

**THE APPALACHIAN REGION:
A DATA OVERVIEW FROM THE
2013-2017 AMERICAN COMMUNITY SURVEY
Chartbook**

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FOREWORD

Most of the data contained in this chartbook come from the 2013-2017 American Community Survey. While the types of demographic and housing data included in Chapters 1 through 4 were also collected in the 2010 decennial census, the types of social and economic data included in Chapters 5 through 12 were not. This is because unlike previous censuses—which consisted of a “short form” of basic demographic and housing questions and a “long form” (used for a sample of households) that also asked detailed questions about social, economic, and housing characteristics—the 2010 census only had a short form.

The decennial long form has been replaced by the American Community Survey (ACS), a nationwide study collected continuously every year in every county in the United States. The ACS is designed to provide communities with reliable and timely demographic, social, economic, and housing data each year. However, the annual sample size of the ACS is much smaller than the sample size of the decennial census long form; therefore, data from five years must be combined to provide reliable estimates for geographic areas with fewer than 20,000 people. Since many counties in the Appalachian Region have fewer than 20,000 residents, we must use the 2013-2017 ACS data to have comparable statistics for all 420 counties in the Region.

The ACS five-year estimates for 2013-2017 represent concepts that are fundamentally different from those associated with data from the decennial census. While the main function of the census is to provide *counts* of people for congressional apportionment and legislative redistricting, the primary purpose of the ACS is to measure the changing *characteristics* of the U.S. population. Moreover, while the decennial census provides a “snapshot” of the U.S. population once every 10 years, the ACS has been described as a “moving video image” that is continually updated. Finally, while the census provides “point in time” estimates designed to approximate an area’s characteristics on a specific date, the ACS provides “period” estimates that represent data collected over a period of time. The five-year estimates in this chartbook, therefore, are data collected over the five-year (or 60-month) period from January 2013 through December 2017. These ACS estimates are *not* averages of monthly or annual values, but rather an *aggregation* of data collected over the five-year period.

For areas with consistent population characteristics throughout the calendar year, ACS period estimates might not differ much from those that would result from a point-in-time survey like the decennial census. However, ACS period estimates might be noticeably different from point-in-time estimates for areas with seasonal populations or those that experience a natural disaster such as a hurricane. For example, a resort community in the upper Midwest might be dominated by locals in the winter months and by temporary workers and tourists in the summer months, with a corresponding decrease in employment rates during the winter and increase in these rates during the summer. In such a community, the ACS period estimate of the percent of persons in the labor force, which is based on data across the entire calendar year, would likely be higher than a decennial census point-in-time estimate from April 1.

And with two non-overlapping five-year periods (2013-2017 and 2008-2012), we can study trends in the data. However, the Census Bureau recommends caution in some instances, due to the changes in question wording and the coding of responses. And in some years, the ACS has added or removed certain questions. For example, the ACS added a “field of degree” question (which focuses on the major degree field for adults with at least a bachelor’s degree) in 2009 and questions on computer and Internet access in 2013. As a result, 2008-2012 data for these items are not available to measure trends. More information about comparing the 2008-2012 and 2013-2017 ACS data is available on the Web page, ["Comparing 2008-2012 ACS 5-year and 2013-2017 ACS 5-year"](#), through the Census Bureau’s website.

While ACS five-year data are needed to provide reliable estimates for areas with small populations, they can make it difficult to track trends in these areas. The 2008-2012 ACS data illustrate this problem, as they are for a time period that covers two distinct periods of economic activity: virtually the entire “Great Recession” of December 2007 through June 2009; and the 42 months of economic recovery that followed the downturn. Since the 2008-2012 ACS pools data from both periods, it smooths out the extreme variations in economic measures that would be evident in annual data from this five-year period.

The data in Chapters 1 through 3 come not from the ACS, but instead from the postcensal population estimates from the Census Bureau’s Population Division. Every year, the Census Bureau produces July 1 estimates for years following the most recent decennial census, using current data on births, deaths, and migration. These estimates, which the Census Bureau revises and updates every year, are available for every U.S. county by age, sex, race, and

Hispanic origin. And not only do the vintage 2017 estimates reflect more timely data than the five-year ACS estimates, these are deemed the official population estimates for the geographic areas shown in this chartbook. In fact, the data from the Population Estimates Program serve as the control totals for the ACS estimates.

This year's chartbook includes data for several new subject areas—including a separate chapter on transportation and commuting patterns. In addition to commuting patterns (such as travel time and place of work, which were introduced in the 2012-2016 chartbook), the new Chapter 7 features data on the means of transportation for Appalachian workers, the availability of vehicles for households (and for workers in households), and the relationship between the workers and the availability of vehicles in Appalachian households. As these data were also available for 2008-2012, we measure trends in these transportation and commuting patterns. In addition, Chapter 5 (which spotlights education) now also includes tables and maps on the presence of computers and the presence and type of Internet subscriptions in the household. Chapter 5 also includes new maps that measure the share of adults who have attained at least an associate's degree.

And beginning with this year's chartbook, we can measure trends in health insurance (Chapter 9) and disability status (Chapter 10), as there are now enough years of ACS data to allow comparisons between two non-overlapping five-year periods (2008-2012 and 2013-2017). However, comparisons for health insurance coverage will be limited due to changes in the age ranges reported in ACS data. Beginning with the 2017 ACS, the age categories in the summary tables used for this report changed—from "Under age 18," "Ages 18 to 24," and "Ages 25 to 34" to "Under age 19," "Ages 19 to 25," and "Ages 26 to 34," respectively. Because the ACS tables for the earlier five-year periods (from 2008-2012 through 2012-2016) used the discontinued age categories, we are only able to measure health insurance trends for the age groups for which comparable age breakdowns are available (in this case, "Under age 35," "Ages 35 to 64," and "Ages 65 and over," as shown in Table 9.3).

The chartbook also includes two reference maps—one of the five Appalachian subregions, and one of the five rural-urban county types. Both the subregions and county types are referenced throughout the report. These maps are in Appendix A.

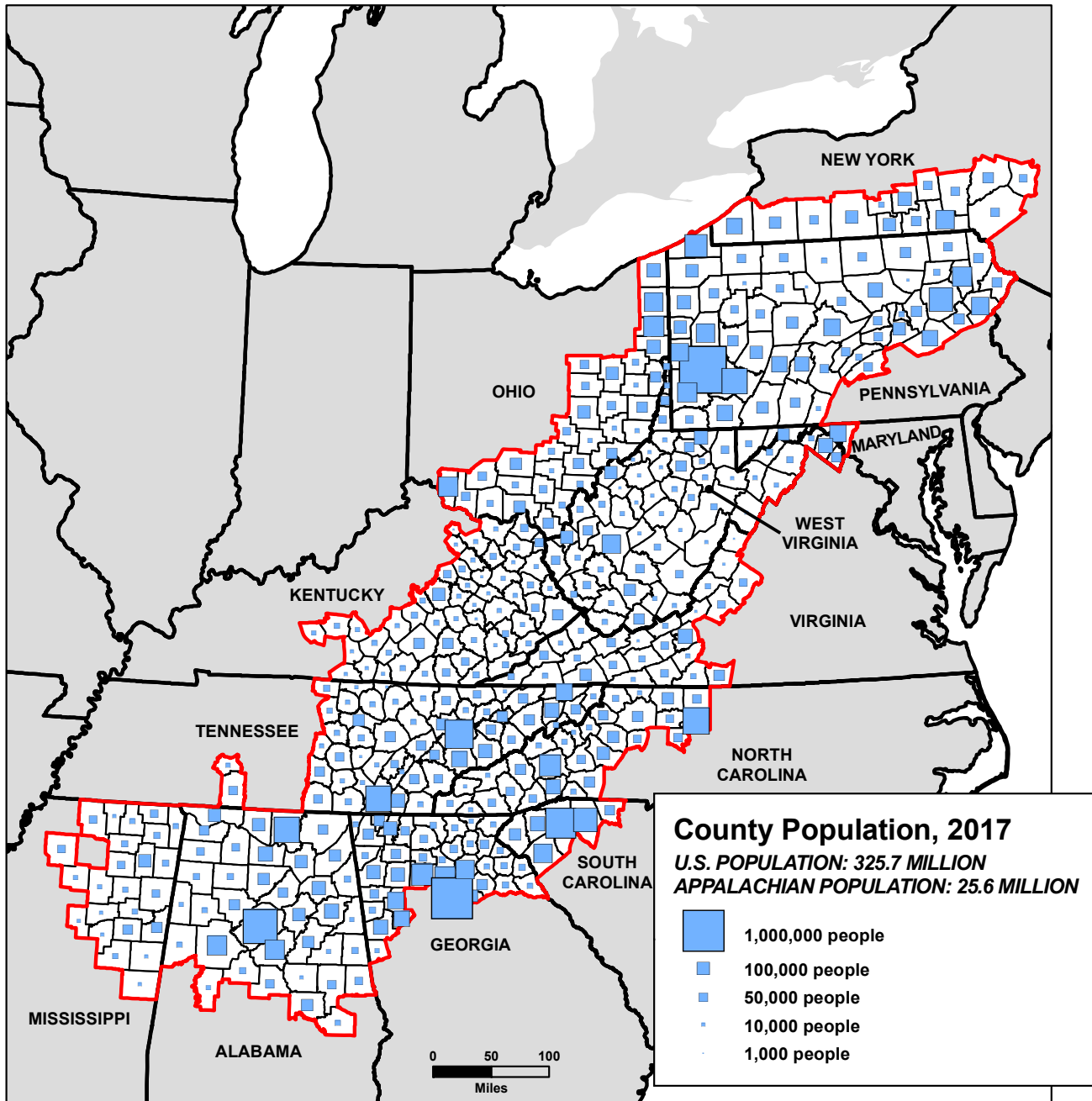
CHAPTER 1: POPULATION BASICS

Table 1.1: Population, Land Area, and Population Density in the Appalachian Region, July 1, 2017

Population, Land Area, and Density	Population, July 1, 2017	Change Since July 1, 2010		Land Area (Square Miles)	Population per Square Mile of Land Area, July 1, 2017
		Number	Percent		
United States	325,719,178	+ 16,380,757	+ 5.3	3,531,905	92.2
Appalachian Region	25,611,363	+ 347,874	+ 1.4	204,452	125.3
Subregions					
Northern Appalachia	8,202,375	- 181,781	- 2.2	56,980	144.0
North Central Appalachia	2,404,112	- 21,504	- 0.9	29,337	81.9
Central Appalachia	1,867,557	- 52,149	- 2.7	29,773	62.7
South Central Appalachia	4,877,941	+ 155,554	+ 3.3	34,997	139.4
Southern Appalachia	8,259,378	+ 447,754	+ 5.7	53,365	154.8
County Types					
Large Metros (pop. 1 million +)	6,107,360	+ 253,228	+ 4.3	18,815	324.6
Small Metros (pop. <1 million)	10,847,040	+ 204,095	+ 1.9	54,302	199.8
Nonmetro, Adjacent to Large Metros	2,199,354	- 16,484	- 0.7	25,382	86.7
Nonmetro, Adjacent to Small Metros	3,955,910	- 38,819	- 1.0	58,591	67.5
Rural (nonmetro, not adj. to a metro)	2,501,699	- 54,146	- 2.1	47,363	52.8
Alabama	4,874,747	+ 89,168	+ 1.9	50,645	96.3
Appalachian Alabama	3,124,174	+ 56,452	+ 1.8	25,763	121.3
Non-Appalachian Alabama	1,750,573	+ 32,716	+ 1.9	24,882	70.4
Georgia	10,429,379	+ 716,683	+ 7.4	57,513	181.3
Appalachian Georgia	3,238,637	+ 297,495	+ 10.1	11,378	284.6
Non-Appalachian Georgia	7,190,742	+ 419,188	+ 6.2	46,135	155.9
Kentucky	4,454,189	+ 106,241	+ 2.4	39,486	112.8
Appalachian Kentucky	1,165,923	- 19,758	- 1.7	18,231	64.0
Non-Appalachian Kentucky	3,288,266	+ 125,999	+ 4.0	21,256	154.7
Maryland	6,052,177	+ 264,078	+ 4.6	9,707	623.5
Appalachian Maryland	251,426	- 1,405	- 0.6	1,529	164.4
Non-Appalachian Maryland	5,800,751	+ 265,483	+ 4.8	8,178	709.3
Mississippi	2,984,100	+ 13,663	+ 0.5	46,923	63.6
Appalachian Mississippi	626,263	- 2,658	- 0.4	12,400	50.5
Non-Appalachian Mississippi	2,357,837	+ 16,321	+ 0.7	34,523	68.3
New York	19,849,399	+ 444,214	+ 2.3	47,126	421.2
Appalachian New York	1,032,309	- 33,740	- 3.2	11,681	88.4
Non-Appalachian New York	18,817,090	+ 477,954	+ 2.6	35,445	530.9
North Carolina	10,273,419	+ 699,172	+ 7.3	48,618	211.3
Appalachian North Carolina	1,757,158	+ 57,440	+ 3.4	11,887	147.8
Non-Appalachian North Carolina	8,516,261	+ 641,732	+ 8.1	36,731	231.9
Ohio	11,658,609	+ 119,327	+ 1.0	40,861	285.3
Appalachian Ohio	1,999,505	- 42,530	- 2.1	15,978	125.1
Non-Appalachian Ohio	9,659,104	+ 161,857	+ 1.7	24,882	388.2
Pennsylvania	12,805,537	+ 94,474	+ 0.7	44,743	286.2
Appalachian Pennsylvania	5,687,435	- 105,147	- 1.8	36,444	156.1
Non-Appalachian Pennsylvania	7,118,102	+ 199,621	+ 2.9	8,298	857.8
South Carolina	5,024,369	+ 388,535	+ 8.4	30,061	167.1
Appalachian South Carolina	1,270,304	+ 96,465	+ 8.2	3,824	332.2
Non-Appalachian South Carolina	3,754,065	+ 292,070	+ 8.4	26,237	143.1
Tennessee	6,715,984	+ 360,102	+ 5.7	41,235	162.9
Appalachian Tennessee	2,894,190	+ 105,751	+ 3.8	20,119	143.9
Non-Appalachian Tennessee	3,821,794	+ 254,351	+ 7.1	21,116	181.0
Virginia	8,470,020	+ 444,814	+ 5.5	39,490	214.5
Appalachian Virginia	748,182	- 22,033	- 2.9	11,179	66.9
Non-Appalachian Virginia	7,721,838	+ 466,847	+ 6.4	28,311	272.8
West Virginia (entire state)	1,815,857	- 38,458	- 2.1	24,038	75.5

Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

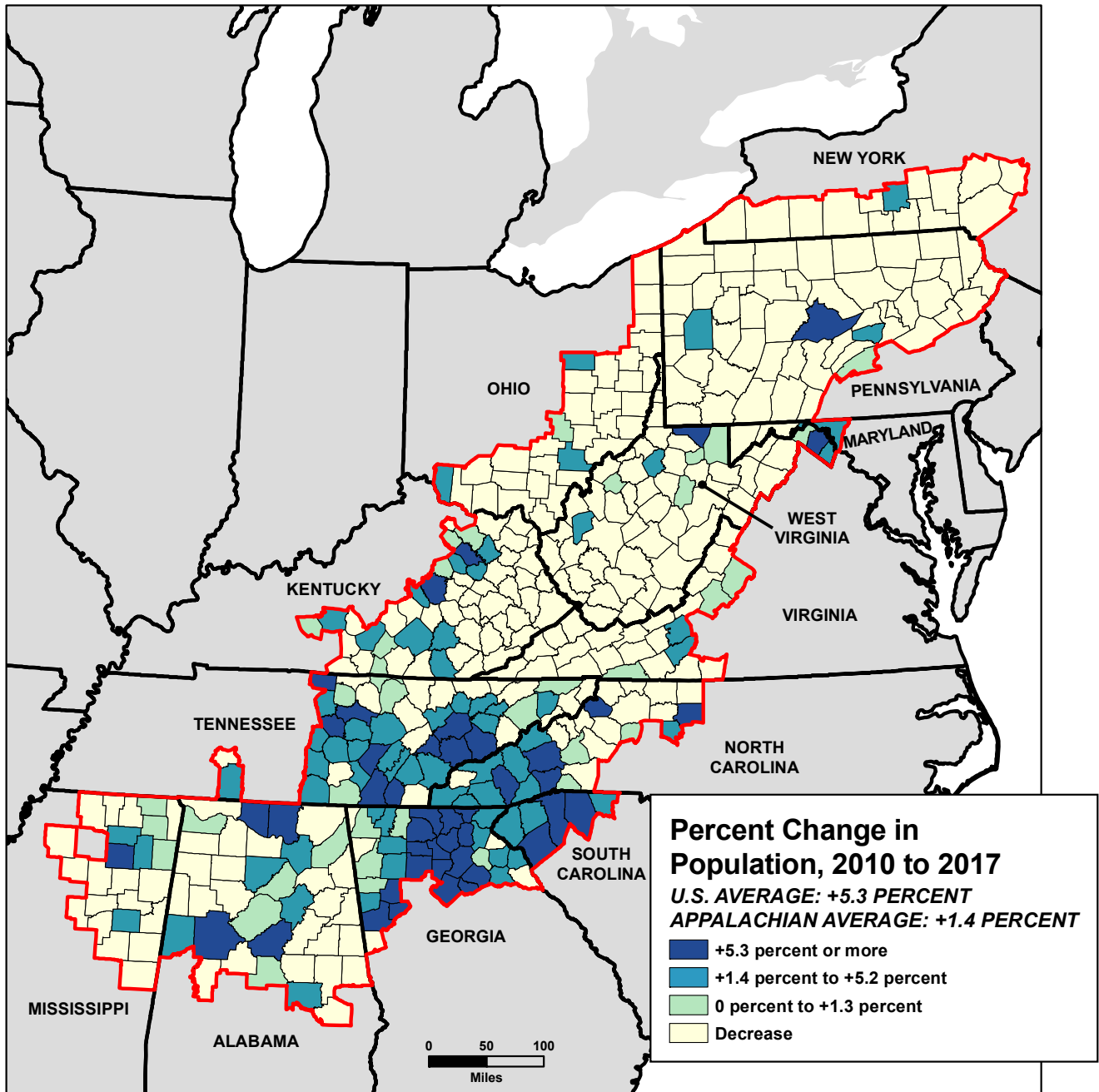
Figure 1.1: Population Distribution in the Appalachian Region, July 1, 2017



Map Title: Population Distribution in the Appalachian Region, July 1, 2017
 Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

Of the 325.7 million persons in the United States as of July 1, 2017, 25.6 million lived in the Appalachian Region—348,000 more than in July 1, 2010. Yet the population of the Region’s 420 counties varied greatly. On one hand, two-thirds of the counties had populations of fewer than 50,000 people, and 128 counties had fewer than 20,000 residents. On the other hand, pockets of the Appalachian population lived in large and mid-sized metropolitan areas, including Pittsburgh, Birmingham, and the Atlanta suburbs. Allegheny County, Pennsylvania (where Pittsburgh is located) had more than 1.2 million residents in 2017.

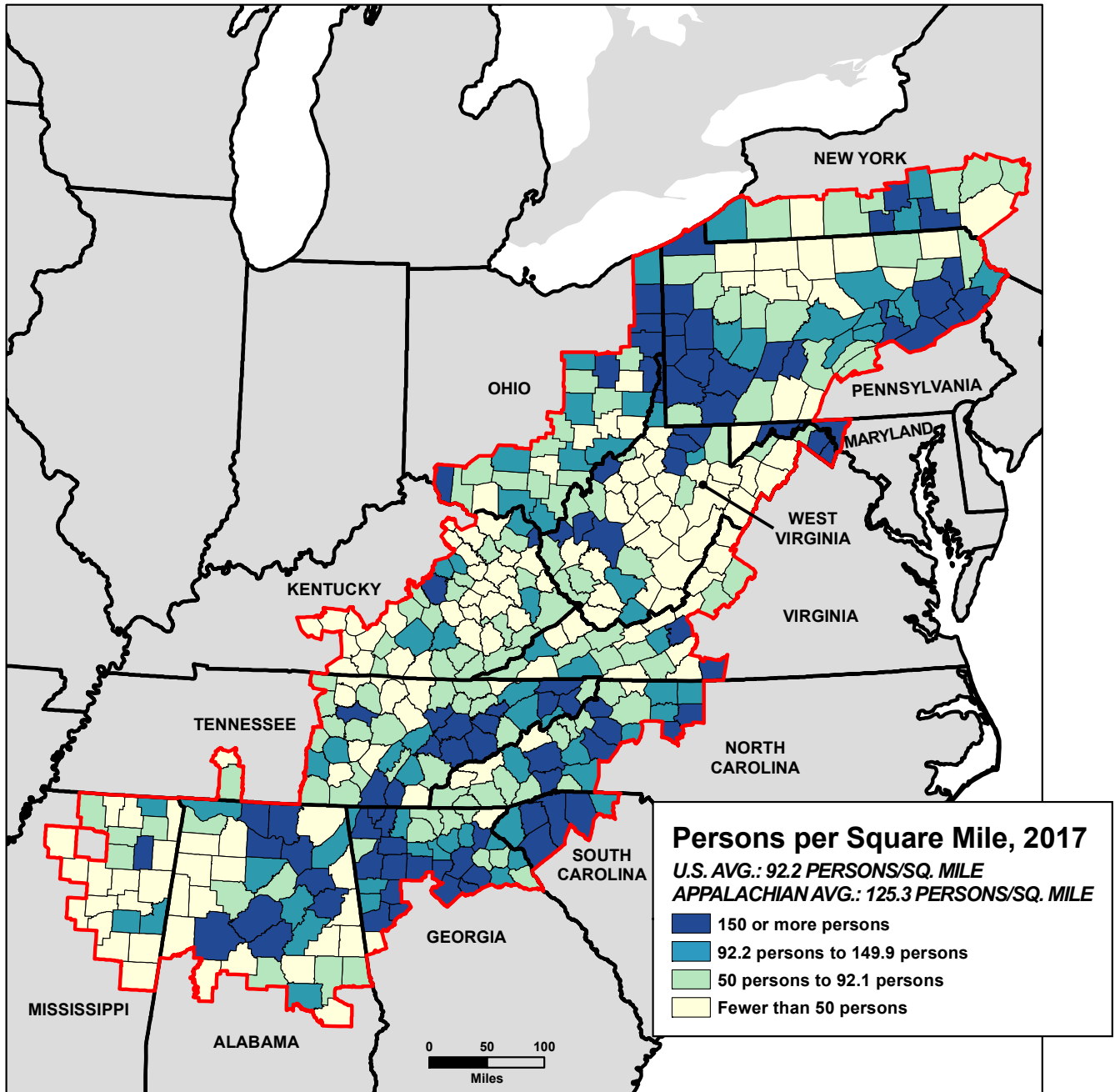
Figure 1.2: Population Change in the Appalachian Region, July 1, 2010 to July 1, 2017



Map Title: Population Change in the Appalachian Region, July 1, 2010 to July 1, 2017
 Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

The Appalachian Region’s population grew by nearly 1.5 percent between 2010 and 2017—slightly more than between 2010 and 2016—but still only about one-fourth the national average of 5.3 percent. Demographic change in this decade has been even slower in much of Appalachia—in fact, the Appalachian sections of eight states (including all of West Virginia) have actually lost population since mid-2010. Indeed, those eight states had 212 of the 271 Appalachian counties that lost residents since mid-2010. On the other hand, 45 counties in Appalachia grew at or above the national rate during this period. Of these counties, 39 were in the five Southern states (Alabama, Georgia, the Carolinas, and Tennessee) whose Appalachian sections gained population. Indeed, Southern Appalachia was the only subregion where the rate of population growth exceeded the national average. Population growth was particularly high in the Appalachian parts of Georgia and South Carolina, with increases of 10.1 percent and 8.2 percent, respectively. Many counties with college towns—such as Centre County, Pennsylvania (State College); Monongalia County, West Virginia (Morgantown); and Knox County, Tennessee (Knoxville)—also had rapid growth since 2010.

Figure 1.3: Population per Square Mile of Land Area in the Appalachian Region, July 1, 2017



Map Title: Population per Square Mile of Land Area in the Appalachian Region, July 1, 2017
 Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

While Appalachia’s population density was noticeably greater than the United States as a whole in 2017, just two-fifths of the Region’s counties had population concentrations at or above the national average. Most of the high-density counties were in metropolitan areas, both large (Pittsburgh, Birmingham, suburban Atlanta) and small (Winston-Salem, North Carolina; Knoxville, Tennessee).

BASIC POPULATION TRENDS

- Appalachia had a population of 25.6 million in 2017—roughly 348,000 more residents than it had in mid-2010 (see Table 1.1). Although this was a larger increase than between 2010 and 2016, growth in the Region as a whole has still been slow at just under 1.5 percent; by comparison, the United States as a whole grew more than 5 percent between 2010 and 2017.
- Most of Appalachia, in fact, has lost population since 2010. West Virginia and the Appalachian portions of seven other states had fewer residents in 2017 than they did six years earlier. And in four of those states—New York, Ohio, Virginia, and West Virginia—the population loss exceeded 2 percent. (And the loss was almost that severe in Appalachian Kentucky and Pennsylvania.) Appalachian counties outside metropolitan areas also lost people between 2010 and 2017—indeed, 191 of the 268 counties classified in one of the three nonmetropolitan county types suffered population declines. And as a group, the most rural Appalachian counties lost 2 percent of their 2010 population. In many counties, population losses since 2010 have continued longstanding demographic trends going back several decades.
- In contrast to the other three subregions, South Central and Southern Appalachia added residents between 2010 and 2017. Population growth in Southern Appalachia, in fact, was 5.7 percent—slightly above the national rate. The five states whose Appalachian sections have grown since 2010 were all in the South—Alabama, Georgia, North Carolina, South Carolina, and Tennessee. Georgia’s and South Carolina’s Appalachian sections have grown especially rapidly since 2010, with increases exceeding 8 percent in both cases.
- Several possible factors account for the rapid growth in some parts of Appalachia. For example, roughly half of the 44 counties whose post-2010 growth exceeded the national average have been classified as “retirement destination” counties by the Economic Research Service (ERS) of the U.S. Department of Agriculture. Many high-growth areas also benefit from being part of a major research university, such as Pennsylvania State University (Centre County), the University of Alabama (Tuscaloosa County), or West Virginia University (Monongalia County). Yet the major single factor may well be a diversified economy. Of the 44 rapid-growth Appalachian counties, 29 are part of metropolitan areas, and 18 (including 17 of the 29 in metros) have been classified as “nonspecialized” by ERS—meaning that they weren’t dependent on a single economic sector.

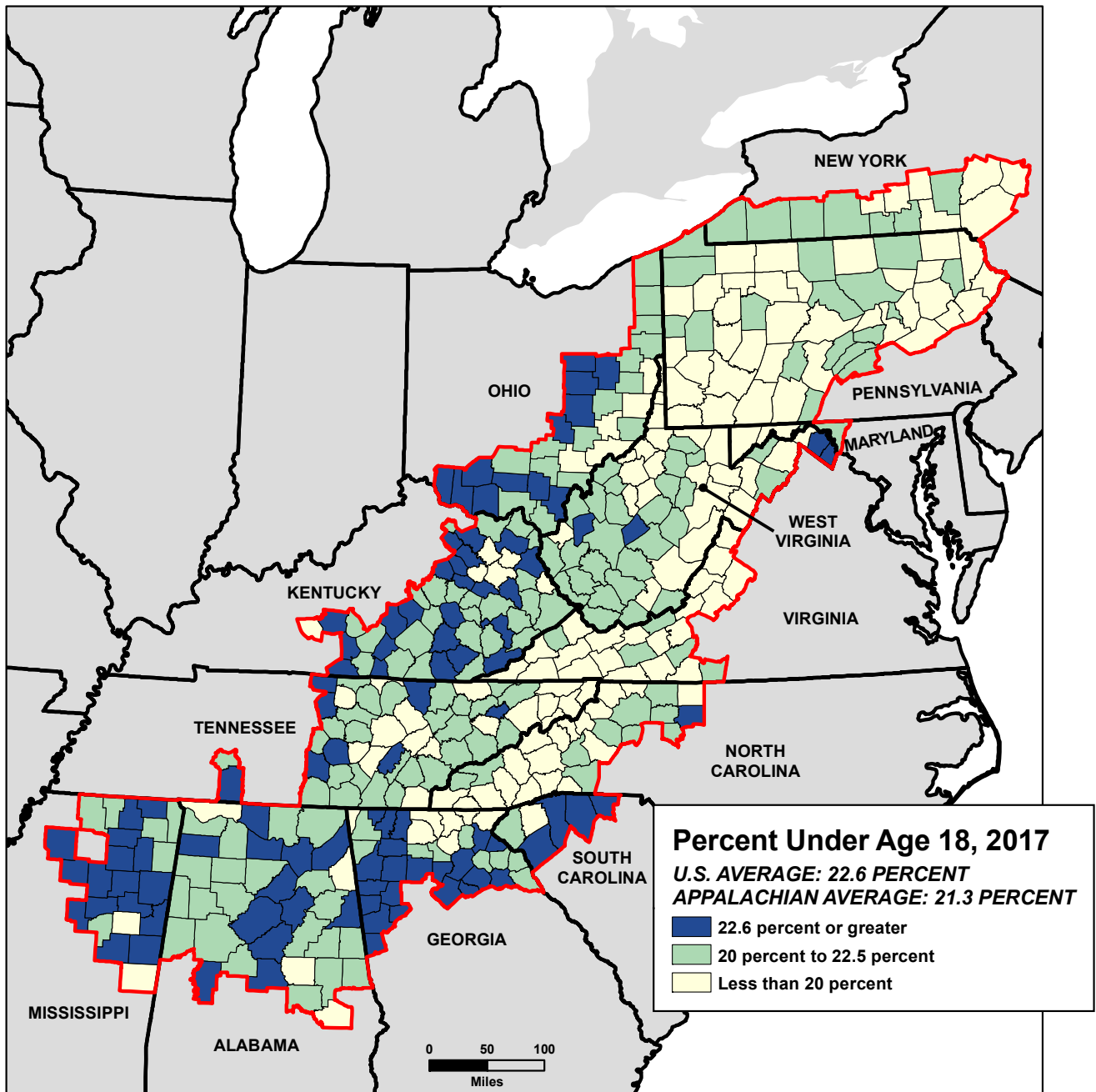
CHAPTER 2: AGE

Table 2.1: Population in the Appalachian Region by Age Group, July 1, 2017

Population by Age Group	Total Population, July 1, 2017	Percent of Population				Median Age (Years)
		Under Age 18	Ages 18-24	Ages 25-64	Ages 65 and over	
United States	325,719,178	22.6	9.4	52.4	15.6	38.0
Appalachian Region	25,611,363	21.3	9.2	51.5	17.9	41.0
Subregions						
Northern Appalachia	8,202,375	19.7	9.5	51.3	19.5	42.7
North Central Appalachia	2,404,112	20.9	9.1	51.5	18.4	41.5
Central Appalachia	1,867,557	21.5	8.3	51.9	18.3	42.0
South Central Appalachia	4,877,941	20.2	9.3	51.0	19.5	42.4
Southern Appalachia	8,259,378	23.6	9.2	52.0	15.3	38.5
County Types						
Large Metros (pop. 1 million +)	6,107,360	22.6	8.5	53.1	15.8	39.6
Small Metros (pop. <1 million)	10,847,040	20.8	9.9	51.3	17.9	40.7
Nonmetro, Adjacent to Large Metros	2,199,354	21.3	9.4	50.7	18.6	41.6
Nonmetro, Adjacent to Small Metros	3,955,910	20.6	8.5	50.7	20.2	43.4
Rural (nonmetro, not adj. to a metro)	2,501,699	21.1	9.4	50.4	19.1	41.9
Alabama	4,874,747	22.5	9.4	51.7	16.5	39.0
Appalachian Alabama	3,124,174	22.3	9.1	52.1	16.5	39.4
Non-Appalachian Alabama	1,750,573	22.8	9.8	50.9	16.5	38.5
Georgia	10,429,379	24.1	9.6	52.8	13.5	36.7
Appalachian Georgia	3,238,637	25.2	8.8	52.5	13.5	37.6
Non-Appalachian Georgia	7,190,742	23.6	10.0	52.9	13.5	36.4
Kentucky	4,454,189	22.7	9.4	51.9	16.0	38.8
Appalachian Kentucky	1,165,923	22.0	8.9	51.7	17.4	40.9
Non-Appalachian Kentucky	3,288,266	22.9	9.6	52.0	15.5	38.2
Maryland	6,052,177	22.3	8.9	53.9	14.9	38.7
Appalachian Maryland	251,426	20.4	9.2	52.1	18.3	41.4
Non-Appalachian Maryland	5,800,751	22.3	8.9	53.9	14.8	38.6
Mississippi	2,984,100	23.9	9.8	50.8	15.5	37.4
Appalachian Mississippi	626,263	23.3	10.5	49.8	16.5	38.0
Non-Appalachian Mississippi	2,357,837	24.1	9.6	51.1	15.2	37.3
New York	19,849,399	20.9	9.4	53.7	15.9	38.7
Appalachian New York	1,032,309	19.5	12.9	48.9	18.7	40.9
Non-Appalachian New York	18,817,090	21.0	9.2	54.0	15.8	38.6
North Carolina	10,273,419	22.4	9.5	52.3	15.9	38.7
Appalachian North Carolina	1,757,158	19.9	8.8	50.9	20.3	43.3
Non-Appalachian North Carolina	8,516,261	22.9	9.6	52.5	15.0	37.9
Ohio	11,658,609	22.3	9.2	51.8	16.7	39.4
Appalachian Ohio	1,999,505	21.6	8.7	51.1	18.6	41.9
Non-Appalachian Ohio	9,659,104	22.5	9.3	51.9	16.3	38.9
Pennsylvania	12,805,537	20.8	9.2	52.2	17.8	40.7
Appalachian Pennsylvania	5,687,435	19.4	9.2	51.8	19.6	43.0
Non-Appalachian Pennsylvania	7,118,102	22.0	9.1	52.5	16.4	39.1
South Carolina	5,024,369	22.0	9.3	51.5	17.2	39.4
Appalachian South Carolina	1,270,304	22.6	9.6	51.4	16.5	38.9
Non-Appalachian South Carolina	3,754,065	21.8	9.2	51.5	17.5	39.6
Tennessee	6,715,984	22.4	9.1	52.4	16.0	38.7
Appalachian Tennessee	2,894,190	20.8	8.9	51.4	18.8	41.8
Non-Appalachian Tennessee	3,821,794	23.7	9.3	53.1	13.9	36.8
Virginia	8,470,020	22.1	9.5	53.4	15.0	38.2
Appalachian Virginia	748,182	18.3	11.0	50.3	20.4	43.4
Non-Appalachian Virginia	7,721,838	22.4	9.4	53.7	14.5	37.9
West Virginia (entire state)	1,815,857	20.4	8.7	51.5	19.4	42.5

Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

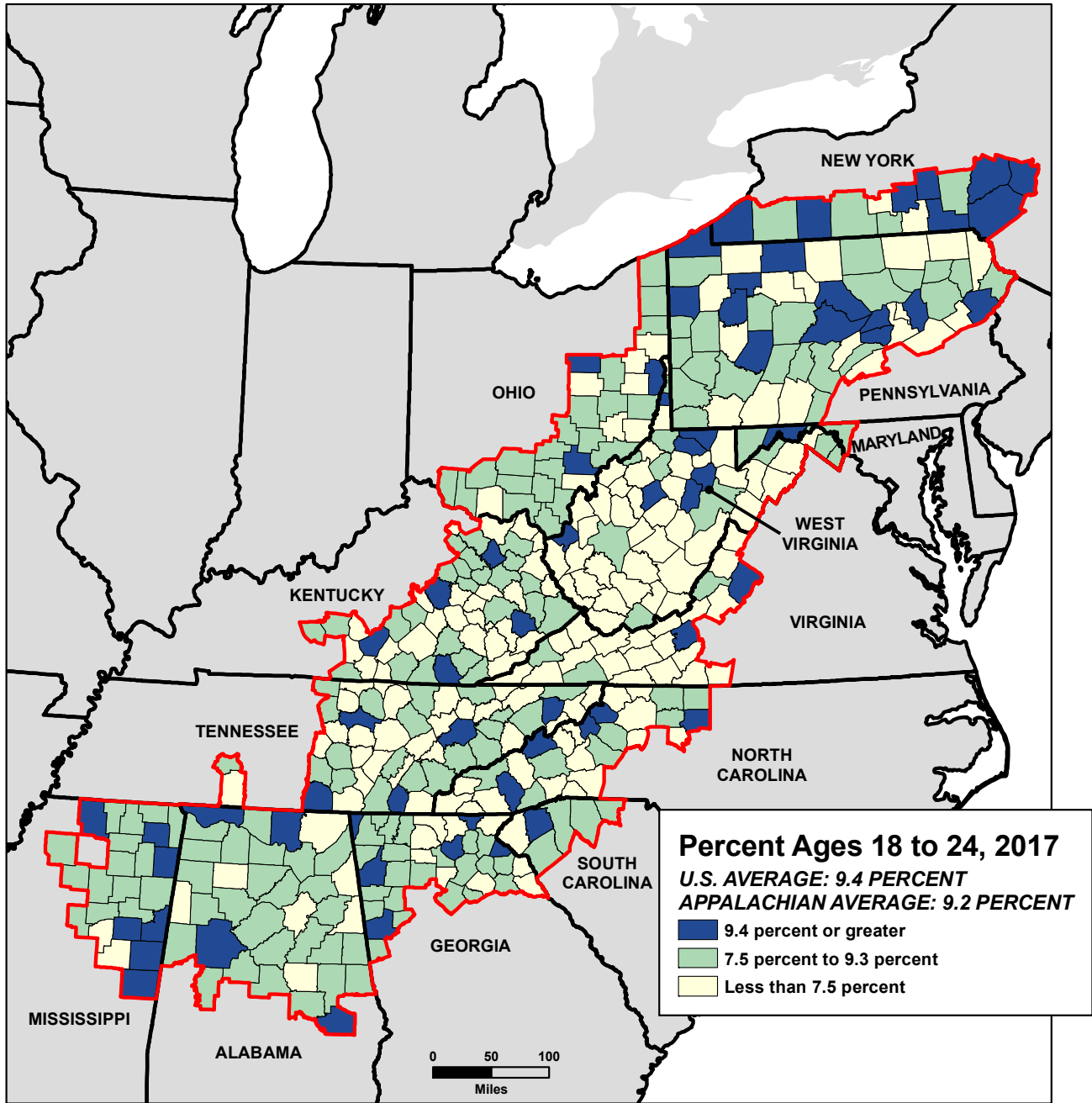
Figure 2.1: Percent of Population in the Appalachian Region Under Age 18, July 1, 2017



Map Title: Percent of Population in the Appalachian Region Under Age 18, July 1, 2017
 Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

As of mid-2017, the share of children and youth under age 18 in the Appalachian population was slightly below the national average of 22.6 percent. And the share was actually less than 20 percent in more than one-third of the Region's 420 counties. Most of these counties were outside metropolitan areas, with concentrations in Pennsylvania, West Virginia, Virginia, North Carolina, and Tennessee. Yet in another 101 Appalachian counties, the share of children under age 18 matched or exceeded the national average. More than half of these counties were in Southern Appalachia, with concentrations in Georgia, Mississippi, Alabama, and South Carolina. Among the states, the Appalachian portions of Georgia, Mississippi, and South Carolina were the only three in the Region where the under-18 percentage was equal to or greater than that of the nation as a whole.

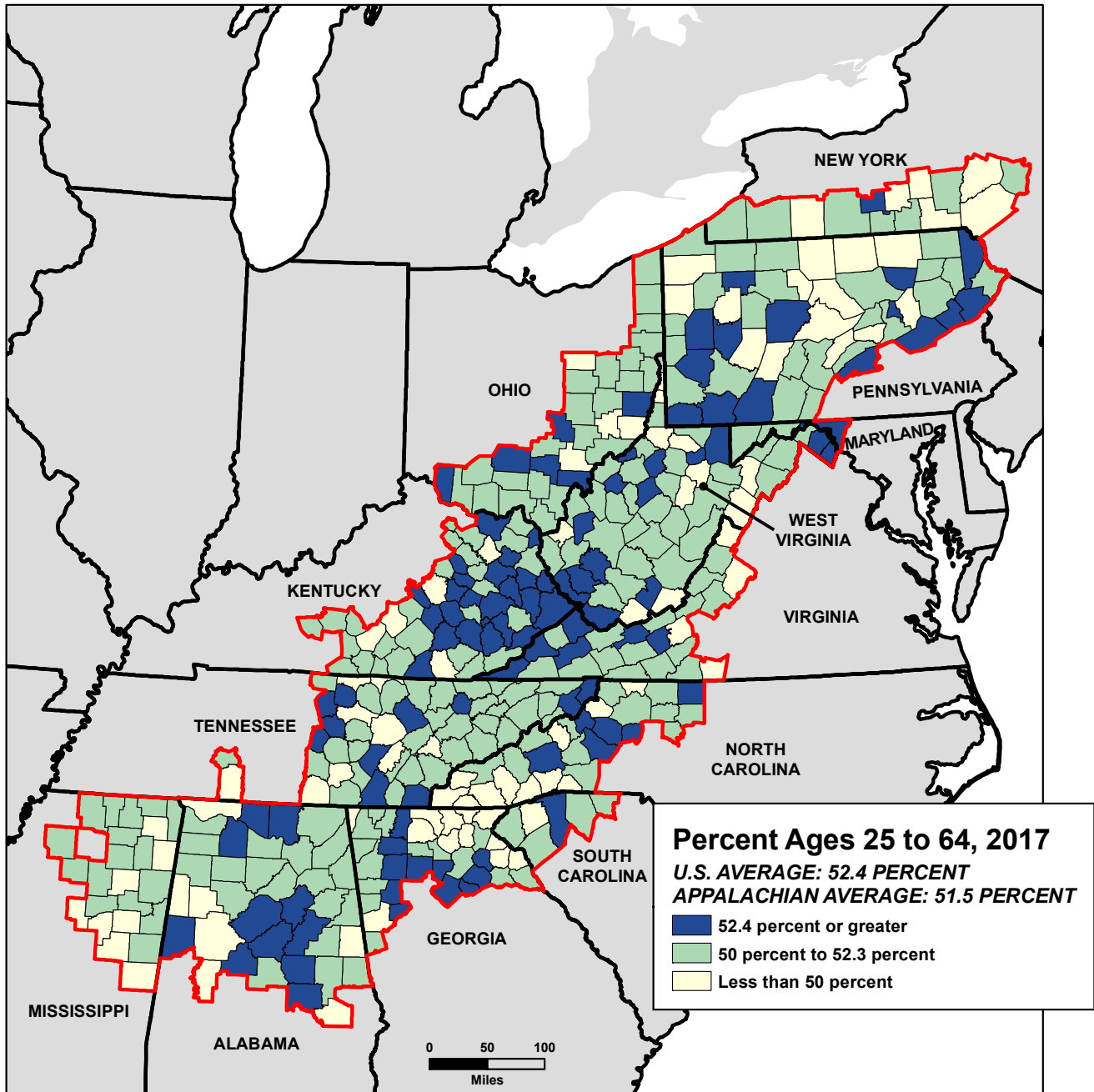
Figure 2.2: Percent of Population in the Appalachian Region Ages 18 to 24, July 1, 2017



Map Title: Percent of Population in the Appalachian Region Ages 18 to 24, July 1, 2017
 Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

Although the share of young adults (ages 18 to 24) in Appalachia roughly equaled the national average in 2017, there were great variations within the Region. For example, persons in this age group made up at least 15 percent of the population in 20 counties. Nearly all of these counties are home to colleges and universities such as Virginia Tech (Montgomery County, Virginia); Cornell University (Tompkins County, New York); Ohio University (Athens County, Ohio); and Mississippi State University (Oktibbeha County, Mississippi). In contrast, 18-to-24-year-olds made up less than 7.5 percent of the population in 173 Appalachian counties. Of the counties in this latter group, 125 were outside metropolitan areas and 52 were in the most rural counties—both of which suggest a possible lack of opportunities in these communities for youth making the transition to adulthood.

Figure 2.3: Percent of Population in the Appalachian Region Ages 25 to 64, July 1, 2017

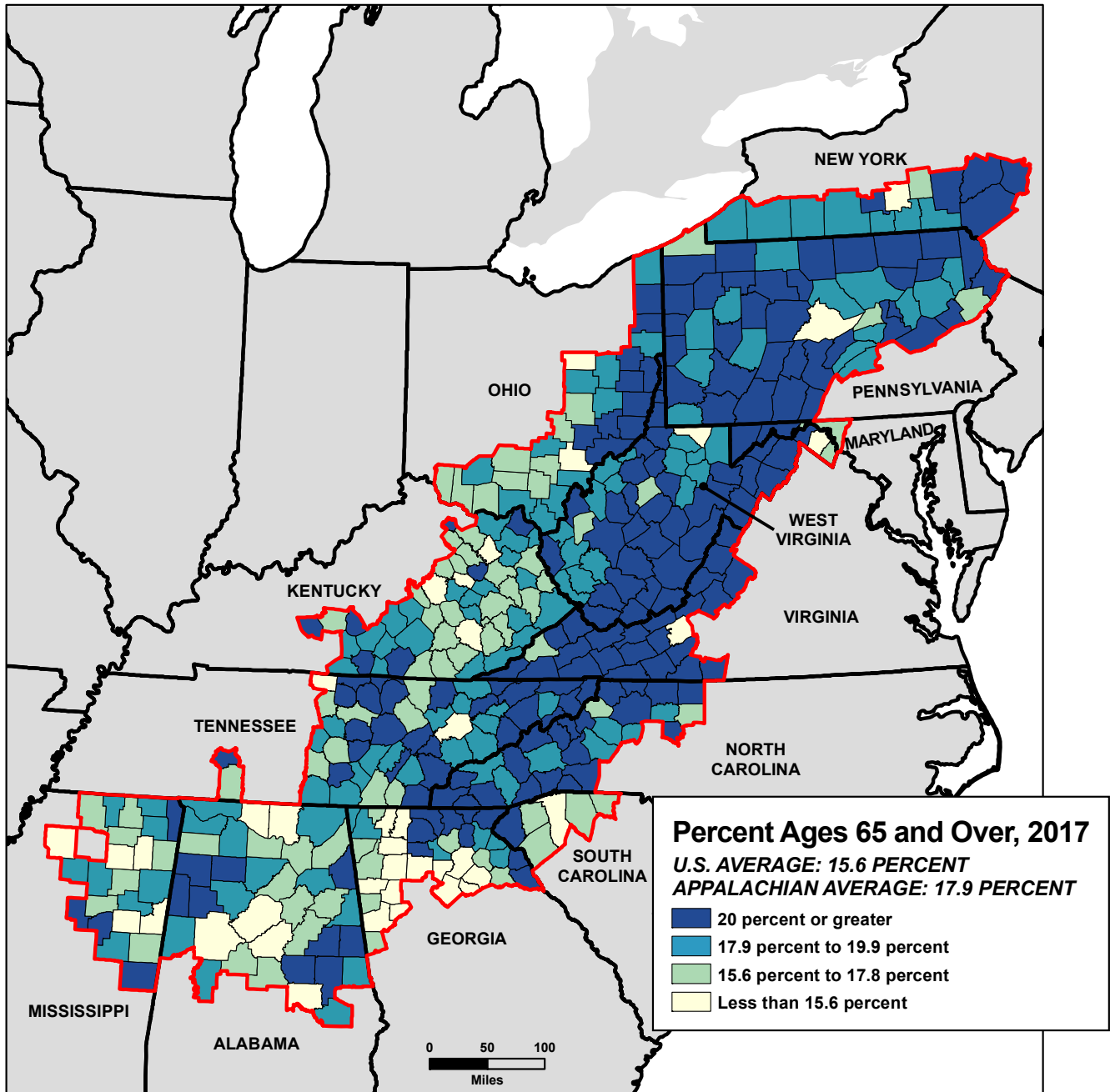


Map Title: Percent of Population in the Appalachian Region Ages 25 to 64, July 1, 2017

Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

In both the United States and Appalachia, adults in the prime working ages (ages 25 to 64) made up a slight majority of all residents in 2017. In 106 of the 420 Appalachian counties, the percentage of persons in this age group matched or exceeded the national average. But there were 92 counties in the Region (74 of which were outside metropolitan areas) where 25-to-64-year-olds made up less than half of the population. Many of these counties—such as Rowan County, Kentucky, home to Morehead State University—house colleges and universities (and thus had a high share of their populations in the 18-to-24 age range).

Figure 2.4: Percent of Population in the Appalachian Region Ages 65 and Over, July 1, 2017

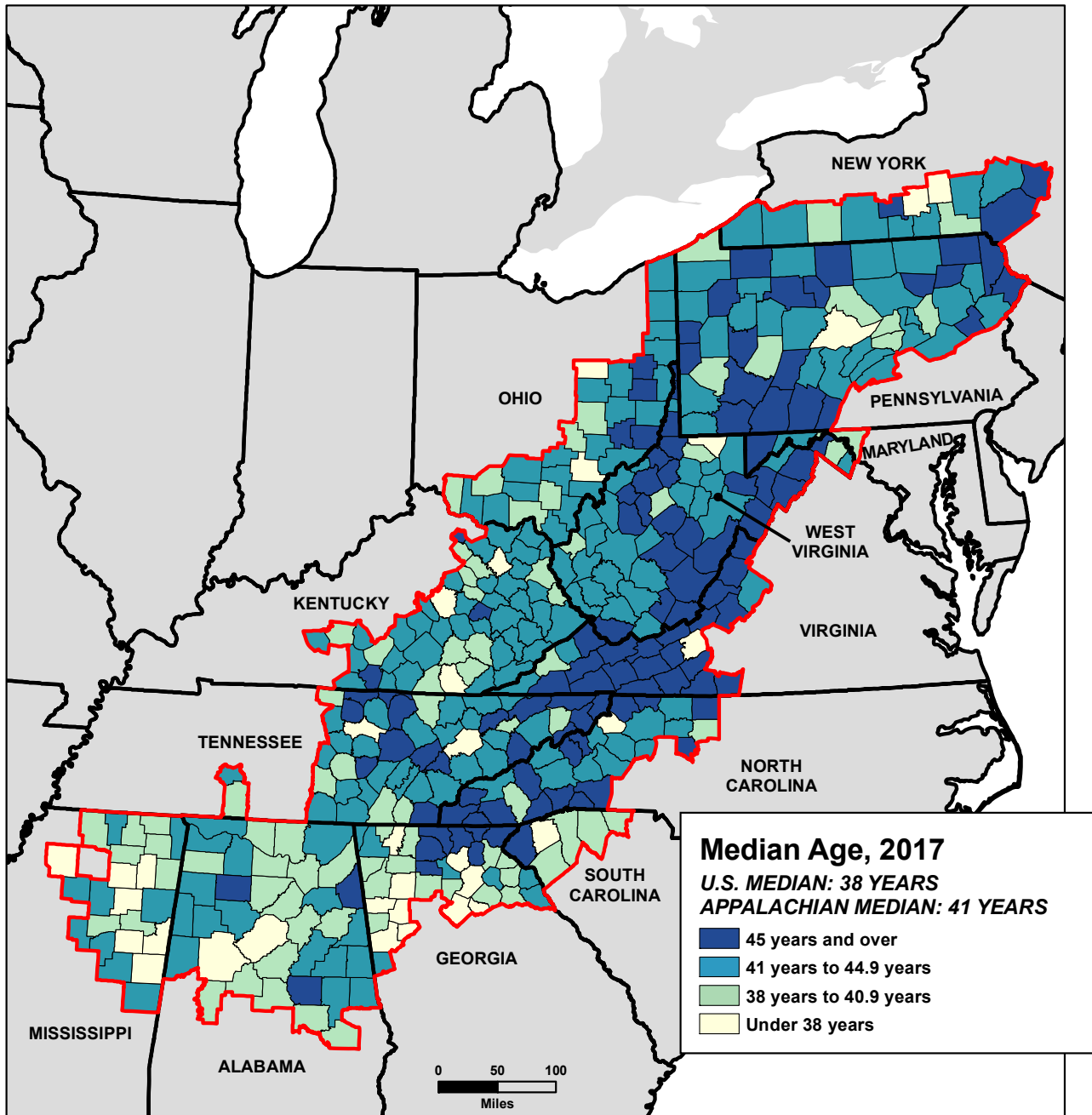


Map Title: Percent of Population in the Appalachian Region Ages 65 and Over, July 1, 2017

Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

The share of residents ages 65 and over in the Appalachian Region exceeded the national average by more than two percentage points in 2017. Moreover, the percentage of persons in this age group matched or exceeded the U.S. share in 381 of the 420 Appalachian counties—and the overall Region share (17.9 percent) in 302 of them. In fact, older persons made up at least 20 percent of the population in 184 Appalachian counties, almost three-fourths of which were outside metropolitan areas. In contrast, most of the 39 Appalachian counties with older population shares below the national average were either in metro areas or home to colleges and universities. As more of the large baby boom cohorts move into this age group, the share of residents ages 65 and over will continue to increase over the coming years in both Appalachia and the nation.

Figure 2.5: Median Age of Persons in the Appalachian Region, July 1, 2017



Map Title: Median Age of Persons in the Appalachian Region, July 1, 2017
 Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

At 41 years, the median age of the Appalachian population was three years older than that of the United States as of mid-2017. Indeed, the median age of the population (the point at which half the population is older and half is younger) matched or exceeded the regional median in nearly three-fourths of Appalachia’s counties. And in 117 counties—82 of which were outside metro areas—the median age was at least 45 years. Of the 33 counties with populations whose median age was younger than the national median, 20 were in Southern Appalachia—the only subregion where the overall age structure roughly resembled that of the nation. (Appalachian Georgia alone had 10 of these counties.) As the U.S. and Appalachian populations grow older, median age will almost certainly continue to rise in most of the Region’s counties—with the possible exception of counties where a college or university is a major presence (such as Montgomery County, Virginia, home to Virginia Tech and Radford University).

Table 2.2: Percentage Point Change in the Share of the Population in the Appalachian Region, by Age Group, July 1, 2010 to July 1, 2017

Population by Age Group	Percentage Point Change in Share of Population				Change in Median Age (Years)
	Under Age 18	Ages 18-24	Ages 25-64	Ages 65 and over	
United States	- 1.4	- 0.5	- 0.6	+ 2.5	+ 0.8
Appalachian Region	- 1.1	- 0.5	- 1.3	+ 2.7	+ 1.1
Subregions					
Northern Appalachia	- 1.2	- 0.6	- 1.0	+ 2.7	+ 1.0
North Central Appalachia	- 0.9	- 0.5	- 1.8	+ 3.1	+ 1.2
Central Appalachia	- 0.7	- 0.4	- 2.1	+ 3.2	+ 1.6
South Central Appalachia	- 1.2	- 0.4	- 1.5	+ 3.1	+ 1.5
Southern Appalachia	- 1.3	- 0.3	- 1.0	+ 2.7	+ 1.4
County Types					
Large Metros (pop. 1 million +)	- 1.2	- 0.3	- 1.0	+ 2.5	+ 1.0
Small Metros (pop. <1 million)	- 1.1	- 0.5	- 1.2	+ 2.7	+ 1.1
Nonmetro, Adjacent to Large Metros	- 1.2	- 0.5	- 1.3	+ 2.9	+ 1.4
Nonmetro, Adjacent to Small Metros	- 1.1	- 0.3	- 1.8	+ 3.2	+ 1.6
Rural (nonmetro, not adj. to a metro)	- 1.0	- 0.4	- 1.8	+ 3.2	+ 1.5
Alabama	- 1.1	- 0.6	- 0.8	+ 2.7	+ 1.1
Appalachian Alabama	- 1.1	- 0.7	- 0.9	+ 2.7	+ 1.2
Non-Appalachian Alabama	- 1.3	- 0.7	- 0.8	+ 2.7	+ 1.3
Georgia	- 1.5	- 0.4	- 0.8	+ 2.8	+ 1.3
Appalachian Georgia	- 1.9	+ 0.2	- 1.2	+ 2.9	+ 1.6
Non-Appalachian Georgia	- 1.4	- 0.7	- 0.7	+ 2.7	+ 1.3
Kentucky	- 0.8	- 0.2	- 1.7	+ 2.7	+ 0.7
Appalachian Kentucky	- 0.7	- 0.3	- 2.0	+ 3.0	+ 1.4
Non-Appalachian Kentucky	- 1.0	- 0.1	- 1.5	+ 2.5	+ 0.8
Maryland	- 1.1	- 0.8	- 0.8	+ 2.6	+ 0.7
Appalachian Maryland	- 0.9	- 0.5	- 1.2	+ 2.5	+ 1.0
Non-Appalachian Maryland	- 1.2	- 0.8	- 0.8	+ 2.7	+ 0.8
Mississippi	- 1.5	- 0.5	- 0.7	+ 2.6	+ 1.4
Appalachian Mississippi	- 1.3	- 0.3	- 0.7	+ 2.4	+ 1.0
Non-Appalachian Mississippi	- 1.5	- 0.6	- 0.6	+ 2.7	+ 1.5
New York	- 1.4	- 0.8	- 0.3	+ 2.4	+ 0.7
Appalachian New York	- 1.5	+ 0.1	- 1.7	+ 3.1	+ 0.8
Non-Appalachian New York	- 1.3	- 0.9	- 0.2	+ 2.4	+ 0.8
North Carolina	- 1.4	- 0.5	- 0.9	+ 2.9	+ 1.3
Appalachian North Carolina	- 1.6	- 0.3	- 1.6	+ 3.4	+ 1.9
Non-Appalachian North Carolina	- 1.4	- 0.5	- 0.9	+ 2.9	+ 1.4
Ohio	- 1.3	- 0.4	- 1.0	+ 2.6	+ 0.6
Appalachian Ohio	- 1.3	- 0.3	- 1.3	+ 3.0	+ 1.3
Non-Appalachian Ohio	- 1.2	- 0.4	- 0.9	+ 2.5	+ 0.6
Pennsylvania	- 1.1	- 0.7	- 0.5	+ 2.4	+ 0.5
Appalachian Pennsylvania	- 1.1	- 0.8	- 0.7	+ 2.6	+ 1.0
Non-Appalachian Pennsylvania	- 1.1	- 0.8	- 0.3	+ 2.3	+ 0.5
South Carolina	- 1.3	- 1.0	- 1.2	+ 3.5	+ 1.5
Appalachian South Carolina	- 1.0	- 0.6	- 0.9	+ 2.6	+ 0.9
Non-Appalachian South Carolina	- 1.4	- 1.1	- 1.3	+ 3.8	+ 1.8
Tennessee	- 1.1	- 0.5	- 1.0	+ 2.5	+ 0.6
Appalachian Tennessee	- 1.0	- 0.3	- 1.6	+ 2.8	+ 1.2
Non-Appalachian Tennessee	- 1.1	- 0.5	- 0.7	+ 2.3	+ 0.8
Virginia	- 1.0	- 0.5	- 1.2	+ 2.7	+ 0.7
Appalachian Virginia	- 1.2	- 0.7	- 1.7	+ 3.6	+ 2.1
Non-Appalachian Virginia	- 1.1	- 0.4	- 1.2	+ 2.7	+ 0.9
West Virginia (entire state)	- 0.5	- 0.4	- 2.4	+ 3.3	+ 1.2

Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

TRENDS IN AGE

- Like the United States as a whole, Appalachia’s population became older between 2010 and 2017 (see Table 2.2). And it’s been aging at about the same pace as the national population over this period: The median age of the Region’s population (the point at which half the population is older and half is younger) rose by a year to 41 years over the seven-year period.
- Some parts of the Appalachian Region are aging faster than others. For example, the median age rose 2.1 years in Appalachian Virginia, 1.9 years in Appalachian North Carolina, and 1.6 years in Appalachian Georgia. Yet while the median age in 2017 stood at 43 years in North Carolina’s and Virginia’s Appalachian sections, it was 37.6 years in Georgia—still below the U.S. median of 38 years. Meanwhile, the median age in Appalachian counties outside metropolitan areas rose slightly faster than in the Region’s metropolitan counties. Yet among all Appalachian subregions and county types, as well as in the Appalachian portions of nearly every state in the Region, the median age increased faster than the national average—noticeably faster in some cases.
- In both the United States and Appalachia, the aging of the population has come largely at the expense of younger age groups. For example, the share of Appalachia’s population under age 18 and the share ages 25 to 64 are both a full percentage point lower in mid-2017 than each of them was in mid-2010. The decline in the share of residents ages 25 to 64 has occurred as older members of the baby boom cohorts moved into the “65 and over” age category. Between 2010 and 2017, the share of residents in the older age group increased by more than two percentage points both in the Region and nationally.
- While much of Appalachia is “aging in place” (particularly with the aging of the baby boom cohorts), the migration of some older residents to retirement destinations is a factor behind the aging of some parts of the Region. For example, several Appalachian counties where the median age is at least 45 years—such as Union County, Georgia; Transylvania County, North Carolina; and Oconee County, South Carolina—have been designated as “retirement” counties by the Economic Research Service of the U.S. Department of Agriculture.
- Both Appalachia and the United States have declining child and young adult populations due to lower fertility and smaller age cohorts. Yet while the working-age (ages 25 to 64) population has increased nationally since 2010, Appalachia has lost people in this age group: There were 13.2 million Appalachian residents ages 25 to 64 in 2017, down 1 percent from seven years earlier.

CHAPTER 3: RACE AND HISPANIC ORIGIN

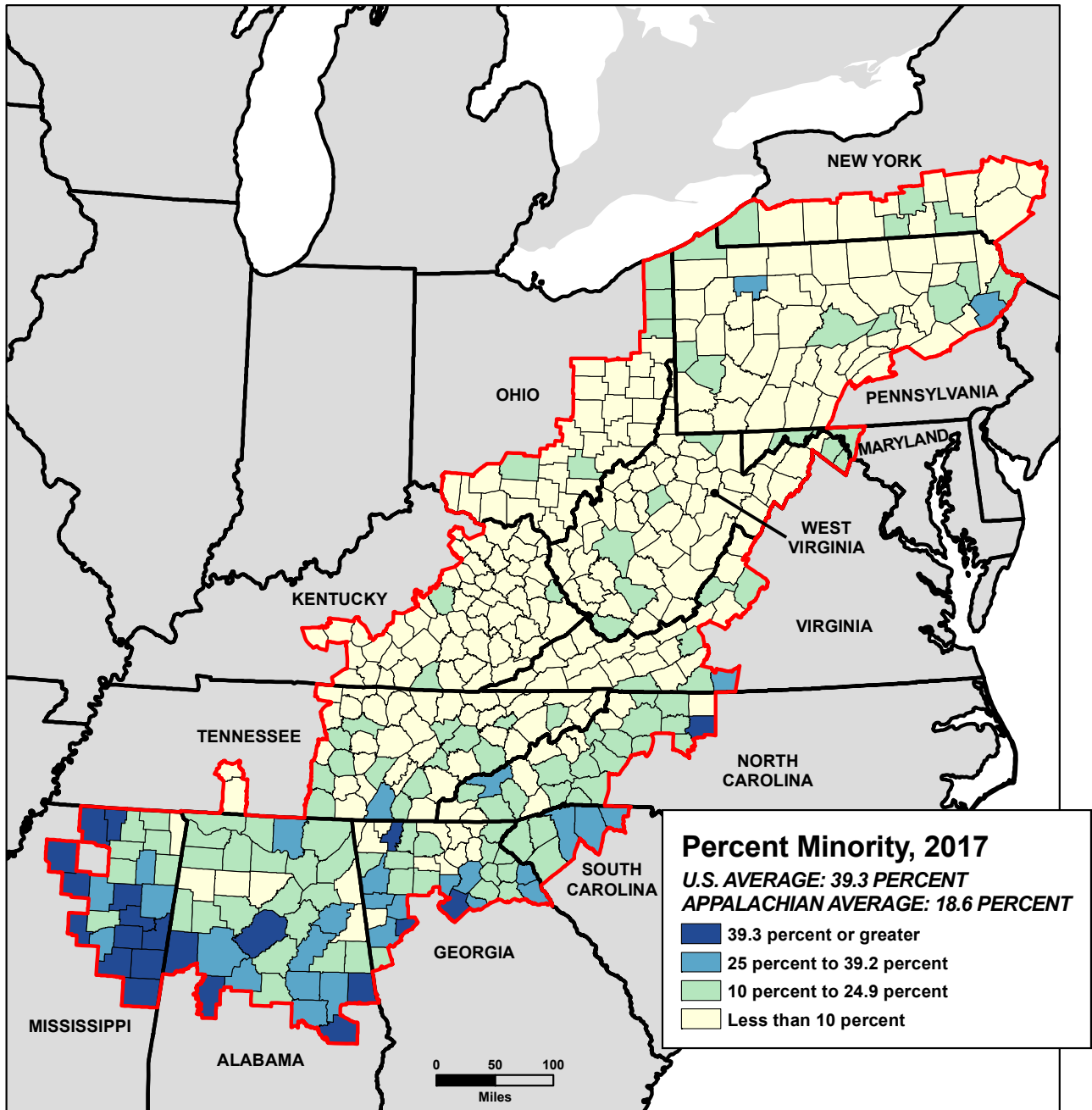
Table 3.1: Population in the Appalachian Region by Race and Hispanic Origin, July 1, 2017

Population by Race and Hispanic Origin	Total Population, July 1, 2017	Percent of Population				
		White Alone, Not Hispanic	Minority			
			Total	Black Alone, Not Hispanic	Hispanic or Latino	Other, Not Hispanic
United States	325,719,178	60.7	39.3	12.5	18.1	8.7
Appalachian Region	25,611,363	81.4	18.6	9.7	5.1	3.8
Subregions						
Northern Appalachia	8,202,375	87.8	12.2	5.4	3.3	3.5
North Central Appalachia	2,404,112	92.4	7.6	3.1	1.6	2.9
Central Appalachia	1,867,557	94.5	5.5	1.9	1.7	1.9
South Central Appalachia	4,877,941	84.1	15.9	7.1	5.4	3.4
Southern Appalachia	8,259,378	67.2	32.8	19.3	8.6	4.9
County Types						
Large Metros (pop. 1 million +)	6,107,360	71.6	28.4	16.0	6.6	5.8
Small Metros (pop. <1 million)	10,847,040	81.0	19.0	9.5	5.7	3.7
Nonmetro, Adjacent to Large Metros	2,199,354	88.1	11.9	5.3	3.9	2.7
Nonmetro, Adjacent to Small Metros	3,955,910	89.4	10.6	4.5	3.7	2.5
Rural (nonmetro, not adj. to a metro)	2,501,699	88.1	11.9	7.7	2.2	2.0
Alabama	4,874,747	65.6	34.4	26.5	4.3	3.6
Appalachian Alabama	3,124,174	69.5	30.5	22.4	4.8	3.3
Non-Appalachian Alabama	1,750,573	58.7	41.3	34.0	3.4	4.0
Georgia	10,429,379	52.8	47.2	31.3	9.6	6.2
Appalachian Georgia	3,238,637	63.6	36.4	15.1	14.0	7.3
Non-Appalachian Georgia	7,190,742	48.0	52.0	38.6	7.7	5.7
Kentucky	4,454,189	84.6	15.4	8.1	3.7	3.6
Appalachian Kentucky	1,165,923	94.5	5.5	1.9	1.7	1.9
Non-Appalachian Kentucky	3,288,266	81.1	18.9	10.4	4.4	4.2
Maryland	6,052,177	50.9	49.1	29.7	10.1	9.3
Appalachian Maryland	251,426	83.3	16.7	9.1	3.7	3.9
Non-Appalachian Maryland	5,800,751	49.4	50.6	30.6	10.4	9.5
Mississippi	2,984,100	56.7	43.3	37.4	3.2	2.7
Appalachian Mississippi	626,263	63.4	36.6	31.8	2.7	2.1
Non-Appalachian Mississippi	2,357,837	54.9	45.1	38.9	3.3	2.9
New York	19,849,399	55.3	44.7	14.6	19.2	11.0
Appalachian New York	1,032,309	88.2	11.8	2.8	3.7	5.2
Non-Appalachian New York	18,817,090	53.5	46.5	15.2	20.1	11.3
North Carolina	10,273,419	63.1	36.9	21.4	9.5	6.0
Appalachian North Carolina	1,757,158	79.8	20.2	8.8	7.7	3.7
Non-Appalachian North Carolina	8,516,261	59.7	40.3	24.0	9.8	6.5
Ohio	11,658,609	79.1	20.9	12.5	3.8	4.6
Appalachian Ohio	1,999,505	90.9	9.1	4.3	2.1	2.6
Non-Appalachian Ohio	9,659,104	76.6	23.4	14.2	4.1	5.0
Pennsylvania	12,805,537	76.5	23.5	10.8	7.3	5.3
Appalachian Pennsylvania	5,687,435	87.6	12.4	5.6	3.3	3.5
Non-Appalachian Pennsylvania	7,118,102	67.6	32.4	15.0	10.5	6.9
South Carolina	5,024,369	63.8	36.2	26.8	5.7	3.7
Appalachian South Carolina	1,270,304	72.7	27.3	16.7	6.8	3.9
Non-Appalachian South Carolina	3,754,065	60.7	39.3	30.2	5.3	3.7
Tennessee	6,715,984	73.9	26.1	16.8	5.5	3.9
Appalachian Tennessee	2,894,190	87.3	12.7	5.5	4.1	3.1
Non-Appalachian Tennessee	3,821,794	63.8	36.2	25.3	6.5	4.4
Virginia	8,470,020	61.9	38.1	19.1	9.4	9.6
Appalachian Virginia	748,182	89.1	10.9	5.5	2.5	3.0
Non-Appalachian Virginia	7,721,838	59.2	40.8	20.4	10.1	10.3
West Virginia (entire state)	1,815,857	92.2	7.8	3.5	1.6	2.7

Note: "Other" includes these racial groups: (a) American Indian and Alaska Native alone; (b) Asian alone; (c) Native Hawaiian and Other Pacific Islander alone; and (d) Two or more races.

Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

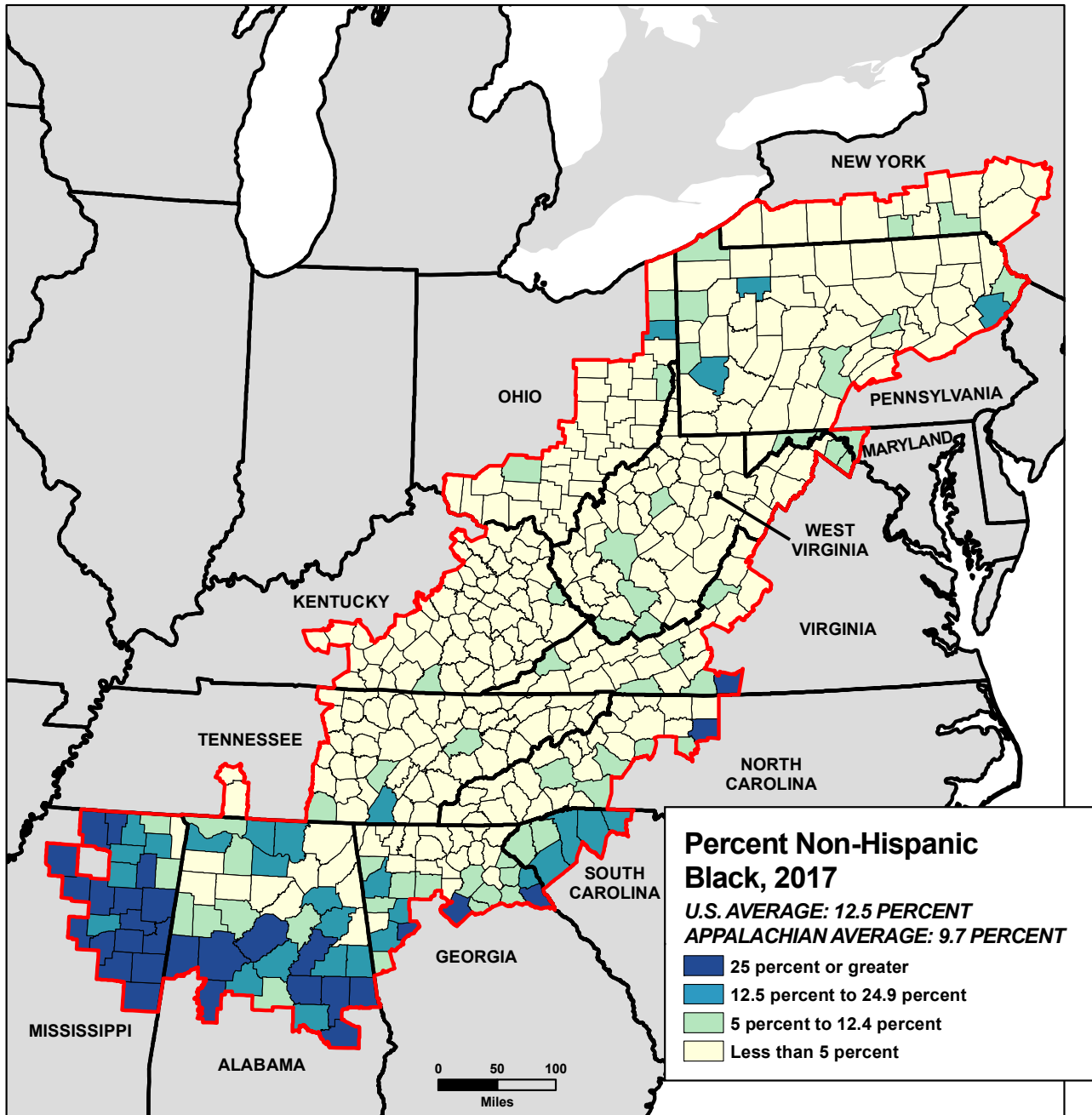
Figure 3.1: Percent of Population in the Appalachian Region That Is Minority, July 1, 2017



Map Title: Percent of Population in the Appalachian Region That Is Minority, July 1, 2017
 Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

The Appalachian Region is significantly less racially and ethnically diverse than the United States as a whole, and most parts of the Region have remained far below the national average in their minority populations. In more than three-fifths of Appalachian counties, minorities (defined as anyone who identifies with a racial or ethnic group *other than* “white alone, not Hispanic”) made up less than 10 percent of the population in mid-2017. There were just 21 counties—all but one in Southern Appalachia and more than half in Mississippi alone—where minorities’ share of the population matched or exceeded the national average of 39 percent.

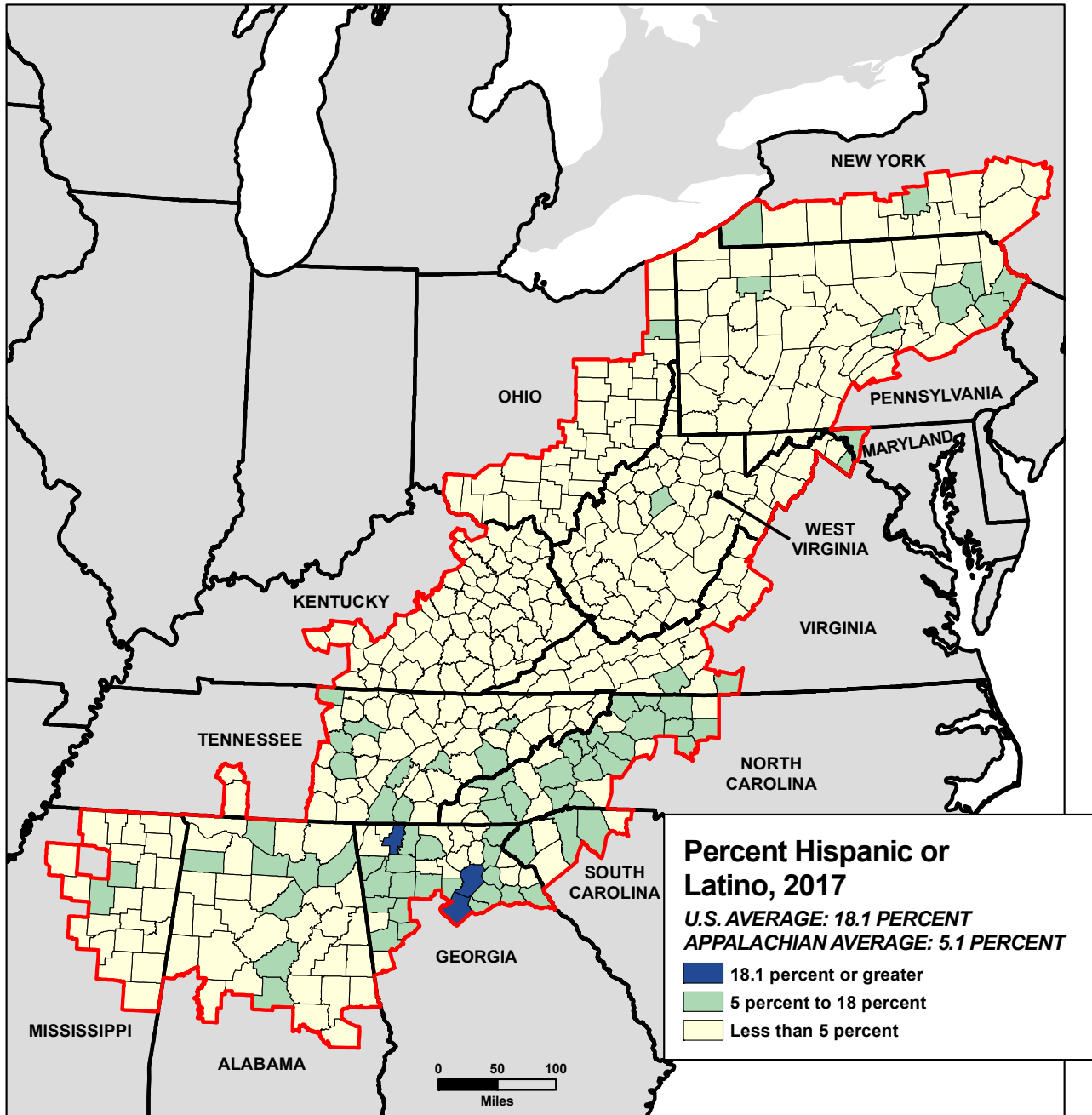
Figure 3.2: Percent of Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2017



Map Title: Percent of Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2017
 Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

While non-Hispanic African Americans have remained the largest single minority group in Appalachia as of 2017, their share of the Region’s total population was still lower than in the United States as a whole. Within the Region, the largest proportions were in Southern Appalachia—the only subregion where blacks’ share of the population exceeded the national average. Southern Appalachia also had 52 of the Region’s 59 counties where the black share of the population matched or surpassed that of the nation—as well as 28 of the 30 where at least one in four residents were African American. At the other end of the spectrum, persons who were “black alone, not Hispanic” accounted for less than 5 percent of the residents in nearly three-fourths of Appalachian counties.

Figure 3.3: Percent of Population in the Appalachian Region That Is Hispanic or Latino, July 1, 2017



Map Title: Percent of Population in the Appalachian Region That Is Hispanic or Latino, July 1, 2017
 Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

Although Hispanics are now the United States' largest minority group, they made up only one in 20 residents in the Appalachian Region in 2017. The county patterns reflect this fact, as Hispanics were at least 5 percent of the population in just 78 of Appalachia's 420 counties, 65 of which were in Southern and South Central Appalachia. Moreover, just three Appalachian counties (Gwinnett, Hall, and Whitfield—all in Georgia) had Latino population shares that matched or exceeded the national average.

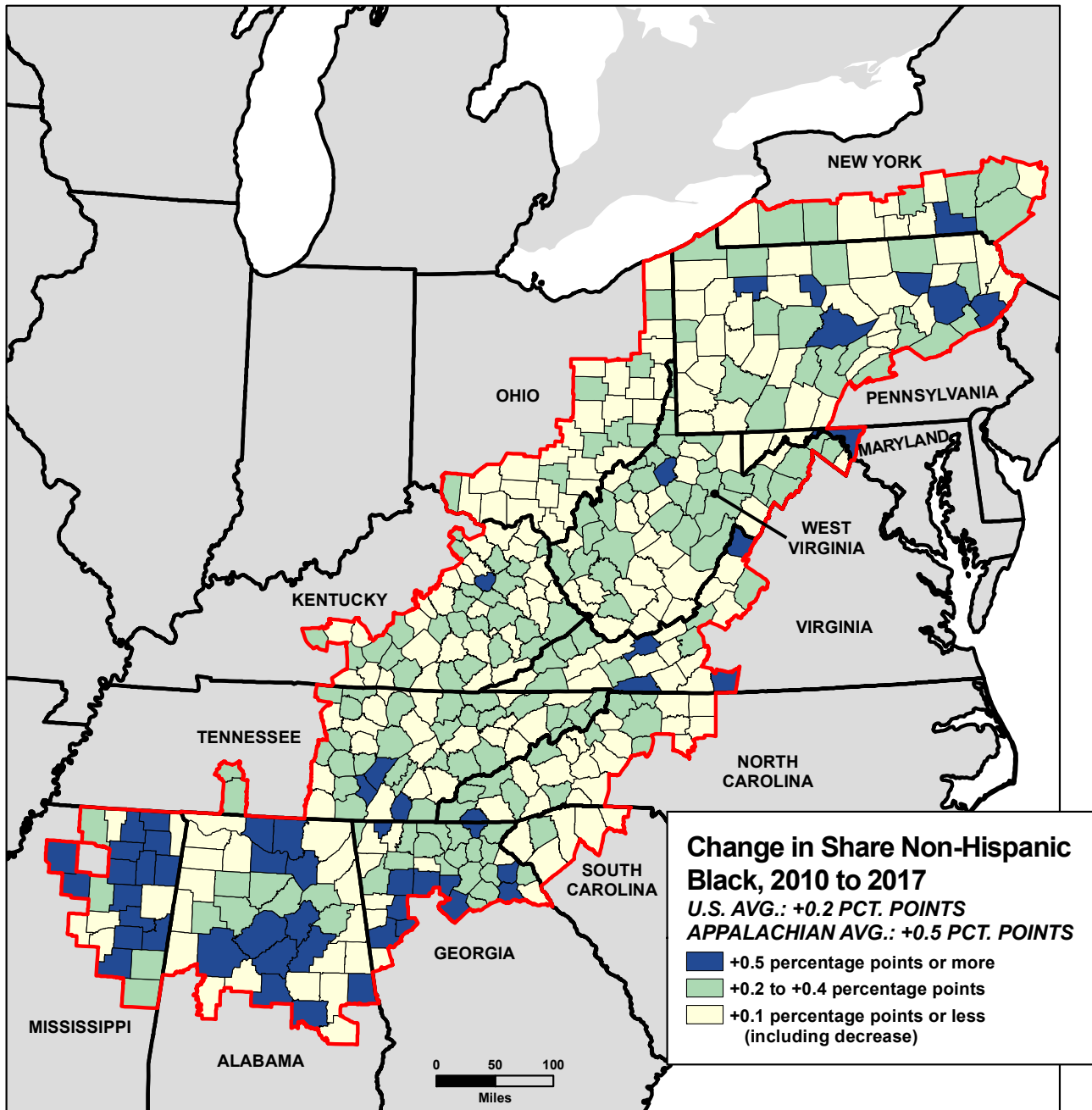
Table 3.2: Percentage Point Change in the Share of the Population in the Appalachian Region, by Race and Hispanic Origin, July 1, 2010 to July 1, 2017

Population by Race and Hispanic Origin	Percentage Point Change in Share of Population				
	White Alone, Not Hispanic	Minority			
		Total	Black Alone, Not Hispanic	Hispanic or Latino	Other, Not Hispanic
United States	- 3.1	+ 3.1	+ 0.2	+ 1.7	+ 1.2
Appalachian Region	- 2.2	+ 2.2	+ 0.5	+ 0.9	+ 0.8
Subregions					
Northern Appalachia	- 1.8	+ 1.8	+ 0.2	+ 0.9	+ 0.7
North Central Appalachia	- 1.0	+ 1.0	+ 0.1	+ 0.4	+ 0.5
Central Appalachia	- 1.0	+ 1.0	+ 0.1	+ 0.4	+ 0.5
South Central Appalachia	- 1.6	+ 1.6	+ 0.2	+ 0.8	+ 0.6
Southern Appalachia	- 2.8	+ 2.8	+ 0.8	+ 1.0	+ 1.0
County Types					
Large Metros (pop. 1 million +)	- 3.5	+ 3.5	+ 1.2	+ 0.9	+ 1.4
Small Metros (pop. <1 million)	- 2.2	+ 2.2	+ 0.4	+ 1.0	+ 0.7
Nonmetro, Adjacent to Large Metros	- 1.3	+ 1.3	+ 0.2	+ 0.7	+ 0.5
Nonmetro, Adjacent to Small Metros	- 1.2	+ 1.2	+ 0.1	+ 0.7	+ 0.5
Rural (nonmetro, not adj. to a metro)	- 1.2	+ 1.2	+ 0.3	+ 0.5	+ 0.4
Alabama	- 1.5	+ 1.5	+ 0.4	+ 0.4	+ 0.7
Appalachian Alabama	- 1.6	+ 1.6	+ 0.7	+ 0.4	+ 0.5
Non-Appalachian Alabama	- 1.2	+ 1.2	+ 0.1	+ 0.4	+ 0.8
Georgia	- 3.1	+ 3.1	+ 1.1	+ 0.8	+ 1.2
Appalachian Georgia	- 4.6	+ 4.6	+ 1.9	+ 1.3	+ 1.5
Non-Appalachian Georgia	- 2.6	+ 2.6	+ 1.0	+ 0.6	+ 1.0
Kentucky	- 1.8	+ 1.8	+ 0.4	+ 0.6	+ 0.8
Appalachian Kentucky	- 0.9	+ 0.9	+ 0.1	+ 0.3	+ 0.5
Non-Appalachian Kentucky	- 1.9	+ 1.9	+ 0.4	+ 0.7	+ 0.9
Maryland	- 3.8	+ 3.8	+ 0.6	+ 1.9	+ 1.4
Appalachian Maryland	- 3.1	+ 3.1	+ 1.1	+ 1.1	+ 0.9
Non-Appalachian Maryland	- 3.9	+ 3.9	+ 0.5	+ 1.9	+ 1.3
Mississippi	- 1.3	+ 1.3	+ 0.5	+ 0.4	+ 0.4
Appalachian Mississippi	- 1.4	+ 1.4	+ 0.5	+ 0.4	+ 0.5
Non-Appalachian Mississippi	- 1.3	+ 1.3	+ 0.5	+ 0.4	+ 0.4
New York	- 3.1	+ 3.1	+ 0.0	+ 1.5	+ 1.7
Appalachian New York	- 1.9	+ 1.9	+ 0.2	+ 0.6	+ 1.0
Non-Appalachian New York	- 3.1	+ 3.1	- 0.1	+ 1.6	+ 1.7
North Carolina	- 2.2	+ 2.2	+ 0.2	+ 1.1	+ 1.0
Appalachian North Carolina	- 1.5	+ 1.5	+ 0.2	+ 0.8	+ 0.5
Non-Appalachian North Carolina	- 2.2	+ 2.2	+ 0.0	+ 1.0	+ 1.1
Ohio	- 2.1	+ 2.1	+ 0.4	+ 0.7	+ 1.0
Appalachian Ohio	- 1.0	+ 1.0	+ 0.0	+ 0.5	+ 0.4
Non-Appalachian Ohio	- 2.3	+ 2.3	+ 0.4	+ 0.7	+ 1.1
Pennsylvania	- 3.0	+ 3.0	+ 0.3	+ 1.6	+ 1.0
Appalachian Pennsylvania	- 2.0	+ 2.0	+ 0.2	+ 0.9	+ 0.9
Non-Appalachian Pennsylvania	- 3.5	+ 3.5	+ 0.2	+ 2.0	+ 1.2
South Carolina	- 0.3	+ 0.3	- 0.9	+ 0.6	+ 0.7
Appalachian South Carolina	- 1.8	+ 1.8	+ 0.2	+ 1.0	+ 0.8
Non-Appalachian South Carolina	+ 0.1	- 0.1	- 1.3	+ 0.4	+ 0.7
Tennessee	- 1.8	+ 1.8	+ 0.2	+ 0.9	+ 0.8
Appalachian Tennessee	- 1.5	+ 1.5	+ 0.1	+ 0.8	+ 0.6
Non-Appalachian Tennessee	- 1.6	+ 1.6	- 0.1	+ 0.9	+ 0.8
Virginia	- 3.0	+ 3.0	+ 0.0	+ 1.4	+ 1.5
Appalachian Virginia	- 1.4	+ 1.4	+ 0.2	+ 0.6	+ 0.7
Non-Appalachian Virginia	- 3.0	+ 3.0	- 0.2	+ 1.5	+ 1.6
West Virginia (entire state)	- 1.0	+ 1.0	+ 0.1	+ 0.4	+ 0.5

Note: "Other" includes these racial groups: (a) American Indian and Alaska Native alone; (b) Asian alone; (c) Native Hawaiian and Other Pacific Islander alone; and (d) Two or more races.

Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

Figure 3.4: Percentage Point Change in the Share of the Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2010 to July 1, 2017

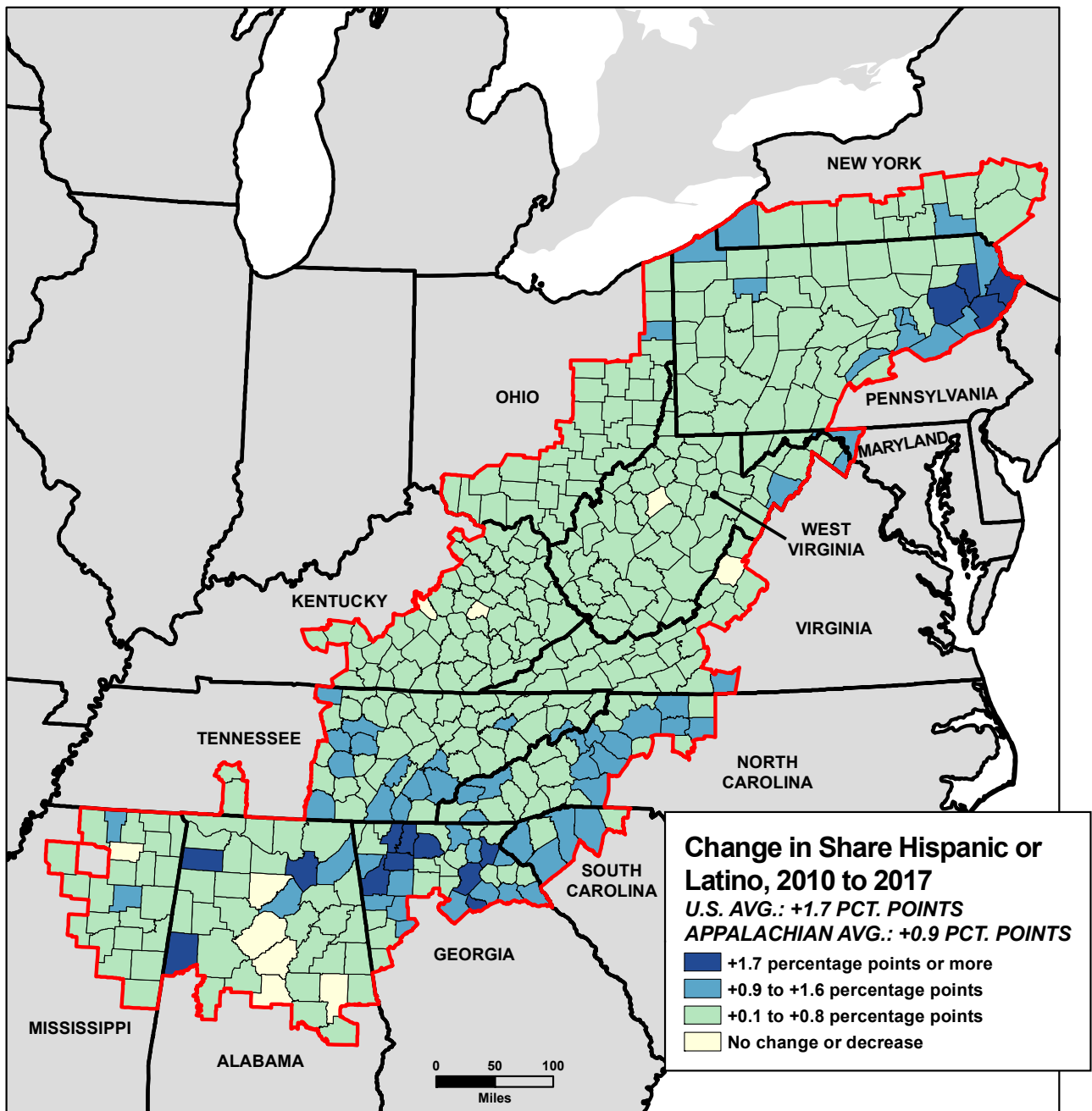


Map Title: Percentage Point Change in the Share of the Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2010 to July 1, 2017

Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

Although African Americans' share of the U.S. population barely changed between 2010 and 2017, their share of the Appalachian population increased half a percentage point, from 9.2 percent to 9.7 percent. And there were 55 counties—mostly with sizeable, but some with small, African American concentrations—where blacks' share of the population increased by at least that much. (In 23 of these counties, the share rose at least a full percentage point.) Yet in more than one-fourth of Appalachia's 420 counties, the African American share of the population has either stayed the same or decreased from its level in 2010.

Figure 3.5: Percentage Point Change in the Share of the Population in the Appalachian Region That Is Hispanic or Latino, July 1, 2010 to July 1, 2017



Map Title: Percentage Point Change in the Share of the Population in the Appalachian Region That Is Hispanic or Latino, July 1, 2010 to July 1, 2017

Data Source: U.S. Census Bureau, Vintage 2017 Population Estimates.

The Hispanic/Latino share of the Appalachian population rose by nine-tenths of a percentage point from 2010 to 2017—although this increase was only about half the national average over the seven-year period. Still, there were 15 counties (all of which were in Georgia, Alabama, or Pennsylvania) where the Hispanic share of the population grew at or above the national rate. Opportunities in industries such as food processing (in Franklin County, Alabama and Luzerne County, Pennsylvania) and construction (in the counties surrounding Atlanta)—as well as in creating small businesses—have been cited as possible factors fueling this growth.

TRENDS IN RACE AND HISPANIC ORIGIN

- The Appalachian Region has become more racially and ethnically diverse since 2010. Between July 1 of that year and July 1, 2017, the share of the population that is minority (defined as anyone who identifies with a racial or ethnic group *other than* “white alone, not Hispanic”) rose more than two percentage points to 18.6 percent (see Tables 3.1 and 3.2). The pace of this increased diversity, however, is not as great as that of the nation, where the increase was more than three percentage points over the period.
- Within the Region, the greatest increase in racial diversity is occurring in Southern Appalachia and in counties that are part of large metropolitan areas (1 million population or more). Since 2010, minorities’ share of the population in those two areas rose more than 2.5 percentage points—3.5 points in large metros. And Appalachian Georgia has grown even faster: The minority share of the population increased nearly five percentage points between 2010 and 2017. Not surprisingly, these three areas have minority concentrations that come close to the national minority share of 39 percent (33 percent for Southern Appalachia, 28 percent for counties in large metros, and 36 percent for Appalachian Georgia).
- Although African Americans comprise the largest minority group in Appalachia, Hispanics have fueled much (if not most) of the minority increase. The Hispanic/Latino share of the Appalachian population rose 0.9 percentage points between mid-2010 and mid-2017, compared with a 0.5 point increase in the Region’s African American share. The increase in the Latino population may be associated with employment opportunities in such industries as warehouse and food processing and construction, as well as in the creation of small businesses. As with the overall minority population, Southern Appalachia, large metropolitan areas, and Appalachian Georgia had the greatest increases in both the black and Latino shares of the total population. (Interestingly, blacks fueled a slightly larger share of the minority increase than Latinos did in large metros and Appalachian Georgia.)

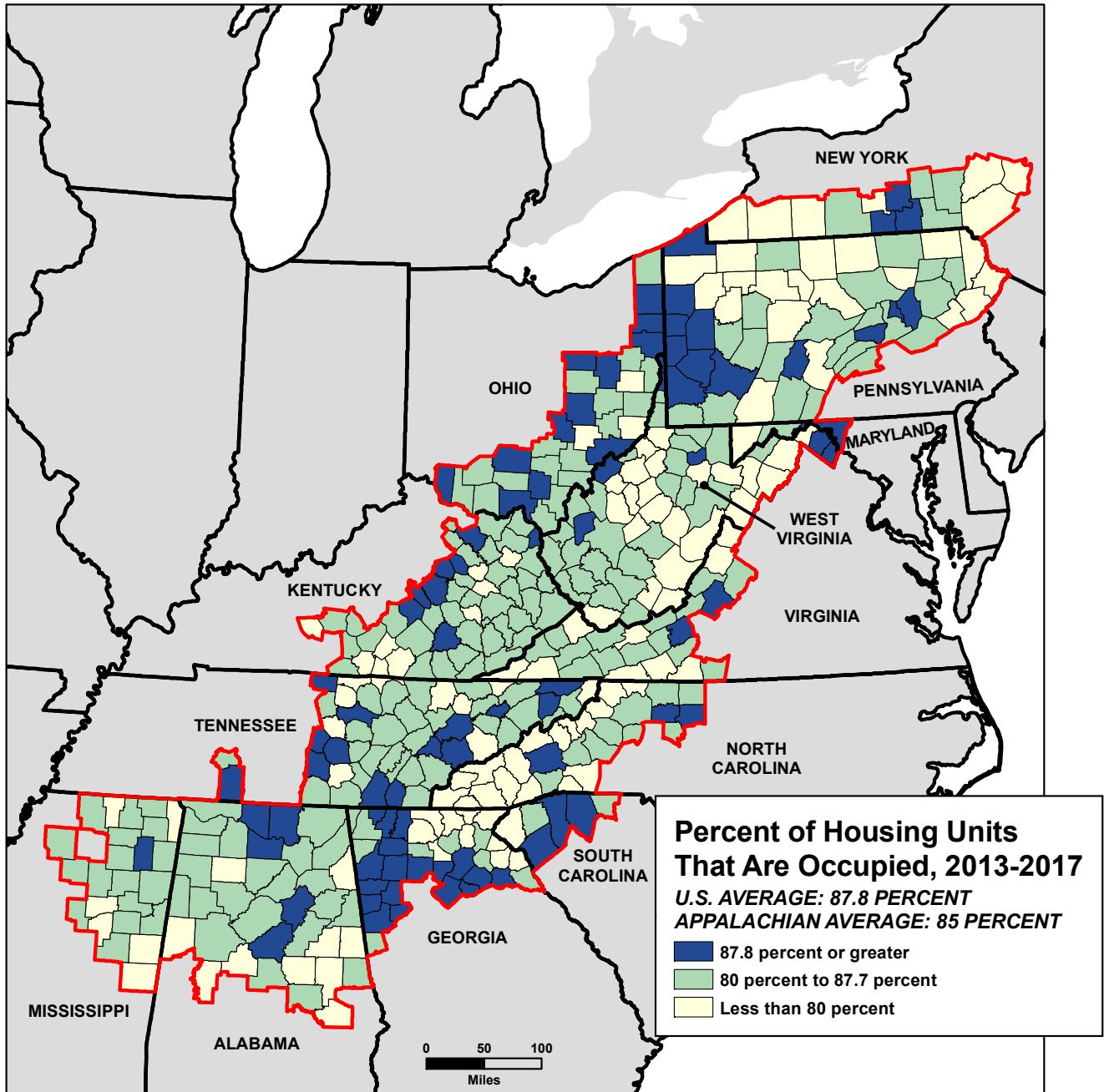
CHAPTER 4: HOUSING OCCUPANCY, TENURE, AND TYPE

Table 4.1: Occupancy and Tenure of Housing Units in the Appalachian Region, 2013-2017

Housing Occupancy and Tenure	Total Number of Housing Units	Number of Occupied Housing Units	Percent of Total Housing Units		Percent of Occupied Housing Units	
			Occupied	Vacant	Owner-Occupied	Renter-Occupied
United States	135,393,564	118,825,921	87.8	12.2	63.8	36.2
Appalachian Region	11,733,197	9,968,829	85.0	15.0	70.4	29.6
Subregions						
Northern Appalachia	3,960,348	3,355,355	84.7	15.3	70.8	29.2
North Central Appalachia	1,127,351	952,196	84.5	15.5	72.1	27.9
Central Appalachia	891,132	742,914	83.4	16.6	72.0	28.0
South Central Appalachia	2,308,178	1,936,283	83.9	16.1	69.3	30.7
Southern Appalachia	3,446,188	2,982,081	86.5	13.5	69.9	30.1
County Types						
Large Metros (pop. 1 million +)	2,593,814	2,314,330	89.2	10.8	70.5	29.5
Small Metros (pop. <1 million)	4,872,011	4,239,720	87.0	13.0	68.8	31.2
Nonmetro, Adjacent to Large Metros	1,035,996	856,434	82.7	17.3	71.3	28.7
Nonmetro, Adjacent to Small Metros	1,969,329	1,570,998	79.8	20.2	73.0	27.0
Rural (nonmetro, not adj. to a metro)	1,262,047	987,347	78.2	21.8	72.4	27.6
Alabama	2,231,126	1,856,695	83.2	16.8	68.6	31.4
Appalachian Alabama	1,412,697	1,195,020	84.6	15.4	70.1	29.9
Non-Appalachian Alabama	818,429	661,675	80.8	19.2	65.8	34.2
Georgia	4,203,288	3,663,104	87.1	12.9	63.0	37.0
Appalachian Georgia	1,215,383	1,077,035	88.6	11.4	70.3	29.7
Non-Appalachian Georgia	2,987,905	2,586,069	86.6	13.4	59.9	40.1
Kentucky	1,965,202	1,724,514	87.8	12.2	67.0	33.0
Appalachian Kentucky	545,106	459,071	84.2	15.8	70.7	29.3
Non-Appalachian Kentucky	1,420,096	1,265,443	89.1	10.9	65.7	34.3
Maryland	2,427,014	2,181,093	89.9	10.1	66.8	33.2
Appalachian Maryland	113,502	95,623	84.2	15.8	67.4	32.6
Non-Appalachian Maryland	2,313,512	2,085,470	90.1	9.9	66.8	33.2
Mississippi	1,308,259	1,103,514	84.3	15.7	68.1	31.9
Appalachian Mississippi	283,255	236,502	83.5	16.5	70.0	30.0
Non-Appalachian Mississippi	1,025,004	867,012	84.6	15.4	67.6	32.4
New York	8,255,911	7,302,710	88.5	11.5	54.0	46.0
Appalachian New York	514,953	416,654	80.9	19.1	69.2	30.8
Non-Appalachian New York	7,740,958	6,886,056	89.0	11.0	53.1	46.9
North Carolina	4,521,697	3,874,346	85.7	14.3	65.0	35.0
Appalachian North Carolina	876,534	703,053	80.2	19.8	69.3	30.7
Non-Appalachian North Carolina	3,645,163	3,171,293	87.0	13.0	64.0	36.0
Ohio	5,174,838	4,633,145	89.5	10.5	66.1	33.9
Appalachian Ohio	906,634	793,340	87.5	12.5	71.3	28.7
Non-Appalachian Ohio	4,268,204	3,839,805	90.0	10.0	65.0	35.0
Pennsylvania	5,653,599	5,007,442	88.6	11.4	69.0	31.0
Appalachian Pennsylvania	2,755,515	2,339,671	84.9	15.1	71.1	28.9
Non-Appalachian Pennsylvania	2,898,084	2,667,771	92.1	7.9	67.2	32.8
South Carolina	2,229,324	1,871,307	83.9	16.1	68.6	31.4
Appalachian South Carolina	534,853	473,524	88.5	11.5	68.3	31.7
Non-Appalachian South Carolina	1,694,471	1,397,783	82.5	17.5	68.7	31.3
Tennessee	2,903,199	2,547,194	87.7	12.3	66.3	33.7
Appalachian Tennessee	1,317,408	1,137,525	86.3	13.7	69.4	30.6
Non-Appalachian Tennessee	1,585,791	1,409,669	88.9	11.1	63.7	36.3
Virginia	3,466,921	3,105,636	89.6	10.4	66.2	33.8
Appalachian Virginia	368,080	304,140	82.6	17.4	71.5	28.5
Non-Appalachian Virginia	3,098,841	2,801,496	90.4	9.6	65.6	34.4
West Virginia (entire state)	889,277	737,671	83.0	17.0	72.7	27.3

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Figure 4.1: Percent of Housing Units in the Appalachian Region That Are Occupied, 2013-2017

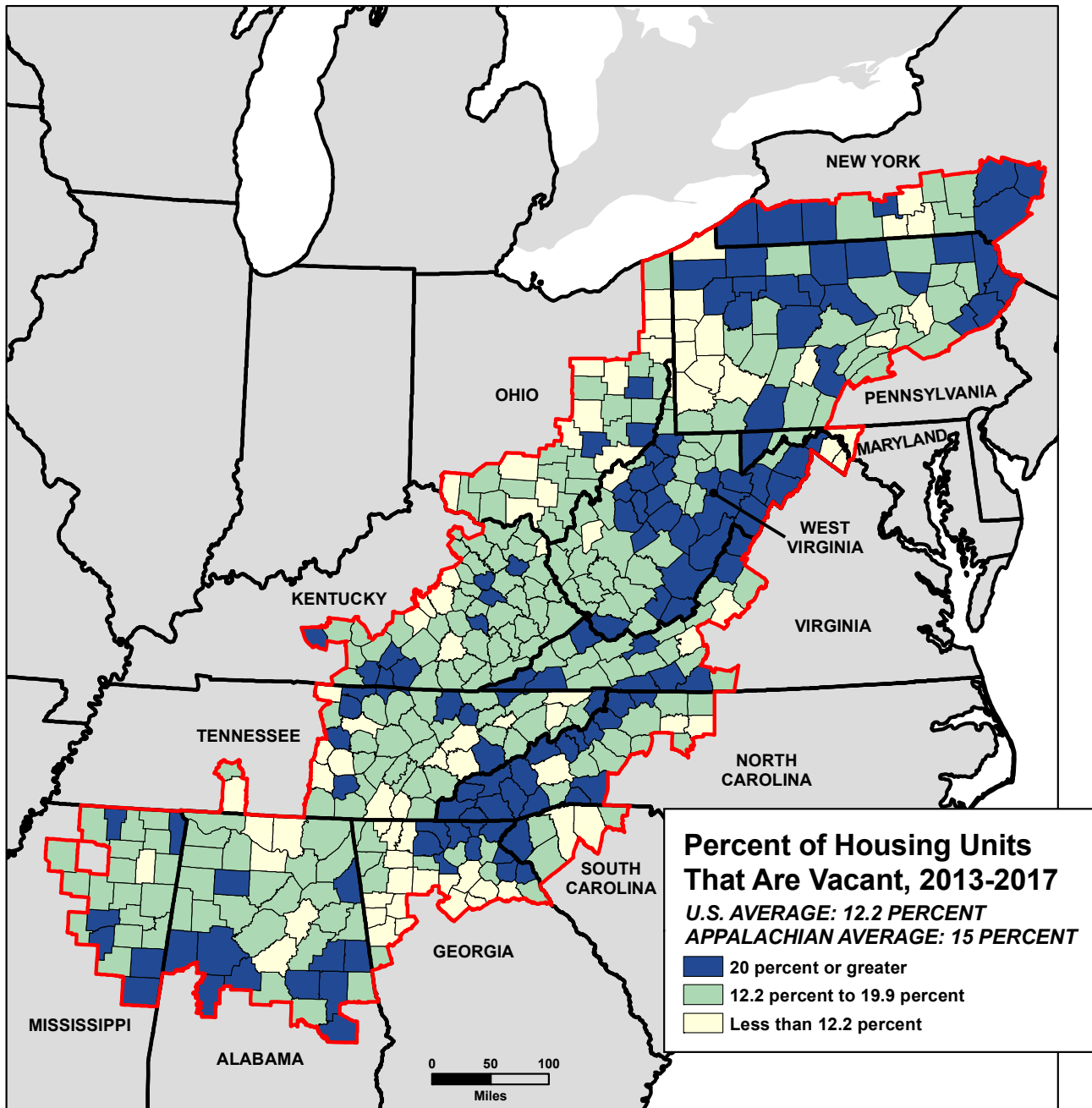


Map Title: Percent of Housing Units in the Appalachian Region That Are Occupied, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Although the home occupancy rate during the 2013-2017 period was slightly lower in Appalachia than in the United States as a whole, there were 89 counties in the Region that had occupancy rates matching or exceeding the national average. And while they were scattered throughout the Region, 64 of these counties were in metropolitan areas, such as Pittsburgh, the Atlanta and Birmingham suburbs, and Winston-Salem, North Carolina. Conversely, less than four-fifths of housing units were occupied in 125 Appalachian counties—107 of which were located outside metropolitan areas.

Figure 4.2: Percent of Housing Units in the Appalachian Region That Are Vacant, 2013-2017

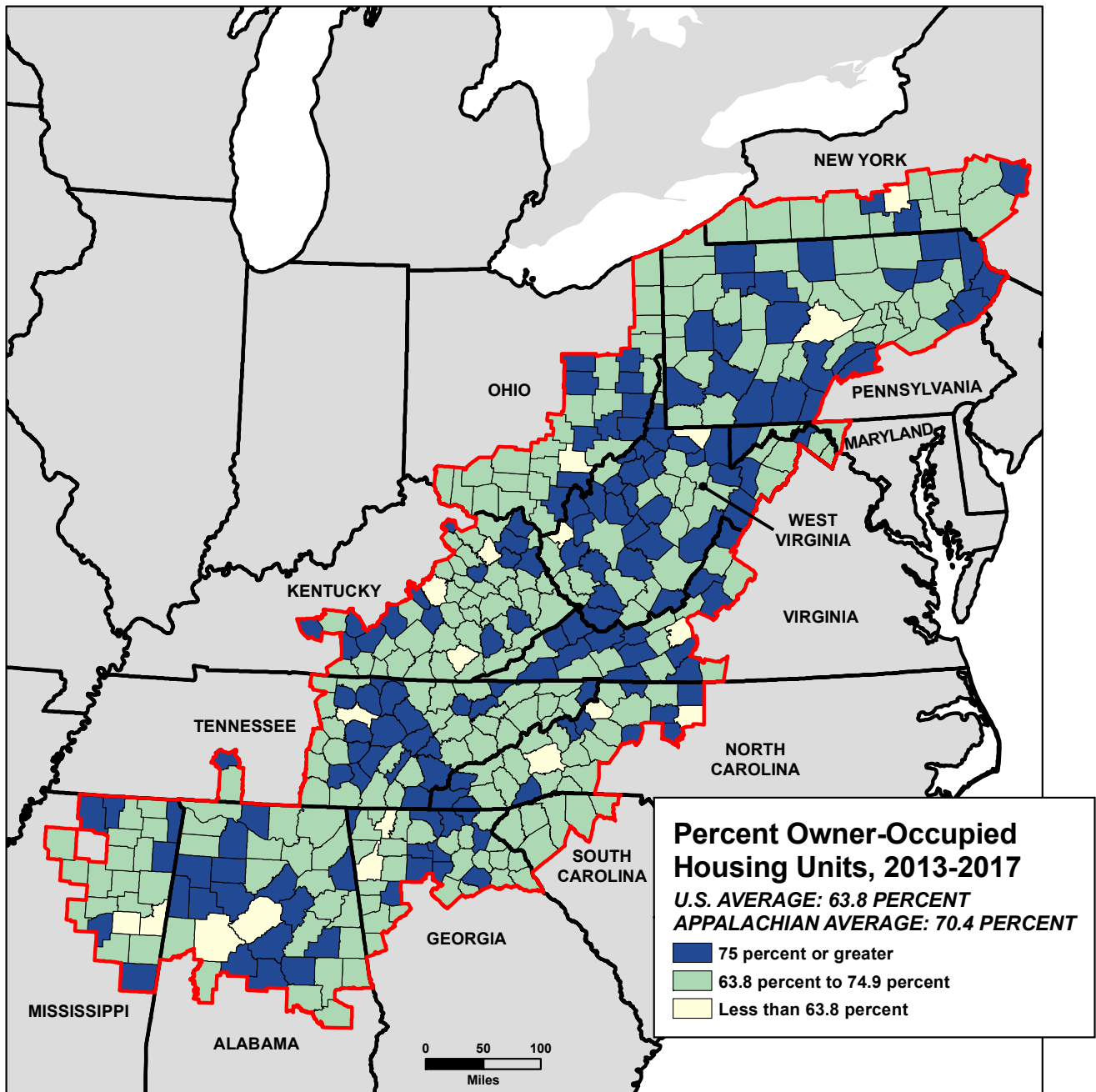


Map Title: Percent of Housing Units in the Appalachian Region That Are Vacant, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

One in seven housing units in Appalachia were vacant during the 2013-2017 period, compared to one in eight for the nation as a whole. Vacancy rates varied within the Region, however. While 127 of the 420 Appalachian counties (all but 19 of which were outside metropolitan areas) had vacancy rates at or above 20 percent, another 84 counties (mostly in metro areas) had rates below the national average. It is important to note that in 155 of the 336 Appalachian counties with vacancy rates of 12.2 percent or more, at least one-third of the vacant units were designated for seasonal or occasional use—suggesting significant recreational, resort, or retirement activity in the community. Examples of such areas include the Great Smoky Mountains along the North Carolina-Tennessee border, the Greenbrier resort in West Virginia (Greenbrier County), and the Pocono Mountains in northeastern Pennsylvania.

Figure 4.3: Percent Owner-Occupied Housing Units in the Appalachian Region, 2013-2017

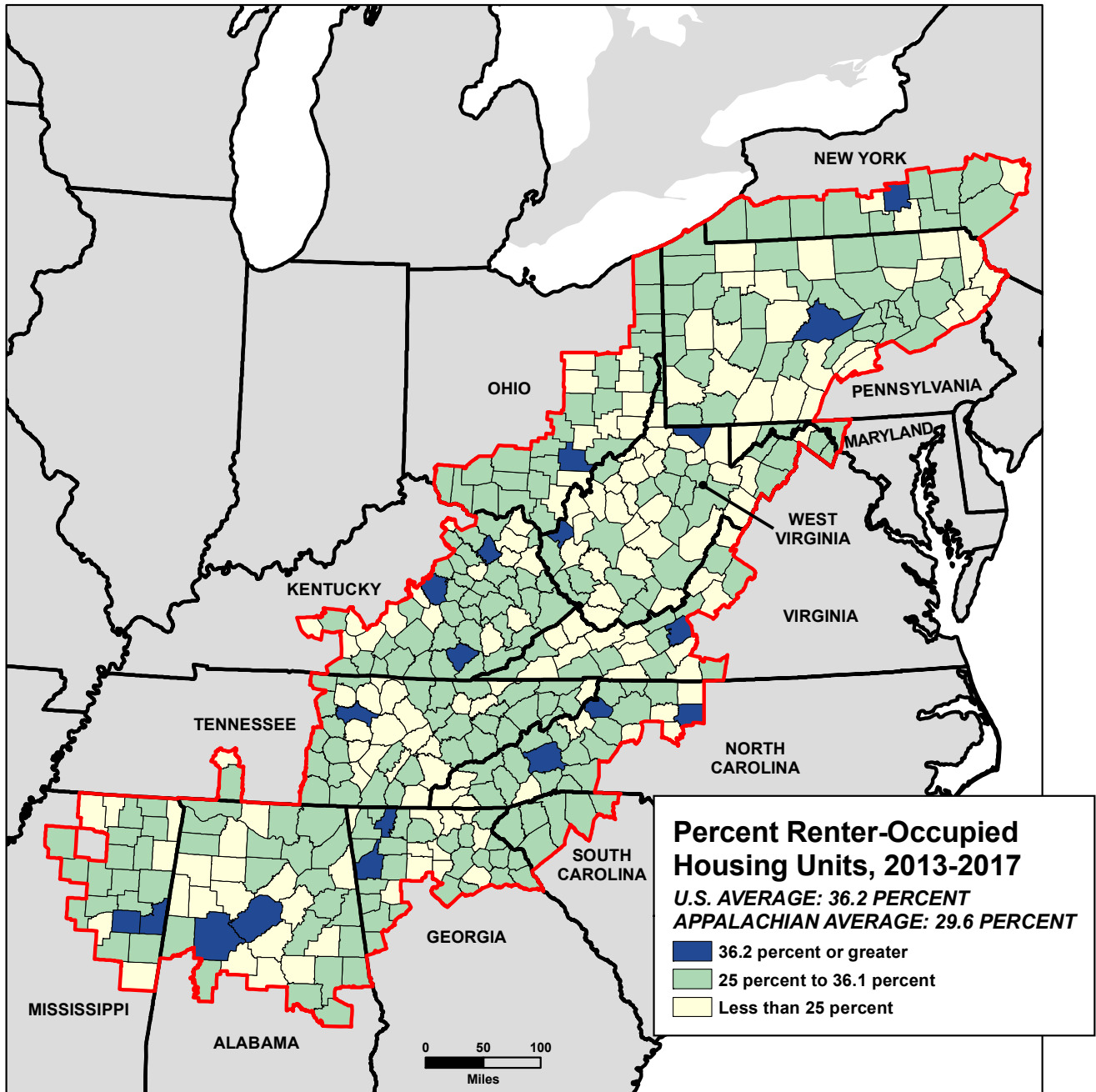


Map Title: Percent Owner-Occupied Housing Units in the Appalachian Region, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Homeownership was more common in the Appalachian Region than in the rest of the country in the 2013-2017 period. In all but 19 counties, the share of owner-occupied housing units matched or exceeded the national average. Indeed, the homeownership rate was at least 75 percent in 157 of Appalachia’s 420 counties, scattered throughout the Region. It is important to note that in some areas, the high homeownership rates might be related to low levels of economic and residential mobility, as well as the older age structure of the Appalachian population.

Figure 4.4: Percent Renter-Occupied Housing Units in the Appalachian Region, 2013-2017



Map Title: Percent Renter-Occupied Housing Units in the Appalachian Region, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

The share of renter-occupied housing units during the 2013-2017 period was well below the national average throughout Appalachia; in fact, it was less than 25 percent in 155 of the Region's 420 counties. Among the 19 Appalachian counties where the share of renter-occupied units matched or exceeded the national average, almost all are home to colleges or universities, where students make up a sizeable share of the population. Examples of these counties include Tompkins County, New York (Cornell University and Ithaca College); Watauga County, North Carolina (Appalachian State University); and Putnam County, Tennessee (Tennessee Technological University).

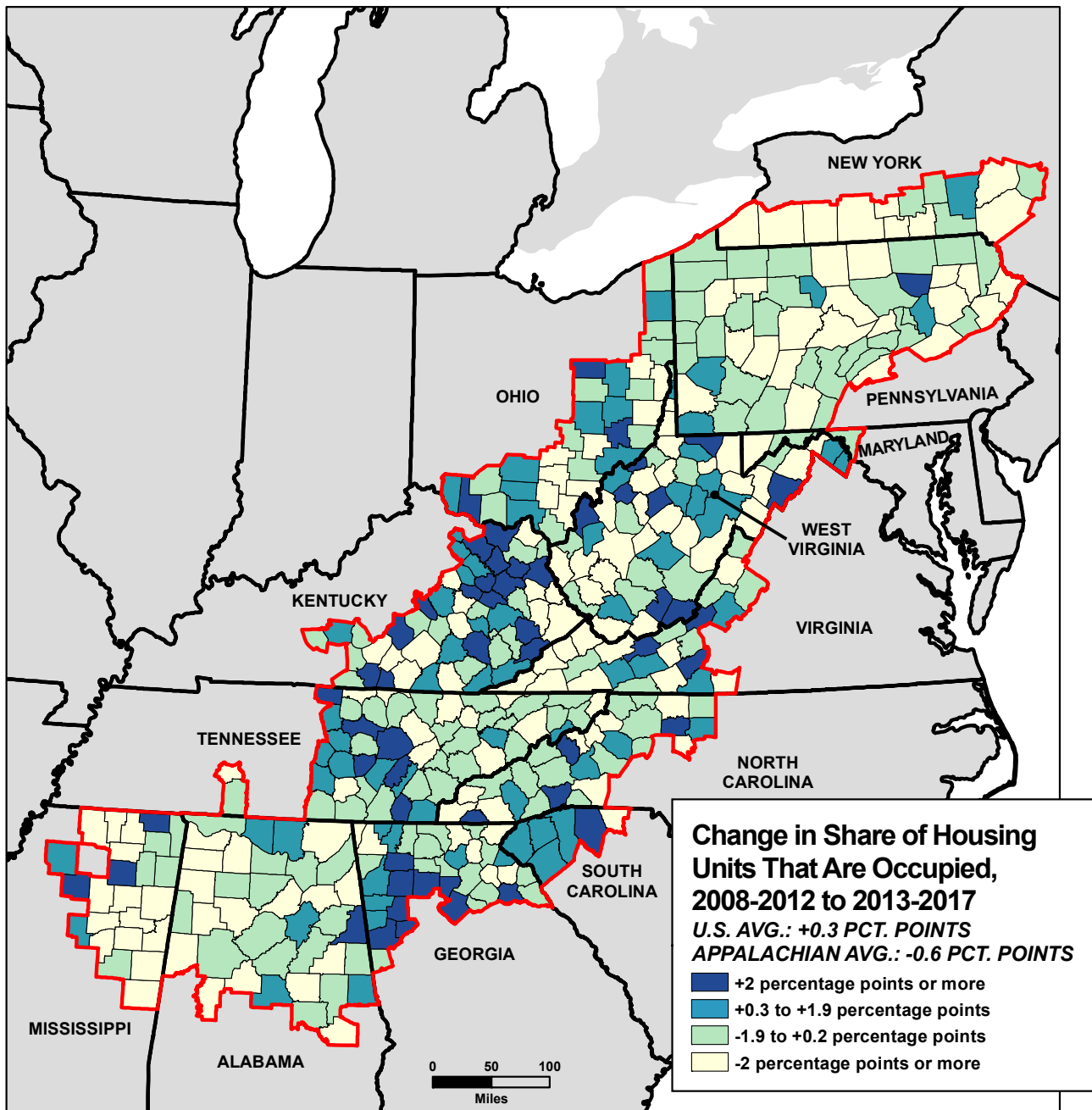
Table 4.2: Percentage Point Change in Occupancy and Tenure of Housing Units in the Appalachian Region, 2008-2012 to 2013-2017

Housing Occupancy and Tenure	Percentage Point Change, Share of Total Housing Units		Percentage Point Change, Share of Occupied Housing Units	
	Occupied	Vacant	Owner-Occupied	Renter-Occupied
United States	+ 0.3	- 0.3	- 1.7	+ 1.7
Appalachian Region	- 0.6	+ 0.6	- 1.3	+ 1.3
Subregions				
Northern Appalachia	- 1.3	+ 1.3	- 0.8	+ 0.8
North Central Appalachia	- 0.5	+ 0.5	- 1.0	+ 1.0
Central Appalachia	- 0.9	+ 0.9	- 1.2	+ 1.2
South Central Appalachia	- 0.7	+ 0.7	- 1.3	+ 1.3
Southern Appalachia	+ 0.2	- 0.2	- 1.8	+ 1.8
County Types				
Large Metros (pop. 1 million +)	+ 0.6	- 0.6	- 1.5	+ 1.5
Small Metros (pop. <1 million)	- 0.7	+ 0.7	- 1.4	+ 1.4
Nonmetro, Adjacent to Large Metros	- 0.9	+ 0.9	- 1.0	+ 1.0
Nonmetro, Adjacent to Small Metros	- 1.3	+ 1.3	- 1.1	+ 1.1
Rural (nonmetro, not adj. to a metro)	- 1.5	+ 1.5	- 0.7	+ 0.7
Alabama	- 1.4	+ 1.4	- 1.6	+ 1.6
Appalachian Alabama	- 1.0	+ 1.0	- 1.3	+ 1.3
Non-Appalachian Alabama	- 2.0	+ 2.0	- 2.1	+ 2.1
Georgia	+ 1.2	- 1.2	- 3.0	+ 3.0
Appalachian Georgia	+ 1.7	- 1.7	- 2.7	+ 2.7
Non-Appalachian Georgia	+ 1.1	- 1.1	- 3.2	+ 3.2
Kentucky	+ 0.1	- 0.1	- 1.7	+ 1.7
Appalachian Kentucky	- 0.1	+ 0.1	- 1.2	+ 1.2
Non-Appalachian Kentucky	+ 0.0	+ 0.0	- 1.8	+ 1.8
Maryland	+ 0.0	+ 0.0	- 1.3	+ 1.3
Appalachian Maryland	- 1.4	+ 1.4	- 1.3	+ 1.3
Non-Appalachian Maryland	+ 0.0	+ 0.0	- 1.3	+ 1.3
Mississippi	- 1.1	+ 1.1	- 1.8	+ 1.8
Appalachian Mississippi	- 1.9	+ 1.9	- 1.3	+ 1.3
Non-Appalachian Mississippi	- 0.8	+ 0.8	- 1.9	+ 1.9
New York	- 0.7	+ 0.7	- 0.5	+ 0.5
Appalachian New York	- 2.5	+ 2.5	- 0.4	+ 0.4
Non-Appalachian New York	- 0.6	+ 0.6	- 0.5	+ 0.5
North Carolina	+ 0.3	- 0.3	- 2.1	+ 2.1
Appalachian North Carolina	- 0.6	+ 0.6	- 1.6	+ 1.6
Non-Appalachian North Carolina	+ 0.5	- 0.5	- 2.2	+ 2.2
Ohio	+ 0.6	- 0.6	- 1.9	+ 1.9
Appalachian Ohio	- 0.4	+ 0.4	- 1.5	+ 1.5
Non-Appalachian Ohio	+ 0.9	- 0.9	- 2.0	+ 2.0
Pennsylvania	- 0.5	+ 0.5	- 1.1	+ 1.1
Appalachian Pennsylvania	- 1.1	+ 1.1	- 0.7	+ 0.7
Non-Appalachian Pennsylvania	- 0.1	+ 0.1	- 1.5	+ 1.5
South Carolina	+ 1.1	- 1.1	- 0.9	+ 0.9
Appalachian South Carolina	+ 1.4	- 1.4	- 1.4	+ 1.4
Non-Appalachian South Carolina	+ 1.0	- 1.0	- 0.7	+ 0.7
Tennessee	- 0.1	+ 0.1	- 2.1	+ 2.1
Appalachian Tennessee	- 0.9	+ 0.9	- 1.5	+ 1.5
Non-Appalachian Tennessee	+ 0.6	- 0.6	- 2.5	+ 2.5
Virginia	+ 0.3	- 0.3	- 1.6	+ 1.6
Appalachian Virginia	- 1.8	+ 1.8	- 0.1	+ 0.1
Non-Appalachian Virginia	+ 0.5	- 0.5	- 1.8	+ 1.8
West Virginia (entire state)	- 1.2	+ 1.2	- 1.0	+ 1.0

Note: Since occupied units and vacant units sum to the total number of housing units, the sum of the percentage point changes for the two categories will equal zero. The same principle holds for the sum of the percentage point changes for owner-occupied units and renter-occupied units, since these two categories sum to the total number of occupied housing units.

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 4.5: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Occupied, 2008-2012 to 2013-2017

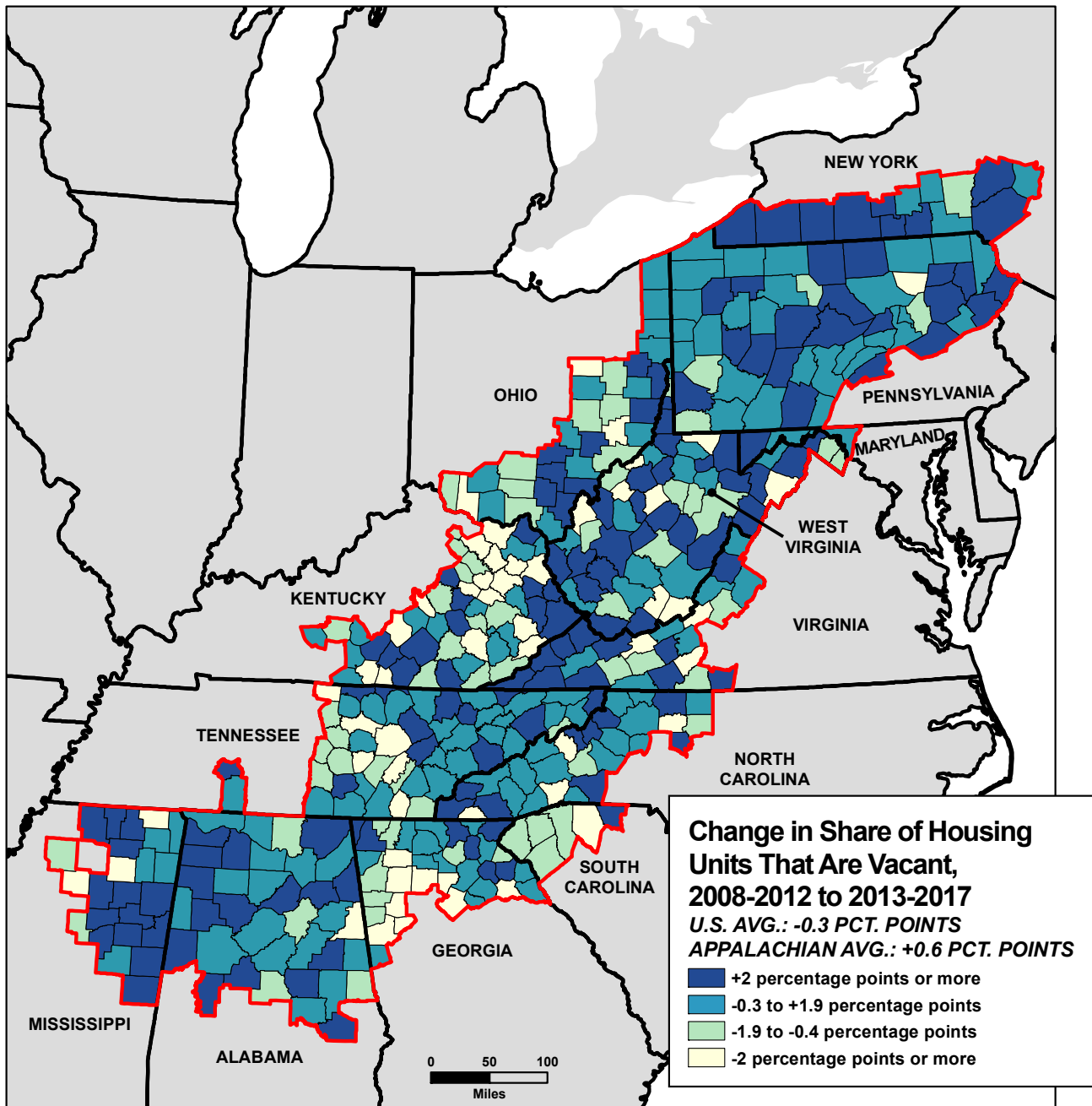


Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Occupied, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Appalachia’s home occupancy rate in 2013-2017 was more than half a percentage point lower than it was in 2008-2012; by contrast, home occupancy nationally had recovered to pre-recession levels (rising by 0.3 percentage points). Yet in the Region’s case, factors other than the effects of the Great Recession may also be at play. For example, severe weather events like the “Super Outbreak” of tornadoes that swept through parts of Mississippi, Alabama, Georgia, and Tennessee in April 2011, caused extreme structural damage and displaced families and (in some cases) entire communities. In 129 Appalachian counties, however, the occupancy rate rose at or above the national average between the two periods, and the rate increased at least two percentage points in 55 of these counties. Nearly half of the 55 counties in the latter group were in Georgia or Kentucky; indeed, the occupancy rate in Georgia’s Appalachian section (as well as in South Carolina’s) increased during the period.

Figure 4.6: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Vacant, 2008-2012 to 2013-2017

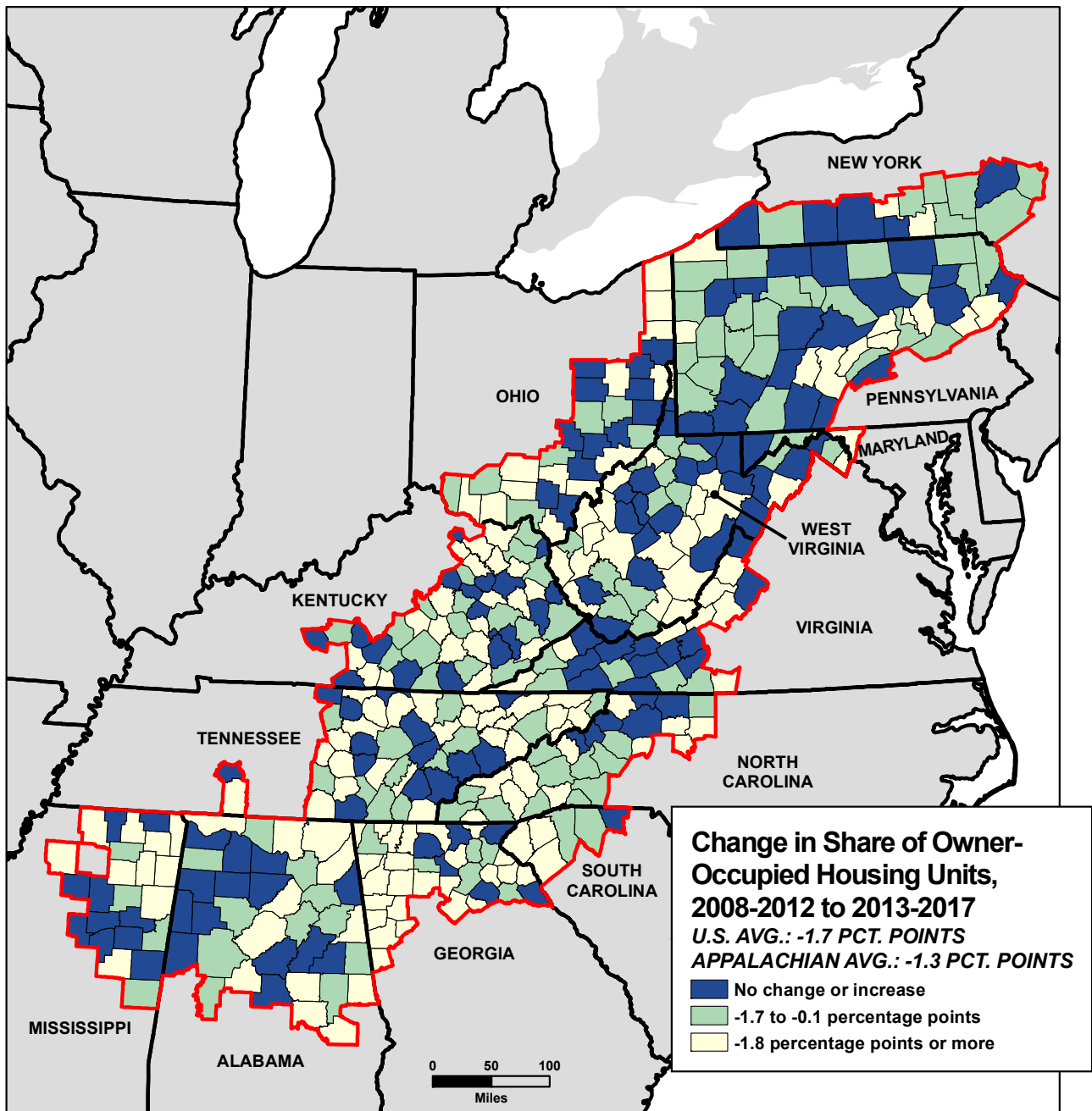


Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Vacant, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Between 2008-2012 and 2013-2017, the percentage of vacant housing units rose 0.6 percentage points in Appalachia, while declining 0.3 points in the nation as a whole. Housing vacancy increased in 271 of the Region's 420 counties, and was at least two percentage points higher in 147 of these counties. While this at least partly suggests the failure of occupancy rates in Appalachia to return to pre-recessionary levels, another possible factor could be a slight increase in the share of vacant units that were designated for seasonal or occasional use (which could indicate significant recreational or retirement activity, such as in much of Appalachian North Carolina). In 110 of the 271 Appalachian counties where overall vacancy rates increased from their 2008-2012 levels, the percentage of vacant units designated for seasonal use also rose.

Figure 4.7: Percentage Point Change in the Share of Owner-Occupied Housing Units in the Appalachian Region, 2008-2012 to 2013-2017

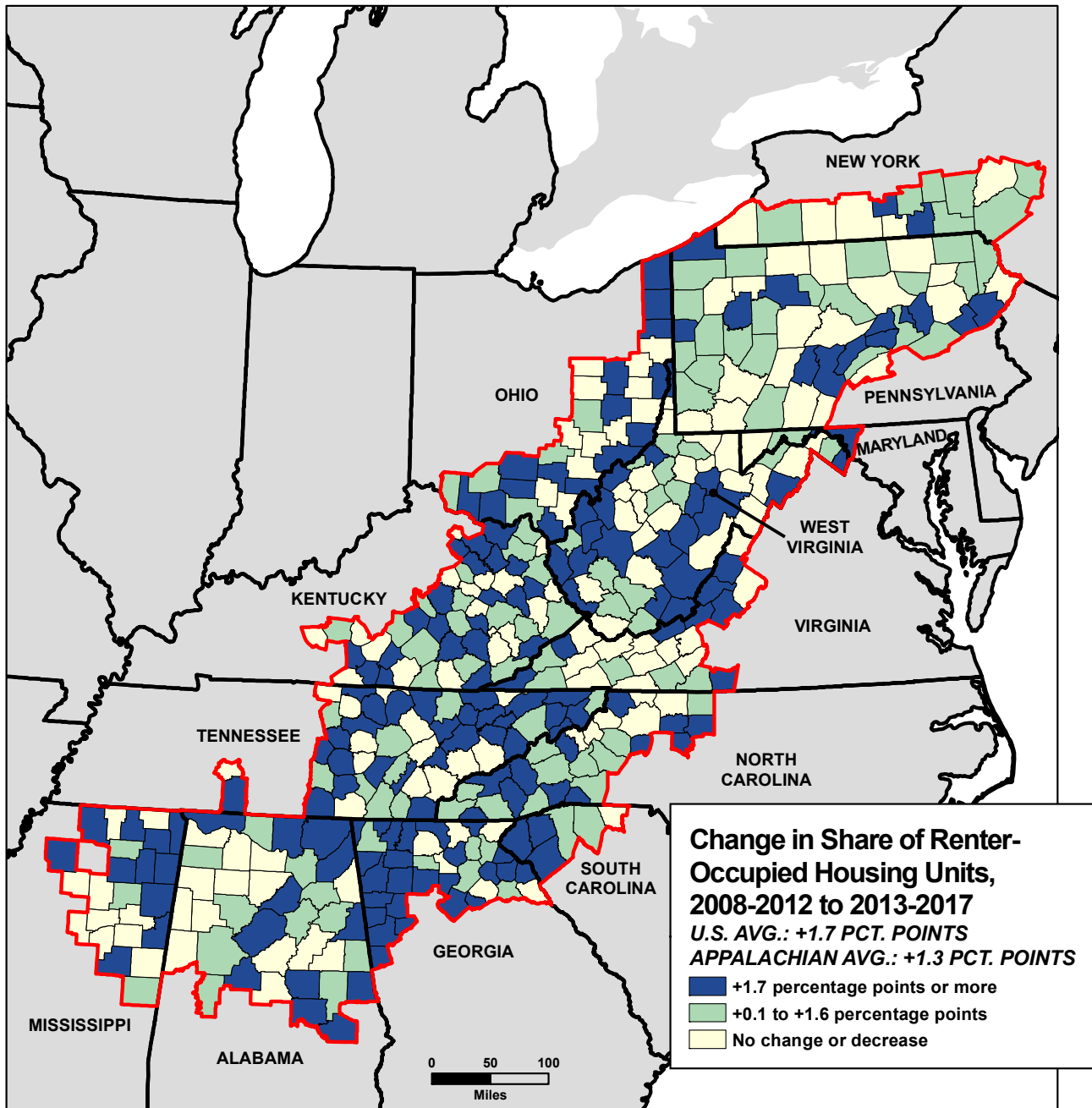


Map Title: Percentage Point Change in the Share of Owner-Occupied Housing Units in the Appalachian Region, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

The share of owner-occupied housing units fell 1.3 percentage points in the Appalachian Region between 2008-2012 and 2013-2017. The decline was even greater for the nation, as well as in 163 Appalachian counties where homeownership rates fell more than 1.7 percentage points (the national average). Still, there were 137 counties in the Region—96 of which were outside metropolitan areas—where homeownership either stayed the same or increased between these two periods. While these 137 counties were scattered throughout Appalachia, 56 of them were in three states—Pennsylvania, West Virginia, and Kentucky. (West Virginia alone had 21 of these counties.)

Figure 4.8: Percentage Point Change in the Share of Renter-Occupied Housing Units in the Appalachian Region, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Renter-Occupied Housing Units in the Appalachian Region, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

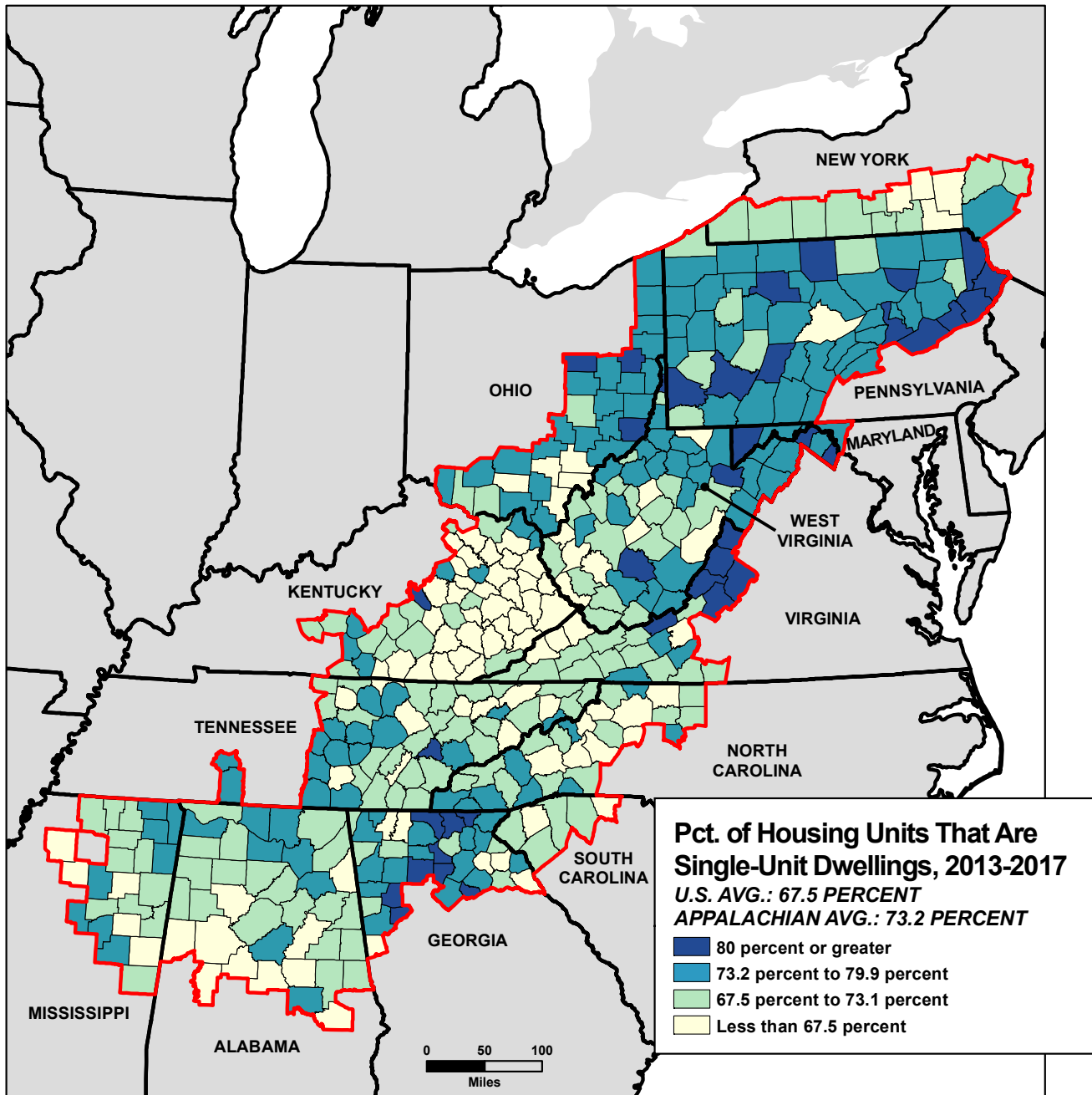
Although the share of renter-occupied housing units didn't increase as much in Appalachia as it did nationwide between 2008-2012 and 2013-2017, there were variations within the Region. In 172 Appalachian counties, for example, the increases in rental rates matched or exceeded the national average. More than half of the counties in this group were in South Central and Southern Appalachia. Georgia alone had 25 such counties; indeed, the share of renter-occupied units increased nearly three percentage points in that state's Appalachian section. Conversely, the percentage of units occupied by renters either stayed the same or decreased in 137 counties.

Table 4.3: Housing Units in the Appalachian Region, by Type of Housing, 2013-2017

Housing Units (Type of Housing)	Total Number of Housing Units (Occupied and Vacant)	Percent of All Housing Units					
		Single-Unit Dwellings (Attached or Detached)	Multiple-Unit Fixed Dwellings			Mobile Homes	Boats, RVs, Vans, Etc.
			Total	Two to Four Units	Five or More Units		
United States	135,393,564	67.5	26.1	8.0	18.0	6.3	0.1
Appalachian Region	11,733,197	73.2	14.9	6.0	8.9	11.8	0.1
Subregions							
Northern Appalachia	3,960,348	75.7	17.7	8.5	9.1	6.6	0.0
North Central Appalachia	1,127,351	73.0	12.4	4.8	7.7	14.5	0.1
Central Appalachia	891,132	66.2	9.2	4.3	4.9	24.6	0.1
South Central Appalachia	2,308,178	71.2	14.7	5.2	9.5	14.0	0.1
Southern Appalachia	3,446,188	73.5	14.2	4.3	9.9	12.2	0.1
County Types							
Large Metros (pop. 1 million +)	2,593,814	76.9	17.2	5.2	12.0	5.8	0.0
Small Metros (pop. <1 million)	4,872,011	72.4	17.3	6.8	10.5	10.2	0.1
Nonmetro, Adjacent to Large Metros	1,035,996	72.6	12.8	6.7	6.1	14.4	0.1
Nonmetro, Adjacent to Small Metros	1,969,329	72.6	10.3	5.3	5.1	16.9	0.1
Rural (nonmetro, not adj. to a metro)	1,262,047	69.7	9.8	4.7	5.1	20.4	0.1
Alabama	2,231,126	70.1	16.4	5.0	11.4	13.4	0.1
Appalachian Alabama	1,412,697	71.5	15.8	4.6	11.2	12.7	0.1
Non-Appalachian Alabama	818,429	67.8	17.5	5.7	11.8	14.6	0.1
Georgia	4,203,288	70.2	20.6	5.2	15.4	9.1	0.1
Appalachian Georgia	1,215,383	78.4	12.3	3.5	8.8	9.3	0.1
Non-Appalachian Georgia	2,987,905	66.9	23.9	5.8	18.1	9.1	0.1
Kentucky	1,965,202	69.7	18.3	7.2	11.1	12.0	0.1
Appalachian Kentucky	545,106	65.1	10.4	5.1	5.2	24.5	0.1
Non-Appalachian Kentucky	1,420,096	71.4	21.3	8.0	13.3	7.2	0.1
Maryland	2,427,014	72.9	25.6	3.8	21.8	1.5	0.0
Appalachian Maryland	113,502	78.6	17.2	6.2	11.0	4.3	0.0
Non-Appalachian Maryland	2,313,512	72.7	26.0	3.6	22.3	1.3	0.0
Mississippi	1,308,259	70.3	14.5	5.4	9.1	15.1	0.1
Appalachian Mississippi	283,255	69.4	11.7	5.8	5.9	18.8	0.1
Non-Appalachian Mississippi	1,025,004	70.6	15.2	5.2	10.0	14.1	0.1
New York	8,255,911	47.0	50.6	17.6	33.0	2.4	0.0
Appalachian New York	514,953	67.3	22.3	13.6	8.6	10.4	0.0
Non-Appalachian New York	7,740,958	45.7	52.5	17.9	34.6	1.8	0.0
North Carolina	4,521,697	69.3	17.5	4.8	12.7	13.2	0.1
Appalachian North Carolina	876,534	70.0	13.2	4.5	8.8	16.7	0.1
Non-Appalachian North Carolina	3,645,163	69.1	18.5	4.9	13.6	12.3	0.0
Ohio	5,174,838	73.1	23.0	8.8	14.3	3.8	0.0
Appalachian Ohio	906,634	75.5	13.9	6.0	7.9	10.5	0.1
Non-Appalachian Ohio	4,268,204	72.6	25.0	9.4	15.6	2.4	0.0
Pennsylvania	5,653,599	75.7	20.3	8.6	11.7	4.0	0.0
Appalachian Pennsylvania	2,755,515	76.7	17.3	7.9	9.4	5.9	0.0
Non-Appalachian Pennsylvania	2,898,084	74.7	23.0	9.1	13.9	2.2	0.0
South Carolina	2,229,324	65.7	17.6	5.0	12.7	16.6	0.1
Appalachian South Carolina	534,853	69.7	15.9	4.8	11.0	14.4	0.1
Non-Appalachian South Carolina	1,694,471	64.5	18.2	5.0	13.2	17.3	0.1
Tennessee	2,903,199	71.7	18.9	6.2	12.7	9.3	0.1
Appalachian Tennessee	1,317,408	71.6	15.2	5.6	9.6	13.1	0.1
Non-Appalachian Tennessee	1,585,791	71.8	21.9	6.6	15.3	6.2	0.1
Virginia	3,466,921	72.8	22.0	4.5	17.5	5.2	0.0
Appalachian Virginia	368,080	70.8	11.5	4.1	7.4	17.6	0.1
Non-Appalachian Virginia	3,098,841	73.1	23.2	4.5	18.7	3.7	0.0
West Virginia (entire state)	889,277	72.8	12.1	4.9	7.2	15.1	0.1

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Figure 4.9: Percent of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2013-2017



Map Title: Percent of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

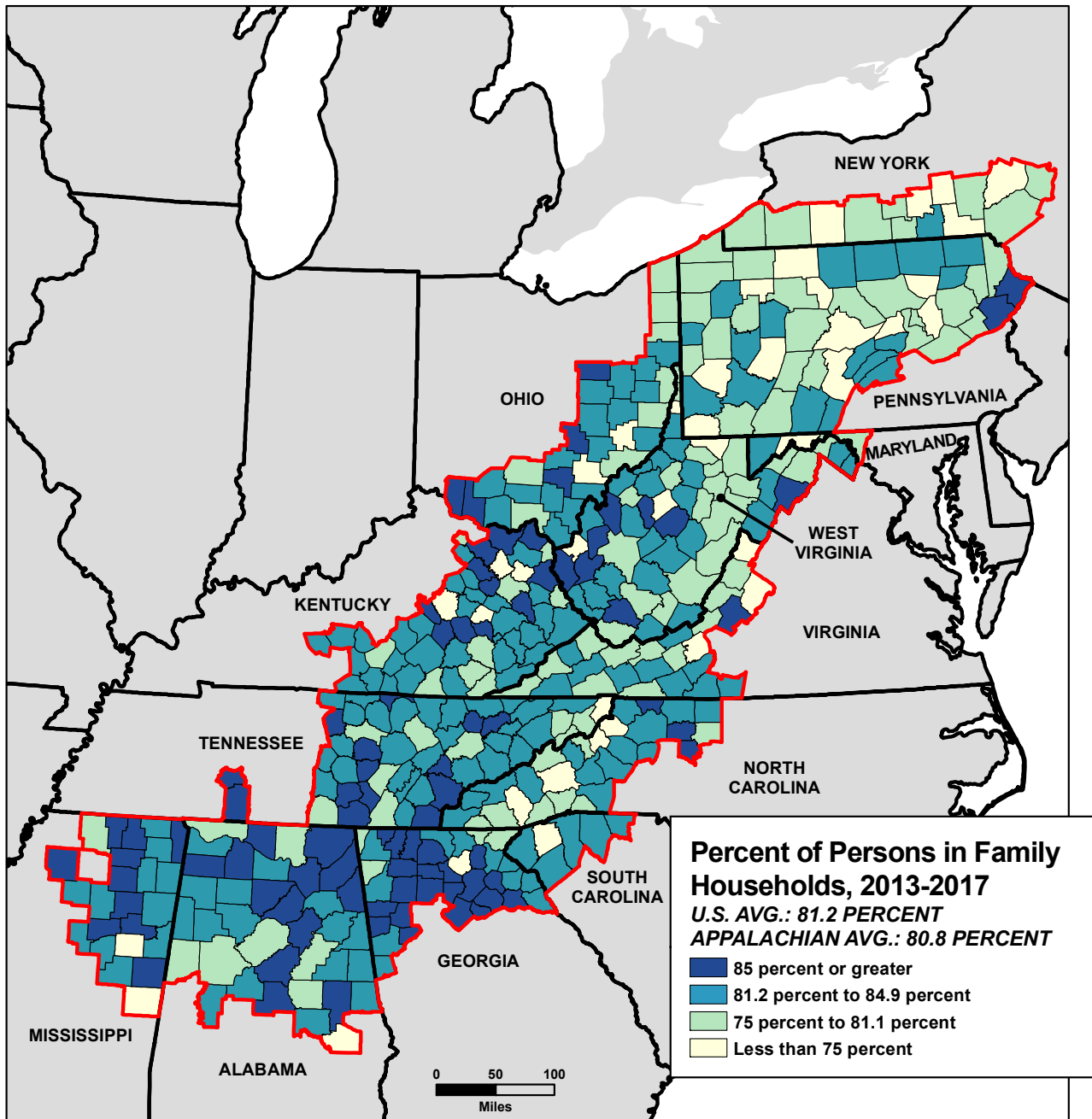
In 2013-2017, 73 percent of housing units in the Appalachian Region were single-unit dwellings (either attached or detached)—a larger share than the national average of 68 percent. And the share was even greater in much of Appalachia: In 185 of the 420 counties (most of which were in Northern or North Central Appalachia), the share of single-unit homes was at or above the average for the Region. Moreover, in 38 Appalachian counties, single-unit dwellings accounted for at least 80 percent of the housing stock. In contrast, there were 96 counties in the Region (nearly half in Central Appalachia) where the share of single-unit homes was lower than the U.S. average. In these low prevalence counties, mobile homes tended to comprise most of the remaining housing stock: They accounted for at least 25 percent of housing units in 65 of the counties where the share of single-unit homes was less than the national share.

Table 4.4: Population in Households and Group Quarters in the Appalachian Region, 2013-2017

Population in Households and Group Quarters	All Persons	Percent of All Persons			
		In Households			In Group Quarters
		Total	In Family Households	In Non-Family Households	
United States	321,004,407	97.5	81.2	16.3	2.5
Appalachian Region	25,492,251	97.0	80.8	16.3	3.0
Subregions					
Northern Appalachia	8,270,315	95.9	77.7	18.3	4.1
North Central Appalachia	2,415,931	97.0	80.3	16.7	3.0
Central Appalachia	1,884,432	96.9	82.1	14.8	3.1
South Central Appalachia	4,817,405	97.2	79.9	17.4	2.8
Southern Appalachia	8,104,168	98.0	84.2	13.8	2.0
County Types					
Large Metros (pop. 1 million +)	6,031,129	98.2	82.7	15.4	1.8
Small Metros (pop. <1 million)	10,779,024	96.7	79.6	17.1	3.3
Nonmetro, Adjacent to Large Metros	2,197,693	96.5	80.5	16.0	3.5
Nonmetro, Adjacent to Small Metros	3,964,812	96.8	81.1	15.7	3.2
Rural (nonmetro, not adj. to a metro)	2,519,593	96.2	80.7	15.5	3.8
Alabama	4,850,771	97.5	82.1	15.4	2.5
Appalachian Alabama	3,106,467	97.5	82.5	15.1	2.5
Non-Appalachian Alabama	1,744,304	97.6	81.5	16.0	2.4
Georgia	10,201,635	97.5	82.6	14.9	2.5
Appalachian Georgia	3,134,069	98.8	87.4	11.4	1.2
Non-Appalachian Georgia	7,067,566	96.9	80.4	16.5	3.1
Kentucky	4,424,376	97.0	80.5	16.5	3.0
Appalachian Kentucky	1,172,230	96.7	81.8	14.9	3.3
Non-Appalachian Kentucky	3,252,146	97.2	80.1	17.1	2.8
Maryland	5,996,079	97.7	82.2	15.5	2.3
Appalachian Maryland	251,653	93.2	77.2	16.0	6.8
Non-Appalachian Maryland	5,744,426	97.9	82.4	15.5	2.1
Mississippi	2,986,220	96.8	82.4	14.5	3.2
Appalachian Mississippi	627,470	97.2	82.3	14.9	2.8
Non-Appalachian Mississippi	2,358,750	96.8	82.4	14.3	3.2
New York	19,798,228	97.1	79.8	17.3	2.9
Appalachian New York	1,044,224	94.3	74.4	19.9	5.7
Non-Appalachian New York	18,754,004	97.2	80.1	17.1	2.8
North Carolina	10,052,564	97.3	80.7	16.6	2.7
Appalachian North Carolina	1,732,121	97.3	79.6	17.7	2.7
Non-Appalachian North Carolina	8,320,443	97.3	81.0	16.4	2.7
Ohio	11,609,756	97.3	79.5	17.8	2.7
Appalachian Ohio	2,010,095	96.9	80.9	16.1	3.1
Non-Appalachian Ohio	9,599,661	97.4	79.2	18.2	2.6
Pennsylvania	12,790,505	96.7	79.3	17.4	3.3
Appalachian Pennsylvania	5,730,386	96.1	77.7	18.4	3.9
Non-Appalachian Pennsylvania	7,060,119	97.1	80.5	16.6	2.9
South Carolina	4,893,444	97.2	81.0	16.2	2.8
Appalachian South Carolina	1,236,162	97.6	81.8	15.8	2.4
Non-Appalachian South Carolina	3,657,282	97.1	80.7	16.4	2.9
Tennessee	6,597,381	97.7	81.5	16.2	2.3
Appalachian Tennessee	2,854,162	97.6	81.2	16.4	2.4
Non-Appalachian Tennessee	3,743,219	97.7	81.7	16.0	2.3
Virginia	8,365,952	97.1	81.0	16.1	2.9
Appalachian Virginia	756,369	95.5	77.1	18.5	4.5
Non-Appalachian Virginia	7,609,583	97.3	81.4	15.9	2.7
West Virginia (entire state)	1,836,843	97.4	80.2	17.2	2.6

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Figure 4.10: Percent of Persons in the Appalachian Region Living in Family Households, 2013-2017



Map Title: Percent of Persons in the Appalachian Region Living in Family Households, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

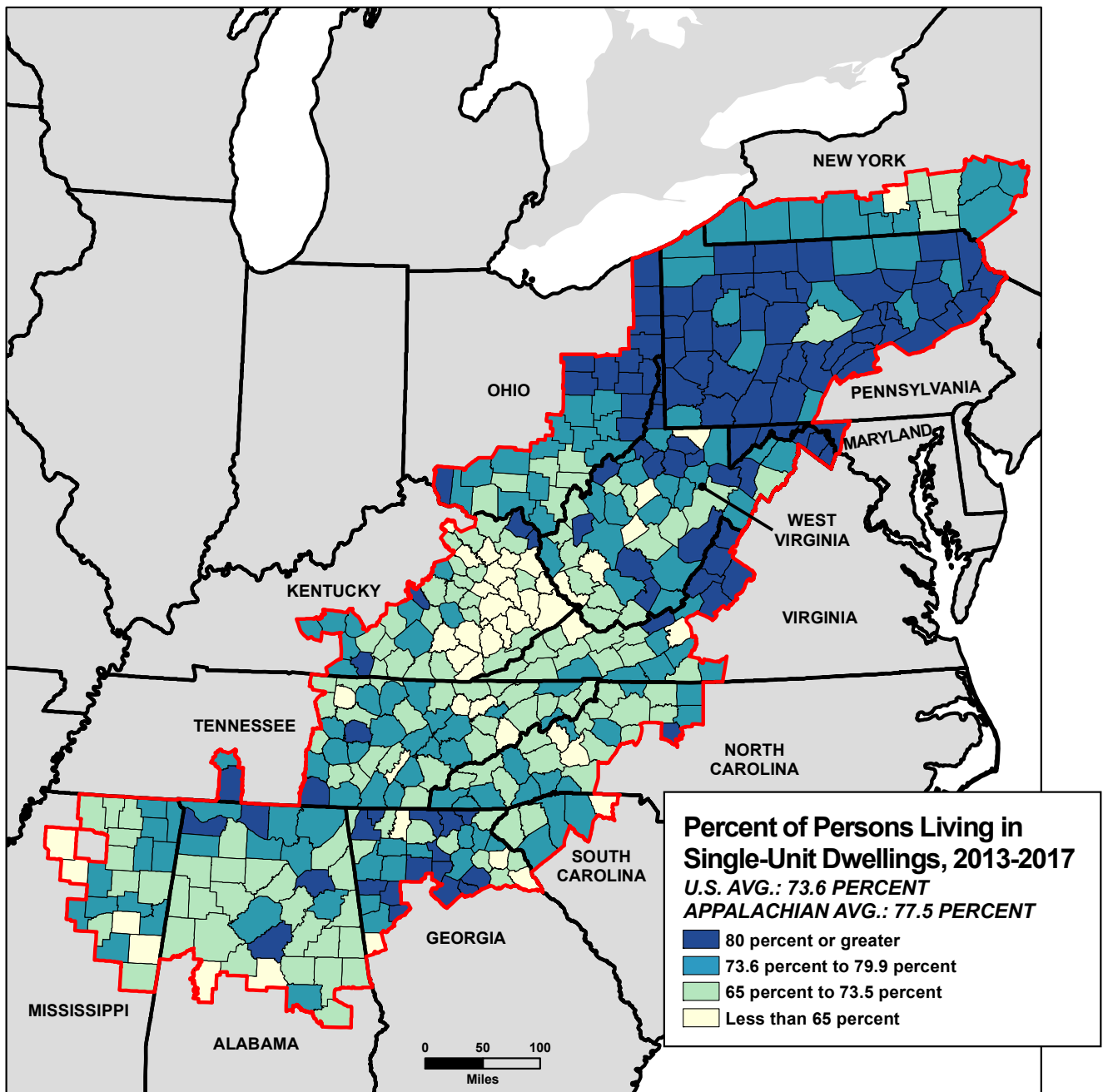
Almost 81 percent of Appalachia’s residents lived in family households during 2013-2017, which was just under the national average. Yet in 88 counties in the Region, at least 85 percent lived in family households. Half of these counties were in Southern Appalachia, although there were pockets in the Central and South Central subregions. In contrast, there were 40 Appalachian counties where less than three-fourths of the residents were in family households. Almost half of the counties in the latter group have at least 10 percent of their residents living in group quarters, whether dormitories (in counties housing a college or university), nursing care facilities, or prisons. Forest County, Pennsylvania, which houses a state correctional facility, is particularly noteworthy in this regard: Persons in group quarters account for three-fifths of the county’s residents. (Rockbridge County, Virginia, home to Virginia Military Institute and Washington and Lee University, provides a more typical example, with 12 percent of that county’s residents living in group quarters.)

Table 4.5: Population in Occupied Housing Units in the Appalachian Region, by Type of Housing, 2013-2017

Population in Housing Units (Type of Housing)	Total Population in Occupied Housing Units	Percent of Population in Occupied Housing Units					
		In Single-Unit Dwellings (Attached or Detached)	In Multiple-Unit Fixed Dwellings			In Mobile Homes	In Boats, RVs, Vans, Etc.
			Total	Two to Four Units	Five or More Units		
United States	312,916,765	73.6	20.7	7.2	13.5	5.6	0.1
Appalachian Region	24,731,541	77.5	11.1	4.6	6.4	11.3	0.1
Subregions							
Northern Appalachia	7,934,549	81.7	12.7	6.6	6.2	5.6	0.0
North Central Appalachia	2,343,607	77.0	9.1	3.6	5.6	13.8	0.0
Central Appalachia	1,826,593	68.8	7.1	3.6	3.5	24.0	0.1
South Central Appalachia	4,684,462	74.4	11.3	4.1	7.2	14.2	0.1
Southern Appalachia	7,942,330	77.4	10.8	3.5	7.2	11.8	0.1
County Types							
Large Metros (pop. 1 million +)	5,919,639	82.4	12.0	3.8	8.3	5.5	0.0
Small Metros (pop. <1 million)	10,428,611	77.1	12.8	5.3	7.5	10.0	0.0
Nonmetro, Adjacent to Large Metros	2,120,252	76.6	9.6	5.3	4.3	13.8	0.1
Nonmetro, Adjacent to Small Metros	3,839,527	75.3	7.8	4.2	3.5	16.9	0.1
Rural (nonmetro, not adj. to a metro)	2,423,512	72.0	7.7	3.9	3.8	20.2	0.1
Alabama	4,731,852	74.8	11.9	4.1	7.8	13.2	0.1
Appalachian Alabama	3,030,276	75.7	11.7	3.8	7.9	12.6	0.1
Non-Appalachian Alabama	1,701,576	73.3	12.3	4.6	7.7	14.3	0.0
Georgia	9,943,137	75.4	15.9	4.4	11.5	8.7	0.1
Appalachian Georgia	3,095,860	81.8	9.7	2.9	6.8	8.4	0.0
Non-Appalachian Georgia	6,847,277	72.5	18.6	5.0	13.6	8.8	0.1
Kentucky	4,293,245	75.1	13.7	5.9	7.8	11.1	0.0
Appalachian Kentucky	1,133,726	68.0	8.3	4.5	3.8	23.6	0.0
Non-Appalachian Kentucky	3,159,519	77.7	15.7	6.4	9.2	6.6	0.0
Maryland	5,855,584	80.0	18.9	2.7	16.2	1.1	0.0
Appalachian Maryland	234,456	83.8	12.8	4.6	8.2	3.3	0.0
Non-Appalachian Maryland	5,621,128	79.8	19.1	2.6	16.5	1.0	0.0
Mississippi	2,892,138	73.6	11.4	4.5	6.9	14.9	0.1
Appalachian Mississippi	609,996	71.7	9.0	4.6	4.4	19.2	0.1
Non-Appalachian Mississippi	2,282,142	74.1	12.1	4.5	7.6	13.8	0.1
New York	19,220,855	51.7	46.4	18.0	28.3	1.8	0.0
Appalachian New York	985,103	72.3	18.3	11.9	6.4	9.4	0.0
Non-Appalachian New York	18,235,752	50.6	47.9	18.4	29.5	1.4	0.0
North Carolina	9,784,981	73.1	13.5	3.9	9.6	13.3	0.0
Appalachian North Carolina	1,685,482	72.4	10.2	3.3	6.9	17.3	0.1
Non-Appalachian North Carolina	8,099,499	73.3	14.2	4.0	10.1	12.5	0.0
Ohio	11,296,980	80.5	16.2	6.4	9.7	3.3	0.0
Appalachian Ohio	1,948,743	80.8	9.7	4.3	5.4	9.4	0.1
Non-Appalachian Ohio	9,348,237	80.5	17.5	6.9	10.6	2.0	0.0
Pennsylvania	12,363,237	82.6	14.1	6.4	7.7	3.2	0.0
Appalachian Pennsylvania	5,505,444	82.7	12.3	6.0	6.3	4.9	0.0
Non-Appalachian Pennsylvania	6,857,793	82.5	15.6	6.7	8.9	1.9	0.0
South Carolina	4,756,406	70.2	12.4	4.0	8.4	17.4	0.0
Appalachian South Carolina	1,206,198	73.5	11.9	3.6	8.3	14.6	0.0
Non-Appalachian South Carolina	3,550,208	69.1	12.6	4.1	8.4	18.3	0.0
Tennessee	6,443,385	76.5	14.3	5.0	9.3	9.1	0.1
Appalachian Tennessee	2,784,947	75.2	11.4	4.6	6.8	13.3	0.1
Non-Appalachian Tennessee	3,658,438	77.5	16.5	5.3	11.2	5.9	0.1
Virginia	8,123,404	78.6	17.0	3.6	13.5	4.4	0.0
Appalachian Virginia	722,689	73.9	9.3	3.2	6.2	16.7	0.0
Non-Appalachian Virginia	7,400,715	79.0	17.8	3.6	14.2	3.2	0.0
West Virginia (entire state)	1,788,621	76.7	8.6	3.5	5.0	14.7	0.0

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Figure 4.11: Among Persons in the Appalachian Region in Occupied Housing Units, Percent Living in Single-Unit Dwellings (Attached or Detached), 2013-2017



Map Title: Among Persons in the Appalachian Region in Occupied Housing Units, Percent Living in Single-Unit Dwellings (Attached or Detached), 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

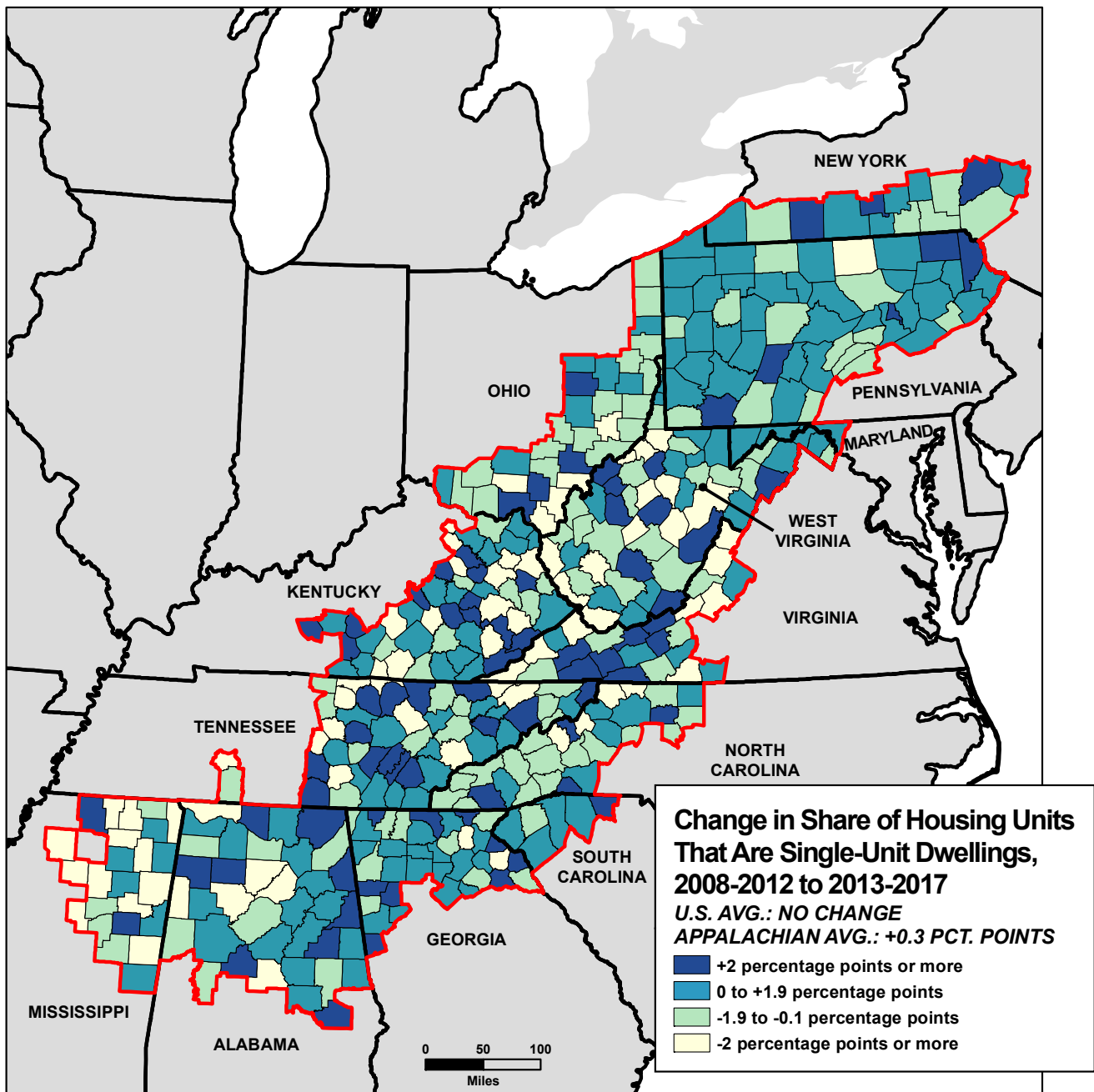
Of the Appalachian population who live in occupied housing units, 78 percent lived in single-unit dwellings during the 2013-2017 period, four percentage points above the national average. And the share was even greater in much of the Region: In 107 counties, at least four in five residents lived in single-unit homes. More than half of these were in Northern Appalachia; 40 were in Pennsylvania alone. Yet in 179 of Appalachia's 420 counties, the share living in single-unit dwellings was below the U.S. average of just under 74 percent; in 45 counties (more than half of which were in Central Appalachia), the percentage was below 65 percent. And in 40 of the counties that had the lowest prevalence of persons in single-unit homes, at least one in four residents lived in mobile homes.

Table 4.6: Percentage Point Change in the Share of Housing Units in the Appalachian Region, by Type of Housing, 2008-2012 to 2013-2017

Housing Units (Type of Housing)	Percentage Point Change in Share of All Housing Units					
	Single-Unit Dwellings (Attached or Detached)	Multiple-Unit Fixed Dwellings			Mobile Homes	Boats, RVs, Vans, Etc.
		Total	Two to Four Units	Five or More Units		
United States	+ 0.0	+ 0.2	- 0.2	+ 0.3	- 0.2	+ 0.0
Appalachian Region	+ 0.3	+ 0.1	- 0.1	+ 0.1	- 0.4	+ 0.1
Subregions						
Northern Appalachia	+ 0.5	- 0.2	- 0.4	+ 0.0	- 0.2	+ 0.0
North Central Appalachia	+ 0.1	- 0.1	- 0.2	+ 0.2	+ 0.0	+ 0.1
Central Appalachia	- 0.2	+ 0.1	+ 0.1	+ 0.0	+ 0.1	+ 0.0
South Central Appalachia	+ 0.2	+ 0.5	+ 0.1	+ 0.4	- 0.8	+ 0.0
Southern Appalachia	+ 0.4	+ 0.2	- 0.1	+ 0.3	- 0.7	+ 0.0
County Types						
Large Metros (pop. 1 million +)	+ 0.6	- 0.3	- 0.2	- 0.1	- 0.4	+ 0.0
Small Metros (pop. <1 million)	+ 0.2	+ 0.2	- 0.2	+ 0.3	- 0.4	+ 0.1
Nonmetro, Adjacent to Large Metros	+ 0.1	+ 0.0	- 0.2	+ 0.3	- 0.3	+ 0.1
Nonmetro, Adjacent to Small Metros	+ 0.3	+ 0.0	+ 0.0	+ 0.1	- 0.4	+ 0.0
Rural (nonmetro, not adj. to a metro)	+ 0.1	+ 0.3	+ 0.0	+ 0.2	- 0.4	+ 0.0
Alabama	+ 0.0	+ 0.6	+ 0.0	+ 0.7	- 0.7	+ 0.0
Appalachian Alabama	+ 0.2	+ 0.6	+ 0.0	+ 0.6	- 0.7	+ 0.0
Non-Appalachian Alabama	- 0.2	+ 0.8	- 0.1	+ 0.8	- 0.6	+ 0.0
Georgia	+ 0.3	+ 0.1	- 0.1	+ 0.3	- 0.4	+ 0.0
Appalachian Georgia	+ 0.9	- 0.3	- 0.1	- 0.1	- 0.6	+ 0.0
Non-Appalachian Georgia	+ 0.0	+ 0.2	- 0.2	+ 0.5	- 0.3	+ 0.1
Kentucky	+ 0.2	+ 0.3	+ 0.2	+ 0.2	- 0.5	+ 0.0
Appalachian Kentucky	+ 0.3	+ 0.3	+ 0.3	- 0.1	- 0.5	+ 0.0
Non-Appalachian Kentucky	+ 0.1	+ 0.3	+ 0.1	+ 0.2	- 0.4	+ 0.1
Maryland	+ 0.1	+ 0.1	- 0.1	+ 0.3	- 0.2	+ 0.0
Appalachian Maryland	+ 1.1	- 0.8	- 1.0	+ 0.1	- 0.2	+ 0.0
Non-Appalachian Maryland	+ 0.1	+ 0.2	- 0.1	+ 0.2	- 0.3	+ 0.0
Mississippi	- 0.7	+ 0.9	+ 0.2	+ 0.7	- 0.2	+ 0.0
Appalachian Mississippi	- 1.7	+ 0.9	+ 0.2	+ 0.7	+ 0.8	+ 0.1
Non-Appalachian Mississippi	- 0.4	+ 0.9	+ 0.1	+ 0.8	- 0.4	+ 0.0
New York	+ 0.0	+ 0.1	- 0.5	+ 0.6	+ 0.0	+ 0.0
Appalachian New York	+ 0.5	- 0.1	- 0.2	+ 0.0	- 0.4	+ 0.0
Non-Appalachian New York	+ 0.0	+ 0.1	- 0.5	+ 0.6	- 0.1	+ 0.0
North Carolina	+ 0.3	+ 0.4	- 0.2	+ 0.6	- 0.7	+ 0.1
Appalachian North Carolina	- 0.1	+ 0.5	+ 0.1	+ 0.4	- 0.4	+ 0.1
Non-Appalachian North Carolina	+ 0.3	+ 0.4	- 0.2	+ 0.6	- 0.8	+ 0.0
Ohio	+ 0.0	+ 0.1	- 0.1	+ 0.3	- 0.1	+ 0.0
Appalachian Ohio	+ 0.0	- 0.2	- 0.3	+ 0.1	+ 0.2	+ 0.1
Non-Appalachian Ohio	+ 0.0	+ 0.2	- 0.1	+ 0.3	- 0.2	+ 0.0
Pennsylvania	+ 0.5	- 0.3	- 0.4	+ 0.1	- 0.2	+ 0.0
Appalachian Pennsylvania	+ 0.6	- 0.4	- 0.4	+ 0.0	- 0.3	+ 0.0
Non-Appalachian Pennsylvania	+ 0.3	- 0.3	- 0.5	+ 0.2	+ 0.0	+ 0.0
South Carolina	+ 0.8	- 0.1	- 0.1	+ 0.1	- 0.7	+ 0.0
Appalachian South Carolina	+ 0.7	+ 0.3	+ 0.1	+ 0.0	- 0.9	+ 0.0
Non-Appalachian South Carolina	+ 0.9	- 0.2	- 0.3	+ 0.1	- 0.7	+ 0.0
Tennessee	- 0.1	+ 0.7	+ 0.2	+ 0.5	- 0.6	+ 0.0
Appalachian Tennessee	+ 0.3	+ 0.4	+ 0.0	+ 0.4	- 0.8	+ 0.0
Non-Appalachian Tennessee	- 0.5	+ 0.8	+ 0.2	+ 0.6	- 0.4	+ 0.1
Virginia	- 0.1	+ 0.5	+ 0.1	+ 0.3	- 0.3	+ 0.0
Appalachian Virginia	- 0.1	+ 0.5	+ 0.3	+ 0.2	- 0.4	+ 0.1
Non-Appalachian Virginia	+ 0.0	+ 0.4	+ 0.1	+ 0.3	- 0.3	+ 0.0
West Virginia (entire state)	- 0.2	+ 0.1	- 0.2	+ 0.3	+ 0.2	+ 0.1

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 4.12: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

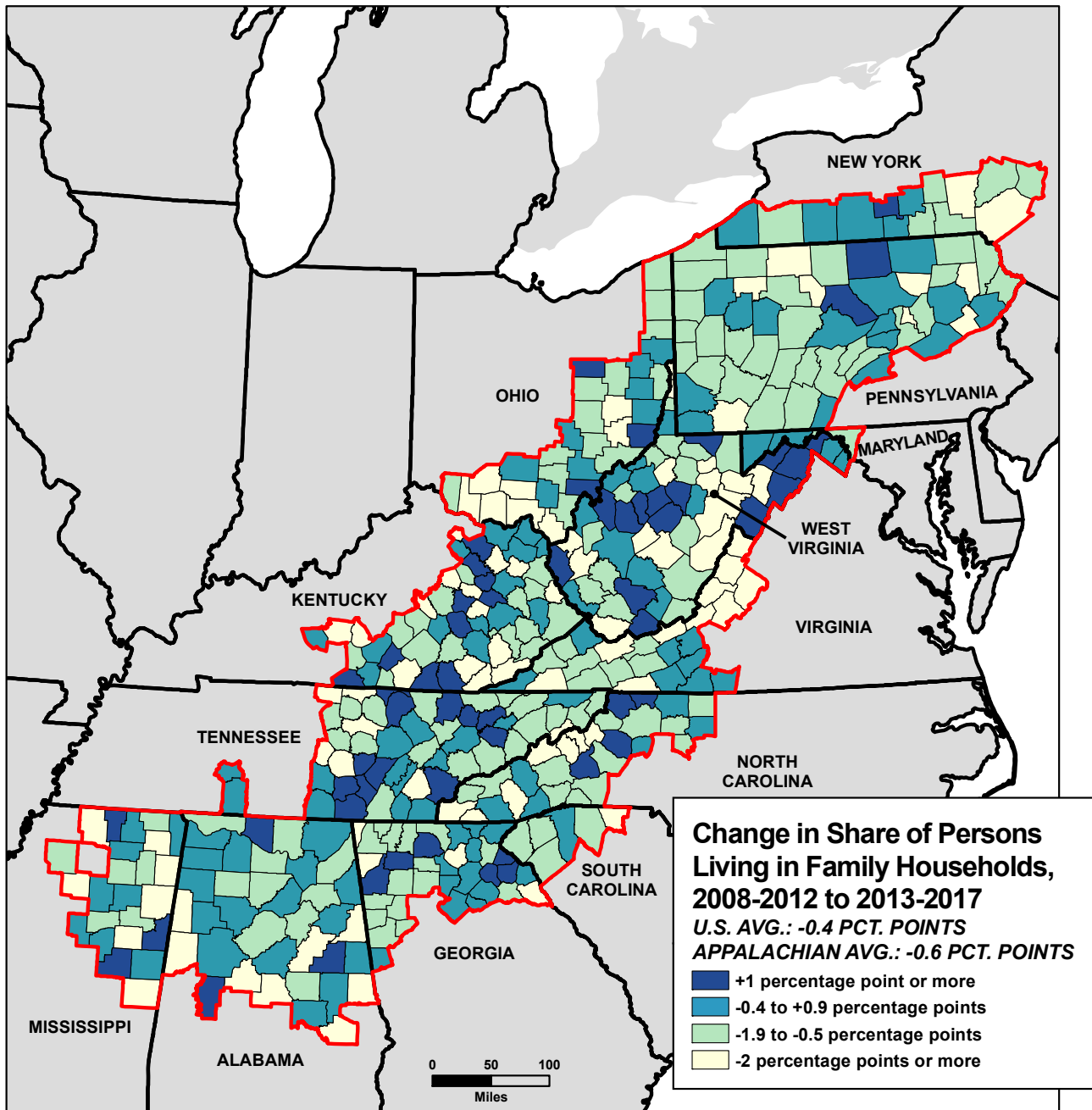
The share of single-unit dwellings among the housing stock increased slightly in Appalachia between the 2008-2012 and 2013-2017 periods, while remaining the same nationwide. And this rise occurred in most of the Region’s 420 counties. In fact, there were 81 counties (scattered throughout Appalachia) where the share of housing units that were single-unit dwellings rose at least two percentage points. Yet in 74 other Appalachian counties, the share of single-unit homes was at least two percentage points lower in 2013-2017 than in the earlier period. Of the counties in the latter group, 25 were in Central Appalachia (the only subregion where the share decreased), while 12 others were in Appalachian Mississippi (where the share declined by almost two percentage points—the biggest drop among the states). The increased share of single-unit homes in Appalachia seems to have come at the expense of mobile homes, the share of which fell by nearly half a percentage point between 2008-2012 and 2013-2017.

Table 4.7: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Households and Group Quarters, 2008-2012 to 2013-2017

Population in Households and Group Quarters	Percentage Point Change in Share of All Persons			
	In Households			In Group Quarters
	Total	In Family Households	In Non-Family Households	
United States	+ 0.1	- 0.4	+ 0.5	- 0.1
Appalachian Region	+ 0.0	- 0.6	+ 0.7	+ 0.0
Subregions				
Northern Appalachia	- 0.1	- 0.9	+ 0.9	+ 0.1
North Central Appalachia	+ 0.0	- 0.5	+ 0.5	+ 0.0
Central Appalachia	- 0.3	- 1.0	+ 0.8	+ 0.3
South Central Appalachia	+ 0.0	- 0.6	+ 0.6	+ 0.0
Southern Appalachia	+ 0.1	- 0.5	+ 0.6	- 0.1
County Types				
Large Metros (pop. 1 million +)	+ 0.0	- 0.6	+ 0.5	+ 0.0
Small Metros (pop. <1 million)	+ 0.0	- 0.5	+ 0.5	+ 0.0
Nonmetro, Adjacent to Large Metros	+ 0.0	- 0.6	+ 0.6	+ 0.0
Nonmetro, Adjacent to Small Metros	- 0.1	- 0.7	+ 0.7	+ 0.1
Rural (nonmetro, not adj. to a metro)	- 0.3	- 1.1	+ 0.8	+ 0.3
Alabama	- 0.1	- 0.6	+ 0.5	+ 0.1
Appalachian Alabama	- 0.1	- 0.6	+ 0.6	+ 0.1
Non-Appalachian Alabama	+ 0.1	- 0.5	+ 0.4	- 0.1
Georgia	+ 0.2	- 0.3	+ 0.4	- 0.2
Appalachian Georgia	+ 0.2	- 0.1	+ 0.3	- 0.2
Non-Appalachian Georgia	+ 0.1	- 0.5	+ 0.6	- 0.1
Kentucky	- 0.1	- 1.1	+ 1.0	+ 0.1
Appalachian Kentucky	- 0.1	- 1.1	+ 1.0	+ 0.1
Non-Appalachian Kentucky	+ 0.0	- 1.0	+ 1.0	+ 0.0
Maryland	+ 0.1	+ 0.1	+ 0.0	- 0.1
Appalachian Maryland	- 0.5	- 0.6	+ 0.1	+ 0.5
Non-Appalachian Maryland	+ 0.1	+ 0.1	+ 0.0	- 0.1
Mississippi	- 0.1	- 0.9	+ 0.9	+ 0.1
Appalachian Mississippi	- 0.2	- 1.2	+ 1.0	+ 0.2
Non-Appalachian Mississippi	+ 0.1	- 0.8	+ 0.8	- 0.1
New York	+ 0.1	- 0.3	+ 0.5	- 0.1
Appalachian New York	- 0.1	- 0.9	+ 0.8	+ 0.1
Non-Appalachian New York	+ 0.1	- 0.3	+ 0.4	- 0.1
North Carolina	+ 0.0	- 0.6	+ 0.6	+ 0.0
Appalachian North Carolina	+ 0.1	- 0.6	+ 0.7	- 0.1
Non-Appalachian North Carolina	+ 0.0	- 0.5	+ 0.6	+ 0.0
Ohio	+ 0.0	- 0.9	+ 0.9	+ 0.0
Appalachian Ohio	- 0.2	- 0.9	+ 0.8	+ 0.2
Non-Appalachian Ohio	+ 0.0	- 0.9	+ 0.9	+ 0.0
Pennsylvania	+ 0.1	- 0.5	+ 0.6	- 0.1
Appalachian Pennsylvania	+ 0.0	- 0.9	+ 0.9	+ 0.0
Non-Appalachian Pennsylvania	+ 0.1	- 0.3	+ 0.4	- 0.1
South Carolina	+ 0.2	- 0.5	+ 0.8	- 0.2
Appalachian South Carolina	+ 0.3	- 0.5	+ 0.8	- 0.3
Non-Appalachian South Carolina	+ 0.2	- 0.6	+ 0.8	- 0.2
Tennessee	+ 0.1	- 0.4	+ 0.5	- 0.1
Appalachian Tennessee	- 0.1	- 0.4	+ 0.4	+ 0.1
Non-Appalachian Tennessee	+ 0.2	- 0.3	+ 0.5	- 0.2
Virginia	+ 0.1	- 0.2	+ 0.3	- 0.1
Appalachian Virginia	- 0.1	- 1.3	+ 1.3	+ 0.1
Non-Appalachian Virginia	+ 0.2	+ 0.0	+ 0.2	- 0.2
West Virginia (entire state)	+ 0.1	- 0.3	+ 0.3	- 0.1

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 4.13: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Family Households, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Family Households, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

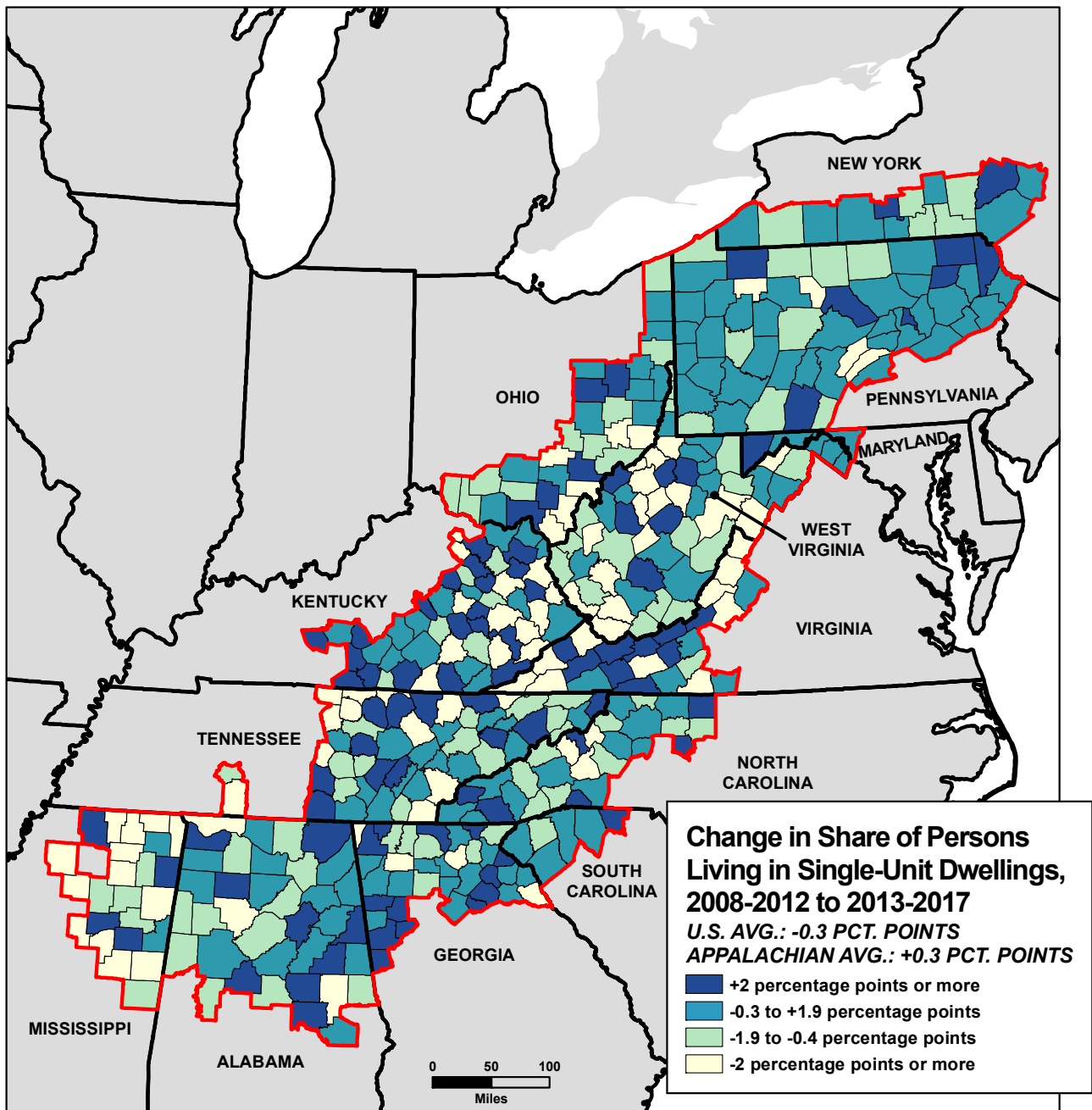
In the Appalachian Region, the share of persons living in family households fell more than half a percentage point between 2008-2012 and 2013-2017—slightly more than in the nation as a whole. And the decline was even greater in parts of Appalachia: In 91 counties, the share in family households dropped at least two percentage points. One-third of these counties were in the most isolated rural areas, which had the largest decline among the county types (more than a full percentage point). The decline in the share of residents in married-couple households has fueled this drop; the percentage of persons in married-couple households in Appalachia fell 1.2 percentage points—twice the decline for all family households. Yet the declining prevalence of family households was not universal: there were 59 Appalachian counties where the share increased by at least a full percentage point.

Table 4.8: Percentage Point Change in the Share of Population in Occupied Housing Units in the Appalachian Region, by Type of Housing, 2008-2012 to 2013-2017

Population in Housing Units (Type of Housing)	Percentage Point Change in Share of Population in Occupied Housing Units					
	In Single-Unit Dwellings (Attached or Detached)	In Multiple-Unit Fixed Dwellings			In Mobile Homes	In Boats, RVs, Vans, Etc.
		Total	Two to Four Units	Five or More Units		
United States	- 0.3	+ 0.5	+ 0.0	+ 0.6	- 0.3	+ 0.0
Appalachian Region	+ 0.3	+ 0.3	- 0.1	+ 0.2	- 0.6	+ 0.1
Subregions						
Northern Appalachia	+ 0.4	- 0.1	- 0.2	+ 0.2	- 0.4	+ 0.0
North Central Appalachia	- 0.3	+ 0.3	- 0.1	+ 0.5	- 0.1	+ 0.0
Central Appalachia	+ 0.0	+ 0.3	+ 0.3	+ 0.0	- 0.3	+ 0.1
South Central Appalachia	+ 0.3	+ 0.7	+ 0.1	+ 0.6	- 1.0	+ 0.1
Southern Appalachia	+ 0.6	+ 0.3	+ 0.0	+ 0.1	- 0.9	+ 0.1
County Types						
Large Metros (pop. 1 million +)	+ 0.5	+ 0.0	+ 0.0	+ 0.1	- 0.6	+ 0.0
Small Metros (pop. <1 million)	+ 0.1	+ 0.3	+ 0.0	+ 0.4	- 0.5	+ 0.0
Nonmetro, Adjacent to Large Metros	+ 0.3	+ 0.2	- 0.1	+ 0.3	- 0.5	+ 0.1
Nonmetro, Adjacent to Small Metros	+ 0.4	+ 0.2	+ 0.0	+ 0.1	- 0.5	+ 0.0
Rural (nonmetro, not adj. to a metro)	+ 0.4	+ 0.3	+ 0.1	+ 0.3	- 0.8	+ 0.1
Alabama	+ 0.2	+ 0.7	+ 0.1	+ 0.6	- 0.9	+ 0.0
Appalachian Alabama	+ 0.4	+ 0.7	+ 0.2	+ 0.5	- 1.0	+ 0.0
Non-Appalachian Alabama	+ 0.0	+ 0.6	- 0.1	+ 0.7	- 0.6	- 0.1
Georgia	+ 0.3	+ 0.5	+ 0.0	+ 0.4	- 0.8	+ 0.1
Appalachian Georgia	+ 1.2	- 0.2	+ 0.0	- 0.2	- 1.1	+ 0.0
Non-Appalachian Georgia	- 0.2	+ 0.7	+ 0.0	+ 0.7	- 0.7	+ 0.1
Kentucky	+ 0.2	+ 0.5	+ 0.3	+ 0.2	- 0.8	+ 0.0
Appalachian Kentucky	+ 0.6	+ 0.6	+ 0.5	+ 0.1	- 1.2	- 0.1
Non-Appalachian Kentucky	+ 0.1	+ 0.5	+ 0.3	+ 0.1	- 0.5	+ 0.0
Maryland	- 0.4	+ 0.7	- 0.1	+ 0.8	- 0.3	+ 0.0
Appalachian Maryland	+ 0.9	- 0.2	- 0.5	+ 0.2	- 0.8	+ 0.0
Non-Appalachian Maryland	- 0.5	+ 0.7	- 0.1	+ 0.8	- 0.2	+ 0.0
Mississippi	- 0.5	+ 1.0	+ 0.2	+ 0.8	- 0.5	+ 0.0
Appalachian Mississippi	- 1.7	+ 0.5	- 0.1	+ 0.6	+ 1.1	+ 0.1
Non-Appalachian Mississippi	- 0.2	+ 1.2	+ 0.3	+ 0.9	- 0.9	+ 0.0
New York	- 0.7	+ 0.8	- 0.2	+ 0.9	- 0.1	+ 0.0
Appalachian New York	+ 0.1	+ 0.4	+ 0.1	+ 0.3	- 0.5	+ 0.0
Non-Appalachian New York	- 0.7	+ 0.8	- 0.2	+ 0.9	- 0.1	- 0.1
North Carolina	+ 0.1	+ 0.7	+ 0.0	+ 0.7	- 0.9	+ 0.0
Appalachian North Carolina	+ 0.4	+ 0.6	+ 0.2	+ 0.5	- 1.0	+ 0.0
Non-Appalachian North Carolina	+ 0.1	+ 0.7	+ 0.0	+ 0.6	- 0.8	+ 0.0
Ohio	- 0.4	+ 0.6	+ 0.0	+ 0.5	- 0.1	+ 0.0
Appalachian Ohio	- 0.1	+ 0.2	- 0.1	+ 0.3	- 0.2	+ 0.1
Non-Appalachian Ohio	- 0.5	+ 0.6	+ 0.0	+ 0.6	- 0.1	+ 0.0
Pennsylvania	+ 0.0	+ 0.1	- 0.1	+ 0.3	- 0.3	+ 0.0
Appalachian Pennsylvania	+ 0.4	- 0.1	- 0.3	+ 0.1	- 0.4	+ 0.0
Non-Appalachian Pennsylvania	- 0.3	+ 0.3	- 0.1	+ 0.4	+ 0.0	+ 0.0
South Carolina	+ 0.7	+ 0.4	+ 0.0	+ 0.4	- 1.0	- 0.1
Appalachian South Carolina	+ 1.0	+ 0.0	- 0.1	+ 0.1	- 0.9	- 0.1
Non-Appalachian South Carolina	+ 0.6	+ 0.6	+ 0.0	+ 0.5	- 1.1	- 0.1
Tennessee	- 0.5	+ 1.0	+ 0.2	+ 0.8	- 0.6	+ 0.1
Appalachian Tennessee	+ 0.2	+ 0.6	+ 0.1	+ 0.5	- 0.9	+ 0.0
Non-Appalachian Tennessee	- 1.0	+ 1.2	+ 0.2	+ 1.0	- 0.3	+ 0.1
Virginia	- 0.4	+ 0.8	+ 0.2	+ 0.7	- 0.4	+ 0.0
Appalachian Virginia	+ 0.3	+ 0.4	+ 0.2	+ 0.3	- 0.7	+ 0.0
Non-Appalachian Virginia	- 0.5	+ 0.8	+ 0.2	+ 0.7	- 0.3	+ 0.0
West Virginia (entire state)	- 0.3	+ 0.2	- 0.3	+ 0.4	+ 0.2	+ 0.0

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 4.14: Among Persons in the Appalachian Region in Occupied Housing Units, Percentage Point Change in the Share Living in Single-Unit Dwellings (Attached or Detached), 2008-2012 to 2013-2017



Map Title: Among Persons in the Appalachian Region in Occupied Housing Units, Percentage Point Change in the Share Living in Single-Unit Dwellings (Attached or Detached), 2008-2012 to 2013-2017
 Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Contrary to the national trend, the share of Appalachian residents living in single-unit homes was slightly higher in 2013-2017 than in 2008-2012. And in 95 of the Region’s 420 counties, the share actually increased two percentage points or more. Roughly one-fourth of these counties were in either Georgia or Alabama; the share in Appalachian Georgia rose more than a full percentage point. However, the share living in single-unit dwellings declined at least two percentage points in another 84 counties—one-third of which were in Kentucky or West Virginia. As with the share of housing units, Appalachia’s increased share of persons in single-unit residences has largely come at the expense of mobile units; the percentage of the Appalachian population living in mobile homes fell 0.6 points between 2008-2012 and 2013-2017.

TRENDS IN HOUSING OCCUPANCY, TENURE, AND TYPE

- At 85 percent in 2013-2017, Appalachia's home occupancy rate is 0.6 percentage points lower than it was in 2008-2012 (see Tables 4.1 and 4.2). This decrease was present among all subregions except Southern Appalachia, all county types except the ones in large metropolitan areas, and the Appalachian portions of every state except Georgia and South Carolina. And although the drop suggests that occupancy rates in the Region (in contrast to the nation as a whole) have not yet returned to pre-recession levels, other factors might be at play—for example, the displacement caused by severe weather events like the April 2011 Super Outbreak of tornadoes that devastated parts of Mississippi, Alabama, Georgia, and Tennessee.
- One factor behind the decline in Appalachia's occupancy rates from 2008-2012 to 2013-2017 might be a slight increase in the percentage of vacant units that were designated for seasonal or occasional use. Between the two periods, the share of such units was higher in two-fifths of the 271 Appalachian counties where the overall vacancy rates increased.
- Homeownership rates in Appalachia fell more than a full percentage point between 2008-2012 and 2013-2017. Among subregions, the declines were greatest in Southern Appalachia, while there was an urban/rural pattern among county types (with the drop in homeownership being greatest among counties in large metropolitan areas). As with the drop in the occupancy rate, the decrease in homeownership partly suggests the continued effects of the 2007-2009 recession and the slow economic recovery that has followed.
- Single-unit dwellings accounted for 73 percent of Appalachia's housing stock in 2013-2017, which represents a slight increase from 2008-2012 (see Tables 4.3 and 4.6). Within the Region, the share increased for all county types and all subregions except Central Appalachia, which showed a slight decrease. The greatest increases were in Northern Appalachia and counties in large metro areas; the share increased at least half a percentage point in both cases. The share also increased in the Appalachian section of most states, particularly in Maryland, Georgia, Pennsylvania, and South Carolina. But the percentage did fall in some states—in Mississippi, for example, the share dropped almost two percentage points. Throughout Appalachia, the rising share of single-unit homes seems to have come at the expense of mobile homes, the share of which has fallen by nearly half a percentage point overall since 2008-2012, with slightly larger drops in the South Central and Southern subregions. (In Appalachian Mississippi, the share of mobile homes increased 0.8 percentage points.)
- At just under 81 percent, the share of Appalachian residents living in family households was 0.6 percentage points lower in 2013-2017 than in 2008-2012 (see Tables 4.4 and 4.7), and the decline was present throughout the Region. The greatest drops—at least a full percentage point in most cases—were in Northern and Central Appalachia, the most rural counties, and the Appalachian sections of Kentucky, Mississippi, New York, Ohio, Pennsylvania, and Virginia. The decline in the percentage of persons in married-couple households has fueled the drop overall; the share of persons in married-couple households in Appalachia fell 1.2 percentage points.
- The share of Appalachian residents living in single-unit homes was 77.5 percent in 2013-2017, slightly higher than in 2008-2012 (see Tables 4.5 and 4.8). But this modest increase was not present throughout the Region. For example, although the share increased more than half a percentage point in Southern Appalachia (and a full percentage point in Appalachian Georgia and South Carolina), it stayed the same in Central Appalachia and fell slightly in North Central Appalachia. And while there were increases in the Appalachian sections of most states, there were noticeable declines in Mississippi (a decrease of nearly two percentage points) and West Virginia. As with the share of housing units, Appalachia's increased share of persons in single-unit residences has largely come at the expense of mobile units; the share of the Appalachian population living in mobile homes in 2013-2017 was 0.6 percentage points lower than it was in 2008-2012.

CHAPTER 5: EDUCATION, DEVICE OWNERSHIP, AND INTERNET ACCESS

Table 5.1: Educational Attainment of Persons Ages 25 and Over in the Appalachian Region, 2013-2017

Education (Highest Level Attained)	Total Population Ages 25 and Over, 2013-2017	Percent of Population Ages 25 and Over					
		Less than High School Diploma	High School Diploma or More				
			Total	H.S. Grad, No Postsecondary Degree	Associate's Degree or More		
Total	Associate's Degree	Bachelor's Degree or More					
United States	216,271,644	12.7	87.3	48.1	39.2	8.3	30.9
Appalachian Region	17,573,934	13.6	86.4	54.1	32.3	8.5	23.7
Subregions							
Northern Appalachia	5,808,764	9.7	90.3	55.9	34.4	9.4	25.0
North Central Appalachia	1,677,483	13.4	86.6	58.7	27.9	7.8	20.1
Central Appalachia	1,313,827	22.0	78.0	57.3	20.7	6.9	13.8
South Central Appalachia	3,366,963	14.3	85.7	52.9	32.7	8.4	24.4
Southern Appalachia	5,406,897	15.3	84.7	50.8	33.9	8.3	25.6
County Types							
Large Metros (pop. 1 million +)	4,127,743	10.0	90.0	49.8	40.2	8.9	31.4
Small Metros (pop. <1 million)	7,409,448	12.8	87.2	53.6	33.7	8.5	25.2
Nonmetro, Adjacent to Large Metros	1,511,720	15.1	84.9	58.7	26.2	8.9	17.3
Nonmetro, Adjacent to Small Metros	2,788,589	16.5	83.5	58.5	25.0	8.2	16.8
Rural (nonmetro, not adj. to a metro)	1,736,434	19.8	80.2	55.8	24.4	8.0	16.4
Alabama	3,276,637	14.7	85.3	52.6	32.7	8.2	24.5
Appalachian Alabama	2,112,935	14.7	85.3	52.1	33.2	8.1	25.1
Non-Appalachian Alabama	1,163,702	14.7	85.3	53.6	31.7	8.2	23.5
Georgia	6,693,826	13.7	86.3	48.8	37.4	7.5	29.9
Appalachian Georgia	2,051,195	15.4	84.6	49.7	35.0	7.8	27.2
Non-Appalachian Georgia	4,642,631	13.0	87.0	48.5	38.5	7.4	31.1
Kentucky	2,986,199	14.8	85.2	54.0	31.2	8.0	23.2
Appalachian Kentucky	804,021	22.2	77.8	56.0	21.8	7.0	14.7
Non-Appalachian Kentucky	2,182,178	12.1	87.9	53.3	34.6	8.3	26.3
Maryland	4,095,427	10.2	89.8	44.3	45.5	6.5	39.0
Appalachian Maryland	175,783	12.1	87.9	59.3	28.6	8.3	20.3
Non-Appalachian Maryland	3,919,644	10.1	89.9	43.6	46.3	6.4	39.8
Mississippi	1,956,101	16.6	83.4	53.0	30.4	9.1	21.3
Appalachian Mississippi	411,542	19.7	80.3	53.3	27.0	8.7	18.3
Non-Appalachian Mississippi	1,544,559	15.8	84.2	52.9	31.3	9.2	22.1
New York	13,660,809	13.9	86.1	42.2	44.0	8.7	35.3
Appalachian New York	699,830	10.0	90.0	51.5	38.5	12.3	26.2
Non-Appalachian New York	12,960,979	14.1	85.9	41.7	44.3	8.5	35.8
North Carolina	6,784,048	13.1	86.9	47.8	39.1	9.3	29.9
Appalachian North Carolina	1,223,819	14.3	85.7	49.8	35.8	9.6	26.2
Non-Appalachian North Carolina	5,560,229	12.8	87.2	47.3	39.8	9.2	30.7
Ohio	7,888,150	10.2	89.8	54.0	35.8	8.5	27.2
Appalachian Ohio	1,390,810	13.0	87.0	60.7	26.3	8.7	17.5
Non-Appalachian Ohio	6,497,340	9.6	90.4	52.6	37.8	8.5	29.3
Pennsylvania	8,885,953	10.1	89.9	51.6	38.2	8.2	30.1
Appalachian Pennsylvania	4,059,661	9.0	91.0	55.2	35.8	9.2	26.6
Non-Appalachian Pennsylvania	4,826,292	11.0	89.0	48.6	40.3	7.3	33.0
South Carolina	3,325,601	13.5	86.5	50.2	36.3	9.3	27.0
Appalachian South Carolina	831,225	14.6	85.4	48.9	36.5	9.8	26.7
Non-Appalachian South Carolina	2,494,376	13.1	86.9	50.7	36.2	9.1	27.1
Tennessee	4,478,450	13.5	86.5	53.5	33.0	7.0	26.1
Appalachian Tennessee	1,990,780	14.9	85.1	55.6	29.5	7.2	22.3
Non-Appalachian Tennessee	2,487,670	12.3	87.7	51.8	35.8	6.8	29.1
Virginia	5,680,765	11.0	89.0	43.9	45.1	7.5	37.6
Appalachian Virginia	528,668	17.1	82.9	53.8	29.1	8.9	20.2
Non-Appalachian Virginia	5,152,097	10.4	89.6	42.9	46.7	7.4	39.3
West Virginia (entire state)	1,293,665	14.1	85.9	59.1	26.8	6.9	19.9

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Table 5.2: Educational Attainment of Persons Ages 25 to 64 in the Appalachian Region, 2013-2017

Education (Highest Level Attained)	Total Population Ages 25 to 64, 2013-2017	Percent of Population Ages 25 to 64					
		Less than High School Diploma	High School Diploma or More				
			Total	H.S. Grad, No Postsecondary Degree	Associate's Degree or More		
					Total	Associate's Degree	Bachelor's Degree or More
United States	168,539,255	11.4	88.6	47.2	41.4	9.0	32.3
Appalachian Region	13,205,375	11.5	88.5	53.4	35.0	9.7	25.3
Subregions							
Northern Appalachia	4,272,559	7.9	92.1	53.8	38.3	11.0	27.3
North Central Appalachia	1,254,779	10.8	89.2	58.6	30.6	9.0	21.6
Central Appalachia	987,091	17.5	82.5	59.7	22.8	8.1	14.6
South Central Appalachia	2,467,983	12.0	88.0	53.1	34.8	9.4	25.4
Southern Appalachia	4,222,963	13.8	86.2	50.2	36.0	9.1	26.9
County Types							
Large Metros (pop. 1 million +)	3,219,897	8.6	91.4	47.8	43.7	9.9	33.8
Small Metros (pop. <1 million)	5,562,319	10.9	89.1	52.8	36.3	9.6	26.7
Nonmetro, Adjacent to Large Metros	1,121,134	13.0	87.0	58.6	28.3	10.2	18.1
Nonmetro, Adjacent to Small Metros	2,022,420	13.9	86.1	59.1	27.0	9.6	17.4
Rural (nonmetro, not adj. to a metro)	1,279,605	16.6	83.4	57.1	26.3	9.3	17.0
Alabama	2,514,605	12.9	87.1	52.3	34.8	9.1	25.7
Appalachian Alabama	1,624,528	13.0	87.0	51.5	35.5	9.1	26.4
Non-Appalachian Alabama	890,077	12.7	87.3	53.8	33.4	9.2	24.2
Georgia	5,393,396	12.3	87.7	48.3	39.4	8.1	31.3
Appalachian Georgia	1,649,806	14.2	85.8	49.0	36.8	8.4	28.3
Non-Appalachian Georgia	3,743,590	11.5	88.5	48.0	40.5	7.9	32.6
Kentucky	2,313,493	12.1	87.9	54.1	33.8	9.1	24.7
Appalachian Kentucky	610,530	18.0	82.0	58.1	23.9	8.3	15.7
Non-Appalachian Kentucky	1,702,963	10.1	89.9	52.7	37.3	9.4	27.9
Maryland	3,246,242	8.9	91.1	43.5	47.6	7.0	40.6
Appalachian Maryland	131,644	10.2	89.8	58.7	31.1	9.6	21.5
Non-Appalachian Maryland	3,114,598	8.9	91.1	42.8	48.3	6.8	41.4
Mississippi	1,519,074	14.5	85.5	53.4	32.1	10.3	21.9
Appalachian Mississippi	312,797	17.2	82.8	53.8	29.0	10.1	18.9
Non-Appalachian Mississippi	1,206,277	13.8	86.2	53.3	32.9	10.3	22.6
New York	10,652,458	12.0	88.0	40.9	47.1	9.5	37.6
Appalachian New York	514,933	8.6	91.4	50.3	41.1	13.8	27.3
Non-Appalachian New York	10,137,525	12.1	87.9	40.5	47.4	9.3	38.1
North Carolina	5,269,111	11.5	88.5	46.9	41.6	10.1	31.5
Appalachian North Carolina	888,319	12.8	87.2	49.6	37.6	10.9	26.7
Non-Appalachian North Carolina	4,380,792	11.3	88.7	46.4	42.3	9.9	32.5
Ohio	6,043,508	8.6	91.4	52.5	38.9	9.7	29.2
Appalachian Ohio	1,035,156	11.2	88.8	59.8	29.0	10.3	18.7
Non-Appalachian Ohio	5,008,352	8.0	92.0	51.0	40.9	9.6	31.4
Pennsylvania	6,704,931	8.2	91.8	49.7	42.1	9.3	32.8
Appalachian Pennsylvania	2,987,951	7.0	93.0	52.8	40.2	10.8	29.4
Non-Appalachian Pennsylvania	3,716,980	9.2	90.8	47.3	43.6	8.1	35.5
South Carolina	2,530,345	11.8	88.2	50.3	37.8	10.1	27.7
Appalachian South Carolina	635,832	12.8	87.2	48.6	38.6	10.7	27.9
Non-Appalachian South Carolina	1,894,513	11.5	88.5	50.9	37.6	9.9	27.7
Tennessee	3,465,094	11.3	88.7	53.4	35.3	7.8	27.6
Appalachian Tennessee	1,473,636	12.2	87.8	56.3	31.5	8.2	23.4
Non-Appalachian Tennessee	1,991,458	10.6	89.4	51.2	38.2	7.5	30.7
Virginia	4,492,898	9.2	90.8	43.2	47.6	8.1	39.5
Appalachian Virginia	382,904	12.8	87.2	55.1	32.1	10.1	22.0
Non-Appalachian Virginia	4,109,994	8.8	91.2	42.1	49.0	7.9	41.2
West Virginia (entire state)	957,339	11.2	88.8	59.4	29.5	8.0	21.5

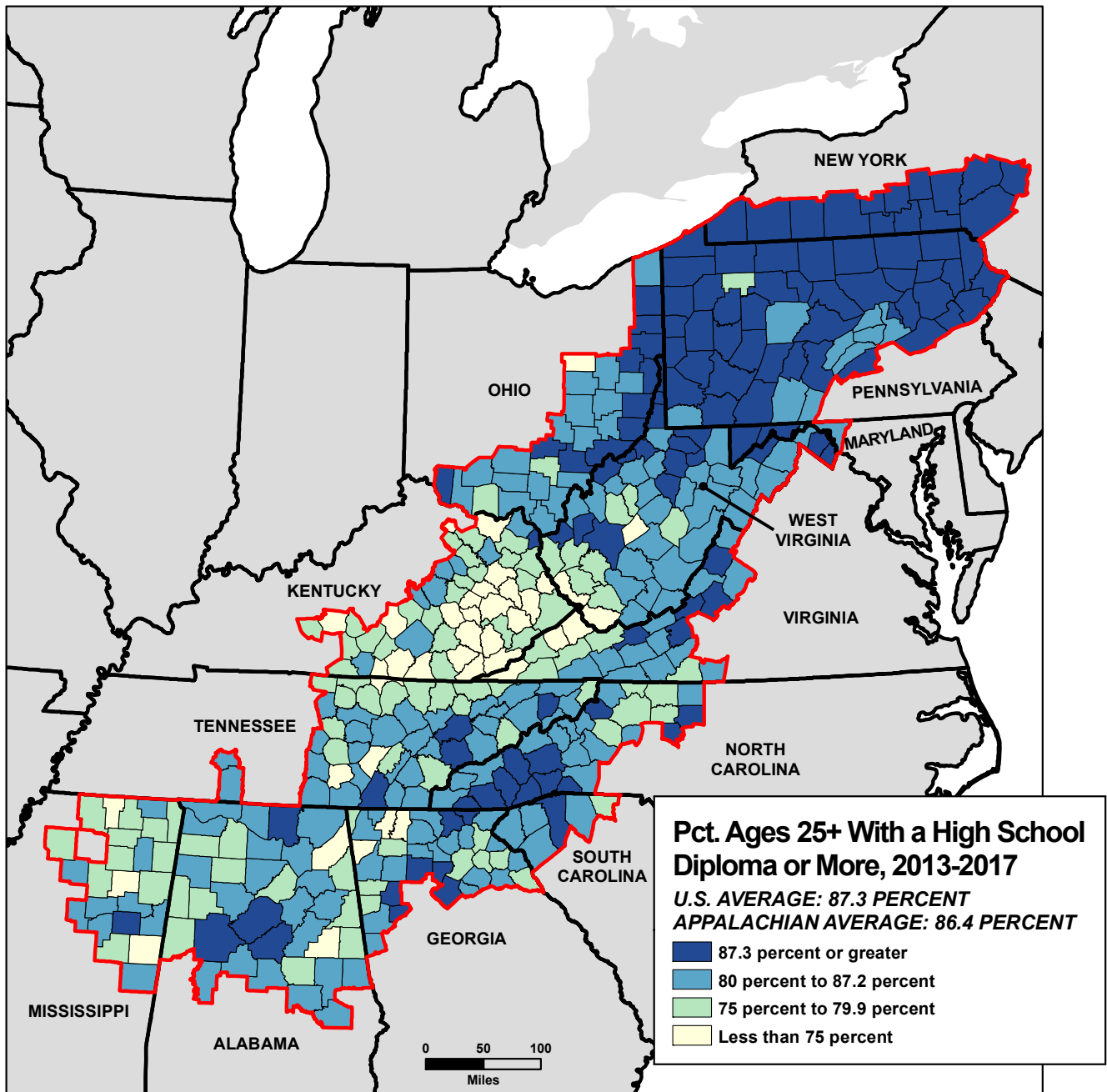
Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Table 5.3: Educational Attainment of Persons Ages 65 and Over in the Appalachian Region, 2013-2017

Education (Highest Level Attained)	Total Population Ages 65 and Over, 2013-2017	Percent of Population Ages 65 and Over					
		Less than High School Diploma	High School Diploma or More				
			Total	H.S. Grad, No Postsecondary Degree	Associate's Degree or More		
					Total	Associate's Degree	Bachelor's Degree or More
United States	47,732,389	17.2	82.8	51.2	31.6	5.7	25.9
Appalachian Region	4,368,559	19.8	80.2	56.2	24.0	5.0	19.0
Subregions							
Northern Appalachia	1,536,205	14.8	85.2	61.7	23.4	5.1	18.4
North Central Appalachia	422,704	21.1	78.9	59.1	19.8	4.2	15.6
Central Appalachia	326,736	35.5	64.5	49.9	14.6	3.2	11.4
South Central Appalachia	898,980	20.6	79.4	52.4	27.0	5.5	21.6
Southern Appalachia	1,183,934	20.9	79.1	52.6	26.5	5.3	21.2
County Types							
Large Metros (pop. 1 million +)	907,846	15.0	85.0	56.9	28.1	5.3	22.7
Small Metros (pop. <1 million)	1,847,129	18.3	81.7	55.9	25.8	5.1	20.7
Nonmetro, Adjacent to Large Metros	390,586	20.9	79.1	59.1	20.0	4.9	15.1
Nonmetro, Adjacent to Small Metros	766,169	23.4	76.6	56.9	19.7	4.6	15.0
Rural (nonmetro, not adj. to a metro)	456,829	28.6	71.4	52.3	19.0	4.3	14.7
Alabama	762,032	20.6	79.4	53.7	25.7	4.9	20.8
Appalachian Alabama	488,407	20.2	79.8	54.3	25.5	4.9	20.6
Non-Appalachian Alabama	273,625	21.1	78.9	52.7	26.1	5.0	21.1
Georgia	1,300,430	19.6	80.4	51.0	29.5	5.1	24.4
Appalachian Georgia	401,389	20.1	79.9	52.4	27.5	5.1	22.4
Non-Appalachian Georgia	899,041	19.4	80.6	50.3	30.3	5.0	25.3
Kentucky	672,706	23.9	76.1	53.9	22.2	4.1	18.1
Appalachian Kentucky	193,491	35.5	64.5	49.5	15.0	3.1	11.8
Non-Appalachian Kentucky	479,215	19.2	80.8	55.6	25.2	4.5	20.7
Maryland	849,185	15.0	85.0	47.4	37.6	4.8	32.7
Appalachian Maryland	44,139	17.5	82.5	61.3	21.3	4.6	16.6
Non-Appalachian Maryland	805,046	14.9	85.1	46.7	38.5	4.8	33.6
Mississippi	437,027	24.1	75.9	51.4	24.5	5.0	19.5
Appalachian Mississippi	98,745	27.7	72.3	51.7	20.7	4.2	16.4
Non-Appalachian Mississippi	338,282	23.1	76.9	51.4	25.6	5.2	20.4
New York	3,008,351	20.7	79.3	46.5	32.8	5.8	27.0
Appalachian New York	184,897	13.9	86.1	55.0	31.2	8.1	23.0
Non-Appalachian New York	2,823,454	21.1	78.9	46.0	32.9	5.6	27.3
North Carolina	1,514,937	18.6	81.4	50.8	30.6	6.5	24.2
Appalachian North Carolina	335,500	18.5	81.5	50.5	31.0	6.1	24.9
Non-Appalachian North Carolina	1,179,437	18.6	81.4	50.9	30.5	6.6	24.0
Ohio	1,844,642	15.6	84.4	58.9	25.5	4.8	20.7
Appalachian Ohio	355,654	18.3	81.7	63.5	18.2	4.2	14.0
Non-Appalachian Ohio	1,488,988	15.0	85.0	57.8	27.2	4.9	22.3
Pennsylvania	2,181,022	16.0	84.0	57.6	26.4	4.7	21.8
Appalachian Pennsylvania	1,071,710	14.6	85.4	62.1	23.4	4.8	18.6
Non-Appalachian Pennsylvania	1,109,312	17.4	82.6	53.2	29.4	4.6	24.8
South Carolina	795,256	18.6	81.4	50.0	31.4	6.7	24.7
Appalachian South Carolina	195,393	20.6	79.4	49.6	29.8	7.0	22.8
Non-Appalachian South Carolina	599,863	18.0	82.0	50.1	31.9	6.6	25.3
Tennessee	1,013,356	21.0	79.0	53.9	25.1	4.3	20.8
Appalachian Tennessee	517,144	22.6	77.4	53.7	23.8	4.6	19.2
Non-Appalachian Tennessee	496,212	19.4	80.6	54.1	26.5	4.0	22.5
Virginia	1,187,867	17.9	82.1	46.6	35.6	5.5	30.1
Appalachian Virginia	145,764	28.4	71.6	50.4	21.2	5.8	15.4
Non-Appalachian Virginia	1,042,103	16.4	83.6	46.0	37.6	5.4	32.2
West Virginia (entire state)	336,326	22.3	77.7	58.3	19.4	3.9	15.4

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

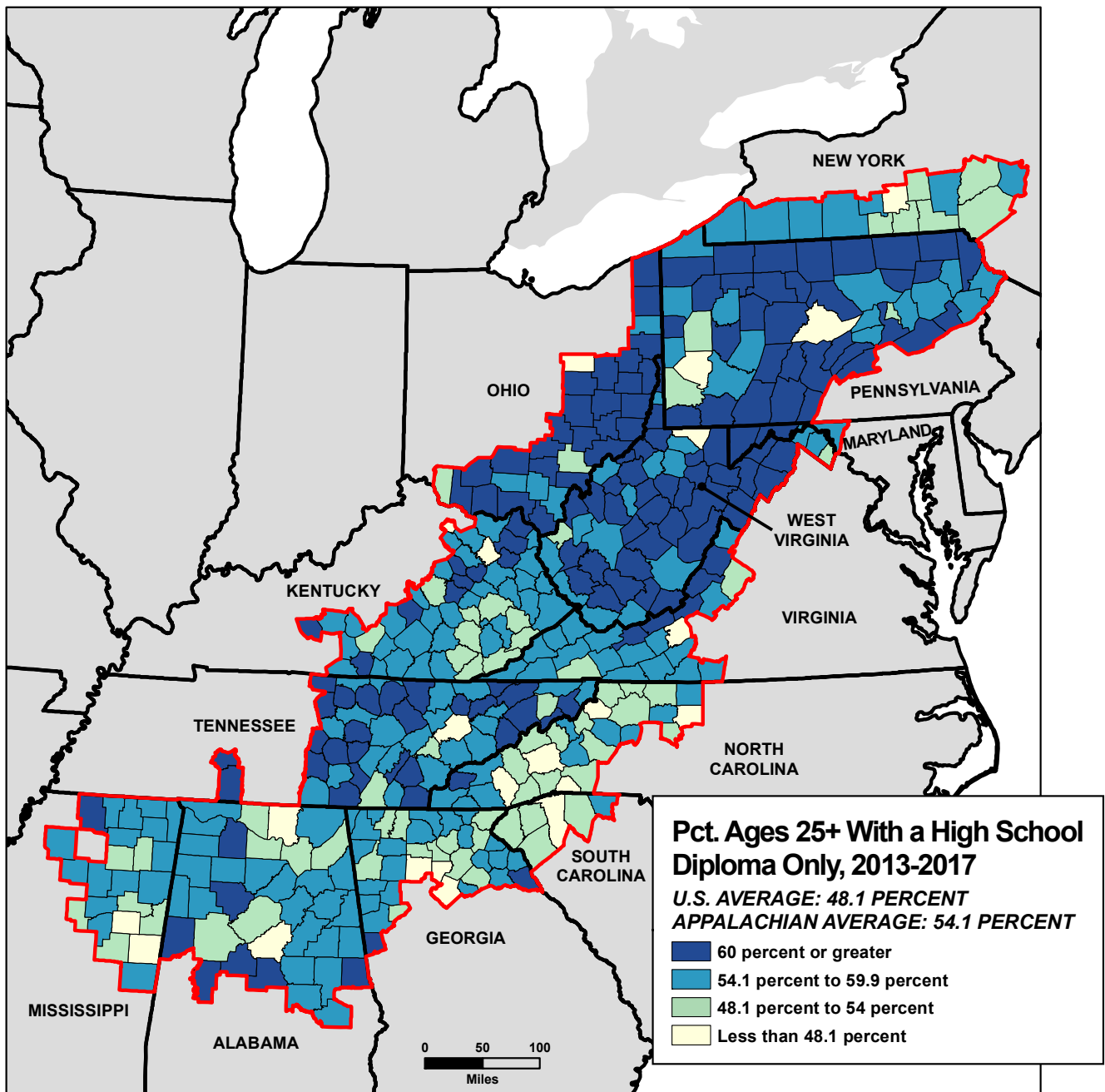
Figure 5.1: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2013-2017



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Although the share of Appalachian adults with at least a high school diploma was slightly below the national average over the 2013-2017 period, it matched or exceeded the national share in 121 counties in the Region—101 of which were either in Northern Appalachia or in metropolitan areas. The rates were especially high in the Appalachian sections of Pennsylvania and New York, where the share of adults who had completed high school was 91 percent and 90 percent, respectively. Yet in 40 counties, less than three-fourths of adults had completed high school; all but two of those counties were in Central, South Central, and Southern Appalachia, and 36 were outside metropolitan areas. More than half of these 40 counties were in Kentucky alone; just 78 percent of adults in the state’s Appalachian counties had a high school diploma or more in 2013-2017.

Figure 5.2: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2013-2017

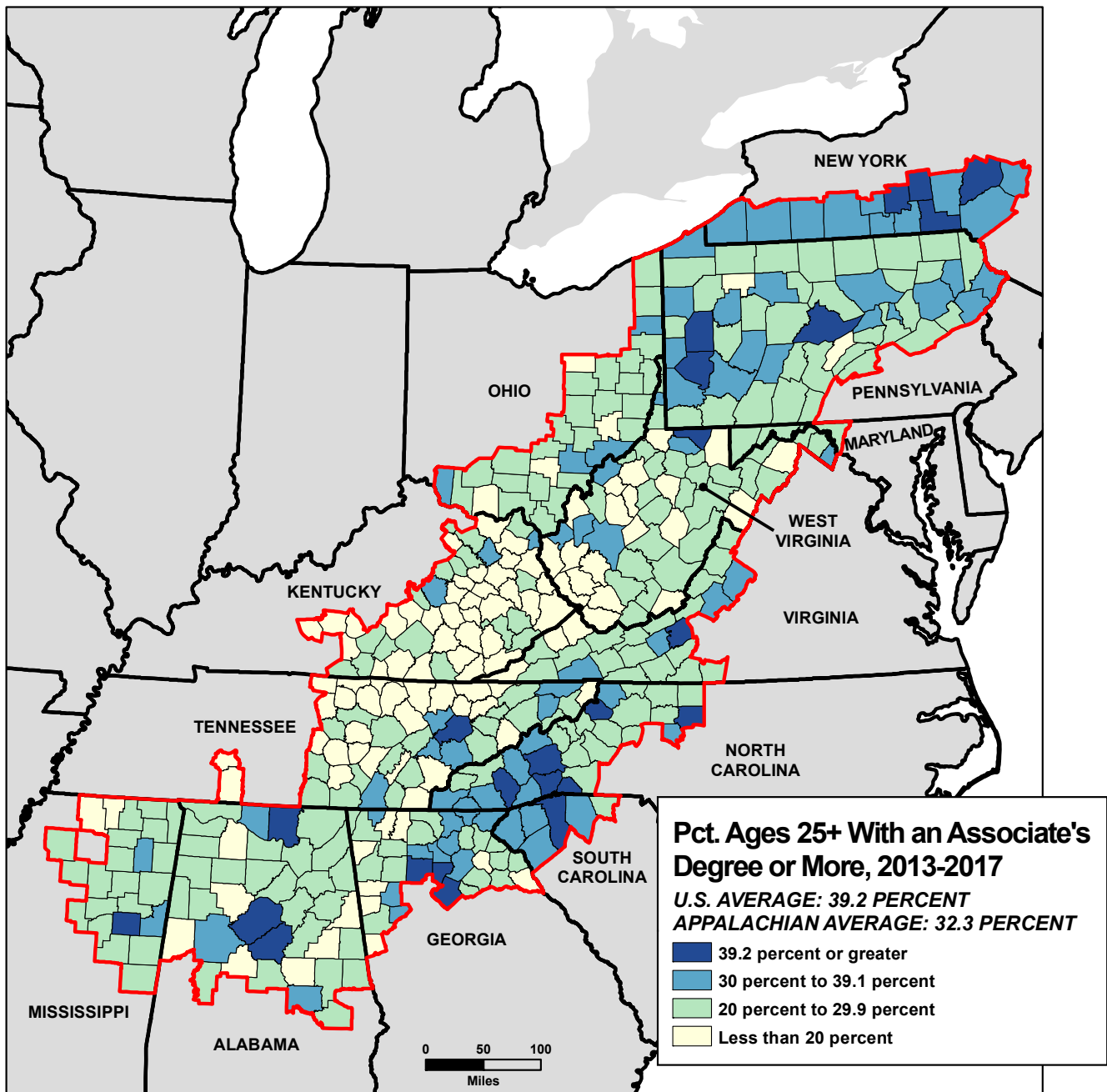


Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

During the 2013-2017 period, 54 percent of adults ages 25 and over in the Appalachian Region had a high school diploma, but no postsecondary degree (including an associate’s degree). And the share was at least 60 percent in 150 of the Region’s 420 counties—122 of which were in four states: Ohio, Pennsylvania, Tennessee, and West Virginia. Many of these adults had attended college but did not graduate, while others acquired vocational training. Conversely, 32 percent of adults in Appalachia did earn an associate’s or bachelor’s degree, while 14 percent never finished high school.

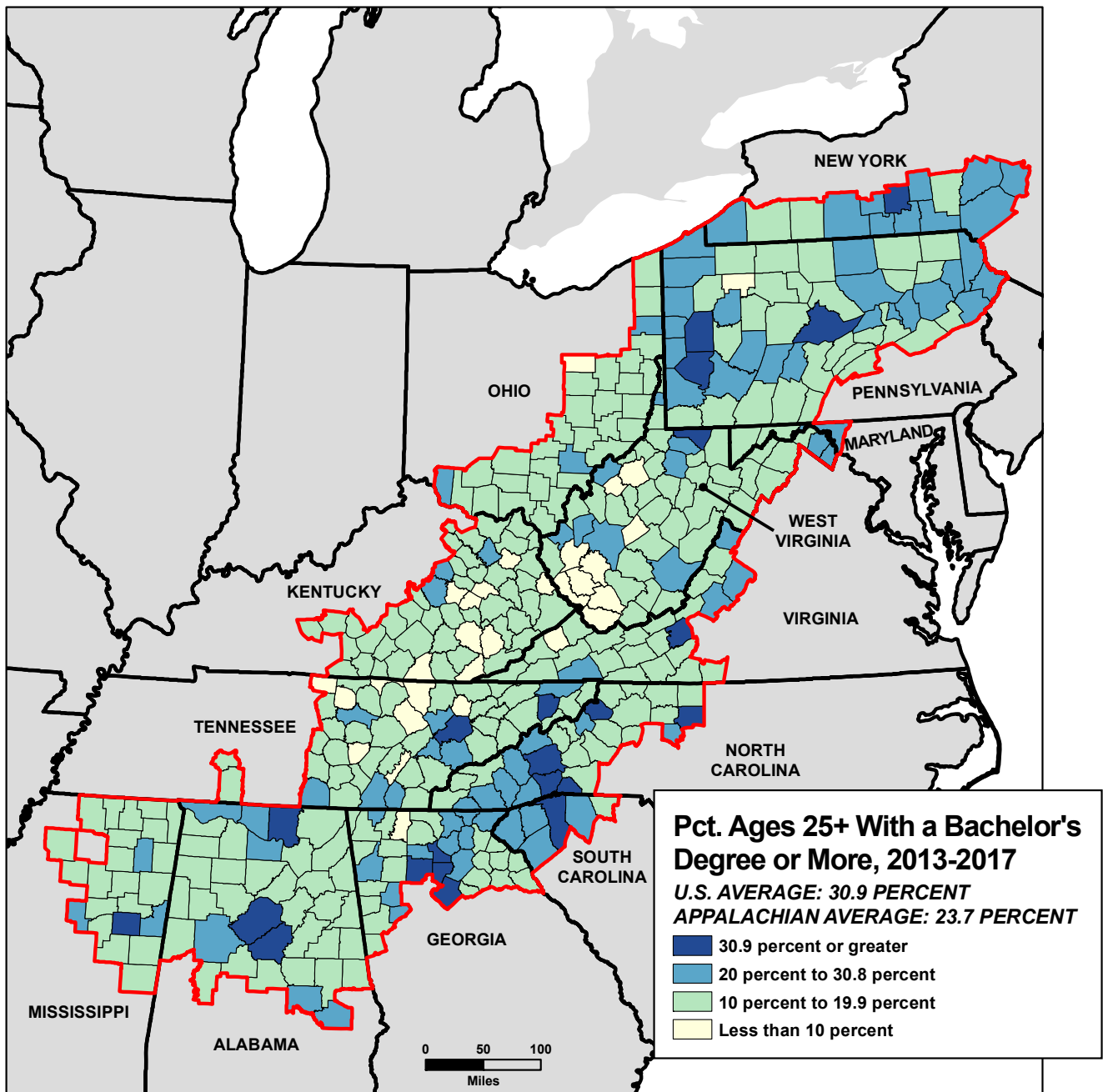
Figure 5.3: Percent of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree or More, 2013-2017



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree or More, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In the Appalachian Region, the share of adults ages 25 and over with an associate's degree or more was seven percentage points below the national average in 2013-2017. And it was even lower in most of Appalachia: The share was less than 30 percent in 319 of the Region's 420 counties, and less than 20 percent in 107 of them. More than half the counties in the latter group were in Central Appalachia, and 34 of them were in Kentucky alone. In contrast, the share matched or exceeded the national average in 24 counties—which were in metropolitan areas and/or home to a major college or university. The relatively lower share of Appalachian residents with at least a bachelor's degree is fueling the overall regional gap on this measure: The share of adults in the Region whose highest postsecondary degree was an associate's degree was 8.5 percent—just above the national average. And it was even higher in some parts of the Region—12 percent in Appalachian New York, for example.

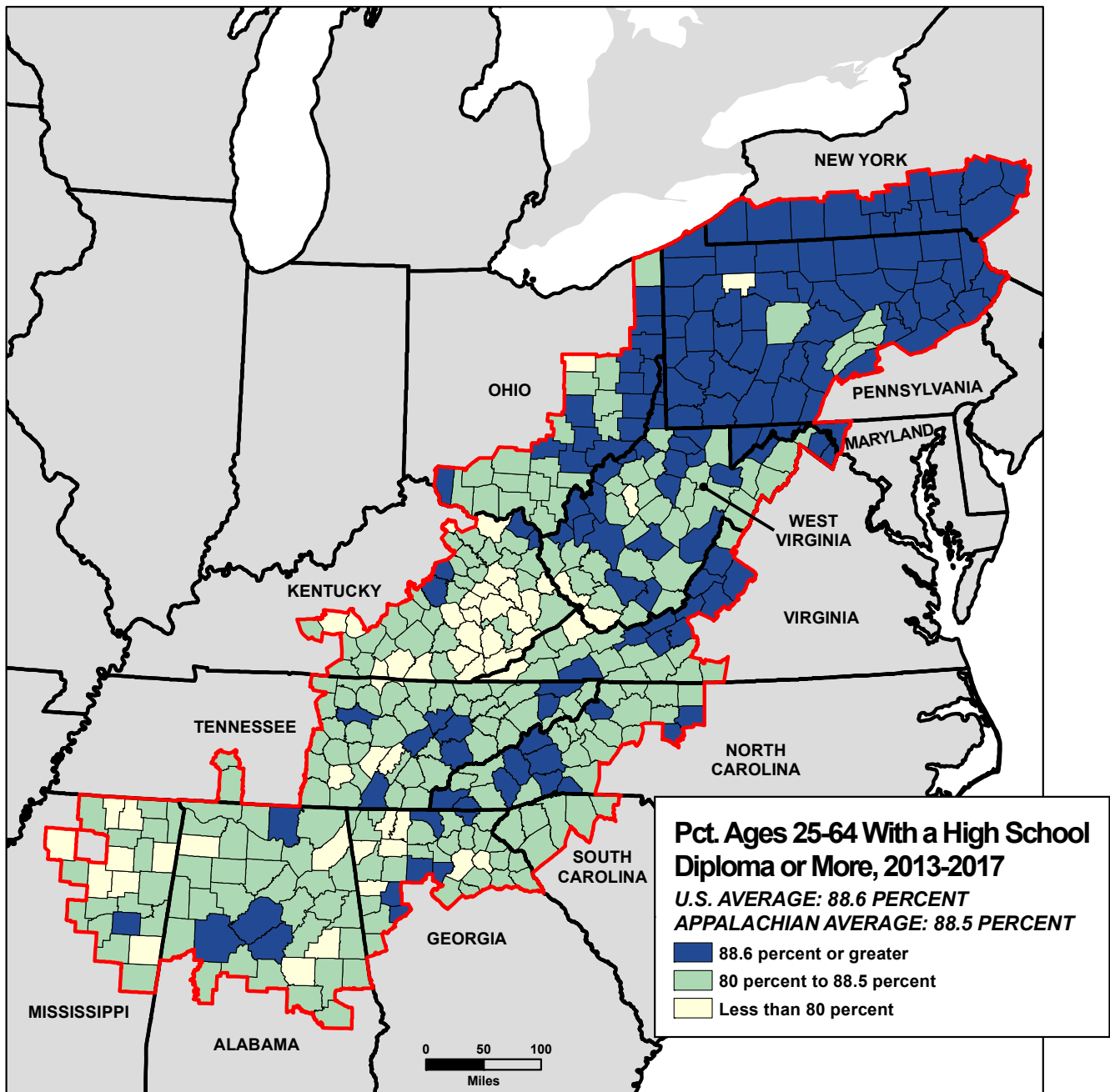
Figure 5.4: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2013-2017



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

The share of adults ages 25 and over with a bachelor's degree or more was seven percentage points lower in Appalachia during the 2013-2017 period than in the nation as a whole. Indeed, the rate was lower than the national average in 398 of the Region's 420 counties. In fact, less than one in five residents ages 25 and over were graduates of a four-year college or university in 306 Appalachian counties. And in 30 counties—all but three of which were either outside metropolitan areas or in Central Appalachia—the share was less than one in 10. The 22 counties where the percentage of college graduates matched or surpassed the national average were largely in metro areas (e.g., Pittsburgh, Birmingham, suburban Atlanta) or home to a college or university (such as Oktibbeha County, Mississippi, where Mississippi State University is located).

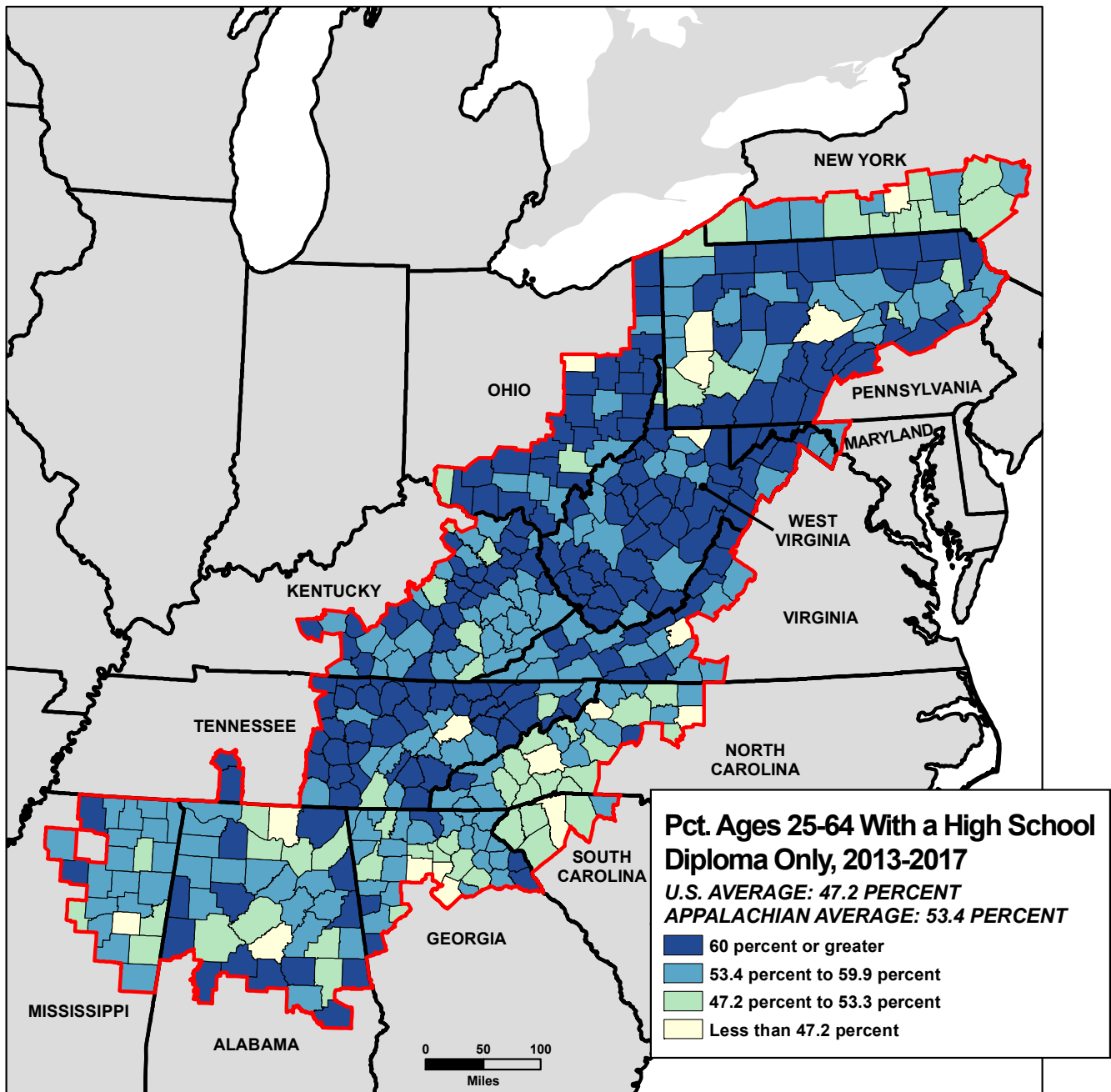
Figure 5.5: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2013-2017



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In 2013-2017, the percentage of working-age adults (ages 25 to 64) in the Appalachian Region with at least a high school diploma was almost at the national average of 88.6 percent, and the share matched or exceeded the national rate in 146 counties. More than half of these counties were in metropolitan areas, and 102 of them were in Northern or North Central Appalachia. Nearly half of these 146 counties were in New York or Pennsylvania; the share of working-age adults with a high school diploma or more exceeded 90 percent in both states. (The share was barely under 90 percent in Appalachian Maryland, where all three of the state’s counties in the Region matched or exceeded the national average.) At the other end of the spectrum, less than three-fourths of working-age adults had finished high school in 12 Appalachian counties. Almost all of these counties were outside metropolitan areas.

Figure 5.6: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2013-2017

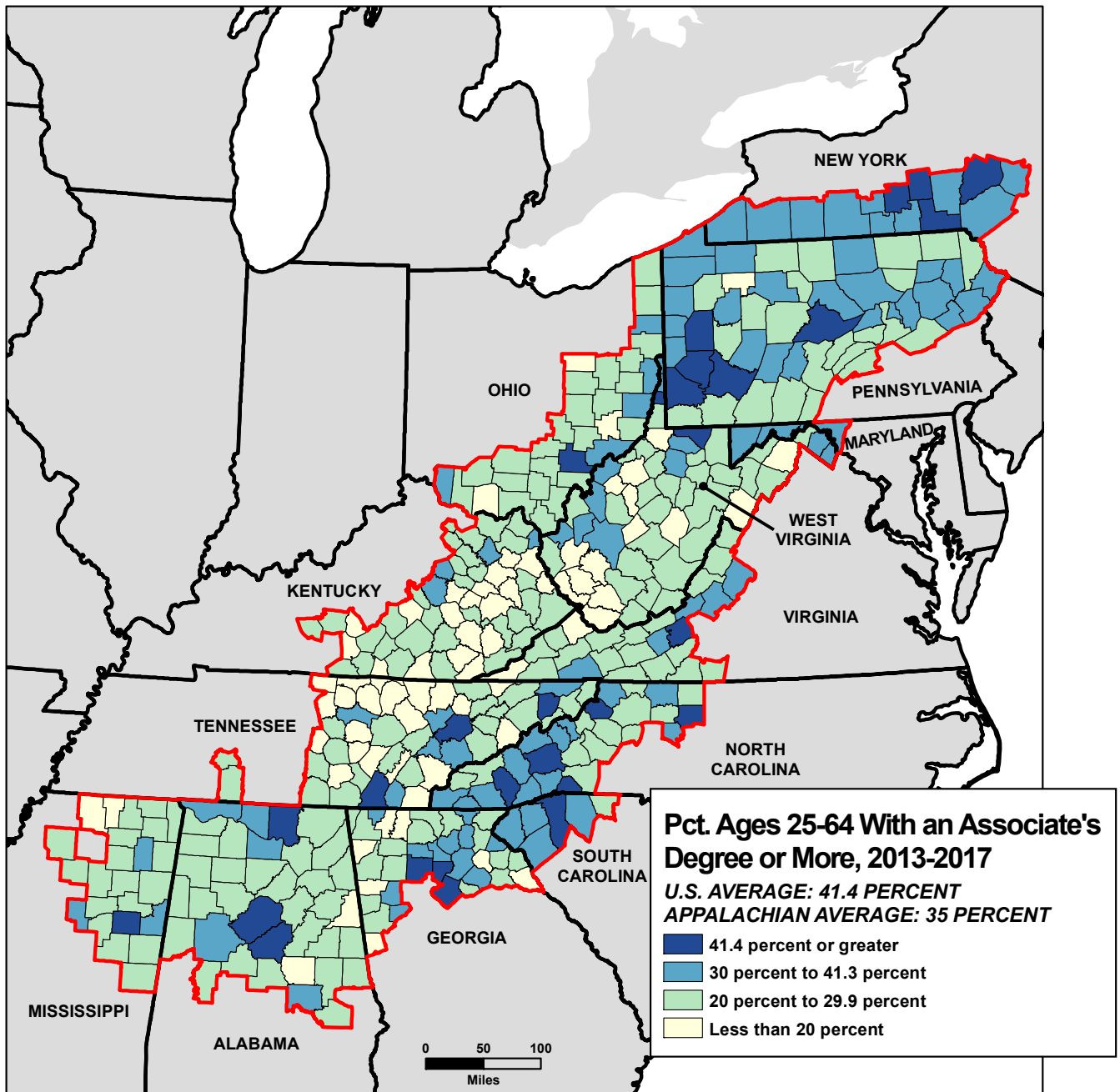


Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In 2013-2017, more than half of working-age adults (ages 25 to 64) in the Appalachian Region had a high school diploma but no postsecondary degree, compared to just under half nationally. And the share was at least 60 percent in 184 of Appalachia’s 420 counties. Nearly half of these counties were in North Central and Central Appalachia. In contrast, there were 18 Appalachian counties where the share of 25-to-64-year-olds with no more than a high school diploma was below the national average; these were in metro areas and/or college or university towns. Many working-age adults with this level of attainment did continue their education after high school, either by attending college without graduating or by acquiring vocational training.

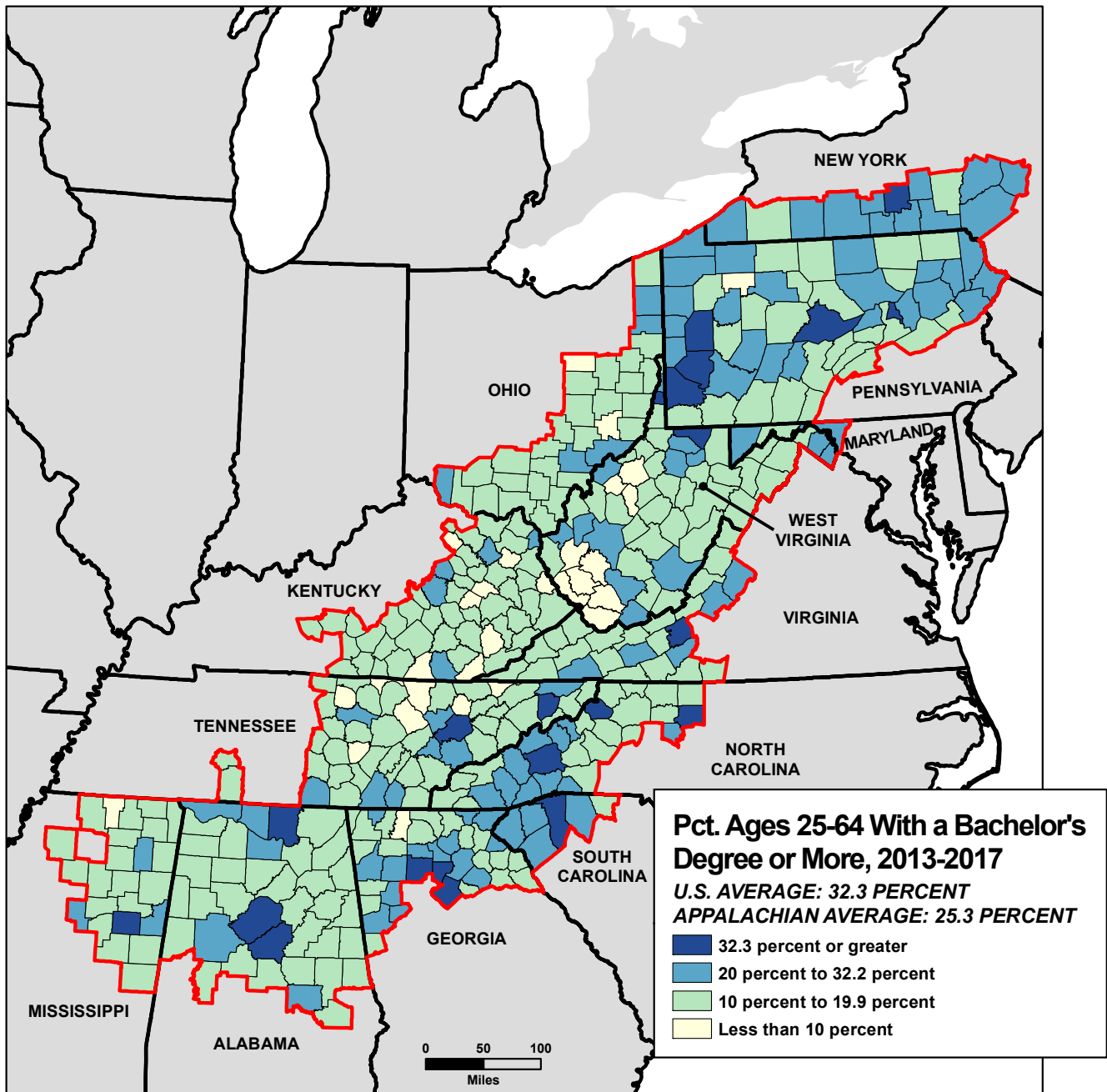
Figure 5.7: Percent of Persons Ages 25 to 64 in the Appalachian Region With an Associate’s Degree or More, 2013-2017



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With an Associate’s Degree or More, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In 2013-2017, 35 percent of working-age adults (ages 25 to 64) in Appalachia had attained an associate’s degree or more, six percentage points below the national average. And the share was even lower in much of the Region: More than two-thirds of Appalachia’s 420 counties had attainment rates below 30 percent, while one-sixth had rates below 20 percent. (Central Appalachia had more than half of the counties with the lowest shares.) In contrast, 29 counties—virtually all in metro areas and/or containing a college or university—matched or exceeded the national share. As with the total adult population, Appalachia’s lower-than-average share on this measure is due to the lower share with a bachelor’s degree or more. For nearly 10 percent of working-age adults in Appalachia, the highest level of education was an associate’s degree compared with just 9 percent nationally. And the share was at least 10 percent in seven of the 13 Appalachian states, led by Appalachian New York at almost 14 percent.

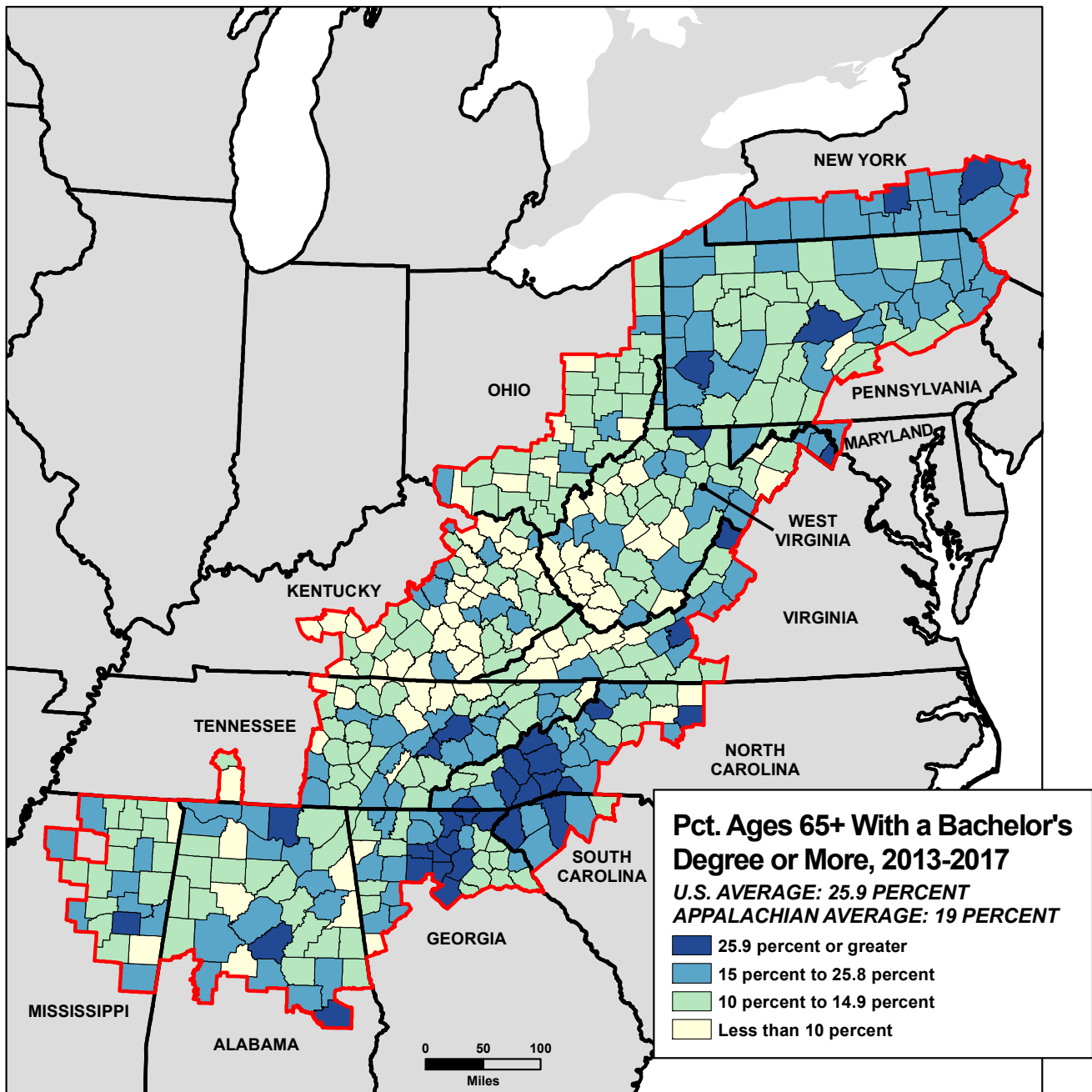
Figure 5.8: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2013-2017



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With an Bachelor's Degree or More, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

One-fourth of Appalachia’s working-age population had a bachelor’s degree or more in 2013-2017—seven percentage points lower than the U.S. average of 32 percent. This is a striking indicator of the lower educational level of the Appalachian workforce. Indeed, just under 15 percent of working-age adults in Central Appalachia had a bachelor’s degree, as did 17 percent of residents in the Region’s most rural counties. There were only 22 Appalachian counties—all either in metro areas (e.g., suburban Atlanta) and/or housing a four-year college or university (e.g., Watauga County, North Carolina, home to Appalachian State University)—where the share of working-age adults ages 25 to 64 with at least a bachelor’s degree matched or exceeded the national average. In contrast, less than one in 10 adults had a four-year degree in 29 counties. Of the counties in this latter group, 22 were outside metropolitan areas and 14 were not even adjacent to a metro, suggesting a lack of employment opportunities for college-educated adults in such areas.

Figure 5.9: Percent of Persons Ages 65 and Over in the Appalachian Region With a Bachelor's Degree or More, 2013-2017



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region With a Bachelor's Degree or More, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

While slightly more than one in four older Americans (ages 65 and over) had at least a bachelor's degree in 2013-2017, less than one in 10 had one in 80 of Appalachia's 420 counties. (And in most of these counties, less than two-thirds of older adults had completed high school.) Three-fourths of these counties were outside metropolitan areas, and more than half were in Central Appalachia—Kentucky alone had 28 of these counties. Yet in 36 Appalachian counties, the share of older adults with a four-year degree was at or above the national average. These were either counties in metropolitan areas (like suburban Atlanta), counties that had a college or university (such as Macon County, Alabama, home to Tuskegee University), or counties with significant retirement or seasonal activity (the latter suggested by the fact that much of their vacant housing is for seasonal or occasional use—such as Rabun, Towns, and Union counties in Georgia, home of the Chattahoochee-Oconee National Forest).

Table 5.4: Percentage Point Change in Educational Attainment of Persons Ages 25 and Over in the Appalachian Region, 2008-2012 to 2013-2017

Education (Highest Level Attained)	Percentage Point Change in Share of Population Ages 25 and Over					
	Less than High School Diploma	High School Diploma or More				
		Total	H.S. Grad, No Postsecondary Degree	Associate's Degree or More		
				Total	Associate's Degree	Bachelor's Degree or More
United States	- 1.6	+ 1.6	- 1.4	+ 3.0	+ 0.6	+ 2.4
Appalachian Region	- 2.3	+ 2.3	- 1.0	+ 3.3	+ 0.9	+ 2.4
Subregions						
Northern Appalachia	- 1.7	+ 1.7	- 2.0	+ 3.6	+ 0.8	+ 2.9
North Central Appalachia	- 2.4	+ 2.4	- 0.8	+ 3.2	+ 1.1	+ 2.1
Central Appalachia	- 4.2	+ 4.2	+ 1.7	+ 2.5	+ 1.0	+ 1.5
South Central Appalachia	- 2.8	+ 2.8	- 0.5	+ 3.3	+ 0.9	+ 2.5
Southern Appalachia	- 2.4	+ 2.4	- 0.7	+ 3.1	+ 0.9	+ 2.2
County Types						
Large Metros (pop. 1 million +)	- 1.8	+ 1.8	- 2.0	+ 3.8	+ 0.7	+ 3.1
Small Metros (pop. <1 million)	- 2.1	+ 2.1	- 1.1	+ 3.3	+ 0.8	+ 2.5
Nonmetro, Adjacent to Large Metros	- 2.4	+ 2.4	- 0.2	+ 2.6	+ 1.0	+ 1.6
Nonmetro, Adjacent to Small Metros	- 2.5	+ 2.5	- 0.4	+ 2.8	+ 1.0	+ 1.8
Rural (nonmetro, not adj. to a metro)	- 3.4	+ 3.4	+ 0.4	+ 3.0	+ 1.2	+ 1.8
Alabama	- 2.7	+ 2.7	- 0.6	+ 3.3	+ 1.0	+ 2.2
Appalachian Alabama	- 2.7	+ 2.7	- 0.7	+ 3.3	+ 1.0	+ 2.3
Non-Appalachian Alabama	- 2.8	+ 2.8	- 0.3	+ 3.1	+ 0.9	+ 2.2
Georgia	- 1.9	+ 1.9	- 1.1	+ 2.9	+ 0.7	+ 2.1
Appalachian Georgia	- 1.8	+ 1.8	- 0.9	+ 2.8	+ 0.7	+ 2.1
Non-Appalachian Georgia	- 1.9	+ 1.9	- 1.1	+ 3.0	+ 0.8	+ 2.2
Kentucky	- 2.8	+ 2.8	- 0.6	+ 3.3	+ 1.1	+ 2.2
Appalachian Kentucky	- 4.1	+ 4.1	+ 1.2	+ 2.9	+ 1.0	+ 1.9
Non-Appalachian Kentucky	- 2.1	+ 2.1	- 1.2	+ 3.3	+ 1.1	+ 2.2
Maryland	- 1.3	+ 1.3	- 1.6	+ 2.9	+ 0.3	+ 2.7
Appalachian Maryland	- 2.4	+ 2.4	- 0.5	+ 3.0	+ 0.5	+ 2.5
Non-Appalachian Maryland	- 1.3	+ 1.3	- 1.7	+ 2.9	+ 0.2	+ 2.6
Mississippi	- 2.4	+ 2.4	+ 0.0	+ 2.4	+ 1.1	+ 1.3
Appalachian Mississippi	- 2.9	+ 2.9	+ 0.2	+ 2.7	+ 1.1	+ 1.6
Non-Appalachian Mississippi	- 2.2	+ 2.2	- 0.1	+ 2.3	+ 1.0	+ 1.2
New York	- 1.2	+ 1.2	- 1.6	+ 2.9	+ 0.4	+ 2.5
Appalachian New York	- 1.4	+ 1.4	- 1.7	+ 3.1	+ 0.7	+ 2.4
Non-Appalachian New York	- 1.2	+ 1.2	- 1.5	+ 2.9	+ 0.4	+ 2.5
North Carolina	- 2.4	+ 2.4	- 1.3	+ 3.7	+ 0.7	+ 3.1
Appalachian North Carolina	- 2.5	+ 2.5	- 1.4	+ 3.8	+ 1.0	+ 2.8
Non-Appalachian North Carolina	- 2.4	+ 2.4	- 1.3	+ 3.6	+ 0.6	+ 3.1
Ohio	- 1.6	+ 1.6	- 1.8	+ 3.4	+ 0.8	+ 2.5
Appalachian Ohio	- 1.8	+ 1.8	- 1.2	+ 3.0	+ 1.2	+ 1.7
Non-Appalachian Ohio	- 1.5	+ 1.5	- 1.8	+ 3.4	+ 0.8	+ 2.6
Pennsylvania	- 1.6	+ 1.6	- 2.1	+ 3.7	+ 0.7	+ 3.1
Appalachian Pennsylvania	- 1.7	+ 1.7	- 2.3	+ 4.0	+ 0.8	+ 3.2
Non-Appalachian Pennsylvania	- 1.6	+ 1.6	- 1.9	+ 3.4	+ 0.6	+ 2.8
South Carolina	- 2.5	+ 2.5	- 0.7	+ 3.2	+ 0.7	+ 2.4
Appalachian South Carolina	- 2.7	+ 2.7	- 0.6	+ 3.3	+ 0.9	+ 2.5
Non-Appalachian South Carolina	- 2.4	+ 2.4	- 0.7	+ 3.1	+ 0.7	+ 2.4
Tennessee	- 2.6	+ 2.6	- 0.7	+ 3.3	+ 0.8	+ 2.6
Appalachian Tennessee	- 3.0	+ 3.0	+ 0.2	+ 2.8	+ 0.8	+ 1.9
Non-Appalachian Tennessee	- 2.4	+ 2.4	- 1.4	+ 3.6	+ 0.7	+ 3.0
Virginia	- 2.1	+ 2.1	- 1.5	+ 3.6	+ 0.6	+ 2.9
Appalachian Virginia	- 4.0	+ 4.0	+ 0.4	+ 3.6	+ 0.8	+ 2.8
Non-Appalachian Virginia	- 1.8	+ 1.8	- 1.6	+ 3.4	+ 0.7	+ 2.7
West Virginia (entire state)	- 2.5	+ 2.5	- 0.3	+ 2.8	+ 0.8	+ 2.0

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Table 5.5: Percentage Point Change in Educational Attainment of Persons Ages 25 to 64 in the Appalachian Region, 2008-2012 to 2013-2017

Education (Highest Level Attained)	Percentage Point Change in Share of Population Ages 25 to 64					
	Less than High School Diploma	High School Diploma or More				
		Total	H.S. Grad, No Postsecondary Degree	Associate's Degree or More		
				Total	Associate's Degree	Bachelor's Degree or More
United States	- 0.9	+ 0.9	- 1.7	+ 2.6	+ 0.5	+ 2.1
Appalachian Region	- 1.2	+ 1.2	- 1.8	+ 2.9	+ 0.8	+ 2.1
Subregions						
Northern Appalachia	- 0.3	+ 0.3	- 2.9	+ 3.2	+ 0.7	+ 2.5
North Central Appalachia	- 1.3	+ 1.3	- 1.6	+ 3.0	+ 1.2	+ 1.8
Central Appalachia	- 3.1	+ 3.1	+ 0.6	+ 2.5	+ 1.1	+ 1.3
South Central Appalachia	- 1.6	+ 1.6	- 1.2	+ 2.7	+ 0.7	+ 2.0
Southern Appalachia	- 1.4	+ 1.4	- 1.4	+ 2.8	+ 0.8	+ 1.9
County Types						
Large Metros (pop. 1 million +)	- 0.7	+ 0.7	- 2.5	+ 3.4	+ 0.6	+ 2.8
Small Metros (pop. <1 million)	- 1.1	+ 1.1	- 1.7	+ 2.8	+ 0.7	+ 2.1
Nonmetro, Adjacent to Large Metros	- 1.2	+ 1.2	- 1.0	+ 2.1	+ 0.9	+ 1.2
Nonmetro, Adjacent to Small Metros	- 1.2	+ 1.2	- 1.3	+ 2.4	+ 1.0	+ 1.4
Rural (nonmetro, not adj. to a metro)	- 2.2	+ 2.2	- 0.6	+ 2.8	+ 1.3	+ 1.5
Alabama	- 1.8	+ 1.8	- 1.1	+ 2.9	+ 0.9	+ 2.0
Appalachian Alabama	- 1.6	+ 1.6	- 1.4	+ 3.0	+ 1.0	+ 2.0
Non-Appalachian Alabama	- 2.2	+ 2.2	- 0.5	+ 2.6	+ 0.8	+ 1.8
Georgia	- 1.2	+ 1.2	- 1.5	+ 2.7	+ 0.8	+ 2.0
Appalachian Georgia	- 1.1	+ 1.1	- 1.3	+ 2.4	+ 0.7	+ 1.6
Non-Appalachian Georgia	- 1.2	+ 1.2	- 1.6	+ 2.8	+ 0.7	+ 2.1
Kentucky	- 1.7	+ 1.7	- 1.5	+ 3.1	+ 1.2	+ 2.0
Appalachian Kentucky	- 2.9	+ 2.9	- 0.1	+ 2.9	+ 1.2	+ 1.8
Non-Appalachian Kentucky	- 1.0	+ 1.0	- 1.9	+ 3.0	+ 1.2	+ 1.8
Maryland	- 0.6	+ 0.6	- 2.0	+ 2.6	+ 0.2	+ 2.4
Appalachian Maryland	- 1.2	+ 1.2	- 1.5	+ 2.7	+ 0.6	+ 2.1
Non-Appalachian Maryland	- 0.6	+ 0.6	- 2.0	+ 2.6	+ 0.1	+ 2.4
Mississippi	- 1.6	+ 1.6	- 0.3	+ 1.9	+ 1.1	+ 0.9
Appalachian Mississippi	- 1.8	+ 1.8	- 0.7	+ 2.5	+ 1.2	+ 1.3
Non-Appalachian Mississippi	- 1.5	+ 1.5	- 0.2	+ 1.8	+ 1.0	+ 0.7
New York	- 0.8	+ 0.8	- 1.7	+ 2.4	+ 0.2	+ 2.3
Appalachian New York	- 0.4	+ 0.4	- 1.8	+ 2.1	+ 0.5	+ 1.6
Non-Appalachian New York	- 0.9	+ 0.9	- 1.6	+ 2.4	+ 0.2	+ 2.2
North Carolina	- 1.5	+ 1.5	- 2.0	+ 3.5	+ 0.5	+ 3.0
Appalachian North Carolina	- 1.2	+ 1.2	- 2.0	+ 3.1	+ 0.9	+ 2.2
Non-Appalachian North Carolina	- 1.5	+ 1.5	- 1.9	+ 3.4	+ 0.4	+ 3.1
Ohio	- 0.6	+ 0.6	- 2.5	+ 3.1	+ 0.8	+ 2.3
Appalachian Ohio	- 0.5	+ 0.5	- 2.2	+ 2.6	+ 1.3	+ 1.3
Non-Appalachian Ohio	- 0.7	+ 0.7	- 2.5	+ 3.1	+ 0.7	+ 2.5
Pennsylvania	- 0.5	+ 0.5	- 2.9	+ 3.4	+ 0.6	+ 2.8
Appalachian Pennsylvania	- 0.4	+ 0.4	- 3.2	+ 3.6	+ 0.7	+ 2.9
Non-Appalachian Pennsylvania	- 0.5	+ 0.5	- 2.5	+ 3.1	+ 0.5	+ 2.6
South Carolina	- 1.5	+ 1.5	- 1.3	+ 2.7	+ 0.6	+ 2.1
Appalachian South Carolina	- 1.6	+ 1.6	- 1.2	+ 2.9	+ 0.7	+ 2.1
Non-Appalachian South Carolina	- 1.5	+ 1.5	- 1.2	+ 2.7	+ 0.5	+ 2.2
Tennessee	- 1.6	+ 1.6	- 1.4	+ 3.0	+ 0.8	+ 2.3
Appalachian Tennessee	- 1.9	+ 1.9	- 0.4	+ 2.3	+ 0.9	+ 1.5
Non-Appalachian Tennessee	- 1.3	+ 1.3	- 2.2	+ 3.5	+ 0.7	+ 2.8
Virginia	- 1.4	+ 1.4	- 1.8	+ 3.2	+ 0.6	+ 2.7
Appalachian Virginia	- 2.8	+ 2.8	- 0.5	+ 3.3	+ 0.4	+ 2.9
Non-Appalachian Virginia	- 1.3	+ 1.3	- 1.9	+ 3.1	+ 0.6	+ 2.6
West Virginia (entire state)	- 1.5	+ 1.5	- 1.0	+ 2.6	+ 0.9	+ 1.7

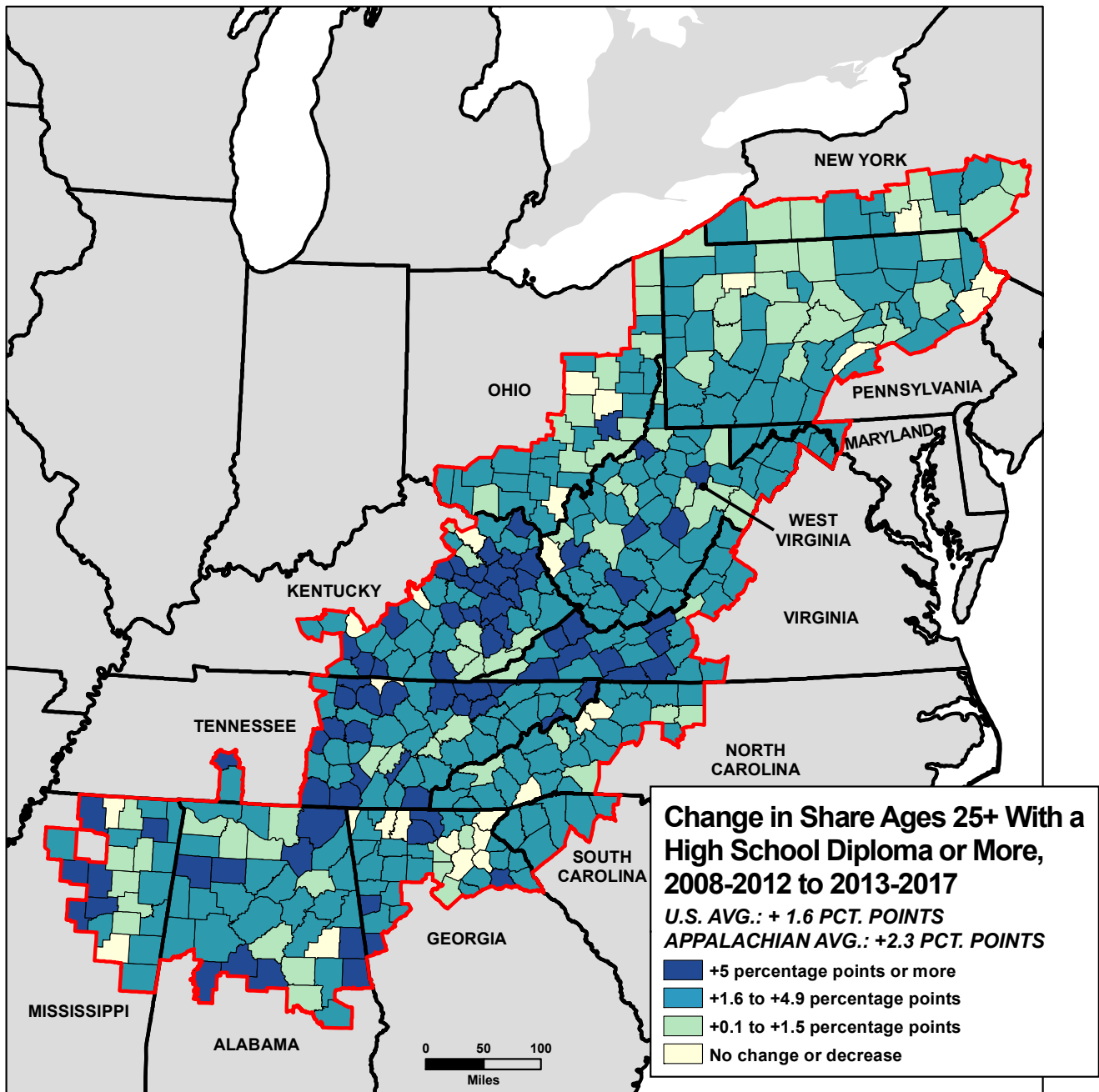
Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Table 5.6: Percentage Point Change in Educational Attainment of Persons Ages 65 and Over in the Appalachian Region, 2008-2012 to 2013-2017

Education (Highest Level Attained)	Percentage Point Change in Share of Population Ages 65 and Over					
	Less than High School Diploma	High School Diploma or More				
		Total	H.S. Grad, No Postsecondary Degree	Associate's Degree or More		
				Total	Associate's Degree	Bachelor's Degree or More
United States	- 4.9	+ 4.9	- 0.9	+ 5.8	+ 1.4	+ 4.4
Appalachian Region	- 7.2	+ 7.2	+ 1.4	+ 5.8	+ 1.6	+ 4.2
Subregions						
Northern Appalachia	- 6.3	+ 6.3	+ 0.1	+ 6.1	+ 1.7	+ 4.5
North Central Appalachia	- 7.4	+ 7.4	+ 2.1	+ 5.2	+ 1.5	+ 3.7
Central Appalachia	- 10.2	+ 10.2	+ 6.7	+ 3.5	+ 1.1	+ 2.4
South Central Appalachia	- 7.8	+ 7.8	+ 1.8	+ 6.0	+ 1.7	+ 4.4
Southern Appalachia	- 7.3	+ 7.3	+ 1.5	+ 5.9	+ 1.5	+ 4.4
County Types						
Large Metros (pop. 1 million +)	- 6.8	+ 6.8	- 0.5	+ 7.3	+ 1.7	+ 5.5
Small Metros (pop. <1 million)	- 6.6	+ 6.6	+ 0.7	+ 5.9	+ 1.4	+ 4.4
Nonmetro, Adjacent to Large Metros	- 7.7	+ 7.7	+ 2.4	+ 5.2	+ 1.6	+ 3.6
Nonmetro, Adjacent to Small Metros	- 7.4	+ 7.4	+ 2.6	+ 4.9	+ 1.7	+ 3.1
Rural (nonmetro, not adj. to a metro)	- 8.9	+ 8.9	+ 4.5	+ 4.3	+ 1.3	+ 3.0
Alabama	- 7.0	+ 7.0	+ 1.5	+ 5.5	+ 1.4	+ 4.1
Appalachian Alabama	- 7.6	+ 7.6	+ 2.1	+ 5.5	+ 1.5	+ 4.0
Non-Appalachian Alabama	- 6.2	+ 6.2	+ 0.5	+ 5.5	+ 1.4	+ 4.1
Georgia	- 6.3	+ 6.3	+ 0.6	+ 5.8	+ 1.3	+ 4.5
Appalachian Georgia	- 6.7	+ 6.7	+ 0.3	+ 6.4	+ 1.3	+ 5.1
Non-Appalachian Georgia	- 6.1	+ 6.1	+ 0.7	+ 5.4	+ 1.2	+ 4.2
Kentucky	- 8.8	+ 8.8	+ 3.4	+ 5.4	+ 1.3	+ 4.1
Appalachian Kentucky	- 11.0	+ 11.0	+ 7.1	+ 3.9	+ 1.0	+ 2.8
Non-Appalachian Kentucky	- 7.7	+ 7.7	+ 1.7	+ 6.0	+ 1.4	+ 4.7
Maryland	- 5.2	+ 5.2	- 0.4	+ 5.6	+ 0.9	+ 4.6
Appalachian Maryland	- 7.5	+ 7.5	+ 2.6	+ 5.0	+ 1.0	+ 3.9
Non-Appalachian Maryland	- 5.0	+ 5.0	- 0.5	+ 5.6	+ 0.8	+ 4.6
Mississippi	- 6.3	+ 6.3	+ 1.2	+ 5.1	+ 1.5	+ 3.5
Appalachian Mississippi	- 7.7	+ 7.7	+ 3.7	+ 4.1	+ 1.2	+ 2.8
Non-Appalachian Mississippi	- 5.8	+ 5.8	+ 0.6	+ 5.3	+ 1.6	+ 3.7
New York	- 3.7	+ 3.7	- 2.0	+ 5.8	+ 1.5	+ 4.3
Appalachian New York	- 5.4	+ 5.4	- 1.8	+ 7.3	+ 2.1	+ 5.1
Non-Appalachian New York	- 3.7	+ 3.7	- 1.9	+ 5.6	+ 1.4	+ 4.3
North Carolina	- 6.9	+ 6.9	+ 0.9	+ 6.0	+ 1.8	+ 4.3
Appalachian North Carolina	- 7.1	+ 7.1	+ 0.5	+ 6.6	+ 1.7	+ 4.9
Non-Appalachian North Carolina	- 6.9	+ 6.9	+ 1.1	+ 5.8	+ 1.8	+ 4.1
Ohio	- 5.7	+ 5.7	+ 0.3	+ 5.5	+ 1.5	+ 3.9
Appalachian Ohio	- 7.1	+ 7.1	+ 1.9	+ 5.2	+ 1.7	+ 3.5
Non-Appalachian Ohio	- 5.4	+ 5.4	- 0.1	+ 5.5	+ 1.5	+ 4.0
Pennsylvania	- 6.0	+ 6.0	+ 0.0	+ 6.1	+ 1.4	+ 4.8
Appalachian Pennsylvania	- 6.3	+ 6.3	+ 0.2	+ 6.2	+ 1.6	+ 4.6
Non-Appalachian Pennsylvania	- 5.8	+ 5.8	- 0.2	+ 5.9	+ 1.2	+ 4.7
South Carolina	- 7.4	+ 7.4	+ 1.5	+ 5.8	+ 1.7	+ 4.1
Appalachian South Carolina	- 7.6	+ 7.6	+ 1.3	+ 6.2	+ 1.9	+ 4.4
Non-Appalachian South Carolina	- 7.2	+ 7.2	+ 1.6	+ 5.6	+ 1.7	+ 3.9
Tennessee	- 7.9	+ 7.9	+ 2.4	+ 5.5	+ 1.2	+ 4.3
Appalachian Tennessee	- 7.9	+ 7.9	+ 2.8	+ 5.2	+ 1.4	+ 3.8
Non-Appalachian Tennessee	- 7.8	+ 7.8	+ 2.0	+ 5.8	+ 1.1	+ 4.7
Virginia	- 6.0	+ 6.0	- 0.6	+ 6.6	+ 1.6	+ 5.0
Appalachian Virginia	- 9.7	+ 9.7	+ 3.9	+ 5.7	+ 2.7	+ 3.0
Non-Appalachian Virginia	- 5.3	+ 5.3	- 1.3	+ 6.6	+ 1.4	+ 5.2
West Virginia (entire state)	- 7.1	+ 7.1	+ 2.2	+ 5.0	+ 1.2	+ 3.7

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 5.10: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2008-2012 to 2013-2017

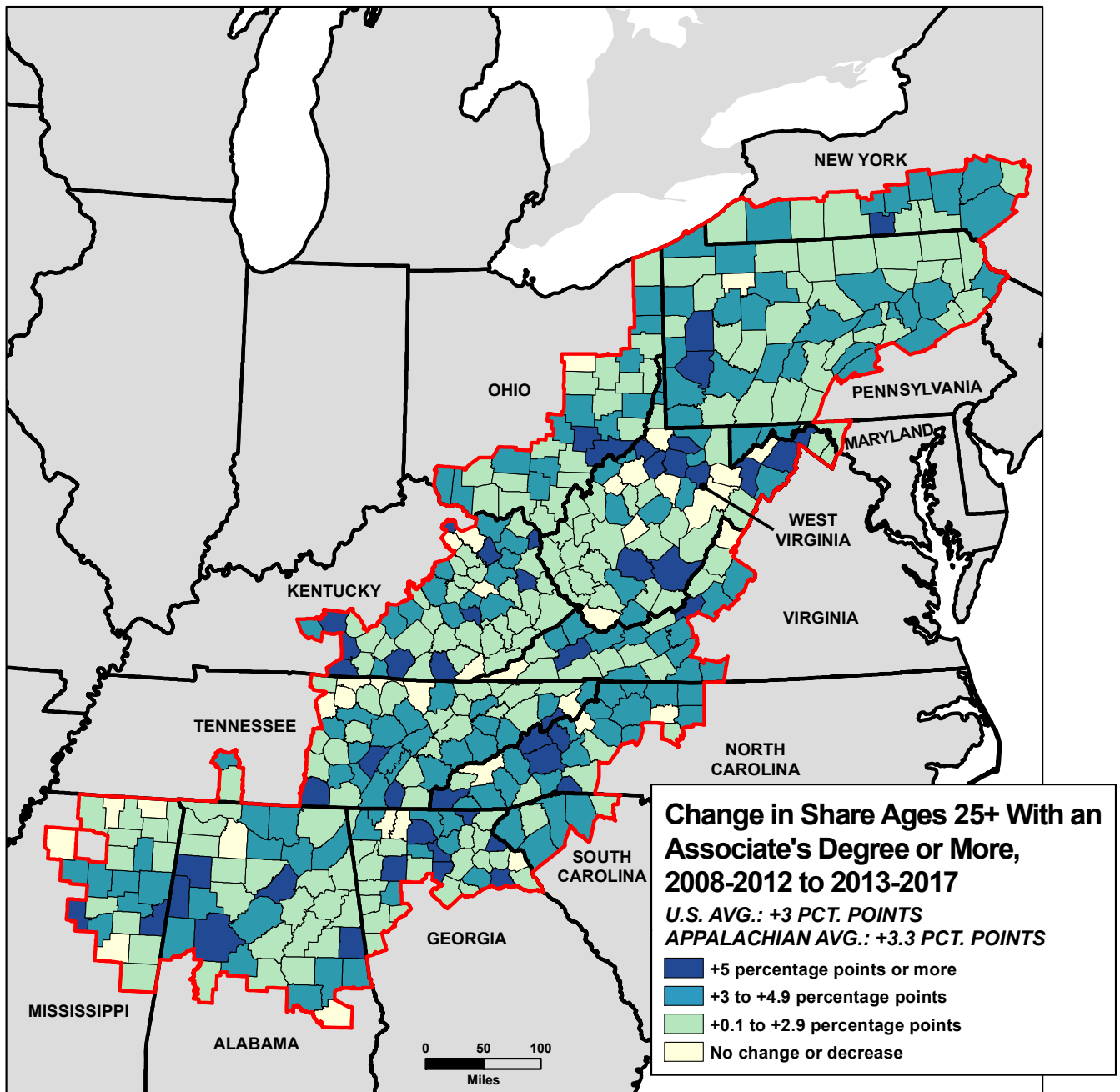


Map Title: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Since the 2008-2012 period, the share of Appalachian adults who have completed high school or more has increased more than two percentage points. This rise, which is close to a full percentage point above the national average, has continued a longstanding trend in the Region. And that increase has been even greater in some places: The share of adults with at least a high school diploma rose at least four percentage points in the Appalachian counties of Kentucky and Virginia. In 78 Appalachian counties—all but six in Central, South Central, and Southern Appalachia—the share of adults with a high school diploma or more rose by at least five percentage points (more than three times the national average) between 2008-2012 and 2013-2017. In about half of these 78 counties, however, less than 80 percent of adult residents have completed high school.

Figure 5.11: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree or More, 2008-2012 to 2013-2017

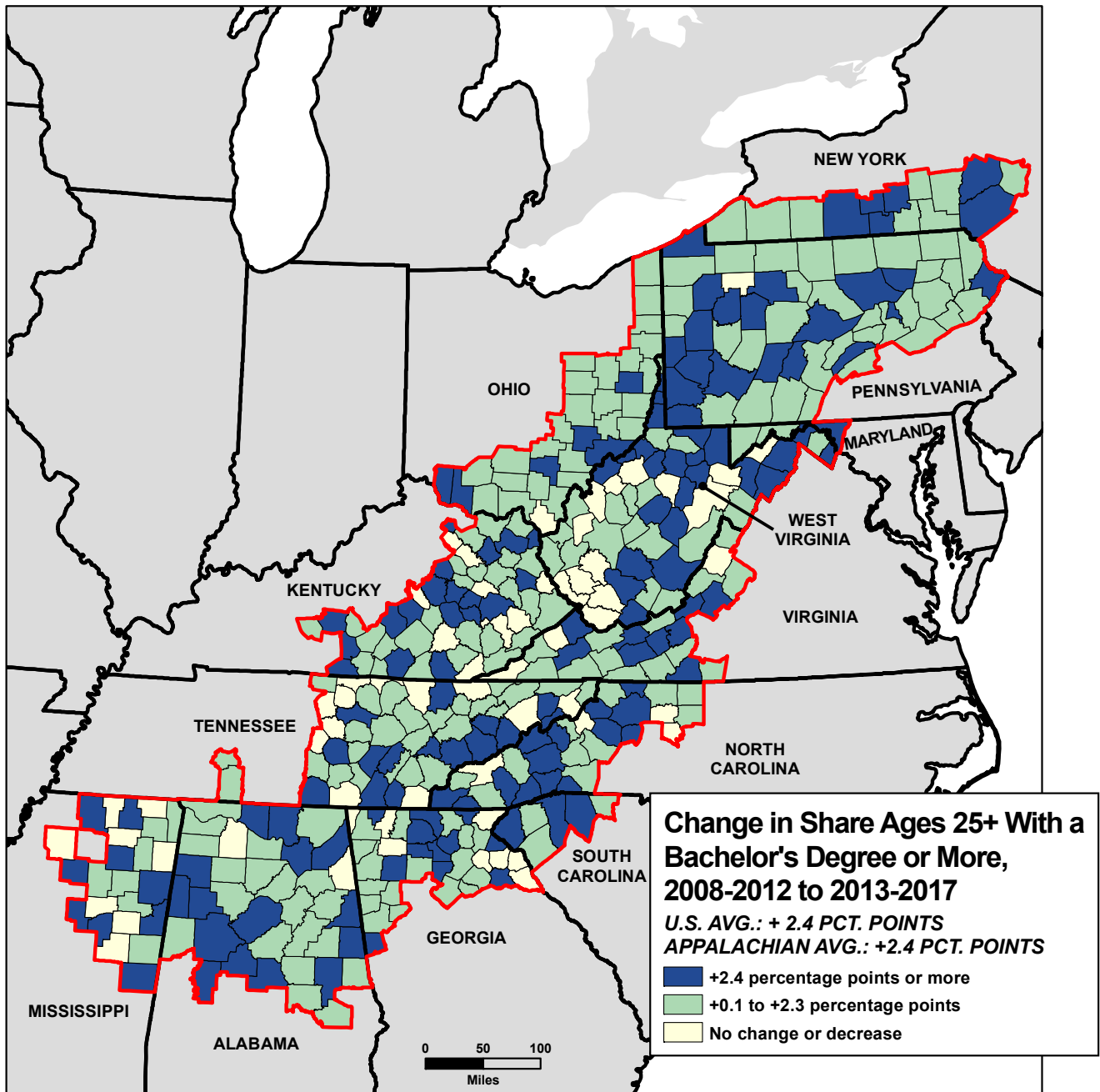


Map Title: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree or More, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

The share of adults ages 25 and over in the Appalachian Region with at least an associate's degree increased more than three percentage points between 2008-2012 and 2013-2017, slightly above the national average. And in 50 Appalachian counties, the share rose at least five percentage points. Yet the increase was smaller than the national average in 187 of the Region's counties, and either stayed the same or decreased in 35 others. Throughout Appalachia, improvements in the share of adults with at least a bachelor's degree were responsible for most of the increase: The share of adults whose highest level of education was an associate's degree or more rose less than a full percentage point between the two periods.

Figure 5.12: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Although the percentage of Appalachian adults ages 25 and over with at least a bachelor's degree is considerably lower than the national average, that share has been increasing. Both in Appalachia and nationwide, it was more than two percentage points higher in 2013-2017 than it was in 2008-2012, suggesting a continued trend toward greater educational attainment among cohorts entering this age group. And in 152 of the Region's 420 counties (scattered throughout the Region), the increased share matched or exceeded the national average. Conversely, the share of adults ages 25 and over with at least a four-year degree either remained the same or decreased in 61 counties. While counties in the latter group were likewise spread throughout the Region, three-fourths of them were outside metropolitan areas.

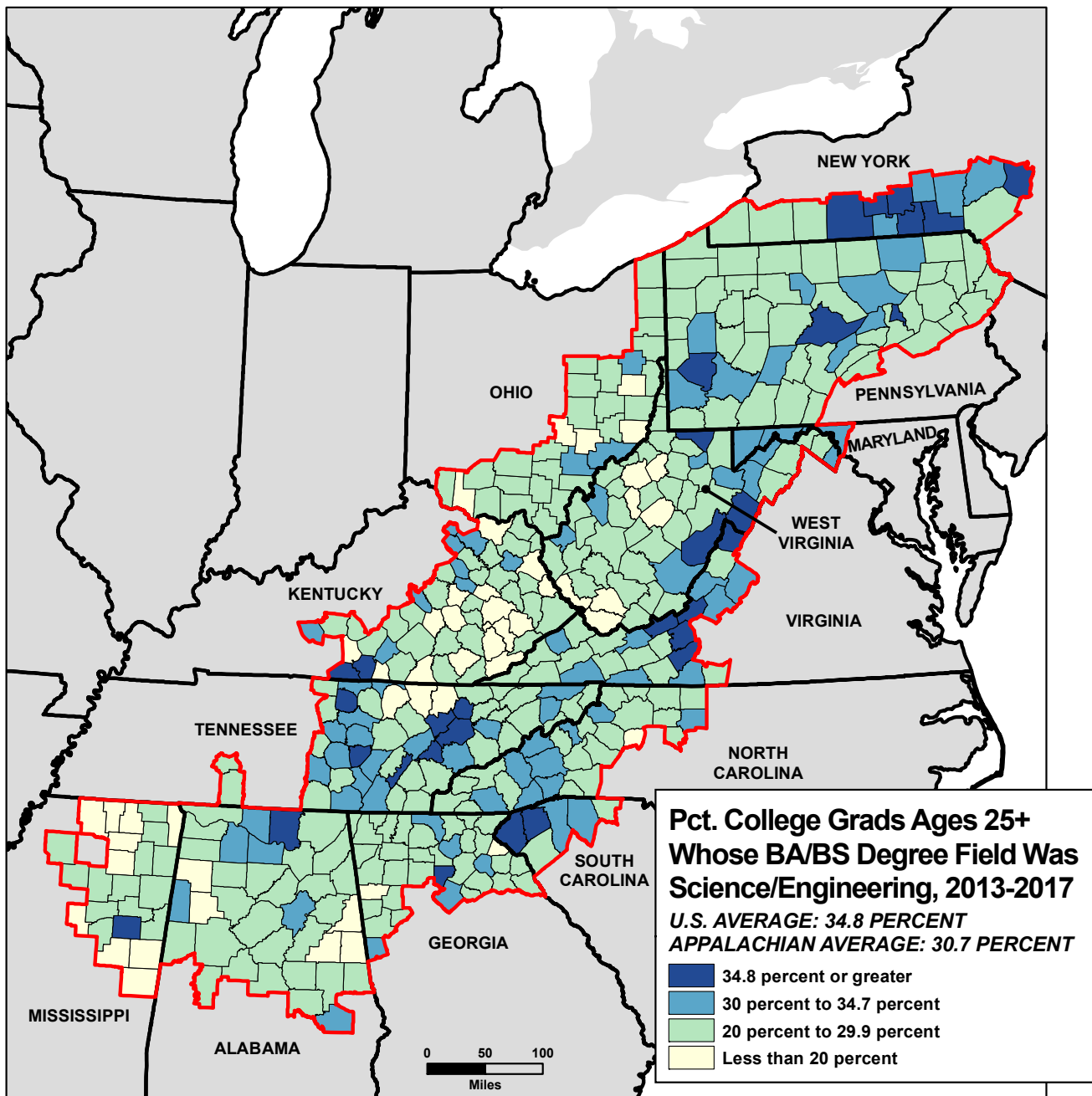
Table 5.7: Bachelor's Degree Field (First Major) for Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2013-2017

Bachelor's Degree Field (First Major)	Total Population Ages 25 and Over With a Bachelor's Degree or More, 2013-2017	Percent of Population Ages 25 and Over With a Bachelor's Degree or More				
		Science and Engineering	Science- and Engineering-Related Fields	Business	Education	Arts, Humanities, and Other
United States	66,887,603	34.8	9.3	20.4	12.7	22.7
Appalachian Region	4,173,468	30.7	10.9	20.2	17.8	20.5
Subregions						
Northern Appalachia	1,449,364	31.6	11.2	18.3	18.4	20.5
North Central Appalachia	336,748	28.6	12.7	18.7	20.5	19.5
Central Appalachia	181,424	26.1	13.4	15.8	26.1	18.5
South Central Appalachia	820,737	31.7	10.7	18.9	16.1	22.6
Southern Appalachia	1,385,195	30.2	9.8	23.8	16.6	19.7
County Types						
Large Metros (pop. 1 million +)	1,294,424	31.6	10.0	23.7	14.3	20.3
Small Metros (pop. <1 million)	1,864,785	32.0	10.9	19.3	16.8	21.0
Nonmetro, Adjacent to Large Metros	262,164	27.1	11.6	17.4	24.0	19.8
Nonmetro, Adjacent to Small Metros	467,275	27.4	12.1	17.3	23.5	19.7
Rural (nonmetro, not adj. to a metro)	284,820	26.1	11.6	16.8	25.7	19.7
Alabama	803,578	29.3	10.3	23.2	17.4	19.7
Appalachian Alabama	530,288	30.1	10.1	23.4	16.7	19.6
Non-Appalachian Alabama	273,290	27.9	10.7	22.8	18.7	19.9
Georgia	2,003,531	32.1	9.0	24.3	13.4	21.2
Appalachian Georgia	557,418	30.3	9.3	25.6	15.2	19.6
Non-Appalachian Georgia	1,446,113	32.8	8.9	23.8	12.7	21.8
Kentucky	692,568	28.9	11.6	20.1	16.9	22.6
Appalachian Kentucky	118,473	25.0	13.1	14.8	26.9	20.2
Non-Appalachian Kentucky	574,095	29.7	11.3	21.1	14.8	23.1
Maryland	1,596,997	41.0	8.7	18.2	9.9	22.3
Appalachian Maryland	35,684	33.1	9.4	16.5	19.0	22.0
Non-Appalachian Maryland	1,561,313	41.2	8.6	18.2	9.7	22.3
Mississippi	417,318	25.4	12.1	21.4	21.8	19.3
Appalachian Mississippi	75,431	24.8	11.6	20.0	26.2	17.5
Non-Appalachian Mississippi	341,887	25.5	12.3	21.7	20.8	19.7
New York	4,820,813	34.2	8.7	18.9	11.4	26.8
Appalachian New York	183,296	36.7	9.3	12.7	18.5	22.8
Non-Appalachian New York	4,637,517	34.1	8.7	19.1	11.2	27.0
North Carolina	2,025,716	34.2	9.3	20.2	13.2	23.0
Appalachian North Carolina	321,142	30.8	10.8	17.4	16.0	25.0
Non-Appalachian North Carolina	1,704,574	34.8	9.1	20.8	12.7	22.7
Ohio	2,148,627	30.7	11.0	21.6	16.1	20.6
Appalachian Ohio	243,884	25.7	13.6	18.8	22.6	19.3
Non-Appalachian Ohio	1,904,743	31.3	10.7	22.0	15.3	20.8
Pennsylvania	2,673,219	33.2	10.4	19.8	15.2	21.4
Appalachian Pennsylvania	1,078,237	31.7	11.2	19.1	17.6	20.3
Non-Appalachian Pennsylvania	1,594,982	34.2	9.8	20.3	13.5	22.2
South Carolina	898,081	31.4	9.2	22.2	15.9	21.3
Appalachian South Carolina	222,058	32.0	9.3	21.7	16.4	20.6
Non-Appalachian South Carolina	676,023	31.3	9.1	22.4	15.7	21.5
Tennessee	1,166,773	29.9	10.3	22.6	15.0	22.2
Appalachian Tennessee	443,329	31.3	11.2	20.5	16.8	20.3
Non-Appalachian Tennessee	723,444	29.1	9.8	23.9	13.9	23.3
Virginia	2,133,497	40.5	7.5	19.0	9.7	23.2
Appalachian Virginia	106,807	35.4	10.0	16.6	16.3	21.6
Non-Appalachian Virginia	2,026,690	40.8	7.4	19.1	9.4	23.3
West Virginia (entire state)	257,421	28.6	12.6	19.1	20.8	18.9

Note: Examples of "Science- and Engineering-Related Fields" include nursing, architecture, and mathematics teacher education.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Figure 5.13: Among Persons Ages 25 and Over in the Appalachian Region With a Bachelor’s Degree or More, Percent Whose Bachelor’s Degree Field (First Major) Was Science and Engineering, 2013-2017



Map Title: Among Persons Ages 25 and Over in the Appalachian Region With a Bachelor’s Degree or More, Percent Whose Bachelor’s Degree Field (First Major) Was Science and Engineering, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Among the 4.2 million adults in the Appalachian Region with a bachelor’s degree or more, 31 percent held a degree in the science and engineering field—slightly lower than the national share of 35 percent. But there was much variation within the Region. In 31 Appalachian counties, the share of BA/BS holders with science and engineering degrees matched or exceeded the national average. A number of these counties are home to major universities including Virginia Tech, Penn State, and Carnegie Mellon University. Yet in another 49 counties in the Region, less than one-fifth of adult college graduates had a science and engineering degree. Science and engineering jobs are becoming increasingly important in keeping the United States competitive in the global economy. The field of science and engineering includes the following detailed fields and majors: computers, mathematics, and statistics; biological, agricultural, and environmental sciences; physical and related science; psychology; social sciences; and engineering.

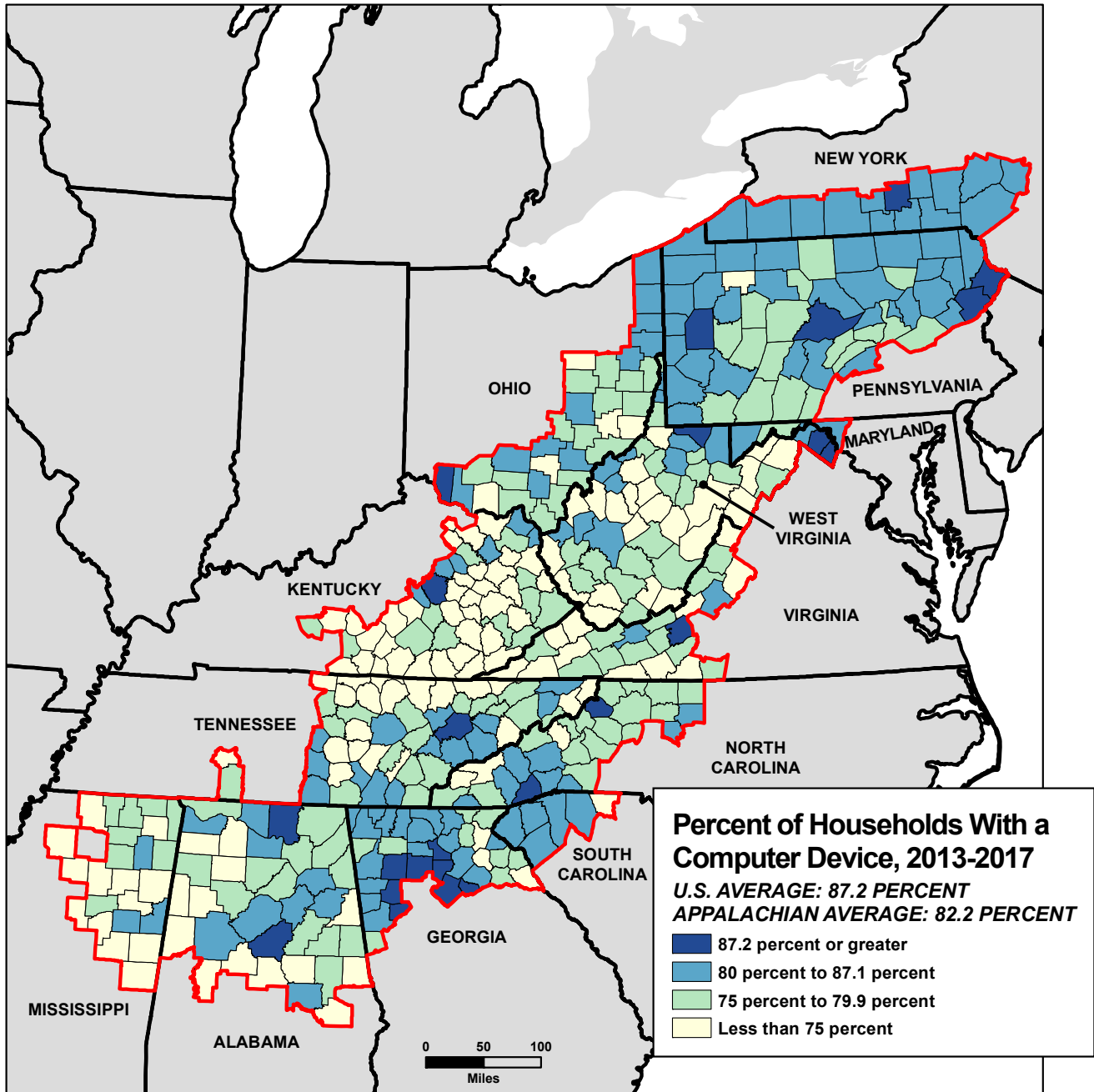
Table 5.8: Households in the Appalachian Region With a Computer Device, By Type of Device, 2013-2017

Device Ownership	Total Households	Percent of Households With One of More Computer Devices					Percent of Households Without a Computer Device
		Total	Desktop or Laptop Computer	Smartphone	Tablet	Other Device	
United States	118,825,921	87.2	78.2	71.1	53.7	4.8	12.8
Appalachian Region	9,968,829	82.2	72.2	63.8	48.3	3.6	17.8
Subregions							
Northern Appalachia	3,355,355	82.7	74.4	61.8	47.5	3.3	17.3
North Central Appalachia	952,196	80.7	70.6	61.0	46.3	3.4	19.3
Central Appalachia	742,914	74.9	63.7	54.9	41.9	3.3	25.1
South Central Appalachia	1,936,283	81.6	71.4	63.2	47.3	3.1	18.4
Southern Appalachia	2,982,081	84.3	73.0	69.5	52.0	4.2	15.7
County Types							
Large Metros (pop. 1 million +)	2,314,330	86.9	78.1	70.8	54.2	4.1	13.1
Small Metros (pop. <1 million)	4,239,720	83.2	73.2	65.3	49.4	3.9	16.8
Nonmetro, Adjacent to Large Metros	856,434	80.0	69.2	59.8	44.5	2.7	20.0
Nonmetro, Adjacent to Small Metros	1,570,998	77.8	67.1	56.7	42.8	2.9	22.2
Rural (nonmetro, not adj. to a metro)	987,347	75.8	64.9	55.7	41.8	2.7	24.2
Alabama	1,856,695	81.4	68.7	65.9	48.2	3.7	18.6
Appalachian Alabama	1,195,020	82.6	70.0	67.5	49.7	3.5	17.4
Non-Appalachian Alabama	661,675	79.3	66.5	63.1	45.6	3.9	20.7
Georgia	3,663,104	87.0	77.0	72.6	54.5	4.8	13.0
Appalachian Georgia	1,077,035	88.4	79.4	73.9	56.9	5.5	11.6
Non-Appalachian Georgia	2,586,069	86.5	76.1	72.1	53.6	4.5	13.5
Kentucky	1,724,514	82.4	71.5	65.8	49.6	4.1	17.6
Appalachian Kentucky	459,071	75.6	64.7	56.3	42.7	3.7	24.4
Non-Appalachian Kentucky	1,265,443	84.9	74.0	69.3	52.1	4.3	15.1
Maryland	2,181,093	90.2	83.1	75.2	58.1	6.3	9.8
Appalachian Maryland	95,623	81.3	72.5	62.4	47.6	3.2	18.7
Non-Appalachian Maryland	2,085,470	90.6	83.6	75.8	58.5	6.4	9.4
Mississippi	1,103,514	79.0	64.0	65.8	46.4	3.7	21.0
Appalachian Mississippi	236,502	76.1	59.5	63.3	43.7	2.2	23.9
Non-Appalachian Mississippi	867,012	79.8	65.2	66.5	47.1	4.2	20.2
New York	7,302,710	86.8	79.0	70.0	53.1	6.0	13.2
Appalachian New York	416,654	84.4	77.0	60.1	46.6	3.2	15.6
Non-Appalachian New York	6,886,056	87.0	79.1	70.6	53.5	6.2	13.0
North Carolina	3,874,346	85.5	75.9	69.5	52.1	4.5	14.5
Appalachian North Carolina	703,053	81.9	72.4	62.4	46.6	3.2	18.1
Non-Appalachian North Carolina	3,171,293	86.3	76.6	71.0	53.4	4.8	13.7
Ohio	4,633,145	85.8	76.0	68.1	51.9	3.7	14.2
Appalachian Ohio	793,340	80.9	70.2	61.2	46.4	2.8	19.1
Non-Appalachian Ohio	3,839,805	86.8	77.2	69.5	53.1	3.9	13.2
Pennsylvania	5,007,442	84.8	76.7	65.9	50.6	3.7	15.2
Appalachian Pennsylvania	2,339,671	83.0	75.0	62.4	48.0	3.4	17.0
Non-Appalachian Pennsylvania	2,667,771	86.3	78.3	69.1	52.9	4.1	13.7
South Carolina	1,871,307	84.2	73.1	68.7	51.0	5.8	15.8
Appalachian South Carolina	473,524	83.5	72.7	67.8	51.1	4.2	16.5
Non-Appalachian South Carolina	1,397,783	84.4	73.2	69.0	51.0	6.3	15.6
Tennessee	2,547,194	83.2	72.2	67.7	50.6	4.4	16.8
Appalachian Tennessee	1,137,525	80.9	69.9	63.5	47.5	3.0	19.1
Non-Appalachian Tennessee	1,409,669	85.0	74.0	71.0	53.0	5.6	15.0
Virginia	3,105,636	88.6	81.0	73.1	56.2	5.0	11.4
Appalachian Virginia	304,140	77.8	67.9	56.9	43.5	3.2	22.2
Non-Appalachian Virginia	2,801,496	89.7	82.4	74.9	57.5	5.2	10.3
West Virginia (entire state)	737,671	79.8	69.8	59.3	45.4	3.9	20.2

Note: Device percentages are not mutually exclusive.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Figure 5.14: Percent of Households in the Appalachian Region With a Computer Device, 2013-2017



Map Title: Percent of Households in the Appalachian Region With a Computer Device, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In 2013-2017, 82 percent of households in the Appalachian Region had one or more computer devices (desktop or laptop, smartphone, tablet, or other device)—five points below the national average. And the share is even lower in most of the Region: it was below 80 percent in 264 of Appalachia’s 420 counties and less than 75 percent in 127 of these. All but 15 of the counties in the latter group were outside metropolitan areas and nearly half were in the most rural areas. Central Appalachia had 54 of these counties. Yet there were 24 Appalachian counties where the share of households with a computer was at or above the national average; all but three of these were in metropolitan areas. With computer devices now commonly used for such activities as school work, entertainment, online banking, health care access, and socializing, these data suggest aspects of a “digital divide”—particularly between urban and rural areas in Appalachia.

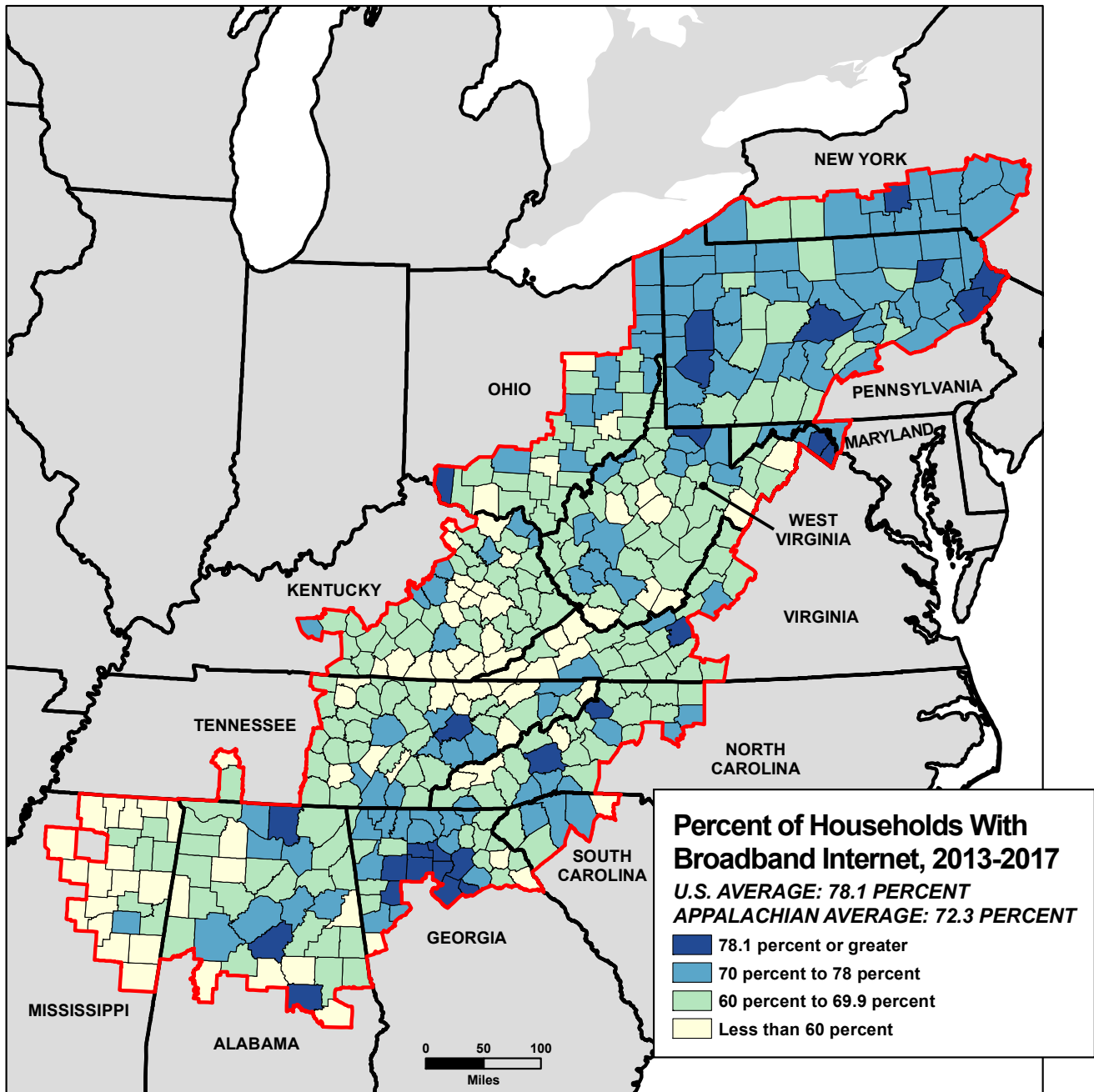
Table 5.9: Households in the Appalachian Region With an Internet Subscription, By Type of Subscription, 2013-2017

Type of Internet Subscription	Total Households	Percent of Households With an Internet Subscription					
		Total	Dial-Up Only	Broadband (High-Speed)			
				Total	Cable, Fiber Optic, or DSL	Cellular	Satellite
United States	118,825,921	78.7	0.6	78.1	67.0	49.3	5.4
Appalachian Region	9,968,829	73.1	0.8	72.3	60.8	42.8	5.4
Subregions							
Northern Appalachia	3,355,355	75.0	1.0	74.0	64.4	42.1	4.4
North Central Appalachia	952,196	71.5	0.9	70.6	58.5	40.3	6.3
Central Appalachia	742,914	65.2	0.9	64.3	53.2	34.5	5.9
South Central Appalachia	1,936,283	71.9	0.7	71.2	58.8	41.8	5.3
Southern Appalachia	2,982,081	74.2	0.6	73.7	60.6	47.2	6.1
County Types							
Large Metros (pop. 1 million +)	2,314,330	78.9	0.6	78.3	68.9	49.2	4.7
Small Metros (pop. <1 million)	4,239,720	74.4	0.7	73.7	62.7	44.0	4.7
Nonmetro, Adjacent to Large Metros	856,434	69.7	1.1	68.6	54.5	39.3	6.4
Nonmetro, Adjacent to Small Metros	1,570,998	67.7	1.1	66.6	53.2	37.2	6.6
Rural (nonmetro, not adj. to a metro)	987,347	65.5	0.9	64.6	51.2	34.8	7.0
Alabama	1,856,695	70.9	0.7	70.2	55.6	44.9	6.0
Appalachian Alabama	1,195,020	71.9	0.6	71.3	56.8	45.7	5.9
Non-Appalachian Alabama	661,675	68.9	0.8	68.1	53.5	43.4	6.0
Georgia	3,663,104	77.2	0.5	76.8	65.7	49.2	5.8
Appalachian Georgia	1,077,035	80.1	0.5	79.6	69.4	50.7	6.1
Non-Appalachian Georgia	2,586,069	76.0	0.4	75.6	64.2	48.5	5.6
Kentucky	1,724,514	73.5	0.7	72.9	60.7	46.4	5.9
Appalachian Kentucky	459,071	66.1	0.9	65.2	54.4	36.5	6.0
Non-Appalachian Kentucky	1,265,443	76.2	0.6	75.6	63.0	50.0	5.9
Maryland	2,181,093	83.4	0.5	82.8	74.3	53.2	3.8
Appalachian Maryland	95,623	72.4	1.0	71.4	59.8	44.5	5.2
Non-Appalachian Maryland	2,085,470	83.9	0.5	83.4	75.0	53.6	3.7
Mississippi	1,103,514	64.9	0.7	64.3	46.2	41.1	7.9
Appalachian Mississippi	236,502	60.4	0.8	59.6	38.0	38.4	8.3
Non-Appalachian Mississippi	867,012	66.2	0.6	65.5	48.4	41.9	7.8
New York	7,302,710	79.4	0.5	78.9	71.8	45.7	3.2
Appalachian New York	416,654	75.2	1.0	74.2	62.4	39.3	6.4
Non-Appalachian New York	6,886,056	79.7	0.4	79.2	72.4	46.1	3.0
North Carolina	3,874,346	76.4	0.6	75.8	65.2	47.6	4.9
Appalachian North Carolina	703,053	72.6	0.8	71.9	60.2	41.2	5.4
Non-Appalachian North Carolina	3,171,293	77.2	0.5	76.7	66.3	49.0	4.8
Ohio	4,633,145	77.8	0.7	77.1	66.1	47.8	4.7
Appalachian Ohio	793,340	71.5	1.0	70.4	57.3	39.5	6.1
Non-Appalachian Ohio	3,839,805	79.1	0.6	78.5	68.0	49.5	4.5
Pennsylvania	5,007,442	77.6	0.8	76.8	68.9	46.0	3.4
Appalachian Pennsylvania	2,339,671	75.9	1.0	74.9	66.2	43.3	3.8
Non-Appalachian Pennsylvania	2,667,771	79.2	0.7	78.5	71.2	48.4	3.0
South Carolina	1,871,307	73.0	0.6	72.4	60.8	45.6	5.4
Appalachian South Carolina	473,524	73.6	0.5	73.1	61.4	47.2	5.6
Non-Appalachian South Carolina	1,397,783	72.8	0.6	72.2	60.6	45.0	5.4
Tennessee	2,547,194	73.0	0.6	72.4	59.5	46.4	5.5
Appalachian Tennessee	1,137,525	70.8	0.7	70.2	57.6	41.5	5.1
Non-Appalachian Tennessee	1,409,669	74.8	0.5	74.3	60.9	50.3	5.9
Virginia	3,105,636	80.7	0.7	80.0	68.4	52.8	5.2
Appalachian Virginia	304,140	68.0	1.1	66.8	52.7	37.6	6.7
Non-Appalachian Virginia	2,801,496	82.1	0.6	81.5	70.1	54.5	5.0
West Virginia (entire state)	737,671	71.0	0.7	70.3	60.2	38.7	5.5

Note: Households can have more than one type of Internet subscription at a time. Broadband categories are not mutually exclusive.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Figure 5.15: Percent of Households in the Appalachian Region With a Broadband Internet Subscription, 2013-2017



Map Title: Percent of Households in the Appalachian Region With a Broadband Internet Subscription, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Access to broadband or high-speed Internet service (cable, fiber optic, DSL, cellular, or satellite) enhances people’s ability to pay bills, pursue formal and informal learning, telework, and connect with friends and family. During the 2013-2017 period, almost three in four Appalachian households (72 percent) had a broadband Internet subscription, compared to nearly four in five households nationwide (78 percent). Yet there are signs of a rural-urban “digital divide” within the Region: In 80 Appalachian counties—69 of which were outside metropolitan areas—less than 60 percent of households had a broadband subscription. (Nearly half of these 80 counties were in the Region’s most rural areas.) In contrast, all but one of the 27 counties with subscription rates at or above the national average were in metro areas—and the sole exception (Watauga County, North Carolina) is home to a major university (Appalachian State). With high-speed Internet access being credited as enhancing economic growth and development, these are signs that many communities in the Region may be at risk of being left behind.

TRENDS IN EDUCATION

- Since the 2008-2012 period, the share of Appalachian adults ages 25 and over with at least a high school diploma has risen more than two percentage points, to 86 percent in 2013-2017 (see Tables 5.1 and 5.4). The increase is almost a full percentage point greater than the national average, placing the Region's high school completion prevalence almost equal to that of the country. Most of this increase is due to the rising share of adults attaining a bachelor's degree or more.
- Within the Region, the high school completion prevalence among adults ages 25 and over increased the most in Central Appalachia (an improvement of more than four percentage points) and in Appalachia's most rural counties (an increase of more than three points). With these improvements, the share of adults completing high school as of 2013-2017 has reached 78 percent in Central Appalachia and has surpassed 80 percent in the Region's rural areas. The Appalachian sections of Kentucky and Virginia had the largest increases among the states—at least four percentage points.
- Nearly one-third of Appalachian adults ages 25 and over had at least an associate's degree in 2013-2017—more than three percentage points higher than in 2008-2012. In large metropolitan areas and the Appalachian sections of Pennsylvania and North Carolina, the increase was almost four points. The increase was smaller in Central Appalachia (2.5 points). Throughout the Region, improvements in the share of adults with at least a bachelor's degree fueled most of this increase; the percentage whose highest level of education was an associate's degree rose about one percentage point.
- The share of adults ages 25 and over in the Region with at least a bachelor's degree has increased more than two percentage points since 2008-2012—in this case, approaching 24 percent. The increase has been at least two percentage points in four of the five subregions and has been even greater in metropolitan areas and in the Appalachian portions of several states—particularly Maryland, North Carolina, Pennsylvania, South Carolina, and Virginia. In Central Appalachia, the Region's nonmetropolitan counties, and in Appalachian Ohio, the improvement has been smaller.
- The pattern of improvement among working-age adults ages 25 to 64 has been similar to that for all adults, except that the overall improvement was smaller: 1.2 percentage points for high school completion, 2.9 points for completion of at least an associate's degree, and 2.1 points for attainment of a college degree (see Table 5.5). Central Appalachia, Appalachian Kentucky and Virginia, and the Region's most rural counties, still had the greatest improvement in the share with at least a high school diploma. Northern Appalachia, counties in large metros, and the Appalachian sections of Pennsylvania and Virginia, showed the greatest gains in the share of working-age adults with at least an associate's and a bachelor's degree—with the gains in attaining the latter degree driving most of the increase. North Central and Central Appalachia, rural counties, and the Appalachian sections of Ohio, Kentucky, and Mississippi experienced the largest gains in the share of adults whose highest level of education was an associate's degree.
- The greatest improvement since 2008-2012 has been among adults ages 65 and over. The share of older adults in Appalachia with at least a high school diploma has risen seven percentage points; the share with at least a bachelor's degree has increased four points (see Table 5.6). Possible factors fueling this increase include both the influx of younger, more educated cohorts into the older ages, and the arrival of well-educated older adults moving into the Region upon retirement. Within Appalachia's subregions, county types, and states, the patterns of improvement that were present among working-age adults generally held among older adults as well. (In Central Appalachia, for example, the share of older adults with at least a high school diploma rose more than 10 percentage points, while the share with a bachelor's degree or more increased by just over two points.)
- Even with the improvements cited above, however, it is important to note that regardless of age, the prevalence of four-year college completion among adults remains well below the U.S. average in many parts of the Region (see Tables 5.1 through 5.3). For example, the percentage of persons ages 25 and over with a bachelor's degree or more remained at least 10 percentage points below the national share in the Appalachian sections of six states (Kentucky, Maryland, Mississippi, Ohio, Virginia, and West Virginia).

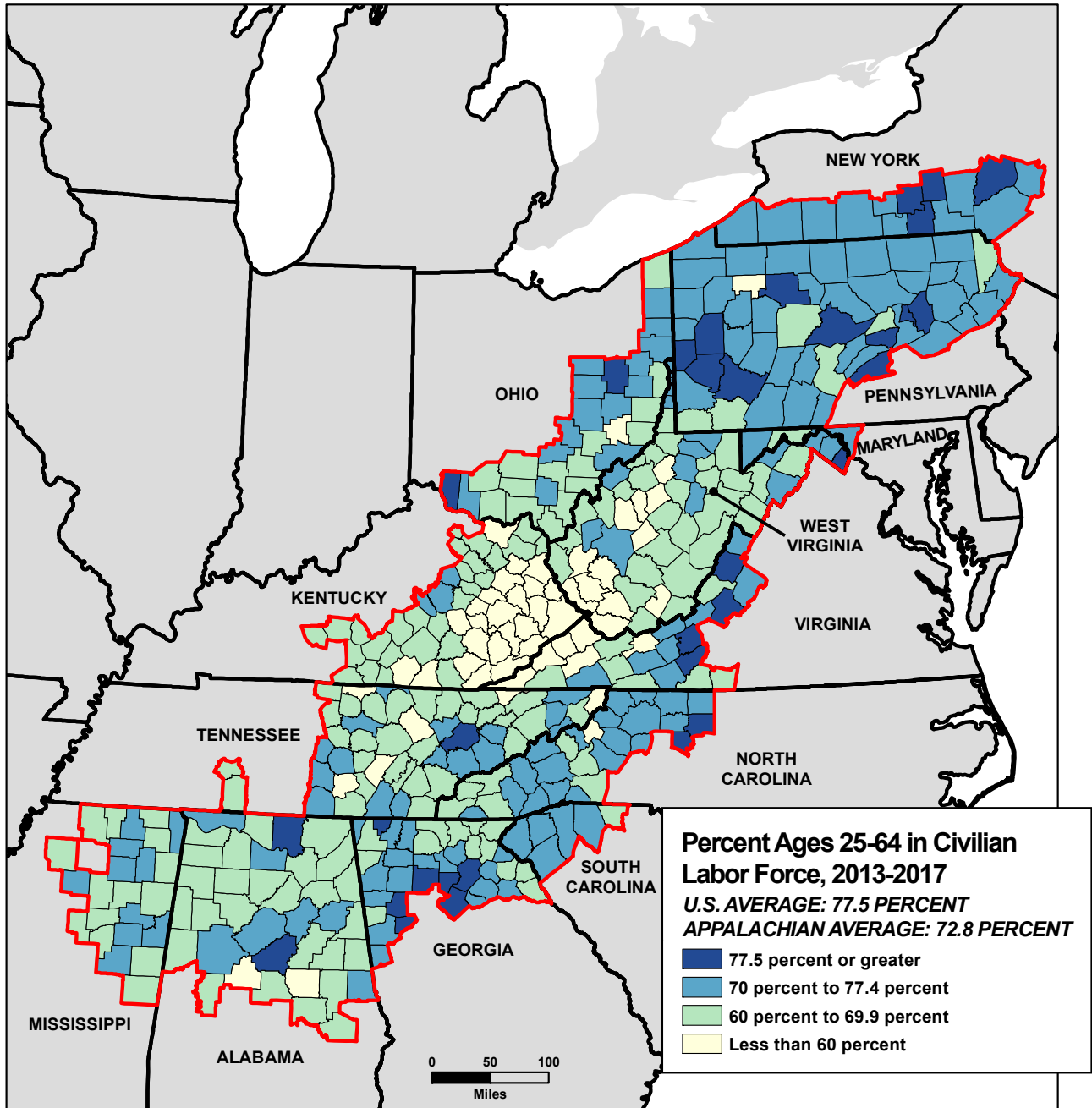
CHAPTER 6: LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Table 6.1: Labor Force, Employment, and Unemployment Status of Persons Ages 25 to 64 in the Appalachian Region, 2013-2017

Labor Force, Employment, and Unemployment	Total Number of Civilian Persons Ages 25-64	Total Persons Ages 25-64 in Civilian Labor Force		Employment Rate (Pct. of Civ. Labor Force)	Unemployment Rate (Pct. of Civ. Labor Force)
		Number	Percent		
United States	167,916,375	130,055,255	77.5	94.6	5.4
Appalachian Region	13,193,123	9,605,374	72.8	94.6	5.4
Subregions					
Northern Appalachia	4,270,090	3,223,856	75.5	94.9	5.1
North Central Appalachia	1,253,724	867,977	69.2	94.4	5.6
Central Appalachia	986,502	588,657	59.7	92.7	7.3
South Central Appalachia	2,465,237	1,796,284	72.9	94.7	5.3
Southern Appalachia	4,217,570	3,128,600	74.2	94.6	5.4
County Types					
Large Metros (pop. 1 million +)	3,217,243	2,506,842	77.9	95.0	5.0
Small Metros (pop. <1 million)	5,556,045	4,095,643	73.7	94.7	5.3
Nonmetro, Adjacent to Large Metros	1,120,350	788,559	70.4	94.3	5.7
Nonmetro, Adjacent to Small Metros	2,021,188	1,390,565	68.8	94.2	5.8
Rural (nonmetro, not adj. to a metro)	1,278,297	823,765	64.4	93.5	6.5
Alabama	2,504,924	1,782,544	71.2	94.0	6.0
Appalachian Alabama	1,622,013	1,161,267	71.6	94.3	5.7
Non-Appalachian Alabama	882,911	621,277	70.4	93.5	6.5
Georgia	5,363,729	4,068,602	75.9	94.0	6.0
Appalachian Georgia	1,648,226	1,271,451	77.1	94.9	5.1
Non-Appalachian Georgia	3,715,503	2,797,151	75.3	93.6	6.4
Kentucky	2,305,009	1,649,764	71.6	94.4	5.6
Appalachian Kentucky	610,210	365,247	59.9	92.5	7.5
Non-Appalachian Kentucky	1,694,799	1,284,517	75.8	94.9	5.1
Maryland	3,228,415	2,648,805	82.0	95.0	5.0
Appalachian Maryland	131,401	94,168	71.7	94.2	5.8
Non-Appalachian Maryland	3,097,014	2,554,637	82.5	95.0	5.0
Mississippi	1,513,503	1,078,873	71.3	93.0	7.0
Appalachian Mississippi	311,941	219,803	70.5	93.6	6.4
Non-Appalachian Mississippi	1,201,562	859,070	71.5	92.8	7.2
New York	10,639,587	8,337,757	78.4	94.4	5.6
Appalachian New York	514,650	387,700	75.3	94.6	5.4
Non-Appalachian New York	10,124,937	7,950,057	78.5	94.4	5.6
North Carolina	5,217,537	3,992,352	76.5	94.2	5.8
Appalachian North Carolina	887,468	653,258	73.6	94.8	5.2
Non-Appalachian North Carolina	4,330,069	3,339,094	77.1	94.1	5.9
Ohio	6,036,907	4,671,186	77.4	94.8	5.2
Appalachian Ohio	1,034,710	738,014	71.3	94.5	5.5
Non-Appalachian Ohio	5,002,197	3,933,172	78.6	94.8	5.2
Pennsylvania	6,700,962	5,236,123	78.1	94.7	5.3
Appalachian Pennsylvania	2,986,416	2,277,814	76.3	95.1	4.9
Non-Appalachian Pennsylvania	3,714,546	2,958,309	79.6	94.5	5.5
South Carolina	2,515,417	1,882,373	74.8	94.2	5.8
Appalachian South Carolina	635,390	476,079	74.9	95.0	5.0
Non-Appalachian South Carolina	1,880,027	1,406,294	74.8	93.9	6.1
Tennessee	3,450,737	2,567,243	74.4	94.6	5.4
Appalachian Tennessee	1,472,057	1,053,062	71.5	94.5	5.5
Non-Appalachian Tennessee	1,978,680	1,514,181	76.5	94.7	5.3
Virginia	4,420,713	3,515,266	79.5	95.6	4.4
Appalachian Virginia	382,341	260,613	68.2	94.5	5.5
Non-Appalachian Virginia	4,038,372	3,254,653	80.6	95.7	4.3
West Virginia (entire state)	956,300	646,898	67.6	94.1	5.9

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

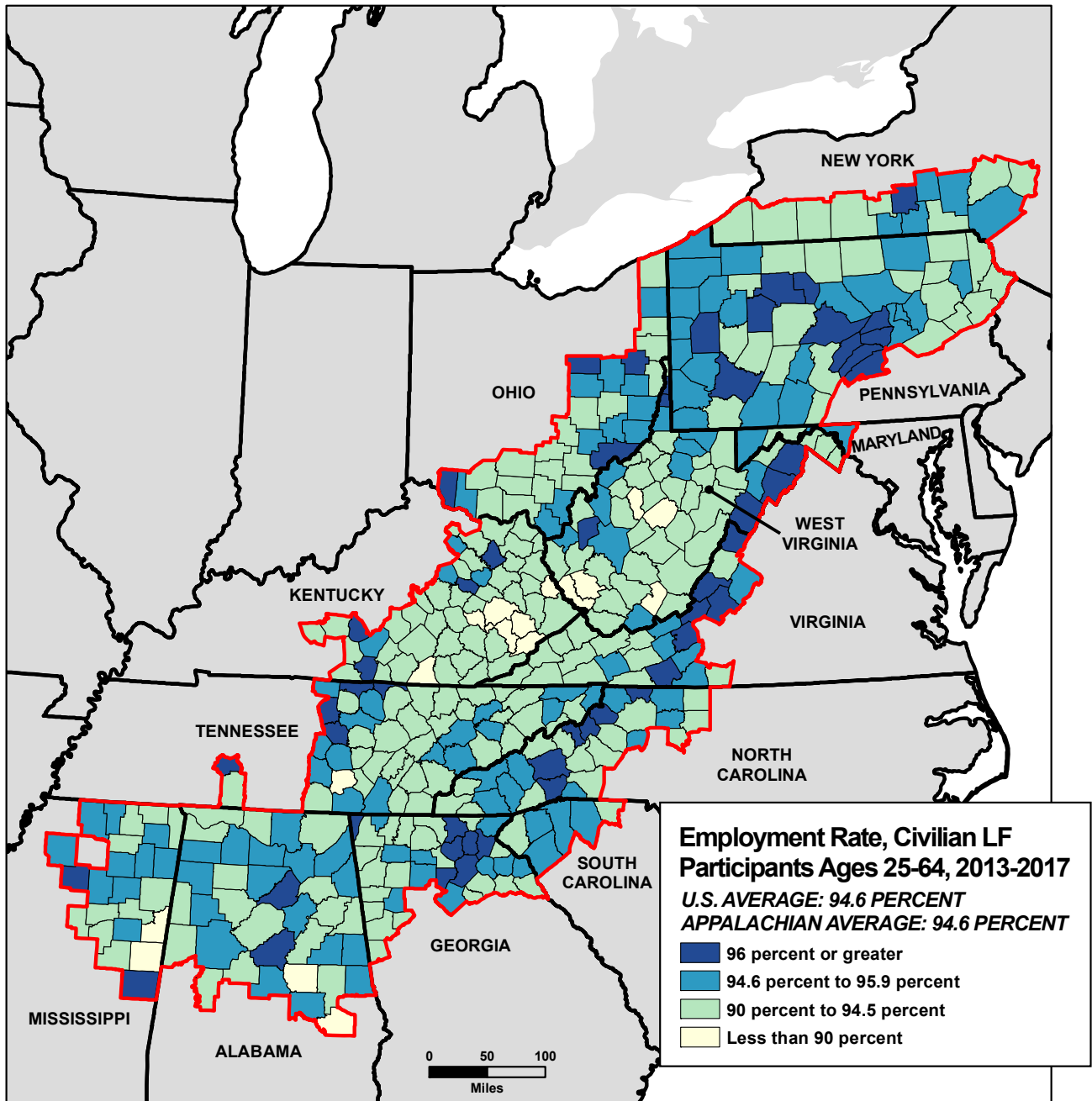
Figure 6.1: Percent of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Labor Force, 2013-2017



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Labor Force, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In the 2013-2017 period, 73 percent of Appalachia’s civilian population in the prime working ages (ages 25 to 64) were in the civilian labor force, slightly below the U.S. average of 77.5 percent. In 33 Appalachian counties (27 of which were in metropolitan areas), the share was at or above the national average, yet there were 53 counties where less than 60 percent of 25-to-64-year-olds were in the civilian labor force. Nearly all the counties in the latter group were outside of metropolitan areas, and 38 were in Central Appalachia. Indeed, just under 60 percent of working-age residents in Central Appalachia and 64 percent of those in the most isolated rural areas were in the labor force. And there are indications of a possible connection between educational attainment and labor force participation. For example, in 24 of the 33 counties where labor force participation levels were at or above the national rate, at least 90 percent of working-age adults had attained at least a high school diploma.

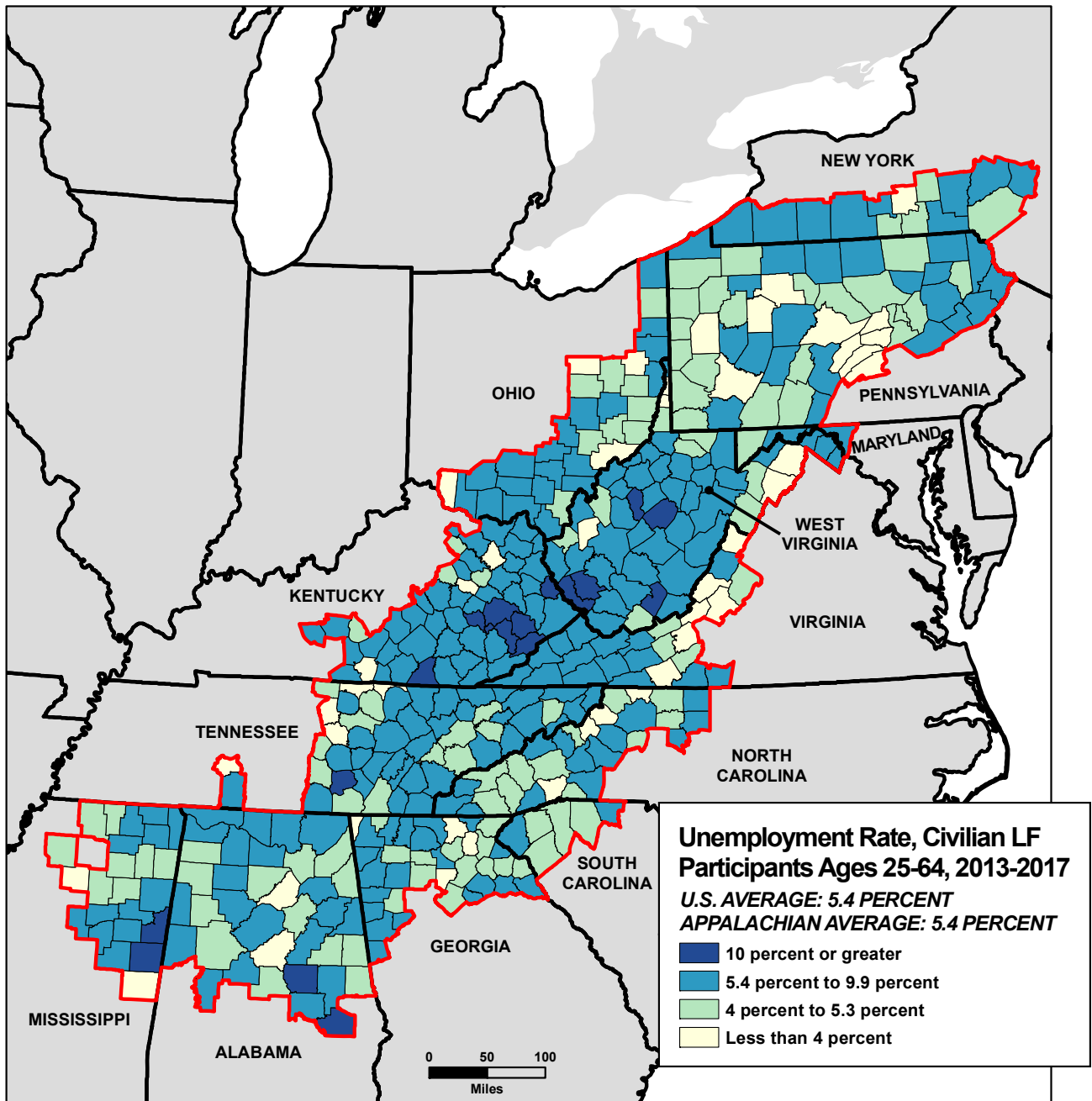
Figure 6.2: Employment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2013-2017



Map Title: Employment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

The employment rate in Appalachia among members of the civilian labor force ages 25 to 64 was identical to the national rate during the 2013-2017 period. Although there were only slight differences among subregions and urban/rural county types, there was some variation at the county level. In 179 of the Region's 420 counties, the employment rate matched or exceeded the national average, with 54 counties having employment rates of 96 percent or greater. Yet in 17 counties in the Region (nearly half of which were in Central Appalachia), employment among 25-to-64-year-olds was less than 90 percent. And all 17 of these counties with low employment were outside metropolitan areas. While most of the counties with the lowest employment rates also had similarly low employment in 2008-2012, the rate had been at least 92 percent in eight of them—suggesting that these eight counties may not have fully recovered economically from the recent recession.

Figure 6.3: Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2013-2017



Map Title: Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

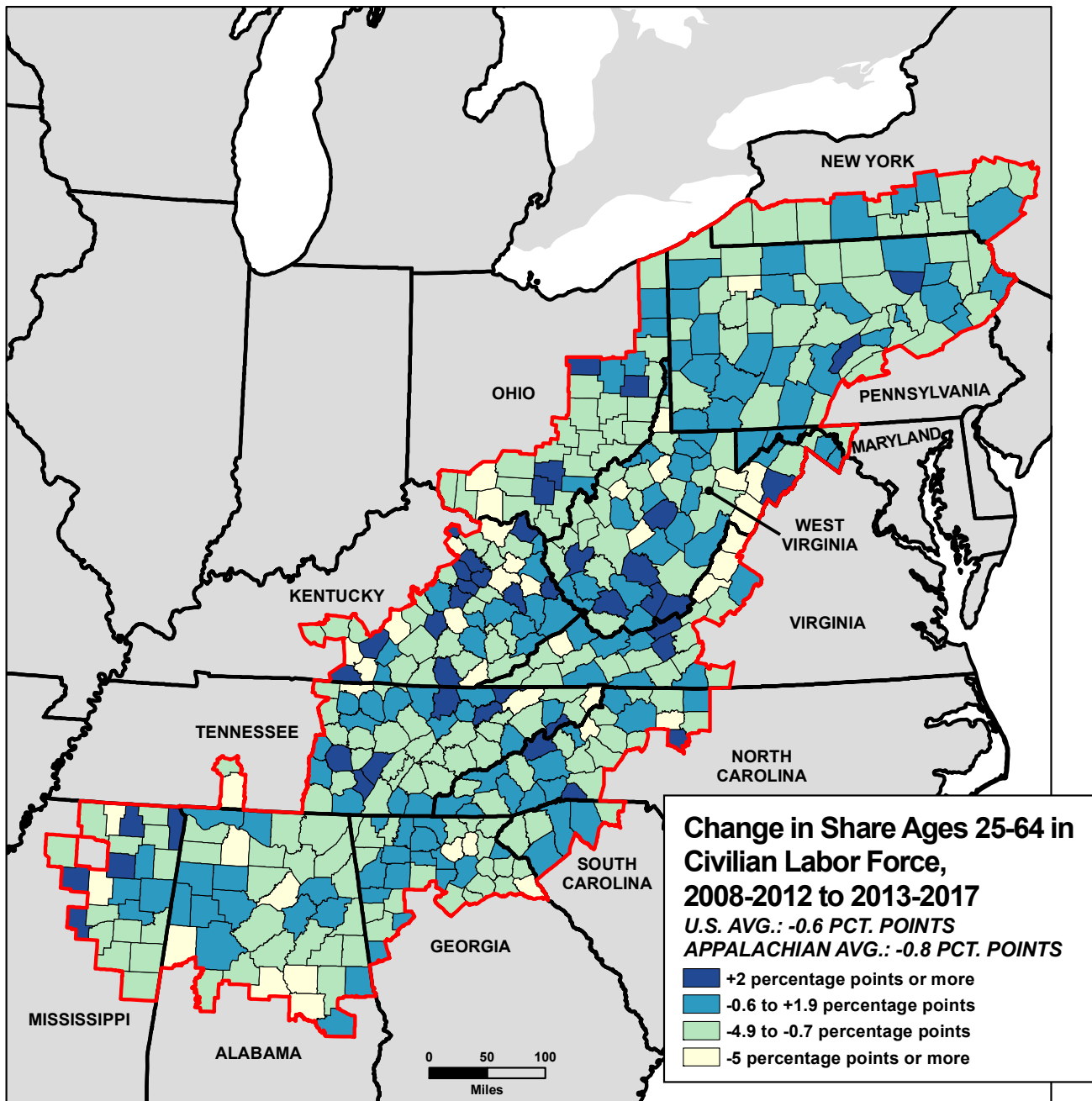
Unemployment in the Appalachian Region among persons ages 25 to 64 matched the national average of 5.4 percent during the 2013-2017 period. Within Appalachia, the jobless rate was at least 10 percent in 17 counties—all of which were outside metropolitan areas and nine of which were in Central Appalachia. (Unemployment was 7.3 percent in Central Appalachia.) Conversely, the unemployment rate was less than 4 percent in 46 other counties, with 15 of these located in Northern Appalachia—the subregion that had the lowest jobless level. There are indications of a connection between unemployment and educational attainment: In all but one of the 17 Appalachian counties with double-digit unemployment, the share of 25-to-64-year-olds with at least a high school diploma was below the national average; in 11 of these counties, the share was less than four-fifths.

Table 6.2: Percentage Point Change in Labor Force, Employment, and Unemployment Status of Persons Ages 25 to 64 in the Appalachian Region, 2008-2012 to 2013-2017

Labor Force, Employment, and Unemployment	Percentage Point Change		
	Labor Force Participation Rate	Employment Rate (Pct. of Civ. Labor Force)	Unemployment Rate (Pct. of Civ. Labor Force)
United States	- 0.6	+ 2.3	- 2.3
Appalachian Region	- 0.8	+ 2.3	- 2.3
Subregions			
Northern Appalachia	- 0.6	+ 1.7	- 1.7
North Central Appalachia	- 1.0	+ 1.6	- 1.6
Central Appalachia	- 0.6	+ 1.3	- 1.3
South Central Appalachia	- 1.2	+ 2.7	- 2.7
Southern Appalachia	- 0.9	+ 3.0	- 3.0
County Types			
Large Metros (pop. 1 million +)	- 0.3	+ 2.4	- 2.4
Small Metros (pop. <1 million)	- 1.0	+ 2.2	- 2.2
Nonmetro, Adjacent to Large Metros	- 1.6	+ 2.8	- 2.8
Nonmetro, Adjacent to Small Metros	- 1.2	+ 2.2	- 2.2
Rural (nonmetro, not adj. to a metro)	- 1.0	+ 1.7	- 1.7
Alabama	- 1.5	+ 2.3	- 2.3
Appalachian Alabama	- 1.5	+ 2.4	- 2.4
Non-Appalachian Alabama	- 1.7	+ 2.2	- 2.2
Georgia	- 0.8	+ 2.8	- 2.8
Appalachian Georgia	- 0.8	+ 3.4	- 3.4
Non-Appalachian Georgia	- 0.9	+ 2.5	- 2.5
Kentucky	- 0.2	+ 2.2	- 2.2
Appalachian Kentucky	- 0.8	+ 1.5	- 1.5
Non-Appalachian Kentucky	- 0.2	+ 2.4	- 2.4
Maryland	- 0.7	+ 1.2	- 1.2
Appalachian Maryland	- 1.8	+ 1.2	- 1.2
Non-Appalachian Maryland	- 0.6	+ 1.2	- 1.2
Mississippi	- 0.9	+ 1.2	- 1.2
Appalachian Mississippi	- 0.8	+ 2.5	- 2.5
Non-Appalachian Mississippi	- 0.9	+ 0.8	- 0.8
New York	- 0.1	+ 1.6	- 1.6
Appalachian New York	- 1.4	+ 1.1	- 1.1
Non-Appalachian New York	- 0.1	+ 1.7	- 1.7
North Carolina	- 0.8	+ 3.0	- 3.0
Appalachian North Carolina	- 1.2	+ 3.4	- 3.4
Non-Appalachian North Carolina	- 0.7	+ 2.9	- 2.9
Ohio	- 0.7	+ 2.9	- 2.9
Appalachian Ohio	- 1.3	+ 3.2	- 3.2
Non-Appalachian Ohio	- 0.7	+ 2.7	- 2.7
Pennsylvania	- 0.3	+ 1.6	- 1.6
Appalachian Pennsylvania	- 0.3	+ 1.6	- 1.6
Non-Appalachian Pennsylvania	- 0.4	+ 1.7	- 1.7
South Carolina	- 0.3	+ 3.5	- 3.5
Appalachian South Carolina	- 0.2	+ 3.9	- 3.9
Non-Appalachian South Carolina	- 0.4	+ 3.3	- 3.3
Tennessee	- 0.7	+ 2.7	- 2.7
Appalachian Tennessee	- 1.2	+ 2.6	- 2.6
Non-Appalachian Tennessee	- 0.4	+ 2.8	- 2.8
Virginia	- 0.1	+ 1.0	- 1.0
Appalachian Virginia	- 0.8	+ 1.2	- 1.2
Non-Appalachian Virginia	- 0.1	+ 1.0	- 1.0
West Virginia (entire state)	- 0.7	+ 0.4	- 0.4

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 6.4: Percentage Point Change in the Share of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Labor Force, 2008-2012 to 2013-2017

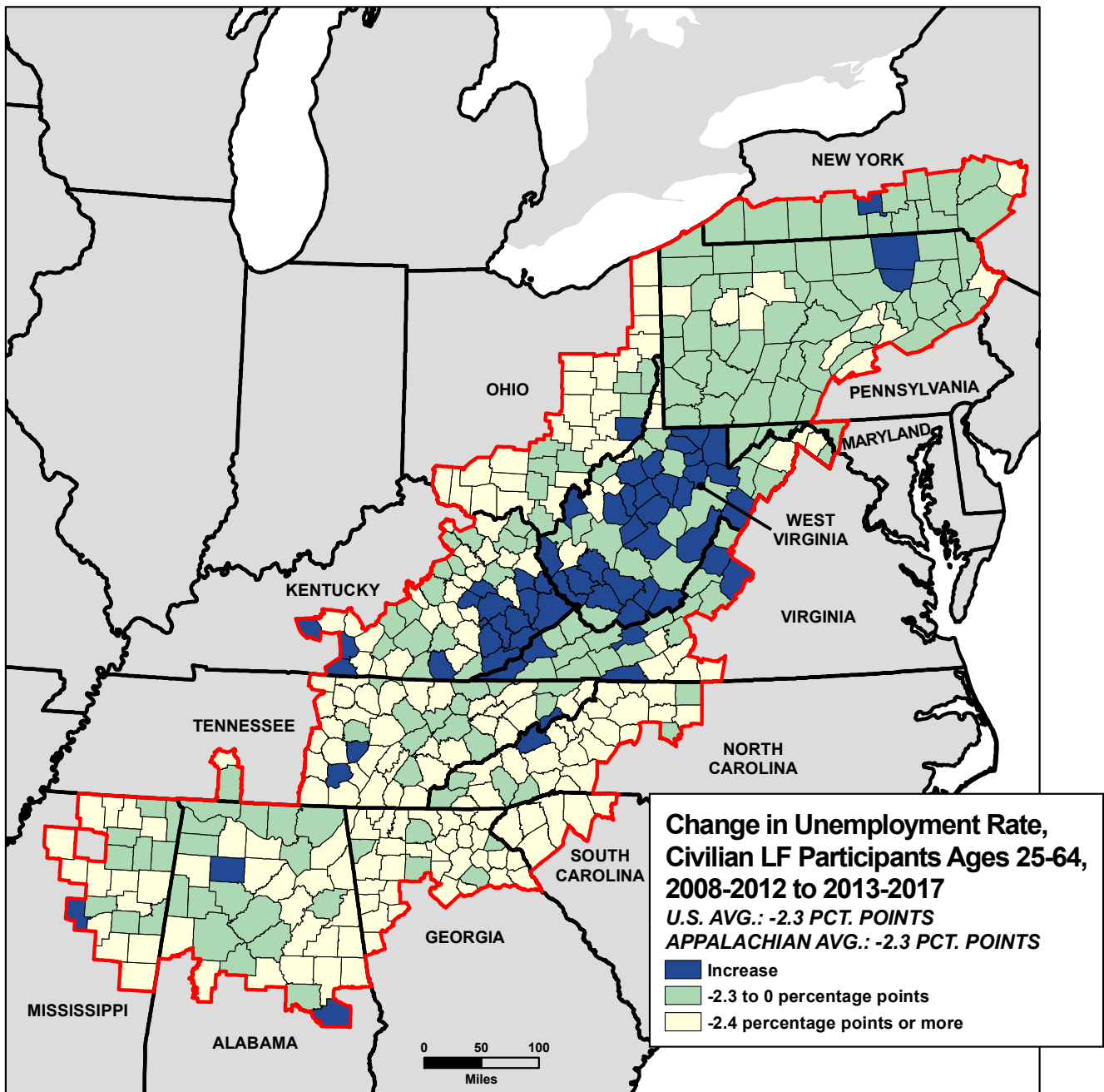


Map Title: Percentage Point Change in the Share of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Labor Force, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Between 2008-2012 and 2013-2017, the labor force participation rate among civilians ages 25 to 64 fell 0.8 percentage points in the Appalachian Region, compared with 0.6 percentage points for the nation as a whole. The decline was present in most of the Region—nearly three-fifths of Appalachia’s 420 counties had decreases in labor force participation rates that exceeded the U.S. average. And in 41 counties (31 of them in Central, South Central, and Southern Appalachia), the labor force participation rate among working-age adults was at least five percentage points lower than in 2008-2012. But participation rates did increase in some parts of Appalachia—there were 43 counties in the Region where the share of adults in the labor force rose by at least two percentage points. Almost two-thirds of the counties in this latter group were in three states—Kentucky, Tennessee, and West Virginia.

Figure 6.5: Percentage Point Change in the Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Unemployment among civilian labor force participants declined by more than two percentage points between 2008-2012 and 2013-2017, both in Appalachia and nationwide. And in 198 of the Region’s 420 counties, unemployment declined even further. (Most of these counties were in South Central and Southern Appalachia.) These numbers support an economic rebound from the “Great Recession” of 2007-2009, given that the 2008-2012 period includes all but one month of the economic downturn, and the 2013-2017 period covers the later years of the post-recession period. Yet in 61 Appalachian counties, the unemployment rate was actually higher in 2013-2017 than it was in 2008-2012, with half of these counties in either Kentucky or West Virginia. While 13 of these counties already had jobless rates at or above the national average of 7.7 percent in 2008-2012, unemployment in the earlier period had been less than 5 percent in 15 others. This suggests that more recent economic forces—in addition to a slow recovery—may be at play in some areas.

TRENDS IN LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

- Among working-age adults (ages 25 to 64), Appalachia's labor force participation rate in 2013-2017 was 72.8 percent, 0.8 percentage points lower than its rate in 2008-2012 (see Tables 6.1 and 6.2). The decline was even greater in South Central Appalachia and in nonmetropolitan counties bordering metro areas, where the rates fell more than a full percentage point.
- Within the civilian labor force, the employment rate in Appalachia was 94.6 percent, which was more than two percentage points higher than the employment rate in 2008-2012. Among the subregions, the increase was greatest in Southern Appalachia, where employment rose three percentage points. Employment in Central Appalachia, however, only rose by 1.3 points, the lowest among the subregions. Elsewhere in the Region, the employment rate rose less than two percentage points among the most rural Appalachian counties—a noticeably smaller increase than among Appalachian counties within or bordering metropolitan areas. Among the states, employment increased the most in the Appalachian sections of South Carolina (3.9 percentage points), Georgia (3.4 points), North Carolina (3.4 points), and Ohio (3.2 points). West Virginia had the smallest increase at 0.4 percentage points.
- As Appalachia's employment rate rose between 2008-2012 and 2013-2017, its unemployment rate fell. The Region's unemployment rate of 5.4 percent in the later period is 2.3 percentage points lower than its rate in 2008-2012.
- The labor force and employment data provide a mixed picture. On one hand, the lower labor force rates in 2013-2017 for both Appalachia and the United States suggest that labor force levels may not yet have rebounded from the economic downturn of 2007-2009. Yet the higher employment rates (and thus the lower rates of unemployment) support the idea of an economic recovery in much of the Region.

CHAPTER 7: TRANSPORTATION AND COMMUTING PATTERNS

Table 7.1: Means of Transportation for Workers Ages 16 and Over in the Appalachian Region, 2013-2017

Means of Transportation	Total Workers Ages 16 and Over	Percent of Workers Ages 16 and Over					
		Car, Truck, or Van (Drove Alone)	Car, Truck, or Van (Carpooled)	Public Transportation (Excluding Taxicab)	Walked	Taxicab, Motorcycle, Bicycle, or Other Means	Worked at Home
United States	148,432,042	76.4	9.2	5.1	2.7	1.8	4.7
Appalachian Region	10,988,569	82.2	9.3	1.2	2.3	1.2	3.9
Subregions							
Northern Appalachia	3,719,529	79.8	8.9	2.5	3.6	1.2	3.9
North Central Appalachia	992,575	82.7	9.2	0.7	2.7	1.1	3.5
Central Appalachia	655,177	83.4	10.3	0.3	1.9	1.2	2.8
South Central Appalachia	2,075,825	83.1	9.1	0.6	1.7	1.2	4.4
Southern Appalachia	3,545,463	83.7	9.6	0.5	1.1	1.2	4.0
County Types							
Large Metros (pop. 1 million +)	2,827,733	80.3	9.2	2.6	2.0	1.1	4.8
Small Metros (pop. <1 million)	4,724,441	83.0	8.8	0.9	2.2	1.2	3.8
Nonmetro, Adjacent to Large Metros	901,734	83.0	9.5	0.4	2.6	1.2	3.4
Nonmetro, Adjacent to Small Metros	1,593,239	82.4	10.1	0.3	2.6	1.1	3.4
Rural (nonmetro, not adj. to a metro)	941,422	82.3	10.0	0.4	2.6	1.4	3.3
Alabama	2,030,100	85.9	8.6	0.4	1.1	1.0	3.1
Appalachian Alabama	1,318,830	86.0	8.7	0.4	1.0	1.0	2.9
Non-Appalachian Alabama	711,270	85.7	8.2	0.3	1.2	1.1	3.4
Georgia	4,553,332	79.5	10.0	2.1	1.5	1.7	5.2
Appalachian Georgia	1,426,751	81.0	10.5	0.6	1.1	1.4	5.4
Non-Appalachian Georgia	3,126,581	78.7	9.8	2.8	1.7	1.8	5.1
Kentucky	1,909,202	82.2	9.6	1.1	2.3	1.4	3.4
Appalachian Kentucky	409,165	82.5	10.7	0.3	2.3	1.4	2.8
Non-Appalachian Kentucky	1,500,037	82.1	9.3	1.3	2.3	1.4	3.6
Maryland	3,008,292	73.8	9.1	8.8	2.4	1.4	4.5
Appalachian Maryland	108,083	81.0	9.8	1.1	2.9	1.1	4.1
Non-Appalachian Maryland	2,900,209	73.5	9.1	9.1	2.4	1.4	4.5
Mississippi	1,208,408	85.1	9.4	0.3	1.4	1.6	2.1
Appalachian Mississippi	249,862	85.4	9.6	0.2	1.2	1.0	2.5
Non-Appalachian Mississippi	958,546	85.0	9.3	0.4	1.5	1.8	2.0
New York	9,269,671	52.9	6.6	28.2	6.3	1.9	4.1
Appalachian New York	457,804	77.6	9.2	1.9	6.0	1.3	3.9
Non-Appalachian New York	8,811,867	51.6	6.5	29.6	6.3	2.0	4.1
North Carolina	4,570,330	81.2	9.5	1.0	1.8	1.3	5.2
Appalachian North Carolina	745,111	82.0	9.4	0.5	1.7	1.2	5.1
Non-Appalachian North Carolina	3,825,219	81.0	9.5	1.2	1.9	1.3	5.2
Ohio	5,382,511	83.4	7.7	1.6	2.2	1.1	3.9
Appalachian Ohio	847,404	84.5	8.0	0.5	2.2	1.3	3.4
Non-Appalachian Ohio	4,535,107	83.2	7.6	1.8	2.2	1.1	3.9
Pennsylvania	5,976,599	76.4	8.5	5.6	3.8	1.4	4.4
Appalachian Pennsylvania	2,621,472	79.2	9.0	3.0	3.5	1.2	4.1
Non-Appalachian Pennsylvania	3,355,127	74.3	8.0	7.5	3.9	1.6	4.6
South Carolina	2,168,006	82.6	9.3	0.6	2.2	1.5	3.8
Appalachian South Carolina	550,020	84.4	9.3	0.5	1.4	1.0	3.4
Non-Appalachian South Carolina	1,617,986	82.1	9.3	0.6	2.4	1.6	3.9
Tennessee	2,951,964	83.6	9.0	0.7	1.4	1.3	4.1
Appalachian Tennessee	1,214,285	84.1	9.0	0.4	1.4	1.1	3.9
Non-Appalachian Tennessee	1,737,679	83.2	8.9	1.0	1.3	1.4	4.3
Virginia	4,115,810	77.3	9.3	4.4	2.4	1.7	4.8
Appalachian Virginia	307,375	83.1	8.8	1.1	2.4	1.2	3.4
Non-Appalachian Virginia	3,808,435	76.9	9.3	4.7	2.5	1.8	4.9
West Virginia (entire state)	732,407	82.2	9.7	0.9	2.9	1.1	3.2

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Table 7.2: Means of Transportation for Workers Ages 16 and Over in the Appalachian Region Below the Poverty Level, 2013-2017

Means of Transportation	Total Workers Ages 16 and Over Below the Poverty Level	Percent of Workers Ages 16 and Over Below the Poverty Level					
		Car, Truck, or Van (Drove Alone)	Car, Truck, or Van (Carpooled)	Public Transportation (Excluding Taxicab)	Walked	Taxicab, Motorcycle, Bicycle, or Other Means	Worked at Home
United States	10,043,600	64.7	12.9	8.3	6.2	3.5	4.4
Appalachian Region	795,515	71.6	13.5	2.8	5.8	2.7	3.7
Subregions							
Northern Appalachia	232,839	64.4	12.4	5.9	10.4	2.8	4.1
North Central Appalachia	76,680	69.4	12.8	2.1	9.0	2.5	4.1
Central Appalachia	62,048	76.0	13.7	0.6	4.4	2.3	3.2
South Central Appalachia	170,130	74.5	13.2	2.1	3.2	2.5	4.4
Southern Appalachia	253,818	75.8	14.9	1.1	2.7	2.8	2.9
County Types							
Large Metros (pop. 1 million +)	160,102	67.0	15.4	5.6	6.1	2.5	3.4
Small Metros (pop. <1 million)	350,915	72.0	12.7	3.0	5.8	2.8	3.7
Nonmetro, Adjacent to Large Metros	72,732	71.8	12.9	0.9	7.3	2.8	4.3
Nonmetro, Adjacent to Small Metros	126,823	72.9	14.6	0.9	5.2	2.6	3.9
Rural (nonmetro, not adj. to a metro)	84,943	76.2	12.4	1.0	4.8	2.1	3.6
Alabama	160,944	79.5	12.5	1.2	2.7	1.9	2.3
Appalachian Alabama	98,126	78.4	13.5	1.3	2.7	2.0	2.2
Non-Appalachian Alabama	62,818	81.2	11.0	1.0	2.6	1.7	2.5
Georgia	355,265	68.7	15.5	4.8	3.4	3.6	3.9
Appalachian Georgia	92,542	72.0	16.8	0.9	2.8	3.7	3.8
Non-Appalachian Georgia	262,723	67.6	15.0	6.2	3.6	3.6	4.0
Kentucky	150,924	71.2	13.2	3.1	6.2	2.8	3.5
Appalachian Kentucky	41,663	75.4	13.5	0.6	4.9	2.6	3.0
Non-Appalachian Kentucky	109,261	69.6	13.1	4.0	6.7	2.9	3.6
Maryland	120,006	56.7	13.3	15.4	6.4	2.8	5.3
Appalachian Maryland	6,505	66.0	15.8	3.2	7.6	2.4	5.0
Non-Appalachian Maryland	113,501	56.2	13.2	16.1	6.4	2.9	5.3
Mississippi	112,877	78.7	13.3	1.0	2.4	3.0	1.7
Appalachian Mississippi	22,722	82.1	12.0	0.0	1.6	1.9	2.3
Non-Appalachian Mississippi	90,155	77.8	13.6	1.2	2.6	3.3	1.6
New York	580,287	34.0	7.8	37.4	13.1	2.9	4.9
Appalachian New York	35,237	61.1	11.7	6.2	13.5	2.9	4.5
Non-Appalachian New York	545,050	32.2	7.5	39.4	13.0	2.9	4.9
North Carolina	351,828	71.6	16.0	3.0	3.3	2.3	3.9
Appalachian North Carolina	63,018	74.1	13.3	2.0	3.1	2.5	5.0
Non-Appalachian North Carolina	288,810	71.0	16.6	3.2	3.3	2.3	3.6
Ohio	366,381	68.8	12.4	5.7	6.7	2.9	3.5
Appalachian Ohio	63,714	73.8	11.7	1.1	6.3	3.0	4.0
Non-Appalachian Ohio	302,667	67.7	12.5	6.6	6.8	2.9	3.4
Pennsylvania	326,498	58.1	12.5	12.4	10.1	2.8	4.1
Appalachian Pennsylvania	152,764	62.4	12.6	7.1	11.2	2.8	4.0
Non-Appalachian Pennsylvania	173,734	54.3	12.4	17.0	9.2	2.9	4.2
South Carolina	170,827	73.4	14.9	1.8	3.5	3.4	3.0
Appalachian South Carolina	40,428	74.5	15.4	1.7	2.8	3.0	2.7
Non-Appalachian South Carolina	130,399	73.1	14.8	1.8	3.7	3.5	3.1
Tennessee	222,587	74.3	14.3	2.2	2.8	2.5	3.8
Appalachian Tennessee	98,193	75.7	13.7	1.3	2.8	2.3	4.2
Non-Appalachian Tennessee	124,394	73.1	14.8	3.0	2.9	2.7	3.5
Virginia	208,044	65.7	13.2	7.0	5.5	4.1	4.5
Appalachian Virginia	24,466	72.3	12.9	4.1	4.6	2.4	3.7
Non-Appalachian Virginia	183,578	64.8	13.3	7.4	5.6	4.3	4.7
West Virginia (entire state)	56,137	69.0	13.1	2.8	9.0	2.2	3.9

Note: Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2017, the poverty threshold for a family of two adults and two children was \$24,858. The poverty universe does not include unrelated individuals under age 15, people living in college dormitories, and people living in institutional group quarters.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Table 7.3: Availability of Vehicles for Households in the Appalachian Region, 2013-2017

Availability of Vehicles	Total Households	Percent of Households				
		No Vehicle Available	One Vehicle Available	Two Vehicles Available	Three Vehicles Available	Four or More Vehicles Available
United States	118,825,921	8.8	33.2	37.4	14.2	6.4
Appalachian Region	9,968,829	7.3	32.2	37.6	15.6	7.2
Subregions						
Northern Appalachia	3,355,355	9.5	34.4	37.0	13.5	5.7
North Central Appalachia	952,196	7.7	32.4	37.4	15.4	7.1
Central Appalachia	742,914	8.7	32.4	36.2	15.6	7.1
South Central Appalachia	1,936,283	5.9	31.3	37.3	17.1	8.3
Southern Appalachia	2,982,081	5.4	30.2	39.0	17.2	8.3
County Types						
Large Metros (pop. 1 million +)	2,314,330	7.1	31.8	39.1	15.2	6.8
Small Metros (pop. <1 million)	4,239,720	7.3	32.8	37.5	15.3	7.1
Nonmetro, Adjacent to Large Metros	856,434	7.4	31.8	37.1	16.0	7.7
Nonmetro, Adjacent to Small Metros	1,570,998	7.1	31.1	36.8	16.9	8.1
Rural (nonmetro, not adj. to a metro)	987,347	8.4	32.4	36.5	15.6	7.1
Alabama	1,856,695	6.2	32.7	37.0	16.2	7.8
Appalachian Alabama	1,195,020	5.9	31.7	37.2	16.8	8.4
Non-Appalachian Alabama	661,675	6.9	34.6	36.7	15.2	6.6
Georgia	3,663,104	6.7	33.2	38.2	15.1	6.7
Appalachian Georgia	1,077,035	4.1	27.6	41.5	18.1	8.6
Non-Appalachian Georgia	2,586,069	7.8	35.6	36.8	13.9	5.9
Kentucky	1,724,514	7.7	33.0	37.9	14.8	6.6
Appalachian Kentucky	459,071	8.8	33.1	36.2	15.3	6.7
Non-Appalachian Kentucky	1,265,443	7.3	33.0	38.5	14.6	6.6
Maryland	2,181,093	9.1	32.4	37.0	14.6	7.0
Appalachian Maryland	95,623	8.9	31.8	35.2	16.2	8.0
Non-Appalachian Maryland	2,085,470	9.1	32.5	37.0	14.5	6.9
Mississippi	1,103,514	6.7	33.2	37.1	15.8	7.2
Appalachian Mississippi	236,502	6.7	31.0	36.9	17.3	8.0
Non-Appalachian Mississippi	867,012	6.6	33.9	37.1	15.4	7.0
New York	7,302,710	29.0	32.8	26.2	8.4	3.5
Appalachian New York	416,654	10.5	35.9	36.7	12.3	4.6
Non-Appalachian New York	6,886,056	30.1	32.6	25.6	8.2	3.5
North Carolina	3,874,346	6.1	32.1	38.4	16.1	7.2
Appalachian North Carolina	703,053	5.8	31.7	37.6	16.8	8.1
Non-Appalachian North Carolina	3,171,293	6.1	32.2	38.6	15.9	7.0
Ohio	4,633,145	8.3	33.3	37.6	14.4	6.4
Appalachian Ohio	793,340	7.9	30.9	36.6	16.5	8.2
Non-Appalachian Ohio	3,839,805	8.4	33.8	37.8	14.0	6.1
Pennsylvania	5,007,442	11.1	34.1	36.4	13.0	5.5
Appalachian Pennsylvania	2,339,671	9.5	34.5	37.2	13.3	5.5
Non-Appalachian Pennsylvania	2,667,771	12.4	33.7	35.8	12.7	5.4
South Carolina	1,871,307	6.5	33.4	38.5	15.1	6.5
Appalachian South Carolina	473,524	6.5	31.6	38.8	15.8	7.2
Non-Appalachian South Carolina	1,397,783	6.5	34.0	38.4	14.8	6.2
Tennessee	2,547,194	6.1	32.2	38.1	16.1	7.5
Appalachian Tennessee	1,137,525	5.9	31.2	37.6	16.9	8.4
Non-Appalachian Tennessee	1,409,669	6.2	32.9	38.5	15.5	6.8
Virginia	3,105,636	6.3	30.4	38.1	16.9	8.3
Appalachian Virginia	304,140	7.2	29.7	35.3	18.6	9.2
Non-Appalachian Virginia	2,801,496	6.2	30.4	38.4	16.8	8.2
West Virginia (entire state)	737,671	8.7	34.7	37.3	13.7	5.6

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Table 7.4: Number of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, by Means of Transportation, 2013-2017

Availability of Vehicles	Total Workers Ages 16 and Over	Car, Truck, or Van (Drove Alone)	Car, Truck, or Van (Carpooled)	Public Transportation (Excluding Taxicab)	Walked	Taxicab, Motorcycle, Bicycle, or Other Means	Worked at Home
United States	6,417,792	1,330,506	713,424	2,649,075	934,259	513,285	277,243
Appalachian Region	287,716	102,072	61,096	35,148	48,591	27,554	13,255
Subregions							
Northern Appalachia	140,603	37,746	25,993	26,144	29,892	12,508	8,320
North Central Appalachia	25,046	9,660	5,118	2,009	4,892	2,214	1,153
Central Appalachia	13,778	5,910	3,651	119	2,170	1,482	446
South Central Appalachia	38,283	17,351	7,685	3,649	4,307	3,738	1,553
Southern Appalachia	70,006	31,405	18,649	3,227	7,330	7,612	1,783
County Types							
Large Metros (pop. 1 million +)	76,794	23,529	13,025	19,137	13,439	5,221	2,443
Small Metros (pop. <1 million)	116,915	44,039	23,508	13,932	19,404	11,593	4,439
Nonmetro, Adjacent to Large Metros	25,227	9,145	5,895	760	4,864	2,729	1,834
Nonmetro, Adjacent to Small Metros	40,530	16,016	10,818	693	6,471	4,006	2,526
Rural (nonmetro, not adj. to a metro)	28,250	9,343	7,850	626	4,413	4,005	2,013
Alabama	39,760	19,502	9,812	2,126	4,201	3,192	927
Appalachian Alabama	24,270	11,907	5,966	1,478	2,503	1,888	528
Non-Appalachian Alabama	15,490	7,595	3,846	648	1,698	1,304	399
Georgia	138,454	41,171	32,421	31,001	13,506	15,812	4,543
Appalachian Georgia	28,550	11,378	8,292	1,163	2,964	3,893	860
Non-Appalachian Georgia	109,904	29,793	24,129	29,838	10,542	11,919	3,683
Kentucky	50,484	15,670	10,282	8,467	7,743	5,986	2,336
Appalachian Kentucky	9,123	3,266	2,668	115	1,442	1,291	341
Non-Appalachian Kentucky	41,361	12,404	7,614	8,352	6,301	4,695	1,995
Maryland	122,979	26,214	14,372	58,689	13,381	7,026	3,297
Appalachian Maryland	3,416	1,371	487	386	651	353	168
Non-Appalachian Maryland	119,563	24,843	13,885	58,303	12,730	6,673	3,129
Mississippi	26,611	12,819	7,191	837	2,518	2,750	496
Appalachian Mississippi	5,149	2,400	1,411	30	623	532	153
Non-Appalachian Mississippi	21,462	10,419	5,780	807	1,895	2,218	343
New York	2,015,217	116,559	67,626	1,370,191	291,284	84,642	84,915
Appalachian New York	20,058	5,293	3,460	2,904	6,040	1,556	805
Non-Appalachian New York	1,995,159	111,266	64,166	1,367,287	285,244	83,086	84,110
North Carolina	105,279	41,635	26,072	13,375	10,548	10,296	3,353
Appalachian North Carolina	15,085	7,038	3,076	1,233	1,390	1,748	600
Non-Appalachian North Carolina	90,194	34,597	22,996	12,142	9,158	8,548	2,753
Ohio	160,650	48,777	32,816	33,955	22,027	14,658	8,417
Appalachian Ohio	27,522	8,762	7,757	945	3,487	4,259	2,312
Non-Appalachian Ohio	133,128	40,015	25,059	33,010	18,540	10,399	6,105
Pennsylvania	295,189	57,669	40,568	105,520	53,931	21,389	16,112
Appalachian Pennsylvania	95,721	25,846	15,292	21,872	20,294	6,998	5,419
Non-Appalachian Pennsylvania	199,468	31,823	25,276	83,648	33,637	14,391	10,693
South Carolina	49,480	17,582	15,023	3,962	5,878	5,980	1,055
Appalachian South Carolina	12,037	5,720	2,980	556	1,240	1,299	242
Non-Appalachian South Carolina	37,443	11,862	12,043	3,406	4,638	4,681	813
Tennessee	58,299	24,092	12,355	7,838	6,691	5,023	2,300
Appalachian Tennessee	20,409	9,428	4,186	1,772	2,490	1,713	820
Non-Appalachian Tennessee	37,890	14,664	8,169	6,066	4,201	3,310	1,480
Virginia	110,622	34,392	19,440	28,962	12,553	10,784	4,491
Appalachian Virginia	6,043	2,802	1,239	644	760	368	230
Non-Appalachian Virginia	104,579	31,590	18,201	28,318	11,793	10,416	4,261
West Virginia (entire state)	20,333	6,861	4,282	2,050	4,707	1,656	777

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Table 7.5: Percent of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, by Means of Transportation, 2013-2017

Availability of Vehicles	Total Workers Ages 16 and Over	Car, Truck, or Van (Drove Alone)	Car, Truck, or Van (Carpooled)	Public Transportation (Excluding Taxicab)	Walked	Taxicab, Motorcycle, Bicycle, or Other Means	Worked at Home
United States	4.4	1.2	5.3	35.3	27.0	19.3	4.1
Appalachian Region	2.6	1.1	6.0	27.8	23.7	21.6	3.2
Subregions							
Northern Appalachia	3.8	1.3	7.9	28.9	26.6	27.7	6.0
North Central Appalachia	2.5	1.2	5.6	28.5	20.7	21.0	3.5
Central Appalachia	2.1	1.1	5.4	6.9	21.2	19.1	2.5
South Central Appalachia	1.9	1.0	4.1	33.3	16.2	15.6	1.8
Southern Appalachia	2.0	1.1	5.5	19.8	22.5	18.9	1.3
County Types							
Large Metros (pop. 1 million +)	2.7	1.0	5.1	25.9	27.6	16.2	1.8
Small Metros (pop. <1 million)	2.5	1.1	5.7	33.9	23.3	21.2	2.6
Nonmetro, Adjacent to Large Metros	2.8	1.2	7.0	24.9	23.6	26.3	6.3
Nonmetro, Adjacent to Small Metros	2.6	1.2	6.7	14.9	19.2	22.4	4.8
Rural (nonmetro, not adj. to a metro)	3.0	1.2	8.4	17.4	23.0	31.5	6.8
Alabama	2.0	1.1	5.7	29.9	22.6	15.8	1.5
Appalachian Alabama	1.9	1.1	5.2	31.3	22.2	15.0	1.4
Non-Appalachian Alabama	2.2	1.3	6.6	27.2	23.3	17.3	1.7
Georgia	3.1	1.1	7.2	33.1	24.8	21.1	2.0
Appalachian Georgia	2.0	1.0	5.6	13.5	22.0	20.1	1.1
Non-Appalachian Georgia	3.6	1.2	7.9	35.1	25.7	21.5	2.4
Kentucky	2.7	1.0	5.7	41.9	23.2	23.1	3.7
Appalachian Kentucky	2.3	1.0	6.1	8.8	20.5	22.9	3.1
Non-Appalachian Kentucky	2.8	1.0	5.5	44.2	23.9	23.1	3.8
Maryland	4.1	1.2	5.2	22.4	21.3	17.1	2.5
Appalachian Maryland	3.2	1.6	4.6	34.3	22.6	31.3	3.8
Non-Appalachian Maryland	4.2	1.2	5.3	22.3	21.2	16.7	2.5
Mississippi	2.2	1.3	6.4	21.2	20.0	14.1	2.0
Appalachian Mississippi	2.1	1.1	5.9	7.0	25.8	20.7	2.5
Non-Appalachian Mississippi	2.3	1.3	6.5	22.9	18.6	13.1	1.8
New York	21.9	2.4	11.2	52.7	54.0	47.8	23.2
Appalachian New York	4.5	1.5	8.3	34.6	29.2	26.3	5.0
Non-Appalachian New York	22.8	2.5	11.4	52.7	55.0	48.6	24.1
North Carolina	2.3	1.1	6.1	29.3	17.9	17.7	1.5
Appalachian North Carolina	2.0	1.2	4.4	34.3	13.5	20.5	1.6
Non-Appalachian North Carolina	2.4	1.1	6.5	28.8	18.9	17.2	1.4
Ohio	3.0	1.1	8.0	40.1	22.1	24.0	4.2
Appalachian Ohio	3.3	1.2	11.5	25.3	21.4	38.7	8.2
Non-Appalachian Ohio	3.0	1.1	7.3	40.8	22.3	20.8	3.5
Pennsylvania	5.0	1.3	8.1	32.1	28.0	26.0	6.4
Appalachian Pennsylvania	3.7	1.2	6.5	28.0	25.9	23.2	5.3
Non-Appalachian Pennsylvania	6.0	1.3	9.5	33.4	29.4	27.6	7.2
South Carolina	2.3	1.0	7.5	34.2	22.3	19.1	1.3
Appalachian South Carolina	2.2	1.2	5.9	22.5	22.6	23.2	1.4
Non-Appalachian South Carolina	2.4	0.9	8.0	37.3	22.2	18.2	1.3
Tennessee	2.0	1.0	4.7	37.1	20.6	13.6	1.9
Appalachian Tennessee	1.7	0.9	3.9	38.2	18.9	12.9	1.7
Non-Appalachian Tennessee	2.2	1.0	5.3	36.7	21.8	14.1	2.0
Virginia	2.7	1.1	5.2	16.1	17.3	15.6	2.3
Appalachian Virginia	2.0	1.1	4.6	21.1	15.2	10.1	2.4
Non-Appalachian Virginia	2.8	1.1	5.2	16.0	17.5	15.9	2.3
West Virginia (entire state)	2.8	1.1	6.1	33.7	24.9	20.1	3.4

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Table 7.6: Relationship Between Number of Workers and Availability of Vehicles for Households in the Appalachian Region With One or More Workers, 2013-2017

Availability of Vehicles	Total Households With One or More Workers	Percent of Households With One or More Workers			
		Households With Zero Vehicles	Households Where Workers Exceed Vehicles	Households Where Workers Equal Vehicles	Households Where Vehicles Exceed Workers
United States	87,162,391	5.1	6.6	51.9	36.4
Appalachian Region	6,721,932	3.2	4.7	49.3	42.8
Subregions					
Northern Appalachia	2,271,844	4.7	5.8	52.4	37.1
North Central Appalachia	616,359	3.2	4.5	48.0	44.3
Central Appalachia	421,792	2.5	4.1	42.9	50.5
South Central Appalachia	1,282,501	2.2	3.9	47.4	46.4
Southern Appalachia	2,129,436	2.3	4.3	48.6	44.8
County Types					
Large Metros (pop. 1 million +)	1,700,779	3.3	5.1	52.7	38.8
Small Metros (pop. <1 million)	2,886,212	3.1	4.8	50.1	42.0
Nonmetro, Adjacent to Large Metros	556,521	3.3	4.5	46.8	45.4
Nonmetro, Adjacent to Small Metros	988,852	3.1	4.3	44.8	47.8
Rural (nonmetro, not adj. to a metro)	589,568	3.3	4.3	45.0	47.4
Alabama	1,258,161	2.4	3.8	48.3	45.6
Appalachian Alabama	817,772	2.2	3.7	47.8	46.3
Non-Appalachian Alabama	440,389	2.6	4.0	49.3	44.1
Georgia	2,730,749	3.5	5.6	51.6	39.3
Appalachian Georgia	822,705	2.2	5.0	49.4	43.4
Non-Appalachian Georgia	1,908,044	4.1	5.9	52.5	37.5
Kentucky	1,168,454	3.3	5.0	50.9	40.9
Appalachian Kentucky	262,316	2.6	4.3	44.0	49.0
Non-Appalachian Kentucky	906,138	3.4	5.2	52.8	38.6
Maryland	1,701,564	5.0	8.0	53.7	33.3
Appalachian Maryland	65,425	4.0	6.1	48.1	41.9
Non-Appalachian Maryland	1,636,139	5.1	8.0	53.9	33.0
Mississippi	748,692	2.7	4.4	48.2	44.8
Appalachian Mississippi	155,020	2.5	3.5	45.2	48.7
Non-Appalachian Mississippi	593,672	2.7	4.6	48.9	43.7
New York	5,346,735	24.2	12.0	42.2	21.6
Appalachian New York	277,773	5.6	6.8	52.7	34.9
Non-Appalachian New York	5,068,962	25.2	12.2	41.6	20.9
North Carolina	2,792,138	2.8	4.7	50.3	42.2
Appalachian North Carolina	462,544	2.4	4.0	47.8	45.8
Non-Appalachian North Carolina	2,329,594	2.9	4.8	50.8	41.5
Ohio	3,288,369	3.7	4.6	54.0	37.7
Appalachian Ohio	523,047	3.7	3.8	47.1	45.5
Non-Appalachian Ohio	2,765,322	3.7	4.8	55.3	36.3
Pennsylvania	3,553,115	5.9	6.8	53.4	33.8
Appalachian Pennsylvania	1,597,107	4.6	6.0	53.3	36.2
Non-Appalachian Pennsylvania	1,956,008	7.1	7.5	53.5	32.0
South Carolina	1,308,174	2.9	5.1	50.7	41.3
Appalachian South Carolina	333,939	2.8	4.7	50.0	42.5
Non-Appalachian South Carolina	974,235	2.9	5.3	51.0	40.8
Tennessee	1,806,743	2.4	4.5	50.3	42.8
Appalachian Tennessee	751,977	2.0	3.8	47.3	46.9
Non-Appalachian Tennessee	1,054,766	2.7	5.0	52.4	39.9
Virginia	2,374,625	3.3	5.9	51.1	39.8
Appalachian Virginia	189,819	2.5	3.9	42.8	50.8
Non-Appalachian Virginia	2,184,806	3.4	6.0	51.8	38.9
West Virginia (entire state)	462,488	3.5	4.9	49.4	42.2

Note: "Households Where Workers Equal Vehicles" include households with three (3) or more workers with three (3) or more vehicles available. Because those are open-ended categories, some of these households could have more workers than available vehicles, while others could have more vehicles than workers.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Table 7.7: Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, by Amount of Time, 2013-2017

Travel Time to Work (Minutes)	Workers Ages 16 and Over	Percent of Workers Ages 16 and Over				Mean Travel Time to Work (Minutes)
		Less Than 15 Minutes	15 Minutes to 29 Minutes	30 Minutes to 59 Minutes	60 Minutes or More	
United States	141,404,632	26.3	36.2	28.6	8.9	26.4
Appalachian Region	10,557,739	28.9	37.2	26.4	7.6	25.1
Subregions						
Northern Appalachia	3,573,094	32.0	36.0	24.6	7.3	24.4
North Central Appalachia	957,820	29.0	35.6	26.0	9.4	26.4
Central Appalachia	636,753	31.1	33.1	27.0	8.7	25.7
South Central Appalachia	1,984,826	30.1	40.8	23.9	5.2	23.0
Southern Appalachia	3,405,246	24.3	37.4	29.7	8.6	26.7
County Types						
Large Metros (pop. 1 million +)	2,691,598	21.4	33.7	34.1	10.8	29.2
Small Metros (pop. <1 million)	4,545,806	29.8	41.5	23.3	5.4	23.2
Nonmetro, Adjacent to Large Metros	871,506	33.9	33.8	23.8	8.5	24.6
Nonmetro, Adjacent to Small Metros	1,538,751	32.6	33.8	25.6	8.1	25.0
Rural (nonmetro, not adj. to a metro)	910,078	35.4	34.6	22.7	7.2	23.6
Alabama	1,967,598	26.4	39.4	28.1	6.1	24.6
Appalachian Alabama	1,280,858	25.5	39.5	28.7	6.3	24.9
Non-Appalachian Alabama	686,740	28.2	39.3	26.9	5.6	23.9
Georgia	4,315,152	22.7	35.9	31.0	10.3	28.0
Appalachian Georgia	1,349,585	20.3	33.3	33.2	13.2	30.4
Non-Appalachian Georgia	2,965,567	23.8	37.1	30.0	9.0	27.0
Kentucky	1,843,797	30.8	39.2	24.4	5.5	23.1
Appalachian Kentucky	397,786	33.7	33.2	25.1	8.0	24.7
Non-Appalachian Kentucky	1,446,011	30.1	40.9	24.2	4.9	22.7
Maryland	2,872,476	17.0	31.2	36.4	15.4	32.7
Appalachian Maryland	103,660	30.9	36.7	21.5	10.8	26.4
Non-Appalachian Maryland	2,768,816	16.5	31.0	37.0	15.6	32.9
Mississippi	1,182,591	30.9	37.1	25.3	6.7	24.4
Appalachian Mississippi	243,527	33.3	36.5	24.4	5.9	23.5
Non-Appalachian Mississippi	939,064	30.2	37.3	25.6	6.9	24.6
New York	8,890,814	20.0	29.3	33.1	17.6	33.0
Appalachian New York	439,782	39.6	36.4	18.9	5.1	20.9
Non-Appalachian New York	8,451,032	19.0	28.9	33.8	18.2	33.6
North Carolina	4,334,735	27.5	40.1	26.5	5.9	24.3
Appalachian North Carolina	706,794	30.6	41.8	22.6	5.0	22.7
Non-Appalachian North Carolina	3,627,941	26.9	39.8	27.3	6.1	24.6
Ohio	5,174,623	28.9	40.4	25.6	5.0	23.4
Appalachian Ohio	818,390	30.7	36.2	25.0	8.2	25.3
Non-Appalachian Ohio	4,356,233	28.6	41.2	25.7	4.4	23.0
Pennsylvania	5,715,074	26.8	35.3	28.9	9.0	26.7
Appalachian Pennsylvania	2,514,000	30.4	35.6	26.4	7.6	25.2
Non-Appalachian Pennsylvania	3,201,074	23.9	35.1	30.9	10.0	27.9
South Carolina	2,085,473	26.9	39.5	27.8	5.8	24.3
Appalachian South Carolina	531,276	27.5	43.1	25.6	3.9	22.8
Non-Appalachian South Carolina	1,554,197	26.7	38.2	28.6	6.5	24.8
Tennessee	2,830,030	25.9	39.6	28.3	6.2	24.8
Appalachian Tennessee	1,166,334	28.6	40.3	25.5	5.5	23.7
Non-Appalachian Tennessee	1,663,696	24.0	39.0	30.3	6.7	25.6
Virginia	3,918,322	22.3	36.3	31.1	10.3	28.2
Appalachian Virginia	296,963	33.0	35.4	24.8	6.7	23.8
Non-Appalachian Virginia	3,621,359	21.4	36.3	31.6	10.6	28.6
West Virginia (entire state)	708,784	30.2	36.4	24.2	9.2	25.7

Note: Persons ages 16 and over who primarily worked from home are excluded from this analysis.

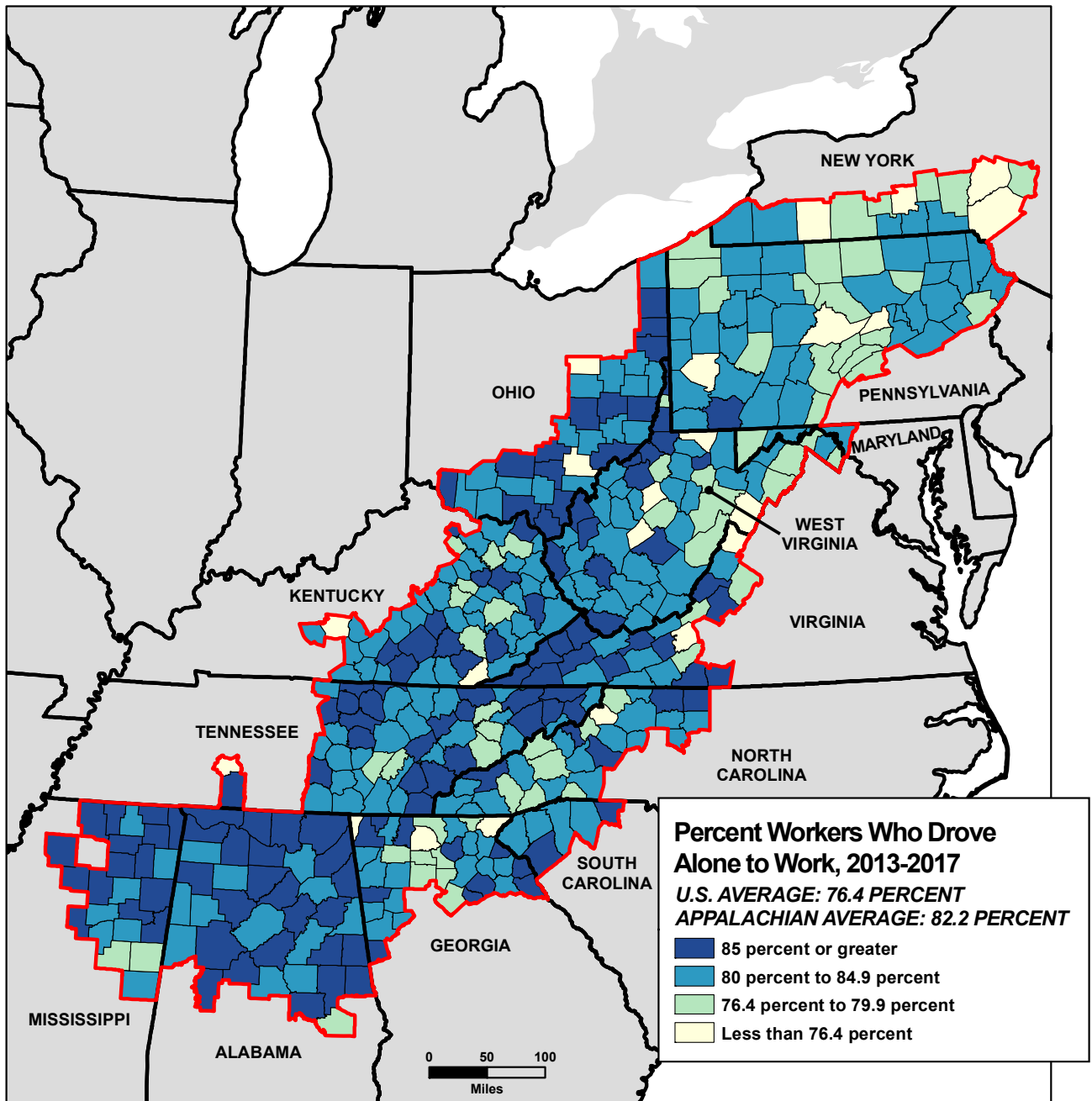
Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Table 7.8: Place of Work (State and County Level) for Workers Ages 16 and Over in the Appalachian Region, 2013-2017

Place of Work (State and County Level)	Workers Ages 16 and Over	Percent of Workers Ages 16 and Over			
		Worked in County of Residence	Worked Outside County of Residence		
			Total	Worked in State of Residence	Worked Outside State of Residence
United States	148,432,042	72.4	27.6	23.9	3.7
Appalachian Region	10,988,569	68.3	31.7	27.2	4.5
Subregions					
Northern Appalachia	3,719,529	73.6	26.4	22.1	4.3
North Central Appalachia	992,575	63.3	36.7	25.6	11.1
Central Appalachia	655,177	60.5	39.5	33.5	5.9
South Central Appalachia	2,075,825	70.8	29.2	26.1	3.2
Southern Appalachia	3,545,463	64.2	35.8	32.4	3.4
County Types					
Large Metros (pop. 1 million +)	2,827,733	63.8	36.2	33.6	2.6
Small Metros (pop. <1 million)	4,724,441	72.3	27.7	22.4	5.3
Nonmetro, Adjacent to Large Metros	901,734	67.2	32.8	28.7	4.1
Nonmetro, Adjacent to Small Metros	1,593,239	64.9	35.1	29.1	5.9
Rural (nonmetro, not adj. to a metro)	941,422	68.7	31.3	27.2	4.1
Alabama	2,030,100	72.7	27.3	22.7	4.6
Appalachian Alabama	1,318,830	71.4	28.6	25.8	2.8
Non-Appalachian Alabama	711,270	75.1	24.9	17.0	7.9
Georgia	4,553,332	58.5	41.5	38.8	2.7
Appalachian Georgia	1,426,751	53.5	46.5	42.6	3.9
Non-Appalachian Georgia	3,126,581	60.7	39.3	37.1	2.2
Kentucky	1,909,202	68.1	31.9	25.5	6.5
Appalachian Kentucky	409,165	62.7	37.3	32.8	4.4
Non-Appalachian Kentucky	1,500,037	69.5	30.5	23.5	7.0
Maryland	3,008,292	53.7	46.3	29.5	16.8
Appalachian Maryland	108,083	72.1	27.9	16.3	11.6
Non-Appalachian Maryland	2,900,209	53.0	47.0	30.0	17.0
Mississippi	1,208,408	63.6	36.4	28.1	8.3
Appalachian Mississippi	249,862	64.1	35.9	30.4	5.5
Non-Appalachian Mississippi	958,546	63.4	36.6	27.5	9.0
New York	9,269,671	64.2	35.8	33.3	2.5
Appalachian New York	457,804	76.9	23.1	20.4	2.7
Non-Appalachian New York	8,811,867	63.5	36.5	34.0	2.5
North Carolina	4,570,330	71.5	28.5	26.0	2.6
Appalachian North Carolina	745,111	72.0	28.0	25.5	2.5
Non-Appalachian North Carolina	3,825,219	71.4	28.6	26.1	2.6
Ohio	5,382,511	69.6	30.4	27.7	2.7
Appalachian Ohio	847,404	61.2	38.8	30.4	8.4
Non-Appalachian Ohio	4,535,107	71.1	28.9	27.2	1.7
Pennsylvania	5,976,599	70.5	29.5	24.3	5.2
Appalachian Pennsylvania	2,621,472	74.6	25.4	22.0	3.4
Non-Appalachian Pennsylvania	3,355,127	67.2	32.8	26.1	6.7
South Carolina	2,168,006	70.6	29.4	24.2	5.3
Appalachian South Carolina	550,020	75.3	24.7	22.5	2.2
Non-Appalachian South Carolina	1,617,986	69.0	31.0	24.7	6.3
Tennessee	2,951,964	71.6	28.4	24.7	3.7
Appalachian Tennessee	1,214,285	70.9	29.1	26.1	3.0
Non-Appalachian Tennessee	1,737,679	72.0	28.0	23.8	4.2
Virginia	4,115,810	48.5	51.5	42.7	8.8
Appalachian Virginia	307,375	59.0	41.0	32.4	8.6
Non-Appalachian Virginia	3,808,435	47.6	52.4	43.5	8.8
West Virginia (entire state)	732,407	66.8	33.2	20.9	12.3

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

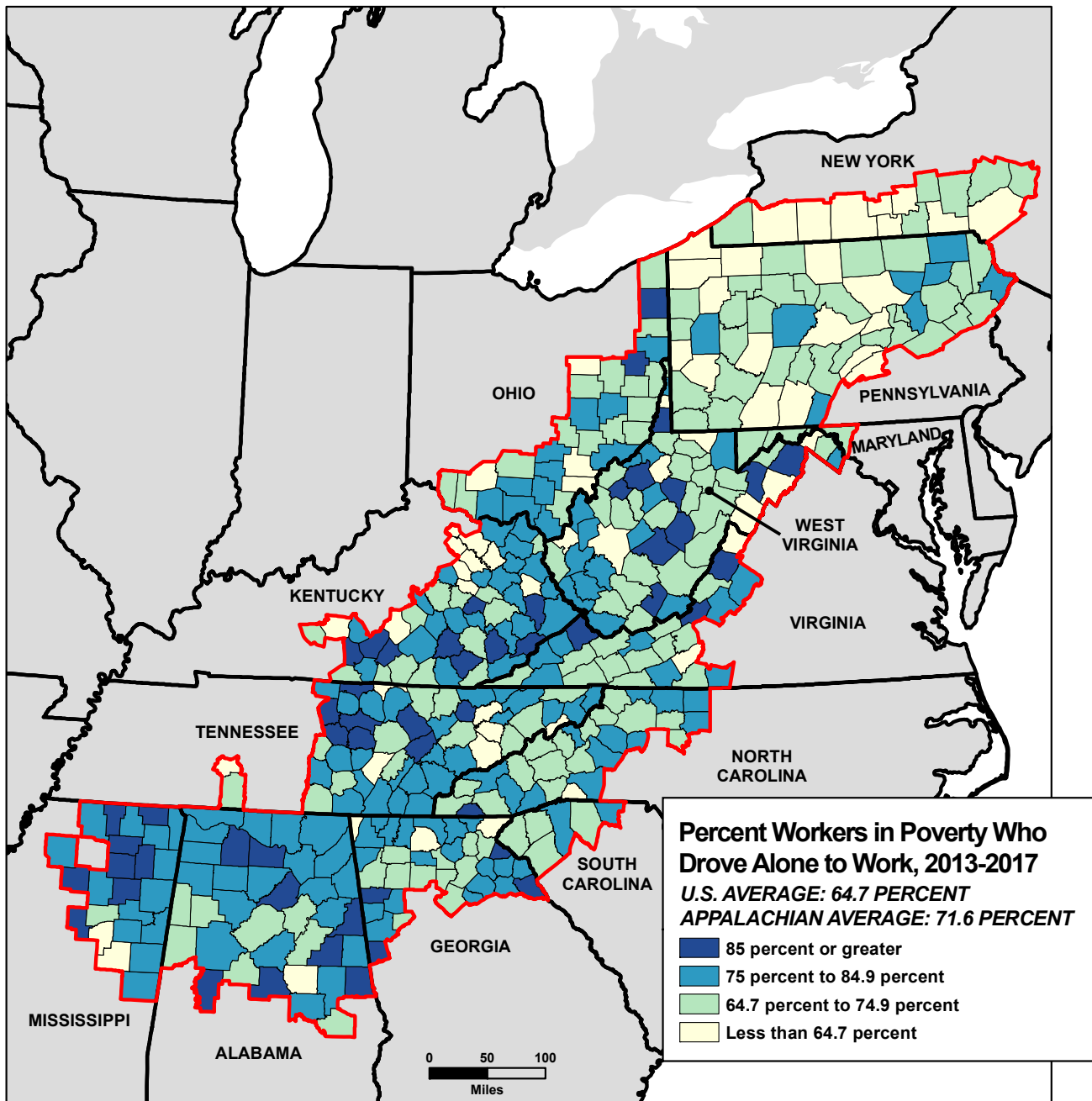
Figure 7.1: Percent of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2013-2017



Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In the 2013-2017 period, 82 percent of workers in the Appalachian Region drove alone to their jobs, which is nearly six percentage points higher than the nationwide share. And the percentage is even greater in much of Appalachia: In 133 Appalachian counties, at least 85 percent of workers drove alone. Central, South Central, and Southern Appalachia accounted for 107 of these counties, including 39 in Alabama and Mississippi alone. (The share of workers driving alone exceeded 85 percent in the Appalachian sections of both states.) In contrast, Northern and North Central Appalachia had 13 of the 22 counties in the Region where the share of workers driving alone was below the national average.

Figure 7.2: Percent of Workers Ages 16 and Over Below the Poverty Level in the Appalachian Region Who Drove Alone to Work, 2013-2017

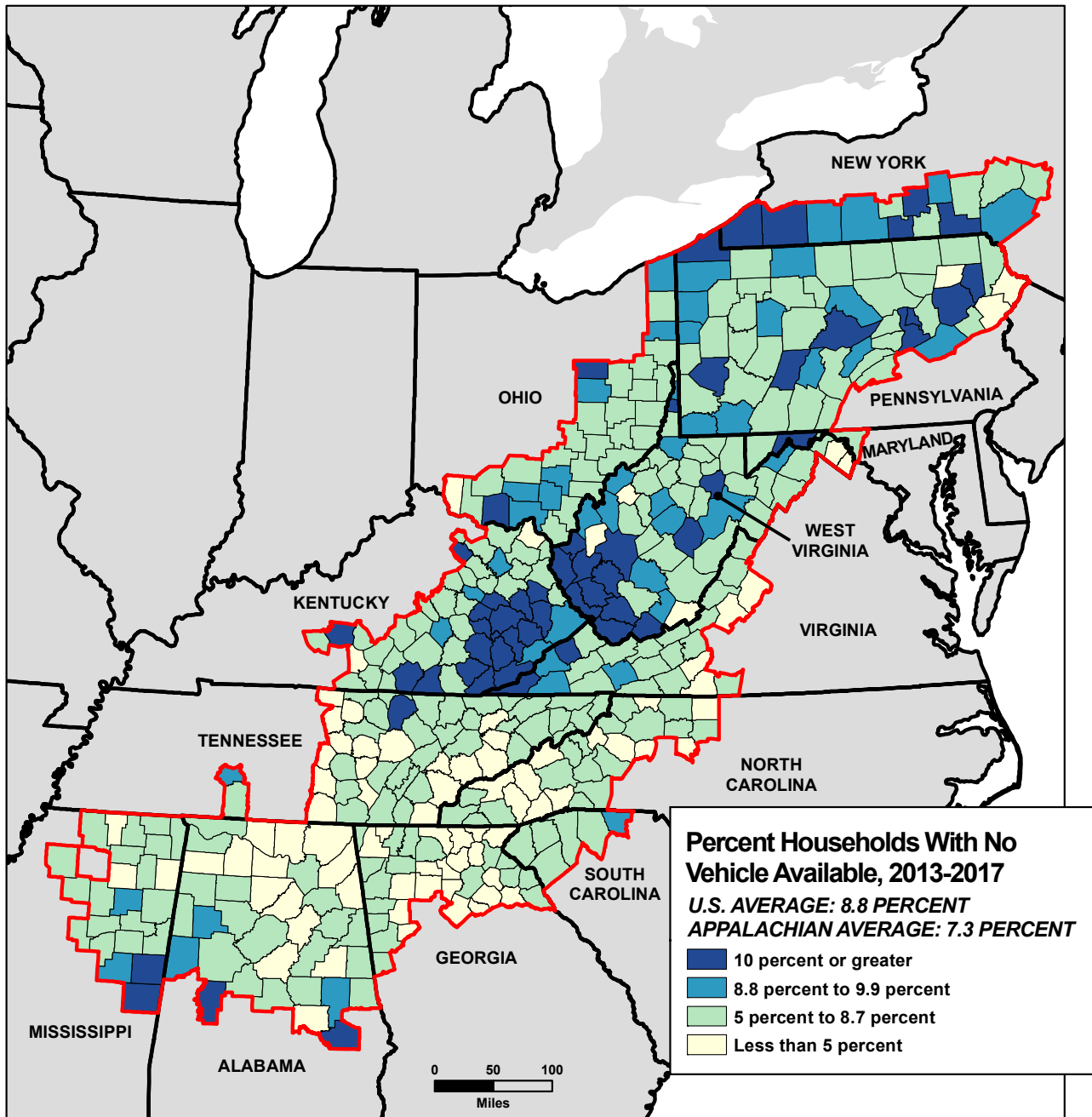


Map Title: Percent of Workers Ages 16 and Over Below the Poverty Line in the Appalachian Region Who Drove Alone to Work, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Among workers with incomes below the poverty level (\$24,858 for a family of two adults and two children in 2017), the share who drove alone to their places of employment was nearly 72 percent in Appalachia, compared to just 65 percent in the nation as a whole. The share was at least 75 percent in nearly half of the Region's 420 counties, and at least 85 percent in 52 of them. Central, South Central, and Southern Appalachia had the vast majority of counties in both groups; the share of poor workers who drove alone exceeded 74 percent in all three subregions. In contrast, nearly half of the 61 counties with rates below the national average were in Northern Appalachia—the only subregion where fewer than two-thirds of workers below the poverty level drove alone to their jobs.

Figure 7.3: Percent of Households in the Appalachian Region With No Vehicle Available, 2013-2017

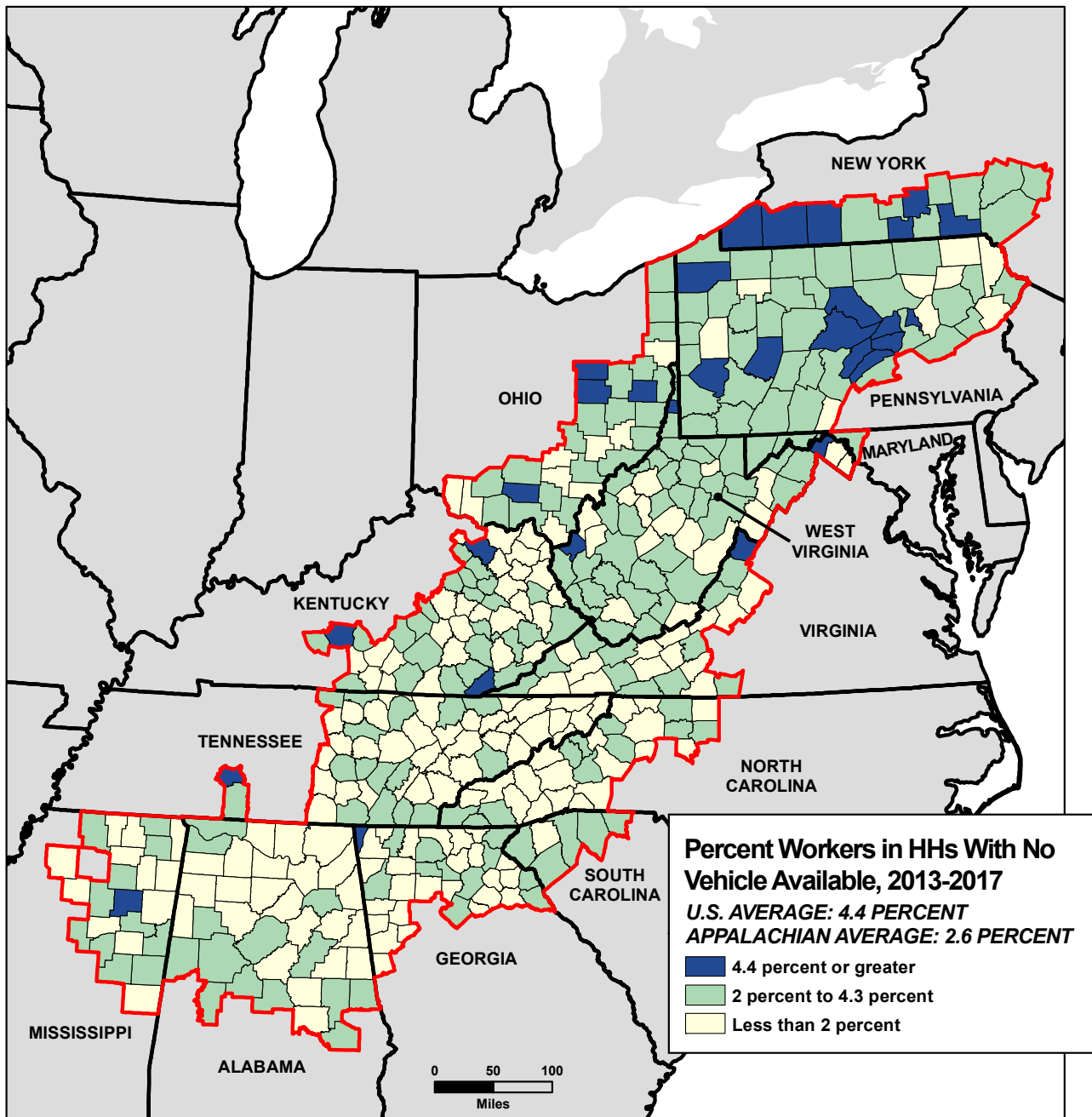


Map Title: Percent of Households in the Appalachian Region With No Vehicle Available, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Having a reliable mode of transportation is an important part of many household members' ability to gain and keep employment. Yet in Appalachia, just over 7 percent of households have no vehicle available to get to current and/or potential employment. While this is lower than the national average of almost 9 percent, that is not the case in much of the Region. In fact, there were 54 Appalachian counties where at least one in 10 households had no vehicle available; 44 of these counties were in four states—New York, Pennsylvania, West Virginia, and Kentucky. In contrast, there were 82 counties in the Region where less than 5 percent of households were without any motor vehicle. All but 14 of the counties in the latter group were in South Central and Southern Appalachia.

Figure 7.4: Percent of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2013-2017

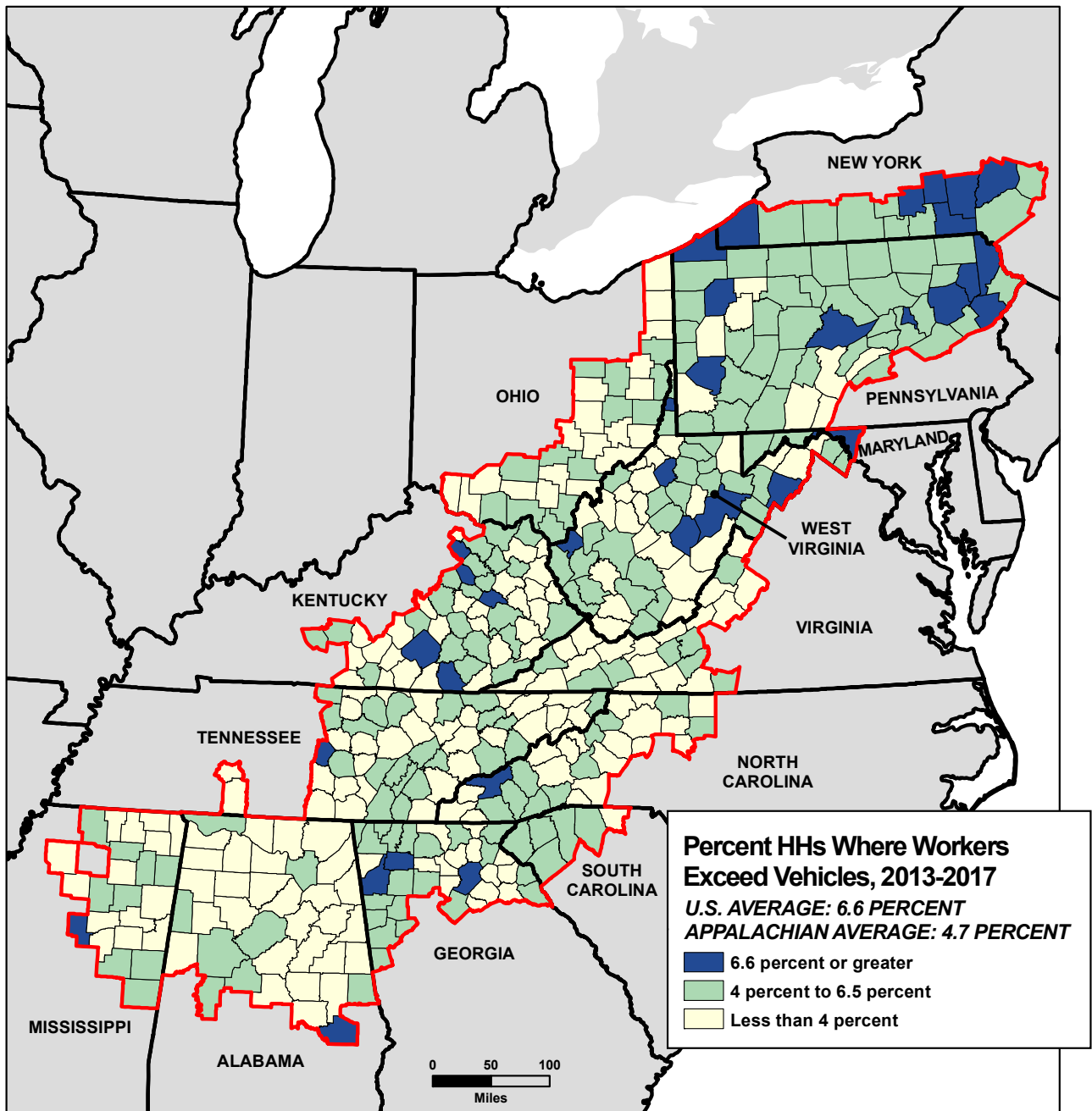


Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Just 2.6 percent of Appalachian workers live in households with no vehicle available, which is almost two percentage points below the national average. And the share is even lower in a large part of the Region: in 188 of Appalachia's 420 counties, less than 2 percent of the work force did not have a vehicle in their household. These counties were concentrated in Central, South Central, and Southern Appalachia; the share of workers without a vehicle was around 2 percent in all three subregions. In contrast, Northern Appalachia had 20 of the Region's 30 counties where the share of workers in zero-vehicle households was at or above the U.S. average.

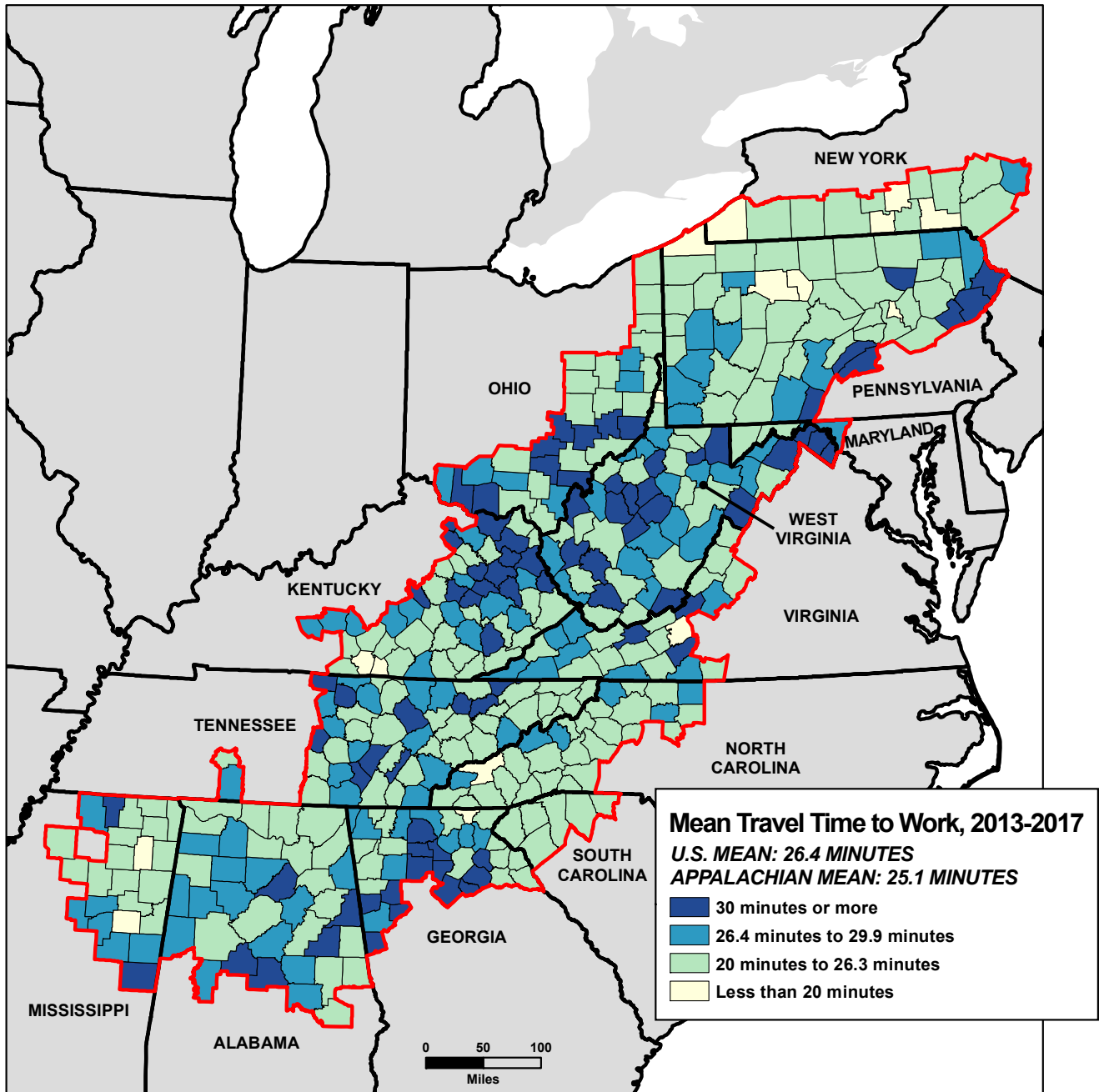
Figure 7.5: Percent of Households With One or More Workers in the Appalachian Region Where the Number of Workers Exceeds the Number of Vehicles Available, 2013-2017



Map Title: Percent of Households With One or More Workers in the Appalachian Region Where the Number of Workers Exceeds the Number of Vehicles Available, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In about 5 percent of Appalachian households, the number of workers in the household exceeds the number of vehicles available to provide transportation to places of employment, compared with about 7 percent nationwide. Such a situation is potentially problematic for household members, as they often must make special arrangements to accommodate different work schedules and responsibilities. This share is even lower in much of the Region: Less than 4 percent in nearly half of Appalachia's 420 counties, mostly in Central, South Central, and Southern Appalachia. Yet in 34 Appalachian counties, the share of households with more workers than vehicles matched or exceeded the national average. Nearly half of the counties in the latter group were in two states: New York and Pennsylvania.

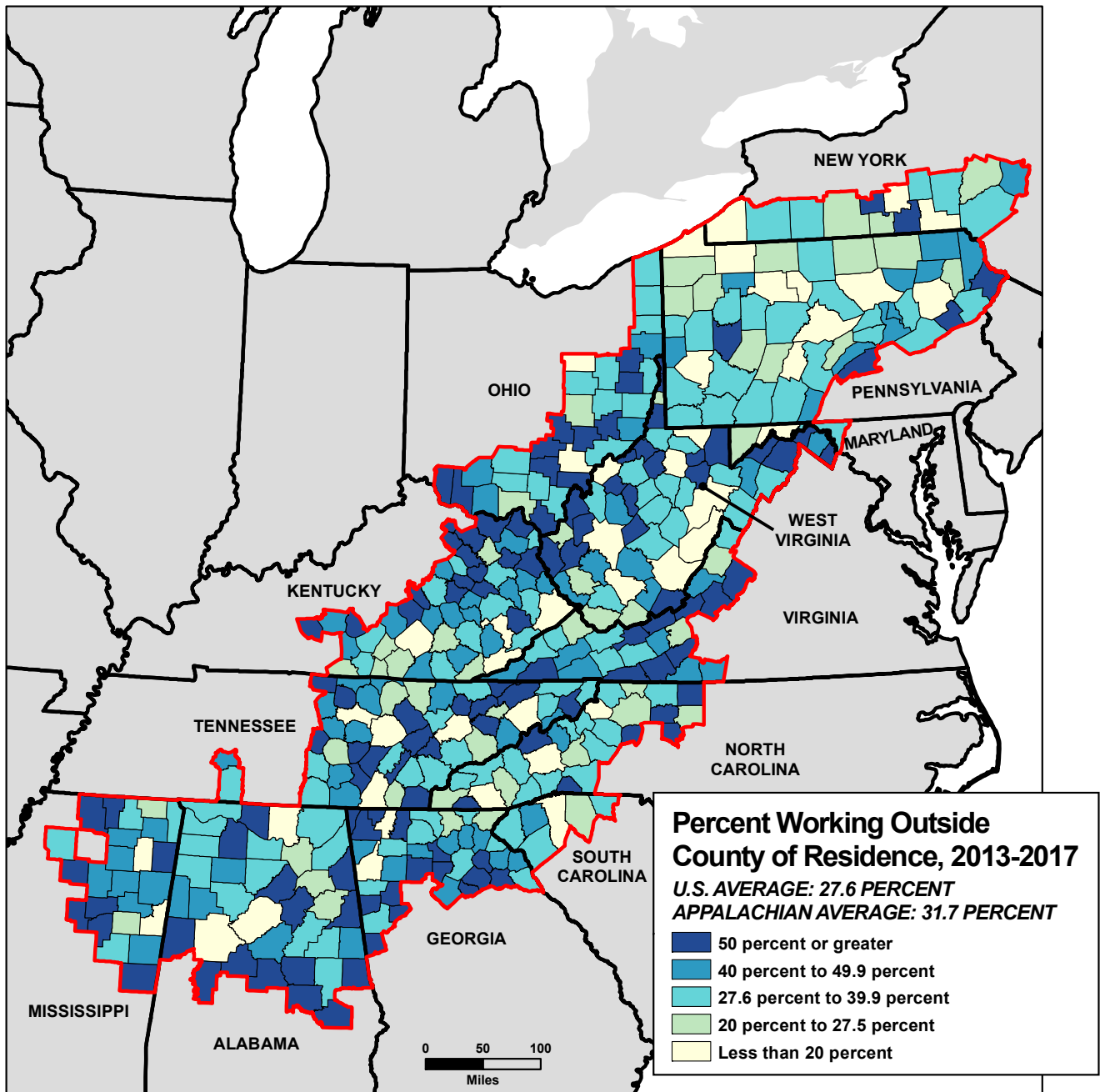
Figure 7.6: Mean Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, 2013-2017



Map Title: Mean Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In the Appalachian Region, workers ages 16 and older took, on average, 25 minutes to get to their jobs, a minute less than workers nationwide. But that was not the case in much of Appalachia: In 187 of the Region’s 420 counties, the mean travel time to work was at or above the national average. And in 83 Appalachian counties, workers averaged a half hour or more to get to their jobs. Nearly half of these 83 counties were in metropolitan areas, including suburban Atlanta and the exurban counties of New York City (Pike County, Pennsylvania) and Washington, D.C. (Jefferson County, West Virginia). Yet workers in 46 nonmetropolitan counties—32 of which were in Kentucky, West Virginia, and Ohio—faced similarly lengthy commutes. By comparison, workers in just 16 Appalachian counties had average commutes lasting less than 20 minutes. Some of these counties were home to colleges and universities (for example, Broome County, New York, home to Binghamton University).

Figure 7.7: Percent of Workers Ages 16 and Over in the Appalachian Region Who Work Outside Their County of Residence, 2013-2017



Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Work Outside Their County of Residence, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

About 32 percent of Appalachian workers ages 16 and older had jobs outside their county of residence during 2013-2017, four percentage points above the average nationwide. And the share is even higher in much of the Region: In 205 of Appalachia's 420 counties, at least 40 percent of workers had their primary employment outside their county of residence. And in 125 of these counties, at least half of workers were commuting to another county. Most of the counties in this latter group were in metropolitan areas, including the suburbs and exurbs of Atlanta, Birmingham, and even places like Cincinnati (Brown and Clermont counties in Ohio). In contrast, just 43 Appalachian counties had fewer than one in five workers employed outside their residential county. Many of these were central counties in metro areas (such as Allegheny County, Pennsylvania, where Pittsburgh is located) and counties that housed colleges and universities (like Tuscaloosa County, Alabama, home to the University of Alabama).

Table 7.9: Percentage Point Change in Means of Transportation for Workers Ages 16 and Over in the Appalachian Region, 2008-2012 to 2013-2017

Means of Transportation	Percentage Point Change in Share of Workers Ages 16 and Over					
	Car, Truck, or Van (Drove Alone)	Car, Truck, or Van (Carpooled)	Public Transportation (Excluding Taxicab)	Walked	Taxicab, Motorcycle, Bicycle, or Other Means	Worked at Home
United States	+ 0.3	- 0.8	+ 0.1	- 0.1	+ 0.0	+ 0.4
Appalachian Region	+ 0.7	- 1.0	+ 0.0	- 0.1	+ 0.1	+ 0.4
Subregions						
Northern Appalachia	+ 0.9	- 1.1	+ 0.0	- 0.3	+ 0.0	+ 0.3
North Central Appalachia	+ 0.6	- 1.0	+ 0.0	- 0.1	+ 0.2	+ 0.3
Central Appalachia	+ 0.3	- 0.9	- 0.1	+ 0.0	+ 0.2	+ 0.4
South Central Appalachia	- 0.1	- 0.7	+ 0.0	+ 0.0	+ 0.1	+ 0.8
Southern Appalachia	+ 0.8	- 1.1	+ 0.0	- 0.1	+ 0.0	+ 0.5
County Types						
Large Metros (pop. 1 million +)	+ 0.6	- 1.0	- 0.2	- 0.1	- 0.1	+ 0.7
Small Metros (pop. <1 million)	+ 0.4	- 0.9	+ 0.0	- 0.2	+ 0.0	+ 0.5
Nonmetro, Adjacent to Large Metros	+ 1.4	- 0.8	+ 0.0	- 0.4	+ 0.0	+ 0.0
Nonmetro, Adjacent to Small Metros	+ 1.0	- 1.1	+ 0.0	- 0.1	+ 0.0	+ 0.1
Rural (nonmetro, not adj. to a metro)	+ 0.9	- 1.5	- 0.1	+ 0.0	+ 0.3	+ 0.4
Alabama	+ 1.6	- 1.9	+ 0.0	- 0.1	+ 0.0	+ 0.5
Appalachian Alabama	+ 1.6	- 1.9	+ 0.0	- 0.1	+ 0.1	+ 0.3
Non-Appalachian Alabama	+ 1.7	- 2.1	- 0.2	- 0.2	- 0.2	+ 0.9
Georgia	+ 0.5	- 1.0	- 0.1	- 0.1	+ 0.0	+ 0.5
Appalachian Georgia	+ 0.6	- 0.9	+ 0.0	+ 0.1	- 0.2	+ 0.5
Non-Appalachian Georgia	+ 0.4	- 1.0	+ 0.0	- 0.1	+ 0.1	+ 0.6
Kentucky	+ 0.0	- 0.8	- 0.1	+ 0.1	+ 0.3	+ 0.4
Appalachian Kentucky	+ 0.7	- 1.2	- 0.2	+ 0.0	+ 0.4	+ 0.3
Non-Appalachian Kentucky	- 0.2	- 0.7	- 0.1	+ 0.2	+ 0.3	+ 0.5
Maryland	+ 0.6	- 1.3	+ 0.0	+ 0.0	+ 0.3	+ 0.4
Appalachian Maryland	+ 1.2	- 1.8	+ 0.2	+ 0.3	- 0.1	+ 0.1
Non-Appalachian Maryland	+ 0.6	- 1.3	+ 0.0	+ 0.0	+ 0.3	+ 0.4
Mississippi	+ 1.9	- 1.7	- 0.1	- 0.3	+ 0.3	- 0.3
Appalachian Mississippi	+ 1.2	- 1.6	- 0.2	- 0.2	+ 0.0	+ 0.7
Non-Appalachian Mississippi	+ 2.1	- 1.7	+ 0.0	- 0.3	+ 0.5	- 0.6
New York	- 1.1	- 0.5	+ 1.4	- 0.1	+ 0.1	+ 0.2
Appalachian New York	+ 1.5	- 1.0	+ 0.0	- 0.2	- 0.1	- 0.4
Non-Appalachian New York	- 1.1	- 0.5	+ 1.4	- 0.1	+ 0.2	+ 0.2
North Carolina	+ 0.3	- 1.2	- 0.1	+ 0.0	+ 0.0	+ 0.9
Appalachian North Carolina	- 0.1	- 0.8	+ 0.0	- 0.2	+ 0.1	+ 0.9
Non-Appalachian North Carolina	+ 0.4	- 1.3	+ 0.0	+ 0.1	+ 0.0	+ 0.9
Ohio	+ 0.3	- 0.6	- 0.1	- 0.1	+ 0.0	+ 0.4
Appalachian Ohio	+ 0.9	- 1.2	- 0.1	- 0.1	+ 0.2	+ 0.1
Non-Appalachian Ohio	+ 0.2	- 0.6	- 0.1	- 0.1	+ 0.0	+ 0.4
Pennsylvania	- 0.1	- 0.7	+ 0.2	- 0.1	+ 0.1	+ 0.7
Appalachian Pennsylvania	+ 0.8	- 1.0	+ 0.0	- 0.4	+ 0.0	+ 0.6
Non-Appalachian Pennsylvania	- 0.6	- 0.5	+ 0.1	+ 0.0	+ 0.2	+ 0.7
South Carolina	+ 0.4	- 0.6	+ 0.0	+ 0.2	- 0.1	+ 0.2
Appalachian South Carolina	+ 0.0	+ 0.0	+ 0.1	- 0.4	+ 0.0	+ 0.4
Non-Appalachian South Carolina	+ 0.7	- 0.8	- 0.1	+ 0.3	- 0.2	+ 0.1
Tennessee	+ 0.2	- 1.0	- 0.1	+ 0.1	+ 0.2	+ 0.7
Appalachian Tennessee	- 0.3	- 0.5	+ 0.0	+ 0.0	+ 0.0	+ 0.7
Non-Appalachian Tennessee	+ 0.6	- 1.4	- 0.1	+ 0.0	+ 0.3	+ 0.7
Virginia	+ 0.1	- 0.9	+ 0.0	+ 0.1	+ 0.3	+ 0.3
Appalachian Virginia	+ 0.9	- 1.6	+ 0.1	+ 0.3	+ 0.0	+ 0.2
Non-Appalachian Virginia	+ 0.1	- 0.9	+ 0.0	+ 0.2	+ 0.4	+ 0.3
West Virginia (entire state)	+ 0.3	- 0.7	+ 0.1	+ 0.0	+ 0.1	+ 0.2

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Table 7.10: Percentage Point Change in Means of Transportation for Workers Ages 16 and Over in the Appalachian Region Below the Poverty Level, 2008-2012 to 2013-2017

Means of Transportation	Percentage Point Change in Share of Workers Ages 16 and Over Below the Poverty Level					
	Car, Truck, or Van (Drove Alone)	Car, Truck, or Van (Carpooled)	Public Transportation (Excluding Taxicab)	Walked	Taxicab, Motorcycle, Bicycle, or Other Means	Worked at Home
United States	+ 1.9	- 1.4	- 0.1	- 0.3	- 0.1	+ 0.0
Appalachian Region	+ 1.8	- 1.4	+ 0.0	- 0.4	+ 0.0	+ 0.1
Subregions						
Northern Appalachia	+ 1.2	- 0.4	+ 0.0	- 0.9	+ 0.1	+ 0.0
North Central Appalachia	- 0.8	+ 0.3	- 0.1	- 0.7	+ 0.6	+ 0.5
Central Appalachia	+ 1.7	- 1.9	+ 0.0	- 0.3	+ 0.1	+ 0.6
South Central Appalachia	+ 1.1	- 1.1	+ 0.1	- 0.4	- 0.2	+ 0.4
Southern Appalachia	+ 3.4	- 2.8	- 0.2	+ 0.2	- 0.3	- 0.1
County Types						
Large Metros (pop. 1 million +)	+ 2.0	- 0.6	- 0.2	- 0.1	- 0.8	- 0.2
Small Metros (pop. <1 million)	+ 1.6	- 1.3	- 0.1	- 0.6	+ 0.0	+ 0.3
Nonmetro, Adjacent to Large Metros	+ 1.5	- 1.7	- 0.2	- 0.1	+ 0.3	+ 0.2
Nonmetro, Adjacent to Small Metros	+ 1.3	- 0.9	+ 0.3	- 0.6	+ 0.2	- 0.2
Rural (nonmetro, not adj. to a metro)	+ 3.3	- 3.1	- 0.1	- 0.4	+ 0.1	+ 0.3
Alabama	+ 5.5	- 4.3	- 0.4	- 0.2	- 0.6	+ 0.1
Appalachian Alabama	+ 4.6	- 3.9	- 0.4	- 0.1	- 0.2	+ 0.0
Non-Appalachian Alabama	+ 6.7	- 4.8	- 0.6	- 0.5	- 1.3	+ 0.5
Georgia	+ 3.0	- 2.6	- 0.3	- 0.1	- 0.5	+ 0.4
Appalachian Georgia	+ 3.3	- 2.6	+ 0.0	+ 0.8	- 1.0	- 0.6
Non-Appalachian Georgia	+ 3.0	- 2.6	- 0.5	- 0.5	- 0.2	+ 0.8
Kentucky	+ 0.9	- 1.9	- 0.1	+ 0.2	+ 0.2	+ 0.6
Appalachian Kentucky	+ 2.9	- 3.0	+ 0.0	- 0.7	+ 0.5	+ 0.2
Non-Appalachian Kentucky	+ 0.2	- 1.4	- 0.2	+ 0.6	+ 0.1	+ 0.7
Maryland	+ 2.9	- 0.4	- 1.6	- 1.1	- 0.3	+ 0.4
Appalachian Maryland	+ 1.4	- 1.7	+ 1.7	- 2.6	- 0.4	+ 1.6
Non-Appalachian Maryland	+ 3.0	- 0.3	- 1.9	- 0.9	- 0.2	+ 0.3
Mississippi	+ 3.9	- 3.1	+ 0.1	- 0.7	+ 0.7	- 0.7
Appalachian Mississippi	+ 7.4	- 5.4	- 1.0	- 0.9	- 0.3	+ 0.1
Non-Appalachian Mississippi	+ 2.9	- 2.5	+ 0.3	- 0.6	+ 0.9	- 0.9
New York	+ 0.7	- 0.3	+ 0.8	- 0.5	- 0.1	- 0.5
Appalachian New York	+ 1.6	- 0.7	+ 0.8	- 1.2	- 0.7	+ 0.0
Non-Appalachian New York	+ 0.7	- 0.3	+ 0.6	- 0.5	- 0.1	- 0.6
North Carolina	+ 3.3	- 2.5	- 0.1	- 0.4	- 0.6	+ 0.3
Appalachian North Carolina	+ 1.9	- 1.8	+ 0.1	- 0.4	- 0.7	+ 0.9
Non-Appalachian North Carolina	+ 3.6	- 2.6	- 0.2	- 0.5	- 0.6	+ 0.2
Ohio	+ 0.3	- 0.8	+ 0.0	- 0.2	+ 0.7	+ 0.0
Appalachian Ohio	+ 1.0	- 0.8	- 0.5	- 0.6	+ 1.0	- 0.2
Non-Appalachian Ohio	+ 0.1	- 0.8	+ 0.0	- 0.1	+ 0.6	+ 0.1
Pennsylvania	+ 1.0	+ 0.2	+ 0.1	- 0.9	- 0.1	- 0.4
Appalachian Pennsylvania	+ 0.9	- 0.1	+ 0.0	- 1.0	+ 0.3	- 0.1
Non-Appalachian Pennsylvania	+ 1.5	+ 0.5	- 0.4	- 0.6	- 0.4	- 0.7
South Carolina	+ 1.6	- 1.1	+ 0.0	- 0.5	+ 0.0	+ 0.0
Appalachian South Carolina	- 1.9	+ 0.6	+ 0.3	- 0.2	+ 0.9	+ 0.4
Non-Appalachian South Carolina	+ 2.7	- 1.6	- 0.2	- 0.6	- 0.2	- 0.1
Tennessee	+ 1.5	- 1.2	- 0.3	- 0.6	+ 0.4	+ 0.1
Appalachian Tennessee	+ 0.2	+ 0.0	- 0.1	- 0.4	+ 0.1	+ 0.3
Non-Appalachian Tennessee	+ 2.5	- 2.3	- 0.3	- 0.6	+ 0.6	+ 0.1
Virginia	+ 1.5	- 1.9	- 0.1	+ 0.0	+ 0.7	- 0.2
Appalachian Virginia	+ 1.3	- 2.3	+ 0.4	+ 0.4	- 0.4	+ 0.6
Non-Appalachian Virginia	+ 1.7	- 1.8	- 0.3	- 0.1	+ 0.8	- 0.2
West Virginia (entire state)	- 0.9	+ 0.7	+ 0.2	- 0.4	- 0.4	+ 0.7

Note: Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2017, the poverty threshold for a family of two adults and two children was \$24,858. The poverty universe does not include unrelated individuals under age 15, people living in college dormitories, and people living in institutional group quarters.

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Table 7.11: Percentage Point Change in Availability of Vehicles for Households in the Appalachian Region, 2008-2012 to 2013-2017

Availability of Vehicles	Percentage Point Change in Share of Households				
	No Vehicle Available	One Vehicle Available	Two Vehicles Available	Three Vehicles Available	Four or More Vehicles Available
United States	- 0.2	- 0.5	- 0.2	+ 0.4	+ 0.6
Appalachian Region	- 0.2	- 0.5	- 0.4	+ 0.3	+ 0.6
Subregions					
Northern Appalachia	- 0.1	- 0.1	- 0.4	+ 0.2	+ 0.5
North Central Appalachia	+ 0.1	- 0.6	- 0.2	+ 0.1	+ 0.7
Central Appalachia	+ 0.1	- 0.3	- 0.5	+ 0.0	+ 0.7
South Central Appalachia	- 0.3	- 0.5	- 0.3	+ 0.4	+ 0.6
Southern Appalachia	- 0.1	- 0.8	- 0.3	+ 0.5	+ 0.8
County Types					
Large Metros (pop. 1 million +)	- 0.5	- 0.6	- 0.4	+ 0.6	+ 0.9
Small Metros (pop. <1 million)	+ 0.0	- 0.6	- 0.2	+ 0.2	+ 0.6
Nonmetro, Adjacent to Large Metros	+ 0.1	- 0.4	- 0.1	+ 0.0	+ 0.5
Nonmetro, Adjacent to Small Metros	+ 0.1	- 0.6	- 0.6	+ 0.4	+ 0.7
Rural (nonmetro, not adj. to a metro)	- 0.1	- 0.2	- 0.5	+ 0.1	+ 0.6
Alabama	- 0.3	+ 0.1	- 0.4	+ 0.0	+ 0.5
Appalachian Alabama	- 0.2	+ 0.1	- 0.4	- 0.1	+ 0.5
Non-Appalachian Alabama	- 0.3	+ 0.2	- 0.5	+ 0.2	+ 0.3
Georgia	+ 0.0	- 0.7	- 0.5	+ 0.4	+ 0.7
Appalachian Georgia	+ 0.0	- 1.7	- 0.6	+ 1.0	+ 1.1
Non-Appalachian Georgia	+ 0.0	- 0.2	- 0.5	+ 0.2	+ 0.5
Kentucky	- 0.1	- 0.2	- 0.2	- 0.1	+ 0.6
Appalachian Kentucky	- 0.1	- 0.1	- 0.4	+ 0.1	+ 0.6
Non-Appalachian Kentucky	- 0.2	- 0.2	- 0.2	- 0.1	+ 0.7
Maryland	- 0.3	- 0.2	+ 0.1	+ 0.0	+ 0.5
Appalachian Maryland	+ 0.7	- 0.1	- 1.4	+ 0.4	+ 0.5
Non-Appalachian Maryland	- 0.3	- 0.1	+ 0.1	- 0.1	+ 0.4
Mississippi	- 0.2	- 0.7	- 0.1	+ 0.4	+ 0.6
Appalachian Mississippi	- 0.7	- 1.1	+ 0.0	+ 0.8	+ 1.0
Non-Appalachian Mississippi	- 0.2	- 0.5	- 0.1	+ 0.3	+ 0.5
New York	- 0.1	+ 0.3	- 0.6	+ 0.1	+ 0.2
Appalachian New York	+ 0.6	+ 0.0	- 0.6	+ 0.0	+ 0.0
Non-Appalachian New York	- 0.2	+ 0.3	- 0.6	+ 0.1	+ 0.3
North Carolina	- 0.4	- 0.4	- 0.3	+ 0.4	+ 0.6
Appalachian North Carolina	- 0.6	- 0.1	+ 0.1	+ 0.1	+ 0.5
Non-Appalachian North Carolina	- 0.5	- 0.4	- 0.3	+ 0.4	+ 0.6
Ohio	+ 0.1	- 0.5	- 0.4	+ 0.3	+ 0.5
Appalachian Ohio	+ 0.4	- 0.6	- 0.8	+ 0.5	+ 0.7
Non-Appalachian Ohio	+ 0.0	- 0.5	- 0.4	+ 0.4	+ 0.6
Pennsylvania	- 0.5	+ 0.1	- 0.3	+ 0.3	+ 0.5
Appalachian Pennsylvania	- 0.3	- 0.1	- 0.3	+ 0.2	+ 0.5
Non-Appalachian Pennsylvania	- 0.8	+ 0.2	- 0.2	+ 0.4	+ 0.5
South Carolina	- 0.6	- 0.3	+ 0.0	+ 0.3	+ 0.6
Appalachian South Carolina	+ 0.2	- 1.3	+ 0.3	+ 0.1	+ 0.6
Non-Appalachian South Carolina	- 0.8	+ 0.0	- 0.1	+ 0.2	+ 0.6
Tennessee	- 0.2	- 0.7	- 0.2	+ 0.2	+ 0.9
Appalachian Tennessee	+ 0.0	- 1.0	- 0.4	+ 0.4	+ 1.0
Non-Appalachian Tennessee	- 0.4	- 0.6	- 0.1	+ 0.2	+ 0.8
Virginia	+ 0.0	+ 0.1	- 0.2	- 0.2	+ 0.4
Appalachian Virginia	- 0.2	+ 0.0	- 0.5	+ 0.5	+ 0.2
Non-Appalachian Virginia	+ 0.0	+ 0.0	- 0.2	- 0.2	+ 0.4
West Virginia (entire state)	+ 0.1	- 0.6	- 0.1	+ 0.0	+ 0.7

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Table 7.12: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region in Who Live in Households With No Vehicle Available, by Means of Transportation, 2008-2012 to 2013-2017

Availability of Vehicles	Percentage Point Change in Share Who Live in Households With No Vehicle Available						
	Total Workers Ages 16 and Over	Car, Truck, or Van (Drove Alone)	Car, Truck, or Van (Carpooled)	Public Transportation (Excluding Taxicab)	Walked	Taxicab, Motorcycle, Bicycle, or Other Means	Worked at Home
United States	+ 0.0	+ 0.0	- 0.1	- 1.1	+ 0.4	+ 0.3	- 0.2
Appalachian Region	+ 0.0	- 0.1	+ 0.6	+ 1.7	+ 2.9	+ 3.5	+ 0.0
Subregions							
Northern Appalachia	+ 0.2	+ 0.0	+ 1.3	+ 1.6	+ 3.6	+ 3.3	+ 0.2
North Central Appalachia	+ 0.1	+ 0.1	+ 0.6	- 0.1	- 0.6	+ 3.3	+ 0.5
Central Appalachia	+ 0.2	+ 0.1	+ 1.0	- 2.0	+ 3.7	+ 3.0	- 0.1
South Central Appalachia	- 0.1	- 0.1	- 0.3	- 1.2	+ 1.0	+ 1.4	- 0.1
Southern Appalachia	+ 0.1	+ 0.0	+ 0.4	+ 4.4	+ 4.6	+ 5.2	- 0.1
County Types							
Large Metros (pop. 1 million +)	+ 0.0	- 0.1	+ 0.5	+ 1.4	+ 3.5	+ 4.1	- 0.1
Small Metros (pop. <1 million)	+ 0.0	- 0.1	+ 0.3	+ 1.0	+ 2.0	+ 3.0	+ 0.0
Nonmetro, Adjacent to Large Metros	+ 0.3	+ 0.1	+ 1.1	+ 10.7	+ 4.7	- 0.2	+ 1.0
Nonmetro, Adjacent to Small Metros	+ 0.3	+ 0.1	+ 1.3	- 1.6	+ 2.2	+ 3.8	+ 0.4
Rural (nonmetro, not adj. to a metro)	+ 0.1	+ 0.0	+ 0.8	+ 6.7	+ 2.9	+ 4.9	- 1.1
Alabama	- 0.1	+ 0.0	- 0.5	+ 4.9	+ 2.3	+ 0.7	- 0.2
Appalachian Alabama	- 0.1	- 0.1	- 0.2	+ 4.2	+ 2.5	+ 1.9	- 0.4
Non-Appalachian Alabama	- 0.2	+ 0.2	- 1.0	+ 5.8	+ 2.2	- 0.4	+ 0.0
Georgia	+ 0.1	+ 0.0	+ 0.6	+ 0.1	+ 0.2	+ 2.3	- 0.1
Appalachian Georgia	+ 0.3	+ 0.0	+ 1.4	+ 7.5	+ 7.1	+ 7.3	- 0.1
Non-Appalachian Georgia	+ 0.0	+ 0.0	+ 0.1	- 0.5	- 1.4	+ 0.3	- 0.2
Kentucky	+ 0.2	+ 0.0	+ 0.5	+ 4.6	+ 0.9	+ 3.6	+ 1.0
Appalachian Kentucky	+ 0.3	+ 0.0	+ 1.5	- 1.6	+ 0.9	+ 5.9	+ 0.8
Non-Appalachian Kentucky	+ 0.2	+ 0.0	+ 0.1	+ 4.4	+ 0.8	+ 2.9	+ 1.0
Maryland	- 0.4	+ 0.0	- 0.4	- 1.9	- 2.3	- 1.6	- 0.1
Appalachian Maryland	+ 0.5	+ 0.3	+ 0.2	+ 13.5	- 4.8	+ 13.0	+ 0.2
Non-Appalachian Maryland	- 0.3	+ 0.0	- 0.3	- 2.0	- 2.2	- 2.0	- 0.1
Mississippi	- 0.1	+ 0.2	- 0.2	+ 7.4	- 3.3	- 1.8	- 0.4
Appalachian Mississippi	- 0.1	+ 0.0	- 1.2	+ 5.1	+ 7.5	+ 9.7	- 0.2
Non-Appalachian Mississippi	+ 0.0	+ 0.2	+ 0.0	+ 6.2	- 5.9	- 3.8	- 0.5
New York	+ 0.2	- 0.2	+ 0.0	- 1.3	- 0.1	+ 2.2	- 0.8
Appalachian New York	+ 0.5	+ 0.2	+ 2.7	+ 0.0	+ 4.5	- 4.9	+ 0.7
Non-Appalachian New York	+ 0.1	- 0.3	- 0.2	- 1.3	- 0.3	+ 2.4	- 1.0
North Carolina	- 0.2	+ 0.0	- 1.1	- 3.9	- 0.7	+ 0.2	+ 0.0
Appalachian North Carolina	- 0.2	- 0.1	- 0.7	- 5.1	- 0.1	+ 3.7	+ 0.6
Non-Appalachian North Carolina	- 0.2	+ 0.1	- 1.1	- 3.8	- 0.8	- 0.5	- 0.2
Ohio	+ 0.1	+ 0.0	+ 1.0	+ 2.7	+ 0.8	+ 3.4	+ 0.0
Appalachian Ohio	+ 0.3	+ 0.0	+ 2.3	+ 9.5	+ 0.1	+ 7.4	- 0.5
Non-Appalachian Ohio	+ 0.2	+ 0.1	+ 0.8	+ 2.3	+ 1.1	+ 2.4	+ 0.2
Pennsylvania	+ 0.0	- 0.1	+ 1.0	- 1.4	+ 2.1	+ 0.5	- 0.2
Appalachian Pennsylvania	+ 0.1	- 0.1	+ 0.6	+ 1.3	+ 3.8	+ 3.1	+ 0.2
Non-Appalachian Pennsylvania	- 0.1	- 0.1	+ 1.4	- 2.3	+ 0.4	- 1.4	- 0.4
South Carolina	- 0.4	- 0.1	- 0.5	+ 0.3	- 2.8	- 3.8	- 1.2
Appalachian South Carolina	+ 0.2	+ 0.2	- 0.3	- 7.9	+ 2.7	+ 3.4	+ 0.0
Non-Appalachian South Carolina	- 0.5	- 0.2	- 0.6	+ 2.7	- 4.3	- 5.2	- 1.5
Tennessee	+ 0.0	+ 0.0	+ 0.0	+ 0.5	+ 2.0	- 0.5	- 0.4
Appalachian Tennessee	+ 0.0	- 0.1	+ 0.4	+ 1.7	+ 2.6	+ 0.5	- 0.6
Non-Appalachian Tennessee	+ 0.0	+ 0.0	- 0.1	+ 0.1	+ 1.5	- 1.1	- 0.3
Virginia	+ 0.0	+ 0.1	+ 0.2	- 1.6	- 1.8	+ 1.0	+ 0.1
Appalachian Virginia	- 0.1	+ 0.1	- 0.6	+ 0.8	+ 0.5	- 5.9	- 1.6
Non-Appalachian Virginia	+ 0.0	+ 0.0	+ 0.2	- 1.7	- 1.9	+ 1.4	+ 0.2
West Virginia (entire state)	+ 0.2	+ 0.0	+ 0.9	- 0.4	+ 1.6	+ 1.9	+ 0.6

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Table 7.13: Change in Relationship Between Number of Workers and Availability of Vehicles for Households in the Appalachian Region With One or More Workers, 2008-2012 to 2013-2017

Availability of Vehicles	Percentage Point Change in Share of Households With One or More Workers			
	Households With Zero Vehicles	Households Where Workers Exceed Vehicles	Households Where Workers Equal Vehicles	Households Where Vehicles Exceed Workers
United States	- 0.1	+ 0.4	+ 0.0	- 0.3
Appalachian Region	+ 0.1	+ 0.1	+ 0.1	- 0.4
Subregions				
Northern Appalachia	+ 0.3	+ 0.1	+ 0.1	- 0.5
North Central Appalachia	+ 0.3	+ 0.4	- 0.4	- 0.4
Central Appalachia	+ 0.2	+ 0.2	- 0.6	+ 0.1
South Central Appalachia	- 0.1	+ 0.2	+ 0.0	- 0.2
Southern Appalachia	+ 0.0	+ 0.1	+ 0.4	- 0.5
County Types				
Large Metros (pop. 1 million +)	- 0.1	+ 0.0	+ 0.8	- 0.8
Small Metros (pop. <1 million)	+ 0.1	+ 0.3	- 0.1	- 0.3
Nonmetro, Adjacent to Large Metros	+ 0.3	+ 0.1	- 0.4	+ 0.0
Nonmetro, Adjacent to Small Metros	+ 0.4	+ 0.2	- 0.4	- 0.2
Rural (nonmetro, not adj. to a metro)	+ 0.1	+ 0.3	- 0.2	- 0.2
Alabama	- 0.1	- 0.1	+ 0.6	- 0.4
Appalachian Alabama	- 0.2	+ 0.1	+ 0.8	- 0.7
Non-Appalachian Alabama	- 0.2	- 0.4	+ 0.4	+ 0.1
Georgia	+ 0.0	+ 0.2	+ 0.1	- 0.3
Appalachian Georgia	+ 0.2	+ 0.1	+ 0.1	- 0.4
Non-Appalachian Georgia	- 0.1	+ 0.3	+ 0.1	- 0.3
Kentucky	+ 0.3	+ 0.7	+ 0.0	- 0.8
Appalachian Kentucky	+ 0.2	+ 0.2	- 0.6	+ 0.2
Non-Appalachian Kentucky	+ 0.2	+ 0.8	+ 0.0	- 1.0
Maryland	- 0.4	+ 0.8	+ 0.2	- 0.6
Appalachian Maryland	+ 0.4	+ 0.5	- 1.5	+ 0.6
Non-Appalachian Maryland	- 0.3	+ 0.7	+ 0.2	- 0.5
Mississippi	- 0.1	+ 0.2	- 1.0	+ 0.9
Appalachian Mississippi	- 0.1	+ 0.3	- 1.7	+ 1.4
Non-Appalachian Mississippi	- 0.2	+ 0.2	- 0.8	+ 0.7
New York	+ 0.2	+ 1.0	- 0.6	- 0.6
Appalachian New York	+ 0.6	+ 0.1	- 0.3	- 0.4
Non-Appalachian New York	+ 0.1	+ 0.9	- 0.6	- 0.5
North Carolina	- 0.2	+ 0.1	+ 0.4	- 0.2
Appalachian North Carolina	- 0.1	- 0.1	+ 0.6	- 0.4
Non-Appalachian North Carolina	- 0.2	+ 0.1	+ 0.3	- 0.2
Ohio	+ 0.2	+ 0.4	+ 0.3	- 0.8
Appalachian Ohio	+ 0.5	+ 0.4	- 0.2	- 0.6
Non-Appalachian Ohio	+ 0.1	+ 0.4	+ 0.3	- 0.7
Pennsylvania	- 0.2	+ 0.4	+ 0.2	- 0.5
Appalachian Pennsylvania	+ 0.1	+ 0.1	+ 0.5	- 0.7
Non-Appalachian Pennsylvania	- 0.3	+ 0.7	- 0.1	- 0.2
South Carolina	- 0.4	+ 0.4	+ 0.5	- 0.5
Appalachian South Carolina	+ 0.3	+ 0.4	+ 0.7	- 1.4
Non-Appalachian South Carolina	- 0.6	+ 0.4	+ 0.5	- 0.3
Tennessee	- 0.1	+ 0.7	- 0.1	- 0.5
Appalachian Tennessee	+ 0.0	+ 0.4	- 0.3	+ 0.0
Non-Appalachian Tennessee	- 0.1	+ 1.0	- 0.1	- 0.7
Virginia	+ 0.1	+ 0.4	+ 0.4	- 0.8
Appalachian Virginia	- 0.1	+ 0.2	- 0.3	+ 0.2
Non-Appalachian Virginia	+ 0.1	+ 0.4	+ 0.4	- 0.8
West Virginia (entire state)	+ 0.3	+ 0.2	- 0.7	+ 0.2

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Table 7.14: Change in Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, by Amount of Time, 2008-2012 to 2013-2017

Travel Time to Work (Minutes)	Percentage Point Change in Share of Workers Ages 16 and Over				Change in Mean Travel Time to Work (Minutes)
	Less Than 15 Minutes	15 Minutes to 29 Minutes	30 Minutes to 59 Minutes	60 Minutes or More	
United States	- 1.8	- 0.2	+ 1.1	+ 0.8	+ 1.0
Appalachian Region	- 1.5	+ 0.4	+ 0.9	+ 0.4	+ 0.5
Subregions					
Northern Appalachia	- 1.8	+ 0.4	+ 1.0	+ 0.2	+ 0.5
North Central Appalachia	- 1.4	+ 0.6	+ 0.6	+ 0.2	+ 0.3
Central Appalachia	- 0.4	+ 0.1	+ 0.4	- 0.2	+ 0.0
South Central Appalachia	- 1.0	- 0.1	+ 0.9	+ 0.2	+ 0.4
Southern Appalachia	- 1.7	+ 0.4	+ 0.6	+ 0.7	+ 0.8
County Types					
Large Metros (pop. 1 million +)	- 1.4	- 0.1	+ 0.6	+ 0.9	+ 0.9
Small Metros (pop. <1 million)	- 1.8	+ 0.8	+ 1.0	+ 0.1	+ 0.5
Nonmetro, Adjacent to Large Metros	- 1.3	- 0.3	+ 1.3	+ 0.3	+ 0.4
Nonmetro, Adjacent to Small Metros	- 1.0	+ 0.2	+ 0.6	+ 0.3	+ 0.3
Rural (nonmetro, not adj. to a metro)	- 0.6	+ 0.6	+ 0.0	- 0.1	+ 0.1
Alabama	- 1.7	+ 0.3	+ 1.3	+ 0.2	+ 0.5
Appalachian Alabama	- 1.3	+ 0.7	+ 0.5	+ 0.1	+ 0.3
Non-Appalachian Alabama	- 2.2	- 0.5	+ 2.6	+ 0.2	+ 0.8
Georgia	- 1.7	- 0.4	+ 0.6	+ 1.3	+ 1.0
Appalachian Georgia	- 1.8	+ 0.3	- 0.3	+ 1.8	+ 1.2
Non-Appalachian Georgia	- 1.5	- 0.6	+ 1.0	+ 1.0	+ 1.0
Kentucky	- 1.1	- 0.5	+ 1.4	+ 0.1	+ 0.4
Appalachian Kentucky	+ 0.0	- 0.6	+ 0.9	- 0.2	+ 0.0
Non-Appalachian Kentucky	- 1.3	- 0.5	+ 1.5	+ 0.4	+ 0.5
Maryland	- 1.2	- 0.6	+ 0.7	+ 1.0	+ 0.9
Appalachian Maryland	- 1.7	+ 1.2	+ 0.0	+ 0.4	+ 0.3
Non-Appalachian Maryland	- 1.1	- 0.7	+ 0.8	+ 1.1	+ 0.8
Mississippi	- 0.9	+ 0.1	+ 0.8	+ 0.0	+ 0.5
Appalachian Mississippi	- 2.4	+ 2.8	+ 0.2	- 0.5	+ 0.5
Non-Appalachian Mississippi	- 0.6	- 0.6	+ 1.0	+ 0.2	+ 0.4
New York	- 2.1	- 0.7	+ 1.4	+ 1.4	+ 1.5
Appalachian New York	- 2.0	+ 1.3	+ 0.5	+ 0.1	+ 0.4
Non-Appalachian New York	- 2.0	- 0.8	+ 1.4	+ 1.4	+ 1.5
North Carolina	- 1.4	- 0.3	+ 1.1	+ 0.6	+ 0.8
Appalachian North Carolina	- 1.2	+ 0.3	+ 0.7	+ 0.2	+ 0.5
Non-Appalachian North Carolina	- 1.4	- 0.4	+ 1.2	+ 0.7	+ 0.9
Ohio	- 1.5	+ 0.2	+ 1.0	+ 0.1	+ 0.4
Appalachian Ohio	- 0.9	+ 0.5	+ 0.4	+ 0.1	+ 0.3
Non-Appalachian Ohio	- 1.5	+ 0.2	+ 1.2	+ 0.1	+ 0.4
Pennsylvania	- 1.9	- 0.3	+ 1.4	+ 0.7	+ 0.9
Appalachian Pennsylvania	- 1.9	+ 0.2	+ 1.4	+ 0.3	+ 0.7
Non-Appalachian Pennsylvania	- 1.9	- 0.6	+ 1.4	+ 0.9	+ 1.0
South Carolina	- 1.7	- 0.8	+ 1.9	+ 0.6	+ 0.9
Appalachian South Carolina	- 1.6	- 1.1	+ 2.7	+ 0.0	+ 0.6
Non-Appalachian South Carolina	- 1.8	- 0.8	+ 1.7	+ 0.9	+ 1.0
Tennessee	- 1.4	- 0.1	+ 0.9	+ 0.6	+ 0.7
Appalachian Tennessee	- 1.0	- 0.1	+ 0.9	+ 0.0	+ 0.3
Non-Appalachian Tennessee	- 1.7	- 0.1	+ 0.8	+ 1.1	+ 0.9
Virginia	- 1.2	- 0.2	+ 0.9	+ 0.6	+ 0.7
Appalachian Virginia	- 0.4	- 0.3	+ 0.3	+ 0.3	+ 0.3
Non-Appalachian Virginia	- 1.3	- 0.2	+ 0.8	+ 0.6	+ 0.7
West Virginia (entire state)	- 1.6	+ 1.1	+ 0.5	+ 0.1	+ 0.3

Note: Persons ages 16 and over who primarily worked from home are excluded from this analysis.

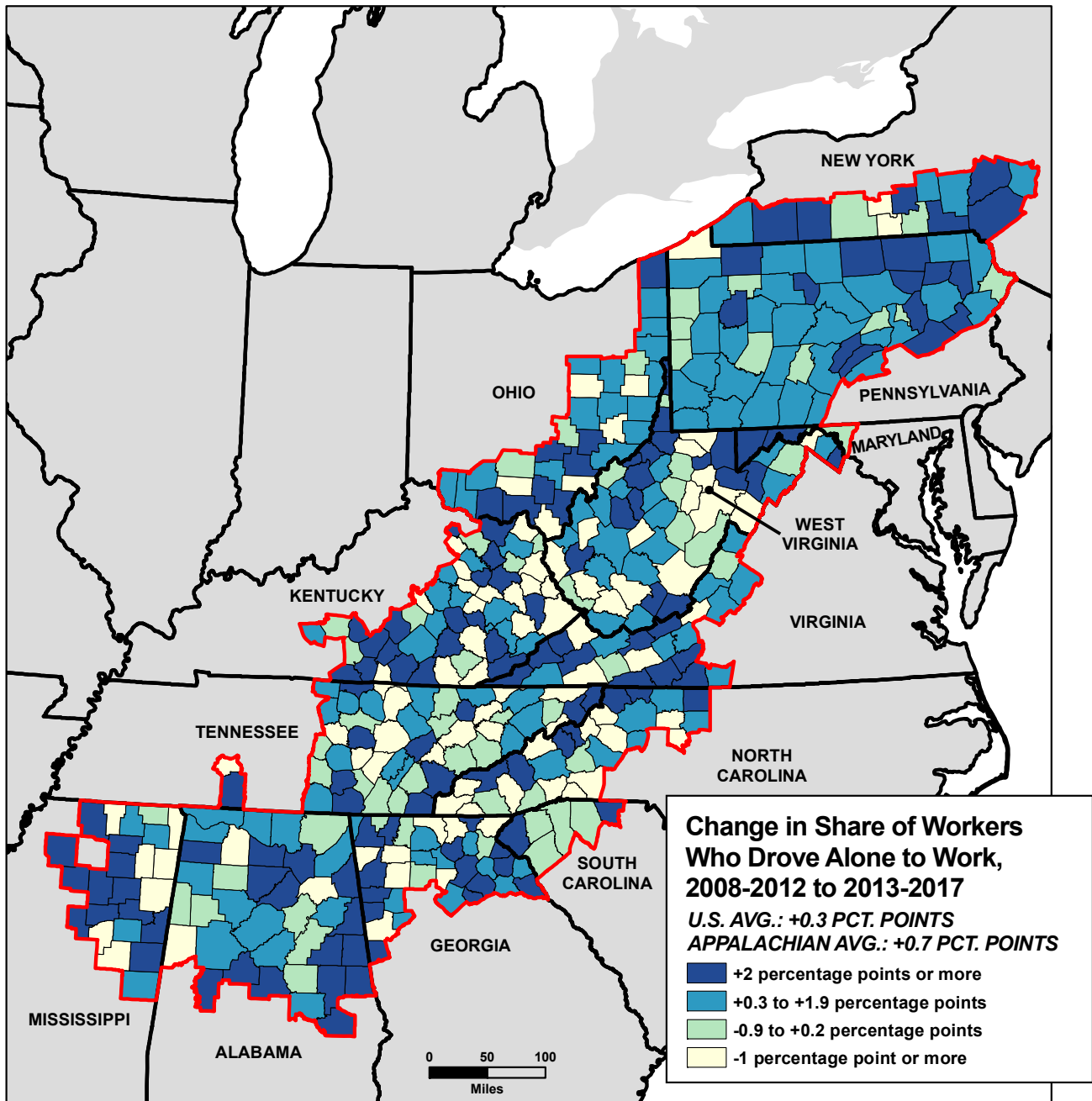
Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Table 7.15: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region, by Place of Work (State and County Level), 2008-2012 to 2013-2017

Place of Work (State and County Level)	Percentage Point Change in Share of Workers Ages 16 and Over			
	Worked in County of Residence	Worked Outside County of Residence		
		Total	Worked in State of Residence	Worked Outside State of Residence
United States	- 0.1	+ 0.1	+ 0.2	- 0.1
Appalachian Region	- 0.7	+ 0.7	+ 0.8	- 0.1
Subregions				
Northern Appalachia	- 0.4	+ 0.4	+ 0.4	+ 0.0
North Central Appalachia	- 0.7	+ 0.7	+ 0.6	+ 0.2
Central Appalachia	- 1.4	+ 1.4	+ 1.0	+ 0.4
South Central Appalachia	- 0.9	+ 0.9	+ 1.1	- 0.2
Southern Appalachia	- 0.5	+ 0.5	+ 0.6	- 0.1
County Types				
Large Metros (pop. 1 million +)	- 0.4	+ 0.4	+ 0.5	- 0.2
Small Metros (pop. <1 million)	- 0.5	+ 0.5	+ 0.6	- 0.1
Nonmetro, Adjacent to Large Metros	- 1.5	+ 1.5	+ 1.4	+ 0.1
Nonmetro, Adjacent to Small Metros	- 0.8	+ 0.8	+ 0.8	- 0.1
Rural (nonmetro, not adj. to a metro)	- 1.1	+ 1.1	+ 1.0	+ 0.1
Alabama	- 0.2	+ 0.2	+ 0.0	+ 0.3
Appalachian Alabama	+ 0.1	- 0.1	- 0.1	+ 0.0
Non-Appalachian Alabama	- 0.8	+ 0.8	+ 0.1	+ 0.7
Georgia	- 0.1	+ 0.1	+ 0.2	- 0.1
Appalachian Georgia	+ 0.1	- 0.1	+ 0.1	- 0.1
Non-Appalachian Georgia	- 0.2	+ 0.2	+ 0.3	- 0.1
Kentucky	- 0.6	+ 0.6	+ 0.7	+ 0.0
Appalachian Kentucky	- 1.8	+ 1.8	+ 1.4	+ 0.2
Non-Appalachian Kentucky	- 0.4	+ 0.4	+ 0.6	- 0.2
Maryland	+ 0.8	- 0.8	- 0.2	- 0.7
Appalachian Maryland	- 0.7	+ 0.7	- 0.7	+ 1.3
Non-Appalachian Maryland	+ 0.9	- 0.9	- 0.2	- 0.8
Mississippi	- 1.0	+ 1.0	+ 0.7	+ 0.3
Appalachian Mississippi	- 1.3	+ 1.3	+ 1.9	- 0.5
Non-Appalachian Mississippi	- 1.0	+ 1.0	+ 0.4	+ 0.5
New York	- 0.5	+ 0.5	+ 0.6	- 0.1
Appalachian New York	- 0.7	+ 0.7	+ 0.5	+ 0.2
Non-Appalachian New York	- 0.4	+ 0.4	+ 0.6	- 0.1
North Carolina	- 0.5	+ 0.5	+ 0.5	+ 0.1
Appalachian North Carolina	- 1.1	+ 1.1	+ 0.8	+ 0.2
Non-Appalachian North Carolina	- 0.4	+ 0.4	+ 0.5	+ 0.1
Ohio	- 0.6	+ 0.6	+ 0.8	- 0.1
Appalachian Ohio	- 0.5	+ 0.5	+ 0.8	- 0.3
Non-Appalachian Ohio	- 0.8	+ 0.8	+ 0.8	+ 0.0
Pennsylvania	- 0.2	+ 0.2	+ 0.4	- 0.2
Appalachian Pennsylvania	- 0.4	+ 0.4	+ 0.4	+ 0.0
Non-Appalachian Pennsylvania	+ 0.0	+ 0.0	+ 0.2	- 0.3
South Carolina	- 0.7	+ 0.7	+ 0.7	+ 0.1
Appalachian South Carolina	- 1.2	+ 1.2	+ 1.4	- 0.2
Non-Appalachian South Carolina	- 0.6	+ 0.6	+ 0.4	+ 0.2
Tennessee	- 0.5	+ 0.5	+ 0.8	- 0.3
Appalachian Tennessee	- 0.9	+ 0.9	+ 1.4	- 0.5
Non-Appalachian Tennessee	- 0.3	+ 0.3	+ 0.5	- 0.1
Virginia	+ 0.3	- 0.3	- 0.1	- 0.2
Appalachian Virginia	- 0.4	+ 0.4	+ 0.3	+ 0.2
Non-Appalachian Virginia	+ 0.4	- 0.4	- 0.2	- 0.2
West Virginia (entire state)	- 0.8	+ 0.8	+ 0.3	+ 0.4

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 7.8: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2008-2012 to 2013-2017

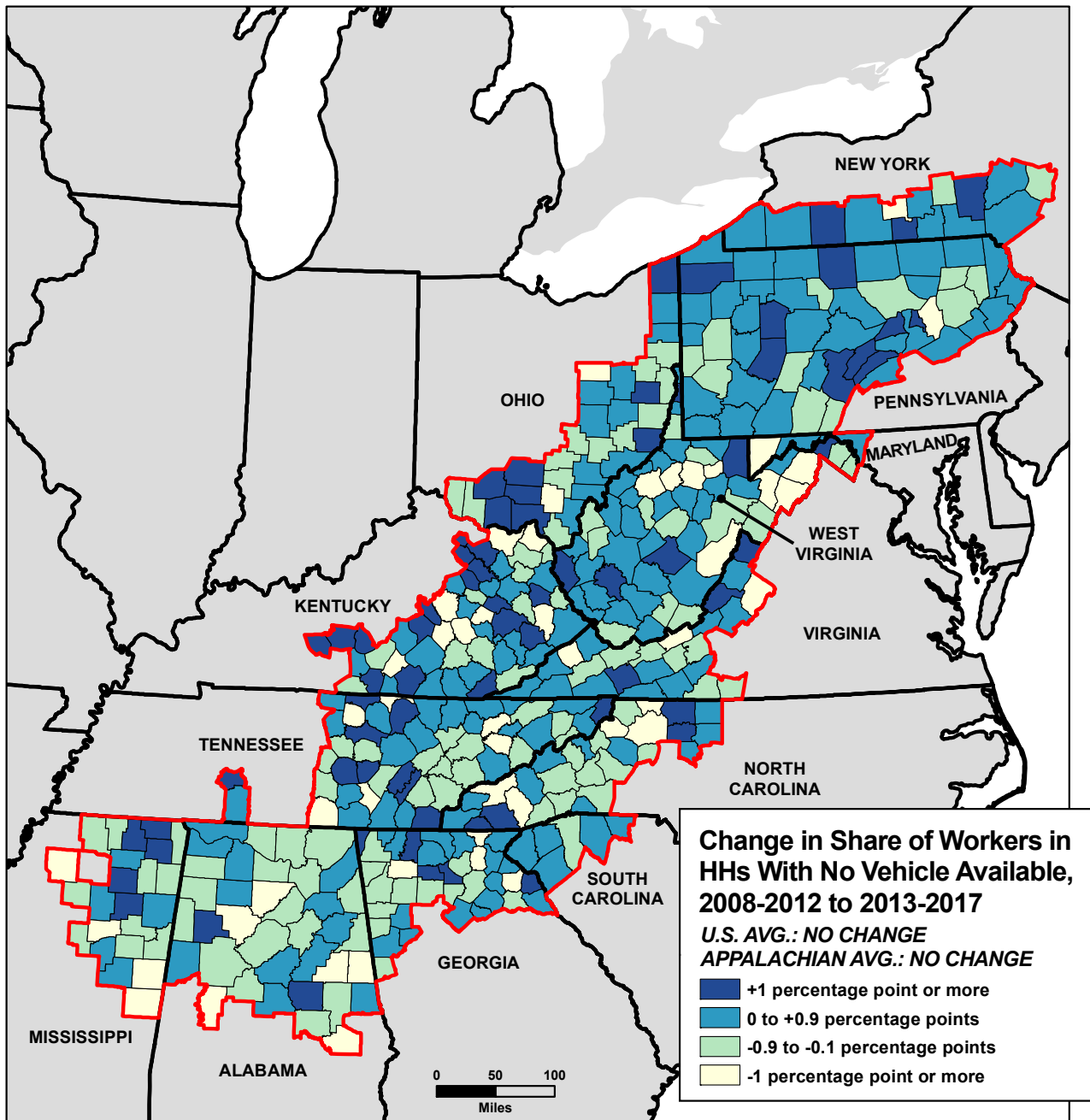


Map Title: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

The share of Appalachian workers who drove alone to work was almost a full percentage point higher in 2013-2017 than it was in 2008-2012. While this increase was greater than the national increase of 0.3 points, it was not as high as it was in much of the Appalachian Region. In 136 Appalachian counties, for example, the share increased at least two percentage points between the two time periods. These counties were scattered throughout the Region and across all rural-urban county types. Yet the percentage of workers who drove alone did not increase everywhere in Appalachia. In fact, there were 89 counties where the share fell at least a full percentage point.

Figure 7.9: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2008-2012 to 2013-2017

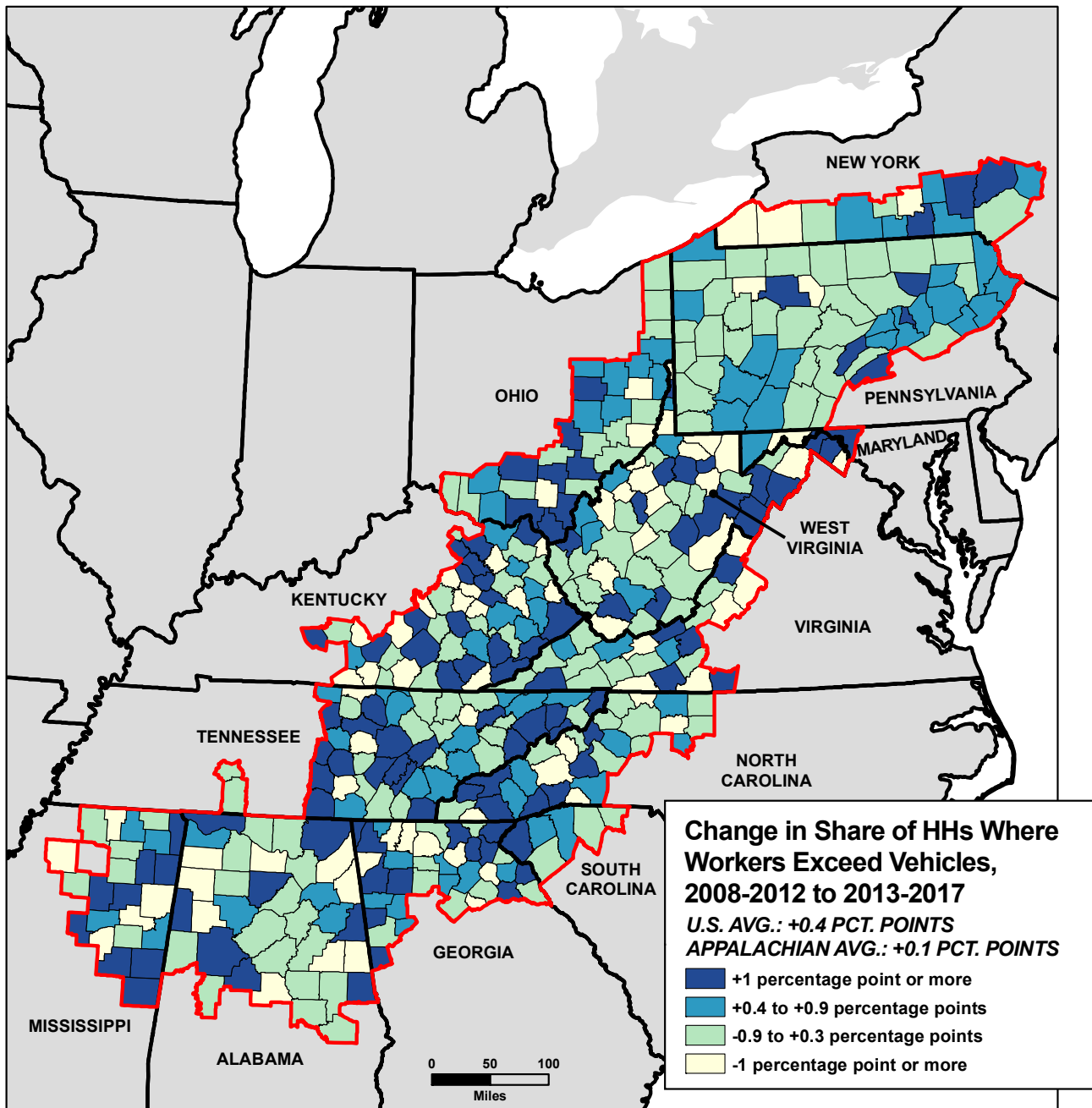


Map Title: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Both in Appalachia and nationwide, the share of workers in households with no vehicle available remained unchanged between the 2008-2012 and the 2013-2017 periods. But there was noticeable change among many Appalachian counties. The share rose at least a full percentage point in 72 Appalachian counties, while it fell a full point or more in 49 others.

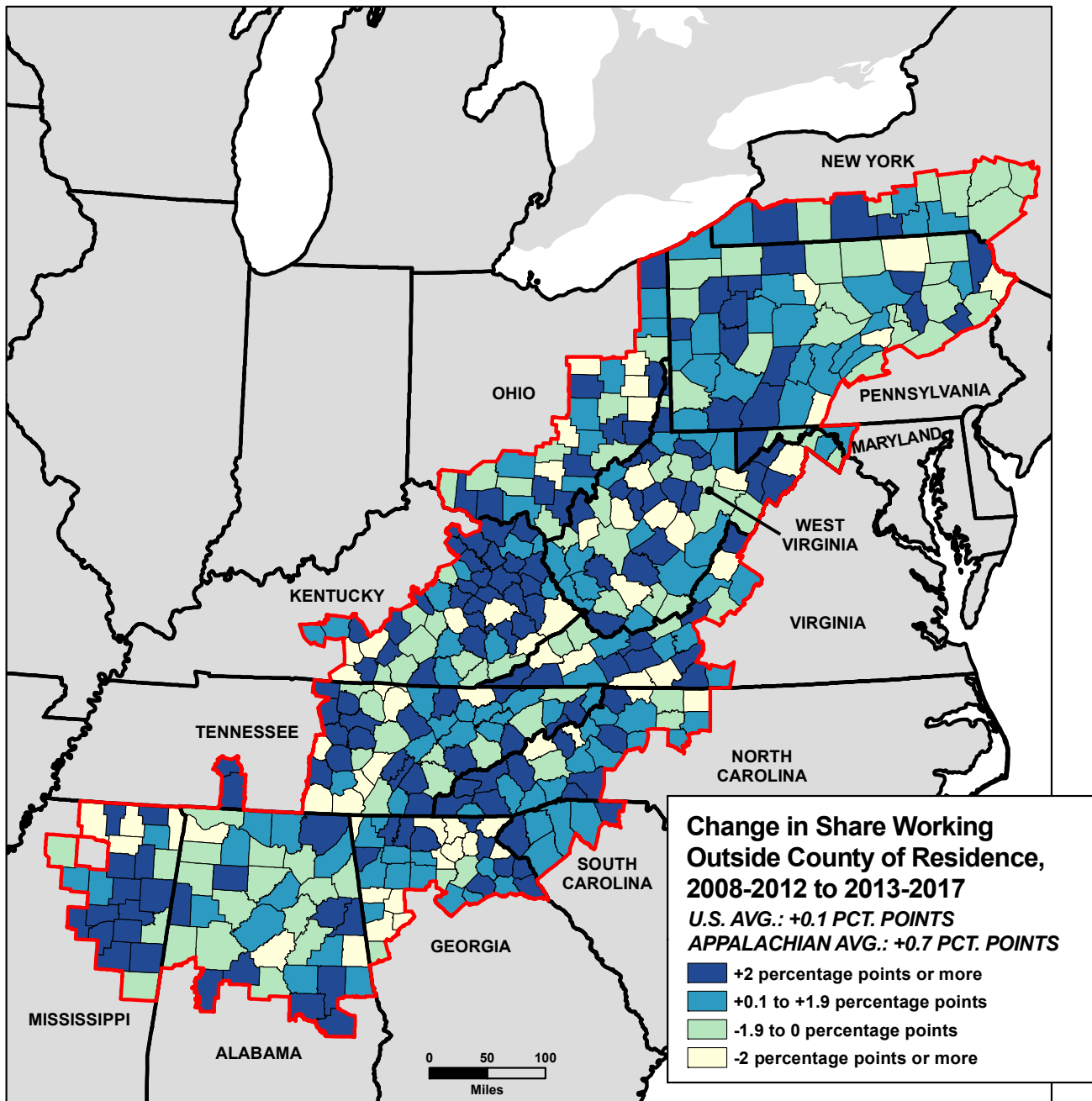
Figure 7.10: Percentage Point Change in Share of Households With One or More Workers in the Appalachian Region Where the Number of Workers Exceeds the Number of Vehicles Available, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in Share of Households With One or More Workers in the Appalachian Region Where the Number of Workers Exceeds the Number of Vehicles Available, 2008-2012 to 2013-2017
 Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Between 2008-2012 and 2013-2017, the percentage of Appalachian households where the number of workers exceeded the number of available vehicles barely increased, compared to a more noticeable (but still modest) increase nationwide (0.4 percentage points). Still, much of the Region showed change. For example, the share of households where workers exceeded vehicles rose a full percentage point or more in 112 of Appalachia’s 420 counties. Meanwhile, there were 78 counties in the Region where the share fell at least a full point.

Figure 7.11: Percentage Point Change in the Share of Workers Ages 16 and Over in the Appalachian Region Who Worked Outside Their County of Residence, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Workers Ages 16 and Over in the Appalachian Region Who Worked Outside Their County of Residence, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

A greater share of Appalachian residents worked outside their county of residence in 2013-2017 than in 2008-2012; this was also the case in more than three-fifths of Appalachia’s 420 counties. And in 149 of these counties, the share of workers whose employment commitments caused them to travel outside their counties increased at least two percentage points between these two periods. More than three-fourths of these counties were outside metropolitan areas, while 53 of them were in four states—Kentucky, Mississippi, North Carolina, and South Carolina. The Appalachian sections of these states had the greatest increases in the percentage of workers commuting between counties—all exceeding one percentage point. Yet there were 62 counties—scattered throughout the Region—where the share working outside their residential county was two or more percentage points lower in 2013-2017 than in the earlier period.

TRENDS IN TRANSPORTATION AND COMMUTING PATTERNS

- At just over 82 percent, the share of Appalachian workers who drove alone to work in 2013-2017 was almost a full percentage point higher than it was in 2008-2012 (see Tables 7.1 and 7.9). While this increase was greater than the national average of 0.3 points, it was not as high as it was in much of the Appalachian Region. For example, this share rose by more than a percentage point in the Appalachian sections of Alabama, Maryland, Mississippi, and New York. This increase in workers driving alone came mostly at the expense of the share of persons who carpooled to work, which fell a percentage point between the 2008-2012 and 2013-2017 periods. The growth of telework and home-based businesses was also evident, as the share of workers who worked at home increased nearly half a percentage point between the two periods.
- Although the share of Appalachian workers below the poverty level (\$24,858 for a family of two adults and two children in 2017) who drove alone to their jobs (72 percent in 2013-2017) was not as high as it was for all workers (see Tables 7.2 and 7.10), it did increase almost two percentage points from its level in 2008-2012. And the increase was even greater in Southern Appalachia: It rose more than three points in the subregion (as well as in Appalachian Georgia), more than four points in Alabama, and more than seven percentage points in Mississippi. And similar to the pattern for all workers, the increase of poor workers driving alone came largely at the expense of the share of workers carpooling; the latter fell 1.4 percentage points from 2008-2012 to 2013-2017.
- In 2013-2017, 7.3 percent of Appalachian households lacked an available vehicle to get to current and/or potential employment, down 0.2 points from 2008-2012 (see Tables 7.3 and 7.11). Yet trends between the two periods varied within the Region: In large metros and the Appalachian sections of Mississippi and North Carolina, for example, the share fell at least half a percentage point. On the other hand, the share of households with no vehicle available increased 0.7 points in Appalachian Maryland and 0.6 points in Appalachian New York.
- Just as in the nation as a whole, the share of workers in households with no vehicle available (2.6 percent) remained unchanged in Appalachia between the 2008-2012 and the 2013-2017 periods (see Tables 7.5 and 7.12). And among the subregions, county types, and states, the share neither rose nor fell more than half a percentage point. In contrast, the share of workers lacking a vehicle rose noticeably in Appalachia among workers who used modes of transport where a private vehicle is more of a convenience than a necessity, such as public transportation, walking, taxicabs, motorcycles, or bicycles.
- In 2013-2017, the number of workers exceeded the number of vehicles available in 4.7 percent of Appalachian households—a figure that barely changed from its 2008-2012 level (see Tables 7.6 and 7.13). And the change was slight in most of the Region: In virtually every subregion, urban-rural county type, and state, the share of households with more workers than vehicles rose less than half a percentage point. The Appalachian sections of Maryland (an increase of 0.5 points) and North Carolina (a decline of 0.1 point) were the most notable exceptions.
- On average, Appalachian workers traveled 25 minutes to their jobs in 2013-2017, about half a minute longer than they did in 2008-2012 (see Tables 7.7 and 7.14). The average commute was longer throughout the Region: Only in Central Appalachia did the mean travel time remain the same between the two periods. And a greater percentage of workers had longer commutes: The share of workers who took between 30 minutes and 59 minutes to get to their jobs rose nearly a full percentage point between the 2008-2012 and 2013-2017 periods. And the share who took at least an hour to get to work rose 0.4 points in Appalachia—and 0.9 points in counties that were part of large metro areas.
- Slightly less than 32 percent of employed Appalachian residents ages 16 and over worked outside their county of residence in 2013-2017, representing an increase of 0.7 percentage points from the 2008-2012 period (see Tables 7.8 and 7.15). Within Appalachia, Central and South Central Appalachia had the greatest increases, while the counties outside metropolitan areas had greater increases than those within metros. Among the states, the share working outside their home county increased at least one full percentage point in the Appalachian sections of Kentucky, Mississippi, and the Carolinas, while the share in Alabama and Georgia fell 0.1 point each between the two periods.

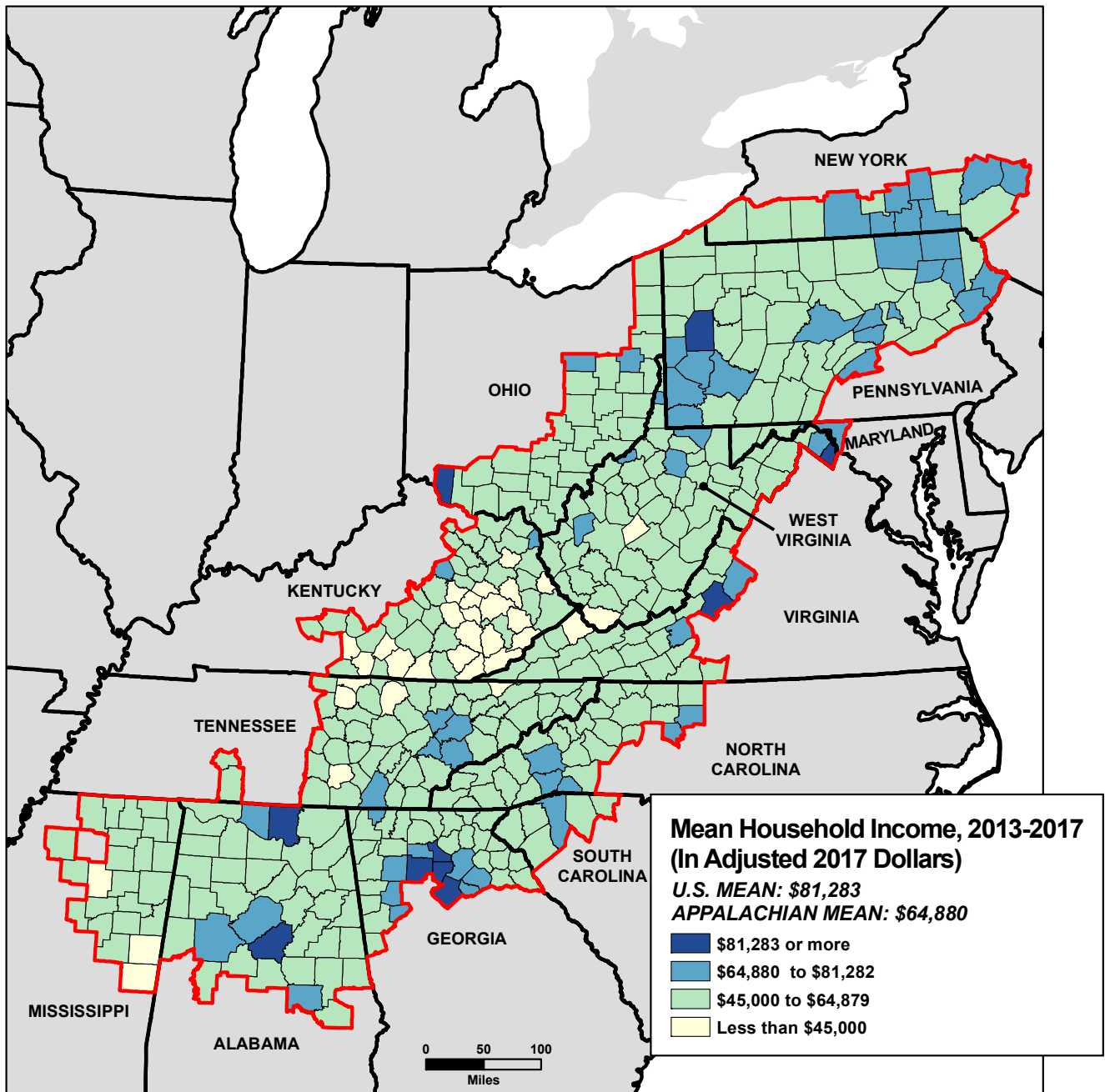
CHAPTER 8: INCOME AND POVERTY

Table 8.1: Household, Family, and Per Capita Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017

Income	Household Income, 2013-2017 (2017 Dollars)		Family Income, 2013-2017 (2017 Dollars)		Per Capita Income, 2013-2017 (2017 Dollars)
	Mean HH Income	Median HH Income	Mean Family Income	Median Family Income	
United States	81,283	57,652	95,031	70,850	31,177
Appalachian Region	64,880	47,836	77,028	60,256	26,135
Subregions					
Northern Appalachia	67,210	50,672	81,098	65,146	27,894
North Central Appalachia	61,466	45,900	72,807	58,281	25,037
Central Appalachia	50,113	35,862	59,074	45,693	20,324
South Central Appalachia	62,248	44,652	74,317	56,882	25,783
Southern Appalachia	68,737	50,907	80,170	62,335	26,229
County Types					
Large Metros (pop. 1 million +)	77,533	58,203	91,675	72,376	30,505
Small Metros (pop. <1 million)	65,499	48,415	78,402	61,644	26,579
Nonmetro, Adjacent to Large Metros	57,854	43,634	68,250	54,798	23,230
Nonmetro, Adjacent to Small Metros	56,281	42,502	66,000	53,286	23,009
Rural (nonmetro, not adj. to a metro)	52,339	38,156	61,958	48,363	21,235
Alabama	64,476	46,472	77,153	59,115	25,746
Appalachian Alabama	66,587	48,324	79,239	60,858	26,560
Non-Appalachian Alabama	60,664	43,575	73,266	56,394	24,298
Georgia	74,763	52,977	86,636	64,053	28,015
Appalachian Georgia	75,599	57,657	85,168	67,131	26,945
Non-Appalachian Georgia	74,414	51,542	87,332	62,930	28,489
Kentucky	64,436	46,535	76,499	59,003	25,888
Appalachian Kentucky	49,451	35,172	58,110	44,837	19,897
Non-Appalachian Kentucky	69,872	51,486	83,481	65,427	28,048
Maryland	103,845	78,916	120,839	95,597	39,070
Appalachian Maryland	68,423	52,300	81,427	65,701	26,613
Non-Appalachian Maryland	105,469	80,806	122,609	97,510	39,616
Mississippi	58,371	42,009	68,673	52,689	22,500
Appalachian Mississippi	53,331	39,189	63,008	49,552	20,951
Non-Appalachian Mississippi	59,746	43,026	70,209	54,113	22,912
New York	93,443	62,765	109,230	77,141	35,752
Appalachian New York	64,771	49,516	77,961	63,605	26,451
Non-Appalachian New York	95,178	64,329	111,062	78,500	36,270
North Carolina	70,523	50,320	83,338	62,195	28,123
Appalachian North Carolina	61,433	44,230	73,018	56,395	25,691
Non-Appalachian North Carolina	72,538	51,930	85,573	64,142	28,629
Ohio	71,119	52,407	85,559	66,885	29,011
Appalachian Ohio	60,661	46,023	71,665	58,470	24,561
Non-Appalachian Ohio	73,279	54,322	88,567	69,357	29,943
Pennsylvania	78,192	56,951	94,204	72,692	31,476
Appalachian Pennsylvania	69,249	52,185	83,915	67,155	28,910
Non-Appalachian Pennsylvania	86,035	62,477	102,984	78,800	33,560
South Carolina	66,759	48,781	78,694	60,643	26,645
Appalachian South Carolina	66,248	48,582	78,570	61,503	26,265
Non-Appalachian South Carolina	66,932	48,910	78,737	60,452	26,774
Tennessee	68,386	48,708	80,742	60,217	27,277
Appalachian Tennessee	62,012	44,168	73,837	55,899	25,452
Non-Appalachian Tennessee	73,529	52,832	86,300	64,520	28,668
Virginia	94,229	68,766	109,435	83,164	36,268
Appalachian Virginia	58,205	42,588	70,187	55,126	24,270
Non-Appalachian Virginia	98,140	72,755	113,527	87,787	37,460
West Virginia (entire state)	59,634	44,061	70,948	55,949	24,774

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

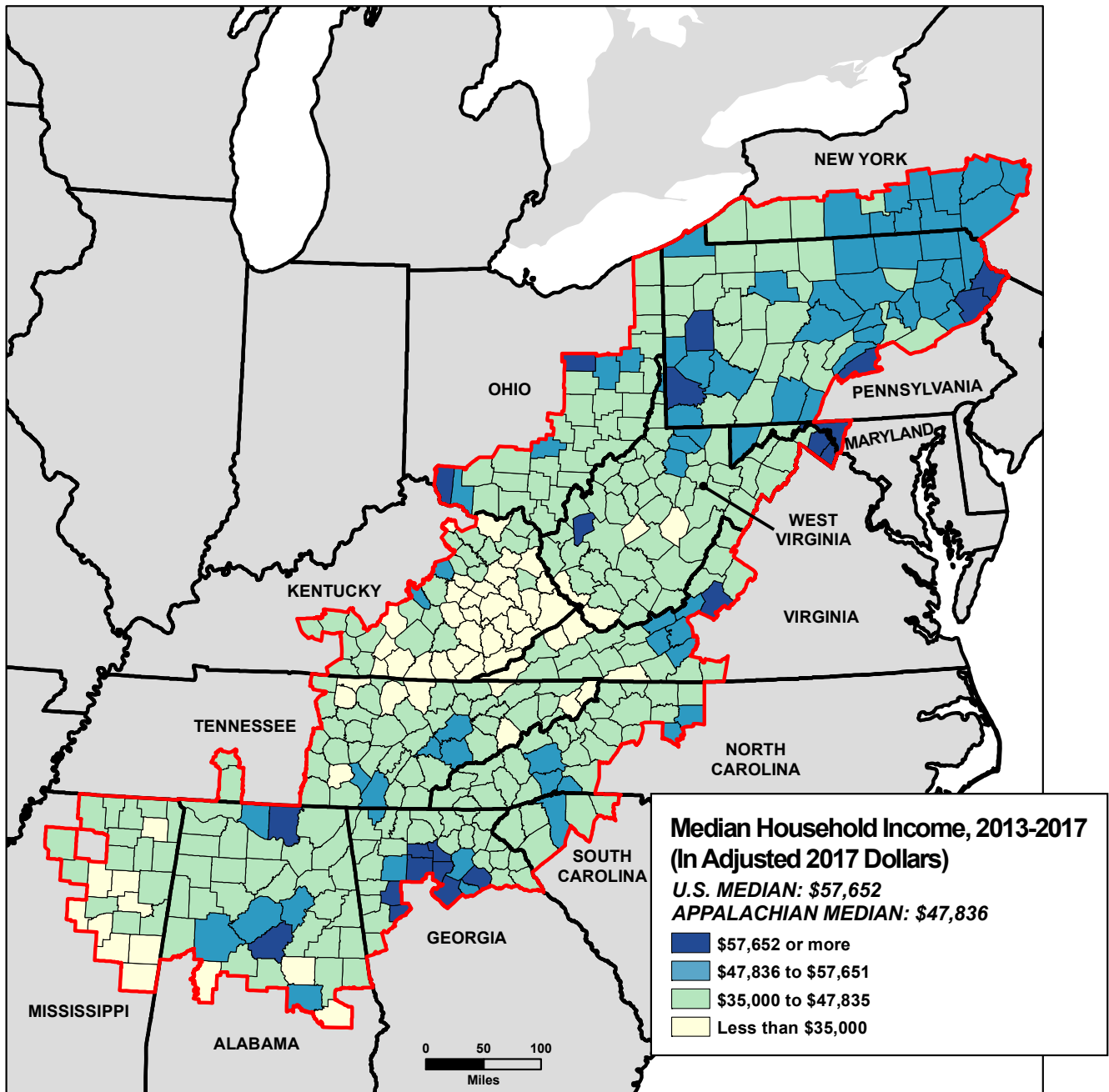
Figure 8.1: Mean Household Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017



Map Title: Mean Household Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In the 2013-2017 period, the mean income of Appalachian households was \$64,880, just 80 percent of the U.S. average (\$81,283). In just 10 of the Region’s counties (all of which were in metropolitan areas), average household income matched or exceeded the national mean. And in only 60 additional counties (46 of which were in metros), mean household income matched or surpassed the Appalachian average. In contrast, mean household income was less than \$45,000 in 32 counties—all but one of which were outside metro areas, and 27 of which were in Central Appalachia (21 in Kentucky alone).

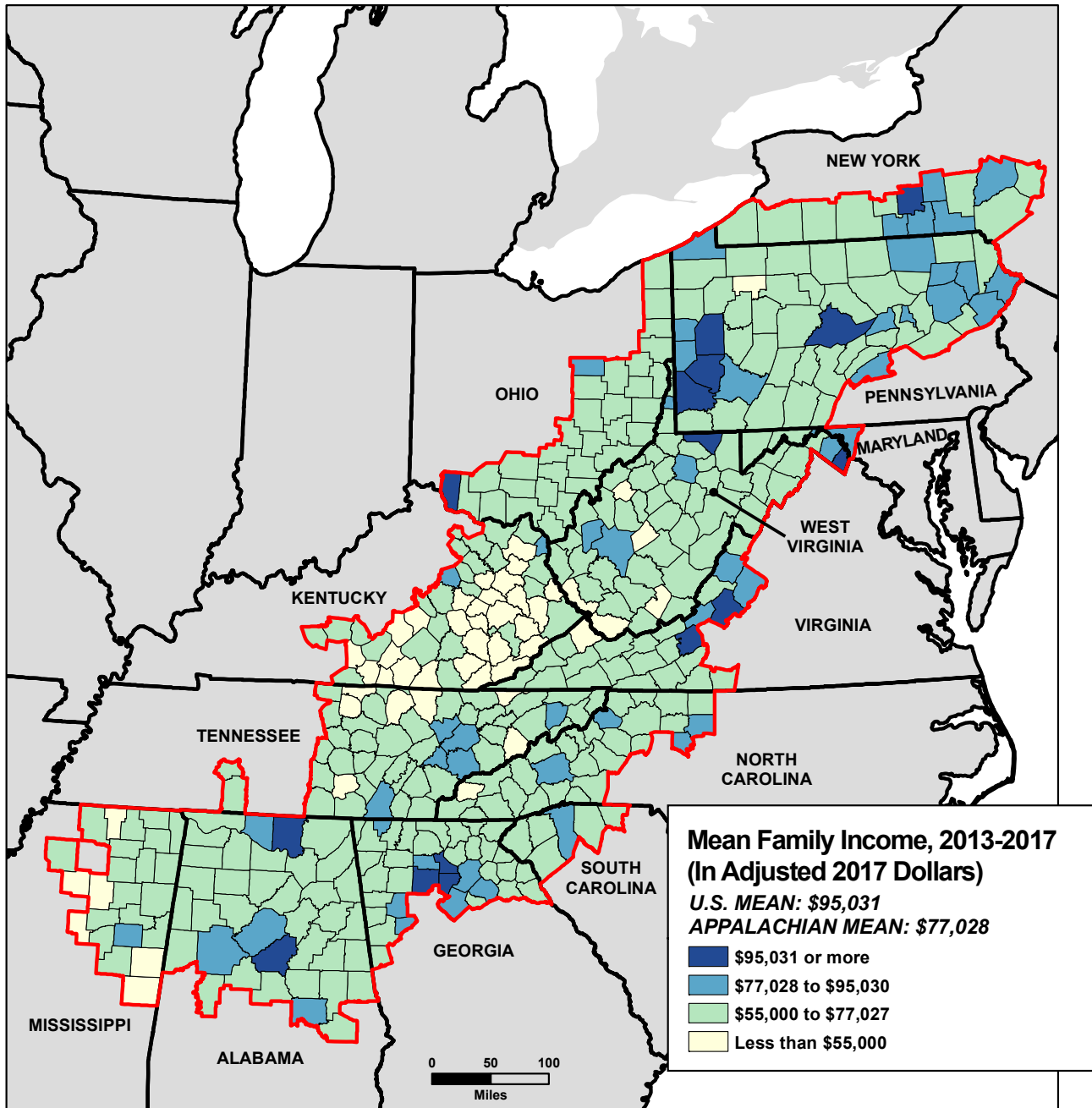
Figure 8.2: Median Household Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017



Map Title: Median Household Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

At \$47,836, median household income in Appalachia (the level at which half the households have higher incomes and the other half have lower incomes) was 83 percent that of the United States (\$57,652) during the 2013-2017 period. There were 22 counties in the Region (20 of which were in metropolitan areas) that had household incomes at or above the national median, while another 70 had incomes at or above the regional median. On the other hand, 59 counties in the Region had median household incomes below \$35,000—all but three of which were outside metro areas and 40 of which were in Central Appalachia. This distribution is not surprising: median household income was \$38,156 for the most rural counties and \$35,862 for Central Appalachia. It is useful to note that the income levels displayed here reflect income received at least four years after the end of the 2007-2009 economic downturn.

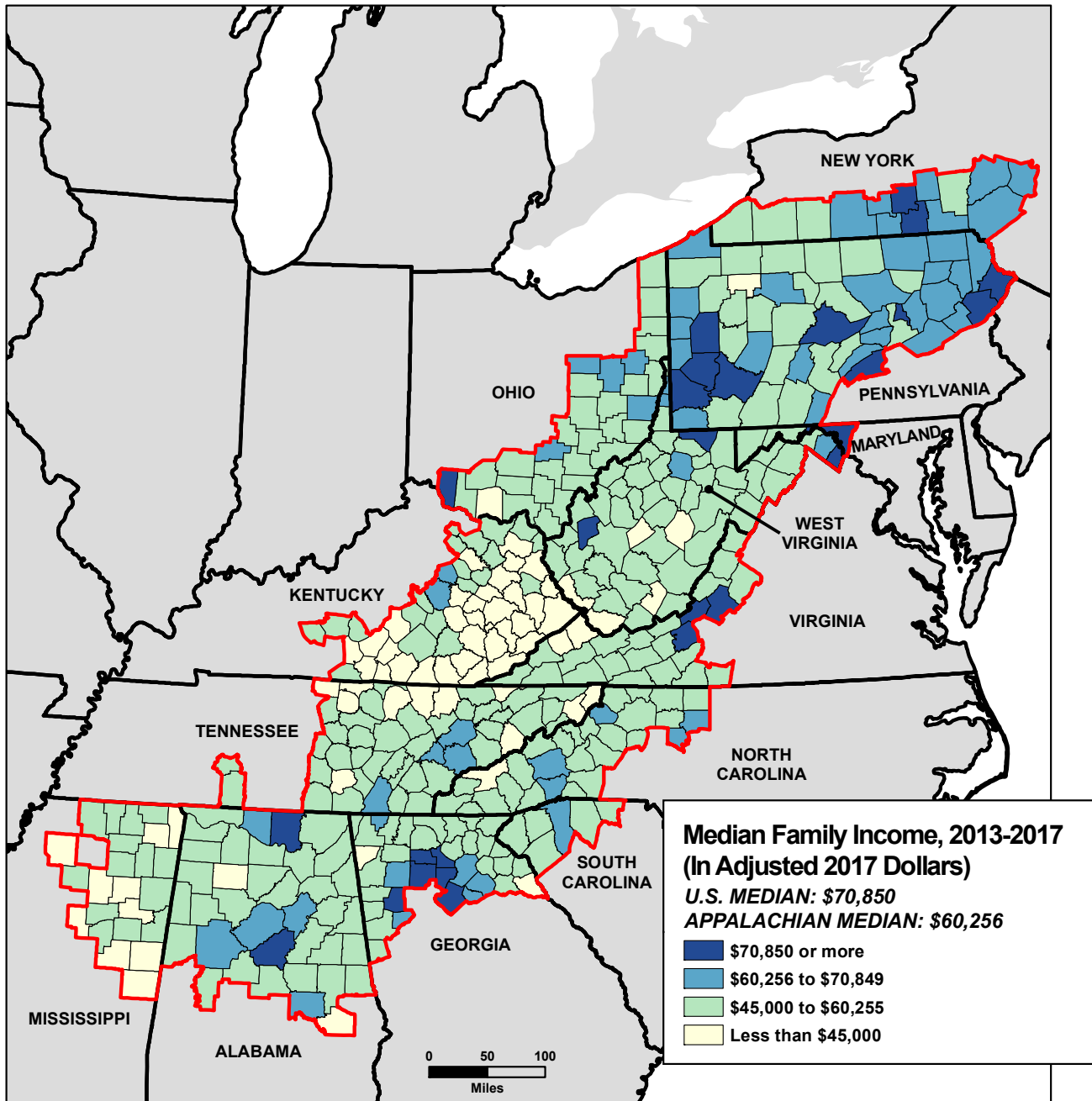
Figure 8.3: Mean Family Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017



Map Title: Mean Family Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In only 15 Appalachian counties (all of which were in metropolitan areas), the average income of families matched or surpassed the U.S. mean of \$95,031 for the 2013-2017 period. And there were just an additional 53 counties (41 of which were part of metro areas) where mean family income was equal to or greater than the average for the Appalachian Region (\$77,028). In contrast, mean family income was less than \$55,000 in 49 Appalachian counties. All but three of these counties were outside metropolitan areas, while nearly three-fourths were in Central Appalachia and 28 were in Kentucky alone. Overall, mean family income over the 2013-2017 period was no more than \$68,250 for each of the three nonmetro county types, and just \$59,074 for Central Appalachia, and \$58,110 for Appalachian Kentucky.

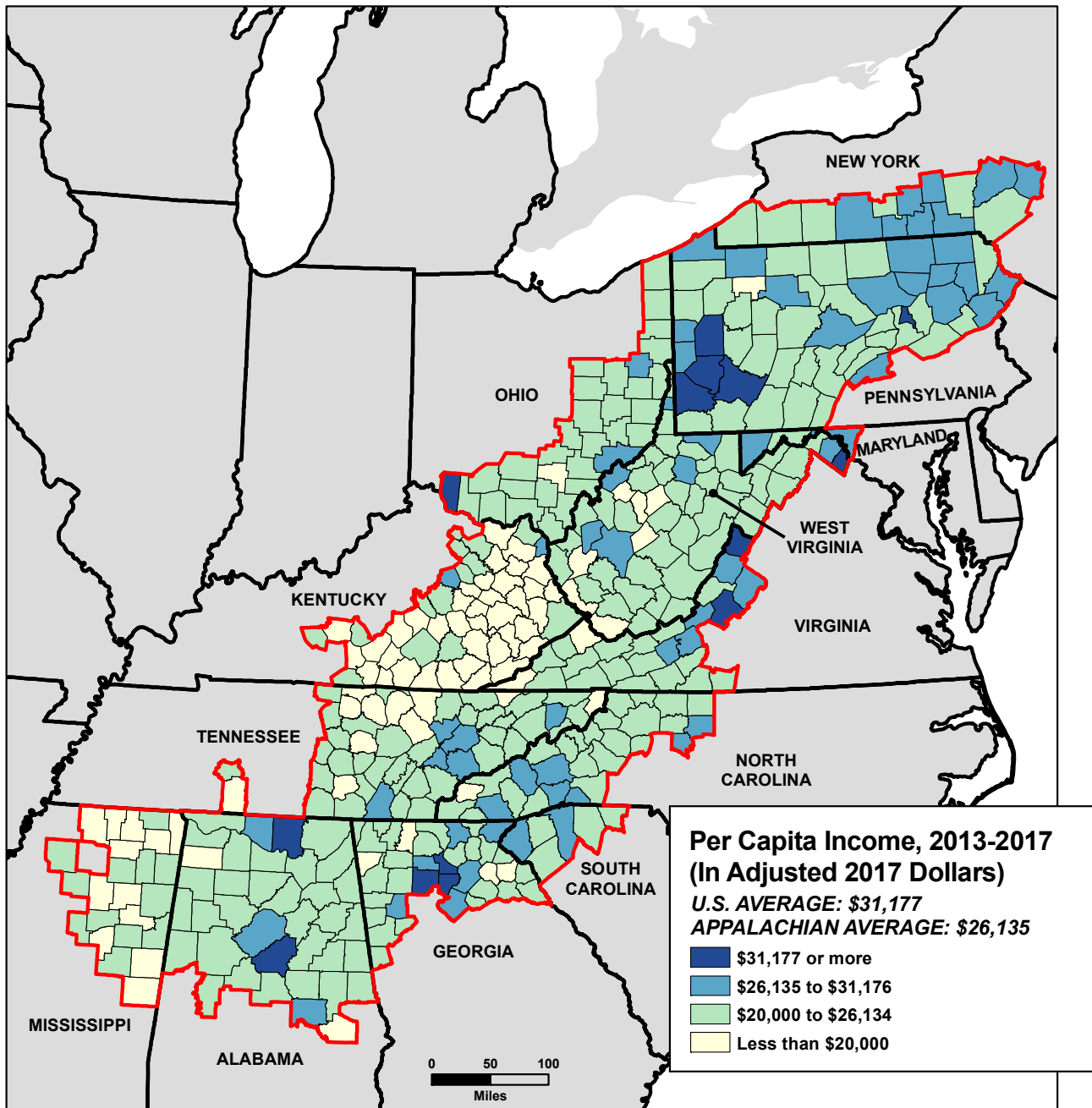
Figure 8.4: Median Family Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017



Map Title: Median Family Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In 27 Appalachian counties—all of which were in metro areas—median family income (the level where half of all families have higher incomes while the other half have lower incomes) matched or exceeded the U.S. median of \$70,850 during the 2013-2017 period. In another 62 counties (39 of which were in metros), median income was at or above the median for families in the Appalachian Region (\$60,256). In contrast, median family income was less than \$45,000 in 67 counties. Two-thirds of the counties in this latter group were rural counties not adjacent to a metro area (median family income in those counties as a whole was \$48,363), and 32 were in Appalachian Kentucky (where median family income was \$44,837). It is important to note that the 2013-2017 period seems to include a time of relatively slow economic recovery following the recession of 2007-2009.

Figure 8.5: Per Capita Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017



Map Title: Per Capita Income in the Appalachian Region (In Adjusted 2017 Dollars), 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

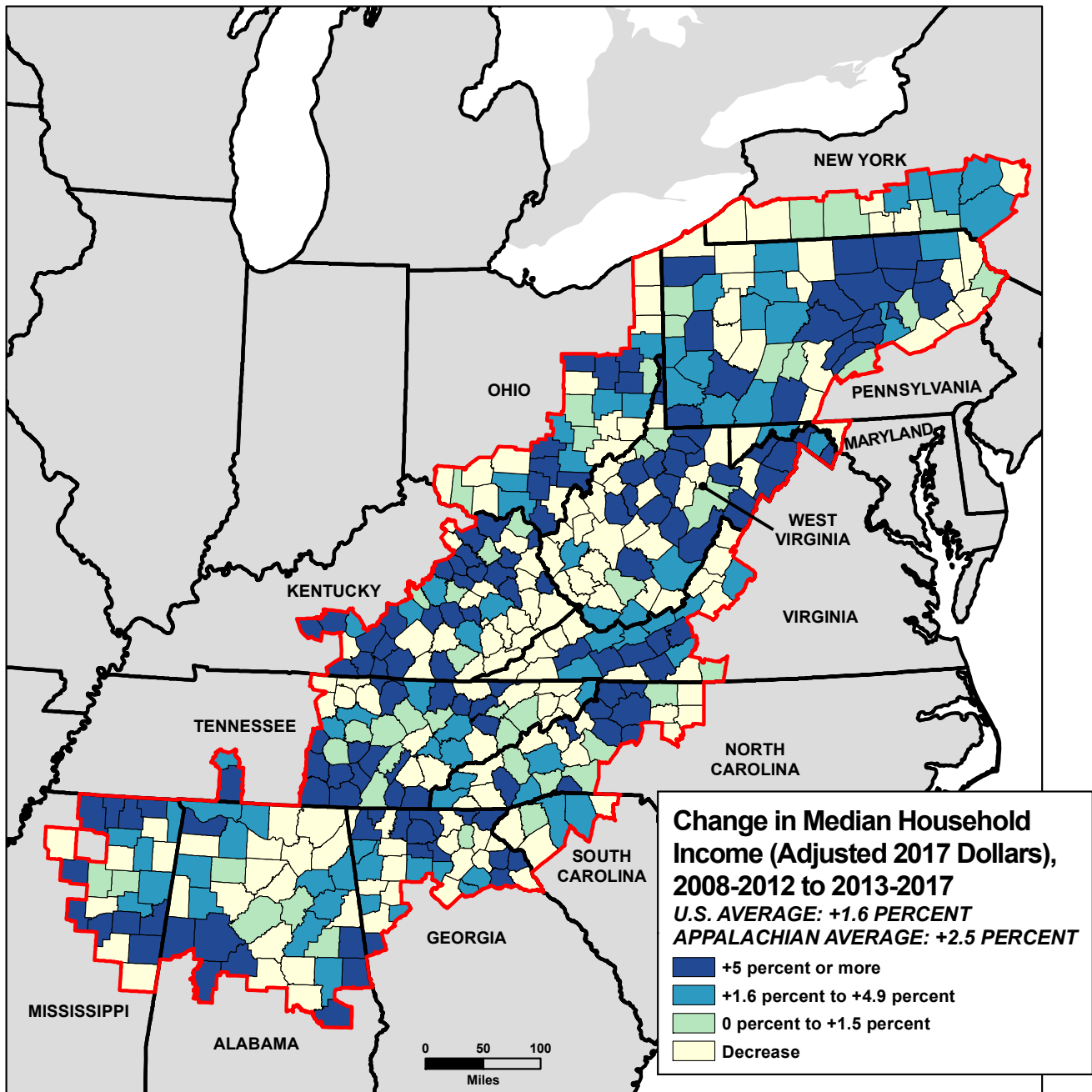
At \$26,135, per capita income in the Appalachian Region was 84 percent that of the U.S. average of \$31,177 during the 2013-2017 period. And there was considerable variation within the Region. Per capita income was the same or higher than the national average in 14 Appalachian counties, including Pittsburgh, suburban Atlanta, and Clermont County, Ohio (which is part of metropolitan Cincinnati). In 66 other counties, per capita income was at or above the regional average; while nearly half of these were in Northern Appalachia, there were pockets in the South Central and Southern subregions. Yet in 79 Appalachian counties, per capita income was less than \$20,000. As with other income measures, most of the counties with the highest per capita incomes were in metro areas, while those with the lowest were disproportionately in rural areas, particularly in Central Appalachia. Indeed, per capita income in 2013-2017 was only \$21,235 in the most rural Appalachian counties as a whole, and just \$20,324 in Central Appalachia.

Table 8.2: Change in Household, Family, and Per Capita Income in the Appalachian Region (In Adjusted 2017 Dollars), 2008-2012 to 2013-2017

Income	Percent Change in Household Income (In 2017 Dollars)		Percent Change in Family Income (in 2017 Dollars)		Percent Change in Per Capita Income (In 2017 Dollars)
	Mean HH Income	Median HH Income	Mean Family Income	Median Family Income	
United States	+ 4.1	+ 1.6	+ 4.4	+ 2.6	+ 3.9
Appalachian Region	+ 3.7	+ 2.5	+ 4.0	+ 2.6	+ 4.0
Subregions					
Northern Appalachia	+ 4.3	+ 3.1	+ 4.9	+ 4.3	+ 5.0
North Central Appalachia	+ 3.6	+ 2.6	+ 3.1	+ 2.4	+ 4.0
Central Appalachia	+ 2.1	+ 1.1	+ 2.2	+ 0.7	+ 2.9
South Central Appalachia	+ 4.1	+ 1.6	+ 4.0	+ 2.0	+ 4.2
Southern Appalachia	+ 3.1	+ 2.5	+ 3.7	+ 2.8	+ 3.1
County Types					
Large Metros (pop. 1 million +)	+ 3.9	+ 2.9	+ 4.6	+ 3.7	+ 4.2
Small Metros (pop. <1 million)	+ 3.2	+ 2.1	+ 3.3	+ 2.0	+ 3.3
Nonmetro, Adjacent to Large Metros	+ 4.0	+ 1.3	+ 4.4	+ 2.3	+ 5.0
Nonmetro, Adjacent to Small Metros	+ 3.6	+ 2.1	+ 3.2	+ 2.4	+ 4.0
Rural (nonmetro, not adj. to a metro)	+ 4.0	+ 3.6	+ 4.3	+ 2.8	+ 4.4
Alabama	+ 1.7	+ 0.7	+ 2.7	+ 1.7	+ 2.0
Appalachian Alabama	+ 1.9	+ 2.0	+ 2.5	+ 1.6	+ 2.1
Non-Appalachian Alabama	+ 1.3	- 1.2	+ 3.1	+ 0.8	+ 2.0
Georgia	+ 3.3	- 0.2	+ 3.9	+ 1.2	+ 3.5
Appalachian Georgia	+ 3.8	+ 1.9	+ 4.5	+ 3.3	+ 3.5
Non-Appalachian Georgia	+ 3.1	+ 0.1	+ 3.7	+ 0.5	+ 3.5
Kentucky	+ 4.1	+ 2.1	+ 4.3	+ 2.5	+ 4.3
Appalachian Kentucky	+ 1.6	+ 1.9	+ 0.9	+ 0.9	+ 2.5
Non-Appalachian Kentucky	+ 4.6	+ 2.9	+ 5.2	+ 3.5	+ 4.4
Maryland	+ 2.3	+ 1.1	+ 2.1	+ 1.5	+ 1.3
Appalachian Maryland	+ 1.7	+ 0.5	+ 3.3	+ 0.5	+ 0.3
Non-Appalachian Maryland	+ 2.2	+ 1.6	+ 2.0	+ 0.8	+ 1.3
Mississippi	+ 0.7	+ 1.0	+ 1.7	+ 2.0	+ 1.8
Appalachian Mississippi	+ 3.6	+ 6.0	+ 3.6	+ 4.2	+ 3.6
Non-Appalachian Mississippi	+ 0.0	+ 0.1	+ 1.1	+ 1.9	+ 1.3
New York	+ 4.5	+ 1.7	+ 5.4	+ 3.1	+ 4.1
Appalachian New York	+ 2.8	+ 0.5	+ 3.4	+ 2.3	+ 3.3
Non-Appalachian New York	+ 4.5	+ 2.3	+ 5.5	+ 3.1	+ 4.1
North Carolina	+ 3.7	+ 1.3	+ 4.3	+ 1.8	+ 4.0
Appalachian North Carolina	+ 3.1	+ 0.7	+ 2.8	+ 1.6	+ 3.5
Non-Appalachian North Carolina	+ 3.7	+ 1.4	+ 4.5	+ 2.3	+ 4.0
Ohio	+ 3.9	+ 1.6	+ 4.5	+ 2.2	+ 4.9
Appalachian Ohio	+ 4.0	+ 1.8	+ 4.6	+ 3.1	+ 5.3
Non-Appalachian Ohio	+ 3.8	+ 2.1	+ 4.4	+ 2.1	+ 4.7
Pennsylvania	+ 4.1	+ 1.9	+ 4.3	+ 3.0	+ 4.4
Appalachian Pennsylvania	+ 4.7	+ 4.0	+ 5.3	+ 5.2	+ 5.5
Non-Appalachian Pennsylvania	+ 3.5	+ 1.0	+ 3.4	+ 1.2	+ 3.4
South Carolina	+ 3.3	+ 2.2	+ 3.8	+ 3.0	+ 4.2
Appalachian South Carolina	+ 3.3	+ 2.5	+ 3.6	+ 3.2	+ 3.7
Non-Appalachian South Carolina	+ 3.3	+ 2.2	+ 3.9	+ 2.3	+ 4.4
Tennessee	+ 5.0	+ 3.2	+ 5.2	+ 2.9	+ 5.0
Appalachian Tennessee	+ 4.5	+ 2.1	+ 4.6	+ 1.9	+ 4.3
Non-Appalachian Tennessee	+ 5.2	+ 3.7	+ 5.4	+ 3.1	+ 5.3
Virginia	+ 2.0	+ 1.0	+ 2.4	+ 1.5	+ 1.7
Appalachian Virginia	+ 5.6	+ 3.0	+ 6.4	+ 4.4	+ 6.5
Non-Appalachian Virginia	+ 1.6	+ 0.3	+ 1.8	+ 1.1	+ 1.2
West Virginia (entire state)	+ 3.1	+ 2.0	+ 2.2	+ 1.0	+ 3.0

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 8.6: Percent Change in Median Household Income in the Appalachian Region (In Adjusted 2017 Dollars), 2008-2012 to 2013-2017



Map Title: Percent Change in Median Household Income in the Appalachian Region (In Adjusted 2017 Dollars), 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Adjusting for inflation, the median income for Appalachian households (the level where half of all households have higher incomes while the other half have lower incomes) was 2.5 percent higher in 2013-2017 than it was in 2008-2012, suggesting that incomes have recovered from the recent economic downturn. This was above the national increase of 1.6 percent; indeed, household income rose faster than the national average in more than half of Appalachia's 420 counties. Moreover, median household income rose at least 5 percent in 140 Appalachian counties between the two periods. But not all the news was positive: In 154 Appalachian counties, real median household income fell between 2008-2012 and 2013-2017.

Table 8.3: Number of Persons in the Appalachian Region in Poverty, by Age Group, 2013-2017

Poverty Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	45,650,345	14,710,485	26,622,668	6,542,077	20,080,591	4,317,192
Appalachian Region	4,017,654	1,230,044	2,392,138	561,027	1,831,111	395,472
Subregions						
Northern Appalachia	1,122,784	330,362	674,139	174,086	500,053	118,283
North Central Appalachia	409,542	117,507	253,749	61,153	192,596	38,286
Central Appalachia	437,949	128,362	264,610	45,280	219,330	44,977
South Central Appalachia	800,714	233,708	485,111	122,282	362,829	81,895
Southern Appalachia	1,246,665	420,105	714,529	158,226	556,303	112,031
County Types						
Large Metros (pop. 1 million +)	748,543	238,645	435,579	92,749	342,830	74,319
Small Metros (pop. <1 million)	1,673,335	508,368	1,010,800	267,598	743,202	154,167
Nonmetro, Adjacent to Large Metros	377,065	117,897	222,794	52,701	170,093	36,374
Nonmetro, Adjacent to Small Metros	687,895	208,824	403,752	79,817	323,935	75,319
Rural (nonmetro, not adj. to a metro)	530,816	156,310	319,213	68,162	251,051	55,293
Alabama	849,699	282,396	490,427	116,490	373,937	76,876
Appalachian Alabama	506,115	166,146	293,279	65,069	228,210	46,690
Non-Appalachian Alabama	343,584	116,250	197,148	51,421	145,727	30,186
Georgia	1,679,030	592,450	955,229	224,299	730,930	131,351
Appalachian Georgia	423,236	150,904	236,755	45,620	191,135	35,577
Non-Appalachian Georgia	1,255,794	441,546	718,474	178,679	539,795	95,774
Kentucky	783,586	244,826	466,816	103,111	363,705	71,944
Appalachian Kentucky	289,292	84,339	175,898	31,768	144,130	29,055
Non-Appalachian Kentucky	494,294	160,487	290,918	71,343	219,575	42,889
Maryland	566,966	171,383	331,532	76,939	254,593	64,051
Appalachian Maryland	32,260	9,964	18,855	4,280	14,575	3,441
Non-Appalachian Maryland	534,706	161,419	312,677	72,659	240,018	60,610
Mississippi	620,007	215,831	348,783	81,533	267,250	55,393
Appalachian Mississippi	130,899	42,829	75,057	19,592	55,465	13,013
Non-Appalachian Mississippi	489,108	173,002	273,726	61,941	211,785	42,380
New York	2,908,471	878,104	1,696,671	369,127	1,327,544	333,696
Appalachian New York	161,976	44,835	103,603	33,400	70,203	13,538
Non-Appalachian New York	2,746,495	833,269	1,593,068	335,727	1,257,341	320,158
North Carolina	1,579,871	516,821	923,859	223,827	700,032	139,191
Appalachian North Carolina	288,986	86,199	171,946	39,885	132,061	30,841
Non-Appalachian North Carolina	1,290,885	430,622	751,913	183,942	567,971	108,350
Ohio	1,683,890	550,914	990,702	240,202	750,500	142,274
Appalachian Ohio	335,117	107,550	196,966	40,960	156,006	30,601
Non-Appalachian Ohio	1,348,773	443,364	793,736	199,242	594,494	111,673
Pennsylvania	1,623,537	490,831	960,903	236,659	724,244	171,803
Appalachian Pennsylvania	731,243	209,478	439,214	115,497	323,717	82,551
Non-Appalachian Pennsylvania	892,294	281,353	521,689	121,162	400,527	89,252
South Carolina	790,657	263,340	454,914	106,667	348,247	72,403
Appalachian South Carolina	186,415	60,226	109,438	27,945	81,493	16,751
Non-Appalachian South Carolina	604,242	203,114	345,476	78,722	266,754	55,652
Tennessee	1,072,360	357,310	621,406	140,518	480,888	93,644
Appalachian Tennessee	482,054	144,816	287,998	63,749	224,249	49,240
Non-Appalachian Tennessee	590,306	212,494	333,408	76,769	256,639	44,404
Virginia	906,838	273,962	547,038	148,065	398,973	85,838
Appalachian Virginia	132,972	32,610	86,188	28,004	58,184	14,174
Non-Appalachian Virginia	773,866	241,352	460,850	120,061	340,789	71,664
West Virginia (entire state)	317,089	90,148	196,941	45,258	151,683	30,000

Note: Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2017, the poverty threshold for a family of two adults and two children was \$24,858. The poverty universe does not include unrelated individuals under age 15, people living in college dormitories, and people living in institutional group quarters.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

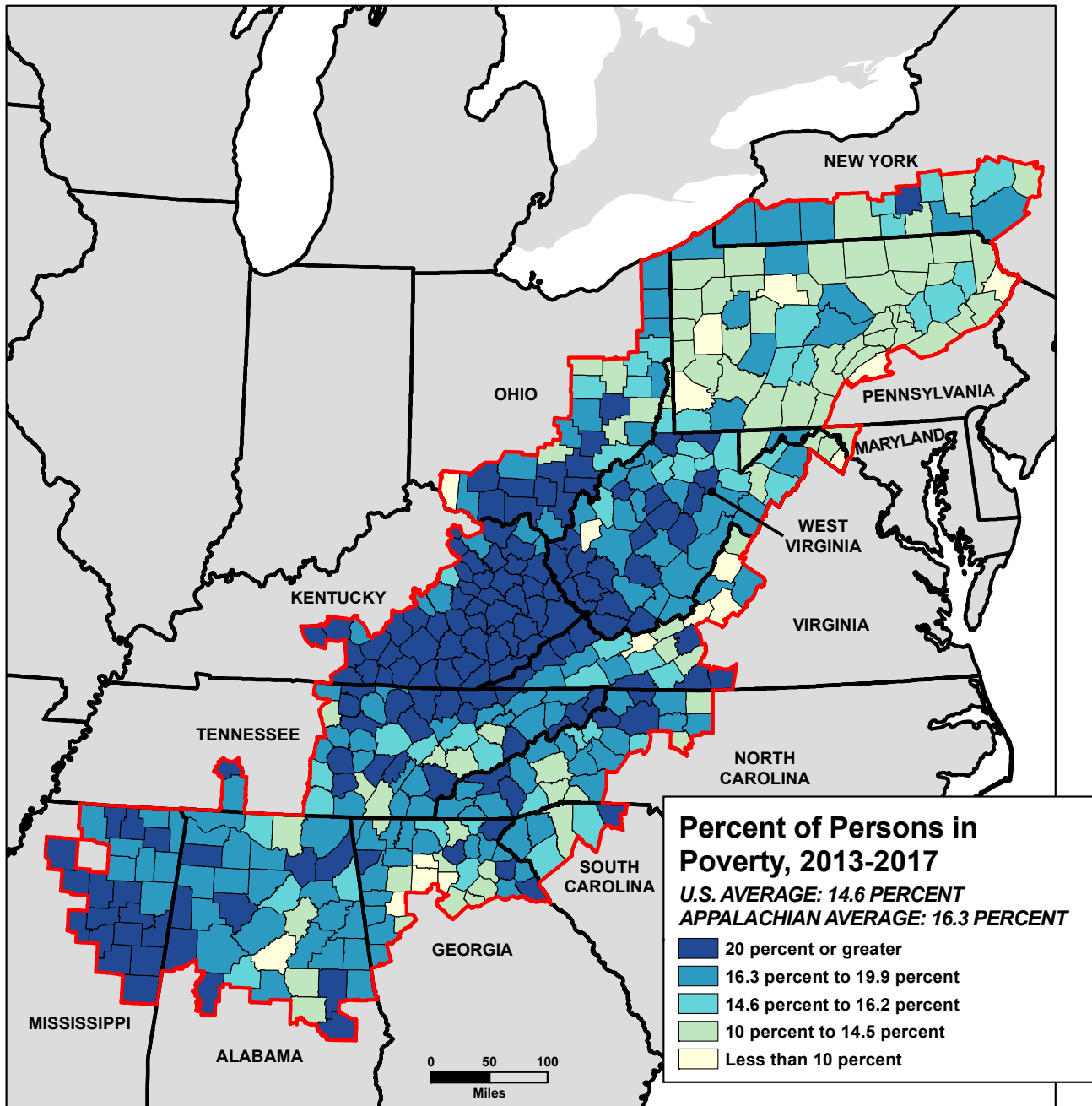
Table 8.4: Percent of Persons in the Appalachian Region in Poverty, by Age Group, 2013-2017

Poverty Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	14.6	20.3	13.7	23.4	12.1	9.3
Appalachian Region	16.3	22.8	15.8	26.6	14.1	9.3
Subregions						
Northern Appalachia	14.1	20.5	13.9	26.1	12.0	8.0
North Central Appalachia	17.5	23.6	17.7	30.6	15.6	9.3
Central Appalachia	24.0	32.2	23.9	30.8	22.8	14.2
South Central Appalachia	17.1	24.2	17.1	30.5	14.9	9.4
Southern Appalachia	15.7	22.0	14.7	22.8	13.3	9.7
County Types						
Large Metros (pop. 1 million +)	12.6	17.5	11.9	19.3	10.7	8.4
Small Metros (pop. <1 million)	16.1	22.8	15.8	28.8	13.6	8.6
Nonmetro, Adjacent to Large Metros	17.8	25.4	17.4	28.9	15.5	9.6
Nonmetro, Adjacent to Small Metros	18.0	25.9	17.7	26.0	16.4	10.2
Rural (nonmetro, not adj. to a metro)	21.9	29.8	21.9	32.8	20.1	12.5
Alabama	18.0	26.0	16.9	27.4	15.1	10.4
Appalachian Alabama	16.7	24.0	15.7	24.7	14.3	9.8
Non-Appalachian Alabama	20.2	29.3	19.0	31.8	16.7	11.3
Georgia	16.9	24.0	15.4	25.0	13.8	10.3
Appalachian Georgia	13.7	19.0	12.5	17.2	11.7	9.0
Non-Appalachian Georgia	18.4	26.4	16.7	28.3	14.7	10.9
Kentucky	18.3	24.7	17.6	27.5	16.0	11.1
Appalachian Kentucky	25.6	33.2	25.4	33.4	24.2	15.6
Non-Appalachian Kentucky	15.7	21.8	14.9	25.5	13.1	9.3
Maryland	9.7	12.9	9.0	15.7	7.9	7.8
Appalachian Maryland	13.7	19.7	13.2	21.0	11.9	8.3
Non-Appalachian Maryland	9.5	12.6	8.8	15.5	7.8	7.7
Mississippi	21.5	30.2	19.9	30.6	18.0	13.1
Appalachian Mississippi	21.5	29.4	20.4	33.1	18.0	13.6
Non-Appalachian Mississippi	21.4	30.4	19.8	29.9	18.0	12.9
New York	15.1	21.3	13.9	21.8	12.6	11.5
Appalachian New York	16.4	22.3	17.1	34.2	13.8	7.6
Non-Appalachian New York	15.0	21.2	13.7	21.0	12.5	11.7
North Carolina	16.1	22.9	15.3	26.4	13.4	9.4
Appalachian North Carolina	17.1	25.0	16.9	29.3	15.0	9.5
Non-Appalachian North Carolina	15.9	22.5	14.9	25.8	13.1	9.4
Ohio	14.9	21.3	14.3	24.8	12.6	8.0
Appalachian Ohio	17.2	24.9	16.8	25.5	15.4	9.0
Non-Appalachian Ohio	14.4	20.6	13.8	24.7	12.0	7.8
Pennsylvania	13.1	18.6	12.6	23.1	11.0	8.2
Appalachian Pennsylvania	13.3	19.0	13.0	25.5	11.1	8.0
Non-Appalachian Pennsylvania	13.0	18.3	12.3	21.2	10.9	8.4
South Carolina	16.6	24.5	15.7	26.1	14.0	9.3
Appalachian South Carolina	15.5	21.7	14.9	26.5	12.9	8.8
Non-Appalachian South Carolina	17.0	25.5	16.0	25.9	14.3	9.5
Tennessee	16.7	24.3	15.6	25.1	14.1	9.5
Appalachian Tennessee	17.3	24.6	17.0	27.2	15.4	9.8
Non-Appalachian Tennessee	16.1	24.0	14.6	23.6	13.1	9.2
Virginia	11.2	14.9	10.7	21.4	9.0	7.4
Appalachian Virginia	18.4	23.7	19.5	40.8	15.6	10.0
Non-Appalachian Virginia	10.5	14.2	9.9	19.2	8.4	7.0
West Virginia (entire state)	17.8	24.6	18.1	30.5	16.1	9.2

Note: Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2017, the poverty threshold for a family of two adults and two children was \$24,858. The poverty universe does not include unrelated individuals under age 15, people living in college dormitories, and people living in institutional group quarters.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

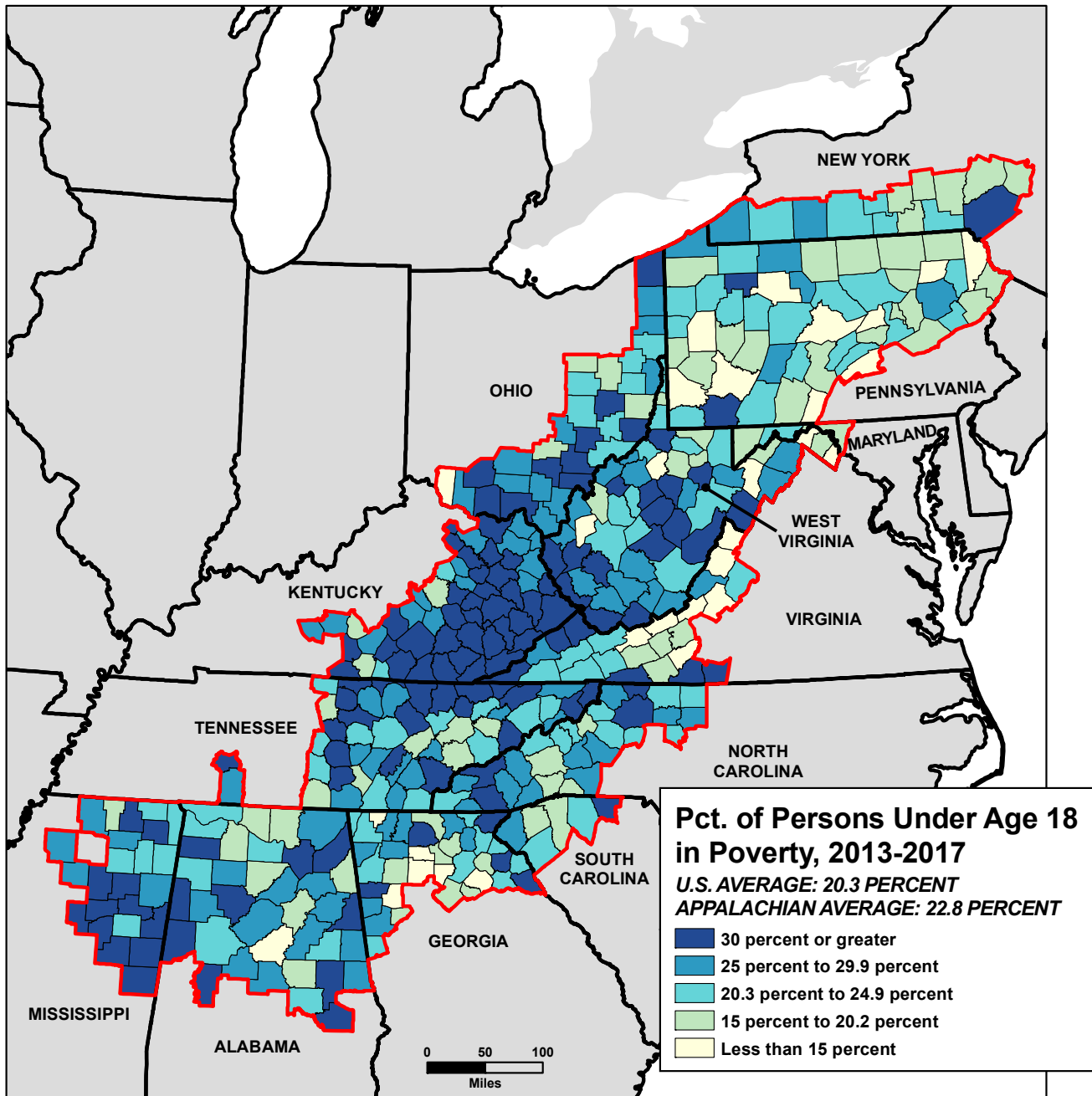
Figure 8.7: Percent of Persons in the Appalachian Region in Poverty, 2013-2017



Map Title: Percent of Persons in the Appalachian Region in Poverty, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Over the 2013-2017 period, 16.3 percent of Appalachian residents lived below the poverty level (income below \$24,858 for a family of two adults and two children in 2017)—close to two percentage points above the U.S. average. But there is a great deal of variation within the Region: In 142 counties, at least 20 percent of persons were poor, yet in another 96 counties the poverty rate was lower than the national average. And there was a geographic and urban/rural pattern: More than four-fifths of the counties with poverty rates at or above 20 percent were outside metropolitan areas, and they were overwhelmingly in Central, South Central, and Southern Appalachia. In contrast, the counties where poverty was below the U.S. rate were mostly in Northern Appalachia and in metropolitan areas.

Figure 8.8: Percent of Persons Under Age 18 in the Appalachian Region in Poverty, 2013-2017

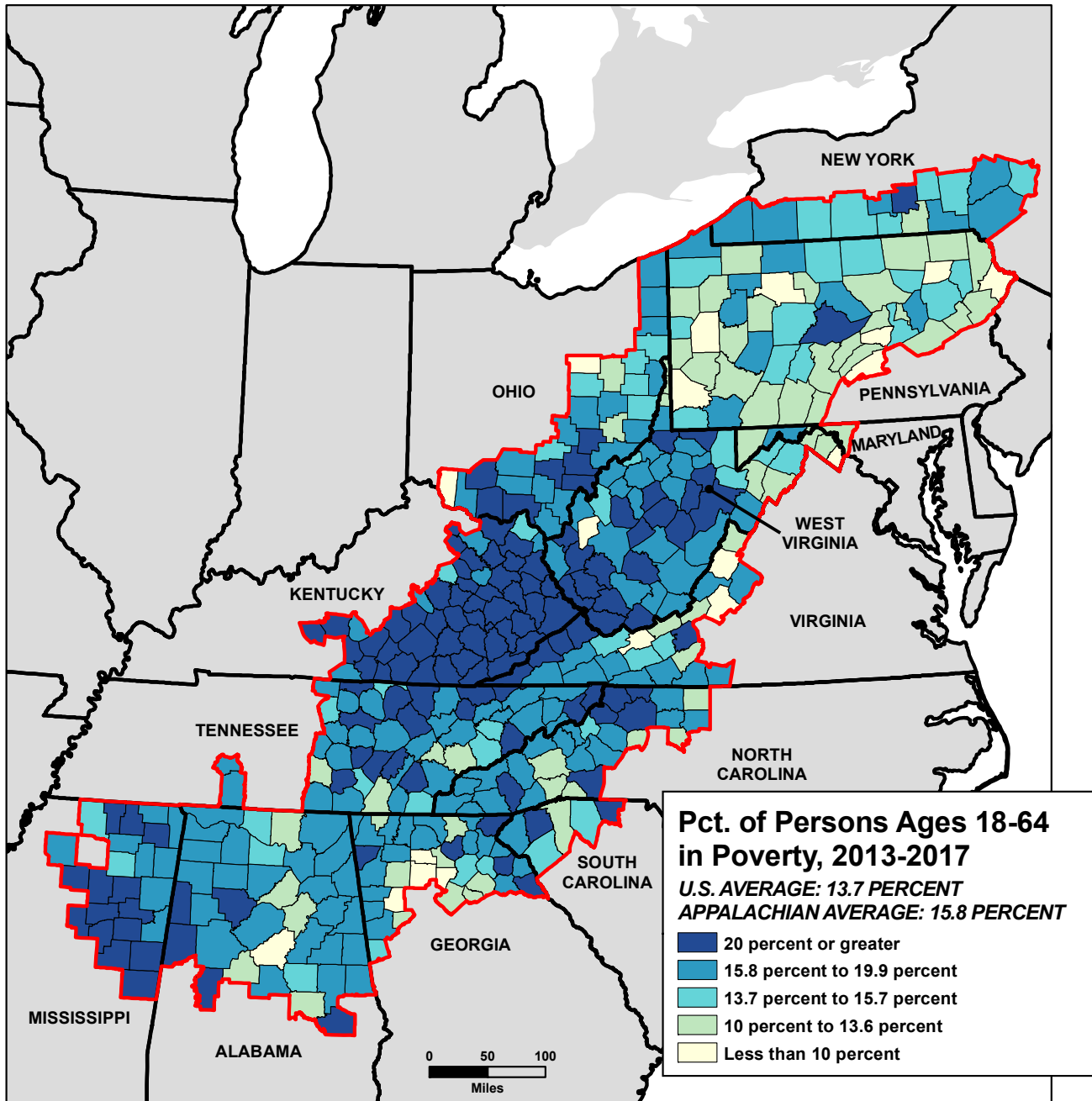


Map Title: Percent of Persons Under Age 18 in the Appalachian Region in Poverty, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Child poverty in the Appalachian Region was just under 23 percent in 2013-2017—more than two percentage points above the national rate of just over 20 percent. And the problem is even more acute in some parts of Appalachia. In 122 counties, at least 30 percent of children under age 18 lived below the poverty level (income below \$24,858 for a family of two adults and two children in 2017). All but 13 of these counties were outside metropolitan areas and nearly half were in the most isolated rural areas. Central Appalachia was home to 52 of the counties with the highest poverty rates, while most of the rest were in South Central and Southern Appalachia. However, there were 103 counties (primarily in Northern Appalachia and in metropolitan areas) where child poverty rates were below the national average. Indeed, 19 of the 30 Appalachian counties where child poverty was less than 15 percent were in metro areas, and 10 were in Northern Appalachia.

Figure 8.9: Percent of Persons Ages 18 to 64 in the Appalachian Region in Poverty, 2013-2017

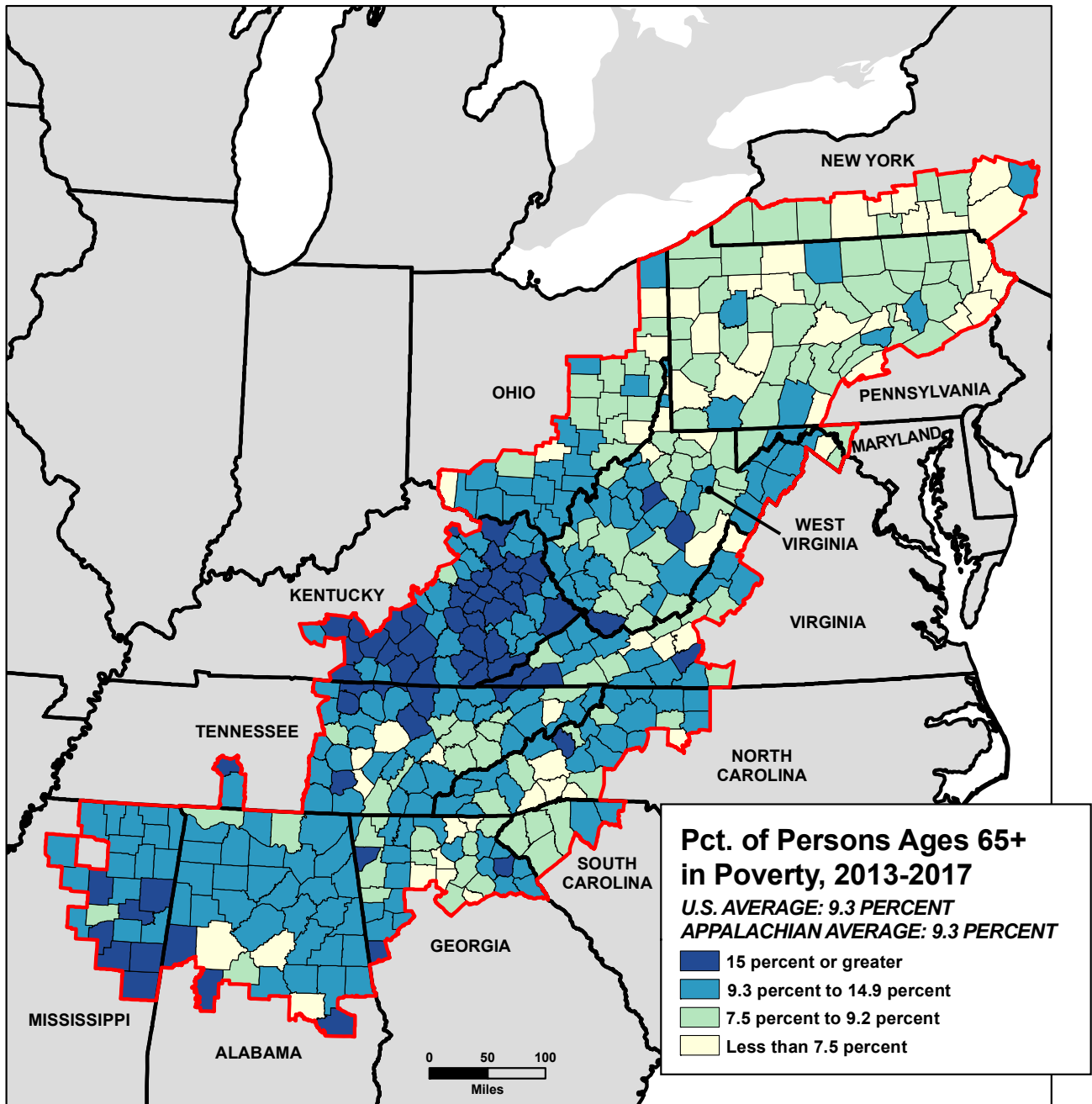


Map Title: Percent of Persons Ages 18 to 64 in the Appalachian Region in Poverty, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Though at slightly lower levels, the poverty pattern among adults ages 18 to 64 in the Appalachian Region mirrored that for the overall population in the 2013-2017 period. Just under 16 percent of Appalachian residents in this age group were below poverty (income of less than \$24,858 for a family of two adults and two children in 2017), and this rate was two percentage points above the U.S. average of 13.7 percent. Within the Region, there were rural/urban and geographic patterns of poverty concentration. Of the 127 counties where at least one in five 18-to-64-year-olds were poor, 109 were outside metropolitan areas; 105 were in Central, South Central, and Southern Appalachia; and 46 were in Kentucky alone. Conversely, 72 of the 83 counties with rates below the national average were either in metro areas or in Northern Appalachia.

Figure 8.10: Percent of Persons Ages 65 and Over in the Appalachian Region in Poverty, 2013-2017



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region in Poverty, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

The poverty rate for the oldest residents of Appalachia matched the national average of 9.3 percent in 2013-2017. Yet the rate was even lower in 169 counties, 73 of which were in Northern Appalachia alone. But as with other age groups, poverty was especially prevalent among the senior population in Appalachian Kentucky, where about one in six residents ages 65 and over were poor in 2013-2017. Moreover, the state had more than half of Appalachia's 61 counties where the poverty rate among seniors was 15 percent or higher. (Determined by a series of income thresholds based on family size and composition, the poverty level in 2017 was \$14,816 for a family of two adults headed by someone age 65 or older.)

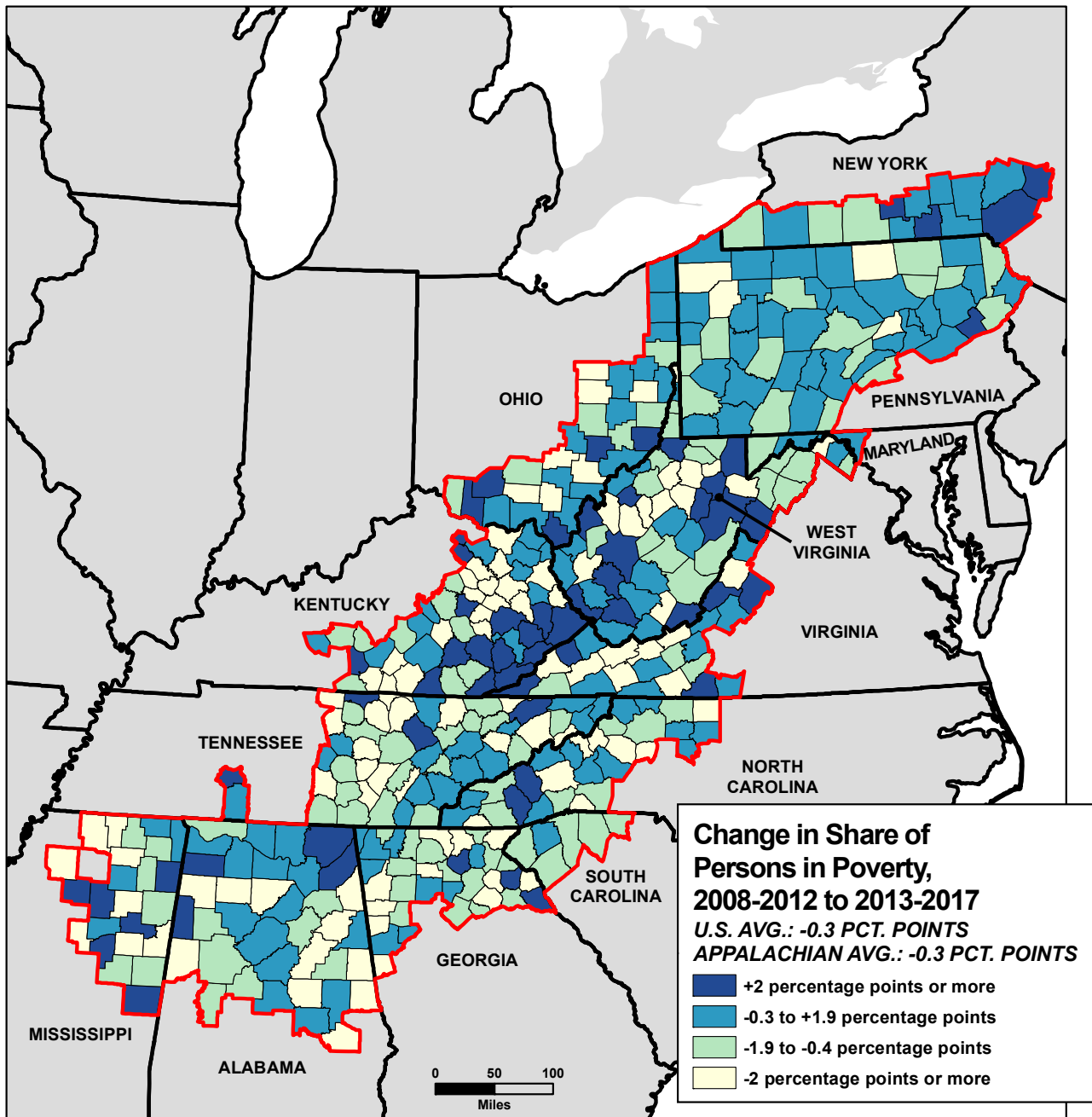
Table 8.5: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, by Age Group, 2008-2012 to 2013-2017

Poverty Status	Percentage Point Change in Share of Persons in Poverty					
	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	- 0.3	- 0.5	+ 0.0	- 1.4	+ 0.3	- 0.1
Appalachian Region	- 0.3	- 0.4	+ 0.0	- 1.9	+ 0.4	- 0.7
Subregions						
Northern Appalachia	- 0.1	- 0.2	+ 0.4	- 1.6	+ 0.8	- 0.3
North Central Appalachia	+ 0.2	+ 0.1	+ 0.7	- 1.6	+ 1.0	- 0.4
Central Appalachia	+ 0.2	+ 0.2	+ 1.1	- 1.5	+ 1.5	- 2.0
South Central Appalachia	- 0.5	- 0.3	+ 0.0	- 2.1	+ 0.3	- 0.6
Southern Appalachia	- 0.9	- 0.9	- 0.5	- 2.2	- 0.2	- 1.1
County Types						
Large Metros (pop. 1 million +)	- 0.5	- 0.6	- 0.2	- 2.5	+ 0.1	- 0.2
Small Metros (pop. <1 million)	- 0.1	+ 0.1	+ 0.2	- 1.5	+ 0.5	- 0.4
Nonmetro, Adjacent to Large Metros	- 1.1	- 1.5	- 0.7	- 3.3	- 0.2	- 1.1
Nonmetro, Adjacent to Small Metros	+ 0.0	- 0.1	+ 0.7	- 1.2	+ 1.0	- 1.0
Rural (nonmetro, not adj. to a metro)	- 0.5	- 1.0	+ 0.5	- 1.5	+ 0.8	- 1.7
Alabama	- 0.1	+ 0.0	+ 0.3	- 0.7	+ 0.6	- 0.7
Appalachian Alabama	- 0.2	- 0.3	+ 0.3	- 0.9	+ 0.6	- 0.8
Non-Appalachian Alabama	+ 0.0	+ 0.4	+ 0.4	- 0.3	+ 0.6	- 0.7
Georgia	- 0.5	- 0.1	- 0.3	- 2.3	+ 0.1	- 1.0
Appalachian Georgia	- 1.0	- 0.6	- 0.9	- 2.8	- 0.7	- 1.3
Non-Appalachian Georgia	- 0.2	+ 0.2	+ 0.0	- 1.7	+ 0.4	- 0.8
Kentucky	- 0.3	- 1.0	+ 0.4	- 1.9	+ 0.8	- 1.1
Appalachian Kentucky	+ 0.5	- 0.2	+ 1.6	- 0.6	+ 2.0	- 2.1
Non-Appalachian Kentucky	- 0.4	- 1.1	+ 0.1	- 2.3	+ 0.4	- 0.6
Maryland	+ 0.3	+ 0.7	+ 0.3	- 0.9	+ 0.4	+ 0.1
Appalachian Maryland	+ 0.5	+ 0.5	+ 1.0	- 1.3	+ 1.4	- 0.7
Non-Appalachian Maryland	+ 0.2	+ 0.6	+ 0.2	- 0.9	+ 0.5	+ 0.1
Mississippi	- 0.8	- 1.8	+ 0.1	- 1.8	+ 0.5	- 1.5
Appalachian Mississippi	- 1.8	- 3.4	- 0.9	- 3.5	- 0.3	- 1.7
Non-Appalachian Mississippi	- 0.6	- 1.3	+ 0.4	- 1.3	+ 0.7	- 1.5
New York	+ 0.2	+ 0.3	+ 0.4	- 0.7	+ 0.6	+ 0.1
Appalachian New York	+ 0.3	+ 0.2	+ 1.0	- 1.1	+ 1.3	- 0.4
Non-Appalachian New York	+ 0.2	+ 0.3	+ 0.3	- 0.7	+ 0.5	+ 0.0
North Carolina	- 0.7	- 0.9	- 0.2	- 2.1	+ 0.0	- 0.8
Appalachian North Carolina	- 0.8	- 0.8	- 0.4	- 3.0	+ 0.0	- 0.4
Non-Appalachian North Carolina	- 0.7	- 1.0	- 0.2	- 1.9	+ 0.1	- 0.9
Ohio	- 0.5	- 0.9	- 0.1	- 2.6	+ 0.3	- 0.1
Appalachian Ohio	+ 0.1	- 0.2	+ 0.7	- 2.3	+ 1.1	+ 0.0
Non-Appalachian Ohio	- 0.6	- 1.0	- 0.2	- 2.6	+ 0.2	+ 0.0
Pennsylvania	+ 0.0	+ 0.2	+ 0.3	- 1.7	+ 0.7	- 0.2
Appalachian Pennsylvania	- 0.1	- 0.2	+ 0.3	- 1.6	+ 0.7	- 0.4
Non-Appalachian Pennsylvania	+ 0.2	+ 0.6	+ 0.3	- 1.7	+ 0.7	+ 0.0
South Carolina	- 1.0	- 0.8	- 0.5	- 2.1	- 0.1	- 1.3
Appalachian South Carolina	- 1.2	- 1.6	- 0.8	- 1.5	- 0.8	- 1.1
Non-Appalachian South Carolina	- 0.8	- 0.5	- 0.3	- 2.4	+ 0.0	- 1.3
Tennessee	- 0.6	- 0.2	- 0.4	- 2.6	+ 0.1	- 1.1
Appalachian Tennessee	- 0.5	+ 0.0	- 0.3	- 2.9	+ 0.2	- 0.8
Non-Appalachian Tennessee	- 0.7	- 0.4	- 0.3	- 2.3	+ 0.0	- 1.3
Virginia	+ 0.1	+ 0.3	+ 0.3	- 0.5	+ 0.5	- 0.5
Appalachian Virginia	- 0.2	- 0.6	+ 0.7	+ 1.6	+ 0.5	- 1.2
Non-Appalachian Virginia	+ 0.2	+ 0.5	+ 0.4	- 0.7	+ 0.5	- 0.5
West Virginia (entire state)	+ 0.2	+ 0.5	+ 0.7	- 1.3	+ 1.0	- 0.7

Note: Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2017, the poverty threshold for a family of two adults and two children was \$24,858. The poverty universe does not include unrelated individuals under age 15, people living in college dormitories, and people living in institutional group quarters.

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 8.11: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

The share of Appalachian residents living below the poverty level (income of less than \$24,858 for a family of two adults and two children in 2017) decreased by 0.3 percentage points between the 2008-2012 and 2013-2017 periods, the same change as in the nation as a whole. And the decrease in the poverty rate was even greater in 214 of Appalachia's 420 counties (scattered throughout the Region). Conversely, there were 62 counties where poverty rates increased by at least two percentage points between the two periods. The overall picture nevertheless suggests that in the aftermath of the Great Recession, poverty rates in much of Appalachia have fallen.

Table 8.6: Income-to-Poverty Ratio for Persons in the Appalachian Region, 2013-2017

Income-to-Poverty Ratio	Persons for Whom Poverty Status Is Determined	Percent of Persons for Whom Poverty Status is Determined			
		Below 50% of Poverty Level	50% to 99% of Poverty Level	100% to 199% of Poverty Level	200% of Poverty Level and Greater
United States	313,048,563	6.5	8.1	18.2	67.2
Appalachian Region	24,713,230	7.0	9.3	20.4	63.3
Subregions					
Northern Appalachia	7,937,550	6.3	7.9	18.5	67.4
North Central Appalachia	2,338,174	7.7	9.8	20.5	62.0
Central Appalachia	1,823,220	10.1	13.9	23.9	52.1
South Central Appalachia	4,681,545	7.3	9.8	21.8	61.1
Southern Appalachia	7,932,741	6.6	9.1	20.8	63.5
County Types					
Large Metros (pop. 1 million +)	5,920,472	5.5	7.2	17.2	70.2
Small Metros (pop. <1 million)	10,421,200	7.0	9.0	20.0	64.0
Nonmetro, Adjacent to Large Metros	2,118,540	7.6	10.2	22.8	59.4
Nonmetro, Adjacent to Small Metros	3,832,204	7.4	10.6	23.2	58.8
Rural (nonmetro, not adj. to a metro)	2,420,814	9.5	12.5	23.9	54.1
Alabama	4,729,116	7.8	10.1	20.7	61.4
Appalachian Alabama	3,029,357	7.0	9.7	20.3	63.0
Non-Appalachian Alabama	1,699,759	9.3	10.9	21.3	58.5
Georgia	9,931,935	7.7	9.2	20.0	63.1
Appalachian Georgia	3,090,049	5.6	8.1	20.2	66.1
Non-Appalachian Georgia	6,841,886	8.6	9.7	19.9	61.8
Kentucky	4,287,887	7.9	10.4	19.9	61.9
Appalachian Kentucky	1,132,081	10.9	14.7	23.7	50.7
Non-Appalachian Kentucky	3,155,806	6.8	8.9	18.5	65.9
Maryland	5,856,088	4.7	5.0	13.0	77.4
Appalachian Maryland	234,632	5.7	8.0	18.3	67.9
Non-Appalachian Maryland	5,621,456	4.6	4.9	12.7	77.8
Mississippi	2,890,123	9.9	11.6	22.5	56.0
Appalachian Mississippi	609,234	8.7	12.8	25.0	53.5
Non-Appalachian Mississippi	2,280,889	10.2	11.3	21.9	56.7
New York	19,285,448	6.7	8.4	16.3	68.6
Appalachian New York	985,602	7.6	8.9	19.6	64.0
Non-Appalachian New York	18,299,846	6.7	8.3	16.2	68.8
North Carolina	9,783,738	7.0	9.1	20.4	63.5
Appalachian North Carolina	1,686,212	7.2	9.9	22.0	60.9
Non-Appalachian North Carolina	8,097,526	7.0	8.9	20.0	64.0
Ohio	11,289,161	6.9	8.0	17.6	67.5
Appalachian Ohio	1,946,033	7.7	9.6	20.4	62.4
Non-Appalachian Ohio	9,343,128	6.7	7.7	17.1	68.5
Pennsylvania	12,377,251	6.0	7.1	16.5	70.4
Appalachian Pennsylvania	5,509,247	5.9	7.4	17.8	68.9
Non-Appalachian Pennsylvania	6,868,004	6.1	6.9	15.5	71.5
South Carolina	4,751,345	7.6	9.1	20.8	62.6
Appalachian South Carolina	1,204,101	7.2	8.3	21.0	63.5
Non-Appalachian South Carolina	3,547,244	7.7	9.3	20.7	62.3
Tennessee	6,436,601	7.2	9.5	20.6	62.7
Appalachian Tennessee	2,780,682	7.2	10.1	22.2	60.5
Non-Appalachian Tennessee	3,655,919	7.1	9.0	19.4	64.4
Virginia	8,116,130	5.3	5.9	14.8	74.0
Appalachian Virginia	721,996	8.7	9.7	21.7	59.9
Non-Appalachian Virginia	7,394,134	5.0	5.5	14.2	75.4
West Virginia (entire state)	1,784,004	7.8	10.0	21.2	61.0

Note: Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2017, the poverty threshold for a family of two adults and two children was \$24,858. The poverty universe does not include unrelated individuals under age 15, people living in college dormitories, and people living in institutional group quarters.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Table 8.7: Number of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2013-2017

Income-to-Poverty Ratio (Below 50%)	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	20,276,204	6,510,949	12,452,185	3,561,652	8,890,533	1,313,070
Appalachian Region	1,731,265	548,339	1,075,949	322,918	753,031	106,977
Subregions						
Northern Appalachia	498,400	149,779	313,098	105,039	208,059	35,523
North Central Appalachia	180,556	55,560	115,549	36,319	79,230	9,447
Central Appalachia	184,805	63,438	112,029	23,891	88,138	9,338
South Central Appalachia	342,706	102,283	219,434	72,314	147,120	20,989
Southern Appalachia	524,798	177,279	315,839	85,355	230,484	31,680
County Types						
Large Metros (pop. 1 million +)	323,228	102,723	196,662	50,186	146,476	23,843
Small Metros (pop. <1 million)	734,506	226,141	465,235	159,597	305,638	43,130
Nonmetro, Adjacent to Large Metros	161,730	52,679	99,731	30,299	69,432	9,320
Nonmetro, Adjacent to Small Metros	282,897	91,809	173,094	42,768	130,326	17,994
Rural (nonmetro, not adj. to a metro)	228,904	74,987	141,227	40,068	101,159	12,690
Alabama	370,884	131,570	219,258	63,106	156,152	20,056
Appalachian Alabama	212,636	73,716	126,532	34,548	91,984	12,388
Non-Appalachian Alabama	158,248	57,854	92,726	28,558	64,168	7,668
Georgia	761,938	267,322	454,034	123,810	330,224	40,582
Appalachian Georgia	172,903	57,485	104,411	22,897	81,514	11,007
Non-Appalachian Georgia	589,035	209,837	349,623	100,913	248,710	29,575
Kentucky	337,217	114,062	206,363	55,441	150,922	16,792
Appalachian Kentucky	122,841	41,776	75,127	16,883	58,244	5,938
Non-Appalachian Kentucky	214,376	72,286	131,236	38,558	92,678	10,854
Maryland	273,285	81,788	167,496	42,818	124,678	24,001
Appalachian Maryland	13,472	4,190	8,098	2,147	5,951	1,184
Non-Appalachian Maryland	259,813	77,598	159,398	40,671	118,727	22,817
Mississippi	284,882	109,128	161,656	45,328	116,328	14,098
Appalachian Mississippi	52,998	17,954	31,766	11,077	20,689	3,278
Non-Appalachian Mississippi	231,884	91,174	129,890	34,251	95,639	10,820
New York	1,296,854	399,232	799,840	198,079	601,761	97,782
Appalachian New York	74,702	19,675	51,342	21,640	29,702	3,685
Non-Appalachian New York	1,222,152	379,557	748,498	176,439	572,059	94,097
North Carolina	688,118	229,345	422,039	122,683	299,356	36,734
Appalachian North Carolina	121,265	37,120	76,135	23,018	53,117	8,010
Non-Appalachian North Carolina	566,853	192,225	345,904	99,665	246,239	28,724
Ohio	776,037	263,821	468,590	133,304	335,286	43,626
Appalachian Ohio	149,183	52,026	88,397	22,458	65,939	8,760
Non-Appalachian Ohio	626,854	211,795	380,193	110,846	269,347	34,866
Pennsylvania	740,815	225,611	461,710	140,607	321,103	53,494
Appalachian Pennsylvania	322,597	93,928	203,681	70,258	133,423	24,988
Non-Appalachian Pennsylvania	418,218	131,683	258,029	70,349	187,680	28,506
South Carolina	359,556	124,929	213,921	57,767	156,154	20,706
Appalachian South Carolina	86,261	28,124	53,130	16,833	36,297	5,007
Non-Appalachian South Carolina	273,295	96,805	160,791	40,934	119,857	15,699
Tennessee	462,337	160,807	277,250	73,361	203,889	24,280
Appalachian Tennessee	201,082	63,873	124,912	33,907	91,005	12,297
Non-Appalachian Tennessee	261,255	96,934	152,338	39,454	112,884	11,983
Virginia	429,123	127,332	275,433	91,470	183,963	26,358
Appalachian Virginia	62,732	15,673	43,632	20,125	23,507	3,427
Non-Appalachian Virginia	366,391	111,659	231,801	71,345	160,456	22,931
West Virginia (entire state)	138,593	42,799	88,786	27,127	61,659	7,008

Note: Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2017, the poverty threshold for a family of two adults and two children was \$24,858. The poverty universe does not include unrelated individuals under age 15, people living in college dormitories, and people living in institutional group quarters.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

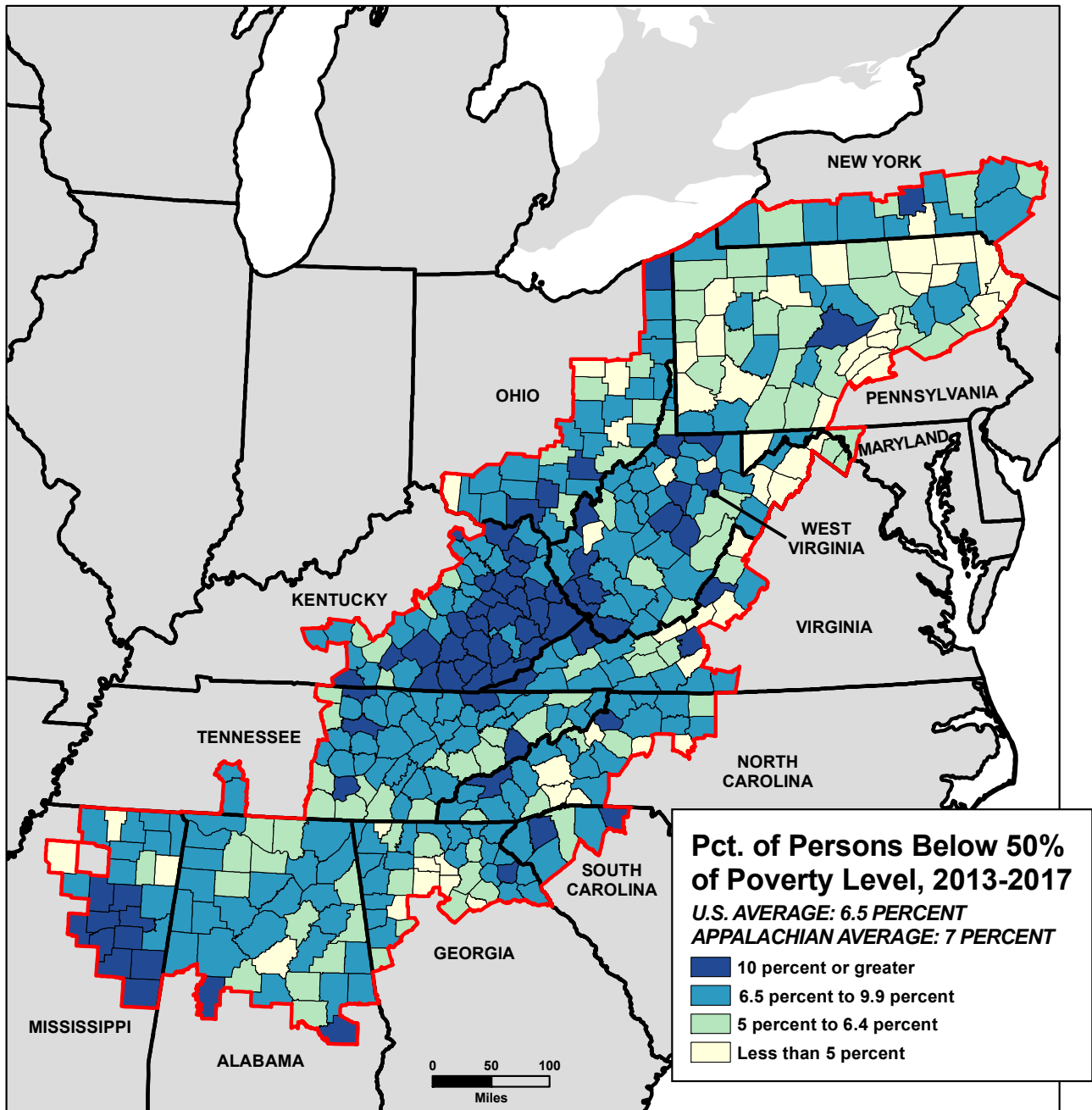
Table 8.8: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2013-2017

Income-to-Poverty Ratio (Below 50%)	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	6.5	9.0	6.4	12.8	5.3	2.8
Appalachian Region	7.0	10.2	7.1	15.3	5.8	2.5
Subregions						
Northern Appalachia	6.3	9.3	6.5	15.7	5.0	2.4
North Central Appalachia	7.7	11.2	8.1	18.2	6.4	2.3
Central Appalachia	10.1	15.9	10.1	16.2	9.2	3.0
South Central Appalachia	7.3	10.6	7.7	18.1	6.0	2.4
Southern Appalachia	6.6	9.3	6.5	12.3	5.5	2.7
County Types						
Large Metros (pop. 1 million +)	5.5	7.5	5.4	10.4	4.6	2.7
Small Metros (pop. <1 million)	7.0	10.2	7.3	17.2	5.6	2.4
Nonmetro, Adjacent to Large Metros	7.6	11.4	7.8	16.6	6.3	2.5
Nonmetro, Adjacent to Small Metros	7.4	11.4	7.6	13.9	6.6	2.4
Rural (nonmetro, not adj. to a metro)	9.5	14.3	9.7	19.3	8.1	2.9
Alabama	7.8	12.1	7.6	14.8	6.3	2.7
Appalachian Alabama	7.0	10.7	6.8	13.1	5.7	2.6
Non-Appalachian Alabama	9.3	14.6	8.9	17.7	7.3	2.9
Georgia	7.7	10.8	7.3	13.8	6.2	3.2
Appalachian Georgia	5.6	7.2	5.5	8.6	5.0	2.8
Non-Appalachian Georgia	8.6	12.6	8.1	16.0	6.8	3.4
Kentucky	7.9	11.5	7.8	14.8	6.6	2.6
Appalachian Kentucky	10.9	16.4	10.9	17.8	9.8	3.2
Non-Appalachian Kentucky	6.8	9.8	6.7	13.8	5.5	2.3
Maryland	4.7	6.2	4.5	8.7	3.9	2.9
Appalachian Maryland	5.7	8.3	5.7	10.5	4.9	2.8
Non-Appalachian Maryland	4.6	6.1	4.5	8.7	3.8	2.9
Mississippi	9.9	15.3	9.2	17.0	7.8	3.3
Appalachian Mississippi	8.7	12.3	8.6	18.7	6.7	3.4
Non-Appalachian Mississippi	10.2	16.0	9.4	16.5	8.1	3.3
New York	6.7	9.7	6.5	11.7	5.7	3.4
Appalachian New York	7.6	9.8	8.5	22.1	5.8	2.1
Non-Appalachian New York	6.7	9.7	6.4	11.0	5.7	3.4
North Carolina	7.0	10.2	7.0	14.5	5.8	2.5
Appalachian North Carolina	7.2	10.8	7.5	16.9	6.0	2.5
Non-Appalachian North Carolina	7.0	10.1	6.9	14.0	5.7	2.5
Ohio	6.9	10.2	6.8	13.8	5.6	2.5
Appalachian Ohio	7.7	12.1	7.5	14.0	6.5	2.6
Non-Appalachian Ohio	6.7	9.9	6.6	13.7	5.4	2.4
Pennsylvania	6.0	8.5	6.0	13.7	4.9	2.5
Appalachian Pennsylvania	5.9	8.5	6.0	15.5	4.6	2.4
Non-Appalachian Pennsylvania	6.1	8.5	6.1	12.3	5.1	2.7
South Carolina	7.6	11.6	7.4	14.1	6.3	2.7
Appalachian South Carolina	7.2	10.1	7.2	16.0	5.8	2.6
Non-Appalachian South Carolina	7.7	12.2	7.4	13.5	6.4	2.7
Tennessee	7.2	10.9	7.0	13.1	6.0	2.5
Appalachian Tennessee	7.2	10.9	7.4	14.5	6.3	2.4
Non-Appalachian Tennessee	7.1	11.0	6.7	12.1	5.7	2.5
Virginia	5.3	6.9	5.4	13.2	4.2	2.3
Appalachian Virginia	8.7	11.4	9.9	29.3	6.3	2.4
Non-Appalachian Virginia	5.0	6.6	5.0	11.4	4.0	2.2
West Virginia (entire state)	7.8	11.7	8.2	18.3	6.6	2.1

Note: Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2017, the poverty threshold for a family of two adults and two children was \$24,858. The poverty universe does not include unrelated individuals under age 15, people living in college dormitories, and people living in institutional group quarters.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Figure 8.12: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, 2013-2017

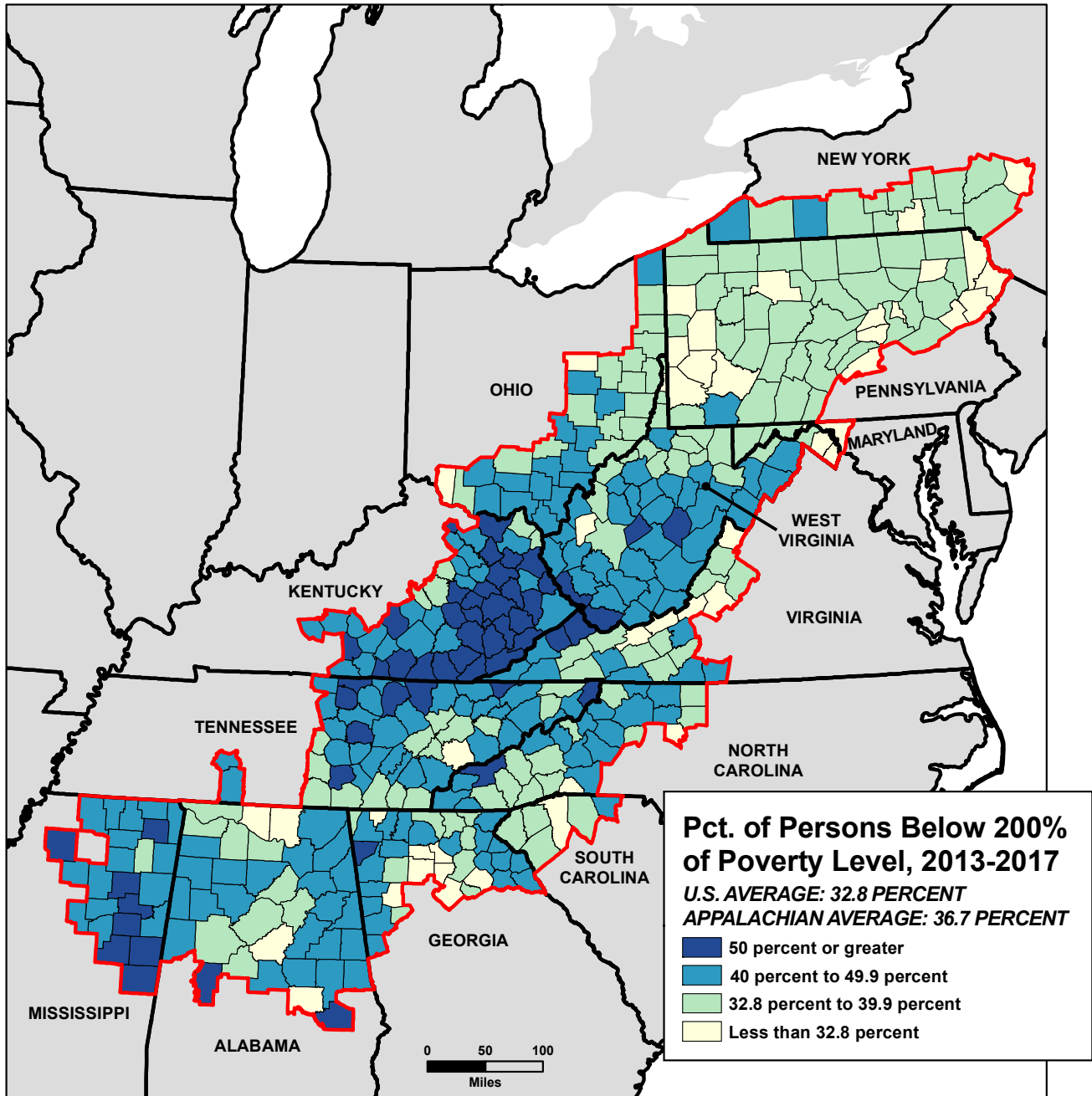


Map Title: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In the 2013-2017 period, 7 percent of Appalachian residents were in extreme poverty (incomes below 50 percent of the poverty level, or less than \$12,429 for a family of two adults and two children in 2017). While this was slightly higher than the national average of 6.5 percent, the situation was even worse in much of the Region. For example, in 72 Appalachian counties at least one in 10 residents were extremely poor. All but seven of these counties were outside metropolitan areas, and 37 of them were in Central Appalachia. (Kentucky alone had 29 counties in this group.) In contrast, there were 55 counties in the Region where less than 5 percent of the population had incomes below 50 percent of the poverty level. Northern Appalachia had 24 of these counties, although the group included several Georgia counties that were outside Atlanta.

Figure 8.13: Percent of Persons in the Appalachian Region Below 200% of Poverty Level, 2013-2017



Map Title: Percent of Persons in the Appalachian Region Below 200% of Poverty Level, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

About 37 percent of persons in the Appalachian Region had incomes less than twice the poverty level in 2013-2017, four percentage points higher than the national rate of just under 33 percent. (In 2017 a family of two adults and two children fell in this category if their income was less than \$49,716.) The share of persons who were poor (below 100% of poverty) and low-income (between 100% and 199% of poverty) was 40 percent or more in 232 of Appalachia's 420 counties, mostly in Central, South Central, and Southern Appalachia. And in 55 Appalachian counties, at least half of residents had incomes below 200 percent of poverty; 38 of these counties were in Central Appalachia and 29 were in Kentucky alone. (Another eight of these counties were in Mississippi.) In contrast, there were 46 counties in the Region where the share of persons who were poor or low-income was below the national average. Nearly half were in Northern Appalachia, although several were outside Atlanta.

Table 8.9: Percentage Point Change in Share of Persons in the Appalachian Region, by Income-to-Poverty Ratio, 2008-2012 to 2013-2017

Income-to-Poverty Ratio	Percentage Point Change in Share of Poverty Universe			
	Below 50% of Poverty Level	50% to 99% of Poverty Level	100% to 199% of Poverty Level	200% of Poverty Level and Greater
United States	+ 0.0	- 0.3	- 0.5	+ 0.8
Appalachian Region	+ 0.0	- 0.3	- 0.7	+ 1.0
Subregions				
Northern Appalachia	+ 0.2	- 0.1	- 1.1	+ 1.2
North Central Appalachia	+ 0.2	+ 0.0	- 0.8	+ 0.6
Central Appalachia	+ 0.6	- 0.4	- 1.1	+ 0.9
South Central Appalachia	- 0.2	- 0.3	- 0.3	+ 0.8
Southern Appalachia	- 0.2	- 0.7	- 0.3	+ 1.1
County Types				
Large Metros (pop. 1 million +)	- 0.1	- 0.3	- 0.7	+ 1.1
Small Metros (pop. <1 million)	+ 0.0	- 0.2	- 0.4	+ 0.6
Nonmetro, Adjacent to Large Metros	- 0.3	- 0.8	+ 0.0	+ 1.1
Nonmetro, Adjacent to Small Metros	+ 0.2	- 0.2	- 0.9	+ 0.8
Rural (nonmetro, not adj. to a metro)	+ 0.5	- 0.9	- 1.4	+ 1.7
Alabama	+ 0.1	- 0.3	- 0.4	+ 0.6
Appalachian Alabama	+ 0.0	- 0.2	- 0.4	+ 0.6
Non-Appalachian Alabama	+ 0.4	- 0.5	- 0.6	+ 0.6
Georgia	- 0.1	- 0.4	- 0.3	+ 0.8
Appalachian Georgia	- 0.3	- 0.7	- 0.1	+ 1.1
Non-Appalachian Georgia	- 0.1	- 0.2	- 0.4	+ 0.7
Kentucky	- 0.1	- 0.2	- 0.8	+ 1.2
Appalachian Kentucky	+ 0.6	- 0.1	- 1.4	+ 0.9
Non-Appalachian Kentucky	- 0.3	- 0.1	- 0.5	+ 1.1
Maryland	+ 0.2	+ 0.1	+ 0.2	- 0.4
Appalachian Maryland	- 0.3	+ 0.8	- 0.8	+ 0.3
Non-Appalachian Maryland	+ 0.1	+ 0.1	+ 0.2	- 0.4
Mississippi	+ 0.5	- 1.3	- 0.7	+ 1.5
Appalachian Mississippi	- 0.5	- 1.3	- 0.9	+ 2.8
Non-Appalachian Mississippi	+ 0.7	- 1.2	- 0.6	+ 1.2
New York	+ 0.0	+ 0.2	- 0.4	+ 0.2
Appalachian New York	+ 0.2	+ 0.2	- 0.1	- 0.2
Non-Appalachian New York	+ 0.1	+ 0.1	- 0.3	+ 0.2
North Carolina	- 0.3	- 0.4	- 0.3	+ 1.0
Appalachian North Carolina	- 0.5	- 0.3	- 0.5	+ 1.3
Non-Appalachian North Carolina	- 0.2	- 0.5	- 0.3	+ 0.9
Ohio	- 0.2	- 0.3	- 0.5	+ 1.0
Appalachian Ohio	+ 0.4	- 0.2	- 1.1	+ 1.0
Non-Appalachian Ohio	- 0.4	- 0.2	- 0.3	+ 0.9
Pennsylvania	+ 0.3	- 0.2	- 0.6	+ 0.5
Appalachian Pennsylvania	+ 0.2	- 0.2	- 1.3	+ 1.4
Non-Appalachian Pennsylvania	+ 0.3	- 0.1	+ 0.1	- 0.3
South Carolina	- 0.3	- 0.6	- 0.6	+ 1.6
Appalachian South Carolina	- 0.1	- 1.1	- 0.3	+ 1.5
Non-Appalachian South Carolina	- 0.4	- 0.4	- 0.8	+ 1.6
Tennessee	- 0.3	- 0.3	- 0.5	+ 1.0
Appalachian Tennessee	- 0.1	- 0.4	- 0.1	+ 0.7
Non-Appalachian Tennessee	- 0.5	- 0.2	- 0.7	+ 1.3
Virginia	+ 0.3	- 0.2	- 0.3	+ 0.1
Appalachian Virginia	+ 1.1	- 1.3	- 1.0	+ 1.2
Non-Appalachian Virginia	+ 0.3	+ 0.0	- 0.1	- 0.1
West Virginia (entire state)	+ 0.2	+ 0.0	- 0.3	+ 0.1

Note: Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2017, the poverty threshold for a family of two adults and two children was \$24,858. The poverty universe does not include unrelated individuals under age 15, people living in college dormitories, and people living in institutional group quarters.

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

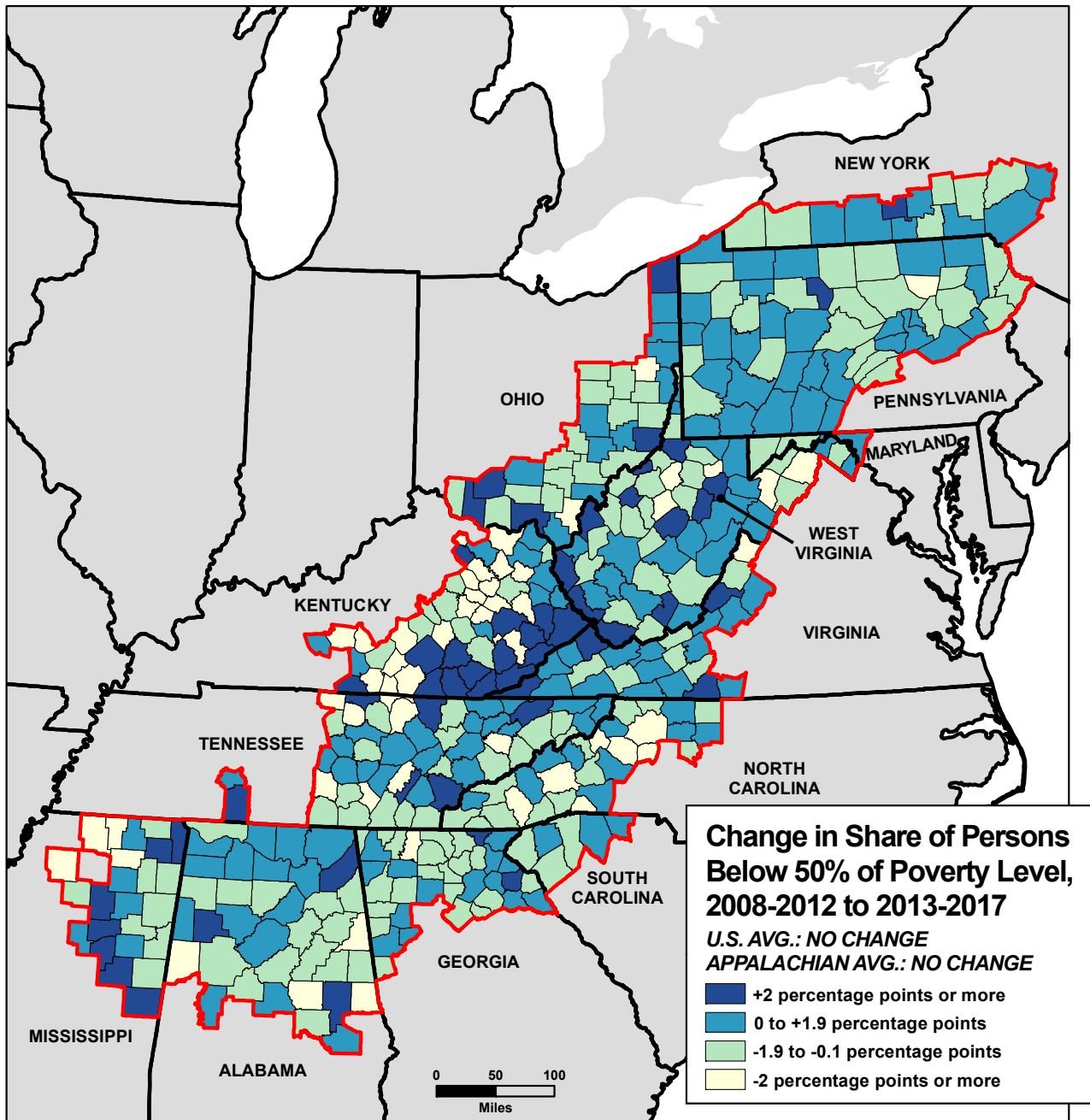
Table 8.10: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2008-2012 to 2013-2017

Income-to-Poverty Ratio (Below 50%)	Percentage Point Change in Share of Persons Below 50% of Poverty Level					
	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	+ 0.0	- 0.2	+ 0.1	- 0.7	+ 0.2	+ 0.3
Appalachian Region	+ 0.0	- 0.1	+ 0.2	- 0.8	+ 0.3	+ 0.3
Subregions						
Northern Appalachia	+ 0.2	+ 0.0	+ 0.3	- 0.7	+ 0.5	+ 0.3
North Central Appalachia	+ 0.2	+ 0.2	+ 0.4	- 1.3	+ 0.6	+ 0.6
Central Appalachia	+ 0.6	+ 0.7	+ 1.1	- 0.2	+ 1.3	+ 0.1
South Central Appalachia	- 0.2	+ 0.1	- 0.1	- 0.9	+ 0.0	+ 0.3
Southern Appalachia	- 0.2	- 0.5	+ 0.0	- 0.7	+ 0.1	+ 0.3
County Types						
Large Metros (pop. 1 million +)	- 0.1	- 0.5	+ 0.0	- 1.3	+ 0.2	+ 0.4
Small Metros (pop. <1 million)	+ 0.0	+ 0.1	+ 0.2	- 0.7	+ 0.3	+ 0.4
Nonmetro, Adjacent to Large Metros	- 0.3	- 0.3	- 0.2	- 1.5	+ 0.1	+ 0.3
Nonmetro, Adjacent to Small Metros	+ 0.2	+ 0.2	+ 0.5	- 0.6	+ 0.7	+ 0.2
Rural (nonmetro, not adj. to a metro)	+ 0.5	+ 0.4	+ 0.9	+ 1.0	+ 0.8	+ 0.3
Alabama	+ 0.1	+ 0.2	+ 0.4	+ 0.1	+ 0.5	+ 0.2
Appalachian Alabama	+ 0.0	- 0.2	+ 0.2	- 0.4	+ 0.3	+ 0.3
Non-Appalachian Alabama	+ 0.4	+ 0.9	+ 0.6	+ 0.9	+ 0.6	+ 0.2
Georgia	- 0.1	- 0.1	- 0.2	- 1.7	+ 0.1	+ 0.5
Appalachian Georgia	- 0.3	- 0.5	- 0.2	- 1.1	- 0.1	+ 0.1
Non-Appalachian Georgia	- 0.1	+ 0.2	- 0.1	- 1.7	+ 0.3	+ 0.7
Kentucky	- 0.1	- 0.9	+ 0.3	- 0.8	+ 0.5	+ 0.0
Appalachian Kentucky	+ 0.6	- 0.1	+ 1.2	- 0.1	+ 1.4	- 0.1
Non-Appalachian Kentucky	- 0.3	- 1.1	+ 0.0	- 1.0	+ 0.2	+ 0.1
Maryland	+ 0.2	+ 0.1	+ 0.1	- 0.8	+ 0.3	+ 0.6
Appalachian Maryland	- 0.3	- 2.1	+ 0.2	- 1.1	+ 0.5	+ 0.6
Non-Appalachian Maryland	+ 0.1	+ 0.1	+ 0.2	- 0.8	+ 0.3	+ 0.6
Mississippi	+ 0.5	+ 0.5	+ 0.7	+ 0.1	+ 0.9	+ 0.3
Appalachian Mississippi	- 0.5	- 1.9	- 0.2	+ 0.0	- 0.1	+ 0.9
Non-Appalachian Mississippi	+ 0.7	+ 1.0	+ 1.0	+ 0.2	+ 1.1	+ 0.1
New York	+ 0.0	+ 0.0	+ 0.1	- 0.5	+ 0.3	+ 0.5
Appalachian New York	+ 0.2	+ 0.0	+ 0.6	- 0.4	+ 0.6	+ 0.1
Non-Appalachian New York	+ 0.1	+ 0.0	+ 0.1	- 0.6	+ 0.3	+ 0.4
North Carolina	- 0.3	- 0.5	- 0.1	- 1.1	+ 0.1	+ 0.3
Appalachian North Carolina	- 0.5	- 0.3	- 0.5	- 1.8	- 0.3	+ 0.3
Non-Appalachian North Carolina	- 0.2	- 0.5	+ 0.0	- 1.0	+ 0.2	+ 0.2
Ohio	- 0.2	- 0.6	+ 0.0	- 1.4	+ 0.2	+ 0.4
Appalachian Ohio	+ 0.4	+ 0.6	+ 0.4	- 1.6	+ 0.8	+ 0.6
Non-Appalachian Ohio	- 0.4	- 0.7	- 0.2	- 1.4	+ 0.0	+ 0.2
Pennsylvania	+ 0.3	+ 0.2	+ 0.3	- 0.8	+ 0.6	+ 0.2
Appalachian Pennsylvania	+ 0.2	- 0.1	+ 0.2	- 0.6	+ 0.5	+ 0.3
Non-Appalachian Pennsylvania	+ 0.3	+ 0.5	+ 0.5	- 0.8	+ 0.7	+ 0.2
South Carolina	- 0.3	- 0.5	- 0.2	- 1.8	+ 0.1	+ 0.4
Appalachian South Carolina	- 0.1	- 0.4	+ 0.0	- 0.2	+ 0.1	+ 0.5
Non-Appalachian South Carolina	- 0.4	- 0.4	- 0.3	- 2.3	+ 0.1	+ 0.4
Tennessee	- 0.3	- 0.4	- 0.1	- 1.6	+ 0.1	+ 0.2
Appalachian Tennessee	- 0.1	+ 0.4	- 0.2	- 2.1	+ 0.2	+ 0.3
Non-Appalachian Tennessee	- 0.5	- 0.8	- 0.1	- 1.2	+ 0.0	- 0.1
Virginia	+ 0.3	+ 0.3	+ 0.4	+ 0.2	+ 0.5	+ 0.3
Appalachian Virginia	+ 1.1	+ 1.1	+ 1.7	+ 5.4	+ 0.9	+ 0.4
Non-Appalachian Virginia	+ 0.3	+ 0.3	+ 0.4	- 0.4	+ 0.5	+ 0.2
West Virginia (entire state)	+ 0.2	+ 0.3	+ 0.4	- 0.5	+ 0.5	+ 0.4

Note: Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2017, the poverty threshold for a family of two adults and two children was \$24,858. The poverty universe does not include unrelated individuals under age 15, people living in college dormitories, and people living in institutional group quarters.

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 8.14: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

The share of Appalachian residents living in extreme poverty (50 percent of the poverty level, or earning less than \$12,429 for a family of two adults and two children in 2017) remained the same between the 2008-2012 and 2013-2017 periods. But there was much variation within the Region. On one hand, the rate of extreme poverty rose at least two percentage points in 55 counties. Almost three-fourths of these counties were in Central, South Central, and Southern Appalachia, and all but four were outside metropolitan areas. Yet in 54 other counties, extreme poverty rates went down by at least two points. As was true with poverty rates, extreme poverty rates have now fallen to pre-recession levels in much of the Appalachian Region.

TRENDS IN INCOME AND POVERTY

- Adjusting for inflation, income trends in the Appalachian Region were positive between the 2008-2012 and 2013-2017 periods (see Tables 8.1 and 8.2).
 - The mean income measures all increased noticeably during the two periods. Mean household income, for example, rose 3.7 percent to \$64,880 in 2013-2017. Mean family and per capita income were both 4 percent higher, at \$77,028 and \$26,135, respectively. (All monetary figures are in 2017 Dollars.)
 - Meanwhile, the two median income measures—which are not affected by extreme values—both registered more modest increases since 2008-2012. Median household income (the level where half of all households have higher incomes while the other half have lower incomes) rose 2.5 percent to \$47,836 in 2013-2017. Median family income increased 2.6 percent to \$60,256.
- While the post 2008-2012 trend in median household income was noticeably better in Appalachia than in the nation, that was not the case for the other measures. Appalachia's growth in median family and per capita income was about the same as the national average, while the increases in mean household and family income were not quite as great as they are in the U.S.
- Within the Appalachian Region, all income measures increased for the subregions and county types, even after adjusting for inflation. Among the subregions, income growth was highest in Northern Appalachia and lowest in Central Appalachia. Among the county types, the increases depended on the income measure. For example, nonmetropolitan counties adjacent to large metro areas had the largest increase in per capita income (5 percent) but the smallest increase in median household income (1.3 percent). However, there were still counties throughout the Region that experienced declines in income between 2008-2012 and 2013-2017.
- Since 2008-2012, the share of Appalachian residents in poverty (incomes below \$24,858 for a family of two adults and two children in 2017) has fallen 0.3 percentage points to 16.3 percent in 2013-2017 (see Tables 8.4 and 8.5). Poverty decreased in three of the subregions (rising slightly in North Central and Central Appalachia) and among four of the five county types. The decline in poverty was greatest in the Appalachian portions of Mississippi, South Carolina, and Georgia: Poverty fell by at least a full percentage point in each state. In contrast, the poverty rate in Kentucky and Maryland increased by half a percentage point between 2008-2012 and 2013-2017.
- Both child poverty and poverty among young adults (ages 18 to 24) have fallen since 2008-2012: Child poverty dropped 0.4 percentage points to 22.8 percent in 2013-2017, while poverty among 18-to-24-year-olds fell nearly two points to 26.6 percent. And for both of these age groups, Appalachian Mississippi had the largest decreases: more than three percentage points in each case. Conversely, poverty rates among working-age adults (ages 25 to 64) rose slightly to 14.1 percent, but this increase was not uniform throughout the Region. For example, poverty among working-age adults rose at least a full percentage point in Kentucky, Maryland, New York, Ohio, and West Virginia, but fell by 0.8 points in South Carolina and 0.7 points in Georgia.
- Poverty declined 0.7 percentage points for older residents (ages 65 and over) between 2008-2012 and 2013-2017, and this decline was evident throughout the Appalachian Region. (Central Appalachia, the region's most rural areas, and the Appalachian portions of Kentucky, Mississippi, and Georgia had the biggest drops in the poverty rate for persons ages 65 and over.)
- In 2013-2017, the share of Appalachian residents below 50 percent of poverty (income below \$12,429 for a family of two adults and two children in 2017) was 7 percent, the same level it was in 2008-2012 (see Tables 8.6 through 8.10). Within the Region, however, there was change—increases in some parts and decreases in others. And the share decreased among children and young adults while increasing among adults ages 25 and over.
- Overall, the income and poverty trends in the Appalachian Region since 2008-2012 show that, for the most part, poverty levels have fallen while incomes have risen, suggesting that much—if not most—of Appalachia has recovered from the 2007-2009 recession.

CHAPTER 9: HEALTH INSURANCE COVERAGE

Table 9.1: Number of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2013-2017

Health Insurance Status	All Ages	Under Age 35				Ages 35-64	Ages 65 and Over
		Total	Under Age 19	Ages 19-25	Ages 26-34		
United States	33,177,146	17,327,820	4,434,876	5,517,483	7,375,461	15,446,016	403,310
Appalachian Region	2,463,868	1,247,373	302,894	411,972	532,507	1,198,855	17,640
Subregions							
Northern Appalachia	546,054	290,054	88,805	88,439	112,810	250,689	5,311
North Central Appalachia	187,420	92,891	19,826	33,072	39,993	93,765	764
Central Appalachia	172,474	84,791	19,548	30,203	35,040	86,744	939
South Central Appalachia	533,198	250,824	50,434	87,267	113,123	279,492	2,882
Southern Appalachia	1,024,722	528,813	124,281	172,991	231,541	488,165	7,744
County Types							
Large Metros (pop. 1 million +)	570,655	294,497	74,392	88,990	131,115	270,831	5,327
Small Metros (pop. <1 million)	1,003,105	506,597	107,556	173,676	225,365	490,073	6,435
Nonmetro, Adjacent to Large Metros	217,014	110,306	33,058	34,974	42,274	105,510	1,198
Nonmetro, Adjacent to Small Metros	403,073	197,164	50,453	65,673	81,038	202,926	2,983
Rural (nonmetro, not adj. to a metro)	270,021	138,809	37,435	48,659	52,715	129,515	1,697
Alabama	512,029	263,137	41,459	98,478	123,200	245,506	3,386
Appalachian Alabama	316,749	161,728	26,139	58,133	77,456	152,909	2,112
Non-Appalachian Alabama	195,280	101,409	15,320	40,345	45,744	92,597	1,274
Georgia	1,481,625	789,638	205,153	251,898	332,587	679,723	12,264
Appalachian Georgia	480,141	249,902	73,822	72,463	103,617	225,640	4,599
Non-Appalachian Georgia	1,001,484	539,736	131,331	179,435	228,970	454,083	7,665
Kentucky	341,351	184,560	47,325	60,274	76,961	154,583	2,208
Appalachian Kentucky	99,906	51,335	13,267	18,371	19,697	47,996	575
Non-Appalachian Kentucky	241,445	133,225	34,058	41,903	57,264	106,587	1,633
Maryland	433,369	223,227	55,059	64,549	103,619	200,962	9,180
Appalachian Maryland	15,994	8,120	2,584	2,071	3,465	7,727	147
Non-Appalachian Maryland	417,375	215,107	52,475	62,478	100,154	193,235	9,033
Mississippi	398,647	208,671	43,005	79,549	86,117	188,344	1,632
Appalachian Mississippi	81,714	41,727	7,396	17,109	17,222	39,726	261
Non-Appalachian Mississippi	316,933	166,944	35,609	62,440	68,895	148,618	1,371
New York	1,481,650	750,029	136,660	225,296	388,073	706,538	25,083
Appalachian New York	61,824	35,047	11,615	10,917	12,515	26,193	584
Non-Appalachian New York	1,419,826	714,982	125,045	214,379	375,558	680,345	24,499
North Carolina	1,186,403	591,216	127,958	192,493	270,765	587,396	7,791
Appalachian North Carolina	214,142	100,340	19,832	35,049	45,459	112,754	1,048
Non-Appalachian North Carolina	972,261	490,876	108,126	157,444	225,306	474,642	6,743
Ohio	847,730	443,441	128,387	137,555	177,499	395,534	8,755
Appalachian Ohio	172,993	90,550	31,974	27,626	30,950	80,704	1,739
Non-Appalachian Ohio	674,737	352,891	96,413	109,929	146,549	314,830	7,016
Pennsylvania	893,635	482,708	136,386	143,450	202,872	400,943	9,984
Appalachian Pennsylvania	355,056	185,822	51,004	57,460	77,358	165,999	3,235
Non-Appalachian Pennsylvania	538,579	296,886	85,382	85,990	125,514	234,944	6,749
South Carolina	578,318	288,026	59,815	96,323	131,888	286,822	3,470
Appalachian South Carolina	146,118	75,456	16,924	25,286	33,246	69,890	772
Non-Appalachian South Carolina	432,200	212,570	42,891	71,037	98,642	216,932	2,698
Tennessee	706,290	346,208	75,934	114,831	155,443	355,518	4,564
Appalachian Tennessee	299,629	139,584	27,209	48,014	64,361	158,373	1,672
Non-Appalachian Tennessee	406,661	206,624	48,725	66,817	91,082	197,145	2,892
Virginia	810,412	417,258	107,345	131,977	177,936	381,843	11,311
Appalachian Virginia	75,833	36,628	7,818	13,452	15,358	38,705	500
Non-Appalachian Virginia	734,579	380,630	99,527	118,525	162,578	343,138	10,811
West Virginia (entire state)	143,769	71,134	13,310	26,021	31,803	72,239	396

Note: The health insurance universe consists of the civilian noninstitutional population.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

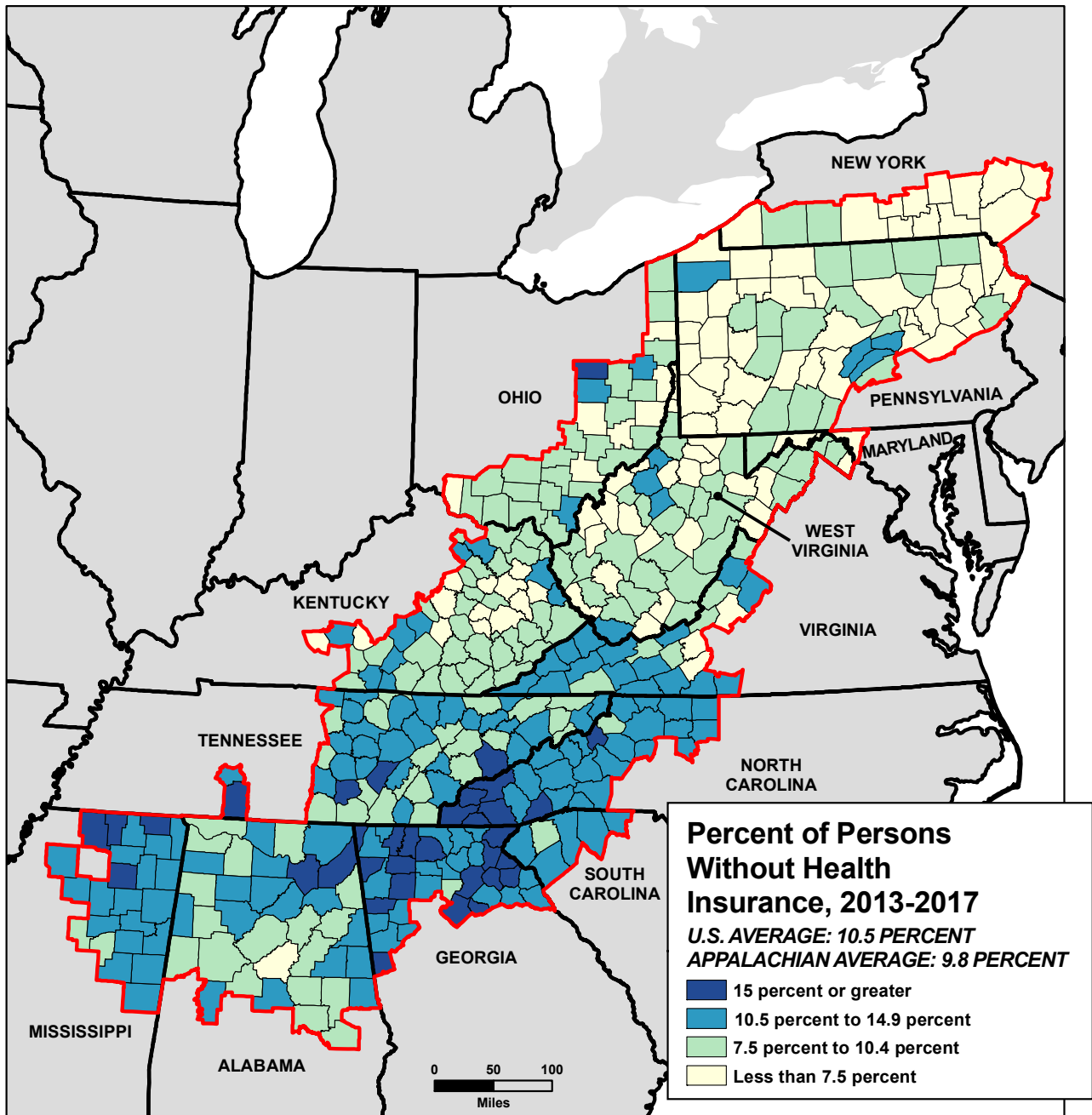
Table 9.2: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2013-2017

Health Insurance Status	All Ages	Under Age 35				Ages 35-64	Ages 65 and Over
		Total	Under Age 19	Ages 19-25	Ages 26-34		
United States	10.5	11.8	5.7	18.1	19.2	12.6	0.9
Appalachian Region	9.8	11.5	5.2	17.5	19.9	12.0	0.4
Subregions							
Northern Appalachia	6.7	8.6	5.0	11.4	13.3	7.8	0.4
North Central Appalachia	7.9	9.2	3.7	14.9	16.0	9.9	0.2
Central Appalachia	9.4	10.9	4.5	18.8	18.8	11.5	0.3
South Central Appalachia	11.2	12.6	4.8	19.3	22.9	14.8	0.3
Southern Appalachia	12.8	14.3	6.1	23.2	25.8	15.4	0.7
County Types							
Large Metros (pop. 1 million +)	9.6	11.1	5.1	17.2	19.1	11.2	0.6
Small Metros (pop. <1 million)	9.5	10.9	4.4	16.3	19.7	11.7	0.4
Nonmetro, Adjacent to Large Metros	10.1	12.0	6.6	17.4	19.4	12.4	0.3
Nonmetro, Adjacent to Small Metros	10.4	12.4	5.8	19.4	21.5	13.1	0.4
Rural (nonmetro, not adj. to a metro)	11.0	13.2	6.5	20.7	21.4	13.4	0.4
Alabama	10.7	12.1	3.5	21.4	22.7	13.2	0.5
Appalachian Alabama	10.3	11.7	3.5	20.3	22.1	12.7	0.4
Non-Appalachian Alabama	11.4	12.8	3.6	23.3	23.7	14.2	0.5
Georgia	14.8	16.4	7.8	26.0	27.6	17.3	1.0
Appalachian Georgia	15.4	17.1	8.7	26.8	30.1	18.0	1.2
Non-Appalachian Georgia	14.5	16.1	7.3	25.7	26.6	17.0	0.9
Kentucky	7.9	9.3	4.4	14.6	15.7	9.0	0.3
Appalachian Kentucky	8.7	10.3	4.8	17.4	16.6	10.4	0.3
Non-Appalachian Kentucky	7.6	9.0	4.3	13.6	15.4	8.5	0.4
Maryland	7.3	8.3	3.9	11.9	14.4	8.4	1.1
Appalachian Maryland	6.7	8.0	4.7	9.5	14.2	8.2	0.4
Non-Appalachian Maryland	7.4	8.3	3.8	12.0	14.4	8.4	1.2
Mississippi	13.6	15.0	5.6	27.2	26.0	17.0	0.4
Appalachian Mississippi	13.2	14.4	4.7	25.8	25.9	17.1	0.3
Non-Appalachian Mississippi	13.8	15.2	5.8	27.6	26.0	17.0	0.4
New York	7.6	8.4	3.1	11.5	15.3	9.2	0.9
Appalachian New York	6.0	7.7	5.1	8.7	12.2	6.6	0.3
Non-Appalachian New York	7.7	8.4	3.0	11.7	15.5	9.3	0.9
North Carolina	12.1	13.2	5.3	20.9	24.0	15.1	0.5
Appalachian North Carolina	12.5	14.3	5.3	23.3	26.1	16.5	0.3
Non-Appalachian North Carolina	12.0	13.0	5.3	20.4	23.6	14.8	0.6
Ohio	7.4	8.6	4.6	12.8	13.7	8.8	0.5
Appalachian Ohio	8.8	10.8	6.9	16.0	15.6	10.2	0.5
Non-Appalachian Ohio	7.1	8.2	4.2	12.2	13.3	8.5	0.5
Pennsylvania	7.1	8.8	4.8	12.1	14.1	8.0	0.5
Appalachian Pennsylvania	6.3	8.0	4.3	10.9	12.9	7.4	0.3
Non-Appalachian Pennsylvania	7.7	9.4	5.1	13.0	15.0	8.6	0.6
South Carolina	12.1	13.4	5.2	21.2	24.1	15.4	0.4
Appalachian South Carolina	11.9	13.5	5.7	20.7	24.2	14.7	0.4
Non-Appalachian South Carolina	12.1	13.3	5.0	21.4	24.1	15.6	0.5
Tennessee	10.9	11.7	4.8	18.6	20.4	13.9	0.5
Appalachian Tennessee	10.6	11.7	4.3	18.4	21.5	14.1	0.3
Non-Appalachian Tennessee	11.1	11.7	5.2	18.8	19.7	13.8	0.6
Virginia	9.9	11.2	5.4	17.1	18.1	11.7	1.0
Appalachian Virginia	10.3	12.0	5.1	16.5	21.9	13.2	0.4
Non-Appalachian Virginia	9.9	11.1	5.4	17.2	17.8	11.6	1.1
West Virginia (entire state)	8.0	9.5	3.3	15.8	16.9	9.9	0.1

Note: The health insurance universe consists of the civilian noninstitutional population.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

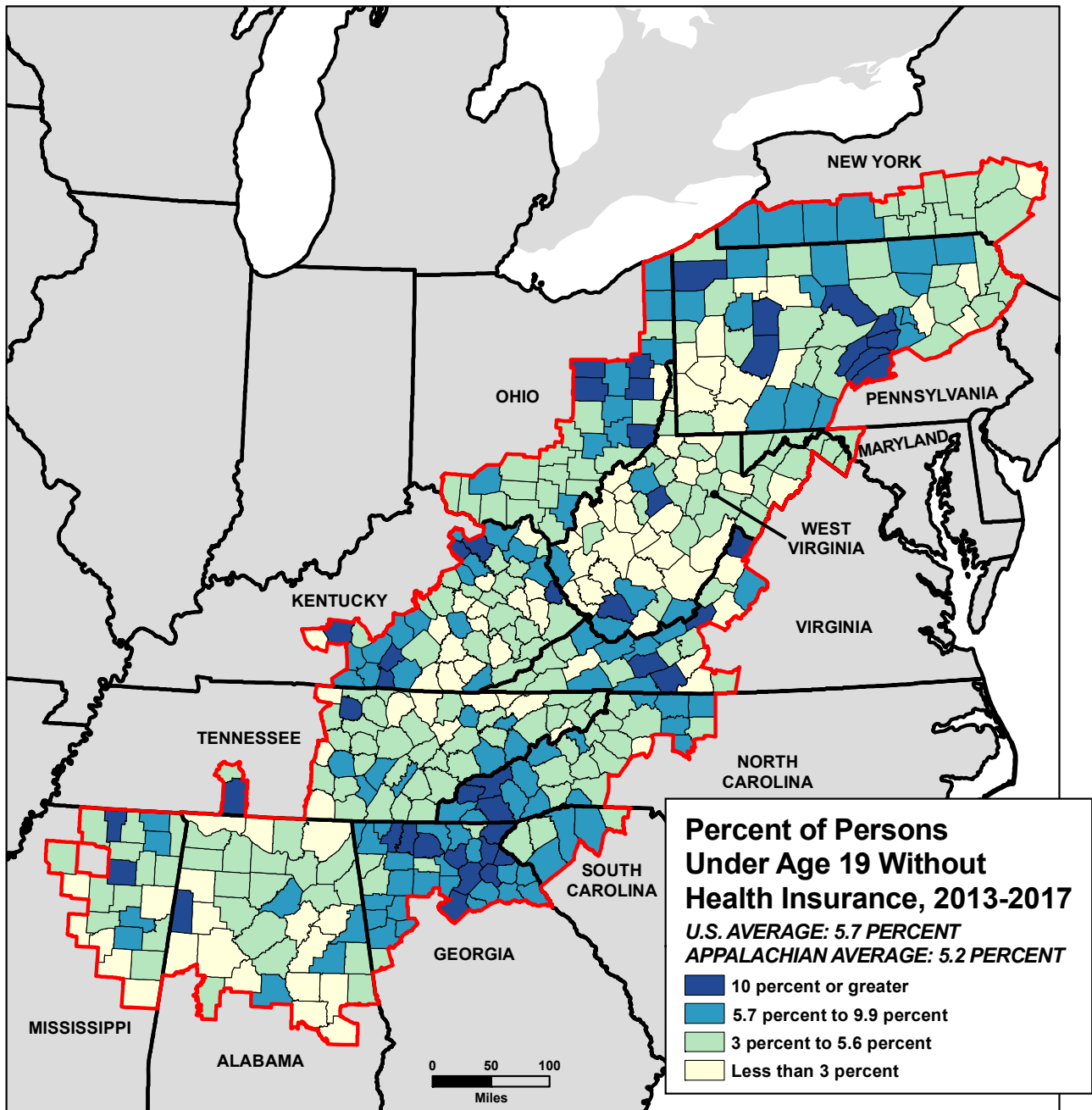
Figure 9.1: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, 2013-2017



Map Title: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Nearly 2.5 million persons in the Appalachian Region lacked any kind of health insurance coverage in the 2013-2017 period—a figure representing just under 10 percent of Appalachia’s residents. Although the percentage for the Region is slightly lower than the U.S. share of 10.5 percent, almost half of the 420 Appalachian counties had non-coverage rates that matched or exceeded the national average. In 35 Appalachian counties—including 17 in Georgia—at least 15 percent of residents were not covered by insurance. (Indeed, just over 15 percent of residents in Appalachian Georgia were not covered by health insurance.) At the other end of the spectrum, 94 counties had uninsured rates below 7.5 percent, and nearly half of these were in either New York, Pennsylvania, or Maryland—the states with the lowest shares of uninsured residents in Appalachia (each under 7 percent).

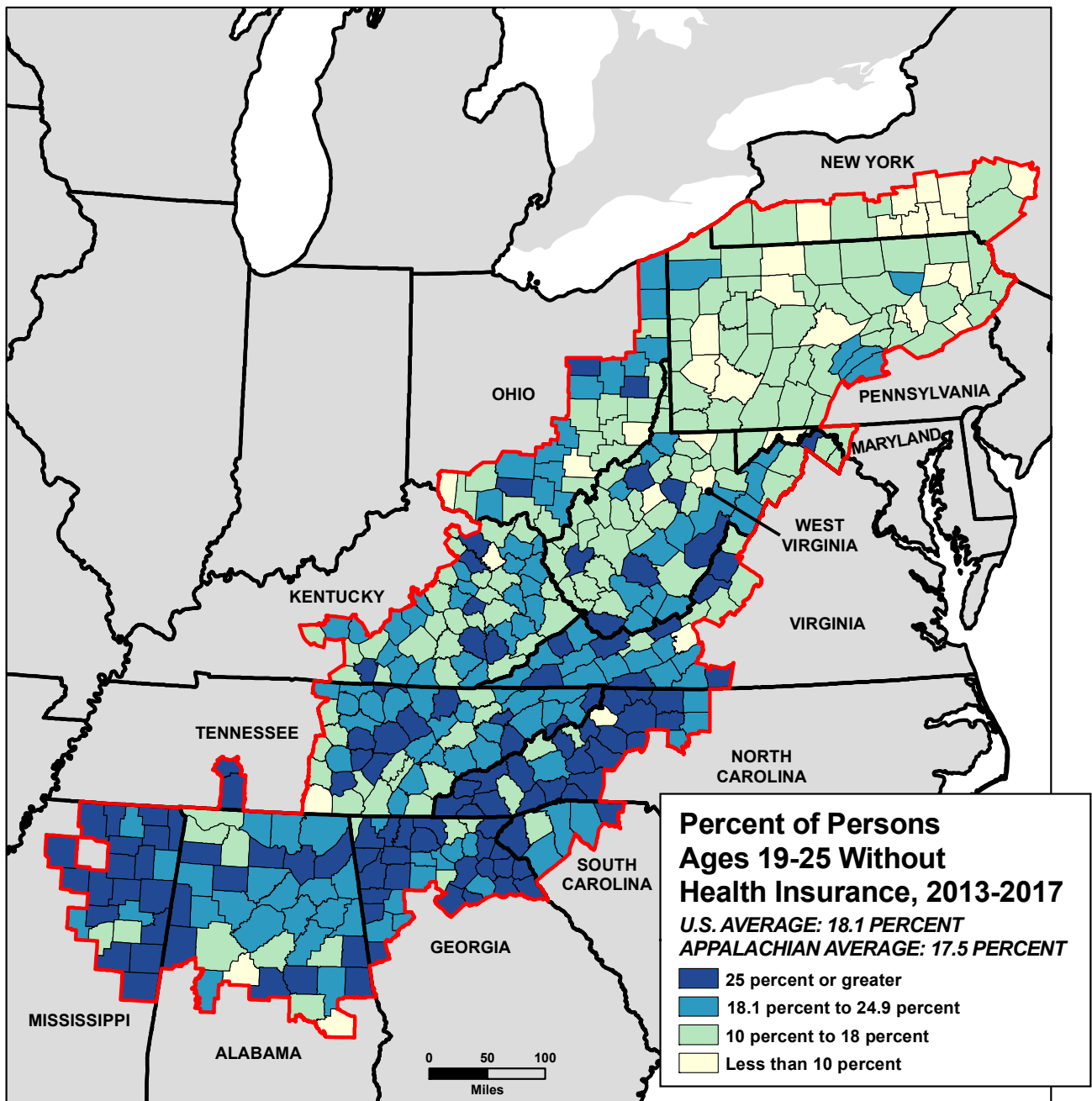
Figure 9.2: Percent of Persons Under Age 19 in the Appalachian Region Not Covered by Health Insurance, 2013-2017



Map Title: Percent of Persons Under Age 19 in the Appalachian Region Not Covered by Health Insurance, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Just over 5 percent of Appalachia’s children and youth under age 19 were uninsured during 2013-2017, half a percentage point below the national average. But the rate varied throughout the Region. On one hand, 92 counties had non-coverage rates under 3 percent; nearly half were in West Virginia and Alabama—the two states in the Region where less than 4 percent of children and youth were without health insurance. Conversely, at least one in 10 persons under age 19 lacked health insurance in 44 other counties. While the counties in the latter group were scattered throughout Appalachia, all but eight of them were outside metropolitan areas, and 10 of them were in Appalachian Georgia, where the uninsured rate for children and youth was just under 9 percent.

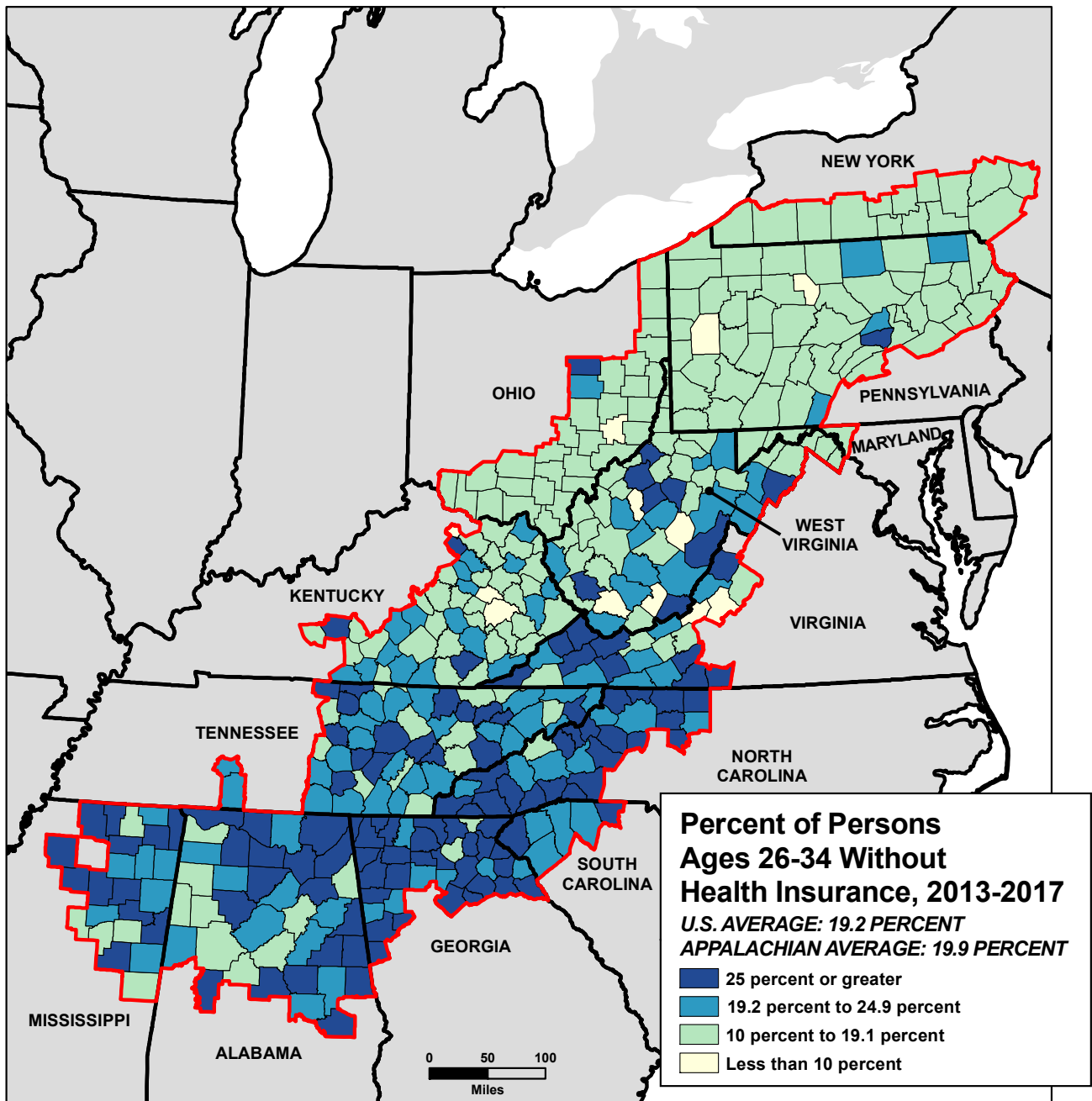
Figure 9.3: Percent of Persons Ages 19 to 25 in the Appalachian Region Not Covered by Health Insurance, 2013-2017



Map Title: Percent of Persons Ages 19 to 25 in the Appalachian Region Not Covered by Health Insurance, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

During the 2013-2017 period, more than one in six Appalachian residents ages 19 to 25 did not have health insurance coverage. Although Appalachia’s rate for these young adults was slightly lower than the national average, the non-coverage problem was especially prevalent in much of Southern Appalachia, as well as in the Region’s most rural counties: In both these areas, more than one-fifth of 19-to-25-year-olds did not have coverage. This situation was especially dire in 113 counties, where non-coverage rates were at least 25 percent. Among these counties, 75 were in the five states with uninsured rates for young adults exceeding 20 percent (Alabama, Georgia, Mississippi, and the Carolinas), and 83 were outside metropolitan areas. In contrast, 32 Appalachian counties had less than 10 percent of persons ages 19 to 25 without health insurance; these counties were in Northern or North Central Appalachia, in metro areas, and/or had a four-year college or university within their boundaries.

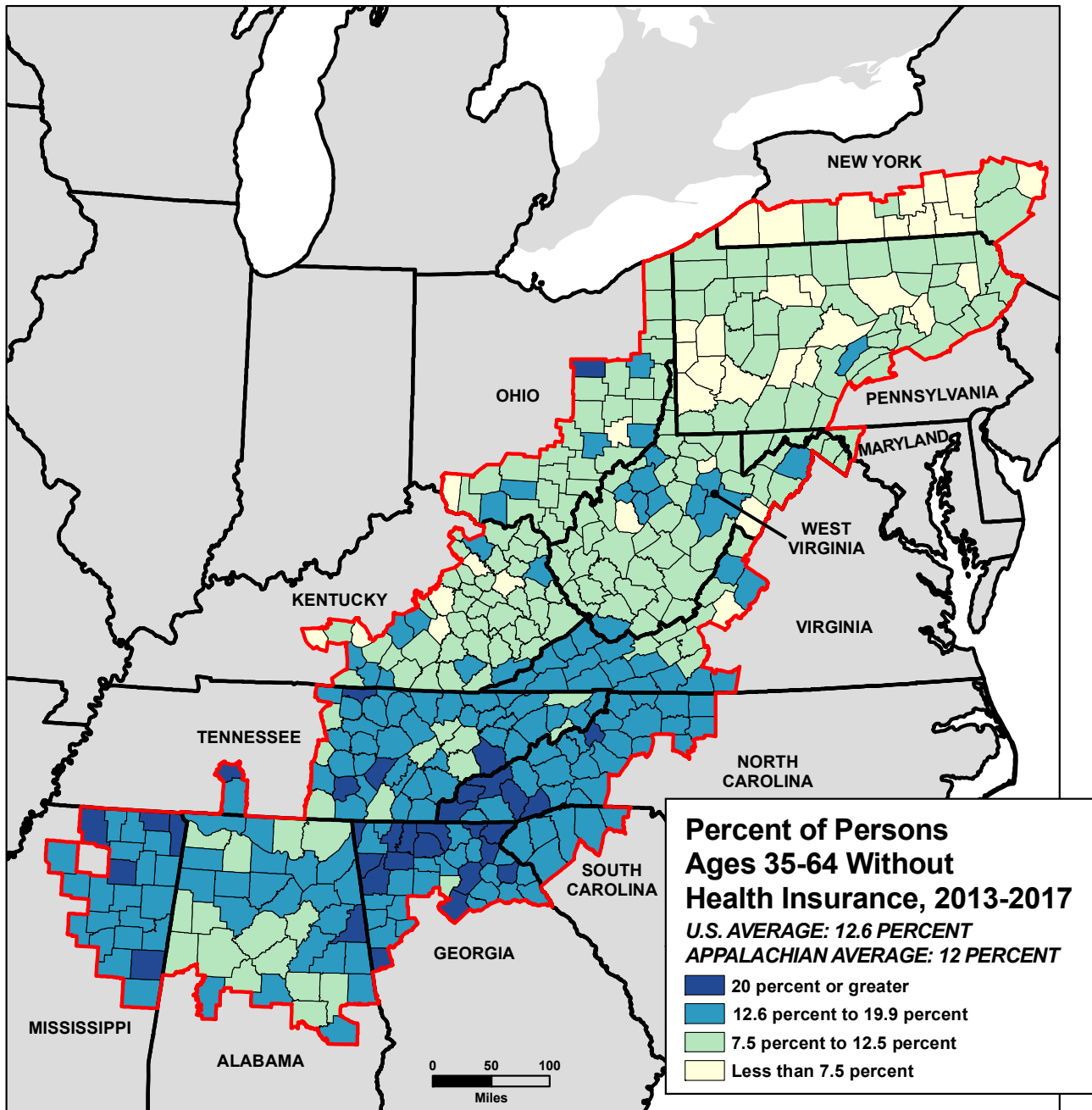
Figure 9.4: Percent of Persons Ages 26 to 34 in the Appalachian Region Not Covered by Health Insurance, 2013-2017



Map Title: Percent of Persons Ages 26 to 34 in the Appalachian Region Not Covered by Health Insurance, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Lack of health insurance coverage was highest among young adults ages 26 to 34—one in five Appalachian residents in this group were uninsured during the 2013-2017 period. This was the one age group where non-coverage was more prevalent in Appalachia than nationally. And the situation was even worse in Southern Appalachia, where more than one-fourth of 26-to-34-year-olds were without insurance. Indeed, Southern Appalachia had nearly half of the 121 counties where at least 25 percent of residents ages 26 to 34 lacked health insurance; another 37 such counties were in South Central Appalachia, where the non-coverage rate was 23 percent. And 28 of these counties were in Georgia alone; non-coverage among 26-to-34-year-olds in Appalachian Georgia was 30 percent. However, nearly half of Appalachian counties did have non-coverage rates below the national average; these were primarily in the Northern, North Central, and Central subregions. And there were 12 Appalachian counties where less than 10 percent of young adults ages 26 to 34 were without health insurance.

Figure 9.5: Percent of Persons Ages 35 to 64 in the Appalachian Region Not Covered by Health Insurance, 2013-2017



Map Title: Percent of Persons Ages 35 to 64 in the Appalachian Region Not Covered by Health Insurance, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In 2013-2017, 12 percent of Appalachia’s working-age population ages 35 to 64 were not covered by health insurance. While this rate was slightly below that for the nation, there was great variation within the Region. For example, more than 16 percent of 35-to-64-year-olds in the Appalachian sections of Georgia, Mississippi, and North Carolina were uninsured; these three states accounted for 26 of the 33 counties with non-coverage rates of at least 20 percent for this age group. (Georgia alone had 15 of these counties.) By comparison, there were 37 Appalachian counties where less than 7.5 percent of working-age residents were not insured; 25 of the counties in this latter group were in New York or Pennsylvania; the rate was less than 7.5 percent in the Appalachian sections of these states.

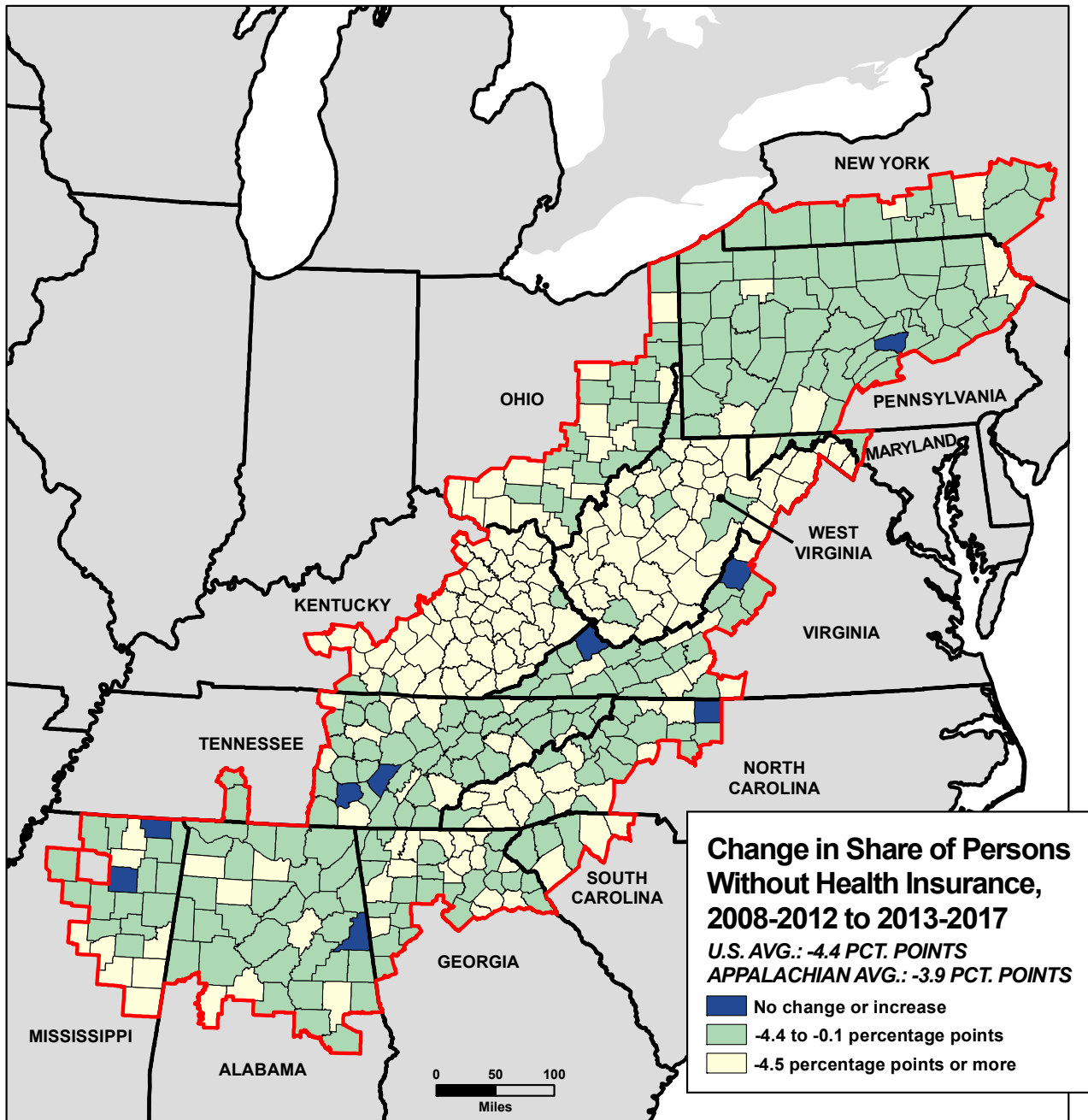
Table 9.3: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2008-2012 to 2013-2017

Health Insurance Status	All Ages	Under Age 35	Ages 35-64	Ages 65 and Over
United States	- 4.4	- 5.6	- 3.8	+ 0.0
Appalachian Region	- 3.9	- 4.8	- 3.6	+ 0.0
Subregions				
Northern Appalachia	- 3.3	- 3.9	- 3.4	+ 0.1
North Central Appalachia	- 6.0	- 6.9	- 6.6	- 0.1
Central Appalachia	- 6.6	- 7.7	- 7.4	+ 0.0
South Central Appalachia	- 3.4	- 4.5	- 2.9	+ 0.0
Southern Appalachia	- 3.6	- 4.8	- 2.7	+ 0.0
County Types				
Large Metros (pop. 1 million +)	- 3.2	- 4.2	- 2.7	+ 0.0
Small Metros (pop. <1 million)	- 3.7	- 4.9	- 3.3	+ 0.1
Nonmetro, Adjacent to Large Metros	- 3.8	- 4.6	- 3.6	- 0.1
Nonmetro, Adjacent to Small Metros	- 4.2	- 5.1	- 4.4	+ 0.1
Rural (nonmetro, not adj. to a metro)	- 5.3	- 6.0	- 5.8	- 0.1
Alabama	- 3.2	- 4.4	- 2.4	+ 0.1
Appalachian Alabama	- 3.2	- 4.5	- 2.2	+ 0.1
Non-Appalachian Alabama	- 3.3	- 4.3	- 2.7	+ 0.1
Georgia	- 4.0	- 5.0	- 3.0	- 0.1
Appalachian Georgia	- 3.8	- 4.7	- 2.7	- 0.2
Non-Appalachian Georgia	- 4.1	- 5.0	- 3.2	- 0.1
Kentucky	- 6.2	- 7.2	- 6.9	+ 0.0
Appalachian Kentucky	- 8.3	- 9.3	- 9.6	+ 0.0
Non-Appalachian Kentucky	- 5.5	- 6.4	- 5.8	+ 0.1
Maryland	- 3.4	- 4.4	- 3.0	+ 0.0
Appalachian Maryland	- 3.9	- 4.9	- 3.9	- 0.3
Non-Appalachian Maryland	- 3.3	- 4.4	- 2.9	+ 0.0
Mississippi	- 3.9	- 5.1	- 2.8	+ 0.0
Appalachian Mississippi	- 3.4	- 4.9	- 2.0	+ 0.0
Non-Appalachian Mississippi	- 3.9	- 5.1	- 3.0	+ 0.0
New York	- 3.7	- 5.0	- 3.0	- 0.1
Appalachian New York	- 3.3	- 4.1	- 3.5	+ 0.1
Non-Appalachian New York	- 3.7	- 5.1	- 3.1	- 0.2
North Carolina	- 4.1	- 5.4	- 3.3	+ 0.0
Appalachian North Carolina	- 4.1	- 5.6	- 3.4	+ 0.0
Non-Appalachian North Carolina	- 4.1	- 5.3	- 3.3	+ 0.0
Ohio	- 4.2	- 4.8	- 4.6	+ 0.0
Appalachian Ohio	- 4.5	- 4.8	- 5.5	- 0.1
Non-Appalachian Ohio	- 4.1	- 4.8	- 4.4	+ 0.1
Pennsylvania	- 2.6	- 3.3	- 2.4	+ 0.0
Appalachian Pennsylvania	- 3.0	- 3.7	- 3.0	+ 0.0
Non-Appalachian Pennsylvania	- 2.3	- 3.1	- 1.8	- 0.1
South Carolina	- 4.8	- 6.5	- 3.6	- 0.1
Appalachian South Carolina	- 4.8	- 6.1	- 4.2	+ 0.0
Non-Appalachian South Carolina	- 4.9	- 6.7	- 3.5	+ 0.0
Tennessee	- 3.0	- 3.8	- 2.6	+ 0.1
Appalachian Tennessee	- 3.1	- 4.0	- 2.6	+ 0.0
Non-Appalachian Tennessee	- 2.9	- 3.7	- 2.4	+ 0.0
Virginia	- 2.4	- 3.2	- 1.5	+ 0.1
Appalachian Virginia	- 3.0	- 4.0	- 2.7	+ 0.2
Non-Appalachian Virginia	- 2.3	- 3.2	- 1.3	+ 0.1
West Virginia (entire state)	- 6.4	- 7.8	- 6.9	- 0.2

Note: The health insurance universe consists of the civilian noninstitutional population.

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 9.6: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

The share of Appalachian residents not covered by health insurance fell almost four percentage points between the 2008-2012 and 2013-2017 periods. While the improvement is slightly less than in the nation as a whole, it was above the national average in many parts of the Region: Non-coverage rates fell at least six percentage points in North Central and Central Appalachia, 6.4 points in West Virginia, and more than eight points in Appalachian Kentucky. Indeed, those two states alone accounted for 100 of the 189 Appalachian counties where the decline in non-coverage rates was greater than the national average. But this did not happen everywhere in Appalachia: In fact, there were nine counties where the share of residents who lacked health insurance in 2013-2017 matched or exceeded the share without insurance in the earlier period. Analysts cite programs designed to increase coverage, including expansion of the Children’s Health Insurance Program (CHIP) and provisions of the Affordable Care Act, as factors in the decreased share of persons—particularly those under age 65—without health insurance.

TRENDS IN HEALTH INSURANCE COVERAGE

- Between the 2008-2012 and 2013-2017 periods, the share of Appalachian residents not covered by health insurance fell almost four percentage points to just under 10 percent (see Tables 9.2 and 9.3). And this improvement was even greater in many parts of the Region: Non-coverage rates fell at least six percentage points in North Central and Central Appalachia and more than five points in the Region's most rural counties. As for the states, uninsured rates fell more than eight points in Kentucky, more than six points in West Virginia, and almost five points in South Carolina and Ohio. Indeed, non-coverage rates fell by at least three percentage points in every subregion, county type, and Appalachian state.
- The decline in health insurance non-coverage was particularly great among children and younger adults under age 35. The uninsured rate in the under-35 population was nearly five percentage points lower in 2013-2017 than in 2008-2012. Provisions to expand health coverage, particularly among children and adults under age 26, have been cited as factors for this decline. As with the general population, declines in non-coverage among children and young adults were the greatest in North Central and Central Appalachia, rural counties, West Virginia, and the Appalachian sections of Kentucky and South Carolina. (The uninsured rate among persons under age 35 fell by more than nine points in Kentucky.)
- In most cases, the decline in health insurance coverage was more modest among the older working-age population (ages 35-64). In both Appalachia and the nation, the uninsured rate in this age group fell less than four percentage points. Yet in every major part of the Region—each subregion, each county type, and each state's Appalachian section—the non-coverage prevalence among residents in this age group was lower in 2013-2017 than in 2008-2012. And the areas with the largest declines for the younger groups (North Central and Central Appalachia, rural counties, Kentucky, and West Virginia) had the largest declines for 35-to-64-year-olds.
- Analysts cite programs designed to increase coverage, including expansion of the Children's Health Insurance Program (CHIP) and provisions of the Affordable Care Act, as factors in the decreased share of persons under age 65—particularly younger persons—lacking health insurance in 2013-2017.

CHAPTER 10: DISABILITY STATUS

Table 10.1: Number of Persons in the Appalachian Region With a Disability, by Age Group, 2013-2017

Disability Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-34	Ages 35-64	
United States	39,792,082	3,054,559	20,276,199	4,464,853	15,811,346	16,461,324
Appalachian Region	4,040,139	274,456	2,133,877	411,158	1,722,719	1,631,806
Subregions						
Northern Appalachia	1,230,986	91,646	618,183	129,810	488,373	521,157
North Central Appalachia	439,868	29,387	239,693	45,387	194,306	170,788
Central Appalachia	433,481	25,424	252,092	41,716	210,376	155,965
South Central Appalachia	791,752	48,321	409,902	75,451	334,451	333,529
Southern Appalachia	1,144,052	79,678	614,007	118,794	495,213	450,367
County Types						
Large Metros (pop. 1 million +)	772,712	58,319	402,415	81,532	320,883	311,978
Small Metros (pop. <1 million)	1,662,508	114,951	870,268	174,425	695,843	677,289
Nonmetro, Adjacent to Large Metros	370,761	25,449	200,017	38,496	161,521	145,295
Nonmetro, Adjacent to Small Metros	733,651	45,943	385,775	70,107	315,668	301,933
Rural (nonmetro, not adj. to a metro)	500,507	29,794	275,402	46,598	228,804	195,311
Alabama	775,390	51,291	418,171	82,916	335,255	305,928
Appalachian Alabama	494,192	31,406	267,825	51,934	215,891	194,961
Non-Appalachian Alabama	281,198	19,885	150,346	30,982	119,364	110,967
Georgia	1,237,621	98,797	669,968	138,565	531,403	468,856
Appalachian Georgia	361,563	28,288	191,820	37,598	154,222	141,455
Non-Appalachian Georgia	876,058	70,509	478,148	100,967	377,181	327,401
Kentucky	751,563	55,374	425,520	83,525	341,995	270,669
Appalachian Kentucky	266,028	16,445	156,871	27,142	129,729	92,712
Non-Appalachian Kentucky	485,535	38,929	268,649	56,383	212,266	177,957
Maryland	638,104	52,249	322,918	72,479	250,439	262,937
Appalachian Maryland	39,058	3,101	21,168	4,652	16,516	14,789
Non-Appalachian Maryland	599,046	49,148	301,750	67,827	233,923	248,148
Mississippi	476,197	33,104	260,350	50,185	210,165	182,743
Appalachian Mississippi	107,706	6,378	59,118	10,865	48,253	42,210
Non-Appalachian Mississippi	368,491	26,726	201,232	39,320	161,912	140,533
New York	2,232,221	164,090	1,091,291	242,314	848,977	976,840
Appalachian New York	151,408	12,370	78,150	18,267	59,883	60,888
Non-Appalachian New York	2,080,813	151,720	1,013,141	224,047	789,094	915,952
North Carolina	1,344,677	100,939	704,954	144,807	560,147	538,784
Appalachian North Carolina	266,939	16,380	132,506	24,162	108,344	118,053
Non-Appalachian North Carolina	1,077,738	84,559	572,448	120,645	451,803	420,731
Ohio	1,583,200	129,884	834,652	178,577	656,075	618,664
Appalachian Ohio	327,001	23,169	177,505	34,316	143,189	126,327
Non-Appalachian Ohio	1,256,199	106,715	657,147	144,261	512,886	492,337
Pennsylvania	1,730,190	140,996	869,035	192,207	676,828	720,159
Appalachian Pennsylvania	851,502	64,112	421,706	88,934	332,772	365,684
Non-Appalachian Pennsylvania	878,688	76,884	447,329	103,273	344,056	354,475
South Carolina	706,323	50,594	372,078	72,662	299,416	283,651
Appalachian South Carolina	180,591	13,606	95,244	18,397	76,847	71,741
Non-Appalachian South Carolina	525,732	36,988	276,834	54,265	222,569	211,910
Tennessee	1,001,684	69,850	545,687	107,959	437,728	386,147
Appalachian Tennessee	500,619	31,000	267,893	47,451	220,442	201,726
Non-Appalachian Tennessee	501,065	38,850	277,794	60,508	217,286	184,421
Virginia	936,175	71,450	480,446	106,202	374,244	384,279
Appalachian Virginia	137,365	6,653	72,972	13,432	59,540	57,740
Non-Appalachian Virginia	798,810	64,797	407,474	92,770	314,704	326,539
West Virginia (entire state)	356,167	21,548	191,099	34,008	157,091	143,520

Note: The ACS defines persons with a disability as having difficulty in at least one of the following six areas: hearing, vision, cognition, walking or climbing, self-care, or attending to the functions of independent living. The disability universe consists of the civilian noninstitutional population.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

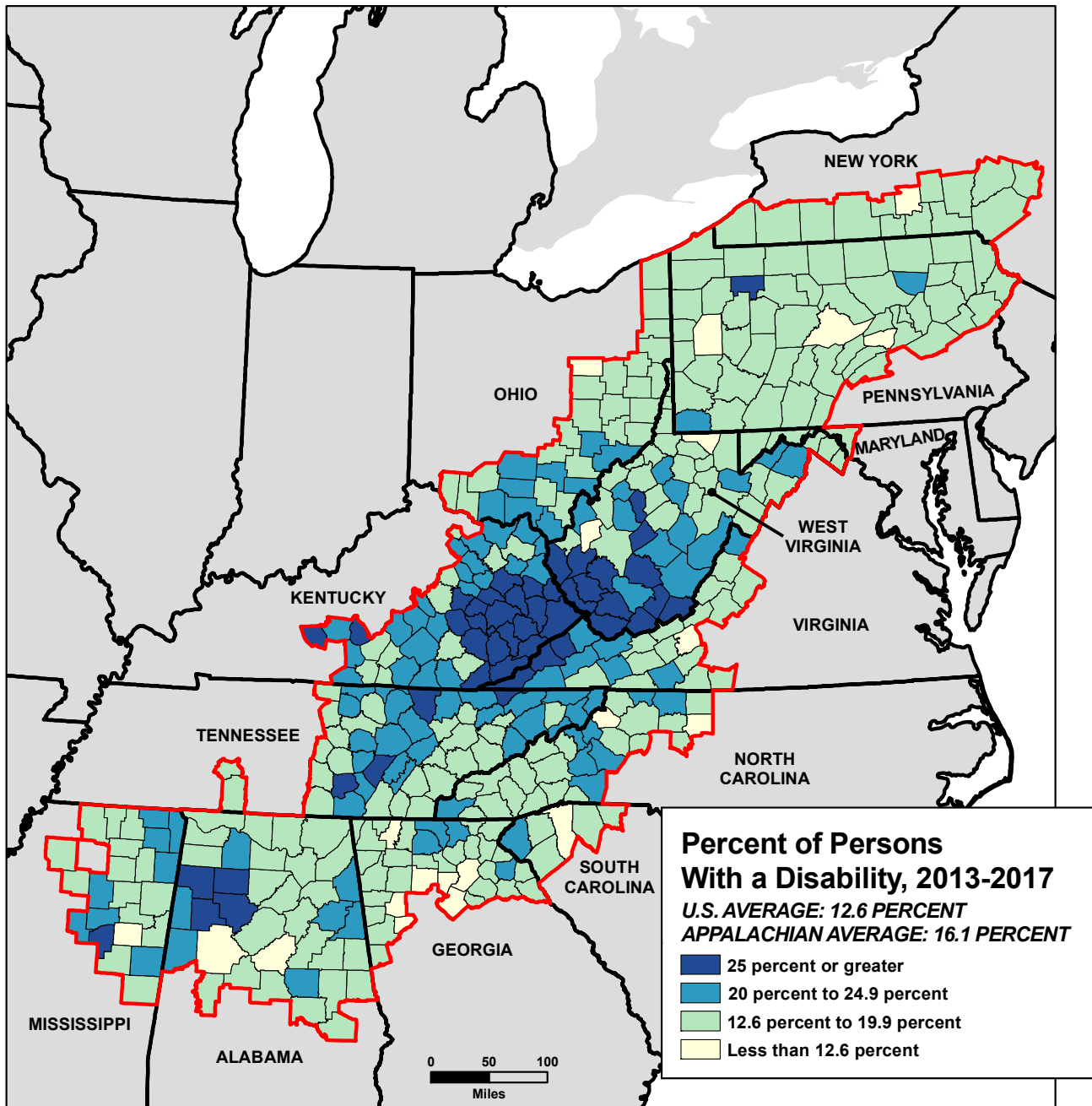
Table 10.2: Percent of Persons in the Appalachian Region With a Disability, by Age Group, 2013-2017

Disability Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-34	Ages 35-64	
United States	12.6	4.2	10.3	6.1	12.9	35.5
Appalachian Region	16.1	5.0	13.9	7.6	17.3	38.5
Subregions						
Northern Appalachia	15.2	5.6	12.4	7.4	15.1	35.3
North Central Appalachia	18.5	5.8	16.5	9.0	20.4	41.7
Central Appalachia	23.5	6.3	22.5	11.3	28.0	49.3
South Central Appalachia	16.7	4.9	14.1	7.5	17.7	38.1
Southern Appalachia	14.3	4.1	12.5	6.8	15.7	38.9
County Types						
Large Metros (pop. 1 million +)	12.9	4.2	10.8	6.3	13.2	35.2
Small Metros (pop. <1 million)	15.7	5.1	13.3	7.4	16.6	37.8
Nonmetro, Adjacent to Large Metros	17.2	5.4	15.4	8.6	18.9	38.5
Nonmetro, Adjacent to Small Metros	18.9	5.6	16.6	9.1	20.3	40.7
Rural (nonmetro, not adj. to a metro)	20.3	5.6	18.5	9.0	23.6	44.3
Alabama	16.3	4.7	14.3	7.7	18.1	41.2
Appalachian Alabama	16.1	4.5	14.2	7.6	17.9	41.1
Non-Appalachian Alabama	16.4	4.9	14.4	7.9	18.4	41.6
Georgia	12.4	4.0	10.7	6.0	13.5	36.9
Appalachian Georgia	11.6	3.5	10.0	5.7	12.3	35.8
Non-Appalachian Georgia	12.7	4.2	11.0	6.1	14.1	37.4
Kentucky	17.3	5.5	15.9	8.7	19.9	41.7
Appalachian Kentucky	23.2	6.3	22.3	11.3	28.0	49.7
Non-Appalachian Kentucky	15.2	5.2	13.6	7.8	16.9	38.4
Maryland	10.8	3.9	8.7	5.4	10.5	31.9
Appalachian Maryland	16.4	6.0	14.7	9.3	17.5	35.5
Non-Appalachian Maryland	10.6	3.8	8.4	5.3	10.2	31.7
Mississippi	16.3	4.6	14.7	7.5	19.0	43.1
Appalachian Mississippi	17.4	4.3	15.8	7.6	20.7	44.2
Non-Appalachian Mississippi	16.0	4.6	14.4	7.5	18.5	42.8
New York	11.4	3.9	8.8	5.1	11.0	33.5
Appalachian New York	14.7	6.0	12.1	7.3	15.2	34.2
Non-Appalachian New York	11.2	3.8	8.6	5.0	10.8	33.5
North Carolina	13.7	4.4	11.6	6.6	14.4	36.6
Appalachian North Carolina	15.6	4.7	12.8	6.9	15.8	36.2
Non-Appalachian North Carolina	13.2	4.4	11.3	6.6	14.1	36.7
Ohio	13.8	5.0	11.9	7.1	14.6	34.8
Appalachian Ohio	16.6	5.3	14.9	8.6	18.1	37.1
Non-Appalachian Ohio	13.3	4.9	11.2	6.8	13.8	34.3
Pennsylvania	13.7	5.3	11.1	6.8	13.6	34.3
Appalachian Pennsylvania	15.2	5.7	12.2	7.4	14.8	35.4
Non-Appalachian Pennsylvania	12.6	4.9	10.3	6.4	12.5	33.2
South Carolina	14.7	4.6	12.7	6.8	16.1	36.5
Appalachian South Carolina	14.7	4.8	12.7	6.6	16.2	37.5
Non-Appalachian South Carolina	14.7	4.6	12.7	6.9	16.0	36.1
Tennessee	15.4	4.7	13.6	7.4	17.1	39.2
Appalachian Tennessee	17.8	5.2	15.6	8.0	19.7	40.1
Non-Appalachian Tennessee	13.6	4.3	12.1	7.0	15.2	38.3
Virginia	11.5	3.8	9.4	5.7	11.5	33.1
Appalachian Virginia	18.6	4.7	16.0	8.2	20.3	40.6
Non-Appalachian Virginia	10.8	3.8	8.7	5.4	10.6	32.0
West Virginia (entire state)	19.7	5.7	17.3	9.1	21.5	43.8

Note: The ACS defines persons with a disability as having difficulty in at least one of the following six areas: hearing, vision, cognition, walking or climbing, self-care, or attending to the functions of independent living. The disability universe consists of the civilian noninstitutional population.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

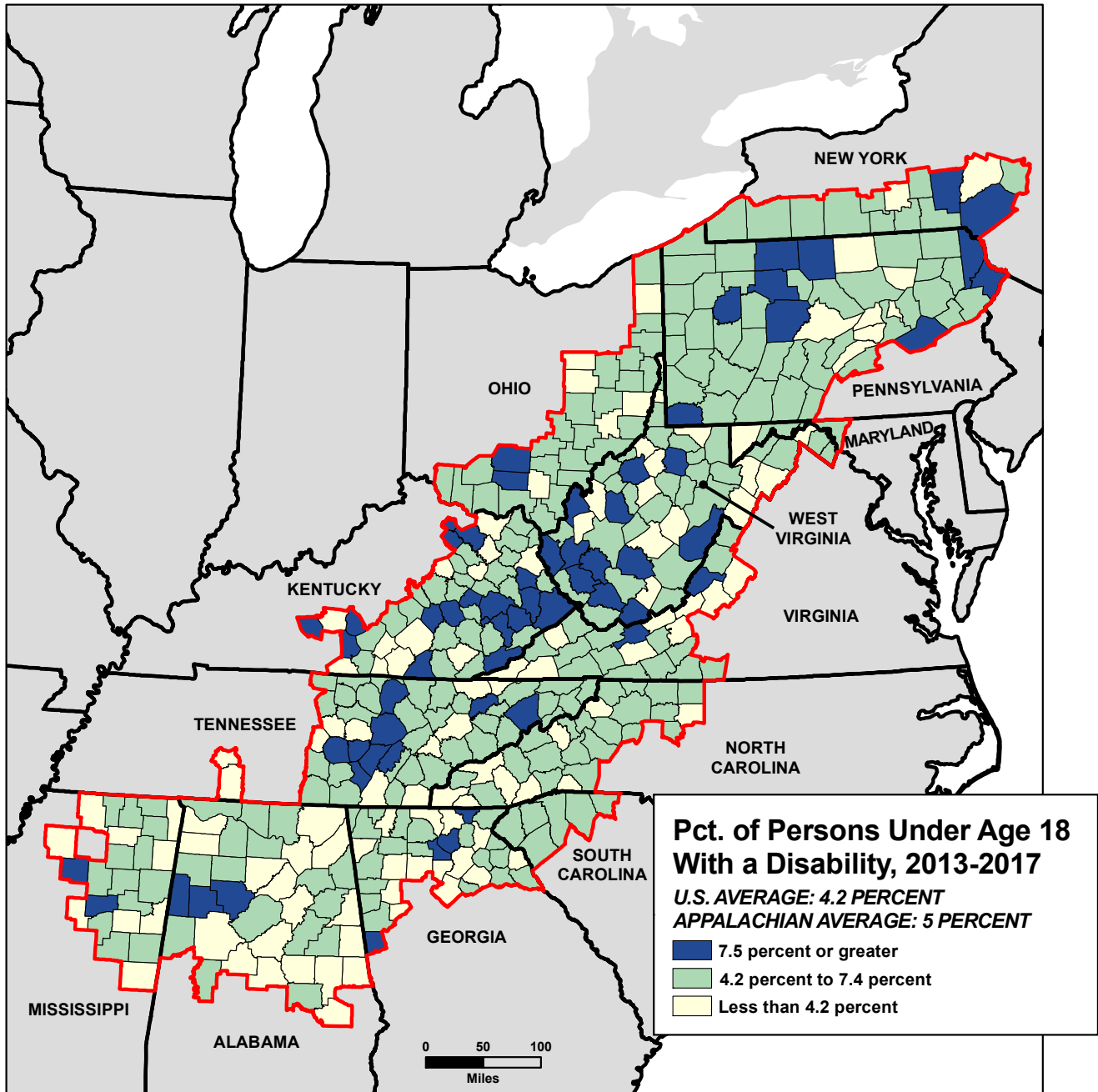
Figure 10.1: Percent of Persons in the Appalachian Region With a Disability, 2013-2017



Map Title: Percent of Persons in the Appalachian Region With a Disability, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In the 2013-2017 period, about one in six Appalachian residents reported having a disability, which the ACS defines as having difficulty in at least one of the following six areas: hearing, vision, cognition, walking or climbing, self-care, or attending to the functions of independent living. Disability prevalence is particularly high in some parts of the Region; the rate was 25 percent or more in 47 counties, 25 of which were in Appalachia’s most rural counties (where the overall disability rate was 20 percent). Kentucky and West Virginia—the two states with the highest levels of disability in the Region—combined for 34 of these counties. Appalachia’s relatively high disability rate corresponds to the population’s older age structure: Among the 47 counties with the highest disability prevalence levels, the share of residents age 65 or older exceeded the national average (15.6 percent in mid-2017) in all but one of them. And in 20 of these counties, the share of older persons was at least 20 percent.

Figure 10.2: Percent of Persons Under Age 18 in the Appalachian Region With a Disability, 2013-2017

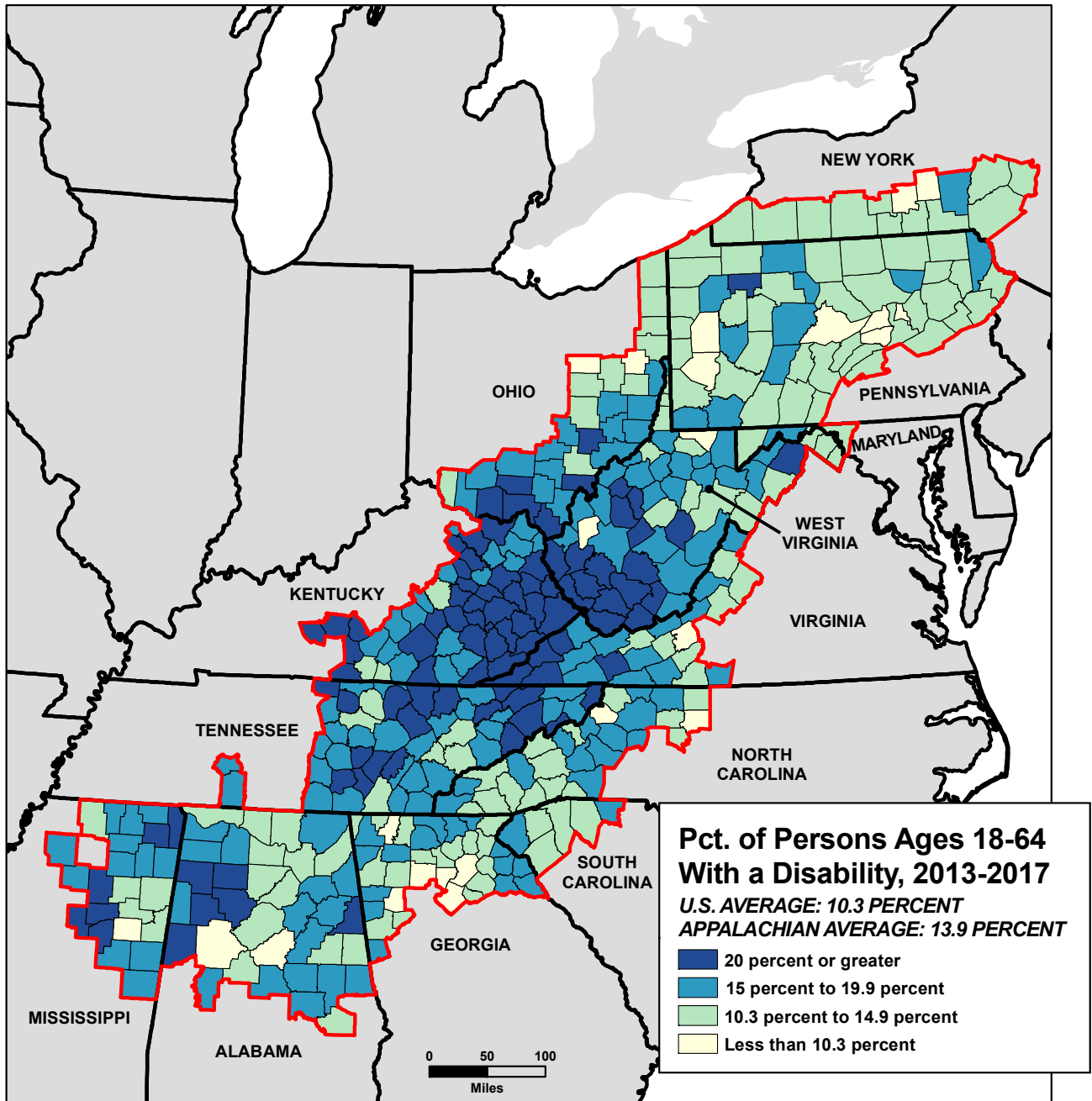


Map Title: Percent of Persons Under Age 18 in the Appalachian Region With a Disability, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

At 5 percent, the prevalence of disability among children under age 18 in Appalachia was slightly higher than the national average during the 2013-2017 period. But there was variation within the Region. For example, the rate was at least 7.5 percent in 62 counties, 51 of which were outside metropolitan areas. In 113 other counties, however, the disability prevalence was below the national average of just over 4 percent. More than one-third of the counties in the latter group were in Southern Appalachia—the only subregion where the disability rate among the under-18 population (4.1 percent) did not exceed the national average.

Figure 10.3: Percent of Persons Ages 18 to 64 in the Appalachian Region With a Disability, 2013-2017

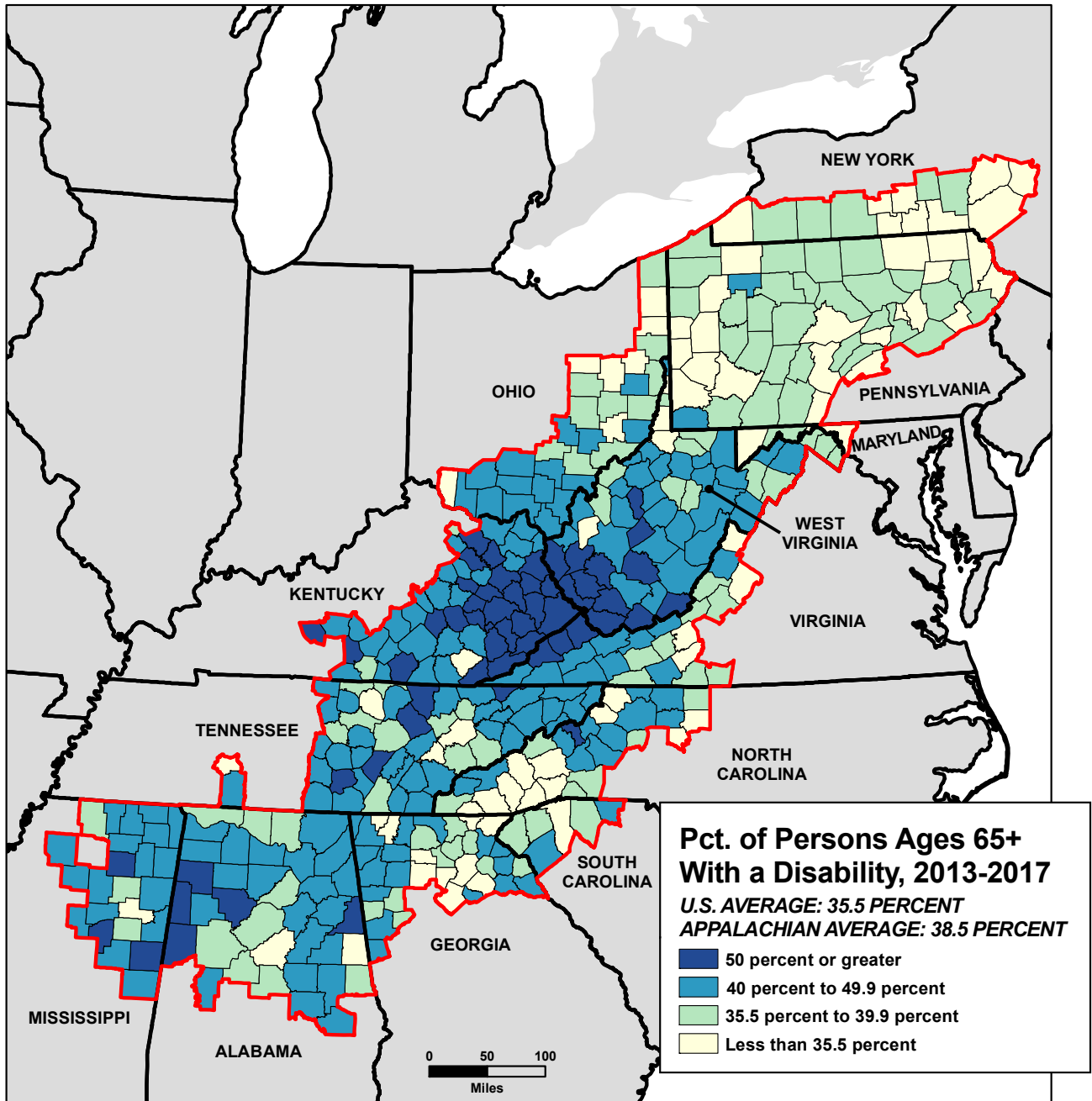


Map Title: Percent of Persons Ages 18 to 64 in the Appalachian Region With a Disability, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In the 2013-2017 period, approximately one in seven adults ages 18 to 64 in Appalachia reported a disability, compared with about one in 10 nationally. Disability prevalence was particularly high in some parts of the Region: In Central Appalachia, for example, more than one-fifth of working-age adults had a disability. Indeed, Central Appalachia had 53 of the 93 Appalachian counties where the disability rate among 18-to-64-year-olds was 20 percent or higher. More than a third of these counties were in Kentucky alone. Central Appalachia’s historic reliance on mining and related resource-based industries, as well as Appalachia’s relatively high rates of cancer, heart disease, and diabetes, may be associated with the subregion’s high disability prevalence.

Figure 10.4: Percent of Persons Ages 65 and Over in the Appalachian Region With a Disability, 2013-2017



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region With a Disability, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Almost two-fifths of adults ages 65 and over in the Appalachian Region reported a disability in the 2013-2017 period, three percentage points above the national share. And the prevalence was even greater in some parts of the Region: Nearly half of the older residents in Central Appalachia—and in Appalachian Kentucky—had at least one disability. Indeed, Central Appalachia had 39 of the 55 counties where at least half of older residents reported a disability. (Kentucky alone had 26 of these counties.) And there are signs that disabled adults in the Region may be aging in place: In 30 of these 55 counties, the share of 18-to-64-year-olds with a disability was at or above 25 percent—more than twice the national average for that age group. Yet there are 77 other Appalachian counties where the disability rate for the older population was actually lower than the national average. More than half of these low-prevalence counties were in Northern Appalachia—the only subregion where the disability prevalence rate for older residents, at 35 percent, was below the national average.

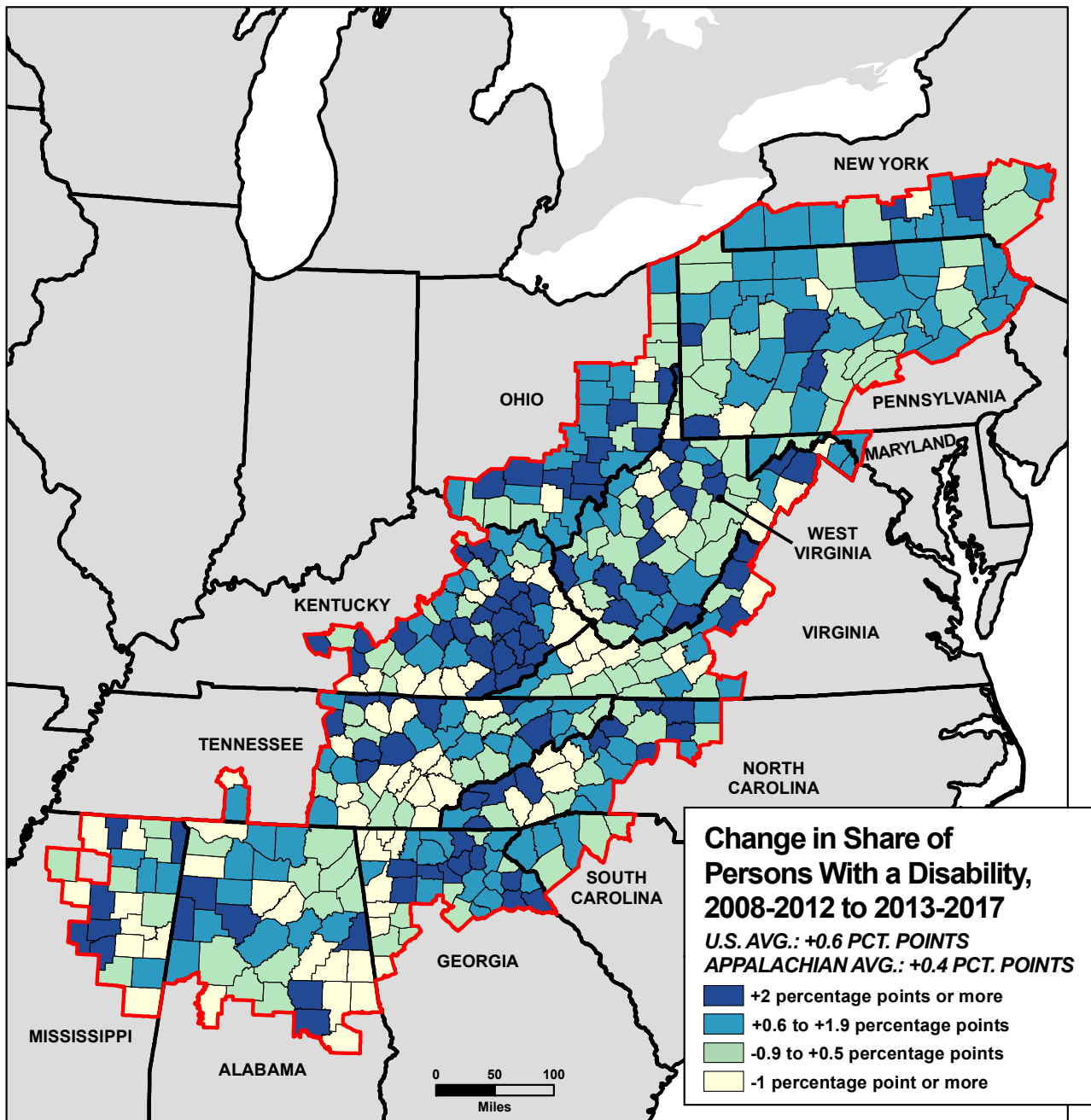
Table 10.3: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, by Age Group, 2008-2012 to 2013-2017

Disability Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-34	Ages 35-64	
United States	+ 0.6	+ 0.2	+ 0.3	+ 0.6	+ 0.3	- 1.3
Appalachian Region	+ 0.4	+ 0.1	+ 0.2	+ 0.3	+ 0.2	- 1.6
Subregions						
Northern Appalachia	+ 0.6	+ 0.3	+ 0.4	+ 0.4	+ 0.6	- 1.3
North Central Appalachia	+ 0.9	+ 0.4	+ 0.7	+ 0.6	+ 0.7	- 1.1
Central Appalachia	+ 0.5	+ 0.5	- 0.2	+ 0.2	- 0.3	- 0.8
South Central Appalachia	+ 0.5	+ 0.0	- 0.1	+ 0.4	- 0.1	- 1.4
Southern Appalachia	+ 0.2	- 0.1	+ 0.0	+ 0.3	- 0.2	- 2.7
County Types						
Large Metros (pop. 1 million +)	+ 0.3	+ 0.0	+ 0.1	+ 0.3	+ 0.1	- 2.3
Small Metros (pop. <1 million)	+ 0.5	+ 0.2	+ 0.1	+ 0.4	+ 0.0	- 1.4
Nonmetro, Adjacent to Large Metros	+ 0.9	+ 0.0	+ 1.0	+ 1.0	+ 1.1	- 1.7
Nonmetro, Adjacent to Small Metros	+ 0.6	+ 0.0	+ 0.3	+ 0.6	+ 0.3	- 1.2
Rural (nonmetro, not adj. to a metro)	+ 0.3	+ 0.3	- 0.3	- 0.3	- 0.1	- 1.5
Alabama	+ 0.0	- 0.2	- 0.3	+ 0.4	- 0.7	- 2.4
Appalachian Alabama	+ 0.2	- 0.2	+ 0.0	+ 0.5	- 0.3	- 2.1
Non-Appalachian Alabama	- 0.5	- 0.5	- 1.0	+ 0.2	- 1.5	- 2.9
Georgia	+ 0.6	+ 0.1	+ 0.3	+ 0.4	+ 0.2	- 2.5
Appalachian Georgia	+ 0.2	- 0.2	+ 0.0	+ 0.1	- 0.1	- 3.3
Non-Appalachian Georgia	+ 0.7	+ 0.2	+ 0.4	+ 0.5	+ 0.4	- 2.1
Kentucky	+ 0.6	- 0.1	+ 0.4	+ 0.3	+ 0.5	- 1.1
Appalachian Kentucky	+ 0.9	+ 0.1	+ 0.3	+ 0.2	+ 0.4	+ 0.2
Non-Appalachian Kentucky	+ 0.5	- 0.1	+ 0.5	+ 0.3	+ 0.6	- 1.6
Maryland	+ 0.7	+ 0.3	+ 0.6	+ 0.7	+ 0.5	- 1.3
Appalachian Maryland	+ 0.8	- 0.5	+ 1.5	+ 1.1	+ 1.8	- 2.5
Non-Appalachian Maryland	+ 0.7	+ 0.3	+ 0.5	+ 0.7	+ 0.4	- 1.2
Mississippi	+ 0.0	- 0.3	- 0.3	+ 0.0	- 0.5	- 3.0
Appalachian Mississippi	- 0.3	- 0.1	- 0.5	- 0.3	- 0.6	- 3.5
Non-Appalachian Mississippi	+ 0.0	- 0.4	- 0.3	+ 0.1	- 0.5	- 2.8
New York	+ 0.5	+ 0.2	+ 0.3	+ 0.5	+ 0.1	- 1.1
Appalachian New York	+ 0.8	+ 0.4	+ 0.6	+ 0.5	+ 1.0	- 1.3
Non-Appalachian New York	+ 0.5	+ 0.2	+ 0.2	+ 0.5	+ 0.1	- 1.0
North Carolina	+ 0.6	+ 0.1	+ 0.2	+ 0.8	+ 0.0	- 1.8
Appalachian North Carolina	+ 0.6	+ 0.3	+ 0.1	+ 0.5	+ 0.0	- 1.2
Non-Appalachian North Carolina	+ 0.5	+ 0.1	+ 0.2	+ 0.9	+ 0.0	- 1.9
Ohio	+ 0.6	+ 0.2	+ 0.6	+ 0.5	+ 0.7	- 1.5
Appalachian Ohio	+ 1.0	+ 0.0	+ 1.0	+ 0.8	+ 1.3	- 1.1
Non-Appalachian Ohio	+ 0.6	+ 0.2	+ 0.4	+ 0.4	+ 0.5	- 1.5
Pennsylvania	+ 0.5	+ 0.4	+ 0.4	+ 0.5	+ 0.5	- 1.3
Appalachian Pennsylvania	+ 0.5	+ 0.4	+ 0.4	+ 0.5	+ 0.5	- 1.5
Non-Appalachian Pennsylvania	+ 0.7	+ 0.4	+ 0.5	+ 0.6	+ 0.5	- 1.2
South Carolina	+ 0.9	+ 0.8	+ 0.6	+ 0.9	+ 0.4	- 1.9
Appalachian South Carolina	+ 0.6	+ 0.7	+ 0.2	+ 0.5	+ 0.1	- 1.4
Non-Appalachian South Carolina	+ 1.0	+ 0.8	+ 0.7	+ 1.1	+ 0.5	- 2.1
Tennessee	+ 0.4	+ 0.1	+ 0.2	+ 0.6	+ 0.0	- 1.9
Appalachian Tennessee	+ 0.3	+ 0.0	- 0.2	+ 0.0	+ 0.0	- 1.5
Non-Appalachian Tennessee	+ 0.6	+ 0.1	+ 0.5	+ 1.1	+ 0.3	- 2.3
Virginia	+ 0.6	+ 0.2	+ 0.4	+ 0.7	+ 0.3	- 1.8
Appalachian Virginia	- 0.3	+ 0.1	- 0.9	+ 0.5	- 1.7	- 2.7
Non-Appalachian Virginia	+ 0.8	+ 0.3	+ 0.6	+ 0.7	+ 0.6	- 1.6
West Virginia (entire state)	+ 0.7	+ 0.6	+ 0.0	+ 0.2	+ 0.0	- 0.5

Note: The ACS defines persons with a disability as having difficulty in at least one of the following six areas: hearing, vision, cognition, walking or climbing, self-care, or attending to the functions of independent living. The disability universe consists of the civilian noninstitutional population.

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 10.5: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

The share of Appalachian residents reporting a disability was nearly half a percentage point higher in 2013-2017 than it was in 2008-2012. Although the increase in disability prevalence was slightly below the national average, that was not the case in most of the Region's 420 counties. Indeed, in 96 Appalachian counties, the share of persons with a disability rose at least two percentage points between the two periods. While these were scattered throughout the Region, 74 were outside metropolitan areas. And in more than half of these counties, at least one in five residents were age 65 or older—another sign of the link between the increased prevalence of disability and the aging of the Region's population. But the increase in disability in Appalachia was not universal: The share of persons with a disability actually fell in one-third of the Region's counties, and the decline was at least a full percentage point in 80 of them.

TRENDS IN DISABILITY STATUS

- At 16 percent in 2013-2017, the share of Appalachian residents reporting a disability was nearly half a percentage point higher than it was in 2008-2012 (see Tables 10.2 and 10.3). Although the increase in disability prevalence was slightly below the national average, that was not the case everywhere in the Region. For example, while the share went up nearly a full percentage point in North Central Appalachia and nonmetropolitan counties adjacent to large metro areas, it only rose 0.2 points in Southern Appalachia. And while disability prevalence increased the most in the Appalachian sections of Ohio, Kentucky, Maryland, New York, and West Virginia, it actually decreased in Appalachian Mississippi and Virginia (0.3 points each).
- Disability prevalence in Appalachia grew for every age group under age 65—albeit very slightly (0.3 points or less in each group). But there were variations within the Region in each case. In Maryland's Appalachian section, for example, disability rates rose more than a full percentage point for adults ages 18-34 and 35-64, but fell half a point among children under age 18. In Appalachian Georgia, disability prevalence fell 0.2 points for children and 0.1 points for adults ages 35-64, but barely rose (0.1 points) among young adults (ages 18-34).
- In contrast, the prevalence of disability fell almost two percentage points among persons ages 65 and over. The decline was greatest in Southern Appalachia (almost three points) and in large metropolitan areas (more than two points), while the decrease was much more modest in Central Appalachia (just under one point). Among the states, Mississippi, Georgia, Virginia, and Maryland had the largest decreases among older persons (at least 2.5 percentage points in each case), while the rate fell just 0.5 points in West Virginia and actually increased in Appalachian Kentucky.
- The aging of Appalachia's population has long been linked to in the increase in disability prevalence in the Region—similar to what has been occurring nationally. Yet the movement of younger (and likely healthier) age cohorts into the older age groups has produced a paradoxical effect of reducing the disability prevalence among older Appalachian residents in recent years. As these younger groups continue to move into the older ages, it will be interesting to see if this pattern continues.

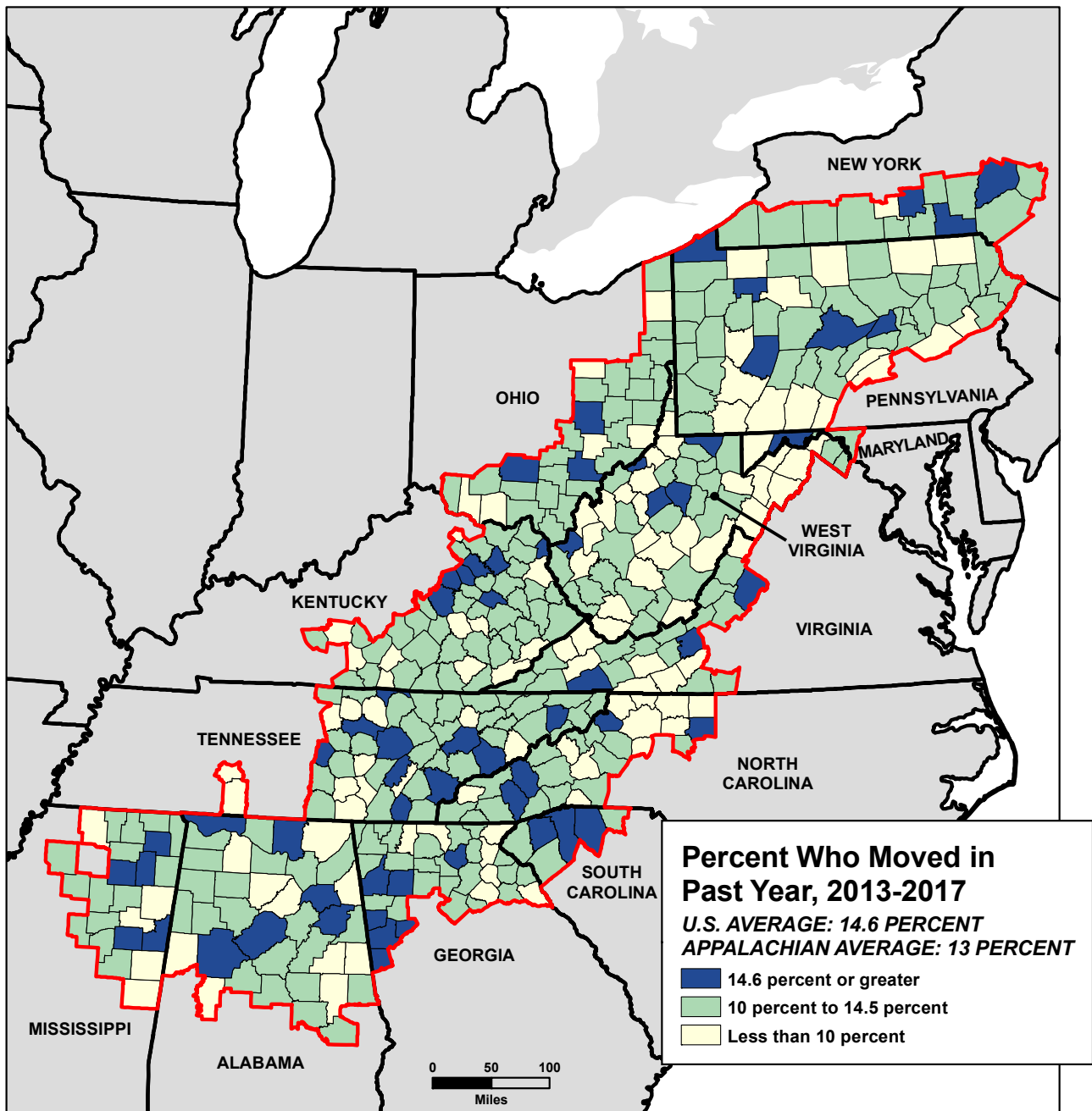
CHAPTER 11: MIGRATION

Table 11.1: Mobility Status of Persons Ages 1 and Over in the Appalachian Region, 2013-2017

Mobility Status in the Last Year	Total Population Ages 1 and Over, 2013-2017	Percent of Population Ages 1 and Over					
		Did Not Move in Past Year	Moved from a Different Residence in the Past Year				
			Within the County	Outside the County			
				Within the State	Outside the State		
United States	317,248,555	85.4	14.6	8.4	6.2	3.2	3.0
Appalachian Region	25,224,539	87.0	13.0	7.3	5.7	3.3	2.4
Subregions							
Northern Appalachia	8,188,374	87.6	12.4	7.5	5.0	2.9	2.1
North Central Appalachia	2,391,078	87.5	12.5	6.9	5.6	3.2	2.4
Central Appalachia	1,864,590	88.0	12.0	6.5	5.6	3.7	1.8
South Central Appalachia	4,770,165	86.4	13.6	7.3	6.3	3.5	2.8
Southern Appalachia	8,010,332	86.3	13.7	7.5	6.2	3.6	2.5
County Types							
Large Metros (pop. 1 million +)	5,963,227	87.2	12.8	7.2	5.6	3.2	2.4
Small Metros (pop. <1 million)	10,668,511	86.1	13.9	7.9	6.1	3.3	2.8
Nonmetro, Adjacent to Large Metros	2,175,930	87.5	12.5	7.4	5.2	3.6	1.6
Nonmetro, Adjacent to Small Metros	3,923,859	88.3	11.7	6.5	5.2	3.3	2.0
Rural (nonmetro, not adj. to a metro)	2,493,012	87.8	12.2	6.6	5.6	3.8	1.9
Alabama	4,795,681	85.8	14.2	8.5	5.7	3.1	2.6
Appalachian Alabama	3,071,464	85.9	14.1	8.4	5.7	3.4	2.3
Non-Appalachian Alabama	1,724,217	85.7	14.3	8.5	5.8	2.6	3.1
Georgia	10,075,118	84.3	15.7	7.7	8.0	4.6	3.3
Appalachian Georgia	3,097,454	87.2	12.8	6.1	6.6	4.0	2.6
Non-Appalachian Georgia	6,977,664	83.0	17.0	8.4	8.6	4.9	3.7
Kentucky	4,372,319	84.5	15.5	8.7	6.8	4.0	2.8
Appalachian Kentucky	1,159,184	87.1	12.9	6.9	6.0	4.2	1.8
Non-Appalachian Kentucky	3,213,135	83.5	16.5	9.4	7.1	3.9	3.2
Maryland	5,927,919	86.3	13.7	7.3	6.3	2.8	3.5
Appalachian Maryland	249,146	86.1	13.9	8.4	5.5	3.0	2.5
Non-Appalachian Maryland	5,678,773	86.3	13.7	7.3	6.4	2.8	3.6
Mississippi	2,951,122	86.3	13.7	7.4	6.2	3.7	2.6
Appalachian Mississippi	620,099	86.4	13.6	7.8	5.8	3.8	2.0
Non-Appalachian Mississippi	2,331,023	86.3	13.7	7.3	6.4	3.6	2.8
New York	19,577,129	89.4	10.6	6.1	4.6	2.4	2.1
Appalachian New York	1,034,059	85.9	14.1	8.2	6.0	3.6	2.4
Non-Appalachian New York	18,543,070	89.6	10.4	5.9	4.5	2.4	2.1
North Carolina	9,938,545	84.8	15.2	8.1	7.1	3.6	3.6
Appalachian North Carolina	1,716,812	87.4	12.6	6.6	6.0	3.4	2.6
Non-Appalachian North Carolina	8,221,733	84.2	15.8	8.4	7.4	3.6	3.8
Ohio	11,477,267	85.1	14.9	9.3	5.5	3.4	2.1
Appalachian Ohio	1,988,145	87.6	12.4	7.5	4.9	3.2	1.7
Non-Appalachian Ohio	9,489,122	84.6	15.4	9.7	5.6	3.5	2.2
Pennsylvania	12,653,578	87.7	12.3	7.3	5.0	2.7	2.4
Appalachian Pennsylvania	5,674,705	87.8	12.2	7.4	4.9	2.8	2.1
Non-Appalachian Pennsylvania	6,978,873	87.6	12.4	7.2	5.1	2.5	2.6
South Carolina	4,838,105	85.1	14.9	7.9	7.0	3.2	3.9
Appalachian South Carolina	1,221,315	85.1	14.9	8.5	6.4	3.2	3.2
Non-Appalachian South Carolina	3,616,790	85.1	14.9	7.6	7.2	3.2	4.1
Tennessee	6,521,606	85.2	14.8	8.6	6.3	3.1	3.2
Appalachian Tennessee	2,824,753	86.4	13.6	7.6	6.0	3.3	2.8
Non-Appalachian Tennessee	3,696,853	84.3	15.7	9.3	6.5	2.9	3.6
Virginia	8,266,889	84.3	15.7	6.6	9.0	5.0	4.0
Appalachian Virginia	749,059	86.3	13.7	6.2	7.4	4.7	2.8
Non-Appalachian Virginia	7,517,830	84.1	15.9	6.7	9.2	5.1	4.1
West Virginia (entire state)	1,818,344	88.3	11.7	6.4	5.3	2.6	2.7

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

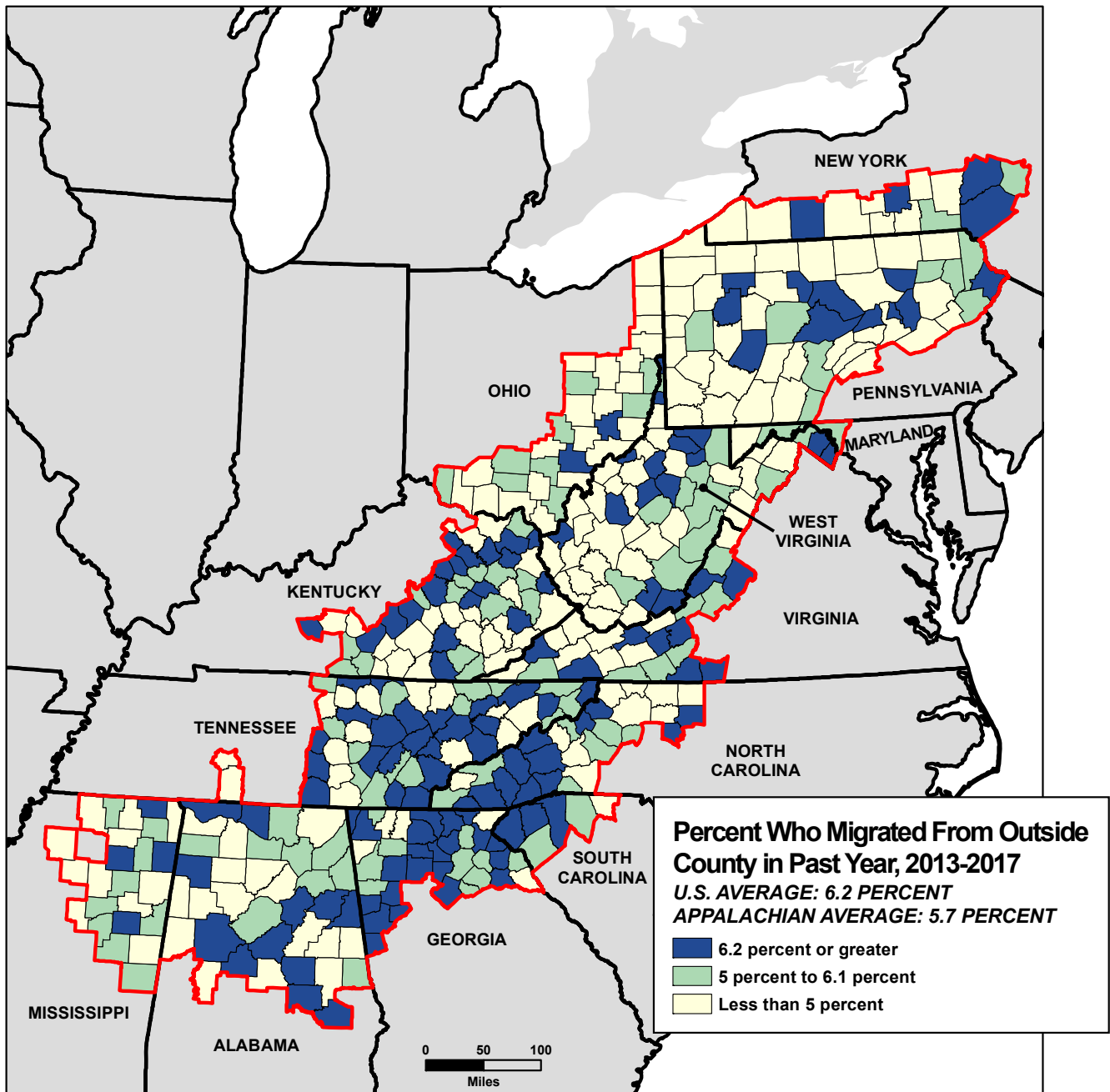
Figure 11.1: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Moved in the Past Year, 2013-2017



Map Title: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Moved in the Past Year, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Residential mobility in the Appalachian Region was lower than the national average, including in all subregions and county types. In fact, the percentage of residents ages 1 and over who moved in the past year only matched or exceeded the U.S. average in 62 of the Region’s counties—37 of which were in South Central or Southern Appalachia. Most also were counties in major metropolitan areas, those that housed a four-year college or university, or rural counties that were likely retirement or recreational destinations. Yet in 113 Appalachian counties, less than 10 percent of the residents had moved in the previous 12 months; almost three-fourths of these counties were outside metro areas.

Figure 11.2: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their County of Residence in the Past Year, 2013-2017

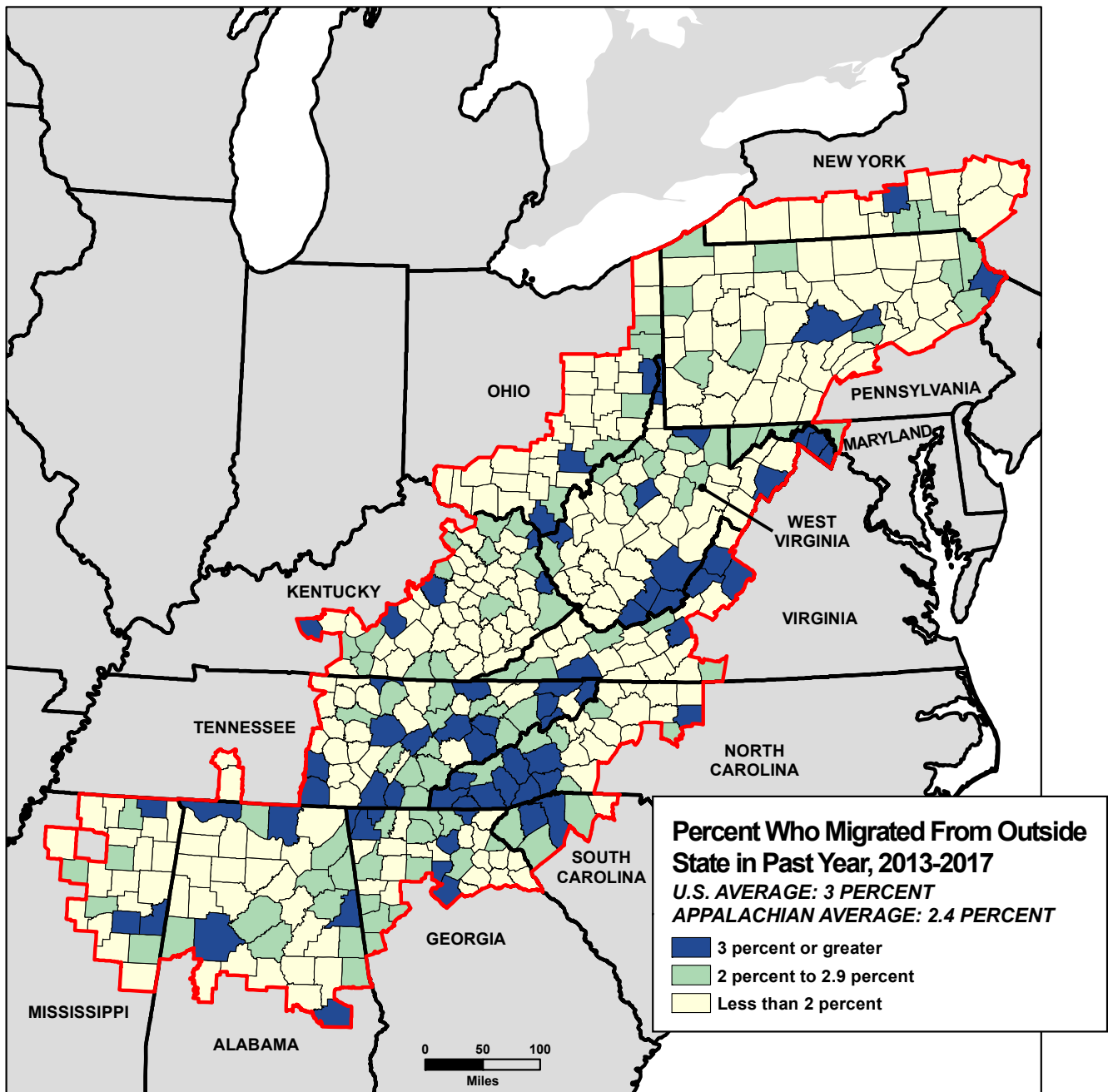


Map Title: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their County of Residence in the Past Year, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

While people in Appalachia were slightly less likely to have migrated from outside their county of residence in the 2013-2017 period than Americans as a whole, residents in 136 of the Region's counties had migration rates at or above the national average. These counties were scattered throughout Appalachia (albeit with a slightly greater concentration in the Southern and South Central subregions) and were distributed across all urban/rural types. In 180 counties, however, less than 5 percent of the residents had migrated from another county. Almost three-fourths of these counties were outside metropolitan areas, and more than one-third of those nonmetro counties were rural counties not adjacent to a metro area.

Figure 11.3: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their State of Residence in the Past Year, 2013-2017



Map Title: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their State of Residence in the Past Year, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

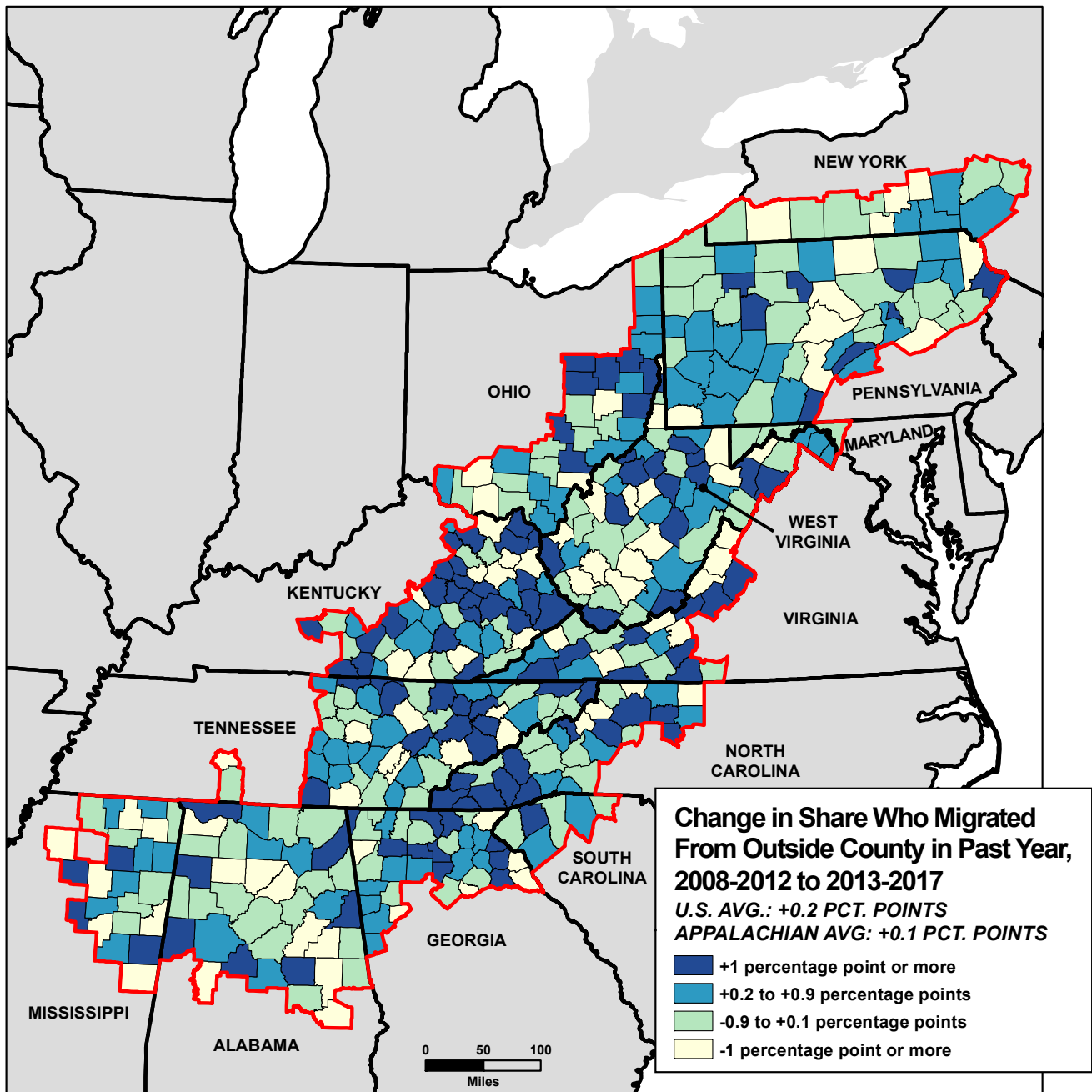
The share of people in the Appalachian Region who had migrated from outside their state of residence was 2.4 percent in the 2013-2017 period, compared with 3 percent of all Americans. Yet in 73 of Appalachia’s 420 counties, out-of-state migration levels were at or above the U.S. average. Almost two-thirds of these counties were in South Central and Southern Appalachia, and more than half were in metropolitan areas. Some of these counties are also home to four-year colleges or universities, such as Tompkins County, New York (Cornell University and Ithaca College), Centre County, Pennsylvania, (Penn State University), and Monongalia County, West Virginia (West Virginia University). In contrast, there were 251 counties in the Region where less than 2 percent of residents had come from out of state. Nearly three-fourths of the counties in this latter group were outside metropolitan areas.

Table 11.2: Percentage Point Change in Mobility Status of Persons Ages 1 and Over in the Appalachian Region, 2008-2012 to 2013-2017

Mobility Status in the Last Year	Percentage Point Change in Share of Population Ages 1 and Over					
	Did Not Move in Past Year	Moved from a Different Residence in the Past Year				
		Within the County		Outside the County		
					Within the State	Outside the State
United States	+ 0.6	- 0.6	- 0.8	+ 0.2	+ 0.0	+ 0.1
Appalachian Region	+ 0.4	- 0.4	- 0.5	+ 0.1	+ 0.1	+ 0.1
Subregions						
Northern Appalachia	+ 0.0	+ 0.0	+ 0.0	+ 0.1	+ 0.1	+ 0.0
North Central Appalachia	+ 0.3	- 0.3	- 0.4	+ 0.0	+ 0.2	- 0.1
Central Appalachia	+ 0.1	- 0.1	- 0.6	+ 0.6	+ 0.6	- 0.2
South Central Appalachia	+ 0.4	- 0.4	- 0.6	+ 0.3	+ 0.1	+ 0.2
Southern Appalachia	+ 0.9	- 0.9	- 1.0	+ 0.1	- 0.1	+ 0.1
County Types						
Large Metros (pop. 1 million +)	+ 0.5	- 0.5	- 0.7	+ 0.2	+ 0.0	+ 0.2
Small Metros (pop. <1 million)	+ 0.3	- 0.3	- 0.4	+ 0.2	+ 0.1	+ 0.1
Nonmetro, Adjacent to Large Metros	+ 1.2	- 1.2	- 0.9	- 0.2	+ 0.0	- 0.2
Nonmetro, Adjacent to Small Metros	+ 0.4	- 0.4	- 0.4	+ 0.0	+ 0.2	+ 0.0
Rural (nonmetro, not adj. to a metro)	+ 0.1	- 0.1	- 0.3	+ 0.2	+ 0.3	+ 0.0
Alabama	+ 0.9	- 0.9	- 0.6	- 0.3	- 0.2	- 0.1
Appalachian Alabama	+ 0.6	- 0.6	- 0.5	+ 0.0	+ 0.0	+ 0.0
Non-Appalachian Alabama	+ 1.6	- 1.6	- 0.9	- 0.7	- 0.4	- 0.4
Georgia	+ 1.0	- 1.0	- 0.8	- 0.2	- 0.3	+ 0.0
Appalachian Georgia	+ 1.5	- 1.5	- 1.6	+ 0.0	- 0.2	+ 0.2
Non-Appalachian Georgia	+ 0.7	- 0.7	- 0.4	- 0.3	- 0.2	+ 0.0
Kentucky	- 0.4	+ 0.4	+ 0.1	+ 0.3	+ 0.5	- 0.2
Appalachian Kentucky	+ 0.0	+ 0.0	- 0.7	+ 0.7	+ 0.9	- 0.2
Non-Appalachian Kentucky	- 0.5	+ 0.5	+ 0.4	+ 0.2	+ 0.4	- 0.2
Maryland	- 0.3	+ 0.3	+ 0.2	+ 0.1	+ 0.1	- 0.1
Appalachian Maryland	+ 0.6	- 0.6	- 0.1	- 0.6	- 0.1	- 0.5
Non-Appalachian Maryland	- 0.4	+ 0.4	+ 0.2	+ 0.2	+ 0.2	+ 0.0
Mississippi	+ 0.7	- 0.7	- 0.6	- 0.2	+ 0.0	- 0.1
Appalachian Mississippi	+ 0.0	+ 0.0	+ 0.0	+ 0.0	+ 0.0	+ 0.0
Non-Appalachian Mississippi	+ 0.9	- 0.9	- 0.7	- 0.2	- 0.1	- 0.1
New York	+ 0.7	- 0.7	- 0.6	+ 0.0	+ 0.0	- 0.1
Appalachian New York	+ 0.6	- 0.6	- 0.3	- 0.2	- 0.1	- 0.1
Non-Appalachian New York	+ 0.7	- 0.7	- 0.7	+ 0.0	+ 0.1	- 0.1
North Carolina	+ 0.4	- 0.4	- 0.6	+ 0.1	+ 0.1	+ 0.1
Appalachian North Carolina	+ 0.4	- 0.4	- 0.9	+ 0.5	+ 0.2	+ 0.3
Non-Appalachian North Carolina	+ 0.4	- 0.4	- 0.5	+ 0.1	+ 0.1	+ 0.1
Ohio	- 0.3	+ 0.3	- 0.2	+ 0.4	+ 0.3	+ 0.2
Appalachian Ohio	- 0.3	+ 0.3	- 0.1	+ 0.4	+ 0.3	+ 0.1
Non-Appalachian Ohio	- 0.3	+ 0.3	- 0.2	+ 0.4	+ 0.3	+ 0.2
Pennsylvania	- 0.1	+ 0.1	+ 0.0	+ 0.2	+ 0.1	+ 0.1
Appalachian Pennsylvania	- 0.1	+ 0.1	+ 0.1	+ 0.1	+ 0.1	+ 0.0
Non-Appalachian Pennsylvania	- 0.2	+ 0.2	- 0.2	+ 0.3	+ 0.1	+ 0.2
South Carolina	+ 0.4	- 0.4	- 0.5	+ 0.1	+ 0.0	+ 0.2
Appalachian South Carolina	+ 1.0	- 1.0	- 1.1	+ 0.2	+ 0.1	+ 0.0
Non-Appalachian South Carolina	+ 0.2	- 0.2	- 0.4	+ 0.1	+ 0.0	+ 0.2
Tennessee	+ 0.8	- 0.8	- 0.9	+ 0.2	+ 0.1	+ 0.1
Appalachian Tennessee	+ 0.4	- 0.4	- 0.6	+ 0.2	+ 0.2	+ 0.1
Non-Appalachian Tennessee	+ 1.2	- 1.2	- 1.2	+ 0.1	- 0.1	+ 0.1
Virginia	- 0.4	+ 0.4	+ 0.0	+ 0.3	+ 0.3	+ 0.0
Appalachian Virginia	+ 0.5	- 0.5	- 0.6	+ 0.0	+ 0.0	+ 0.1
Non-Appalachian Virginia	- 0.4	+ 0.4	+ 0.1	+ 0.3	+ 0.4	+ 0.0
West Virginia (entire state)	+ 0.4	- 0.4	- 0.3	- 0.1	+ 0.1	- 0.2

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 11.4: Percentage Point Change in the Share of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their County of Residence in the Past Year, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their County of Residence in the Past Year, 2008-2012 to 2013-2017
 Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Both in Appalachia and the nation as a whole, the share of individuals migrating from outside their county of residence increased only slightly (0.1 and 0.2 percentage points, respectively) from 2008-2012 to 2013-2017. Yet there was more noticeable change within the Region. In 112 counties, for example, the share of residents who migrated from another county increased at least a full percentage point. Yet in 81 other counties, the share of migrants from another county fell by a percentage point or more between the two periods. The Appalachian sections of Kentucky and North Carolina both had increases of at least half a percentage point, while Appalachian Maryland had a decline of 0.6 points.

TRENDS IN MIGRATION

- Like Americans as a whole, Appalachian residents were slightly less mobile in 2013-2017 than they were in 2008-2012. Between the two periods, the share of persons in the Region who had moved from a different residence in the past year decreased by almost half a percentage point to 13 percent in 2013-2017 (see Tables 11.1 and 11.2). However, this decline occurred in within-county movement; the share of residents who migrated from outside their county and their state of residence increased marginally (just one-tenth of a percentage point) between the two periods.
- Within the Region, the decline in residential mobility was greatest among nonmetropolitan counties adjacent to large metro areas, where the share of residents who had moved in the previous year fell more than a full percentage point between 2008-2012 and 2013-2017. The decline was almost as great in Southern Appalachia, where the share fell 0.9 points. Smaller declines were experienced in North Central and South Central Appalachia, and among counties within large metropolitan areas. Yet in the Appalachian section of Ohio, mobility shares actually increased by almost one-third of a percentage point.
- Appalachia's tiny increase (0.1 percentage points) in the percentage of residents migrating from outside their county of residence between 2008-2012 and 2013-2017 actually masked changes within the Region. For example, the share rose more noticeably in both Central Appalachia and the Appalachian sections of Kentucky and North Carolina (by at least half a percentage point in each case). Meanwhile, the share fell 0.6 points in Appalachian Maryland.

CHAPTER 12: VETERAN STATUS

Table 12.1: Veteran Status of Adult Civilians in the Appalachian Region, by Age Group, 2013-2017

Veteran Status	Civilian Population				Percent Who Are Veterans			
	Ages 18 and Over	Ages 18-34	Ages 35-64	Ages 65 and Over	Ages 18 and Over	Ages 18-34	Ages 35-64	Ages 65 and Over
United States	246,379,319	74,405,276	124,241,654	47,732,389	7.7	2.2	6.5	19.4
Appalachian Region	19,990,901	5,500,778	10,121,564	4,368,559	8.7	2.1	7.1	20.7
Subregions								
Northern Appalachia	6,619,454	1,793,769	3,289,480	1,536,205	9.1	2.1	7.1	21.8
North Central Appalachia	1,904,335	515,517	966,114	422,704	9.5	2.3	8.0	21.7
Central Appalachia	1,476,162	382,458	766,968	326,736	7.6	1.9	5.9	18.0
South Central Appalachia	3,828,802	1,025,688	1,904,134	898,980	8.9	2.0	7.1	20.6
Southern Appalachia	6,162,148	1,783,346	3,194,868	1,183,934	8.1	2.0	7.1	19.8
County Types								
Large Metros (pop. 1 million +)	4,648,880	1,298,452	2,442,582	907,846	8.1	2.0	6.7	20.7
Small Metros (pop. <1 million)	8,500,282	2,415,188	4,237,965	1,847,129	8.9	2.1	7.5	21.1
Nonmetro, Adjacent to Large Metros	1,723,181	462,880	869,715	390,586	9.0	2.1	7.4	20.7
Nonmetro, Adjacent to Small Metros	3,137,972	789,698	1,582,105	766,169	9.3	2.3	7.1	20.9
Rural (nonmetro, not adj. to a metro)	1,980,586	534,560	989,197	456,829	7.7	1.8	5.9	18.6
Alabama	3,735,780	1,092,414	1,881,334	762,032	9.1	2.5	8.5	20.3
Appalachian Alabama	2,402,987	693,329	1,221,251	488,407	8.7	2.3	7.9	20.0
Non-Appalachian Alabama	1,332,793	399,085	660,083	273,625	9.9	2.8	9.6	20.8
Georgia	7,655,139	2,374,730	3,979,979	1,300,430	8.4	2.5	8.2	20.0
Appalachian Georgia	2,327,520	666,157	1,259,974	401,389	7.5	1.8	6.5	20.1
Non-Appalachian Georgia	5,327,619	1,708,573	2,720,005	899,041	8.9	2.8	9.0	19.9
Kentucky	3,397,079	984,414	1,739,959	672,706	8.2	2.4	7.2	19.4
Appalachian Kentucky	911,976	246,372	472,113	193,491	7.3	1.9	5.8	17.8
Non-Appalachian Kentucky	2,485,103	738,042	1,267,846	479,215	8.6	2.5	7.7	20.1
Maryland	4,620,593	1,361,615	2,409,793	849,185	8.2	2.6	7.6	19.2
Appalachian Maryland	199,573	55,154	100,280	44,139	9.6	2.4	8.5	21.1
Non-Appalachian Maryland	4,421,020	1,306,461	2,309,513	805,046	8.2	2.6	7.5	19.1
Mississippi	2,249,677	685,227	1,127,423	437,027	7.7	2.1	7.0	18.0
Appalachian Mississippi	478,400	144,290	235,365	98,745	6.6	1.7	5.6	16.2
Non-Appalachian Mississippi	1,771,277	540,937	892,058	338,282	8.0	2.2	7.4	18.5
New York	15,571,733	4,799,493	7,763,889	3,008,351	4.9	1.2	3.5	14.2
Appalachian New York	836,520	253,696	397,927	184,897	8.7	1.9	7.4	20.7
Non-Appalachian New York	14,735,213	4,545,797	7,365,962	2,823,454	4.7	1.1	3.3	13.8
North Carolina	7,666,358	2,218,702	3,932,719	1,514,937	8.7	2.8	7.9	19.7
Appalachian North Carolina	1,379,772	353,914	690,358	335,500	8.7	1.8	6.5	20.3
Non-Appalachian North Carolina	6,286,586	1,864,788	3,242,361	1,179,437	8.8	3.0	8.1	19.5
Ohio	8,974,264	2,572,167	4,557,455	1,844,642	8.4	2.1	7.0	20.5
Appalachian Ohio	1,568,989	408,815	804,520	355,654	9.4	2.2	7.6	21.9
Non-Appalachian Ohio	7,405,275	2,163,352	3,752,935	1,488,988	8.2	2.1	6.9	20.1
Pennsylvania	10,096,921	2,862,941	5,052,958	2,181,022	8.0	1.8	6.1	20.5
Appalachian Pennsylvania	4,606,747	1,242,952	2,292,085	1,071,710	9.1	2.1	6.9	21.9
Non-Appalachian Pennsylvania	5,490,174	1,619,989	2,760,873	1,109,312	7.0	1.5	5.4	19.1
South Carolina	3,772,087	1,090,218	1,886,613	795,256	9.8	3.1	8.8	21.2
Appalachian South Carolina	953,241	279,570	478,278	195,393	8.4	2.2	7.1	20.6
Non-Appalachian South Carolina	2,818,846	810,648	1,408,335	599,863	10.2	3.4	9.3	21.4
Tennessee	5,081,551	1,487,145	2,581,050	1,013,356	8.7	2.5	7.7	20.4
Appalachian Tennessee	2,251,711	603,241	1,131,326	517,144	9.2	2.3	7.6	20.9
Non-Appalachian Tennessee	2,829,840	883,904	1,449,724	496,212	8.3	2.7	7.8	19.8
Virginia	6,388,866	1,905,796	3,295,203	1,187,867	10.8	4.1	10.8	21.5
Appalachian Virginia	614,601	170,655	298,182	145,764	7.8	1.6	6.1	18.5
Non-Appalachian Virginia	5,774,265	1,735,141	2,997,021	1,042,103	11.1	4.4	11.2	21.9
West Virginia (entire state)	1,458,864	382,633	739,905	336,326	9.5	2.3	7.8	21.4

Note: The ACS defines veterans as men and women who have served on active duty in the U.S. Armed Forces, the National Guard or Reserves, or in the U.S. Merchant Marine during World War II.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

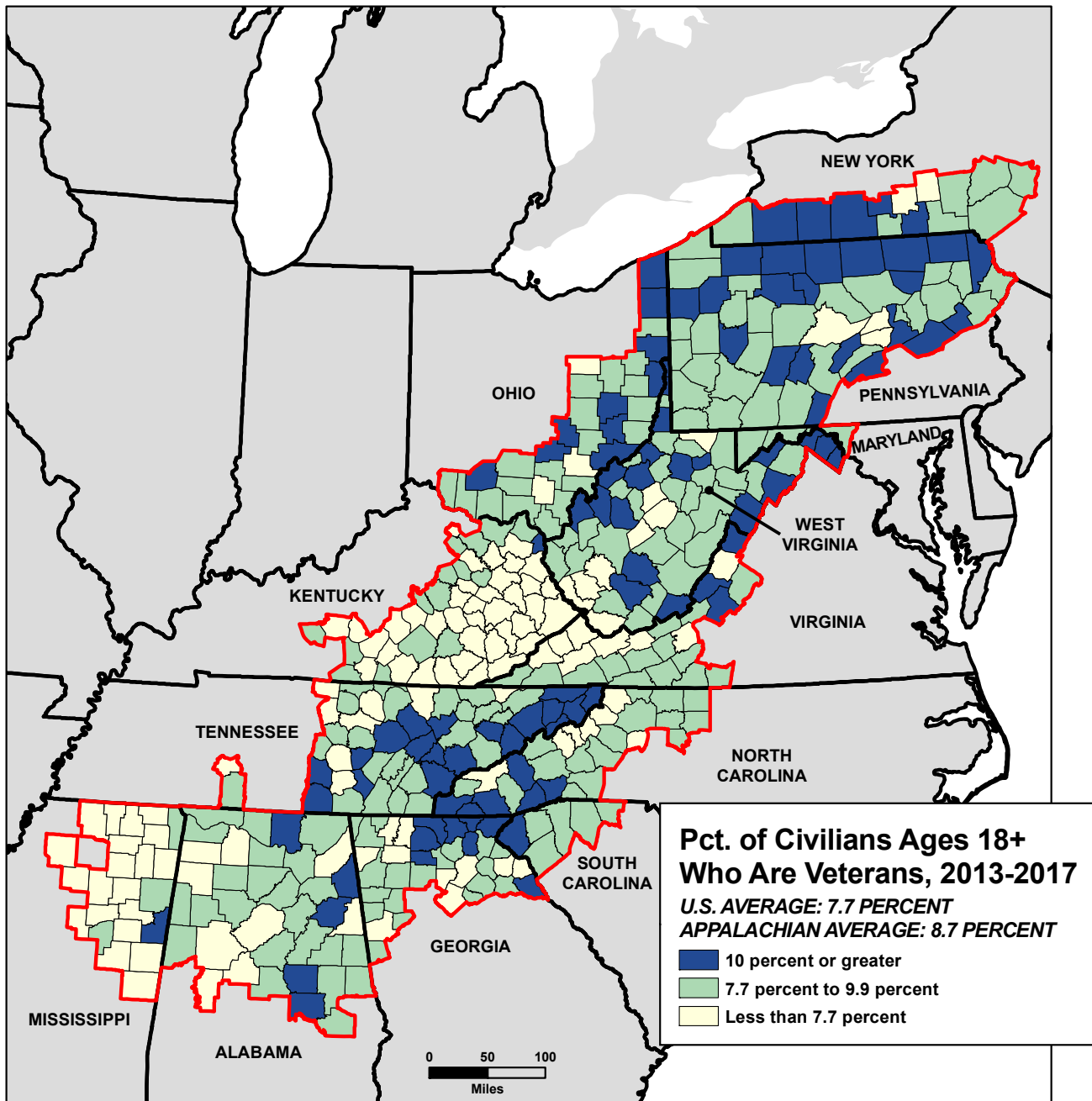
Table 12.2: Veteran Status of Adult Civilians in the Appalachian Region, by Gender, 2013-2017

Veteran Status	Civilian Population Ages 18 and Over			Percent Who Are Veterans		
	Both Sexes	Males	Females	Both Sexes	Males	Females
United States	246,379,319	119,526,965	126,852,354	7.7	14.5	1.3
Appalachian Region	19,990,901	9,704,373	10,286,528	8.7	16.7	1.1
Subregions						
Northern Appalachia	6,619,454	3,241,837	3,377,617	9.1	17.5	1.1
North Central Appalachia	1,904,335	936,270	968,065	9.5	18.1	1.2
Central Appalachia	1,476,162	723,601	752,561	7.6	14.6	0.8
South Central Appalachia	3,828,802	1,845,296	1,983,506	8.9	17.2	1.2
Southern Appalachia	6,162,148	2,957,369	3,204,779	8.1	15.5	1.2
County Types						
Large Metros (pop. 1 million +)	4,648,880	2,232,519	2,416,361	8.1	15.6	1.2
Small Metros (pop. <1 million)	8,500,282	4,114,331	4,385,951	8.9	17.2	1.2
Nonmetro, Adjacent to Large Metros	1,723,181	848,832	874,349	9.0	17.2	1.1
Nonmetro, Adjacent to Small Metros	3,137,972	1,537,085	1,600,887	9.3	17.7	1.1
Rural (nonmetro, not adj. to a metro)	1,980,586	971,606	1,008,980	7.7	14.8	0.9
Alabama	3,735,780	1,776,877	1,958,903	9.1	17.5	1.6
Appalachian Alabama	2,402,987	1,147,384	1,255,603	8.7	16.8	1.4
Non-Appalachian Alabama	1,332,793	629,493	703,300	9.9	18.8	1.9
Georgia	7,655,139	3,654,218	4,000,921	8.4	15.7	1.8
Appalachian Georgia	2,327,520	1,124,408	1,203,112	7.5	14.2	1.2
Non-Appalachian Georgia	5,327,619	2,529,810	2,797,809	8.9	16.3	2.1
Kentucky	3,397,079	1,645,543	1,751,536	8.2	15.7	1.2
Appalachian Kentucky	911,976	445,260	466,716	7.3	14.0	0.9
Non-Appalachian Kentucky	2,485,103	1,200,283	1,284,820	8.6	16.3	1.3
Maryland	4,620,593	2,196,698	2,423,895	8.2	15.3	1.9
Appalachian Maryland	199,573	101,607	97,966	9.6	17.6	1.4
Non-Appalachian Maryland	4,421,020	2,095,091	2,325,929	8.2	15.1	1.9
Mississippi	2,249,677	1,069,494	1,180,183	7.7	14.6	1.4
Appalachian Mississippi	478,400	228,376	250,024	6.6	12.9	0.9
Non-Appalachian Mississippi	1,771,277	841,118	930,159	8.0	15.1	1.5
New York	15,571,733	7,435,221	8,136,512	4.9	9.5	0.6
Appalachian New York	836,520	409,513	427,007	8.7	16.5	1.2
Non-Appalachian New York	14,735,213	7,025,708	7,709,505	4.7	9.1	0.6
North Carolina	7,666,358	3,639,583	4,026,775	8.7	16.6	1.6
Appalachian North Carolina	1,379,772	660,227	719,545	8.7	16.9	1.1
Non-Appalachian North Carolina	6,286,586	2,979,356	3,307,230	8.8	16.5	1.8
Ohio	8,974,264	4,334,866	4,639,398	8.4	16.1	1.1
Appalachian Ohio	1,568,989	769,387	799,602	9.4	18.2	1.0
Non-Appalachian Ohio	7,405,275	3,565,479	3,839,796	8.2	15.7	1.2
Pennsylvania	10,096,921	4,879,626	5,217,295	8.0	15.4	1.0
Appalachian Pennsylvania	4,606,747	2,255,711	2,351,036	9.1	17.5	1.1
Non-Appalachian Pennsylvania	5,490,174	2,623,915	2,866,259	7.0	13.6	0.9
South Carolina	3,772,087	1,796,868	1,975,219	9.8	18.6	1.7
Appalachian South Carolina	953,241	457,201	496,040	8.4	16.5	1.0
Non-Appalachian South Carolina	2,818,846	1,339,667	1,479,179	10.2	19.3	1.9
Tennessee	5,081,551	2,435,631	2,645,920	8.7	16.6	1.4
Appalachian Tennessee	2,251,711	1,087,093	1,164,618	9.2	17.7	1.2
Non-Appalachian Tennessee	2,829,840	1,348,538	1,481,302	8.3	15.7	1.6
Virginia	6,388,866	3,069,326	3,319,540	10.8	19.5	2.7
Appalachian Virginia	614,601	304,500	310,101	7.8	14.8	1.0
Non-Appalachian Virginia	5,774,265	2,764,826	3,009,439	11.1	20.0	2.9
West Virginia (entire state)	1,458,864	713,706	745,158	9.5	18.2	1.1

Note: The ACS defines veterans as men and women who have served on active duty in the U.S. Armed Forces, the National Guard or Reserves, or in the U.S. Merchant Marine during World War II.

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Figure 12.1: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, 2013-2017

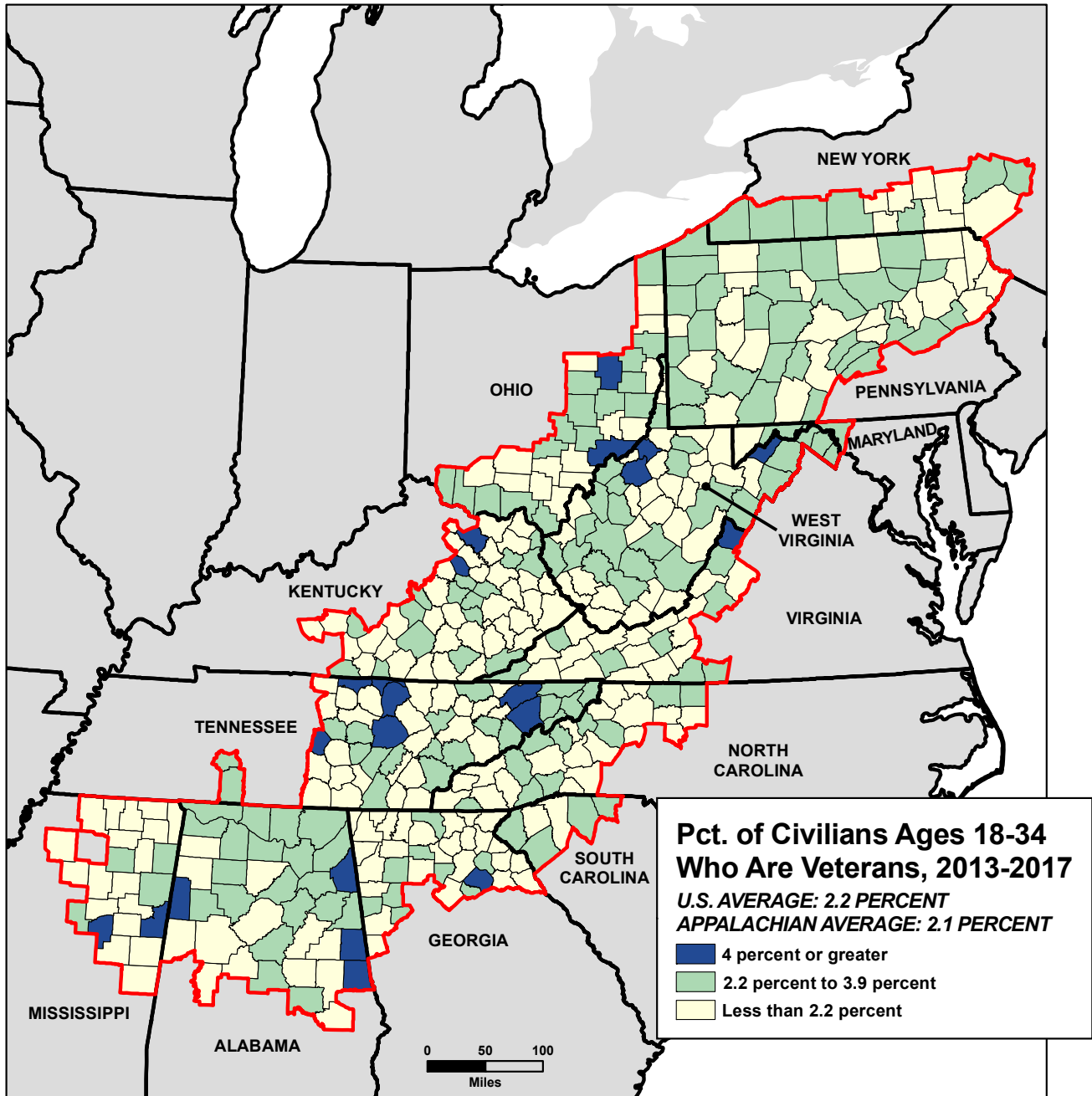


Map Title: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, 2013-2017

Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In 2013-2017, 9 percent of adult civilians ages 18 and over in the Appalachian Region were veterans—men and women who have served on active duty in the U.S. Armed Forces, the National Guard or Reserves, or in the U.S. Merchant Marine during World War II. While slightly higher than the national average, there was considerable variation throughout the Region. In 100 Appalachian counties, for example, at least one in 10 civilian residents were veterans. Most of the counties with the highest share of veterans were in Northern and North Central Appalachia, although there were pockets of high concentration further south, particularly in Tennessee. In contrast, the veteran prevalence rate was lower than the national average in 117 counties; nearly half the counties in this group were in Central Appalachia—and 38 of them were in Kentucky alone. Another 20 of these counties were in Appalachian Mississippi—the state that had the Region’s lowest share of veterans among adult civilians.

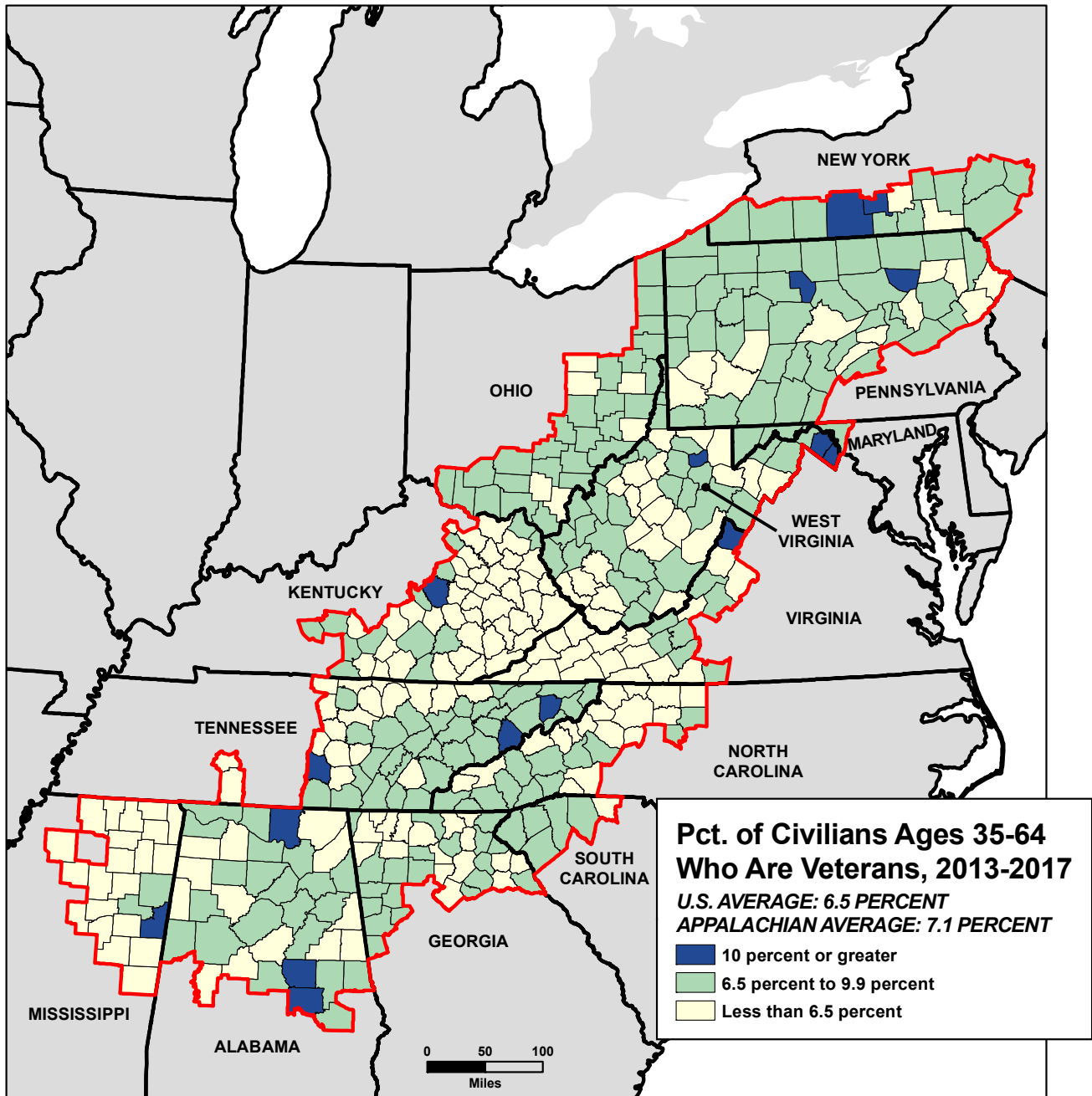
Figure 12.2: Percent of Civilians Ages 18 to 34 in the Appalachian Region Who Are Veterans, 2013-2017



Map Title: Percent of Adult Civilians Ages 18 to 34 in the Appalachian Region Who Are Veterans, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

Military veterans accounted for just 2.1 percent of Appalachia’s young adult (ages 18-34) civilian population in the 2013-2017 period, compared to 2.2 percent for the nation as a whole. Yet in 191 of the Region’s 420 counties, the prevalence was at or above the national rate. In fact, there were 22 Appalachian counties where at least 4 percent of 18-to-34-year-old civilians were veterans. Most veterans of the wars in Iraq and Afghanistan fall in this age group.

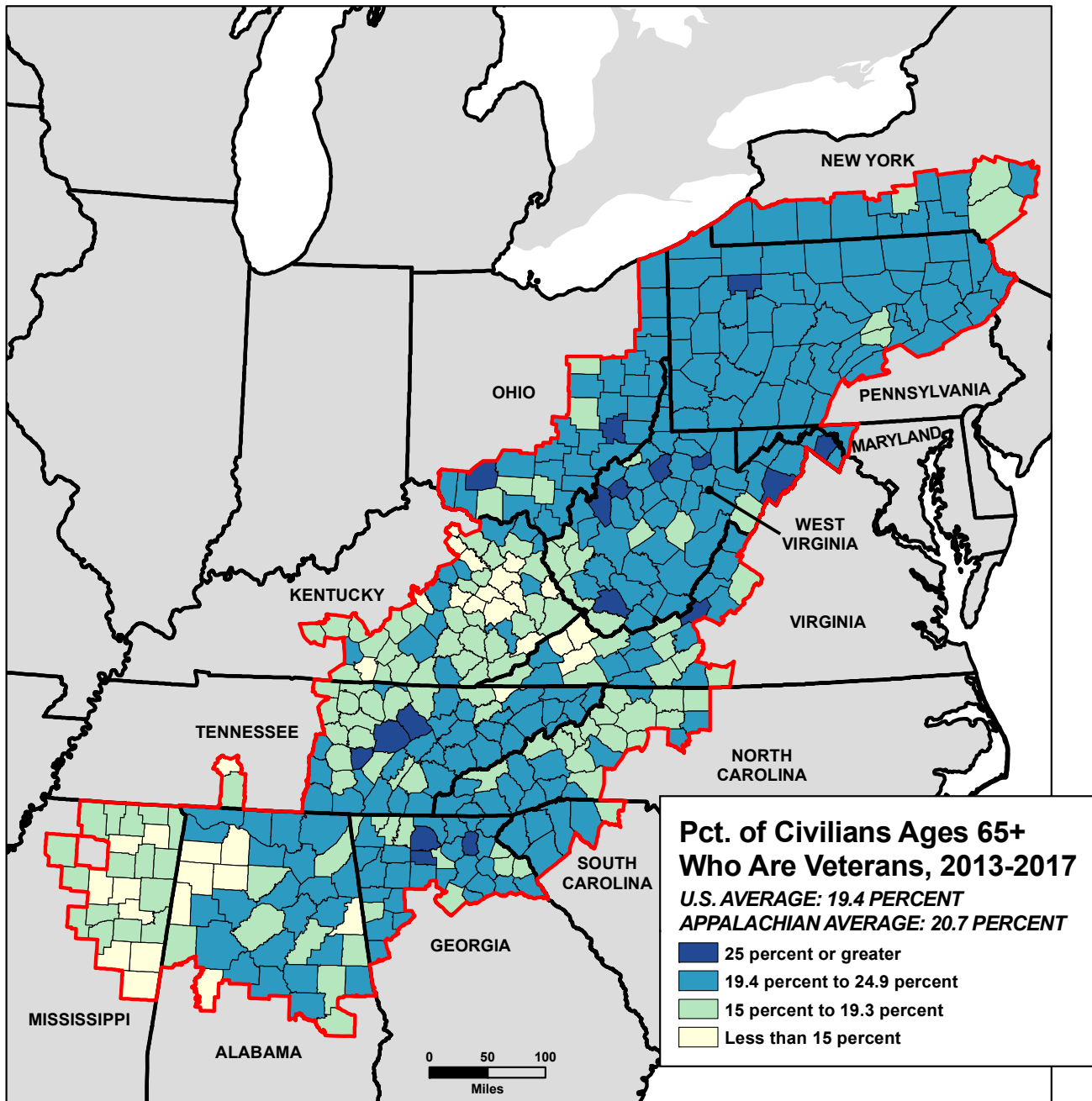
Figure 12.3: Percent of Civilians Ages 35 to 64 in the Appalachian Region Who Are Veterans, 2013-2017



Map Title: Percent of Adult Civilians Ages 35 to 64 in the Appalachian Region Who Are Veterans, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In the Appalachian Region, 7.1 percent of 35-to-64-year-old civilian residents were military veterans in 2013-2017, slightly above the U.S. rate of 6.5 percent. The prevalence was even higher in some counties: In 16 of them, veterans comprised at least one in 10 civilians ages 35 to 64. These counties were scattered throughout the Region. In 186 counties, however, the veteran prevalence rate was lower than the national average; almost one-third of the counties in this latter group were in Central Appalachia, where just under 6 percent of 35-to-64-year-old civilians were veterans. Most veterans of the 1991 Gulf War fall in this age group, as do the youngest Vietnam veterans.

Figure 12.4: Percent of Civilians Ages 65 and Over in the Appalachian Region Who Are Veterans, 2013-2017



Map Title: Percent of Adult Civilians Ages 65 and Over in the Appalachian Region Who Are Veterans, 2013-2017
 Data Source: U.S. Census Bureau, 2013-2017 American Community Survey.

In 2013-2017, more than one-fifth of Appalachia’s civilian residents ages 65 and over were military veterans—most of whom served during World War II and the wars in Korea and Vietnam. Yet there is some variation within the Region. For example, at least 25 percent of older civilians were veterans in 17 counties—nine of which were in Northern and North Central Appalachia, the subregions with the highest prevalence rates in this age group. By contrast, there were 34 counties where veterans comprised less than 15 percent of the older civilian residents. Central Appalachia had 18 of the counties in the latter group; 14 were in Kentucky alone. In both places, veterans were just 18 percent of older civilians. (Only Appalachian Mississippi had an even lower share, at 16 percent.)

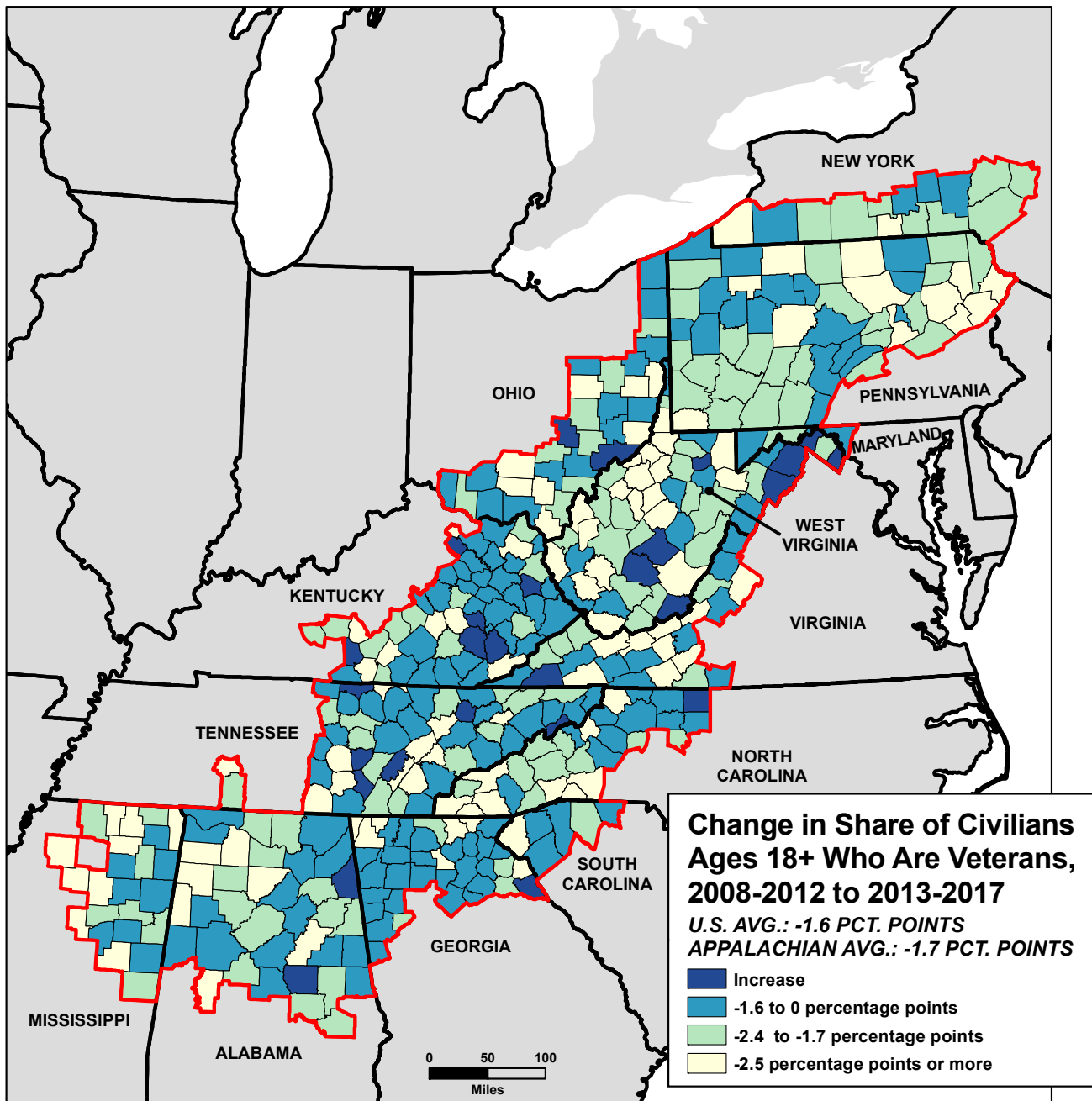
Table 12.3: Percentage Point Change in Veteran Status of Adult Civilians in the Appalachian Region, by Age Group and Gender, 2008-2012 to 2013-2017

Veteran Status	Percentage Point Change in Share of Adults Who Are Veterans					
	Total, Ages 18 and Over	By Age Group			By Gender	
		Ages 18-34	Ages 35-64	Ages 65 and Over	Males	Females
United States	-1.6	-0.2	-2.4	-3.4	-3.4	+0.0
Appalachian Region	-1.7	-0.3	-2.7	-2.5	-3.6	+0.0
Subregions						
Northern Appalachia	-2.0	-0.3	-2.9	-3.0	-4.2	+0.0
North Central Appalachia	-1.6	-0.6	-2.7	-2.0	-3.4	+0.0
Central Appalachia	-1.2	-0.3	-2.4	-1.2	-2.6	+0.1
South Central Appalachia	-1.7	-0.3	-2.9	-2.1	-3.5	+0.0
Southern Appalachia	-1.6	-0.4	-2.6	-2.6	-3.3	+0.0
County Types						
Large Metros (pop. 1 million +)	-1.7	-0.3	-2.5	-3.2	-3.6	+0.0
Small Metros (pop. <1 million)	-1.8	-0.4	-2.9	-2.6	-3.7	+0.0
Nonmetro, Adjacent to Large Metros	-1.7	-0.2	-2.9	-2.5	-3.5	+0.0
Nonmetro, Adjacent to Small Metros	-1.6	-0.2	-2.9	-2.0	-3.6	+0.0
Rural (nonmetro, not adj. to a metro)	-1.7	-0.6	-2.7	-2.0	-3.5	+0.0
Alabama	-1.9	-0.5	-2.7	-2.9	-3.8	+0.0
Appalachian Alabama	-1.8	-0.2	-2.8	-2.8	-3.7	+0.0
Non-Appalachian Alabama	-1.9	-1.1	-2.6	-3.1	-4.1	+0.0
Georgia	-1.4	-0.2	-2.3	-2.6	-2.7	-0.1
Appalachian Georgia	-1.4	-0.4	-2.4	-2.3	-2.9	+0.0
Non-Appalachian Georgia	-1.3	-0.1	-2.2	-2.8	-2.7	+0.0
Kentucky	-1.5	-0.2	-2.5	-2.0	-3.1	+0.0
Appalachian Kentucky	-1.1	-0.2	-2.2	-0.8	-2.3	+0.2
Non-Appalachian Kentucky	-1.6	-0.2	-2.7	-2.5	-3.4	-0.1
Maryland	-1.7	-0.5	-2.2	-3.7	-3.5	-0.1
Appalachian Maryland	-1.5	-0.2	-2.0	-3.0	-2.7	-0.1
Non-Appalachian Maryland	-1.7	-0.6	-2.3	-3.7	-3.6	-0.1
Mississippi	-1.7	-0.7	-2.5	-3.1	-3.7	+0.0
Appalachian Mississippi	-1.8	-0.8	-2.4	-3.1	-3.9	+0.0
Non-Appalachian Mississippi	-1.7	-0.7	-2.5	-3.1	-3.6	+0.0
New York	-1.5	-0.1	-1.9	-3.7	-3.2	+0.0
Appalachian New York	-1.9	-0.4	-2.8	-3.2	-4.0	+0.0
Non-Appalachian New York	-1.4	-0.2	-1.9	-3.7	-3.1	+0.0
North Carolina	-1.6	-0.2	-2.6	-2.5	-3.2	-0.1
Appalachian North Carolina	-1.8	-0.2	-3.2	-2.3	-3.7	-0.1
Non-Appalachian North Carolina	-1.5	-0.2	-2.5	-2.6	-3.1	+0.0
Ohio	-1.7	-0.1	-2.8	-2.9	-3.7	-0.1
Appalachian Ohio	-1.7	-0.1	-2.9	-2.0	-3.4	+0.0
Non-Appalachian Ohio	-1.7	-0.1	-2.7	-3.2	-3.8	+0.0
Pennsylvania	-1.9	-0.3	-2.6	-3.5	-4.1	+0.0
Appalachian Pennsylvania	-2.0	-0.4	-2.9	-3.2	-4.3	+0.0
Non-Appalachian Pennsylvania	-1.8	-0.3	-2.4	-3.7	-3.9	-0.1
South Carolina	-1.5	-0.1	-2.7	-2.6	-3.2	+0.0
Appalachian South Carolina	-1.7	-0.2	-2.9	-2.5	-3.3	-0.2
Non-Appalachian South Carolina	-1.5	-0.1	-2.7	-2.6	-3.2	+0.0
Tennessee	-1.5	-0.1	-2.6	-1.9	-3.2	+0.0
Appalachian Tennessee	-1.4	-0.1	-2.6	-1.6	-3.1	+0.1
Non-Appalachian Tennessee	-1.6	-0.1	-2.7	-2.2	-3.3	+0.0
Virginia	-1.3	-0.4	-1.9	-2.9	-3.0	+0.0
Appalachian Virginia	-2.0	-0.6	-3.0	-3.0	-4.1	+0.0
Non-Appalachian Virginia	-1.3	-0.4	-1.9	-2.9	-2.9	+0.0
West Virginia (entire state)	-1.8	-0.7	-2.9	-2.2	-3.8	+0.0

Note: The ACS defines veterans as men and women who have served on active duty in the U.S. Armed Forces, the National Guard or Reserves, or in the U.S. Merchant Marine during World War II.

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

Figure 12.5: Percentage Point Change in the Share of Adult Civilians in the Appalachian Region Who Are Veterans, 2008-2012 to 2013-2017



Map Title: Percentage Point Change in the Share of Adult Civilians in the Appalachian Region Who Are Veterans, 2008-2012 to 2013-2017

Data Sources: U.S. Census Bureau, 2008-2012 and 2013-2017 American Community Surveys.

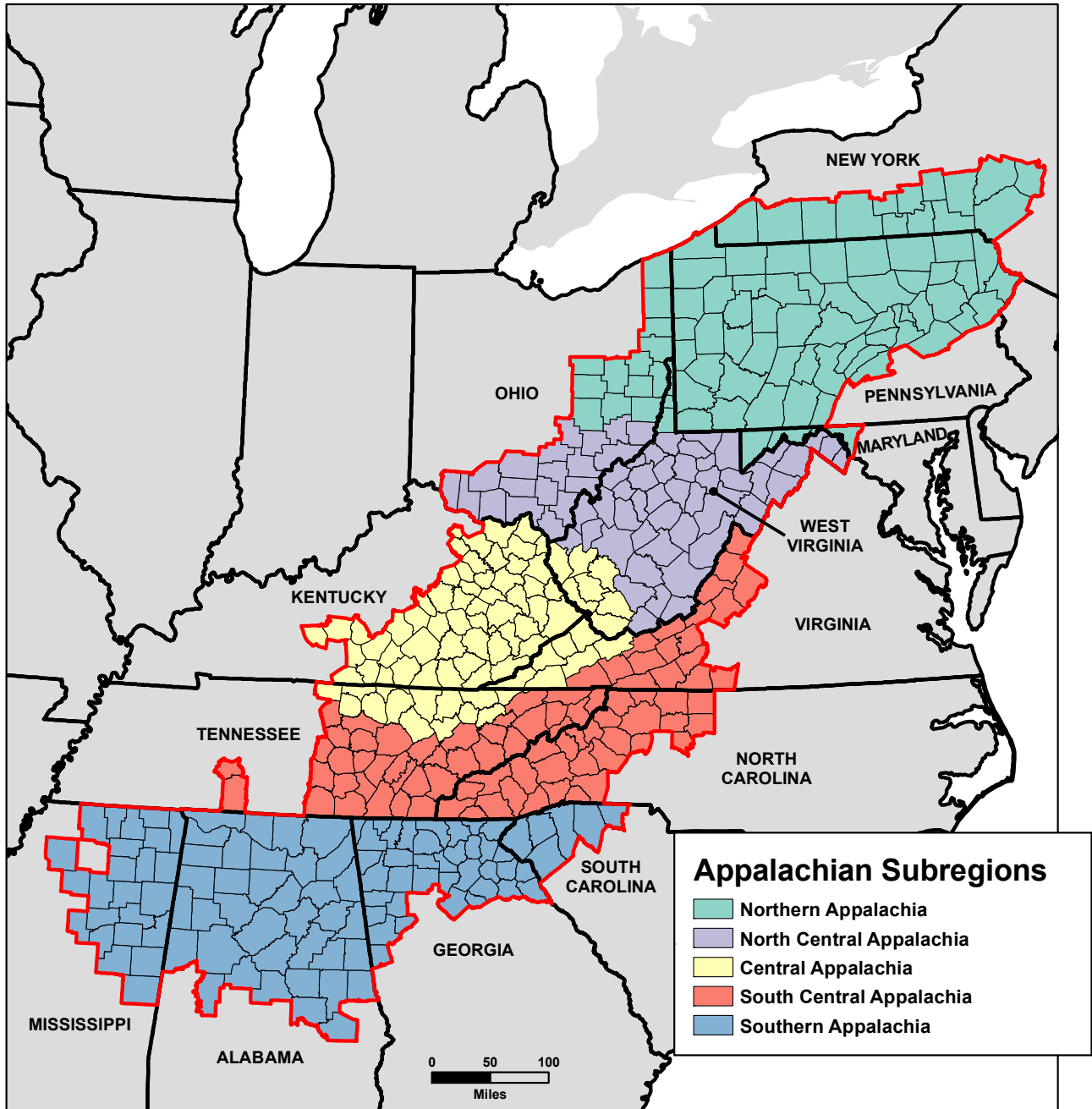
The share of Appalachia’s adult civilians ages 18 and over who were military veterans was almost two percentage points lower in the 2013-2017 period than it was in 2008-2012. And the magnitude of the decrease varied little among the county types and the Appalachian versus non-Appalachian portions of most of the 13 states—Virginia being a notable exception. Among the subregions, the decrease was largest in Northern Appalachia (two percentage points) and smallest in Central Appalachia (1.2 points). Yet there was significant variation at the county level. For example, in 102 Appalachian counties (spread throughout the Region), veterans’ share of the population fell by at least 2.5 percentage points. Yet the share actually increased in 27 counties—nine of which were in Central Appalachia. Veterans were at least 10 percent of the civilian population in more than half of the counties where the share increased, compared to just one-fifth of the counties with the largest decreases.

TRENDS IN VETERAN STATUS

- In Appalachia, the share of adult civilians who were military veterans declined almost two percentage points between 2008-2012 and 2013-2017, falling to just under 9 percent (see Tables 12.1 and 12.3). There was little difference in the decrease among the county types, and the Appalachian versus non-Appalachian portions of the 13 states. Virginia was a notable exception: The veteran prevalence rate fell two percentage points in that state's Appalachian portion, compared to a decrease of 1.3 points in the rest of the state. And among the subregions, the decline in veteran prevalence ranged from two percentage points in Northern Appalachia to 1.2 points in Central Appalachia.
- The decrease in veteran status was more pronounced among middle-aged and older civilians than among younger ones. While the share of veterans fell less than half a percentage point among younger civilians ages 18 to 34, it declined nearly three percentage points among civilians ages 35 and over. As veteran status is more prevalent among older residents than younger ones, the movement of cohorts with lower prevalence rates into older ages accounts for much of the decline. (Mortality among the oldest veterans also is a factor, particularly in the decline among persons ages 65 and over.)
- Not surprisingly, the decreased share in veteran status among men has fueled the overall decrease. The share of adult men in the Appalachian Region who were veterans fell more than three percentage points between 2008-2012 and 2013-2017, while the share among women remained unchanged. Of course, men remain far more likely than women to be military veterans—the respective rates in Appalachia were 17 percent and 1 percent (see Table 12.2).

APPENDIX A: REFERENCE MAPS

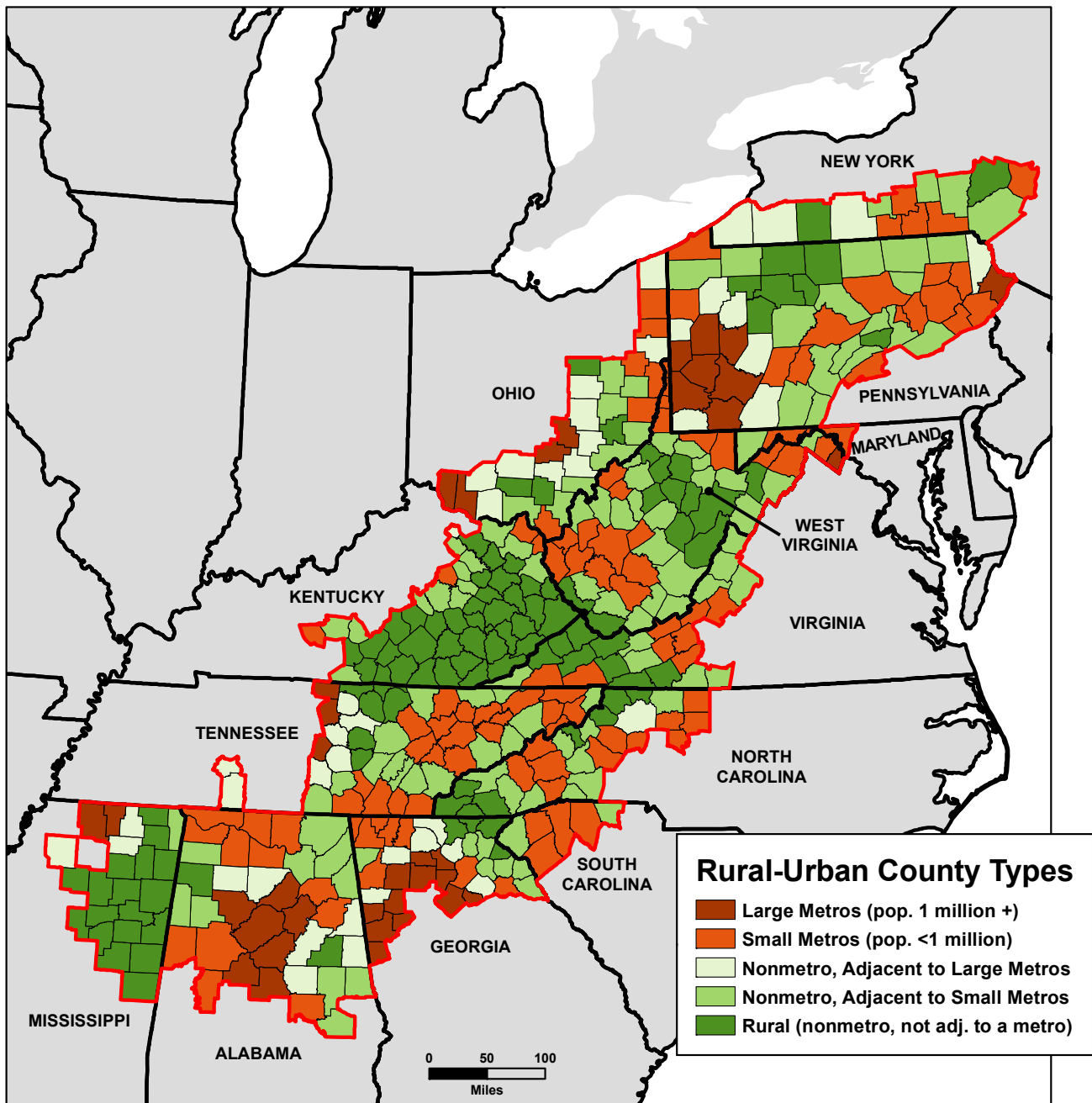
Figure A.1: Appalachian Subregions



Map Title: Appalachian Subregions
Data Source: Appalachian Regional Commission.

The Appalachian Region covers 205,000 square miles and includes all of West Virginia and portions of 12 other states from New York to Mississippi. The 420 counties of the Region are grouped into five subregions, based on similarities in economic and demographic characteristics and geographic location.

Figure A.2: Rural-Urban County Types in the Appalachian Region



Map Title: Rural-Urban County Types in the Appalachian Region

Data Source: USDA, Economic Research Service, 2013 Urban Influence Codes condensed by ARC.

While Appalachia is a distinct part of the United States, the Region is far from homogeneous, including both rural counties and major metropolitan areas such as Pittsburgh, Birmingham, and parts of suburban Atlanta. This map shows the rural-urban type for each Appalachian county.