was 17.1 percent in the Midwest, 17.1 percent in the Northeast, 26.7 percent in the South, and 20.3 percent in the West. Similarly, by metro status (Figure 13), the school-age median poverty rate in metropolitan areas was 19.4 percent, 23.0 percent in micropolitan areas, and 23.7 percent in non-metropolitan/micropolitan areas (Figure 13).

¹² The term ‘children in families’ denotes children who are related to the householder by birth, marriage or adoption. Foster children are not included in families.

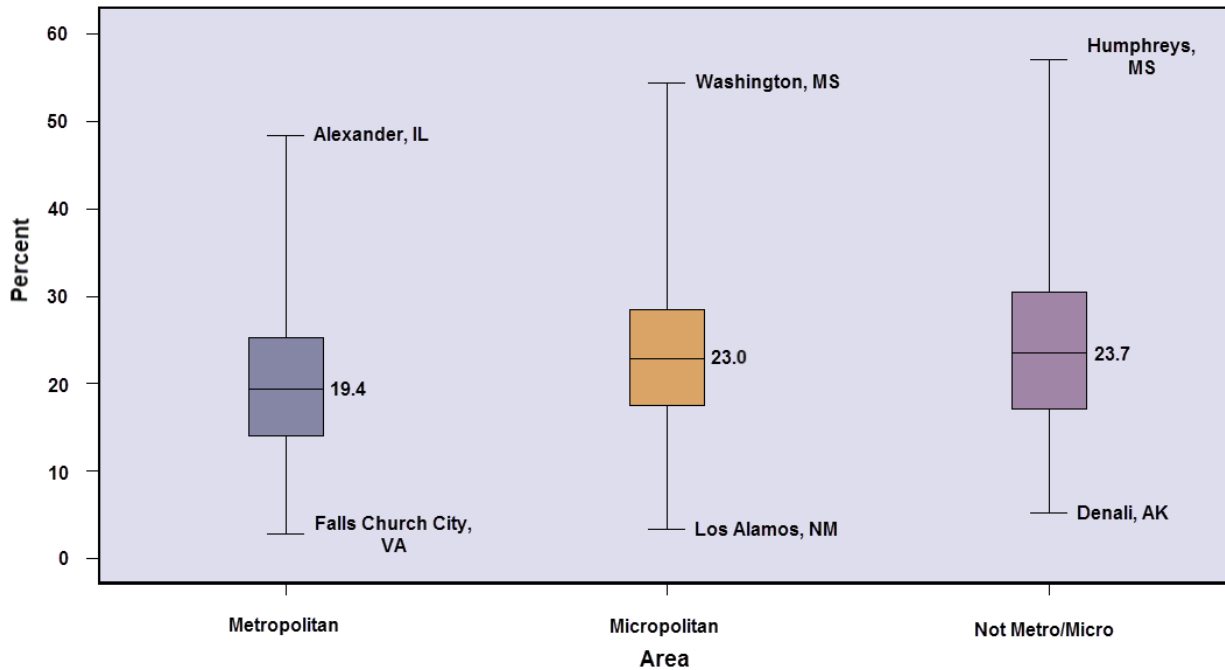
Figure 12. Range of Poverty Rates of the School-Age Population at the County-Level by Region: 2012



Notes: The data shown are estimates containing uncertainty. Apparent differences among the estimates may not be statistically significant. In particular, counties identified as minimum and maximum may have several other counties that are statistically indistinguishable. The box and whisker plot shows the distribution of poverty by county. The whiskers indicate the minimum and maximum values, while the lower and upper borders of the box represent the interquartile range (25th and 75th percentile). The line inside the box indicates the location of the 50th percentile (middle value).

Source: U.S. Census Bureau, 2012 Small Area Income and Poverty Estimates

Figure 13. Range of Poverty Rates of the School-Age Population at the County-Level by Metro Status: 2012



Notes: The data shown are estimates containing uncertainty. Apparent differences among the estimates may not be statistically significant. In particular, counties identified as minimum and maximum may have several other counties that are statistically indistinguishable. The box and whisker plot shows the distribution of poverty by county. The whiskers indicate the minimum and maximum values, while the lower and upper borders of the box represent the interquartile range (25th and 75th percentile). The line inside the box indicates the location of the 50th percentile (middle value).
 Source: U.S. Census Bureau, 2012 Small Area Income and Poverty Estimates

Geographic Poverty Rate Comparisons of School-Age Children

Figure 14 compares poverty rates at the county-level to the national poverty rate for school-age children. In this map, the blue shade identifies counties with poverty rates for school-age children higher than the national poverty rate (21.1 percent), while the orange shade identifies those counties with poverty rates for school-age children below the national poverty rate. Overall, there were 1,970 counties with rates that were statistically significantly different from the national average with 987 counties above and 983 counties below the national poverty rate.

Large concentration of counties with poverty rates statistically significantly above the national average for school-age children were observed in the South and West. In particular, two states had more than 80 percent of their counties that were statistically significantly greater than the national poverty rate: Arizona and Mississippi. In the following states more than 80 percent of the counties had poverty rates for school-age children statistically significantly lower than the national poverty rate: Connecticut, Minnesota, North Dakota, Rhode Island and Wyoming.

Figure 14. **Poverty Rate Comparisons Between County-level and the National Poverty Rate of the School-Age Population: 2012**

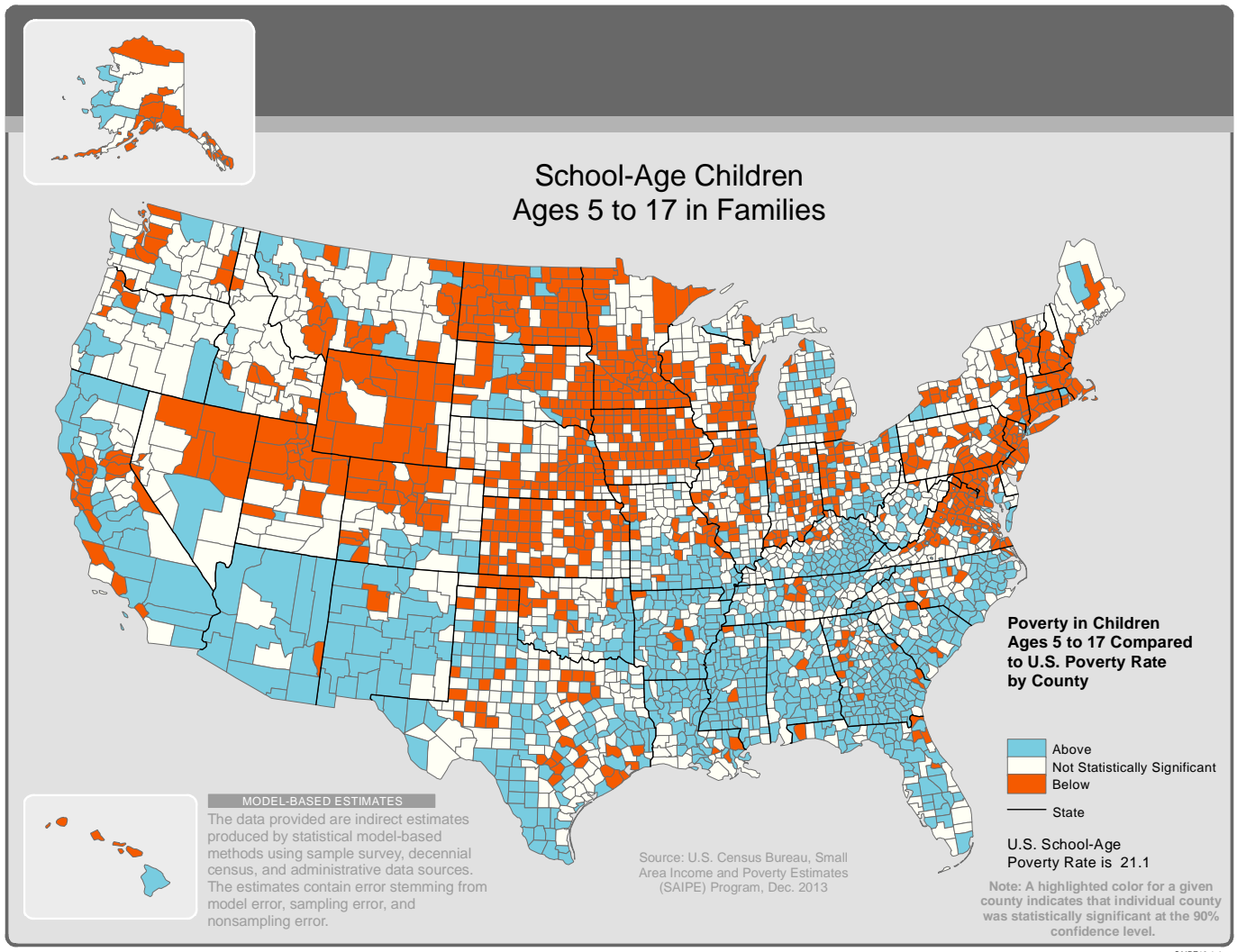
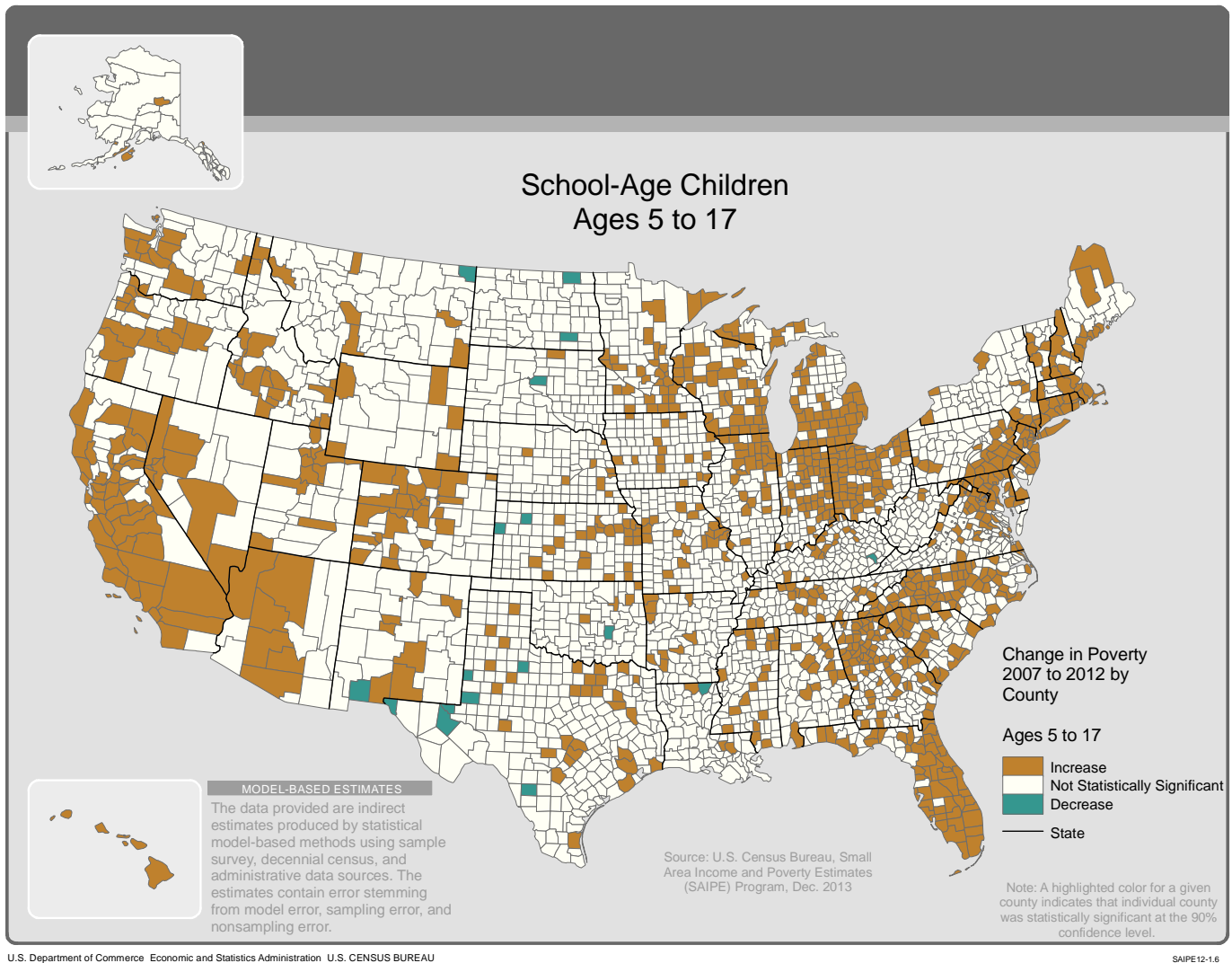


Figure 15 shows counties where there was a statistically significant change in the poverty rate between 2007 and 2012. According to the data, 69 percent of counties in the United States did not experience a statistically significant change in the poverty rate for school-age children during this period, while less than 1 percent showed a statistically significant decrease and 31 percent showed a statistically significant increase.

Figure 15. Changes in Poverty Rates for the School-Age Population by County: 2007 to 2012



Both Figures 16 and 17 show poverty rates of school-age children for the 25 largest and the 25 smallest counties and compares their aggregate average to the national poverty rate. The aggregate average for the largest 25 counties was 24.0 percent (+/-0.7) with a national poverty rate of 21.1 percent (+/-0.2).¹³ Among the 25 largest counties, the county poverty rate for the population of school-age children ranged from 8.6 percent to 37.2 percent. Seventeen of the 25 counties had a statistically significant difference (green) from the aggregate average, with six counties below and eleven counties above both rates.

Among the smallest counties, the aggregate average was 20.6 percent (+/- 1.7).¹⁴ Poverty rates for these counties ranged from 10.6 percent to 30.0 percent.¹⁵

¹³The aggregate poverty rate is based on the aggregate average of the 25 largest or smallest counties weighted proportionately to their school-age population. Each of the individual counties has been tested against the aggregate for statistical significance at the 90 percent confidence level. The school-age aggregate poverty rate for the largest counties is statistically different than the national poverty rate.

¹⁴ For the smaller counties, fewer counties are different from the aggregate average due to higher uncertainty in their estimated poverty rates.

¹⁵ There is no statistical difference between the school-age aggregate poverty rate for the smallest 25 counties and the national poverty rate.

Figure 16. Poverty Rate Comparisons Between the Aggregate and the National Poverty Rate of the School-Age Population by the 25 Largest Counties: 2012

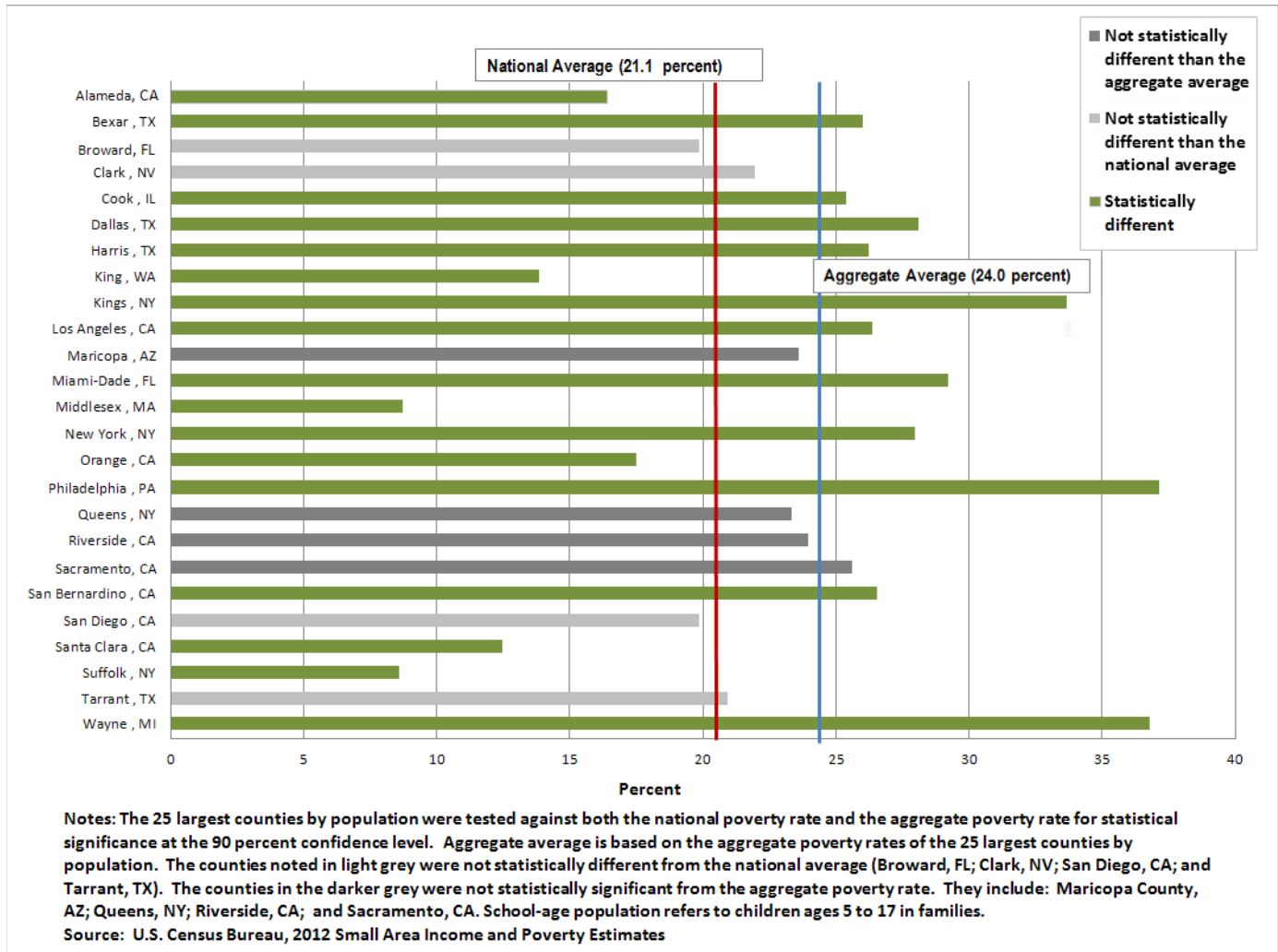
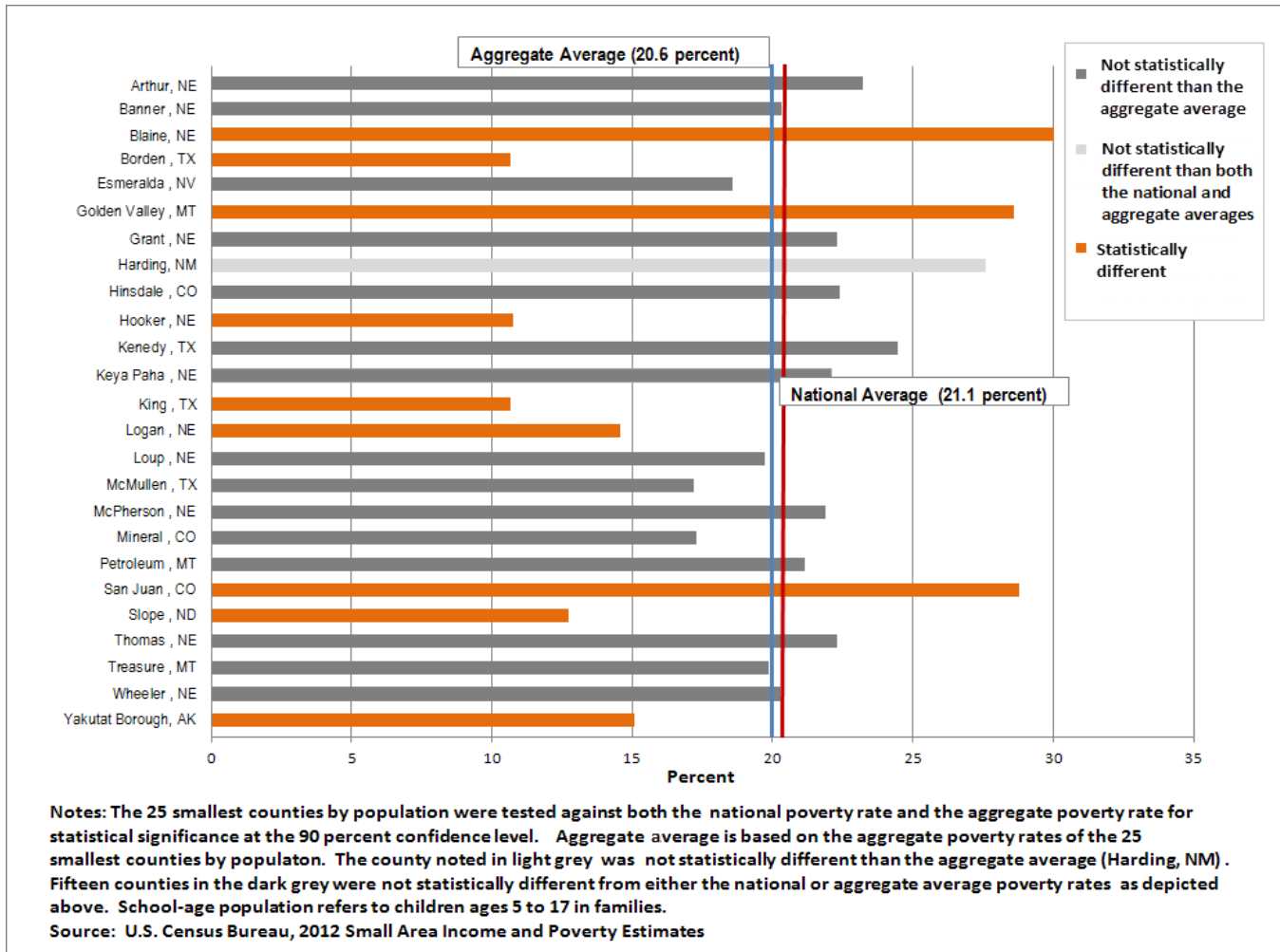


Figure 17. Poverty Rate Comparisons Between the Aggregate and the National Poverty Rate of the School-Age Population by the 25 Smallest Counties: 2012

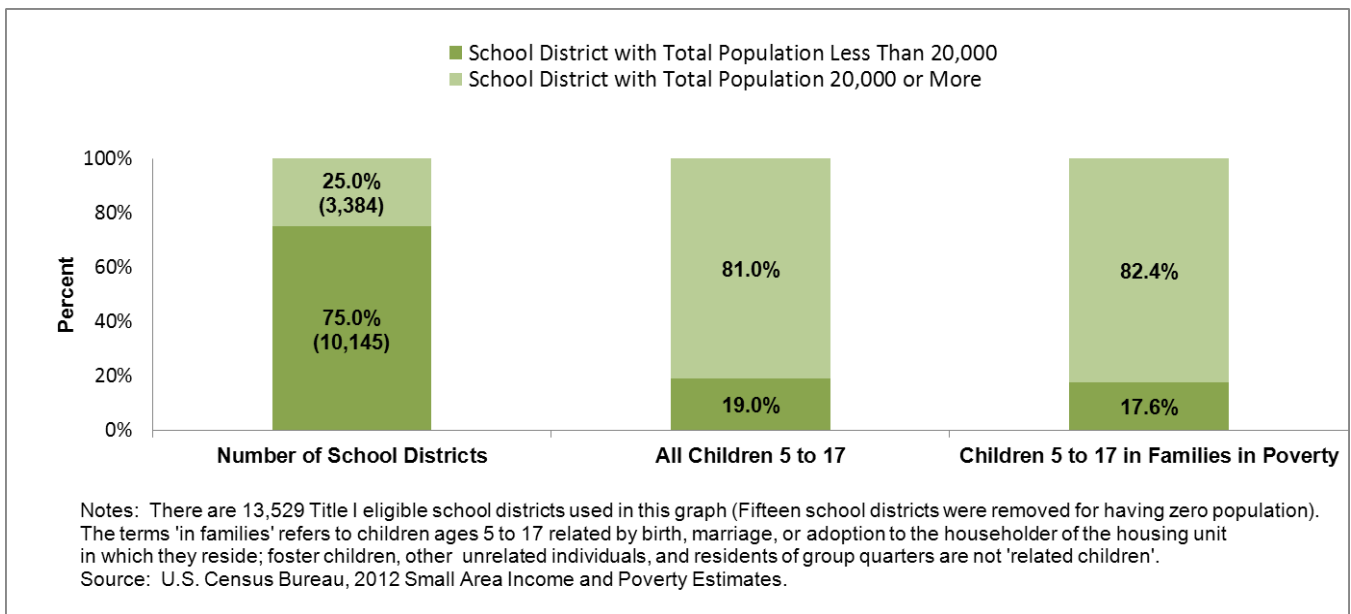


III. School District Estimates

Poverty

The 2012 SAIPE data contains estimates for all school districts in the Title I universe, which includes a total of 13,544 school districts in the United States. However, of those, 15 school districts did not have any school age children and were excluded from this analysis (13,529 school districts).^{16 17} Figure 18 shows the percent distribution of the number of school districts, the number of school-age children, and the number of school-age children in families in poverty by school district population size (school districts with populations less than 20,000 and 20,000 or more). According to this figure, school-age children, as well as school-age children in families in poverty, tended to be concentrated in school districts with a population of 20,000 or more.^{18 19} In 2012, an estimated 25 percent of school districts had a total population size of 20,000 or more. These school districts contained an estimated 81 percent of all school-age children in the nation and an estimated 82.4 percent of school-age children in poverty.

Figure 18. **Distribution of School Districts, School-Age Children and School-Age Children in Families in Poverty by School District Population: 2012**



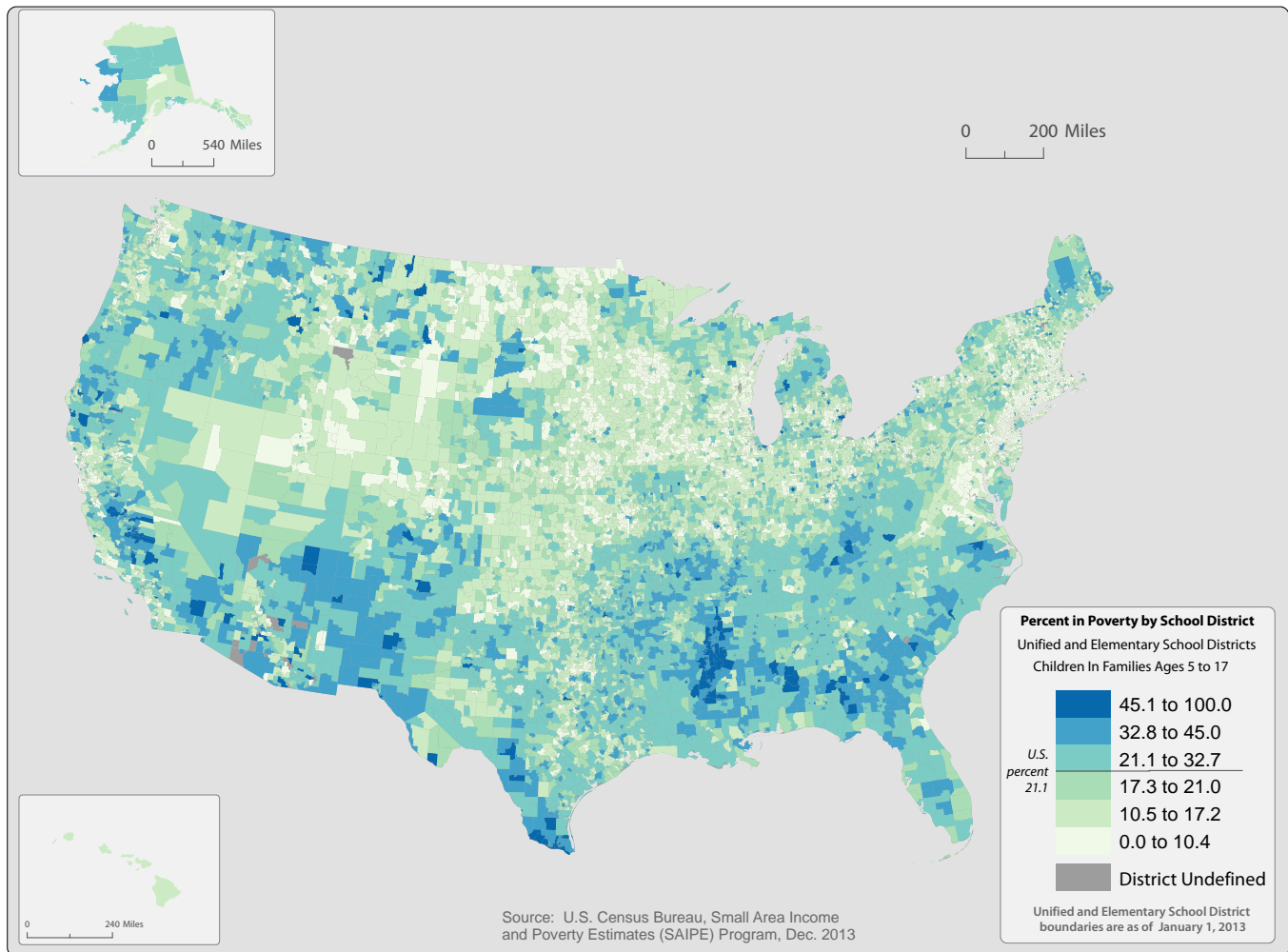
¹⁶ When interpreting the maps and other compilations of school district SAIPE estimates, additional sources of uncertainty exist, as compared to county-level estimates. For further information see <http://www.census.gov/did/www/saibe/methods/schooldistrictuncertainty.html>.

¹⁷ The Title I universe is the set of U.S. school districts for which Title I of the No Child Left Behind Act of 2001 pertains. There are 13,544 such school districts as of January 1, 2013.

¹⁸ Supplemental information for school district administrators is available in Appendix 3.

¹⁹ The term 'children in families' denotes children who are related to the householder by birth, marriage or adoption. Foster children are not included in families.

Figure 19. **Percentage of School-Age Children in Families in Poverty by School District: 2012**



Variation in Poverty

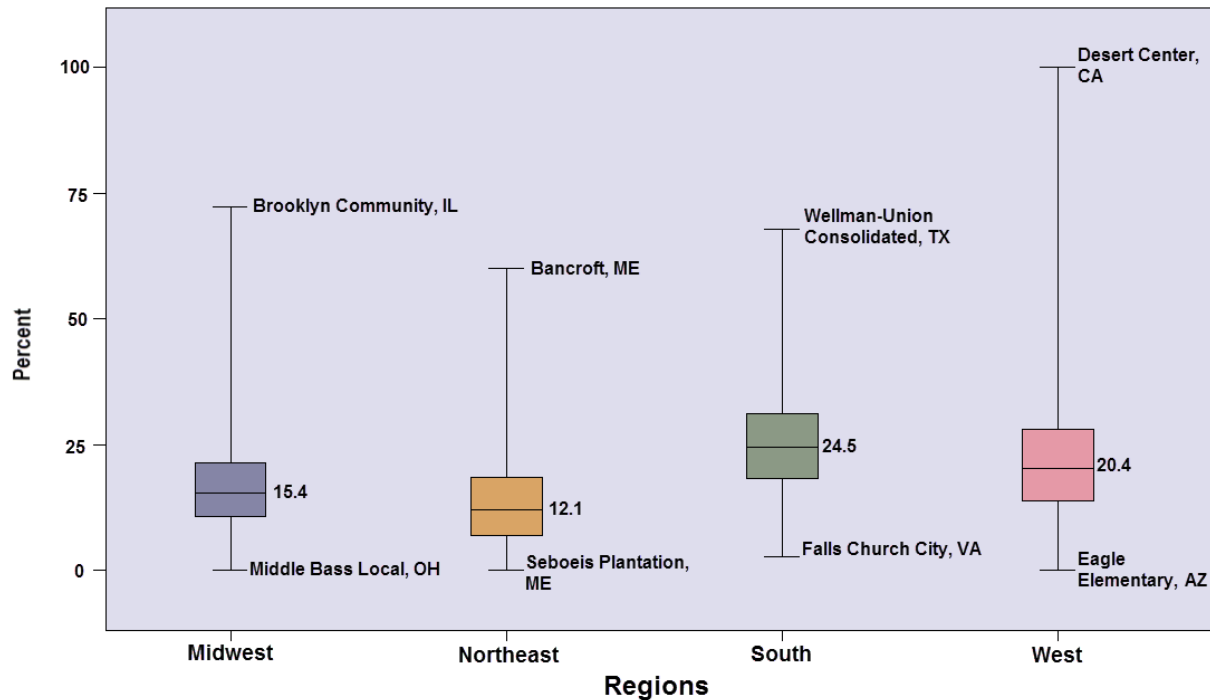
Figure 19 shows the distribution of school-age 5-17 children living in families in poverty by school district.²⁰ This map provides an overview of the variation in poverty throughout the United States by school districts.²¹ The lightest green areas show the school districts with the lowest poverty rates (0.0 to 10.4 percent) and the dark blue highlights the school districts with the highest poverty rates (45.1 to 100.0 percent). School districts with both high and low poverty rates are scattered throughout the nation, with some areas of concentration.

Figure 20 displays the highest, median, and lowest poverty rate estimates for the school-aged population at the school district level by region. The median school district poverty rate is 15.4 percent in the Midwest, 12.1 percent in the Northeast, 24.5 percent in the South, and 20.4 percent in West.

²⁰ The term 'children ages 5 to 17' refers to an estimate of the number of children who live within the geographic boundaries of the school district and who are in the appropriate grade range. It is not a measure of school district enrollment.

²¹ For a large-scale view, refer to the SAIPE interactive mapping tool: <http://www.census.gov/did/www/saipe/data/maps/index.html>.

Figure 20. Range of School-Age Poverty Rates at the School District Level by Region: 2012



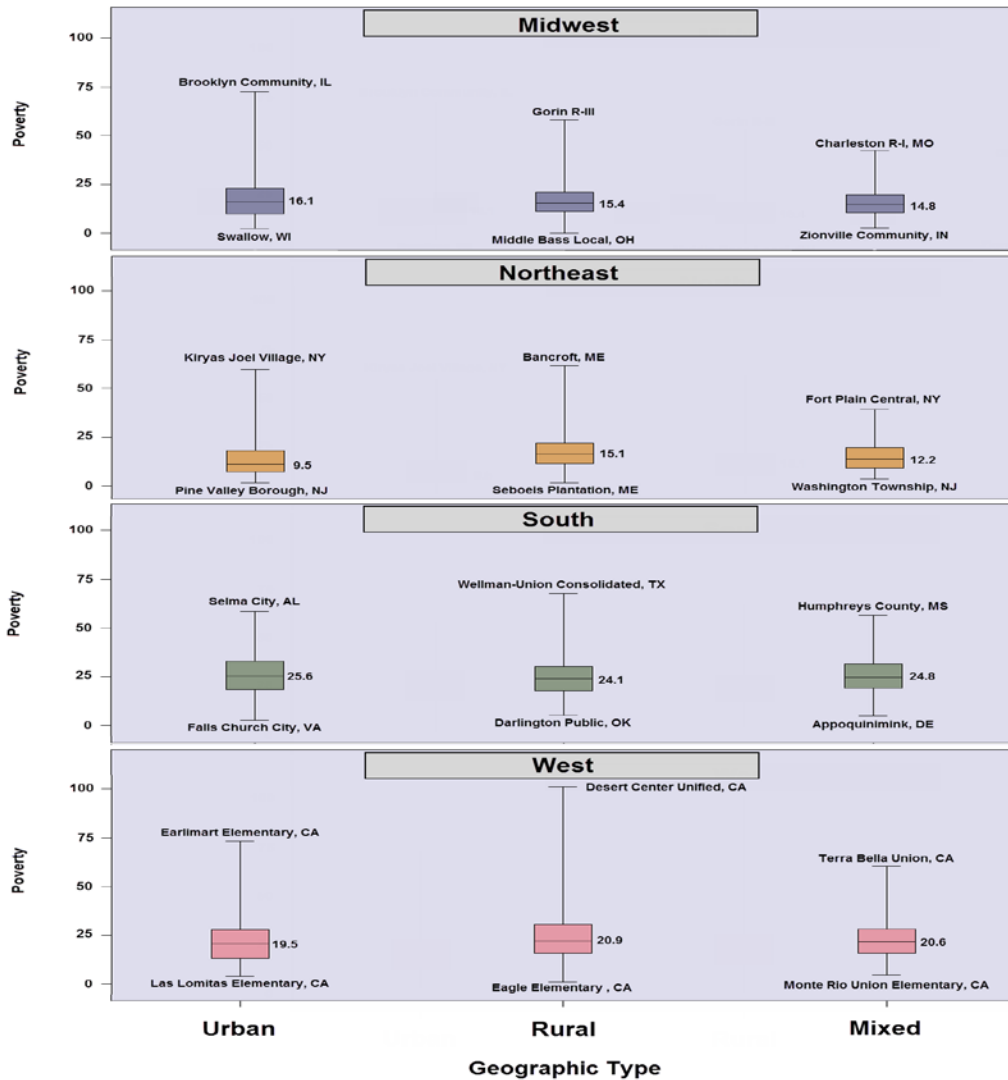
Notes: The data shown are estimates containing uncertainty. Apparent differences among the estimates may not be statistically significant. In particular, school districts identified as minimum and maximum may have several other school districts that are statistically indistinguishable. The box and whisker plot shows the distribution of poverty by school district. The whiskers indicate the minimum and maximum values, while the lower and upper borders of the box represent the quartile range (25th and 75th percentile). The line inside the box indicates the location of the 50th percentile (median value).

Source: U.S. Census Bureau, 2012 Small Area Income and Poverty Estimates

School districts are usually smaller entities than counties and can be within a metropolitan area, but still composed of entirely rural blocks. For this reason, it is more useful to analyze metro status as a geographical type (urban, rural, or mixed urban and rural), rather than metropolitan or micropolitan areas.²² Figure 21 presents school-age poverty rates at the school district level by geographical type and region.

²² The rural percentage of any geographic area is calculated as the percentage of Census 2010 total population within blocks designated as rural by their Census 2010 population density. The categories used in this report are: 'Urban' - a school district with less than 34 percent of the population in rural blocks; 'Mixed Urban and Rural' - a school district with 34 to 66 percent of the population in rural blocks; and 'Rural' - a school district with 67 percent or more of the population in rural blocks.

Figure 21. Range of School-Age Poverty Rates at the School District Level by Region and Geographic Type: 2012



Notes: The data shown are estimates containing uncertainty. Apparent differences among the estimates may not be statistically significant. In particular, school districts identified as minimum and maximum may have several other school districts that are statistically indistinguishable. The school-age poverty rate refers to children 5 to 17 in families. The rural percentage of the geographic area is calculated as the percentage of Census 2010 total population within blocks designated as rural by their Census 2010 population density. The categories used in this report are "urban" – a school district with less than 34 percent of the population in rural blocks; "mixed, urban, rural" – a school district with 34 to 66 percent of the population in rural blocks, and "rural" – a district with 67 percent or more of the population in rural blocks. The box and whisker plot shows the distribution of poverty by school district, the whiskers indicate the minimum and maximum values, while the lower and upper borders of the box represent the interquartile range (25th and 75th percentile). The line inside the box indicates the location of the 50th percentile (median value)

Source: U.S. Census Bureau, 2012 Small Area Income and Poverty Estimates

Table 1. **Distribution of Poverty Rates at the School District Level by State: 2012**

Name	Number of Districts	School-Age Population	Less than or equal to 10 percent poverty rate	10 percent to 20 percent poverty rate	More than 20 percent poverty rate
United States	13,529	53,726,434	18.5	32.3	49.2
Alabama	134	819,139	3.0	31.5	65.5
Alaska	53	132,309	8.6	80.8	10.6
Arizona	215	1,179,139	8.8	31.6	59.6
Arkansas	239	516,862	0.5	29.6	70.0
California	961	6,698,618	13.9	28.6	57.5
Colorado	178	893,790	27.1	38.1	34.8
Connecticut	166	600,102	53.5	23.5	23.0
Delaware	16	148,771	8.3	63.6	28.1
District of Columbia	1	70,604	0.0	0.0	100.0
Florida	67	2,931,017	0.0	26.7	73.3
Georgia	183	1,815,093	3.9	36.3	59.8
Hawaii	1	213,862	0.0	100.0	0.0
Idaho	115	310,681	0.0	63.8	36.2
Illinois	865	2,247,787	26.7	31.9	41.4
Indiana	291	1,165,961	16.7	42.4	40.9
Iowa	351	526,587	31.1	46.9	22.0
Kansas	286	521,037	31.6	34.0	34.5
Kentucky	176	738,700	2.5	29.6	67.9
Louisiana	69	803,037	0.0	18.2	81.8
Maine	236	199,014	14.5	50.5	35.0
Maryland	24	978,576	50.3	36.3	13.4
Massachusetts	301	1,035,858	48.2	24.4	27.4
Michigan	551	1,691,156	18.8	38.1	43.1
Minnesota	337	927,808	41.8	43.1	15.1
Mississippi	149	541,505	0.0	16.5	83.5
Missouri	520	1,024,229	21.3	32.2	46.5
Montana	417	161,016	9.4	52.2	38.4
Nebraska	250	331,137	24.3	50.9	24.8
Nevada	17	480,282	0.1	6.1	93.9
New Hampshire	176	208,887	49.1	36.2	14.7
New Jersey	561	1,498,735	54.0	20.4	25.6
New Mexico	89	370,906	0.9	9.8	89.4
New York	684	3,095,956	26.8	18.8	54.4
North Carolina	118	1,666,588	0.0	24.3	75.7
North Dakota	182	108,499	44.3	49.1	6.6
Ohio	613	1,968,793	23.4	32.9	43.7
Oklahoma	524	675,405	10.5	36.7	52.8
Oregon	197	628,108	4.1	51.4	44.5
Pennsylvania	500	2,019,683	30.9	36.9	32.3
Rhode Island	36	161,406	33.7	33.4	32.9
South Carolina	86	783,689	1.4	25.5	73.1
South Dakota	152	144,967	20.3	66.3	13.4
Tennessee	136	1,090,040	3.5	28.9	67.6
Texas	1,031	5,043,794	11.6	30.9	57.5
Utah	41	630,124	28.2	53.1	18.7
Vermont	274	93,430	40.6	41.3	18.1
Virginia	138	1,347,135	43.6	33.0	23.4
Washington	295	1,141,810	20.7	51.8	27.5
West Virginia	55	280,970	0.0	22.1	77.9
Wisconsin	424	966,976	30.6	49.5	19.9
Wyoming	48	96,856	18.2	77.0	4.8

Notes: The data shown are estimates containing uncertainty. Apparent differences among the estimates may not be statistically significant. The estimates shown are conceptually different from the SAIGE state estimates because some undefined geographic areas are not included in these estimates. The poverty ratio is computed as the number of children ages 5 to 17 in families in poverty divided by the number of children ages 5 to 17.
 Source: U.S. Census Bureau, 2012 Small Area Income and Poverty Estimates

Distribution of Poverty

Table 1 shows the state distribution of the number of school districts and school-age population by ranges in the poverty rate of less than or equal to 10 percent poverty rate, 10 to 20 percent poverty rate, and more than 20 percent poverty rate of school districts. In the United States, there were 53.7 million school-age children in 13,529 school districts.²³ Of these, 18.5 percent of school-age children reside in school districts with poverty rate estimates below 10 percent.²⁴ An estimated 32.2 percent of school-age children reside in districts with poverty rate estimates between 10 and 20 percent, and 49.3 percent of school-age children reside in districts with poverty rate estimates greater than 20 percent. Additionally the school-age population is heavily concentrated: California and Texas hold 21.9 percent of the school age population. Moreover, the six states with 2 million or more school-age persons (California, Florida, Illinois, New York, Pennsylvania and Texas) make up 41 percent of this population in the United States.

Viewing the SAIPE poverty data by state suggests a wide range of variation in the distribution of school-age population by school district poverty rates (Figure 22). The distribution shows that in some states, a large proportion of the school-age children reside in districts with poverty rates less than 10 percent, while in some states, the larger proportion of the school-age children reside in districts with poverty rates greater than 20 percent. Most states are somewhere in between, exhibiting a mix of poverty rate categories.

Income and Poverty Data Sources Available from the Census Bureau

SAIPE is one of several sources of income and poverty data available from the Census Bureau. Other sources include: the Annual Social and Economic Supplement to the Current Population Survey (CPS ASEC); the American Community Survey (ACS); the Survey of Income and Program Participation (SIPP); and the Census 2000 long-form. Each of these sources differs from the others in various ways, such as the length and detail of its questionnaire, the number of households included (sample size), and the methodology used to collect and process the data. It is important to understand that different surveys and methods are designed to meet different needs and produce different results.

Because of its detailed questionnaire, the CPS ASEC is the source of both the official national estimates of poverty levels and rates and widely used estimates of household income and individual earnings, as well as the distribution of that income. The CPS ASEC provides a consistent historical time series beginning in 1959 at the national level and can also be used to look at state-level trends and differences (through multi-year averages) beginning in 1980.

Since 2006, the ACS has released annual subnational estimates of income and poverty for all places, counties, and metropolitan statistical areas with a population of at least 65,000 as well as for states and for the nation. The sample size of the ACS is about 3.5 million addresses per year, making this survey exceptionally useful for subnational analyses. Three-year ACS estimates were made available starting in 2008 for areas and subpopulations as small as 20,000. Five-year ACS estimates became available for census tracts/block groups and for small subgroups of the population starting in 2010. More information on the American Community Survey is located at: <http://www.census.gov/acs/www/>.

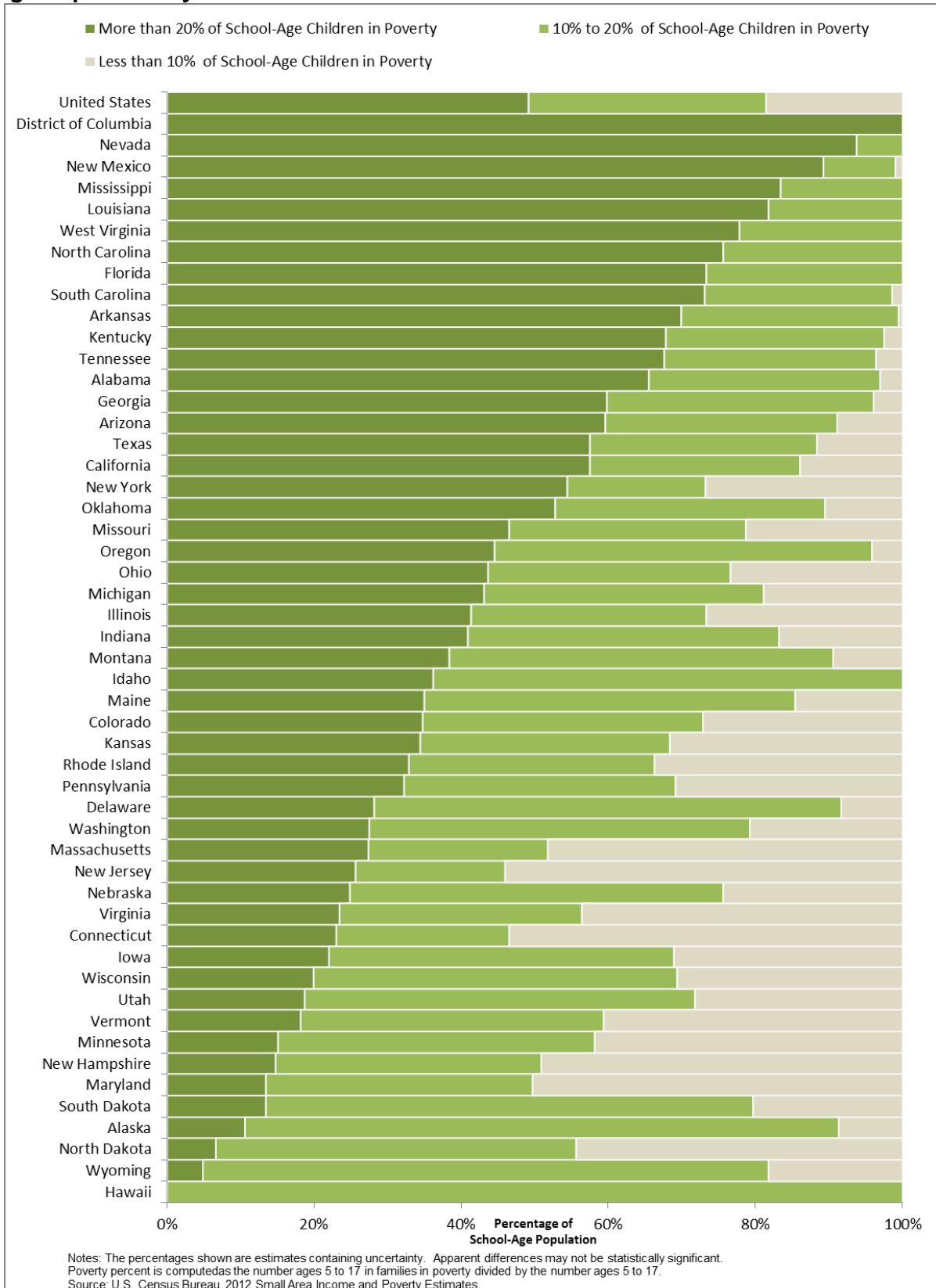
The SIPP is most useful for understanding the dynamics of income and poverty (changes in income and poverty rates for the same households over three or four years) and for examining the nature and frequency of poverty spells. The SIPP also permits researchers to look at monthly or quarterly changes in income and poverty.

The Decennial Census long-form estimates offer the best measure of change between 1990 and 2000 for subnational areas and for subpopulations. Since the ACS replaced the long-form, the 2010 Census does not provide income and poverty estimates. Since 2010, ACS 5-year estimates provide data at the census tract level that is comparable to earlier decennial census estimates.

²³ For analysis, 15 counties were omitted for having zero population for children ages 5 to 17.

²⁴ Poverty rates for school districts are computed as the number of children ages 5 to 17 in families in poverty divided by the number of children ages 5 to 17. Thus, the estimate is not a true rate because children not in families are included in the denominator but not the numerator.

Figure 22. **Percent Distribution of the Range in Poverty Rates at the School District Level of the School-Age Population by State: 2012**



Disclaimer

This paper is released to inform interested parties of ongoing research and to encourage discussion of work in progress. The views expressed on statistical, methodological, or technical issues are those of the authors and not necessarily those of the U.S. Census Bureau.

Acknowledgements

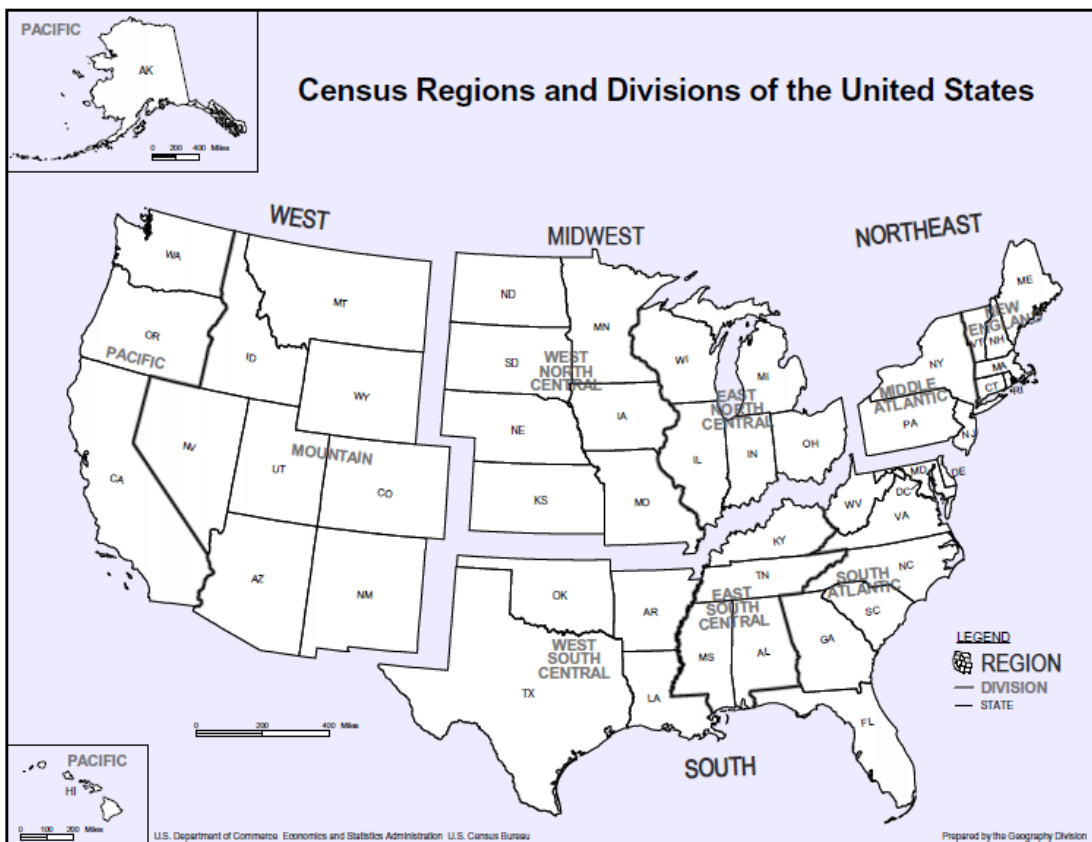
The Small Area Estimates Branch of the United States Census Bureau prepared this document.

Contact

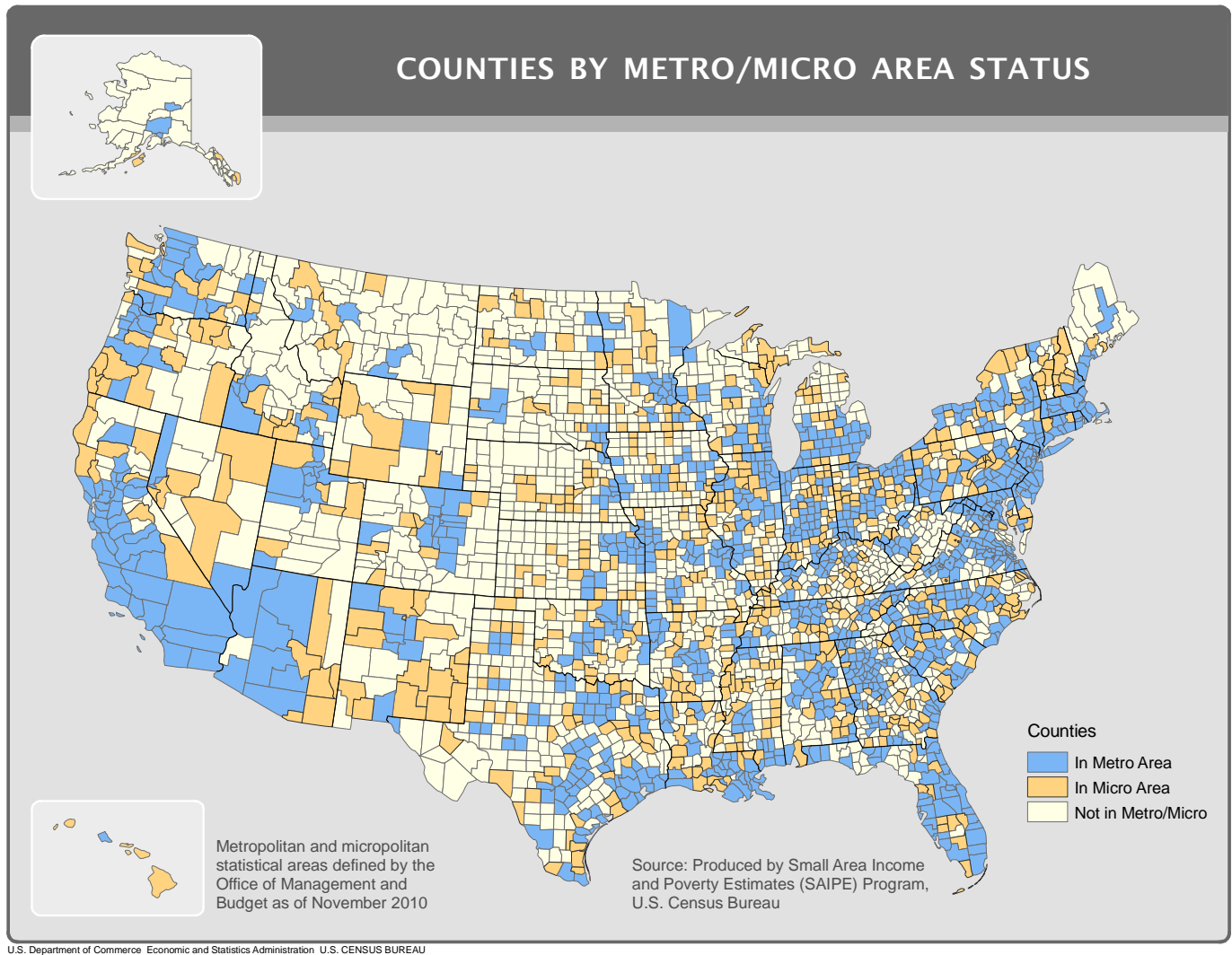
For questions related to the contents of this document, including the SAIPE program's estimates and methodology, contact the Small Area Estimates Branch at: (301) 763-3193 or sehds.saipe@census.gov. For questions related to income and poverty definitions, the American Community Survey, or other Census Bureau surveys, contact the U.S. Census Bureau call center at 1-800-923-8282 (toll free) or visit ask.census.gov for further information.

Appendix

Appendix 1.



Appendix 2.



Appendix 3. **Supplemental Information for School Districts**

School District Grade Relevance and Boundary Updates

Grade relevance refers to the grades served by school districts in a particular geographic area. For example, one district may provide secondary education for grades 9 to 12, while another district in the same geographic area may provide elementary education for grades Kindergarten through 8. These two districts thus occupy the same territory and can be said to have overlapping boundaries. In the SAIPE program's computations, each child is assigned to a specific grade and counted among either the secondary or elementary school-age population in that area. This is done based on the child's age in the decennial census and the updated grade spans of the secondary and elementary districts. In the above example of 9-12 and K-8 grade ranges, the relevant children ages 5 to 17 in the secondary district are the subset of children ages 14 to 17, and the relevant children ages 5 to 17 in the elementary district are the subset of children ages 5 to 13.

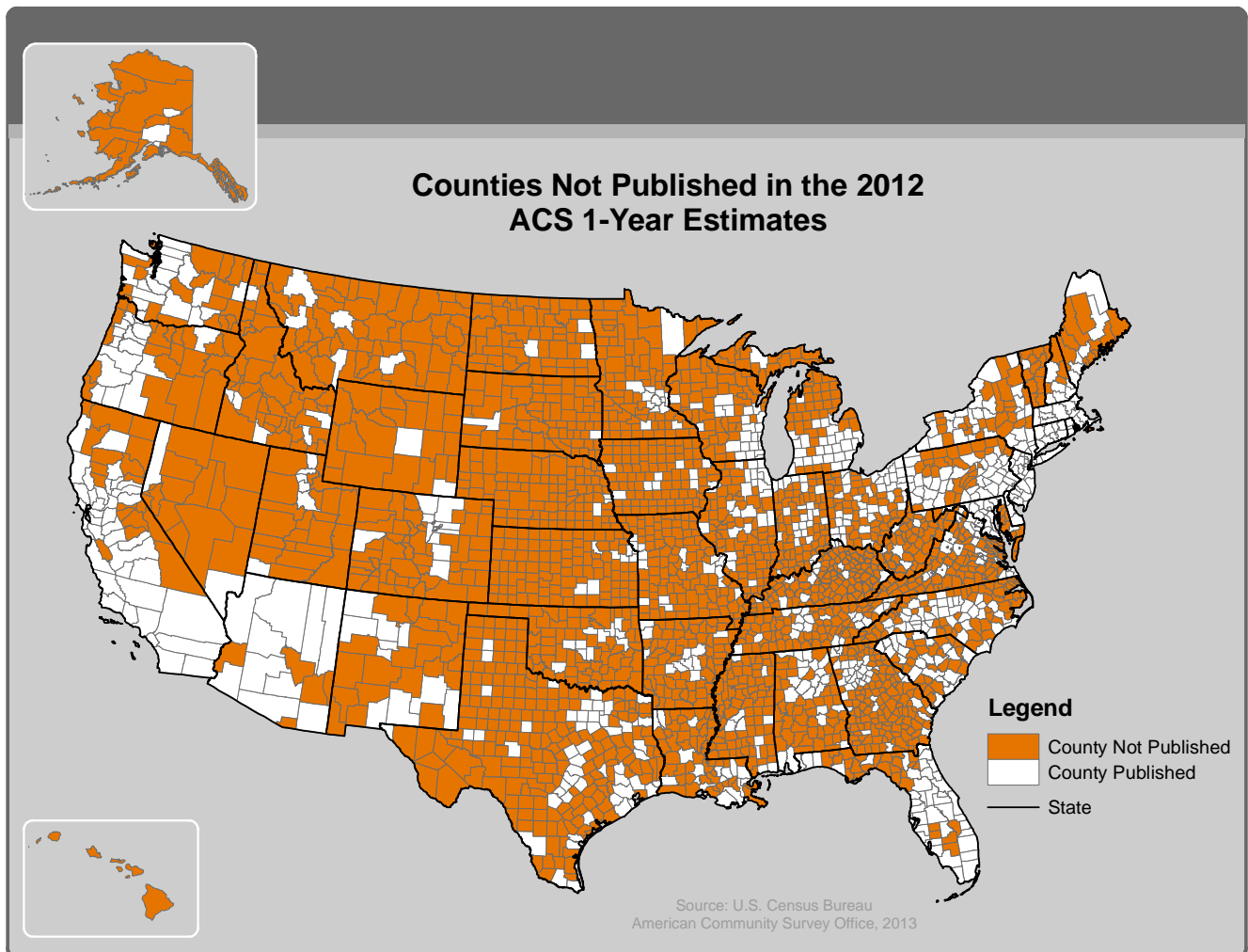
Grade spans and boundaries of school districts are updated through the Census Bureau's school district boundary review, known as the School District Review Program (SDRP). Specifically, the SDRP identifies new districts and districts no longer in existence, collects boundary changes to existing school districts, and collects

other administrative information, such as the grade range for which each district is financially responsible. Further information is available at: <http://www.census.gov/geo/partnerships/sdrp.html>.

Comparing SAIFE Estimates to Means-Tested Government Programs

Many government programs use the poverty guidelines to establish income eligibility for benefit programs that are above the official poverty thresholds used by SAIFE. The 2011 poverty threshold for a family of four was \$22,811 (100 percent of poverty). The poverty guidelines, a simplified version of the poverty thresholds, are issued each year by the U.S. Department of Health and Human Services (HHS).²⁵ For example, income eligibility for the Supplemental Nutrition Assistance Program (SNAP) is generally income less than 130 percent of the poverty guideline. The Free and Reduced-Price Lunch (FRPL) program uses the same 130 percent of the poverty guideline for free lunch and 185% of the poverty guideline for reduced price lunch. A family of four would need an annual income lower than \$29,965 to be eligible for SNAP or free lunch and the same family would need an annual income lower than \$42,643 to be eligible for reduced price lunch.²⁶

Appendix 4.



²⁵ For more information about poverty guidelines including how they differ from poverty thresholds used by the U.S. Census Bureau, see <http://www.census.gov/hhes/www/poverty/about/overview/measure.html>.

²⁶ Poverty guidelines are higher for Alaska and Hawaii. Poverty thresholds are uniform across all 50 states.