

**THE APPALACHIAN REGION:
A DATA OVERVIEW FROM THE
2015-2019 AMERICAN COMMUNITY SURVEY
Chartbook**

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FOREWORD

The data contained in this Chartbook describe how residents in the Appalachian Region were faring before the COVID-19 pandemic began in March 2020. As such, these numbers do not measure the social and economic impact of the outbreak. The Chartbook data do, however, provide a benchmark: As data from the pandemic and post-pandemic period are released in the coming years, these figures can serve as a point of comparison that ultimately can enable data users to better measure the pandemic's effect on Appalachia's social and economic dynamics.

Most of the data come from the 2015-2019 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The decennial long form has been replaced by the American Community Survey (ACS), a nationwide study collected continuously every year in every county in the United States.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 2015-2019 ACS data to have comparable statistics for all 420 counties in the Region.

The ACS five-year estimates for 2015-2019 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 2015 through December 2019. 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 (2015-2019 and 2010-2014), 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—such as changes in some of the age categories reported in the questions for health insurance coverage. And in some years, the ACS has added or removed certain questions. For example, the ACS added questions on computer and Internet access in 2013. As a result, 2010-2014 data for these items are not available to measure trends. More information about comparing the 2010-2014 and 2015-2019 ACS data is available on the Web page, ["Comparing 2010-2014 ACS 5-year and 2015-2019 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. Data from the upcoming 2016-2020 ACS will illustrate this problem, as they are for a time period that covers two distinct periods of economic activity: the four years and two months prior to the outbreak of the COVID-19 pandemic in the United States (January 2016 through February 2020), and the first 10 months after the pandemic hit (March through December 2020). Since the 2016-2020 ACS will pool data from both

periods, it will smooth out the extreme variations in the social and 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 2019 estimates reflect more timely data than the five-year ACS estimates, they also 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 two appendices. Appendix A uses selected demographic and socioeconomic measures to provide an overview comparing rural Appalachia (defined here as nonmetropolitan counties not adjacent to any metropolitan area) to rural areas outside the Appalachian Region. (It also includes a map showing the location of these rural counties.) Appendix B contains 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.

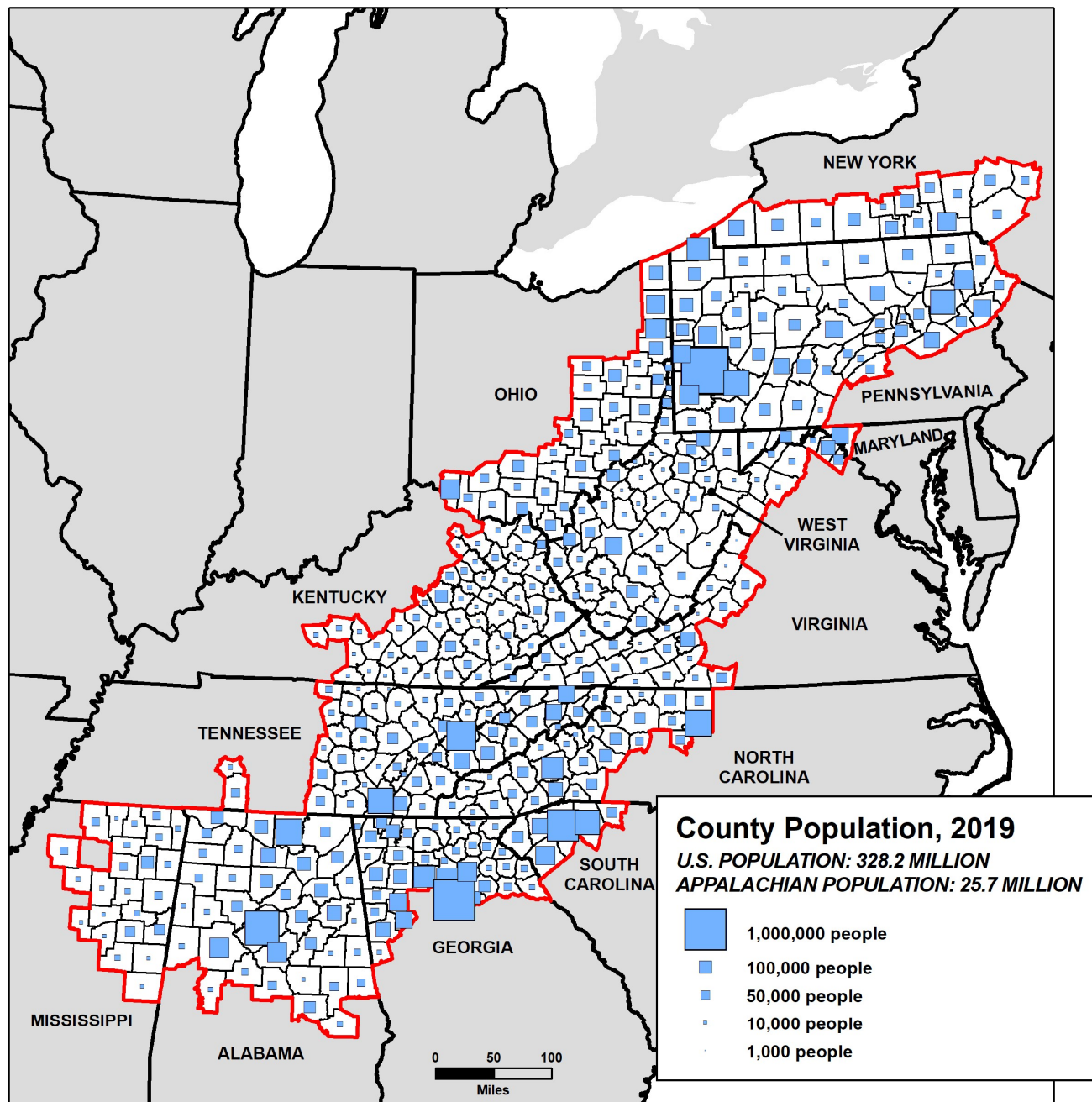
CHAPTER 1: POPULATION BASICS

Table 1.1: Population, Land Area, and Population Density in the Appalachian Region, July 1, 2019

Population, Land Area, and Density	Population, July 1, 2019	Change Since July 1, 2010		Land Area (Square Miles)	Population per Square Mile of Land Area, July 1, 2019
		Number	Percent		
United States	328,239,523	+ 18,917,857	+ 6.1	3,531,905	92.9
Appalachian Region	25,717,174	+ 454,609	+ 1.8	204,452	125.8
Subregions					
Northern Appalachia	8,131,869	- 252,189	- 3.0	56,980	142.7
North Central Appalachia	2,385,186	- 40,348	- 1.7	29,337	81.3
Central Appalachia	1,855,390	- 64,343	- 3.4	29,773	62.3
South Central Appalachia	4,936,819	+ 214,605	+ 4.5	34,997	141.1
Southern Appalachia	8,407,910	+ 596,884	+ 7.6	53,365	157.6
County Types					
Large Metros (pop. 1 million +)	6,167,428	+ 313,677	+ 5.4	18,815	327.8
Small Metros (pop. <1 million)	10,908,974	+ 266,831	+ 2.5	54,302	200.9
Nonmetro, Adjacent to Large Metros	2,203,175	- 12,813	- 0.6	25,382	86.8
Nonmetro, Adjacent to Small Metros	3,950,918	- 44,041	- 1.1	58,591	67.4
Rural (nonmetro, not adj. to a metro)	2,486,679	- 69,045	- 2.7	47,363	52.5
Alabama	4,903,185	+ 117,748	+ 2.5	50,645	96.8
Appalachian Alabama	3,145,252	+ 77,661	+ 2.5	25,763	122.1
Non-Appalachian Alabama	1,757,933	+ 40,087	+ 2.3	24,882	70.7
Georgia	10,617,423	+ 905,542	+ 9.3	57,513	184.6
Appalachian Georgia	3,329,896	+ 389,140	+ 13.2	11,378	292.7
Non-Appalachian Georgia	7,287,527	+ 516,402	+ 7.6	46,135	158.0
Kentucky	4,467,673	+ 119,492	+ 2.7	39,486	113.1
Appalachian Kentucky	1,159,828	- 25,867	- 2.2	18,231	63.6
Non-Appalachian Kentucky	3,307,845	+ 145,359	+ 4.6	21,256	155.6
Maryland	6,045,680	+ 257,035	+ 4.4	9,707	622.8
Appalachian Maryland	250,479	- 2,348	- 0.9	1,529	163.8
Non-Appalachian Maryland	5,795,201	+ 259,383	+ 4.7	8,178	708.6
Mississippi	2,976,149	+ 5,601	+ 0.2	46,923	63.4
Appalachian Mississippi	623,147	- 5,798	- 0.9	12,400	50.3
Non-Appalachian Mississippi	2,353,002	+ 11,399	+ 0.5	34,523	68.2
New York	19,453,561	+ 53,683	+ 0.3	47,126	412.8
Appalachian New York	1,016,039	- 49,849	- 4.7	11,681	87.0
Non-Appalachian New York	18,437,522	+ 103,532	+ 0.6	35,445	520.2
North Carolina	10,488,084	+ 913,761	+ 9.5	48,618	215.7
Appalachian North Carolina	1,776,786	+ 77,071	+ 4.5	11,887	149.5
Non-Appalachian North Carolina	8,711,298	+ 836,690	+ 10.6	36,731	237.2
Ohio	11,689,100	+ 149,764	+ 1.3	40,861	286.1
Appalachian Ohio	1,988,162	- 53,932	- 2.6	15,978	124.4
Non-Appalachian Ohio	9,700,938	+ 203,696	+ 2.1	24,882	389.9
Pennsylvania	12,801,989	+ 90,829	+ 0.7	44,743	286.1
Appalachian Pennsylvania	5,644,957	- 147,650	- 2.5	36,444	154.9
Non-Appalachian Pennsylvania	7,157,032	+ 238,479	+ 3.4	8,298	862.5
South Carolina	5,148,714	+ 513,065	+ 11.1	30,061	171.3
Appalachian South Carolina	1,309,615	+ 135,881	+ 11.6	3,824	342.5
Non-Appalachian South Carolina	3,839,099	+ 377,184	+ 10.9	26,237	146.3
Tennessee	6,829,174	+ 473,863	+ 7.5	41,235	165.6
Appalachian Tennessee	2,938,971	+ 150,700	+ 5.4	20,119	146.1
Non-Appalachian Tennessee	3,890,203	+ 323,163	+ 9.1	21,116	184.2
Virginia	8,535,519	+ 511,820	+ 6.4	39,490	216.1
Appalachian Virginia	741,895	- 28,308	- 3.7	11,179	66.4
Non-Appalachian Virginia	7,793,624	+ 540,128	+ 7.4	28,311	275.3
West Virginia (entire state)	1,792,147	- 62,092	- 3.3	24,038	74.6

Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

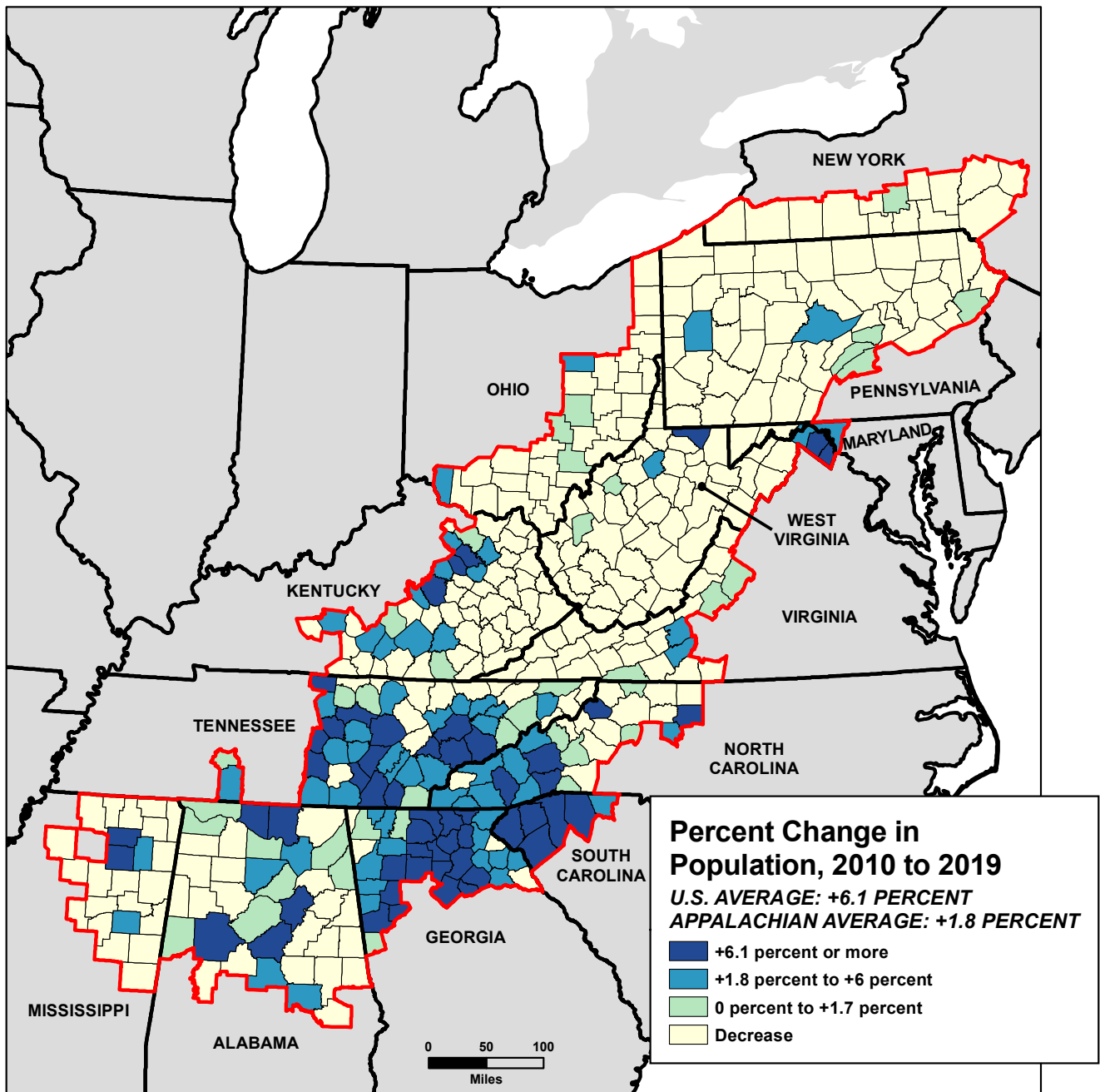
Figure 1.1: Population Distribution in the Appalachian Region, July 1, 2019



Map Title: Population Distribution in the Appalachian Region, July 1, 2019
 Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

Of the 328.2 million persons in the United States as of July 1, 2019, 25.7 million lived in the Appalachian Region—455,000 more than on 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 2019.

Figure 1.2: Population Change in the Appalachian Region, July 1, 2010 to July 1, 2019

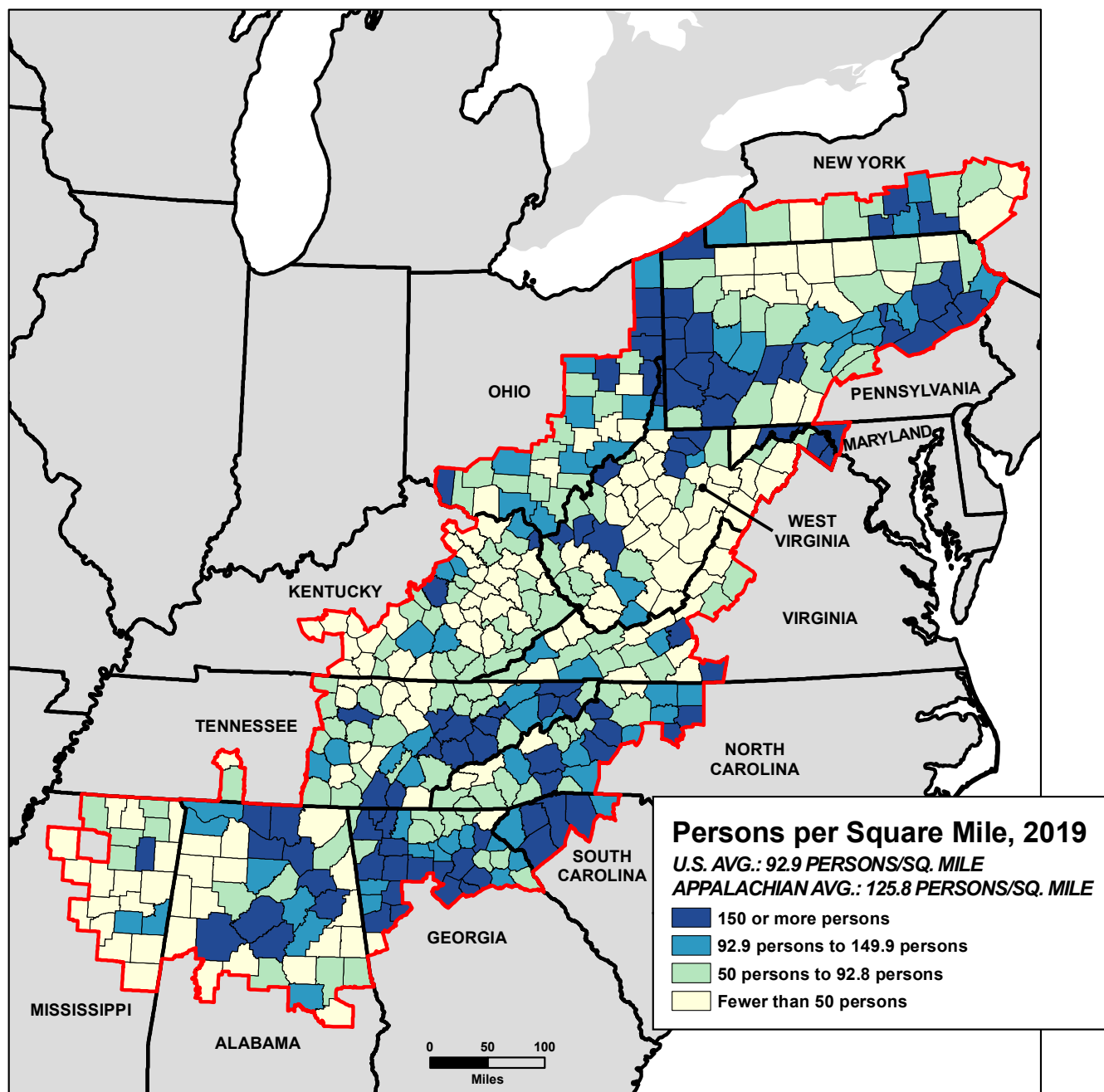


Map Title: Population Change in the Appalachian Region, July 1, 2010 to July 1, 2019

Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

The Appalachian Region's population grew by 1.8 percent between 2010 and 2019—slightly more than between 2010 and 2018—but still less than one-third the national average of 6.1 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 214 of the 263 Appalachian counties that lost residents since 2010. On the other hand, 55 counties in Appalachia grew at or above the national rate during this period. Of these counties, 47 were in the five Southern states (Alabama, Georgia, the Carolinas, and Tennessee) whose Appalachian sections gained population. Indeed, at 7.6 percent, 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 13.2 percent and 11.6 percent, respectively. Many counties with college towns—such as Monongalia County, West Virginia (Morgantown); Knox County, Tennessee (Knoxville); and Pickens County, South Carolina (Clemson)—also experienced rapid growth since 2010.

Figure 1.3: Population per Square Mile of Land Area in the Appalachian Region, July 1, 2019



Map Title: Population per Square Mile of Land Area in the Appalachian Region, July 1, 2019

Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

While Appalachia's population density was noticeably greater than the United States as a whole in 2019, 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 25.7 million in 2019—roughly 455,000 more residents than it had in mid-2010 (see Table 1.1). Although this was a larger increase than between 2010 and 2018, growth in the Region as a whole has still been slow at 1.8 percent; by comparison, the United States as a whole grew more than 6 percent between 2010 and 2019.
- Most of Appalachia, in fact, has lost population since 2010. West Virginia and the Appalachian portions of seven other states had fewer residents in 2019 than they did nine years earlier. And in three of those states—New York, Virginia, and West Virginia—the population loss exceeded 3 percent. Appalachian counties outside metropolitan areas also lost people between 2010 and 2019—indeed, 188 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 almost 3 percent of their 2010 population. In many counties, post-2010 population losses 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 2019. Population growth in Southern Appalachia, in fact, was 7.6 percent—more than a full percentage point 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 11 percent in each case.
- Several possible factors account for the rapid growth in some parts of Appalachia. For example, slightly more than half of the 55 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 West Virginia University (Monongalia County), the University of Alabama (Tuscaloosa County), or the University of Tennessee (Knox County). Yet the major single factor may well be a diversified economy. Of the 55 rapid-growth Appalachian counties, 34 are part of metropolitan areas, and 23 (including 20 of the 34 in metros) have been classified as “nonspecialized” by ERS—meaning that they weren’t dependent on a single economic sector.

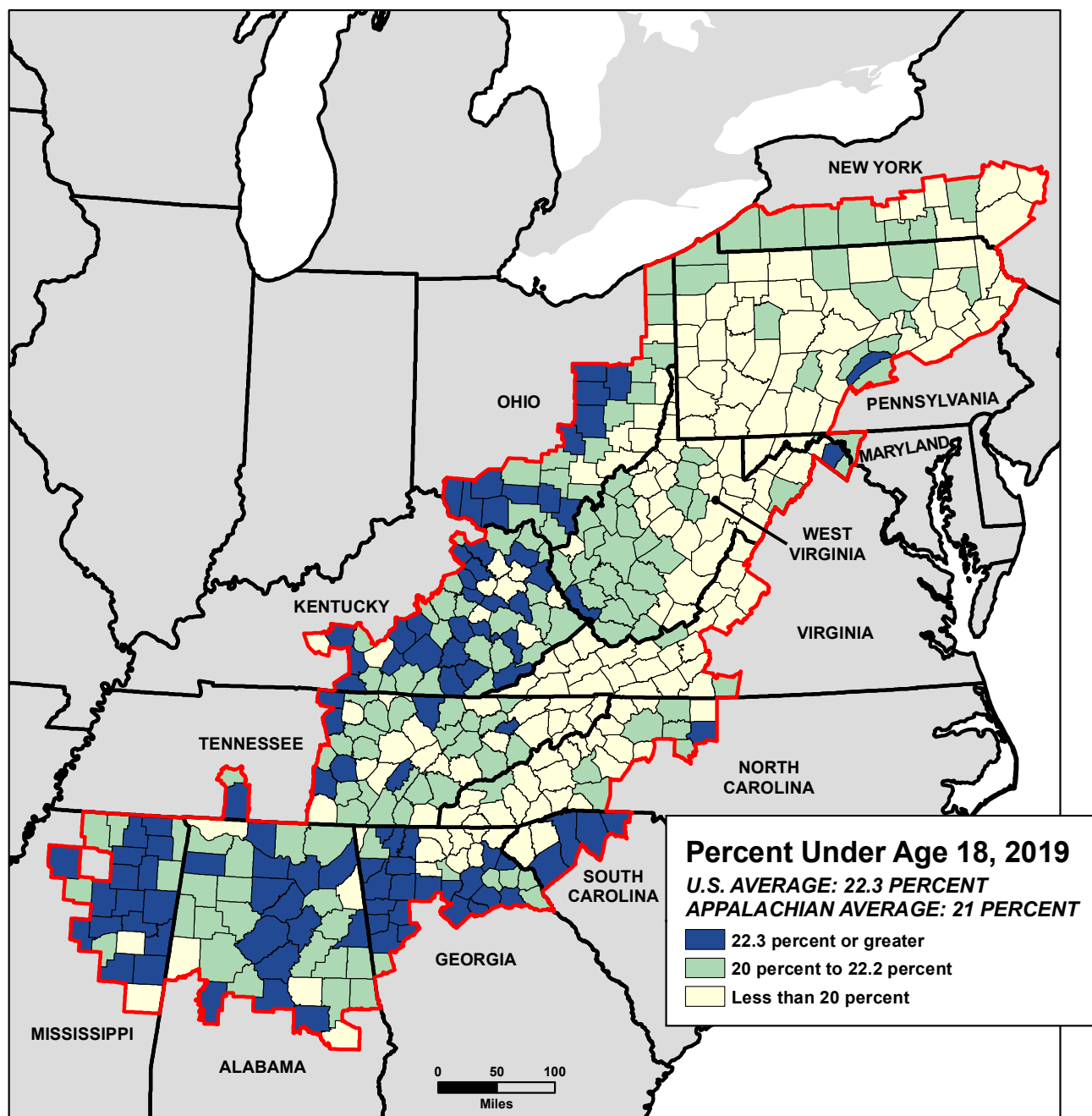
CHAPTER 2: AGE

Table 2.1: Population in the Appalachian Region by Age Group, July 1, 2019

Population by Age Group	Total Population, July 1, 2019	Percent of Population				Median Age (Years)
		Under Age 18	Ages 18-24	Ages 25-64	Ages 65 and over	
United States	328,239,523	22.3	9.2	52.1	16.5	38.4
Appalachian Region	25,717,174	21.0	9.1	51.1	18.8	41.3
Subregions						
Northern Appalachia	8,131,869	19.5	9.3	50.8	20.5	42.9
North Central Appalachia	2,385,186	20.6	9.0	51.0	19.5	42.0
Central Appalachia	1,855,390	21.3	8.2	51.3	19.2	42.3
South Central Appalachia	4,936,819	19.8	9.3	50.6	20.3	42.6
Southern Appalachia	8,407,910	23.2	9.1	51.7	16.1	38.8
County Types						
Large Metros (pop. 1 million +)	6,167,428	22.2	8.4	52.7	16.6	39.8
Small Metros (pop. <1 million)	10,908,974	20.5	9.7	51.0	18.8	41.0
Nonmetro, Adjacent to Large Metros	2,203,175	21.0	9.3	50.3	19.5	41.9
Nonmetro, Adjacent to Small Metros	3,950,918	20.3	8.4	50.2	21.1	43.8
Rural (nonmetro, not adj. to a metro)	2,486,679	20.8	9.2	49.9	20.1	42.2
Alabama	4,903,185	22.2	9.2	51.3	17.3	39.4
Appalachian Alabama	3,145,252	22.1	9.0	51.7	17.3	39.6
Non-Appalachian Alabama	1,757,933	22.4	9.6	50.5	17.5	38.9
Georgia	10,617,423	23.6	9.6	52.6	14.3	37.1
Appalachian Georgia	3,329,896	24.6	8.9	52.3	14.3	38.0
Non-Appalachian Georgia	7,287,527	23.1	9.9	52.7	14.3	36.7
Kentucky	4,467,673	22.4	9.3	51.5	16.8	39.1
Appalachian Kentucky	1,159,828	21.9	8.7	51.2	18.2	41.1
Non-Appalachian Kentucky	3,307,845	22.6	9.5	51.6	16.3	38.4
Maryland	6,045,680	22.1	8.7	53.4	15.9	39.1
Appalachian Maryland	250,479	20.1	9.1	51.8	19.0	41.6
Non-Appalachian Maryland	5,795,201	22.2	8.7	53.4	15.7	39.0
Mississippi	2,976,149	23.5	9.5	50.7	16.4	38.0
Appalachian Mississippi	623,147	22.9	10.2	49.6	17.2	38.4
Non-Appalachian Mississippi	2,353,002	23.6	9.3	50.9	16.1	37.9
New York	19,453,561	20.7	9.1	53.3	16.9	39.2
Appalachian New York	1,016,039	19.2	12.5	48.4	19.8	41.3
Non-Appalachian New York	18,437,522	20.8	8.9	53.6	16.8	39.1
North Carolina	10,488,084	21.9	9.4	51.9	16.7	39.1
Appalachian North Carolina	1,776,786	19.4	8.8	50.6	21.3	43.7
Non-Appalachian North Carolina	8,711,298	22.5	9.6	52.2	15.8	38.2
Ohio	11,689,100	22.1	9.1	51.4	17.5	39.5
Appalachian Ohio	1,988,162	21.4	8.6	50.5	19.6	42.1
Non-Appalachian Ohio	9,700,938	22.2	9.2	51.5	17.1	39.0
Pennsylvania	12,801,989	20.6	8.9	51.8	18.7	40.8
Appalachian Pennsylvania	5,644,957	19.1	9.0	51.3	20.6	43.2
Non-Appalachian Pennsylvania	7,157,032	21.7	8.9	52.2	17.2	39.2
South Carolina	5,148,714	21.6	9.1	51.1	18.2	39.9
Appalachian South Carolina	1,309,615	22.3	9.5	51.1	17.1	38.9
Non-Appalachian South Carolina	3,839,099	21.3	8.9	51.2	18.6	40.2
Tennessee	6,829,174	22.1	9.0	52.2	16.7	39.0
Appalachian Tennessee	2,938,971	20.5	8.8	51.1	19.5	42.0
Non-Appalachian Tennessee	3,890,203	23.3	9.1	53.0	14.6	37.0
Virginia	8,535,519	21.8	9.4	52.9	15.9	38.6
Appalachian Virginia	741,895	18.1	11.0	49.5	21.5	43.8
Non-Appalachian Virginia	7,793,624	22.2	9.2	53.3	15.4	38.2
West Virginia (entire state)	1,792,147	20.1	8.6	50.9	20.5	42.9

Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

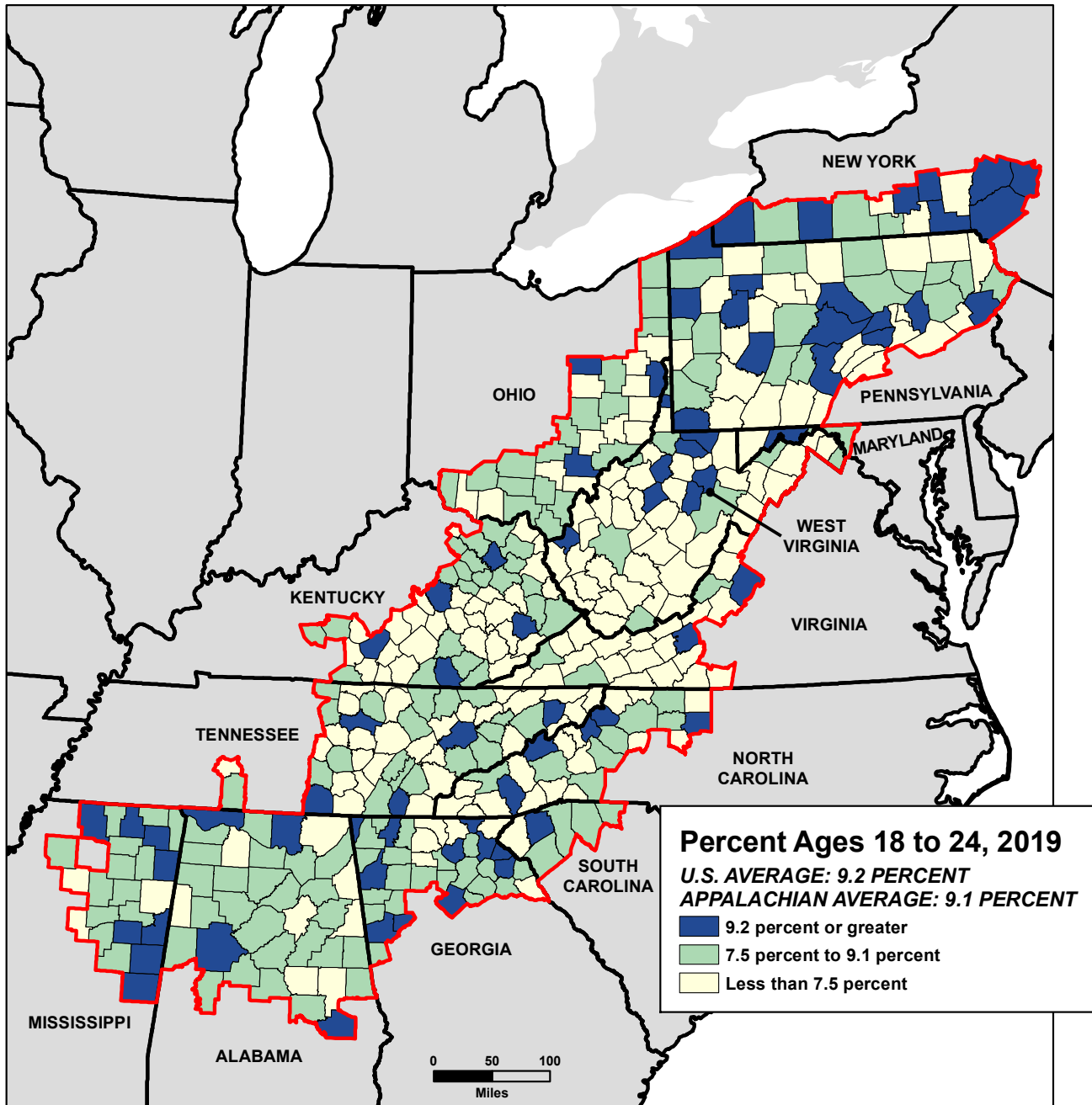
Figure 2.1: Percent of Population in the Appalachian Region Under Age 18, July 1, 2019



Map Title: Percent of Population in the Appalachian Region Under Age 18, July 1, 2019
 Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

As of mid-2019, the share of children and youth under age 18 in the Appalachian population was slightly below the national average of 22.3 percent. And the share was actually less than 20 percent in 175 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 102 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, 2019

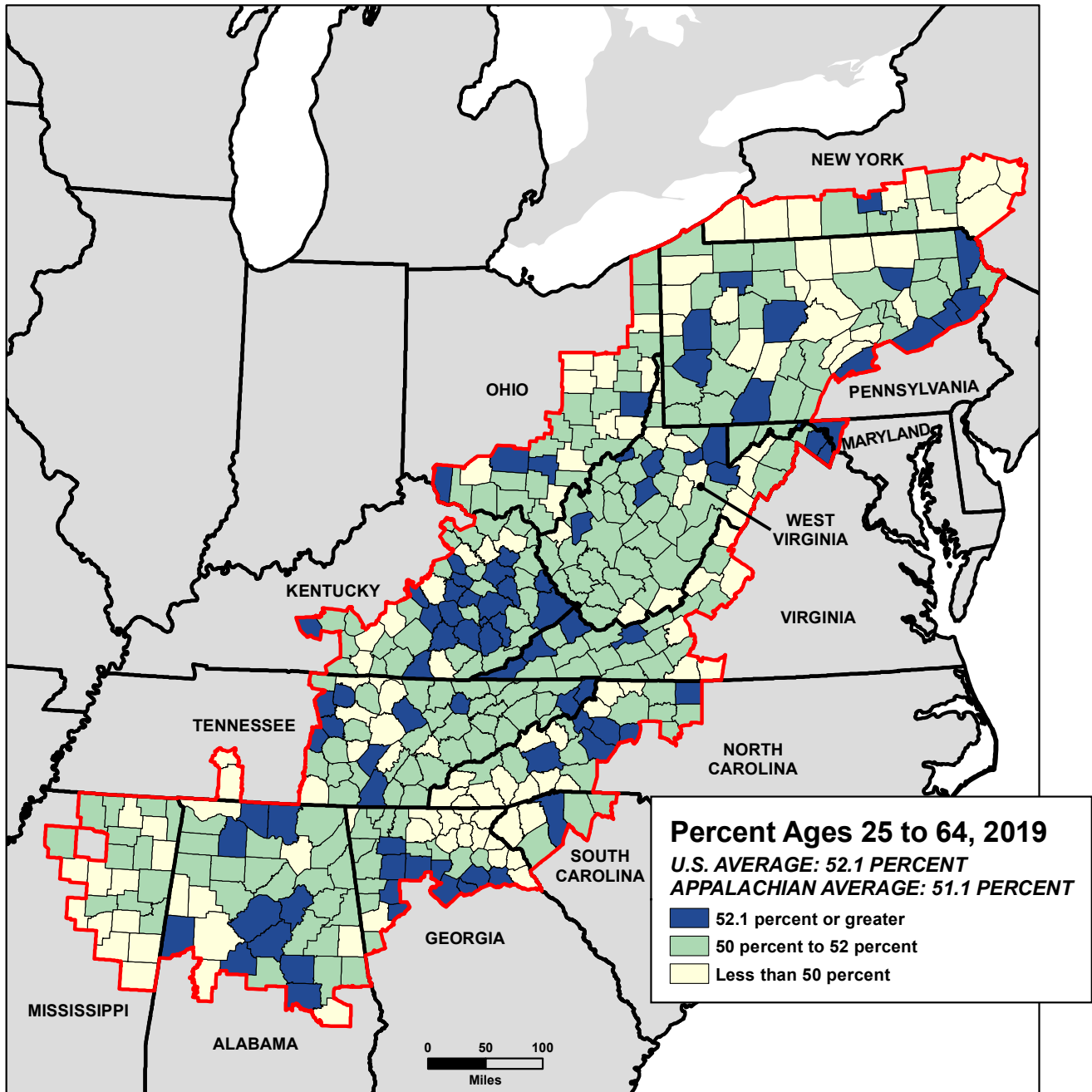


Map Title: Percent of Population in the Appalachian Region Ages 18 to 24, July 1, 2019

Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

Although the share of young adults (ages 18 to 24) in Appalachia roughly equaled the national average in 2019, there were great variations within the Region. For example, persons in this age group made up at least 15 percent of the population in 19 counties. Nearly all of these counties are home to colleges and universities such as Pennsylvania State University (Centre County, Pennsylvania); Virginia Tech (Montgomery County, Virginia); and Appalachian State University (Watauga County, North Carolina). In contrast, 18-to-24-year-olds made up less than 7.5 percent of the population in 188 Appalachian counties. Of the counties in this latter group, 134 were outside metropolitan areas and 58 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, 2019

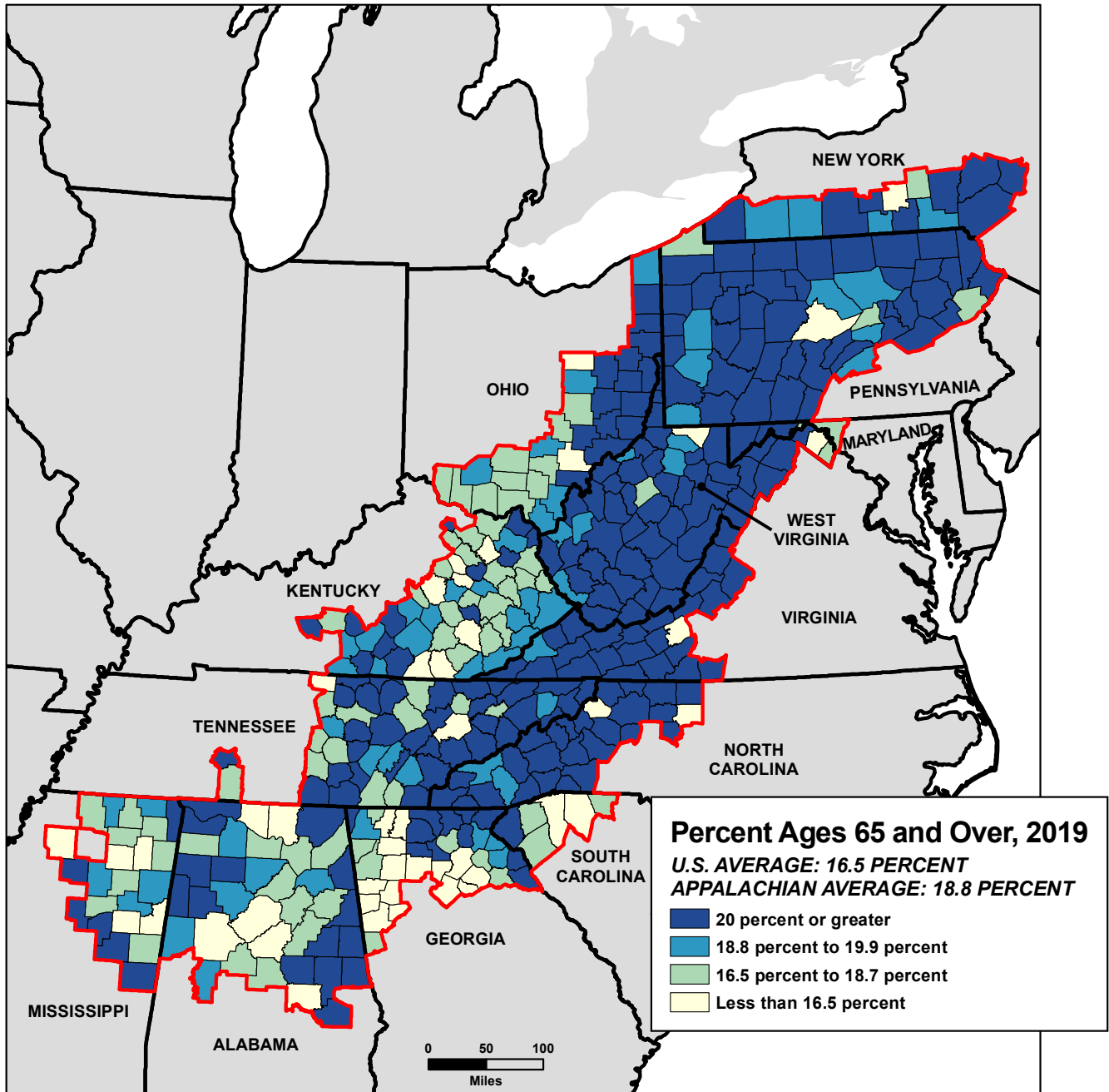


Map Title: Percent of Population in the Appalachian Region Ages 25 to 64, July 1, 2019

Data Source: U.S. Census Bureau, Vintage 2019 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 2019. And in 86 of the 420 Appalachian counties, the percentage of persons in this age group matched or exceeded the national average. But there were 121 counties in the Region (98 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 Oktibbeha County, Mississippi, home to Mississippi State University—house colleges and universities (and thus had a high share of their populations in the 18-to-24 age range).

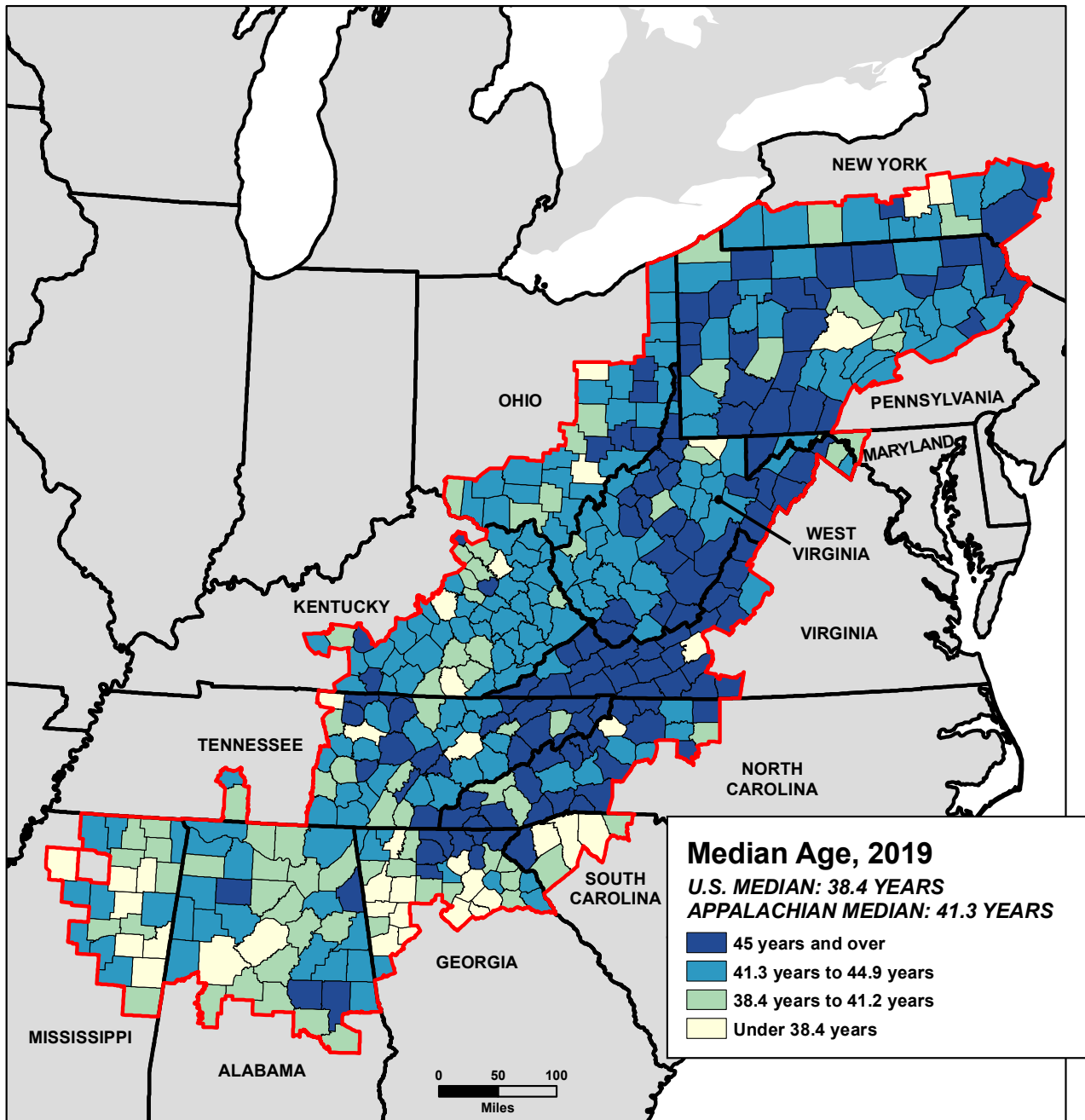
Figure 2.4: Percent of Population in the Appalachian Region Ages 65 and Over, July 1, 2019



Map Title: Percent of Population in the Appalachian Region Ages 65 and Over, July 1, 2019
 Data Source: U.S. Census Bureau, Vintage 2019 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 2019. Moreover, the percentage of persons in this age group matched or exceeded the U.S. share in 374 of the 420 Appalachian counties—and the overall Region share (18.8 percent) in 298 of them. In fact, older persons made up at least 20 percent of the population in 236 Appalachian counties, two-thirds of which were outside metropolitan areas. In contrast, most of the 46 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, 2019



Map Title: Median Age of Persons in the Appalachian Region, July 1, 2019
 Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

At just over 41 years, the median age of the Appalachian population was nearly three years older than that of the United States as of mid-2019. 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 133 counties—95 of which were outside metro areas—the median age was at least 45 years. Of the 38 counties with populations whose median age was younger than the national median, 24 were in Southern Appalachia—the only subregion where the overall age structure roughly resembled that of the nation. (Appalachian Georgia alone had 12 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 Athens County, Ohio, home to Ohio 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, 2019

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	- 1.7	- 0.7	- 0.9	+ 3.4	+ 1.2
Appalachian Region	- 1.4	- 0.6	- 1.7	+ 3.6	+ 1.4
Subregions					
Northern Appalachia	- 1.4	- 0.8	- 1.5	+ 3.7	+ 1.2
North Central Appalachia	- 1.2	- 0.6	- 2.3	+ 4.2	+ 1.7
Central Appalachia	- 0.9	- 0.5	- 2.7	+ 4.1	+ 1.9
South Central Appalachia	- 1.6	- 0.4	- 1.9	+ 3.9	+ 1.7
Southern Appalachia	- 1.7	- 0.4	- 1.3	+ 3.5	+ 1.7
County Types					
Large Metros (pop. 1 million +)	- 1.6	- 0.4	- 1.4	+ 3.3	+ 1.2
Small Metros (pop. <1 million)	- 1.4	- 0.7	- 1.5	+ 3.6	+ 1.4
Nonmetro, Adjacent to Large Metros	- 1.5	- 0.6	- 1.7	+ 3.8	+ 1.7
Nonmetro, Adjacent to Small Metros	- 1.4	- 0.4	- 2.3	+ 4.1	+ 2.0
Rural (nonmetro, not adj. to a metro)	- 1.3	- 0.6	- 2.3	+ 4.2	+ 1.8
Alabama	- 1.4	- 0.8	- 1.2	+ 3.5	+ 1.5
Appalachian Alabama	- 1.3	- 0.8	- 1.3	+ 3.5	+ 1.4
Non-Appalachian Alabama	- 1.7	- 0.9	- 1.2	+ 3.7	+ 1.7
Georgia	- 2.0	- 0.4	- 1.0	+ 3.6	+ 1.7
Appalachian Georgia	- 2.5	+ 0.3	- 1.4	+ 3.7	+ 2.0
Non-Appalachian Georgia	- 1.9	- 0.8	- 0.9	+ 3.5	+ 1.6
Kentucky	- 1.1	- 0.3	- 2.1	+ 3.5	+ 1.0
Appalachian Kentucky	- 0.8	- 0.5	- 2.5	+ 3.8	+ 1.6
Non-Appalachian Kentucky	- 1.3	- 0.2	- 1.9	+ 3.3	+ 1.0
Maryland	- 1.3	- 1.0	- 1.3	+ 3.6	+ 1.1
Appalachian Maryland	- 1.2	- 0.6	- 1.5	+ 3.2	+ 1.2
Non-Appalachian Maryland	- 1.3	- 1.0	- 1.3	+ 3.6	+ 1.2
Mississippi	- 1.9	- 0.8	- 0.8	+ 3.5	+ 2.0
Appalachian Mississippi	- 1.7	- 0.6	- 0.9	+ 3.1	+ 1.4
Non-Appalachian Mississippi	- 2.0	- 0.9	- 0.8	+ 3.6	+ 2.1
New York	- 1.6	- 1.1	- 0.7	+ 3.3	+ 1.2
Appalachian New York	- 1.8	- 0.3	- 2.2	+ 4.2	+ 1.2
Non-Appalachian New York	- 1.5	- 1.2	- 0.6	+ 3.4	+ 1.3
North Carolina	- 1.9	- 0.6	- 1.3	+ 3.7	+ 1.7
Appalachian North Carolina	- 2.1	- 0.3	- 1.9	+ 4.4	+ 2.3
Non-Appalachian North Carolina	- 1.8	- 0.5	- 1.2	+ 3.7	+ 1.7
Ohio	- 1.5	- 0.5	- 1.4	+ 3.4	+ 0.7
Appalachian Ohio	- 1.5	- 0.4	- 1.9	+ 4.0	+ 1.5
Non-Appalachian Ohio	- 1.5	- 0.5	- 1.3	+ 3.3	+ 0.7
Pennsylvania	- 1.3	- 1.0	- 0.9	+ 3.3	+ 0.6
Appalachian Pennsylvania	- 1.4	- 1.0	- 1.2	+ 3.6	+ 1.2
Non-Appalachian Pennsylvania	- 1.4	- 1.0	- 0.6	+ 3.1	+ 0.6
South Carolina	- 1.7	- 1.2	- 1.6	+ 4.5	+ 2.0
Appalachian South Carolina	- 1.3	- 0.7	- 1.2	+ 3.2	+ 0.9
Non-Appalachian South Carolina	- 1.9	- 1.4	- 1.6	+ 4.9	+ 2.4
Tennessee	- 1.4	- 0.6	- 1.2	+ 3.2	+ 0.9
Appalachian Tennessee	- 1.3	- 0.4	- 1.9	+ 3.5	+ 1.4
Non-Appalachian Tennessee	- 1.5	- 0.7	- 0.8	+ 3.0	+ 1.0
Virginia	- 1.3	- 0.6	- 1.7	+ 3.6	+ 1.1
Appalachian Virginia	- 1.4	- 0.7	- 2.5	+ 4.7	+ 2.5
Non-Appalachian Virginia	- 1.3	- 0.6	- 1.6	+ 3.6	+ 1.2
West Virginia (entire state)	- 0.8	- 0.5	- 3.0	+ 4.4	+ 1.6

Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

TRENDS IN AGE

- Like the United States as a whole, Appalachia's population became older between 2010 and 2019 (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 more than a year to 41.3 years over the nine-year period.
- Some parts of the Appalachian Region are aging faster than others. For example, the median age rose by at least two years in the Appalachian sections of Virginia, North Carolina, and Georgia. Yet while the median age in 2019 was almost 44 years in Appalachian North Carolina and Virginia, it was 38 years in Georgia—still slightly below the U.S. median of 38.4 years (see Table 2.1). Meanwhile, the median age in Appalachian counties outside metropolitan areas rose slightly faster than in the Region's metropolitan counties. Yet among almost all Appalachian subregions and county types, as well as in the Appalachian portions of most states 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 more than a full percentage point lower in mid-2019 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 2019, the share of residents in the oldest age group increased by more than three 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 Transylvania County, North Carolina; Oconee County, South Carolina; and Fentress County, Tennessee—have been designated as "retirement" counties by the Economic Research Service of the U.S. Department of Agriculture.

CHAPTER 3: RACE AND HISPANIC ORIGIN

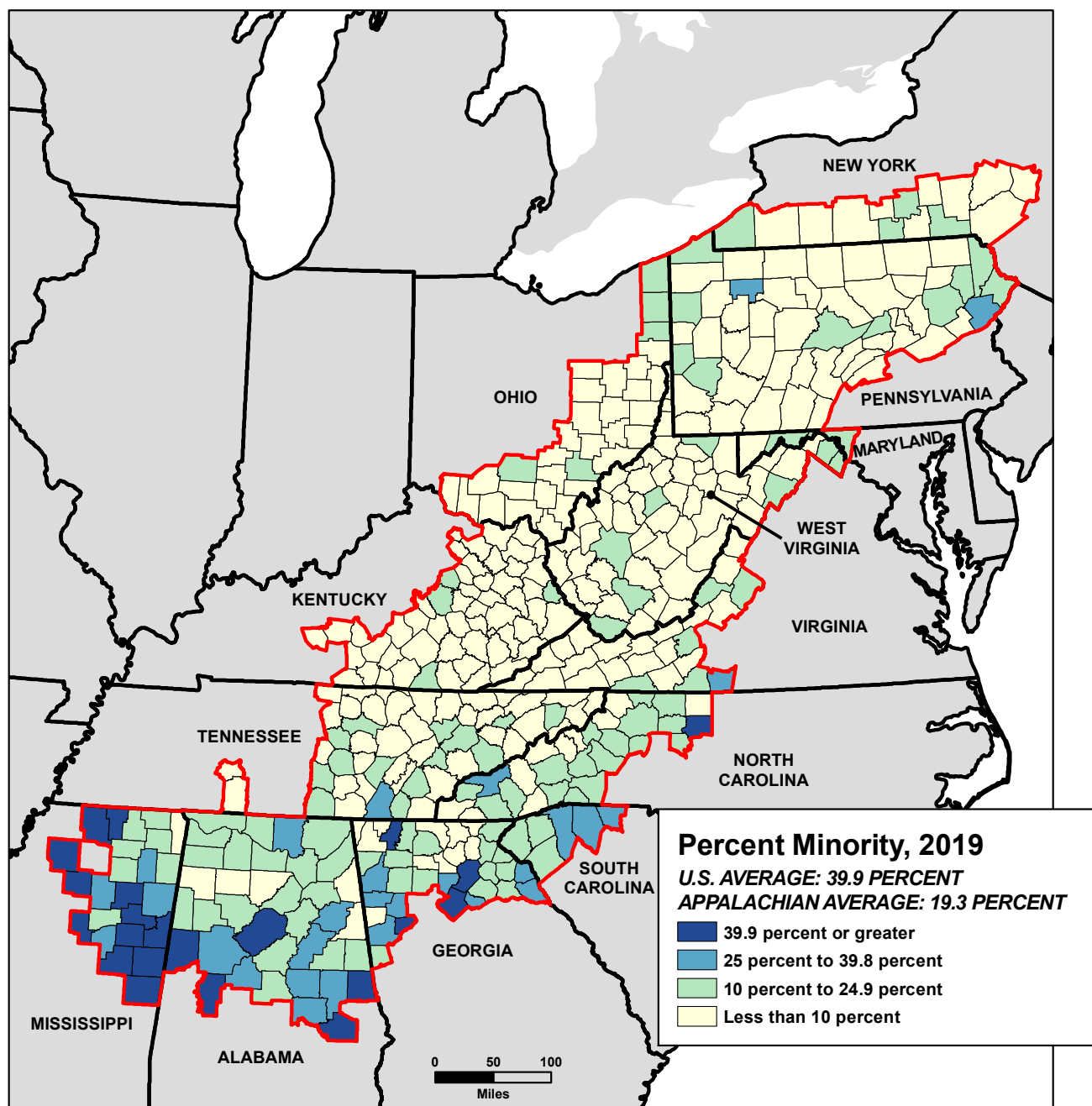
Table 3.1: Population in the Appalachian Region by Race and Hispanic Origin, July 1, 2019

Population by Race and Hispanic Origin	Total Population, July 1, 2019	Percent of Population				
		White Alone, Not Hispanic	Minority			
			Total	Black Alone, Not Hispanic	Hispanic or Latino	Other, Not Hispanic
United States	328,239,523	60.1	39.9	12.5	18.5	8.9
Appalachian Region	25,717,174	80.7	19.3	9.9	5.4	3.9
Subregions						
Northern Appalachia	8,131,869	87.2	12.8	5.5	3.6	3.7
North Central Appalachia	2,385,186	92.2	7.8	3.1	1.7	2.9
Central Appalachia	1,855,390	94.3	5.7	2.0	1.8	2.0
South Central Appalachia	4,936,819	83.7	16.3	7.1	5.7	3.5
Southern Appalachia	8,407,910	66.4	33.6	19.5	8.9	5.1
County Types						
Large Metros (pop. 1 million +)	6,167,428	70.6	29.4	16.3	7.0	6.1
Small Metros (pop. <1 million)	10,908,974	80.4	19.6	9.7	6.1	3.8
Nonmetro, Adjacent to Large Metros	2,203,175	87.7	12.3	5.3	4.1	2.8
Nonmetro, Adjacent to Small Metros	3,950,918	89.0	11.0	4.5	3.9	2.6
Rural (nonmetro, not adj. to a metro)	2,486,679	87.9	12.1	7.8	2.3	2.1
Alabama	4,903,185	65.3	34.7	26.5	4.6	3.7
Appalachian Alabama	3,145,252	69.1	30.9	22.4	5.1	3.5
Non-Appalachian Alabama	1,757,933	58.5	41.5	33.8	3.6	4.1
Georgia	10,617,423	52.0	48.0	31.6	9.9	6.5
Appalachian Georgia	3,329,896	62.3	37.7	15.6	14.5	7.7
Non-Appalachian Georgia	7,287,527	47.3	52.7	39.0	7.8	5.9
Kentucky	4,467,673	84.1	15.9	8.2	3.9	3.7
Appalachian Kentucky	1,159,828	94.3	5.7	1.9	1.8	2.0
Non-Appalachian Kentucky	3,307,845	80.6	19.4	10.5	4.6	4.3
Maryland	6,045,680	50.0	50.0	29.9	10.6	9.4
Appalachian Maryland	250,479	82.2	17.8	9.6	4.2	4.0
Non-Appalachian Maryland	5,795,201	48.7	51.3	30.8	10.9	9.6
Mississippi	2,976,149	56.4	43.6	37.4	3.4	2.8
Appalachian Mississippi	623,147	63.2	36.8	31.8	2.9	2.2
Non-Appalachian Mississippi	2,353,002	54.6	45.4	38.9	3.5	3.0
New York	19,453,561	55.3	44.7	14.5	19.3	11.0
Appalachian New York	1,016,039	88.0	12.0	2.9	3.9	5.1
Non-Appalachian New York	18,437,522	53.5	46.5	15.1	20.1	11.3
North Carolina	10,488,084	62.6	37.4	21.4	9.8	6.2
Appalachian North Carolina	1,776,786	79.4	20.6	8.8	8.0	3.8
Non-Appalachian North Carolina	8,711,298	59.2	40.8	23.9	10.1	6.7
Ohio	11,689,100	78.4	21.6	12.7	4.0	4.9
Appalachian Ohio	1,988,162	90.7	9.3	4.3	2.3	2.7
Non-Appalachian Ohio	9,700,938	75.9	24.1	14.4	4.4	5.3
Pennsylvania	12,801,989	75.7	24.3	10.9	7.8	5.6
Appalachian Pennsylvania	5,644,957	87.0	13.0	5.7	3.7	3.6
Non-Appalachian Pennsylvania	7,157,032	66.8	33.2	15.0	11.1	7.1
South Carolina	5,148,714	63.7	36.3	26.4	6.0	4.0
Appalachian South Carolina	1,309,615	72.2	27.8	16.6	7.1	4.1
Non-Appalachian South Carolina	3,839,099	60.7	39.3	29.8	5.6	3.9
Tennessee	6,829,174	73.5	26.5	16.7	5.7	4.0
Appalachian Tennessee	2,938,971	86.9	13.1	5.5	4.4	3.2
Non-Appalachian Tennessee	3,890,203	63.4	36.6	25.2	6.7	4.7
Virginia	8,535,519	61.2	38.8	19.1	9.8	9.9
Appalachian Virginia	741,895	88.8	11.2	5.5	2.6	3.0
Non-Appalachian Virginia	7,793,624	58.6	41.4	20.4	10.5	10.5
West Virginia (entire state)	1,792,147	92.0	8.0	3.5	1.7	2.8

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 2019 Population Estimates.

Figure 3.1: Percent of Population in the Appalachian Region That Is Minority, July 1, 2019

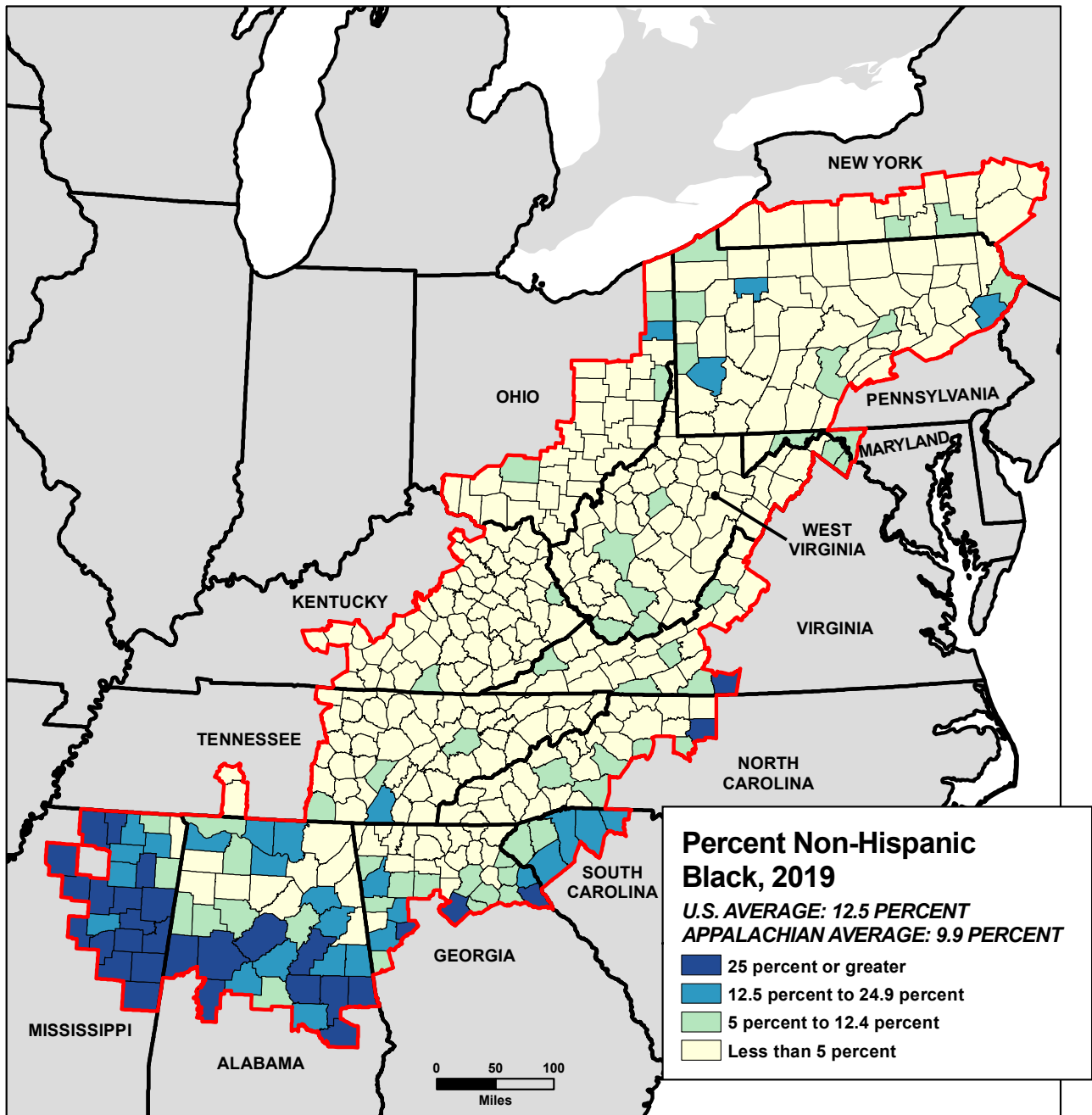


Map Title: Percent of Population in the Appalachian Region That Is Minority, July 1, 2019

Data Source: U.S. Census Bureau, Vintage 2019 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-2019. There were just 22 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 39.9 percent.

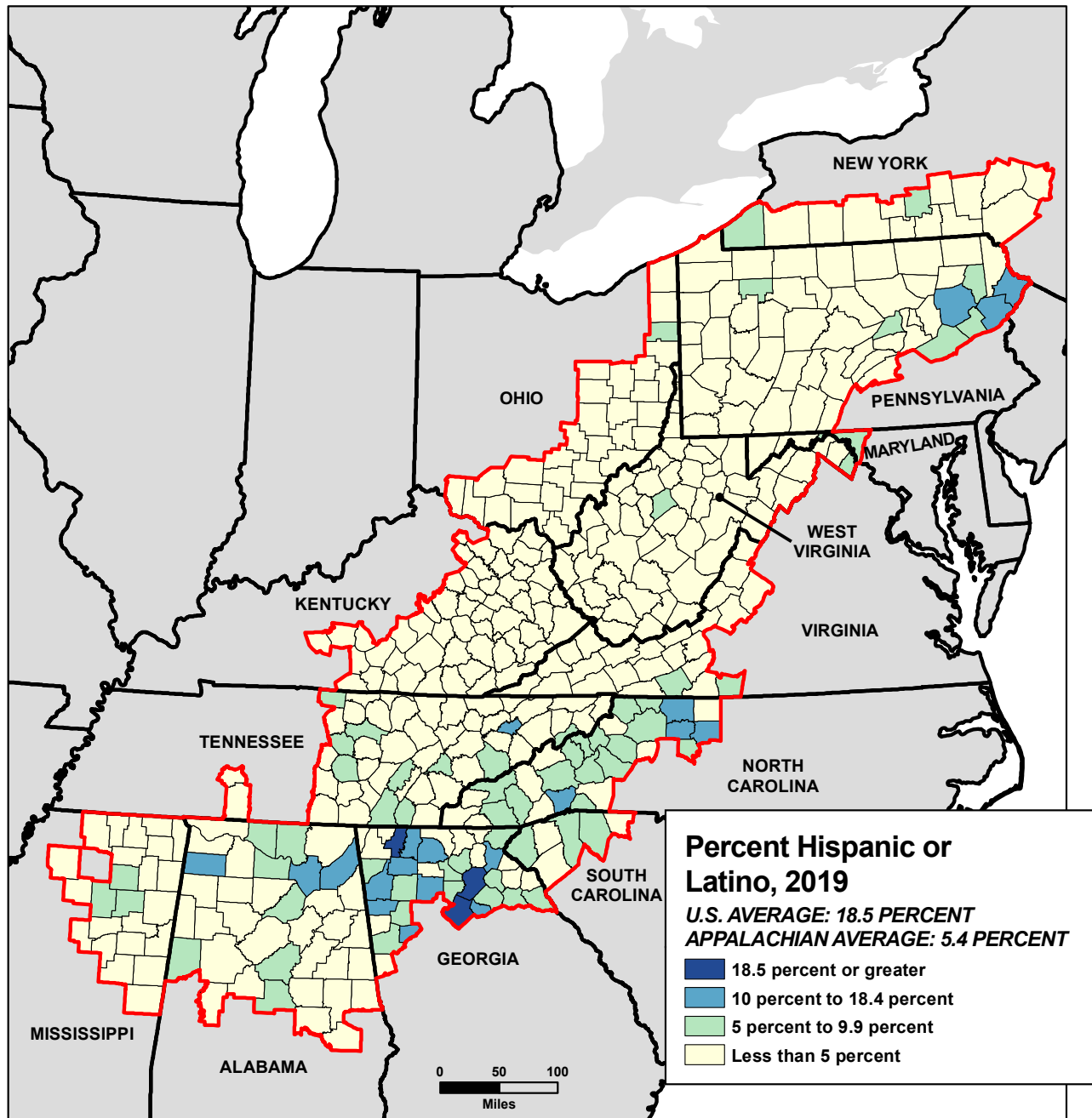
Figure 3.2: Percent of Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2019



Map Title: Percent of Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2019
 Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

While non-Hispanic African Americans have remained the largest single minority group in Appalachia as of 2019, 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, 2019



Map Title: Percent of Population in the Appalachian Region That Is Hispanic or Latino, July 1, 2019
 Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

Although Hispanics are now the largest minority group in the United States, they made up only one in 19 residents in the Appalachian Region in 2019. The county patterns reflect this fact, as Hispanics were at least 5 percent of the population in just 86 of Appalachia's 420 counties, 71 of which were in Southern and South Central Appalachia. Moreover, those two subregions had 20 of the 23 counties where Latinos made up at least 10 percent of the population. And just three Appalachian counties (Gwinnett, Hall, and Whitfield—all in Georgia) had Latino population shares that matched or exceeded the national average.

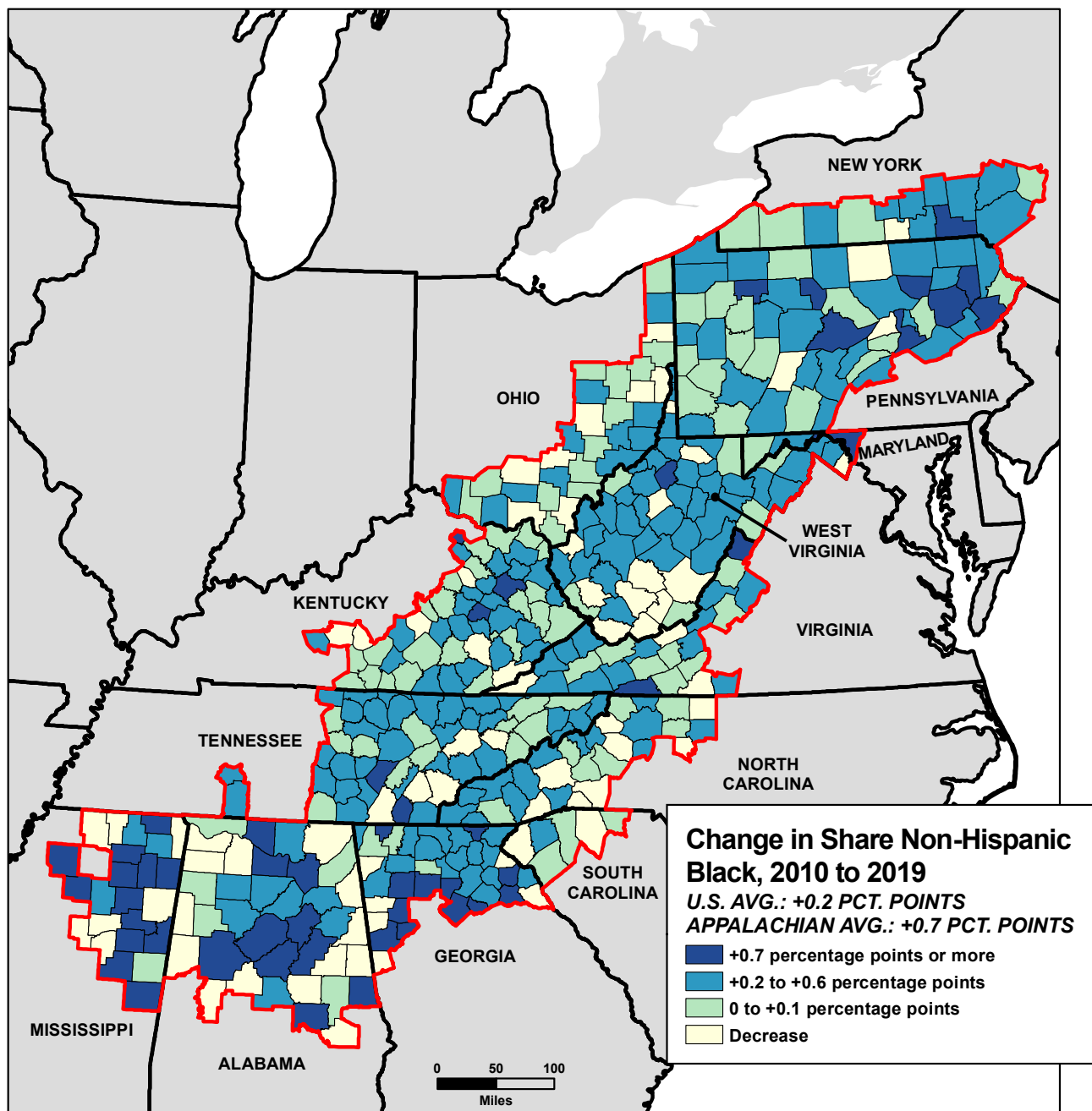
Table 3.2: Percentage Point Change in the Share of the Population in the Appalachian Region, by Race and Hispanic Origin, July 1, 2010 to July 1, 2019

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	- 3.7	+ 3.7	+ 0.2	+ 2.1	+ 1.4
Appalachian Region	- 2.9	+ 2.9	+ 0.7	+ 1.2	+ 0.9
Subregions					
Northern Appalachia	- 2.4	+ 2.4	+ 0.3	+ 1.2	+ 0.9
North Central Appalachia	- 1.2	+ 1.2	+ 0.1	+ 0.5	+ 0.5
Central Appalachia	- 1.2	+ 1.2	+ 0.2	+ 0.5	+ 0.6
South Central Appalachia	- 2.0	+ 2.0	+ 0.2	+ 1.1	+ 0.7
Southern Appalachia	- 3.6	+ 3.6	+ 1.0	+ 1.3	+ 1.2
County Types					
Large Metros (pop. 1 million +)	- 4.5	+ 4.5	+ 1.5	+ 1.3	+ 1.7
Small Metros (pop. <1 million)	- 2.8	+ 2.8	+ 0.6	+ 1.4	+ 0.8
Nonmetro, Adjacent to Large Metros	- 1.7	+ 1.7	+ 0.2	+ 0.9	+ 0.6
Nonmetro, Adjacent to Small Metros	- 1.6	+ 1.6	+ 0.1	+ 0.9	+ 0.6
Rural (nonmetro, not adj. to a metro)	- 1.4	+ 1.4	+ 0.4	+ 0.6	+ 0.5
Alabama	- 1.8	+ 1.8	+ 0.4	+ 0.7	+ 0.8
Appalachian Alabama	- 2.0	+ 2.0	+ 0.7	+ 0.7	+ 0.7
Non-Appalachian Alabama	- 1.4	+ 1.4	- 0.1	+ 0.6	+ 0.9
Georgia	- 3.9	+ 3.9	+ 1.4	+ 1.1	+ 1.5
Appalachian Georgia	- 5.9	+ 5.9	+ 2.4	+ 1.8	+ 1.9
Non-Appalachian Georgia	- 3.3	+ 3.3	+ 1.4	+ 0.7	+ 1.2
Kentucky	- 2.3	+ 2.3	+ 0.5	+ 0.8	+ 0.9
Appalachian Kentucky	- 1.1	+ 1.1	+ 0.1	+ 0.4	+ 0.6
Non-Appalachian Kentucky	- 2.4	+ 2.4	+ 0.5	+ 0.9	+ 1.0
Maryland	- 4.7	+ 4.7	+ 0.8	+ 2.4	+ 1.5
Appalachian Maryland	- 4.2	+ 4.2	+ 1.6	+ 1.6	+ 1.0
Non-Appalachian Maryland	- 4.6	+ 4.6	+ 0.7	+ 2.4	+ 1.4
Mississippi	- 1.6	+ 1.6	+ 0.5	+ 0.6	+ 0.5
Appalachian Mississippi	- 1.6	+ 1.6	+ 0.5	+ 0.6	+ 0.6
Non-Appalachian Mississippi	- 1.6	+ 1.6	+ 0.5	+ 0.6	+ 0.5
New York	- 3.1	+ 3.1	- 0.1	+ 1.6	+ 1.7
Appalachian New York	- 2.1	+ 2.1	+ 0.3	+ 0.8	+ 0.9
Non-Appalachian New York	- 3.1	+ 3.1	- 0.2	+ 1.6	+ 1.7
North Carolina	- 2.7	+ 2.7	+ 0.2	+ 1.4	+ 1.2
Appalachian North Carolina	- 1.9	+ 1.9	+ 0.2	+ 1.1	+ 0.6
Non-Appalachian North Carolina	- 2.7	+ 2.7	- 0.1	+ 1.3	+ 1.3
Ohio	- 2.8	+ 2.8	+ 0.6	+ 0.9	+ 1.3
Appalachian Ohio	- 1.2	+ 1.2	+ 0.0	+ 0.7	+ 0.5
Non-Appalachian Ohio	- 3.0	+ 3.0	+ 0.6	+ 1.0	+ 1.4
Pennsylvania	- 3.8	+ 3.8	+ 0.4	+ 2.1	+ 1.3
Appalachian Pennsylvania	- 2.6	+ 2.6	+ 0.3	+ 1.3	+ 1.0
Non-Appalachian Pennsylvania	- 4.3	+ 4.3	+ 0.2	+ 2.6	+ 1.4
South Carolina	- 0.4	+ 0.4	- 1.3	+ 0.9	+ 1.0
Appalachian South Carolina	- 2.3	+ 2.3	+ 0.1	+ 1.3	+ 1.0
Non-Appalachian South Carolina	+ 0.1	- 0.1	- 1.7	+ 0.7	+ 0.9
Tennessee	- 2.2	+ 2.2	+ 0.1	+ 1.1	+ 0.9
Appalachian Tennessee	- 1.9	+ 1.9	+ 0.1	+ 1.1	+ 0.7
Non-Appalachian Tennessee	- 2.0	+ 2.0	- 0.2	+ 1.1	+ 1.1
Virginia	- 3.7	+ 3.7	+ 0.0	+ 1.9	+ 1.8
Appalachian Virginia	- 1.7	+ 1.7	+ 0.2	+ 0.7	+ 0.7
Non-Appalachian Virginia	- 3.6	+ 3.6	- 0.2	+ 1.9	+ 1.8
West Virginia (entire state)	- 1.2	+ 1.2	+ 0.1	+ 0.5	+ 0.6

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 2019 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, 2019

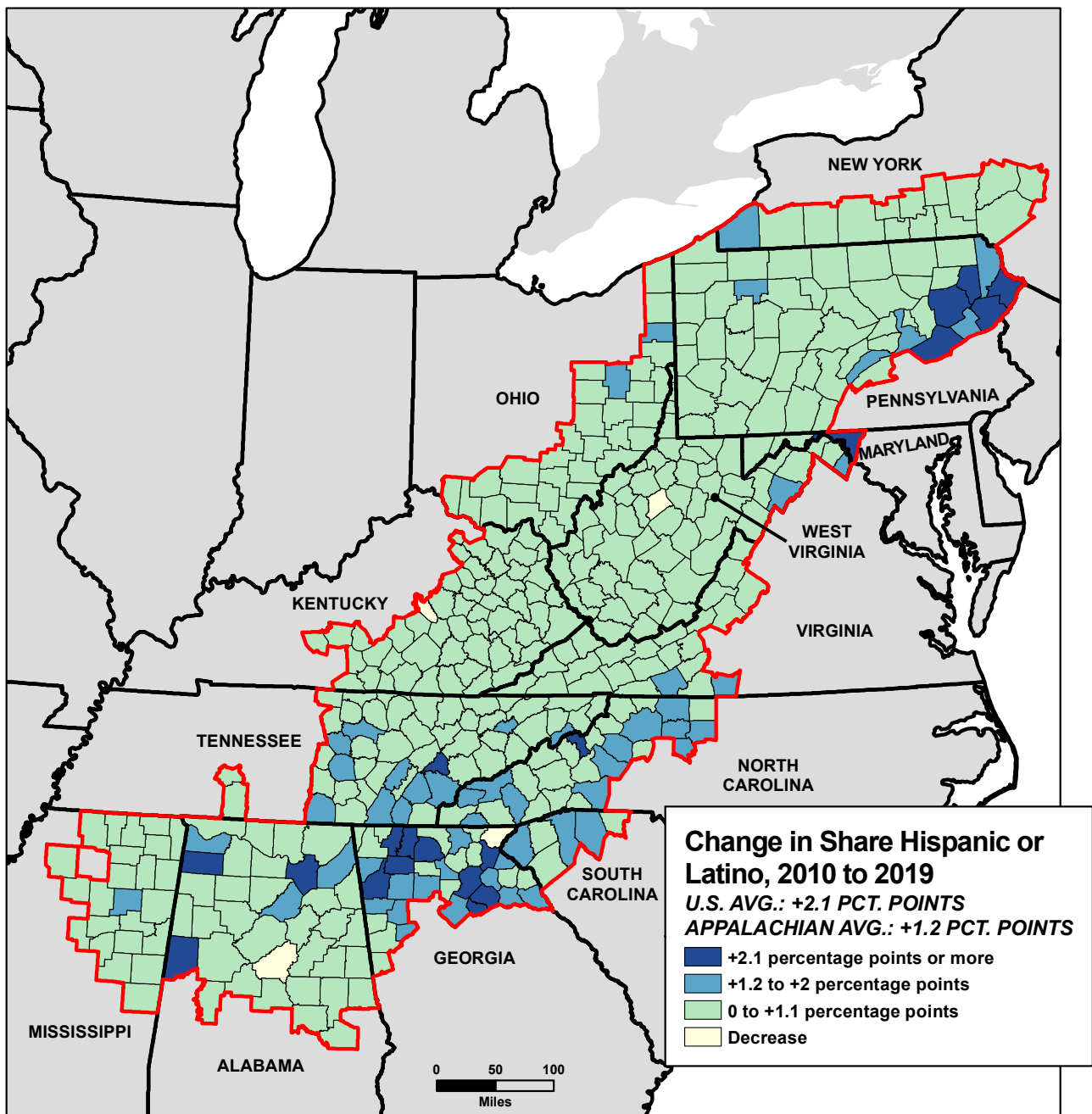


Map Title: Percentage Point Change in the Share of the Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2010 to July 1, 2019

Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

Although African Americans' share of the U.S. population barely changed between 2010 and 2019, their share of the Appalachian population increased more than half a percentage point, from 9.2 percent to 9.9 percent. And there were 53 counties—about evenly divided between those with sizeable and those with small African American concentrations—where blacks' share of the population increased by at least that much. (Most of these counties were in three states—Alabama, Georgia, and Mississippi.) Yet in 75 of Appalachia's 420 counties, the African American share of the population has actually decreased from its level in 2010. Counties in the latter group were largely scattered throughout the Appalachian Region.

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, 2019



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, 2019

Data Source: U.S. Census Bureau, Vintage 2019 Population Estimates.

The Hispanic/Latino share of the Appalachian population rose by just over one percentage point from 2010 to 2019—although this increase was noticeably below the national average over the nine-year period. Still, there were 20 counties (17 of which were in Georgia, Alabama, or Pennsylvania) where the Hispanic share of the population grew at or above the national rate of 2.1 percent. 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, 2019, 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 2.9 percentage points to 19.3 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 3.7 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 three percentage points—reaching 4.5 points in large metros. And Georgia’s Appalachian section has grown even faster: The minority share of the population increased almost six percentage points between 2010 and 2019. Not surprisingly, these three areas have minority concentrations that come close to the national minority share of almost 40 percent (34 percent for Southern Appalachia, 29 percent for counties in large metros, and 38 percent for Appalachian Georgia).
- Although African Americans comprise the largest minority group in Appalachia, Hispanics generally have fueled much (and in some areas, most) of the minority increase. The Hispanic/Latino share of the Appalachian population rose 1.2 percentage points between mid-2010 and mid-2019, compared with a 0.7 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 the black share of the total population—and showed among the largest increases in their Latino share. (Interestingly, blacks fueled a slightly larger share of the minority increase than Latinos did in large metros and Appalachian Georgia.)

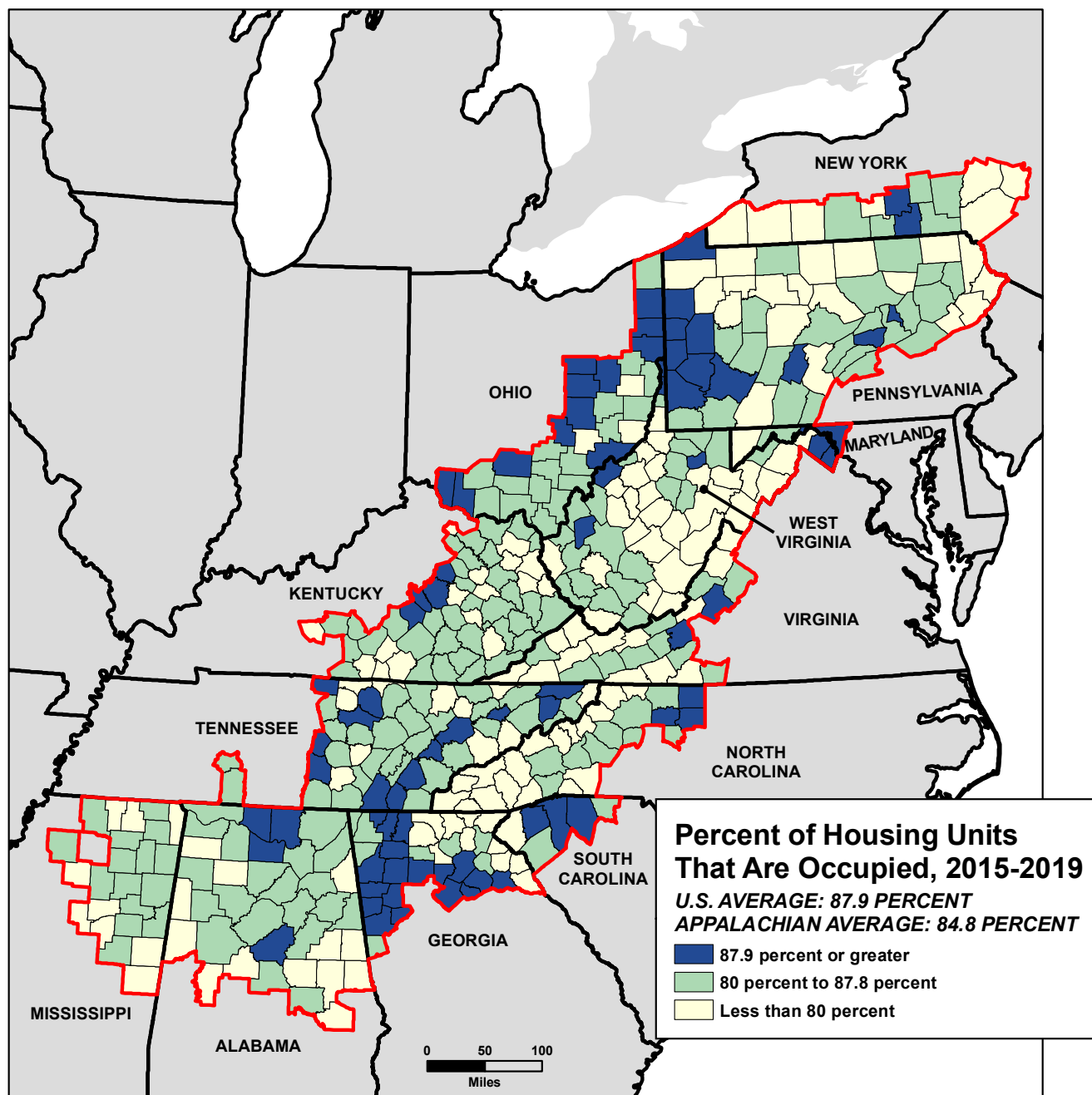
CHAPTER 4: HOUSING OCCUPANCY, TENURE, AND TYPE

Table 4.1: Occupancy and Tenure of Housing Units in the Appalachian Region, 2015-2019

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	137,428,986	120,756,048	87.9	12.1	64.0	36.0
Appalachian Region	11,850,045	10,048,680	84.8	15.2	70.6	29.4
Subregions						
Northern Appalachia	3,977,443	3,362,737	84.5	15.5	70.6	29.4
North Central Appalachia	1,132,164	951,744	84.1	15.9	72.3	27.7
Central Appalachia	895,471	733,678	81.9	18.1	72.0	28.0
South Central Appalachia	2,341,303	1,963,797	83.9	16.1	69.5	30.5
Southern Appalachia	3,503,664	3,036,724	86.7	13.3	70.2	29.8
County Types						
Large Metros (pop. 1 million +)	2,631,106	2,357,023	89.6	10.4	70.4	29.6
Small Metros (pop. <1 million)	4,928,888	4,278,290	86.8	13.2	69.0	31.0
Nonmetro, Adjacent to Large Metros	1,042,609	858,262	82.3	17.7	71.8	28.2
Nonmetro, Adjacent to Small Metros	1,978,998	1,572,387	79.5	20.5	73.2	26.8
Rural (nonmetro, not adj. to a metro)	1,268,444	982,718	77.5	22.5	72.3	27.7
Alabama	2,255,026	1,867,893	82.8	17.2	68.8	31.2
Appalachian Alabama	1,425,636	1,201,680	84.3	15.7	70.3	29.7
Non-Appalachian Alabama	829,390	666,213	80.3	19.7	66.0	34.0
Georgia	4,283,477	3,758,798	87.8	12.2	63.3	36.7
Appalachian Georgia	1,244,527	1,113,264	89.5	10.5	70.8	29.2
Non-Appalachian Georgia	3,038,950	2,645,534	87.1	12.9	60.1	39.9
Kentucky	1,983,949	1,734,618	87.4	12.6	67.2	32.8
Appalachian Kentucky	548,012	453,472	82.7	17.3	70.9	29.1
Non-Appalachian Kentucky	1,435,937	1,281,146	89.2	10.8	65.9	34.1
Maryland	2,448,422	2,205,204	90.1	9.9	66.9	33.1
Appalachian Maryland	113,744	95,859	84.3	15.7	68.4	31.6
Non-Appalachian Maryland	2,334,678	2,109,345	90.3	9.7	66.8	33.2
Mississippi	1,322,808	1,104,394	83.5	16.5	68.2	31.8
Appalachian Mississippi	285,386	234,751	82.3	17.7	69.6	30.4
Non-Appalachian Mississippi	1,037,422	869,643	83.8	16.2	67.8	32.2
New York	8,322,722	7,343,234	88.2	11.8	53.9	46.1
Appalachian New York	517,499	415,551	80.3	19.7	69.0	31.0
Non-Appalachian New York	7,805,223	6,927,683	88.8	11.2	53.0	47.0
North Carolina	4,627,089	3,965,482	85.7	14.3	65.2	34.8
Appalachian North Carolina	889,250	716,083	80.5	19.5	69.5	30.5
Non-Appalachian North Carolina	3,737,839	3,249,399	86.9	13.1	64.3	35.7
Ohio	5,202,304	4,676,358	89.9	10.1	66.1	33.9
Appalachian Ohio	908,191	792,013	87.2	12.8	71.3	28.7
Non-Appalachian Ohio	4,294,113	3,884,345	90.5	9.5	65.0	35.0
Pennsylvania	5,693,314	5,053,106	88.8	11.2	68.9	31.1
Appalachian Pennsylvania	2,770,315	2,351,466	84.9	15.1	70.8	29.2
Non-Appalachian Pennsylvania	2,922,999	2,701,640	92.4	7.6	67.2	32.8
South Carolina	2,286,826	1,921,862	84.0	16.0	69.4	30.6
Appalachian South Carolina	548,115	487,029	88.9	11.1	69.3	30.7
Non-Appalachian South Carolina	1,738,711	1,434,833	82.5	17.5	69.4	30.6
Tennessee	2,963,486	2,597,292	87.6	12.4	66.3	33.7
Appalachian Tennessee	1,338,073	1,155,507	86.4	13.6	69.6	30.4
Non-Appalachian Tennessee	1,625,413	1,441,785	88.7	11.3	63.6	36.4
Virginia	3,514,032	3,151,045	89.7	10.3	66.3	33.7
Appalachian Virginia	369,115	299,420	81.1	18.9	71.3	28.7
Non-Appalachian Virginia	3,144,917	2,851,625	90.7	9.3	65.7	34.3
West Virginia (entire state)	892,182	732,585	82.1	17.9	73.2	26.8

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Figure 4.1: Percent of Housing Units in the Appalachian Region That Are Occupied, 2015-2019

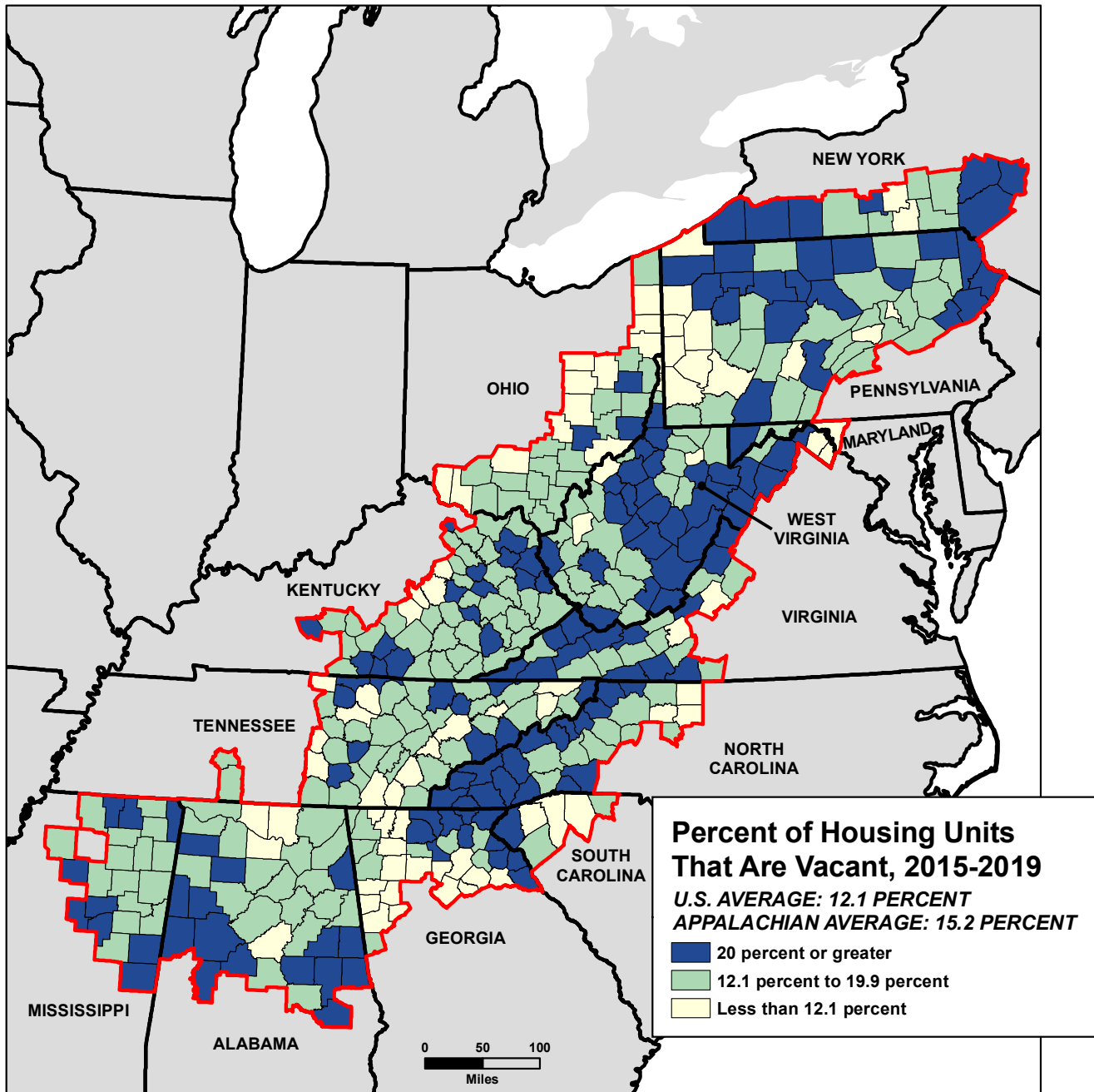


Map Title: Percent of Housing Units in the Appalachian Region That Are Occupied, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Although the home occupancy rate during the 2015-2019 period was slightly lower in Appalachia than in the United States as a whole, there were 80 counties in the Region that had occupancy rates matching or exceeding the national average. And while they were scattered throughout the Region, 60 of these counties were in metropolitan areas, such as Pittsburgh, the Atlanta and Birmingham suburbs, exurban Cincinnati, and Greenville, South Carolina. Conversely, less than four-fifths of housing units were occupied in 149 Appalachian counties—127 of which were located outside metropolitan areas.

Figure 4.2: Percent of Housing Units in the Appalachian Region That Are Vacant, 2015-2019

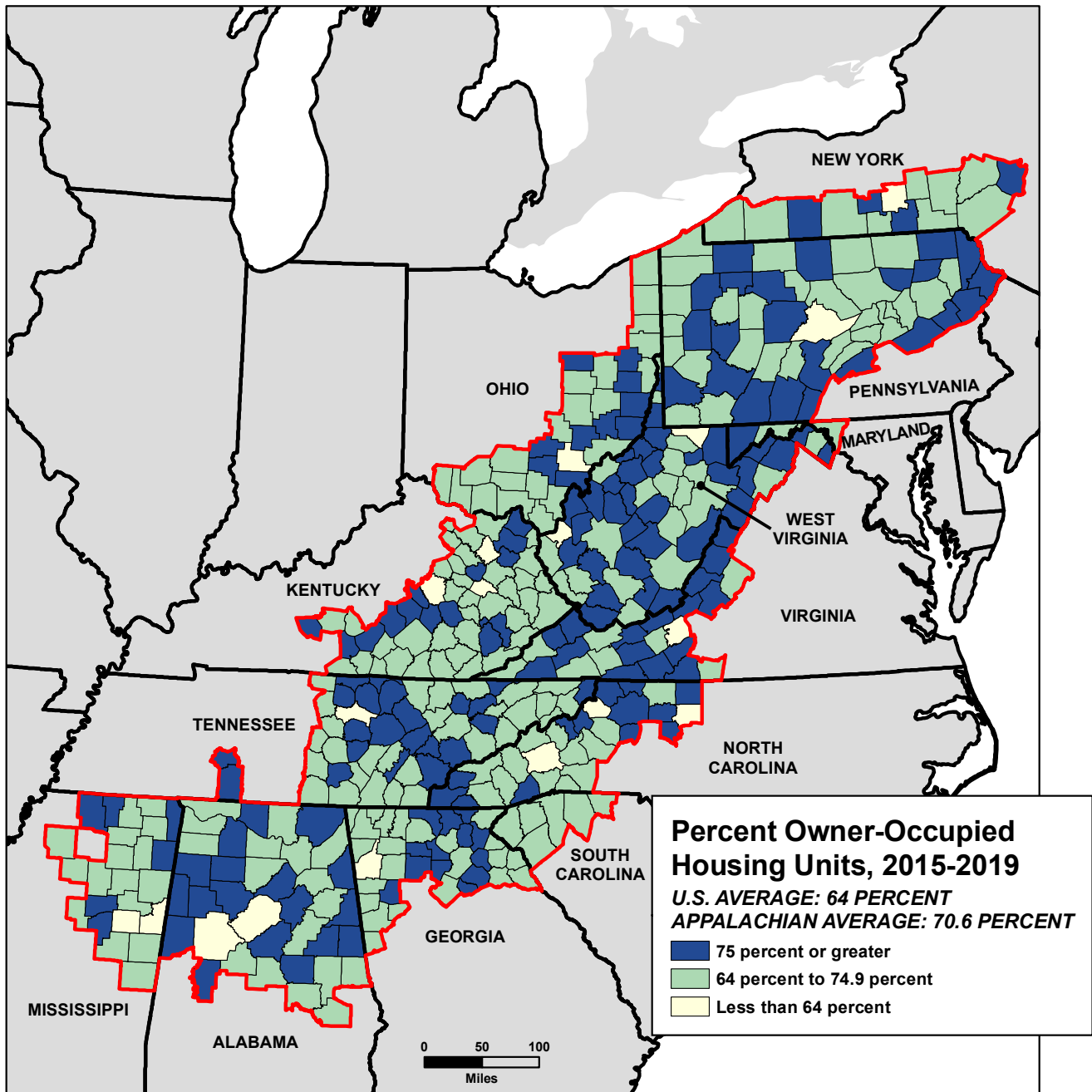


Map Title: Percent of Housing Units in the Appalachian Region That Are Vacant, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

More than one in seven housing units in Appalachia were vacant during the 2015-2019 period, compared to one in eight for the nation as a whole. Vacancy rates varied within the Region, however. While 151 of the 420 Appalachian counties (all but 23 of which were outside metropolitan areas) had vacancy rates at or above 20 percent, another 79 counties (mostly in metro areas) had rates below the national average. It is important to note that in 147 of the 341 Appalachian counties with vacancy rates of 12.1 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.

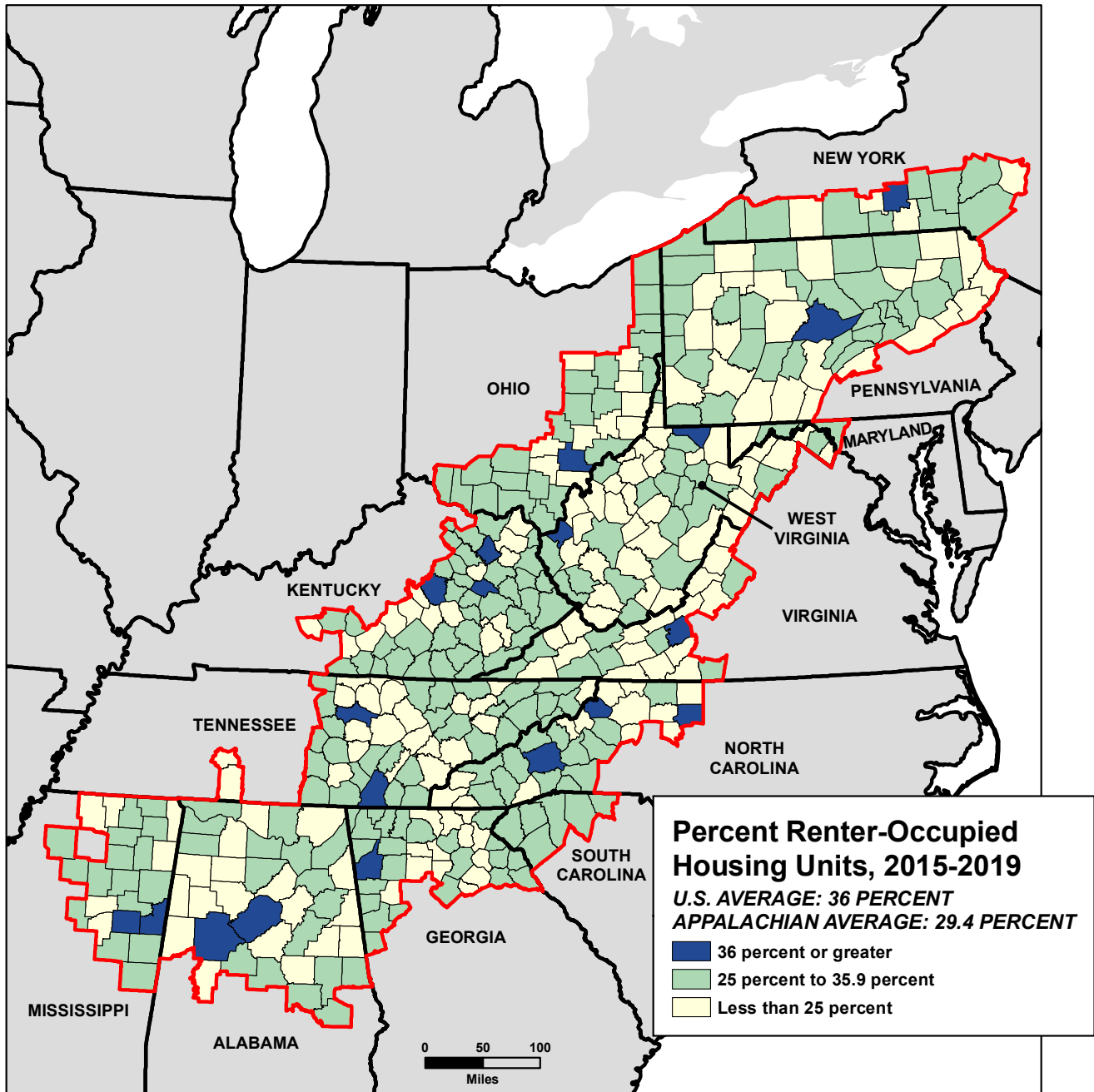
Figure 4.3: Percent Owner-Occupied Housing Units in the Appalachian Region, 2015-2019



Map Title: Percent Owner-Occupied Housing Units in the Appalachian Region, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Homeownership was more common in the Appalachian Region than in the rest of the country in the 2015-2019 period. In all but 18 counties, the share of owner-occupied housing units matched or exceeded the national average. Indeed, the homeownership rate was at least 75 percent in 173 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, 2015-2019



Map Title: Percent Renter-Occupied Housing Units in the Appalachian Region, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

The share of renter-occupied housing units during the 2015-2019 period was well below the national average throughout Appalachia; in fact, it was less than 25 percent in 173 of the Region's 420 counties. Among the 19 Appalachian counties where the share of renter-occupied units matched or exceeded the national average of 36 percent, 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); Montgomery County, Virginia (Virginia Tech and Radford University); and Rowan County, Kentucky (Morehead State University).

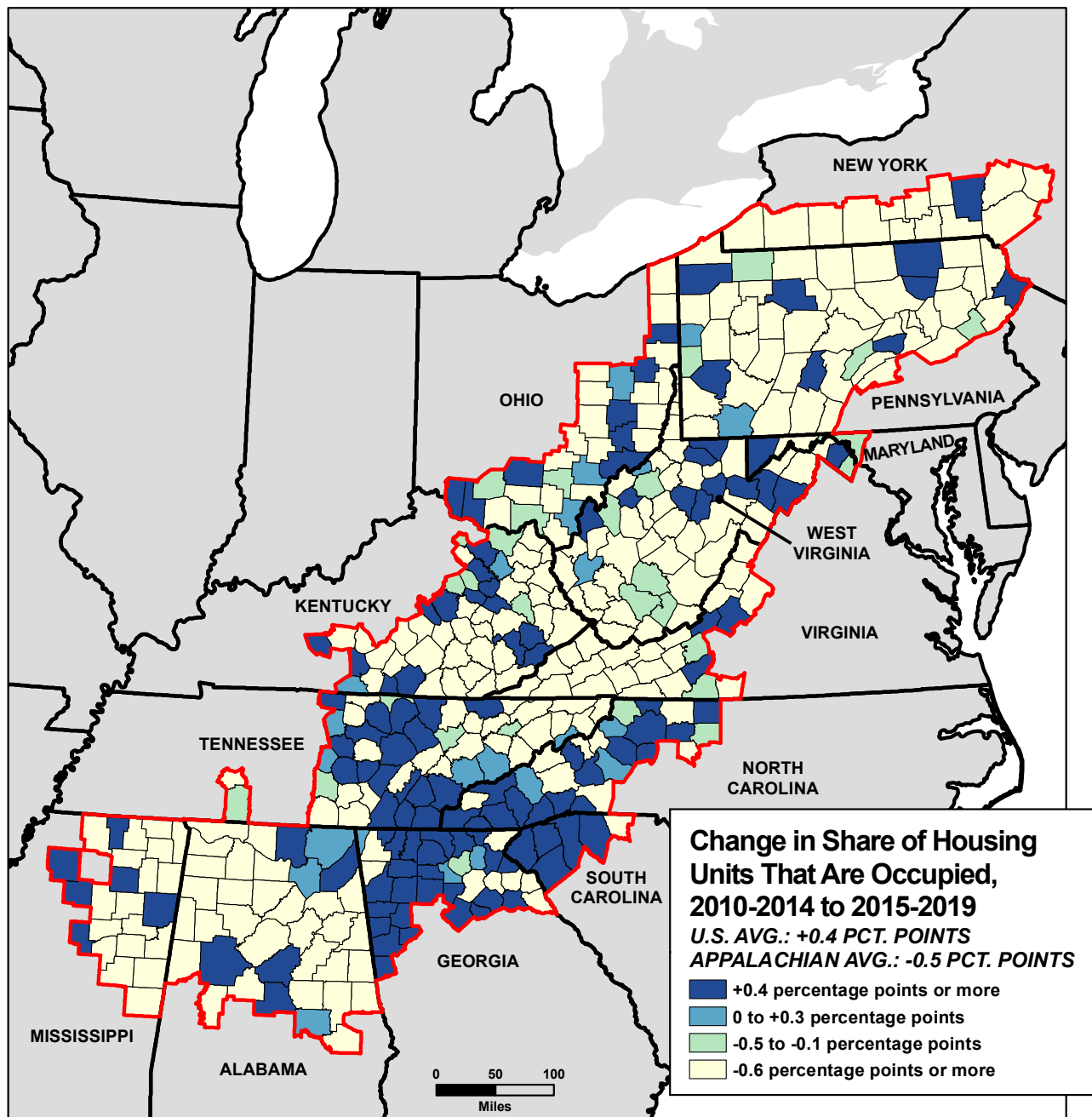
Table 4.2: Percentage Point Change in Occupancy and Tenure of Housing Units in the Appalachian Region, 2010-2014 to 2015-2019

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	+ 0.4	- 0.4	- 0.4	+ 0.4
Appalachian Region	- 0.5	+ 0.5	- 0.3	+ 0.3
Subregions				
Northern Appalachia	- 1.1	+ 1.1	- 0.5	+ 0.5
North Central Appalachia	- 0.7	+ 0.7	- 0.2	+ 0.2
Central Appalachia	- 2.4	+ 2.4	- 0.6	+ 0.6
South Central Appalachia	- 0.2	+ 0.2	- 0.2	+ 0.2
Southern Appalachia	+ 0.6	- 0.6	- 0.4	+ 0.4
County Types				
Large Metros (pop. 1 million +)	+ 0.9	- 0.9	- 0.6	+ 0.6
Small Metros (pop. <1 million)	- 0.6	+ 0.6	- 0.3	+ 0.3
Nonmetro, Adjacent to Large Metros	- 1.0	+ 1.0	+ 0.2	- 0.2
Nonmetro, Adjacent to Small Metros	- 1.0	+ 1.0	- 0.3	+ 0.3
Rural (nonmetro, not adj. to a metro)	- 1.7	+ 1.7	- 0.5	+ 0.5
Alabama	- 1.3	+ 1.3	- 0.4	+ 0.4
Appalachian Alabama	- 0.9	+ 0.9	- 0.3	+ 0.3
Non-Appalachian Alabama	- 1.8	+ 1.8	- 0.6	+ 0.6
Georgia	+ 1.7	- 1.7	- 0.9	+ 0.9
Appalachian Georgia	+ 2.5	- 2.5	- 0.5	+ 0.5
Non-Appalachian Georgia	+ 1.4	- 1.4	- 1.1	+ 1.1
Kentucky	- 0.4	+ 0.4	- 0.5	+ 0.5
Appalachian Kentucky	- 2.0	+ 2.0	- 0.2	+ 0.2
Non-Appalachian Kentucky	+ 0.2	- 0.2	- 0.5	+ 0.5
Maryland	+ 0.2	- 0.2	- 0.2	+ 0.2
Appalachian Maryland	- 0.5	+ 0.5	+ 1.1	- 1.1
Non-Appalachian Maryland	+ 0.2	- 0.2	- 0.3	+ 0.3
Mississippi	- 1.5	+ 1.5	- 0.7	+ 0.7
Appalachian Mississippi	- 2.5	+ 2.5	- 1.2	+ 1.2
Non-Appalachian Mississippi	- 1.3	+ 1.3	- 0.6	+ 0.6
New York	- 0.8	+ 0.8	+ 0.1	- 0.1
Appalachian New York	- 2.2	+ 2.2	- 0.4	+ 0.4
Non-Appalachian New York	- 0.6	+ 0.6	+ 0.1	- 0.1
North Carolina	+ 0.4	- 0.4	- 0.6	+ 0.6
Appalachian North Carolina	+ 0.5	- 0.5	- 0.4	+ 0.4
Non-Appalachian North Carolina	+ 0.3	- 0.3	- 0.6	+ 0.6
Ohio	+ 0.9	- 0.9	- 0.8	+ 0.8
Appalachian Ohio	- 0.4	+ 0.4	- 0.6	+ 0.6
Non-Appalachian Ohio	+ 1.2	- 1.2	- 0.8	+ 0.8
Pennsylvania	- 0.1	+ 0.1	- 0.6	+ 0.6
Appalachian Pennsylvania	- 0.7	+ 0.7	- 0.6	+ 0.6
Non-Appalachian Pennsylvania	+ 0.4	- 0.4	- 0.6	+ 0.6
South Carolina	+ 0.9	- 0.9	+ 0.8	- 0.8
Appalachian South Carolina	+ 1.7	- 1.7	+ 0.5	- 0.5
Non-Appalachian South Carolina	+ 0.7	- 0.7	+ 0.9	- 0.9
Tennessee	+ 0.0	+ 0.0	- 0.8	+ 0.8
Appalachian Tennessee	- 0.3	+ 0.3	- 0.3	+ 0.3
Non-Appalachian Tennessee	+ 0.3	- 0.3	- 1.2	+ 1.2
Virginia	+ 0.3	- 0.3	- 0.4	+ 0.4
Appalachian Virginia	- 2.9	+ 2.9	- 0.1	+ 0.1
Non-Appalachian Virginia	+ 0.7	- 0.7	- 0.4	+ 0.4
West Virginia (entire state)	- 2.0	+ 2.0	+ 0.2	- 0.2

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, 2010-2014 and 2015-2019 American Community Surveys.

Figure 4.5: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Occupied, 2010-2014 to 2015-2019

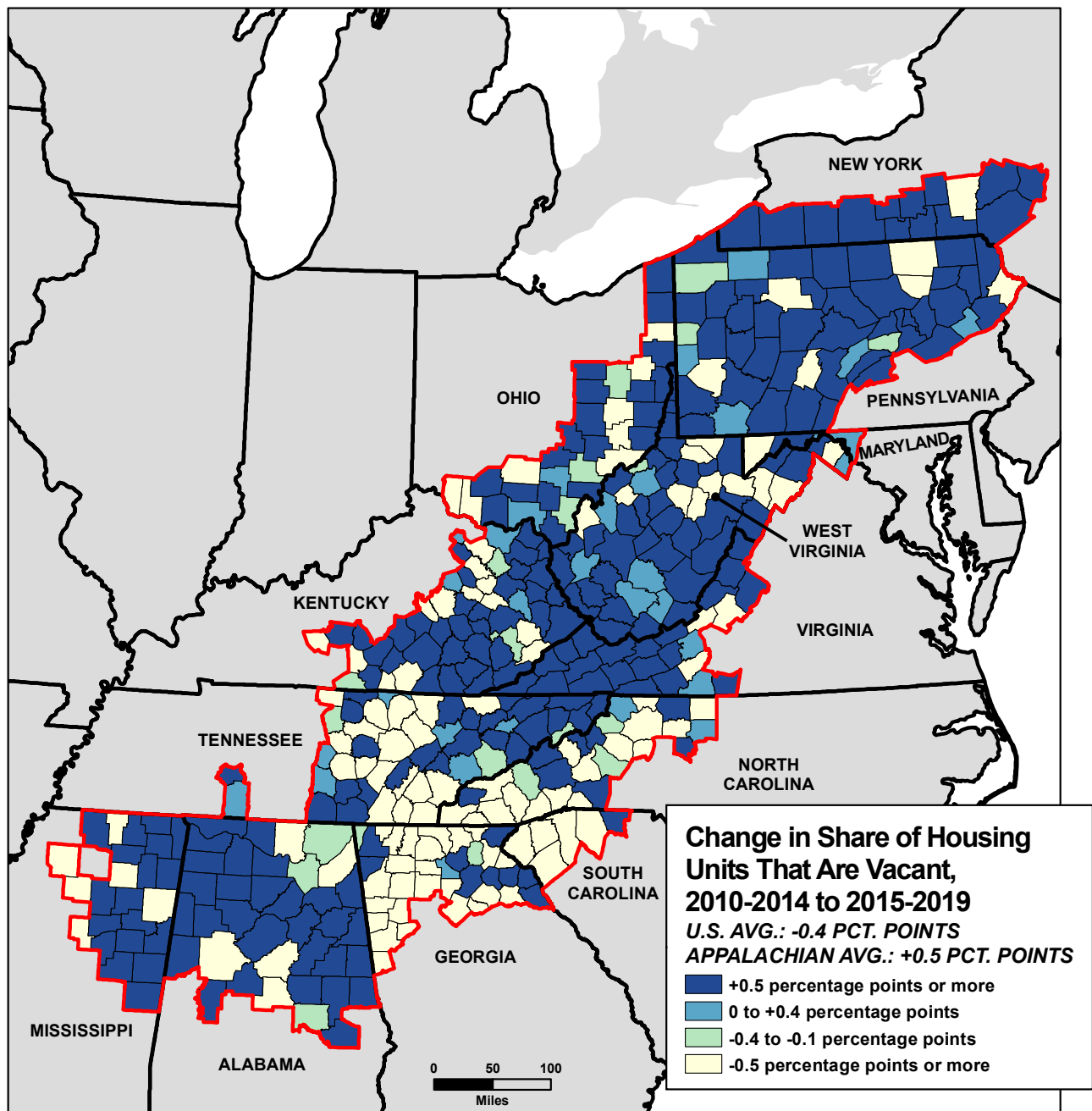


Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Occupied, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Although home occupancy had risen 0.4 percentage points nationally during the period, Appalachia's home occupancy rate in 2015-2019 was 0.5 percentage points lower than it was in 2010-2014. And in most Appalachian counties, the decline in occupancy rates was even greater. Yet factors other than the aftermath of the Great Recession of 2007-2009 may also be at play. For example, severe weather events like the outbreak of tornadoes that swept through parts of Alabama and Tennessee in November 2016 caused extreme structural damage and displaced families and (in some cases) entire communities. On the other hand, the occupancy rate rose at or above the national average in 121 counties. While they were spread throughout the Region, there were concentrations in a few states, including Georgia and the Carolinas; indeed, the occupancy rate in the Appalachian sections of those three states increased between the two periods.

Figure 4.6: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Vacant, 2010-2014 to 2015-2019

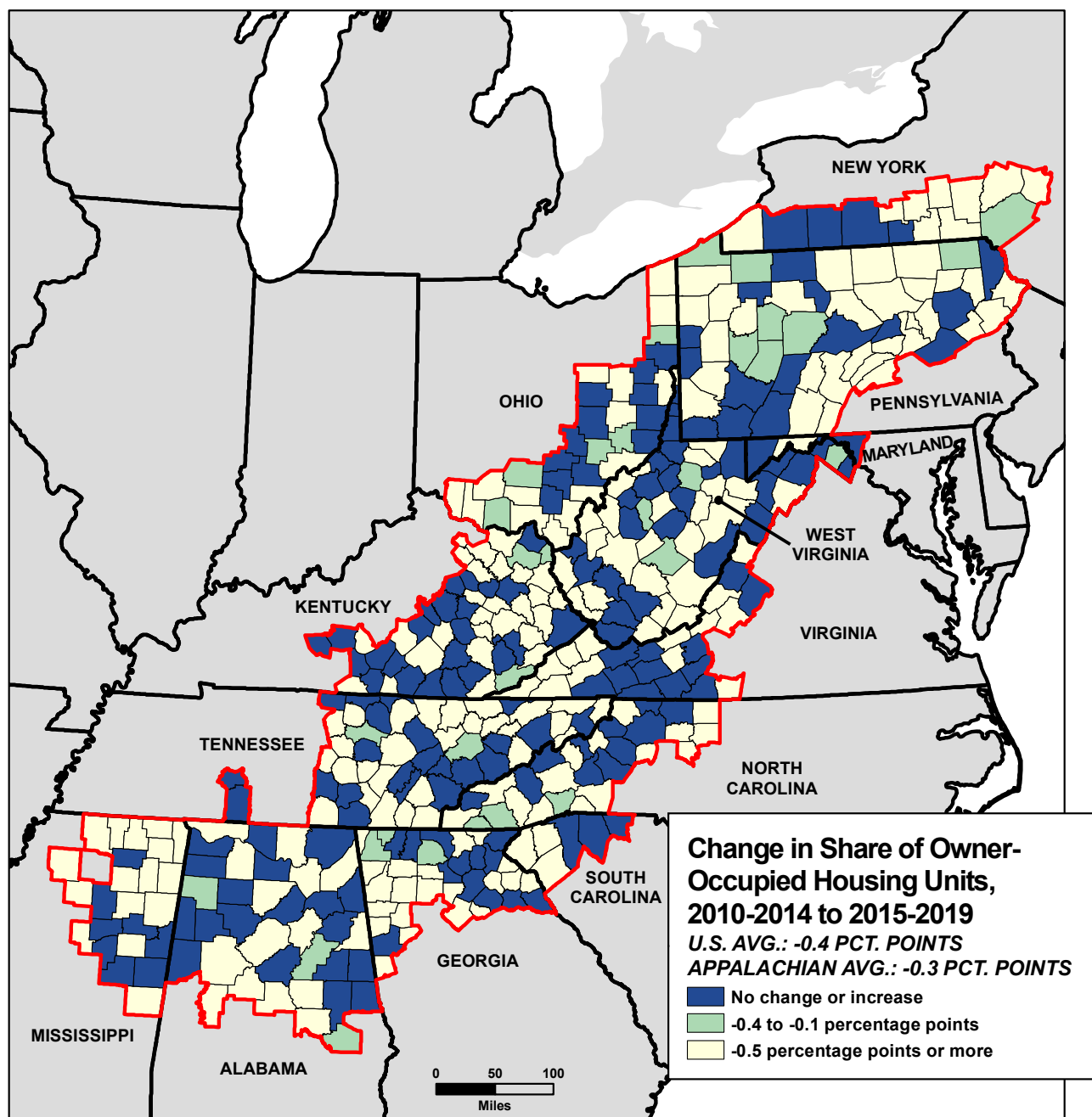


Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Vacant, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Between 2010-2014 and 2015-2019, the share of vacant housing units rose 0.5 percentage points in Appalachia, while declining 0.4 points in the nation as a whole. And the increase in housing vacancy was at or above that level in 250 of the Region's 420 counties. This at least partly suggests the failure of occupancy rates in Appalachia to return to pre-recessionary levels (as well as the effects of severe weather events). Yet another potential factor could lie in the fact that some parts of the Region had an 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 Tennessee and North Carolina). In 89 of the 281 Appalachian counties where overall vacancy rates remained constant or increased between the 2010-2014 and 2015-2019 periods, the percentage of vacant units designated for seasonal use did likewise.

Figure 4.7: Percentage Point Change in the Share of Owner-Occupied Housing Units in the Appalachian Region, 2010-2014 to 2015-2019

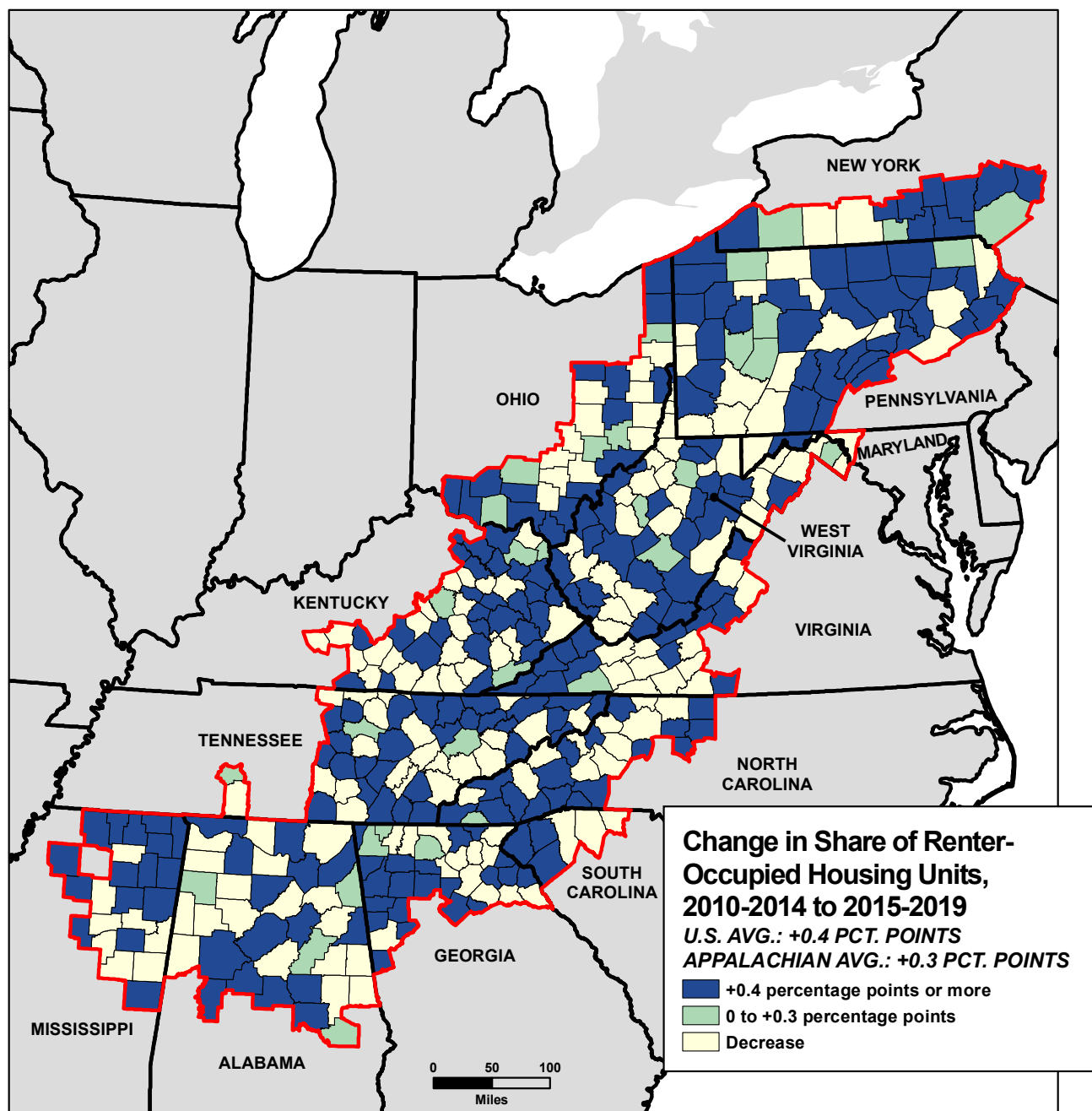


Map Title: Percentage Point Change in the Share of Owner-Occupied Housing Units in the Appalachian Region, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

In both the Appalachian Region and the nation as a whole, the share of owner-occupied housing units fell less than half a percentage point between 2010-2014 and 2015-2019. And the decline exceeded the national average in more than half of Appalachia's 420 counties. Still, there were 171 counties in the Region—112 of which were outside metropolitan areas—where homeownership either stayed the same or increased between these two periods. Counties in both groups were scattered throughout Appalachia.

Figure 4.8: Percentage Point Change in the Share of Renter-Occupied Housing Units in the Appalachian Region, 2010-2014 to 2015-2019



Map Title: Percentage Point Change in the Share of Renter-Occupied Housing Units in the Appalachian Region, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

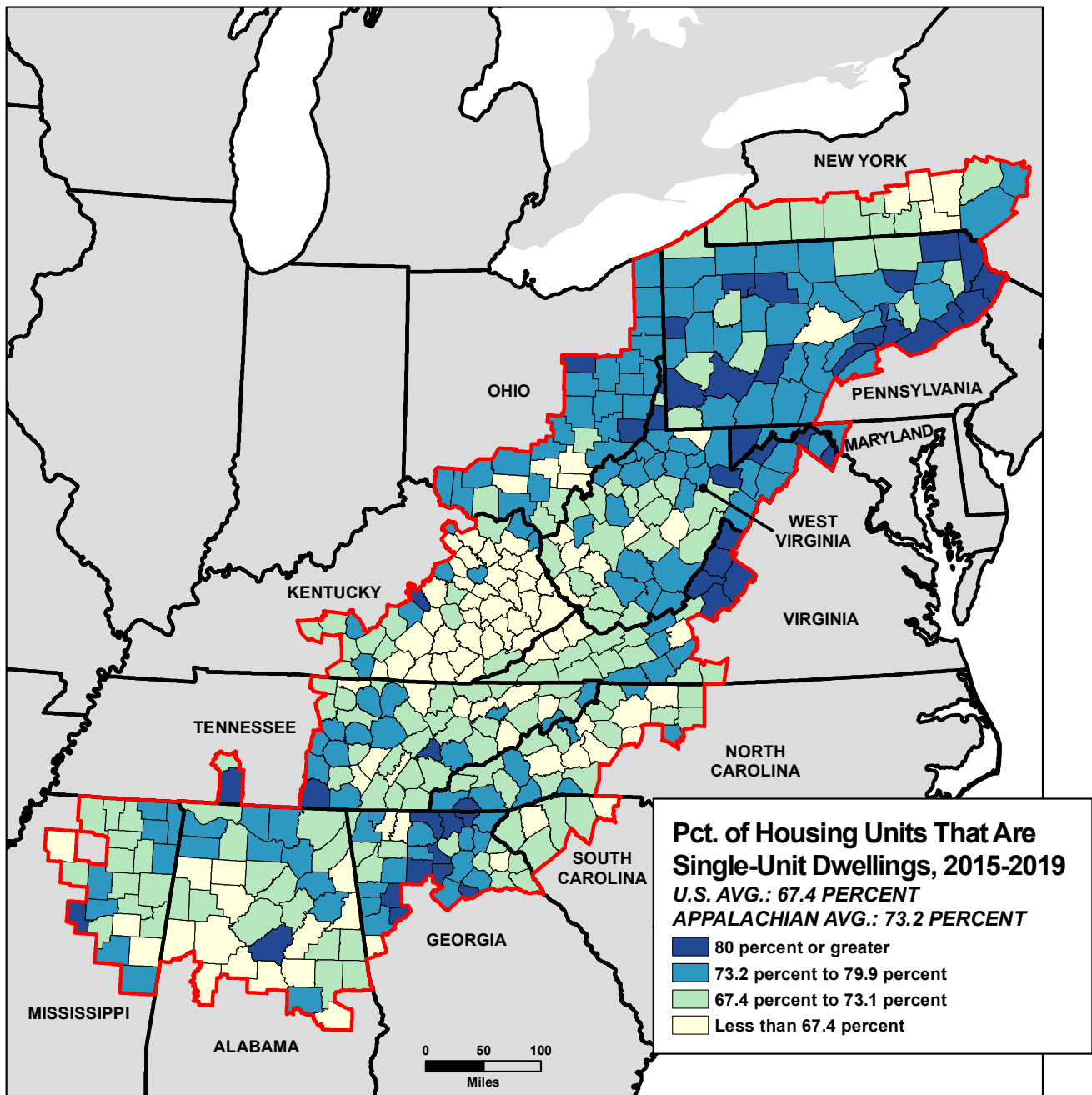
The share of renter-occupied housing units increased at about the same rate in Appalachia as it did nationwide between 2010-2014 and 2015-2019. Yet variations were present within the Region: For example, there were 222 Appalachian counties where the increases in rental shares matched or exceeded the national average of 0.4 percentage points. These counties were scattered throughout the Region. Conversely, the percentage of units occupied by renters decreased in 165 counties between the two periods.

Table 4.3: Housing Units in the Appalachian Region, by Type of Housing, 2015-2019

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	137,428,986	67.4	26.3	7.9	18.4	6.2	0.1
Appalachian Region	11,850,045	73.2	15.0	5.9	9.1	11.7	0.1
Subregions							
Northern Appalachia	3,977,443	75.7	17.8	8.5	9.3	6.5	0.0
North Central Appalachia	1,132,164	73.1	12.5	4.8	7.7	14.3	0.1
Central Appalachia	895,471	66.4	9.2	4.3	5.0	24.3	0.1
South Central Appalachia	2,341,303	71.2	14.8	5.2	9.7	13.8	0.1
Southern Appalachia	3,503,664	73.5	14.3	4.3	10.1	12.0	0.1
County Types							
Large Metros (pop. 1 million +)	2,631,106	76.8	17.5	5.2	12.3	5.6	0.0
Small Metros (pop. <1 million)	4,928,888	72.5	17.4	6.7	10.7	10.0	0.1
Nonmetro, Adjacent to Large Metros	1,042,609	72.8	12.7	6.6	6.1	14.4	0.1
Nonmetro, Adjacent to Small Metros	1,978,998	72.8	10.3	5.2	5.1	16.7	0.1
Rural (nonmetro, not adj. to a metro)	1,268,444	69.8	9.9	4.8	5.1	20.2	0.1
Alabama	2,255,026	70.2	16.5	4.9	11.5	13.2	0.1
Appalachian Alabama	1,425,636	71.5	15.9	4.6	11.3	12.5	0.1
Non-Appalachian Alabama	829,390	67.9	17.4	5.5	11.9	14.6	0.1
Georgia	4,283,477	70.2	20.8	5.1	15.7	9.0	0.1
Appalachian Georgia	1,244,527	78.3	12.5	3.5	9.0	9.2	0.1
Non-Appalachian Georgia	3,038,950	66.9	24.1	5.8	18.4	8.9	0.1
Kentucky	1,983,949	69.9	18.3	7.3	11.0	11.8	0.1
Appalachian Kentucky	548,012	65.3	10.2	4.9	5.3	24.5	0.1
Non-Appalachian Kentucky	1,435,937	71.6	21.4	8.2	13.1	7.0	0.1
Maryland	2,448,422	72.7	25.8	3.7	22.1	1.4	0.0
Appalachian Maryland	113,744	78.4	17.2	6.5	10.7	4.4	0.0
Non-Appalachian Maryland	2,334,678	72.5	26.2	3.6	22.7	1.3	0.0
Mississippi	1,322,808	70.2	14.5	5.4	9.1	15.1	0.1
Appalachian Mississippi	285,386	69.9	11.7	5.6	6.0	18.4	0.1
Non-Appalachian Mississippi	1,037,422	70.3	15.3	5.4	9.9	14.2	0.1
New York	8,322,722	46.9	50.7	17.3	33.5	2.3	0.0
Appalachian New York	517,499	67.4	22.4	13.4	8.9	10.2	0.0
Non-Appalachian New York	7,805,223	45.6	52.6	17.5	35.1	1.8	0.0
North Carolina	4,627,089	69.2	17.8	4.8	13.1	12.8	0.1
Appalachian North Carolina	889,250	69.9	13.7	4.7	9.0	16.3	0.1
Non-Appalachian North Carolina	3,737,839	69.1	18.8	4.8	14.1	12.0	0.1
Ohio	5,202,304	73.2	23.0	8.7	14.4	3.7	0.0
Appalachian Ohio	908,191	75.6	14.0	6.1	7.9	10.3	0.1
Non-Appalachian Ohio	4,294,113	72.7	24.9	9.2	15.7	2.3	0.0
Pennsylvania	5,693,314	75.6	20.5	8.4	12.1	3.9	0.0
Appalachian Pennsylvania	2,770,315	76.7	17.5	7.9	9.6	5.8	0.0
Non-Appalachian Pennsylvania	2,922,999	74.6	23.3	8.9	14.4	2.1	0.0
South Carolina	2,286,826	66.3	17.4	4.7	12.7	16.2	0.1
Appalachian South Carolina	548,115	70.2	15.8	4.6	11.2	13.9	0.1
Non-Appalachian South Carolina	1,738,711	65.0	17.9	4.8	13.2	17.0	0.1
Tennessee	2,963,486	71.7	19.1	5.9	13.2	9.2	0.1
Appalachian Tennessee	1,338,073	71.7	15.2	5.5	9.8	12.9	0.1
Non-Appalachian Tennessee	1,625,413	71.7	22.2	6.3	15.9	6.1	0.1
Virginia	3,514,032	72.6	22.3	4.4	17.9	5.1	0.0
Appalachian Virginia	369,115	70.7	11.6	4.2	7.4	17.6	0.0
Non-Appalachian Virginia	3,144,917	72.8	23.5	4.4	19.1	3.6	0.0
West Virginia (entire state)	892,182	73.1	12.0	4.9	7.2	14.8	0.1

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Figure 4.9: Percent of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2015-2019



Map Title: Percent of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

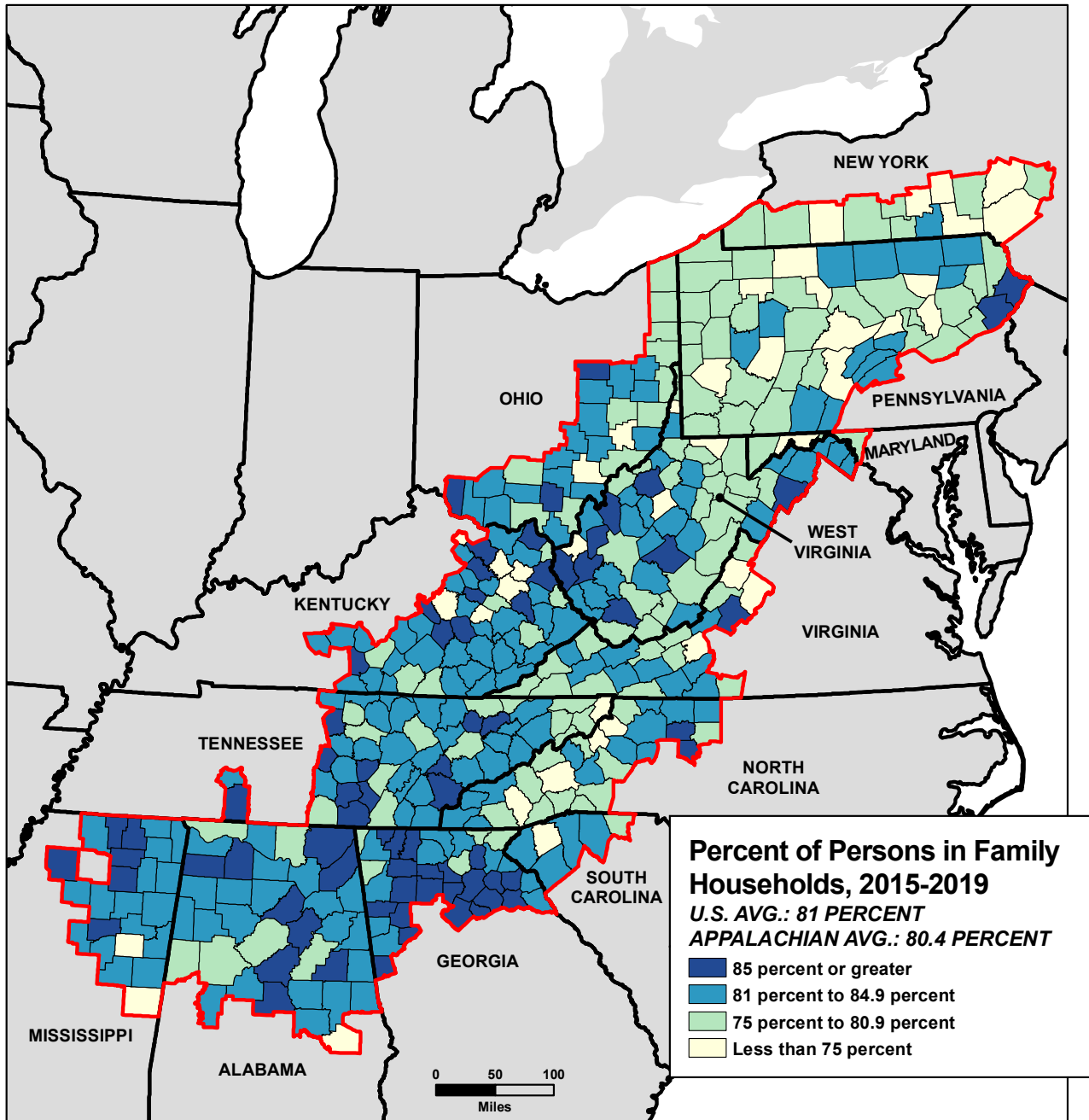
In 2015-2019, 73.2 percent of housing units in the Appalachian Region were single-unit dwellings (either attached or detached)—a larger share than the national average of 67.4 percent. And the share was even greater in much of Appalachia: In 188 of the 420 counties, the share of single-unit homes was at or above the average for the Region. (Most of these counties were in Northern or North Central Appalachia—with 42 in Pennsylvania alone.) And in 46 Appalachian counties, single-unit dwellings accounted for at least 80 percent of the housing stock. In contrast, there were 93 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 64 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, 2015-2019

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	324,697,795	97.5	81.0	16.5	2.5
Appalachian Region	25,592,408	97.0	80.4	16.6	3.0
Subregions					
Northern Appalachia	8,194,408	96.0	77.1	18.8	4.0
North Central Appalachia	2,403,368	97.0	80.0	17.1	3.0
Central Appalachia	1,869,041	96.9	81.8	15.1	3.1
South Central Appalachia	4,872,974	97.2	79.4	17.8	2.8
Southern Appalachia	8,252,617	98.0	84.1	14.0	2.0
County Types					
Large Metros (pop. 1 million +)	6,098,760	98.2	82.5	15.7	1.8
Small Metros (pop. <1 million)	10,837,673	96.8	79.2	17.5	3.2
Nonmetro, Adjacent to Large Metros	2,198,261	96.5	80.1	16.4	3.5
Nonmetro, Adjacent to Small Metros	3,955,461	96.8	80.8	16.0	3.2
Rural (nonmetro, not adj. to a metro)	2,502,253	96.2	80.2	16.0	3.8
Alabama	4,876,250	97.6	81.8	15.8	2.4
Appalachian Alabama	3,124,917	97.6	82.1	15.4	2.4
Non-Appalachian Alabama	1,751,333	97.6	81.1	16.5	2.4
Georgia	10,403,847	97.5	82.4	15.1	2.5
Appalachian Georgia	3,231,061	98.8	87.4	11.4	1.2
Non-Appalachian Georgia	7,172,786	96.9	80.1	16.8	3.1
Kentucky	4,449,052	97.0	80.2	16.8	3.0
Appalachian Kentucky	1,165,722	96.7	81.5	15.2	3.3
Non-Appalachian Kentucky	3,283,330	97.2	79.8	17.4	2.8
Maryland	6,018,848	97.7	82.0	15.6	2.3
Appalachian Maryland	250,789	92.9	76.6	16.3	7.1
Non-Appalachian Maryland	5,768,059	97.9	82.3	15.6	2.1
Mississippi	2,984,418	96.8	81.9	14.9	3.2
Appalachian Mississippi	625,503	97.2	81.8	15.4	2.8
Non-Appalachian Mississippi	2,358,915	96.7	82.0	14.8	3.3
New York	19,572,319	97.1	79.4	17.6	2.9
Appalachian New York	1,028,021	94.4	74.1	20.3	5.6
Non-Appalachian New York	18,544,298	97.2	79.7	17.5	2.8
North Carolina	10,264,876	97.3	80.5	16.9	2.7
Appalachian North Carolina	1,753,350	97.2	79.1	18.1	2.8
Non-Appalachian North Carolina	8,511,526	97.3	80.7	16.6	2.7
Ohio	11,655,397	97.3	79.0	18.3	2.7
Appalachian Ohio	1,998,612	97.0	80.3	16.6	3.0
Non-Appalachian Ohio	9,656,785	97.4	78.7	18.6	2.6
Pennsylvania	12,791,530	96.7	79.1	17.6	3.3
Appalachian Pennsylvania	5,683,956	96.1	77.1	18.9	3.9
Non-Appalachian Pennsylvania	7,107,574	97.2	80.6	16.6	2.8
South Carolina	5,020,806	97.3	80.8	16.5	2.7
Appalachian South Carolina	1,271,136	97.7	81.5	16.2	2.3
Non-Appalachian South Carolina	3,749,670	97.2	80.6	16.6	2.8
Tennessee	6,709,356	97.6	81.1	16.6	2.4
Appalachian Tennessee	2,892,989	97.5	80.7	16.9	2.5
Non-Appalachian Tennessee	3,816,367	97.7	81.4	16.4	2.3
Virginia	8,454,463	97.1	80.7	16.4	2.9
Appalachian Virginia	749,047	95.4	76.5	18.9	4.6
Non-Appalachian Virginia	7,705,416	97.3	81.1	16.2	2.7
West Virginia (entire state)	1,817,305	97.4	79.8	17.6	2.6

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Figure 4.10: Percent of Persons in the Appalachian Region Living in Family Households, 2015-2019



Map Title: Percent of Persons in the Appalachian Region Living in Family Households, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

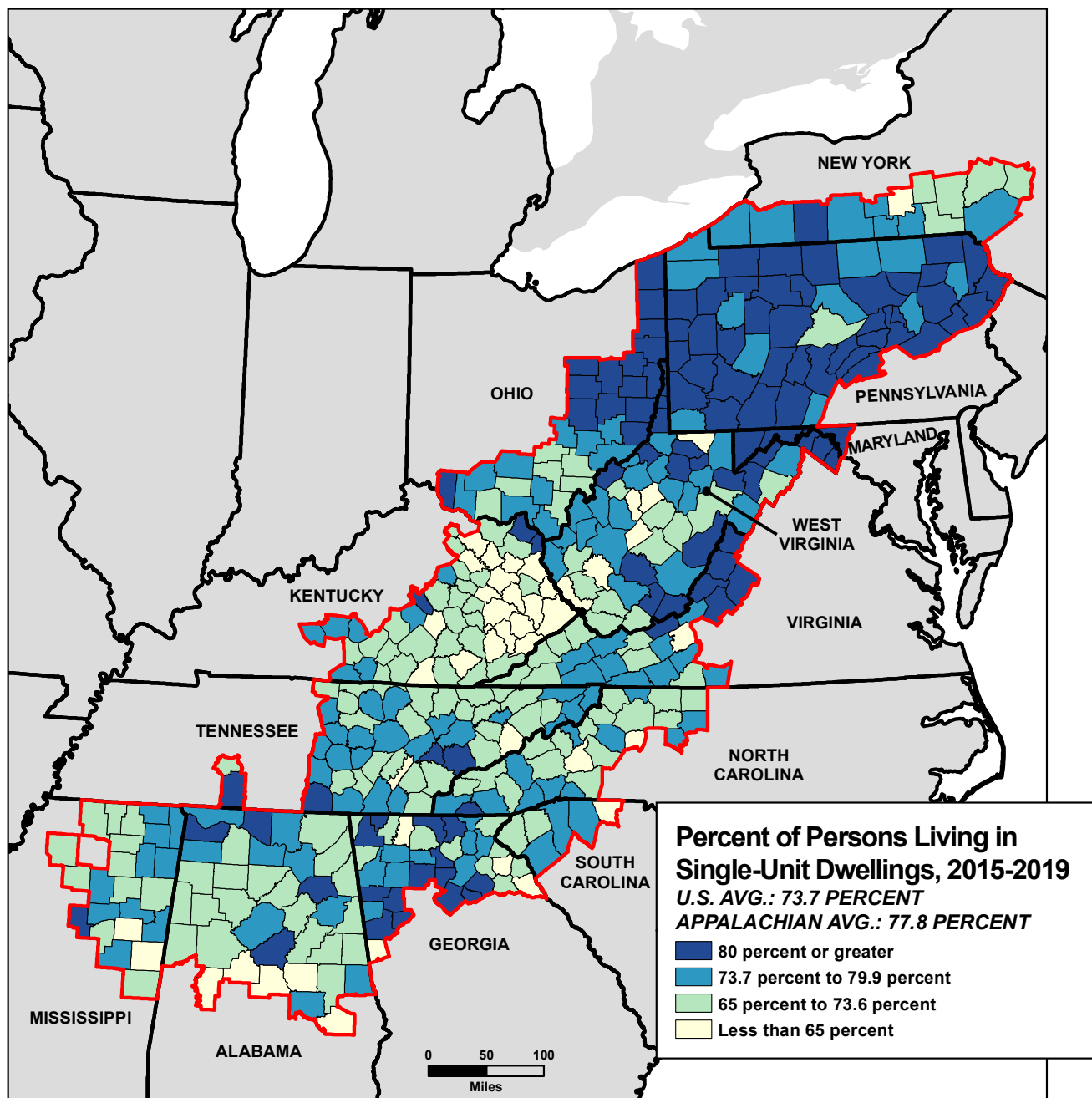
Just over 80 percent of Appalachia's residents lived in family households during 2015-2019, which was just below the national average. Yet in 73 counties in the Region, at least 85 percent lived in family households. Almost half of these counties were in Southern Appalachia, although there were pockets elsewhere in the Region. In contrast, there were 41 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 almost 51 percent of the county's residents. (Rockbridge County, Virginia, home to Virginia Military Institute and Washington and Lee University, provides a more typical example, with 10 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, 2015-2019

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	316,606,796	73.7	20.8	7.0	13.7	5.5	0.1
Appalachian Region	24,831,959	77.8	11.1	4.5	6.6	11.1	0.1
Subregions							
Northern Appalachia	7,862,610	81.8	12.8	6.5	6.3	5.4	0.0
North Central Appalachia	2,332,005	77.3	9.2	3.6	5.7	13.4	0.1
Central Appalachia	1,810,945	69.2	7.2	3.6	3.6	23.6	0.0
South Central Appalachia	4,735,804	74.6	11.4	4.1	7.3	13.9	0.1
Southern Appalachia	8,090,595	77.8	10.7	3.4	7.3	11.5	0.1
County Types							
Large Metros (pop. 1 million +)	5,988,467	82.5	12.1	3.7	8.4	5.3	0.0
Small Metros (pop. <1 million)	10,486,301	77.3	12.8	5.2	7.7	9.8	0.1
Nonmetro, Adjacent to Large Metros	2,121,042	77.0	9.6	5.2	4.3	13.3	0.1
Nonmetro, Adjacent to Small Metros	3,829,889	75.5	7.7	4.2	3.6	16.7	0.1
Rural (nonmetro, not adj. to a metro)	2,406,260	72.3	7.7	3.9	3.8	19.9	0.1
Alabama	4,758,473	75.1	11.7	3.9	7.8	13.1	0.1
Appalachian Alabama	3,048,676	75.8	11.6	3.8	7.9	12.5	0.1
Non-Appalachian Alabama	1,709,797	74.0	11.9	4.2	7.7	14.0	0.1
Georgia	10,143,245	75.6	15.9	4.3	11.6	8.4	0.1
Appalachian Georgia	3,192,480	82.0	9.8	2.9	6.9	8.2	0.1
Non-Appalachian Georgia	6,950,765	72.7	18.7	5.0	13.7	8.5	0.1
Kentucky	4,317,164	75.3	13.7	6.0	7.8	10.9	0.0
Appalachian Kentucky	1,127,259	68.2	8.1	4.1	4.0	23.6	0.0
Non-Appalachian Kentucky	3,189,905	77.8	15.7	6.6	9.1	6.4	0.1
Maryland	5,878,256	79.9	19.0	2.6	16.4	1.1	0.0
Appalachian Maryland	233,007	83.5	12.6	4.4	8.2	3.9	0.0
Non-Appalachian Maryland	5,645,249	79.7	19.3	2.6	16.7	1.0	0.0
Mississippi	2,889,445	73.7	11.3	4.6	6.8	14.8	0.1
Appalachian Mississippi	607,877	72.5	9.2	4.6	4.6	18.2	0.1
Non-Appalachian Mississippi	2,281,568	74.1	11.9	4.6	7.3	13.9	0.1
New York	19,000,028	51.9	46.3	17.7	28.6	1.8	0.0
Appalachian New York	970,580	72.9	18.1	11.5	6.6	9.0	0.0
Non-Appalachian New York	18,029,448	50.7	47.8	18.1	29.8	1.4	0.0
North Carolina	9,987,956	73.4	13.6	3.8	9.8	12.9	0.1
Appalachian North Carolina	1,704,490	72.2	10.5	3.5	7.1	17.2	0.1
Non-Appalachian North Carolina	8,283,466	73.7	14.3	3.9	10.4	12.0	0.0
Ohio	11,340,272	80.7	16.1	6.3	9.8	3.2	0.0
Appalachian Ohio	1,938,201	81.1	9.7	4.3	5.4	9.1	0.1
Non-Appalachian Ohio	9,402,071	80.6	17.4	6.7	10.7	1.9	0.0
Pennsylvania	12,367,989	82.5	14.4	6.4	8.0	3.1	0.0
Appalachian Pennsylvania	5,461,311	82.8	12.5	6.0	6.5	4.7	0.0
Non-Appalachian Pennsylvania	6,906,678	82.3	15.9	6.6	9.3	1.8	0.0
South Carolina	4,884,815	71.0	12.1	3.7	8.4	16.9	0.1
Appalachian South Carolina	1,241,562	74.4	11.6	3.3	8.3	14.0	0.0
Non-Appalachian South Carolina	3,643,253	69.8	12.2	3.8	8.4	17.9	0.1
Tennessee	6,551,609	76.9	14.3	4.8	9.5	8.8	0.1
Appalachian Tennessee	2,822,023	75.6	11.4	4.5	7.0	12.9	0.1
Non-Appalachian Tennessee	3,729,586	77.8	16.4	5.0	11.4	5.7	0.1
Virginia	8,210,230	78.5	17.2	3.5	13.7	4.2	0.0
Appalachian Virginia	714,632	74.3	9.7	3.3	6.4	16.0	0.0
Non-Appalachian Virginia	7,495,598	79.0	17.9	3.5	14.4	3.1	0.0
West Virginia (entire state)	1,769,861	77.1	8.6	3.6	5.1	14.2	0.0

Data Source: U.S. Census Bureau, 2015-2019 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), 2015-2019



Map Title: Among Persons in the Appalachian Region in Occupied Housing Units, Percent Living in Single-Unit Dwellings (Attached or Detached), 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

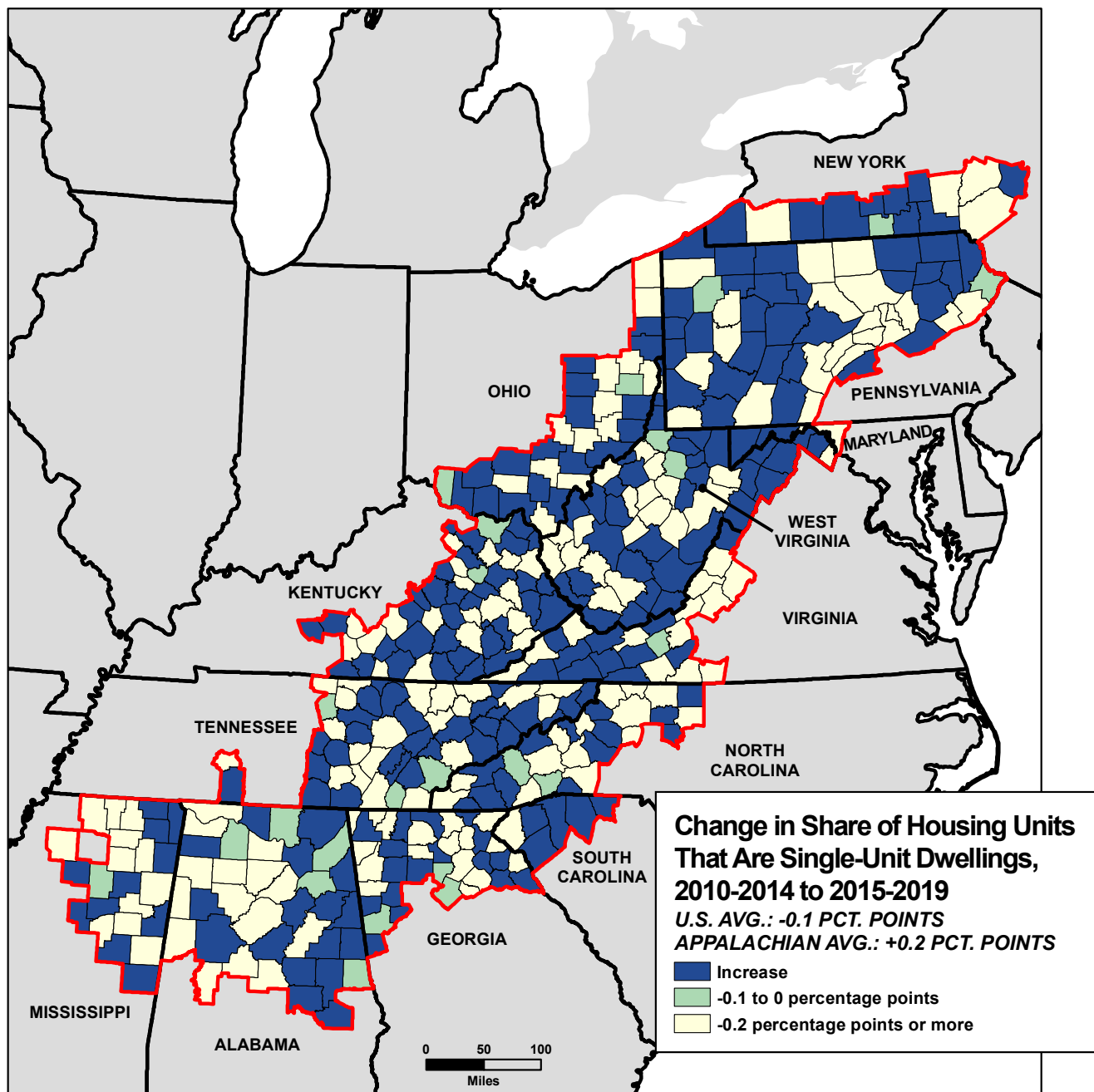
Of the Appalachian population who live in occupied housing units, 77.8 percent lived in single-unit dwellings during the 2015-2019 period, four percentage points above the national average. And the share was even greater in much of the Region: In 111 counties, at least four in five residents lived in single-unit homes. More than half of these were in Northern Appalachia; 40 were in Pennsylvania alone. (There were concentrations in other states, including Ohio, Georgia, and Maryland.) Yet in 182 of Appalachia's 420 counties, the share living in single-unit dwellings was below the U.S. average of 73.7 percent; in 43 counties (almost half of which were in Central Appalachia), the percentage was below 65 percent. And in 38 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, 2010-2014 to 2015-2019

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	- 0.1	+ 0.3	- 0.3	+ 0.5	- 0.2	+ 0.0
Appalachian Region	+ 0.2	+ 0.1	- 0.1	+ 0.2	- 0.3	+ 0.0
Subregions						
Northern Appalachia	+ 0.2	+ 0.0	- 0.2	+ 0.2	- 0.3	+ 0.0
North Central Appalachia	+ 0.5	+ 0.0	- 0.1	+ 0.1	- 0.5	+ 0.1
Central Appalachia	+ 0.1	+ 0.0	+ 0.0	+ 0.1	- 0.1	+ 0.0
South Central Appalachia	+ 0.1	+ 0.3	+ 0.1	+ 0.3	- 0.5	+ 0.0
Southern Appalachia	+ 0.2	+ 0.2	- 0.1	+ 0.4	- 0.5	+ 0.0
County Types						
Large Metros (pop. 1 million +)	+ 0.2	+ 0.2	- 0.1	+ 0.3	- 0.4	+ 0.0
Small Metros (pop. <1 million)	+ 0.2	+ 0.1	- 0.2	+ 0.4	- 0.4	+ 0.0
Nonmetro, Adjacent to Large Metros	+ 0.1	- 0.1	- 0.2	+ 0.1	+ 0.0	+ 0.0
Nonmetro, Adjacent to Small Metros	+ 0.3	+ 0.0	+ 0.0	+ 0.0	- 0.4	+ 0.0
Rural (nonmetro, not adj. to a metro)	+ 0.2	+ 0.2	+ 0.1	+ 0.1	- 0.5	+ 0.0
Alabama	+ 0.0	+ 0.4	- 0.1	+ 0.5	- 0.4	+ 0.0
Appalachian Alabama	+ 0.0	+ 0.4	+ 0.0	+ 0.5	- 0.4	+ 0.0
Non-Appalachian Alabama	+ 0.0	+ 0.3	- 0.2	+ 0.5	- 0.3	+ 0.0
Georgia	+ 0.1	+ 0.3	- 0.2	+ 0.5	- 0.3	+ 0.0
Appalachian Georgia	+ 0.3	+ 0.1	+ 0.0	+ 0.1	- 0.4	+ 0.0
Non-Appalachian Georgia	- 0.1	+ 0.3	- 0.2	+ 0.6	- 0.3	+ 0.0
Kentucky	+ 0.2	+ 0.2	+ 0.2	+ 0.0	- 0.4	+ 0.0
Appalachian Kentucky	+ 0.5	- 0.2	- 0.2	+ 0.0	- 0.2	+ 0.0
Non-Appalachian Kentucky	+ 0.1	+ 0.3	+ 0.4	- 0.2	- 0.3	+ 0.1
Maryland	- 0.2	+ 0.3	- 0.1	+ 0.5	- 0.2	+ 0.0
Appalachian Maryland	+ 0.4	- 0.3	- 0.1	- 0.2	- 0.1	+ 0.0
Non-Appalachian Maryland	- 0.2	+ 0.3	- 0.1	+ 0.5	- 0.2	+ 0.0
Mississippi	- 0.4	+ 0.4	+ 0.1	+ 0.3	- 0.1	+ 0.0
Appalachian Mississippi	- 0.7	+ 0.4	- 0.1	+ 0.4	+ 0.4	+ 0.0
Non-Appalachian Mississippi	- 0.3	+ 0.4	+ 0.2	+ 0.2	- 0.2	+ 0.0
New York	+ 0.0	+ 0.0	- 0.7	+ 0.8	- 0.1	+ 0.0
Appalachian New York	+ 0.2	+ 0.2	- 0.2	+ 0.3	- 0.4	+ 0.0
Non-Appalachian New York	+ 0.1	+ 0.0	- 0.8	+ 0.8	- 0.1	+ 0.0
North Carolina	+ 0.1	+ 0.5	- 0.1	+ 0.7	- 0.7	+ 0.1
Appalachian North Carolina	- 0.3	+ 0.7	+ 0.5	+ 0.3	- 0.4	+ 0.0
Non-Appalachian North Carolina	+ 0.2	+ 0.4	- 0.2	+ 0.8	- 0.7	+ 0.1
Ohio	+ 0.2	+ 0.0	- 0.2	+ 0.2	- 0.2	+ 0.0
Appalachian Ohio	+ 0.2	+ 0.0	- 0.1	+ 0.1	- 0.2	+ 0.1
Non-Appalachian Ohio	+ 0.2	- 0.1	- 0.3	+ 0.2	- 0.2	+ 0.0
Pennsylvania	+ 0.2	+ 0.0	- 0.4	+ 0.5	- 0.2	+ 0.0
Appalachian Pennsylvania	+ 0.3	+ 0.0	- 0.2	+ 0.2	- 0.3	+ 0.0
Non-Appalachian Pennsylvania	+ 0.2	+ 0.0	- 0.6	+ 0.6	- 0.1	+ 0.0
South Carolina	+ 1.3	- 0.6	- 0.4	- 0.2	- 0.7	+ 0.0
Appalachian South Carolina	+ 0.9	- 0.2	- 0.3	+ 0.1	- 0.8	+ 0.1
Non-Appalachian South Carolina	+ 1.3	- 0.8	- 0.4	- 0.3	- 0.6	+ 0.0
Tennessee	- 0.1	+ 0.6	- 0.2	+ 0.8	- 0.4	+ 0.0
Appalachian Tennessee	+ 0.4	+ 0.0	- 0.2	+ 0.3	- 0.5	+ 0.0
Non-Appalachian Tennessee	- 0.6	+ 0.9	- 0.2	+ 1.1	- 0.3	+ 0.0
Virginia	- 0.3	+ 0.5	+ 0.0	+ 0.5	- 0.2	+ 0.0
Appalachian Virginia	- 0.5	+ 0.4	+ 0.3	+ 0.1	+ 0.1	- 0.1
Non-Appalachian Virginia	- 0.3	+ 0.4	- 0.1	+ 0.5	- 0.2	+ 0.0
West Virginia (entire state)	+ 0.6	- 0.1	- 0.1	+ 0.1	- 0.5	+ 0.1

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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), 2010-2014 to 2015-2019



Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

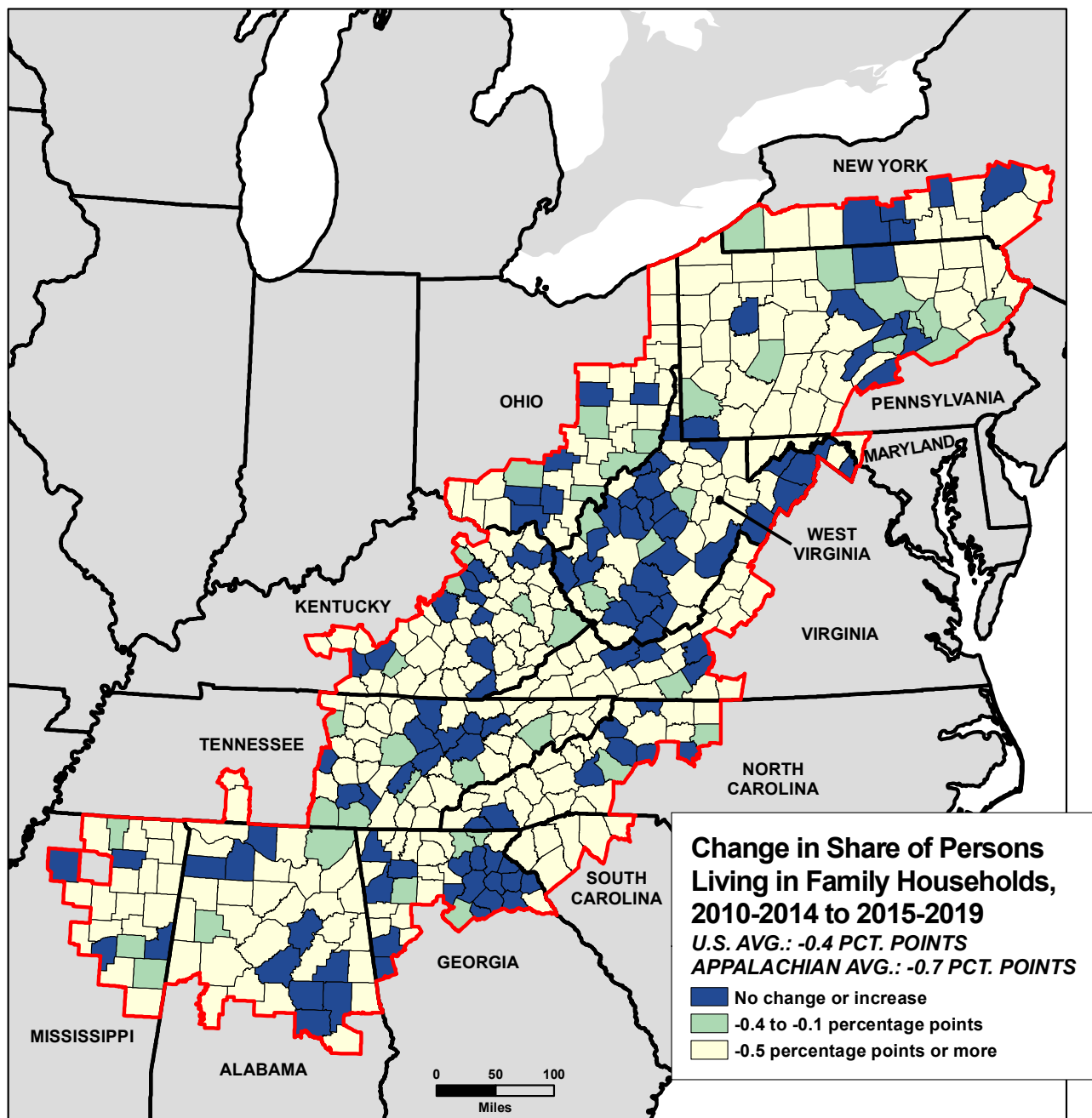
The share of single-unit dwellings among the housing stock increased slightly in Appalachia between the 2010-2014 and 2015-2019 periods, while remaining about the same nationwide. And the share likewise rose in 225 of the Region's 420 counties. Yet there were 171 other Appalachian counties where the share of single-unit homes was at least 0.2 points lower in 2015-2019 than in the earlier period. The slight rise in the share of single-unit homes in Appalachia seems to have come at the expense of mobile homes, the share of which fell 0.3 percentage points between 2010-2014 and 2015-2019.

Table 4.7: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Households and Group Quarters, 2010-2014 to 2015-2019

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	- 0.7	+ 0.7	+ 0.0
Subregions				
Northern Appalachia	+ 0.0	- 1.1	+ 1.0	+ 0.0
North Central Appalachia	+ 0.0	- 0.4	+ 0.5	+ 0.0
Central Appalachia	- 0.1	- 0.8	+ 0.7	+ 0.1
South Central Appalachia	+ 0.0	- 0.9	+ 0.8	+ 0.0
Southern Appalachia	+ 0.0	- 0.6	+ 0.7	+ 0.0
County Types				
Large Metros (pop. 1 million +)	+ 0.1	- 0.6	+ 0.7	- 0.1
Small Metros (pop. <1 million)	+ 0.1	- 0.7	+ 0.7	- 0.1
Nonmetro, Adjacent to Large Metros	+ 0.1	- 0.7	+ 0.8	- 0.1
Nonmetro, Adjacent to Small Metros	+ 0.0	- 0.8	+ 0.7	+ 0.0
Rural (nonmetro, not adj. to a metro)	- 0.1	- 1.1	+ 1.0	+ 0.1
Alabama	+ 0.0	- 0.8	+ 0.8	+ 0.0
Appalachian Alabama	+ 0.0	- 0.9	+ 0.8	+ 0.0
Non-Appalachian Alabama	+ 0.1	- 0.7	+ 0.7	- 0.1
Georgia	+ 0.1	- 0.4	+ 0.5	- 0.1
Appalachian Georgia	+ 0.1	- 0.1	+ 0.2	- 0.1
Non-Appalachian Georgia	+ 0.1	- 0.6	+ 0.7	- 0.1
Kentucky	+ 0.0	- 0.9	+ 0.9	+ 0.0
Appalachian Kentucky	- 0.1	- 1.0	+ 0.9	+ 0.1
Non-Appalachian Kentucky	+ 0.1	- 0.8	+ 0.9	- 0.1
Maryland	+ 0.1	- 0.2	+ 0.2	- 0.1
Appalachian Maryland	- 0.5	- 1.1	+ 0.6	+ 0.5
Non-Appalachian Maryland	+ 0.1	- 0.1	+ 0.2	- 0.1
Mississippi	+ 0.0	- 1.1	+ 1.1	+ 0.0
Appalachian Mississippi	- 0.1	- 1.4	+ 1.3	+ 0.1
Non-Appalachian Mississippi	+ 0.0	- 1.0	+ 1.1	+ 0.0
New York	+ 0.1	- 0.6	+ 0.6	- 0.1
Appalachian New York	+ 0.1	- 0.6	+ 0.6	- 0.1
Non-Appalachian New York	+ 0.0	- 0.6	+ 0.7	+ 0.0
North Carolina	- 0.1	- 0.6	+ 0.7	+ 0.1
Appalachian North Carolina	- 0.1	- 0.9	+ 0.8	+ 0.1
Non-Appalachian North Carolina	- 0.1	- 0.7	+ 0.6	+ 0.1
Ohio	+ 0.0	- 1.0	+ 1.0	+ 0.0
Appalachian Ohio	+ 0.0	- 1.1	+ 1.0	+ 0.0
Non-Appalachian Ohio	+ 0.0	- 1.0	+ 0.9	+ 0.0
Pennsylvania	+ 0.1	- 0.5	+ 0.6	- 0.1
Appalachian Pennsylvania	+ 0.0	- 1.1	+ 1.0	+ 0.0
Non-Appalachian Pennsylvania	+ 0.1	- 0.1	+ 0.2	- 0.1
South Carolina	+ 0.2	- 0.6	+ 0.8	- 0.2
Appalachian South Carolina	+ 0.3	- 1.1	+ 1.3	- 0.3
Non-Appalachian South Carolina	+ 0.2	- 0.4	+ 0.6	- 0.2
Tennessee	+ 0.0	- 0.7	+ 0.8	+ 0.0
Appalachian Tennessee	- 0.1	- 0.9	+ 0.9	+ 0.1
Non-Appalachian Tennessee	+ 0.1	- 0.5	+ 0.7	- 0.1
Virginia	+ 0.0	- 0.5	+ 0.6	+ 0.0
Appalachian Virginia	- 0.3	- 1.3	+ 1.0	+ 0.3
Non-Appalachian Virginia	+ 0.1	- 0.5	+ 0.6	- 0.1
West Virginia (entire state)	+ 0.1	- 0.3	+ 0.3	- 0.1

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Figure 4.13: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Family Households, 2010-2014 to 2015-2019



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Family Households, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

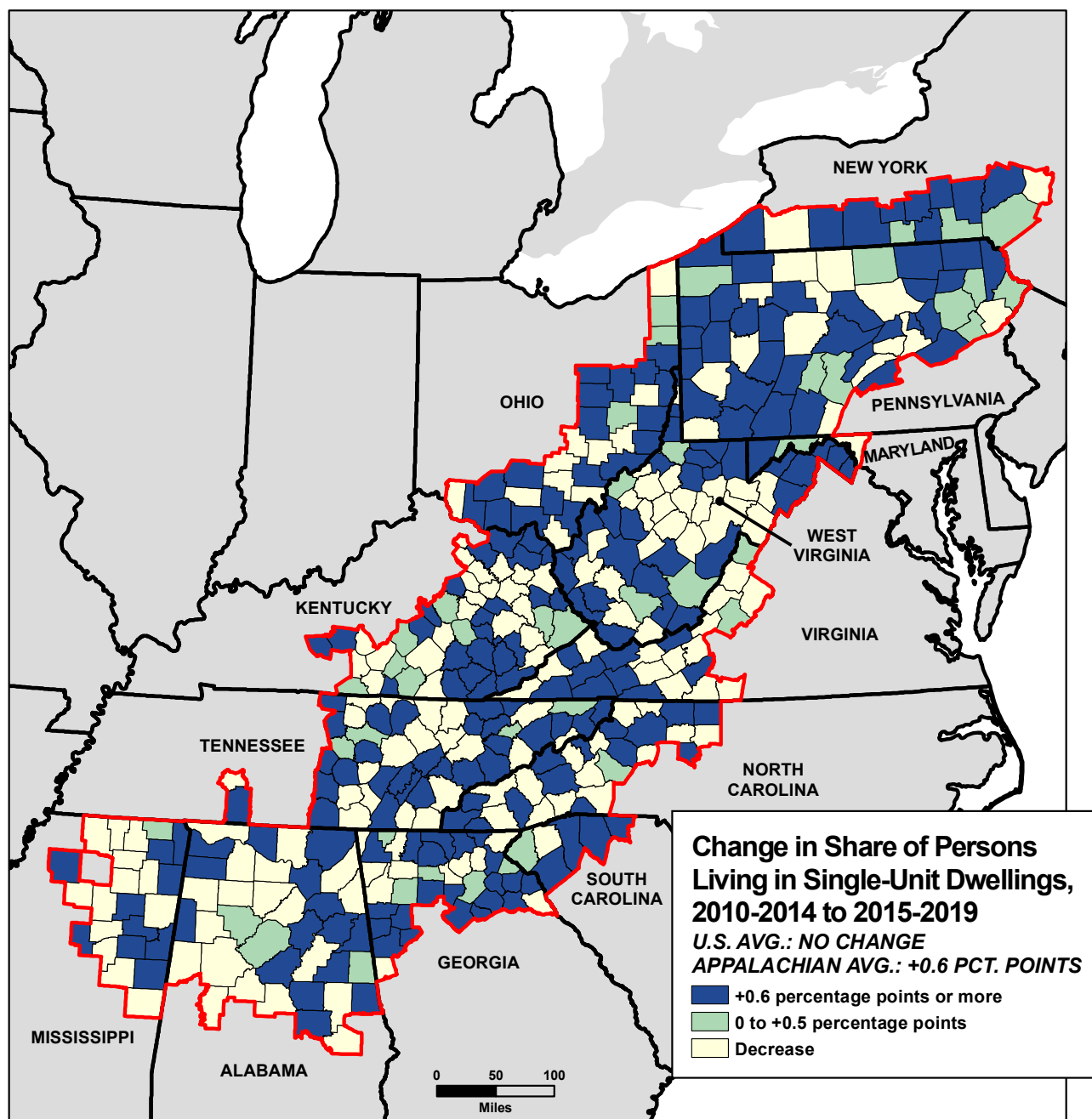
In the Appalachian Region, the share of persons living in family households fell 0.7 percentage points between 2010-2014 and 2015-2019—slightly more than in the nation as a whole (0.4 points). And there were 267 Appalachian counties—scattered throughout the Region—where the decrease in the share living in family households likewise exceeded the national average. 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 0.5 percentage points. Yet the declining prevalence of family households was not universal: there were 110 Appalachian counties where the share remained the same or increased.

Table 4.8: Percentage Point Change in the Share of the Population in Occupied Housing Units in the Appalachian Region, by Type of Housing, 2010-2014 to 2015-2019

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	+ 0.0	+ 0.3	- 0.3	+ 0.5	- 0.3	+ 0.0
Appalachian Region	+ 0.6	+ 0.1	- 0.1	+ 0.2	- 0.6	+ 0.1
Subregions						
Northern Appalachia	+ 0.4	+ 0.1	- 0.1	+ 0.2	- 0.5	+ 0.0
North Central Appalachia	+ 0.5	+ 0.2	+ 0.0	+ 0.3	- 0.8	+ 0.1
Central Appalachia	+ 0.7	+ 0.2	+ 0.1	+ 0.1	- 0.8	- 0.1
South Central Appalachia	+ 0.4	+ 0.3	+ 0.0	+ 0.3	- 0.8	+ 0.0
Southern Appalachia	+ 0.8	+ 0.0	- 0.1	+ 0.1	- 0.7	+ 0.0
County Types						
Large Metros (pop. 1 million +)	+ 0.5	+ 0.0	- 0.1	+ 0.1	- 0.6	+ 0.0
Small Metros (pop. <1 million)	+ 0.4	+ 0.1	- 0.1	+ 0.3	- 0.5	+ 0.1
Nonmetro, Adjacent to Large Metros	+ 0.6	+ 0.1	- 0.2	+ 0.2	- 0.7	+ 0.1
Nonmetro, Adjacent to Small Metros	+ 0.4	+ 0.0	+ 0.1	+ 0.1	- 0.4	+ 0.0
Rural (nonmetro, not adj. to a metro)	+ 0.9	+ 0.1	+ 0.0	+ 0.2	- 1.1	+ 0.0
Alabama	+ 0.4	+ 0.0	- 0.2	+ 0.2	- 0.5	+ 0.0
Appalachian Alabama	+ 0.2	+ 0.2	+ 0.1	+ 0.2	- 0.5	+ 0.0
Non-Appalachian Alabama	+ 1.0	- 0.4	- 0.6	+ 0.2	- 0.7	+ 0.0
Georgia	+ 0.4	+ 0.3	+ 0.0	+ 0.3	- 0.8	+ 0.1
Appalachian Georgia	+ 1.0	- 0.1	+ 0.0	- 0.1	- 0.8	+ 0.1
Non-Appalachian Georgia	+ 0.2	+ 0.5	+ 0.0	+ 0.5	- 0.7	+ 0.1
Kentucky	+ 0.3	+ 0.3	+ 0.4	+ 0.0	- 0.7	+ 0.0
Appalachian Kentucky	+ 0.8	+ 0.1	- 0.1	+ 0.2	- 0.9	- 0.1
Non-Appalachian Kentucky	+ 0.0	+ 0.4	+ 0.5	- 0.2	- 0.4	+ 0.1
Maryland	- 0.2	+ 0.4	- 0.2	+ 0.6	- 0.1	+ 0.0
Appalachian Maryland	+ 0.0	- 0.4	- 0.4	+ 0.0	+ 0.4	+ 0.0
Non-Appalachian Maryland	- 0.3	+ 0.4	- 0.1	+ 0.5	- 0.1	+ 0.0
Mississippi	+ 0.0	+ 0.3	+ 0.2	+ 0.2	- 0.4	+ 0.0
Appalachian Mississippi	- 0.3	+ 0.3	- 0.2	+ 0.5	+ 0.0	+ 0.1
Non-Appalachian Mississippi	+ 0.2	+ 0.3	+ 0.3	+ 0.0	- 0.5	+ 0.0
New York	- 0.1	+ 0.3	- 0.5	+ 0.8	- 0.1	+ 0.0
Appalachian New York	+ 0.8	+ 0.0	- 0.2	+ 0.2	- 0.7	+ 0.0
Non-Appalachian New York	- 0.2	+ 0.2	- 0.5	+ 0.8	- 0.1	- 0.1
North Carolina	+ 0.6	+ 0.4	+ 0.0	+ 0.4	- 1.0	+ 0.1
Appalachian North Carolina	- 0.1	+ 0.5	+ 0.4	+ 0.3	- 0.4	+ 0.0
Non-Appalachian North Carolina	+ 0.8	+ 0.4	- 0.1	+ 0.5	- 1.1	+ 0.0
Ohio	+ 0.2	+ 0.1	- 0.2	+ 0.3	- 0.3	+ 0.0
Appalachian Ohio	+ 0.5	+ 0.1	- 0.1	+ 0.2	- 0.7	+ 0.1
Non-Appalachian Ohio	+ 0.1	+ 0.1	- 0.2	+ 0.3	- 0.2	+ 0.0
Pennsylvania	- 0.1	+ 0.4	- 0.1	+ 0.5	- 0.3	+ 0.0
Appalachian Pennsylvania	+ 0.3	+ 0.2	- 0.1	+ 0.3	- 0.5	+ 0.0
Non-Appalachian Pennsylvania	- 0.3	+ 0.4	- 0.2	+ 0.7	- 0.1	+ 0.0
South Carolina	+ 1.5	- 0.3	- 0.4	+ 0.1	- 1.1	+ 0.0
Appalachian South Carolina	+ 1.7	- 0.5	- 0.5	+ 0.0	- 1.2	+ 0.0
Non-Appalachian South Carolina	+ 1.4	- 0.4	- 0.4	+ 0.1	- 1.1	+ 0.0
Tennessee	+ 0.2	+ 0.5	- 0.2	+ 0.7	- 0.7	+ 0.1
Appalachian Tennessee	+ 0.9	+ 0.1	- 0.2	+ 0.4	- 1.0	+ 0.0
Non-Appalachian Tennessee	- 0.4	+ 0.7	- 0.3	+ 1.0	- 0.3	+ 0.1
Virginia	- 0.3	+ 0.6	+ 0.1	+ 0.5	- 0.3	+ 0.0
Appalachian Virginia	+ 0.0	+ 0.6	+ 0.2	+ 0.4	- 0.6	+ 0.0
Non-Appalachian Virginia	- 0.3	+ 0.5	+ 0.0	+ 0.5	- 0.2	+ 0.0
West Virginia (entire state)	+ 0.8	+ 0.0	- 0.1	+ 0.1	- 0.8	+ 0.0

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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), 2010-2014 to 2015-2019



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), 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

The share of Appalachian residents living in single-unit homes was 0.6 percentage points higher in 2015-2019 than in 2010-2014. (In contrast, the national share remained unchanged.) And the increase was at or above the regional average in 212 of the Region's 420 counties. Yet the share living in single-unit dwellings declined in another 164 counties. 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 2010-2014 and 2015-2019.

TRENDS IN HOUSING OCCUPANCY, TENURE, AND TYPE

- At just under 85 percent in 2015-2019, Appalachia's home occupancy rate was 0.5 percentage points lower than it was in 2010-2014 (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, North Carolina, 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 November 2016 outbreak of tornadoes that struck parts of Alabama and Tennessee.
- One factor behind the decline in Appalachia's occupancy rates from 2010-2014 to 2015-2019 might lie in the fact that some parts of the Region had an 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 about one-third of the 276 Appalachian counties where the overall vacancy rates increased.
- Homeownership rates in Appalachia fell slightly (0.3 percentage points) between 2010-2014 and 2015-2019. Among subregions, the declines were greatest in Northern and Central Appalachia, while among county types, the drop in homeownership was greatest among counties in large metropolitan areas and in the most rural counties. As with the drop in the occupancy rate, the decrease in homeownership partly suggests lingering effects of the 2007-2009 recession and the slow economic recovery that has followed.
- Single-unit dwellings accounted for just over 73 percent of Appalachia's housing stock in 2015-2019, which represents a very slight increase from 2010-2014 (see Tables 4.3 and 4.6). Within the Region, the share increased for all county types and for all subregions. The greatest increases were in North Central Appalachia and nonmetropolitan counties adjacent to small metro areas. The share also increased in the Appalachian section of most states, particularly in South Carolina, West Virginia, and Kentucky. But the percentage did fall in some states—in Mississippi, for example, the share dropped 0.7 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 0.3 percentage points overall since 2010-2014, with slightly larger drops in three of the five subregions—and an even more pronounced one in South Carolina. In contrast, the share of mobile homes in Appalachian Mississippi increased 0.4 percentage points.
- At 80.4 percent, the share of Appalachian residents living in family households was 0.7 percentage points lower in 2015-2019 than in 2010-2014 (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 each case—occurred in Northern Appalachia, the most rural counties, and the Appalachian sections of seven states. The decline in the percentage of persons in married-couple households has fueled the drop in family households overall; the share of persons in married-couple households in Appalachia fell 0.5 percentage points.
- The share of Appalachian residents living in single-unit homes was 77.8 percent in 2015-2019, more than half a percentage point higher than in 2010-2014 (see Tables 4.5 and 4.8). But although the share rose in every subregion and county type, there was greater divergence among the states. For example, the share rose almost two percentage points in South Carolina's Appalachian section yet fell slightly in Appalachian Mississippi and North Carolina. 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 2015-2019 was 0.6 percentage points lower than it was in 2010-2014.

CHAPTER 5: EDUCATION, DEVICE OWNERSHIP, AND INTERNET ACCESS

Table 5.1: Educational Attainment of Persons Ages 25 and Over in the Appalachian Region, 2015-2019

Education (Highest Level Attained)	Total Population Ages 25 and Over, 2015-2019	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	220,622,076	12.0	88.0	47.4	40.6	8.5	32.1
Appalachian Region	17,769,645	12.8	87.2	53.6	33.6	8.9	24.7
Subregions							
Northern Appalachia	5,799,636	9.1	90.9	55.2	35.6	9.7	25.9
North Central Appalachia	1,680,359	12.6	87.4	58.8	28.6	8.0	20.6
Central Appalachia	1,311,096	20.8	79.2	57.4	21.8	7.4	14.4
South Central Appalachia	3,430,875	13.3	86.7	52.6	34.1	8.8	25.3
Southern Appalachia	5,547,679	14.5	85.5	50.1	35.5	8.6	26.9
County Types							
Large Metros (pop. 1 million +)	4,203,350	9.4	90.6	48.8	41.8	9.2	32.7
Small Metros (pop. <1 million)	7,505,875	12.0	88.0	53.0	35.0	8.9	26.1
Nonmetro, Adjacent to Large Metros	1,522,124	14.4	85.6	58.3	27.3	9.2	18.2
Nonmetro, Adjacent to Small Metros	2,800,218	15.4	84.6	58.5	26.1	8.6	17.5
Rural (nonmetro, not adj. to a metro)	1,738,078	18.6	81.4	56.0	25.4	8.3	17.1
Alabama	3,320,877	13.8	86.2	52.2	34.0	8.5	25.5
Appalachian Alabama	2,140,903	13.8	86.2	51.6	34.6	8.5	26.1
Non-Appalachian Alabama	1,179,974	13.9	86.1	53.3	32.8	8.5	24.3
Georgia	6,888,279	12.9	87.1	48.0	39.1	7.8	31.3
Appalachian Georgia	2,131,349	14.6	85.4	48.7	36.6	8.0	28.6
Non-Appalachian Georgia	4,756,930	12.1	87.9	47.7	40.3	7.7	32.5
Kentucky	3,019,093	13.7	86.3	53.7	32.5	8.3	24.2
Appalachian Kentucky	804,571	21.0	79.0	56.3	22.8	7.6	15.2
Non-Appalachian Kentucky	2,214,522	11.1	88.9	52.8	36.1	8.6	27.5
Maryland	4,139,008	9.8	90.2	43.3	46.9	6.7	40.2
Appalachian Maryland	176,472	11.6	88.4	58.8	29.6	8.7	21.0
Non-Appalachian Maryland	3,962,536	9.7	90.3	42.6	47.7	6.6	41.0
Mississippi	1,975,670	15.5	84.5	52.7	31.8	9.8	22.0
Appalachian Mississippi	414,161	18.4	81.6	53.5	28.1	9.2	18.9
Non-Appalachian Mississippi	1,561,509	14.7	85.3	52.5	32.8	9.9	22.9
New York	13,631,937	13.2	86.8	41.5	45.3	8.7	36.6
Appalachian New York	695,349	9.6	90.4	51.1	39.3	12.5	26.8
Non-Appalachian New York	12,936,588	13.4	86.6	41.0	45.6	8.5	37.1
North Carolina	6,983,859	12.2	87.8	46.9	40.9	9.7	31.3
Appalachian North Carolina	1,248,726	13.3	86.7	49.6	37.1	10.1	27.0
Non-Appalachian North Carolina	5,735,133	12.0	88.0	46.3	41.7	9.6	32.2
Ohio	7,975,777	9.6	90.4	53.4	36.9	8.7	28.3
Appalachian Ohio	1,392,953	12.5	87.5	60.6	26.9	8.8	18.1
Non-Appalachian Ohio	6,582,824	9.0	91.0	51.9	39.1	8.6	30.4
Pennsylvania	8,954,232	9.5	90.5	50.6	39.9	8.5	31.4
Appalachian Pennsylvania	4,057,799	8.4	91.6	54.4	37.2	9.6	27.6
Non-Appalachian Pennsylvania	4,896,433	10.4	89.6	47.5	42.1	7.6	34.6
South Carolina	3,446,971	12.5	87.5	49.6	37.9	9.8	28.1
Appalachian South Carolina	861,266	13.8	86.2	47.9	38.3	10.2	28.1
Non-Appalachian South Carolina	2,585,705	12.1	87.9	50.2	37.8	9.7	28.1
Tennessee	4,587,393	12.5	87.5	52.8	34.6	7.3	27.3
Appalachian Tennessee	2,030,248	13.8	86.2	55.2	31.0	7.6	23.3
Non-Appalachian Tennessee	2,557,145	11.5	88.5	51.0	37.5	7.0	30.5
Virginia	5,776,886	10.3	89.7	43.1	46.5	7.8	38.8
Appalachian Virginia	528,421	15.9	84.1	54.0	30.1	9.3	20.9
Non-Appalachian Virginia	5,248,465	9.7	90.3	42.1	48.2	7.6	40.6
West Virginia (entire state)	1,287,427	13.1	86.9	58.9	28.0	7.3	20.6

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Table 5.2: Educational Attainment of Persons Ages 25 to 64 in the Appalachian Region, 2015-2019

Education (Highest Level Attained)	Total Population Ages 25 to 64, 2015-2019	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	169,838,280	10.9	89.1	46.4	42.7	9.1	33.5
Appalachian Region	13,174,154	11.1	88.9	52.7	36.2	10.0	26.2
Subregions							
Northern Appalachia	4,202,331	7.7	92.3	53.0	39.4	11.2	28.2
North Central Appalachia	1,237,023	10.3	89.7	58.6	31.2	9.1	22.0
Central Appalachia	969,723	16.9	83.1	59.2	23.9	8.7	15.2
South Central Appalachia	2,482,460	11.5	88.5	52.6	36.0	9.8	26.2
Southern Appalachia	4,282,617	13.2	86.8	49.3	37.5	9.4	28.1
County Types							
Large Metros (pop. 1 million +)	3,238,317	8.3	91.7	46.6	45.2	10.1	35.1
Small Metros (pop. <1 million)	5,560,290	10.6	89.4	52.0	37.4	9.9	27.5
Nonmetro, Adjacent to Large Metros	1,114,391	12.8	87.2	57.8	29.4	10.4	18.9
Nonmetro, Adjacent to Small Metros	2,000,760	13.2	86.8	58.8	28.0	9.9	18.0
Rural (nonmetro, not adj. to a metro)	1,260,396	15.8	84.2	57.1	27.1	9.5	17.6
Alabama	2,515,996	12.4	87.6	51.6	36.0	9.4	26.5
Appalachian Alabama	1,625,540	12.4	87.6	50.8	36.8	9.4	27.4
Non-Appalachian Alabama	890,456	12.3	87.7	53.2	34.5	9.5	25.0
Georgia	5,481,794	11.7	88.3	47.3	41.1	8.3	32.7
Appalachian Georgia	1,693,591	13.7	86.3	47.9	38.4	8.6	29.8
Non-Appalachian Georgia	3,788,203	10.7	89.3	47.0	42.2	8.2	34.0
Kentucky	2,308,955	11.5	88.5	53.5	35.1	9.4	25.6
Appalachian Kentucky	602,619	17.1	82.9	57.9	24.9	8.9	16.1
Non-Appalachian Kentucky	1,706,336	9.5	90.5	51.9	38.6	9.6	29.0
Maryland	3,236,330	8.7	91.3	42.5	48.9	7.1	41.7
Appalachian Maryland	130,628	10.0	90.0	58.3	31.8	9.9	21.9
Non-Appalachian Maryland	3,105,702	8.6	91.4	41.8	49.6	7.0	42.6
Mississippi	1,514,648	13.6	86.4	52.9	33.6	11.0	22.5
Appalachian Mississippi	311,275	16.0	84.0	53.7	30.2	10.6	19.6
Non-Appalachian Mississippi	1,203,373	13.0	87.0	52.6	34.4	11.1	23.3
New York	10,485,631	11.4	88.6	40.2	48.4	9.5	38.9
Appalachian New York	502,552	8.6	91.4	49.8	41.6	13.7	27.8
Non-Appalachian New York	9,983,079	11.5	88.5	39.7	48.7	9.2	39.5
North Carolina	5,355,846	10.9	89.1	45.8	43.3	10.4	32.9
Appalachian North Carolina	893,121	12.3	87.7	49.2	38.5	11.3	27.2
Non-Appalachian North Carolina	4,462,725	10.7	89.3	45.1	44.2	10.2	34.0
Ohio	6,034,483	8.2	91.8	51.8	39.9	9.7	30.2
Appalachian Ohio	1,021,466	11.0	89.0	59.6	29.5	10.2	19.3
Non-Appalachian Ohio	5,013,017	7.6	92.4	50.3	42.1	9.6	32.5
Pennsylvania	6,672,512	7.9	92.1	48.5	43.6	9.5	34.1
Appalachian Pennsylvania	2,943,888	6.8	93.2	51.8	41.5	11.0	30.4
Non-Appalachian Pennsylvania	3,728,624	8.9	91.1	45.9	45.3	8.3	36.9
South Carolina	2,583,413	11.1	88.9	49.6	39.3	10.5	28.8
Appalachian South Carolina	652,211	12.2	87.8	47.5	40.2	10.9	29.3
Non-Appalachian South Carolina	1,931,202	10.7	89.3	50.3	39.0	10.4	28.6
Tennessee	3,512,269	10.6	89.4	52.4	36.9	8.0	28.9
Appalachian Tennessee	1,485,735	11.6	88.4	55.5	32.9	8.6	24.4
Non-Appalachian Tennessee	2,026,534	9.9	90.1	50.2	39.9	7.6	32.2
Virginia	4,504,940	8.7	91.3	42.3	49.0	8.3	40.7
Appalachian Virginia	376,215	12.1	87.9	54.8	33.1	10.5	22.6
Non-Appalachian Virginia	4,128,725	8.4	91.6	41.1	50.5	8.1	42.3
West Virginia (entire state)	935,313	10.5	89.5	59.0	30.4	8.4	22.0

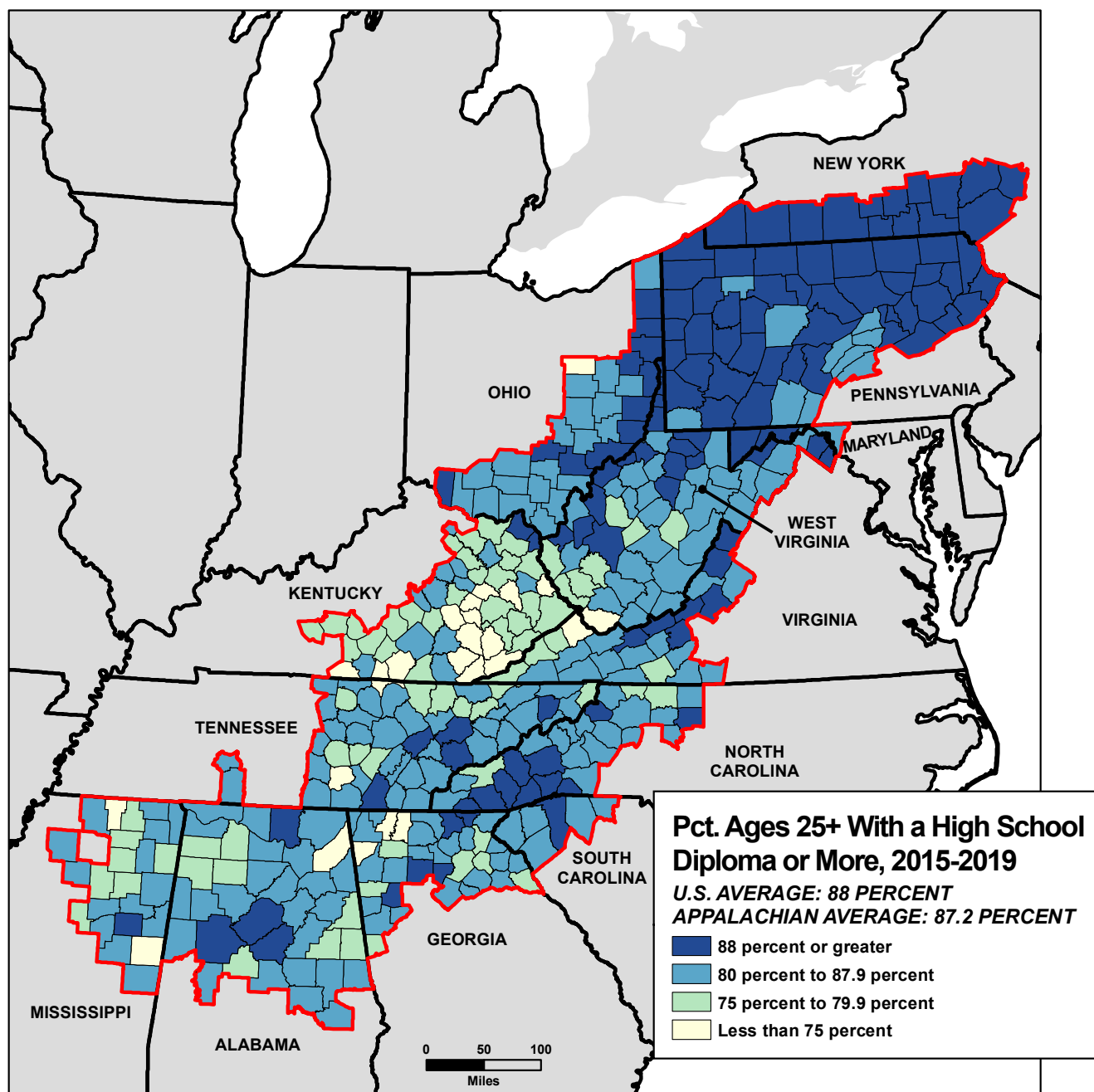
Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Table 5.3: Educational Attainment of Persons Ages 65 and Over in the Appalachian Region, 2015-2019

Education (Highest Level Attained)	Total Population Ages 65 and Over, 2015-2019	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	50,783,796	15.6	84.4	50.6	33.8	6.3	27.5
Appalachian Region	4,595,491	17.6	82.4	56.2	26.2	5.7	20.4
Subregions							
Northern Appalachia	1,597,305	13.0	87.0	61.2	25.9	6.0	19.9
North Central Appalachia	443,336	19.0	81.0	59.4	21.6	4.9	16.7
Central Appalachia	341,373	32.0	68.0	52.1	16.0	3.8	12.2
South Central Appalachia	948,415	18.1	81.9	52.8	29.1	6.1	23.0
Southern Appalachia	1,265,062	18.8	81.2	52.5	28.7	5.9	22.8
County Types							
Large Metros (pop. 1 million +)	965,033	13.2	86.8	56.2	30.6	6.1	24.5
Small Metros (pop. <1 million)	1,945,585	16.3	83.7	55.7	28.1	5.9	22.2
Nonmetro, Adjacent to Large Metros	407,733	18.6	81.4	59.6	21.8	5.7	16.1
Nonmetro, Adjacent to Small Metros	799,458	20.7	79.3	57.8	21.6	5.4	16.2
Rural (nonmetro, not adj. to a metro)	477,682	26.0	74.0	53.2	20.8	4.9	15.9
Alabama	804,881	18.3	81.7	54.0	27.7	5.5	22.1
Appalachian Alabama	515,363	18.1	81.9	54.2	27.7	5.5	22.2
Non-Appalachian Alabama	289,518	18.8	81.2	53.7	27.5	5.5	22.0
Georgia	1,406,485	17.5	82.5	50.8	31.7	5.8	25.8
Appalachian Georgia	437,758	18.2	81.8	52.1	29.7	5.7	24.0
Non-Appalachian Georgia	968,727	17.2	82.8	50.3	32.5	5.9	26.7
Kentucky	710,138	21.1	78.9	54.6	24.3	4.7	19.6
Appalachian Kentucky	201,952	32.4	67.6	51.3	16.3	3.8	12.6
Non-Appalachian Kentucky	508,186	16.6	83.4	55.9	27.5	5.1	22.4
Maryland	902,678	13.8	86.2	46.4	39.8	5.3	34.5
Appalachian Maryland	45,844	16.4	83.6	60.2	23.4	5.3	18.2
Non-Appalachian Maryland	856,834	13.7	86.3	45.7	40.7	5.3	35.4
Mississippi	461,022	21.7	78.3	52.3	26.0	5.6	20.4
Appalachian Mississippi	102,886	25.7	74.3	52.7	21.6	4.8	16.8
Non-Appalachian Mississippi	358,136	20.6	79.4	52.2	27.3	5.8	21.4
New York	3,146,306	19.1	80.9	45.8	35.0	6.3	28.7
Appalachian New York	192,797	12.1	87.9	54.5	33.3	9.3	24.1
Non-Appalachian New York	2,953,509	19.6	80.4	45.3	35.2	6.1	29.0
North Carolina	1,628,013	16.5	83.5	50.3	33.3	7.4	25.9
Appalachian North Carolina	355,605	15.9	84.1	50.5	33.6	7.0	26.6
Non-Appalachian North Carolina	1,272,408	16.6	83.4	50.2	33.2	7.5	25.7
Ohio	1,941,294	14.0	86.0	58.4	27.6	5.4	22.2
Appalachian Ohio	371,487	16.7	83.3	63.5	19.9	4.8	15.0
Non-Appalachian Ohio	1,569,807	13.4	86.6	57.2	29.4	5.5	23.9
Pennsylvania	2,281,720	14.0	86.0	56.9	29.1	5.4	23.7
Appalachian Pennsylvania	1,113,911	12.5	87.5	61.5	26.0	5.7	20.3
Non-Appalachian Pennsylvania	1,167,809	15.3	84.7	52.5	32.2	5.1	27.1
South Carolina	863,558	16.6	83.4	49.7	33.7	7.5	26.2
Appalachian South Carolina	209,055	18.5	81.5	49.3	32.2	7.8	24.4
Non-Appalachian South Carolina	654,503	15.9	84.1	49.8	34.2	7.4	26.8
Tennessee	1,075,124	18.8	81.2	54.2	27.1	4.8	22.2
Appalachian Tennessee	544,513	20.0	80.0	54.5	25.5	5.1	20.4
Non-Appalachian Tennessee	530,611	17.5	82.5	53.8	28.7	4.6	24.1
Virginia	1,271,946	15.9	84.1	46.2	37.8	5.8	32.0
Appalachian Virginia	152,206	25.4	74.6	51.9	22.7	6.2	16.5
Non-Appalachian Virginia	1,119,740	14.7	85.3	45.5	39.9	5.8	34.1
West Virginia (entire state)	352,114	19.9	80.1	58.8	21.4	4.5	16.8

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

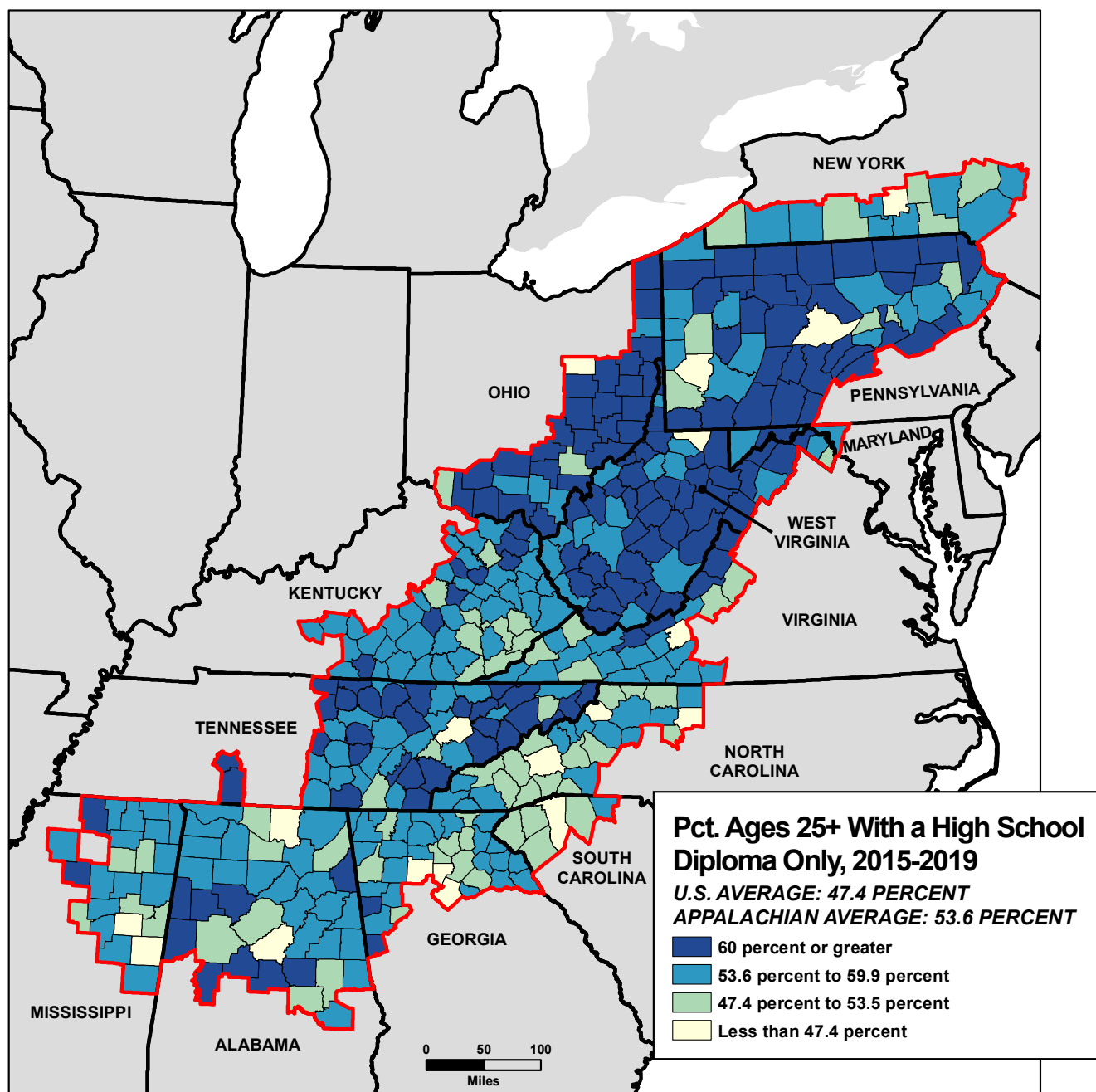
Figure 5.1: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2015-2019



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Although the share of Appalachian adults with at least a high school diploma was slightly below the national average over the 2015-2019 period, it matched or exceeded the national share in 123 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 92 percent and 90 percent, respectively. Yet in 25 counties, less than three-fourths of adults had completed high school; all but one of those counties were in Central, South Central, and Southern Appalachia, and 22 were outside metropolitan areas. Kentucky alone had 14 of these 25 counties; just 79 percent of adults in the state's Appalachian counties had a high school diploma or more in 2015-2019.

Figure 5.2: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2015-2019

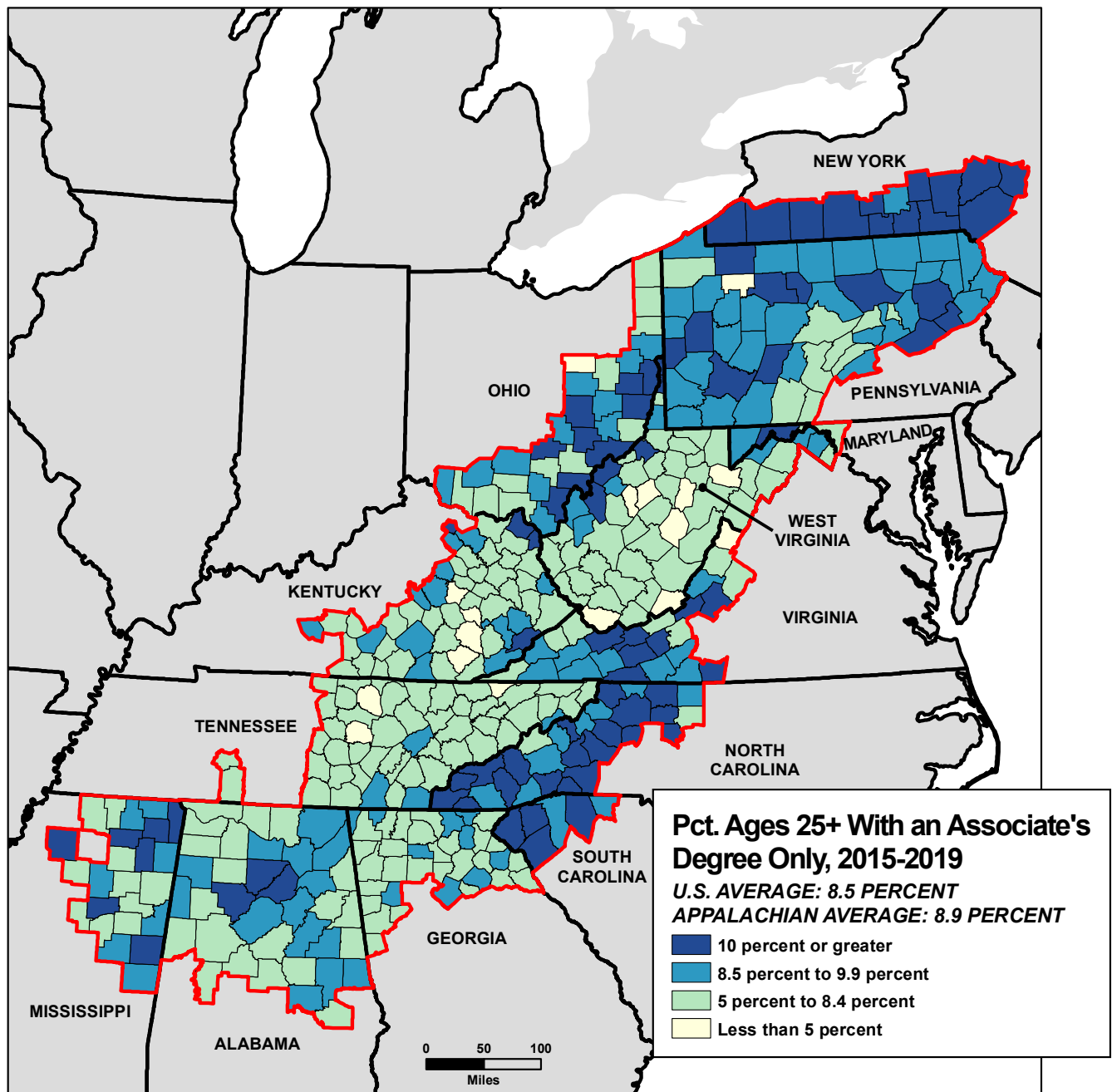


Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

During the 2015-2019 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 151 of the Region's 420 counties—124 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, 34 percent of adults in Appalachia did earn an associate's or bachelor's degree, while 13 percent never finished high school.

Figure 5.3: Percent of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree but Without a Bachelor's Degree, 2015-2019

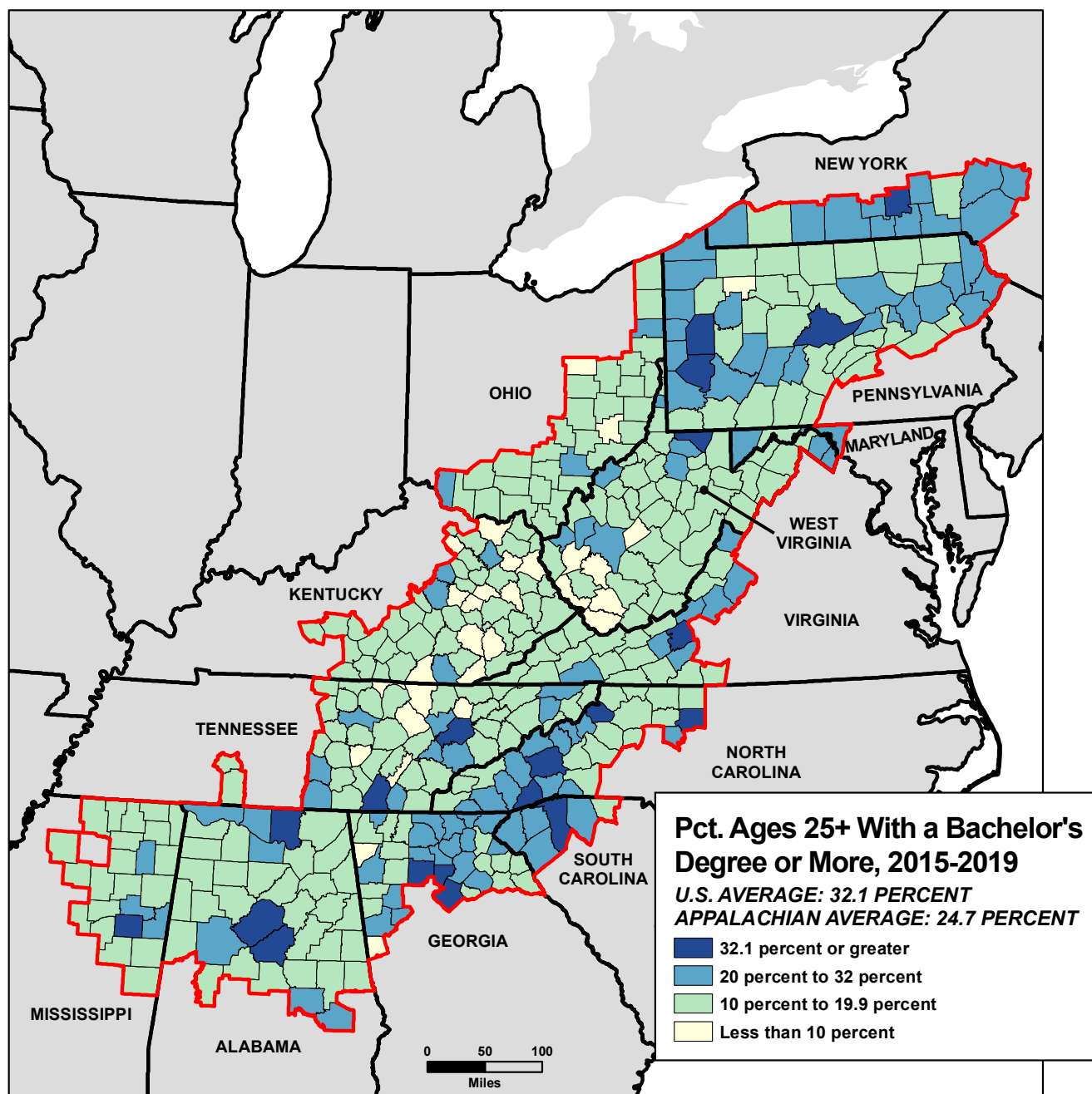


Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree but Without a Bachelor's Degree, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In the Appalachian Region, the share of adults ages 25 and over with an associate's degree but without a bachelor's degree was 8.9 percent in 2015-2019, just above the national rate (8.5 percent). And it was even higher in some parts of the Region—12.5 percent in Appalachian New York and just over 10 percent in both North and South Carolina, for example. Indeed, those three states alone accounted for 36 of the 84 counties where the share matched or exceeded 10 percent. In contrast, the share was less than 5 percent in 17 other Appalachian counties—14 of which were in West Virginia, Kentucky, or Tennessee. In the Appalachian portion of each of these states, less than 8 percent of adults had an associate's degree as their highest level of education.

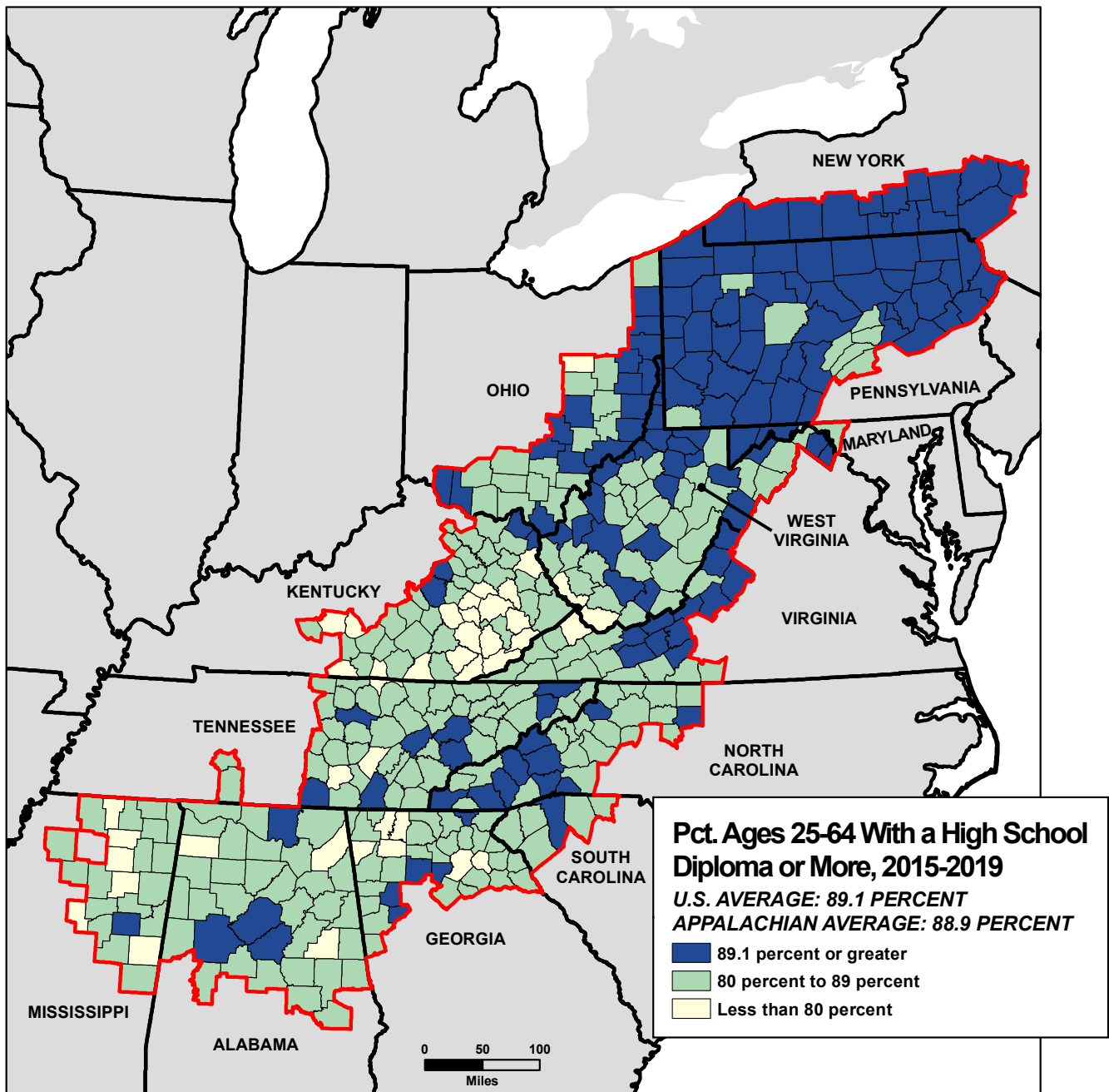
Figure 5.4: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2015-2019



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 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 2015-2019 period than in the nation as a whole. Indeed, the rate was lower than the national average in 400 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 294 Appalachian counties. And in 29 counties—all but two of which were either outside metropolitan areas or in Central Appalachia—the share was less than one in 10. The 20 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 Centre County, Pennsylvania, where Pennsylvania State University is located).

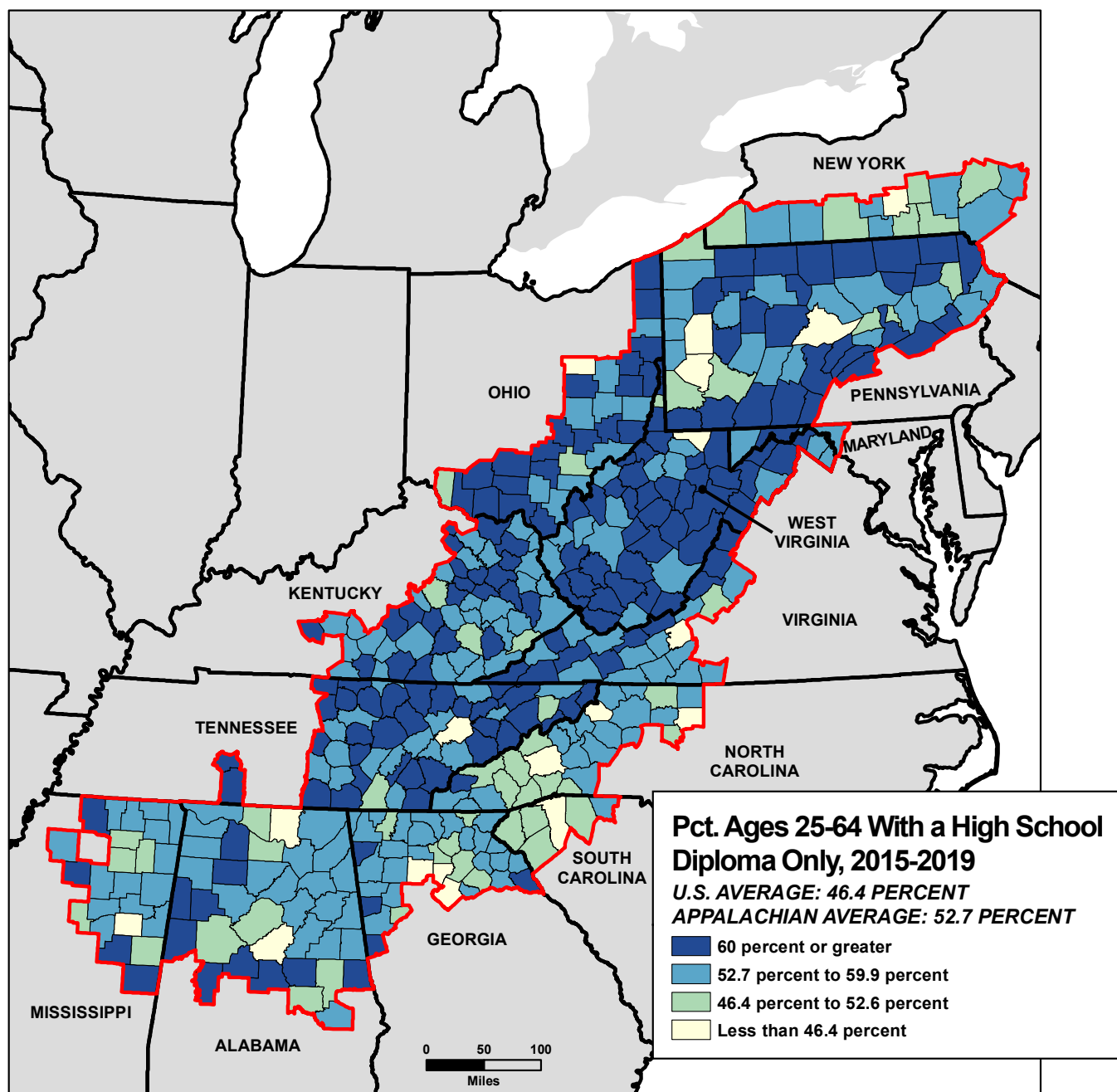
Figure 5.5: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2015-2019



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In 2015-2019, 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 89.1 percent, and the share matched or exceeded the national rate in 145 counties. More than half of these counties were in metropolitan areas, and 101 of them were in Northern or North Central Appalachia. Two-fifths of these 145 counties were in New York or Pennsylvania; the share of working-age adults with a high school diploma or more exceeded 91 percent in both states' Appalachian sections. (The share in Appalachian Pennsylvania was 93 percent.) At the other end of the spectrum, less than 80 percent of working-age adults had finished high school in 41 Appalachian counties. Almost all of these counties were outside metropolitan areas, and 19 of them were in Kentucky alone.

Figure 5.6: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2015-2019

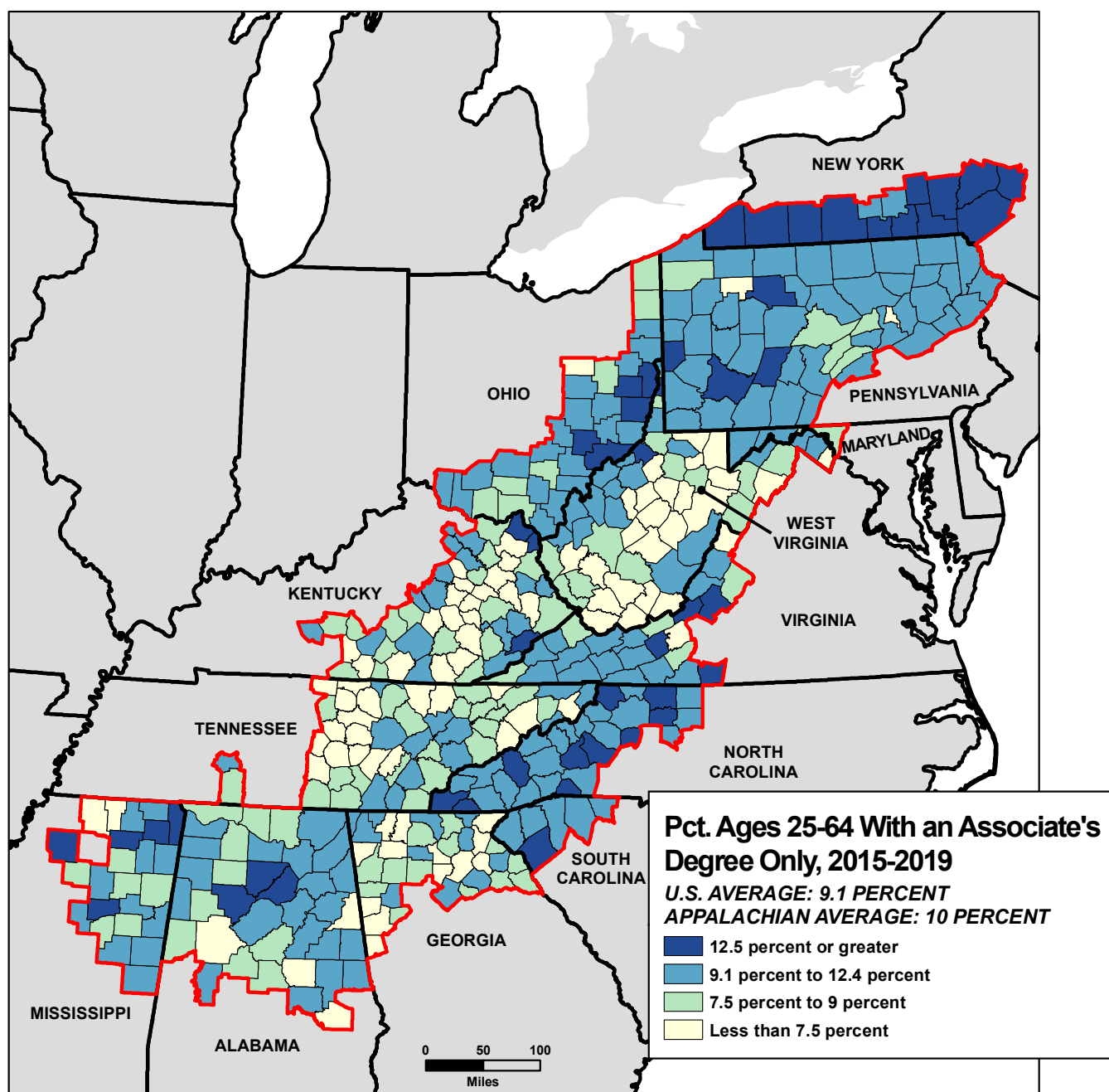


Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In 2015-2019, almost 53 percent of working-age adults (ages 25 to 64) in the Appalachian Region had a high school diploma but no postsecondary degree, compared to just over 46 percent nationally. And the share was at least 60 percent in 171 of Appalachia's 420 counties. More than one-third of these counties were in Ohio and West Virginia; the share with just a high school diploma was at least 59 percent in the Appalachian portion of both states. 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; all but one of 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 but Without a Bachelor's Degree, 2015-2019

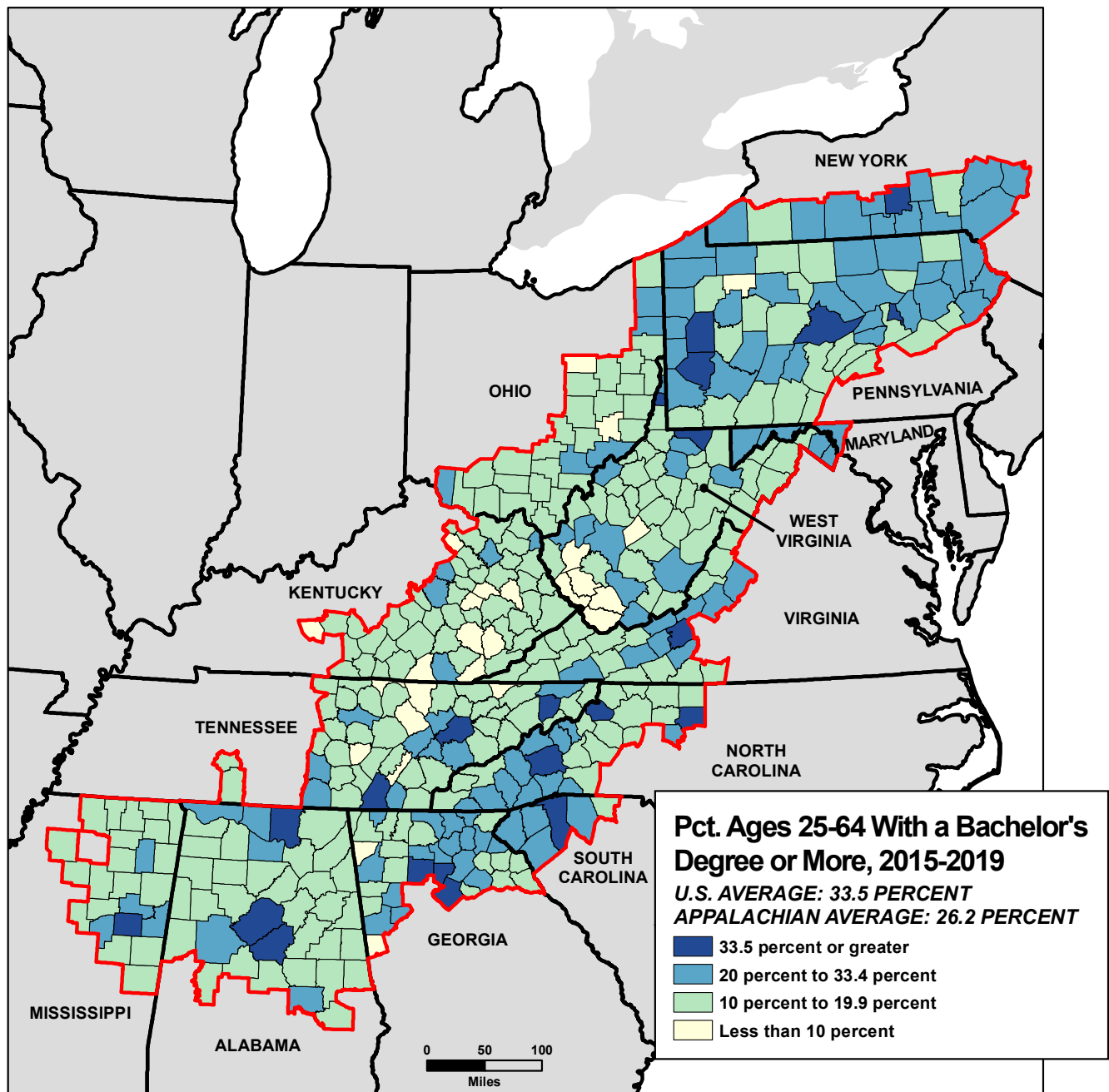


Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With an Associate's Degree but Without a Bachelor's Degree, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In 2015-2019, 10 percent of working-age adults (ages 25 to 64) in Appalachia had attained an associate's degree but not a bachelor's degree, compared with just over 9 percent nationally. And the share was even higher in much of the Region: In 49 Appalachian counties (including 12 in New York), at least one in eight working-age adults had an associate's degree as their highest level of education. In contrast, there were 86 counties where less than 7.5 percent of 25-to-64-year-olds had attained an associate's degree only. All but 11 of the counties in the latter group were in four states—Georgia, Kentucky, Tennessee, and West Virginia.

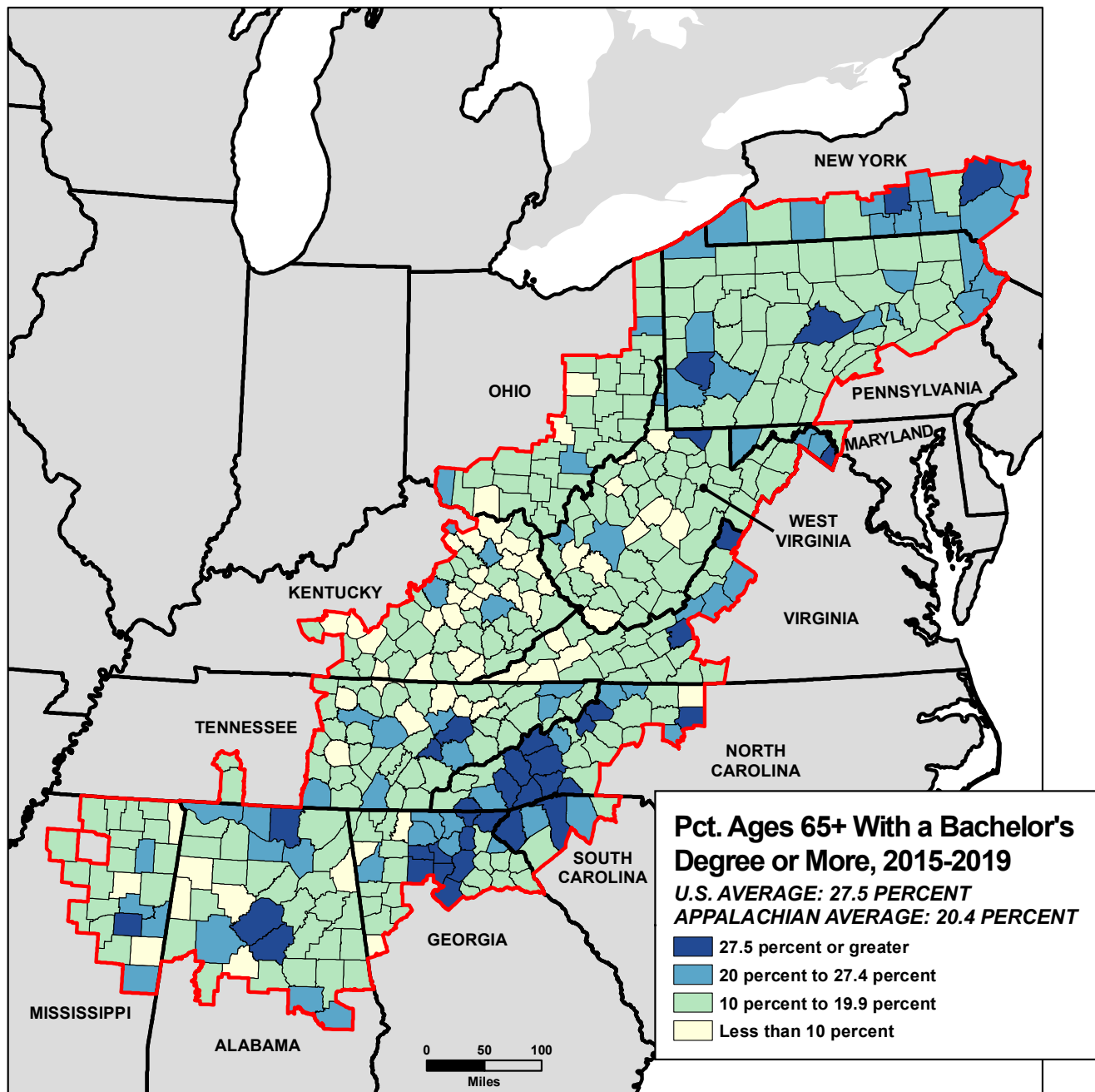
Figure 5.8: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2015-2019



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Just over 26 percent of Appalachia's working-age population had a bachelor's degree or more in 2015-2019—more than seven percentage points lower than the U.S. average of 33.5 percent. This is a striking indicator of the lower educational level of the Appalachian workforce. Indeed, just 15.2 percent of working-age adults in Central Appalachia had a bachelor's degree, as did 17.6 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 26 counties. Of the counties in this latter group, 21 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, 2015-2019



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region With a Bachelor's Degree or More, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

While 27.5 percent of older Americans (ages 65 and over) had at least a bachelor's degree in 2015-2019, less than 10 percent had one in 57 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 three-fifths were in Central Appalachia—Kentucky alone had 22 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 Oktibbeha County, Mississippi, home to Mississippi State 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 Avery, Transylvania, and other western North Carolina counties that lie along the Blue Ridge Parkway).

Table 5.4: Percentage Point Change in Educational Attainment of Persons Ages 25 and Over in the Appalachian Region, 2010-2014 to 2015-2019

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	- 1.7	+ 1.7	- 1.7	+ 3.4	+ 0.6	+ 2.8
Appalachian Region	- 2.1	+ 2.1	- 1.3	+ 3.5	+ 0.9	+ 2.5
Subregions						
Northern Appalachia	- 1.5	+ 1.5	- 2.1	+ 3.5	+ 0.7	+ 2.7
North Central Appalachia	- 2.3	+ 2.3	- 0.3	+ 2.6	+ 0.8	+ 1.8
Central Appalachia	- 3.5	+ 3.5	+ 0.8	+ 2.6	+ 1.2	+ 1.4
South Central Appalachia	- 2.8	+ 2.8	- 0.8	+ 3.5	+ 1.0	+ 2.5
Southern Appalachia	- 2.2	+ 2.2	- 1.4	+ 3.7	+ 0.8	+ 2.9
County Types						
Large Metros (pop. 1 million +)	- 1.7	+ 1.7	- 2.4	+ 4.1	+ 0.8	+ 3.4
Small Metros (pop. <1 million)	- 2.0	+ 2.0	- 1.4	+ 3.4	+ 0.9	+ 2.5
Nonmetro, Adjacent to Large Metros	- 1.9	+ 1.9	- 0.7	+ 2.6	+ 0.9	+ 1.8
Nonmetro, Adjacent to Small Metros	- 2.4	+ 2.4	- 0.5	+ 2.9	+ 1.0	+ 1.9
Rural (nonmetro, not adj. to a metro)	- 3.2	+ 3.2	+ 0.3	+ 2.8	+ 1.0	+ 1.9
Alabama	- 2.5	+ 2.5	- 0.9	+ 3.4	+ 0.9	+ 2.4
Appalachian Alabama	- 2.4	+ 2.4	- 1.0	+ 3.5	+ 0.9	+ 2.5
Non-Appalachian Alabama	- 2.5	+ 2.5	- 0.6	+ 3.1	+ 0.9	+ 2.2
Georgia	- 2.1	+ 2.1	- 1.7	+ 3.7	+ 0.8	+ 3.0
Appalachian Georgia	- 1.9	+ 1.9	- 1.9	+ 3.7	+ 0.7	+ 3.1
Non-Appalachian Georgia	- 2.2	+ 2.2	- 1.6	+ 3.9	+ 0.8	+ 3.0
Kentucky	- 2.8	+ 2.8	- 0.7	+ 3.4	+ 1.0	+ 2.4
Appalachian Kentucky	- 3.5	+ 3.5	+ 0.7	+ 2.8	+ 1.3	+ 1.6
Non-Appalachian Kentucky	- 2.4	+ 2.4	- 1.2	+ 3.6	+ 0.9	+ 2.6
Maryland	- 1.2	+ 1.2	- 2.1	+ 3.3	+ 0.4	+ 2.9
Appalachian Maryland	- 1.8	+ 1.8	- 1.0	+ 2.8	+ 0.8	+ 2.1
Non-Appalachian Maryland	- 1.2	+ 1.2	- 2.1	+ 3.3	+ 0.3	+ 2.9
Mississippi	- 2.6	+ 2.6	- 0.3	+ 2.9	+ 1.3	+ 1.6
Appalachian Mississippi	- 2.9	+ 2.9	+ 0.1	+ 2.8	+ 1.0	+ 1.8
Non-Appalachian Mississippi	- 2.5	+ 2.5	- 0.4	+ 2.9	+ 1.3	+ 1.6
New York	- 1.4	+ 1.4	- 1.7	+ 3.1	+ 0.2	+ 2.9
Appalachian New York	- 1.2	+ 1.2	- 1.7	+ 3.0	+ 0.7	+ 2.3
Non-Appalachian New York	- 1.4	+ 1.4	- 1.7	+ 3.1	+ 0.2	+ 2.9
North Carolina	- 2.4	+ 2.4	- 1.9	+ 4.3	+ 0.9	+ 3.5
Appalachian North Carolina	- 2.7	+ 2.7	- 1.0	+ 3.7	+ 1.2	+ 2.5
Non-Appalachian North Carolina	- 2.3	+ 2.3	- 2.1	+ 4.4	+ 0.8	+ 3.7
Ohio	- 1.6	+ 1.6	- 1.7	+ 3.2	+ 0.6	+ 2.7
Appalachian Ohio	- 1.6	+ 1.6	- 0.8	+ 2.3	+ 0.7	+ 1.7
Non-Appalachian Ohio	- 1.5	+ 1.5	- 1.9	+ 3.4	+ 0.5	+ 2.8
Pennsylvania	- 1.5	+ 1.5	- 2.5	+ 4.1	+ 0.8	+ 3.3
Appalachian Pennsylvania	- 1.5	+ 1.5	- 2.3	+ 3.8	+ 0.8	+ 3.0
Non-Appalachian Pennsylvania	- 1.6	+ 1.6	- 2.6	+ 4.2	+ 0.8	+ 3.5
South Carolina	- 2.5	+ 2.5	- 1.4	+ 3.8	+ 1.1	+ 2.8
Appalachian South Carolina	- 2.4	+ 2.4	- 1.8	+ 4.2	+ 1.1	+ 3.1
Non-Appalachian South Carolina	- 2.5	+ 2.5	- 1.2	+ 3.7	+ 1.1	+ 2.6
Tennessee	- 2.6	+ 2.6	- 1.3	+ 3.8	+ 0.8	+ 2.9
Appalachian Tennessee	- 2.9	+ 2.9	- 0.5	+ 3.4	+ 1.0	+ 2.3
Non-Appalachian Tennessee	- 2.2	+ 2.2	- 1.8	+ 4.0	+ 0.7	+ 3.3
Virginia	- 1.8	+ 1.8	- 1.9	+ 3.6	+ 0.7	+ 3.0
Appalachian Virginia	- 3.4	+ 3.4	+ 0.1	+ 3.2	+ 0.9	+ 2.4
Non-Appalachian Virginia	- 1.7	+ 1.7	- 2.0	+ 3.6	+ 0.6	+ 3.0
West Virginia (entire state)	- 2.5	+ 2.5	- 0.4	+ 2.9	+ 0.9	+ 1.9

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Table 5.5: Percentage Point Change in Educational Attainment of Persons Ages 25 to 64 in the Appalachian Region, 2010-2014 to 2015-2019

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	- 1.1	+ 1.1	- 2.0	+ 3.1	+ 0.4	+ 2.6
Appalachian Region	- 1.1	+ 1.1	- 2.0	+ 3.1	+ 0.8	+ 2.3
Subregions						
Northern Appalachia	- 0.3	+ 0.3	- 2.7	+ 3.1	+ 0.6	+ 2.5
North Central Appalachia	- 1.4	+ 1.4	- 0.8	+ 2.3	+ 0.7	+ 1.5
Central Appalachia	- 2.2	+ 2.2	- 0.5	+ 2.7	+ 1.4	+ 1.3
South Central Appalachia	- 1.5	+ 1.5	- 1.5	+ 3.0	+ 0.9	+ 2.1
Southern Appalachia	- 1.4	+ 1.4	- 2.0	+ 3.5	+ 0.8	+ 2.7
County Types						
Large Metros (pop. 1 million +)	- 0.9	+ 0.9	- 2.9	+ 3.9	+ 0.6	+ 3.3
Small Metros (pop. <1 million)	- 0.9	+ 0.9	- 2.0	+ 2.9	+ 0.7	+ 2.2
Nonmetro, Adjacent to Large Metros	- 0.7	+ 0.7	- 1.6	+ 2.2	+ 0.7	+ 1.4
Nonmetro, Adjacent to Small Metros	- 1.2	+ 1.2	- 1.3	+ 2.6	+ 1.0	+ 1.5
Rural (nonmetro, not adj. to a metro)	- 2.0	+ 2.0	- 0.4	+ 2.5	+ 0.9	+ 1.6
Alabama	- 1.6	+ 1.6	- 1.5	+ 3.1	+ 0.8	+ 2.1
Appalachian Alabama	- 1.6	+ 1.6	- 1.6	+ 3.2	+ 0.8	+ 2.4
Non-Appalachian Alabama	- 1.7	+ 1.7	- 1.1	+ 2.8	+ 0.9	+ 1.9
Georgia	- 1.5	+ 1.5	- 2.1	+ 3.7	+ 0.6	+ 2.9
Appalachian Georgia	- 1.2	+ 1.2	- 2.3	+ 3.5	+ 0.6	+ 2.9
Non-Appalachian Georgia	- 1.7	+ 1.7	- 2.1	+ 3.7	+ 0.7	+ 3.0
Kentucky	- 1.6	+ 1.6	- 1.6	+ 3.4	+ 1.1	+ 2.2
Appalachian Kentucky	- 2.3	+ 2.3	- 0.6	+ 2.8	+ 1.4	+ 1.5
Non-Appalachian Kentucky	- 1.4	+ 1.4	- 1.9	+ 3.3	+ 0.9	+ 2.3
Maryland	- 0.6	+ 0.6	- 2.3	+ 3.0	+ 0.2	+ 2.7
Appalachian Maryland	- 0.9	+ 0.9	- 1.2	+ 2.3	+ 0.7	+ 1.5
Non-Appalachian Maryland	- 0.7	+ 0.7	- 2.3	+ 3.0	+ 0.2	+ 2.7
Mississippi	- 1.9	+ 1.9	- 0.7	+ 2.8	+ 1.3	+ 1.3
Appalachian Mississippi	- 2.2	+ 2.2	- 0.8	+ 2.9	+ 1.1	+ 1.9
Non-Appalachian Mississippi	- 1.8	+ 1.8	- 0.8	+ 2.6	+ 1.4	+ 1.2
New York	- 1.1	+ 1.1	- 1.8	+ 2.9	+ 0.1	+ 2.8
Appalachian New York	- 0.2	+ 0.2	- 1.9	+ 2.1	+ 0.2	+ 1.8
Non-Appalachian New York	- 1.2	+ 1.2	- 1.8	+ 2.9	+ 0.0	+ 2.9
North Carolina	- 1.7	+ 1.7	- 2.5	+ 4.2	+ 0.7	+ 3.5
Appalachian North Carolina	- 1.4	+ 1.4	- 1.7	+ 3.0	+ 1.2	+ 1.8
Non-Appalachian North Carolina	- 1.6	+ 1.6	- 2.7	+ 4.3	+ 0.6	+ 3.7
Ohio	- 0.8	+ 0.8	- 2.3	+ 3.0	+ 0.4	+ 2.5
Appalachian Ohio	- 0.5	+ 0.5	- 1.4	+ 2.0	+ 0.5	+ 1.4
Non-Appalachian Ohio	- 0.9	+ 0.9	- 2.3	+ 3.2	+ 0.4	+ 2.8
Pennsylvania	- 0.6	+ 0.6	- 3.1	+ 3.7	+ 0.6	+ 3.2
Appalachian Pennsylvania	- 0.4	+ 0.4	- 3.0	+ 3.5	+ 0.6	+ 2.8
Non-Appalachian Pennsylvania	- 0.7	+ 0.7	- 3.1	+ 3.9	+ 0.6	+ 3.2
South Carolina	- 1.6	+ 1.6	- 1.8	+ 3.5	+ 0.9	+ 2.6
Appalachian South Carolina	- 1.5	+ 1.5	- 2.4	+ 3.8	+ 0.8	+ 3.0
Non-Appalachian South Carolina	- 1.7	+ 1.7	- 1.7	+ 3.4	+ 0.9	+ 2.4
Tennessee	- 1.6	+ 1.6	- 2.1	+ 3.6	+ 0.7	+ 2.8
Appalachian Tennessee	- 1.6	+ 1.6	- 1.4	+ 3.0	+ 1.0	+ 2.1
Non-Appalachian Tennessee	- 1.5	+ 1.5	- 2.5	+ 4.0	+ 0.6	+ 3.3
Virginia	- 1.2	+ 1.2	- 2.2	+ 3.4	+ 0.6	+ 2.8
Appalachian Virginia	- 1.9	+ 1.9	- 1.1	+ 3.0	+ 0.7	+ 2.3
Non-Appalachian Virginia	- 1.1	+ 1.1	- 2.3	+ 3.4	+ 0.6	+ 2.7
West Virginia (entire state)	- 1.7	+ 1.7	- 0.8	+ 2.4	+ 0.9	+ 1.4

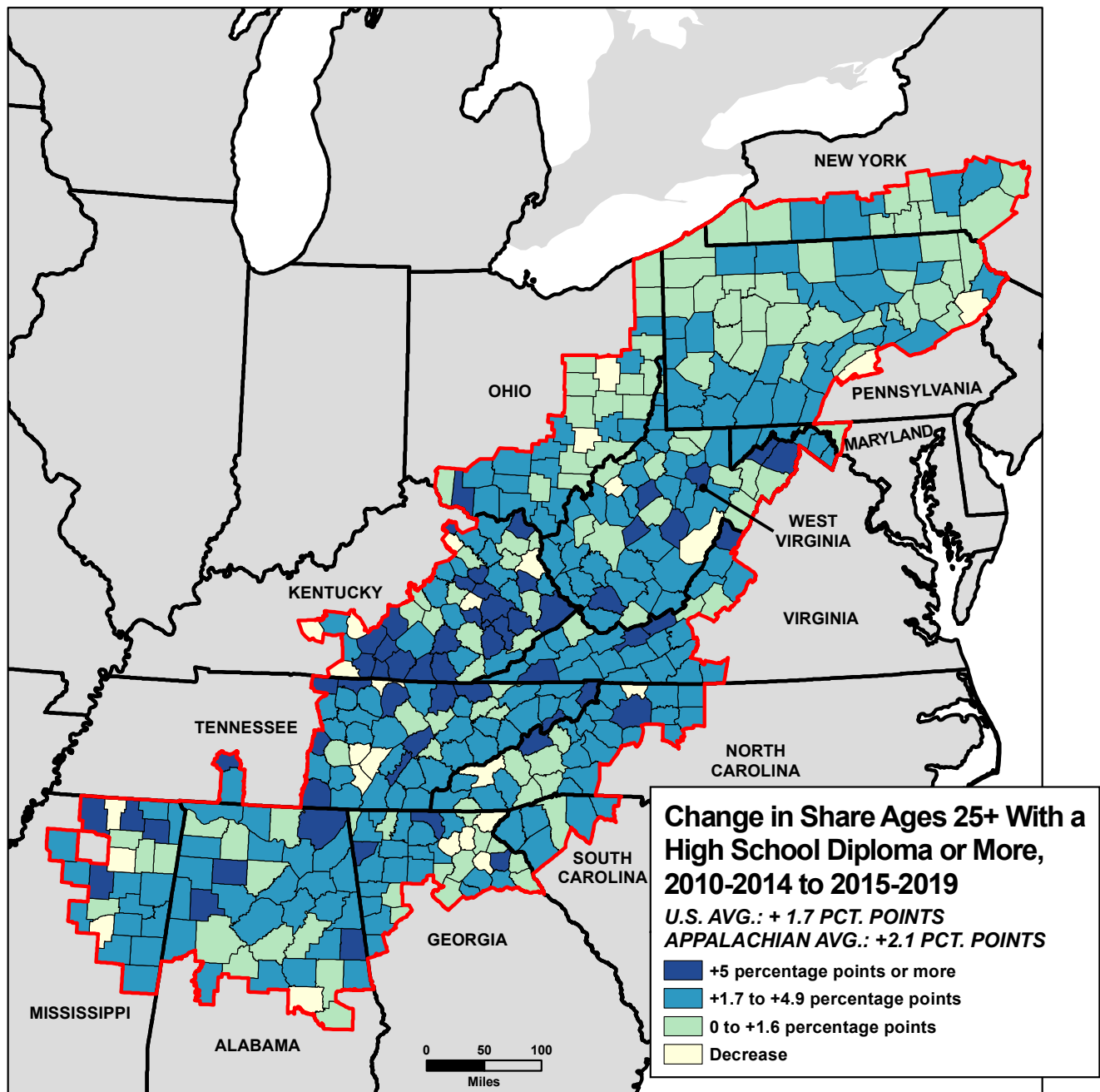
Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Table 5.6: Percentage Point Change in Educational Attainment of Persons Ages 65 and Over in the Appalachian Region, 2010-2014 to 2015-2019

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	- 4.4	+ 4.4	- 1.3	+ 5.7	+ 1.5	+ 4.3
Appalachian Region	- 6.4	+ 6.4	+ 0.6	+ 5.8	+ 1.7	+ 4.0
Subregions						
Northern Appalachia	- 5.4	+ 5.4	- 0.8	+ 6.3	+ 2.0	+ 4.3
North Central Appalachia	- 6.4	+ 6.4	+ 1.1	+ 5.3	+ 1.8	+ 3.5
Central Appalachia	- 9.7	+ 9.7	+ 6.2	+ 3.6	+ 1.4	+ 2.2
South Central Appalachia	- 7.3	+ 7.3	+ 1.6	+ 5.7	+ 1.6	+ 4.0
Southern Appalachia	- 6.2	+ 6.2	+ 0.4	+ 5.8	+ 1.5	+ 4.3
County Types						
Large Metros (pop. 1 million +)	- 5.6	+ 5.6	- 1.4	+ 7.0	+ 1.8	+ 5.2
Small Metros (pop. <1 million)	- 5.9	+ 5.9	+ 0.1	+ 5.9	+ 1.7	+ 4.2
Nonmetro, Adjacent to Large Metros	- 6.7	+ 6.7	+ 2.0	+ 4.7	+ 1.8	+ 2.9
Nonmetro, Adjacent to Small Metros	- 6.9	+ 6.9	+ 2.0	+ 5.1	+ 1.8	+ 3.2
Rural (nonmetro, not adj. to a metro)	- 7.9	+ 7.9	+ 3.3	+ 4.6	+ 1.5	+ 3.1
Alabama	- 6.3	+ 6.3	+ 0.9	+ 5.3	+ 1.5	+ 3.7
Appalachian Alabama	- 6.3	+ 6.3	+ 0.7	+ 5.5	+ 1.5	+ 4.1
Non-Appalachian Alabama	- 6.1	+ 6.1	+ 1.4	+ 4.7	+ 1.5	+ 3.2
Georgia	- 5.8	+ 5.8	- 0.1	+ 5.9	+ 1.6	+ 4.2
Appalachian Georgia	- 5.7	+ 5.7	- 0.4	+ 6.2	+ 1.3	+ 4.9
Non-Appalachian Georgia	- 5.8	+ 5.8	+ 0.0	+ 5.8	+ 1.8	+ 4.1
Kentucky	- 8.3	+ 8.3	+ 2.9	+ 5.4	+ 1.4	+ 4.0
Appalachian Kentucky	- 9.8	+ 9.8	+ 6.1	+ 3.7	+ 1.4	+ 2.4
Non-Appalachian Kentucky	- 7.4	+ 7.4	+ 1.5	+ 6.0	+ 1.4	+ 4.6
Maryland	- 4.2	+ 4.2	- 1.4	+ 5.7	+ 1.1	+ 4.5
Appalachian Maryland	- 4.9	+ 4.9	- 0.7	+ 5.6	+ 1.5	+ 4.1
Non-Appalachian Maryland	- 4.1	+ 4.1	- 1.4	+ 5.6	+ 1.1	+ 4.5
Mississippi	- 6.0	+ 6.0	+ 1.5	+ 4.5	+ 1.6	+ 3.0
Appalachian Mississippi	- 5.9	+ 5.9	+ 2.9	+ 3.0	+ 1.1	+ 1.9
Non-Appalachian Mississippi	- 6.0	+ 6.0	+ 1.1	+ 5.0	+ 1.7	+ 3.2
New York	- 3.7	+ 3.7	- 2.0	+ 5.6	+ 1.4	+ 4.2
Appalachian New York	- 4.9	+ 4.9	- 1.7	+ 6.6	+ 2.6	+ 4.1
Non-Appalachian New York	- 3.6	+ 3.6	- 1.9	+ 5.7	+ 1.3	+ 4.2
North Carolina	- 5.8	+ 5.8	- 0.4	+ 6.3	+ 2.0	+ 4.3
Appalachian North Carolina	- 6.7	+ 6.7	+ 0.5	+ 6.3	+ 1.8	+ 4.5
Non-Appalachian North Carolina	- 5.6	+ 5.6	- 0.7	+ 6.3	+ 2.0	+ 4.3
Ohio	- 4.9	+ 4.9	- 0.5	+ 5.5	+ 1.6	+ 3.9
Appalachian Ohio	- 5.7	+ 5.7	+ 0.9	+ 4.9	+ 1.7	+ 3.1
Non-Appalachian Ohio	- 4.7	+ 4.7	- 0.9	+ 5.5	+ 1.5	+ 4.0
Pennsylvania	- 5.3	+ 5.3	- 1.2	+ 6.5	+ 1.6	+ 5.0
Appalachian Pennsylvania	- 5.6	+ 5.6	- 0.8	+ 6.5	+ 1.9	+ 4.5
Non-Appalachian Pennsylvania	- 5.2	+ 5.2	- 1.4	+ 6.6	+ 1.2	+ 5.4
South Carolina	- 6.4	+ 6.4	+ 0.5	+ 5.9	+ 2.0	+ 3.9
Appalachian South Carolina	- 6.9	+ 6.9	+ 0.5	+ 6.4	+ 2.4	+ 4.1
Non-Appalachian South Carolina	- 6.3	+ 6.3	+ 0.5	+ 5.7	+ 1.9	+ 3.9
Tennessee	- 6.9	+ 6.9	+ 1.6	+ 5.4	+ 1.3	+ 4.0
Appalachian Tennessee	- 7.4	+ 7.4	+ 2.5	+ 4.9	+ 1.4	+ 3.5
Non-Appalachian Tennessee	- 6.3	+ 6.3	+ 0.5	+ 5.9	+ 1.4	+ 4.5
Virginia	- 5.4	+ 5.4	- 0.9	+ 6.3	+ 1.3	+ 5.0
Appalachian Virginia	- 9.0	+ 9.0	+ 3.9	+ 5.2	+ 2.0	+ 3.2
Non-Appalachian Virginia	- 4.7	+ 4.7	- 1.5	+ 6.3	+ 1.3	+ 5.0
West Virginia (entire state)	- 6.5	+ 6.5	+ 1.2	+ 5.4	+ 1.5	+ 3.8

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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, 2010-2014 to 2015-2019

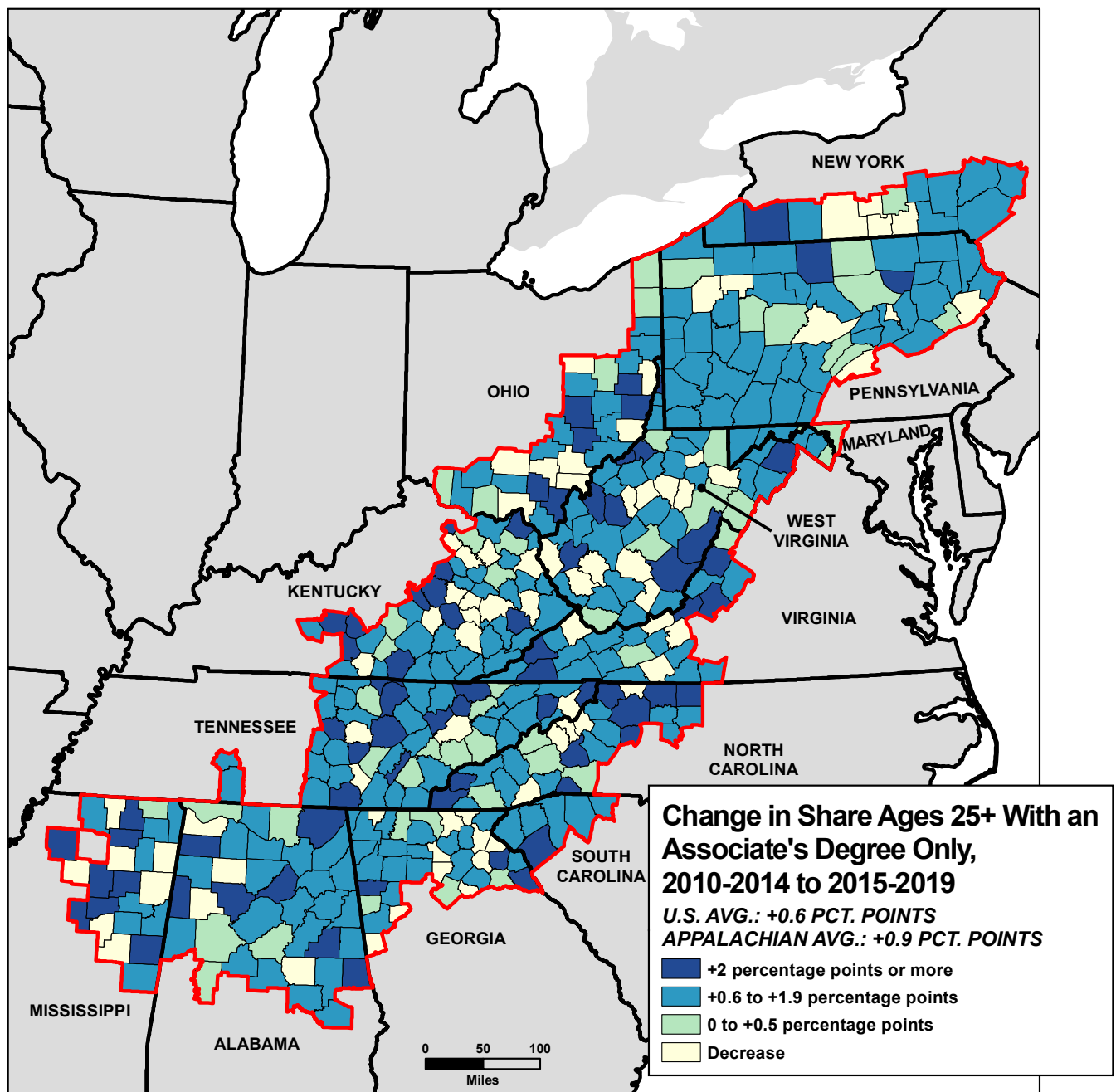


Map Title: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Since the 2010-2014 period, the share of Appalachian adults who have completed high school or more has increased more than two percentage points. This rise, which is higher than the national average of 1.7 points, 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 more than three percentage points in the Appalachian counties of Kentucky and Virginia. In 58 Appalachian counties—all but seven 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 (three times the national average) between 2010-2014 and 2015-2019. In about two-fifths of these 58 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 but Without a Bachelor's Degree, 2010-2014 to 2015-2019

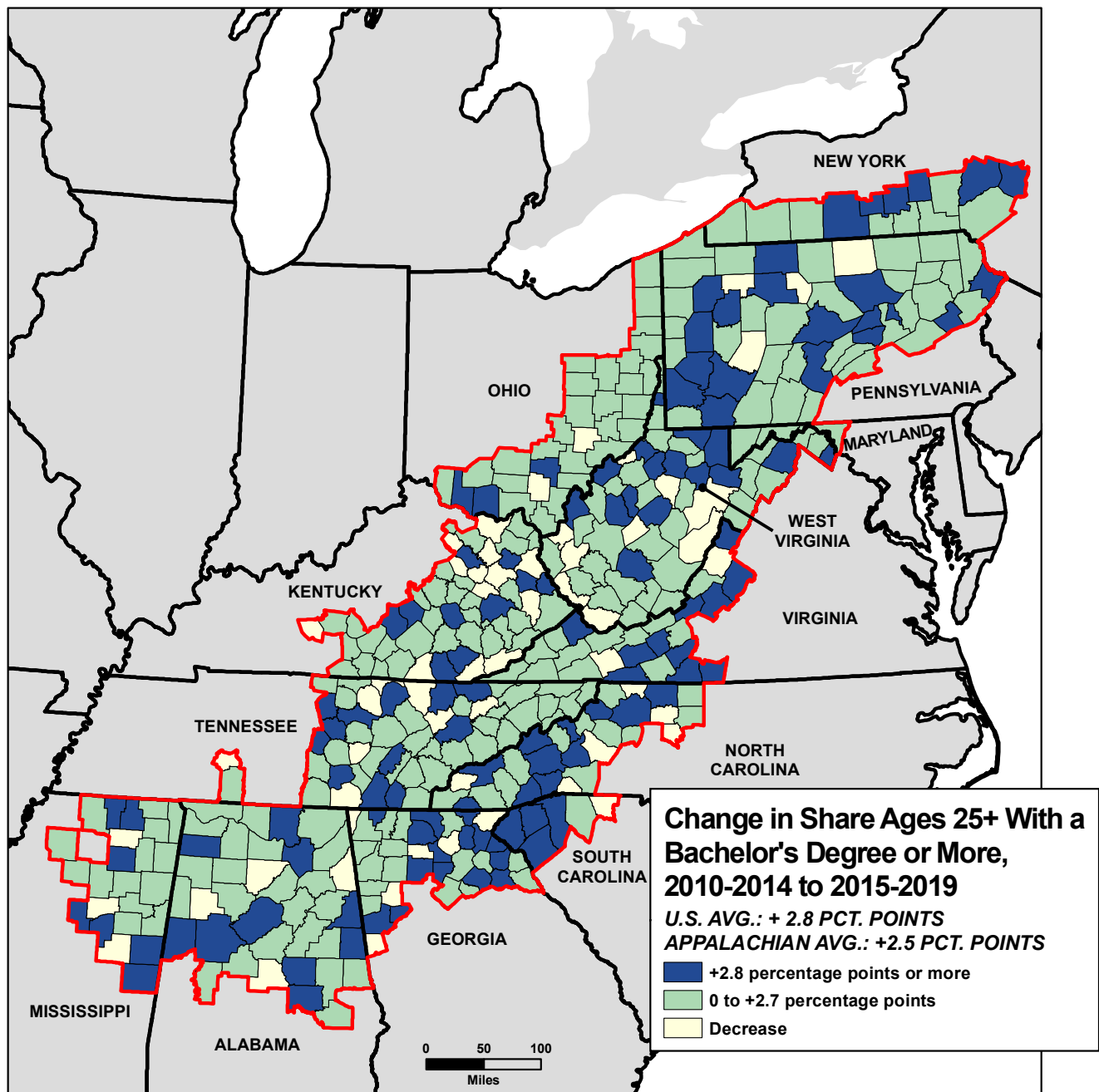


Map Title: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree but Without a Bachelor's Degree, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

The share of adults ages 25 and over in the Appalachian Region whose highest level of education was an associate's degree increased almost a full percentage point between 2010-2014 and 2015-2019, slightly above the national average. And in 74 Appalachian counties, the share rose at least two percentage points. Yet it either stayed the same or increased less than the national average in 52 of the Region's counties, and actually decreased in 76 others. Among most of the counties in this latter group, however, the decrease in the share with only an associate's degree may be related to an increase in the share who have gone on to complete a bachelor's degree or more.

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, 2010-2014 to 2015-2019



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, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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 at almost the same pace as in the nation as a whole. Both in Appalachia and nationwide, it was at least two and a half percentage points higher in 2015-2019 than it was in 2010-2014, suggesting a continued trend toward greater educational attainment. And in 122 of the Region's 420 counties (scattered throughout the Region), the increased share matched or exceeded the national average of 2.8 points. Conversely, the share of adults ages 25 and over with at least a four-year degree decreased in 58 counties. All but 12 counties in the latter group were in Central, South Central, and Southern Appalachia.

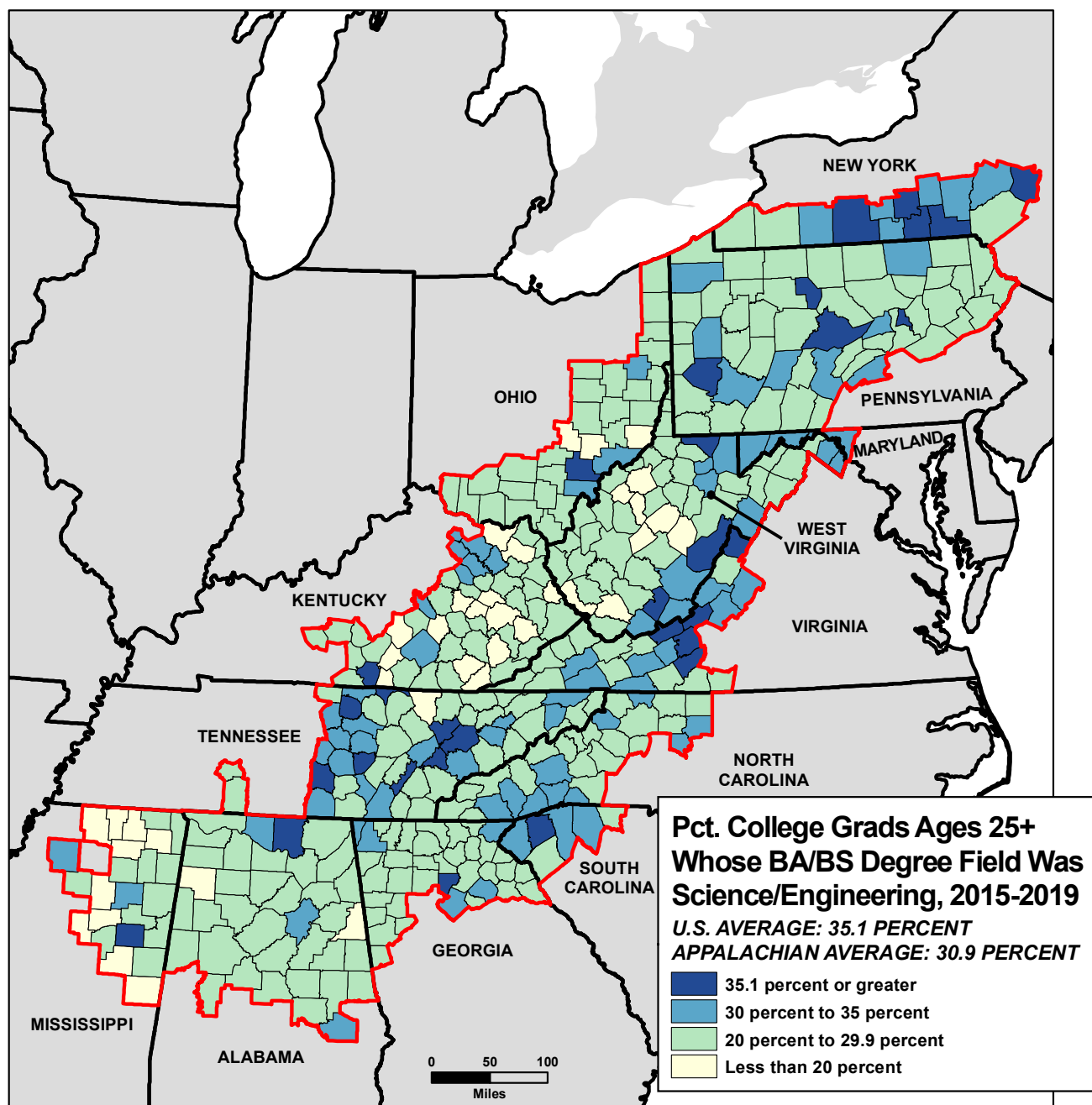
Table 5.7: Bachelor's Degree Field (First Major) for Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2015-2019

Bachelor's Degree Field (First Major)	Total Population Ages 25 and Over With a Bachelor's Degree or More, 2015-2019	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	70,920,162	35.1	9.6	20.3	12.2	22.8
Appalachian Region	4,395,961	30.9	11.2	20.0	17.2	20.7
Subregions						
Northern Appalachia	1,502,377	31.8	11.7	17.9	17.6	20.9
North Central Appalachia	346,714	28.8	13.1	18.5	19.9	19.7
Central Appalachia	189,024	26.2	14.1	15.8	25.2	18.7
South Central Appalachia	867,944	31.8	11.0	18.8	15.6	22.8
Southern Appalachia	1,489,902	30.6	10.0	23.8	16.0	19.6
County Types						
Large Metros (pop. 1 million +)	1,372,692	32.1	10.2	23.5	13.8	20.4
Small Metros (pop. <1 million)	1,959,768	32.1	11.3	19.2	16.2	21.2
Nonmetro, Adjacent to Large Metros	276,388	27.7	11.8	17.5	23.2	19.8
Nonmetro, Adjacent to Small Metros	489,968	27.7	12.4	16.9	22.8	20.3
Rural (nonmetro, not adj. to a metro)	297,145	26.5	12.4	16.8	24.7	19.7
Alabama	845,772	29.2	10.7	23.4	16.8	19.9
Appalachian Alabama	559,394	29.9	10.5	23.6	16.4	19.6
Non-Appalachian Alabama	286,378	27.9	11.0	22.9	17.7	20.6
Georgia	2,157,616	32.3	9.3	24.2	12.8	21.3
Appalachian Georgia	610,003	31.2	9.4	25.3	14.7	19.5
Non-Appalachian Georgia	1,547,613	32.7	9.2	23.8	12.1	22.1
Kentucky	731,082	29.0	11.7	19.8	16.5	23.0
Appalachian Kentucky	122,281	24.9	13.7	15.1	26.0	20.4
Non-Appalachian Kentucky	608,801	29.9	11.3	20.7	14.6	23.5
Maryland	1,662,724	41.0	8.9	18.1	9.4	22.5
Appalachian Maryland	36,971	33.8	10.0	16.8	17.6	21.7
Non-Appalachian Maryland	1,625,753	41.2	8.9	18.2	9.3	22.5
Mississippi	435,153	25.7	12.7	20.9	20.8	19.9
Appalachian Mississippi	78,230	25.3	12.0	19.1	25.9	17.8
Non-Appalachian Mississippi	356,923	25.8	12.9	21.3	19.7	20.3
New York	4,985,807	34.4	8.9	18.8	11.0	26.9
Appalachian New York	186,329	37.0	9.6	12.3	18.1	23.0
Non-Appalachian New York	4,799,478	34.3	8.9	19.1	10.8	27.0
North Carolina	2,182,853	34.3	9.5	20.3	12.8	23.1
Appalachian North Carolina	337,750	30.4	11.1	17.3	16.0	25.2
Non-Appalachian North Carolina	1,845,103	35.0	9.2	20.9	12.3	22.7
Ohio	2,255,326	30.7	11.4	21.5	15.7	20.7
Appalachian Ohio	252,760	25.6	13.7	18.9	22.1	19.7
Non-Appalachian Ohio	2,002,566	31.4	11.1	21.8	14.9	20.9
Pennsylvania	2,814,285	33.4	10.8	19.6	14.5	21.8
Appalachian Pennsylvania	1,121,160	32.0	11.7	18.7	16.8	20.8
Non-Appalachian Pennsylvania	1,693,125	34.3	10.1	20.2	13.0	22.5
South Carolina	969,279	31.3	9.6	22.6	15.3	21.2
Appalachian South Carolina	242,275	32.3	9.8	21.8	15.5	20.6
Non-Appalachian South Carolina	727,004	31.0	9.5	22.8	15.3	21.3
Tennessee	1,254,145	30.2	10.6	22.4	14.2	22.6
Appalachian Tennessee	473,135	31.8	11.5	20.4	15.9	20.4
Non-Appalachian Tennessee	781,010	29.2	10.1	23.6	13.2	23.9
Virginia	2,240,360	40.6	7.7	18.7	9.4	23.5
Appalachian Virginia	110,275	35.3	10.6	16.1	15.7	22.2
Non-Appalachian Virginia	2,130,085	40.9	7.6	18.8	9.1	23.6
West Virginia (entire state)	265,398	28.8	13.3	18.5	20.2	19.1

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

Data Source: U.S. Census Bureau, 2015-2019 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, 2015-2019



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, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Among the 4.3 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 39 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.

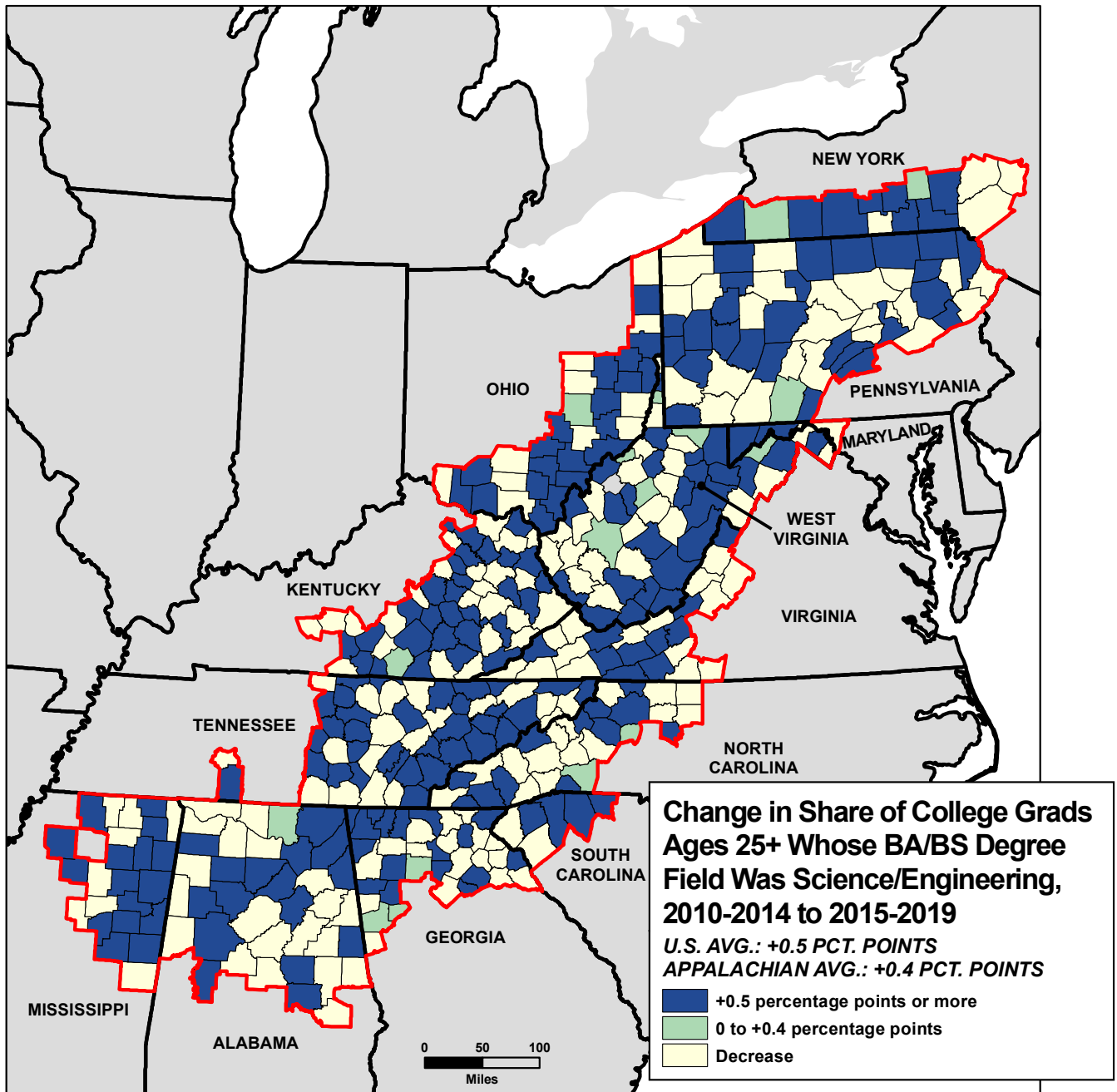
Table 5.8: Percentage Point Change in Bachelor's Degree Field (First Major) for Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2010-2014 to 2015-2019

Bachelor's Degree Field (First Major)	Percentage Point Change in Share 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	+ 0.5	+ 0.5	- 0.1	- 1.2	+ 0.3
Appalachian Region	+ 0.4	+ 0.7	- 0.3	- 1.5	+ 0.6
Subregions					
Northern Appalachia	+ 0.3	+ 0.6	- 0.1	- 1.6	+ 0.6
North Central Appalachia	+ 0.7	+ 0.9	- 0.3	- 1.7	+ 0.3
Central Appalachia	- 0.1	+ 2.8	- 0.2	- 2.4	+ 0.0
South Central Appalachia	+ 0.2	+ 0.7	- 0.3	- 1.5	+ 0.8
Southern Appalachia	+ 0.7	+ 0.5	- 0.5	- 1.1	+ 0.4
County Types					
Large Metros (pop. 1 million +)	+ 0.5	+ 0.2	- 0.1	- 1.1	+ 0.5
Small Metros (pop. <1 million)	+ 0.2	+ 0.8	- 0.4	- 1.4	+ 0.6
Nonmetro, Adjacent to Large Metros	+ 1.6	+ 0.7	- 0.2	- 2.1	+ 0.0
Nonmetro, Adjacent to Small Metros	+ 0.3	+ 1.0	- 0.6	- 1.5	+ 0.9
Rural (nonmetro, not adj. to a metro)	+ 1.2	+ 1.6	- 0.2	- 2.6	+ 0.0
Alabama	+ 0.1	+ 0.6	- 0.1	- 1.4	+ 0.7
Appalachian Alabama	+ 0.1	+ 0.5	- 0.3	- 0.8	+ 0.5
Non-Appalachian Alabama	+ 0.1	+ 0.7	+ 0.2	- 2.3	+ 1.3
Georgia	+ 0.5	+ 0.6	- 0.4	- 1.2	+ 0.5
Appalachian Georgia	+ 0.9	+ 0.2	- 0.7	- 1.2	+ 0.8
Non-Appalachian Georgia	+ 0.3	+ 0.7	- 0.3	- 1.2	+ 0.4
Kentucky	- 0.4	+ 0.7	- 0.1	- 1.3	+ 1.0
Appalachian Kentucky	+ 0.3	+ 1.8	+ 0.1	- 2.2	+ 0.1
Non-Appalachian Kentucky	- 0.5	+ 0.5	- 0.2	- 1.0	+ 1.2
Maryland	- 0.1	+ 0.6	+ 0.1	- 1.1	+ 0.4
Appalachian Maryland	+ 0.6	+ 1.2	- 0.6	- 1.5	+ 0.2
Non-Appalachian Maryland	+ 0.0	+ 0.6	+ 0.1	- 1.0	+ 0.4
Mississippi	+ 0.8	+ 1.3	- 1.1	- 2.0	+ 1.0
Appalachian Mississippi	+ 2.9	+ 1.7	- 1.9	- 2.0	- 0.7
Non-Appalachian Mississippi	+ 0.4	+ 1.3	- 0.9	- 2.0	+ 1.3
New York	+ 0.3	+ 0.3	- 0.1	- 1.0	+ 0.4
Appalachian New York	+ 0.8	+ 0.1	- 0.2	- 1.1	+ 0.4
Non-Appalachian New York	+ 0.3	+ 0.4	+ 0.0	- 0.9	+ 0.4
North Carolina	+ 0.5	+ 0.5	- 0.1	- 1.2	+ 0.3
Appalachian North Carolina	- 0.6	+ 0.6	- 0.3	- 0.3	+ 0.6
Non-Appalachian North Carolina	+ 0.6	+ 0.4	- 0.1	- 1.2	+ 0.3
Ohio	+ 0.0	+ 1.1	+ 0.0	- 1.4	+ 0.3
Appalachian Ohio	+ 0.3	+ 1.0	+ 0.1	- 2.0	+ 0.6
Non-Appalachian Ohio	+ 0.0	+ 1.1	- 0.1	- 1.3	+ 0.4
Pennsylvania	+ 0.1	+ 0.8	+ 0.0	- 1.3	+ 0.7
Appalachian Pennsylvania	+ 0.4	+ 0.6	- 0.1	- 1.6	+ 0.6
Non-Appalachian Pennsylvania	- 0.2	+ 0.8	+ 0.0	- 1.1	+ 0.7
South Carolina	- 0.5	+ 0.9	+ 0.1	- 0.8	+ 0.3
Appalachian South Carolina	+ 0.5	+ 1.0	- 0.6	- 0.9	- 0.1
Non-Appalachian South Carolina	- 0.8	+ 0.8	+ 0.2	- 0.7	+ 0.3
Tennessee	+ 0.3	+ 0.8	- 0.3	- 1.8	+ 1.1
Appalachian Tennessee	+ 0.8	+ 1.1	- 0.3	- 2.4	+ 0.8
Non-Appalachian Tennessee	+ 0.0	+ 0.7	- 0.4	- 1.4	+ 1.1
Virginia	+ 0.3	+ 0.4	- 0.3	- 0.9	+ 0.3
Appalachian Virginia	- 0.2	+ 1.5	- 0.4	- 2.1	+ 1.1
Non-Appalachian Virginia	+ 0.4	+ 0.4	- 0.3	- 0.8	+ 0.3
West Virginia (entire state)	+ 0.6	+ 1.1	- 0.7	- 1.4	+ 0.2

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

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Figure 5.14: Among Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, Percentage Point Change in the Share Whose Bachelor's Degree Field (First Major) Was Science and Engineering, 2010-2014 to 2015-2019



Map Title: Among Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, Percentage Point Change in the Share Whose Bachelor's Degree Field (First Major) Was Science and Engineering, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Among adults in the Appalachian Region with a bachelor's degree or more, the share with a degree in the science and engineering field was 0.4 percentage points greater in 2015-2019 than it was in 2010-2014, compared to an increase of 0.5 points nationally. Yet in 185 of the Region's counties, the share actually decreased—including 28 of the 39 counties where less than one-fifth of adult college graduates had a science and engineering degree. In another 218 Appalachian counties, however, the share increased more than the national average.

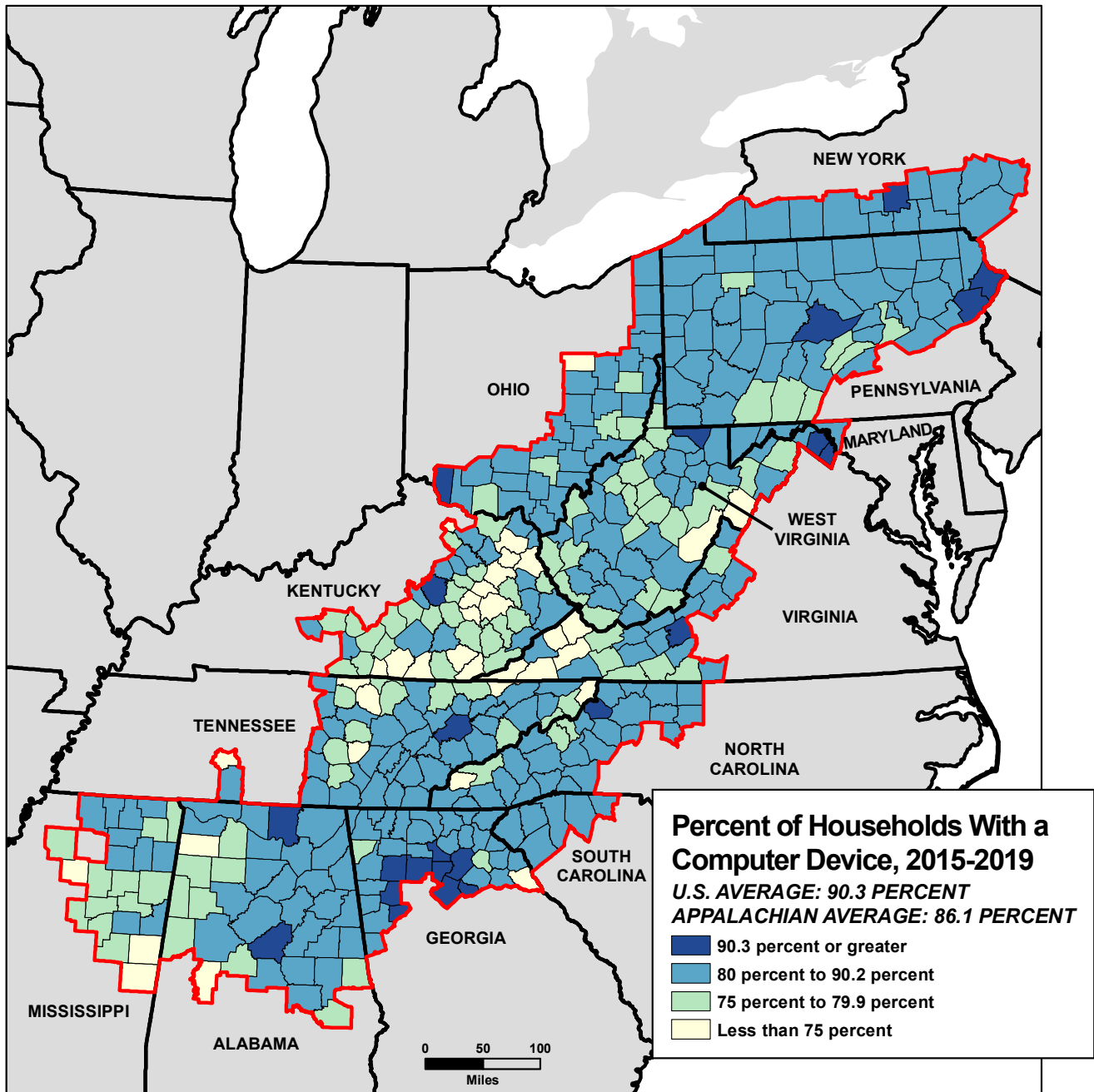
Table 5.9: Households in the Appalachian Region With a Computer Device, By Type of Device, 2015-2019

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	120,756,048	90.3	77.8	79.9	59.6	3.6	9.7
Appalachian Region	10,048,680	86.1	71.6	73.5	54.6	2.7	13.9
Subregions							
Northern Appalachia	3,362,737	86.1	73.6	71.2	54.2	2.4	13.9
North Central Appalachia	951,744	85.1	69.6	70.7	53.1	2.5	14.9
Central Appalachia	733,678	79.8	62.7	65.4	48.9	2.3	20.2
South Central Appalachia	1,963,797	85.9	71.0	73.8	53.4	2.5	14.1
Southern Appalachia	3,036,724	88.0	72.7	78.7	57.6	3.2	12.0
County Types							
Large Metros (pop. 1 million +)	2,357,023	90.0	77.9	79.3	60.7	3.1	10.0
Small Metros (pop. <1 million)	4,278,290	87.0	72.6	74.9	55.3	2.9	13.0
Nonmetro, Adjacent to Large Metros	858,262	84.0	68.4	69.9	51.4	2.1	16.0
Nonmetro, Adjacent to Small Metros	1,572,387	82.5	66.5	67.5	49.5	2.2	17.5
Rural (nonmetro, not adj. to a metro)	982,718	80.5	63.7	66.2	48.1	2.0	19.5
Alabama	1,867,893	85.5	68.2	75.4	52.9	2.8	14.5
Appalachian Alabama	1,201,680	86.4	69.4	76.5	54.5	2.7	13.6
Non-Appalachian Alabama	666,213	84.0	65.9	73.5	50.2	3.0	16.0
Georgia	3,758,798	90.2	76.8	81.4	60.1	3.5	9.8
Appalachian Georgia	1,113,264	91.3	79.2	82.3	63.3	4.1	8.7
Non-Appalachian Georgia	2,645,534	89.8	75.8	81.0	58.7	3.3	10.2
Kentucky	1,734,618	86.4	70.9	75.1	55.7	3.1	13.6
Appalachian Kentucky	453,472	80.3	63.6	66.4	49.7	2.4	19.7
Non-Appalachian Kentucky	1,281,146	88.6	73.4	78.1	57.8	3.3	11.4
Maryland	2,205,204	92.4	82.8	82.4	64.5	4.4	7.6
Appalachian Maryland	95,859	84.7	71.3	70.6	54.5	2.4	15.3
Non-Appalachian Maryland	2,109,345	92.7	83.3	82.9	64.9	4.5	7.3
Mississippi	1,104,394	83.8	63.2	75.4	49.6	2.8	16.2
Appalachian Mississippi	234,751	81.4	57.8	73.7	46.4	1.5	18.6
Non-Appalachian Mississippi	869,643	84.5	64.6	75.9	50.5	3.1	15.5
New York	7,343,234	89.6	78.5	78.4	59.2	4.3	10.4
Appalachian New York	415,551	87.3	76.0	69.7	53.9	2.3	12.7
Non-Appalachian New York	6,927,683	89.8	78.6	78.9	59.5	4.4	10.2
North Carolina	3,965,482	89.1	75.9	78.7	57.9	3.3	10.9
Appalachian North Carolina	716,083	86.0	71.8	73.1	52.3	2.5	14.0
Non-Appalachian North Carolina	3,249,399	89.8	76.8	80.0	59.1	3.4	10.2
Ohio	4,676,358	89.1	75.5	77.1	58.2	2.8	10.9
Appalachian Ohio	792,013	84.7	69.3	71.0	53.0	2.0	15.3
Non-Appalachian Ohio	3,884,345	90.0	76.7	78.3	59.3	3.0	10.0
Pennsylvania	5,053,106	88.0	76.4	75.0	57.4	2.9	12.0
Appalachian Pennsylvania	2,351,466	86.3	74.3	71.7	54.8	2.5	13.7
Non-Appalachian Pennsylvania	2,701,640	89.4	78.2	77.8	59.7	3.2	10.6
South Carolina	1,921,862	88.3	72.9	78.4	56.5	4.9	11.7
Appalachian South Carolina	487,029	88.0	73.1	78.0	57.9	3.0	12.0
Non-Appalachian South Carolina	1,434,833	88.4	72.9	78.5	56.0	5.5	11.6
Tennessee	2,597,292	87.1	71.8	77.1	56.1	3.8	12.9
Appalachian Tennessee	1,155,507	85.5	69.8	74.1	53.8	2.5	14.5
Non-Appalachian Tennessee	1,441,785	88.3	73.5	79.4	58.0	4.8	11.7
Virginia	3,151,045	91.1	80.5	81.3	62.3	3.7	8.9
Appalachian Virginia	299,420	82.2	66.3	68.3	50.2	2.4	17.8
Non-Appalachian Virginia	2,851,625	92.1	82.0	82.6	63.5	3.9	7.9
West Virginia (entire state)	732,585	84.2	68.7	68.9	52.0	2.8	15.8

Note: Device percentages are not mutually exclusive.

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Figure 5.15: Percent of Households in the Appalachian Region With a Computer Device, 2015-2019



Map Title: Percent of Households in the Appalachian Region With a Computer Device, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In 2015-2019, 86 percent of households in the Appalachian Region had one or more computer devices (desktop or laptop, smartphone, tablet, or other device)—four points below the national average. And the share is even lower in much of the Region: it was below 80 percent in 132 of Appalachia’s 420 counties and less than 75 percent in 35 of these. All but two of the counties in the latter group were outside metropolitan areas and 23 were in the most rural areas. Central Appalachia had exactly half of these counties. Yet there were 23 Appalachian counties where the share of households with a computer was at or above the national average; 21 of these were in metropolitan areas. Even before the COVID-19 pandemic hit, computer devices had become commonly used for such activities as school work, entertainment, online banking, health care access, and socializing—and the pandemic’s effects have magnified the importance of such devices. As a result, these data suggest aspects of a “digital divide”—particularly between urban and rural areas in Appalachia—that likely will be highlighted more keenly in the coming years.

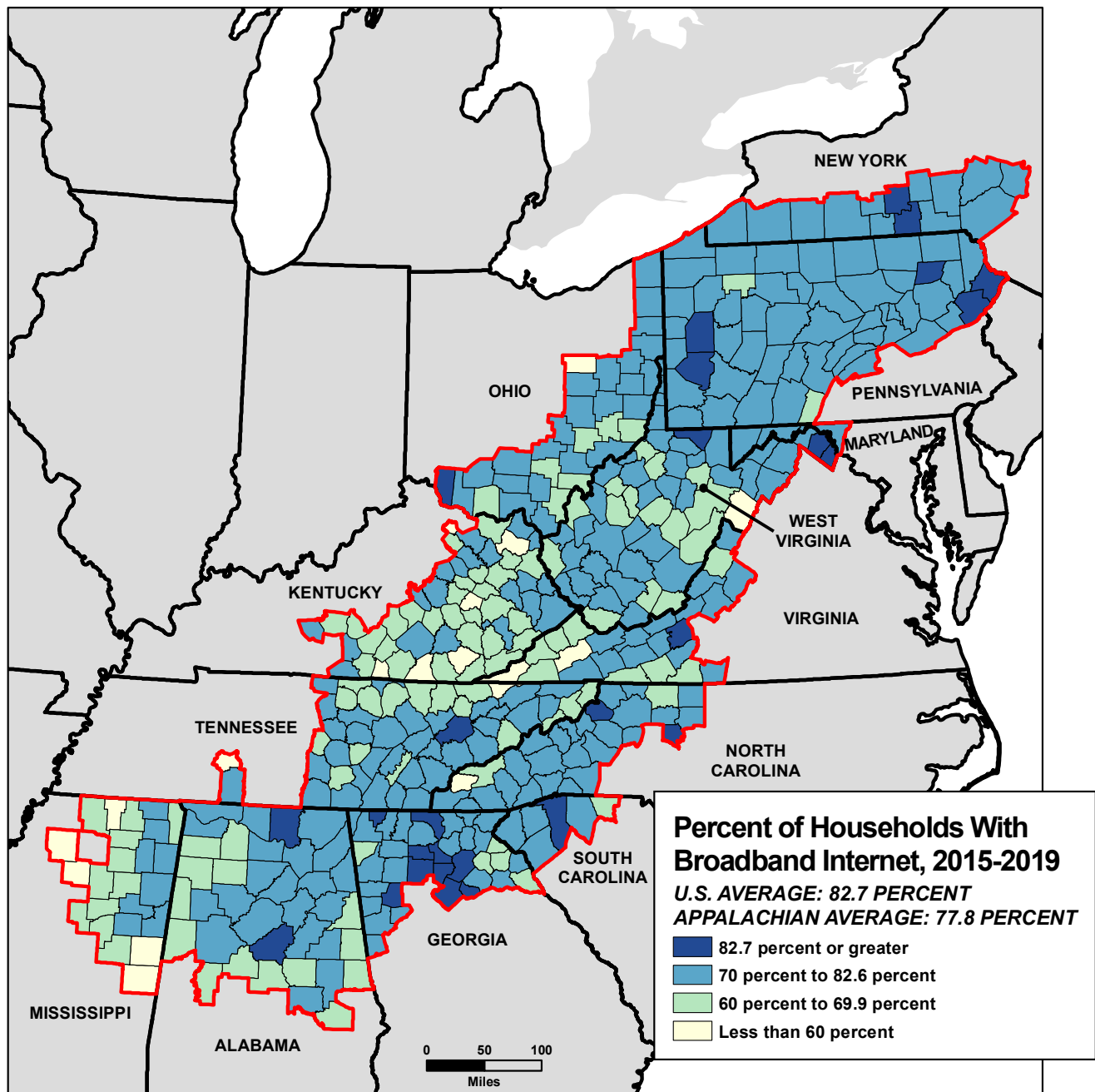
Table 5.10: Households in the Appalachian Region With an Internet Subscription, By Type of Subscription, 2015-2019

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	120,756,048	83.0	0.4	82.7	68.9	66.3	6.3
Appalachian Region	10,048,680	78.3	0.5	77.8	62.9	59.6	6.4
Subregions							
Northern Appalachia	3,362,737	79.7	0.6	79.0	66.3	59.3	5.0
North Central Appalachia	951,744	76.9	0.5	76.4	60.8	56.1	7.2
Central Appalachia	733,678	70.5	0.5	70.0	55.8	49.9	6.7
South Central Appalachia	1,963,797	77.2	0.4	76.8	61.1	57.8	6.3
Southern Appalachia	3,036,724	79.8	0.3	79.5	62.6	64.5	7.6
County Types							
Large Metros (pop. 1 million +)	2,357,023	83.5	0.4	83.2	70.9	66.8	5.7
Small Metros (pop. <1 million)	4,278,290	79.4	0.4	79.0	64.7	60.6	5.7
Nonmetro, Adjacent to Large Metros	858,262	75.2	0.7	74.5	56.4	55.1	7.5
Nonmetro, Adjacent to Small Metros	1,572,387	73.5	0.7	72.8	55.2	54.0	7.6
Rural (nonmetro, not adj. to a metro)	982,718	71.2	0.5	70.7	53.5	50.7	8.0
Alabama	1,867,893	76.8	0.4	76.4	57.2	61.9	7.6
Appalachian Alabama	1,201,680	77.9	0.3	77.6	58.9	62.6	7.4
Non-Appalachian Alabama	666,213	74.8	0.6	74.2	54.1	60.7	7.9
Georgia	3,758,798	81.6	0.3	81.3	67.3	65.9	7.0
Appalachian Georgia	1,113,264	84.0	0.3	83.7	70.4	68.2	7.6
Non-Appalachian Georgia	2,645,534	80.6	0.2	80.3	66.1	65.0	6.7
Kentucky	1,734,618	78.8	0.4	78.4	62.8	62.5	6.6
Appalachian Kentucky	453,472	71.4	0.6	70.9	56.9	52.7	6.8
Non-Appalachian Kentucky	1,281,146	81.4	0.4	81.1	64.9	65.9	6.5
Maryland	2,205,204	86.7	0.3	86.4	75.5	70.6	4.3
Appalachian Maryland	95,859	77.7	0.5	77.2	61.4	60.4	6.4
Non-Appalachian Maryland	2,109,345	87.1	0.3	86.8	76.2	71.1	4.2
Mississippi	1,104,394	71.9	0.3	71.5	47.6	58.2	9.6
Appalachian Mississippi	234,751	69.2	0.3	68.9	39.9	56.5	10.3
Non-Appalachian Mississippi	869,643	72.6	0.3	72.3	49.6	58.7	9.4
New York	7,343,234	83.2	0.3	82.8	72.6	63.5	3.6
Appalachian New York	415,551	79.4	0.7	78.8	64.2	56.0	7.1
Non-Appalachian New York	6,927,683	83.4	0.3	83.1	73.1	64.0	3.4
North Carolina	3,965,482	81.1	0.3	80.7	67.8	63.8	5.8
Appalachian North Carolina	716,083	77.3	0.5	76.9	61.9	57.1	6.5
Non-Appalachian North Carolina	3,249,399	81.9	0.3	81.6	69.1	65.3	5.7
Ohio	4,676,358	82.4	0.4	82.0	68.7	64.5	5.7
Appalachian Ohio	792,013	76.7	0.6	76.1	59.3	55.9	7.0
Non-Appalachian Ohio	3,884,345	83.6	0.4	83.2	70.6	66.3	5.4
Pennsylvania	5,053,106	82.1	0.5	81.5	70.7	63.8	3.9
Appalachian Pennsylvania	2,351,466	80.5	0.7	79.8	68.0	60.8	4.4
Non-Appalachian Pennsylvania	2,701,640	83.4	0.4	83.0	73.0	66.4	3.5
South Carolina	1,921,862	78.5	0.3	78.2	63.3	62.8	6.7
Appalachian South Carolina	487,029	79.7	0.3	79.4	64.9	64.5	6.8
Non-Appalachian South Carolina	1,434,833	78.1	0.3	77.8	62.8	62.2	6.7
Tennessee	2,597,292	78.7	0.3	78.4	62.2	63.0	6.5
Appalachian Tennessee	1,155,507	76.6	0.3	76.2	60.4	57.6	5.8
Non-Appalachian Tennessee	1,441,785	80.3	0.3	80.1	63.7	67.4	7.0
Virginia	3,151,045	84.3	0.4	83.9	70.0	69.1	5.8
Appalachian Virginia	299,420	72.8	0.6	72.1	54.4	52.7	8.2
Non-Appalachian Virginia	2,851,625	85.5	0.3	85.2	71.6	70.9	5.6
West Virginia (entire state)	732,585	76.4	0.4	76.0	62.7	54.1	6.2

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, 2015-2019 American Community Survey.

Figure 5.16: Percent of Households in the Appalachian Region With a Broadband Internet Subscription, 2015-2019



Map Title: Percent of Households in the Appalachian Region With a Broadband Internet Subscription, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 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 learning, telework, and connect with friends and family. Indeed, it has become a tool for promoting economic development. During the 2015-2019 period, more than three in four Appalachian households (78 percent) had a broadband Internet subscription, compared to more than four in five households nationwide (83 percent). Yet there are signs of a rural-urban "digital divide" within the Region: In 18 Appalachian counties, less than 60 percent of households had a broadband subscription. All but one of these counties were outside metropolitan areas, and more than half were in the Region's most rural counties. In contrast, 26 of the 28 counties with subscription rates at or above the national average were in metro areas—and one of the two exceptions (Watauga County, North Carolina) is home to major university (Appalachian State University). With high-speed Internet access becoming even more important as the COVID-19 pandemic has increased remote interaction, these are signs that many communities in the Region may be at risk of being left behind.

TRENDS IN EDUCATION

- Since the 2010-2014 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 87 percent in 2015-2019 (see Tables 5.1 and 5.4). The increase is almost half a 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 and in Appalachia's most rural counties (an increase of more than three percentage points in each case). With these improvements, the share of adults completing high school as of 2015-2019 has reached 79 percent in Central Appalachia and 81 percent in the Region's rural areas. The Appalachian sections of Kentucky and Virginia had the largest increases among the states—3.5 and 3.4 percentage points, respectively.
- The share of Appalachian adults ages 25 and over with an associate's degree but no bachelor's degree was 8.9 percent in 2015-2019—almost a full percentage point higher than in 2010-2014. The increase between the two periods occurred throughout the Region, with the improvement ranging from 0.7 to 1.3 percentage points.
- The share of adults ages 25 and over in the Region with at least a bachelor's degree has risen 2.5 percentage points since 2010-2014 and now exceeds 24 percent. The increase has been at least that much in three of the five subregions, as well as in metropolitan areas and in the Appalachian portions of several states—particularly Alabama, Georgia, North Carolina, Pennsylvania, and South Carolina. In Central Appalachia, the Region's nonmetropolitan counties, and the Appalachian sections of Kentucky, Mississippi, and Ohio, the improvement has been noticeably 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: 1.1 percentage points for high school completion, 0.8 points for completion of an associate's degree without a bachelor's degree, and 2.3 points for attainment of a four-year degree (see Table 5.5). Central Appalachia, Appalachian Kentucky, Mississippi, and Virginia, and the Region's most rural counties, had the greatest improvement in the share with at least a high school diploma. Central Appalachia and Kentucky's Appalachian section likewise showed the greatest gains in the share of working-age adults whose highest education level was an associate's degree. And Southern Appalachia, counties in large metros, and the Appalachian sections of Georgia, Pennsylvania, and South Carolina experienced the largest gains in the share of adults with at least a bachelor's degree.
- The greatest improvement since 2010-2014 has been among adults ages 65 and over. The share of older adults in Appalachia with at least a high school diploma has risen more than six 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—but not universally—held among older adults as well.
- 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).
- Among adults in Appalachia with a bachelor's degree or more, the share with a degree in the science and engineering field was nearly 31 percent in 2015-2019—nearly half a percentage point higher than it was in 2010-2014 (see Tables 5.7 and 5.8). While the share rose in most parts of the Region, the increase was especially noticeable in some of them—for example, rising almost three percentage points in Appalachian Mississippi. Conversely, the share actually fell 0.6 points in North Carolina's Appalachian section.

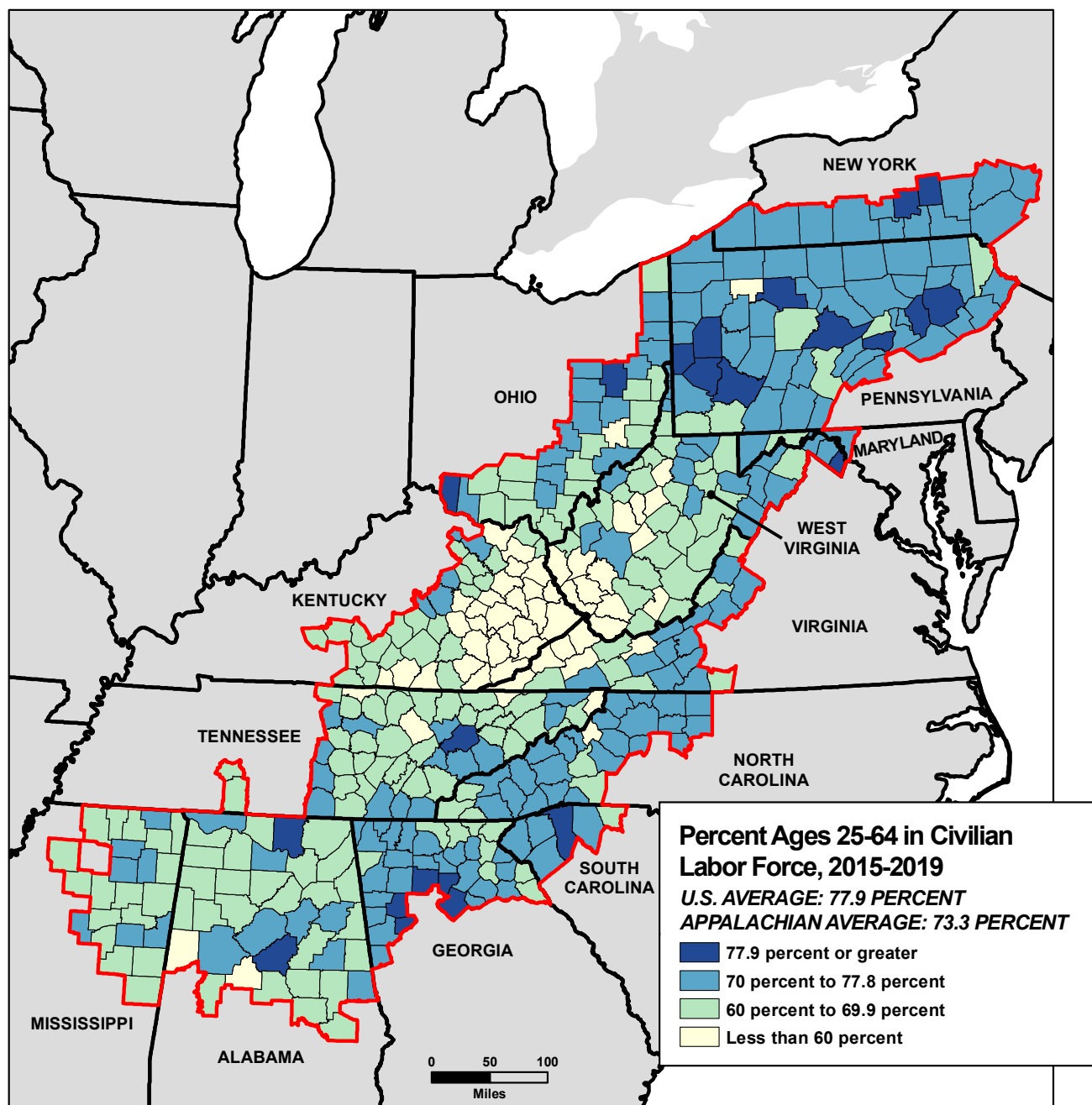
CHAPTER 6: LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Table 6.1: Labor Force, Employment, and Unemployment Status of Persons Ages 25 to 64 in the Appalachian Region, 2015-2019

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	169,180,277	131,796,100	77.9	95.6	4.4
Appalachian Region	13,159,984	9,648,812	73.3	95.6	4.4
Subregions					
Northern Appalachia	4,199,374	3,191,984	76.0	95.7	4.3
North Central Appalachia	1,235,775	860,283	69.6	95.1	4.9
Central Appalachia	969,341	580,284	59.9	93.7	6.3
South Central Appalachia	2,479,505	1,817,492	73.3	95.8	4.2
Southern Appalachia	4,275,989	3,198,769	74.8	95.8	4.2
County Types					
Large Metros (pop. 1 million +)	3,235,354	2,540,535	78.5	96.0	4.0
Small Metros (pop. <1 million)	5,552,552	4,118,282	74.2	95.7	4.3
Nonmetro, Adjacent to Large Metros	1,113,461	789,728	70.9	95.4	4.6
Nonmetro, Adjacent to Small Metros	1,999,624	1,383,659	69.2	95.2	4.8
Rural (nonmetro, not adj. to a metro)	1,258,993	816,608	64.9	94.7	5.3
Alabama	2,505,444	1,789,435	71.4	95.2	4.8
Appalachian Alabama	1,622,243	1,169,702	72.1	95.4	4.6
Non-Appalachian Alabama	883,201	619,733	70.2	94.9	5.1
Georgia	5,450,718	4,176,671	76.6	95.5	4.5
Appalachian Georgia	1,691,799	1,314,203	77.7	96.3	3.7
Non-Appalachian Georgia	3,758,919	2,862,468	76.2	95.1	4.9
Kentucky	2,301,055	1,655,800	72.0	95.5	4.5
Appalachian Kentucky	602,362	362,413	60.2	93.8	6.2
Non-Appalachian Kentucky	1,698,693	1,293,387	76.1	95.9	4.1
Maryland	3,215,181	2,640,451	82.1	95.9	4.1
Appalachian Maryland	130,434	93,208	71.5	95.2	4.8
Non-Appalachian Maryland	3,084,747	2,547,243	82.6	95.9	4.1
Mississippi	1,508,058	1,075,406	71.3	93.9	6.1
Appalachian Mississippi	310,282	218,750	70.5	94.8	5.2
Non-Appalachian Mississippi	1,197,776	856,656	71.5	93.7	6.3
New York	10,471,795	8,248,772	78.8	95.5	4.5
Appalachian New York	502,351	378,767	75.4	95.5	4.5
Non-Appalachian New York	9,969,444	7,870,005	78.9	95.5	4.5
North Carolina	5,306,449	4,079,253	76.9	95.6	4.4
Appalachian North Carolina	892,204	662,384	74.2	96.1	3.9
Non-Appalachian North Carolina	4,414,245	3,416,869	77.4	95.5	4.5
Ohio	6,027,708	4,693,589	77.9	95.7	4.3
Appalachian Ohio	1,021,095	733,458	71.8	95.3	4.7
Non-Appalachian Ohio	5,006,613	3,960,131	79.1	95.7	4.3
Pennsylvania	6,666,871	5,250,517	78.8	95.7	4.3
Appalachian Pennsylvania	2,941,639	2,262,528	76.9	95.9	4.1
Non-Appalachian Pennsylvania	3,725,232	2,987,989	80.2	95.5	4.5
South Carolina	2,567,389	1,936,613	75.4	95.3	4.7
Appalachian South Carolina	651,665	496,114	76.1	95.9	4.1
Non-Appalachian South Carolina	1,915,724	1,440,499	75.2	95.1	4.9
Tennessee	3,497,881	2,620,806	74.9	95.6	4.4
Appalachian Tennessee	1,483,986	1,068,789	72.0	95.5	4.5
Non-Appalachian Tennessee	2,013,895	1,552,017	77.1	95.7	4.3
Virginia	4,426,467	3,530,701	79.8	96.3	3.7
Appalachian Virginia	375,818	254,615	67.7	95.4	4.6
Non-Appalachian Virginia	4,050,649	3,276,086	80.9	96.4	3.6
West Virginia (entire state)	934,106	633,881	67.9	94.7	5.3

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

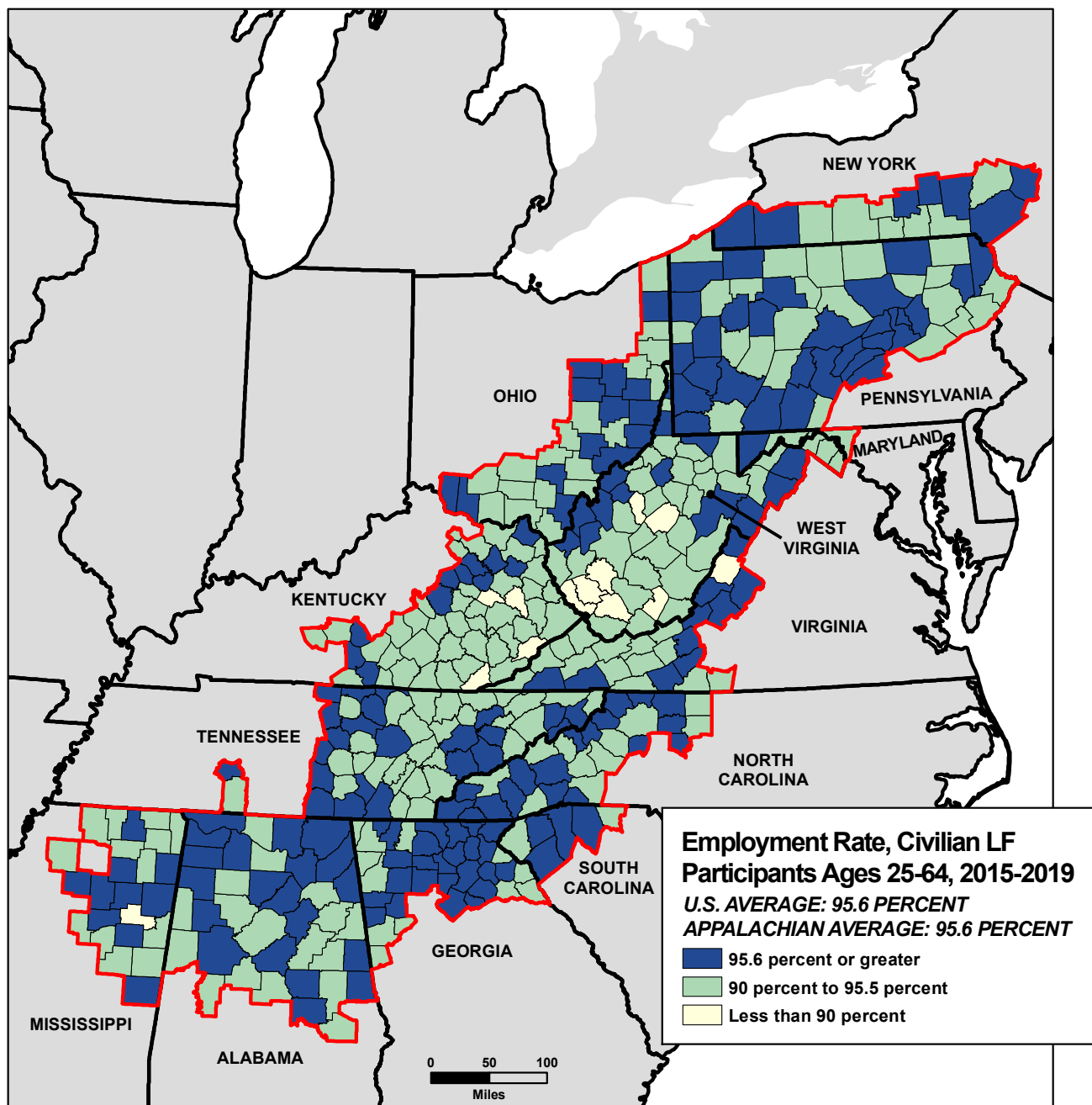
Figure 6.1: Percent of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Civilian Labor Force, 2015-2019



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Civilian Labor Force, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In the 2015-2019 period, 73.3 percent of Appalachia's civilian population in the prime working ages (ages 25 to 64) were in the civilian labor force, more than four percentage points below the U.S. average of 77.9 percent. In 23 Appalachian counties (19 of which were in metropolitan areas), the share was at or above the national average, yet there were 55 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 42 were in Central Appalachia. Indeed, just 60 percent of working-age residents in Central Appalachia and 65 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 18 of the 23 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.

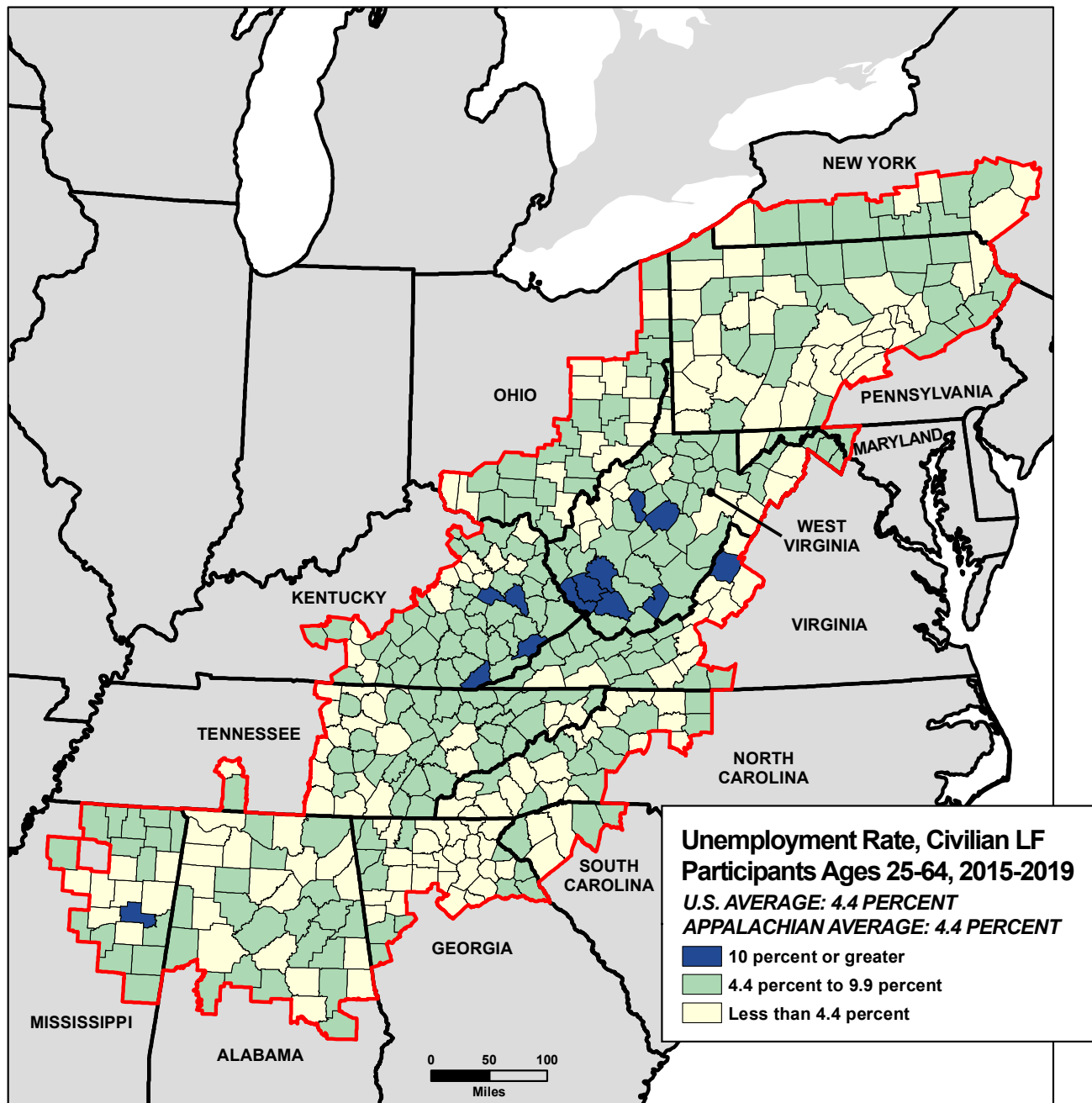
Figure 6.2: Employment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2015-2019



Map Title: Employment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 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 2015-2019 period. Although there were only slight differences among subregions and urban/rural county types, there was some variation at the county level. In 186 of the Region's 420 counties, the employment rate matched or exceeded the national average, yet there were 13 counties in the Region (eight of which were in Central Appalachia) where employment among 25-to-64-year-olds was less than 90 percent—all but one of which were outside metropolitan areas. While many of the 13 counties with the lowest employment rates also had similarly low employment in 2010-2014, the rate had been at least 92 percent in five of them—suggesting continued economic hardship for these counties in the aftermath of the 2007-2009 recession. Of course, the above numbers do not reflect the economic impact of the COVID-19 pandemic.

Figure 6.3: Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2015-2019



Map Title: Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

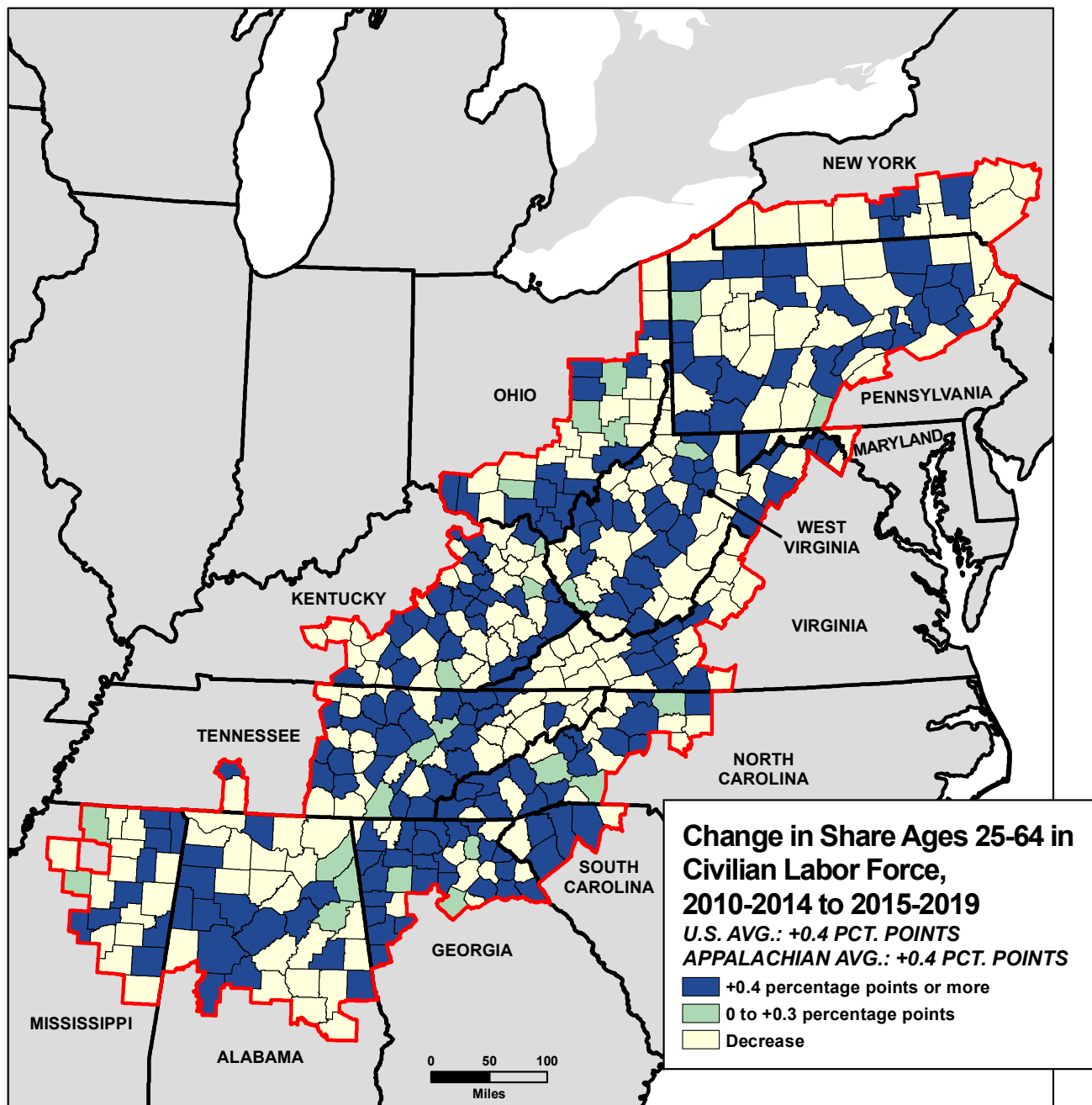
Unemployment in the Appalachian Region among persons ages 25 to 64 matched the national average of 4.4 percent during the 2015-2019 period. Within Appalachia, the jobless rate was at least 10 percent in 13 counties—all but one of which were outside metropolitan areas and eight of which were in Central Appalachia. (Unemployment was 6.3 percent in Central Appalachia.) Conversely, the unemployment rate was below the national average in 172 other counties, with 139 of these located in Northern, South Central, and Southern Appalachia—the subregions where the jobless levels were below the national rate. There are indications of a connection between unemployment and educational attainment: In 11 of the 13 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 five of these counties, the share was less than four-fifths.

Table 6.2: Percentage Point Change in Civilian Labor Force, Employment, and Unemployment Status of Persons Ages 25 to 64 in the Appalachian Region, 2010-2014 to 2015-2019

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	+ 0.4	+ 3.3	- 3.3
Appalachian Region	+ 0.4	+ 3.2	- 3.2
Subregions			
Northern Appalachia	+ 0.4	+ 2.4	- 2.4
North Central Appalachia	+ 0.3	+ 2.6	- 2.6
Central Appalachia	+ 0.1	+ 2.7	- 2.7
South Central Appalachia	+ 0.1	+ 3.7	- 3.7
Southern Appalachia	+ 0.5	+ 4.0	- 4.0
County Types			
Large Metros (pop. 1 million +)	+ 0.9	+ 3.2	- 3.2
Small Metros (pop. <1 million)	+ 0.2	+ 3.2	- 3.2
Nonmetro, Adjacent to Large Metros	- 0.1	+ 3.7	- 3.7
Nonmetro, Adjacent to Small Metros	+ 0.2	+ 3.1	- 3.1
Rural (nonmetro, not adj. to a metro)	+ 0.2	+ 3.2	- 3.2
Alabama	- 0.5	+ 3.5	- 3.5
Appalachian Alabama	- 0.1	+ 3.4	- 3.4
Non-Appalachian Alabama	- 1.1	+ 3.7	- 3.7
Georgia	+ 0.9	+ 4.4	- 4.4
Appalachian Georgia	+ 0.8	+ 4.6	- 4.6
Non-Appalachian Georgia	+ 1.0	+ 4.2	- 4.2
Kentucky	+ 0.6	+ 3.3	- 3.3
Appalachian Kentucky	+ 0.1	+ 3.2	- 3.2
Non-Appalachian Kentucky	+ 0.4	+ 3.2	- 3.2
Maryland	- 0.2	+ 2.5	- 2.5
Appalachian Maryland	- 1.6	+ 2.9	- 2.9
Non-Appalachian Maryland	- 0.1	+ 2.5	- 2.5
Mississippi	- 0.3	+ 2.4	- 2.4
Appalachian Mississippi	+ 0.1	+ 3.6	- 3.6
Non-Appalachian Mississippi	- 0.4	+ 2.2	- 2.2
New York	+ 0.6	+ 3.0	- 3.0
Appalachian New York	- 0.3	+ 2.2	- 2.2
Non-Appalachian New York	+ 0.5	+ 3.0	- 3.0
North Carolina	+ 0.3	+ 4.4	- 4.4
Appalachian North Carolina	+ 0.4	+ 4.6	- 4.6
Non-Appalachian North Carolina	+ 0.2	+ 4.3	- 4.3
Ohio	+ 0.5	+ 3.3	- 3.3
Appalachian Ohio	+ 0.1	+ 3.4	- 3.4
Non-Appalachian Ohio	+ 0.5	+ 3.2	- 3.2
Pennsylvania	+ 0.7	+ 2.8	- 2.8
Appalachian Pennsylvania	+ 0.7	+ 2.4	- 2.4
Non-Appalachian Pennsylvania	+ 0.5	+ 3.0	- 3.0
South Carolina	+ 0.7	+ 4.1	- 4.1
Appalachian South Carolina	+ 1.4	+ 4.1	- 4.1
Non-Appalachian South Carolina	+ 0.5	+ 4.2	- 4.2
Tennessee	+ 0.6	+ 3.4	- 3.4
Appalachian Tennessee	+ 0.2	+ 3.4	- 3.4
Non-Appalachian Tennessee	+ 0.9	+ 3.5	- 3.5
Virginia	+ 0.4	+ 1.8	- 1.8
Appalachian Virginia	- 0.8	+ 2.2	- 2.2
Non-Appalachian Virginia	+ 0.4	+ 1.8	- 1.8
West Virginia (entire state)	+ 0.2	+ 1.6	- 1.6

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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 Civilian Labor Force, 2010-2014 to 2015-2019

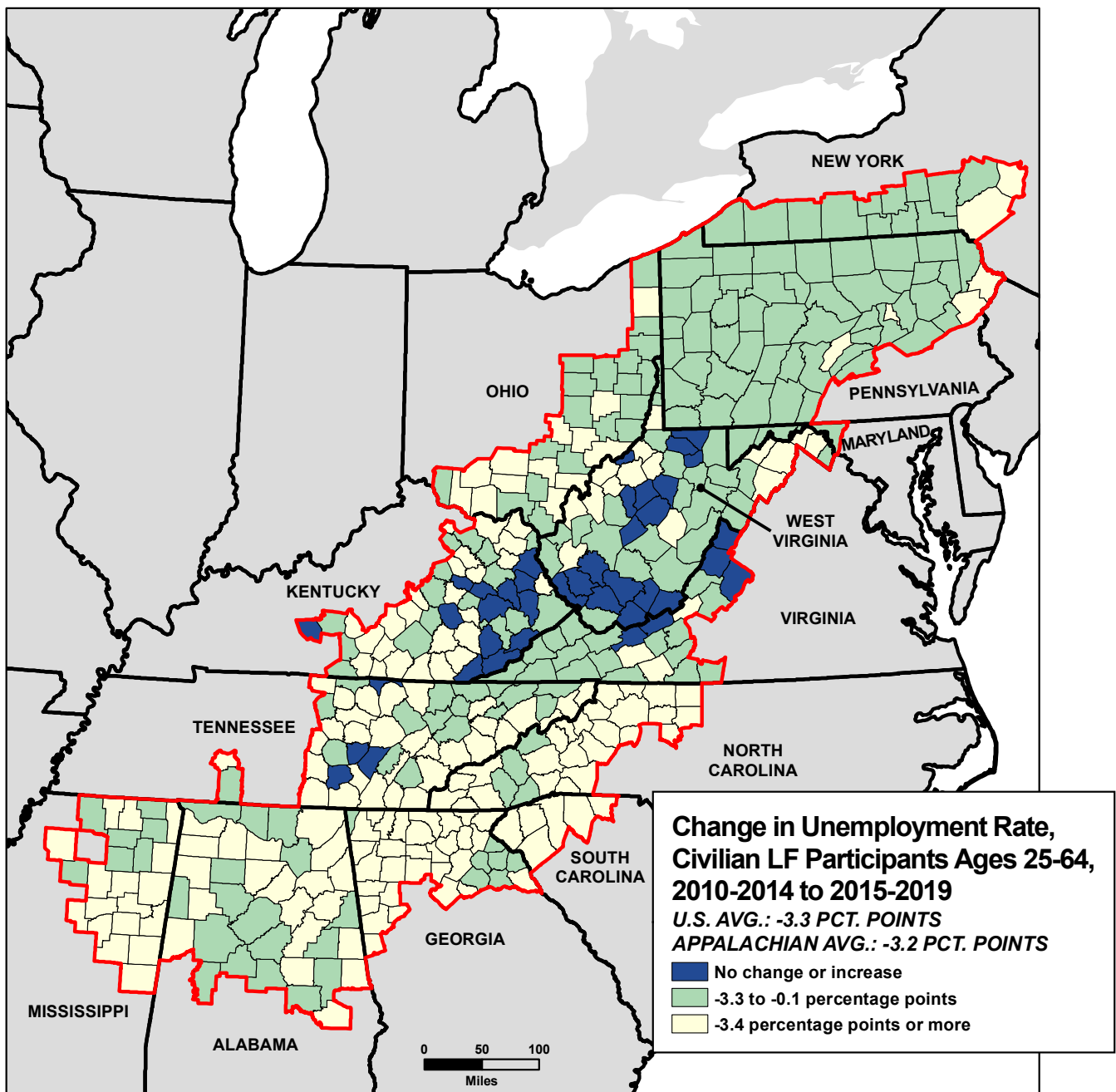


Map Title: Percentage Point Change in the Share of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Civilian Labor Force, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

In both the Appalachian Region and the nation as a whole, the labor force participation rate among civilians ages 25 to 64 was 0.4 percentage points higher in 2015-2019 than it was in 2010-2014. And the increase was present in much of the Region—187 of Appalachia's 420 counties had increases in labor force participation rates that matched or exceeded the U.S. average. For example, the Appalachian section of South Carolina saw an increase of 1.4 percentage points. Yet participation rates also fell in some parts of Appalachia—there were 208 counties in the Region where the share of adults in the labor force decreased between the two periods. In Appalachian Maryland, the labor force participation rate declined by 1.6 points between 2010-2014 and 2015-2019.

Figure 6.5: Percentage Point Change in the Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2010-2014 to 2015-2019



Map Title: Percentage Point Change in the Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Unemployment among civilian labor force participants declined by more than three percentage points between 2010-2014 and 2015-2019, both in Appalachia and nationwide. And in 191 of the Region's 420 counties, unemployment declined even further. (Nearly two-thirds of these counties were in South Central and Southern Appalachia.) These numbers support a continued economic rebound from the recession of 2007-2009. Yet in 39 Appalachian counties, the unemployment rate either remained the same or increased between 2010-2014 and 2015-2019, with 30 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 2010-2014, unemployment in the earlier period had been less than 5 percent in eight others. This suggests that more recent economic forces—in addition to a slow recovery—may be at play in some areas. And these more recent forces do not include the effects of the COVID-19 pandemic, which likely will negatively impact these rates throughout the Region.

TRENDS IN LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

- Among working-age adults (ages 25 to 64), Appalachia's labor force participation rate in 2015-2019 was 73.3 percent, 0.4 percentage points higher than its rate in 2010-2014 (see Tables 6.1 and 6.2). This share increased in all five subregions, four of the five urban-rural county types, and the Appalachian sections of nine states. The largest increases were among large metropolitan areas and the Appalachian sections of Georgia and Pennsylvania. Meanwhile, the Appalachian sections of Maryland and Virginia registered the largest declines, falling 1.6 and 0.8 percentage points, respectively.
- Within the civilian labor force, the employment rate in Appalachia was 95.6 percent, which was more than three percentage points higher than the employment rate in 2010-2014. Among the subregions, the increase was greatest in Southern Appalachia, where employment rose four percentage points. Employment in Northern Appalachia, however, only rose by 2.4 points, the lowest among the subregions. Elsewhere in the Region, the employment rate rose at least three points among all five urban-rural county types. And among the states, employment increased the most in the Appalachian sections of Georgia and North Carolina (4.6 percentage points each). Conversely, West Virginia was the only state where the increase in employment rose less than two percentage points.
- As Appalachia's employment rate rose between 2010-2014 and 2015-2019, its unemployment rate fell. The Region's unemployment rate of 4.4 percent in the later period is 3.2 percentage points lower than its rate in 2010-2014.
- Although there are some parts of the Appalachian Region that likely have not yet rebounded from the economic downturn of 2007-2009, the rise in labor force participation and employment (along with the corresponding lower rates of unemployment) support the idea of an economic recovery in most of the Region. Of course, these labor force and employment patterns occurred before the onset of the 2020 coronavirus pandemic and the economic hardships it has generated.

CHAPTER 7: TRANSPORTATION AND COMMUTING PATTERNS

Table 7.1: Means of Transportation for Workers Ages 16 and Over in the Appalachian Region, 2015-2019

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	152,735,781	76.3	9.0	5.0	2.7	1.8	5.2
Appalachian Region	11,212,954	81.9	9.2	1.2	2.2	1.2	4.4
Subregions							
Northern Appalachia	3,731,882	79.4	9.0	2.6	3.5	1.3	4.3
North Central Appalachia	996,373	82.6	9.0	0.7	2.7	1.1	3.8
Central Appalachia	658,061	83.5	10.0	0.3	1.8	1.1	3.3
South Central Appalachia	2,140,447	83.0	8.7	0.6	1.7	1.2	4.9
Southern Appalachia	3,686,191	83.4	9.5	0.4	1.1	1.1	4.5
County Types							
Large Metros (pop. 1 million +)	2,906,818	79.7	9.1	2.7	1.9	1.1	5.5
Small Metros (pop. <1 million)	4,828,123	82.8	8.8	0.9	2.1	1.1	4.2
Nonmetro, Adjacent to Large Metros	919,168	82.6	9.6	0.4	2.6	1.2	3.5
Nonmetro, Adjacent to Small Metros	1,610,125	82.6	9.8	0.3	2.4	1.2	3.7
Rural (nonmetro, not adj. to a metro)	948,720	82.3	9.7	0.4	2.6	1.4	3.6
Alabama	2,073,072	85.7	8.5	0.3	1.1	1.0	3.3
Appalachian Alabama	1,350,093	85.8	8.8	0.3	1.0	0.9	3.2
Non-Appalachian Alabama	722,979	85.6	8.0	0.3	1.3	1.1	3.7
Georgia	4,781,201	79.2	9.6	2.1	1.5	1.7	5.8
Appalachian Georgia	1,504,102	80.7	10.3	0.6	1.0	1.2	6.1
Non-Appalachian Georgia	3,277,099	78.5	9.3	2.8	1.7	2.0	5.7
Kentucky	1,949,184	82.2	9.4	1.0	2.2	1.4	3.8
Appalachian Kentucky	414,325	82.8	10.6	0.3	2.1	1.1	3.2
Non-Appalachian Kentucky	1,534,859	82.0	9.1	1.2	2.2	1.5	4.0
Maryland	3,046,449	73.9	8.9	8.4	2.3	1.5	5.0
Appalachian Maryland	108,935	80.9	9.6	1.2	2.5	1.0	4.7
Non-Appalachian Maryland	2,937,514	73.6	8.9	8.6	2.3	1.6	5.0
Mississippi	1,223,551	85.1	9.3	0.3	1.3	1.6	2.4
Appalachian Mississippi	251,506	86.4	8.7	0.1	0.9	1.1	2.7
Non-Appalachian Mississippi	972,045	84.8	9.4	0.3	1.4	1.7	2.4
New York	9,300,315	53.0	6.5	28.0	6.1	2.0	4.4
Appalachian New York	454,090	77.8	9.1	1.9	5.7	1.4	4.1
Non-Appalachian New York	8,846,225	51.8	6.3	29.3	6.2	2.1	4.4
North Carolina	4,758,740	80.9	9.2	1.0	1.8	1.3	5.8
Appalachian North Carolina	773,420	81.9	9.1	0.5	1.8	1.3	5.6
Non-Appalachian North Carolina	3,985,320	80.7	9.2	1.1	1.8	1.3	5.8
Ohio	5,488,776	82.9	7.8	1.6	2.2	1.2	4.2
Appalachian Ohio	854,594	83.7	8.4	0.5	2.4	1.5	3.6
Non-Appalachian Ohio	4,634,182	82.8	7.7	1.8	2.2	1.1	4.3
Pennsylvania	6,081,077	75.9	8.5	5.6	3.6	1.5	4.9
Appalachian Pennsylvania	2,636,025	78.6	9.1	3.1	3.4	1.2	4.5
Non-Appalachian Pennsylvania	3,445,052	73.8	7.9	7.5	3.8	1.7	5.2
South Carolina	2,264,320	82.4	9.2	0.5	2.0	1.4	4.5
Appalachian South Carolina	580,490	83.5	9.6	0.4	1.3	1.0	4.2
Non-Appalachian South Carolina	1,683,830	82.0	9.0	0.6	2.3	1.5	4.6
Tennessee	3,066,773	83.1	8.9	0.7	1.3	1.3	4.7
Appalachian Tennessee	1,256,626	83.8	8.7	0.4	1.4	1.1	4.5
Non-Appalachian Tennessee	1,810,147	82.6	9.1	0.9	1.3	1.4	4.9
Virginia	4,197,562	77.0	9.2	4.4	2.4	1.8	5.3
Appalachian Virginia	302,234	83.3	8.5	1.0	2.3	1.2	3.7
Non-Appalachian Virginia	3,895,328	76.5	9.2	4.7	2.4	1.8	5.4
West Virginia (entire state)	726,514	82.5	9.0	0.9	2.8	1.2	3.6

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Table 7.2: Means of Transportation for Workers Ages 16 and Over in the Appalachian Region Below the Poverty Level, 2015-2019

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	9,336,498	65.3	12.6	7.8	6.0	3.5	4.7
Appalachian Region	756,595	71.1	13.5	3.0	5.8	2.6	4.1
Subregions							
Northern Appalachia	227,122	63.8	12.4	6.4	10.2	2.9	4.3
North Central Appalachia	74,060	69.6	13.0	2.2	8.1	2.9	4.2
Central Appalachia	61,649	75.5	14.3	0.6	4.0	2.0	3.6
South Central Appalachia	158,950	73.7	13.1	2.0	3.4	2.7	5.1
Southern Appalachia	234,814	75.5	14.8	1.1	2.8	2.4	3.3
County Types							
Large Metros (pop. 1 million +)	149,500	66.7	14.6	6.3	6.2	2.3	3.8
Small Metros (pop. <1 million)	335,578	71.2	13.0	3.2	5.7	2.8	4.1
Nonmetro, Adjacent to Large Metros	69,516	71.7	13.0	1.0	7.3	3.1	4.1
Nonmetro, Adjacent to Small Metros	120,390	72.3	14.6	0.8	5.2	2.4	4.7
Rural (nonmetro, not adj. to a metro)	81,611	75.9	12.3	0.8	4.8	2.3	3.9
Alabama	150,394	78.8	12.8	1.2	2.6	2.0	2.6
Appalachian Alabama	92,529	78.2	13.5	1.2	2.8	1.8	2.4
Non-Appalachian Alabama	57,865	79.9	11.6	1.1	2.3	2.1	2.9
Georgia	327,380	68.5	15.1	4.7	3.4	3.9	4.5
Appalachian Georgia	84,557	71.2	17.5	0.9	3.1	3.0	4.4
Non-Appalachian Georgia	242,823	67.5	14.3	6.0	3.5	4.2	4.5
Kentucky	144,908	71.1	13.7	2.9	5.4	3.2	3.6
Appalachian Kentucky	41,786	74.9	15.2	0.4	4.3	1.9	3.2
Non-Appalachian Kentucky	103,122	69.6	13.1	3.9	5.8	3.8	3.8
Maryland	115,009	57.8	12.8	14.1	6.4	3.2	5.8
Appalachian Maryland	6,448	66.4	13.5	4.4	8.0	2.8	5.0
Non-Appalachian Maryland	108,561	57.3	12.7	14.6	6.3	3.2	5.8
Mississippi	106,273	79.5	12.6	0.7	2.1	3.1	2.0
Appalachian Mississippi	20,346	83.5	9.6	0.1	1.2	2.7	3.0
Non-Appalachian Mississippi	85,927	78.5	13.3	0.8	2.3	3.2	1.8
New York	524,903	35.7	7.8	35.7	12.7	3.0	5.1
Appalachian New York	34,317	61.6	10.6	6.0	14.2	3.2	4.3
Non-Appalachian New York	490,586	33.9	7.6	37.7	12.6	3.0	5.2
North Carolina	328,164	71.5	15.5	3.0	3.1	2.4	4.5
Appalachian North Carolina	58,494	73.2	14.0	1.7	3.1	2.6	5.4
Non-Appalachian North Carolina	269,670	71.1	15.8	3.3	3.1	2.4	4.3
Ohio	351,056	68.8	12.5	5.6	6.6	3.0	3.6
Appalachian Ohio	61,902	73.8	12.0	1.3	6.0	3.1	3.8
Non-Appalachian Ohio	289,154	67.7	12.6	6.5	6.7	3.0	3.5
Pennsylvania	321,229	57.0	12.6	12.9	9.8	3.1	4.6
Appalachian Pennsylvania	148,703	61.6	13.0	7.8	10.6	2.7	4.4
Non-Appalachian Pennsylvania	172,526	53.1	12.3	17.3	9.1	3.4	4.8
South Carolina	156,430	73.9	14.6	1.6	3.4	2.8	3.7
Appalachian South Carolina	37,382	74.4	15.2	1.9	3.1	2.0	3.4
Non-Appalachian South Carolina	119,048	73.8	14.4	1.5	3.5	3.0	3.9
Tennessee	209,185	74.0	14.1	2.1	2.8	2.5	4.4
Appalachian Tennessee	92,551	74.7	13.2	1.4	3.3	2.4	5.0
Non-Appalachian Tennessee	116,634	73.5	14.8	2.7	2.5	2.6	3.9
Virginia	199,017	65.4	12.9	6.8	5.5	4.4	5.0
Appalachian Virginia	23,081	73.3	10.4	4.6	3.9	3.3	4.5
Non-Appalachian Virginia	175,936	64.3	13.2	7.0	5.7	4.5	5.1
West Virginia (entire state)	54,499	68.6	12.6	3.0	8.4	3.1	4.3

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2019, the poverty threshold for a family of two adults and two children was \$25,926. 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, 2015-2019 American Community Survey.

Table 7.3: Availability of Vehicles for Households in the Appalachian Region, 2015-2019

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	120,756,048	8.6	32.7	37.2	14.6	6.9
Appalachian Region	10,048,680	7.1	31.7	37.4	16.0	7.7
Subregions						
Northern Appalachia	3,362,737	9.4	34.3	36.8	13.6	5.9
North Central Appalachia	951,744	7.7	31.9	36.9	15.8	7.7
Central Appalachia	733,678	8.2	31.9	35.7	16.4	7.8
South Central Appalachia	1,963,797	5.6	30.6	37.3	17.4	9.1
Southern Appalachia	3,036,724	5.2	29.4	38.7	17.7	8.9
County Types						
Large Metros (pop. 1 million +)	2,357,023	7.0	31.3	38.9	15.7	7.1
Small Metros (pop. <1 million)	4,278,290	7.0	32.4	37.3	15.7	7.6
Nonmetro, Adjacent to Large Metros	858,262	7.3	31.0	36.9	16.4	8.4
Nonmetro, Adjacent to Small Metros	1,572,387	6.9	30.8	36.5	17.1	8.7
Rural (nonmetro, not adj. to a metro)	982,718	8.1	31.9	36.3	16.1	7.6
Alabama	1,867,893	6.1	32.1	36.8	16.6	8.4
Appalachian Alabama	1,201,680	5.7	30.9	37.0	17.3	9.1
Non-Appalachian Alabama	666,213	6.8	34.2	36.4	15.5	7.2
Georgia	3,758,798	6.5	32.6	38.1	15.6	7.3
Appalachian Georgia	1,113,264	4.0	26.8	41.1	18.8	9.3
Non-Appalachian Georgia	2,645,534	7.5	35.0	36.9	14.2	6.4
Kentucky	1,734,618	7.2	32.4	37.9	15.3	7.2
Appalachian Kentucky	453,472	8.2	32.3	36.0	16.0	7.5
Non-Appalachian Kentucky	1,281,146	6.9	32.5	38.5	15.1	7.0
Maryland	2,205,204	9.0	32.1	36.9	14.8	7.3
Appalachian Maryland	95,859	8.8	31.2	35.5	16.1	8.4
Non-Appalachian Maryland	2,109,345	9.0	32.1	37.0	14.7	7.3
Mississippi	1,104,394	6.5	33.2	36.6	16.1	7.6
Appalachian Mississippi	234,751	6.2	30.8	37.1	17.4	8.5
Non-Appalachian Mississippi	869,643	6.5	33.8	36.5	15.8	7.4
New York	7,343,234	29.1	32.7	25.9	8.6	3.7
Appalachian New York	415,551	10.4	35.7	36.2	12.7	5.0
Non-Appalachian New York	6,927,683	30.2	32.5	25.3	8.4	3.6
North Carolina	3,965,482	5.8	31.6	38.3	16.4	7.8
Appalachian North Carolina	716,083	5.6	31.1	37.3	17.2	8.8
Non-Appalachian North Carolina	3,249,399	5.9	31.8	38.5	16.3	7.6
Ohio	4,676,358	7.9	33.2	37.6	14.5	6.7
Appalachian Ohio	792,013	7.7	30.8	36.5	16.6	8.5
Non-Appalachian Ohio	3,884,345	8.0	33.7	37.9	14.1	6.4
Pennsylvania	5,053,106	10.9	33.9	36.3	13.2	5.7
Appalachian Pennsylvania	2,351,466	9.5	34.4	37.0	13.4	5.7
Non-Appalachian Pennsylvania	2,701,640	12.2	33.5	35.7	13.0	5.6
South Carolina	1,921,862	6.3	32.7	38.5	15.7	6.8
Appalachian South Carolina	487,029	6.1	31.0	38.3	16.7	7.8
Non-Appalachian South Carolina	1,434,833	6.3	33.3	38.6	15.3	6.5
Tennessee	2,597,292	5.7	31.3	38.0	16.7	8.2
Appalachian Tennessee	1,155,507	5.5	30.3	37.4	17.5	9.2
Non-Appalachian Tennessee	1,441,785	5.9	32.1	38.5	16.1	7.4
Virginia	3,151,045	6.1	30.1	38.1	16.9	8.8
Appalachian Virginia	299,420	6.8	30.0	35.2	18.2	9.9
Non-Appalachian Virginia	2,851,625	6.0	30.1	38.4	16.8	8.7
West Virginia (entire state)	732,585	8.7	34.2	36.9	14.1	6.1

Data Source: U.S. Census Bureau, 2015-2019 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, 2015-2019

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	6,458,718	1,357,516	699,361	2,621,390	932,317	549,763	298,371
Appalachian Region	291,183	101,716	60,987	37,441	46,879	29,830	14,330
Subregions							
Northern Appalachia	144,982	38,263	26,950	28,037	29,185	13,967	8,580
North Central Appalachia	26,276	10,081	5,242	2,329	5,036	2,328	1,260
Central Appalachia	13,520	5,843	3,341	150	2,208	1,378	600
South Central Appalachia	37,846	16,649	7,345	3,789	3,965	4,528	1,570
Southern Appalachia	68,559	30,880	18,109	3,136	6,485	7,629	2,320
County Types							
Large Metros (pop. 1 million +)	79,045	23,043	13,807	20,771	12,461	5,846	3,117
Small Metros (pop. <1 million)	116,992	44,194	23,273	14,627	18,460	11,957	4,481
Nonmetro, Adjacent to Large Metros	26,249	8,950	5,907	897	5,101	3,235	2,159
Nonmetro, Adjacent to Small Metros	40,243	16,099	10,319	593	6,128	4,327	2,777
Rural (nonmetro, not adj. to a metro)	28,654	9,430	7,681	553	4,729	4,465	1,796
Alabama	40,362	20,553	8,918	2,093	4,198	3,310	1,290
Appalachian Alabama	23,599	12,198	4,754	1,483	2,586	1,813	765
Non-Appalachian Alabama	16,763	8,355	4,164	610	1,612	1,497	525
Georgia	141,860	40,885	32,655	32,257	12,428	18,158	5,477
Appalachian Georgia	27,981	10,745	8,713	1,021	2,259	4,110	1,133
Non-Appalachian Georgia	113,879	30,140	23,942	31,236	10,169	14,048	4,344
Kentucky	49,415	15,269	9,959	8,034	7,471	6,259	2,423
Appalachian Kentucky	8,897	3,514	2,469	113	1,456	921	424
Non-Appalachian Kentucky	40,518	11,755	7,490	7,921	6,015	5,338	1,999
Maryland	123,152	27,232	14,092	56,709	13,119	8,249	3,751
Appalachian Maryland	3,335	1,325	597	375	646	223	169
Non-Appalachian Maryland	119,817	25,907	13,495	56,334	12,473	8,026	3,582
Mississippi	25,159	11,912	7,216	291	2,269	2,846	625
Appalachian Mississippi	4,630	2,202	1,285	26	431	576	110
Non-Appalachian Mississippi	20,529	9,710	5,931	265	1,838	2,270	515
New York	2,010,968	122,928	63,021	1,358,299	287,289	89,672	89,759
Appalachian New York	19,821	5,022	3,086	3,064	5,623	1,967	1,059
Non-Appalachian New York	1,991,147	117,906	59,935	1,355,235	281,666	87,705	88,700
North Carolina	105,161	41,975	24,121	13,162	10,469	11,331	4,103
Appalachian North Carolina	15,504	6,939	3,105	1,345	1,360	2,187	568
Non-Appalachian North Carolina	89,657	35,036	21,016	11,817	9,109	9,144	3,535
Ohio	164,257	47,819	34,487	33,407	23,117	16,792	8,635
Appalachian Ohio	29,027	8,831	7,726	1,078	4,136	5,244	2,012
Non-Appalachian Ohio	135,230	38,988	26,761	32,329	18,981	11,548	6,623
Pennsylvania	307,325	60,296	42,806	108,174	53,525	24,707	17,817
Appalachian Pennsylvania	99,747	26,565	16,947	23,620	19,721	7,188	5,706
Non-Appalachian Pennsylvania	207,578	33,731	25,859	84,554	33,804	17,519	12,111
South Carolina	51,395	18,354	15,280	3,666	6,155	6,301	1,639
Appalachian South Carolina	12,349	5,735	3,357	606	1,209	1,130	312
Non-Appalachian South Carolina	39,046	12,619	11,923	3,060	4,946	5,171	1,327
Tennessee	55,931	23,710	11,155	7,383	5,534	5,620	2,529
Appalachian Tennessee	19,299	8,719	3,684	1,847	2,172	1,989	888
Non-Appalachian Tennessee	36,632	14,991	7,471	5,536	3,362	3,631	1,641
Virginia	112,215	34,042	18,275	29,954	12,870	12,266	4,808
Appalachian Virginia	6,152	2,663	1,244	606	747	608	284
Non-Appalachian Virginia	106,063	31,379	17,031	29,348	12,123	11,658	4,524
West Virginia (entire state)	20,842	7,258	4,020	2,257	4,533	1,874	900

Data Source: U.S. Census Bureau, 2015-2019 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, 2015-2019

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	4.3	1.2	5.1	34.8	26.9	20.1	3.9
Appalachian Region	2.6	1.1	6.0	28.9	23.4	23.2	3.0
Subregions							
Northern Appalachia	3.9	1.3	8.1	29.8	26.9	29.4	5.6
North Central Appalachia	2.7	1.2	5.8	32.7	21.4	21.3	3.4
Central Appalachia	2.1	1.1	5.1	8.5	23.2	20.0	2.8
South Central Appalachia	1.8	0.9	4.0	35.0	14.6	18.3	1.5
Southern Appalachia	1.9	1.0	5.2	19.7	20.5	19.9	1.4
County Types							
Large Metros (pop. 1 million +)	2.7	1.0	5.2	27.2	26.0	18.2	2.0
Small Metros (pop. <1 million)	2.4	1.1	5.5	34.4	22.9	22.2	2.3
Nonmetro, Adjacent to Large Metros	2.9	1.2	6.7	28.6	24.6	29.7	6.8
Nonmetro, Adjacent to Small Metros	2.5	1.2	6.5	13.4	19.4	23.6	4.8
Rural (nonmetro, not adj. to a metro)	3.1	1.2	8.4	17.6	24.7	33.3	5.5
Alabama	2.0	1.2	5.1	30.9	22.5	16.5	1.9
Appalachian Alabama	1.8	1.1	4.0	32.6	22.5	15.2	1.8
Non-Appalachian Alabama	2.3	1.4	7.2	27.6	22.6	18.3	2.0
Georgia	3.0	1.1	7.1	33.4	21.8	22.2	2.0
Appalachian Georgia	1.9	0.9	5.6	11.5	17.7	22.7	1.2
Non-Appalachian Georgia	3.5	1.2	7.9	35.6	23.1	22.1	2.4
Kentucky	2.6	1.0	5.5	41.8	23.6	22.9	3.3
Appalachian Kentucky	2.2	1.0	5.7	10.1	22.4	20.5	3.3
Non-Appalachian Kentucky	2.7	0.9	5.4	43.7	23.9	23.4	3.3
Maryland	4.1	1.2	5.2	22.4	21.6	17.8	2.5
Appalachian Maryland	3.1	1.5	5.7	30.8	25.5	20.0	3.4
Non-Appalachian Maryland	4.1	1.2	5.2	22.4	21.4	17.7	2.5
Mississippi	2.1	1.1	6.4	8.5	19.5	15.1	2.2
Appalachian Mississippi	1.9	1.0	5.9	9.4	22.4	21.6	1.7
Non-Appalachian Mississippi	2.1	1.2	6.5	8.5	18.9	14.0	2.3
New York	21.8	2.5	10.6	52.6	54.1	47.6	22.9
Appalachian New York	4.5	1.4	7.5	36.9	28.5	31.0	6.2
Non-Appalachian New York	22.7	2.6	10.8	52.6	55.1	48.2	23.6
North Carolina	2.2	1.1	5.7	28.7	17.7	18.6	1.5
Appalachian North Carolina	2.0	1.1	4.5	38.2	12.8	22.7	1.3
Non-Appalachian North Carolina	2.3	1.1	5.9	27.9	18.8	17.9	1.6
Ohio	3.0	1.1	8.1	40.0	22.8	25.9	3.8
Appalachian Ohio	3.4	1.2	10.9	27.7	24.1	41.7	6.7
Non-Appalachian Ohio	2.9	1.0	7.5	40.6	22.5	22.1	3.4
Pennsylvania	5.1	1.3	8.4	32.1	28.2	28.0	6.2
Appalachian Pennsylvania	3.8	1.3	7.1	28.9	26.1	23.7	5.0
Non-Appalachian Pennsylvania	6.1	1.3	9.6	33.1	29.5	30.3	7.1
South Carolina	2.3	1.0	7.4	34.0	24.1	20.3	1.7
Appalachian South Carolina	2.1	1.2	6.1	27.4	22.5	19.7	1.3
Non-Appalachian South Carolina	2.4	0.9	7.9	35.7	24.6	20.4	1.8
Tennessee	1.8	0.9	4.1	37.1	17.3	14.8	1.8
Appalachian Tennessee	1.5	0.8	3.4	36.9	15.9	14.9	1.6
Non-Appalachian Tennessee	2.0	1.0	4.6	37.2	18.4	14.7	1.9
Virginia	2.7	1.1	4.8	16.5	17.7	16.6	2.2
Appalachian Virginia	2.1	1.1	4.9	21.9	16.2	17.1	2.8
Non-Appalachian Virginia	2.8	1.1	4.8	16.4	17.8	16.6	2.2
West Virginia (entire state)	2.9	1.2	6.2	37.0	24.9	21.4	3.5

Data Source: U.S. Census Bureau, 2015-2019 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, 2015-2019

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	88,842,396	5.0	6.6	52.0	36.4
Appalachian Region	6,799,675	3.2	4.7	49.4	42.7
Subregions					
Northern Appalachia	2,280,526	4.7	5.9	52.6	36.8
North Central Appalachia	615,350	3.2	4.4	48.0	44.4
Central Appalachia	418,710	2.5	4.1	42.7	50.7
South Central Appalachia	1,308,726	2.2	3.7	47.8	46.3
Southern Appalachia	2,176,363	2.3	4.3	48.8	44.7
County Types					
Large Metros (pop. 1 million +)	1,735,752	3.3	5.2	52.8	38.7
Small Metros (pop. <1 million)	2,923,550	3.0	4.7	50.4	41.9
Nonmetro, Adjacent to Large Metros	559,333	3.3	4.5	46.6	45.6
Nonmetro, Adjacent to Small Metros	991,296	3.1	4.3	44.9	47.7
Rural (nonmetro, not adj. to a metro)	589,744	3.4	4.3	45.1	47.3
Alabama	1,266,182	2.3	3.7	48.2	45.8
Appalachian Alabama	823,985	2.2	3.7	47.8	46.3
Non-Appalachian Alabama	442,197	2.7	3.8	48.8	44.7
Georgia	2,820,438	3.5	5.8	51.7	39.0
Appalachian Georgia	852,683	2.1	4.9	49.7	43.3
Non-Appalachian Georgia	1,967,755	4.1	6.2	52.6	37.2
Kentucky	1,182,556	3.1	5.0	50.9	41.0
Appalachian Kentucky	261,554	2.6	4.4	43.7	49.2
Non-Appalachian Kentucky	921,002	3.3	5.2	52.9	38.6
Maryland	1,715,505	5.0	7.7	54.1	33.2
Appalachian Maryland	65,208	3.8	5.0	49.8	41.5
Non-Appalachian Maryland	1,650,297	5.0	7.9	54.3	32.8
Mississippi	749,195	2.6	4.4	48.2	44.9
Appalachian Mississippi	153,443	2.4	3.3	46.1	48.2
Non-Appalachian Mississippi	595,752	2.6	4.6	48.7	44.1
New York	5,378,514	24.4	12.4	41.9	21.3
Appalachian New York	276,786	5.4	6.6	52.6	35.3
Non-Appalachian New York	5,101,728	25.4	12.7	41.4	20.6
North Carolina	2,868,188	2.7	4.7	50.5	42.1
Appalachian North Carolina	475,104	2.4	3.8	48.6	45.3
Non-Appalachian North Carolina	2,393,084	2.8	4.9	50.9	41.5
Ohio	3,335,195	3.7	4.6	54.1	37.6
Appalachian Ohio	523,453	3.7	3.8	47.2	45.3
Non-Appalachian Ohio	2,811,742	3.7	4.7	55.4	36.2
Pennsylvania	3,604,582	6.1	7.0	53.4	33.4
Appalachian Pennsylvania	1,608,498	4.6	6.1	53.4	35.8
Non-Appalachian Pennsylvania	1,996,084	7.3	7.8	53.4	31.5
South Carolina	1,347,354	2.8	5.0	50.8	41.4
Appalachian South Carolina	346,252	2.8	4.7	50.0	42.6
Non-Appalachian South Carolina	1,001,102	2.9	5.1	51.0	41.0
Tennessee	1,853,922	2.3	4.5	50.2	43.0
Appalachian Tennessee	769,586	1.9	3.7	47.3	47.1
Non-Appalachian Tennessee	1,084,336	2.5	5.1	52.2	40.1
Virginia	2,402,985	3.3	5.9	51.3	39.5
Appalachian Virginia	185,297	2.5	3.4	43.4	50.7
Non-Appalachian Virginia	2,217,688	3.3	6.1	52.0	38.6
West Virginia (entire state)	457,826	3.6	4.9	49.2	42.4

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, 2015-2019 American Community Survey.

Table 7.7: Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, by Amount of Time, 2015-2019

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	144,837,205	25.5	36.0	29.2	9.3	26.9
Appalachian Region	10,723,182	28.1	37.0	26.9	8.0	25.7
Subregions						
Northern Appalachia	3,571,688	31.5	35.8	25.0	7.7	24.9
North Central Appalachia	958,613	28.9	35.4	26.4	9.3	26.5
Central Appalachia	636,347	29.9	33.0	27.5	9.6	26.7
South Central Appalachia	2,036,332	29.2	41.1	24.4	5.3	23.4
Southern Appalachia	3,520,202	23.4	37.0	30.4	9.2	27.3
County Types						
Large Metros (pop. 1 million +)	2,747,624	20.7	33.2	34.7	11.4	29.8
Small Metros (pop. <1 million)	4,623,195	28.9	41.5	23.9	5.7	23.7
Nonmetro, Adjacent to Large Metros	886,715	33.6	33.4	24.0	9.0	25.1
Nonmetro, Adjacent to Small Metros	1,551,152	31.8	33.8	25.9	8.5	25.6
Rural (nonmetro, not adj. to a metro)	914,496	34.3	34.6	23.4	7.7	24.3
Alabama	2,003,907	26.2	39.1	28.3	6.5	24.9
Appalachian Alabama	1,307,506	25.2	38.9	29.1	6.7	25.3
Non-Appalachian Alabama	696,401	28.0	39.4	26.7	5.9	24.2
Georgia	4,502,437	22.0	35.3	31.6	11.1	28.8
Appalachian Georgia	1,411,787	19.5	32.6	33.9	14.0	31.3
Non-Appalachian Georgia	3,090,650	23.1	36.6	30.6	9.7	27.6
Kentucky	1,874,500	30.2	39.2	24.7	5.9	23.6
Appalachian Kentucky	401,245	32.3	33.0	25.7	9.0	25.9
Non-Appalachian Kentucky	1,473,255	29.7	40.9	24.4	5.0	23.0
Maryland	2,894,560	16.6	30.9	36.6	15.9	33.2
Appalachian Maryland	103,848	29.0	36.7	23.2	11.1	27.3
Non-Appalachian Maryland	2,790,712	16.1	30.7	37.1	16.1	33.4
Mississippi	1,193,776	29.4	37.8	25.9	6.9	24.8
Appalachian Mississippi	244,637	30.9	37.5	25.6	6.0	23.8
Non-Appalachian Mississippi	949,139	29.1	37.8	26.0	7.1	25.0
New York	8,893,653	19.5	29.0	33.2	18.3	33.6
Appalachian New York	435,556	39.5	36.1	19.1	5.3	21.2
Non-Appalachian New York	8,458,097	18.4	28.7	34.0	18.9	34.3
North Carolina	4,482,594	26.6	39.8	27.3	6.3	24.8
Appalachian North Carolina	730,321	29.4	42.1	23.3	5.2	23.1
Non-Appalachian North Carolina	3,752,273	26.0	39.3	28.1	6.5	25.1
Ohio	5,256,971	28.5	40.3	26.0	5.2	23.7
Appalachian Ohio	823,788	30.3	35.8	25.5	8.3	25.5
Non-Appalachian Ohio	4,433,183	28.1	41.2	26.1	4.6	23.3
Pennsylvania	5,783,357	26.0	35.2	29.4	9.4	27.2
Appalachian Pennsylvania	2,517,229	29.8	35.3	26.8	8.0	25.7
Non-Appalachian Pennsylvania	3,266,128	23.1	35.1	31.5	10.4	28.4
South Carolina	2,163,285	25.4	39.4	29.0	6.2	25.0
Appalachian South Carolina	556,272	25.6	43.4	26.6	4.4	23.7
Non-Appalachian South Carolina	1,607,013	25.3	38.0	29.8	6.8	25.4
Tennessee	2,921,567	25.2	39.5	28.7	6.6	25.2
Appalachian Tennessee	1,199,677	27.9	40.6	25.8	5.7	24.0
Non-Appalachian Tennessee	1,721,890	23.3	38.8	30.6	7.3	26.1
Virginia	3,976,470	21.7	35.9	31.8	10.6	28.7
Appalachian Virginia	291,183	32.1	35.8	25.4	6.8	24.1
Non-Appalachian Virginia	3,685,287	20.9	35.9	32.4	10.9	29.0
West Virginia (entire state)	700,133	30.1	36.4	24.2	9.3	25.9

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

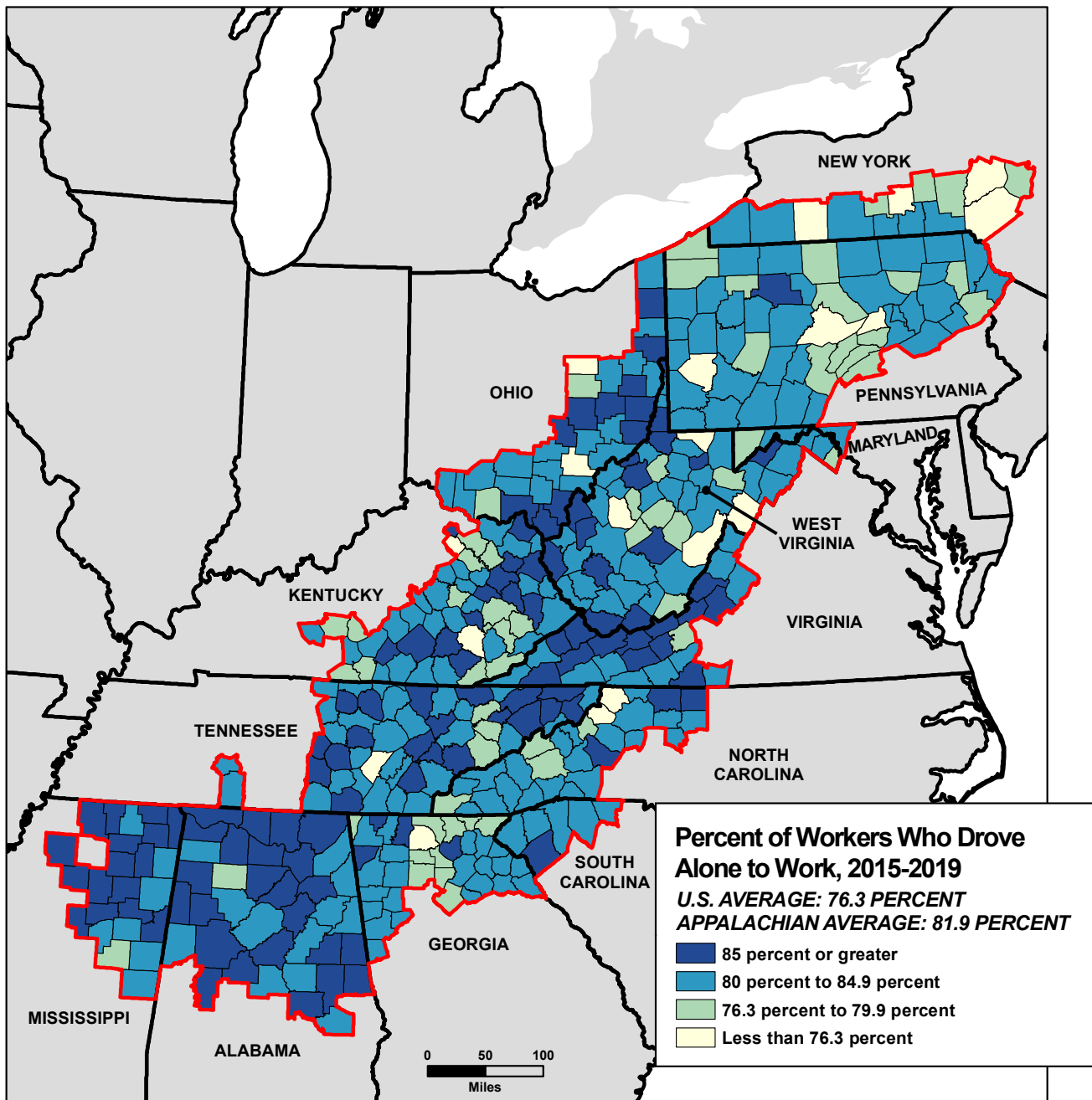
Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Table 7.8: Place of Work (State and County Level) for Workers Ages 16 and Over in the Appalachian Region, 2015-2019

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	152,735,781	72.2	27.8	24.1	3.7
Appalachian Region	11,212,954	67.9	32.1	27.6	4.5
Subregions					
Northern Appalachia	3,731,882	73.3	26.7	22.3	4.4
North Central Appalachia	996,373	63.0	37.0	25.7	11.3
Central Appalachia	658,061	59.7	40.3	34.3	6.1
South Central Appalachia	2,140,447	70.6	29.4	26.4	3.1
Southern Appalachia	3,686,191	63.7	36.3	33.0	3.3
County Types					
Large Metros (pop. 1 million +)	2,906,818	63.5	36.5	33.9	2.6
Small Metros (pop. <1 million)	4,828,123	72.0	28.0	22.7	5.3
Nonmetro, Adjacent to Large Metros	919,168	66.7	33.3	29.2	4.0
Nonmetro, Adjacent to Small Metros	1,610,125	64.3	35.7	29.6	6.2
Rural (nonmetro, not adj. to a metro)	948,720	68.1	31.9	27.9	4.1
Alabama	2,073,072	72.4	27.6	23.1	4.5
Appalachian Alabama	1,350,093	71.1	28.9	26.0	2.9
Non-Appalachian Alabama	722,979	74.8	25.2	17.6	7.6
Georgia	4,781,201	58.2	41.8	39.1	2.7
Appalachian Georgia	1,504,102	52.9	47.1	43.4	3.7
Non-Appalachian Georgia	3,277,099	60.6	39.4	37.2	2.2
Kentucky	1,949,184	67.6	32.4	25.8	6.6
Appalachian Kentucky	414,325	61.8	38.2	33.4	4.9
Non-Appalachian Kentucky	1,534,859	69.1	30.9	23.8	7.1
Maryland	3,046,449	53.8	46.2	29.4	16.8
Appalachian Maryland	108,935	71.3	28.7	16.0	12.6
Non-Appalachian Maryland	2,937,514	53.2	46.8	29.9	16.9
Mississippi	1,223,551	63.2	36.8	28.5	8.3
Appalachian Mississippi	251,506	62.6	37.4	31.7	5.7
Non-Appalachian Mississippi	972,045	63.3	36.7	27.6	9.0
New York	9,300,315	64.0	36.0	33.6	2.4
Appalachian New York	454,090	77.0	23.0	20.4	2.6
Non-Appalachian New York	8,846,225	63.3	36.7	34.3	2.4
North Carolina	4,758,740	71.1	28.9	26.3	2.6
Appalachian North Carolina	773,420	71.6	28.4	26.0	2.5
Non-Appalachian North Carolina	3,985,320	71.0	29.0	26.4	2.7
Ohio	5,488,776	69.5	30.5	27.7	2.8
Appalachian Ohio	854,594	61.1	38.9	30.2	8.6
Non-Appalachian Ohio	4,634,182	71.0	29.0	27.3	1.7
Pennsylvania	6,081,077	70.1	29.9	24.7	5.2
Appalachian Pennsylvania	2,636,025	74.4	25.6	22.3	3.4
Non-Appalachian Pennsylvania	3,445,052	66.8	33.2	26.5	6.7
South Carolina	2,264,320	70.2	29.8	24.3	5.5
Appalachian South Carolina	580,490	74.9	25.1	22.7	2.4
Non-Appalachian South Carolina	1,683,830	68.6	31.4	24.9	6.5
Tennessee	3,066,773	71.4	28.6	25.0	3.6
Appalachian Tennessee	1,256,626	70.8	29.2	26.2	3.0
Non-Appalachian Tennessee	1,810,147	71.8	28.2	24.2	4.0
Virginia	4,197,562	48.5	51.5	42.8	8.6
Appalachian Virginia	302,234	58.5	41.5	33.4	8.1
Non-Appalachian Virginia	3,895,328	47.8	52.2	43.6	8.7
West Virginia (entire state)	726,514	66.3	33.7	21.0	12.7

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Figure 7.1: Percent of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2015-2019

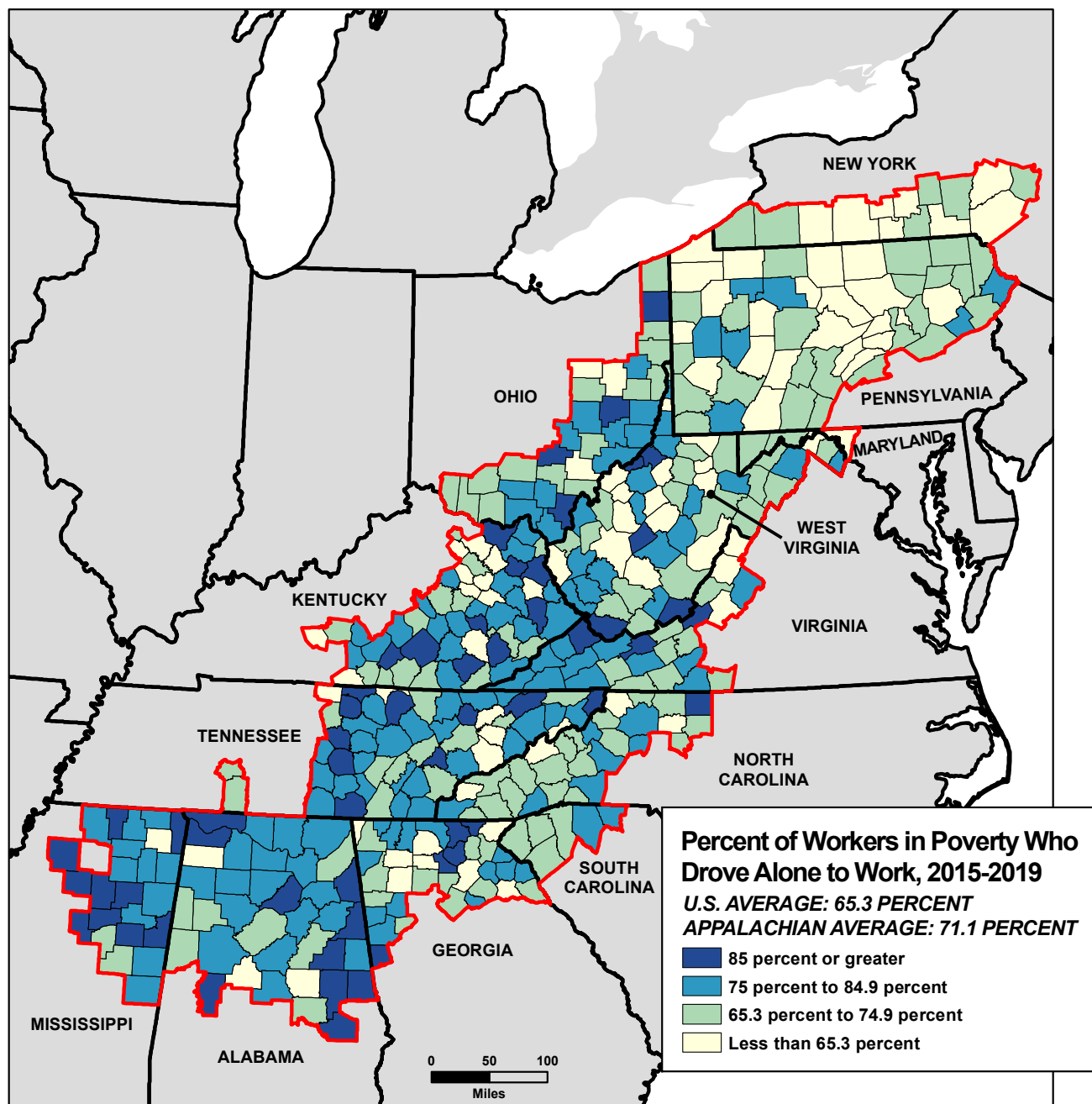


Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In the 2015-2019 period, 81.9 percent of workers in the Appalachian Region drove alone to their jobs, which is more than five percentage points higher than the nationwide share. And the percentage is even greater in much of Appalachia: In 120 Appalachian counties, at least 85 percent of workers drove alone. Central, South Central, and Southern Appalachia accounted for 97 of these counties, including 40 in Alabama and Mississippi alone. (The share of workers driving alone exceeded 85 percent in the Appalachian sections of both states.) In contrast, Northern Appalachia had eight of the 19 counties in the Region where the share of workers driving alone was below the national average; it was the only subregion where less than 80 percent of workers drove alone.

Figure 7.2: Percent of Workers Ages 16 and Over Below the Poverty Level in the Appalachian Region Who Drove Alone to Work, 2015-2019

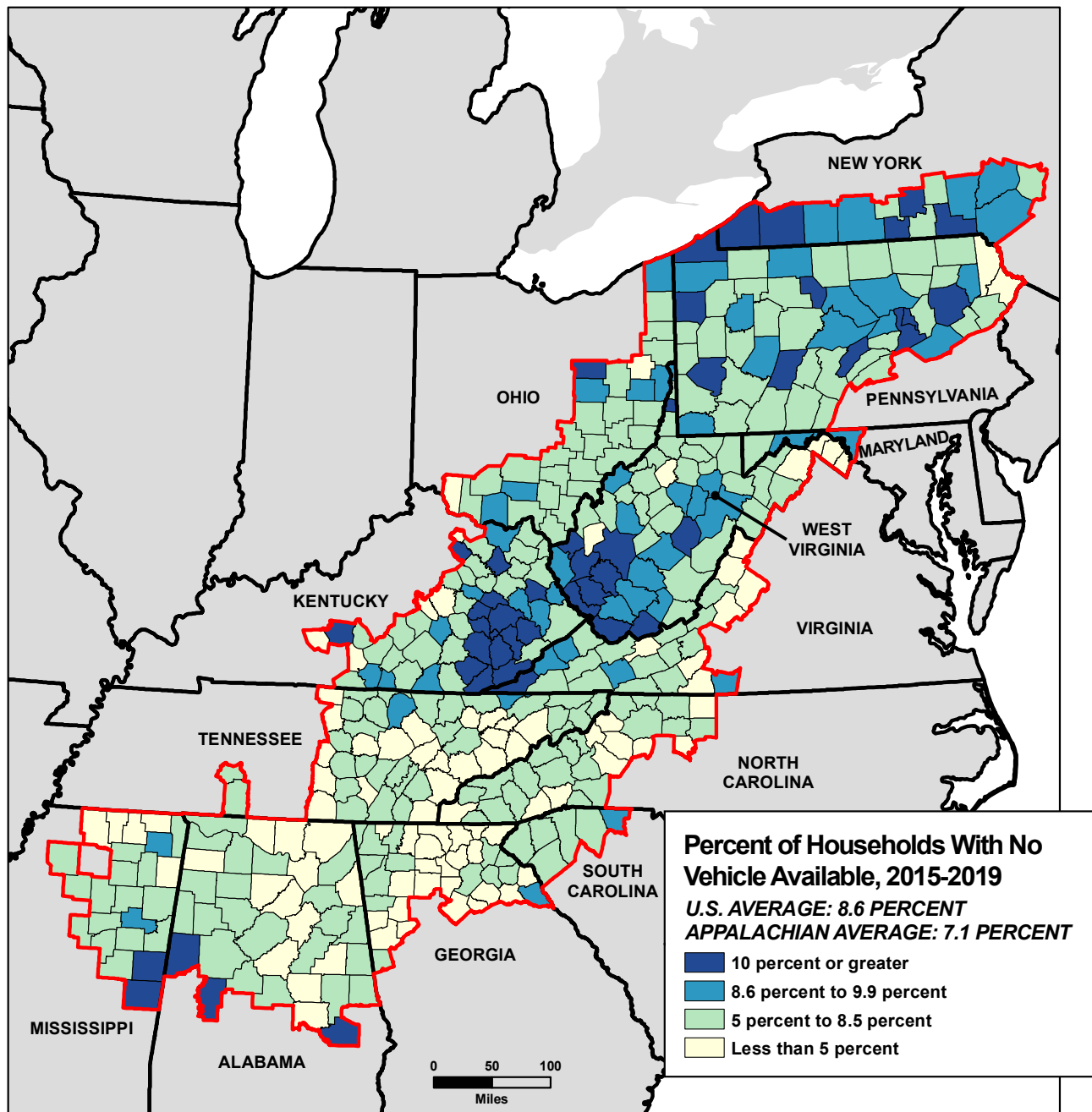


Map Title: Percent of Workers Ages 16 and Over Below the Poverty Level in the Appalachian Region Who Drove Alone to Work, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Among workers with incomes below the poverty level (\$25,926 for a family of two adults and two children in 2019), the share who drove alone to their places of employment was 71 percent in Appalachia, compared to just 65 percent nationally. The share was at least 75 percent in nearly half of the Region's 420 counties, and at least 85 percent in 57 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 73 percent in all three subregions. In contrast, 34 of the 85 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, 2015-2019

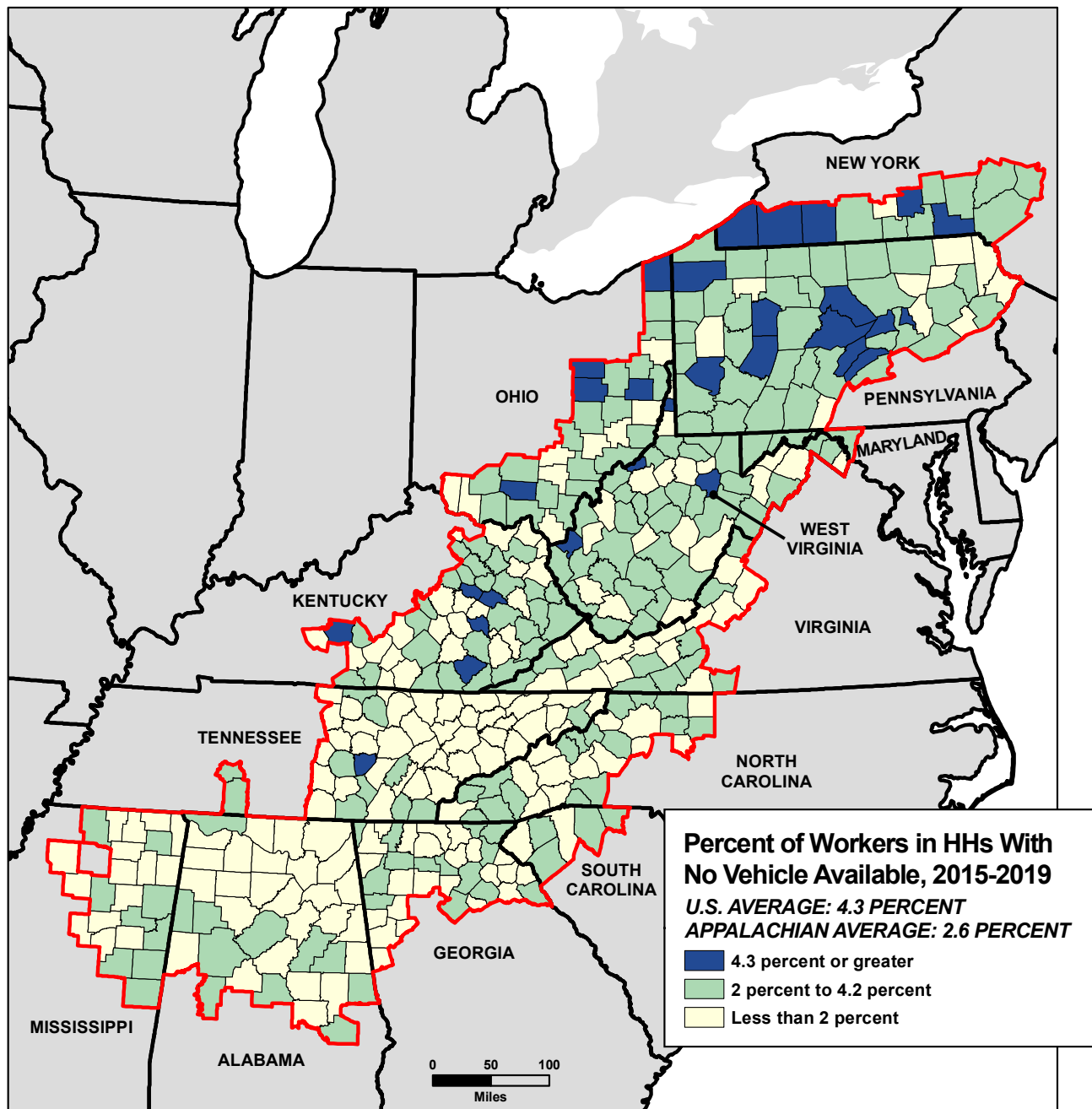


Map Title: Percent of Households in the Appalachian Region With No Vehicle Available, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 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, 7.1 percent of households have no vehicle available to get to current and/or potential employment. While this is lower than the national average of 8.6 percent, that is not the case in much of the Region. In fact, there were 46 Appalachian counties where at least one in 10 households had no vehicle available; 39 of these counties were in four states—New York, Pennsylvania, West Virginia, and Kentucky. Yet in 94 other counties in the Region, less than 5 percent of households were without any motor vehicle. South Central and Southern Appalachia had 75 of the counties in the latter group.

Figure 7.4: Percent of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2015-2019

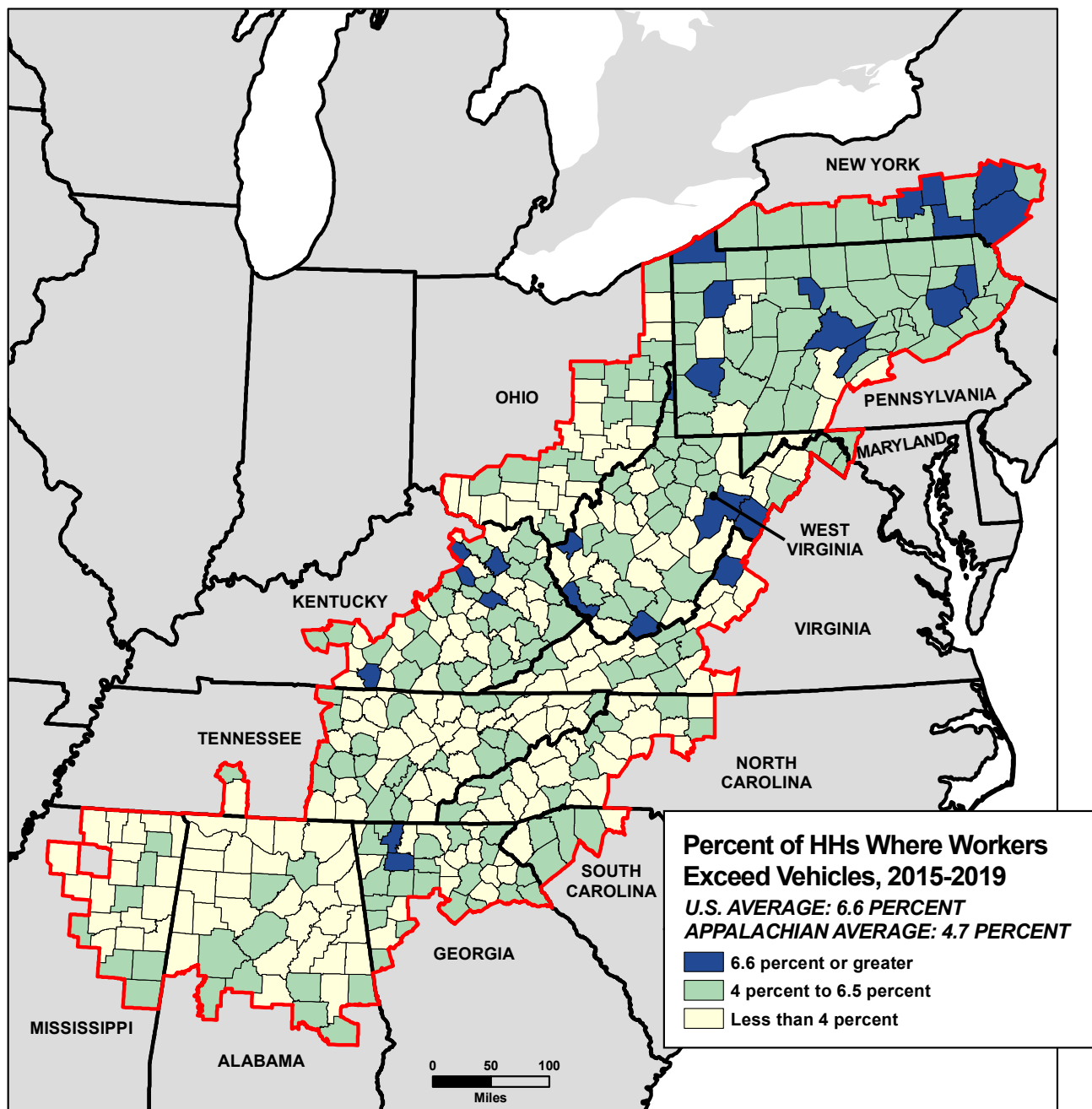


Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 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 of 4.3 percent. And the share is even lower in a large part of the Region: in 193 of Appalachia's 420 counties, less than 2 percent of the work force did not have a vehicle in their household. These counties were heavily 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, 2015-2019

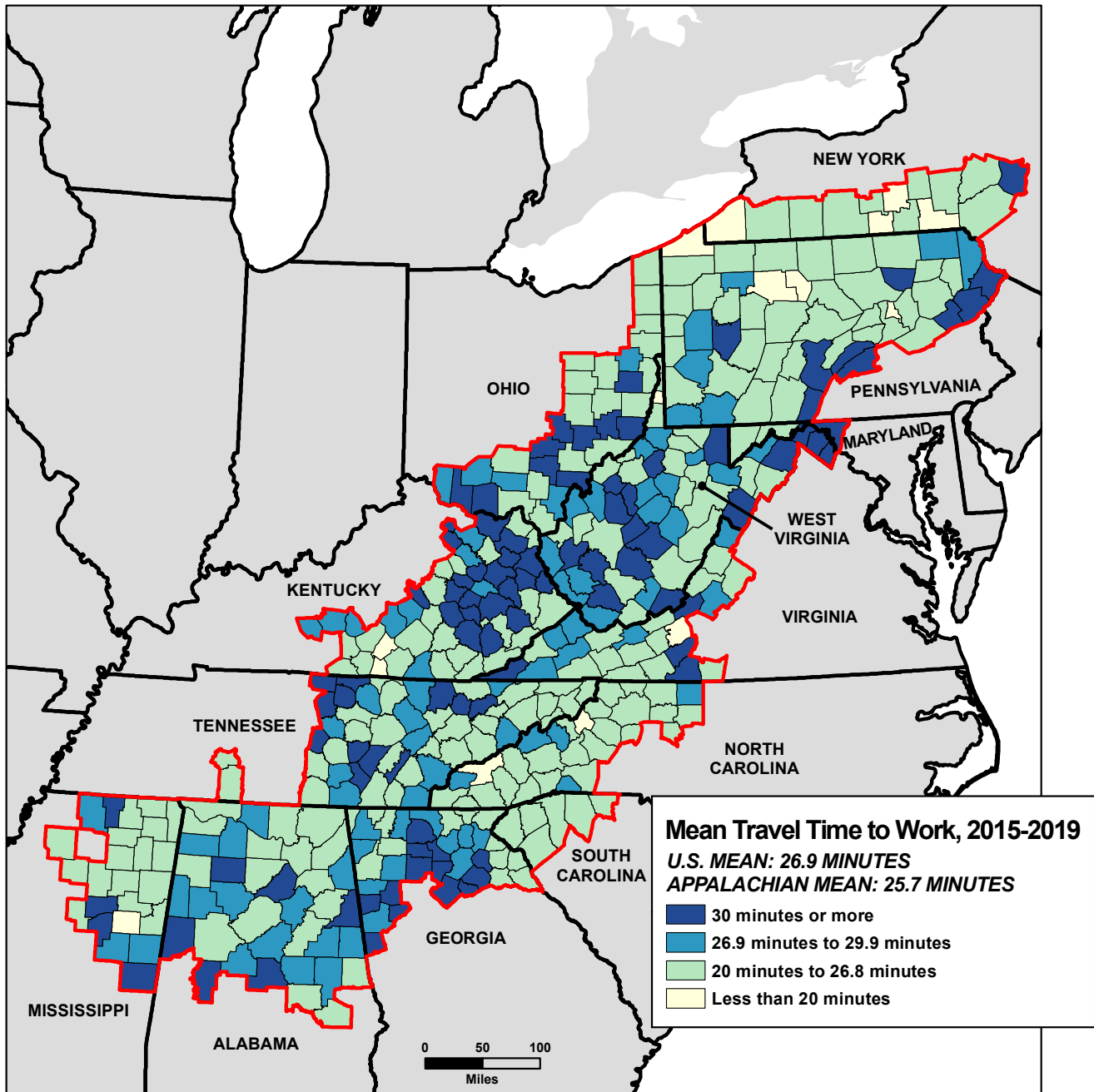


Map Title: Percent of Households With One or More Workers in the Appalachian Region Where the Number of Workers Exceeds the Number of Vehicles Available, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In 4.7 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 6.6 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 than the Appalachian average in much of the Region—less than 4 percent in almost half of Appalachia’s 420 counties, mostly in Central, South Central, and Southern Appalachia. Yet in 27 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 New York and Pennsylvania: In the Appalachian sections of these two states, workers exceeded available vehicles in at least 6 percent of the households.

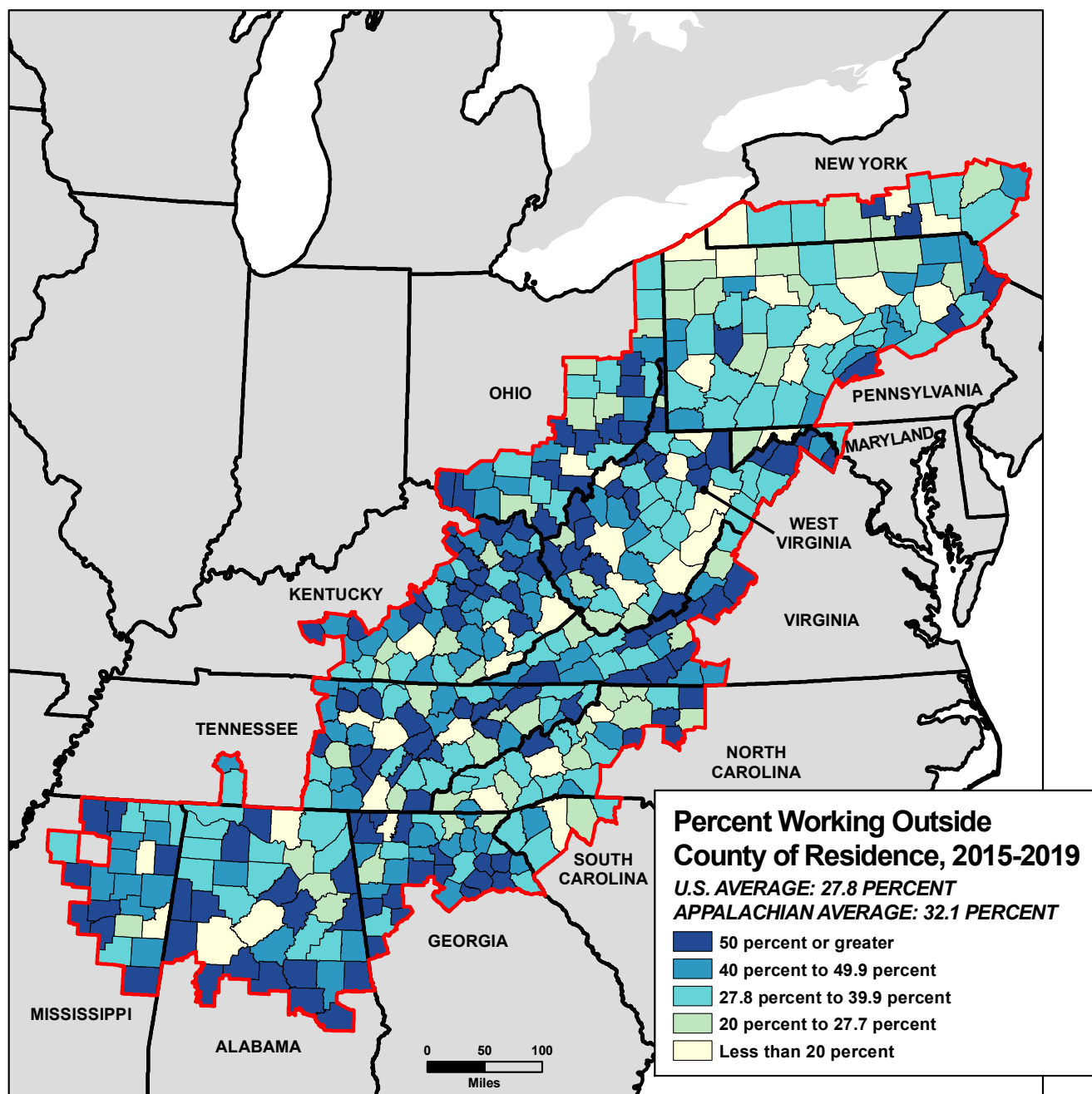
Figure 7.6: Mean Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, 2015-2019



Map Title: Mean Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In the Appalachian Region, workers ages 16 and older took, on average, 25.7 minutes to get to their jobs, just over a minute less than workers nationwide. But that was not the case in much of Appalachia: In 186 of the Region's 420 counties, the mean travel time to work was at or above the national average. And in 98 Appalachian counties, workers averaged a half hour or more to get to their jobs. Nearly half of these 98 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 55 nonmetropolitan counties—36 of which were in Kentucky, West Virginia, and Ohio—faced similarly lengthy commutes. By comparison, workers in just 15 Appalachian counties had average commutes lasting less than 20 minutes. Some of these counties were home to colleges and universities (for example, Montgomery County, Virginia, home to Virginia Tech and Radford University). Of course, it is important to note that these commuting patterns pre-date the onset of the COVID-19 pandemic.

Figure 7.7: Percent of Workers Ages 16 and Over in the Appalachian Region Who Work Outside Their County of Residence, 2015-2019



Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Work Outside Their County of Residence, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

About 32 percent of Appalachian workers ages 16 and older had jobs outside their county of residence during 2015-2019, more than four percentage points above the average nationwide. And the share is even higher in most of the Region: In 214 of Appalachia's 420 counties, at least 40 percent of workers had their primary employment outside their county of residence. And in 126 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 39 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 Greenville County, South Carolina, home to Furman University).

Table 7.9: Percentage Point Change in Means of Transportation for Workers Ages 16 and Over in the Appalachian Region, 2010-2014 to 2015-2019

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	- 0.1	- 0.6	- 0.1	- 0.1	+ 0.0	+ 0.8
Appalachian Region	- 0.2	- 0.5	+ 0.0	- 0.2	+ 0.0	+ 0.9
Subregions						
Northern Appalachia	- 0.2	- 0.4	+ 0.2	- 0.3	+ 0.1	+ 0.7
North Central Appalachia	- 0.1	- 0.7	+ 0.0	- 0.1	+ 0.1	+ 0.7
Central Appalachia	+ 0.1	- 0.9	+ 0.0	- 0.1	+ 0.1	+ 0.8
South Central Appalachia	- 0.3	- 0.8	+ 0.0	+ 0.0	+ 0.1	+ 1.1
Southern Appalachia	- 0.4	- 0.4	- 0.1	- 0.1	- 0.1	+ 1.0
County Types						
Large Metros (pop. 1 million +)	- 0.7	- 0.5	+ 0.1	- 0.1	- 0.1	+ 1.3
Small Metros (pop. <1 million)	- 0.3	- 0.3	+ 0.0	- 0.2	- 0.1	+ 0.9
Nonmetro, Adjacent to Large Metros	+ 0.1	- 0.1	+ 0.0	- 0.2	+ 0.0	+ 0.2
Nonmetro, Adjacent to Small Metros	+ 0.6	- 0.9	+ 0.0	- 0.2	+ 0.1	+ 0.4
Rural (nonmetro, not adj. to a metro)	+ 0.3	- 1.2	+ 0.0	+ 0.0	+ 0.2	+ 0.6
Alabama	+ 0.4	- 0.9	- 0.2	+ 0.0	+ 0.0	+ 0.6
Appalachian Alabama	+ 0.3	- 0.6	- 0.1	- 0.1	- 0.1	+ 0.5
Non-Appalachian Alabama	+ 0.7	- 1.4	- 0.2	+ 0.0	+ 0.0	+ 0.9
Georgia	- 0.3	- 0.8	+ 0.0	- 0.1	+ 0.0	+ 1.0
Appalachian Georgia	- 0.6	- 0.4	+ 0.0	- 0.1	- 0.3	+ 1.3
Non-Appalachian Georgia	- 0.2	- 1.0	+ 0.0	- 0.1	+ 0.3	+ 0.9
Kentucky	- 0.3	- 0.5	- 0.1	+ 0.0	+ 0.2	+ 0.7
Appalachian Kentucky	+ 0.8	- 0.9	- 0.1	- 0.2	+ 0.0	+ 0.6
Non-Appalachian Kentucky	- 0.6	- 0.4	- 0.1	+ 0.0	+ 0.3	+ 0.7
Maryland	+ 0.3	- 0.9	- 0.5	+ 0.0	+ 0.3	+ 0.8
Appalachian Maryland	- 0.2	- 0.8	+ 0.3	- 0.2	+ 0.0	+ 0.7
Non-Appalachian Maryland	+ 0.3	- 0.9	- 0.6	+ 0.0	+ 0.4	+ 0.8
Mississippi	+ 1.0	- 0.9	- 0.1	- 0.3	+ 0.2	+ 0.1
Appalachian Mississippi	+ 1.3	- 1.6	- 0.2	- 0.4	+ 0.1	+ 0.6
Non-Appalachian Mississippi	+ 0.9	- 0.8	- 0.1	- 0.3	+ 0.2	+ 0.1
New York	- 0.6	- 0.3	+ 0.6	- 0.3	+ 0.1	+ 0.5
Appalachian New York	+ 0.8	- 0.6	+ 0.0	- 0.4	+ 0.1	+ 0.1
Non-Appalachian New York	- 0.5	- 0.4	+ 0.5	- 0.2	+ 0.2	+ 0.5
North Carolina	- 0.3	- 1.0	- 0.1	+ 0.0	+ 0.0	+ 1.3
Appalachian North Carolina	- 0.3	- 0.8	+ 0.0	+ 0.0	+ 0.2	+ 1.1
Non-Appalachian North Carolina	- 0.3	- 1.0	- 0.1	+ 0.0	- 0.1	+ 1.3
Ohio	- 0.6	- 0.1	+ 0.0	- 0.1	+ 0.1	+ 0.7
Appalachian Ohio	- 0.5	- 0.1	+ 0.0	+ 0.1	+ 0.3	+ 0.4
Non-Appalachian Ohio	- 0.6	- 0.1	+ 0.0	- 0.1	+ 0.0	+ 0.7
Pennsylvania	- 0.7	- 0.3	+ 0.1	- 0.3	+ 0.2	+ 1.0
Appalachian Pennsylvania	- 0.4	- 0.3	+ 0.2	- 0.3	+ 0.0	+ 0.8
Non-Appalachian Pennsylvania	- 0.9	- 0.4	+ 0.0	- 0.2	+ 0.3	+ 1.1
South Carolina	- 0.3	- 0.1	- 0.1	- 0.1	- 0.3	+ 0.9
Appalachian South Carolina	- 1.5	+ 0.8	+ 0.0	- 0.4	- 0.1	+ 1.2
Non-Appalachian South Carolina	+ 0.1	- 0.5	- 0.1	+ 0.1	- 0.4	+ 0.8
Tennessee	- 0.6	- 0.6	- 0.1	+ 0.0	+ 0.2	+ 1.2
Appalachian Tennessee	- 0.7	- 0.6	+ 0.0	+ 0.1	+ 0.0	+ 1.1
Non-Appalachian Tennessee	- 0.5	- 0.5	- 0.2	+ 0.0	+ 0.2	+ 1.2
Virginia	- 0.5	- 0.4	- 0.1	+ 0.0	+ 0.3	+ 0.7
Appalachian Virginia	+ 0.5	- 1.1	+ 0.0	+ 0.0	- 0.1	+ 0.6
Non-Appalachian Virginia	- 0.5	- 0.4	- 0.1	+ 0.0	+ 0.3	+ 0.7
West Virginia (entire state)	+ 0.2	- 1.2	+ 0.2	+ 0.0	+ 0.2	+ 0.8

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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, 2010-2014 to 2015-2019

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	+ 1.4	- 1.0	- 0.5	- 0.3	- 0.1	+ 0.5
Appalachian Region	- 0.1	- 0.6	+ 0.4	- 0.1	+ 0.0	+ 0.6
Subregions						
Northern Appalachia	- 0.7	+ 0.0	+ 1.0	- 0.6	+ 0.0	+ 0.3
North Central Appalachia	- 0.9	+ 0.4	+ 0.3	- 1.4	+ 1.1	+ 0.6
Central Appalachia	- 0.2	+ 0.2	+ 0.1	- 1.0	- 0.1	+ 0.9
South Central Appalachia	- 0.4	- 1.1	- 0.1	+ 0.0	+ 0.2	+ 1.3
Southern Appalachia	+ 1.0	- 1.4	+ 0.0	+ 0.3	- 0.5	+ 0.4
County Types						
Large Metros (pop. 1 million +)	- 0.2	- 1.4	+ 1.3	+ 0.6	- 0.7	+ 0.2
Small Metros (pop. <1 million)	- 0.7	+ 0.0	+ 0.3	- 0.5	+ 0.0	+ 0.9
Nonmetro, Adjacent to Large Metros	+ 0.5	- 1.1	+ 0.2	- 0.1	+ 0.7	+ 0.0
Nonmetro, Adjacent to Small Metros	- 0.1	- 0.5	+ 0.0	- 0.4	+ 0.0	+ 1.0
Rural (nonmetro, not adj. to a metro)	+ 1.2	- 1.6	- 0.3	- 0.1	+ 0.3	+ 0.4
Alabama	+ 1.7	- 1.8	- 0.2	- 0.1	- 0.1	+ 0.5
Appalachian Alabama	+ 1.6	- 1.9	- 0.2	+ 0.3	- 0.2	+ 0.2
Non-Appalachian Alabama	+ 2.2	- 1.9	- 0.4	- 0.7	- 0.1	+ 0.8
Georgia	+ 1.0	- 1.7	- 0.1	+ 0.0	+ 0.2	+ 0.8
Appalachian Georgia	+ 0.3	- 0.2	+ 0.2	+ 0.8	- 1.0	+ 0.1
Non-Appalachian Georgia	+ 1.2	- 2.2	- 0.3	- 0.3	+ 0.6	+ 1.0
Kentucky	- 0.6	- 0.2	+ 0.0	- 0.7	+ 0.7	+ 0.8
Appalachian Kentucky	+ 1.0	+ 0.6	- 0.2	- 1.6	- 0.3	+ 0.5
Non-Appalachian Kentucky	- 1.2	- 0.6	+ 0.1	- 0.4	+ 1.2	+ 1.0
Maryland	+ 2.3	- 1.0	- 2.5	- 0.3	+ 0.4	+ 1.2
Appalachian Maryland	+ 0.5	- 3.7	+ 1.8	+ 0.8	- 0.2	+ 0.9
Non-Appalachian Maryland	+ 2.4	- 0.9	- 2.8	- 0.3	+ 0.4	+ 1.2
Mississippi	+ 2.9	- 2.6	- 0.3	- 0.4	+ 0.4	+ 0.0
Appalachian Mississippi	+ 5.2	- 6.0	- 0.4	- 0.8	+ 1.1	+ 1.0
Non-Appalachian Mississippi	+ 2.4	- 1.9	- 0.4	- 0.3	+ 0.2	- 0.1
New York	+ 2.3	- 0.1	- 1.6	- 0.7	+ 0.0	+ 0.1
Appalachian New York	+ 1.9	- 2.5	+ 0.3	+ 0.0	+ 0.2	- 0.2
Non-Appalachian New York	+ 2.2	+ 0.1	- 1.7	- 0.7	+ 0.0	+ 0.1
North Carolina	+ 1.5	- 1.4	- 0.3	- 0.5	- 0.3	+ 1.0
Appalachian North Carolina	+ 0.2	- 0.5	- 0.4	- 0.4	- 0.2	+ 1.2
Non-Appalachian North Carolina	+ 1.8	- 1.7	- 0.3	- 0.5	- 0.3	+ 0.9
Ohio	- 0.1	- 0.4	+ 0.1	- 0.1	+ 0.5	+ 0.1
Appalachian Ohio	+ 0.4	+ 0.2	- 0.1	- 0.9	+ 0.6	- 0.3
Non-Appalachian Ohio	- 0.3	- 0.5	+ 0.2	+ 0.0	+ 0.5	+ 0.1
Pennsylvania	- 1.1	+ 0.4	+ 0.9	- 0.8	+ 0.3	+ 0.4
Appalachian Pennsylvania	- 1.4	+ 0.8	+ 1.4	- 1.0	- 0.1	+ 0.4
Non-Appalachian Pennsylvania	- 0.5	+ 0.0	+ 0.1	- 0.5	+ 0.5	+ 0.3
South Carolina	+ 1.3	- 0.2	- 0.4	- 0.5	- 1.2	+ 0.9
Appalachian South Carolina	- 1.4	+ 0.5	+ 0.5	- 0.1	- 0.8	+ 1.4
Non-Appalachian South Carolina	+ 2.1	- 0.4	- 0.7	- 0.6	- 1.3	+ 0.9
Tennessee	+ 0.2	- 1.4	- 0.2	- 0.1	+ 0.3	+ 1.0
Appalachian Tennessee	- 1.8	- 0.5	+ 0.0	+ 0.6	+ 0.3	+ 1.4
Non-Appalachian Tennessee	+ 1.9	- 2.2	- 0.3	- 0.6	+ 0.4	+ 0.7
Virginia	- 0.4	- 0.6	- 0.4	+ 0.0	+ 1.0	+ 0.4
Appalachian Virginia	+ 2.1	- 4.6	+ 1.1	- 0.9	+ 0.5	+ 1.8
Non-Appalachian Virginia	- 0.7	- 0.1	- 0.7	+ 0.0	+ 1.0	+ 0.2
West Virginia (entire state)	- 2.0	- 0.2	+ 0.7	- 0.7	+ 1.0	+ 1.2

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2019, the poverty threshold for a family of two adults and two children was \$25,926. 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, 2010-2014 and 2015-2019 American Community Surveys.

Table 7.11: Percentage Point Change in Availability of Vehicles for Households in the Appalachian Region, 2010-2014 to 2015-2019

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	- 0.5	- 1.1	- 0.3	+ 0.8	+ 1.0
Appalachian Region	- 0.5	- 1.1	- 0.4	+ 0.8	+ 1.1
Subregions					
Northern Appalachia	- 0.2	- 0.3	- 0.3	+ 0.3	+ 0.5
North Central Appalachia	- 0.1	- 1.4	- 0.5	+ 0.7	+ 1.2
Central Appalachia	- 0.6	- 1.0	- 0.9	+ 1.2	+ 1.4
South Central Appalachia	- 0.7	- 1.3	- 0.2	+ 0.7	+ 1.4
Southern Appalachia	- 0.5	- 1.6	- 0.6	+ 1.1	+ 1.4
County Types					
Large Metros (pop. 1 million +)	- 0.5	- 1.2	- 0.5	+ 1.1	+ 1.1
Small Metros (pop. <1 million)	- 0.6	- 1.0	- 0.3	+ 0.7	+ 1.1
Nonmetro, Adjacent to Large Metros	- 0.1	- 1.5	- 0.1	+ 0.7	+ 1.0
Nonmetro, Adjacent to Small Metros	- 0.3	- 0.8	- 0.7	+ 0.6	+ 1.2
Rural (nonmetro, not adj. to a metro)	- 0.5	- 0.7	- 0.6	+ 0.8	+ 1.1
Alabama	- 0.4	- 0.8	- 0.5	+ 0.6	+ 1.1
Appalachian Alabama	- 0.4	- 1.1	- 0.4	+ 0.7	+ 1.2
Non-Appalachian Alabama	- 0.3	- 0.5	- 0.7	+ 0.5	+ 1.0
Georgia	- 0.4	- 1.5	- 0.5	+ 1.1	+ 1.4
Appalachian Georgia	- 0.3	- 2.2	- 1.0	+ 1.7	+ 1.8
Non-Appalachian Georgia	- 0.4	- 1.2	- 0.2	+ 0.7	+ 1.1
Kentucky	- 0.7	- 1.1	- 0.1	+ 0.7	+ 1.2
Appalachian Kentucky	- 0.9	- 1.0	- 0.6	+ 1.0	+ 1.5
Non-Appalachian Kentucky	- 0.5	- 1.1	- 0.1	+ 0.6	+ 1.0
Maryland	- 0.4	- 0.8	+ 0.1	+ 0.3	+ 0.8
Appalachian Maryland	- 0.1	- 0.6	- 0.2	- 0.3	+ 1.1
Non-Appalachian Maryland	- 0.4	- 0.9	+ 0.2	+ 0.3	+ 0.9
Mississippi	- 0.4	- 0.7	- 0.7	+ 0.8	+ 0.9
Appalachian Mississippi	- 1.1	- 0.9	- 0.1	+ 0.8	+ 1.3
Non-Appalachian Mississippi	- 0.3	- 0.7	- 0.8	+ 0.9	+ 0.9
New York	- 0.2	+ 0.0	- 0.6	+ 0.4	+ 0.4
Appalachian New York	+ 0.0	- 0.3	- 0.8	+ 0.7	+ 0.4
Non-Appalachian New York	- 0.3	+ 0.0	- 0.5	+ 0.4	+ 0.4
North Carolina	- 0.7	- 1.2	- 0.3	+ 0.9	+ 1.2
Appalachian North Carolina	- 0.8	- 1.1	- 0.1	+ 0.7	+ 1.3
Non-Appalachian North Carolina	- 0.7	- 1.1	- 0.4	+ 1.0	+ 1.2
Ohio	- 0.5	- 0.7	- 0.1	+ 0.5	+ 0.8
Appalachian Ohio	- 0.1	- 0.8	- 0.3	+ 0.6	+ 0.8
Non-Appalachian Ohio	- 0.5	- 0.7	+ 0.0	+ 0.5	+ 0.8
Pennsylvania	- 0.6	- 0.3	- 0.2	+ 0.5	+ 0.6
Appalachian Pennsylvania	- 0.3	- 0.3	- 0.3	+ 0.3	+ 0.5
Non-Appalachian Pennsylvania	- 0.9	- 0.2	- 0.1	+ 0.6	+ 0.6
South Carolina	- 0.7	- 1.2	+ 0.0	+ 1.2	+ 0.8
Appalachian South Carolina	- 0.6	- 1.4	- 0.6	+ 1.4	+ 1.1
Non-Appalachian South Carolina	- 0.9	- 1.1	+ 0.2	+ 1.0	+ 0.8
Tennessee	- 0.7	- 1.6	- 0.3	+ 1.0	+ 1.4
Appalachian Tennessee	- 0.7	- 1.7	- 0.5	+ 1.1	+ 1.7
Non-Appalachian Tennessee	- 0.7	- 1.5	- 0.1	+ 1.0	+ 1.3
Virginia	- 0.3	- 0.4	- 0.1	+ 0.0	+ 0.9
Appalachian Virginia	- 0.7	+ 0.2	- 0.3	+ 0.1	+ 0.9
Non-Appalachian Virginia	- 0.3	- 0.5	- 0.1	+ 0.0	+ 0.9
West Virginia (entire state)	+ 0.0	- 1.4	- 0.5	+ 0.7	+ 1.1

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Table 7.12: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, by Means of Transportation, 2010-2014 to 2015-2019

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	- 0.2	+ 0.0	- 0.3	- 1.6	- 0.1	+ 0.9	- 0.5
Appalachian Region	- 0.1	- 0.1	+ 0.3	+ 2.2	+ 0.8	+ 3.6	- 0.5
Subregions							
Northern Appalachia	+ 0.1	+ 0.0	+ 1.1	+ 1.8	+ 2.0	+ 2.9	- 0.6
North Central Appalachia	+ 0.2	+ 0.1	+ 0.4	+ 3.6	+ 0.5	+ 0.4	- 0.2
Central Appalachia	+ 0.0	+ 0.0	- 0.2	- 2.5	+ 1.2	+ 4.0	- 0.6
South Central Appalachia	- 0.2	- 0.2	- 0.3	+ 2.6	- 2.0	+ 3.6	- 0.6
Southern Appalachia	- 0.1	- 0.2	- 0.2	+ 3.4	+ 0.3	+ 5.2	+ 0.0
County Types							
Large Metros (pop. 1 million +)	+ 0.0	- 0.1	+ 0.6	+ 2.6	+ 0.4	+ 6.4	+ 0.1
Small Metros (pop. <1 million)	- 0.2	- 0.2	+ 0.0	+ 0.6	+ 0.3	+ 1.8	- 0.6
Nonmetro, Adjacent to Large Metros	+ 0.2	- 0.1	+ 0.3	+ 13.0	+ 6.3	+ 4.4	+ 0.6
Nonmetro, Adjacent to Small Metros	+ 0.0	+ 0.0	+ 0.3	- 5.8	- 1.2	+ 2.2	- 0.2
Rural (nonmetro, not adj. to a metro)	+ 0.1	+ 0.0	+ 0.1	+ 6.1	+ 1.5	+ 3.4	- 2.7
Alabama	- 0.1	+ 0.0	- 1.1	+ 7.5	+ 4.1	+ 3.3	+ 0.1
Appalachian Alabama	- 0.2	- 0.1	- 1.6	+ 8.0	+ 4.3	+ 2.5	+ 0.2
Non-Appalachian Alabama	+ 0.1	+ 0.2	+ 0.0	+ 6.3	+ 3.9	+ 4.4	- 0.1
Georgia	+ 0.0	- 0.1	+ 0.2	+ 1.7	- 4.2	+ 2.6	- 0.1
Appalachian Georgia	+ 0.0	- 0.2	+ 0.9	+ 2.0	- 1.6	+ 9.7	+ 0.0
Non-Appalachian Georgia	- 0.1	+ 0.0	+ 0.0	+ 1.7	- 5.0	- 0.1	- 0.2
Kentucky	+ 0.0	+ 0.0	- 0.1	+ 3.2	+ 0.6	+ 2.7	- 0.2
Appalachian Kentucky	- 0.2	- 0.2	+ 0.0	- 2.3	- 1.2	+ 1.4	- 0.5
Non-Appalachian Kentucky	+ 0.1	- 0.1	- 0.1	+ 2.5	+ 1.1	+ 2.9	- 0.2
Maryland	- 0.3	- 0.1	- 0.5	- 0.7	- 1.8	- 0.8	+ 0.0
Appalachian Maryland	- 0.1	- 0.2	+ 1.0	- 0.7	+ 0.4	- 14.7	- 1.0
Non-Appalachian Maryland	- 0.3	- 0.1	- 0.5	- 0.7	- 1.9	- 0.4	+ 0.1
Mississippi	- 0.2	- 0.1	+ 0.4	- 12.3	- 3.2	- 1.9	+ 0.2
Appalachian Mississippi	- 0.2	- 0.1	- 1.1	+ 8.6	- 0.8	+ 9.2	+ 0.0
Non-Appalachian Mississippi	- 0.3	- 0.1	+ 0.8	- 15.3	- 3.7	- 3.7	+ 0.2
New York	- 0.3	- 0.1	- 0.9	- 1.6	- 0.4	+ 0.7	- 1.4
Appalachian New York	+ 0.2	- 0.1	+ 0.8	+ 0.2	+ 1.4	+ 0.6	+ 1.2
Non-Appalachian New York	- 0.4	- 0.1	- 1.1	- 1.6	- 0.5	+ 0.7	- 1.7
North Carolina	- 0.3	+ 0.0	- 1.2	- 2.9	- 0.7	+ 0.7	- 0.2
Appalachian North Carolina	- 0.2	- 0.1	- 0.6	+ 5.8	- 2.8	+ 3.4	- 0.3
Non-Appalachian North Carolina	- 0.3	+ 0.0	- 1.4	- 3.6	- 0.2	+ 0.3	- 0.1
Ohio	+ 0.0	+ 0.0	+ 0.5	+ 1.0	+ 0.3	+ 3.9	- 0.6
Appalachian Ohio	+ 0.1	- 0.1	+ 0.2	+ 8.3	+ 2.0	+ 4.5	- 2.6
Non-Appalachian Ohio	+ 0.0	- 0.1	+ 0.6	+ 0.5	- 0.1	+ 3.2	- 0.2
Pennsylvania	+ 0.1	- 0.1	+ 1.1	- 1.5	+ 1.2	+ 3.9	- 0.4
Appalachian Pennsylvania	+ 0.2	+ 0.0	+ 1.2	+ 1.9	+ 2.3	+ 2.5	- 0.4
Non-Appalachian Pennsylvania	- 0.1	- 0.1	+ 1.0	- 2.6	+ 0.1	+ 4.2	- 0.4
South Carolina	- 0.3	- 0.1	- 0.1	- 2.1	- 0.7	- 2.1	- 0.3
Appalachian South Carolina	- 0.1	+ 0.0	+ 0.1	+ 2.5	- 2.1	- 6.7	- 0.7
Non-Appalachian South Carolina	- 0.3	- 0.1	- 0.1	- 2.6	- 0.3	- 1.2	- 0.2
Tennessee	- 0.3	- 0.2	- 0.8	+ 0.9	- 2.3	+ 1.6	- 0.4
Appalachian Tennessee	- 0.3	- 0.3	- 0.4	+ 0.4	- 2.1	+ 2.5	- 0.6
Non-Appalachian Tennessee	- 0.3	+ 0.0	- 1.0	+ 1.0	- 2.2	+ 1.0	- 0.3
Virginia	+ 0.0	+ 0.0	- 0.1	- 0.9	- 0.6	+ 2.2	- 0.1
Appalachian Virginia	+ 0.2	+ 0.1	+ 0.4	- 1.2	+ 1.4	+ 6.8	- 1.3
Non-Appalachian Virginia	+ 0.0	+ 0.0	- 0.1	- 0.9	- 0.8	+ 2.0	+ 0.0
West Virginia (entire state)	+ 0.2	+ 0.1	+ 0.5	+ 1.3	+ 0.5	- 1.1	+ 0.3

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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, 2010-2014 to 2015-2019

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	- 0.2	+ 0.3	+ 0.2	- 0.3
Appalachian Region	+ 0.0	+ 0.1	+ 0.3	- 0.4
Subregions				
Northern Appalachia	+ 0.1	+ 0.2	+ 0.5	- 0.8
North Central Appalachia	+ 0.2	+ 0.1	- 0.2	- 0.2
Central Appalachia	+ 0.0	+ 0.3	- 1.1	+ 0.8
South Central Appalachia	- 0.1	- 0.2	+ 0.5	- 0.2
Southern Appalachia	- 0.1	+ 0.2	+ 0.6	- 0.6
County Types				
Large Metros (pop. 1 million +)	+ 0.0	+ 0.1	+ 0.6	- 0.7
Small Metros (pop. <1 million)	- 0.2	+ 0.0	+ 0.4	- 0.2
Nonmetro, Adjacent to Large Metros	+ 0.1	+ 0.2	- 0.4	+ 0.1
Nonmetro, Adjacent to Small Metros	+ 0.2	+ 0.2	+ 0.0	- 0.4
Rural (nonmetro, not adj. to a metro)	+ 0.1	+ 0.3	+ 0.1	- 0.4
Alabama	- 0.2	- 0.3	+ 0.5	- 0.1
Appalachian Alabama	- 0.2	+ 0.0	+ 0.7	- 0.5
Non-Appalachian Alabama	+ 0.0	- 0.7	+ 0.1	+ 0.6
Georgia	+ 0.0	+ 0.5	+ 0.2	- 0.7
Appalachian Georgia	- 0.1	+ 0.2	+ 0.5	- 0.7
Non-Appalachian Georgia	+ 0.0	+ 0.6	+ 0.2	- 0.7
Kentucky	+ 0.0	+ 0.4	- 0.2	- 0.2
Appalachian Kentucky	- 0.1	+ 0.4	- 1.0	+ 0.7
Non-Appalachian Kentucky	+ 0.1	+ 0.5	- 0.1	- 0.4
Maryland	- 0.3	+ 0.2	+ 0.6	- 0.5
Appalachian Maryland	- 0.3	- 1.2	+ 2.4	- 0.8
Non-Appalachian Maryland	- 0.3	+ 0.3	+ 0.5	- 0.5
Mississippi	- 0.1	+ 0.3	- 0.7	+ 0.7
Appalachian Mississippi	- 0.1	+ 0.2	- 0.4	+ 0.3
Non-Appalachian Mississippi	- 0.2	+ 0.2	- 0.9	+ 0.9
New York	+ 0.1	+ 1.2	- 0.6	- 0.7
Appalachian New York	+ 0.0	+ 0.0	- 0.1	+ 0.1
Non-Appalachian New York	+ 0.0	+ 1.2	- 0.5	- 0.6
North Carolina	- 0.3	+ 0.1	+ 0.5	- 0.2
Appalachian North Carolina	- 0.1	- 0.5	+ 1.7	- 1.0
Non-Appalachian North Carolina	- 0.3	+ 0.2	+ 0.3	+ 0.0
Ohio	+ 0.1	+ 0.2	+ 0.5	- 0.8
Appalachian Ohio	+ 0.2	+ 0.1	+ 0.2	- 0.5
Non-Appalachian Ohio	+ 0.0	+ 0.2	+ 0.5	- 0.7
Pennsylvania	+ 0.1	+ 0.5	+ 0.2	- 0.9
Appalachian Pennsylvania	+ 0.1	+ 0.2	+ 0.6	- 1.1
Non-Appalachian Pennsylvania	+ 0.0	+ 0.8	- 0.1	- 0.7
South Carolina	- 0.4	+ 0.1	+ 0.4	- 0.2
Appalachian South Carolina	+ 0.0	+ 0.2	+ 0.5	- 0.6
Non-Appalachian South Carolina	- 0.4	+ 0.1	+ 0.3	+ 0.0
Tennessee	- 0.2	+ 0.6	- 0.1	- 0.2
Appalachian Tennessee	- 0.3	+ 0.2	- 0.4	+ 0.4
Non-Appalachian Tennessee	- 0.3	+ 0.8	- 0.1	- 0.5
Virginia	+ 0.1	+ 0.3	+ 0.4	- 0.8
Appalachian Virginia	+ 0.1	- 0.5	+ 0.3	+ 0.0
Non-Appalachian Virginia	+ 0.0	+ 0.3	+ 0.5	- 0.8
West Virginia (entire state)	+ 0.3	+ 0.2	- 0.8	+ 0.5

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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, 2010-2014 to 2015-2019

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	- 1.9	- 0.4	+ 1.3	+ 1.0	+ 1.2
Appalachian Region	- 1.7	+ 0.0	+ 1.0	+ 0.7	+ 1.0
Subregions					
Northern Appalachia	- 1.6	+ 0.1	+ 0.9	+ 0.6	+ 0.8
North Central Appalachia	- 0.6	- 0.1	+ 0.8	- 0.2	+ 0.2
Central Appalachia	- 1.6	- 0.2	+ 0.8	+ 0.9	+ 1.2
South Central Appalachia	- 1.5	+ 0.1	+ 1.1	+ 0.2	+ 0.6
Southern Appalachia	- 2.1	- 0.2	+ 1.0	+ 1.3	+ 1.3
County Types					
Large Metros (pop. 1 million +)	- 1.6	- 0.6	+ 0.8	+ 1.4	+ 1.3
Small Metros (pop. <1 million)	- 2.0	+ 0.5	+ 1.2	+ 0.3	+ 0.8
Nonmetro, Adjacent to Large Metros	- 1.0	- 0.5	+ 0.8	+ 0.7	+ 0.8
Nonmetro, Adjacent to Small Metros	- 1.1	+ 0.0	+ 0.6	+ 0.5	+ 0.8
Rural (nonmetro, not adj. to a metro)	- 1.6	+ 0.3	+ 0.8	+ 0.5	+ 0.9
Alabama	- 1.0	- 0.3	+ 1.0	+ 0.5	+ 0.6
Appalachian Alabama	- 0.8	- 0.4	+ 0.7	+ 0.4	+ 0.5
Non-Appalachian Alabama	- 1.5	- 0.2	+ 1.3	+ 0.5	+ 0.9
Georgia	- 1.8	- 1.1	+ 1.0	+ 1.9	+ 1.6
Appalachian Georgia	- 2.0	- 0.6	+ 0.2	+ 2.5	+ 1.9
Non-Appalachian Georgia	- 1.7	- 1.2	+ 1.4	+ 1.6	+ 1.4
Kentucky	- 1.3	- 0.5	+ 1.2	+ 0.5	+ 0.8
Appalachian Kentucky	- 1.6	- 0.5	+ 1.1	+ 1.0	+ 1.4
Non-Appalachian Kentucky	- 1.1	- 0.5	+ 1.2	+ 0.4	+ 0.7
Maryland	- 1.0	- 0.7	+ 0.6	+ 1.1	+ 1.0
Appalachian Maryland	- 2.9	+ 0.2	+ 2.0	+ 0.7	+ 1.5
Non-Appalachian Maryland	- 0.9	- 0.7	+ 0.5	+ 1.1	+ 1.0
Mississippi	- 2.3	+ 1.0	+ 1.0	+ 0.3	+ 0.8
Appalachian Mississippi	- 4.9	+ 3.5	+ 1.5	- 0.2	+ 0.5
Non-Appalachian Mississippi	- 1.6	+ 0.2	+ 0.9	+ 0.4	+ 0.8
New York	- 1.8	- 1.0	+ 0.8	+ 2.0	+ 1.7
Appalachian New York	- 1.4	+ 0.7	+ 0.5	+ 0.3	+ 0.5
Non-Appalachian New York	- 1.8	- 1.0	+ 0.9	+ 1.9	+ 1.8
North Carolina	- 1.8	- 0.6	+ 1.6	+ 0.8	+ 1.1
Appalachian North Carolina	- 2.1	+ 0.4	+ 1.5	+ 0.2	+ 0.7
Non-Appalachian North Carolina	- 1.8	- 0.8	+ 1.7	+ 0.9	+ 1.1
Ohio	- 1.3	+ 0.1	+ 1.0	+ 0.2	+ 0.6
Appalachian Ohio	- 0.9	+ 0.0	+ 0.8	+ 0.1	+ 0.4
Non-Appalachian Ohio	- 1.4	+ 0.1	+ 1.0	+ 0.3	+ 0.6
Pennsylvania	- 1.9	- 0.3	+ 1.4	+ 0.8	+ 1.1
Appalachian Pennsylvania	- 1.6	- 0.2	+ 1.1	+ 0.6	+ 0.9
Non-Appalachian Pennsylvania	- 1.9	- 0.5	+ 1.6	+ 0.9	+ 1.2
South Carolina	- 2.6	- 0.7	+ 2.5	+ 0.7	+ 1.2
Appalachian South Carolina	- 3.4	+ 0.1	+ 2.7	+ 0.6	+ 1.4
Non-Appalachian South Carolina	- 2.3	- 1.0	+ 2.4	+ 0.8	+ 1.2
Tennessee	- 1.6	- 0.1	+ 0.8	+ 0.9	+ 0.8
Appalachian Tennessee	- 1.0	+ 0.1	+ 0.7	+ 0.2	+ 0.5
Non-Appalachian Tennessee	- 1.9	- 0.2	+ 0.7	+ 1.4	+ 1.1
Virginia	- 1.3	- 0.7	+ 1.5	+ 0.5	+ 0.9
Appalachian Virginia	- 1.3	- 0.5	+ 1.4	+ 0.5	+ 0.7
Non-Appalachian Virginia	- 1.3	- 0.7	+ 1.5	+ 0.5	+ 0.8
West Virginia (entire state)	- 0.9	+ 0.6	+ 0.2	+ 0.0	+ 0.3

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

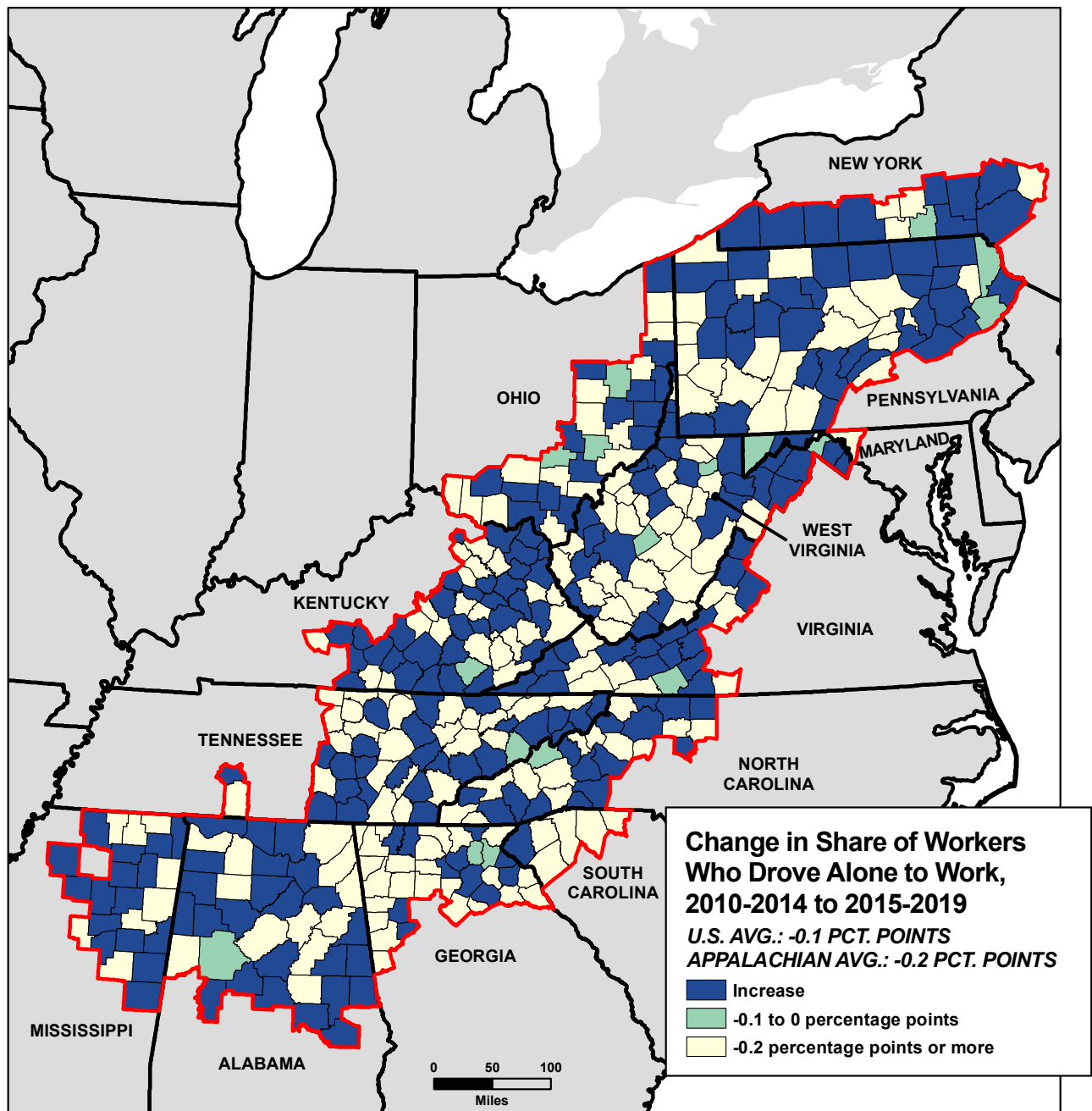
Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

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), 2010-2014 to 2015-2019

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	- 0.2	+ 0.2	+ 0.3	- 0.1
Appalachian Region	- 0.9	+ 0.9	+ 0.9	+ 0.0
Subregions				
Northern Appalachia	- 0.6	+ 0.6	+ 0.4	+ 0.1
North Central Appalachia	- 0.9	+ 0.9	+ 0.5	+ 0.4
Central Appalachia	- 2.2	+ 2.2	+ 1.7	+ 0.5
South Central Appalachia	- 0.7	+ 0.7	+ 1.1	- 0.2
Southern Appalachia	- 0.7	+ 0.7	+ 0.8	- 0.1
County Types				
Large Metros (pop. 1 million +)	- 0.5	+ 0.5	+ 0.6	- 0.1
Small Metros (pop. <1 million)	- 0.7	+ 0.7	+ 0.7	+ 0.0
Nonmetro, Adjacent to Large Metros	- 1.2	+ 1.2	+ 1.2	- 0.2
Nonmetro, Adjacent to Small Metros	- 1.1	+ 1.1	+ 0.9	+ 0.3
Rural (nonmetro, not adj. to a metro)	- 1.3	+ 1.3	+ 1.3	+ 0.2
Alabama	- 0.3	+ 0.3	+ 0.3	+ 0.0
Appalachian Alabama	- 0.1	+ 0.1	+ 0.0	+ 0.1
Non-Appalachian Alabama	- 0.6	+ 0.6	+ 0.8	- 0.2
Georgia	- 0.2	+ 0.2	+ 0.3	- 0.1
Appalachian Georgia	+ 0.0	+ 0.0	+ 0.4	- 0.4
Non-Appalachian Georgia	- 0.2	+ 0.2	+ 0.3	- 0.1
Kentucky	- 1.1	+ 1.1	+ 0.9	+ 0.2
Appalachian Kentucky	- 2.3	+ 2.3	+ 1.8	+ 0.6
Non-Appalachian Kentucky	- 0.9	+ 0.9	+ 0.8	+ 0.0
Maryland	+ 0.8	- 0.8	- 0.3	- 0.5
Appalachian Maryland	- 1.2	+ 1.2	- 0.3	+ 1.4
Non-Appalachian Maryland	+ 0.9	- 0.9	- 0.3	- 0.6
Mississippi	- 0.9	+ 0.9	+ 1.0	- 0.1
Appalachian Mississippi	- 2.7	+ 2.7	+ 2.9	- 0.2
Non-Appalachian Mississippi	- 0.5	+ 0.5	+ 0.4	+ 0.0
New York	- 0.8	+ 0.8	+ 1.0	- 0.2
Appalachian New York	+ 0.0	+ 0.0	+ 0.2	- 0.2
Non-Appalachian New York	- 0.8	+ 0.8	+ 1.0	- 0.2
North Carolina	- 0.7	+ 0.7	+ 0.6	+ 0.1
Appalachian North Carolina	- 1.1	+ 1.1	+ 1.1	+ 0.1
Non-Appalachian North Carolina	- 0.6	+ 0.6	+ 0.6	+ 0.2
Ohio	- 0.4	+ 0.4	+ 0.4	+ 0.0
Appalachian Ohio	- 0.4	+ 0.4	+ 0.3	+ 0.0
Non-Appalachian Ohio	- 0.4	+ 0.4	+ 0.5	+ 0.0
Pennsylvania	- 0.6	+ 0.6	+ 0.6	- 0.1
Appalachian Pennsylvania	- 0.6	+ 0.6	+ 0.6	+ 0.1
Non-Appalachian Pennsylvania	- 0.4	+ 0.4	+ 0.6	- 0.1
South Carolina	- 0.9	+ 0.9	+ 0.6	+ 0.3
Appalachian South Carolina	- 1.3	+ 1.3	+ 1.1	+ 0.2
Non-Appalachian South Carolina	- 0.8	+ 0.8	+ 0.5	+ 0.3
Tennessee	- 0.6	+ 0.6	+ 0.9	- 0.3
Appalachian Tennessee	- 0.7	+ 0.7	+ 1.0	- 0.3
Non-Appalachian Tennessee	- 0.6	+ 0.6	+ 0.9	- 0.2
Virginia	+ 0.1	- 0.1	+ 0.2	- 0.4
Appalachian Virginia	- 1.0	+ 1.0	+ 1.2	- 0.2
Non-Appalachian Virginia	+ 0.3	- 0.3	+ 0.1	- 0.3
West Virginia (entire state)	- 1.1	+ 1.1	+ 0.3	+ 0.8

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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, 2010-2014 to 2015-2019

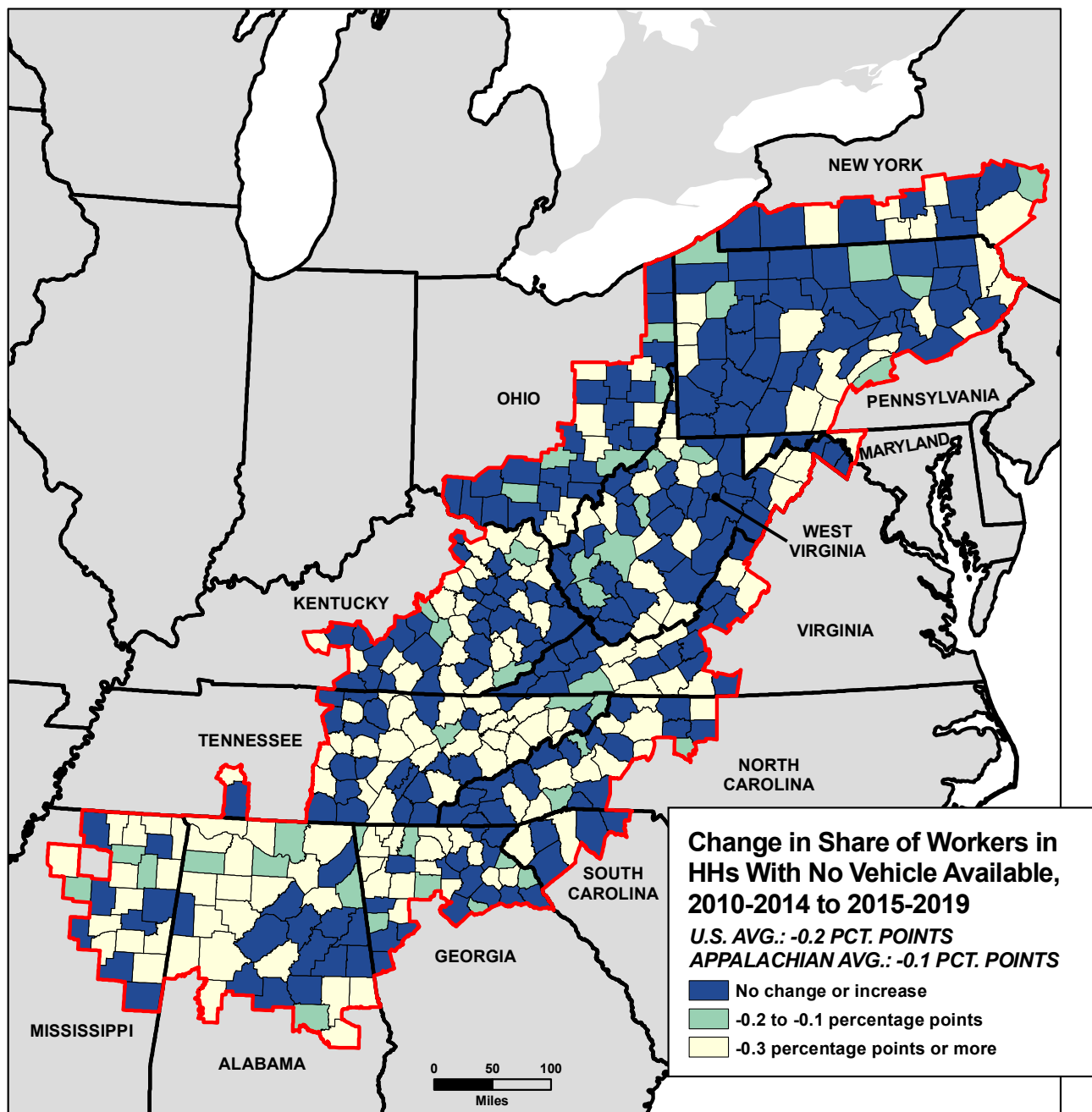


Map Title: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

The share of Appalachian workers who drove alone to work decreased slightly between 2010-2014 and 2015-2019 (0.2 percentage points, compared with a decrease of 0.1 points nationwide). Yet in 220 of Appalachia's 420 counties, the percentage driving alone increased between the two periods. Counties in this group were scattered throughout the Region and across all rural-urban county types.

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, 2010-2014 to 2015-2019

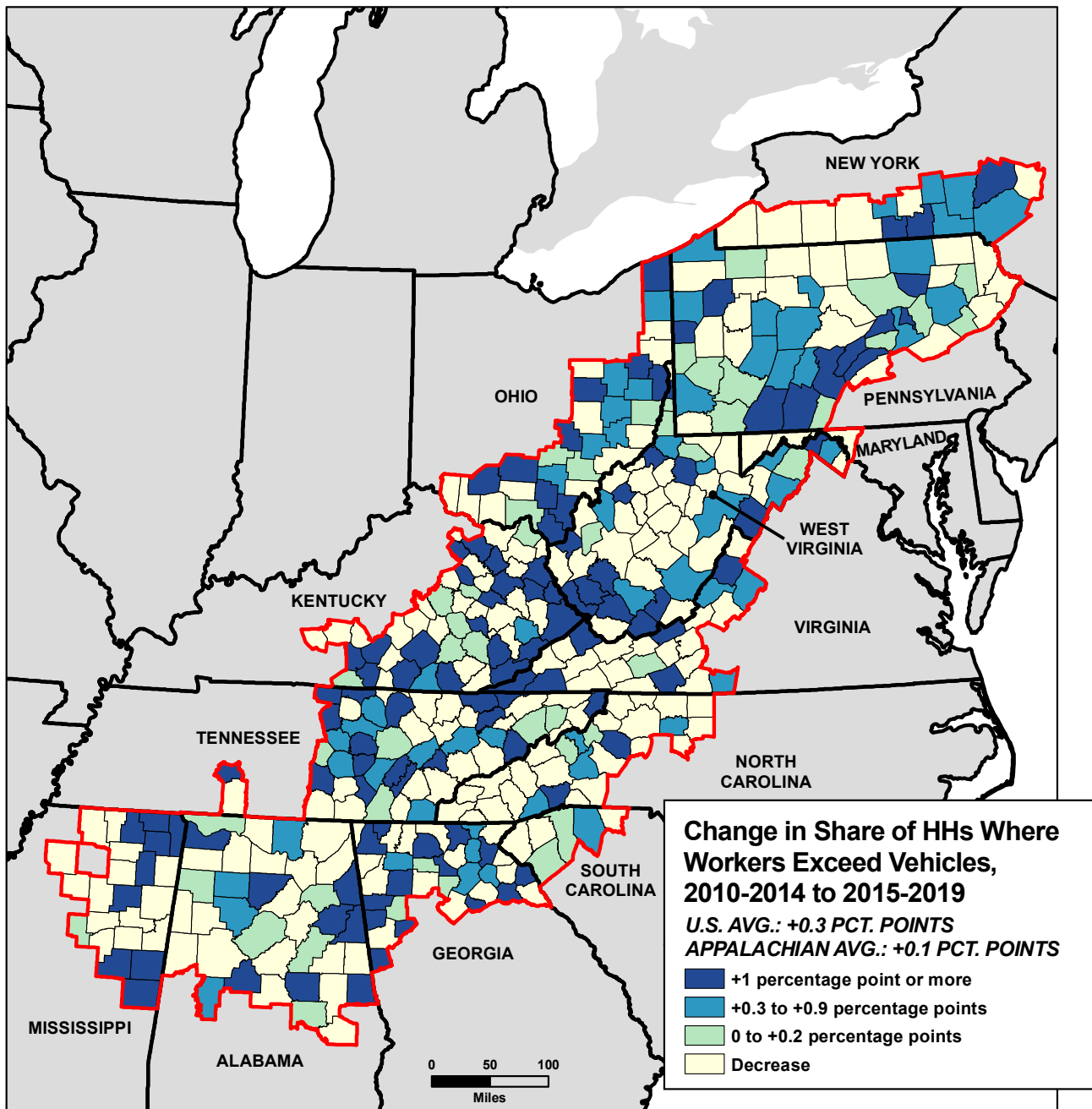


Map Title: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Between the 2010-2014 and 2015-2019 periods, the share of workers in households with no vehicle available barely declined, both in Appalachia and nationwide. Yet the percentage remained constant or increased in 214 of the Region's 420 counties and in the Appalachian portions of Georgia, New York, Ohio, Pennsylvania, Virginia, and West Virginia. The share also increased slightly in the Northern and North Central subregions, as well as in two of the three county types outside metropolitan areas.

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, 2010-2014 to 2015-2019

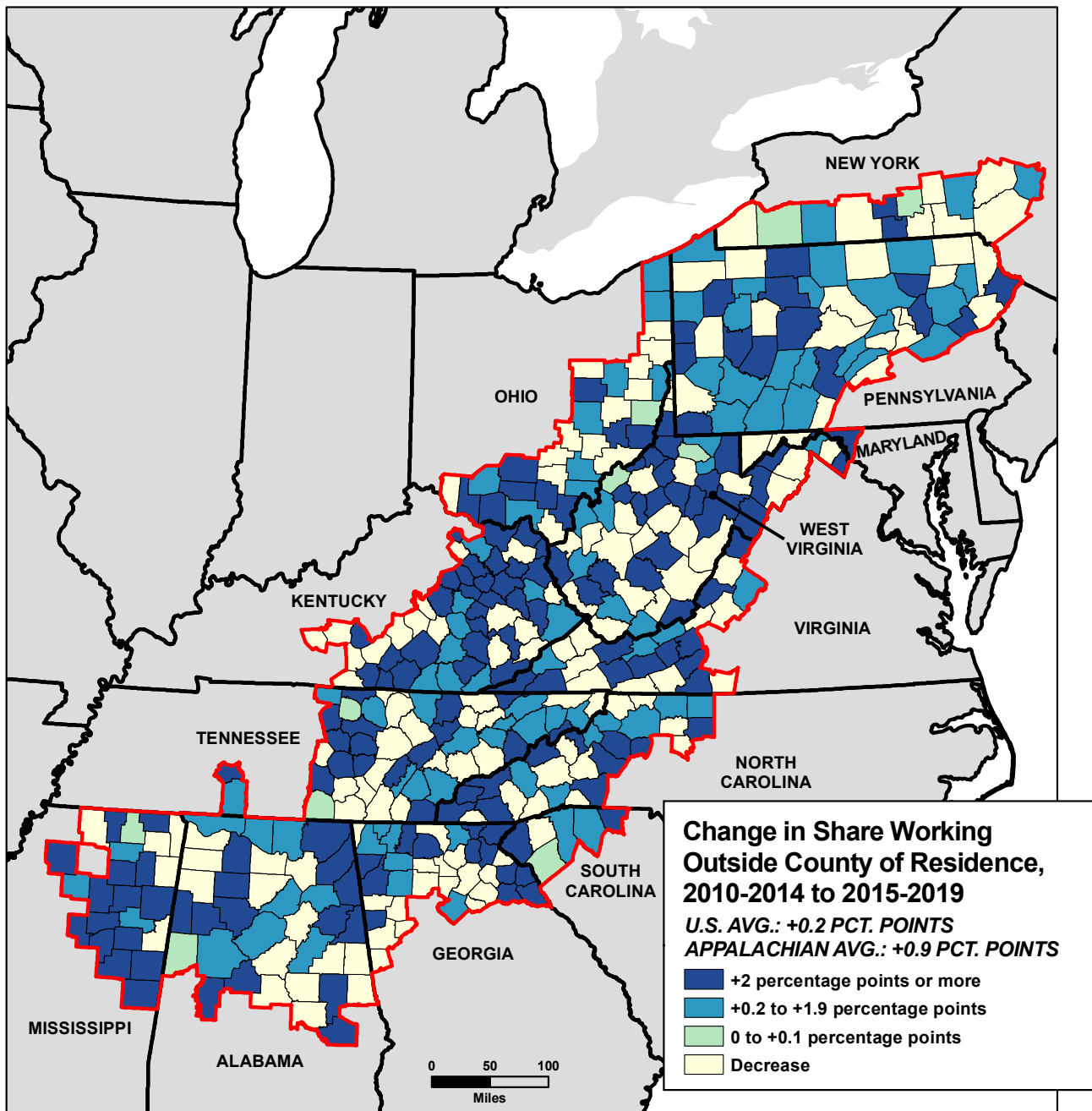


Map Title: Percentage Point Change in Share of Households With One or More Workers in the Appalachian Region Where the Number of Workers Exceeds the Number of Vehicles Available, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Between 2010-2014 and 2015-2019, the percentage of Appalachian households where the number of workers exceeded the number of available vehicles barely increased (0.1 percentage points), compared to a more noticeable (but still minor) increase nationwide (0.3 points). Yet in 173 of the Region's 420 counties, the share of households where workers exceeded vehicles increased at or above the national average. The share rose by at least a full percentage point in 112 of these counties, mostly in Central, South Central, and Southern Appalachia. Meanwhile, there were 200 Appalachian counties where the share decreased between the two periods.

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, 2010-2014 to 2015-2019



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, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

The share of Appalachian residents working outside their county of residence was 0.9 percentage points greater in 2015-2019 than in 2010-2014; this was noticeably higher than the national average of just 0.2 points. In fact, the share increased by at least two percentage points in 161 of the Region's 420 counties. Yet there also were 153 Appalachian counties where the share working outside their residential county was lower in 2015-2019 than in the earlier period.

TRENDS IN TRANSPORTATION AND COMMUTING PATTERNS

- At just under 82 percent, the share of Appalachian workers who drove alone to work in 2015-2019 was just 0.2 percentage points lower than it was in 2010-2014 (see Tables 7.1 and 7.9). Yet the decrease was more noticeable in much of the Appalachian Region. For example, this share declined by at least half a percentage point in Appalachian Georgia, Ohio, South Carolina, and Tennessee, and in counties in the Region's large metropolitan areas. Conversely, the share increased in several parts of the Region, including in nonmetropolitan counties that border small metro areas and in the Appalachian sections of Alabama, Kentucky, Mississippi, New York, Virginia, and West Virginia. Meanwhile, the share of persons who carpooled to work fell 0.5 percentage points between the 2010-2014 and 2015-2019 periods. The growth of telework and home-based businesses was also evident, as the share of workers who worked at home increased 0.9 percentage points between the two periods. And with the rise of telework due to the COVID-19 pandemic, one can expect that trend to continue.
- The share of Appalachian workers below the poverty level (\$25,926 for a family of two adults and two children in 2019) who drove alone to their jobs (71 percent in 2015-2019) was not as high as it was for all workers (see Tables 7.2 and 7.10). Moreover, it remained virtually unchanged (a 0.1 percentage point decrease) from its level in 2010-2014. However, the share did increase in much of the Region: by a full point in Southern Appalachia and the Region's most rural counties, and by more than five points in Mississippi. And similar to the pattern for all workers, the share of poor workers carpooling to their jobs fell between 2010-2014 and 2015-2019, while the share working from home increased.
- In 2015-2019, 7.1 percent of Appalachian households lacked an available vehicle to get to current and/or potential employment, down 0.5 points from 2010-2014 (see Tables 7.3 and 7.11). Within the Region, the decline occurred among every subregion, every urban-rural county type, and in the Appalachian portions of almost every state. (New York and West Virginia showed no change between the two periods.) The decline was largest in Appalachian Mississippi, where the share fell more than a full percentage point.
- The share of workers in households with no vehicle available (2.6 percent) was virtually unchanged in Appalachia between the 2010-2014 and the 2015-2019 periods, falling just 0.1 percentage points (see Tables 7.5 and 7.12). And among the subregions, county types, and states, the share neither rose nor fell more than 0.3 percentage points. 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 2015-2019, the number of workers exceeded the number of vehicles available in 4.7 percent of Appalachian households—a figure that rose just 0.1 percentage points from its 2010-2014 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 only declines in the Region were in South Central Appalachia and the Appalachian sections of North Carolina, Virginia, and Maryland. (In Maryland, the share fell 1.2 points).
- On average, Appalachian workers traveled 25.7 minutes to their jobs in 2015-2019, a full minute longer than they did in 2010-2014 (see Tables 7.7 and 7.14), and the average commute was longer throughout the Region. Moreover, 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 a full percentage point between the 2010-2014 and 2015-2019 periods. And the share who took at least an hour to get to work rose 0.7 points in Appalachia—and 1.4 points in counties that were part of large metro areas.
- Just over 32 percent of employed Appalachian residents ages 16 and over worked outside their county of residence in 2015-2019, representing an increase of 0.9 percentage points from the 2010-2014 period (see Tables 7.8 and 7.15). Within Appalachia, Central Appalachia had the greatest increase, 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 West Virginia and the Appalachian sections of Kentucky, Maryland, Mississippi, the Carolinas, and Virginia. In Kentucky and Mississippi, the increase exceeded two points.

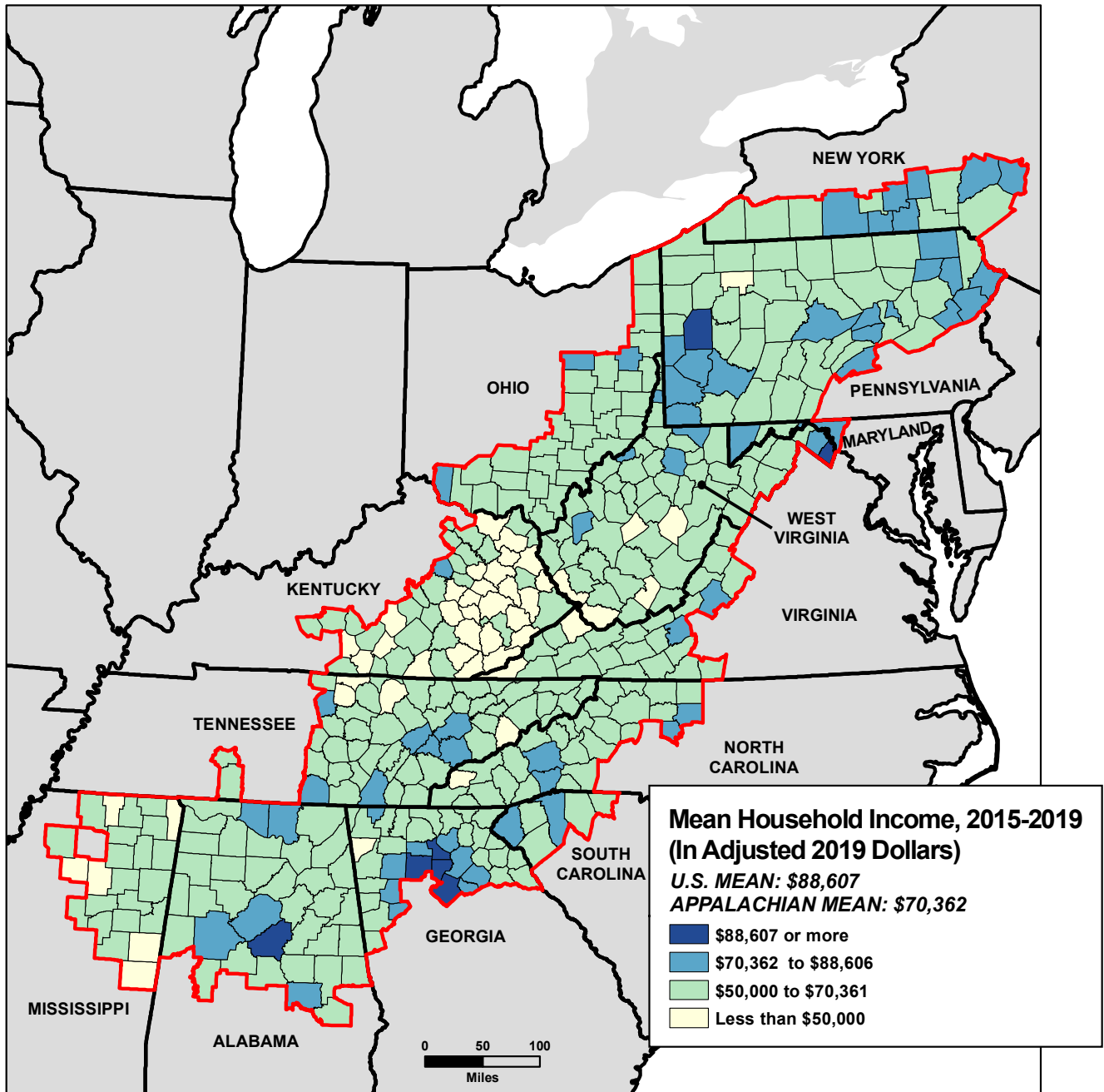
CHAPTER 8: INCOME AND POVERTY

Table 8.1: Household, Family, and Per Capita Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019

Income	Household Income, 2015-2019 (2019 Dollars)		Family Income, 2015-2019 (2019 Dollars)		Per Capita Income, 2015-2019 (2019 Dollars)
	Mean HH Income	Median HH Income	Mean Family Income	Median Family Income	
United States	88,607	62,843	103,863	77,263	34,103
Appalachian Region	70,362	51,916	83,721	65,840	28,433
Subregions					
Northern Appalachia	72,301	54,374	87,400	70,165	30,260
North Central Appalachia	65,897	48,867	78,338	62,246	26,893
Central Appalachia	54,109	38,394	63,632	48,998	21,942
South Central Appalachia	67,816	49,083	81,218	62,777	28,135
Southern Appalachia	75,186	55,770	87,894	68,697	28,712
County Types					
Large Metros (pop. 1 million +)	84,190	63,345	99,847	79,530	33,267
Small Metros (pop. <1 million)	70,915	52,387	84,990	66,977	28,869
Nonmetro, Adjacent to Large Metros	62,726	47,193	74,323	59,861	25,264
Nonmetro, Adjacent to Small Metros	60,931	45,773	71,654	57,719	24,961
Rural (nonmetro, not adj. to a metro)	56,545	40,975	66,947	52,527	23,033
Alabama	69,842	50,536	83,896	64,430	27,928
Appalachian Alabama	72,274	52,537	86,229	66,766	28,830
Non-Appalachian Alabama	65,456	47,040	79,517	61,311	26,320
Georgia	82,406	58,700	95,812	70,851	31,067
Appalachian Georgia	82,732	63,617	93,145	73,707	29,563
Non-Appalachian Georgia	82,269	56,893	97,103	69,798	31,744
Kentucky	70,144	50,589	83,043	63,684	28,178
Appalachian Kentucky	53,815	37,829	62,929	48,468	21,616
Non-Appalachian Kentucky	75,924	55,647	90,496	70,517	30,508
Maryland	111,417	84,805	130,482	103,108	42,122
Appalachian Maryland	72,713	55,207	86,740	70,500	28,529
Non-Appalachian Maryland	113,176	86,967	132,421	105,219	42,714
Mississippi	62,835	45,081	74,380	57,008	24,369
Appalachian Mississippi	57,400	41,785	68,472	53,567	22,678
Non-Appalachian Mississippi	64,302	46,114	75,960	58,239	24,818
New York	101,945	68,486	119,540	84,385	39,326
Appalachian New York	69,405	52,926	83,427	68,159	28,625
Non-Appalachian New York	103,897	70,137	121,631	86,340	39,919
North Carolina	76,940	54,602	91,227	68,435	30,783
Appalachian North Carolina	67,432	48,457	80,381	62,288	28,280
Non-Appalachian North Carolina	79,035	56,514	93,558	70,350	31,299
Ohio	76,958	56,602	92,726	72,439	31,552
Appalachian Ohio	65,439	49,339	77,473	62,780	26,630
Non-Appalachian Ohio	79,306	58,499	95,967	74,910	32,571
Pennsylvania	84,849	61,744	102,124	78,521	34,352
Appalachian Pennsylvania	74,540	56,000	90,500	72,397	31,396
Non-Appalachian Pennsylvania	93,822	67,963	111,813	85,411	36,715
South Carolina	73,520	53,199	87,127	66,357	29,426
Appalachian South Carolina	73,694	54,033	87,945	68,345	29,229
Non-Appalachian South Carolina	73,460	53,311	86,846	66,268	29,493
Tennessee	74,750	53,320	88,501	66,242	29,859
Appalachian Tennessee	67,632	48,693	80,702	61,790	27,805
Non-Appalachian Tennessee	80,454	57,620	94,721	70,761	31,416
Virginia	101,746	74,222	118,940	90,141	39,278
Appalachian Virginia	61,163	45,131	74,506	58,870	25,512
Non-Appalachian Virginia	106,007	78,626	123,384	94,892	40,616
West Virginia (entire state)	63,680	46,711	75,996	59,607	26,480

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Figure 8.1: Mean Household Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019

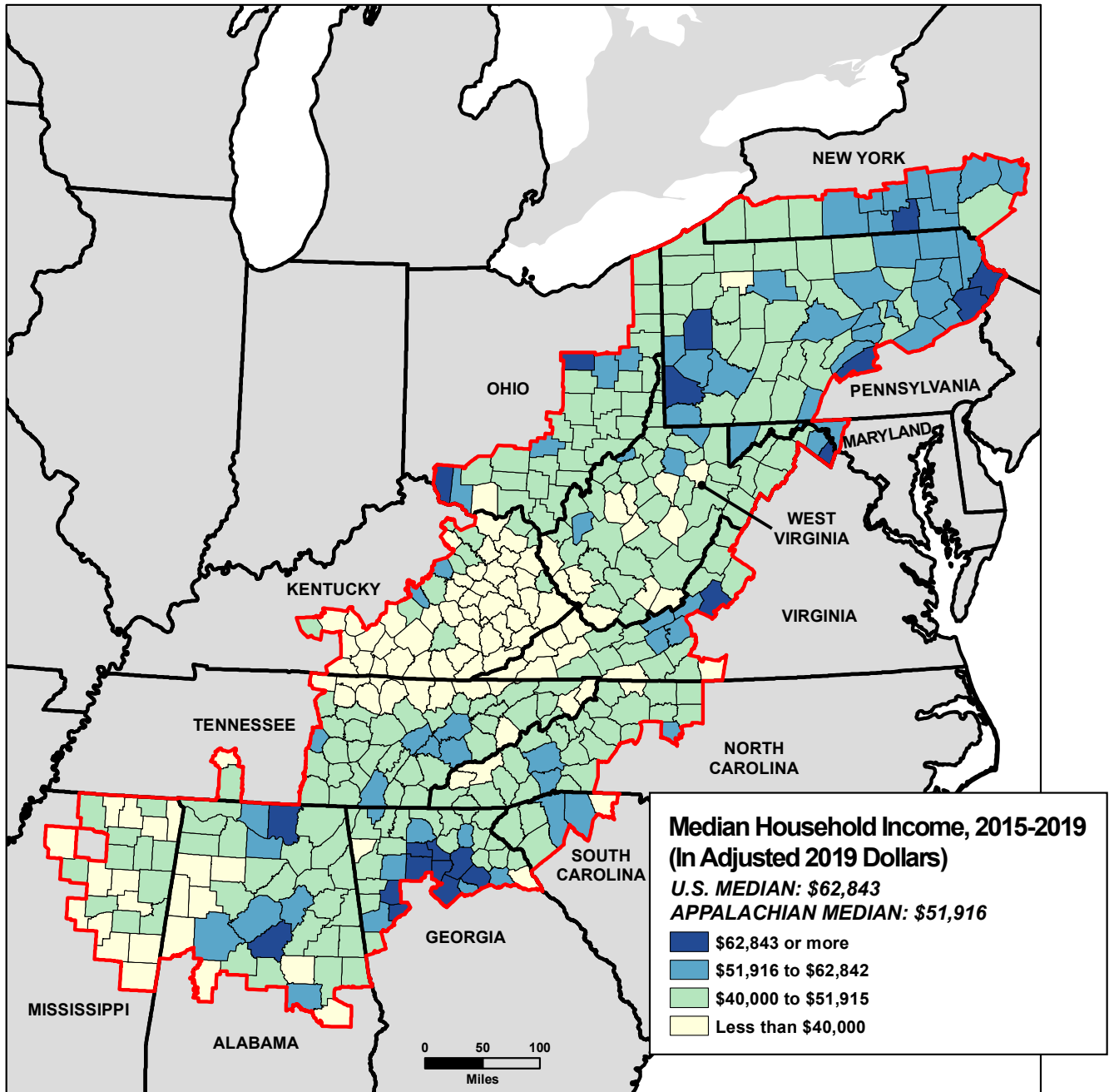


Map Title: Mean Household Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In the 2015-2019 period, the mean income of Appalachian households was \$70,362, just 79 percent of the U.S. average (\$88,607). In just seven of the Region's counties (all of which were in metropolitan areas), average household income matched or exceeded the national mean. And in only 64 additional counties (49 of which were in metros), mean household income matched or surpassed the Appalachian average. In contrast, mean household income was less than \$50,000 in 47 counties—all but two of which were outside metro areas, and 34 of which were in Central Appalachia (27 in Kentucky alone).

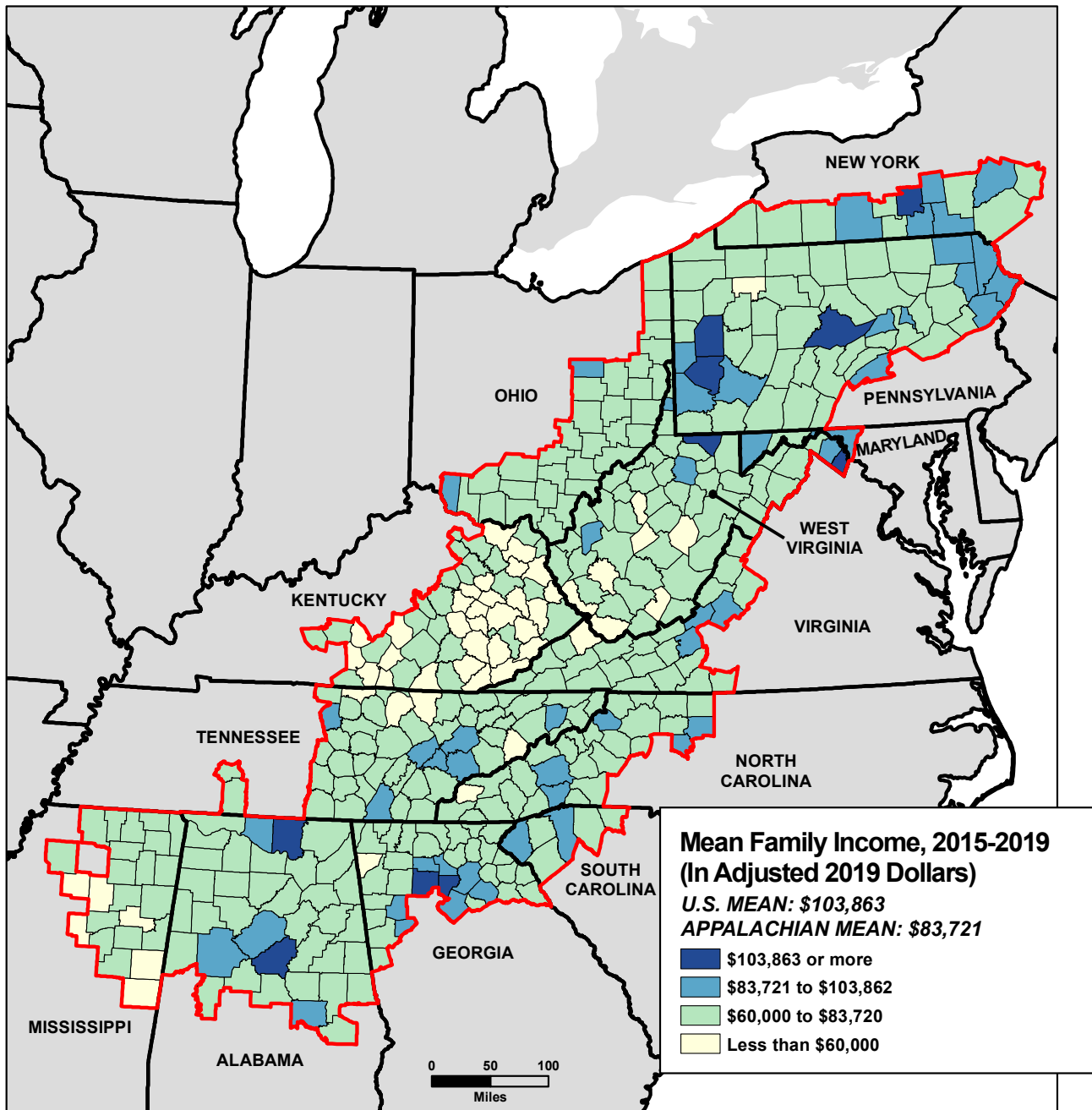
Figure 8.2: Median Household Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019



Map Title: Median Household Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

At \$51,916, 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 (\$62,843) during the 2015-2019 period. There were 21 counties in the Region (19 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, 104 counties in the Region had median household incomes below \$40,000—95 of which were outside metro areas and 61 of which were in Central Appalachia. This distribution is not surprising: median household income was \$40,975 for the most rural counties and \$38,394 for Central Appalachia. It is useful to note that the income levels displayed here reflect income received at least six years after the end of the 2007-2009 economic recession and prior to the onset of the coronavirus pandemic in 2020.

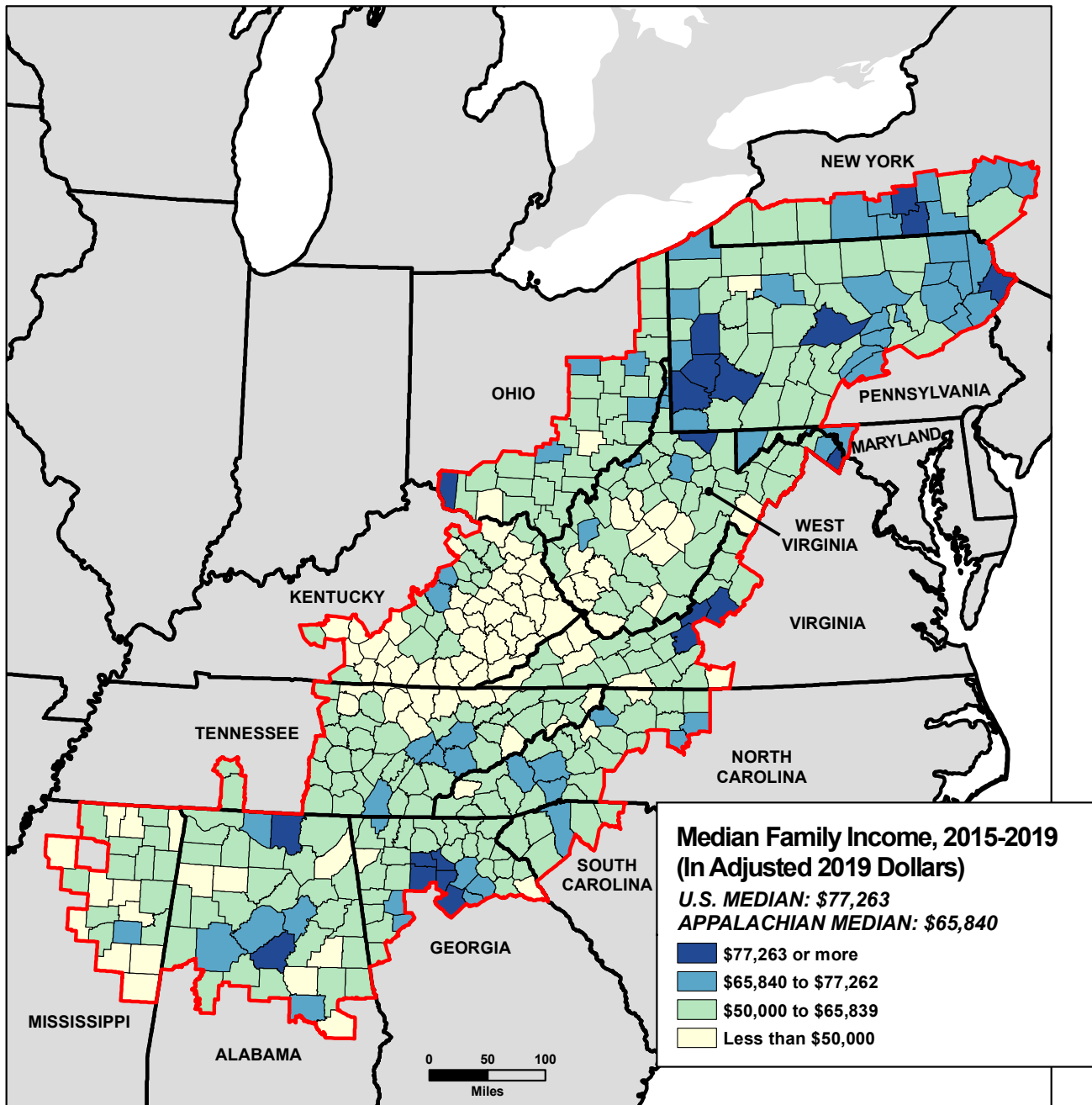
Figure 8.3: Mean Family Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019



Map Title: Mean Family Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In only 10 Appalachian counties (all of which were in metropolitan areas), the average income of families matched or surpassed the U.S. mean of \$103,863 for the 2015-2019 period. And there were just an additional 52 counties (40 of which were part of metro areas) where mean family income was equal to or greater than the average for the Appalachian Region (\$83,721). In contrast, mean family income was less than \$60,000 in 50 Appalachian counties. All but two of these counties were outside metropolitan areas; nearly three-fourths of them did not border any metro. Additionally, 36 of the counties in the lowest income group were in Central Appalachia and 29 were in Kentucky alone. Overall, mean family income over the 2015-2019 period was just \$66,947 for the most rural counties, \$63,632 for Central Appalachia, and \$62,929 for Appalachian Kentucky.

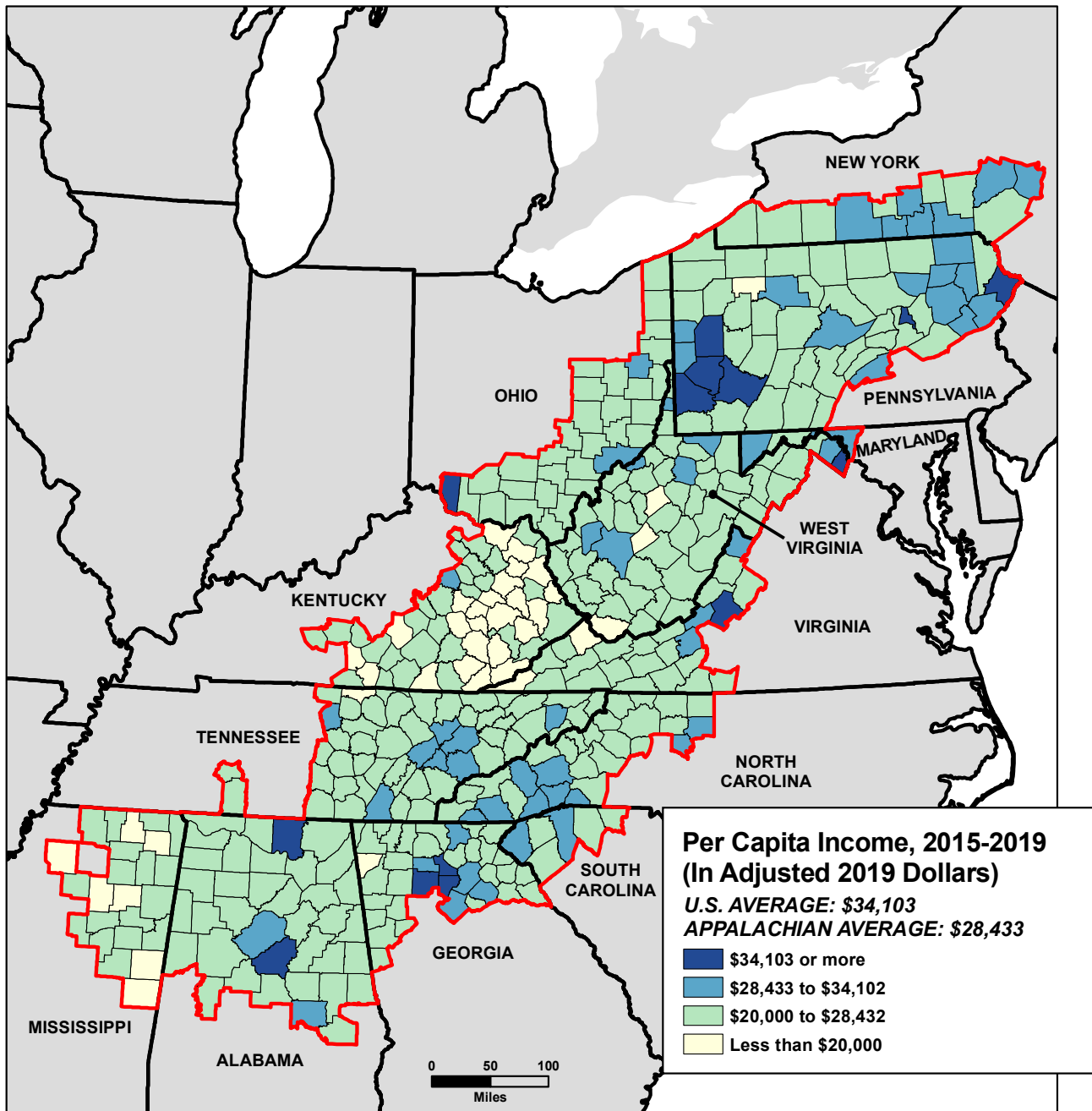
Figure 8.4: Median Family Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019



Map Title: Median Family Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Median family income in Appalachia was 85 percent of the U.S. median of \$77,263 during the 2015-2019 period. Yet in 21 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. In another 63 counties (44 of which were in metros), median income was at or above the median for families in the Appalachian Region (\$65,840). In contrast, median family income was less than \$50,000 in 92 counties. More than half 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 \$52,527), and 36 were in Appalachian Kentucky (where median family income was \$48,468).

Figure 8.5: Per Capita Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019



Map Title: Per Capita Income in the Appalachian Region (In Adjusted 2019 Dollars), 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

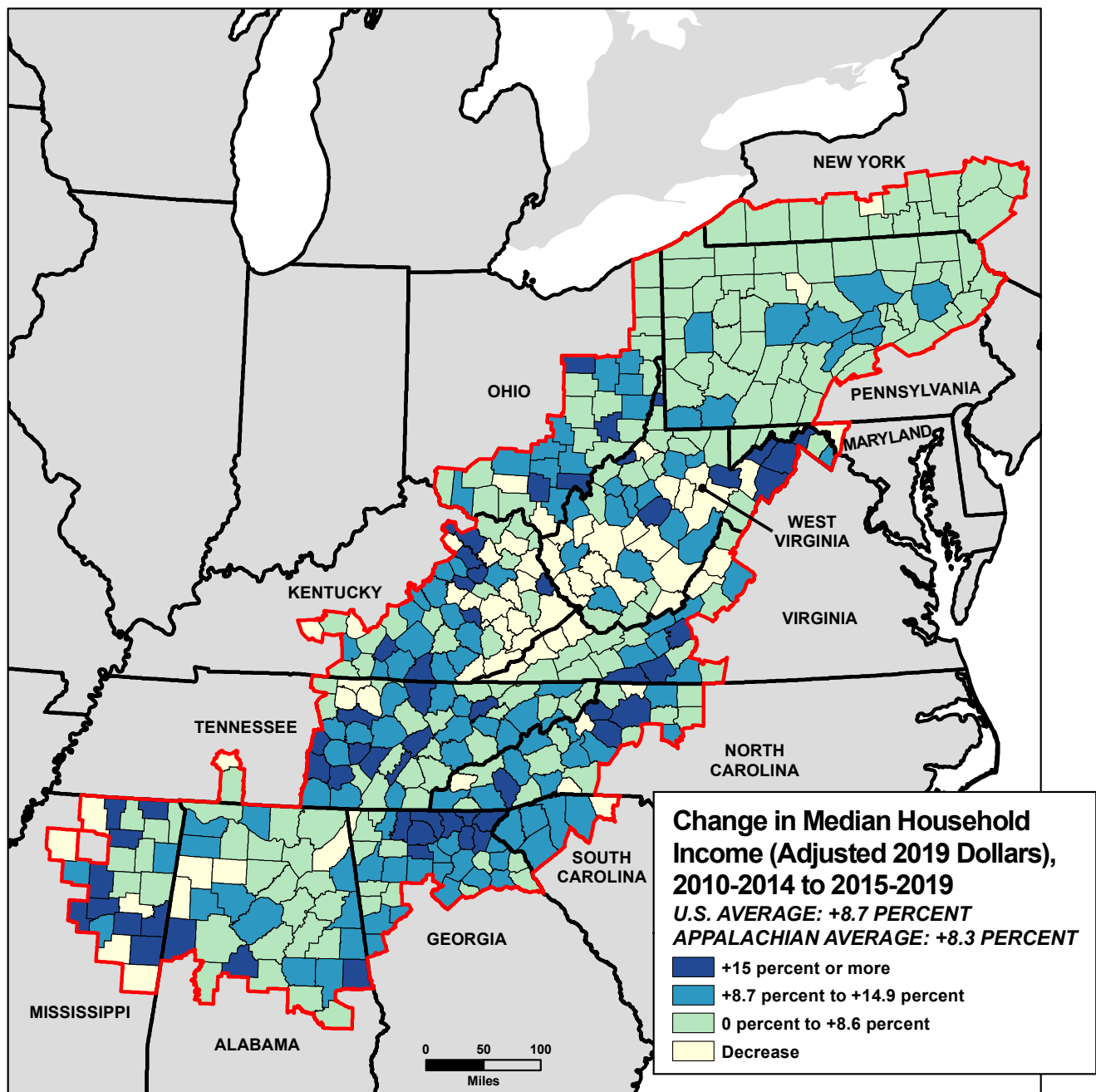
At \$28,433, per capita income in the Appalachian Region was 83 percent that of the U.S. average of \$34,103 during the 2015-2019 period. And there was considerable variation within the Region. Per capita income was the same or higher than the national average in 14 Appalachian counties, including Pittsburgh, suburban Atlanta, and Clermont County, Ohio (which is part of metropolitan Cincinnati). In 60 other counties, per capita income was at or above the regional average; while more than a third of these were in Northern Appalachia, there were pockets in the South Central and Southern subregions as well. Yet in 39 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 2015-2019 was only \$23,033 in the most rural Appalachian counties as a whole, and just \$21,942 in Central Appalachia.

Table 8.2: Change in Household, Family, and Per Capita Income in the Appalachian Region (In Adjusted 2019 Dollars), 2010-2014 to 2015-2019

Income	Percent Change in Household Income (In 2019 Dollars)		Percent Change in Family Income (in 2019 Dollars)		Percent Change in Per Capita Income (In 2019 Dollars)
	Mean HH Income	Median HH Income	Mean Family Income	Median Family Income	
United States	+ 9.9	+ 8.7	+ 10.5	+ 9.2	+ 10.5
Appalachian Region	+ 8.7	+ 8.3	+ 9.1	+ 8.8	+ 9.5
Subregions					
Northern Appalachia	+ 7.4	+ 6.4	+ 7.9	+ 7.7	+ 9.0
North Central Appalachia	+ 6.9	+ 5.8	+ 6.8	+ 5.7	+ 7.6
Central Appalachia	+ 6.2	+ 4.6	+ 5.8	+ 4.3	+ 6.9
South Central Appalachia	+ 9.8	+ 9.4	+ 10.2	+ 9.9	+ 10.3
Southern Appalachia	+ 10.0	+ 10.4	+ 10.9	+ 11.3	+ 10.5
County Types					
Large Metros (pop. 1 million +)	+ 9.3	+ 9.1	+ 10.1	+ 10.7	+ 10.3
Small Metros (pop. <1 million)	+ 8.1	+ 7.7	+ 8.3	+ 8.0	+ 8.8
Nonmetro, Adjacent to Large Metros	+ 8.8	+ 6.8	+ 9.5	+ 8.5	+ 9.9
Nonmetro, Adjacent to Small Metros	+ 8.0	+ 6.8	+ 8.1	+ 7.5	+ 8.7
Rural (nonmetro, not adj. to a metro)	+ 8.0	+ 6.9	+ 8.2	+ 7.7	+ 8.9
Alabama	+ 7.3	+ 7.4	+ 8.7	+ 8.9	+ 7.9
Appalachian Alabama	+ 7.9	+ 8.9	+ 8.8	+ 9.7	+ 8.2
Non-Appalachian Alabama	+ 6.2	+ 4.4	+ 8.3	+ 7.4	+ 7.5
Georgia	+ 11.6	+ 10.1	+ 12.4	+ 11.0	+ 13.0
Appalachian Georgia	+ 11.5	+ 11.5	+ 11.7	+ 11.9	+ 12.2
Non-Appalachian Georgia	+ 11.6	+ 9.9	+ 12.8	+ 10.7	+ 13.4
Kentucky	+ 9.4	+ 8.0	+ 9.2	+ 7.3	+ 9.8
Appalachian Kentucky	+ 6.9	+ 5.2	+ 5.8	+ 5.0	+ 7.3
Non-Appalachian Kentucky	+ 9.8	+ 8.2	+ 9.8	+ 7.8	+ 10.1
Maryland	+ 6.1	+ 5.8	+ 6.9	+ 6.7	+ 6.3
Appalachian Maryland	+ 3.7	+ 2.6	+ 4.9	+ 4.1	+ 4.3
Non-Appalachian Maryland	+ 6.1	+ 6.3	+ 6.9	+ 6.2	+ 6.3
Mississippi	+ 5.9	+ 5.7	+ 7.2	+ 7.4	+ 7.6
Appalachian Mississippi	+ 7.0	+ 6.9	+ 8.6	+ 9.5	+ 7.9
Non-Appalachian Mississippi	+ 5.6	+ 5.3	+ 6.8	+ 7.1	+ 7.5
New York	+ 10.0	+ 8.0	+ 11.0	+ 9.3	+ 10.8
Appalachian New York	+ 5.7	+ 4.4	+ 5.5	+ 5.4	+ 7.6
Non-Appalachian New York	+ 10.1	+ 8.5	+ 11.2	+ 10.1	+ 10.9
North Carolina	+ 10.3	+ 8.2	+ 11.2	+ 10.4	+ 11.2
Appalachian North Carolina	+ 10.7	+ 8.7	+ 10.9	+ 10.6	+ 11.6
Non-Appalachian North Carolina	+ 10.1	+ 8.7	+ 11.2	+ 10.5	+ 11.1
Ohio	+ 8.7	+ 7.2	+ 9.2	+ 7.9	+ 10.1
Appalachian Ohio	+ 8.8	+ 6.4	+ 9.2	+ 7.1	+ 10.3
Non-Appalachian Ohio	+ 8.6	+ 7.6	+ 9.1	+ 7.5	+ 9.9
Pennsylvania	+ 8.7	+ 7.5	+ 8.7	+ 7.6	+ 9.9
Appalachian Pennsylvania	+ 7.7	+ 6.9	+ 8.1	+ 7.9	+ 9.4
Non-Appalachian Pennsylvania	+ 9.2	+ 7.7	+ 8.7	+ 7.4	+ 10.1
South Carolina	+ 11.1	+ 9.3	+ 12.6	+ 10.6	+ 12.4
Appalachian South Carolina	+ 11.5	+ 11.7	+ 13.2	+ 12.3	+ 12.5
Non-Appalachian South Carolina	+ 11.0	+ 9.2	+ 12.4	+ 10.0	+ 12.3
Tennessee	+ 10.9	+ 10.5	+ 11.2	+ 10.5	+ 11.3
Appalachian Tennessee	+ 9.8	+ 9.9	+ 10.3	+ 9.8	+ 10.2
Non-Appalachian Tennessee	+ 11.4	+ 10.7	+ 11.6	+ 10.6	+ 12.0
Virginia	+ 6.5	+ 6.0	+ 7.6	+ 7.0	+ 7.0
Appalachian Virginia	+ 6.2	+ 6.4	+ 7.1	+ 6.5	+ 6.9
Non-Appalachian Virginia	+ 6.2	+ 5.5	+ 7.3	+ 6.4	+ 6.8
West Virginia (entire state)	+ 5.2	+ 3.9	+ 4.9	+ 4.3	+ 5.4

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Figure 8.6: Percent Change in Median Household Income in the Appalachian Region (In Adjusted 2019 Dollars), 2010-2014 to 2015-2019



Map Title: Percent Change in Median Household Income in the Appalachian Region (In Adjusted 2019 Dollars), 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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 8.3 percent higher in 2015-2019 than it was in 2010-2014, suggesting that incomes have recovered from the 2007-2009 economic downturn. While this was slightly less than the national increase of 8.7 percent, household income rose at or above the national average in more than two-fifths of Appalachia's 420 counties. Moreover, median household income rose at least 15 percent in 59 Appalachian counties between the two periods. But not all the news was positive: In 65 Appalachian counties (more than half of which were in Kentucky or West Virginia), real median household income fell between 2010-2014 and 2015-2019. And it is important to note that the overall income improvements in 2015-2019 do not consider the economic hardships felt across the country when the coronavirus pandemic hit in 2020.

Table 8.3: Number of Persons in the Appalachian Region in Poverty, by Age Group, 2015-2019

Poverty Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	42,510,843	13,377,778	24,545,633	5,859,900	18,685,733	4,587,432
Appalachian Region	3,780,441	1,129,258	2,235,486	511,584	1,723,902	415,697
Subregions						
Northern Appalachia	1,069,817	305,022	638,873	162,318	476,555	125,922
North Central Appalachia	393,757	110,649	242,041	56,476	185,565	41,067
Central Appalachia	423,607	122,277	254,102	41,881	212,221	47,228
South Central Appalachia	744,696	215,120	446,089	108,077	338,012	83,487
Southern Appalachia	1,148,564	376,190	654,381	142,832	511,549	117,993
County Types						
Large Metros (pop. 1 million +)	692,630	212,822	401,320	84,043	317,277	78,488
Small Metros (pop. <1 million)	1,585,457	467,462	953,901	248,148	705,753	164,094
Nonmetro, Adjacent to Large Metros	353,708	109,186	206,654	47,407	159,247	37,868
Nonmetro, Adjacent to Small Metros	646,445	194,083	375,145	71,029	304,116	77,217
Rural (nonmetro, not adj. to a metro)	502,201	145,705	298,466	60,957	237,509	58,030
Alabama	795,989	258,068	458,150	105,165	352,985	79,771
Appalachian Alabama	473,202	150,524	274,037	59,099	214,938	48,641
Non-Appalachian Alabama	322,787	107,544	184,113	46,066	138,047	31,130
Georgia	1,528,558	531,056	857,405	196,580	660,825	140,097
Appalachian Georgia	384,745	134,424	211,883	41,077	170,806	38,438
Non-Appalachian Georgia	1,143,813	396,632	645,522	155,503	490,019	101,659
Kentucky	747,010	231,275	440,439	94,950	345,489	75,296
Appalachian Kentucky	275,551	80,171	165,505	28,682	136,823	29,875
Non-Appalachian Kentucky	471,459	151,104	274,934	66,268	208,666	45,421
Maryland	539,991	159,879	312,536	68,873	243,663	67,576
Appalachian Maryland	30,742	9,139	17,836	3,799	14,037	3,767
Non-Appalachian Maryland	509,249	150,740	294,700	65,074	229,626	63,809
Mississippi	585,786	201,265	327,113	73,005	254,108	57,408
Appalachian Mississippi	119,751	38,476	68,074	17,584	50,490	13,201
Non-Appalachian Mississippi	466,035	162,789	259,039	55,421	203,618	44,207
New York	2,681,277	791,913	1,538,655	320,512	1,218,143	350,709
Appalachian New York	154,752	42,015	97,515	30,671	66,844	15,222
Non-Appalachian New York	2,526,525	749,898	1,441,140	289,841	1,151,299	335,487
North Carolina	1,467,591	478,877	843,693	197,131	646,562	145,021
Appalachian North Carolina	264,539	78,792	154,881	34,286	120,595	30,866
Non-Appalachian North Carolina	1,203,052	400,085	688,812	162,845	525,967	114,155
Ohio	1,588,343	509,359	927,049	215,669	711,380	151,935
Appalachian Ohio	317,798	99,404	185,528	36,626	148,902	32,866
Non-Appalachian Ohio	1,270,545	409,955	741,521	179,043	562,478	119,069
Pennsylvania	1,539,183	458,890	900,882	215,854	685,028	179,411
Appalachian Pennsylvania	695,033	192,526	415,737	108,423	307,314	86,770
Non-Appalachian Pennsylvania	844,150	266,364	485,145	107,431	377,714	92,641
South Carolina	741,650	240,953	420,869	94,757	326,112	79,828
Appalachian South Carolina	170,866	52,766	100,387	25,072	75,315	17,713
Non-Appalachian South Carolina	570,784	188,187	320,482	69,685	250,797	62,115
Tennessee	996,930	323,913	574,744	124,486	450,258	98,273
Appalachian Tennessee	450,878	133,240	267,100	55,937	211,163	50,538
Non-Appalachian Tennessee	546,052	190,673	307,644	68,549	239,095	47,735
Virginia	865,691	255,807	516,933	136,607	380,326	92,951
Appalachian Virginia	132,540	32,123	85,248	27,004	58,244	15,169
Non-Appalachian Virginia	733,151	223,684	431,685	109,603	322,082	77,782
West Virginia (entire state)	310,044	85,658	191,755	43,324	148,431	32,631

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2019, the poverty threshold for a family of two adults and two children was \$25,926. 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, 2015-2019 American Community Survey.

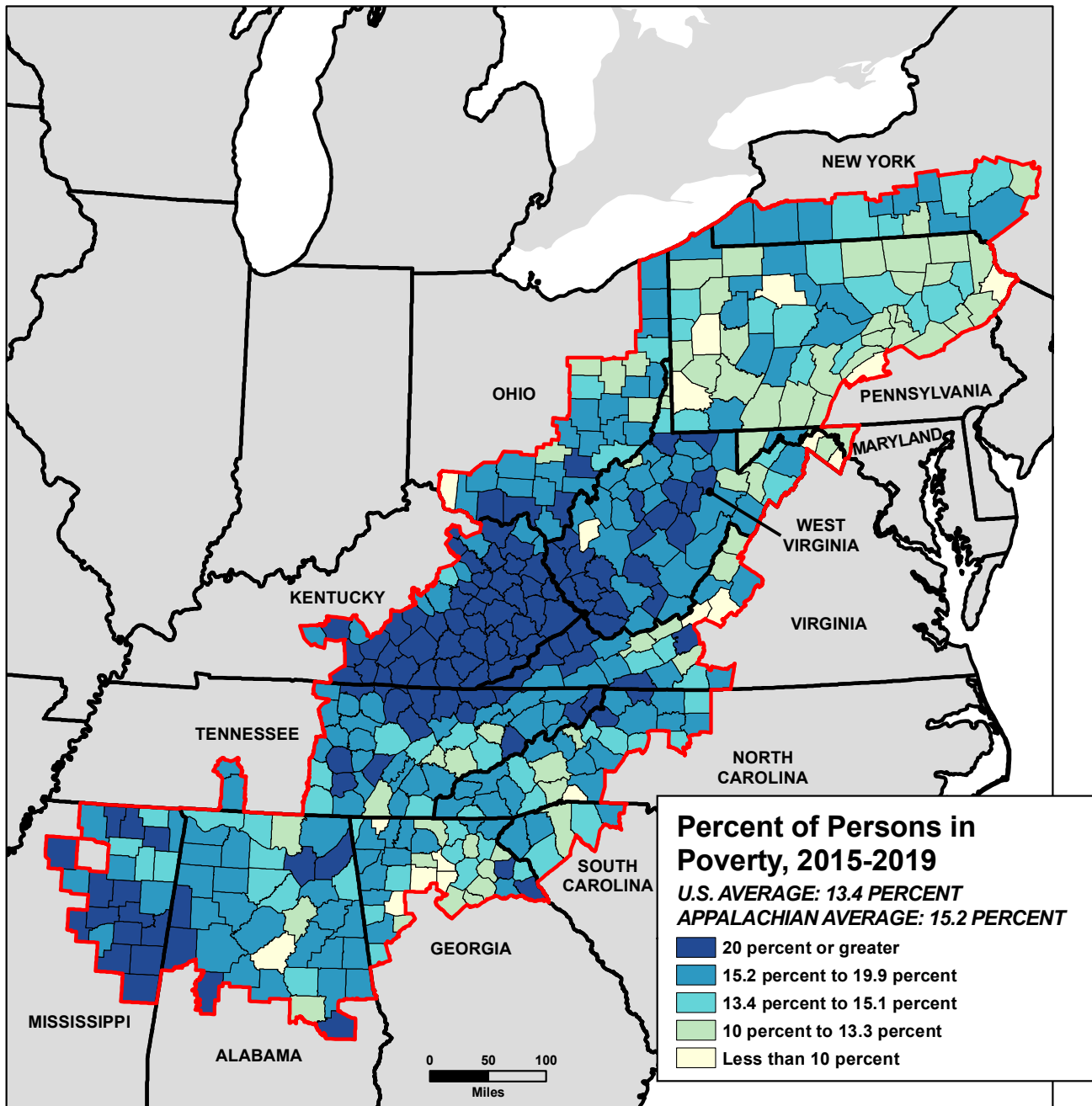
Table 8.4: Percent of Persons in the Appalachian Region in Poverty, by Age Group, 2015-2019

Poverty Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	13.4	18.5	12.6	21.4	11.2	9.3
Appalachian Region	15.2	21.2	14.9	24.8	13.3	9.3
Subregions						
Northern Appalachia	13.6	19.3	13.5	25.4	11.6	8.2
North Central Appalachia	16.9	22.5	17.2	29.2	15.3	9.5
Central Appalachia	23.5	31.2	23.4	29.8	22.5	14.3
South Central Appalachia	15.7	22.3	15.7	27.4	13.8	9.0
Southern Appalachia	14.2	19.6	13.3	20.6	12.1	9.5
County Types						
Large Metros (pop. 1 million +)	11.6	15.7	10.9	17.6	9.9	8.3
Small Metros (pop. <1 million)	15.1	21.1	15.0	27.3	12.9	8.7
Nonmetro, Adjacent to Large Metros	16.7	23.8	16.3	26.5	14.6	9.6
Nonmetro, Adjacent to Small Metros	16.9	24.3	16.7	23.9	15.6	10.0
Rural (nonmetro, not adj. to a metro)	20.9	28.3	20.9	30.6	19.3	12.6
Alabama	16.7	23.9	15.9	25.5	14.3	10.2
Appalachian Alabama	15.5	21.9	14.8	23.0	13.4	9.7
Non-Appalachian Alabama	18.9	27.4	17.8	29.4	15.8	11.0
Georgia	15.1	21.5	13.6	21.9	12.3	10.2
Appalachian Georgia	12.1	16.7	10.9	15.0	10.2	8.9
Non-Appalachian Georgia	16.5	23.8	14.9	24.9	13.2	10.8
Kentucky	17.3	23.5	16.7	25.7	15.2	11.0
Appalachian Kentucky	24.5	32.1	24.4	31.5	23.3	15.3
Non-Appalachian Kentucky	14.8	20.6	14.0	23.7	12.4	9.2
Maryland	9.2	12.1	8.5	14.4	7.6	7.7
Appalachian Maryland	13.2	18.4	12.7	19.4	11.7	8.7
Non-Appalachian Maryland	9.0	11.9	8.3	14.2	7.5	7.6
Mississippi	20.3	28.7	18.8	28.2	17.2	12.8
Appalachian Mississippi	19.7	27.0	18.7	30.3	16.5	13.3
Non-Appalachian Mississippi	20.4	29.1	18.9	27.6	17.4	12.7
New York	14.1	19.6	12.8	20.1	11.7	11.5
Appalachian New York	15.9	21.5	16.5	32.8	13.5	8.2
Non-Appalachian New York	14.0	19.5	12.7	19.3	11.6	11.7
North Carolina	14.7	21.2	13.8	23.3	12.2	9.1
Appalachian North Carolina	15.5	23.0	15.2	25.7	13.7	8.9
Non-Appalachian North Carolina	14.5	20.9	13.5	22.9	11.9	9.2
Ohio	14.0	19.9	13.4	22.7	12.0	8.1
Appalachian Ohio	16.4	23.4	16.1	23.5	14.9	9.2
Non-Appalachian Ohio	13.5	19.2	12.9	22.6	11.4	7.9
Pennsylvania	12.4	17.6	11.9	21.8	10.4	8.1
Appalachian Pennsylvania	12.7	17.9	12.6	25.0	10.7	8.1
Non-Appalachian Pennsylvania	12.2	17.4	11.4	19.3	10.2	8.2
South Carolina	15.2	22.2	14.3	23.5	12.8	9.4
Appalachian South Carolina	13.8	18.7	13.3	23.8	11.6	8.7
Non-Appalachian South Carolina	15.7	23.5	14.6	23.4	13.2	9.7
Tennessee	15.2	21.9	14.3	22.4	13.0	9.4
Appalachian Tennessee	16.0	22.6	15.7	24.1	14.4	9.5
Non-Appalachian Tennessee	14.7	21.4	13.3	21.2	12.0	9.2
Virginia	10.6	13.9	10.1	19.9	8.6	7.5
Appalachian Virginia	18.6	23.9	19.8	40.9	15.9	10.2
Non-Appalachian Virginia	9.8	13.1	9.2	17.7	7.9	7.1
West Virginia (entire state)	17.6	23.8	18.1	30.3	16.1	9.5

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2019, the poverty threshold for a family of two adults and two children was \$25,926. 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, 2015-2019 American Community Survey.

Figure 8.7: Percent of Persons in the Appalachian Region in Poverty, 2015-2019

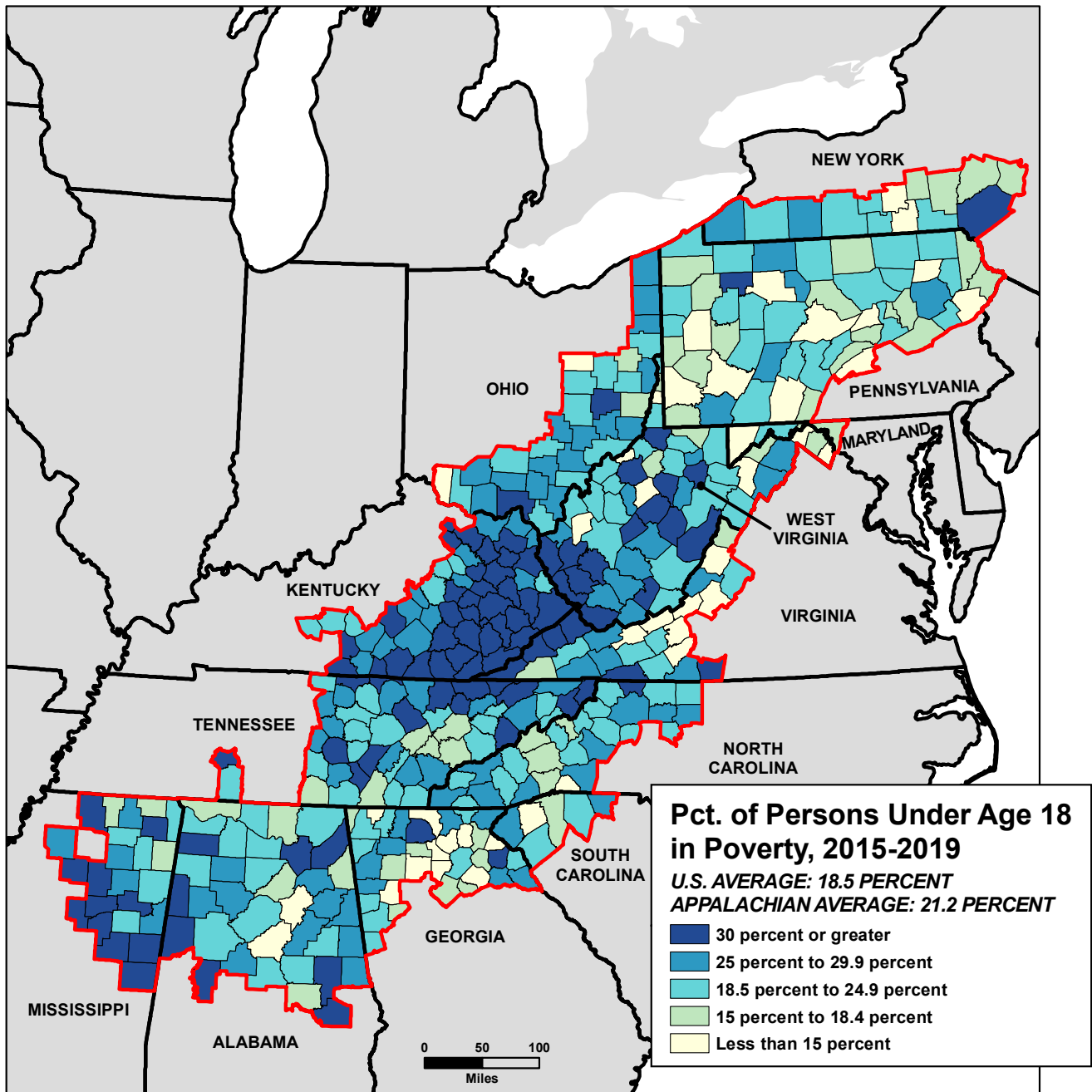


Map Title: Percent of Persons in the Appalachian Region in Poverty, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Over the 2015-2019 period, 15.2 percent of Appalachian residents lived below the poverty level (income below \$25,926 for a family of two adults and two children in 2019)—nearly two percentage points above the U.S. average. But there is a great deal of variation within the Region: In 114 counties, at least 20 percent of persons were poor, yet in another 83 counties the poverty rate was lower than the national average of 13.4 percent. And there was a geographic and urban/rural pattern: All but 15 of the counties with poverty rates at or above 20 percent were outside metropolitan areas, and most of them were in Central Appalachia. (Kentucky alone had 45 of these counties, and West Virginia, Tennessee, and Mississippi also had high poverty clusters.) In contrast, the counties where poverty was below the U.S. rate were mostly in Northern Appalachia and/or in metropolitan areas.

Figure 8.8: Percent of Persons Under Age 18 in the Appalachian Region in Poverty, 2015-2019

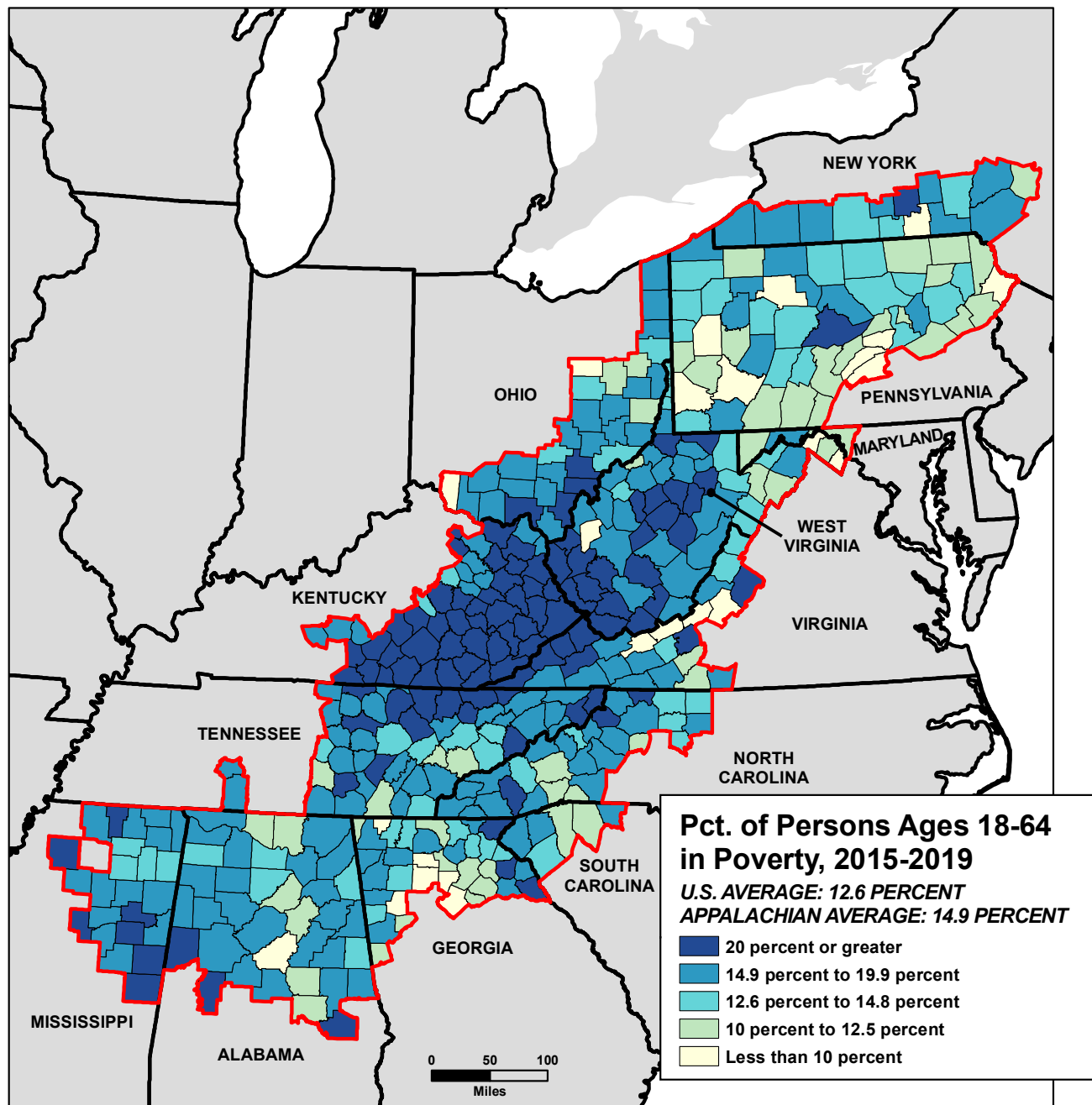


Map Title: Percent of Persons Under Age 18 in the Appalachian Region in Poverty, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Child poverty in the Appalachian Region was 21.2 percent in 2015-2019—almost three percentage points above the national rate of 18.5 percent. And the problem is even more acute in some parts of Appalachia. In 96 counties, at least 30 percent of children under age 18 lived below the poverty level (income below \$25,926 for a family of two adults and two children in 2019). All but 13 of these counties were outside metropolitan areas and more than half were in the most isolated rural areas. Central Appalachia was home to 51 of the counties with the highest child poverty rates, while another 21 were in Southern Appalachia. However, there were 100 counties (primarily in Northern Appalachia and in metropolitan areas) where child poverty rates were below the national average. Indeed, 26 of the 43 Appalachian counties where child poverty was less than 15 percent were in metro areas, and 15 were in Northern Appalachia.

Figure 8.9: Percent of Persons Ages 18 to 64 in the Appalachian Region in Poverty, 2015-2019

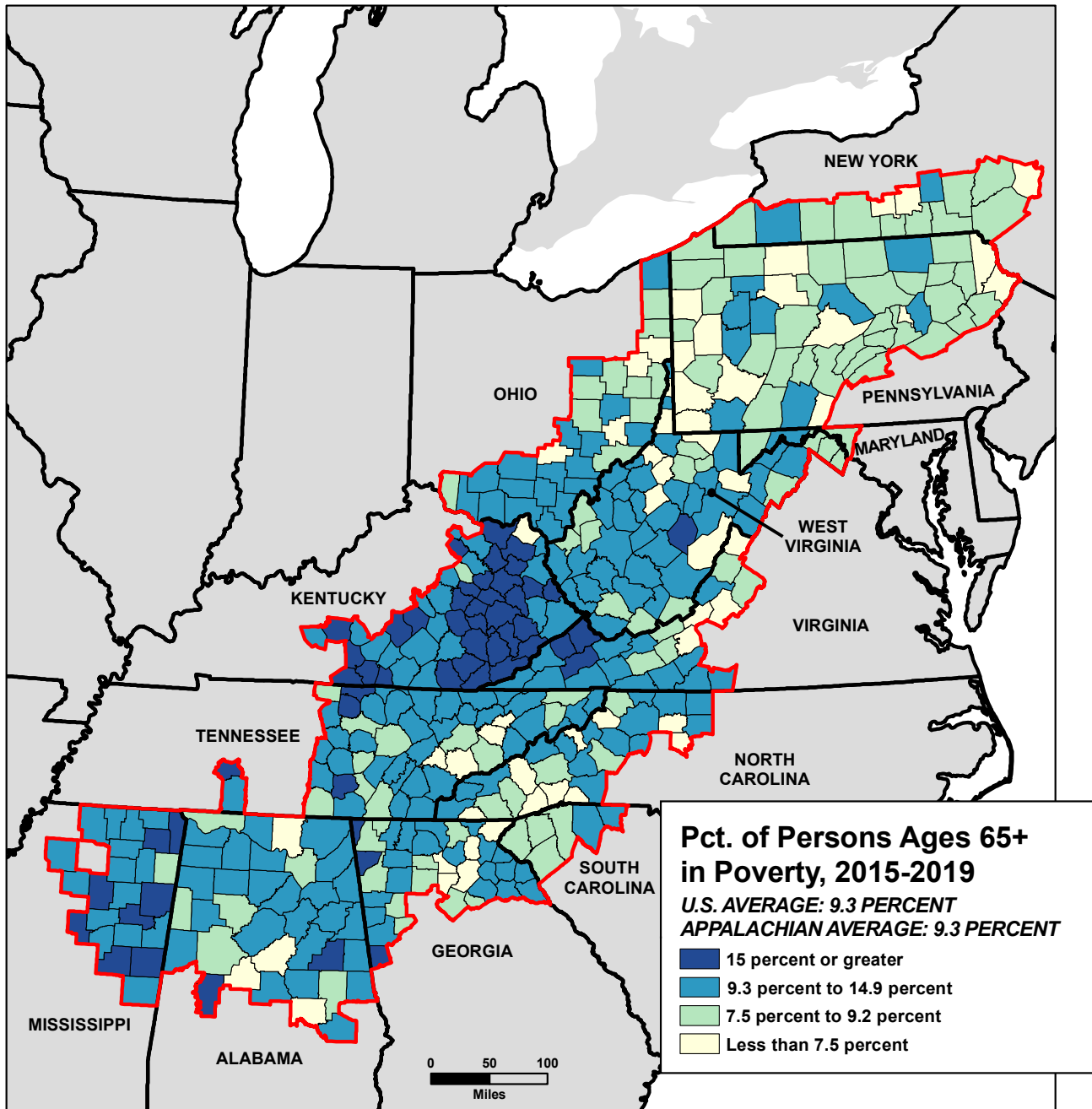


Map Title: Percent of Persons Ages 18 to 64 in the Appalachian Region in Poverty, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 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 2015-2019 period. Almost 15 percent of Appalachian residents in this age group had incomes below the poverty level (income of less than \$25,926 for a family of two adults and two children in 2019), and this rate was more than two percentage points above the U.S. average of 12.6 percent. Within the Region, there were rural/urban and geographic patterns of poverty concentration. Of the 106 counties where at least one in five 18-to-64-year-olds were poor, 89 were outside metropolitan areas; 86 were in Central, South Central, and Southern Appalachia; and 42 were in Kentucky alone. Conversely, 68 of the 80 counties with rates below the national average were in metro areas and/or in Northern Appalachia.

Figure 8.10: Percent of Persons Ages 65 and Over in the Appalachian Region in Poverty, 2015-2019



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region in Poverty, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

The poverty rate for the oldest residents of Appalachia matched the national average of 9.3 percent in 2015-2019. Yet the rate was even lower in 162 counties, 69 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 more than 15 percent of residents ages 65 and over were poor in 2015-2019. Moreover, the state had 33 of the 54 Appalachian 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 2019 was \$15,453 for a family of two adults headed by someone age 65 or older.)

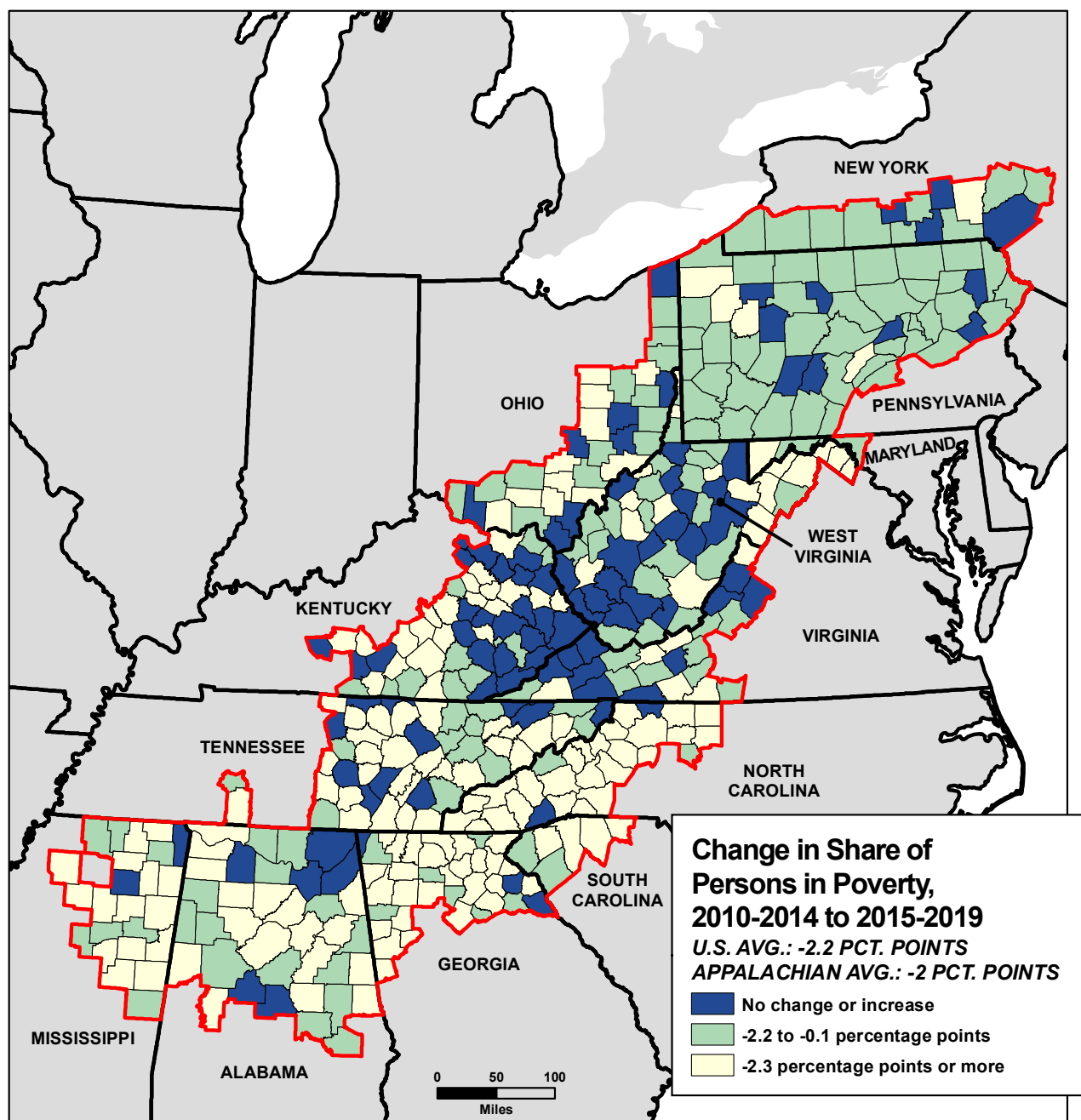
Table 8.5: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, by Age Group, 2010-2014 to 2015-2019

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	- 2.2	- 3.4	- 2.0	- 4.1	- 1.5	- 0.1
Appalachian Region	- 2.0	- 3.2	- 1.6	- 4.0	- 1.2	- 0.3
Subregions						
Northern Appalachia	- 1.0	- 2.1	- 0.6	- 2.2	- 0.3	+ 0.2
North Central Appalachia	- 1.1	- 2.0	- 0.8	- 3.2	- 0.3	+ 0.0
Central Appalachia	- 0.6	- 1.4	+ 0.0	- 2.1	+ 0.4	- 0.6
South Central Appalachia	- 2.7	- 3.7	- 2.5	- 6.3	- 1.8	- 0.8
Southern Appalachia	- 3.1	- 4.8	- 2.6	- 4.6	- 2.3	- 0.7
County Types						
Large Metros (pop. 1 million +)	- 2.1	- 3.6	- 1.8	- 4.0	- 1.4	- 0.2
Small Metros (pop. <1 million)	- 1.8	- 3.1	- 1.4	- 3.3	- 1.1	- 0.1
Nonmetro, Adjacent to Large Metros	- 2.7	- 3.9	- 2.5	- 5.6	- 1.9	- 0.7
Nonmetro, Adjacent to Small Metros	- 1.6	- 2.8	- 1.1	- 3.8	- 0.7	- 0.7
Rural (nonmetro, not adj. to a metro)	- 1.8	- 2.9	- 1.4	- 4.8	- 0.8	- 0.5
Alabama	- 2.2	- 3.6	- 1.7	- 3.7	- 1.2	- 0.6
Appalachian Alabama	- 2.2	- 4.1	- 1.5	- 3.2	- 1.2	- 0.6
Non-Appalachian Alabama	- 2.2	- 2.6	- 2.1	- 4.6	- 1.4	- 0.8
Georgia	- 3.4	- 4.4	- 3.3	- 6.0	- 2.7	- 0.6
Appalachian Georgia	- 3.4	- 4.5	- 3.3	- 4.8	- 3.0	- 0.6
Non-Appalachian Georgia	- 3.3	- 4.4	- 3.2	- 6.2	- 2.5	- 0.6
Kentucky	- 1.6	- 2.5	- 1.2	- 3.9	- 0.8	- 0.4
Appalachian Kentucky	- 0.9	- 1.6	- 0.3	- 3.0	+ 0.2	- 0.7
Non-Appalachian Kentucky	- 1.7	- 2.7	- 1.5	- 4.2	- 1.0	- 0.4
Maryland	- 0.8	- 1.1	- 0.8	- 2.3	- 0.5	+ 0.1
Appalachian Maryland	- 0.8	- 2.4	- 0.5	- 4.3	+ 0.2	+ 0.5
Non-Appalachian Maryland	- 0.8	- 1.0	- 0.8	- 2.2	- 0.5	+ 0.1
Mississippi	- 2.3	- 3.5	- 1.9	- 5.2	- 1.2	- 0.8
Appalachian Mississippi	- 3.7	- 5.6	- 3.5	- 7.8	- 2.5	- 0.1
Non-Appalachian Mississippi	- 2.0	- 3.0	- 1.4	- 4.4	- 0.8	- 0.9
New York	- 1.5	- 2.5	- 1.5	- 3.1	- 1.1	+ 0.1
Appalachian New York	- 0.8	- 1.3	- 0.5	- 2.8	+ 0.0	+ 0.5
Non-Appalachian New York	- 1.5	- 2.6	- 1.4	- 3.1	- 1.1	+ 0.0
North Carolina	- 2.9	- 3.8	- 2.7	- 5.9	- 2.1	- 0.8
Appalachian North Carolina	- 3.6	- 4.8	- 3.5	- 8.3	- 2.6	- 1.0
Non-Appalachian North Carolina	- 2.8	- 3.5	- 2.5	- 5.4	- 2.0	- 0.7
Ohio	- 1.9	- 3.2	- 1.7	- 4.9	- 1.0	+ 0.1
Appalachian Ohio	- 1.4	- 2.6	- 0.9	- 3.9	- 0.4	+ 0.2
Non-Appalachian Ohio	- 2.0	- 3.2	- 1.8	- 5.1	- 1.2	+ 0.1
Pennsylvania	- 1.1	- 1.6	- 1.0	- 3.0	- 0.6	+ 0.0
Appalachian Pennsylvania	- 1.0	- 1.9	- 0.7	- 2.0	- 0.4	+ 0.0
Non-Appalachian Pennsylvania	- 1.2	- 1.3	- 1.2	- 3.8	- 0.7	+ 0.0
South Carolina	- 3.1	- 4.7	- 2.8	- 5.7	- 2.2	- 0.6
Appalachian South Carolina	- 3.7	- 6.5	- 3.0	- 4.2	- 2.7	- 1.1
Non-Appalachian South Carolina	- 2.9	- 4.0	- 2.7	- 6.1	- 2.0	- 0.4
Tennessee	- 2.6	- 3.9	- 2.3	- 5.3	- 1.8	- 0.6
Appalachian Tennessee	- 2.5	- 3.6	- 2.3	- 5.9	- 1.7	- 0.7
Non-Appalachian Tennessee	- 2.6	- 4.0	- 2.3	- 4.8	- 1.8	- 0.6
Virginia	- 0.9	- 1.3	- 0.9	- 2.5	- 0.5	- 0.1
Appalachian Virginia	- 0.2	+ 0.2	+ 0.3	- 0.6	+ 0.5	- 0.7
Non-Appalachian Virginia	- 1.0	- 1.4	- 0.9	- 2.5	- 0.6	- 0.1
West Virginia (entire state)	- 0.5	- 1.6	+ 0.0	- 1.3	+ 0.2	+ 0.1

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2019, the poverty threshold for a family of two adults and two children was \$25,926. 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, 2010-2014 and 2015-2019 American Community Surveys.

Figure 8.11: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, 2010-2014 to 2015-2019



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

The share of Appalachian residents living below the poverty level (income of less than \$25,926 for a family of two adults and two children in 2019) decreased by two percentage points between the 2010-2014 and 2015-2019 periods, almost the same as the 2.2 point decline nationally. And the decrease in the poverty rate was even greater than the national average in 178 of Appalachia's 420 counties (most of which were in South Central and Southern Appalachia). Conversely, there were 95 counties—41 of which were in either Kentucky or West Virginia—where poverty rates either stayed the same or increased between the two periods. Although the overall picture suggests an improved economic climate in much of Appalachia in the ongoing aftermath of the 2007-2009 recession, the economic impact of the 2020 coronavirus pandemic may negate much of this improvement.

Table 8.6: Income-to-Poverty Ratio for Persons in the Appalachian Region, 2015-2019

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	316,715,051	6.0	7.4	17.4	69.1
Appalachian Region	24,812,138	6.5	8.7	19.8	65.0
Subregions					
Northern Appalachia	7,865,972	6.0	7.6	17.9	68.5
North Central Appalachia	2,327,349	7.4	9.5	20.1	63.0
Central Appalachia	1,806,256	9.9	13.5	23.4	53.1
South Central Appalachia	4,732,928	6.7	9.0	21.0	63.3
Southern Appalachia	8,079,633	6.0	8.3	19.9	65.8
County Types					
Large Metros (pop. 1 million +)	5,989,272	5.0	6.5	16.4	72.0
Small Metros (pop. <1 million)	10,477,840	6.6	8.5	19.3	65.6
Nonmetro, Adjacent to Large Metros	2,119,642	7.1	9.6	22.0	61.4
Nonmetro, Adjacent to Small Metros	3,822,542	6.9	10.0	22.8	60.3
Rural (nonmetro, not adj. to a metro)	2,402,842	8.9	12.0	23.4	55.7
Alabama	4,754,288	7.4	9.3	20.1	63.1
Appalachian Alabama	3,047,305	6.6	9.0	19.8	64.7
Non-Appalachian Alabama	1,706,983	8.9	10.0	20.8	60.3
Georgia	10,130,335	6.8	8.3	19.2	65.7
Appalachian Georgia	3,186,751	4.9	7.2	19.2	68.7
Non-Appalachian Georgia	6,943,584	7.6	8.8	19.1	64.4
Kentucky	4,309,501	7.5	9.8	19.4	63.2
Appalachian Kentucky	1,124,558	10.5	14.0	23.6	51.9
Non-Appalachian Kentucky	3,184,943	6.5	8.3	17.9	67.3
Maryland	5,876,434	4.5	4.7	12.4	78.4
Appalachian Maryland	233,069	5.5	7.7	18.0	68.8
Non-Appalachian Maryland	5,643,365	4.4	4.6	12.2	78.8
Mississippi	2,886,767	9.1	11.2	22.0	57.7
Appalachian Mississippi	606,816	8.0	11.7	24.6	55.6
Non-Appalachian Mississippi	2,279,951	9.4	11.0	21.4	58.2
New York	19,063,180	6.4	7.7	15.7	70.3
Appalachian New York	971,725	7.3	8.6	19.0	65.1
Non-Appalachian New York	18,091,455	6.3	7.6	15.5	70.6
North Carolina	9,984,891	6.5	8.2	19.6	65.7
Appalachian North Carolina	1,705,001	6.4	9.1	21.3	63.2
Non-Appalachian North Carolina	8,279,890	6.5	8.1	19.2	66.3
Ohio	11,331,030	6.3	7.7	17.2	68.8
Appalachian Ohio	1,936,262	7.1	9.3	20.0	63.6
Non-Appalachian Ohio	9,394,768	6.2	7.4	16.6	69.8
Pennsylvania	12,380,284	5.6	6.8	15.9	71.7
Appalachian Pennsylvania	5,464,487	5.6	7.1	17.2	70.1
Non-Appalachian Pennsylvania	6,915,797	5.6	6.6	14.9	72.9
South Carolina	4,877,884	6.8	8.4	19.9	64.9
Appalachian South Carolina	1,238,761	6.2	7.6	19.9	66.3
Non-Appalachian South Carolina	3,639,123	7.0	8.7	19.9	64.4
Tennessee	6,542,792	6.5	8.7	19.7	65.1
Appalachian Tennessee	2,817,608	6.6	9.4	21.2	62.8
Non-Appalachian Tennessee	3,725,184	6.5	8.2	18.5	66.8
Virginia	8,201,608	5.1	5.5	14.2	75.2
Appalachian Virginia	714,080	9.0	9.5	20.8	60.6
Non-Appalachian Virginia	7,487,528	4.7	5.1	13.6	76.6
West Virginia (entire state)	1,765,715	7.6	9.9	20.7	61.7

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2019, the poverty threshold for a family of two adults and two children was \$25,926. 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, 2015-2019 American Community Survey.

Table 8.7: Number of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2015-2019

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	18,957,462	5,891,391	11,593,450	3,223,642	8,369,808	1,472,621
Appalachian Region	1,621,579	494,630	1,009,100	294,937	714,163	117,849
Subregions						
Northern Appalachia	470,045	134,603	296,081	97,350	198,731	39,361
North Central Appalachia	171,991	51,860	109,771	33,261	76,510	10,360
Central Appalachia	179,323	60,153	108,480	22,007	86,473	10,690
South Central Appalachia	318,993	93,526	203,543	63,659	139,884	21,924
Southern Appalachia	481,227	154,488	291,225	78,660	212,565	35,514
County Types						
Large Metros (pop. 1 million +)	301,466	91,978	182,868	46,062	136,806	26,620
Small Metros (pop. <1 million)	691,857	204,088	440,692	148,282	292,410	47,077
Nonmetro, Adjacent to Large Metros	149,533	45,986	92,541	27,876	64,665	11,006
Nonmetro, Adjacent to Small Metros	264,329	84,332	160,745	37,076	123,669	19,252
Rural (nonmetro, not adj. to a metro)	214,394	68,246	132,254	35,641	96,613	13,894
Alabama	352,323	120,423	208,965	60,112	148,853	22,935
Appalachian Alabama	199,752	65,375	120,094	33,082	87,012	14,283
Non-Appalachian Alabama	152,571	55,048	88,871	27,030	61,841	8,652
Georgia	687,294	233,228	408,689	107,756	300,933	45,377
Appalachian Georgia	156,399	50,523	93,497	20,414	73,083	12,379
Non-Appalachian Georgia	530,895	182,705	315,192	87,342	227,850	32,998
Kentucky	324,482	109,769	196,078	50,936	145,142	18,635
Appalachian Kentucky	117,717	39,640	71,479	15,338	56,141	6,598
Non-Appalachian Kentucky	206,765	70,129	124,599	35,598	89,001	12,037
Maryland	262,703	77,901	158,988	38,379	120,609	25,814
Appalachian Maryland	12,745	3,611	7,978	2,057	5,921	1,156
Non-Appalachian Maryland	249,958	74,290	151,010	36,322	114,688	24,658
Mississippi	263,329	98,093	149,159	39,850	109,309	16,077
Appalachian Mississippi	48,531	15,308	29,661	10,554	19,107	3,562
Non-Appalachian Mississippi	214,798	82,785	119,498	29,296	90,202	12,515
New York	1,216,622	363,495	746,164	178,746	567,418	106,963
Appalachian New York	70,958	18,073	48,111	19,900	28,211	4,774
Non-Appalachian New York	1,145,664	345,422	698,053	158,846	539,207	102,189
North Carolina	644,054	211,458	391,267	109,895	281,372	41,329
Appalachian North Carolina	109,195	32,990	68,025	19,274	48,751	8,180
Non-Appalachian North Carolina	534,859	178,468	323,242	90,621	232,621	33,149
Ohio	716,550	237,994	430,049	118,298	311,751	48,507
Appalachian Ohio	136,964	46,235	80,708	19,800	60,908	10,021
Non-Appalachian Ohio	579,586	191,759	349,341	98,498	250,843	38,486
Pennsylvania	693,930	207,964	427,090	127,085	300,005	58,876
Appalachian Pennsylvania	306,420	85,045	194,035	65,774	128,261	27,340
Non-Appalachian Pennsylvania	387,510	122,919	233,055	61,311	171,744	31,536
South Carolina	330,853	107,603	199,341	52,836	146,505	23,909
Appalachian South Carolina	76,545	23,282	47,973	14,610	33,363	5,290
Non-Appalachian South Carolina	254,308	84,321	151,368	38,226	113,142	18,619
Tennessee	428,335	144,823	256,715	65,208	191,507	26,797
Appalachian Tennessee	186,950	58,009	115,816	29,260	86,556	13,125
Non-Appalachian Tennessee	241,385	86,814	140,899	35,948	104,951	13,672
Virginia	414,408	121,883	261,192	85,412	175,780	31,333
Appalachian Virginia	64,615	16,240	44,531	19,489	25,042	3,844
Non-Appalachian Virginia	349,793	105,643	216,661	65,923	150,738	27,489
West Virginia (entire state)	134,788	40,299	87,192	25,385	61,807	7,297

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2019, the poverty threshold for a family of two adults and two children was \$25,926. 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, 2015-2019 American Community Survey.

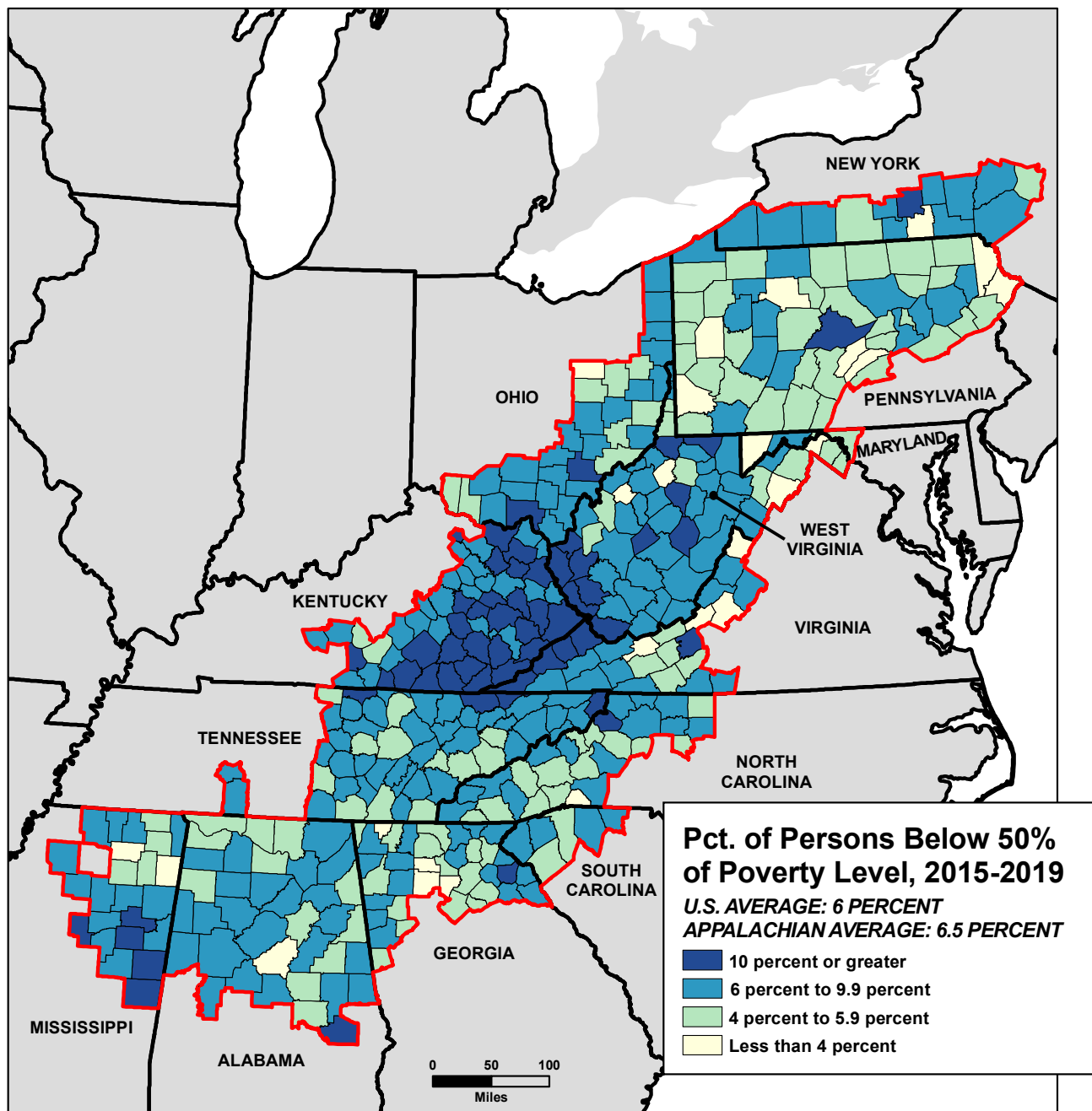
Table 8.8: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2015-2019

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	6.0	8.2	5.9	11.8	5.0	3.0
Appalachian Region	6.5	9.3	6.7	14.3	5.5	2.6
Subregions						
Northern Appalachia	6.0	8.5	6.2	15.2	4.8	2.6
North Central Appalachia	7.4	10.6	7.8	17.2	6.3	2.4
Central Appalachia	9.9	15.4	10.0	15.6	9.2	3.2
South Central Appalachia	6.7	9.7	7.2	16.1	5.7	2.4
Southern Appalachia	6.0	8.1	5.9	11.3	5.0	2.9
County Types						
Large Metros (pop. 1 million +)	5.0	6.8	5.0	9.7	4.3	2.8
Small Metros (pop. <1 million)	6.6	9.2	6.9	16.3	5.3	2.5
Nonmetro, Adjacent to Large Metros	7.1	10.0	7.3	15.6	5.9	2.8
Nonmetro, Adjacent to Small Metros	6.9	10.6	7.1	12.5	6.3	2.5
Rural (nonmetro, not adj. to a metro)	8.9	13.3	9.3	17.9	7.9	3.0
Alabama	7.4	11.2	7.2	14.5	6.0	2.9
Appalachian Alabama	6.6	9.5	6.5	12.9	5.4	2.8
Non-Appalachian Alabama	8.9	14.0	8.6	17.3	7.1	3.1
Georgia	6.8	9.4	6.5	12.0	5.6	3.3
Appalachian Georgia	4.9	6.3	4.8	7.5	4.4	2.9
Non-Appalachian Georgia	7.6	11.0	7.3	14.0	6.1	3.5
Kentucky	7.5	11.1	7.4	13.8	6.4	2.7
Appalachian Kentucky	10.5	15.8	10.5	16.9	9.5	3.4
Non-Appalachian Kentucky	6.5	9.5	6.4	12.8	5.3	2.4
Maryland	4.5	5.9	4.3	8.1	3.8	2.9
Appalachian Maryland	5.5	7.3	5.7	10.5	4.9	2.7
Non-Appalachian Maryland	4.4	5.8	4.3	7.9	3.7	3.0
Mississippi	9.1	14.0	8.6	15.4	7.4	3.6
Appalachian Mississippi	8.0	10.7	8.1	18.2	6.2	3.6
Non-Appalachian Mississippi	9.4	14.8	8.7	14.6	7.7	3.6
New York	6.4	9.0	6.2	11.2	5.5	3.5
Appalachian New York	7.3	9.3	8.2	21.3	5.7	2.6
Non-Appalachian New York	6.3	9.0	6.1	10.6	5.5	3.6
North Carolina	6.5	9.4	6.4	13.0	5.3	2.6
Appalachian North Carolina	6.4	9.6	6.7	14.5	5.5	2.4
Non-Appalachian North Carolina	6.5	9.3	6.3	12.7	5.3	2.7
Ohio	6.3	9.3	6.2	12.5	5.2	2.6
Appalachian Ohio	7.1	10.9	7.0	12.7	6.1	2.8
Non-Appalachian Ohio	6.2	9.0	6.1	12.4	5.1	2.5
Pennsylvania	5.6	8.0	5.6	12.8	4.6	2.7
Appalachian Pennsylvania	5.6	7.9	5.9	15.2	4.5	2.5
Non-Appalachian Pennsylvania	5.6	8.0	5.5	11.0	4.6	2.8
South Carolina	6.8	9.9	6.8	13.1	5.8	2.8
Appalachian South Carolina	6.2	8.3	6.4	13.8	5.2	2.6
Non-Appalachian South Carolina	7.0	10.5	6.9	12.8	6.0	2.9
Tennessee	6.5	9.8	6.4	11.7	5.5	2.6
Appalachian Tennessee	6.6	9.8	6.8	12.6	5.9	2.5
Non-Appalachian Tennessee	6.5	9.8	6.1	11.1	5.3	2.6
Virginia	5.1	6.6	5.1	12.5	4.0	2.5
Appalachian Virginia	9.0	12.1	10.3	29.5	6.8	2.6
Non-Appalachian Virginia	4.7	6.2	4.6	10.6	3.7	2.5
West Virginia (entire state)	7.6	11.2	8.2	17.7	6.7	2.1

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2019, the poverty threshold for a family of two adults and two children was \$25,926. 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, 2015-2019 American Community Survey.

Figure 8.12: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, 2015-2019

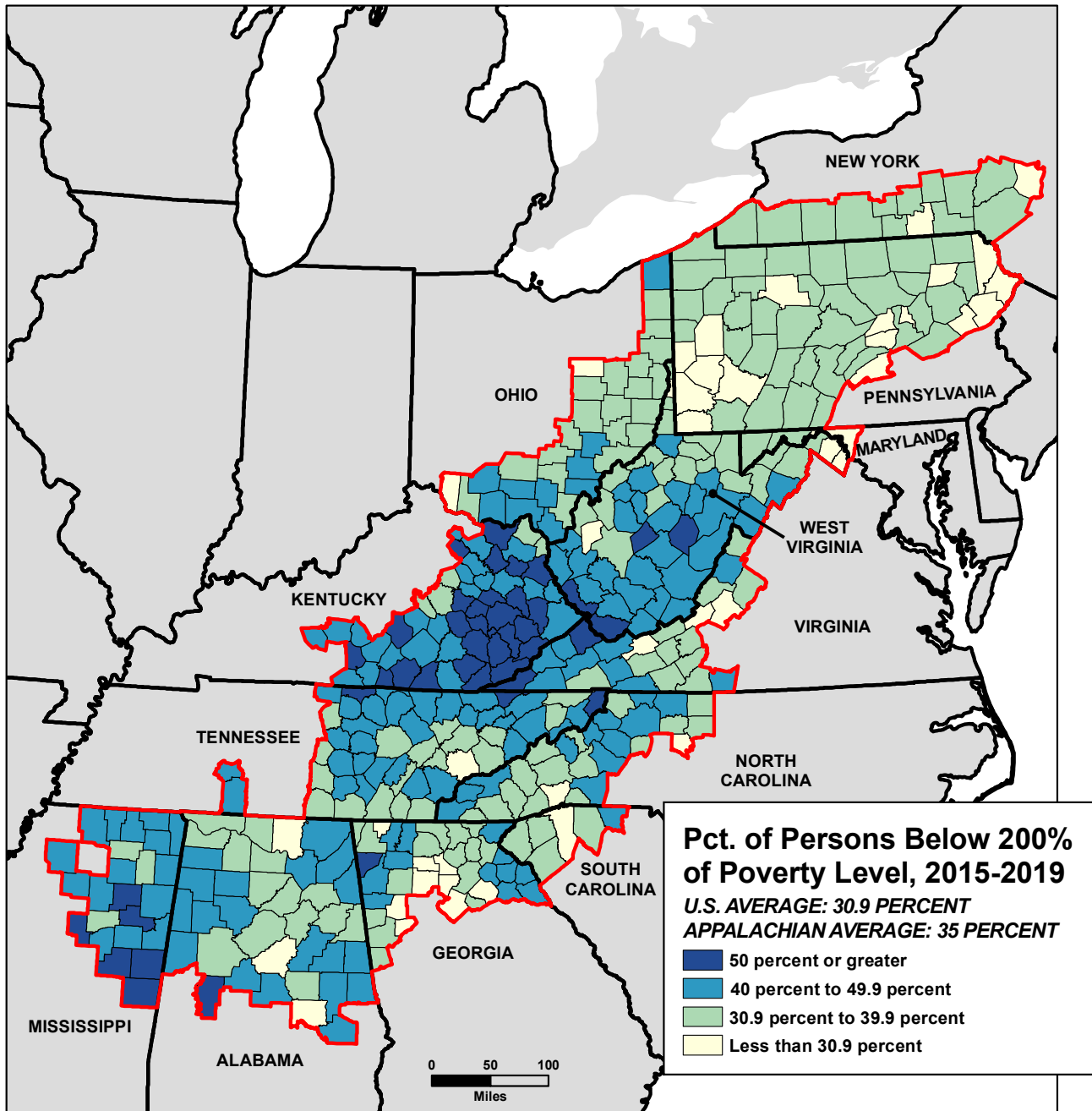


Map Title: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In the 2015-2019 period, 6.5 percent of Appalachian residents were in extreme poverty (incomes below 50 percent of the poverty level, or less than \$12,963 for a family of two adults and two children in 2019). While this was slightly higher than the national average of 6 percent, the situation was even worse in much of the Region. For example, at least one in 10 residents were extremely poor in 60 Appalachian counties. All but eight of these counties were outside metropolitan areas, and 40 of them were in Central Appalachia. (Kentucky alone had 28 counties in this group.) In contrast, there were 26 counties in the Region where less than 4 percent of the population had incomes below 50 percent of the poverty level. Northern Appalachia had 10 of these counties, although the group also included suburban counties outside Atlanta and Birmingham.

Figure 8.13: Percent of Persons in the Appalachian Region Below 200% of Poverty Level, 2015-2019



Map Title: Percent of Persons in the Appalachian Region Below 200% of Poverty Level, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

More than one-third (35 percent) of persons in the Appalachian Region had incomes less than twice the poverty level in 2015-2019, four percentage points higher than the national rate of just under 31 percent. (In 2019, a family of two adults and two children fell in this category if their income was less than \$51,852.) 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 200 of Appalachia's 420 counties; these were overwhelmingly in the Central, South Central, and Southern subregions. And in 43 Appalachian counties, at least half of residents had incomes below 200 percent of poverty; 32 of these counties were in Central Appalachia and 26 were in Kentucky alone. In contrast, there were 44 counties in the Region where the share of persons who were poor and low-income was below the national average. Nearly half of the counties in the latter group 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, 2010-2014 to 2015-2019

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	- 0.9	- 1.3	- 1.5	+ 3.6
Appalachian Region	- 0.8	- 1.1	- 1.4	+ 3.4
Subregions				
Northern Appalachia	- 0.4	- 0.6	- 1.5	+ 2.5
North Central Appalachia	- 0.4	- 0.8	- 1.3	+ 2.4
Central Appalachia	+ 0.1	- 0.8	- 1.4	+ 2.0
South Central Appalachia	- 1.2	- 1.5	- 1.4	+ 4.1
Southern Appalachia	- 1.2	- 1.7	- 1.5	+ 4.4
County Types				
Large Metros (pop. 1 million +)	- 1.0	- 1.2	- 1.7	+ 3.7
Small Metros (pop. <1 million)	- 0.8	- 1.0	- 1.4	+ 3.2
Nonmetro, Adjacent to Large Metros	- 1.0	- 1.7	- 1.0	+ 3.8
Nonmetro, Adjacent to Small Metros	- 0.6	- 1.1	- 1.2	+ 2.8
Rural (nonmetro, not adj. to a metro)	- 0.4	- 1.4	- 1.5	+ 3.3
Alabama	- 0.8	- 1.4	- 1.1	+ 3.3
Appalachian Alabama	- 0.9	- 1.2	- 1.1	+ 3.3
Non-Appalachian Alabama	- 0.6	- 1.6	- 1.1	+ 3.3
Georgia	- 1.6	- 1.7	- 1.4	+ 4.8
Appalachian Georgia	- 1.4	- 2.0	- 1.6	+ 5.0
Non-Appalachian Georgia	- 1.8	- 1.6	- 1.4	+ 4.7
Kentucky	- 0.6	- 1.0	- 1.5	+ 3.0
Appalachian Kentucky	+ 0.0	- 0.9	- 1.3	+ 2.2
Non-Appalachian Kentucky	- 0.7	- 1.0	- 1.5	+ 3.2
Maryland	- 0.3	- 0.5	- 0.9	+ 1.7
Appalachian Maryland	- 0.8	- 0.1	- 0.9	+ 1.7
Non-Appalachian Maryland	- 0.4	- 0.5	- 0.8	+ 1.7
Mississippi	- 0.9	- 1.5	- 1.4	+ 3.8
Appalachian Mississippi	- 1.4	- 2.4	- 1.0	+ 4.6
Non-Appalachian Mississippi	- 0.7	- 1.3	- 1.4	+ 3.5
New York	- 0.5	- 1.0	- 1.3	+ 2.9
Appalachian New York	- 0.4	- 0.4	- 0.9	+ 1.7
Non-Appalachian New York	- 0.6	- 1.0	- 1.3	+ 2.9
North Carolina	- 1.2	- 1.7	- 1.5	+ 4.4
Appalachian North Carolina	- 1.8	- 1.8	- 1.1	+ 4.7
Non-Appalachian North Carolina	- 1.1	- 1.6	- 1.6	+ 4.4
Ohio	- 1.1	- 0.8	- 1.2	+ 3.1
Appalachian Ohio	- 0.5	- 0.8	- 1.5	+ 2.9
Non-Appalachian Ohio	- 1.2	- 0.8	- 1.1	+ 3.1
Pennsylvania	- 0.4	- 0.7	- 1.4	+ 2.5
Appalachian Pennsylvania	- 0.4	- 0.6	- 1.7	+ 2.6
Non-Appalachian Pennsylvania	- 0.5	- 0.7	- 1.1	+ 2.3
South Carolina	- 1.6	- 1.6	- 1.7	+ 4.9
Appalachian South Carolina	- 1.6	- 2.1	- 1.8	+ 5.4
Non-Appalachian South Carolina	- 1.5	- 1.4	- 1.7	+ 4.6
Tennessee	- 1.3	- 1.3	- 1.8	+ 4.5
Appalachian Tennessee	- 1.2	- 1.3	- 1.6	+ 4.1
Non-Appalachian Tennessee	- 1.3	- 1.4	- 2.0	+ 4.6
Virginia	- 0.2	- 0.8	- 1.3	+ 2.2
Appalachian Virginia	+ 0.8	- 1.1	- 2.3	+ 2.5
Non-Appalachian Virginia	- 0.3	- 0.7	- 1.1	+ 2.1
West Virginia (entire state)	- 0.3	- 0.4	- 0.9	+ 1.5

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2019, the poverty threshold for a family of two adults and two children was \$25,926. 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, 2010-2014 and 2015-2019 American Community Surveys.

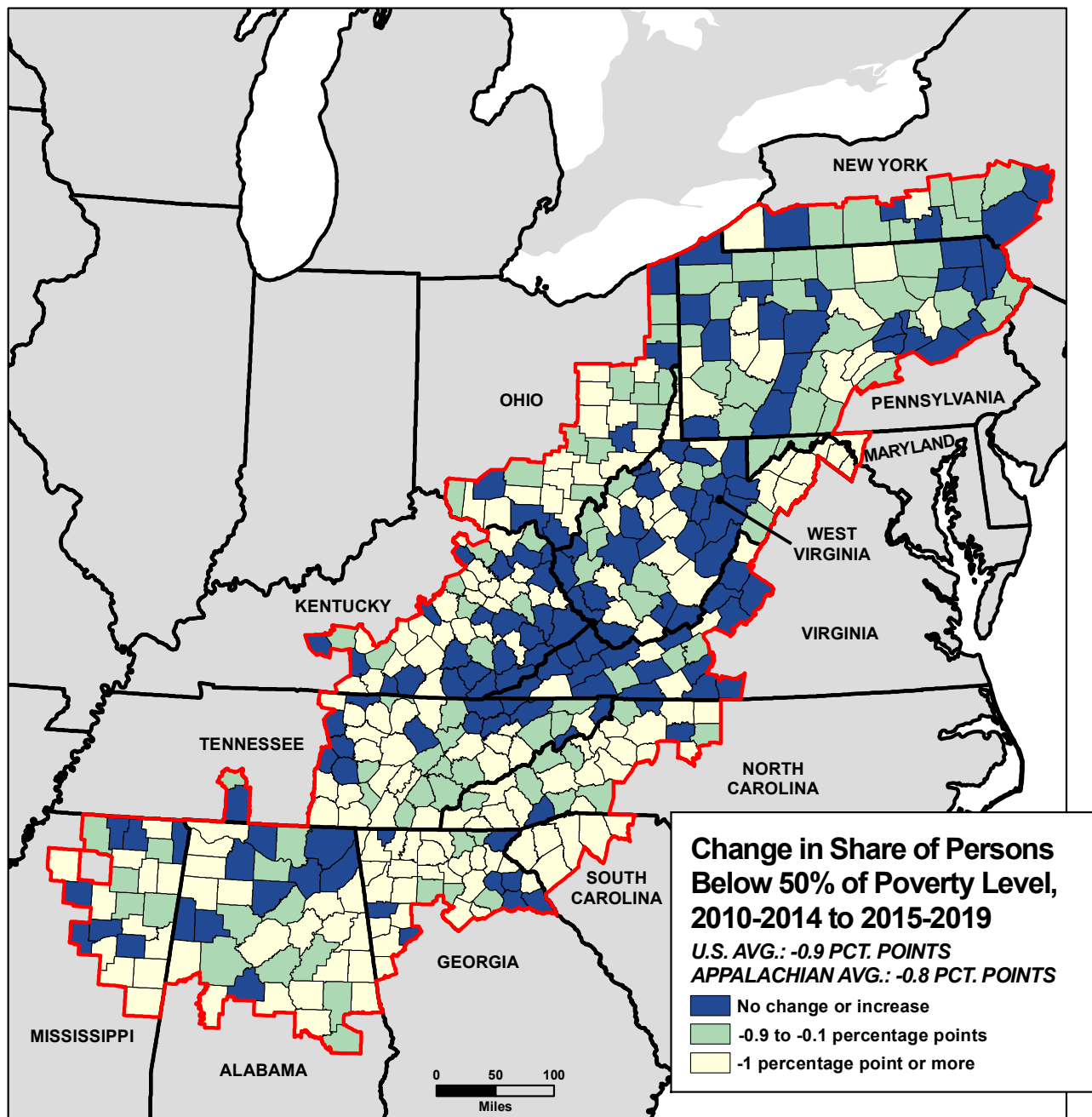
Table 8.10: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2010-2014 to 2015-2019

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	- 0.9	- 1.6	- 0.9	- 2.1	- 0.5	+ 0.5
Appalachian Region	- 0.8	- 1.6	- 0.7	- 2.1	- 0.4	+ 0.4
Subregions						
Northern Appalachia	- 0.4	- 1.3	- 0.3	- 1.4	+ 0.0	+ 0.5
North Central Appalachia	- 0.4	- 0.7	- 0.3	- 2.1	+ 0.1	+ 0.6
Central Appalachia	+ 0.1	- 0.2	+ 0.5	- 1.2	+ 0.8	+ 0.6
South Central Appalachia	- 1.2	- 1.6	- 1.2	- 4.0	- 0.7	+ 0.2
Southern Appalachia	- 1.2	- 2.4	- 1.0	- 1.9	- 0.9	+ 0.4
County Types						
Large Metros (pop. 1 million +)	- 1.0	- 1.9	- 0.7	- 2.1	- 0.5	+ 0.4
Small Metros (pop. <1 million)	- 0.8	- 1.7	- 0.7	- 1.9	- 0.4	+ 0.4
Nonmetro, Adjacent to Large Metros	- 1.0	- 1.8	- 1.0	- 2.3	- 0.7	+ 0.6
Nonmetro, Adjacent to Small Metros	- 0.6	- 1.1	- 0.4	- 2.3	- 0.1	+ 0.3
Rural (nonmetro, not adj. to a metro)	- 0.4	- 1.0	- 0.1	- 2.0	+ 0.2	+ 0.5
Alabama	- 0.8	- 1.8	- 0.5	- 0.7	- 0.4	+ 0.5
Appalachian Alabama	- 0.9	- 2.4	- 0.5	- 0.4	- 0.5	+ 0.4
Non-Appalachian Alabama	- 0.6	- 0.8	- 0.5	- 1.0	- 0.2	+ 0.5
Georgia	- 1.6	- 2.5	- 1.6	- 3.9	- 1.1	+ 0.5
Appalachian Georgia	- 1.4	- 1.9	- 1.4	- 2.5	- 1.2	+ 0.2
Non-Appalachian Georgia	- 1.8	- 2.6	- 1.6	- 4.2	- 1.1	+ 0.7
Kentucky	- 0.6	- 1.1	- 0.4	- 2.0	- 0.1	+ 0.2
Appalachian Kentucky	+ 0.0	- 0.7	+ 0.3	- 1.4	+ 0.6	+ 0.4
Non-Appalachian Kentucky	- 0.7	- 1.1	- 0.6	- 2.1	- 0.3	+ 0.1
Maryland	- 0.3	- 0.6	- 0.4	- 1.6	- 0.1	+ 0.5
Appalachian Maryland	- 0.8	- 2.9	- 0.2	- 2.2	+ 0.1	+ 0.4
Non-Appalachian Maryland	- 0.4	- 0.5	- 0.4	- 1.6	- 0.2	+ 0.6
Mississippi	- 0.9	- 1.7	- 0.6	- 2.3	- 0.2	+ 0.8
Appalachian Mississippi	- 1.4	- 3.4	- 1.0	- 1.4	- 0.8	+ 1.2
Non-Appalachian Mississippi	- 0.7	- 1.3	- 0.5	- 2.6	+ 0.0	+ 0.6
New York	- 0.5	- 1.1	- 0.5	- 1.4	- 0.2	+ 0.4
Appalachian New York	- 0.4	- 0.7	- 0.2	- 1.8	+ 0.1	+ 0.6
Non-Appalachian New York	- 0.6	- 1.1	- 0.5	- 1.3	- 0.2	+ 0.5
North Carolina	- 1.2	- 1.8	- 1.1	- 3.1	- 0.8	+ 0.3
Appalachian North Carolina	- 1.8	- 2.2	- 1.9	- 5.5	- 1.3	+ 0.1
Non-Appalachian North Carolina	- 1.1	- 1.7	- 1.0	- 2.6	- 0.7	+ 0.4
Ohio	- 1.1	- 1.9	- 1.0	- 2.7	- 0.7	+ 0.4
Appalachian Ohio	- 0.5	- 1.0	- 0.5	- 2.3	- 0.2	+ 0.8
Non-Appalachian Ohio	- 1.2	- 2.1	- 1.0	- 2.9	- 0.7	+ 0.2
Pennsylvania	- 0.4	- 0.8	- 0.4	- 1.7	- 0.1	+ 0.4
Appalachian Pennsylvania	- 0.4	- 1.2	- 0.1	- 1.1	+ 0.1	+ 0.4
Non-Appalachian Pennsylvania	- 0.5	- 0.6	- 0.5	- 2.0	- 0.3	+ 0.3
South Carolina	- 1.6	- 3.1	- 1.2	- 3.1	- 0.8	+ 0.4
Appalachian South Carolina	- 1.6	- 3.3	- 1.2	- 2.9	- 0.9	+ 0.4
Non-Appalachian South Carolina	- 1.5	- 3.0	- 1.3	- 3.2	- 0.8	+ 0.5
Tennessee	- 1.3	- 2.1	- 1.1	- 3.0	- 0.8	+ 0.3
Appalachian Tennessee	- 1.2	- 1.8	- 1.2	- 4.0	- 0.7	+ 0.4
Non-Appalachian Tennessee	- 1.3	- 2.3	- 1.0	- 2.2	- 0.8	+ 0.0
Virginia	- 0.2	- 0.3	- 0.3	- 1.0	- 0.1	+ 0.6
Appalachian Virginia	+ 0.8	+ 1.8	+ 1.0	+ 1.7	+ 0.9	+ 0.6
Non-Appalachian Virginia	- 0.3	- 0.4	- 0.4	- 1.2	- 0.2	+ 0.6
West Virginia (entire state)	- 0.3	- 0.8	+ 0.1	- 1.2	+ 0.3	+ 0.2

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2019, the poverty threshold for a family of two adults and two children was \$25,926. 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, 2010-2014 and 2015-2019 American Community Surveys.

Figure 8.14: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, 2010-2014 to 2015-2019



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

The share of Appalachian residents living in extreme poverty (50 percent of the poverty level, or earning less than \$12,963 for a family of two adults and two children in 2019) fell 0.8 percentage points between the 2010-2014 and 2015-2019 periods. But there was much variation within the Region. On one hand, the rate of extreme poverty went down by more than 0.9 percentage points (the national rate) in 183 counties. Yet in 132 other counties, extreme poverty rates either remained constant or increased. More than half of the counties in the latter group were in Northern, North Central, and Central Appalachia, although there were also pockets of concentration further south.

TRENDS IN INCOME AND POVERTY

- Adjusting for inflation, income trends in the Appalachian Region were positive between the 2010-2014 and 2015-2019 periods (see Tables 8.1 and 8.2).
 - The mean income measures all increased noticeably between the two periods. Mean household income, for example, rose 8.7 percent to \$70,362 in 2015-2019. Mean family and per capita income had even greater increases (more than 9 percent each), reaching \$83,721 and \$28,433, respectively. (All monetary figures are in 2019 Dollars.)
 - Although not affected by extreme values, the two median income measures likewise have registered healthy increases since 2010-2014. Median household income (the level where half of all households have higher incomes while the other half have lower incomes) rose 8.3 percent to \$51,916 in 2015-2019. Median family income increased 8.8 percent to \$65,840.
- Despite these increases, the post 2010-2014 income gains were not quite as great in Appalachia as they were nationally. Appalachia's growth on the two median measures, however, was within half a percentage point of the national average.
- Within the Appalachian Region, all income measures increased for the subregions, county types, and states—even after adjusting for inflation. Among the subregions, income growth was highest in Southern and South Central Appalachia and lowest in Central Appalachia. Among the county types, the increases were largest for counties in large metropolitan areas and smaller among counties in the Region's more rural categories. Income gains among the states were largest in Georgia and the Carolinas and smallest in Maryland and West Virginia. Yet despite the overall increases, there were still counties throughout the Region that experienced income declines between 2010-2014 and 2015-2019.
- Since 2010-2014, the share of Appalachian residents in poverty (incomes below \$25,926 for a family of two adults and two children in 2019) has fallen two percentage points to 15.2 percent in 2015-2019 (see Tables 8.4 and 8.5). Poverty decreased in all subregions, county types, and states. The decline in poverty was greatest in the Appalachian portions of Georgia, Mississippi, North Carolina, and South Carolina: Poverty fell by more than three percentage points in each state. In contrast, poverty rates decreased by just 0.5 points in West Virginia and 0.2 points in Virginia.
- Both child poverty and poverty among young adults (ages 18 to 24) have fallen noticeably since 2010-2014: Child poverty dropped more than three percentage points to 21.2 percent in 2015-2019, while poverty among 18-to-24-year-olds fell four points to 24.8 percent. And while South Carolina had the largest decrease in child poverty (6.5 points), North Carolina had the largest decrease for young adults (8.3 points). Poverty rates among working-age adults (ages 25 to 64) had a more modest decline of only 1.2 points to 13.3 percent. Within this age group, however, the decrease was not uniform throughout the Region. For example, poverty among working-age adults fell three percentage points in Appalachian Georgia, but increased slightly in Appalachian Kentucky, Maryland, Virginia, and West Virginia.
- Poverty declined 0.3 percentage points for older residents (ages 65 and over) between 2010-2014 and 2015-2019 in Appalachia, although some parts of the Region either stayed the same (North Central Appalachia and Appalachian Pennsylvania) or rose slightly (Northern Appalachia and the Appalachian portions of several states, including Maryland, Ohio, and New York). Meanwhile, South Central Appalachia, the Region's nonmetro counties, and the Appalachian portions of North and South Carolina had the biggest drops in the poverty rate for persons ages 65 and over.
- In 2015-2019, the share of Appalachian residents below 50 percent of poverty (income below \$12,963 for a family of two adults and two children in 2019) was 6.5 percent, 0.8 percentage points lower than it was in 2010-2014 (see Tables 8.6 through 8.10). Within the Region, however, some areas had even greater decreases while a few (such as the Central Appalachian subregion and the Appalachian portion of Virginia) showed increases. And the share decreased noticeably among children and young adults while increasing slightly among adults ages 65 and over.
- Overall, the income and poverty trends in the Appalachian Region since 2010-2014 show that, for the most part, poverty levels have fallen while incomes have risen, suggesting that much—if not most—of Appalachia has recovered economically from the 2007-2009 recession. However, the economic impact of the COVID-19 pandemic may end up reversing some of these gains.

CHAPTER 9: HEALTH INSURANCE COVERAGE

Table 9.1: Number of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2015-2019

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	28,248,613	14,641,053	3,945,906	4,416,209	6,278,938	13,215,089	392,471
Appalachian Region	2,125,007	1,061,468	278,489	332,273	450,706	1,045,379	18,160
Subregions							
Northern Appalachia	428,271	233,630	78,965	66,846	87,819	189,510	5,131
North Central Appalachia	145,434	69,953	17,749	22,701	29,503	74,305	1,176
Central Appalachia	131,078	64,071	17,805	20,685	25,581	66,127	880
South Central Appalachia	483,434	221,035	45,905	72,293	102,837	259,267	3,132
Southern Appalachia	936,790	472,779	118,065	149,748	204,966	456,170	7,841
County Types							
Large Metros (pop. 1 million +)	509,277	259,117	69,284	78,149	111,684	245,188	4,972
Small Metros (pop. <1 million)	868,213	426,793	97,366	138,472	190,955	434,624	6,796
Nonmetro, Adjacent to Large Metros	187,367	98,437	31,836	28,762	37,839	87,549	1,381
Nonmetro, Adjacent to Small Metros	336,454	162,400	44,898	50,886	66,616	170,840	3,214
Rural (nonmetro, not adj. to a metro)	223,696	114,721	35,105	36,004	43,612	107,178	1,797
Alabama	457,826	230,247	36,972	82,410	110,865	224,687	2,892
Appalachian Alabama	282,766	141,197	24,451	47,525	69,221	139,786	1,783
Non-Appalachian Alabama	175,060	89,050	12,521	34,885	41,644	84,901	1,109
Georgia	1,351,097	710,530	192,226	220,353	297,951	628,641	11,926
Appalachian Georgia	450,323	228,272	71,043	67,154	90,075	217,240	4,811
Non-Appalachian Georgia	900,774	482,258	121,183	153,199	207,876	411,401	7,115
Kentucky	248,714	135,739	40,711	39,640	55,388	110,822	2,153
Appalachian Kentucky	68,812	36,056	11,627	11,345	13,084	32,238	518
Non-Appalachian Kentucky	179,902	99,683	29,084	28,295	42,304	78,584	1,635
Maryland	359,135	184,648	50,281	49,274	85,093	165,680	8,807
Appalachian Maryland	13,184	7,340	2,497	1,771	3,072	5,766	78
Non-Appalachian Maryland	345,951	177,308	47,784	47,503	82,021	159,914	8,729
Mississippi	358,580	185,153	37,417	70,115	77,621	171,827	1,600
Appalachian Mississippi	73,697	38,379	7,396	14,503	16,480	35,002	316
Non-Appalachian Mississippi	284,883	146,774	30,021	55,612	61,141	136,825	1,284
New York	1,117,159	554,074	108,900	149,911	295,263	539,817	23,268
Appalachian New York	48,026	28,225	9,789	8,619	9,817	19,403	398
Non-Appalachian New York	1,069,133	525,849	99,111	141,292	285,446	520,414	22,870
North Carolina	1,076,994	529,066	122,010	164,235	242,821	538,924	9,004
Appalachian North Carolina	196,795	90,378	18,737	29,460	42,181	105,153	1,264
Non-Appalachian North Carolina	880,199	438,688	103,273	134,775	200,640	433,771	7,740
Ohio	702,499	379,559	121,451	106,312	151,796	313,990	8,950
Appalachian Ohio	141,676	75,634	29,528	20,552	25,554	64,237	1,805
Non-Appalachian Ohio	560,823	303,925	91,923	85,760	126,242	249,753	7,145
Pennsylvania	715,285	391,536	122,951	109,673	158,912	314,121	9,628
Appalachian Pennsylvania	274,098	146,704	44,818	42,953	58,933	124,234	3,160
Non-Appalachian Pennsylvania	441,187	244,832	78,133	66,720	99,979	189,887	6,468
South Carolina	515,322	251,782	54,286	81,505	115,991	260,250	3,290
Appalachian South Carolina	130,004	64,931	15,175	20,566	29,190	64,142	931
Non-Appalachian South Carolina	385,318	186,851	39,111	60,939	86,801	196,108	2,359
Tennessee	639,556	309,703	71,344	97,116	141,243	324,846	5,007
Appalachian Tennessee	272,005	123,135	24,742	40,133	58,260	147,213	1,657
Non-Appalachian Tennessee	367,551	186,568	46,602	56,983	82,983	177,633	3,350
Virginia	707,960	363,429	99,819	111,232	152,378	333,028	11,503
Appalachian Virginia	65,602	30,118	7,009	10,139	12,970	34,982	502
Non-Appalachian Virginia	642,358	333,311	92,810	101,093	139,408	298,046	11,001
West Virginia (entire state)	108,019	51,099	11,677	17,553	21,869	55,983	937

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

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

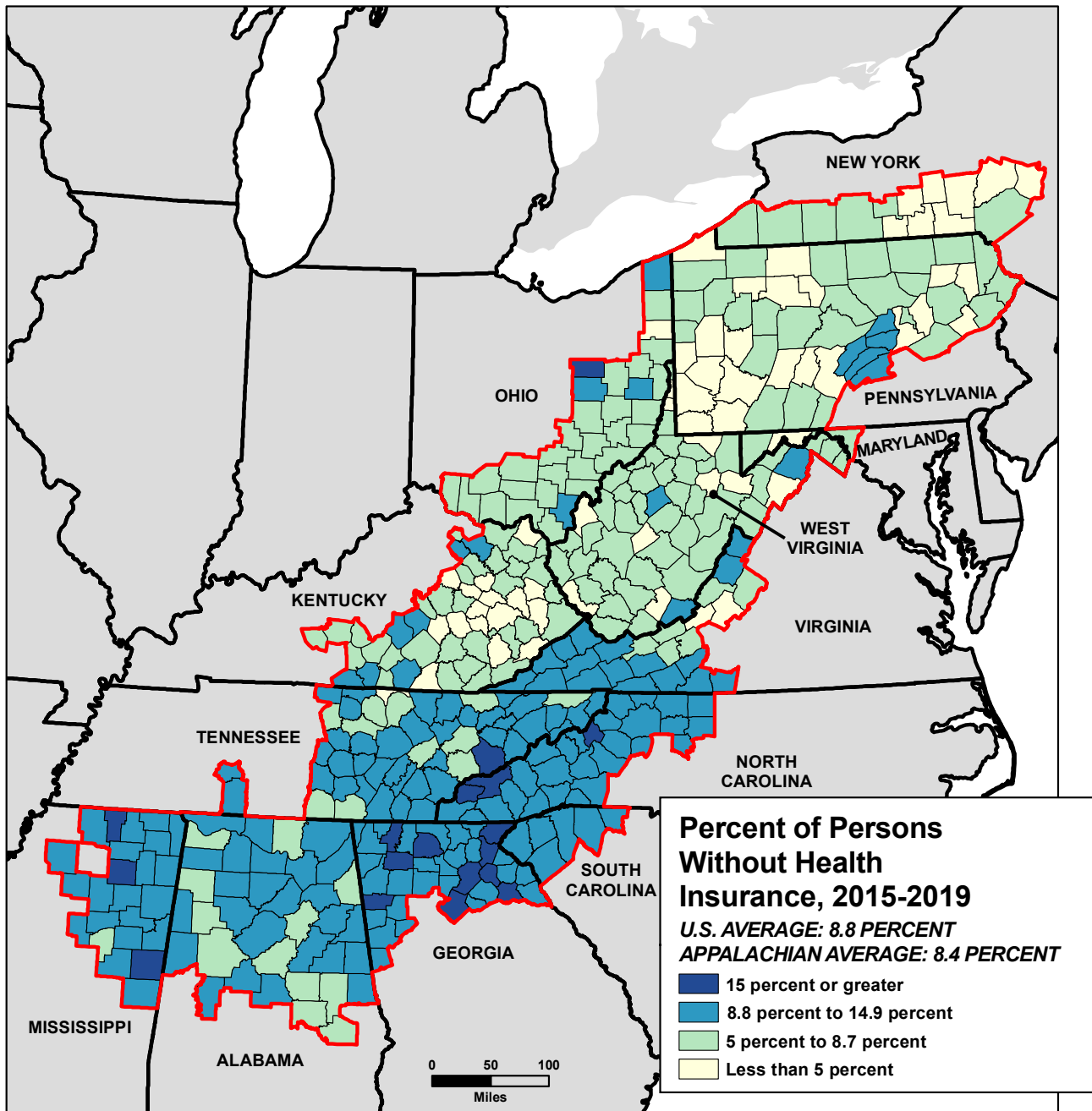
Table 9.2: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2015-2019

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	8.8	10.0	5.1	14.7	16.0	10.7	0.8
Appalachian Region	8.4	9.8	4.8	14.3	16.5	10.6	0.4
Subregions							
Northern Appalachia	5.3	7.0	4.6	8.9	10.2	6.0	0.3
North Central Appalachia	6.2	7.0	3.3	10.5	11.9	8.0	0.3
Central Appalachia	7.2	8.4	4.2	13.4	13.7	9.0	0.3
South Central Appalachia	10.1	11.0	4.4	16.1	20.1	13.8	0.3
Southern Appalachia	11.5	12.7	5.7	20.0	22.2	14.3	0.6
County Types							
Large Metros (pop. 1 million +)	8.4	9.7	4.8	15.2	15.9	10.1	0.5
Small Metros (pop. <1 million)	8.1	9.2	4.0	13.2	16.3	10.5	0.4
Nonmetro, Adjacent to Large Metros	8.7	10.7	6.4	14.6	17.1	10.4	0.3
Nonmetro, Adjacent to Small Metros	8.7	10.3	5.2	15.4	17.4	11.2	0.4
Rural (nonmetro, not adj. to a metro)	9.1	11.1	6.3	15.9	17.5	11.3	0.4
Alabama	9.5	10.6	3.2	18.3	20.1	12.2	0.4
Appalachian Alabama	9.2	10.2	3.3	16.8	19.4	11.7	0.4
Non-Appalachian Alabama	10.2	11.3	3.0	20.6	21.4	13.1	0.4
Georgia	13.2	14.6	7.2	22.7	24.0	15.8	0.9
Appalachian Georgia	14.1	15.3	8.3	24.1	25.3	17.0	1.1
Non-Appalachian Georgia	12.9	14.3	6.7	22.2	23.5	15.3	0.8
Kentucky	5.7	6.9	3.8	9.7	11.1	6.5	0.3
Appalachian Kentucky	6.0	7.3	4.3	11.1	11.0	7.1	0.3
Non-Appalachian Kentucky	5.6	6.7	3.7	9.2	11.2	6.3	0.3
Maryland	6.1	6.9	3.5	9.3	11.8	7.0	1.0
Appalachian Maryland	5.6	7.3	4.6	8.3	12.3	6.2	0.2
Non-Appalachian Maryland	6.1	6.9	3.5	9.4	11.8	7.0	1.0
Mississippi	12.3	13.5	5.0	24.7	23.5	15.6	0.4
Appalachian Mississippi	12.0	13.4	4.8	22.5	24.3	15.2	0.3
Non-Appalachian Mississippi	12.4	13.6	5.0	25.4	23.3	15.7	0.4
New York	5.8	6.3	2.5	8.1	11.7	7.2	0.8
Appalachian New York	4.7	6.4	4.4	7.1	9.6	5.1	0.2
Non-Appalachian New York	5.8	6.3	2.4	8.1	11.8	7.3	0.8
North Carolina	10.7	11.7	5.0	17.7	20.8	13.7	0.6
Appalachian North Carolina	11.4	12.9	5.0	19.6	23.5	15.4	0.4
Non-Appalachian North Carolina	10.6	11.4	5.0	17.4	20.3	13.3	0.6
Ohio	6.1	7.4	4.4	10.0	11.4	7.0	0.5
Appalachian Ohio	7.2	9.1	6.5	12.2	12.6	8.3	0.5
Non-Appalachian Ohio	5.9	7.0	4.0	9.6	11.2	6.8	0.5
Pennsylvania	5.7	7.2	4.3	9.5	10.8	6.4	0.4
Appalachian Pennsylvania	4.9	6.4	3.8	8.5	9.7	5.7	0.3
Non-Appalachian Pennsylvania	6.3	7.7	4.7	10.4	11.5	7.0	0.6
South Carolina	10.5	11.5	4.7	18.2	20.4	13.7	0.4
Appalachian South Carolina	10.3	11.3	5.0	16.8	20.1	13.3	0.5
Non-Appalachian South Carolina	10.5	11.6	4.5	18.7	20.6	13.9	0.4
Tennessee	9.7	10.4	4.5	15.8	17.9	12.7	0.5
Appalachian Tennessee	9.5	10.2	3.9	15.5	18.7	13.2	0.3
Non-Appalachian Tennessee	9.8	10.4	4.9	16.0	17.3	12.3	0.6
Virginia	8.6	9.7	5.0	14.6	15.4	10.2	0.9
Appalachian Virginia	9.0	10.0	4.7	12.8	18.2	12.3	0.3
Non-Appalachian Virginia	8.6	9.7	5.1	14.8	15.1	10.0	1.0
West Virginia (entire state)	6.0	7.0	3.0	11.0	11.9	7.9	0.3

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

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Figure 9.1: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, 2015-2019

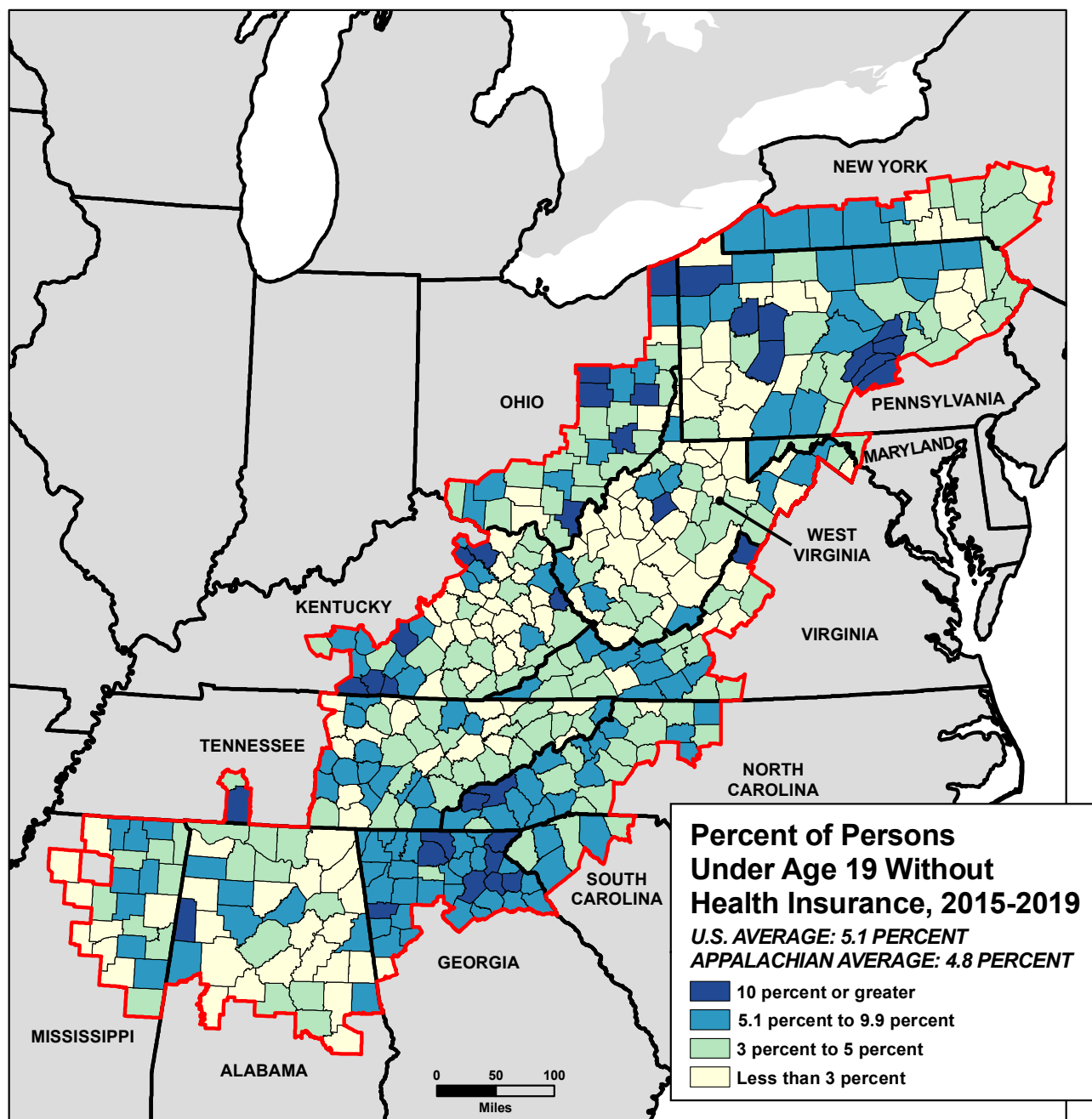


Map Title: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

About 2.1 million persons in the Appalachian Region lacked any kind of health insurance coverage in the 2015-2019 period—a figure representing 8.4 percent of Appalachia’s residents. Although the percentage for the Region is slightly lower than the U.S. share of 8.8 percent, 197 of the 420 Appalachian counties had non-coverage rates that matched or exceeded the national average. In 18 Appalachian counties—10 of which were in Georgia—at least 15 percent of residents were not covered by insurance. (Indeed, just over 14 percent of residents in Georgia’s Appalachian section were not covered by health insurance.) At the other end of the spectrum, 60 counties had uninsured rates below 5 percent, and all but four of these were in either New York, Pennsylvania, Maryland, Kentucky, or West Virginia—the states with the lowest shares of uninsured residents in Appalachia (each 6 percent or lower).

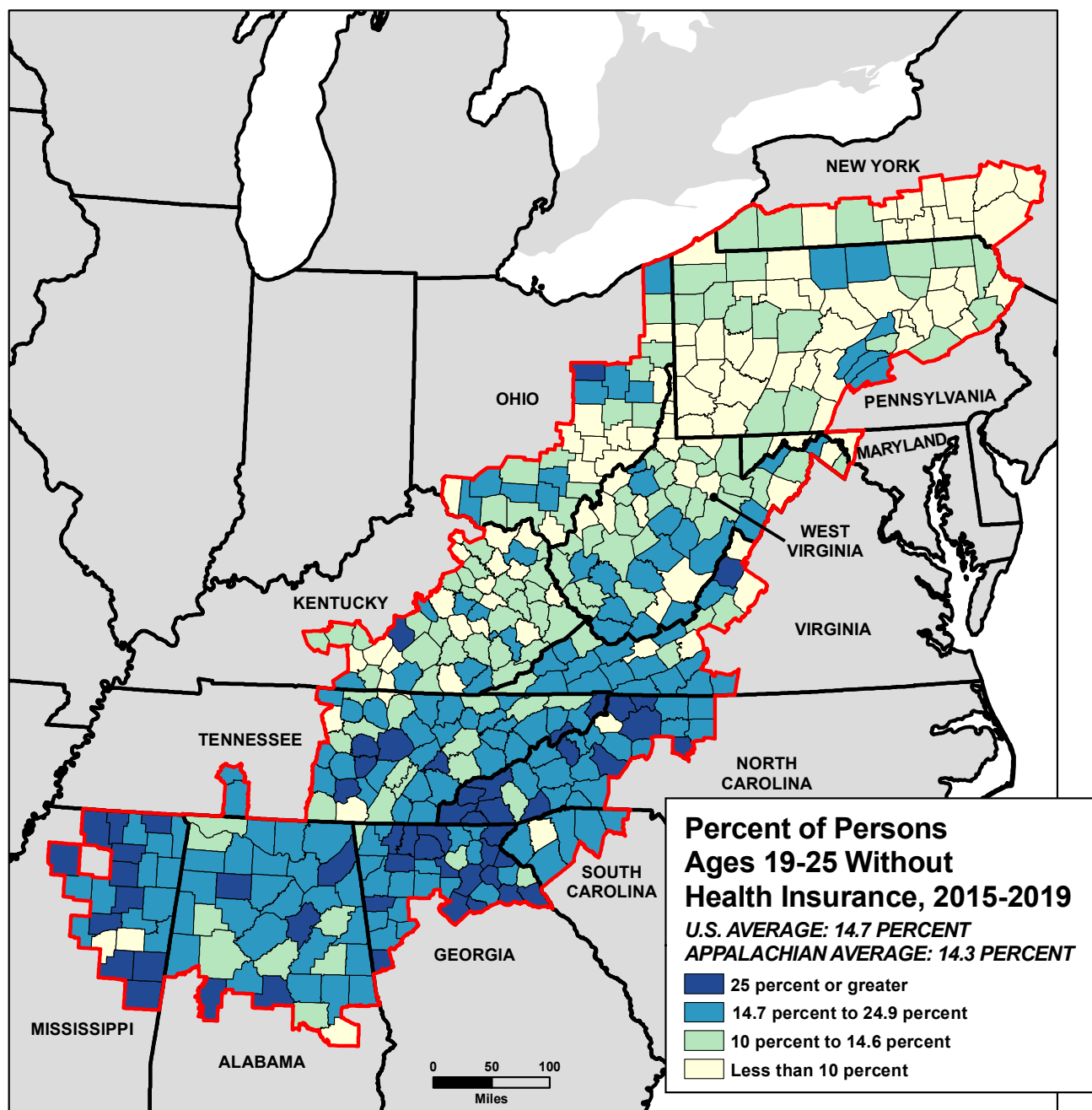
Figure 9.2: Percent of Persons Under Age 19 in the Appalachian Region Not Covered by Health Insurance, 2015-2019



Map Title: Percent of Persons Under Age 19 in the Appalachian Region Not Covered by Health Insurance, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Just under 5 percent of Appalachia's children and youth under age 19 were uninsured during 2015-2019, slightly below the national average. But the rate varied throughout the Region. On one hand, 127 counties had non-coverage rates under 3 percent; more than half were in West Virginia, Alabama, Pennsylvania, and Tennessee—the four states in the Region where less than 4 percent of children and youth lacked health insurance. Conversely, at least one in 10 persons under age 19 were without health insurance in 36 other counties. While the counties in the latter group were scattered throughout Appalachia, all but two of them were outside metropolitan areas, and eight of them were in Appalachian Georgia, where the uninsured rate for children and youth was 8.3 percent—more than three percentage points above the national average.

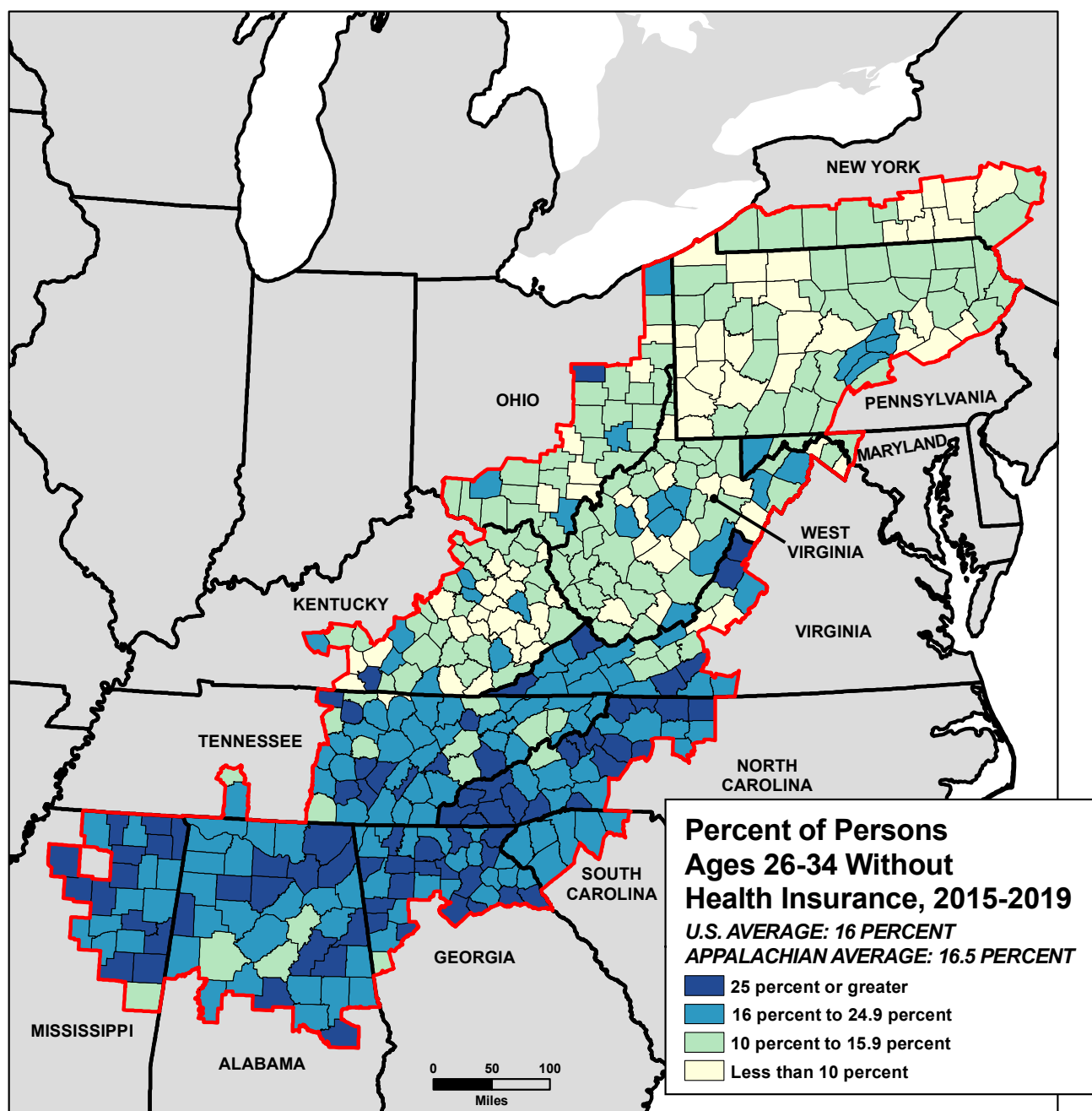
Figure 9.3: Percent of Persons Ages 19 to 25 in the Appalachian Region Not Covered by Health Insurance, 2015-2019



Map Title: Percent of Persons Ages 19 to 25 in the Appalachian Region Not Covered by Health Insurance, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

During the 2015-2019 period, one in seven Appalachian residents ages 19 to 25 did not have health insurance coverage. Although Appalachia's rate for these young adults was slightly below the national average of 14.7 percent, the non-coverage problem was especially prevalent in much of Southern Appalachia; in that subregion, one-fifth of 19-to-25-year-olds did not have coverage. This situation was especially dire in 55 counties, where non-coverage rates reached at least 25 percent. Among these counties, 28 were in either Georgia or Mississippi—the two states where the uninsured rate for young adults was well over 20 percent. (An additional 12 counties were in North Carolina, where 19.6 percent of 19-to-25-year-olds lacked insurance.) And 38 of those 55 counties were outside metropolitan areas. In contrast, 100 Appalachian counties had less than 10 percent of persons ages 19 to 25 without health insurance; most counties in this group were in Northern or North Central Appalachia, in metro areas, and/or had a four-year college or university within their boundaries.

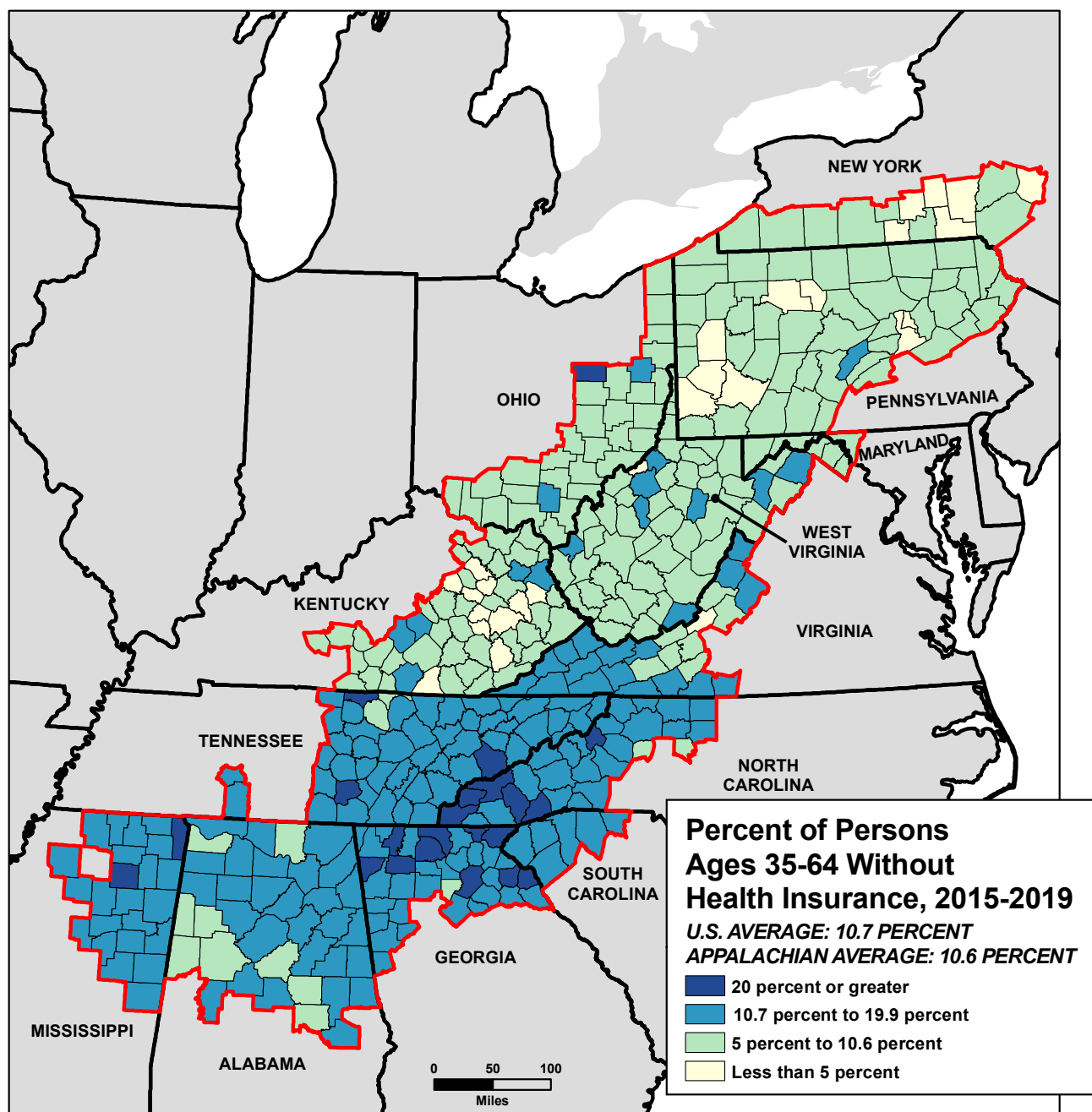
Figure 9.4: Percent of Persons Ages 26 to 34 in the Appalachian Region Not Covered by Health Insurance, 2015-2019



Map Title: Percent of Persons Ages 26 to 34 in the Appalachian Region Not Covered by Health Insurance, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Lack of health insurance coverage was highest among young adults ages 26 to 34—16.5 percent of Appalachian residents in this group were uninsured during the 2015-2019 period. This was the one age group where non-coverage was more prevalent in Appalachia than in the nation as a whole. And the situation was even worse in South Central and Southern Appalachia, where more than one in five 26-to-34-year-olds were without insurance. Indeed, these two subregions had 72 of the 79 counties where at least 25 percent of residents ages 26 to 34 lacked health insurance. However, nearly half of Appalachian counties did have non-coverage rates below the national average of 16 percent; these were overwhelmingly in the Northern, North Central, and Central subregions. And there were 71 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, 2015-2019



Map Title: Percent of Persons Ages 35 to 64 in the Appalachian Region Not Covered by Health Insurance, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In 2015-2019, 10.6 percent of Appalachia's working-age population ages 35 to 64 were not covered by health insurance—just under the national average. Yet there was great variation within the Region. For example, more than 15 percent of 35-to-64-year-olds in the Appalachian sections of Georgia, Mississippi, and North Carolina were uninsured; these three states accounted for 18 of the 22 counties with non-coverage rates of at least 20 percent for this age group. (Georgia alone had 10 of these counties.) By comparison, there were 27 Appalachian counties where less than 5 percent of working-age residents were not insured; all but two of the counties in this latter group were in New York, Pennsylvania, or Kentucky. (The rate was less than 6 percent in the Appalachian sections of New York and Pennsylvania.)

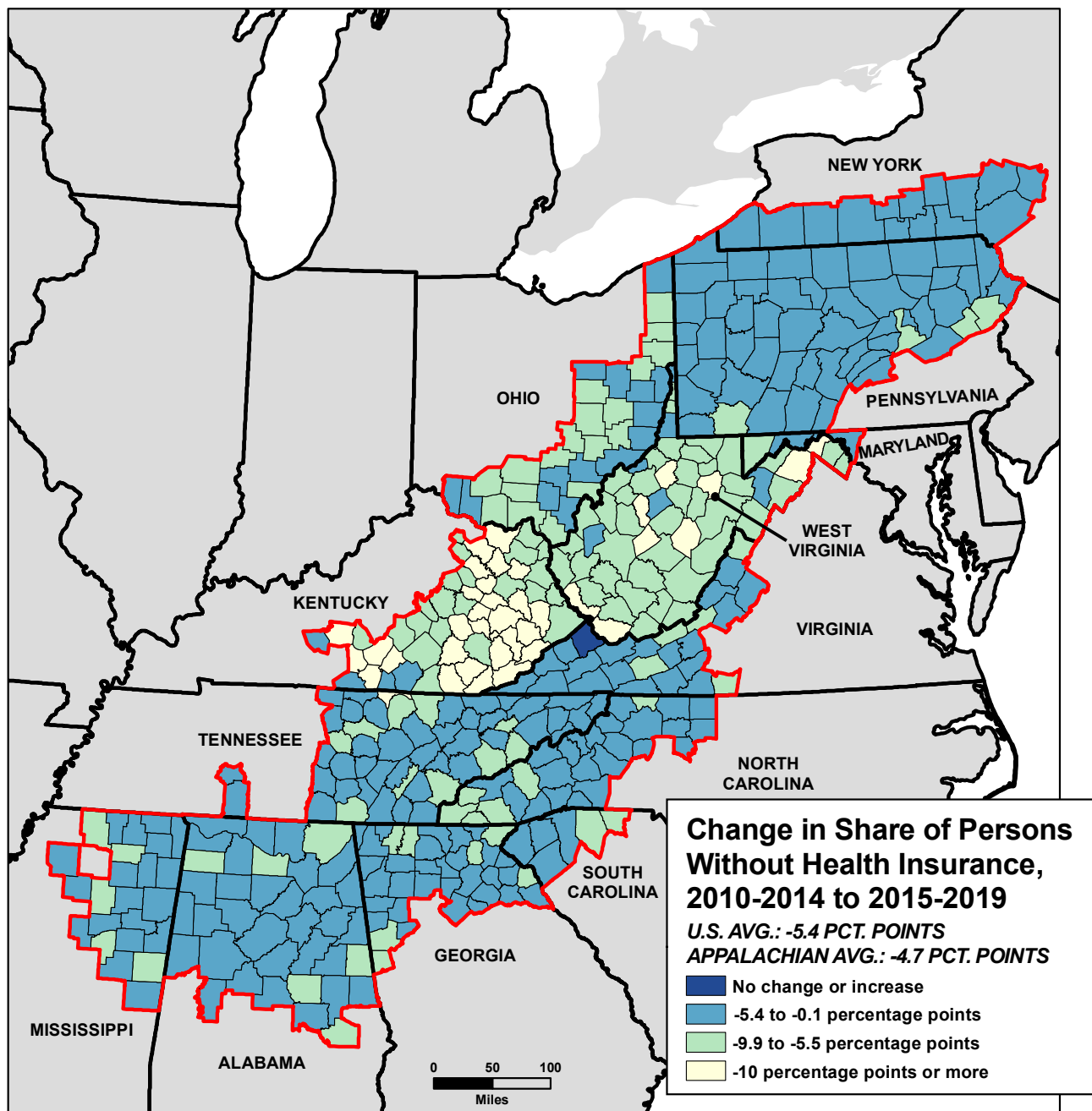
Table 9.3: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2010-2014 to 2015-2019

Health Insurance Status	All Ages	Under Age 35	Ages 35-64	Ages 65 and Over
United States	- 5.4	- 6.1	- 5.8	- 0.2
Appalachian Region	- 4.7	- 5.4	- 5.0	+ 0.0
Subregions				
Northern Appalachia	- 4.2	- 4.6	- 5.1	- 0.1
North Central Appalachia	- 6.6	- 7.6	- 7.7	+ 0.0
Central Appalachia	- 7.5	- 8.5	- 8.9	+ 0.0
South Central Appalachia	- 4.1	- 5.3	- 4.0	+ 0.0
Southern Appalachia	- 4.2	- 5.1	- 4.0	- 0.1
County Types				
Large Metros (pop. 1 million +)	- 3.8	- 4.4	- 4.0	- 0.2
Small Metros (pop. <1 million)	- 4.5	- 5.5	- 4.5	+ 0.0
Nonmetro, Adjacent to Large Metros	- 4.5	- 4.7	- 5.6	- 0.1
Nonmetro, Adjacent to Small Metros	- 5.4	- 6.3	- 6.2	+ 0.1
Rural (nonmetro, not adj. to a metro)	- 6.3	- 7.0	- 7.2	+ 0.0
Alabama	- 4.0	- 4.9	- 3.8	+ 0.0
Appalachian Alabama	- 3.8	- 4.9	- 3.6	+ 0.0
Non-Appalachian Alabama	- 4.2	- 4.8	- 4.3	+ 0.0
Georgia	- 5.1	- 5.7	- 5.0	- 0.2
Appalachian Georgia	- 4.4	- 5.0	- 4.1	- 0.2
Non-Appalachian Georgia	- 5.3	- 6.0	- 5.3	- 0.3
Kentucky	- 7.5	- 8.4	- 8.6	+ 0.0
Appalachian Kentucky	- 9.3	- 10.2	- 11.3	+ 0.0
Non-Appalachian Kentucky	- 6.8	- 7.8	- 7.6	+ 0.0
Maryland	- 3.8	- 4.2	- 4.1	- 0.3
Appalachian Maryland	- 3.6	- 3.0	- 5.4	- 0.5
Non-Appalachian Maryland	- 3.8	- 4.3	- 4.1	- 0.4
Mississippi	- 4.5	- 5.3	- 4.3	+ 0.0
Appalachian Mississippi	- 4.1	- 4.8	- 4.3	+ 0.1
Non-Appalachian Mississippi	- 4.6	- 5.4	- 4.4	+ 0.0
New York	- 4.8	- 5.8	- 5.0	- 0.2
Appalachian New York	- 3.9	- 4.2	- 4.6	- 0.1
Non-Appalachian New York	- 4.9	- 5.9	- 5.0	- 0.3
North Carolina	- 4.8	- 5.5	- 4.9	+ 0.0
Appalachian North Carolina	- 4.6	- 6.0	- 4.5	+ 0.1
Non-Appalachian North Carolina	- 4.8	- 5.5	- 5.0	+ 0.0
Ohio	- 4.8	- 4.8	- 6.1	+ 0.0
Appalachian Ohio	- 5.5	- 5.7	- 7.0	- 0.1
Non-Appalachian Ohio	- 4.6	- 4.7	- 5.8	+ 0.0
Pennsylvania	- 3.8	- 4.4	- 4.4	- 0.1
Appalachian Pennsylvania	- 4.0	- 4.5	- 4.8	+ 0.0
Non-Appalachian Pennsylvania	- 3.7	- 4.3	- 4.0	- 0.1
South Carolina	- 5.4	- 6.5	- 5.5	- 0.2
Appalachian South Carolina	- 5.4	- 6.6	- 5.3	+ 0.1
Non-Appalachian South Carolina	- 5.5	- 6.4	- 5.5	- 0.2
Tennessee	- 3.9	- 4.4	- 4.2	+ 0.0
Appalachian Tennessee	- 3.8	- 4.7	- 3.8	+ 0.0
Non-Appalachian Tennessee	- 4.0	- 4.3	- 4.5	- 0.1
Virginia	- 3.5	- 4.1	- 3.6	- 0.1
Appalachian Virginia	- 3.8	- 5.1	- 3.6	+ 0.1
Non-Appalachian Virginia	- 3.5	- 4.0	- 3.6	- 0.1
West Virginia (entire state)	- 7.2	- 8.5	- 8.1	+ 0.0

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

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Figure 9.6: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, 2010-2014 to 2015-2019



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

The share of Appalachian residents not covered by health insurance fell almost five percentage points between the 2010-2014 and 2015-2019 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 7.5 percentage points in Central Appalachia, more than seven points in West Virginia, and more than nine points in Appalachian Kentucky. Indeed, those two states alone accounted for 37 of the 38 Appalachian counties where the decline in non-coverage rates was at least 10 percentage points. But this did not happen everywhere in Appalachia: In fact, there was one county (Buchanan County, Virginia) where the share of residents who lacked health insurance in 2015-2019 exceeded the share without insurance in 2010-2014. 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 2010-2014 and 2015-2019 periods, the share of Appalachian residents not covered by health insurance fell almost five percentage points to 8.4 percent (see Tables 9.2 and 9.3). And this improvement was even greater in many parts of the Region: Non-coverage rates fell 7.5 percentage points in Central Appalachia and more than six points in North Central Appalachia and the Region's most rural counties. As for the Appalachian sections of states, uninsured rates fell more than nine points in Kentucky, more than seven points in West Virginia, and more than five points in Ohio and South Carolina. Indeed, non-coverage rates fell by at least 3.5 percentage points in every subregion, county type, and the Appalachian section of each state in the Region.
- 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 more than five percentage points lower in 2015-2019 than in 2010-2014. Provisions to expand health insurance 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, the Carolinas, and Ohio. (The uninsured rate among persons under age 35 fell by 10 percentage 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 Appalachia, the uninsured rate in this age group fell five percentage points, compared with 5.8 points nationwide. 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 2015-2019 than in 2010-2014. And most of the areas with the largest declines for the younger groups (North Central and Central Appalachia, rural counties, Kentucky, West Virginia, and Ohio) also 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 2015-2019. But job losses associated with the coronavirus pandemic—and the resulting loss of employer-based health insurance—may lead to a reversal of some of these improvements.

CHAPTER 10: DISABILITY STATUS

Table 10.1: Number of Persons in the Appalachian Region With a Disability, by Age Group, 2015-2019

Disability Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-34	Ages 35-64	
United States	40,335,099	3,084,450	20,187,604	4,668,076	15,519,528	17,063,045
Appalachian Region	4,070,994	278,004	2,111,072	428,213	1,682,859	1,681,918
Subregions						
Northern Appalachia	1,238,904	92,572	614,080	135,364	478,716	532,252
North Central Appalachia	441,114	29,312	235,211	46,145	189,066	176,591
Central Appalachia	432,735	26,965	246,917	41,939	204,978	158,853
South Central Appalachia	797,189	49,052	402,802	78,656	324,146	345,335
Southern Appalachia	1,161,052	80,103	612,062	126,109	485,953	468,887
County Types						
Large Metros (pop. 1 million +)	785,673	59,127	402,977	87,109	315,868	323,569
Small Metros (pop. <1 million)	1,678,077	116,523	864,124	179,994	684,130	697,430
Nonmetro, Adjacent to Large Metros	377,939	25,582	199,950	41,643	158,307	152,407
Nonmetro, Adjacent to Small Metros	736,790	47,312	379,119	71,930	307,189	310,359
Rural (nonmetro, not adj. to a metro)	492,515	29,460	264,902	47,537	217,365	198,153
Alabama	781,503	50,557	414,378	84,037	330,341	316,568
Appalachian Alabama	498,789	31,971	265,602	54,108	211,494	201,216
Non-Appalachian Alabama	282,714	18,586	148,776	29,929	118,847	115,352
Georgia	1,261,925	104,268	667,330	148,759	518,571	490,327
Appalachian Georgia	373,585	28,761	194,792	41,843	152,949	150,032
Non-Appalachian Georgia	888,340	75,507	472,538	106,916	365,622	340,295
Kentucky	762,404	58,039	426,593	88,570	338,023	277,772
Appalachian Kentucky	264,060	17,300	153,048	27,358	125,690	93,712
Non-Appalachian Kentucky	498,344	40,739	273,545	61,212	212,333	184,060
Maryland	652,374	53,839	326,345	78,928	247,417	272,190
Appalachian Maryland	39,595	3,217	20,772	4,570	16,202	15,606
Non-Appalachian Maryland	612,779	50,622	305,573	74,358	231,215	256,584
Mississippi	478,427	34,983	258,316	51,676	206,640	185,128
Appalachian Mississippi	104,413	5,941	56,559	11,409	45,150	41,913
Non-Appalachian Mississippi	374,014	29,042	201,757	40,267	161,490	143,215
New York	2,226,016	161,682	1,075,531	248,800	826,731	988,803
Appalachian New York	153,751	12,772	78,581	18,743	59,838	62,398
Non-Appalachian New York	2,072,265	148,910	996,950	230,057	766,893	926,405
North Carolina	1,352,783	99,472	695,377	147,341	548,036	557,934
Appalachian North Carolina	267,988	15,421	130,440	24,982	105,458	122,127
Non-Appalachian North Carolina	1,084,795	84,051	564,937	122,359	442,578	435,807
Ohio	1,605,634	130,119	834,506	189,626	644,880	641,009
Appalachian Ohio	330,434	22,733	176,943	36,444	140,499	130,758
Non-Appalachian Ohio	1,275,200	107,386	657,563	153,182	504,381	510,251
Pennsylvania	1,759,043	142,152	876,280	203,864	672,416	740,611
Appalachian Pennsylvania	857,646	64,757	420,137	93,949	326,188	372,752
Non-Appalachian Pennsylvania	901,397	77,395	456,143	109,915	346,228	367,859
South Carolina	715,960	50,386	367,491	72,955	294,536	298,083
Appalachian South Carolina	184,265	13,430	95,109	18,749	76,360	75,726
Non-Appalachian South Carolina	531,695	36,956	272,382	54,206	218,176	222,357
Tennessee	1,015,603	72,511	540,478	110,177	430,301	402,614
Appalachian Tennessee	506,139	32,263	264,239	49,390	214,849	209,637
Non-Appalachian Tennessee	509,464	40,248	276,239	60,787	215,452	192,977
Virginia	968,651	75,519	486,156	114,902	371,254	406,976
Appalachian Virginia	140,899	8,177	73,330	14,370	58,960	59,392
Non-Appalachian Virginia	827,752	67,342	412,826	100,532	312,294	347,584
West Virginia (entire state)	349,430	21,261	181,520	32,298	149,222	146,649

Note: The ACS defines persons with a disability as those 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, 2015-2019 American Community Survey.

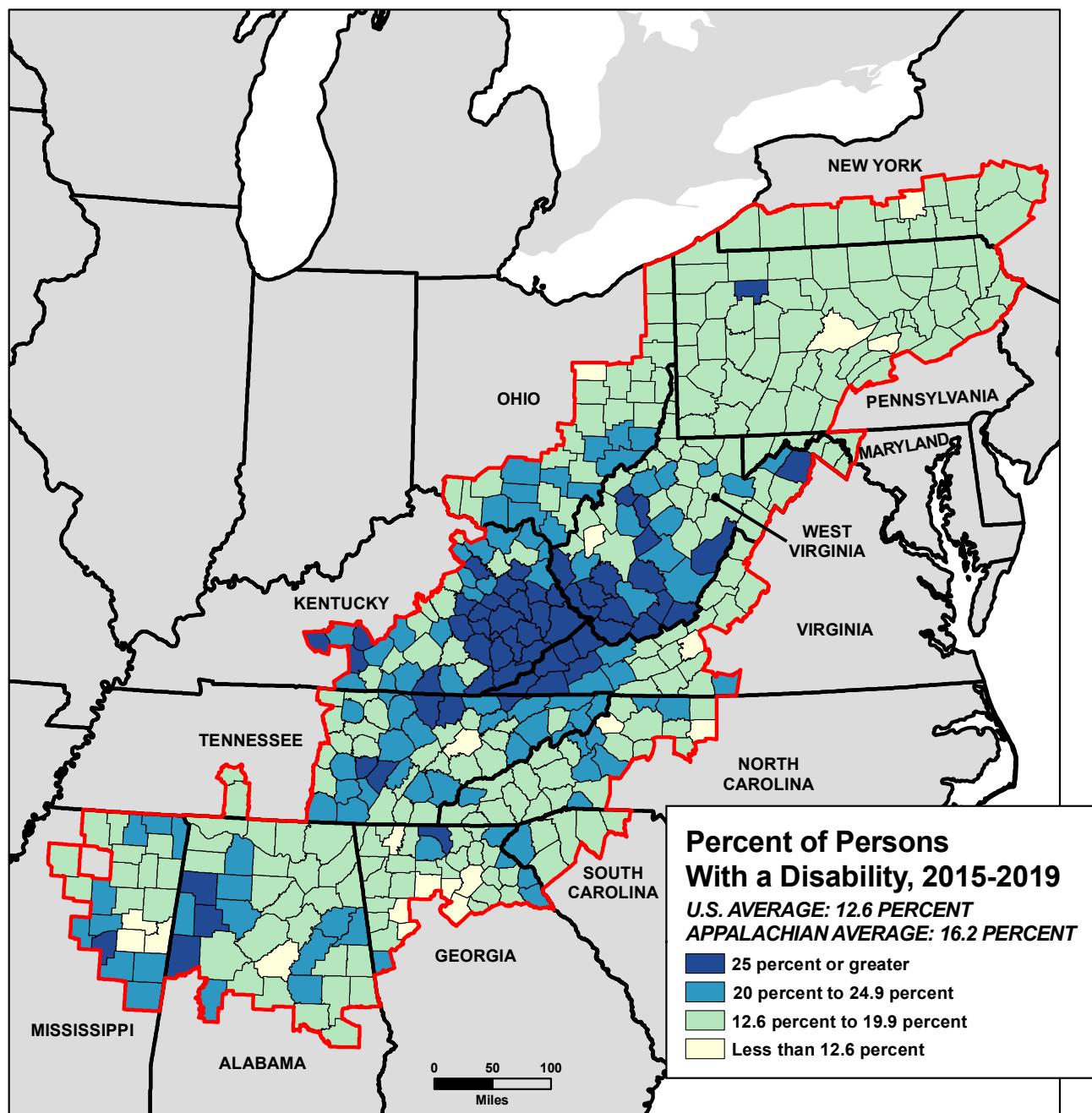
Table 10.2: Percent of Persons in the Appalachian Region With a Disability, by Age Group, 2015-2019

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	6.3	12.6	34.5
Appalachian Region	16.2	5.1	13.8	7.9	17.0	37.7
Subregions						
Northern Appalachia	15.4	5.8	12.6	7.8	15.2	34.6
North Central Appalachia	18.7	5.8	16.5	9.3	20.3	41.0
Central Appalachia	23.7	6.7	22.5	11.5	27.9	48.0
South Central Appalachia	16.6	5.0	13.9	7.7	17.3	37.4
Southern Appalachia	14.2	4.1	12.3	7.0	15.2	37.9
County Types						
Large Metros (pop. 1 million +)	13.0	4.3	10.8	6.7	13.0	34.3
Small Metros (pop. <1 million)	15.7	5.2	13.2	7.6	16.5	36.9
Nonmetro, Adjacent to Large Metros	17.6	5.5	15.5	9.3	18.8	38.6
Nonmetro, Adjacent to Small Metros	19.0	5.8	16.6	9.4	20.2	40.0
Rural (nonmetro, not adj. to a metro)	20.1	5.6	18.2	9.3	22.9	42.9
Alabama	16.3	4.6	14.2	7.8	17.9	40.3
Appalachian Alabama	16.2	4.6	14.1	7.9	17.7	40.0
Non-Appalachian Alabama	16.4	4.7	14.3	7.7	18.3	40.8
Georgia	12.4	4.2	10.5	6.3	13.1	35.6
Appalachian Georgia	11.7	3.5	9.9	6.2	11.9	34.8
Non-Appalachian Georgia	12.7	4.5	10.8	6.4	13.6	36.0
Kentucky	17.5	5.8	16.0	9.1	19.9	40.4
Appalachian Kentucky	23.1	6.8	22.1	11.5	27.7	48.0
Non-Appalachian Kentucky	15.5	5.4	13.8	8.4	17.0	37.4
Maryland	11.0	4.0	8.8	6.0	10.4	31.0
Appalachian Maryland	16.7	6.3	14.6	9.2	17.5	35.9
Non-Appalachian Maryland	10.8	3.9	8.6	5.8	10.1	30.7
Mississippi	16.4	4.9	14.7	7.9	18.8	41.4
Appalachian Mississippi	17.0	4.1	15.2	8.1	19.7	42.1
Non-Appalachian Mississippi	16.2	5.1	14.5	7.8	18.5	41.1
New York	11.5	3.9	8.8	5.4	11.0	32.4
Appalachian New York	15.2	6.4	12.5	7.7	15.6	33.4
Non-Appalachian New York	11.3	3.8	8.6	5.2	10.7	32.3
North Carolina	13.4	4.3	11.3	6.6	13.9	35.1
Appalachian North Carolina	15.5	4.4	12.6	7.0	15.5	35.3
Non-Appalachian North Carolina	13.0	4.3	11.0	6.5	13.6	35.1
Ohio	14.0	5.0	11.9	7.4	14.5	34.2
Appalachian Ohio	16.9	5.3	15.1	9.2	18.2	36.6
Non-Appalachian Ohio	13.4	4.9	11.3	7.1	13.7	33.7
Pennsylvania	14.0	5.4	11.3	7.3	13.7	33.6
Appalachian Pennsylvania	15.4	5.9	12.4	7.9	14.8	34.7
Non-Appalachian Pennsylvania	12.8	5.0	10.5	6.8	12.7	32.6
South Carolina	14.5	4.6	12.3	6.7	15.5	35.2
Appalachian South Carolina	14.6	4.7	12.4	6.6	15.8	37.0
Non-Appalachian South Carolina	14.5	4.5	12.3	6.8	15.4	34.7
Tennessee	15.4	4.8	13.3	7.4	16.8	38.5
Appalachian Tennessee	17.7	5.4	15.3	8.2	19.2	39.6
Non-Appalachian Tennessee	13.6	4.5	11.9	6.9	14.9	37.3
Virginia	11.8	4.1	9.5	6.1	11.4	32.7
Appalachian Virginia	19.2	6.0	16.4	8.8	20.7	40.1
Non-Appalachian Virginia	11.0	3.9	8.8	5.9	10.5	31.7
West Virginia (entire state)	19.5	5.8	16.9	8.8	21.0	42.7

Note: The ACS defines persons with a disability as those 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, 2015-2019 American Community Survey.

Figure 10.1: Percent of Persons in the Appalachian Region With a Disability, 2015-2019

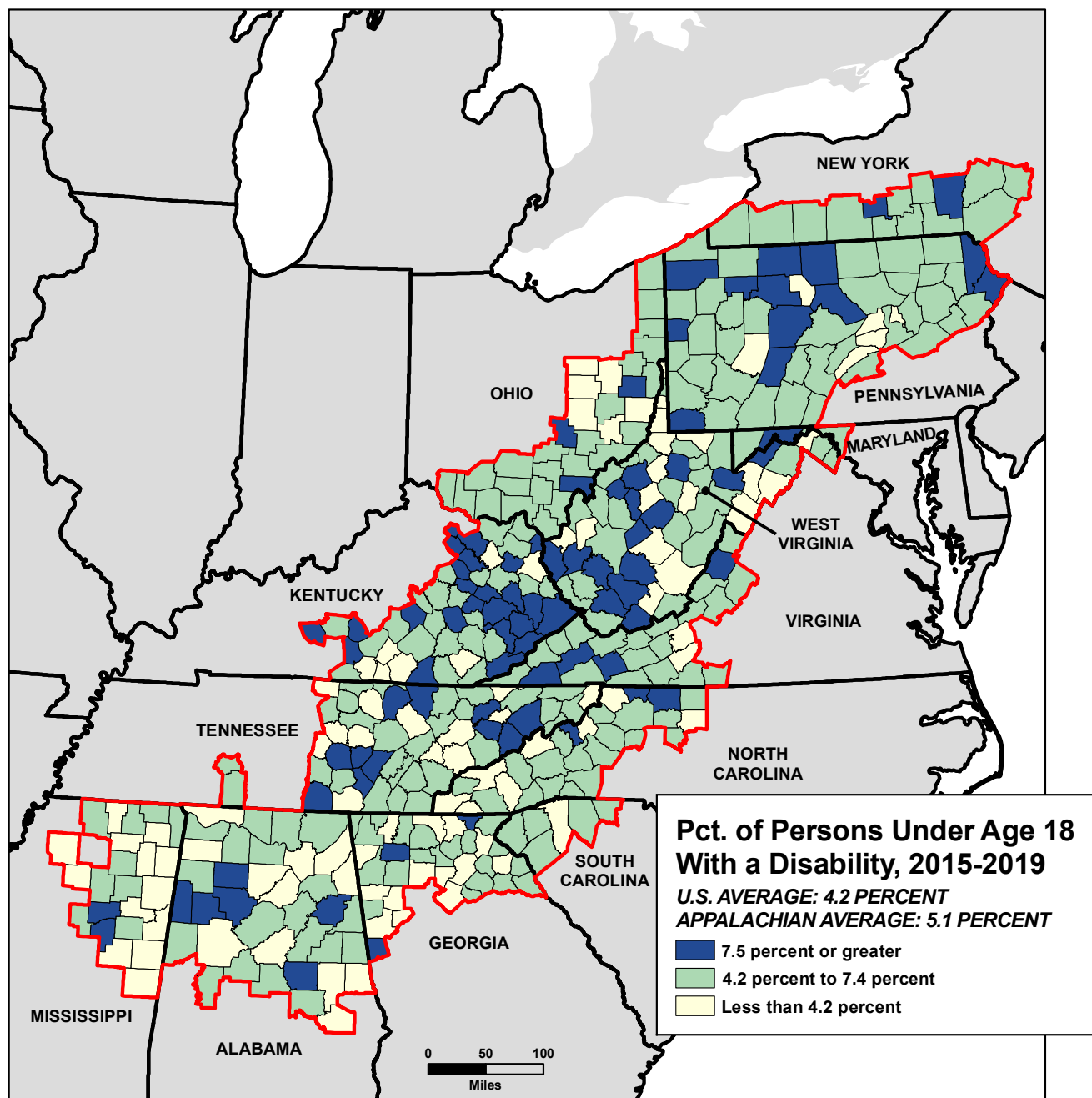


Map Title: Percent of Persons in the Appalachian Region With a Disability, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In the 2015-2019 period, almost 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 57 counties, 32 of which were in Appalachia's most rural counties (where the overall disability rate was just over 20 percent). Kentucky and West Virginia—the two states with the highest levels of disability in the Region—combined for 40 of these counties. Appalachia's relatively high disability rate corresponds to the population's older age structure: Among the 57 counties with the highest disability prevalence levels, the share of residents age 65 or older exceeded the national average (16.5 percent in mid-2019) in all but two of them. And in 31 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, 2015-2019

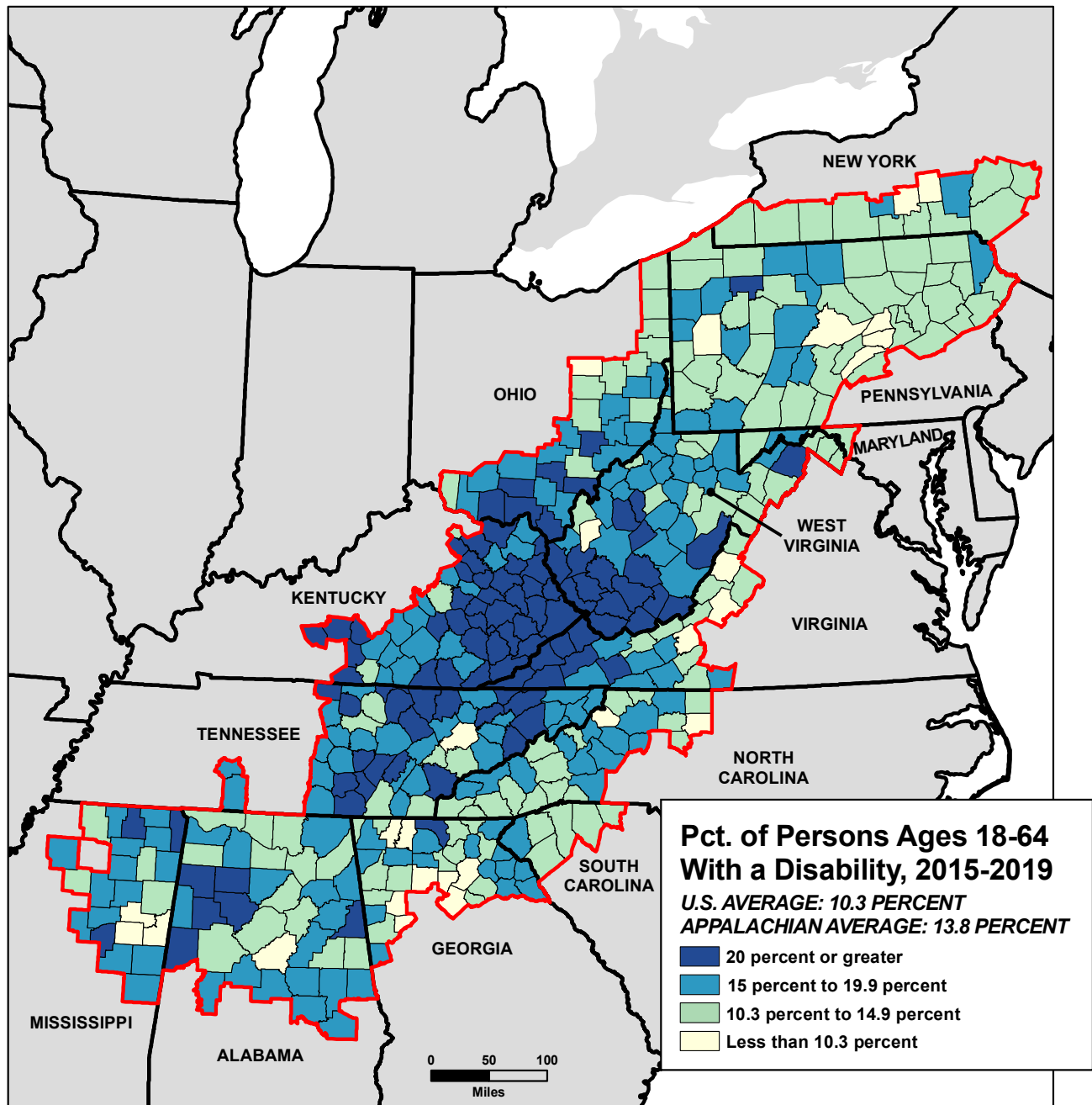


Map Title: Percent of Persons Under Age 18 in the Appalachian Region With a Disability, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

At 5.1 percent, the prevalence of disability among children under age 18 in Appalachia was slightly higher than the national average during the 2015-2019 period. But there was variation within the Region. For example, the rate was at least 7.5 percent in 86 counties, 65 of which were outside metropolitan areas. In 99 other counties, however, the disability prevalence was below the national average of 4.2 percent. Two-fifths 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, 2015-2019

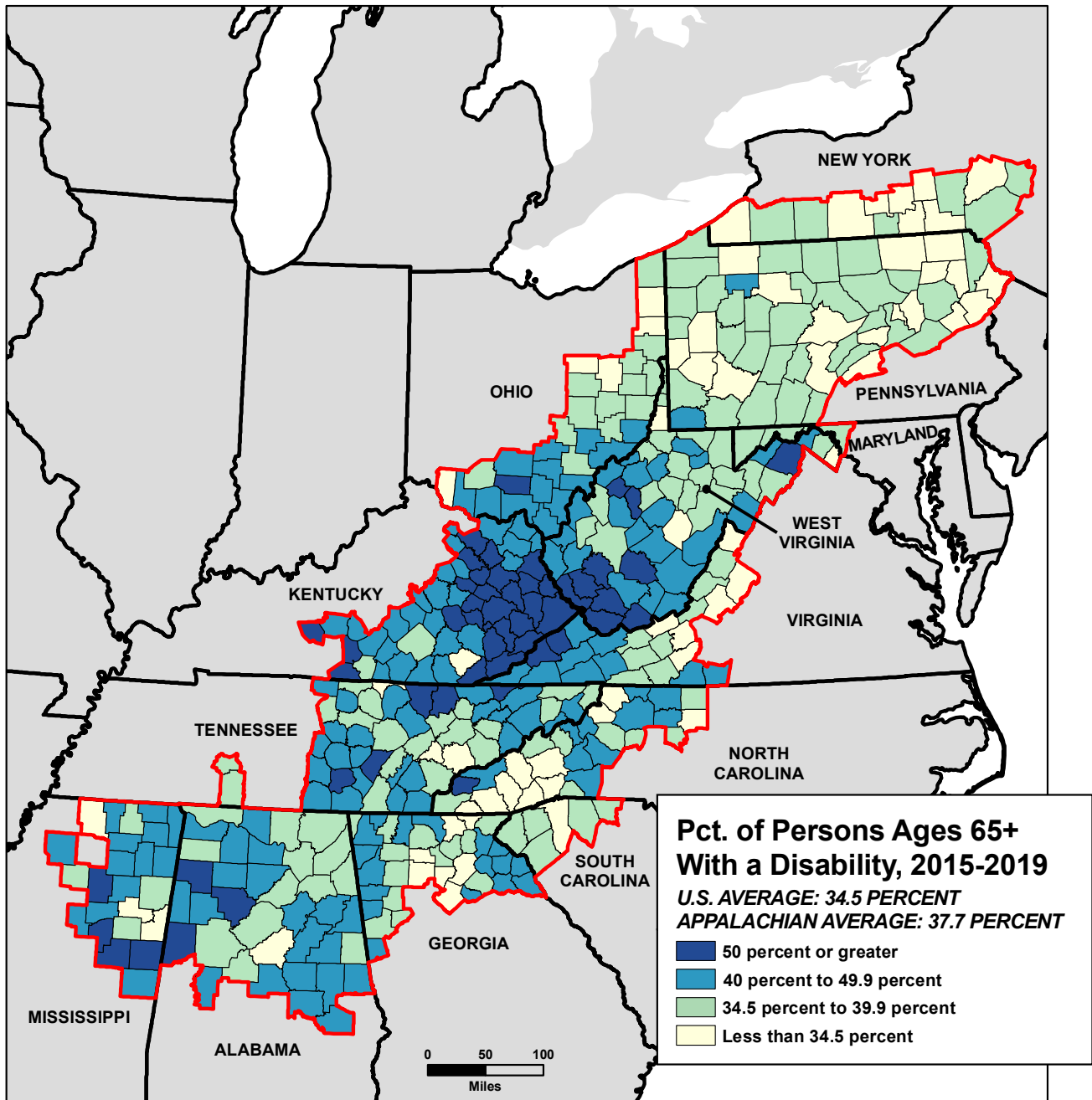


Map Title: Percent of Persons Ages 18 to 64 in the Appalachian Region With a Disability, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In the 2015-2019 period, nearly 14 percent of adults ages 18 to 64 in Appalachia reported a disability, compared with just over 10 percent nationally. Disability prevalence was particularly high in some parts of the Region: In Central Appalachia, for example, 22.5 percent of working-age adults had a disability. Indeed, Central Appalachia had 58 of the 97 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, 2015-2019



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region With a Disability, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Almost 38 percent of adults ages 65 and over in the Appalachian Region reported a disability in the 2015-2019 period, more than 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 36 of the 52 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 24 of these 52 counties, the share of 18-to-64-year-olds with a disability was at or above 25 percent—almost 2.5 times the national average for that age group. In 67 other Appalachian counties, however, the disability rate for the older population actually was lower than the national average. Almost half of these low-prevalence counties were in Northern Appalachia—the only subregion where the disability prevalence rate for older residents, at 34.6 percent, was not at least 2.5 percentage points above the national average.

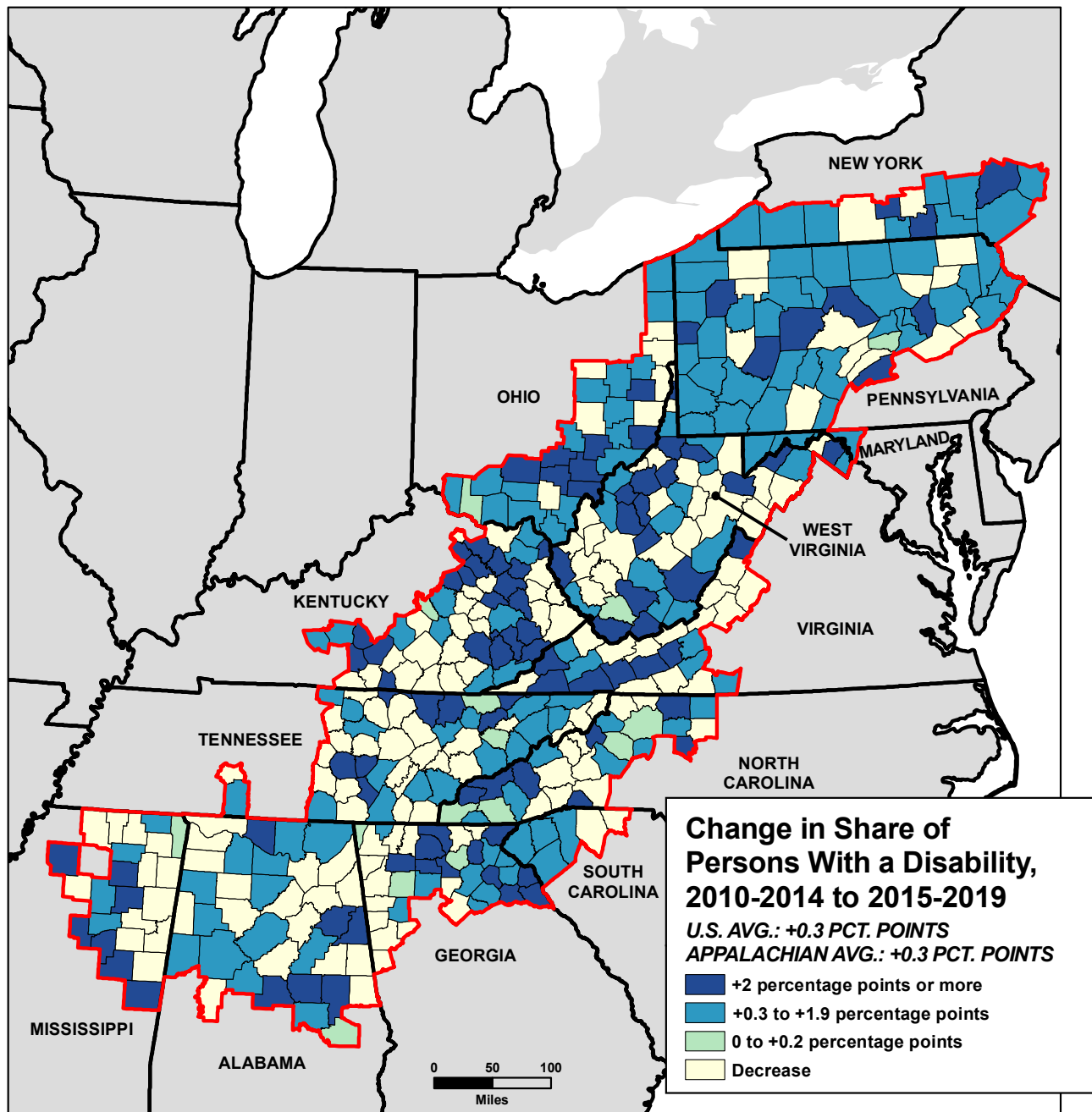
Table 10.3: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, by Age Group, 2010-2014 to 2015-2019

Disability Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-34	Ages 35-64	
United States	+ 0.3	+ 0.1	+ 0.1	+ 0.6	- 0.2	- 1.8
Appalachian Region	+ 0.3	+ 0.2	+ 0.0	+ 0.5	- 0.3	- 1.8
Subregions						
Northern Appalachia	+ 0.7	+ 0.4	+ 0.6	+ 0.8	+ 0.5	- 1.4
North Central Appalachia	+ 0.7	+ 0.2	+ 0.4	+ 0.6	+ 0.3	- 1.4
Central Appalachia	+ 0.4	+ 0.7	- 0.2	+ 0.4	- 0.5	- 2.1
South Central Appalachia	+ 0.0	+ 0.0	- 0.5	+ 0.4	- 0.7	- 1.7
Southern Appalachia	+ 0.0	+ 0.1	- 0.3	+ 0.4	- 0.7	- 2.6
County Types						
Large Metros (pop. 1 million +)	+ 0.3	+ 0.1	+ 0.0	+ 0.6	- 0.2	- 2.0
Small Metros (pop. <1 million)	+ 0.3	+ 0.4	- 0.1	+ 0.5	- 0.2	- 1.9
Nonmetro, Adjacent to Large Metros	+ 1.0	+ 0.1	+ 0.9	+ 1.6	+ 0.6	- 1.0
Nonmetro, Adjacent to Small Metros	+ 0.5	+ 0.2	+ 0.0	+ 0.6	- 0.1	- 1.2
Rural (nonmetro, not adj. to a metro)	- 0.3	+ 0.1	- 0.7	+ 0.2	- 1.2	- 2.7
Alabama	+ 0.2	- 0.1	- 0.2	+ 0.5	- 0.6	- 2.1
Appalachian Alabama	+ 0.2	+ 0.2	- 0.1	+ 0.7	- 0.5	- 2.2
Non-Appalachian Alabama	- 0.1	- 0.5	- 0.4	+ 0.1	- 0.7	- 2.0
Georgia	+ 0.3	+ 0.3	- 0.2	+ 0.5	- 0.4	- 2.7
Appalachian Georgia	+ 0.1	- 0.1	- 0.3	+ 0.5	- 0.6	- 3.0
Non-Appalachian Georgia	+ 0.4	+ 0.5	- 0.1	+ 0.6	- 0.4	- 2.5
Kentucky	+ 0.5	+ 0.2	+ 0.4	+ 0.7	+ 0.2	- 2.1
Appalachian Kentucky	+ 0.2	+ 0.3	- 0.3	+ 0.4	- 0.5	- 1.8
Non-Appalachian Kentucky	+ 0.7	+ 0.1	+ 0.6	+ 1.0	+ 0.6	- 2.1
Maryland	+ 0.6	+ 0.3	+ 0.5	+ 1.1	+ 0.2	- 1.9
Appalachian Maryland	+ 0.9	- 0.2	+ 1.0	+ 0.4	+ 1.4	- 0.6
Non-Appalachian Maryland	+ 0.7	+ 0.3	+ 0.5	+ 1.0	+ 0.2	- 2.0
Mississippi	+ 0.0	+ 0.3	- 0.3	+ 0.5	- 0.7	- 3.7
Appalachian Mississippi	- 0.9	- 0.1	- 1.4	+ 0.5	- 2.3	- 4.3
Non-Appalachian Mississippi	+ 0.2	+ 0.4	+ 0.0	+ 0.5	- 0.4	- 3.6
New York	+ 0.5	+ 0.2	+ 0.3	+ 0.7	+ 0.2	- 1.7
Appalachian New York	+ 1.2	+ 0.9	+ 0.9	+ 0.8	+ 1.1	- 1.3
Non-Appalachian New York	+ 0.5	+ 0.2	+ 0.2	+ 0.6	+ 0.1	- 1.7
North Carolina	+ 0.0	- 0.1	- 0.2	+ 0.5	- 0.6	- 2.7
Appalachian North Carolina	+ 0.2	- 0.4	- 0.2	+ 0.4	- 0.5	- 1.5
Non-Appalachian North Carolina	+ 0.0	- 0.1	- 0.2	+ 0.5	- 0.6	- 3.0
Ohio	+ 0.5	+ 0.1	+ 0.3	+ 0.7	+ 0.3	- 1.5
Appalachian Ohio	+ 0.8	+ 0.0	+ 0.7	+ 1.1	+ 0.7	- 1.5
Non-Appalachian Ohio	+ 0.5	+ 0.1	+ 0.3	+ 0.7	+ 0.2	- 1.4
Pennsylvania	+ 0.7	+ 0.4	+ 0.5	+ 0.8	+ 0.5	- 1.3
Appalachian Pennsylvania	+ 0.7	+ 0.5	+ 0.6	+ 1.1	+ 0.4	- 1.5
Non-Appalachian Pennsylvania	+ 0.6	+ 0.3	+ 0.5	+ 0.6	+ 0.5	- 1.0
South Carolina	+ 0.3	+ 0.5	- 0.2	+ 0.4	- 0.5	- 2.3
Appalachian South Carolina	+ 0.4	+ 0.5	- 0.1	+ 0.2	- 0.1	- 1.3
Non-Appalachian South Carolina	+ 0.3	+ 0.4	- 0.2	+ 0.5	- 0.6	- 2.5
Tennessee	+ 0.2	+ 0.2	- 0.4	+ 0.3	- 0.5	- 1.6
Appalachian Tennessee	- 0.1	+ 0.2	- 0.7	+ 0.1	- 0.9	- 1.5
Non-Appalachian Tennessee	+ 0.4	+ 0.3	+ 0.0	+ 0.5	- 0.2	- 1.8
Virginia	+ 0.8	+ 0.5	+ 0.4	+ 1.0	+ 0.1	- 1.5
Appalachian Virginia	+ 0.4	+ 1.8	+ 0.0	+ 1.1	- 0.6	- 3.5
Non-Appalachian Virginia	+ 0.8	+ 0.4	+ 0.5	+ 1.0	+ 0.2	- 1.1
West Virginia (entire state)	+ 0.2	+ 0.3	- 0.5	- 0.3	- 0.5	- 1.4

Note: The ACS defines persons with a disability as those 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, 2010-2014 and 2015-2019 American Community Surveys.

Figure 10.5: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, 2010-2014 to 2015-2019



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

The share of Appalachian residents reporting a disability was 0.3 percentage points higher in 2015-2019 than it was in 2010-2014, matching the national average. However, the increase in disability prevalence between the two periods was higher in much of the Region, rising at least two percentage points in 101 of Appalachia's 420 counties. The counties in this group were scattered throughout Appalachia, and at least one in five residents were age 65 or older in 63 of them—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 160 of the Region's counties.

TRENDS IN DISABILITY STATUS

- At 16.2 percent in 2015-2019, the share of Appalachian residents reporting a disability was 0.3 percentage points higher than it was in 2010-2014 (see Tables 10.2 and 10.3). Within the Region, the greatest increases in disability prevalence occurred in Northern and North Central Appalachia, nonmetropolitan counties adjacent to large metro areas, and the Appalachian sections of New York, Maryland, Ohio, and Pennsylvania. But disability prevalence did not increase everywhere in Appalachia: The disability share remained the same in South Central and Southern Appalachia and fell in the most rural counties and the Appalachian sections of Mississippi and Tennessee. (Mississippi's prevalence rate fell almost a full percentage point.)
- Disability prevalence in Appalachia increased by half a percentage point among young adults ages 18-34, but barely rose for children and decreased among persons ages 35-64. And there were variations within the Region in each case. In Virginia's Appalachian section, for example, disability rates rose 1.8 percentage points for children and 1.1 points for adults ages 18-34, but fell slightly (0.6 points) among 35-to-64-year-olds. Conversely, disability prevalence rose among all three age groups in Appalachian New York: 0.9 points among children, 0.8 points for young adults ages 18-34, and 1.1 points for adults ages 35-64.
- In contrast, the prevalence of disability fell 1.8 percentage points among persons ages 65 and over. The decline was greatest in Southern Appalachia (2.6 points) and in the Region's most rural counties (2.7 points), while the decrease was much more modest in nonmetropolitan counties bordering metros (around one point). Among the states, Georgia, Mississippi, and Virginia had the largest decreases among older persons (three or more percentage points in each case), while the rate fell just 0.6 points in Appalachian Maryland.
- The aging of Appalachia's population has long been linked to 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 noticeably 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.

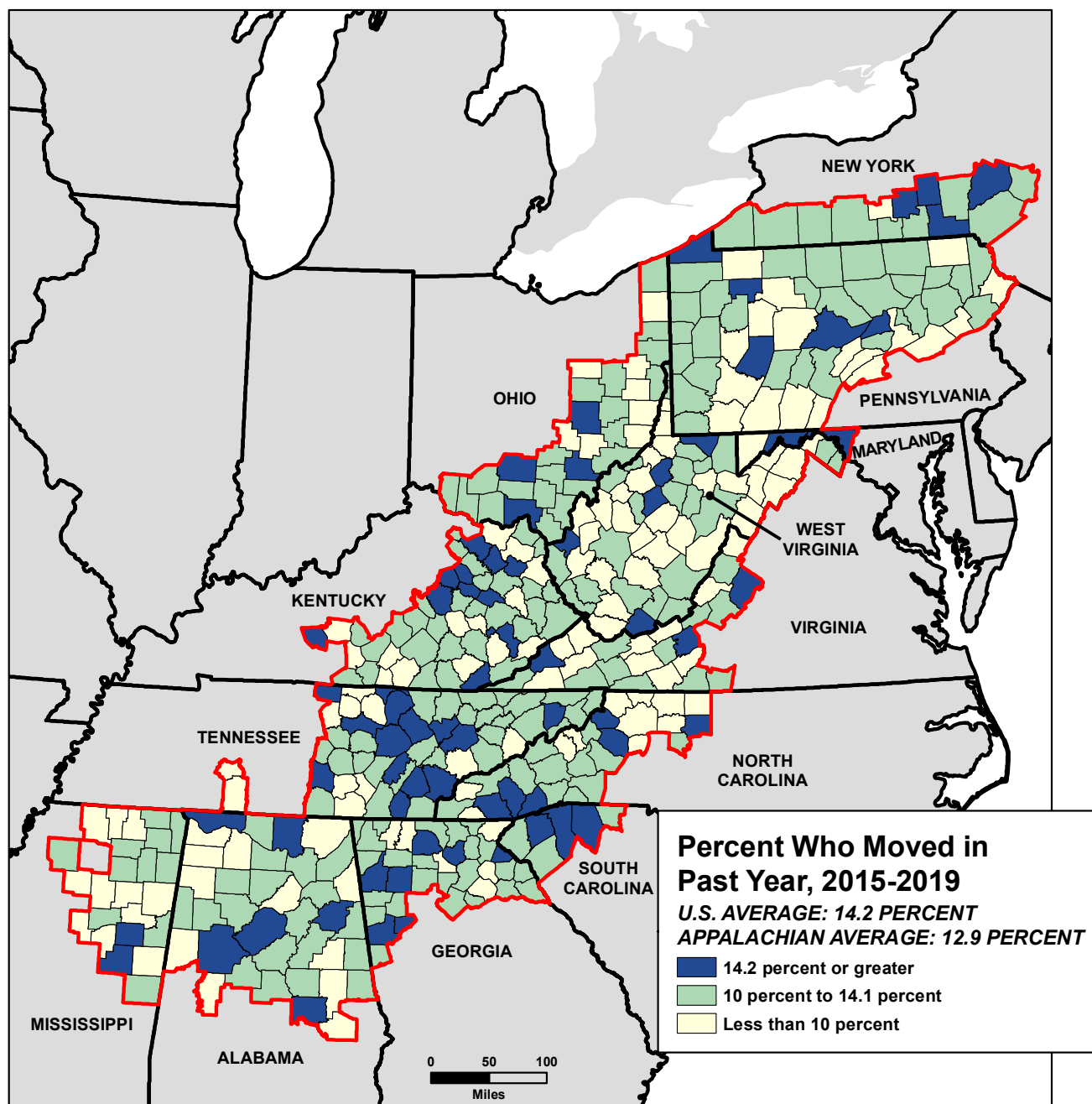
CHAPTER 11: MIGRATION

Table 11.1: Mobility Status of Persons Ages 1 and Over in the Appalachian Region, 2015-2019

Mobility Status in the Last Year	Total Population Ages 1 and Over, 2015-2019	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	320,984,519	85.8	14.2	8.0	6.2	3.2	3.0
Appalachian Region	25,326,521	87.1	12.9	7.1	5.8	3.4	2.4
Subregions							
Northern Appalachia	8,113,328	87.7	12.3	7.3	5.0	2.9	2.1
North Central Appalachia	2,377,933	87.3	12.7	6.9	5.7	3.4	2.3
Central Appalachia	1,849,262	88.0	12.0	6.5	5.6	3.6	1.9
South Central Appalachia	4,827,180	86.6	13.4	7.1	6.4	3.5	2.8
Southern Appalachia	8,158,818	86.6	13.4	7.1	6.3	3.7	2.6
County Types							
Large Metros (pop. 1 million +)	6,031,851	87.2	12.8	7.1	5.7	3.3	2.4
Small Metros (pop. <1 million)	10,727,974	86.3	13.7	7.6	6.1	3.3	2.8
Nonmetro, Adjacent to Large Metros	2,176,730	87.5	12.5	7.0	5.5	3.9	1.6
Nonmetro, Adjacent to Small Metros	3,913,616	88.4	11.6	6.4	5.2	3.2	2.0
Rural (nonmetro, not adj. to a metro)	2,476,350	88.2	11.8	6.3	5.5	3.6	1.8
Alabama	4,821,196	86.3	13.7	8.0	5.7	3.1	2.6
Appalachian Alabama	3,089,660	86.3	13.7	8.1	5.7	3.4	2.3
Non-Appalachian Alabama	1,731,536	86.3	13.7	8.0	5.7	2.5	3.2
Georgia	10,277,909	84.9	15.1	7.0	8.0	4.7	3.3
Appalachian Georgia	3,194,220	87.4	12.6	5.8	6.8	4.2	2.6
Non-Appalachian Georgia	7,083,689	83.8	16.2	7.6	8.6	5.0	3.6
Kentucky	4,397,723	84.9	15.1	8.5	6.7	3.8	2.8
Appalachian Kentucky	1,152,853	87.5	12.5	6.7	5.9	4.0	1.9
Non-Appalachian Kentucky	3,244,870	84.0	16.0	9.1	6.9	3.8	3.1
Maryland	5,950,984	86.4	13.6	7.2	6.4	3.0	3.4
Appalachian Maryland	248,357	86.0	14.0	8.1	6.0	3.5	2.5
Non-Appalachian Maryland	5,702,627	86.4	13.6	7.2	6.4	2.9	3.5
Mississippi	2,949,899	86.9	13.1	7.0	6.1	3.5	2.6
Appalachian Mississippi	618,711	88.1	11.9	6.7	5.2	3.5	1.6
Non-Appalachian Mississippi	2,331,188	86.6	13.4	7.1	6.3	3.5	2.8
New York	19,355,634	89.5	10.5	5.9	4.6	2.5	2.1
Appalachian New York	1,018,642	86.2	13.8	7.9	5.9	3.5	2.4
Non-Appalachian New York	18,336,992	89.7	10.3	5.8	4.5	2.4	2.1
North Carolina	10,148,819	84.8	15.2	7.8	7.4	3.7	3.7
Appalachian North Carolina	1,737,515	87.5	12.5	6.3	6.2	3.5	2.7
Non-Appalachian North Carolina	8,411,304	84.2	15.8	8.1	7.7	3.8	3.9
Ohio	11,521,243	85.3	14.7	9.1	5.6	3.4	2.1
Appalachian Ohio	1,977,485	87.6	12.4	7.4	5.0	3.4	1.6
Non-Appalachian Ohio	9,543,758	84.8	15.2	9.5	5.7	3.4	2.2
Pennsylvania	12,656,430	87.6	12.4	7.2	5.2	2.8	2.4
Appalachian Pennsylvania	5,627,732	87.8	12.2	7.2	5.0	2.8	2.2
Non-Appalachian Pennsylvania	7,028,698	87.5	12.5	7.2	5.4	2.7	2.6
South Carolina	4,964,250	85.7	14.3	7.2	7.1	3.2	3.9
Appalachian South Carolina	1,256,227	84.8	15.2	8.3	6.9	3.5	3.4
Non-Appalachian South Carolina	3,708,023	86.0	14.0	6.8	7.2	3.1	4.1
Tennessee	6,634,641	85.5	14.5	8.1	6.4	3.2	3.3
Appalachian Tennessee	2,864,896	86.2	13.8	7.6	6.2	3.4	2.8
Non-Appalachian Tennessee	3,769,745	85.0	15.0	8.4	6.6	3.0	3.6
Virginia	8,356,873	84.7	15.3	6.3	8.9	4.9	4.0
Appalachian Virginia	742,057	87.0	13.0	6.2	6.8	4.2	2.6
Non-Appalachian Virginia	7,614,816	84.5	15.5	6.3	9.1	5.0	4.1
West Virginia (entire state)	1,798,166	88.3	11.7	6.4	5.3	2.7	2.6

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

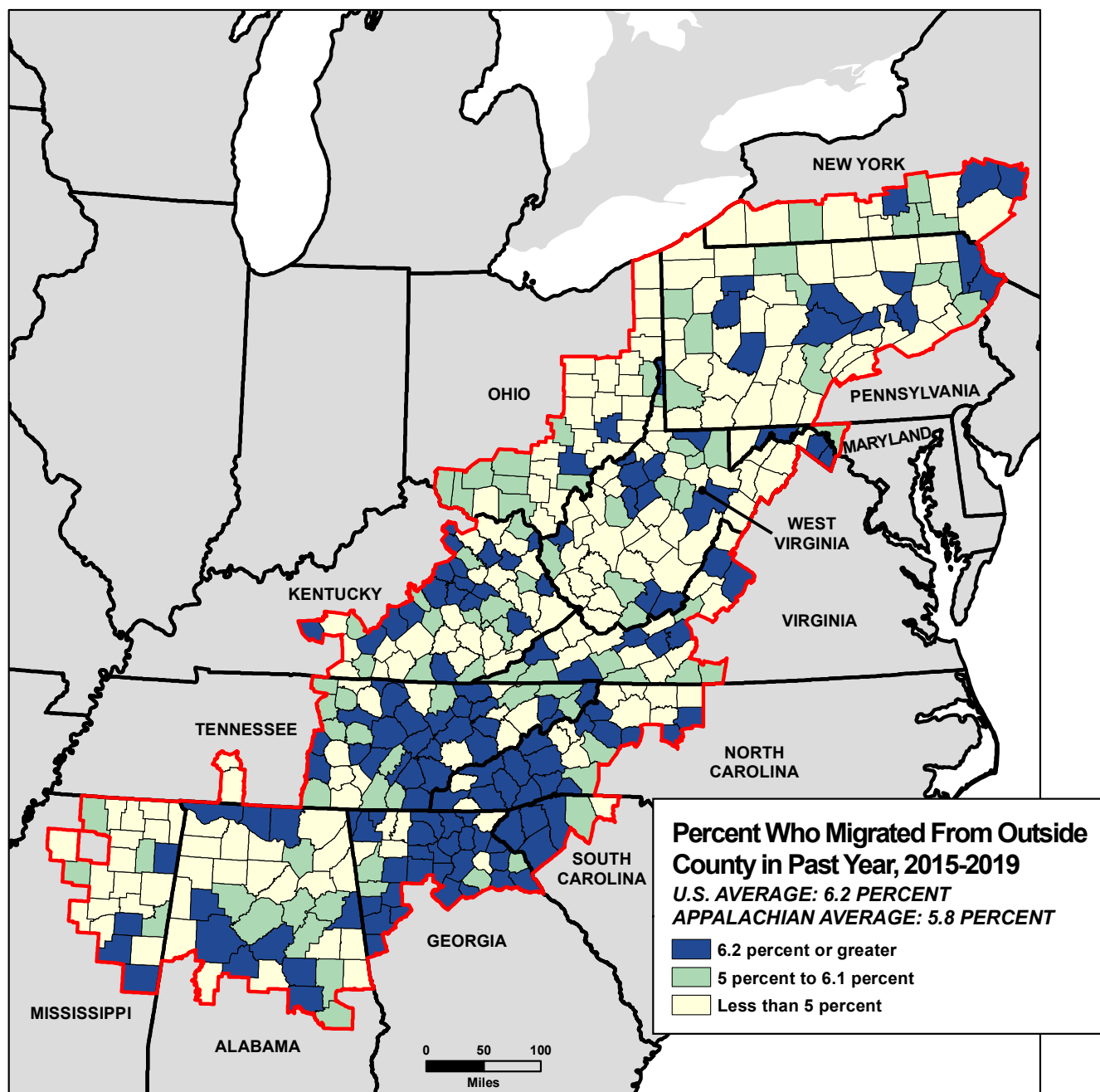
Figure 11.1: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Moved in the Past Year, 2015-2019



Map Title: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Moved in the Past Year, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 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 72 of the Region's counties. Most of these counties were in metropolitan areas, housed a four-year college or university, or were rural counties that were likely retirement or recreational destinations. Yet in 132 Appalachian counties, less than 10 percent of the residents had moved in the previous 12 months. Among these counties with low mobility rates, 92 were outside metro areas and 98 had older population age structures (at least 20 percent of the residents were ages 65 and over).

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, 2015-2019

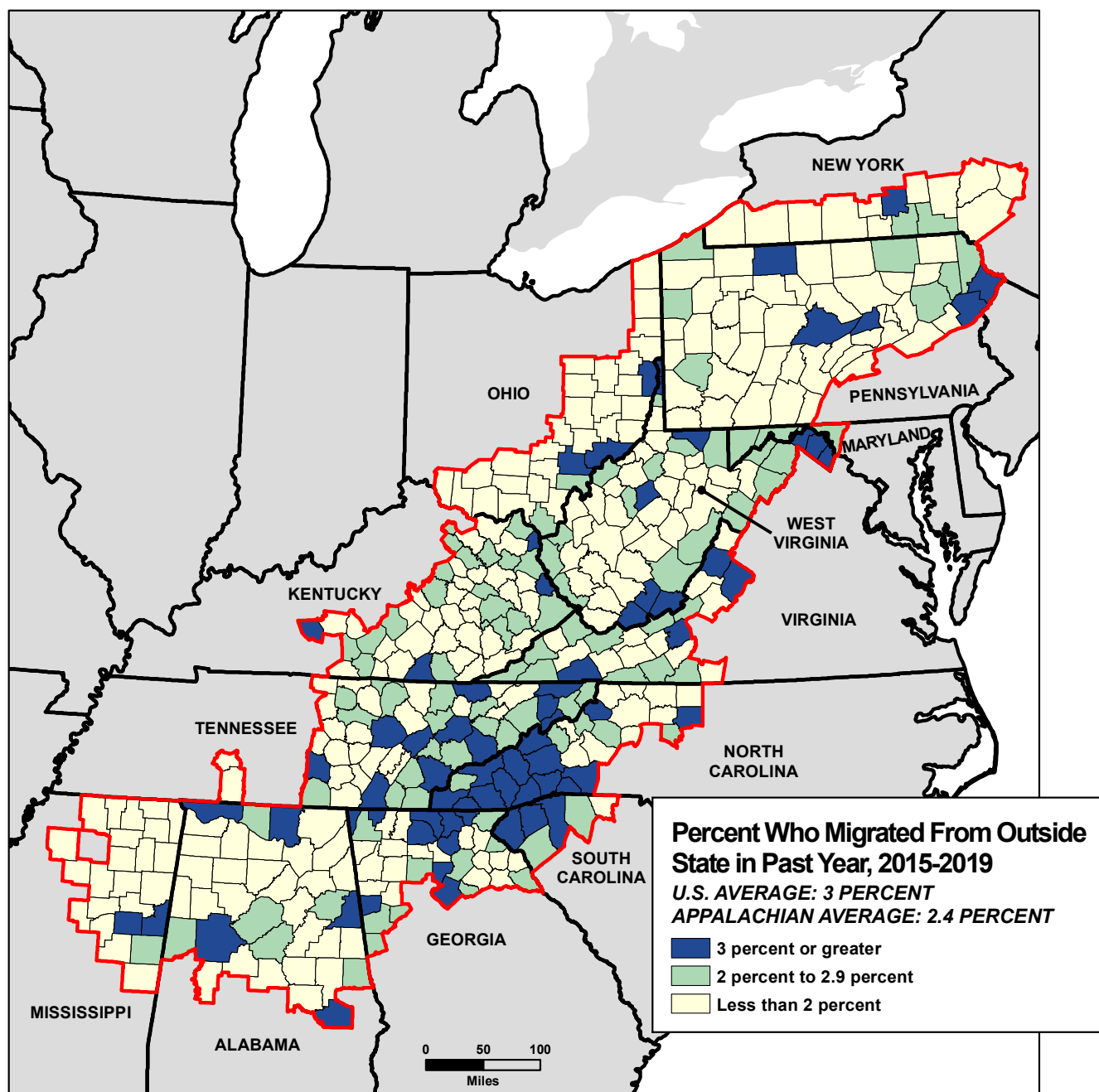


Map Title: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their County of Residence in the Past Year, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

While people in Appalachia were slightly less likely to have migrated from outside their county of residence in the 2015-2019 period than Americans as a whole, residents in one-third of the Region's 420 counties had migration rates at or above the national average of 6.2 percent. These counties were scattered throughout Appalachia (albeit with a greater concentration in the Southern and South Central subregions) and were distributed across all urban/rural types. In 193 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 57 of them 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, 2015-2019



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, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

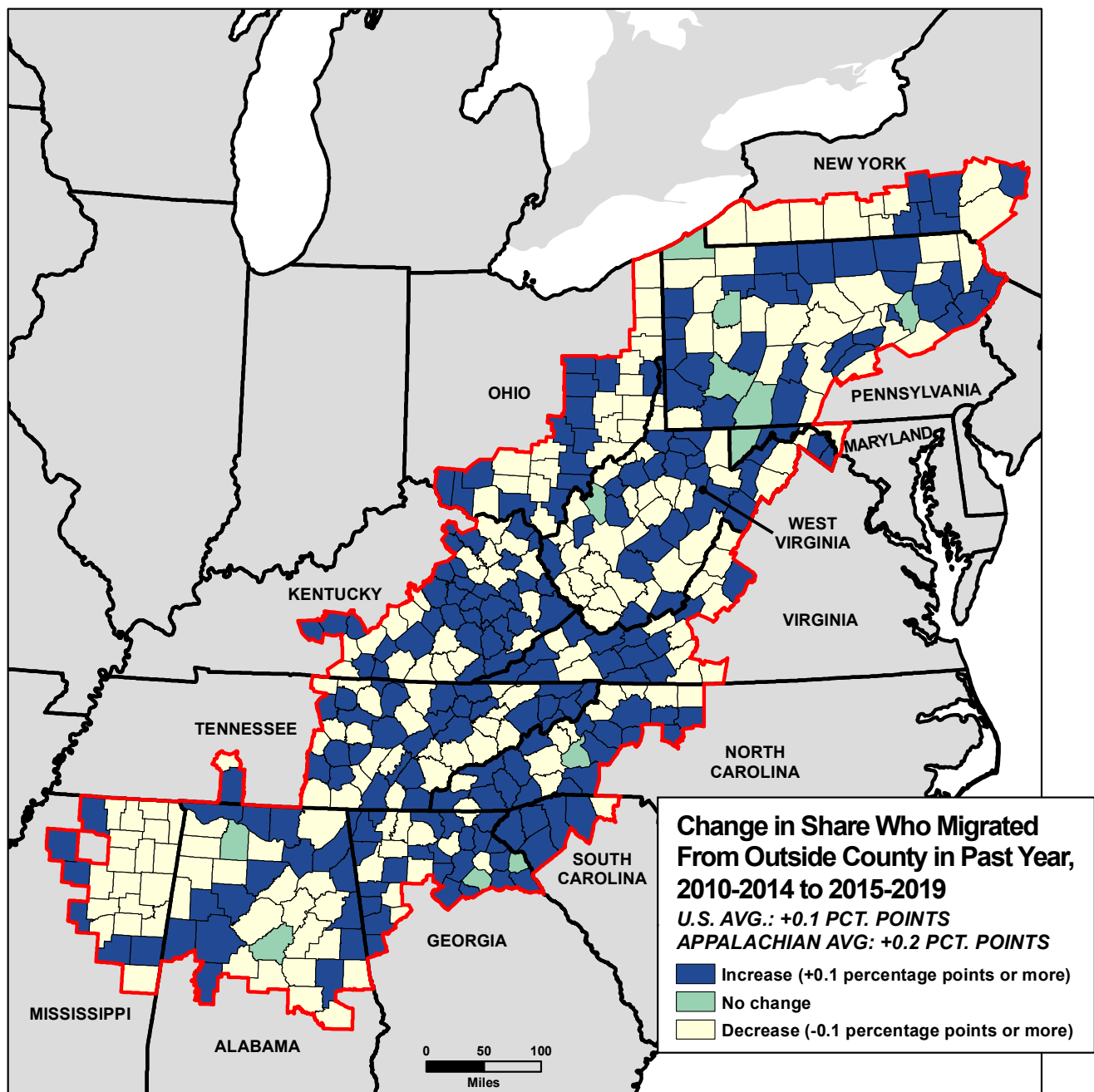
The share of people in the Appalachian Region who had migrated from outside their state of residence was 2.4 percent in the 2015-2019 period, compared with 3 percent of all Americans. Yet in 72 of Appalachia's 420 counties, out-of-state migration levels were at or above the U.S. average. Two-thirds of these counties were in South Central and Southern Appalachia, and almost 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, Ithaca College); Union County, Pennsylvania (Bucknell University); and Pickens County, South Carolina (Clemson University). In contrast, there were 248 counties in the Region where less than 2 percent of residents had come from out of state. Almost 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, 2010-2014 to 2015-2019

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	+ 0.8	- 0.8	- 1.0	+ 0.1	+ 0.0	+ 0.1
Appalachian Region	+ 0.3	- 0.3	- 0.5	+ 0.2	+ 0.2	+ 0.1
Subregions						
Northern Appalachia	+ 0.1	- 0.1	- 0.2	+ 0.1	+ 0.1	+ 0.0
North Central Appalachia	- 0.3	+ 0.3	+ 0.0	+ 0.2	+ 0.4	- 0.2
Central Appalachia	+ 0.2	- 0.2	- 0.5	+ 0.4	+ 0.3	+ 0.0
South Central Appalachia	+ 0.6	- 0.6	- 0.7	+ 0.3	+ 0.0	+ 0.2
Southern Appalachia	+ 0.7	- 0.7	- 1.0	+ 0.3	+ 0.1	+ 0.2
County Types						
Large Metros (pop. 1 million +)	+ 0.1	- 0.1	- 0.4	+ 0.3	+ 0.2	+ 0.1
Small Metros (pop. <1 million)	+ 0.4	- 0.4	- 0.6	+ 0.2	+ 0.2	+ 0.1
Nonmetro, Adjacent to Large Metros	+ 0.7	- 0.7	- 0.9	+ 0.2	+ 0.3	- 0.1
Nonmetro, Adjacent to Small Metros	+ 0.3	- 0.3	- 0.4	+ 0.1	+ 0.0	+ 0.1
Rural (nonmetro, not adj. to a metro)	+ 0.6	- 0.6	- 0.5	- 0.1	+ 0.0	- 0.1
Alabama	+ 1.3	- 1.3	- 1.1	- 0.2	- 0.2	+ 0.0
Appalachian Alabama	+ 0.7	- 0.7	- 0.7	+ 0.1	+ 0.0	+ 0.1
Non-Appalachian Alabama	+ 2.2	- 2.2	- 1.6	- 0.6	- 0.6	- 0.1
Georgia	+ 1.1	- 1.1	- 1.2	+ 0.1	+ 0.0	+ 0.0
Appalachian Georgia	+ 0.7	- 0.7	- 1.2	+ 0.4	+ 0.3	+ 0.1
Non-Appalachian Georgia	+ 1.2	- 1.2	- 1.1	+ 0.0	+ 0.0	- 0.1
Kentucky	+ 0.2	- 0.2	- 0.2	+ 0.1	+ 0.2	- 0.2
Appalachian Kentucky	+ 0.6	- 0.6	- 0.8	+ 0.3	+ 0.3	+ 0.0
Non-Appalachian Kentucky	+ 0.1	- 0.1	+ 0.0	- 0.1	+ 0.2	- 0.3
Maryland	- 0.3	+ 0.3	+ 0.0	+ 0.3	+ 0.4	+ 0.0
Appalachian Maryland	+ 0.2	- 0.2	- 0.4	+ 0.3	+ 0.5	- 0.3
Non-Appalachian Maryland	- 0.4	+ 0.4	+ 0.0	+ 0.3	+ 0.3	+ 0.0
Mississippi	+ 0.9	- 0.9	- 0.6	- 0.3	- 0.2	- 0.1
Appalachian Mississippi	+ 2.1	- 2.1	- 1.2	- 0.9	- 0.4	- 0.5
Non-Appalachian Mississippi	+ 0.6	- 0.6	- 0.4	- 0.2	- 0.2	+ 0.0
New York	+ 0.6	- 0.6	- 0.6	+ 0.0	+ 0.1	- 0.1
Appalachian New York	+ 0.9	- 0.9	- 0.6	- 0.4	- 0.3	- 0.1
Non-Appalachian New York	+ 0.6	- 0.6	- 0.6	+ 0.0	+ 0.1	- 0.1
North Carolina	+ 0.1	- 0.1	- 0.6	+ 0.6	+ 0.2	+ 0.4
Appalachian North Carolina	+ 0.6	- 0.6	- 1.0	+ 0.4	+ 0.1	+ 0.2
Non-Appalachian North Carolina	- 0.1	+ 0.1	- 0.6	+ 0.6	+ 0.3	+ 0.4
Ohio	- 0.1	+ 0.1	- 0.3	+ 0.4	+ 0.2	+ 0.1
Appalachian Ohio	- 0.1	+ 0.1	- 0.1	+ 0.1	+ 0.3	- 0.2
Non-Appalachian Ohio	- 0.1	+ 0.1	- 0.3	+ 0.4	+ 0.1	+ 0.1
Pennsylvania	- 0.4	+ 0.4	+ 0.0	+ 0.4	+ 0.3	+ 0.1
Appalachian Pennsylvania	- 0.1	+ 0.1	- 0.1	+ 0.2	+ 0.1	+ 0.1
Non-Appalachian Pennsylvania	- 0.5	+ 0.5	+ 0.1	+ 0.6	+ 0.3	+ 0.2
South Carolina	+ 1.2	- 1.2	- 1.3	+ 0.1	+ 0.0	+ 0.1
Appalachian South Carolina	- 0.1	+ 0.1	- 0.7	+ 0.8	+ 0.5	+ 0.3
Non-Appalachian South Carolina	+ 1.6	- 1.6	- 1.5	- 0.1	- 0.2	+ 0.1
Tennessee	+ 0.9	- 0.9	- 1.2	+ 0.3	+ 0.2	+ 0.2
Appalachian Tennessee	+ 0.2	- 0.2	- 0.6	+ 0.4	+ 0.2	+ 0.2
Non-Appalachian Tennessee	+ 1.6	- 1.6	- 1.8	+ 0.2	+ 0.1	+ 0.1
Virginia	+ 0.0	+ 0.0	- 0.2	+ 0.1	+ 0.0	+ 0.1
Appalachian Virginia	+ 0.9	- 0.9	- 0.5	- 0.4	- 0.4	- 0.1
Non-Appalachian Virginia	+ 0.0	+ 0.0	- 0.2	+ 0.1	+ 0.1	+ 0.0
West Virginia (entire state)	+ 0.0	+ 0.0	- 0.1	+ 0.1	+ 0.2	- 0.1

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 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, 2010-2014 to 2015-2019



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, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

Both in Appalachia and the nation as a whole, the share of individuals migrating from outside their county of residence barely increased (rising by 0.2 and 0.1 percentage points, respectively) from 2010-2014 to 2015-2019. The share also increased in 213 of Appalachia's 420 counties. Yet in 195 other counties, the share of migrants from another county decreased between the two periods. The Appalachian sections of Georgia, the Carolinas, and Tennessee all had increases of at least 0.4 percentage points (with Appalachian South Carolina showing a rise of 0.8 points), while the share migrating from another county declined in Appalachian Mississippi, New York, and Virginia.

TRENDS IN MIGRATION

- Like Americans as a whole, Appalachian residents were slightly less mobile in 2015-2019 than they were in 2010-2014. Between the two periods, the share of persons in the Region who had moved from a different residence in the past year decreased by 0.3 percentage points to just under 13 percent in 2015-2019 (see Tables 11.1 and 11.2). However, this decline only involved within-county movement; the share of residents who migrated from outside their county of residence increased by 0.2 points between the two periods. The share migrating from out-of-state barely increased.
- Within the Region, the decline in residential mobility was greatest in Appalachian Mississippi, where the share moving in the previous year fell more than two percentage points. Other parts of the Region showing noticeable declines included Southern Appalachia as a whole, nonmetropolitan counties adjacent to large metro areas, and the Appalachian sections of New York and Virginia. Yet in North Central Appalachia, the mobility share increased 0.3 percentage points between the two periods.
- Appalachia's small increase (0.2 percentage points) in the percentage of residents migrating from outside their county of residence between 2010-2014 and 2015-2019 actually masked changes within the Region. For example, the share rose more noticeably in Central Appalachia and the Appalachian sections of South Carolina, Georgia, North Carolina, and Tennessee (by 0.8 percentage points in South Carolina and 0.4 points in the other three states). Meanwhile, the share fell 0.9 points in Appalachian Mississippi and 0.4 points in the Appalachian sections of New York and Virginia.
- Despite anecdotal news reports about increased migration due to the coronavirus pandemic, data from two national moving companies suggest that Americans actually have moved less frequently than they would have pre-pandemic. This suggests that migration prevalence in Appalachia may have remained constant or declined slightly in 2020 due to the pandemic.

CHAPTER 12: VETERAN STATUS

Table 12.1: Number of Adult Civilians in the Appalachian Region Who Are Veterans, by Age Group and Gender, 2015-2019

Veteran Status	Total, Ages 18 and Over	By Age Group			By Gender	
		Ages 18-34	Ages 35-64	Ages 65 and Over	Males	Females
United States	18,230,322	1,609,388	7,533,654	9,087,280	16,611,283	1,619,039
Appalachian Region	1,657,586	115,482	660,802	881,302	1,535,627	121,959
Subregions						
Northern Appalachia	568,290	36,478	211,436	320,376	532,194	36,096
North Central Appalachia	170,648	11,988	69,116	89,544	159,371	11,277
Central Appalachia	104,801	6,672	40,336	57,793	98,391	6,410
South Central Appalachia	330,812	21,888	125,808	183,116	306,503	24,309
Southern Appalachia	483,035	38,456	214,106	230,473	439,168	43,867
County Types						
Large Metros (pop. 1 million +)	361,650	27,401	151,246	183,003	332,184	29,466
Small Metros (pop. <1 million)	728,553	52,399	294,366	381,788	673,707	54,846
Nonmetro, Adjacent to Large Metros	148,503	10,027	59,709	78,767	138,358	10,145
Nonmetro, Adjacent to Small Metros	273,759	17,031	102,236	154,492	255,532	18,227
Rural (nonmetro, not adj. to a metro)	145,121	8,624	53,245	83,252	135,846	9,275
Alabama	330,207	26,094	151,070	153,043	296,507	33,700
Appalachian Alabama	201,099	15,224	89,911	95,964	181,576	19,523
Non-Appalachian Alabama	129,108	10,870	61,159	57,079	114,931	14,177
Georgia	629,302	59,925	310,423	258,954	554,789	74,513
Appalachian Georgia	173,134	14,380	78,972	79,782	157,123	16,011
Non-Appalachian Georgia	456,168	45,545	231,451	179,172	397,666	58,502
Kentucky	267,594	21,807	117,070	128,717	245,918	21,676
Appalachian Kentucky	61,652	4,282	24,030	33,340	57,598	4,054
Non-Appalachian Kentucky	205,942	17,525	93,040	95,377	188,320	17,622
Maryland	365,356	33,175	173,559	158,622	319,176	46,180
Appalachian Maryland	17,594	1,395	7,400	8,799	16,259	1,335
Non-Appalachian Maryland	347,762	31,780	166,159	149,823	302,917	44,845
Mississippi	165,538	14,320	75,502	75,716	148,681	16,857
Appalachian Mississippi	29,832	2,179	12,472	15,181	27,581	2,251
Non-Appalachian Mississippi	135,706	12,141	63,030	60,535	121,100	14,606
New York	705,924	52,979	249,635	403,310	656,633	49,291
Appalachian New York	68,086	4,589	26,344	37,153	63,217	4,869
Non-Appalachian New York	637,838	48,390	223,291	366,157	593,416	44,422
North Carolina	659,584	65,050	296,875	297,659	591,605	67,979
Appalachian North Carolina	114,583	6,951	40,838	66,794	106,611	7,972
Non-Appalachian North Carolina	545,001	58,099	256,037	230,865	484,994	60,007
Ohio	709,287	54,059	291,455	363,773	656,611	52,676
Appalachian Ohio	138,024	9,261	53,876	74,887	129,916	8,108
Non-Appalachian Ohio	571,263	44,798	237,579	288,886	526,695	44,568
Pennsylvania	759,474	49,244	280,503	429,727	708,046	51,428
Appalachian Pennsylvania	394,973	25,037	144,892	225,044	369,970	25,003
Non-Appalachian Pennsylvania	364,501	24,207	135,611	204,683	338,076	26,425
South Carolina	365,139	31,663	159,953	173,523	329,264	35,875
Appalachian South Carolina	78,970	6,673	32,751	39,546	72,888	6,082
Non-Appalachian South Carolina	286,169	24,990	127,202	133,977	256,376	29,793
Tennessee	431,274	37,773	187,068	206,433	391,111	40,163
Appalachian Tennessee	202,295	14,403	80,424	107,468	187,449	14,846
Non-Appalachian Tennessee	228,979	23,370	106,644	98,965	203,662	25,317
Virginia	677,533	74,570	346,062	256,901	584,822	92,711
Appalachian Virginia	46,808	2,632	17,426	26,750	43,358	3,450
Non-Appalachian Virginia	630,725	71,938	328,636	230,151	541,464	89,261
West Virginia (entire state)	130,536	8,476	51,466	70,594	122,081	8,455

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, 2015-2019 American Community Survey.

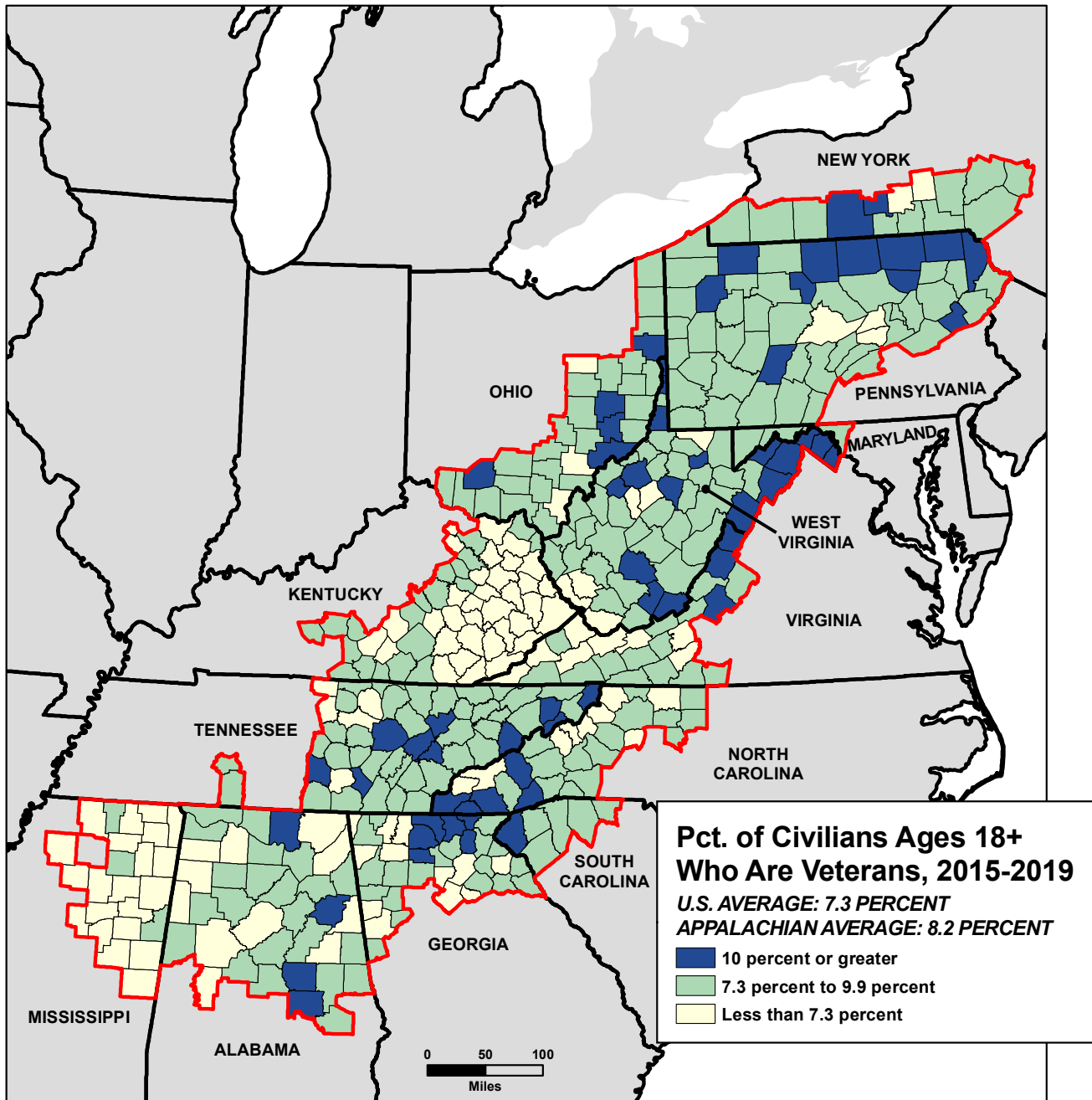
Table 12.2: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, by Age Group and Gender, 2015-2019

Veteran Status	Total, Ages 18 and Over	By Age Group			By Gender	
		Ages 18-34	Ages 35-64	Ages 65 and Over	Males	Females
United States	7.3	2.1	6.0	17.9	13.7	1.3
Appalachian Region	8.2	2.1	6.6	19.2	15.7	1.2
Subregions						
Northern Appalachia	8.6	2.1	6.6	20.1	16.5	1.1
North Central Appalachia	9.0	2.4	7.3	20.2	17.1	1.2
Central Appalachia	7.1	1.8	5.4	16.9	13.7	0.9
South Central Appalachia	8.5	2.1	6.6	19.3	16.3	1.2
Southern Appalachia	7.7	2.1	6.6	18.2	14.5	1.3
County Types						
Large Metros (pop. 1 million +)	7.7	2.1	6.2	19.0	14.6	1.2
Small Metros (pop. <1 million)	8.5	2.2	7.0	19.6	16.2	1.2
Nonmetro, Adjacent to Large Metros	8.6	2.2	7.0	19.3	16.2	1.2
Nonmetro, Adjacent to Small Metros	8.7	2.2	6.6	19.3	16.6	1.1
Rural (nonmetro, not adj. to a metro)	7.4	1.6	5.5	17.4	14.1	0.9
Alabama	8.8	2.4	8.1	19.0	16.6	1.7
Appalachian Alabama	8.3	2.2	7.4	18.6	15.7	1.5
Non-Appalachian Alabama	9.6	2.7	9.3	19.7	18.2	2.0
Georgia	8.0	2.5	7.7	18.4	14.8	1.8
Appalachian Georgia	7.2	2.1	6.1	18.2	13.5	1.3
Non-Appalachian Georgia	8.4	2.6	8.5	18.5	15.4	2.0
Kentucky	7.8	2.2	6.8	18.1	14.8	1.2
Appalachian Kentucky	6.8	1.8	5.2	16.5	13.0	0.9
Non-Appalachian Kentucky	8.2	2.4	7.4	18.8	15.5	1.4
Maryland	7.9	2.5	7.2	17.6	14.5	1.9
Appalachian Maryland	8.8	2.5	7.5	19.2	16.0	1.4
Non-Appalachian Maryland	7.8	2.5	7.2	17.5	14.4	1.9
Mississippi	7.3	2.1	6.7	16.4	13.8	1.4
Appalachian Mississippi	6.2	1.5	5.4	14.8	12.1	0.9
Non-Appalachian Mississippi	7.6	2.3	7.1	16.9	14.3	1.6
New York	4.6	1.1	3.3	12.8	8.9	0.6
Appalachian New York	8.2	1.9	6.8	19.3	15.6	1.2
Non-Appalachian New York	4.4	1.1	3.1	12.4	8.5	0.6
North Carolina	8.4	2.9	7.5	18.3	15.8	1.6
Appalachian North Carolina	8.2	1.9	5.9	18.8	15.9	1.1
Non-Appalachian North Carolina	8.4	3.0	7.8	18.1	15.8	1.8
Ohio	7.8	2.1	6.5	18.7	15.0	1.1
Appalachian Ohio	8.8	2.3	6.8	20.2	16.9	1.0
Non-Appalachian Ohio	7.6	2.1	6.4	18.4	14.6	1.2
Pennsylvania	7.5	1.7	5.6	18.8	14.5	1.0
Appalachian Pennsylvania	8.6	2.0	6.5	20.2	16.5	1.1
Non-Appalachian Pennsylvania	6.6	1.5	4.9	17.5	12.8	0.9
South Carolina	9.4	2.9	8.3	20.1	17.8	1.8
Appalachian South Carolina	8.0	2.3	6.7	18.9	15.5	1.2
Non-Appalachian South Carolina	9.9	3.1	8.9	20.5	18.6	2.0
Tennessee	8.3	2.5	7.2	19.2	15.7	1.5
Appalachian Tennessee	8.8	2.3	7.1	19.7	16.9	1.3
Non-Appalachian Tennessee	7.9	2.6	7.3	18.7	14.8	1.7
Virginia	10.5	3.9	10.5	20.2	18.8	2.8
Appalachian Virginia	7.7	1.6	6.0	17.6	14.3	1.1
Non-Appalachian Virginia	10.8	4.1	10.9	20.6	19.3	2.9
West Virginia (entire state)	9.0	2.3	7.1	20.0	17.2	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, 2015-2019 American Community Survey.

Figure 12.1: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, 2015-2019

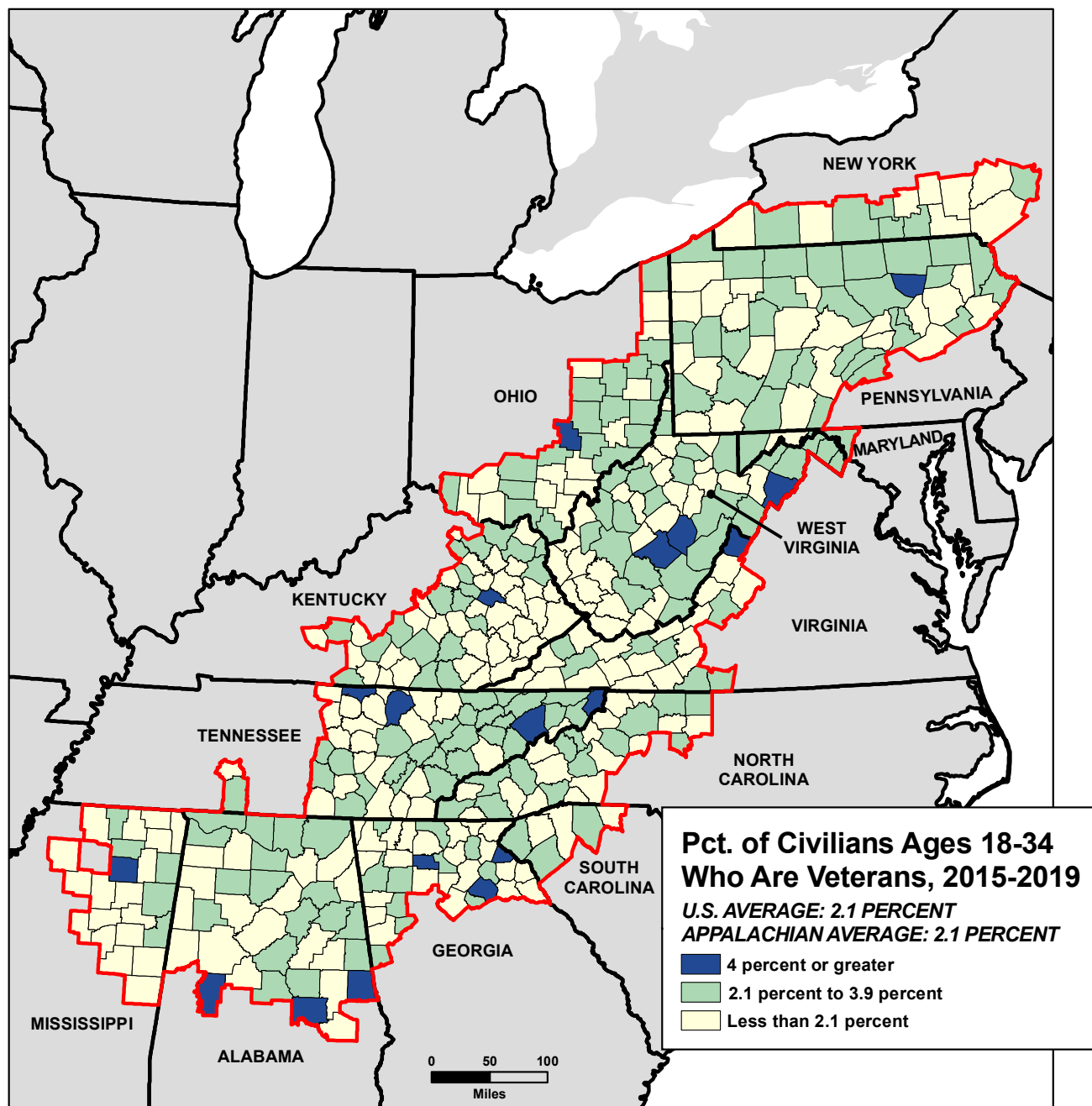


Map Title: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In 2015-2019, nearly 1.7 million adult civilians ages 18 and over in the Appalachian Region (8.2 percent of the total) 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 the percentage is slightly higher than the national share of 7.3 percent, there was considerable variation throughout the Region. In 64 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, North Carolina, and Georgia. In contrast, the veteran prevalence rate was lower than the national average in 114 counties; nearly half the counties in this group were in Kentucky and Mississippi—the only two states where the share of veterans among adult civilians was less than 7 percent.

Figure 12.2: Percent of Civilians Ages 18 to 34 in the Appalachian Region Who Are Veterans, 2015-2019

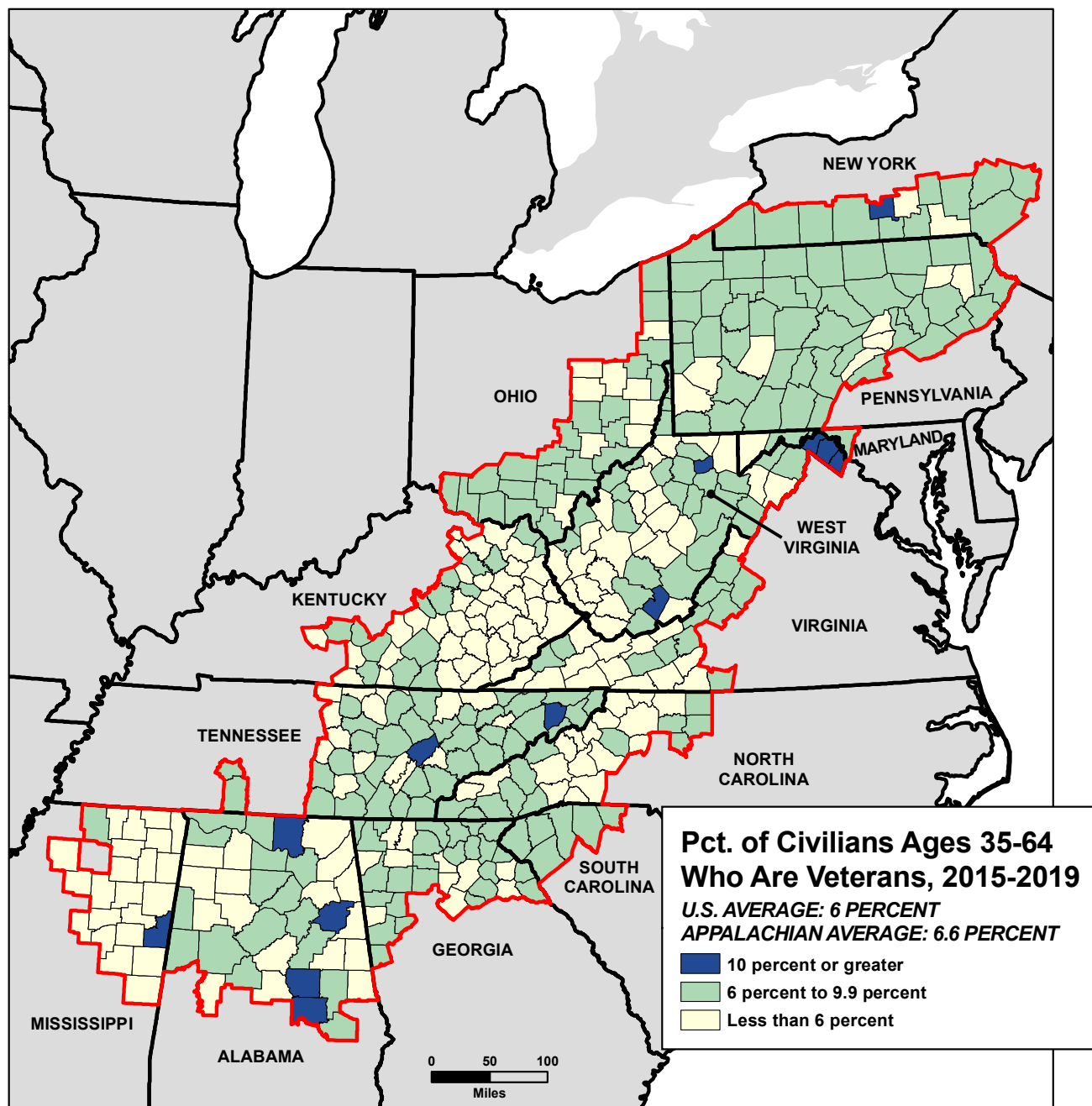


Map Title: Percent of Civilians Ages 18 to 34 in the Appalachian Region Who Are Veterans, 2015-2019

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

Military veterans accounted for just 2.1 percent of Appalachia's young adult (ages 18-34) civilian population in the 2015-2019 period, the same as it was nationally. Yet in 199 of the Region's 420 counties, the prevalence was at or above the national rate. In fact, there were 18 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 into this age group.

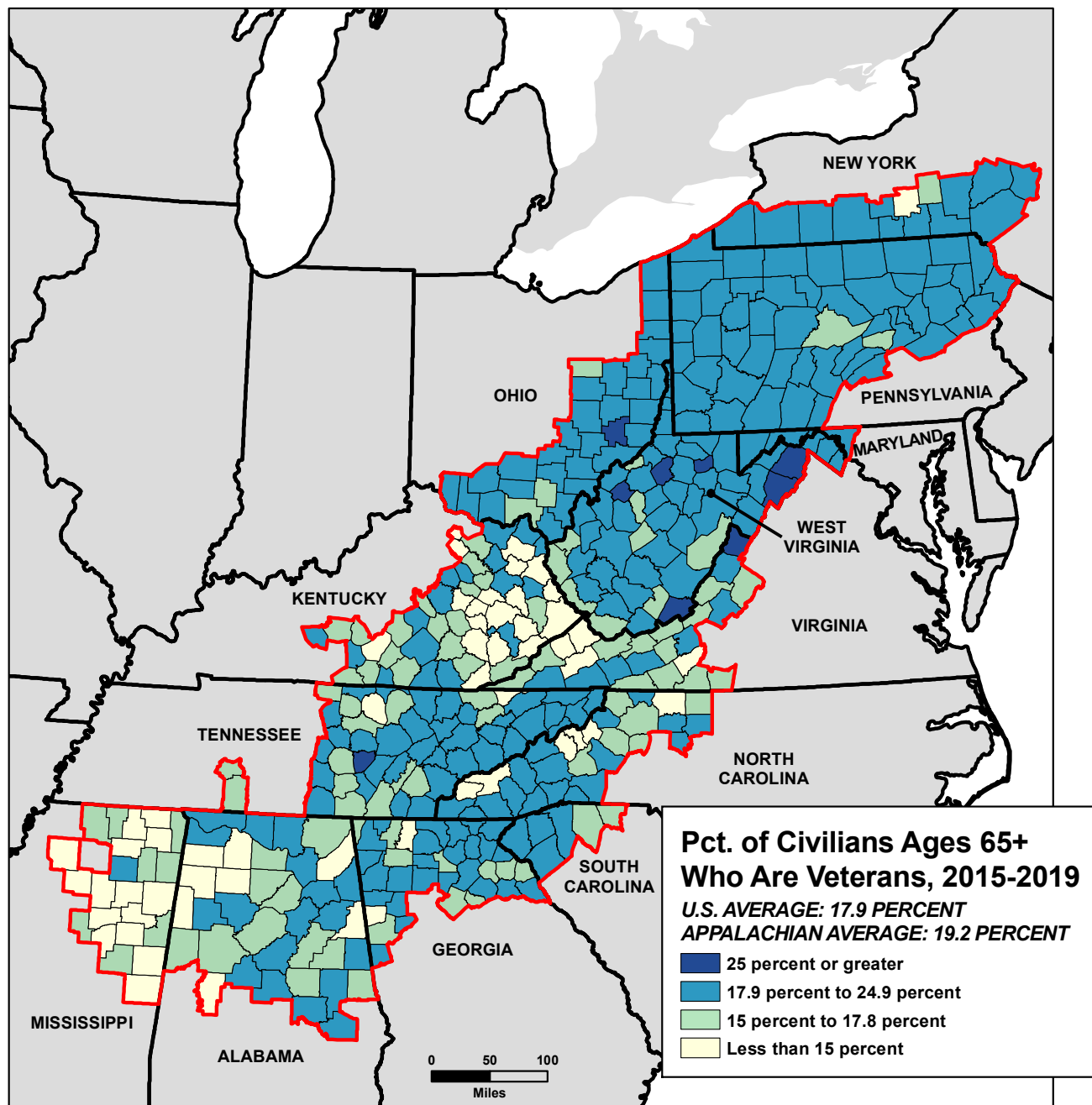
Figure 12.3: Percent of Civilians Ages 35 to 64 in the Appalachian Region Who Are Veterans, 2015-2019



Map Title: Percent of Civilians Ages 35 to 64 in the Appalachian Region Who Are Veterans, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In the Appalachian Region, 6.6 percent of 35-to-64-year-old civilian residents were military veterans in 2015-2019, slightly above the U.S. rate of 6 percent. The prevalence was even higher in some counties: In 13 of them, veterans comprised at least one in 10 civilians ages 35 to 64. These counties were scattered throughout the Region. In 179 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 5.4 percent of 35-to-64-year-old civilians were veterans—the lowest share among the subregions. Most veterans of the 1991 Gulf War fall into 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, 2015-2019



Map Title: Percent of Civilians Ages 65 and Over in the Appalachian Region Who Are Veterans, 2015-2019
 Data Source: U.S. Census Bureau, 2015-2019 American Community Survey.

In 2015-2019, almost 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 nine counties—six of which were in West Virginia. By contrast, there were 57 counties where veterans comprised less than 15 percent of the older civilian residents. Central Appalachia had 24 of the counties in the latter group; 19 were in Kentucky alone. In both places, veterans were less than 17 percent of older civilians. (Only Appalachian Mississippi had an even lower share, at just under 15 percent.)

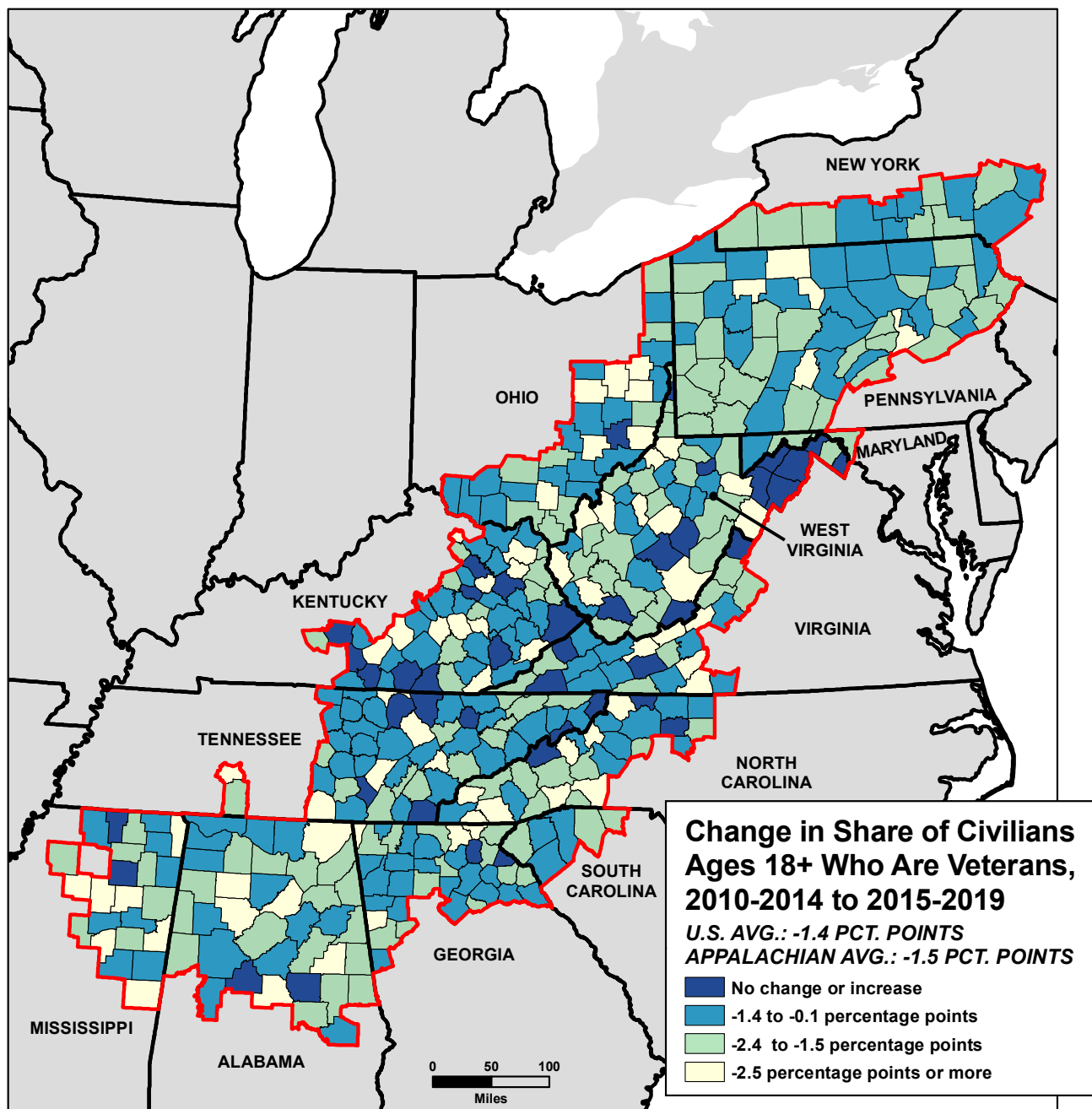
Table 12.3: Percentage Point Change in Veteran Status of Adult Civilians in the Appalachian Region, by Age Group and Gender, 2010-2014 to 2015-2019

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	- 1.4	- 0.3	- 1.8	- 3.7	- 2.8	+ 0.0
Appalachian Region	- 1.5	- 0.2	- 2.0	- 3.2	- 3.1	+ 0.1
Subregions						
Northern Appalachia	- 1.7	- 0.2	- 2.1	- 3.6	- 3.4	+ 0.0
North Central Appalachia	- 1.5	- 0.2	- 2.4	- 2.7	- 3.1	+ 0.1
Central Appalachia	- 1.1	- 0.2	- 1.9	- 1.8	- 2.3	+ 0.1
South Central Appalachia	- 1.4	- 0.1	- 2.1	- 2.8	- 2.9	+ 0.0
Southern Appalachia	- 1.3	- 0.1	- 1.9	- 3.5	- 3.0	+ 0.1
County Types						
Large Metros (pop. 1 million +)	- 1.4	+ 0.0	- 1.8	- 3.9	- 3.1	+ 0.1
Small Metros (pop. <1 million)	- 1.4	- 0.1	- 2.1	- 3.2	- 3.1	+ 0.0
Nonmetro, Adjacent to Large Metros	- 1.4	+ 0.1	- 2.1	- 2.9	- 3.0	+ 0.1
Nonmetro, Adjacent to Small Metros	- 1.6	- 0.3	- 2.2	- 3.0	- 3.2	+ 0.0
Rural (nonmetro, not adj. to a metro)	- 1.3	- 0.6	- 1.9	- 2.6	- 2.8	+ 0.0
Alabama	- 1.4	- 0.5	- 1.9	- 3.2	- 3.1	+ 0.1
Appalachian Alabama	- 1.5	- 0.3	- 2.1	- 3.4	- 3.4	+ 0.1
Non-Appalachian Alabama	- 1.3	- 0.8	- 1.6	- 3.0	- 2.8	+ 0.1
Georgia	- 1.3	- 0.2	- 1.8	- 3.5	- 2.5	- 0.1
Appalachian Georgia	- 1.1	+ 0.2	- 1.7	- 3.8	- 2.5	+ 0.2
Non-Appalachian Georgia	- 1.3	- 0.4	- 1.7	- 3.4	- 2.5	- 0.2
Kentucky	- 1.3	- 0.3	- 1.8	- 2.6	- 2.6	+ 0.0
Appalachian Kentucky	- 1.1	- 0.2	- 1.9	- 1.7	- 2.3	+ 0.1
Non-Appalachian Kentucky	- 1.3	- 0.3	- 1.8	- 3.0	- 2.8	+ 0.1
Maryland	- 1.3	- 0.4	- 1.6	- 4.0	- 2.7	- 0.1
Appalachian Maryland	- 1.8	+ 0.1	- 2.6	- 3.4	- 3.2	- 0.2
Non-Appalachian Maryland	- 1.4	- 0.4	- 1.6	- 4.0	- 2.7	- 0.1
Mississippi	- 1.4	- 0.5	- 1.6	- 3.5	- 3.0	+ 0.1
Appalachian Mississippi	- 1.6	- 0.9	- 1.5	- 3.7	- 3.3	+ 0.0
Non-Appalachian Mississippi	- 1.3	- 0.4	- 1.6	- 3.5	- 2.8	+ 0.2
New York	- 1.1	- 0.2	- 1.2	- 3.7	- 2.3	+ 0.0
Appalachian New York	- 1.5	- 0.4	- 2.0	- 3.5	- 3.1	+ 0.0
Non-Appalachian New York	- 1.0	- 0.1	- 1.2	- 3.7	- 2.3	+ 0.0
North Carolina	- 1.2	+ 0.0	- 1.7	- 3.1	- 2.6	- 0.1
Appalachian North Carolina	- 1.5	- 0.1	- 2.4	- 3.0	- 3.2	- 0.1
Non-Appalachian North Carolina	- 1.2	- 0.1	- 1.6	- 3.2	- 2.5	+ 0.0
Ohio	- 1.6	+ 0.0	- 2.1	- 3.7	- 3.3	+ 0.0
Appalachian Ohio	- 1.6	+ 0.1	- 2.6	- 2.9	- 3.3	+ 0.0
Non-Appalachian Ohio	- 1.6	+ 0.0	- 2.1	- 3.8	- 3.3	+ 0.1
Pennsylvania	- 1.6	- 0.3	- 1.9	- 3.9	- 3.2	+ 0.0
Appalachian Pennsylvania	- 1.6	- 0.3	- 2.0	- 3.7	- 3.4	+ 0.0
Non-Appalachian Pennsylvania	- 1.4	- 0.2	- 1.8	- 4.0	- 3.0	- 0.1
South Carolina	- 1.3	- 0.4	- 2.1	- 2.7	- 2.6	+ 0.0
Appalachian South Carolina	- 1.3	+ 0.1	- 1.8	- 3.5	- 2.7	+ 0.1
Non-Appalachian South Carolina	- 1.2	- 0.5	- 2.1	- 2.4	- 2.6	+ 0.0
Tennessee	- 1.2	- 0.1	- 2.0	- 2.5	- 2.7	+ 0.1
Appalachian Tennessee	- 1.2	+ 0.0	- 1.9	- 2.4	- 2.6	+ 0.1
Non-Appalachian Tennessee	- 1.3	- 0.2	- 2.0	- 2.5	- 2.8	+ 0.2
Virginia	- 1.1	- 0.7	- 1.3	- 3.1	- 2.4	+ 0.1
Appalachian Virginia	- 1.0	- 0.3	- 1.4	- 2.9	- 2.5	+ 0.2
Non-Appalachian Virginia	- 1.1	- 0.8	- 1.3	- 3.2	- 2.4	+ 0.0
West Virginia (entire state)	- 1.6	- 0.3	- 2.5	- 2.8	- 3.3	+ 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, 2010-2014 and 2015-2019 American Community Surveys.

Figure 12.5: Percentage Point Change in the Share of Adult Civilians in the Appalachian Region Who Are Veterans, 2010-2014 to 2015-2019



Map Title: Percentage Point Change in the Share of Adult Civilians in the Appalachian Region Who Are Veterans, 2010-2014 to 2015-2019

Data Sources: U.S. Census Bureau, 2010-2014 and 2015-2019 American Community Surveys.

The share of Appalachia's adult civilians ages 18 and over who were military veterans was 1.5 percentage points lower in the 2015-2019 period than it was in 2010-2014. And the magnitude of the decrease varied only slightly among the county types and the Appalachian portions of most of the 13 states. Among the subregions, the decrease was largest in Northern Appalachia (1.7 percentage points) and smallest in Central Appalachia (1.1 points). Yet there was significant variation at the county level. For example, in 70 Appalachian counties (spread throughout the Region), veterans' share of the population fell by at least 2.5 percentage points. Yet the share actually stayed the same or increased in 43 counties—16 of which were in Central Appalachia. Veterans were at least 10 percent of the civilian population in one-third of the counties where the share increased, compared to just one-tenth of the counties with the largest decreases.

TRENDS IN VETERAN STATUS

- In Appalachia, the share of adult civilians who were military veterans declined 1.5 percentage points between 2010-2014 and 2015-2019, falling to 8.2 percent (see Tables 12.2 and 12.3). There was little difference in the decrease among the county types, and the Appalachian portions of most of the 13 states. (Among the states, the magnitude of the decrease ranged from one percentage point in Virginia's Appalachian section to 1.8 points in Appalachian Maryland.) And among the subregions, the decline in veteran prevalence ranged from 1.7 percentage points in Northern Appalachia to 1.1 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 just 0.2 percentage points among younger civilians ages 18 to 34, it declined two points among civilians ages 35 to 64, and more than three points among civilians ages 65 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 2010-2014 and 2015-2019, while the share among women remained virtually unchanged (rising by just one-tenth of a percentage point). Of course, men remain far more likely than women to be military veterans—the respective rates in Appalachia were 15.7 percent and 1.2 percent (see Table 12.2).

APPENDIX A: AN OVERVIEW OF RURAL APPALACHIA AND NON-APPALACHIAN RURAL AREAS

Comparing Rural Appalachia with Rural Areas Outside Appalachia

Of the 420 counties in the Appalachian Region, 107 are classified as rural—counties that are neither part of nor adjacent to a metropolitan area. As shown in Figure A.1, rural counties are found in each of the 13 states in the Appalachian Region except Maryland and South Carolina. However, there are higher concentrations of rural counties in several states including Mississippi, Kentucky, Virginia, West Virginia, and Pennsylvania. There are 840 rural counties located outside the Appalachian Region, and these are scattered across the United States with higher concentrations in midwestern and western states (see Figure A.1). Given the socioeconomic disadvantages often found in rural counties throughout the country, it is instructive to compare the characteristics of rural counties within Appalachia to those of rural counties located outside the Region.

Demographic and Housing Characteristics

Rural counties in Appalachia experienced a much higher rate of population decline between 2010 and 2019 than rural counties outside the Region—2.7 percent versus 0.5 percent (see Table A.1). The population in rural Appalachia is also older with a median age of 42 years and a smaller share of residents under age 18—20.8 percent versus 22.4 percent. Rural Appalachia is also much less diverse with only 12 percent of the population being members of a racial/ethnic minority (defined as anyone who identifies with a racial or ethnic group other than “white alone, not Hispanic”) compared with 25 percent in the rest of rural America. However, the comparative shares vary among minority groups. For example, there is a slightly higher concentration of non-Hispanic blacks in rural Appalachia than in rural counties outside the Region—7.8 percent compared with 6.5 percent, while there is a much smaller share of Hispanics—2.3 percent versus 11.3 percent. There is also a much smaller share of people who are non-Hispanic American Indian or Alaska Native in rural Appalachia than in rural counties outside the Region.

Education levels are lower in rural Appalachia than in rural areas in the rest of the country. Among adults ages 25 to 64, about 84 percent of rural Appalachian residents have completed high school or more, compared with almost 89 percent of rural residents outside the Region. Nearly 18 percent of working-age adults in rural Appalachia have completed a bachelor’s degree or more, compared with 22 percent of adults residing in rural counties in the rest of the country. However, the share within the Region whose highest education level is an associate’s degree is much closer to the share outside the Region—9.5 percent versus 10.9 percent. Among adults ages 25 to 64 with a bachelor’s degree, slightly more than one-fourth (26.5 percent) of rural Appalachian residents reported their first major was in a science and engineering field compared with nearly 31 percent of rural adults outside Appalachia. These differences in education levels are also reflected in differences in employment and income between rural Appalachia and the rest of rural America.

The share of housing units that are single-dwelling units is five percentage points lower in rural Appalachia, but the share of housing units that are mobile homes is much higher—20.2 percent compared with only 12 percent in rural counties outside the Region. Rural households within the Region are more likely to experience a digital divide than those outside Appalachia. Within rural counties in the Region, the share of households with a computer device and the share with a broadband (high-speed) Internet connection are about five percentage points lower than for households in rural counties outside the Region. One-fourth (25.3 percent) of rural Appalachian households had no access to the Internet in 2015-2019, compared with one-fifth (20.5 percent) of other rural households.

Labor Force and Commuting

The share of rural Appalachian adults ages 25 to 64 in the civilian labor force is about nine percentage points lower than in rural counties outside the Region, and the unemployment rate is slightly higher—5.3 percent versus 4.2 percent. Commuting patterns among rural Appalachian residents who do not work at home also differ from those elsewhere in rural America. Although a higher share of rural Appalachian households had no vehicle available, workers ages 16 and over in rural counties were more likely to drive alone to work (82 percent) than workers in rural counties outside the Region (79 percent). Nearly one-third of rural Appalachian workers commuted outside their county of residence compared with about one-fifth of rural workers in the rest of the country. More than three in 10 workers in rural Appalachian counties had a travel time to work of at least 30 minutes, with an average travel time of 24 minutes. By comparison, slightly more than two in 10 workers in rural counties outside Appalachia took at least a half-hour to get to their jobs, with an average travel time of only 20 minutes. Of course, these commuting patterns pre-date the onset of the coronavirus pandemic in 2020.

Income and Poverty

The lower levels of education and employment among adults in rural Appalachia are reflected in lower levels of income and higher rates of poverty than in rural counties outside the Region. Median household income in rural Appalachian counties is slightly more than \$9,000 below that of households in rural counties in the rest of the country. The share of rural Appalachian residents living in poverty is five percentage points higher than the share in rural counties outside the Region, and this gap is even wider among children (about seven percentage points) and both young adults ages 18 to 24 and older working-age adults ages 25 to 64 (about six percentage points each). Although the gap is smaller, even rural Appalachian adults ages 65 and over have a poverty rate that is nearly three percentage points higher than for older adults in other rural counties. A higher share of rural Appalachian residents also have incomes below 50 percent of the poverty level or are classified as low-income because their income is below 200 percent of poverty.

Health Insurance and Disability

One of the bright spots in rural Appalachia is the higher level of health insurance coverage compared with the rest of rural America. A smaller share of residents in rural Appalachian counties lacks health insurance coverage, and this gap is present among all age groups from 19 to 64. In addition, the share of rural Appalachian residents without health insurance declined more (six percentage points) between 2010-2014 and 2015-2019 than the share in rural areas in the rest of the country (five percentage points). Although the share of young adults ages 19 to 25 in rural Appalachia who lack health insurance coverage is nearly 3 percentage points lower than for young adults in rural areas outside the Region, it is important to note that about 16 percent of rural Appalachian young adults are still without health insurance. Lack of access to health care among young adults can contribute to the development of chronic conditions and negatively affect health at older ages. It may also have put them at greater risk of not receiving needed medical treatment during the pandemic.

In contrast to health insurance coverage, levels of disability are much higher among rural Appalachian adults ages 18 and older than among adults in other rural areas. One-fifth of rural Appalachian residents have a disability compared with about 16 percent of residents of rural counties outside the Region. However, this gap widens to more than six percentage points among adults ages 35 to 64 and five percentage points among those ages 65 and older. In rural Appalachia, nearly one-quarter (22.9 percent) of working-age adults ages 35 to 64 and almost 43 percent of adults ages 65 and older have a disability. By comparison, the respective shares are only 16.5 percent and 37.9 percent for adults in these two age groups in rural counties in the rest of the country. These higher levels of disability in rural Appalachia—especially among working-age adults—may be related to the lower levels of employment and household income compared with rural areas outside the Region.

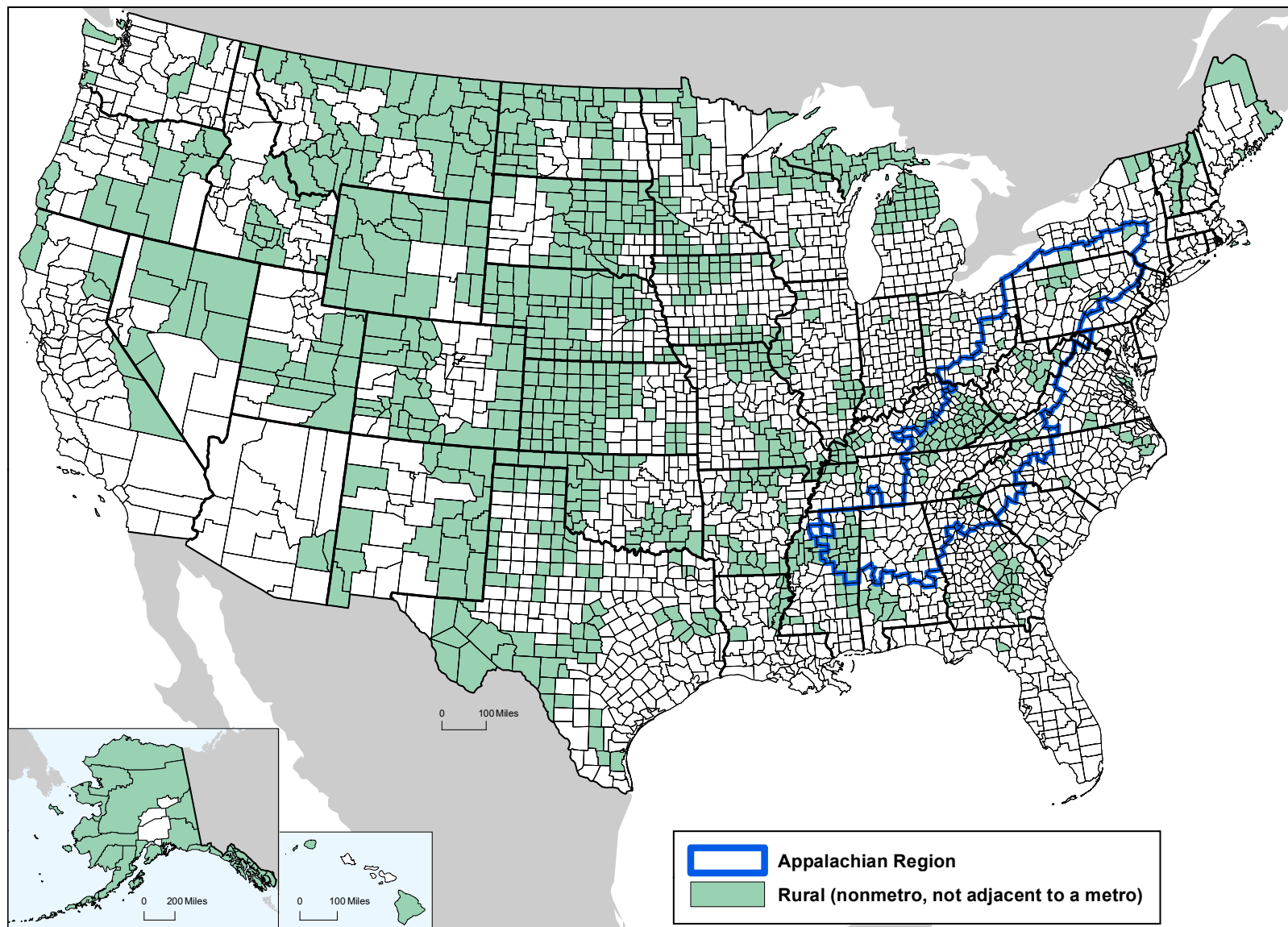
Veteran Status

A smaller share of the civilian population ages 65 and over in rural Appalachia are veterans (17.4 percent) than the share in rural counties in the rest of the country (almost 20 percent). This gap is about the same between rural areas within and outside Appalachia among civilian males ages 18 and older. About 14 percent of rural Appalachian adult male civilians are veterans compared with 16.3 percent of male civilians in rural areas outside the Region.

Summary

A comparison of rural counties within the Appalachian Region with those located outside Appalachia reveals some important contrasts in characteristics and overall levels of well-being between these areas. The population in rural Appalachian counties is older and less diverse and has been declining in number faster since 2010 than the population in rural counties in the rest of the country. With the exception of health insurance coverage, rural Appalachian counties continue to lag behind rural counties in the rest of the country. Rural Appalachian residents have lower levels of education, employment, income, and access to the Internet, and higher levels of poverty and disability than rural residents in other areas of the United States.

Figure A.1: Rural Counties in the United States and the Appalachian Region



Map Title: Rural Counties in the United States and the Appalachian Region

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

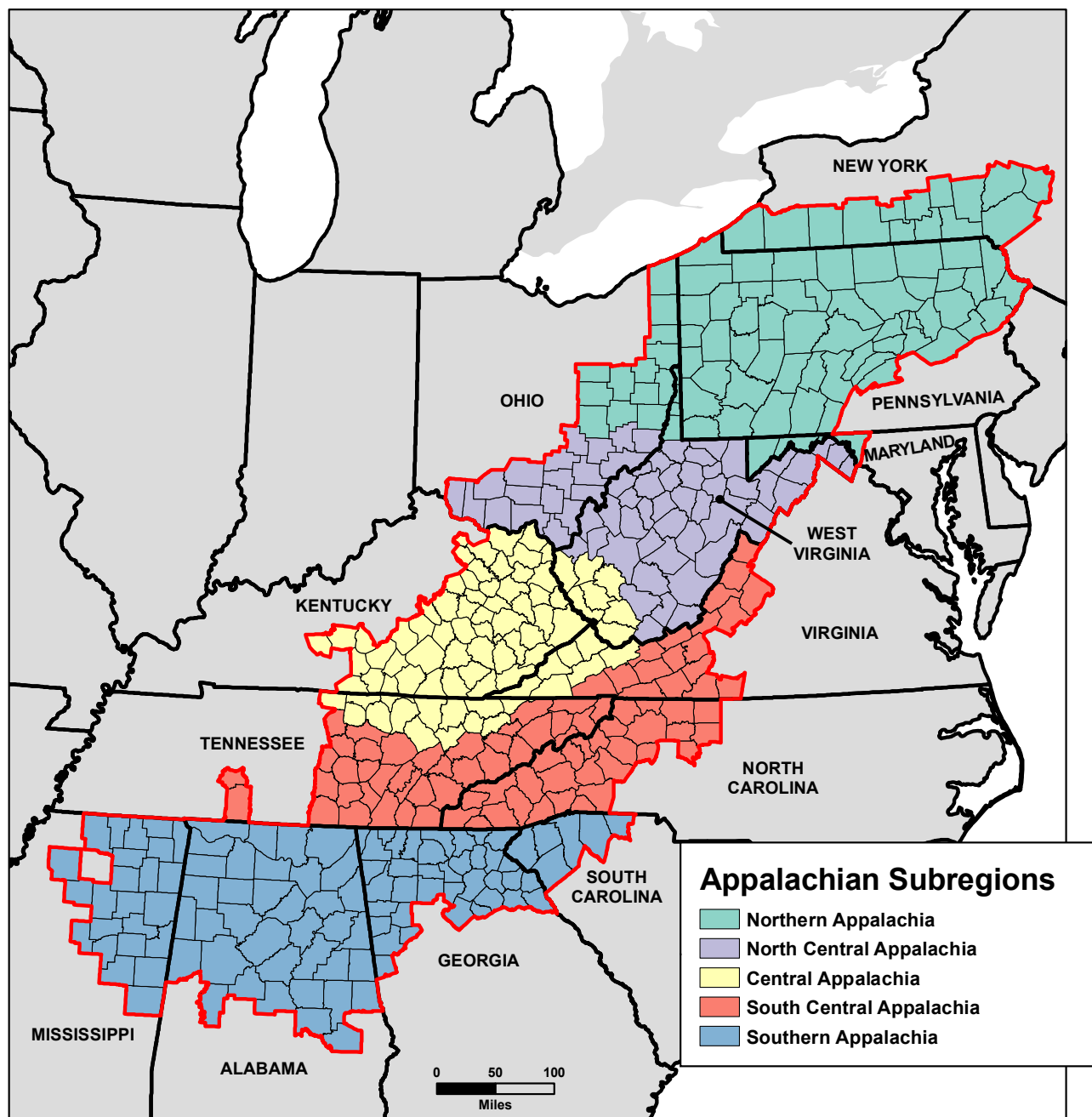
Table A.1: Selected Measures for Rural Appalachia and Rural Areas Outside Appalachia

Demographic, Social, or Economic Characteristic	Appalachian, Rural (nonmetro, not adjacent to a metro)	Non-Appalachian, Rural (nonmetro, not adjacent to a metro)
NUMBER OF COUNTIES	107	840
Demographic and Housing Characteristics		
Population, July 1, 2019	2,486,679	13,200,302
Percent change (2010 to 2019), population	-2.7	-0.5
Median age, July 1, 2019	42.2	40.7
Percent of population under age 18, July 1, 2019	20.8	22.4
Percent of population that is minority, July 1, 2019	12.1	25.3
Percent of population that is black alone, not Hispanic, July 1, 2019	7.8	6.5
Percent of population that is Hispanic or Latino, July 1, 2019	2.3	11.3
Percent of population that is American Indian or Alaska Native alone, not Hispanic, July 1, 2019	0.3	3.3
Percent of persons ages 25-64 with a high school diploma or more, 2015-19	84.2	88.5
Percent of persons ages 25-64 with an associate's degree but without a bachelor's degree, 2015-19	9.5	10.9
Percent of persons ages 25-64 with a bachelor's degree or more, 2015-19	17.6	22.0
Among persons ages 25 and over with a bachelor's degree or more, percent whose bachelor's degree field (first major) was science and engineering, 2015-19	26.5	30.8
Percent of all housing units that are single-unit dwellings, 2015-19	69.8	74.8
Percent of all housing units that are mobile homes, 2015-19	20.2	11.9
Percent of households with one or more computer devices (including smartphone and tablet), 2015-19	80.5	85.5
Percent of households with a broadband (high-speed) Internet subscription, 2015-19	70.7	75.3
Percent of households with no access to the Internet, 2015-19	25.3	20.5
Labor Force and Commuting		
Percent of civilian labor force universe ages 25-64 (excludes Armed Forces personnel) in civilian labor force, 2015-19	64.9	73.7
Unemployment rate, persons ages 25-64 (percent of civilian labor force), 2015-19	5.3	4.2
Percent of households with no vehicle available, 2015-19	8.1	6.3
Percent of workers ages 16 and over who drove alone to work, 2015-19	82.3	78.7
Percent of workers ages 16 and over who worked outside their county of residence, 2015-19	31.9	19.6
Percent of workers ages 16 and over (not working at home) whose travel time to work was 30 minutes or more, 2015-19	31.1	22.0
Mean travel time to work in minutes for all workers ages 16 and over who didn't work at home, 2015-19	24.3	19.7
Income and Poverty		
Median household income (in adjusted 2019 dollars), 2015-19	40,975	50,319
Percent of persons in poverty, 2015-19	20.9	15.8
Percent of persons under age 18 in poverty, 2015-19	28.3	21.7
Percent of persons ages 18-24 in poverty, 2015-19	30.6	24.6
Percent of persons ages 25-64 in poverty, 2015-19	19.3	13.8
Percent of persons ages 65 and over in poverty, 2015-19	12.6	10.1
Percent of persons with income below 50 percent of poverty level, 2015-19	8.9	6.7
Percent of persons with income below 200 percent of poverty level, 2015-19	44.3	37.1
Health Insurance and Disability		
Percent of persons without health insurance coverage, 2015-19	9.1	10.2
Percentage point change (2010-14 to 2015-19), percent of persons without health insurance coverage	-6.3	-5.0
Percent of persons ages 19-25 without health insurance coverage, 2015-19	15.9	18.8
Percent of persons ages 26-34 without health insurance coverage, 2015-19	17.5	19.3
Percent of persons ages 35-64 without health insurance coverage, 2015-19	11.3	12.7
Percent of persons with a disability, 2015-19	20.1	16.0
Percent of persons ages 35-64 with a disability, 2015-19	22.9	16.5
Percent of persons ages 65 and over with a disability, 2015-19	42.9	37.9
Veteran Status		
Percent of civilian population ages 65 and over who are veterans, 2015-19	17.4	19.8
Percent of male civilian population ages 18 and over who are veterans, 2015-19	14.1	16.3

Data Sources: U.S. Census Bureau, Vintage 2019 Population Estimates; and 2010-2014 and 2015-2019 American Community Surveys.

APPENDIX B: REFERENCE MAPS

Figure B.1: Appalachian Subregions

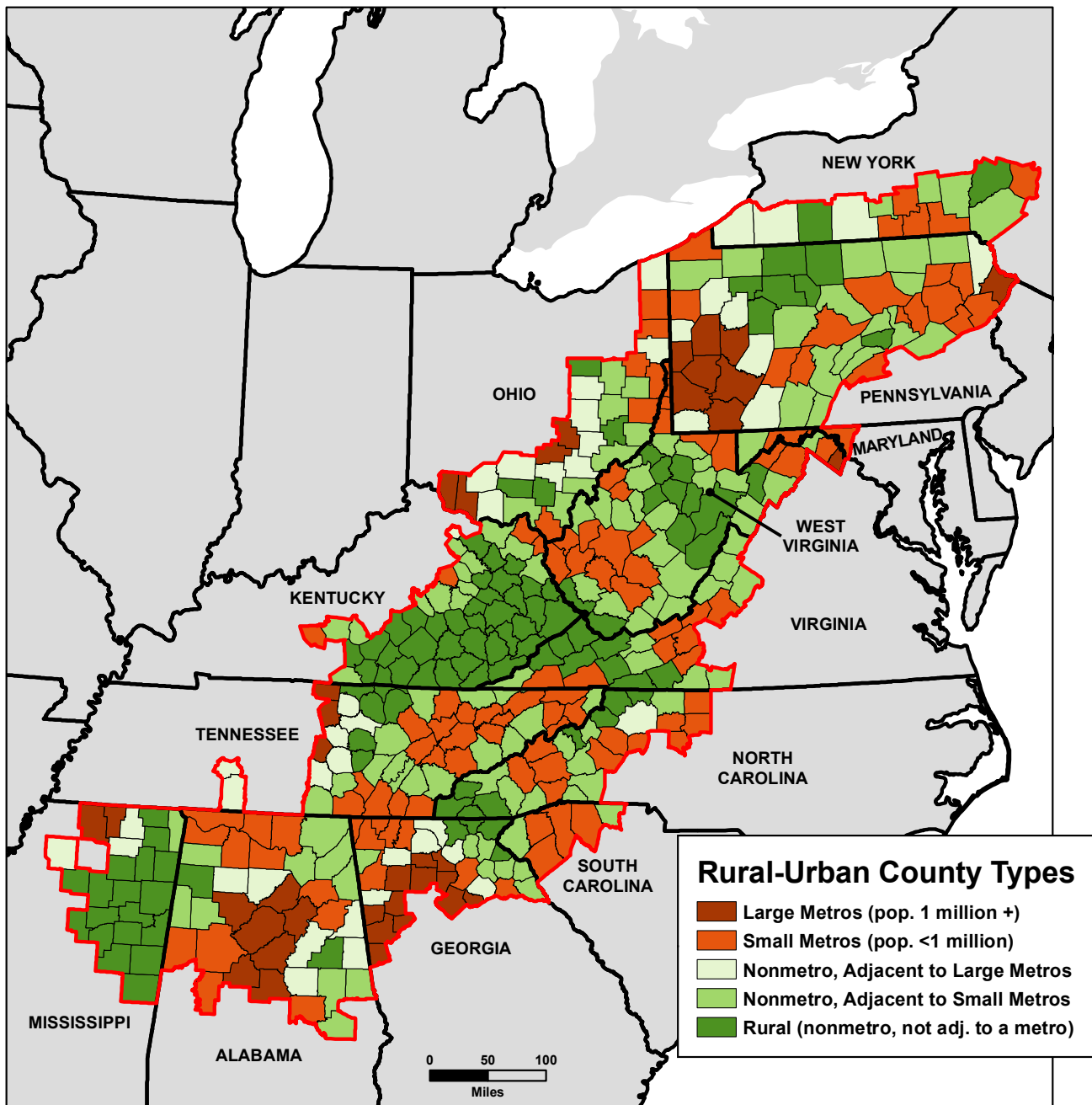


Map Title: Appalachian Subregions

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 B.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.