THE APPALACHIAN REGION: A DATA OVERVIEW FROM THE 2014-2018 AMERICAN COMMUNITY SURVEY Chartbook

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FOREWORD

Most of the data contained in this chartbook come from the 2014-2018 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The decennial long form has been replaced by the American Community Survey (ACS), a nationwide study collected continuously every year in every county in the United States.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 2014-2018 ACS data to have comparable statistics for all 420 counties in the Region.

The ACS five-year estimates for 2014-2018 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 2014 through December 2018. 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 (2014-2018 and 2009-2013), 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, 2009-2013 data for these items are not available to measure trends. More information about comparing the 2009-2013 and 2014-2018 ACS data is available on the Web page, "Comparing 2009-2013 ACS 5-year and 2014-2018 ACS 5-year", through the Census Bureau's website.

While ACS five-year data are needed to provide reliable estimates for areas with small populations, they can make it difficult to track trends in these areas. The 2009-2013 ACS data illustrate this problem, as they are for a time period that covers two distinct periods of economic activity: the last six months of the "Great Recession" of December 2007 through June 2009; and the four and a half years of economic recovery that followed the downturn. Since the 2009-2013 ACS pools data from both periods, it smooths out the extreme variations in economic measures that would be evident in annual data from this five-year period.

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

Hispanic origin. And not only do the vintage 2018 estimates reflect more timely data than the five-year ACS estimates, these are deemed the official population estimates for the geographic areas shown in this chartbook. In fact, the data from the Population Estimates Program serve as the control totals for the ACS estimates.

This year's chartbook is the first that allows data users to measure trends in the major field of degree for adults ages 25 and over (Table 5.8 and Figure 5.14). The ACS introduced a "field of degree" question in 2009, which means that there are now enough years of ACS data to allow comparisons between two non-overlapping five-year periods (2009-2013 and 2014-2018). Chapter 5 ("Education") also includes maps that measure the share of adults who have attained an associate's degree but no bachelor's degree.

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.

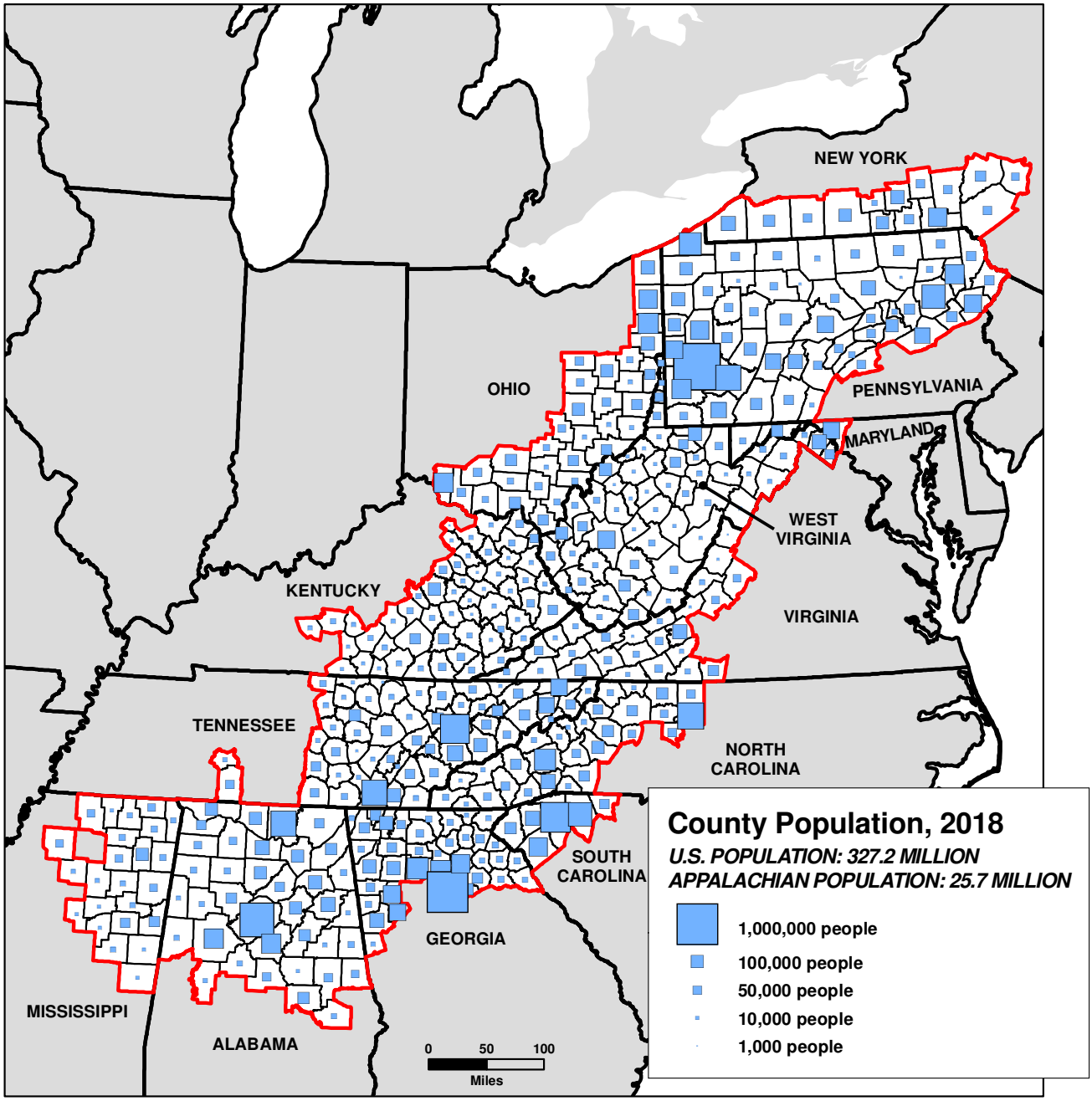
CHAPTER 1: POPULATION BASICS

Table 1.1: Population, Land Area, and Population Density in the Appalachian Region, July 1, 2018

Population, Land Area, and Density	Population, July 1, 2018	Change Since July 1, 2010		Land Area (Square Miles)	Population per Square Mile of Land Area, July 1, 2018
		Number	Percent		
United States	**327,167,434**	**+ 17,841,349**	**+ 5.8**	**3,531,905**	**92.6**
Appalachian Region	**25,663,257**	**+ 400,653**	**+ 1.6**	**204,452**	**125.5**
Subregions					
Northern Appalachia	8,166,629	- 217,442	- 2.6	56,980	143.3
North Central Appalachia	2,396,063	- 29,475	- 1.2	29,337	81.7
Central Appalachia	1,861,973	- 57,766	- 3.0	29,773	62.5
South Central Appalachia	4,905,863	+ 183,687	+ 3.9	34,997	140.2
Southern Appalachia	8,332,729	+ 521,649	+ 6.7	53,365	156.1
County Types					
Large Metros (pop. 1 million +)	6,136,895	+ 283,043	+ 4.8	18,815	326.2
Small Metros (pop. <1 million)	10,876,129	+ 233,889	+ 2.2	54,302	200.3
Nonmetro, Adjacent to Large Metros	2,201,560	- 14,338	- 0.6	25,382	86.7
Nonmetro, Adjacent to Small Metros	3,953,172	- 41,534	- 1.0	58,591	67.5
Rural (nonmetro, not adj. to a metro)	2,495,501	- 60,407	- 2.4	47,363	52.7
Alabama	**4,887,871**	**+ 102,423**	**+ 2.1**	**50,645**	**96.5**
Appalachian Alabama	3,133,777	+ 66,177	+ 2.2	25,763	121.6
Non-Appalachian Alabama	1,754,094	+ 36,246	+ 2.1	24,882	70.5
Georgia	**10,519,475**	**+ 807,665**	**+ 8.3**	**57,513**	**182.9**
Appalachian Georgia	3,284,939	+ 344,121	+ 11.7	11,378	288.7
Non-Appalachian Georgia	7,234,536	+ 463,544	+ 6.8	46,135	156.8
Kentucky	**4,468,402**	**+ 120,202**	**+ 2.8**	**39,486**	**113.2**
Appalachian Kentucky	1,163,748	- 21,968	- 1.9	18,231	63.8
Non-Appalachian Kentucky	3,304,654	+ 142,170	+ 4.5	21,256	155.5
Maryland	**6,042,718**	**+ 254,076**	**+ 4.4**	**9,707**	**622.5**
Appalachian Maryland	251,064	- 1,777	- 0.7	1,529	164.2
Non-Appalachian Maryland	5,791,654	+ 255,853	+ 4.6	8,178	708.2
Mississippi	**2,986,530**	**+ 15,994**	**+ 0.5**	**46,923**	**63.6**
Appalachian Mississippi	625,041	- 3,894	- 0.6	12,400	50.4
Non-Appalachian Mississippi	2,361,489	+ 19,888	+ 0.8	34,523	68.4
New York	**19,542,209**	**+ 142,129**	**+ 0.7**	**47,126**	**414.7**
Appalachian New York	1,022,915	- 42,975	- 4.0	11,681	87.6
Non-Appalachian New York	18,519,294	+ 185,104	+ 1.0	35,445	522.5
North Carolina	**10,383,620**	**+ 809,327**	**+ 8.5**	**48,618**	**213.6**
Appalachian North Carolina	1,767,341	+ 67,653	+ 4.0	11,887	148.7
Non-Appalachian North Carolina	8,616,279	+ 741,674	+ 9.4	36,731	234.6
Ohio	**11,689,442**	**+ 150,115**	**+ 1.3**	**40,861**	**286.1**
Appalachian Ohio	1,993,819	- 48,279	- 2.4	15,978	124.8
Non-Appalachian Ohio	9,695,623	+ 198,394	+ 2.1	24,882	389.7
Pennsylvania	**12,807,060**	**+ 95,902**	**+ 0.8**	**44,743**	**286.2**
Appalachian Pennsylvania	5,666,957	- 125,657	- 2.2	36,444	155.5
Non-Appalachian Pennsylvania	7,140,103	+ 221,559	+ 3.2	8,298	860.5
South Carolina	**5,084,127**	**+ 448,471**	**+ 9.7**	**30,061**	**169.1**
Appalachian South Carolina	1,288,972	+ 115,245	+ 9.8	3,824	337.1
Non-Appalachian South Carolina	3,795,155	+ 333,226	+ 9.6	26,237	144.6
Tennessee	**6,770,010**	**+ 414,709**	**+ 6.5**	**41,235**	**164.2**
Appalachian Tennessee	2,913,462	+ 125,191	+ 4.5	20,119	144.8
Non-Appalachian Tennessee	3,856,548	+ 289,518	+ 8.1	21,116	182.6
Virginia	**8,517,685**	**+ 494,005**	**+ 6.2**	**39,490**	**215.7**
Appalachian Virginia	745,390	- 24,802	- 3.2	11,179	66.7
Non-Appalachian Virginia	7,772,295	+ 518,807	+ 7.2	28,311	274.5
West Virginia (entire state)	**1,805,832**	**- 48,382**	**- 2.6**	**24,038**	**75.1**

Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

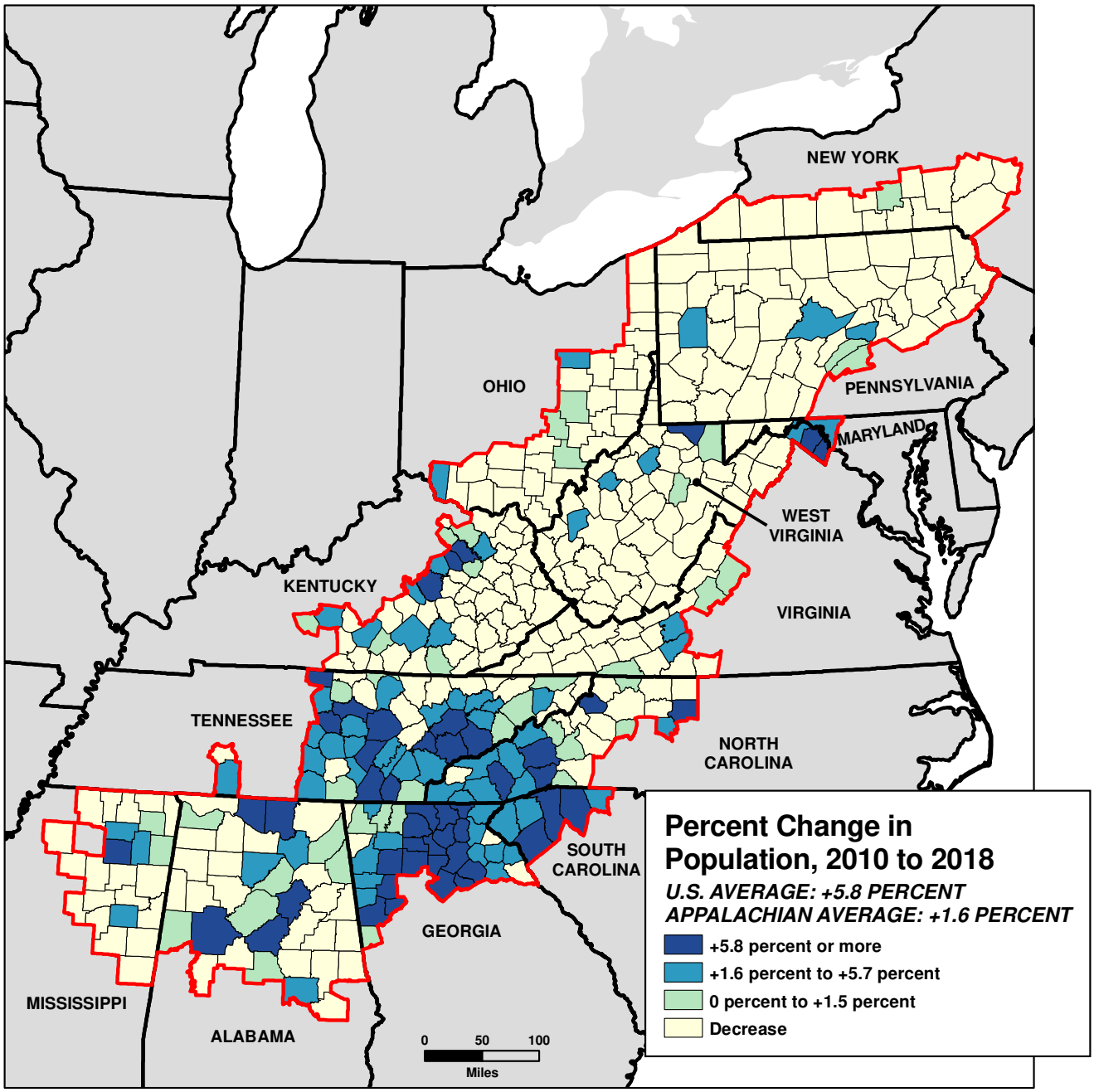
Figure 1.1: Population Distribution in the Appalachian Region, July 1, 2018



Map Title: Population Distribution in the Appalachian Region, July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

Of the 327.2 million persons in the United States as of July 1, 2018, 25.7 million lived in the Appalachian Region—401,000 more than in July 1, 2010. Yet the population of the Region's 420 counties varied greatly. On one hand, two-thirds of the counties had populations of fewer than 50,000 people, and 128 counties had fewer than 20,000 residents. On the other hand, pockets of the Appalachian population lived in large and mid-sized metropolitan areas, including Pittsburgh, Birmingham, and the Atlanta suburbs. Allegheny County, Pennsylvania (where Pittsburgh is located) had more than 1.2 million residents in 2018.

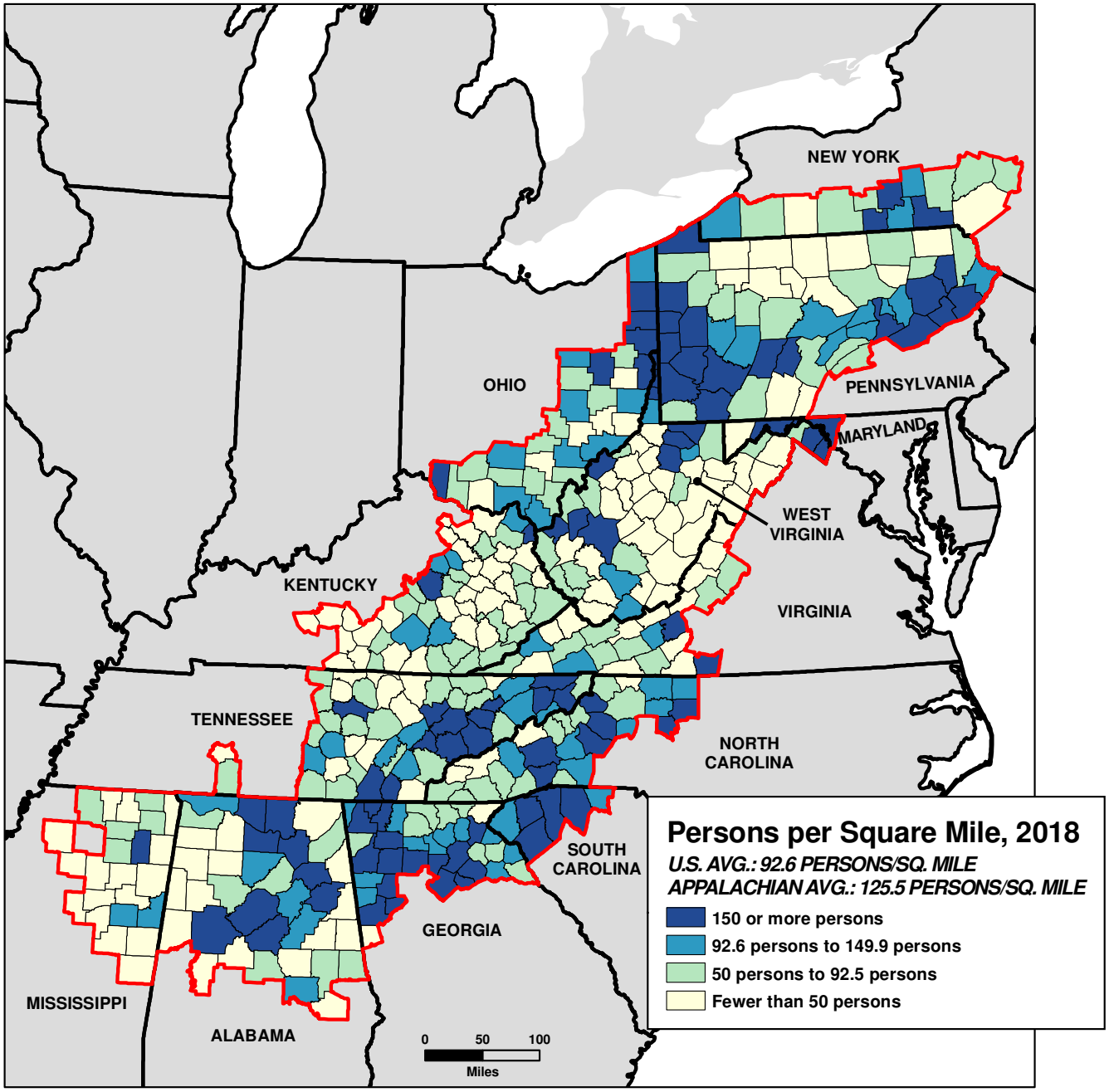
Figure 1.2: Population Change in the Appalachian Region, July 1, 2010 to July 1, 2018



Map Title: Population Change in the Appalachian Region, July 1, 2010 to July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

The Appalachian Region's population grew by 1.6 percent between 2010 and 2018—slightly more than between 2010 and 2017—but still only about one-fourth the national average of 5.8 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 213 of the 264 Appalachian counties that lost residents since then. On the other hand, 49 counties in Appalachia grew at or above the national rate during this period. Of these counties, 42 were in the five Southern states (Alabama, Georgia, the Carolinas, and Tennessee) whose Appalachian sections gained population. Indeed, at 6.7 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 11.7 percent and 9.8 percent, respectively. Many counties with college towns—such as Centre County, Pennsylvania (State College); Monongalia County, West Virginia (Morgantown); and Tuscaloosa County, Alabama (Tuscaloosa)—also experienced rapid growth since 2010.

Figure 1.3: Population per Square Mile of Land Area in the Appalachian Region, July 1, 2018



Map Title: Population per Square Mile of Land Area in the Appalachian Region, July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

While Appalachia's population density was noticeably greater than the United States as a whole in 2018, 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 2018—roughly 401,000 more residents than it had in mid-2010 (see Table 1.1). Although this was a larger increase than between 2010 and 2017, growth in the Region as a whole has still been slow at 1.6 percent; by comparison, the United States as a whole grew almost 6 percent between 2010 and 2018.

- Most of Appalachia, in fact, has lost population since 2010. West Virginia and the Appalachian portions of seven other states had fewer residents in 2018 than they did eight years earlier. And in five of those states—New York, Ohio, Pennsylvania, Virginia, and West Virginia—the population loss exceeded 2 percent. (And the loss was almost that severe in Kentucky's Appalachian section.) Appalachian counties outside metropolitan areas also lost people between 2010 and 2018—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 more than 2 percent of their 2010 population. In many counties, population losses since 2010 have continued longstanding demographic trends going back several decades.

- In contrast to the other three subregions, South Central and Southern Appalachia added residents between 2010 and 2018. Population growth in Southern Appalachia, in fact, was 6.7 percent—nearly 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 approaching or exceeding 10 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 49 counties whose post-2010 growth exceeded the national average have been classified as "retirement destination" counties by the Economic Research Service (ERS) of the U.S. Department of Agriculture. Many high-growth areas also benefit from being part of a major research university, such as Pennsylvania State University (Centre County), the University of Tennessee (Knox County), or Virginia Tech (Montgomery County). Yet the major single factor may well be a diversified economy. Of the 49 rapid-growth Appalachian counties, 31 are part of metropolitan areas, and 20 (including 18 of the 31 in metros) have been classified as "nonspecialized" by ERS—meaning that they weren't dependent on a single economic sector.

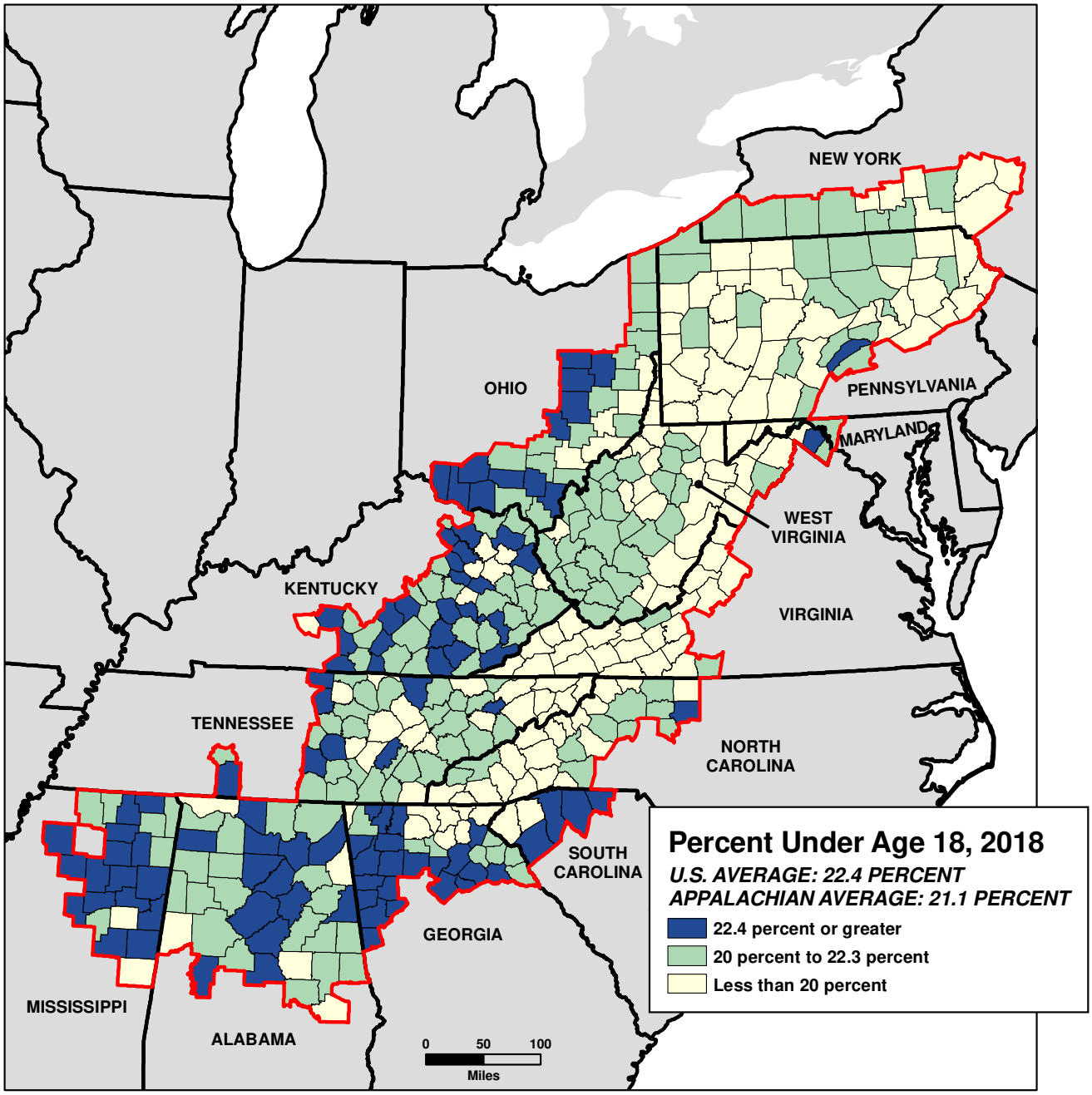
CHAPTER 2: AGE

Table 2.1: Population in the Appalachian Region by Age Group, July 1, 2018

Population by Age Group	Total Population, July 1, 2018	Percent of Population				Median Age (Years)
		Under Age 18	Ages 18-24	Ages 25-64	Ages 65 and over	
United States	**327,167,434**	**22.4**	**9.3**	**52.2**	**16.0**	**38.2**
Appalachian Region	**25,663,257**	**21.1**	**9.2**	**51.3**	**18.4**	**41.1**
Subregions						
Northern Appalachia	8,166,629	19.6	9.4	51.0	20.0	42.8
North Central Appalachia	2,396,063	20.7	9.0	51.3	19.0	41.8
Central Appalachia	1,861,973	21.4	8.3	51.6	18.8	42.1
South Central Appalachia	4,905,863	19.9	9.3	50.8	19.9	42.5
Southern Appalachia	8,332,729	23.3	9.1	51.9	15.7	38.6
County Types						
Large Metros (pop. 1 million +)	6,136,895	22.4	8.5	53.0	16.2	39.7
Small Metros (pop. <1 million)	10,876,129	20.7	9.8	51.2	18.4	40.8
Nonmetro, Adjacent to Large Metros	2,201,560	21.1	9.3	50.5	19.0	41.8
Nonmetro, Adjacent to Small Metros	3,953,172	20.4	8.5	50.4	20.7	43.6
Rural (nonmetro, not adj. to a metro)	2,495,501	20.9	9.3	50.1	19.6	42.0
Alabama	**4,887,871**	**22.3**	**9.3**	**51.5**	**16.9**	**39.2**
Appalachian Alabama	3,133,777	22.1	9.0	51.9	16.9	39.5
Non-Appalachian Alabama	1,754,094	22.6	9.7	50.8	17.0	38.7
Georgia	**10,519,475**	**23.8**	**9.6**	**52.7**	**13.9**	**36.9**
Appalachian Georgia	3,284,939	24.9	8.8	52.4	13.9	37.8
Non-Appalachian Georgia	7,234,536	23.3	10.0	52.8	13.9	36.5
Kentucky	**4,468,402**	**22.6**	**9.3**	**51.7**	**16.4**	**38.9**
Appalachian Kentucky	1,163,748	21.9	8.8	51.5	17.8	41.0
Non-Appalachian Kentucky	3,304,654	22.8	9.5	51.8	15.8	38.3
Maryland	**6,042,718**	**22.2**	**8.8**	**53.6**	**15.4**	**38.8**
Appalachian Maryland	251,064	20.2	9.2	52.0	18.7	41.5
Non-Appalachian Maryland	5,791,654	22.3	8.8	53.7	15.3	38.8
Mississippi	**2,986,530**	**23.6**	**9.8**	**50.7**	**15.9**	**37.7**
Appalachian Mississippi	625,041	23.0	10.4	49.7	16.8	38.1
Non-Appalachian Mississippi	2,361,489	23.8	9.6	51.0	15.6	37.5
New York	**19,542,209**	**20.8**	**9.2**	**53.5**	**16.4**	**39.0**
Appalachian New York	1,022,915	19.3	12.7	48.7	19.3	41.1
Non-Appalachian New York	18,519,294	20.9	9.0	53.8	16.3	38.9
North Carolina	**10,383,620**	**22.2**	**9.5**	**52.1**	**16.3**	**38.9**
Appalachian North Carolina	1,767,341	19.6	8.8	50.8	20.8	43.5
Non-Appalachian North Carolina	8,616,279	22.7	9.6	52.4	15.3	38.1
Ohio	**11,689,442**	**22.2**	**9.1**	**51.6**	**17.1**	**39.4**
Appalachian Ohio	1,993,819	21.5	8.6	50.8	19.1	42.0
Non-Appalachian Ohio	9,695,623	22.3	9.3	51.8	16.7	38.9
Pennsylvania	**12,807,060**	**20.7**	**9.1**	**52.0**	**18.2**	**40.8**
Appalachian Pennsylvania	5,666,957	19.3	9.1	51.6	20.1	43.1
Non-Appalachian Pennsylvania	7,140,103	21.8	9.0	52.4	16.8	39.1
South Carolina	**5,084,127**	**21.8**	**9.2**	**51.3**	**17.7**	**39.6**
Appalachian South Carolina	1,288,972	22.4	9.5	51.2	16.8	38.9
Non-Appalachian South Carolina	3,795,155	21.5	9.1	51.4	18.0	39.9
Tennessee	**6,770,010**	**22.2**	**9.1**	**52.3**	**16.4**	**38.8**
Appalachian Tennessee	2,913,462	20.6	8.9	51.3	19.2	41.9
Non-Appalachian Tennessee	3,856,548	23.5	9.2	53.1	14.3	36.9
Virginia	**8,517,685**	**22.0**	**9.5**	**53.2**	**15.4**	**38.4**
Appalachian Virginia	745,390	18.1	11.1	49.9	20.9	43.6
Non-Appalachian Virginia	7,772,295	22.3	9.3	53.5	14.9	38.0
West Virginia (entire state)	**1,805,832**	**20.2**	**8.7**	**51.2**	**19.9**	**42.7**

Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

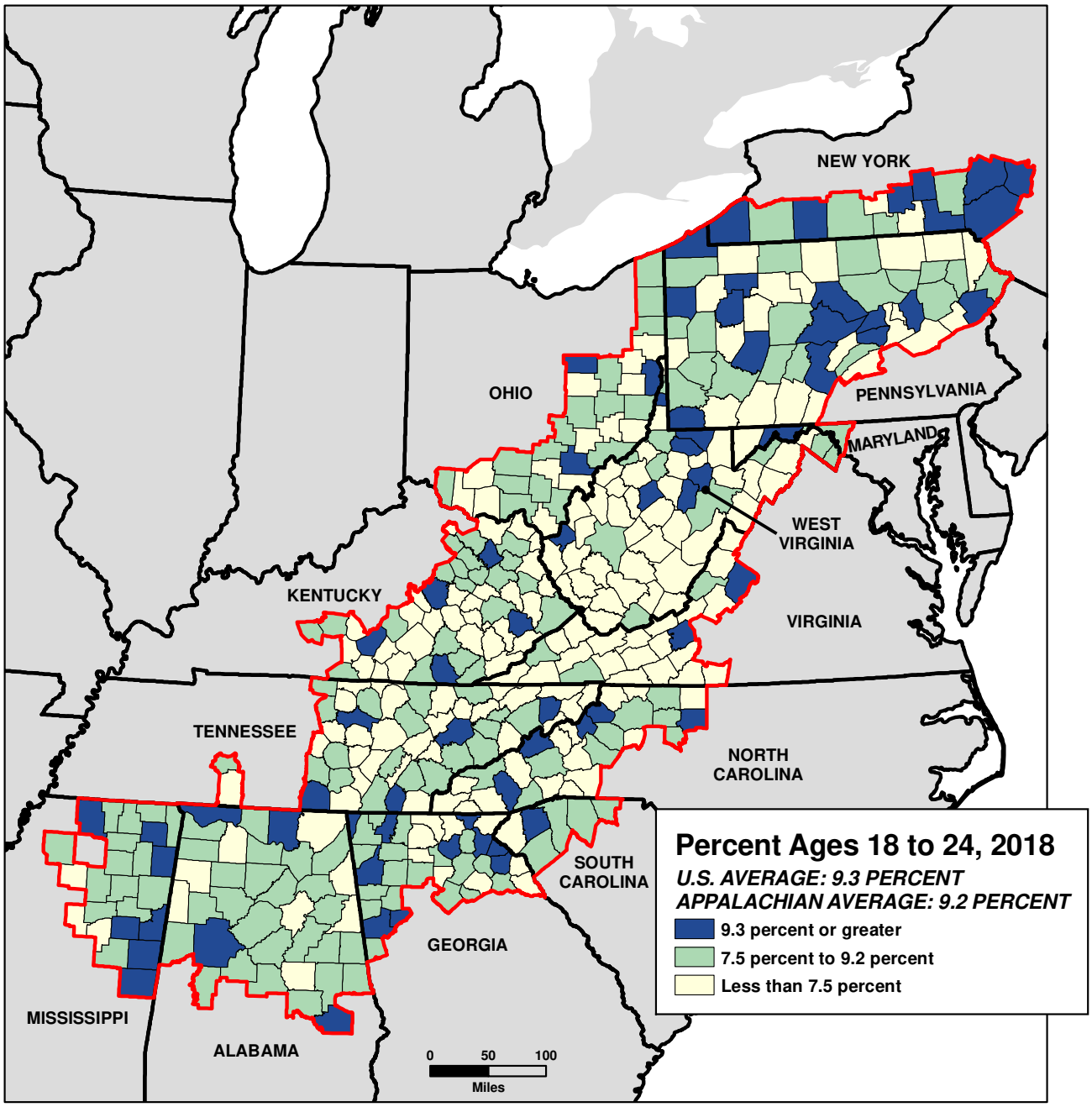
Figure 2.1: Percent of Population in the Appalachian Region Under Age 18, July 1, 2018



Map Title: Percent of Population in the Appalachian Region Under Age 18, July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

As of mid-2018, the share of children and youth under age 18 in the Appalachian population was slightly below the national average of 22.4 percent. And the share was actually less than 20 percent in more than one-third of the Region's 420 counties. Most of these counties were outside metropolitan areas, with concentrations in Pennsylvania, West Virginia, Virginia, North Carolina, and Tennessee. Yet in another 99 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.

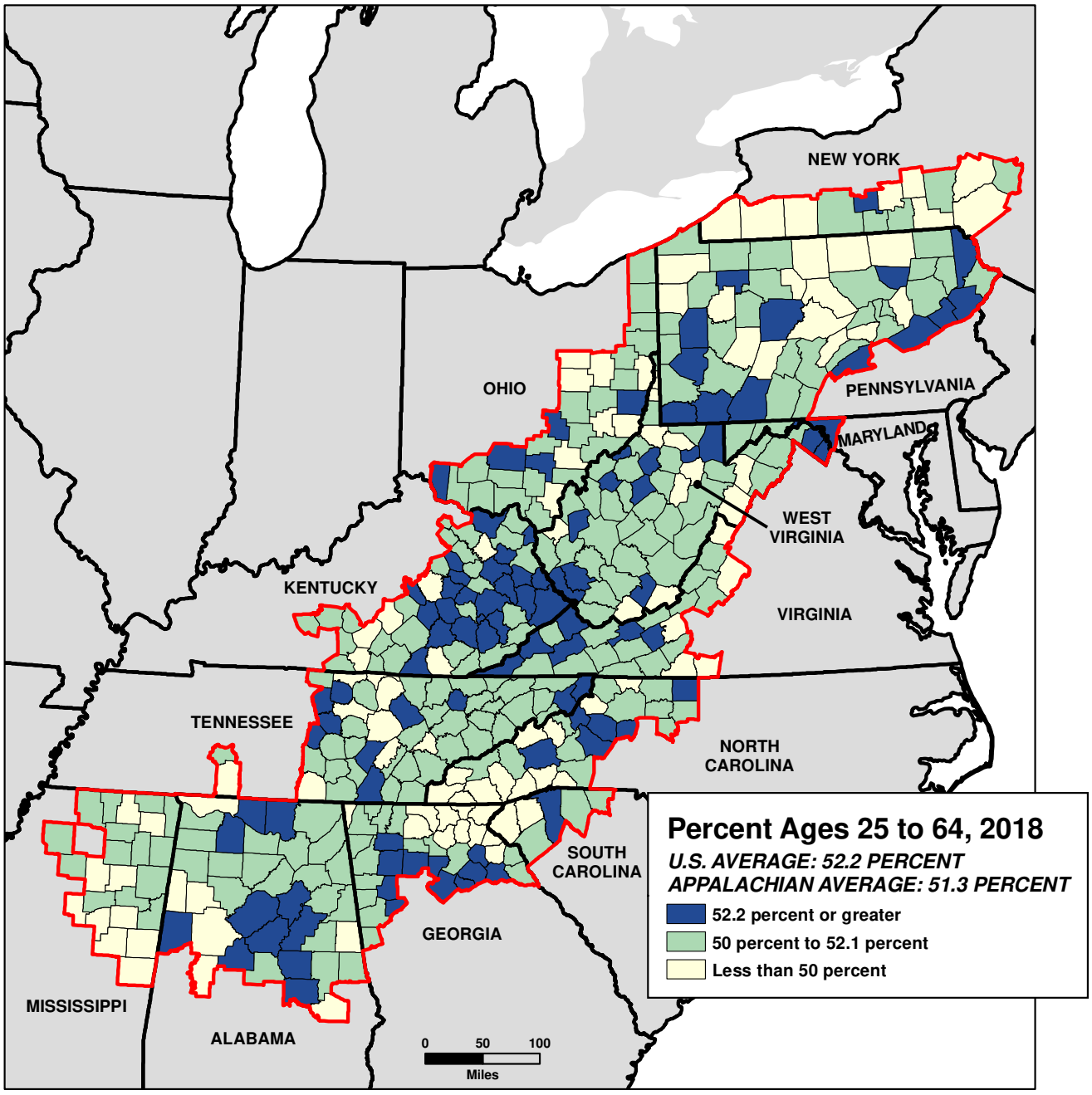
Figure 2.2: Percent of Population in the Appalachian Region Ages 18 to 24, July 1, 2018



Map Title: Percent of Population in the Appalachian Region Ages 18 to 24, July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

Although the share of young adults (ages 18 to 24) in Appalachia roughly equaled the national average in 2018, 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 Ohio University (Athens County, Ohio); Cornell University (Tompkins County, New York); Mississippi State University (Oktibbeha County, Mississippi); 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 187 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.

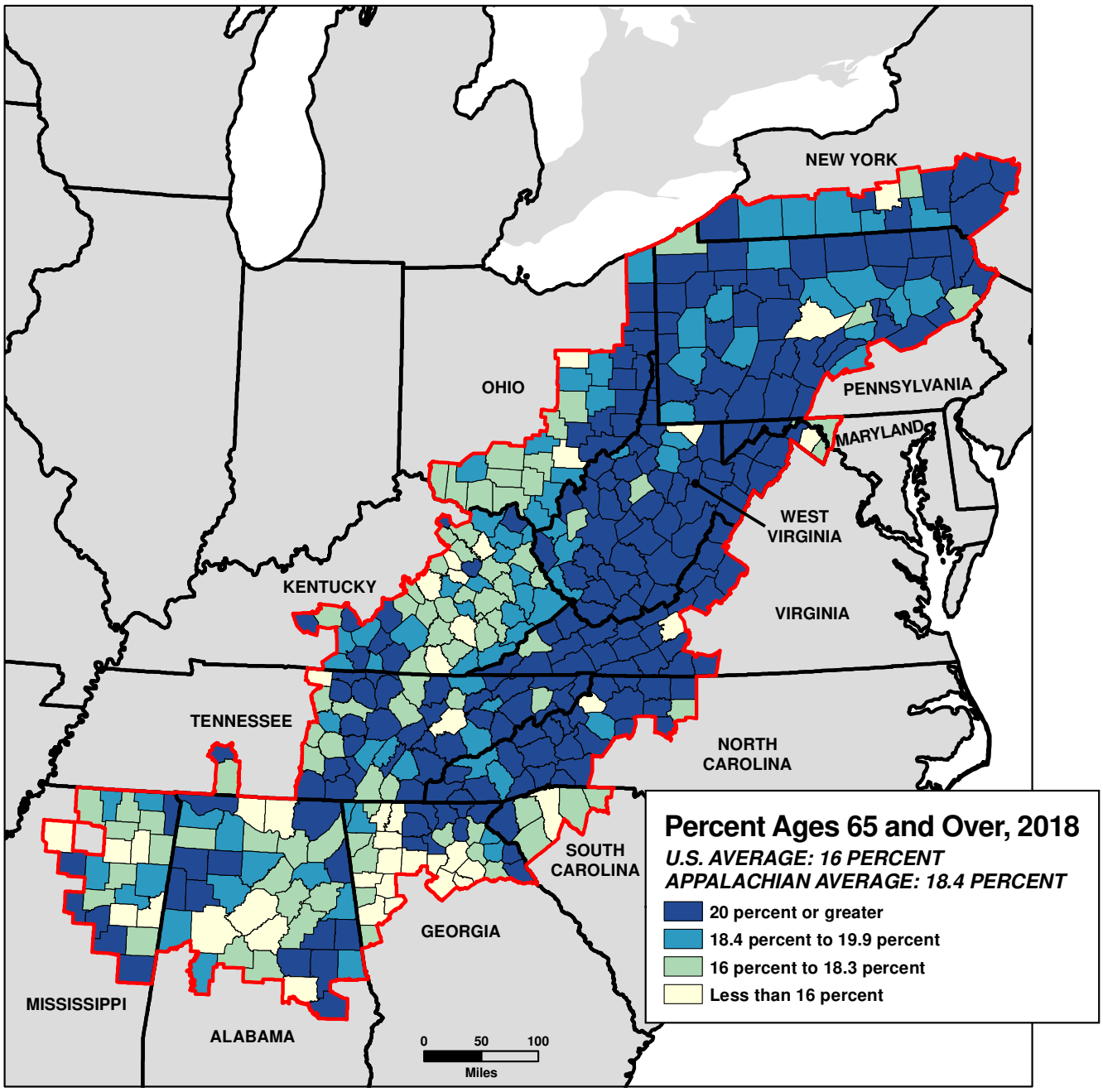
Figure 2.3: Percent of Population in the Appalachian Region Ages 25 to 64, July 1, 2018



Map Title: Percent of Population in the Appalachian Region Ages 25 to 64, July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 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 2018. And in 99 of the 420 Appalachian counties, the percentage of persons in this age group matched or exceeded the national average. But there were 103 counties in the Region (84 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 Pickens County, South Carolina, home to Clemson University—house colleges and universities (and thus had a high share of their populations in the 18-to-24 age range).

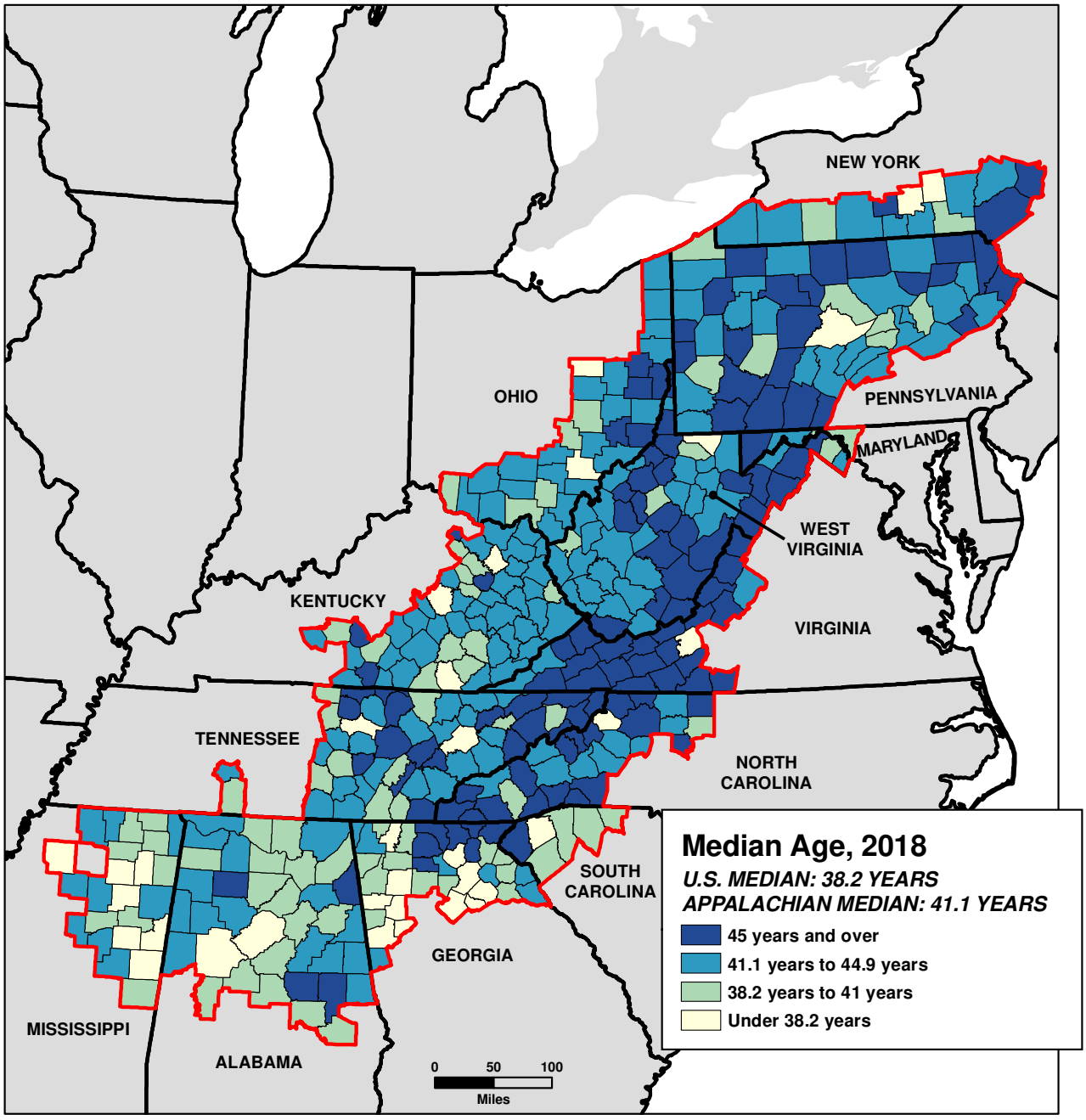
Figure 2.4: Percent of Population in the Appalachian Region Ages 65 and Over, July 1, 2018



Map Title: Percent of Population in the Appalachian Region Ages 65 and Over, July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 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 2018. Moreover, the percentage of persons in this age group matched or exceeded the U.S. share in 378 of the 420 Appalachian counties—and the overall Region share (18.4 percent) in 295 of them. In fact, older persons made up at least 20 percent of the population in 216 Appalachian counties, two-thirds of which were outside metropolitan areas. In contrast, most of the 42 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, 2018



Map Title: Median Age of Persons in the Appalachian Region, July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 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-2018. 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 127 counties—91 of which were outside metro areas—the median age was at least 45 years. Of the 34 counties with populations whose median age was younger than the national median, 21 were in Southern Appalachia—the only subregion where the overall age structure roughly resembled that of the nation. (Appalachian Georgia alone had 11 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 Rowan County, Kentucky, home to Morehead State 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, 2018

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

Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

TRENDS IN AGE

- Like the United States as a whole, Appalachia's population became older between 2010 and 2018 (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 41.1 years over the eight-year period.

- Some parts of the Appalachian Region are aging faster than others. For example, the median age rose more than two years in the Appalachian sections of Virginia and North Carolina, and nearly that much in Appalachian Georgia. Yet while the median age in 2018 was well over 43 years in Appalachian North Carolina and Virginia, it was 37.8 years in Georgia—still below the U.S. median of 38.2 years. Meanwhile, the median age in Appalachian counties outside metropolitan areas rose slightly faster than in the Region's metropolitan counties. Yet among all Appalachian subregions and county types, as well as in the Appalachian portions of nearly every state in the Region, the median age increased faster than the national average—noticeably faster in some cases.

- In both the United States and Appalachia, the aging of the population has come largely at the expense of younger age groups. For example, the share of Appalachia's population under age 18 and the share ages 25 to 64 are both more than a full percentage point lower in mid-2018 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 2018, the share of residents in the older age group increased by more than three percentage points in the Region—and almost that much 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 Towns County, Georgia; Henderson County, North Carolina; and Cumberland County, Tennessee—have been designated as "retirement" counties by the Economic Research Service of the U.S. Department of Agriculture.

- Both Appalachia and the United States have declining child and young adult populations due to lower fertility and smaller age cohorts. Yet while the working-age population (ages 25 to 64) has increased nationally since 2010, Appalachia has lost people in this age group: There were 13.2 million Appalachian residents ages 25 to 64 in 2018, down more than 1 percent from eight years earlier.

CHAPTER 3: RACE AND HISPANIC ORIGIN

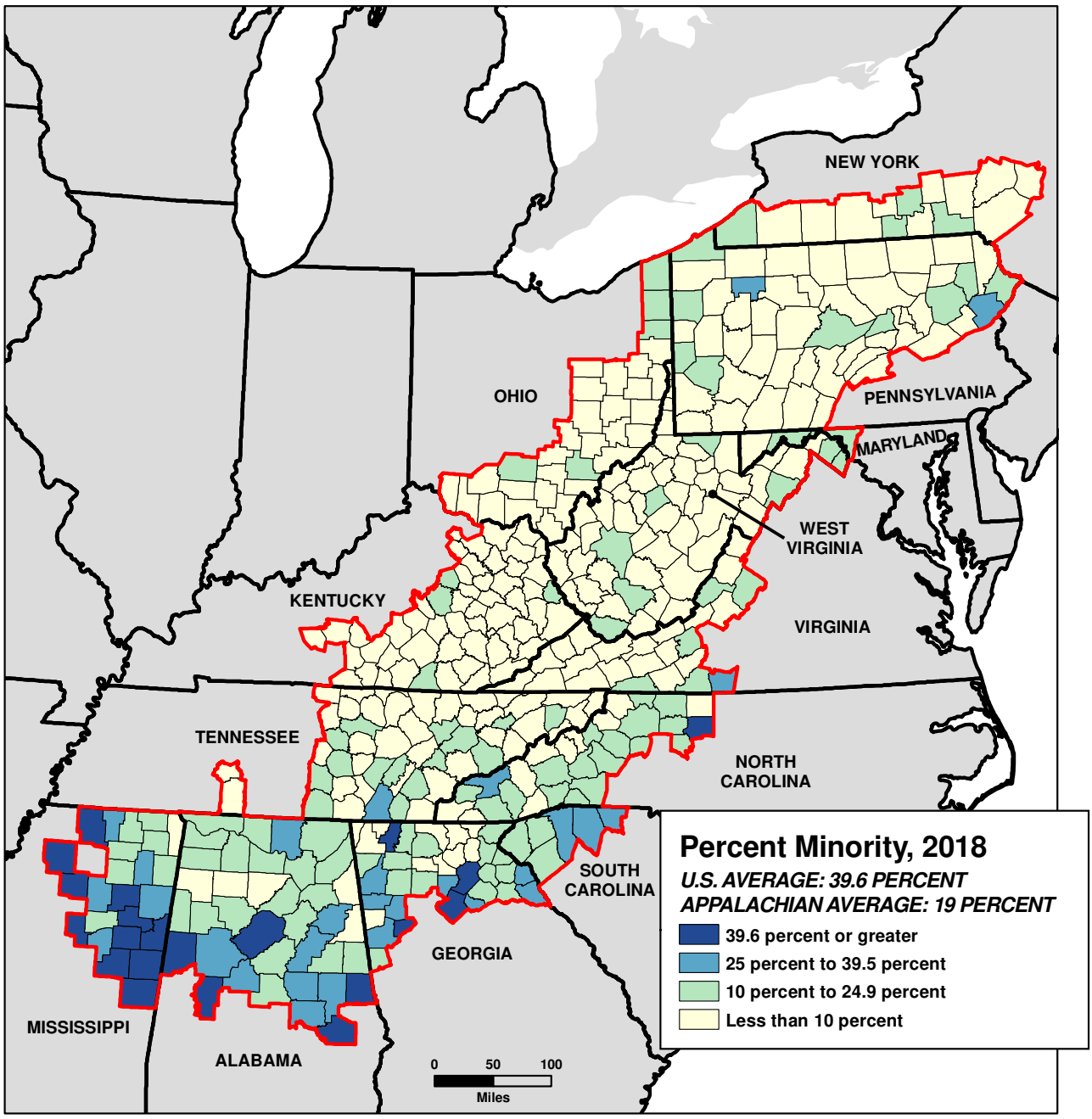
Table 3.1: Population in the Appalachian Region by Race and Hispanic Origin, July 1, 2018

Population by Race and Hispanic Origin	Total Population, July 1, 2018	Percent of Population				
		White Alone, Not Hispanic	Minority			
			Total	Black Alone, Not Hispanic	Hispanic or Latino	Other, Not Hispanic
United States	**327,167,434**	**60.4**	**39.6**	**12.5**	**18.3**	**8.8**
Appalachian Region	**25,663,257**	**81.0**	**19.0**	**9.8**	**5.3**	**3.8**
Subregions						
Northern Appalachia	8,166,629	87.5	12.5	5.5	3.5	3.6
North Central Appalachia	2,396,063	92.3	7.7	3.1	1.7	2.9
Central Appalachia	1,861,973	94.4	5.6	1.9	1.7	1.9
South Central Appalachia	4,905,863	83.9	16.1	7.1	5.5	3.5
Southern Appalachia	8,332,729	66.8	33.2	19.4	8.8	5.0
County Types						
Large Metros (pop. 1 million +)	6,136,895	71.1	28.9	16.1	6.8	6.0
Small Metros (pop. <1 million)	10,876,129	80.7	19.3	9.6	5.9	3.8
Nonmetro, Adjacent to Large Metros	2,201,560	87.9	12.1	5.3	4.0	2.8
Nonmetro, Adjacent to Small Metros	3,953,172	89.2	10.8	4.5	3.8	2.5
Rural (nonmetro, not adj. to a metro)	2,495,501	88.0	12.0	7.7	2.3	2.0
Alabama	**4,887,871**	**65.4**	**34.6**	**26.5**	**4.4**	**3.6**
Appalachian Alabama	3,133,777	69.3	30.7	22.4	5.0	3.4
Non-Appalachian Alabama	1,754,094	58.6	41.4	33.9	3.5	4.1
Georgia	**10,519,475**	**52.4**	**47.6**	**31.5**	**9.8**	**6.3**
Appalachian Georgia	3,284,939	62.9	37.1	15.4	14.3	7.5
Non-Appalachian Georgia	7,234,536	47.6	52.4	38.8	7.7	5.8
Kentucky	**4,468,402**	**84.3**	**15.7**	**8.2**	**3.8**	**3.7**
Appalachian Kentucky	1,163,748	94.4	5.6	1.9	1.8	1.9
Non-Appalachian Kentucky	3,304,654	80.7	19.3	10.4	4.6	4.3
Maryland	**6,042,718**	**50.5**	**49.5**	**29.8**	**10.4**	**9.3**
Appalachian Maryland	251,064	82.7	17.3	9.4	3.9	4.0
Non-Appalachian Maryland	5,791,654	49.1	50.9	30.7	10.7	9.5
Mississippi	**2,986,530**	**56.5**	**43.5**	**37.4**	**3.4**	**2.8**
Appalachian Mississippi	625,041	63.2	36.8	31.8	2.8	2.1
Non-Appalachian Mississippi	2,361,489	54.7	45.3	38.9	3.5	2.9
New York	**19,542,209**	**55.4**	**44.6**	**14.5**	**19.2**	**10.9**
Appalachian New York	1,022,915	88.1	11.9	2.9	3.8	5.1
Non-Appalachian New York	18,519,294	53.6	46.4	15.1	20.1	11.2
North Carolina	**10,383,620**	**62.8**	**37.2**	**21.4**	**9.6**	**6.2**
Appalachian North Carolina	1,767,341	79.6	20.4	8.8	7.8	3.8
Non-Appalachian North Carolina	8,616,279	59.4	40.6	23.9	10.0	6.7
Ohio	**11,689,442**	**78.7**	**21.3**	**12.6**	**3.9**	**4.8**
Appalachian Ohio	1,993,819	90.8	9.2	4.3	2.2	2.7
Non-Appalachian Ohio	9,695,623	76.2	23.8	14.3	4.3	5.2
Pennsylvania	**12,807,060**	**76.1**	**23.9**	**10.8**	**7.6**	**5.5**
Appalachian Pennsylvania	5,666,957	87.3	12.7	5.7	3.5	3.6
Non-Appalachian Pennsylvania	7,140,103	67.2	32.8	15.0	10.9	7.0
South Carolina	**5,084,127**	**63.7**	**36.3**	**26.6**	**5.8**	**3.9**
Appalachian South Carolina	1,288,972	72.4	27.6	16.6	6.9	4.0
Non-Appalachian South Carolina	3,795,155	60.7	39.3	30.0	5.4	3.8
Tennessee	**6,770,010**	**73.7**	**26.3**	**16.7**	**5.6**	**3.9**
Appalachian Tennessee	2,913,462	87.1	12.9	5.5	4.3	3.1
Non-Appalachian Tennessee	3,856,548	63.6	36.4	25.2	6.6	4.5
Virginia	**8,517,685**	**61.5**	**38.5**	**19.1**	**9.6**	**9.8**
Appalachian Virginia	745,390	88.8	11.2	5.5	2.6	3.0
Non-Appalachian Virginia	7,772,295	58.8	41.2	20.4	10.3	10.4
West Virginia (entire state)	**1,805,832**	**92.1**	**7.9**	**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 2018 Population Estimates.

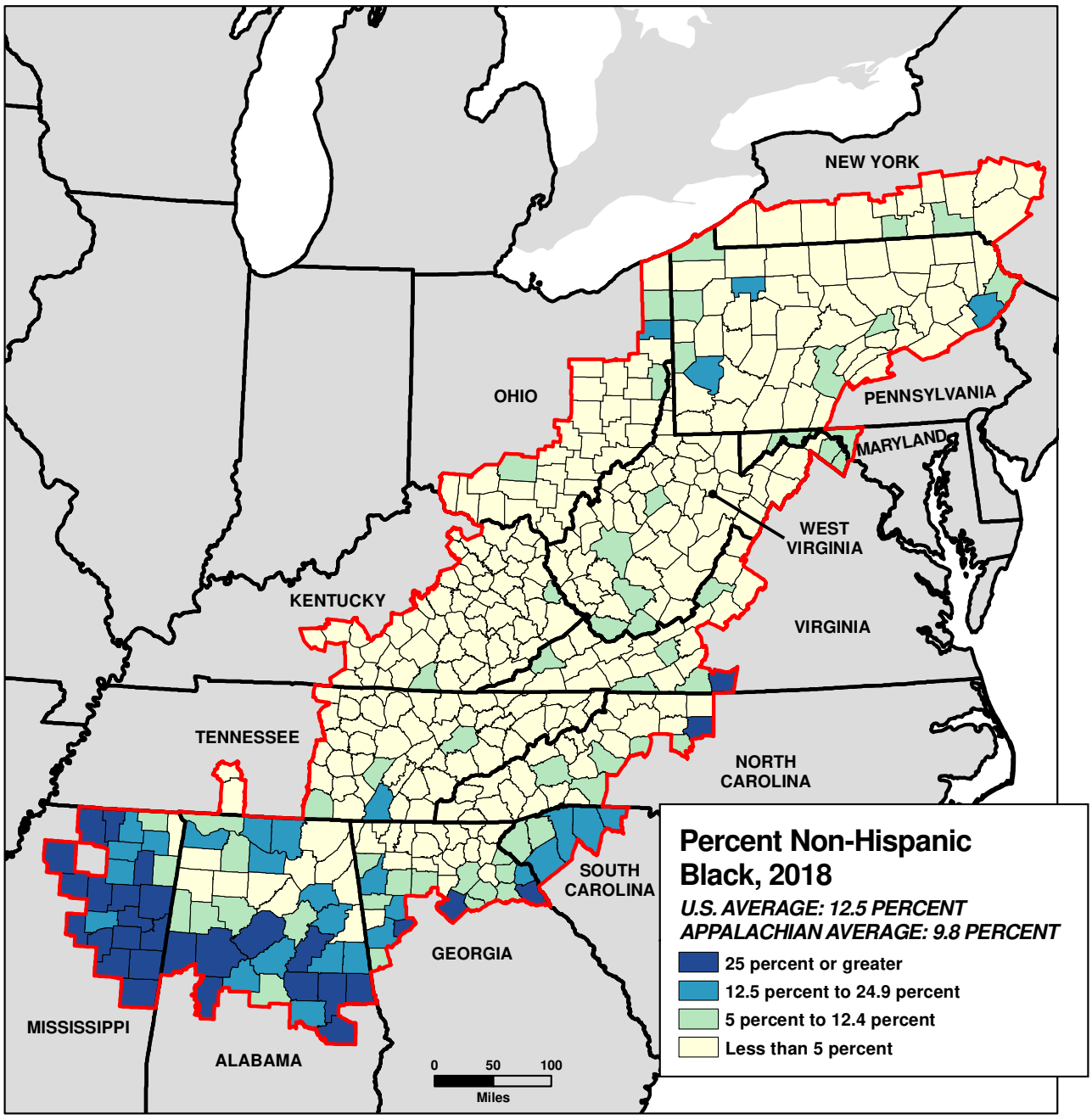
Figure 3.1: Percent of Population in the Appalachian Region That Is Minority, July 1, 2018



Map Title: Percent of Population in the Appalachian Region That Is Minority, July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 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-2018. There were just 21 counties—all but one in Southern Appalachia and more than half in Mississippi alone—where minorities' share of the population matched or exceeded the national average of 39.6 percent.

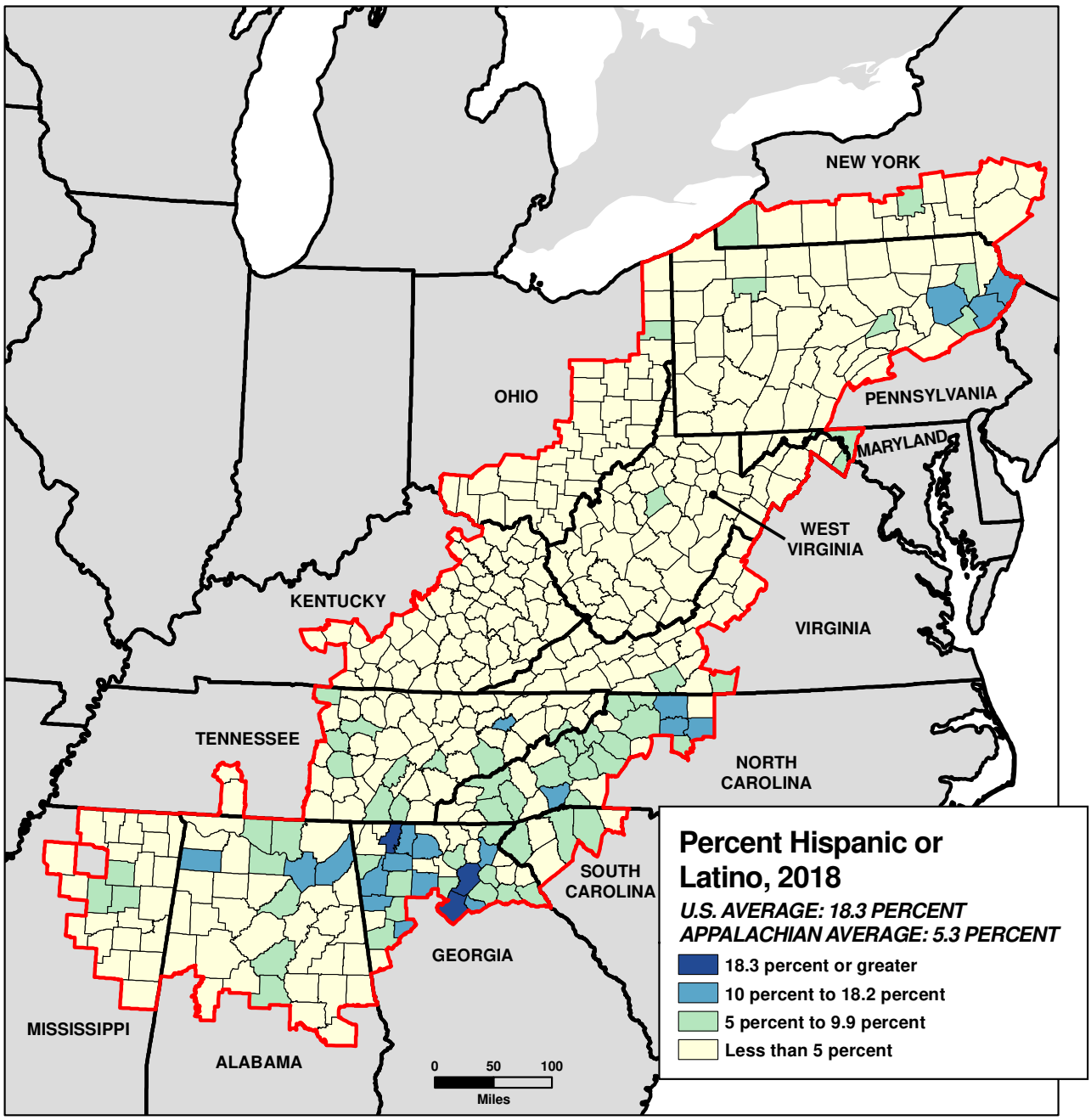
Figure 3.2: Percent of Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2018



Map Title: Percent of Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

While non-Hispanic African Americans have remained the largest single minority group in Appalachia as of 2018, 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, 2018



Map Title: Percent of Population in the Appalachian Region That Is Hispanic or Latino, July 1, 2018
Data Source: U.S. Census Bureau, Vintage 2018 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 2018. The county patterns reflect this fact, as Hispanics were at least 5 percent of the population in just 83 of Appalachia's 420 counties, 69 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.

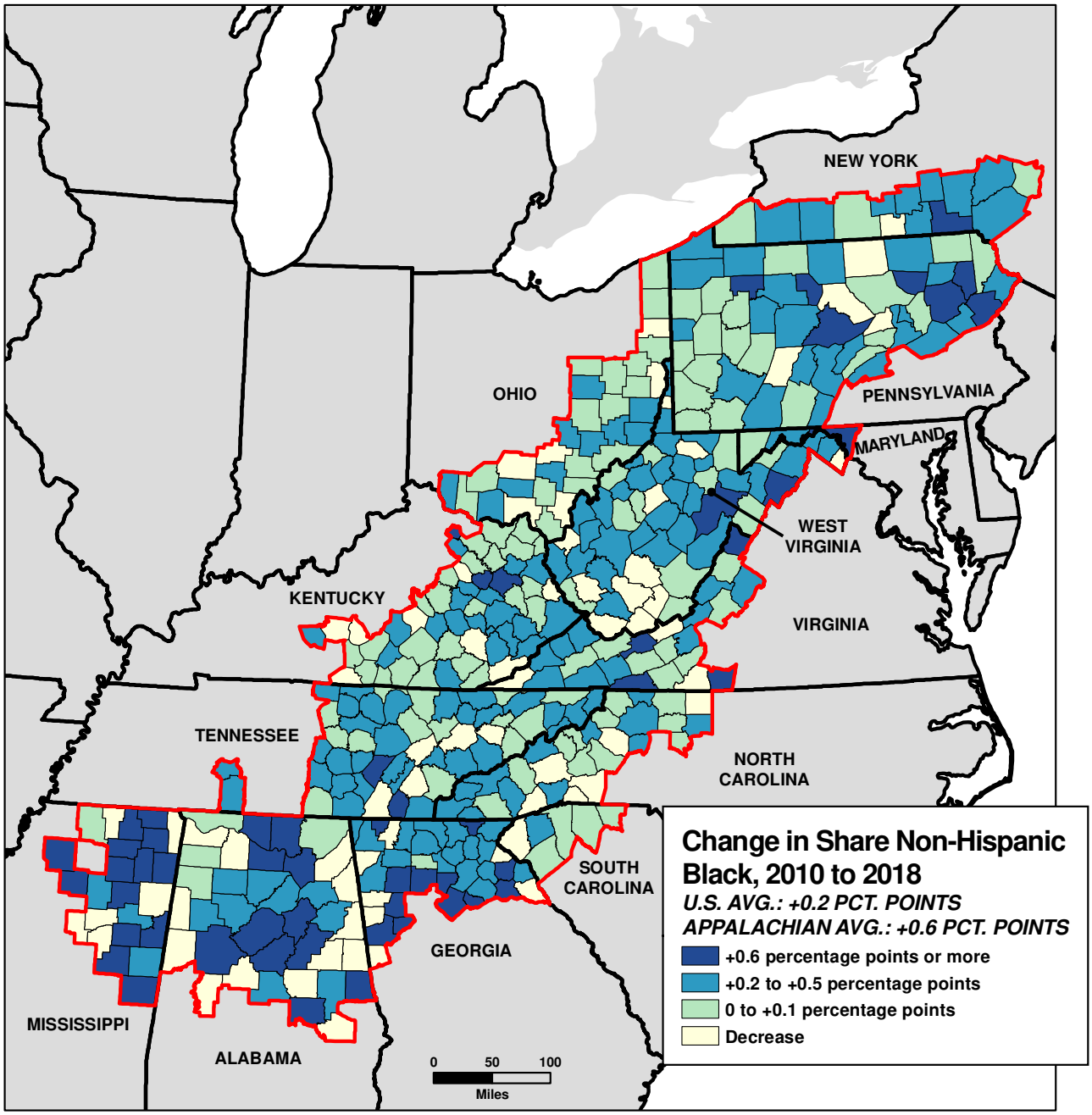
Table 3.2: Percentage Point Change in the Share of the Population in the Appalachian Region, by Race and Hispanic Origin, July 1, 2010 to July 1, 2018

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	**- 3.4**	**+ 3.4**	**+ 0.2**	**+ 1.9**	**+ 1.3**
Appalachian Region	**- 2.6**	**+ 2.6**	**+ 0.6**	**+ 1.1**	**+ 0.8**
Subregions					
Northern Appalachia	- 2.1	+ 2.1	+ 0.3	+ 1.1	+ 0.8
North Central Appalachia	- 1.1	+ 1.1	+ 0.1	+ 0.5	+ 0.5
Central Appalachia	- 1.1	+ 1.1	+ 0.1	+ 0.4	+ 0.5
South Central Appalachia	- 1.8	+ 1.8	+ 0.2	+ 0.9	+ 0.7
Southern Appalachia	- 3.2	+ 3.2	+ 0.9	+ 1.2	+ 1.1
County Types					
Large Metros (pop. 1 million +)	- 4.0	+ 4.0	+ 1.3	+ 1.1	+ 1.6
Small Metros (pop. <1 million)	- 2.5	+ 2.5	+ 0.5	+ 1.2	+ 0.8
Nonmetro, Adjacent to Large Metros	- 1.5	+ 1.5	+ 0.2	+ 0.8	+ 0.6
Nonmetro, Adjacent to Small Metros	- 1.4	+ 1.4	+ 0.1	+ 0.8	+ 0.5
Rural (nonmetro, not adj. to a metro)	- 1.3	+ 1.3	+ 0.3	+ 0.6	+ 0.4
Alabama	**- 1.7**	**+ 1.7**	**+ 0.4**	**+ 0.5**	**+ 0.7**
Appalachian Alabama	- 1.8	+ 1.8	+ 0.7	+ 0.6	+ 0.6
Non-Appalachian Alabama	- 1.3	+ 1.3	+ 0.0	+ 0.5	+ 0.9
Georgia	**- 3.5**	**+ 3.5**	**+ 1.3**	**+ 1.0**	**+ 1.3**
Appalachian Georgia	- 5.3	+ 5.3	+ 2.2	+ 1.6	+ 1.7
Non-Appalachian Georgia	- 3.0	+ 3.0	+ 1.2	+ 0.6	+ 1.1
Kentucky	**- 2.1**	**+ 2.1**	**+ 0.5**	**+ 0.7**	**+ 0.9**
Appalachian Kentucky	- 1.0	+ 1.0	+ 0.1	+ 0.4	+ 0.5
Non-Appalachian Kentucky	- 2.3	+ 2.3	+ 0.4	+ 0.9	+ 1.0
Maryland	**- 4.2**	**+ 4.2**	**+ 0.7**	**+ 2.2**	**+ 1.3**
Appalachian Maryland	- 3.7	+ 3.7	+ 1.4	+ 1.3	+ 1.0
Non-Appalachian Maryland	- 4.2	+ 4.2	+ 0.6	+ 2.2	+ 1.3
Mississippi	**- 1.5**	**+ 1.5**	**+ 0.5**	**+ 0.6**	**+ 0.5**
Appalachian Mississippi	- 1.6	+ 1.6	+ 0.5	+ 0.5	+ 0.5
Non-Appalachian Mississippi	- 1.5	+ 1.5	+ 0.5	+ 0.6	+ 0.4
New York	**- 3.0**	**+ 3.0**	**- 0.1**	**+ 1.5**	**+ 1.6**
Appalachian New York	- 2.0	+ 2.0	+ 0.3	+ 0.7	+ 0.9
Non-Appalachian New York	- 3.0	+ 3.0	- 0.2	+ 1.6	+ 1.6
North Carolina	**- 2.5**	**+ 2.5**	**+ 0.2**	**+ 1.2**	**+ 1.2**
Appalachian North Carolina	- 1.7	+ 1.7	+ 0.2	+ 0.9	+ 0.6
Non-Appalachian North Carolina	- 2.5	+ 2.5	- 0.1	+ 1.2	+ 1.3
Ohio	**- 2.5**	**+ 2.5**	**+ 0.5**	**+ 0.8**	**+ 1.2**
Appalachian Ohio	- 1.1	+ 1.1	+ 0.0	+ 0.6	+ 0.5
Non-Appalachian Ohio	- 2.7	+ 2.7	+ 0.5	+ 0.9	+ 1.3
Pennsylvania	**- 3.4**	**+ 3.4**	**+ 0.3**	**+ 1.9**	**+ 1.2**
Appalachian Pennsylvania	- 2.3	+ 2.3	+ 0.3	+ 1.1	+ 1.0
Non-Appalachian Pennsylvania	- 3.9	+ 3.9	+ 0.2	+ 2.4	+ 1.3
South Carolina	**- 0.4**	**+ 0.4**	**- 1.1**	**+ 0.7**	**+ 0.9**
Appalachian South Carolina	- 2.1	+ 2.1	+ 0.1	+ 1.1	+ 0.9
Non-Appalachian South Carolina	+ 0.1	- 0.1	- 1.5	+ 0.5	+ 0.8
Tennessee	**- 2.0**	**+ 2.0**	**+ 0.1**	**+ 1.0**	**+ 0.8**
Appalachian Tennessee	- 1.7	+ 1.7	+ 0.1	+ 1.0	+ 0.6
Non-Appalachian Tennessee	- 1.8	+ 1.8	- 0.2	+ 1.0	+ 0.9
Virginia	**- 3.4**	**+ 3.4**	**+ 0.0**	**+ 1.7**	**+ 1.7**
Appalachian Virginia	- 1.7	+ 1.7	+ 0.2	+ 0.7	+ 0.7
Non-Appalachian Virginia	- 3.4	+ 3.4	- 0.2	+ 1.7	+ 1.7
West Virginia (entire state)	**- 1.1**	**+ 1.1**	**+ 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 2018 Population Estimates.

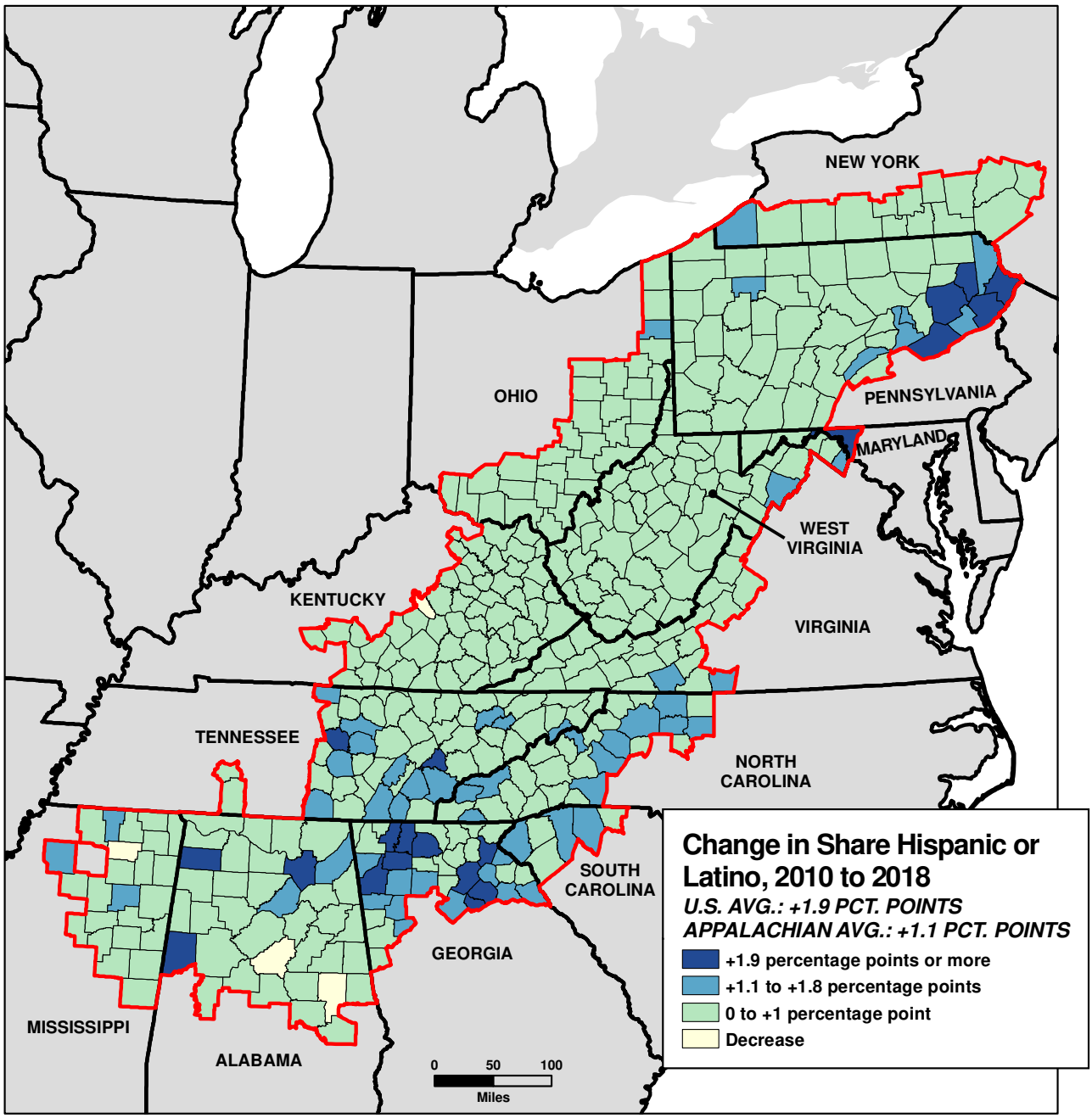
Figure 3.4: Percentage Point Change in the Share of the Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2010 to July 1, 2018



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, 2018
Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

Although African Americans' share of the U.S. population barely changed between 2010 and 2018, their share of the Appalachian population increased more than half a percentage point, from 9.2 percent to 9.8 percent. And there were 57 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 71 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, 2018



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, 2018
Data Source: U.S. Census Bureau, Vintage 2018 Population Estimates.

The Hispanic/Latino share of the Appalachian population rose by just over one percentage point from 2010 to 2018—although this increase was noticeably below the national average over the eight-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. 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, 2018, 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 2.6 percentage points to 19 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 3.4 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—four points in large metros. And Georgia's Appalachian section has grown even faster: The minority share of the population increased more than five percentage points between 2010 and 2018. Not surprisingly, these three areas have minority concentrations that come close to the national minority share of almost 40 percent (33 percent for Southern Appalachia, 29 percent for counties in large metros, and 37 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 1.1 percentage points between mid-2010 and mid-2018, compared with a 0.6 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.)

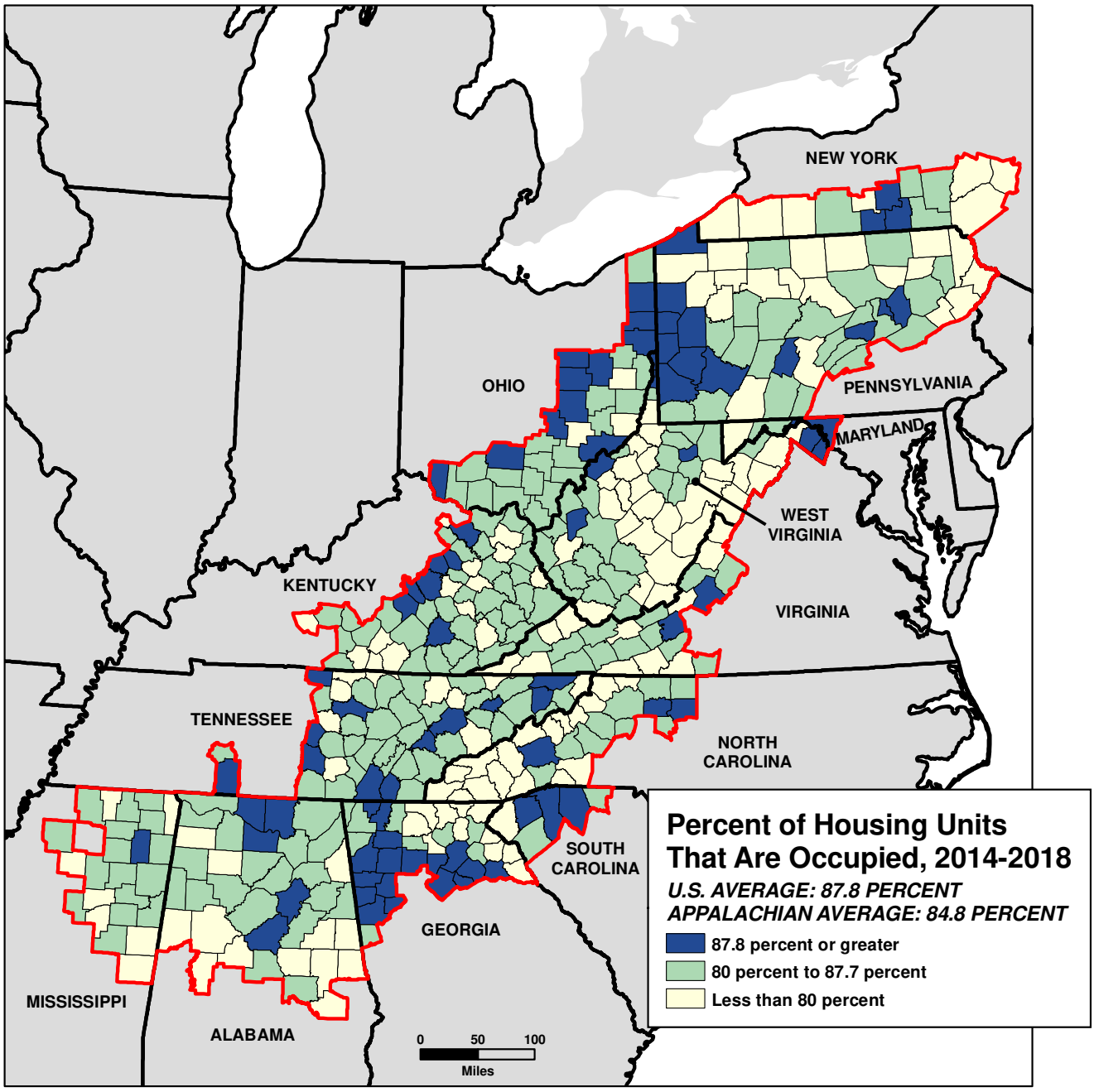
CHAPTER 4: HOUSING OCCUPANCY, TENURE, AND TYPE

Table 4.1: Occupancy and Tenure of Housing Units in the Appalachian Region, 2014-2018

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	**136,384,292**	**119,730,128**	**87.8**	**12.2**	**63.8**	**36.2**
Appalachian Region	**11,789,588**	**9,997,235**	**84.8**	**15.2**	**70.4**	**29.6**
Subregions						
Northern Appalachia	3,969,026	3,353,979	84.5	15.5	70.7	29.3
North Central Appalachia	1,129,847	952,066	84.3	15.7	72.1	27.9
Central Appalachia	893,114	738,405	82.7	17.3	71.9	28.1
South Central Appalachia	2,322,165	1,944,090	83.7	16.3	69.3	30.7
Southern Appalachia	3,475,436	3,008,695	86.6	13.4	69.9	30.1
County Types						
Large Metros (pop. 1 million +)	2,612,389	2,333,958	89.3	10.7	70.4	29.6
Small Metros (pop. <1 million)	4,898,632	4,252,286	86.8	13.2	68.9	31.1
Nonmetro, Adjacent to Large Metros	1,038,954	855,750	82.4	17.6	71.3	28.7
Nonmetro, Adjacent to Small Metros	1,974,076	1,570,305	79.5	20.5	73.1	26.9
Rural (nonmetro, not adj. to a metro)	1,265,537	984,936	77.8	22.2	72.2	27.8
Alabama	**2,244,462**	**1,860,269**	**82.9**	**17.1**	**68.6**	**31.4**
Appalachian Alabama	1,420,719	1,196,775	84.2	15.8	70.1	29.9
Non-Appalachian Alabama	823,743	663,494	80.5	19.5	65.7	34.3
Georgia	**4,241,003**	**3,709,488**	**87.5**	**12.5**	**63.1**	**36.9**
Appalachian Georgia	1,229,083	1,095,656	89.1	10.9	70.4	29.6
Non-Appalachian Georgia	3,011,920	2,613,832	86.8	13.2	60.0	40.0
Kentucky	**1,974,406**	**1,728,681**	**87.6**	**12.4**	**67.0**	**33.0**
Appalachian Kentucky	546,484	456,309	83.5	16.5	70.7	29.3
Non-Appalachian Kentucky	1,427,922	1,272,372	89.1	10.9	65.6	34.4
Maryland	**2,437,740**	**2,192,518**	**89.9**	**10.1**	**66.8**	**33.2**
Appalachian Maryland	113,638	95,774	84.3	15.7	67.9	32.1
Non-Appalachian Maryland	2,324,102	2,096,744	90.2	9.8	66.7	33.3
Mississippi	**1,316,108**	**1,105,576**	**84.0**	**16.0**	**68.2**	**31.8**
Appalachian Mississippi	284,488	236,092	83.0	17.0	69.6	30.4
Non-Appalachian Mississippi	1,031,620	869,484	84.3	15.7	67.8	32.2
New York	**8,287,087**	**7,316,537**	**88.3**	**11.7**	**53.9**	**46.1**
Appalachian New York	516,202	415,285	80.5	19.5	69.1	30.9
Non-Appalachian New York	7,770,885	6,901,252	88.8	11.2	53.0	47.0
North Carolina	**4,573,066**	**3,918,597**	**85.7**	**14.3**	**65.0**	**35.0**
Appalachian North Carolina	882,657	708,685	80.3	19.7	69.2	30.8
Non-Appalachian North Carolina	3,690,409	3,209,912	87.0	13.0	64.1	35.9
Ohio	**5,188,270**	**4,654,075**	**89.7**	**10.3**	**66.0**	**34.0**
Appalachian Ohio	907,325	792,296	87.3	12.7	71.2	28.8
Non-Appalachian Ohio	4,280,945	3,861,779	90.2	9.8	64.9	35.1
Pennsylvania	**5,673,599**	**5,025,132**	**88.6**	**11.4**	**69.0**	**31.0**
Appalachian Pennsylvania	2,763,127	2,342,021	84.8	15.2	71.1	28.9
Non-Appalachian Pennsylvania	2,910,472	2,683,111	92.2	7.8	67.2	32.8
South Carolina	**2,256,951**	**1,894,711**	**84.0**	**16.0**	**68.9**	**31.1**
Appalachian South Carolina	541,146	480,172	88.7	11.3	68.4	31.6
Non-Appalachian South Carolina	1,715,805	1,414,539	82.4	17.6	69.1	30.9
Tennessee	**2,930,530**	**2,567,061**	**87.6**	**12.4**	**66.3**	**33.7**
Appalachian Tennessee	1,325,471	1,142,136	86.2	13.8	69.5	30.5
Non-Appalachian Tennessee	1,605,059	1,424,925	88.8	11.2	63.7	36.3
Virginia	**3,491,091**	**3,128,415**	**89.6**	**10.4**	**66.2**	**33.8**
Appalachian Virginia	368,533	301,358	81.8	18.2	71.4	28.6
Non-Appalachian Virginia	3,122,558	2,827,057	90.5	9.5	65.6	34.4
West Virginia (entire state)	**890,715**	**734,676**	**82.5**	**17.5**	**72.9**	**27.1**

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

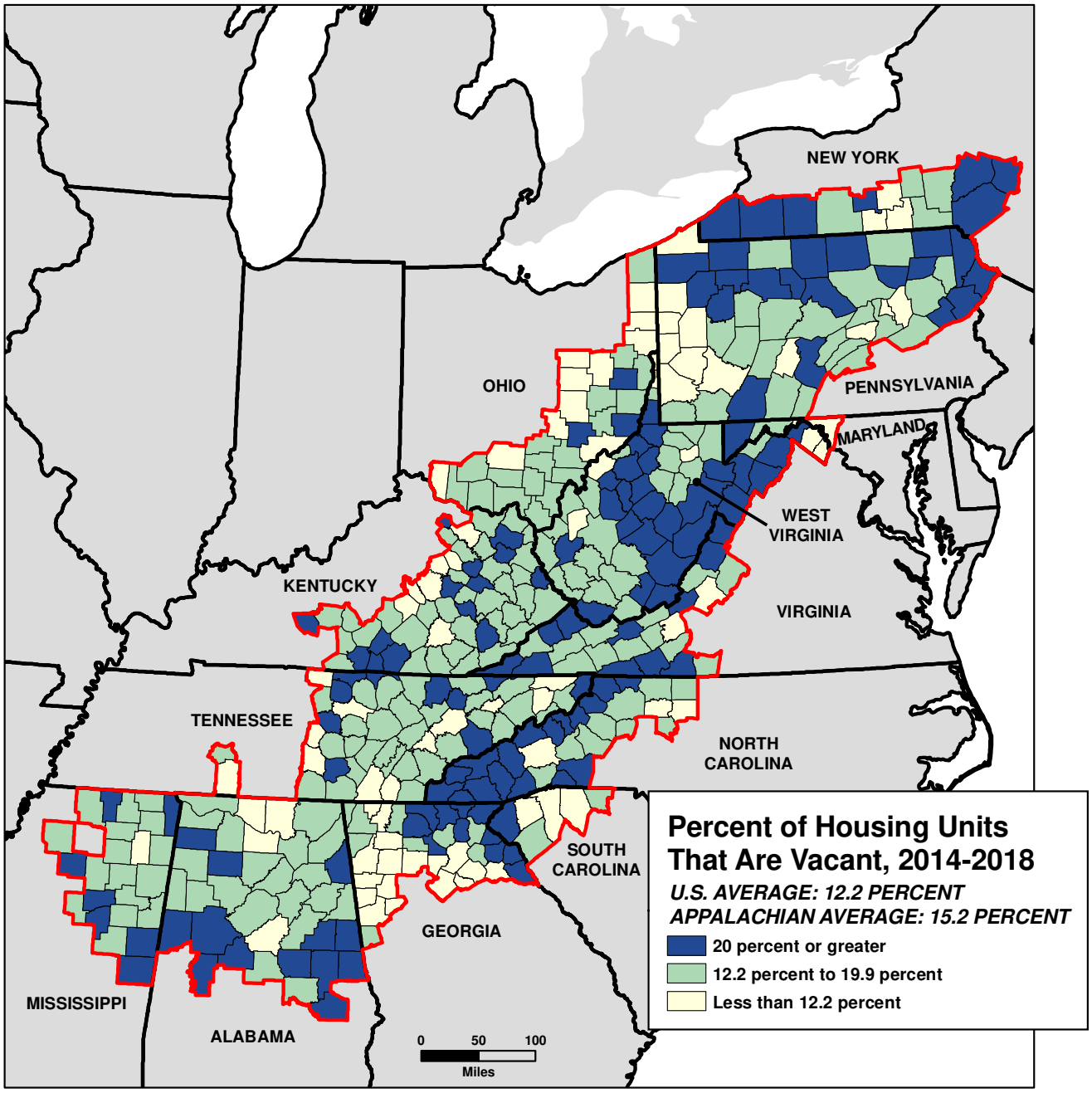
Figure 4.1: Percent of Housing Units in the Appalachian Region That Are Occupied, 2014-2018



Map Title: Percent of Housing Units in the Appalachian Region That Are Occupied, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Although the home occupancy rate during the 2014-2018 period was slightly lower in Appalachia than in the United States as a whole, there were 84 counties in the Region that had occupancy rates matching or exceeding the national average. And while they were scattered throughout the Region, 61 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 140 Appalachian counties—117 of which were located outside metropolitan areas.

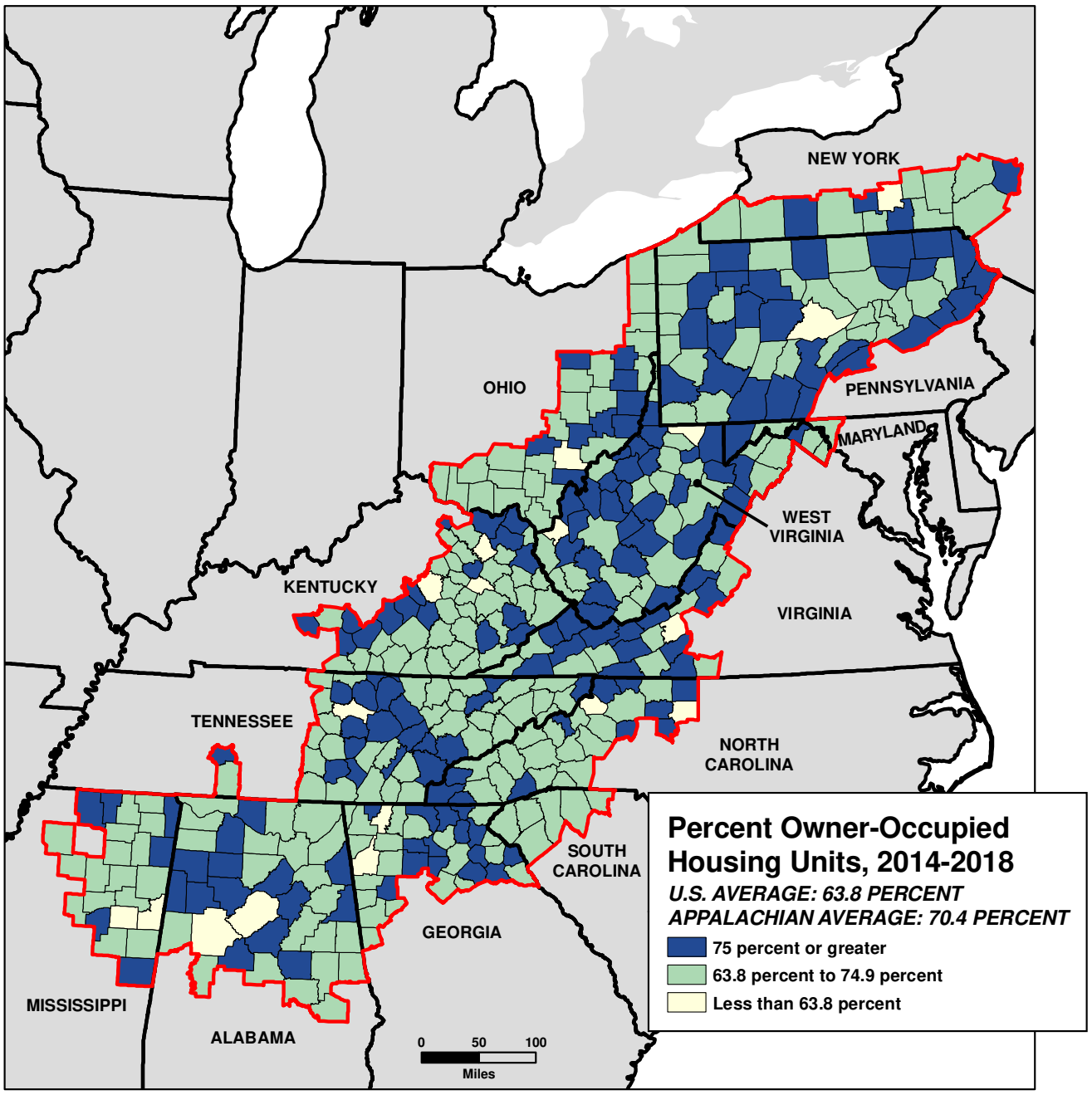
Figure 4.2: Percent of Housing Units in the Appalachian Region That Are Vacant, 2014-2018



Map Title: Percent of Housing Units in the Appalachian Region That Are Vacant, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

One in seven housing units in Appalachia were vacant during the 2014-2018 period, compared to one in eight for the nation as a whole. Vacancy rates varied within the Region, however. While 140 of the 420 Appalachian counties (all but 23 of which were outside metropolitan areas) had vacancy rates at or above 20 percent, another 83 counties (mostly in metro areas) had rates below the national average. It is important to note that in 151 of the 337 Appalachian counties with vacancy rates of 12.2 percent or more, at least one-third of the vacant units were designated for seasonal or occasional use—suggesting significant recreational, resort, or retirement activity in the community. Examples of such areas include the Great Smoky Mountains along the North Carolina-Tennessee border, the Greenbrier resort in West Virginia (Greenbrier County), and the Pocono Mountains in northeastern Pennsylvania.

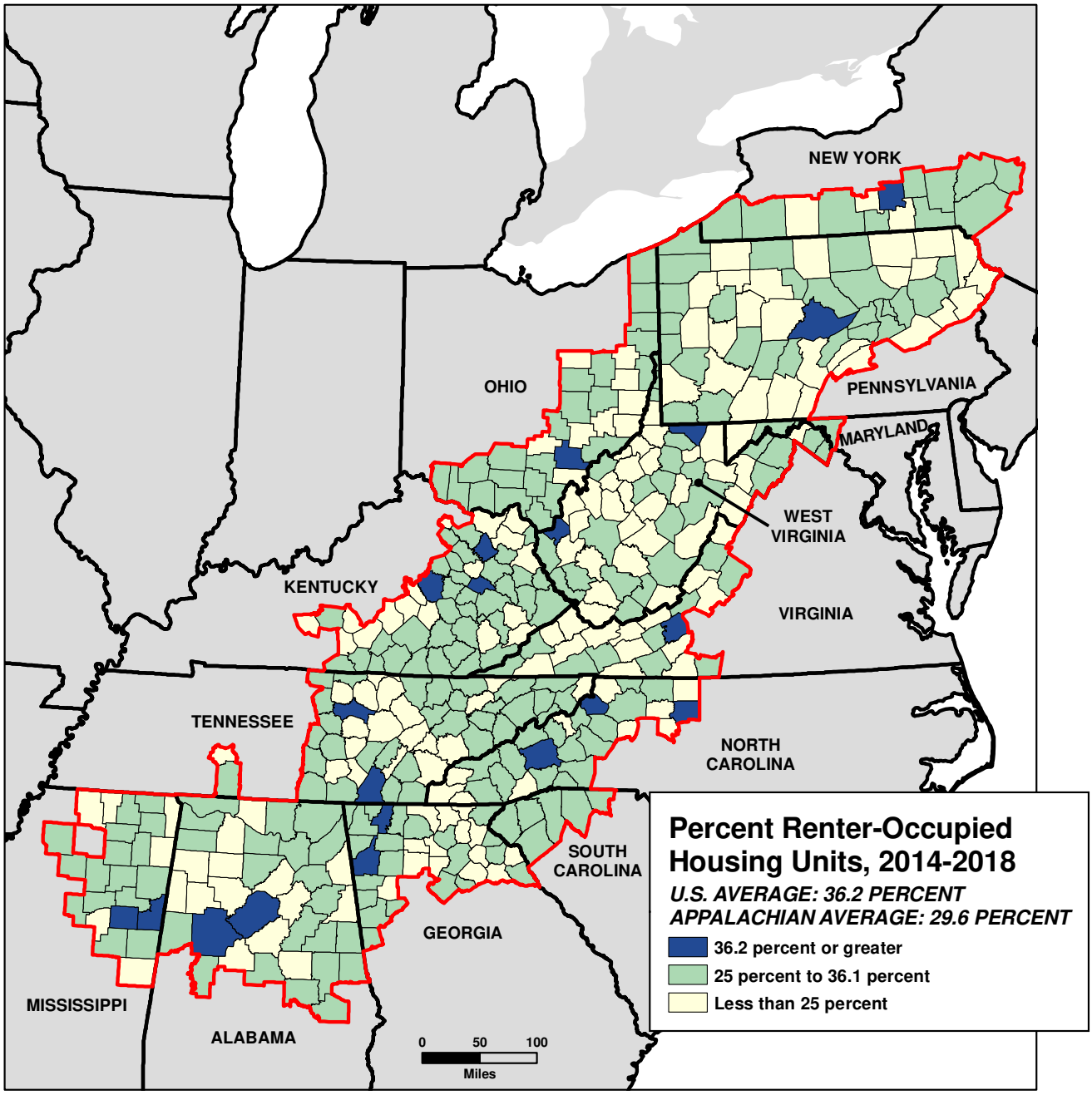
Figure 4.3: Percent Owner-Occupied Housing Units in the Appalachian Region, 2014-2018



Map Title: Percent Owner-Occupied Housing Units in the Appalachian Region, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Homeownership was more common in the Appalachian Region than in the rest of the country in the 2014-2018 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 165 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, 2014-2018



Map Title: Percent Renter-Occupied Housing Units in the Appalachian Region, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

The share of renter-occupied housing units during the 2014-2018 period was well below the national average throughout Appalachia; in fact, it was less than 25 percent in 162 of the Region's 420 counties. Among the 20 Appalachian counties where the share of renter-occupied units matched or exceeded the national average, almost all are home to colleges or universities, where students make up a sizeable share of the population. Examples of these counties include Monongalia County, West Virginia (West Virginia University); Oktibbeha County, Mississippi (Mississippi State University); and Madison County, Kentucky (Eastern Kentucky University).

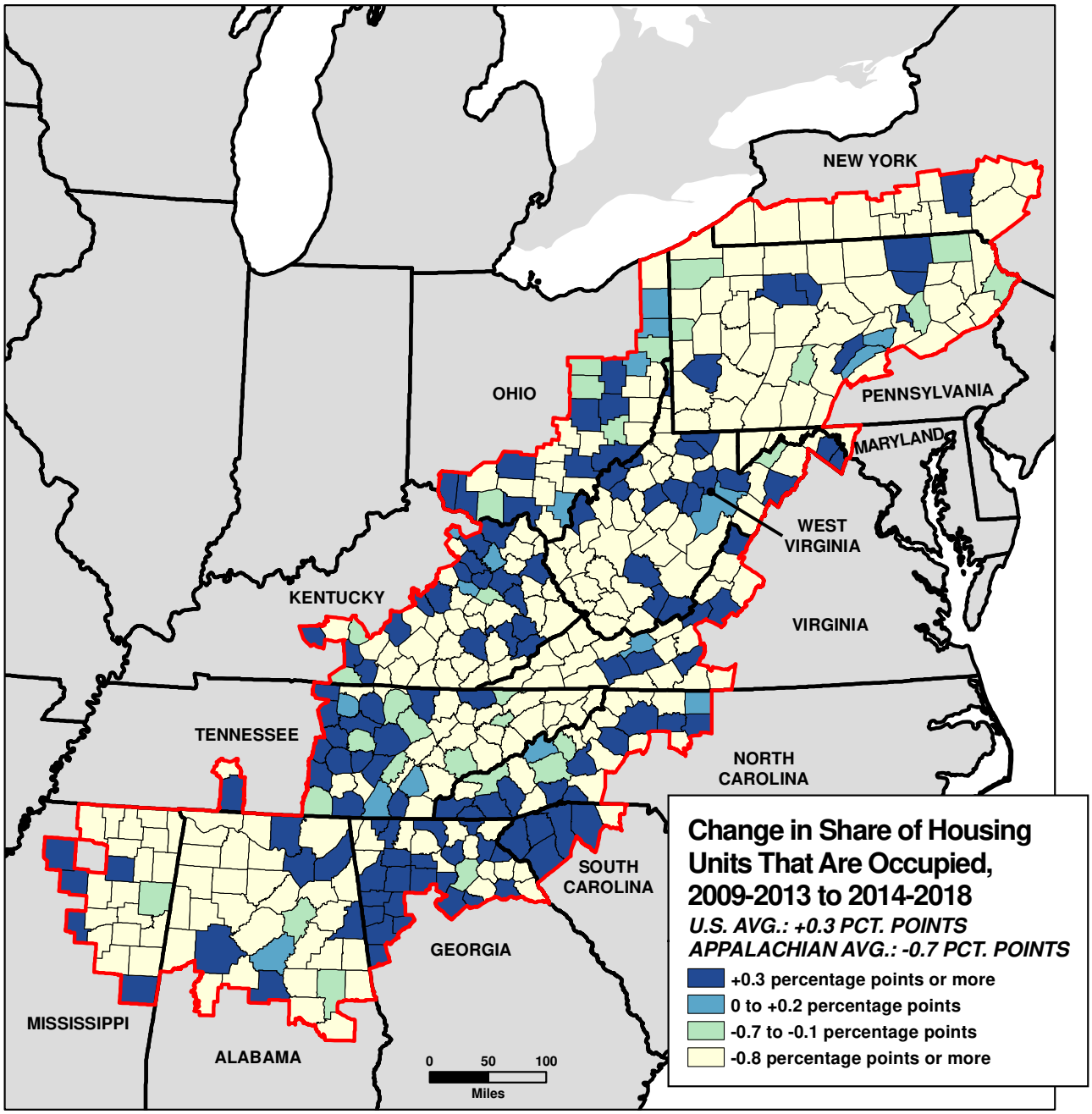
Table 4.2: Percentage Point Change in Occupancy and Tenure of Housing Units in the Appalachian Region, 2009-2013 to 2014-2018

Housing Occupancy and Tenure	Percentage Point Change, Share of Total Housing Units		Percentage Point Change, Share of Occupied Housing Units	
	Occupied	Vacant	Owner-Occupied	Renter-Occupied
United States	**+ 0.3**	**- 0.3**	**- 1.1**	**+ 1.1**
Appalachian Region	**- 0.7**	**+ 0.7**	**- 1.0**	**+ 1.0**
Subregions				
Northern Appalachia	- 1.4	+ 1.4	- 0.6	+ 0.6
North Central Appalachia	- 0.7	+ 0.7	- 0.7	+ 0.7
Central Appalachia	- 1.8	+ 1.8	- 1.2	+ 1.2
South Central Appalachia	- 0.8	+ 0.8	- 0.9	+ 0.9
Southern Appalachia	+ 0.4	- 0.4	- 1.3	+ 1.3
County Types				
Large Metros (pop. 1 million +)	+ 0.6	- 0.6	- 1.1	+ 1.1
Small Metros (pop. <1 million)	- 0.9	+ 0.9	- 0.9	+ 0.9
Nonmetro, Adjacent to Large Metros	- 1.3	+ 1.3	- 0.8	+ 0.8
Nonmetro, Adjacent to Small Metros	- 1.5	+ 1.5	- 0.7	+ 0.7
Rural (nonmetro, not adj. to a metro)	- 1.8	+ 1.8	- 0.9	+ 0.9
Alabama	**- 1.5**	**+ 1.5**	**- 1.1**	**+ 1.1**
Appalachian Alabama	- 1.3	+ 1.3	- 1.0	+ 1.0
Non-Appalachian Alabama	- 2.1	+ 2.1	- 1.6	+ 1.6
Georgia	**+ 1.6**	**- 1.6**	**- 2.0**	**+ 2.0**
Appalachian Georgia	+ 2.1	- 2.1	- 1.8	+ 1.8
Non-Appalachian Georgia	+ 1.3	- 1.3	- 2.3	+ 2.3
Kentucky	**- 0.2**	**+ 0.2**	**- 1.4**	**+ 1.4**
Appalachian Kentucky	- 1.2	+ 1.2	- 1.0	+ 1.0
Non-Appalachian Kentucky	+ 0.1	- 0.1	- 1.6	+ 1.6
Maryland	**+ 0.0**	**+ 0.0**	**- 0.8**	**+ 0.8**
Appalachian Maryland	- 1.0	+ 1.0	+ 0.2	- 0.2
Non-Appalachian Maryland	+ 0.1	- 0.1	- 0.9	+ 0.9
Mississippi	**- 1.2**	**+ 1.2**	**- 1.2**	**+ 1.2**
Appalachian Mississippi	- 2.2	+ 2.2	- 1.7	+ 1.7
Non-Appalachian Mississippi	- 0.9	+ 0.9	- 1.1	+ 1.1
New York	**- 0.9**	**+ 0.9**	**- 0.3**	**+ 0.3**
Appalachian New York	- 2.8	+ 2.8	- 0.4	+ 0.4
Non-Appalachian New York	- 0.8	+ 0.8	- 0.3	+ 0.3
North Carolina	**+ 0.3**	**- 0.3**	**- 1.4**	**+ 1.4**
Appalachian North Carolina	- 0.2	+ 0.2	- 1.2	+ 1.2
Non-Appalachian North Carolina	+ 0.4	- 0.4	- 1.4	+ 1.4
Ohio	**+ 0.8**	**- 0.8**	**- 1.5**	**+ 1.5**
Appalachian Ohio	- 0.5	+ 0.5	- 1.2	+ 1.2
Non-Appalachian Ohio	+ 1.0	- 1.0	- 1.5	+ 1.5
Pennsylvania	**- 0.5**	**+ 0.5**	**- 0.8**	**+ 0.8**
Appalachian Pennsylvania	- 1.2	+ 1.2	- 0.5	+ 0.5
Non-Appalachian Pennsylvania	+ 0.2	- 0.2	- 1.0	+ 1.0
South Carolina	**+ 0.9**	**- 0.9**	**- 0.2**	**+ 0.2**
Appalachian South Carolina	+ 1.6	- 1.6	- 1.0	+ 1.0
Non-Appalachian South Carolina	+ 0.6	- 0.6	+ 0.1	- 0.1
Tennessee	**- 0.1**	**+ 0.1**	**- 1.5**	**+ 1.5**
Appalachian Tennessee	- 0.9	+ 0.9	- 0.9	+ 0.9
Non-Appalachian Tennessee	+ 0.5	- 0.5	- 1.8	+ 1.8
Virginia	**+ 0.2**	**- 0.2**	**- 1.1**	**+ 1.1**
Appalachian Virginia	- 2.5	+ 2.5	- 0.3	+ 0.3
Non-Appalachian Virginia	+ 0.5	- 0.5	- 1.2	+ 1.2
West Virginia (entire state)	**- 1.7**	**+ 1.7**	**- 0.5**	**+ 0.5**

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, 2009-2013 and 2014-2018 American Community Surveys.

Figure 4.5: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Occupied, 2009-2013 to 2014-2018

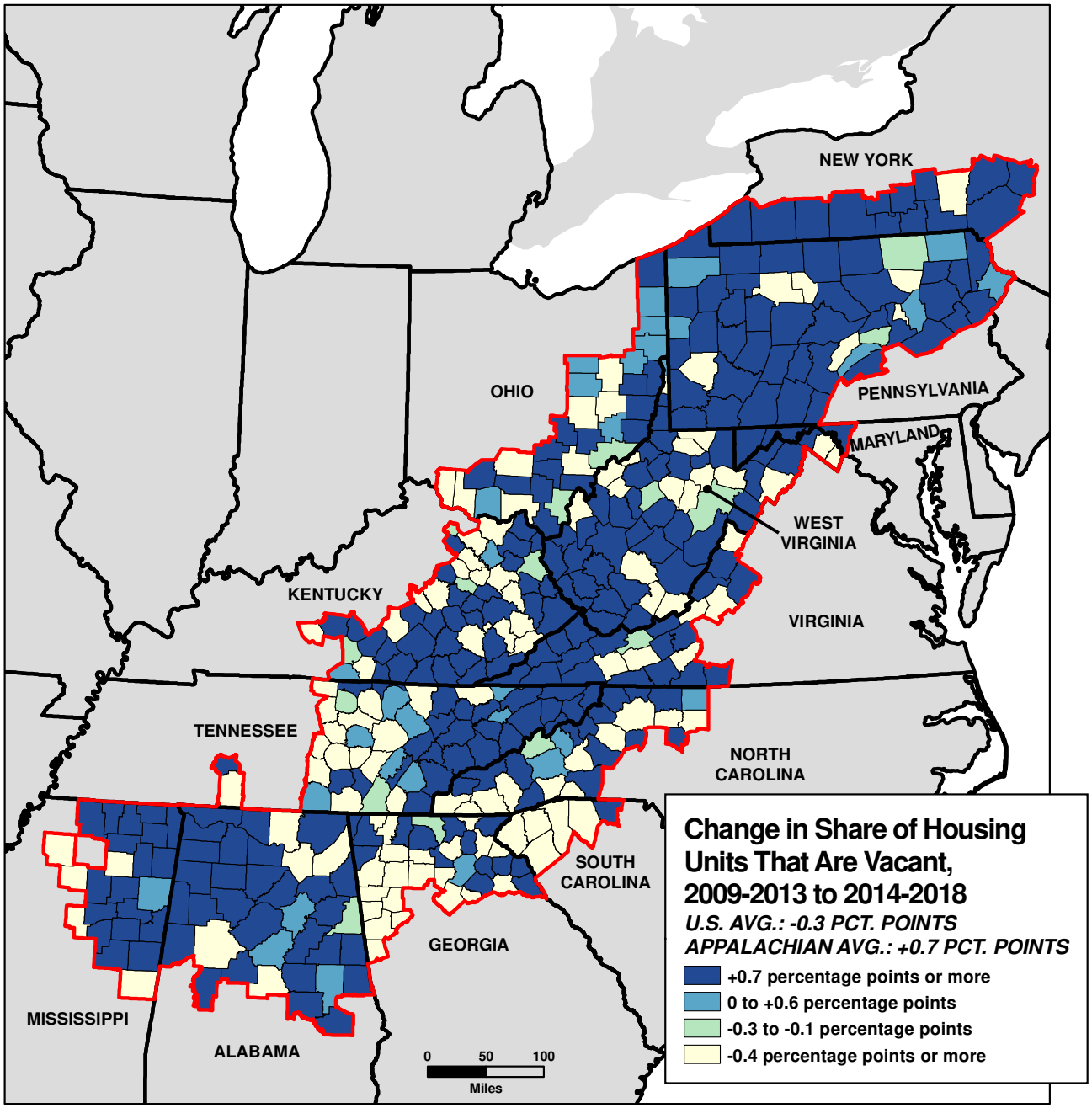


Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Occupied, 2009-2013 to 2014-2018

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Although home occupancy had risen 0.3 percentage points nationally during the period, Appalachia's home occupancy rate in 2014-2018 was 0.7 percentage points lower than it was in 2009-2013. And in most Appalachian counties, the decline in occupancy rates was even greater. Yet factors other than the aftermath of the Great Recession 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. (Moreover, some areas may not have fully recovered from earlier weather events like the April 2011 "Super Outbreak" of tornadoes that damaged parts of Southern Appalachia.) On the other hand, the occupancy rate rose at or above the national average in 124 counties. While they were spread throughout the Region, there were concentrations in a few states, including Georgia and South Carolina; indeed, the occupancy rate in the Appalachian sections of those states increased between the two periods.

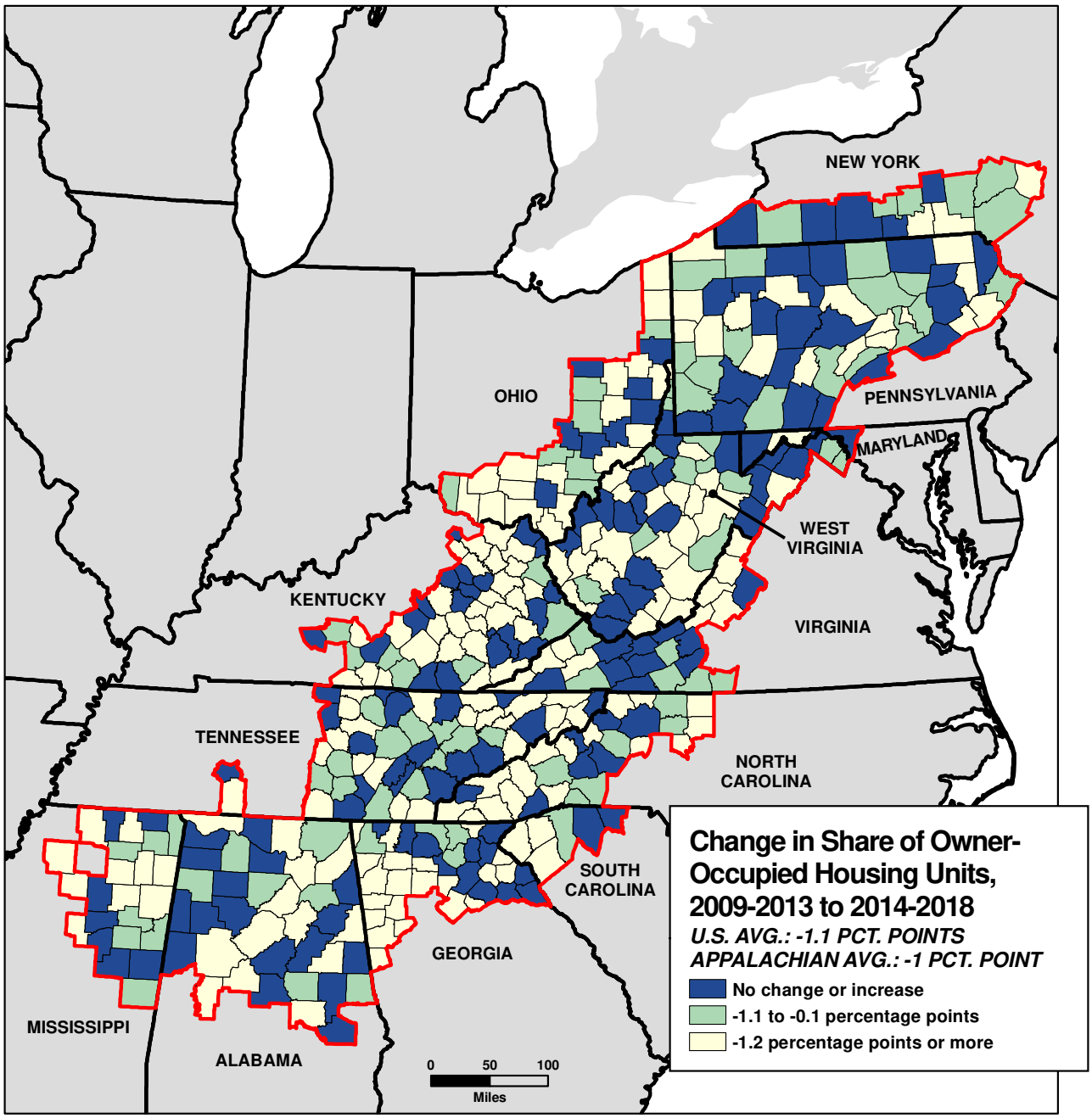
Figure 4.6: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Vacant, 2009-2013 to 2014-2018



Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Vacant, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Between 2009-2013 and 2014-2018, the share of vacant housing units rose 0.7 percentage points in Appalachia, while declining 0.3 points in the nation as a whole. The increase in housing vacancy was even greater in 254 of the Region's 420 counties. While 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), another potential factor could be a slight increase in the share of vacant units that were designated for seasonal or occasional use (which could indicate significant recreational or retirement activity, such as in much of Appalachian Tennessee and North Carolina). In 94 of the 287 Appalachian counties where overall vacancy rates increased or remained constant between the 2009-2013 and 2014-2018 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, 2009-2013 to 2014-2018

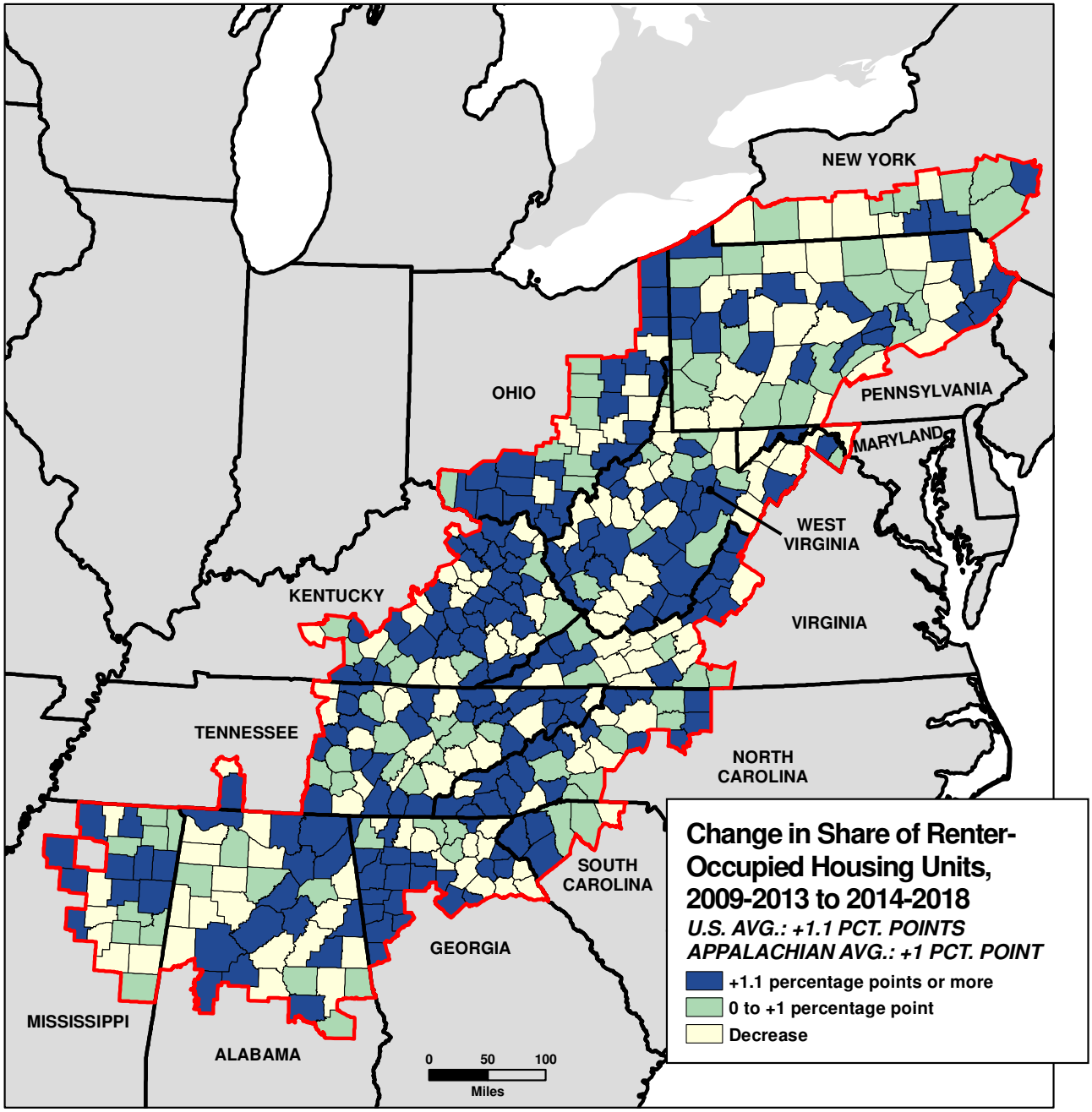


Map Title: Percentage Point Change in the Share of Owner-Occupied Housing Units in the Appalachian Region, 2009-2013 to 2014-2018

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

The share of owner-occupied housing units fell a full percentage point in the Appalachian Region between 2009-2013 and 2014-2018, just under the national average of 1.1 points. Yet the decline exceeded the national average in 183 Appalachian counties. Still, there were 147 counties in the Region—98 of which were outside metropolitan areas—where homeownership either stayed the same or increased between these two periods. Counties in this latter group were scattered throughout Appalachia.

Figure 4.8: Percentage Point Change in the Share of Renter-Occupied Housing Units in the Appalachian Region, 2009-2013 to 2014-2018



Map Title: Percentage Point Change in the Share of Renter-Occupied Housing Units in the Appalachian Region, 2009-2013 to 2014-2018

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

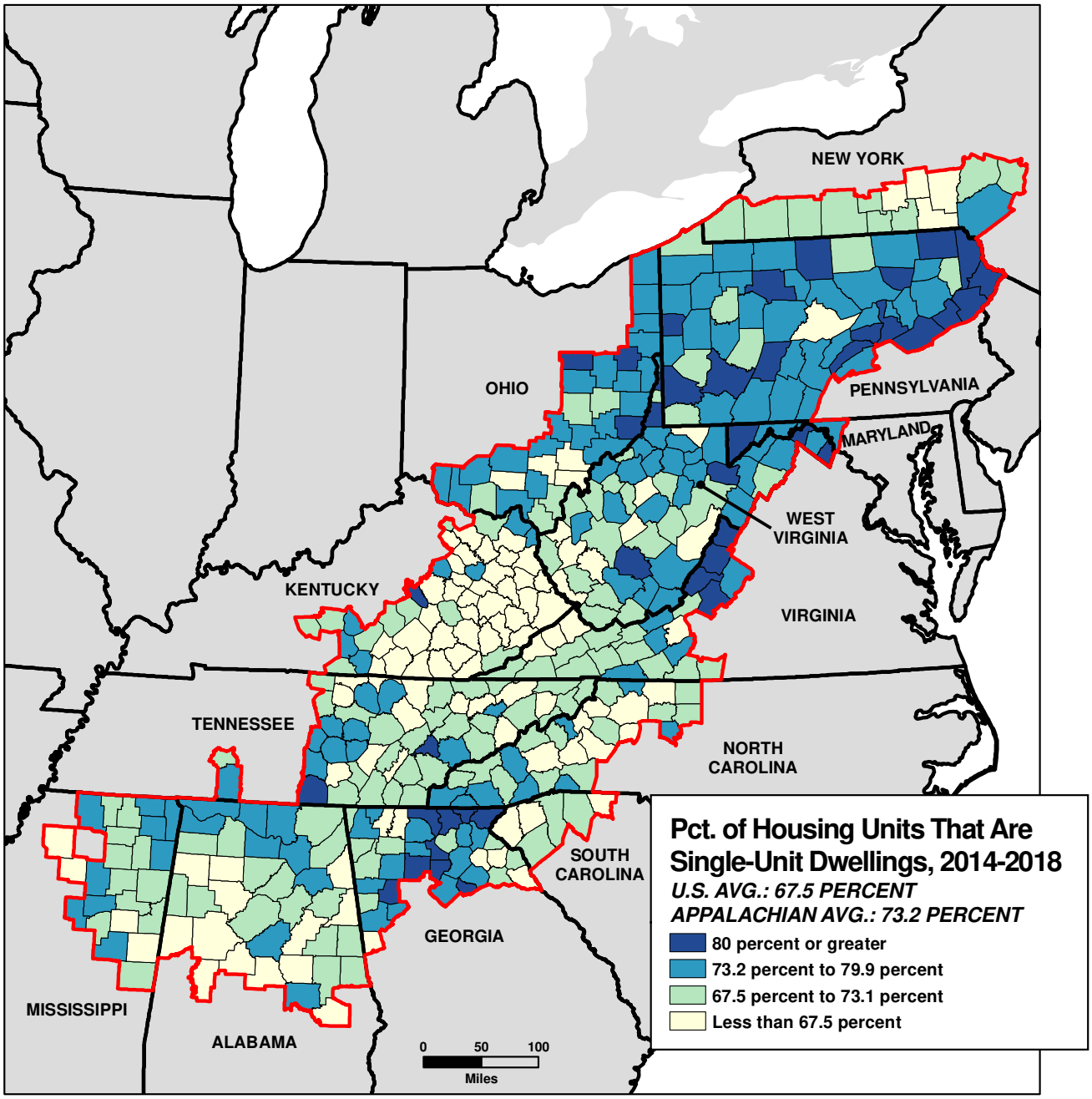
The share of renter-occupied housing units increased at about the same rate in Appalachia as it did nationwide between 2009-2013 and 2014-2018. Yet variations were present within the Region: For example, there were 190 Appalachian counties where the increases in rental shares matched or exceeded the national average of 1.1 percentage points. These were pretty much scattered throughout the Region. Conversely, the percentage of units occupied by renters decreased in 141 counties between the two periods.

Table 4.3: Housing Units in the Appalachian Region, by Type of Housing, 2014-2018

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	**136,384,292**	**67.5**	**26.2**	**8.0**	**18.2**	**6.2**	**0.1**
Appalachian Region	**11,789,588**	**73.2**	**15.0**	**5.9**	**9.0**	**11.8**	**0.1**
Subregions							
Northern Appalachia	3,969,026	75.7	17.7	8.5	9.2	6.6	0.0
North Central Appalachia	1,129,847	73.0	12.5	4.8	7.7	14.5	0.1
Central Appalachia	893,114	66.1	9.2	4.3	4.9	24.6	0.1
South Central Appalachia	2,322,165	71.1	14.8	5.2	9.6	14.0	0.1
Southern Appalachia	3,475,436	73.5	14.3	4.3	10.0	12.1	0.1
County Types							
Large Metros (pop. 1 million +)	2,612,389	76.9	17.3	5.2	12.1	5.7	0.0
Small Metros (pop. <1 million)	4,898,632	72.4	17.4	6.8	10.6	10.1	0.1
Nonmetro, Adjacent to Large Metros	1,038,954	72.6	12.8	6.6	6.2	14.5	0.1
Nonmetro, Adjacent to Small Metros	1,974,076	72.6	10.3	5.3	5.1	17.0	0.1
Rural (nonmetro, not adj. to a metro)	1,265,537	69.6	9.9	4.8	5.1	20.4	0.1
Alabama	**2,244,462**	**70.1**	**16.5**	**5.0**	**11.5**	**13.3**	**0.1**
Appalachian Alabama	1,420,719	71.5	15.8	4.6	11.2	12.6	0.1
Non-Appalachian Alabama	823,743	67.8	17.6	5.7	11.9	14.5	0.1
Georgia	**4,241,003**	**70.2**	**20.7**	**5.1**	**15.5**	**9.0**	**0.1**
Appalachian Georgia	1,229,083	78.4	12.4	3.5	8.9	9.1	0.1
Non-Appalachian Georgia	3,011,920	66.9	24.0	5.8	18.2	9.0	0.1
Kentucky	**1,974,406**	**69.6**	**18.3**	**7.4**	**10.9**	**12.0**	**0.1**
Appalachian Kentucky	546,484	64.9	10.2	5.0	5.3	24.8	0.1
Non-Appalachian Kentucky	1,427,922	71.4	21.4	8.3	13.1	7.1	0.1
Maryland	**2,437,740**	**72.8**	**25.7**	**3.8**	**21.9**	**1.4**	**0.0**
Appalachian Maryland	113,638	78.5	17.1	6.5	10.6	4.3	0.0
Non-Appalachian Maryland	2,324,102	72.6	26.1	3.6	22.5	1.3	0.0
Mississippi	**1,316,108**	**70.2**	**14.4**	**5.4**	**9.1**	**15.2**	**0.1**
Appalachian Mississippi	284,488	69.4	11.8	5.9	6.0	18.7	0.1
Non-Appalachian Mississippi	1,031,620	70.5	15.2	5.2	9.9	14.2	0.1
New York	**8,287,087**	**47.0**	**50.7**	**17.4**	**33.2**	**2.3**	**0.0**
Appalachian New York	516,202	67.2	22.4	13.5	8.9	10.4	0.0
Non-Appalachian New York	7,770,885	45.6	52.5	17.7	34.8	1.8	0.0
North Carolina	**4,573,066**	**69.2**	**17.7**	**4.8**	**12.9**	**13.0**	**0.1**
Appalachian North Carolina	882,657	69.8	13.6	4.6	9.0	16.5	0.1
Non-Appalachian North Carolina	3,690,409	69.0	18.7	4.9	13.8	12.2	0.0
Ohio	**5,188,270**	**73.1**	**23.1**	**8.7**	**14.3**	**3.8**	**0.0**
Appalachian Ohio	907,325	75.5	14.0	6.1	7.9	10.4	0.1
Non-Appalachian Ohio	4,280,945	72.6	25.0	9.3	15.7	2.4	0.0
Pennsylvania	**5,673,599**	**75.7**	**20.3**	**8.5**	**11.9**	**3.9**	**0.0**
Appalachian Pennsylvania	2,763,127	76.8	17.3	7.9	9.5	5.9	0.0
Non-Appalachian Pennsylvania	2,910,472	74.6	23.2	9.0	14.1	2.1	0.0
South Carolina	**2,256,951**	**65.9**	**17.6**	**4.9**	**12.7**	**16.4**	**0.1**
Appalachian South Carolina	541,146	69.6	16.1	4.7	11.3	14.3	0.1
Non-Appalachian South Carolina	1,715,805	64.7	18.1	4.9	13.2	17.1	0.1
Tennessee	**2,930,530**	**71.6**	**19.0**	**6.1**	**12.9**	**9.3**	**0.1**
Appalachian Tennessee	1,325,471	71.5	15.2	5.6	9.6	13.1	0.1
Non-Appalachian Tennessee	1,605,059	71.6	22.2	6.5	15.7	6.2	0.1
Virginia	**3,491,091**	**72.7**	**22.1**	**4.4**	**17.7**	**5.2**	**0.0**
Appalachian Virginia	368,533	70.5	11.7	4.2	7.5	17.8	0.0
Non-Appalachian Virginia	3,122,558	72.9	23.4	4.5	18.9	3.7	0.0
West Virginia (entire state)	**890,715**	**72.9**	**12.0**	**4.8**	**7.2**	**15.1**	**0.1**

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Figure 4.9: Percent of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2014-2018



Map Title: Percent of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

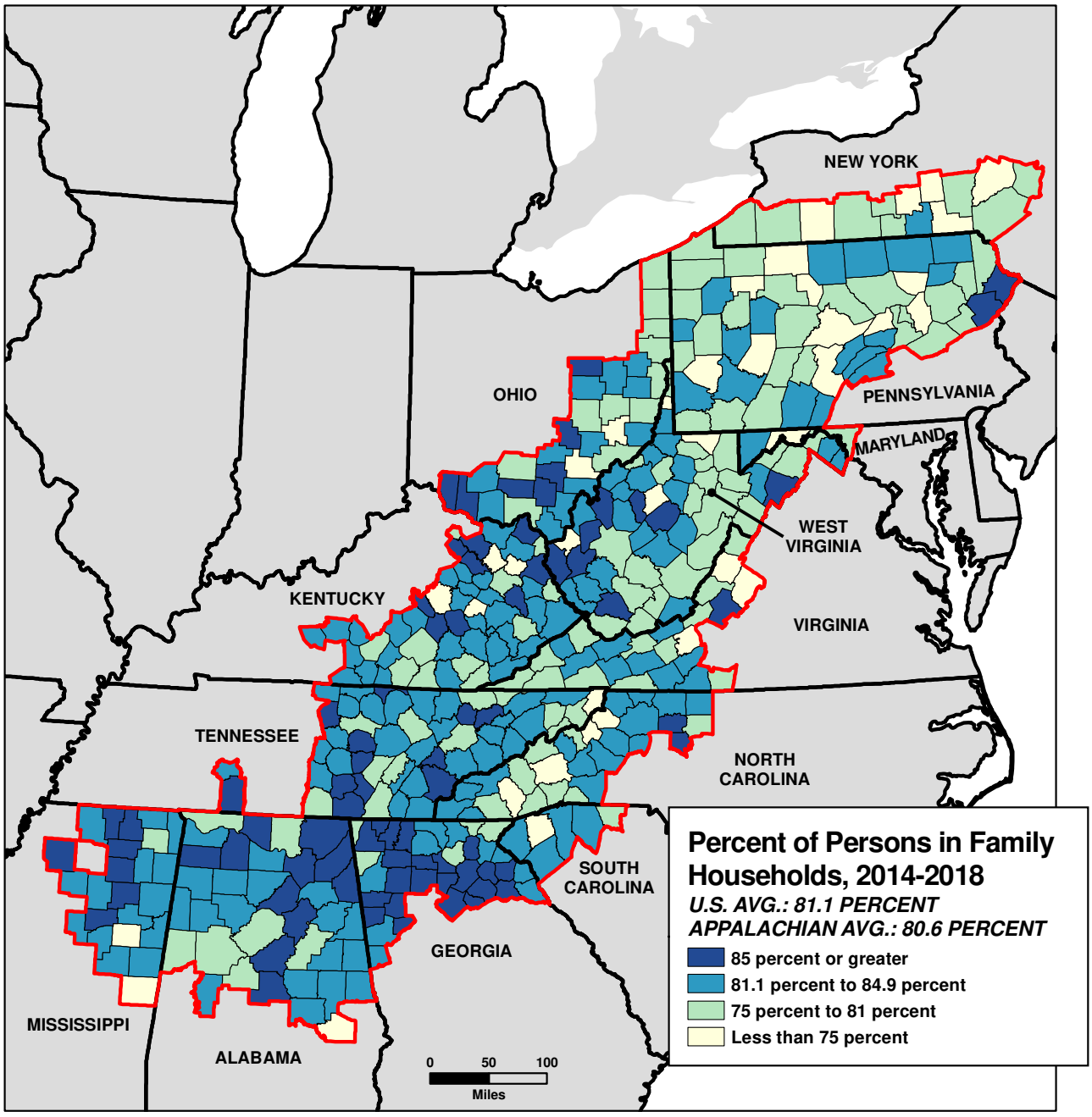
In 2014-2018, 73.2 percent of housing units in the Appalachian Region were single-unit dwellings (either attached or detached)—a larger share than the national average of 67.5 percent. And the share was even greater in much of Appalachia: In 180 of the 420 counties, the share of single-unit homes was at or above the average for the Region. (Most of these counties were in Northern or North Central Appalachia—with 44 in Pennsylvania alone.) And in 42 Appalachian counties, single-unit dwellings accounted for at least 80 percent of the housing stock. In contrast, there were 104 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 71 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, 2014-2018

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	**322,903,030**	**97.5**	**81.1**	**16.4**	**2.5**
Appalachian Region	**25,538,916**	**97.0**	**80.6**	**16.4**	**3.0**
Subregions					
Northern Appalachia	8,231,888	95.9	77.5	18.4	4.1
North Central Appalachia	2,411,693	97.0	80.1	17.0	3.0
Central Appalachia	1,876,440	96.9	81.9	15.0	3.1
South Central Appalachia	4,842,045	97.2	79.6	17.6	2.8
Southern Appalachia	8,176,850	98.0	84.1	13.9	2.0
County Types					
Large Metros (pop. 1 million +)	6,064,631	98.2	82.7	15.5	1.8
Small Metros (pop. <1 million)	10,806,298	96.8	79.4	17.3	3.2
Nonmetro, Adjacent to Large Metros	2,197,522	96.5	80.3	16.2	3.5
Nonmetro, Adjacent to Small Metros	3,959,499	96.8	80.9	16.0	3.2
Rural (nonmetro, not adj. to a metro)	2,510,966	96.2	80.4	15.8	3.8
Alabama	**4,864,680**	**97.6**	**81.9**	**15.6**	**2.4**
Appalachian Alabama	3,116,017	97.5	82.3	15.2	2.5
Non-Appalachian Alabama	1,748,663	97.6	81.3	16.3	2.4
Georgia	**10,297,484**	**97.5**	**82.5**	**15.0**	**2.5**
Appalachian Georgia	3,181,254	98.8	87.4	11.4	1.2
Non-Appalachian Georgia	7,116,230	96.9	80.3	16.6	3.1
Kentucky	**4,440,204**	**97.0**	**80.4**	**16.7**	**3.0**
Appalachian Kentucky	1,169,233	96.7	81.6	15.1	3.3
Non-Appalachian Kentucky	3,270,971	97.2	79.9	17.3	2.8
Maryland	**6,003,435**	**97.7**	**82.1**	**15.5**	**2.3**
Appalachian Maryland	251,164	93.0	77.0	16.1	7.0
Non-Appalachian Maryland	5,752,271	97.9	82.4	15.5	2.1
Mississippi	**2,988,762**	**96.8**	**82.1**	**14.6**	**3.2**
Appalachian Mississippi	626,834	97.1	81.9	15.2	2.9
Non-Appalachian Mississippi	2,361,928	96.7	82.2	14.5	3.3
New York	**19,618,453**	**97.1**	**79.6**	**17.4**	**2.9**
Appalachian New York	1,035,016	94.4	74.3	20.0	5.6
Non-Appalachian New York	18,583,437	97.2	79.9	17.3	2.8
North Carolina	**10,155,624**	**97.3**	**80.6**	**16.7**	**2.7**
Appalachian North Carolina	1,741,894	97.2	79.3	17.9	2.8
Non-Appalachian North Carolina	8,413,730	97.3	80.9	16.4	2.7
Ohio	**11,641,879**	**97.3**	**79.3**	**18.0**	**2.7**
Appalachian Ohio	2,004,905	97.0	80.6	16.4	3.0
Non-Appalachian Ohio	9,636,974	97.4	79.0	18.4	2.6
Pennsylvania	**12,791,181**	**96.7**	**79.3**	**17.4**	**3.3**
Appalachian Pennsylvania	5,707,515	96.1	77.6	18.5	3.9
Non-Appalachian Pennsylvania	7,083,666	97.2	80.7	16.5	2.8
South Carolina	**4,955,925**	**97.2**	**80.9**	**16.3**	**2.8**
Appalachian South Carolina	1,252,745	97.6	81.5	16.1	2.4
Non-Appalachian South Carolina	3,703,180	97.1	80.7	16.4	2.9
Tennessee	**6,651,089**	**97.7**	**81.3**	**16.4**	**2.3**
Appalachian Tennessee	2,870,942	97.6	80.9	16.6	2.4
Non-Appalachian Tennessee	3,780,147	97.7	81.6	16.2	2.3
Virginia	**8,413,774**	**97.1**	**80.8**	**16.3**	**2.9**
Appalachian Virginia	752,343	95.5	76.6	18.9	4.5
Non-Appalachian Virginia	7,661,431	97.3	81.2	16.0	2.7
West Virginia (entire state)	**1,829,054**	**97.4**	**79.9**	**17.5**	**2.6**

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Figure 4.10: Percent of Persons in the Appalachian Region Living in Family Households, 2014-2018



Map Title: Percent of Persons in the Appalachian Region Living in Family Households, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

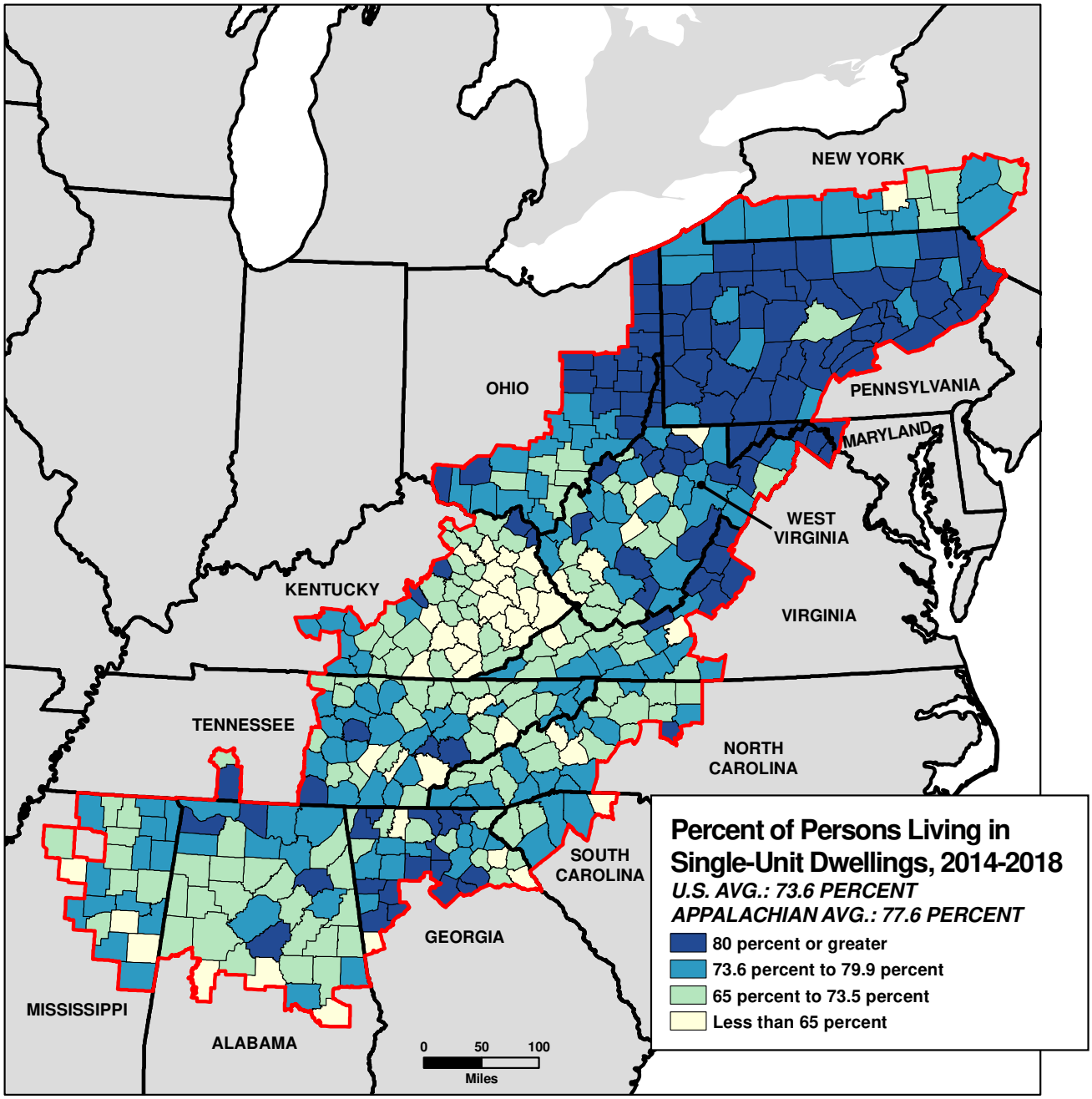
Almost 81 percent of Appalachia's residents lived in family households during 2014-2018, which was just below the national average. Yet in 81 counties in the Region, at least 85 percent lived in family households. Almost half of these counties were in Southern Appalachia, although there were pockets in the Central and South Central subregions. In contrast, there were 38 Appalachian counties where less than three-fourths of the residents were in family households. 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 56 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 11 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, 2014-2018

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	**314,810,420**	**73.6**	**20.8**	**7.1**	**13.6**	**5.6**	**0.1**
Appalachian Region	**24,777,214**	**77.6**	**11.1**	**4.6**	**6.5**	**11.2**	**0.1**
Subregions							
Northern Appalachia	7,897,817	81.8	12.7	6.5	6.2	5.5	0.0
North Central Appalachia	2,339,652	77.1	9.2	3.6	5.6	13.6	0.1
Central Appalachia	1,818,889	68.8	7.1	3.6	3.5	24.1	0.0
South Central Appalachia	4,706,687	74.4	11.4	4.1	7.3	14.1	0.1
Southern Appalachia	8,014,169	77.7	10.7	3.5	7.3	11.5	0.1
County Types							
Large Metros (pop. 1 million +)	5,953,465	82.5	12.0	3.8	8.3	5.4	0.0
Small Metros (pop. <1 million)	10,455,310	77.2	12.9	5.2	7.6	9.9	0.0
Nonmetro, Adjacent to Large Metros	2,120,091	76.9	9.5	5.2	4.3	13.5	0.1
Nonmetro, Adjacent to Small Metros	3,833,873	75.2	7.7	4.2	3.6	16.9	0.1
Rural (nonmetro, not adj. to a metro)	2,414,475	72.1	7.7	3.9	3.8	20.2	0.1
Alabama	**4,745,881**	**75.0**	**11.9**	**4.1**	**7.8**	**13.0**	**0.1**
Appalachian Alabama	3,039,624	75.8	11.7	3.8	7.8	12.5	0.1
Non-Appalachian Alabama	1,706,257	73.7	12.2	4.5	7.7	14.0	0.1
Georgia	**10,037,150**	**75.5**	**15.9**	**4.4**	**11.5**	**8.5**	**0.1**
Appalachian Georgia	3,142,800	82.1	9.7	2.9	6.8	8.2	0.1
Non-Appalachian Georgia	6,894,350	72.6	18.7	5.0	13.7	8.7	0.1
Kentucky	**4,309,065**	**75.0**	**13.8**	**6.0**	**7.7**	**11.2**	**0.0**
Appalachian Kentucky	1,131,028	67.8	8.1	4.3	3.9	24.0	0.0
Non-Appalachian Kentucky	3,178,037	77.6	15.8	6.6	9.1	6.6	0.1
Maryland	**5,862,883**	**80.0**	**18.9**	**2.7**	**16.2**	**1.1**	**0.0**
Appalachian Maryland	233,684	83.4	12.8	4.7	8.1	3.7	0.0
Non-Appalachian Maryland	5,629,199	79.8	19.2	2.6	16.6	1.0	0.0
Mississippi	**2,892,341**	**73.7**	**11.4**	**4.6**	**6.8**	**14.9**	**0.1**
Appalachian Mississippi	608,835	72.2	9.1	4.7	4.5	18.6	0.1
Non-Appalachian Mississippi	2,283,506	74.1	12.0	4.5	7.5	13.9	0.1
New York	**19,043,605**	**51.8**	**46.3**	**17.9**	**28.5**	**1.8**	**0.0**
Appalachian New York	976,541	72.4	18.2	11.6	6.6	9.4	0.0
Non-Appalachian New York	18,067,064	50.7	47.8	18.2	29.6	1.4	0.0
North Carolina	**9,882,910**	**73.2**	**13.6**	**3.9**	**9.7**	**13.1**	**0.1**
Appalachian North Carolina	1,693,685	72.3	10.5	3.4	7.1	17.1	0.1
Non-Appalachian North Carolina	8,189,225	73.4	14.3	4.0	10.3	12.3	0.0
Ohio	**11,327,784**	**80.7**	**16.1**	**6.4**	**9.7**	**3.2**	**0.0**
Appalachian Ohio	1,943,980	81.0	9.7	4.4	5.3	9.2	0.1
Non-Appalachian Ohio	9,383,804	80.6	17.4	6.8	10.6	2.0	0.0
Pennsylvania	**12,366,049**	**82.5**	**14.3**	**6.4**	**7.9**	**3.2**	**0.0**
Appalachian Pennsylvania	5,483,643	82.8	12.3	6.0	6.3	4.8	0.0
Non-Appalachian Pennsylvania	6,882,406	82.3	15.8	6.7	9.1	1.8	0.0
South Carolina	**4,819,128**	**70.5**	**12.3**	**3.9**	**8.4**	**17.1**	**0.0**
Appalachian South Carolina	1,222,910	73.7	11.9	3.5	8.5	14.3	0.0
Non-Appalachian South Carolina	3,596,218	69.4	12.5	4.1	8.4	18.0	0.0
Tennessee	**6,496,195**	**76.5**	**14.4**	**4.9**	**9.4**	**9.0**	**0.1**
Appalachian Tennessee	2,801,194	75.2	11.5	4.6	6.9	13.2	0.1
Non-Appalachian Tennessee	3,695,001	77.5	16.6	5.2	11.4	5.8	0.1
Virginia	**8,169,581**	**78.6**	**17.1**	**3.5**	**13.6**	**4.3**	**0.0**
Appalachian Virginia	718,255	73.9	9.6	3.2	6.4	16.5	0.0
Non-Appalachian Virginia	7,451,326	79.0	17.8	3.5	14.3	3.2	0.0
West Virginia (entire state)	**1,781,035**	**76.8**	**8.6**	**3.5**	**5.0**	**14.6**	**0.0**

Data Source: U.S. Census Bureau, 2014-2018 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), 2014-2018



Map Title: Among Persons in the Appalachian Region in Occupied Housing Units, Percent Living in Single-Unit Dwellings (Attached or Detached), 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

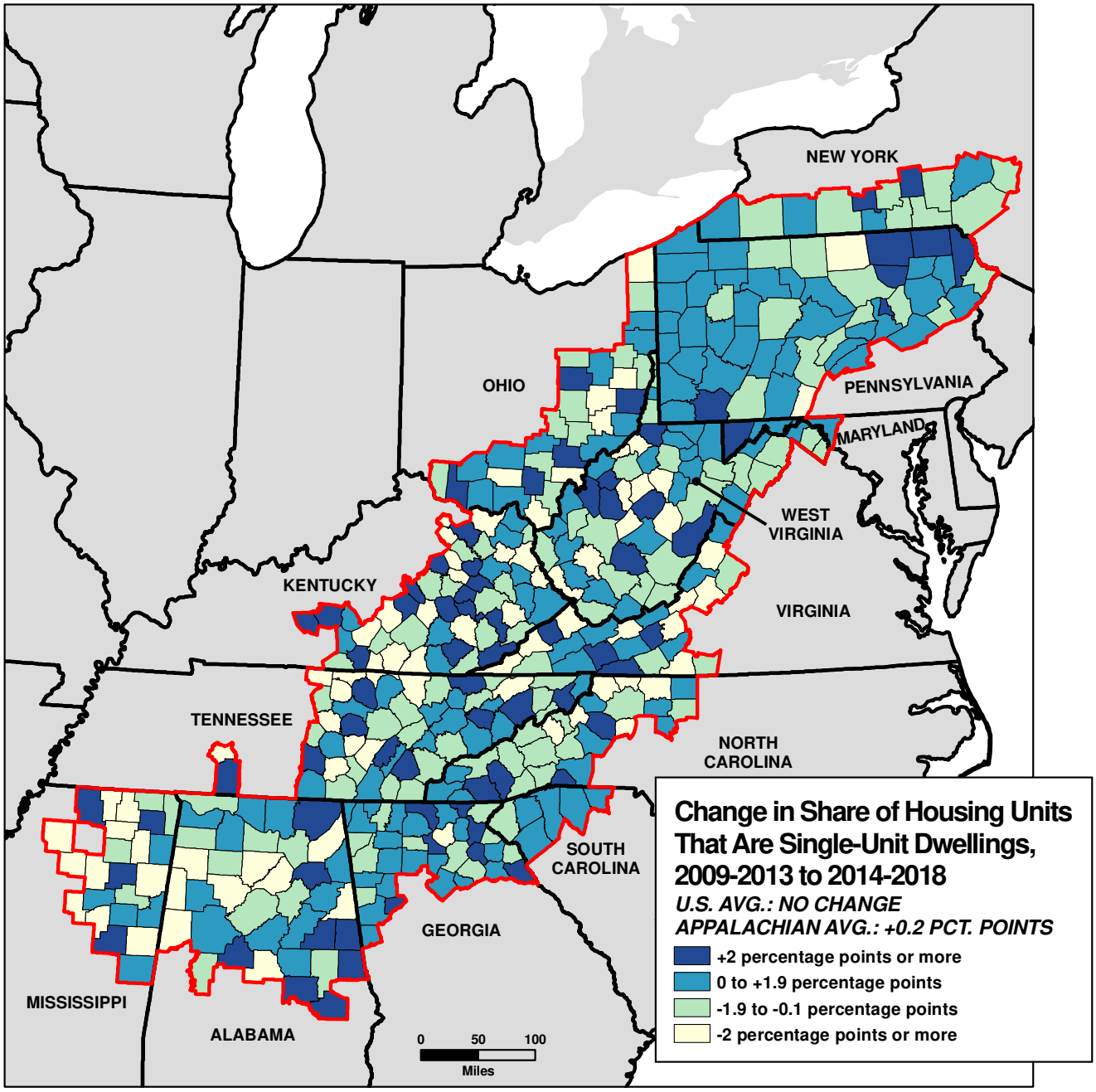
Of the Appalachian population who live in occupied housing units, 77.6 percent lived in single-unit dwellings during the 2014-2018 period, four percentage points above the national average. And the share was even greater in much of the Region: In 114 counties, at least four in five residents lived in single-unit homes. More than half of these were in Northern Appalachia; 41 were in Pennsylvania alone. Yet in 173 of Appalachia's 420 counties, the share living in single-unit dwellings was below the U.S. average of 73.6 percent; in 46 counties (more than half of which were in Central Appalachia), the percentage was below 65 percent. And in 39 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, 2009-2013 to 2014-2018

Housing Units (Type of Housing)	Percentage Point Change in Share of All Housing Units					
	Single-Unit Dwellings (Attached or Detached)	Multiple-Unit Fixed Dwellings			Mobile Homes	Boats, RVs, Vans, Etc.
		Total	Two to Four Units	Five or More Units		
United States	**+ 0.0**	**+ 0.2**	**- 0.2**	**+ 0.4**	**- 0.3**	**+ 0.0**
Appalachian Region	**+ 0.2**	**+ 0.2**	**- 0.1**	**+ 0.2**	**- 0.3**	**+ 0.0**
Subregions						
Northern Appalachia	+ 0.3	- 0.1	- 0.3	+ 0.1	- 0.2	+ 0.0
North Central Appalachia	+ 0.2	+ 0.0	- 0.2	+ 0.2	- 0.2	+ 0.1
Central Appalachia	- 0.5	+ 0.3	+ 0.2	+ 0.1	+ 0.2	+ 0.0
South Central Appalachia	+ 0.0	+ 0.5	+ 0.1	+ 0.4	- 0.5	+ 0.0
Southern Appalachia	+ 0.2	+ 0.3	- 0.1	+ 0.3	- 0.5	+ 0.0
County Types						
Large Metros (pop. 1 million +)	+ 0.4	- 0.1	- 0.2	+ 0.0	- 0.4	+ 0.0
Small Metros (pop. <1 million)	+ 0.1	+ 0.2	- 0.1	+ 0.4	- 0.4	+ 0.1
Nonmetro, Adjacent to Large Metros	+ 0.0	+ 0.0	- 0.3	+ 0.3	+ 0.0	+ 0.0
Nonmetro, Adjacent to Small Metros	+ 0.2	+ 0.0	+ 0.1	+ 0.1	- 0.2	+ 0.0
Rural (nonmetro, not adj. to a metro)	- 0.2	+ 0.4	+ 0.2	+ 0.2	- 0.3	+ 0.0
Alabama	**+ 0.0**	**+ 0.6**	**- 0.1**	**+ 0.6**	**- 0.6**	**+ 0.0**
Appalachian Alabama	+ 0.1	+ 0.5	+ 0.0	+ 0.5	- 0.5	+ 0.0
Non-Appalachian Alabama	+ 0.0	+ 0.7	- 0.1	+ 0.8	- 0.6	+ 0.0
Georgia	**+ 0.1**	**+ 0.2**	**- 0.2**	**+ 0.3**	**- 0.3**	**+ 0.0**
Appalachian Georgia	+ 0.6	- 0.1	- 0.1	+ 0.0	- 0.5	+ 0.0
Non-Appalachian Georgia	- 0.1	+ 0.3	- 0.2	+ 0.5	- 0.2	+ 0.0
Kentucky	**- 0.1**	**+ 0.3**	**+ 0.4**	**- 0.1**	**- 0.3**	**+ 0.0**
Appalachian Kentucky	- 0.2	+ 0.2	+ 0.2	+ 0.1	+ 0.0	+ 0.0
Non-Appalachian Kentucky	- 0.1	+ 0.4	+ 0.4	- 0.1	- 0.4	+ 0.1
Maryland	**+ 0.0**	**+ 0.2**	**+ 0.0**	**+ 0.3**	**- 0.3**	**+ 0.0**
Appalachian Maryland	+ 0.8	- 0.6	- 0.1	- 0.5	- 0.2	+ 0.0
Non-Appalachian Maryland	+ 0.0	+ 0.3	- 0.1	+ 0.3	- 0.2	+ 0.0
Mississippi	**- 0.7**	**+ 0.5**	**+ 0.1**	**+ 0.5**	**+ 0.1**	**+ 0.0**
Appalachian Mississippi	- 1.5	+ 0.8	+ 0.3	+ 0.6	+ 0.7	+ 0.1
Non-Appalachian Mississippi	- 0.4	+ 0.5	+ 0.0	+ 0.4	- 0.1	+ 0.0
New York	**+ 0.0**	**+ 0.1**	**- 0.6**	**+ 0.7**	**- 0.1**	**+ 0.0**
Appalachian New York	+ 0.0	+ 0.3	- 0.1	+ 0.4	- 0.2	+ 0.0
Non-Appalachian New York	+ 0.0	+ 0.0	- 0.6	+ 0.7	- 0.1	+ 0.0
North Carolina	**+ 0.1**	**+ 0.5**	**- 0.1**	**+ 0.6**	**- 0.6**	**+ 0.1**
Appalachian North Carolina	- 0.3	+ 0.8	+ 0.3	+ 0.4	- 0.5	+ 0.0
Non-Appalachian North Carolina	+ 0.1	+ 0.4	- 0.2	+ 0.6	- 0.6	+ 0.0
Ohio	**+ 0.0**	**+ 0.2**	**- 0.2**	**+ 0.3**	**- 0.1**	**+ 0.0**
Appalachian Ohio	- 0.1	+ 0.0	- 0.1	+ 0.1	+ 0.0	+ 0.1
Non-Appalachian Ohio	+ 0.0	+ 0.2	- 0.2	+ 0.3	- 0.1	+ 0.0
Pennsylvania	**+ 0.3**	**- 0.2**	**- 0.4**	**+ 0.3**	**- 0.2**	**+ 0.0**
Appalachian Pennsylvania	+ 0.5	- 0.3	- 0.3	+ 0.2	- 0.2	+ 0.0
Non-Appalachian Pennsylvania	+ 0.1	- 0.1	- 0.5	+ 0.3	- 0.1	+ 0.0
South Carolina	**+ 0.9**	**- 0.3**	**- 0.2**	**- 0.1**	**- 0.7**	**+ 0.0**
Appalachian South Carolina	+ 0.3	+ 0.4	+ 0.0	+ 0.4	- 0.7	+ 0.0
Non-Appalachian South Carolina	+ 1.1	- 0.5	- 0.3	- 0.2	- 0.7	+ 0.0
Tennessee	**- 0.3**	**+ 0.7**	**+ 0.0**	**+ 0.7**	**- 0.5**	**+ 0.0**
Appalachian Tennessee	+ 0.1	+ 0.3	- 0.1	+ 0.4	- 0.6	+ 0.0
Non-Appalachian Tennessee	- 0.7	+ 1.0	+ 0.1	+ 1.0	- 0.3	+ 0.1
Virginia	**- 0.2**	**+ 0.4**	**+ 0.0**	**+ 0.4**	**- 0.2**	**+ 0.0**
Appalachian Virginia	- 0.7	+ 0.5	+ 0.2	+ 0.3	+ 0.2	- 0.1
Non-Appalachian Virginia	- 0.2	+ 0.5	+ 0.1	+ 0.4	- 0.2	+ 0.0
West Virginia (entire state)	**+ 0.1**	**+ 0.0**	**- 0.2**	**+ 0.2**	**+ 0.0**	**+ 0.1**

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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), 2009-2013 to 2014-2018



Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

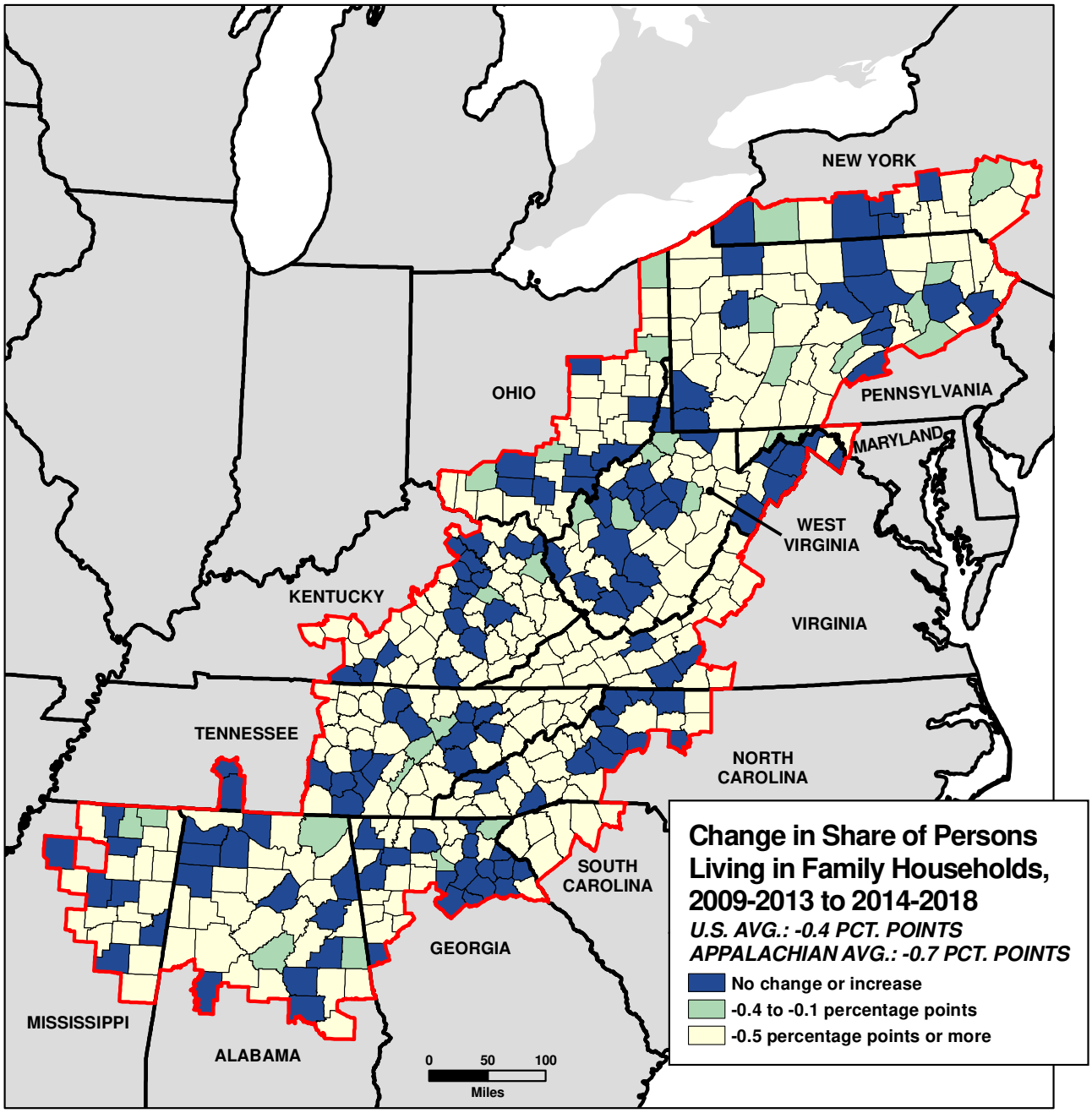
The share of single-unit dwellings among the housing stock increased slightly in Appalachia between the 2009-2013 and 2014-2018 periods, while remaining the same nationwide. And the share likewise rose or stayed the same in most of the Region's 420 counties. In fact, there were 73 counties (scattered throughout Appalachia) where the share of housing units that were single-unit dwellings rose at least two percentage points. Yet in 81 other Appalachian counties, the share of single-unit homes was at least two percentage points lower in 2014-2018 than in the earlier period. Of the counties in the latter group, 26 were in Central Appalachia (the only subregion where the share decreased), while 11 others were in Appalachian Mississippi (where the share declined 1.5 percentage points—the biggest drop among the states). 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 2009-2013 and 2014-2018.

Table 4.7: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Households and Group Quarters, 2009-2013 to 2014-2018

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

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Figure 4.13: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Family Households, 2009-2013 to 2014-2018



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Family Households, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

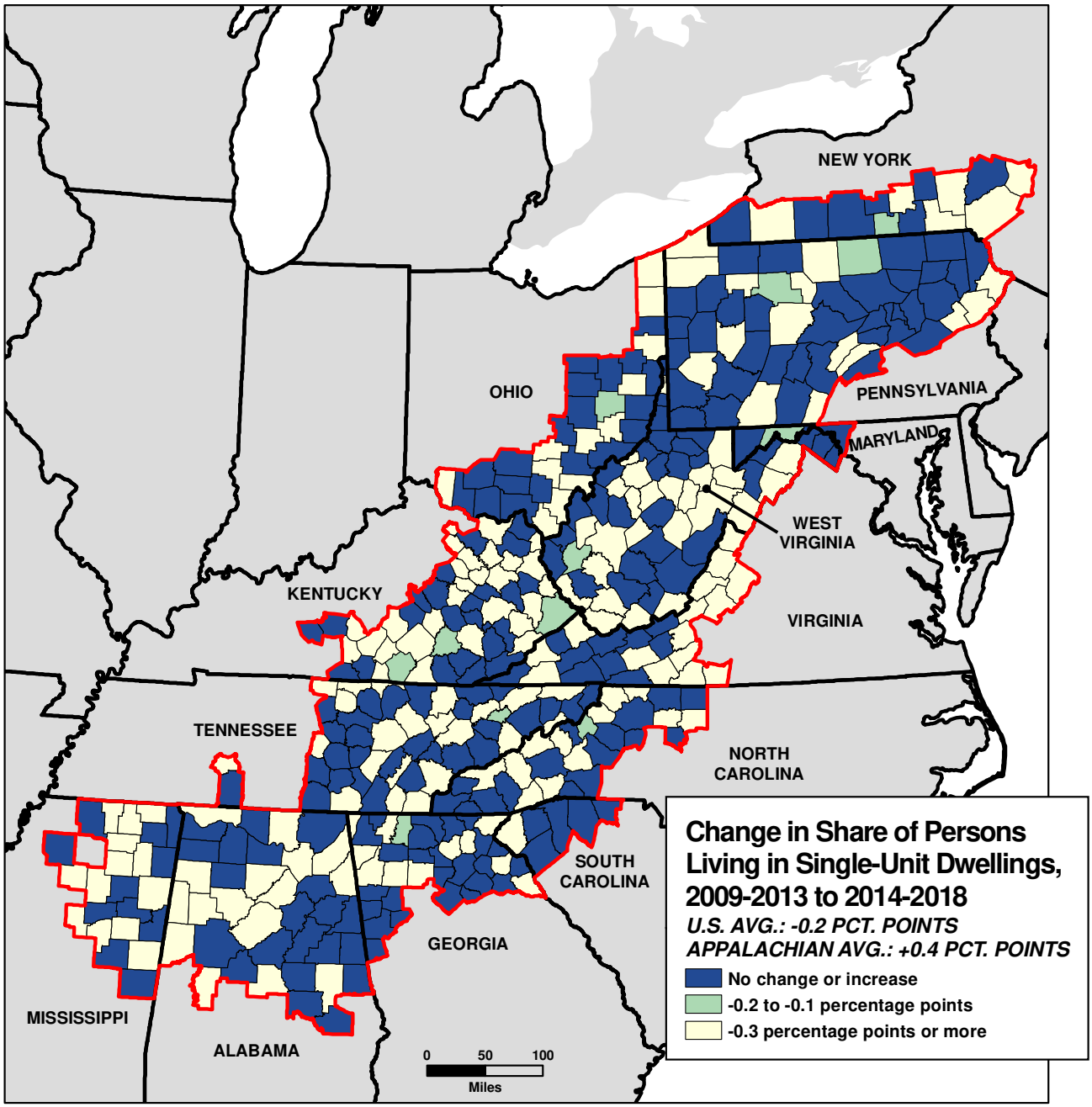
In the Appalachian Region, the share of persons living in family households fell 0.7 percentage points between 2009-2013 and 2014-2018—slightly more than in the nation as a whole (0.4 points). And there were 263 Appalachian counties—scattered throughout the Region—where the decrease in the share living 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 0.7 percentage points—the same magnitude as for all family households. Yet the declining prevalence of family households was not universal: there were 127 Appalachian counties where the share increased or remained the same.

Table 4.8: Percentage Point Change in the Share of Population in Occupied Housing Units in the Appalachian Region, by Type of Housing, 2009-2013 to 2014-2018

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

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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), 2009-2013 to 2014-2018



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), 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Contrary to the national trend, the share of Appalachian residents living in single-unit homes was slightly higher (by just under half a percentage point) in 2014-2018 than in 2009-2013. Indeed, the share also rose or remained constant in 232 of the Region's 420 counties. In contrast, the share living in single-unit dwellings declined more than the national average (-0.2 percentage points) in another 176 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 2009-2013 and 2014-2018.

TRENDS IN HOUSING OCCUPANCY, TENURE, AND TYPE

- At just under 85 percent in 2014-2018, Appalachia's home occupancy rate was 0.7 percentage points lower than it was in 2009-2013 (see Tables 4.1 and 4.2). This decrease was present among all subregions except Southern Appalachia, all county types except the ones in large metropolitan areas, and the Appalachian portions of every state except Georgia and South Carolina. And although the drop suggests that occupancy rates in the Region (in contrast to the nation as a whole) have not yet returned to pre-recession levels, other factors might be at play—for example, the displacement caused by severe weather events like the November 2016 outbreak of tornadoes that struck parts of Alabama and Tennessee (not to mention the aftermath of the April 2011 Super Outbreak of twisters that likewise devastated parts of those states, plus Mississippi and Georgia).

- One factor behind the decline in Appalachia's occupancy rates from 2009-2013 to 2014-2018 might be a slight increase in the percentage of vacant units that were designated for seasonal or occasional use. Between the two periods, the share of such units was higher in about one-third of the 279 Appalachian counties where the overall vacancy rates increased.

- Homeownership rates in Appalachia fell a full percentage point between 2009-2013 and 2014-2018. Among subregions, the declines were greatest in Central and Southern Appalachia, while among county types, the drop in homeownership was greatest among counties in large metropolitan areas. 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 2014-2018, which represents a very slight increase from 2009-2013 (see Tables 4.3 and 4.6). Within the Region, the share increased for all county types except the most rural areas, and for all subregions except Central Appalachia. The greatest increases (albeit by a small margin) were in Northern Appalachia and counties in large metro areas. The share also increased in the Appalachian section of most states, particularly in Maryland, Georgia, and Pennsylvania. But the percentage did fall in some states—in Mississippi, for example, the share dropped 1.5 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 2009-2013, with slightly larger drops in the South Central and Southern subregions—and even larger ones in South Carolina and Tennessee. In contrast, the share of mobile homes in Appalachian Mississippi increased 0.7 percentage points.

- At just under 81 percent, the share of Appalachian residents living in family households was 0.7 percentage points lower in 2014-2018 than in 2009-2013 (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 Central Appalachia, the most rural counties, and the Appalachian sections of Kentucky, Mississippi, South Carolina, and Virginia. (In Virginia, the share fell nearly two percentage points.) 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 0.7 percentage points.

- The share of Appalachian residents living in single-unit homes was 77.6 percent in 2014-2018, slightly higher than in 2009-2013 (see Tables 4.5 and 4.8). But this modest increase was not present throughout the Region. For example, although the share increased more than half a percentage point in Southern Appalachia (and more than a full percentage point in Appalachian Georgia), it stayed the same in Central Appalachia. And while there were increases in the Appalachian sections of most states, there was a noticeable decline in Mississippi (a decrease of almost a full percentage point) and a slight decline in Virginia. As with the share of housing units, Appalachia's increased share of persons in single-unit residences has largely come at the expense of mobile units; the share of the Appalachian population living in mobile homes in 2014-2018 was 0.6 percentage points lower than it was in 2009-2013.

CHAPTER 5: EDUCATION, DEVICE OWNERSHIP, AND INTERNET ACCESS

Table 5.1: Educational Attainment of Persons Ages 25 and Over in the Appalachian Region, 2014-2018

Education (Highest Level Attained)	Total Population Ages 25 and Over, 2014-2018	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	**218,446,071**	**12.3**	**87.7**	**47.7**	**39.9**	**8.4**	**31.5**
Appalachian Region	**17,669,524**	**13.2**	**86.8**	**53.9**	**32.9**	**8.7**	**24.2**
Subregions							
Northern Appalachia	5,805,071	9.4	90.6	55.6	35.0	9.6	25.4
North Central Appalachia	1,680,205	12.9	87.1	58.9	28.2	7.9	20.3
Central Appalachia	1,312,093	21.5	78.5	57.3	21.2	7.2	14.1
South Central Appalachia	3,396,302	13.9	86.1	52.8	33.3	8.6	24.7
Southern Appalachia	5,475,853	14.8	85.2	50.5	34.6	8.4	26.2
County Types							
Large Metros (pop. 1 million +)	4,165,442	9.6	90.4	49.4	41.0	9.0	31.9
Small Metros (pop. <1 million)	7,457,727	12.4	87.6	53.3	34.3	8.7	25.6
Nonmetro, Adjacent to Large Metros	1,515,816	14.8	85.2	58.6	26.7	8.9	17.7
Nonmetro, Adjacent to Small Metros	2,793,837	15.9	84.1	58.6	25.5	8.4	17.1
Rural (nonmetro, not adj. to a metro)	1,736,702	19.2	80.8	56.1	24.7	8.1	16.7
Alabama	**3,299,958**	**14.2**	**85.8**	**52.5**	**33.2**	**8.3**	**24.9**
Appalachian Alabama	2,127,598	14.1	85.9	52.1	33.8	8.2	25.6
Non-Appalachian Alabama	1,172,360	14.5	85.5	53.4	32.1	8.4	23.7
Georgia	**6,786,547**	**13.3**	**86.7**	**48.4**	**38.3**	**7.6**	**30.7**
Appalachian Georgia	2,089,561	15.0	85.0	49.2	35.8	7.9	27.9
Non-Appalachian Georgia	4,696,986	12.6	87.4	48.0	39.4	7.5	31.9
Kentucky	**3,004,004**	**14.3**	**85.7**	**53.9**	**31.8**	**8.1**	**23.6**
Appalachian Kentucky	804,517	21.7	78.3	56.1	22.2	7.4	14.8
Non-Appalachian Kentucky	2,199,487	11.6	88.4	53.1	35.3	8.4	26.8
Maryland	**4,114,858**	**10.0**	**90.0**	**43.8**	**46.3**	**6.6**	**39.6**
Appalachian Maryland	176,033	12.0	88.0	58.9	29.2	8.8	20.4
Non-Appalachian Maryland	3,938,825	9.9	90.1	43.1	47.0	6.6	40.5
Mississippi	**1,967,314**	**16.1**	**83.9**	**52.7**	**31.2**	**9.4**	**21.8**
Appalachian Mississippi	412,807	19.0	81.0	53.5	27.5	8.8	18.7
Non-Appalachian Mississippi	1,554,507	15.3	84.7	52.5	32.2	9.5	22.6
New York	**13,606,342**	**13.5**	**86.5**	**41.8**	**44.6**	**8.7**	**35.9**
Appalachian New York	697,329	9.8	90.2	51.4	38.7	12.3	26.5
Non-Appalachian New York	12,909,013	13.7	86.3	41.3	44.9	8.5	36.4
North Carolina	**6,881,774**	**12.6**	**87.4**	**47.4**	**40.0**	**9.5**	**30.5**
Appalachian North Carolina	1,235,157	13.9	86.1	49.7	36.4	9.8	26.6
Non-Appalachian North Carolina	5,646,617	12.4	87.6	46.9	40.8	9.4	31.4
Ohio	**7,937,085**	**9.9**	**90.1**	**53.7**	**36.4**	**8.6**	**27.8**
Appalachian Ohio	1,391,769	12.8	87.2	60.7	26.5	8.6	17.8
Non-Appalachian Ohio	6,545,316	9.3	90.7	52.2	38.5	8.6	29.9
Pennsylvania	**8,921,363**	**9.8**	**90.2**	**51.1**	**39.1**	**8.3**	**30.8**
Appalachian Pennsylvania	4,059,798	8.7	91.3	54.8	36.5	9.4	27.1
Non-Appalachian Pennsylvania	4,861,565	10.8	89.2	48.0	41.2	7.4	33.8
South Carolina	**3,385,002**	**12.9**	**87.1**	**50.1**	**37.0**	**9.6**	**27.4**
Appalachian South Carolina	845,887	14.2	85.8	48.6	37.1	9.9	27.2
Non-Appalachian South Carolina	2,539,115	12.4	87.6	50.6	37.0	9.5	27.5
Tennessee	**4,530,706**	**13.0**	**87.0**	**53.2**	**33.8**	**7.1**	**26.6**
Appalachian Tennessee	2,008,283	14.4	85.6	55.5	30.1	7.4	22.7
Non-Appalachian Tennessee	2,522,423	11.9	88.1	51.4	36.7	6.9	29.8
Virginia	**5,730,352**	**10.7**	**89.3**	**43.5**	**45.8**	**7.6**	**38.2**
Appalachian Virginia	528,701	16.6	83.4	53.8	29.6	9.2	20.5
Non-Appalachian Virginia	5,201,651	10.1	89.9	42.5	47.4	7.5	40.0
West Virginia (entire state)	**1,292,084**	**13.5**	**86.5**	**59.1**	**27.4**	**7.1**	**20.3**

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Table 5.2: Educational Attainment of Persons Ages 25 to 64 in the Appalachian Region, 2014-2018

Education (Highest Level Attained)	Total Population Ages 25 to 64, 2014-2018	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	**169,207,490**	**11.2**	**88.8**	**46.8**	**42.0**	**9.1**	**32.9**
Appalachian Region	**13,186,906**	**11.3**	**88.7**	**53.1**	**35.6**	**9.8**	**25.7**
Subregions							
Northern Appalachia	4,238,948	7.8	92.2	53.4	38.8	11.1	27.8
North Central Appalachia	1,246,844	10.5	89.5	58.7	30.8	9.1	21.8
Central Appalachia	978,295	17.3	82.7	59.5	23.3	8.4	14.8
South Central Appalachia	2,471,641	11.8	88.2	52.9	35.3	9.6	25.7
Southern Appalachia	4,251,178	13.4	86.6	49.9	36.7	9.2	27.5
County Types							
Large Metros (pop. 1 million +)	3,229,254	8.4	91.6	47.2	44.4	10.0	34.4
Small Metros (pop. <1 million)	5,560,577	10.8	89.2	52.4	36.8	9.7	27.1
Nonmetro, Adjacent to Large Metros	1,116,756	12.9	87.1	58.3	28.7	10.2	18.5
Nonmetro, Adjacent to Small Metros	2,010,852	13.5	86.5	59.1	27.5	9.8	17.7
Rural (nonmetro, not adj. to a metro)	1,269,467	16.2	83.8	57.2	26.6	9.3	17.2
Alabama	**2,516,126**	**12.6**	**87.4**	**52.1**	**35.3**	**9.3**	**26.0**
Appalachian Alabama	1,625,417	12.5	87.5	51.4	36.1	9.2	26.9
Non-Appalachian Alabama	890,709	12.7	87.3	53.5	33.8	9.4	24.4
Georgia	**5,434,258**	**12.0**	**88.0**	**47.8**	**40.2**	**8.2**	**32.0**
Appalachian Georgia	1,670,204	13.9	86.1	48.4	37.6	8.5	29.1
Non-Appalachian Georgia	3,764,054	11.2	88.8	47.5	41.3	8.0	33.3
Kentucky	**2,312,495**	**11.9**	**88.1**	**53.8**	**34.3**	**9.3**	**25.1**
Appalachian Kentucky	606,880	17.7	82.3	57.9	24.4	8.7	15.7
Non-Appalachian Kentucky	1,705,615	9.8	90.2	52.4	37.9	9.5	28.4
Maryland	**3,239,521**	**8.8**	**91.2**	**42.9**	**48.3**	**7.1**	**41.2**
Appalachian Maryland	131,069	10.3	89.7	58.4	31.3	10.1	21.2
Non-Appalachian Maryland	3,108,452	8.7	91.3	42.3	49.0	7.0	42.1
Mississippi	**1,517,836**	**14.1**	**85.9**	**53.0**	**33.0**	**10.6**	**22.4**
Appalachian Mississippi	311,968	16.5	83.5	53.9	29.6	10.2	19.4
Non-Appalachian Mississippi	1,205,868	13.5	86.5	52.7	33.8	10.7	23.2
New York	**10,537,653**	**11.7**	**88.3**	**40.6**	**47.7**	**9.5**	**38.3**
Appalachian New York	508,620	8.7	91.3	50.1	41.2	13.7	27.6
Non-Appalachian New York	10,029,033	11.8	88.2	40.1	48.1	9.3	38.8
North Carolina	**5,310,776**	**11.2**	**88.8**	**46.5**	**42.3**	**10.2**	**32.1**
Appalachian North Carolina	889,482	12.6	87.4	49.5	37.9	11.0	26.9
Non-Appalachian North Carolina	4,421,294	10.9	89.1	45.8	43.2	10.1	33.2
Ohio	**6,044,224**	**8.4**	**91.6**	**52.2**	**39.5**	**9.7**	**29.8**
Appalachian Ohio	1,028,223	11.1	88.9	59.7	29.2	10.2	19.0
Non-Appalachian Ohio	5,016,001	7.8	92.2	50.6	41.6	9.6	32.0
Pennsylvania	**6,691,502**	**8.1**	**91.9**	**49.1**	**42.9**	**9.4**	**33.5**
Appalachian Pennsylvania	2,967,576	6.9	93.1	52.2	40.9	11.0	29.9
Non-Appalachian Pennsylvania	3,723,926	9.0	91.0	46.5	44.4	8.2	36.3
South Carolina	**2,555,919**	**11.4**	**88.6**	**50.2**	**38.4**	**10.4**	**28.1**
Appalachian South Carolina	643,589	12.6	87.4	48.3	39.2	10.7	28.5
Non-Appalachian South Carolina	1,912,330	11.0	89.0	50.8	38.2	10.2	28.0
Tennessee	**3,485,493**	**10.9**	**89.1**	**53.0**	**36.0**	**7.9**	**28.1**
Appalachian Tennessee	1,476,844	11.9	88.1	56.0	32.0	8.4	23.7
Non-Appalachian Tennessee	2,008,649	10.2	89.8	50.8	39.0	7.6	31.4
Virginia	**4,500,106**	**9.0**	**91.0**	**42.7**	**48.3**	**8.2**	**40.1**
Appalachian Virginia	379,669	12.5	87.5	54.6	32.8	10.5	22.4
Non-Appalachian Virginia	4,120,437	8.7	91.3	41.6	49.7	8.0	41.7
West Virginia (entire state)	**947,365**	**10.7**	**89.3**	**59.3**	**29.9**	**8.2**	**21.8**

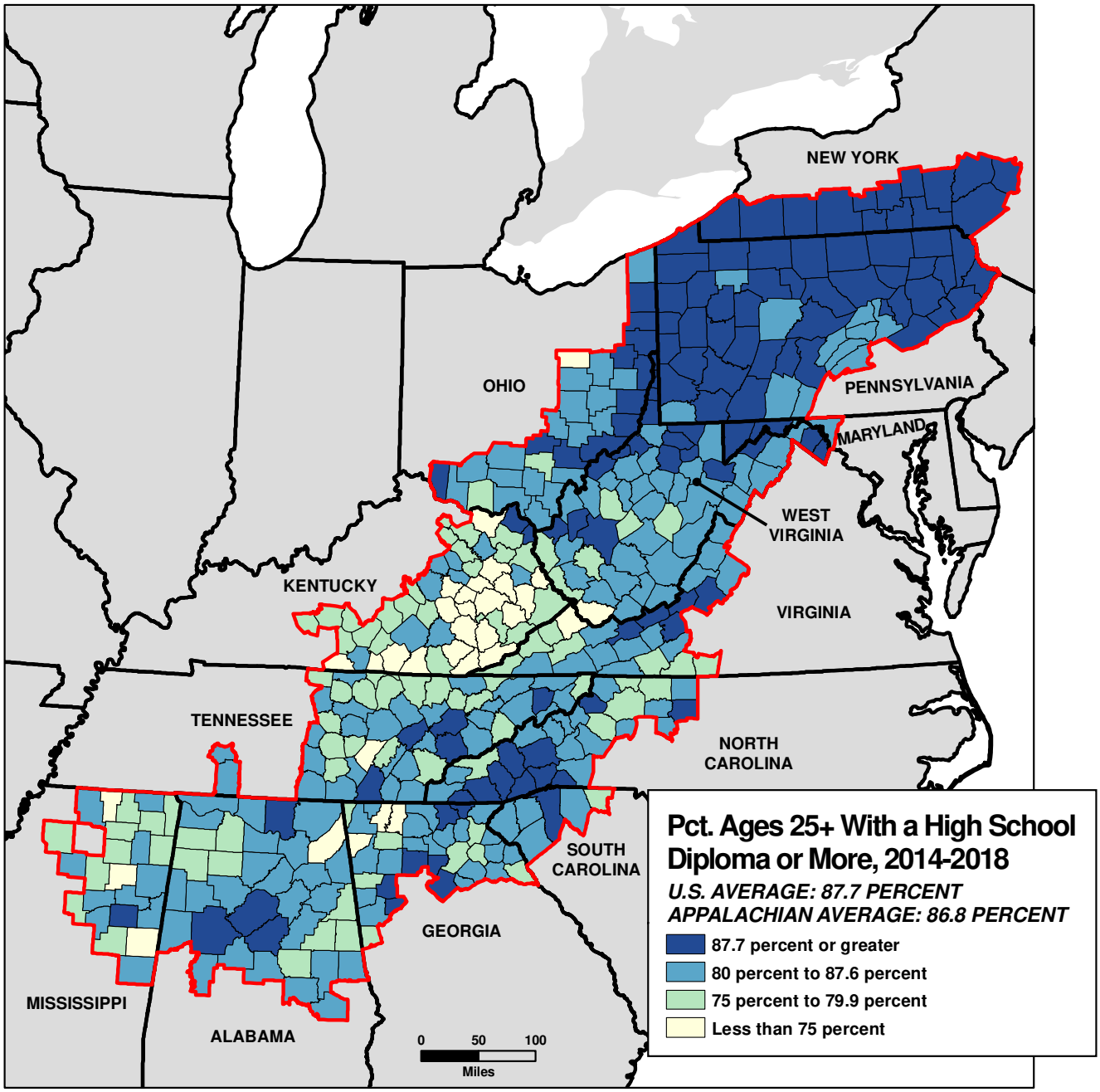
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Table 5.3: Educational Attainment of Persons Ages 65 and Over in the Appalachian Region, 2014-2018

Education (Highest Level Attained)	Total Population Ages 65 and Over, 2014-2018	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	**49,238,581**	**16.4**	**83.6**	**50.9**	**32.7**	**6.0**	**26.7**
Appalachian Region	**4,482,618**	**18.7**	**81.3**	**56.3**	**25.0**	**5.3**	**19.7**
Subregions							
Northern Appalachia	1,566,123	13.8	86.2	61.5	24.6	5.5	19.1
North Central Appalachia	433,361	20.0	80.0	59.5	20.5	4.4	16.1
Central Appalachia	333,798	33.8	66.2	50.9	15.3	3.5	11.8
South Central Appalachia	924,661	19.4	80.6	52.6	28.0	5.8	22.2
Southern Appalachia	1,224,675	19.8	80.2	52.7	27.4	5.5	21.9
County Types							
Large Metros (pop. 1 million +)	936,188	14.0	86.0	56.7	29.2	5.6	23.6
Small Metros (pop. <1 million)	1,897,150	17.3	82.7	55.8	26.9	5.5	21.5
Nonmetro, Adjacent to Large Metros	399,060	19.8	80.2	59.2	20.9	5.3	15.6
Nonmetro, Adjacent to Small Metros	782,985	22.1	77.9	57.4	20.5	5.0	15.5
Rural (nonmetro, not adj. to a metro)	467,235	27.3	72.7	53.0	19.7	4.6	15.1
Alabama	**783,832**	**19.6**	**80.4**	**53.9**	**26.5**	**5.2**	**21.3**
Appalachian Alabama	502,181	19.2	80.8	54.3	26.4	5.1	21.3
Non-Appalachian Alabama	281,651	20.1	79.9	53.2	26.7	5.3	21.4
Georgia	**1,352,289**	**18.6**	**81.4**	**50.9**	**30.6**	**5.4**	**25.2**
Appalachian Georgia	419,357	19.1	80.9	52.3	28.6	5.4	23.3
Non-Appalachian Georgia	932,932	18.3	81.7	50.2	31.4	5.4	26.0
Kentucky	**691,509**	**22.5**	**77.5**	**54.3**	**23.2**	**4.4**	**18.8**
Appalachian Kentucky	197,637	34.1	65.9	50.4	15.5	3.5	12.0
Non-Appalachian Kentucky	493,872	17.8	82.2	55.9	26.3	4.8	21.5
Maryland	**875,337**	**14.3**	**85.7**	**46.9**	**38.8**	**5.1**	**33.8**
Appalachian Maryland	44,964	16.8	83.2	60.2	23.0	5.0	18.0
Non-Appalachian Maryland	830,373	14.1	85.9	46.2	39.7	5.1	34.6
Mississippi	**449,478**	**22.9**	**77.1**	**52.0**	**25.2**	**5.3**	**19.8**
Appalachian Mississippi	100,839	26.7	73.3	52.4	20.9	4.6	16.3
Non-Appalachian Mississippi	348,639	21.8	78.2	51.9	26.4	5.5	20.8
New York	**3,068,689**	**19.9**	**80.1**	**46.2**	**33.9**	**6.1**	**27.9**
Appalachian New York	188,709	13.0	87.0	55.0	32.0	8.5	23.4
Non-Appalachian New York	2,879,980	20.3	79.7	45.6	34.1	5.9	28.2
North Carolina	**1,570,998**	**17.5**	**82.5**	**50.5**	**32.0**	**6.9**	**25.1**
Appalachian North Carolina	345,675	17.2	82.8	50.5	32.4	6.6	25.8
Non-Appalachian North Carolina	1,225,323	17.6	82.4	50.5	31.9	7.0	24.9
Ohio	**1,892,861**	**14.8**	**85.2**	**58.7**	**26.5**	**5.0**	**21.5**
Appalachian Ohio	363,546	17.5	82.5	63.6	18.8	4.4	14.5
Non-Appalachian Ohio	1,529,315	14.2	85.8	57.5	28.3	5.2	23.1
Pennsylvania	**2,229,861**	**15.0**	**85.0**	**57.3**	**27.8**	**5.0**	**22.7**
Appalachian Pennsylvania	1,092,222	13.4	86.6	61.9	24.7	5.2	19.5
Non-Appalachian Pennsylvania	1,137,639	16.4	83.6	52.9	30.7	4.8	25.9
South Carolina	**829,083**	**17.5**	**82.5**	**50.0**	**32.5**	**7.2**	**25.3**
Appalachian South Carolina	202,298	19.5	80.5	49.9	30.6	7.3	23.3
Non-Appalachian South Carolina	626,785	16.8	83.2	50.1	33.1	7.1	26.0
Tennessee	**1,045,213**	**20.0**	**80.0**	**53.8**	**26.2**	**4.6**	**21.5**
Appalachian Tennessee	531,439	21.4	78.6	53.9	24.7	4.9	19.9
Non-Appalachian Tennessee	513,774	18.6	81.4	53.7	27.7	4.4	23.3
Virginia	**1,230,246**	**16.9**	**83.1**	**46.5**	**36.7**	**5.6**	**31.0**
Appalachian Virginia	149,032	26.9	73.1	51.6	21.5	5.9	15.6
Non-Appalachian Virginia	1,081,214	15.5	84.5	45.8	38.7	5.6	33.2
West Virginia (entire state)	**344,719**	**21.0**	**79.0**	**58.7**	**20.3**	**4.2**	**16.1**

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

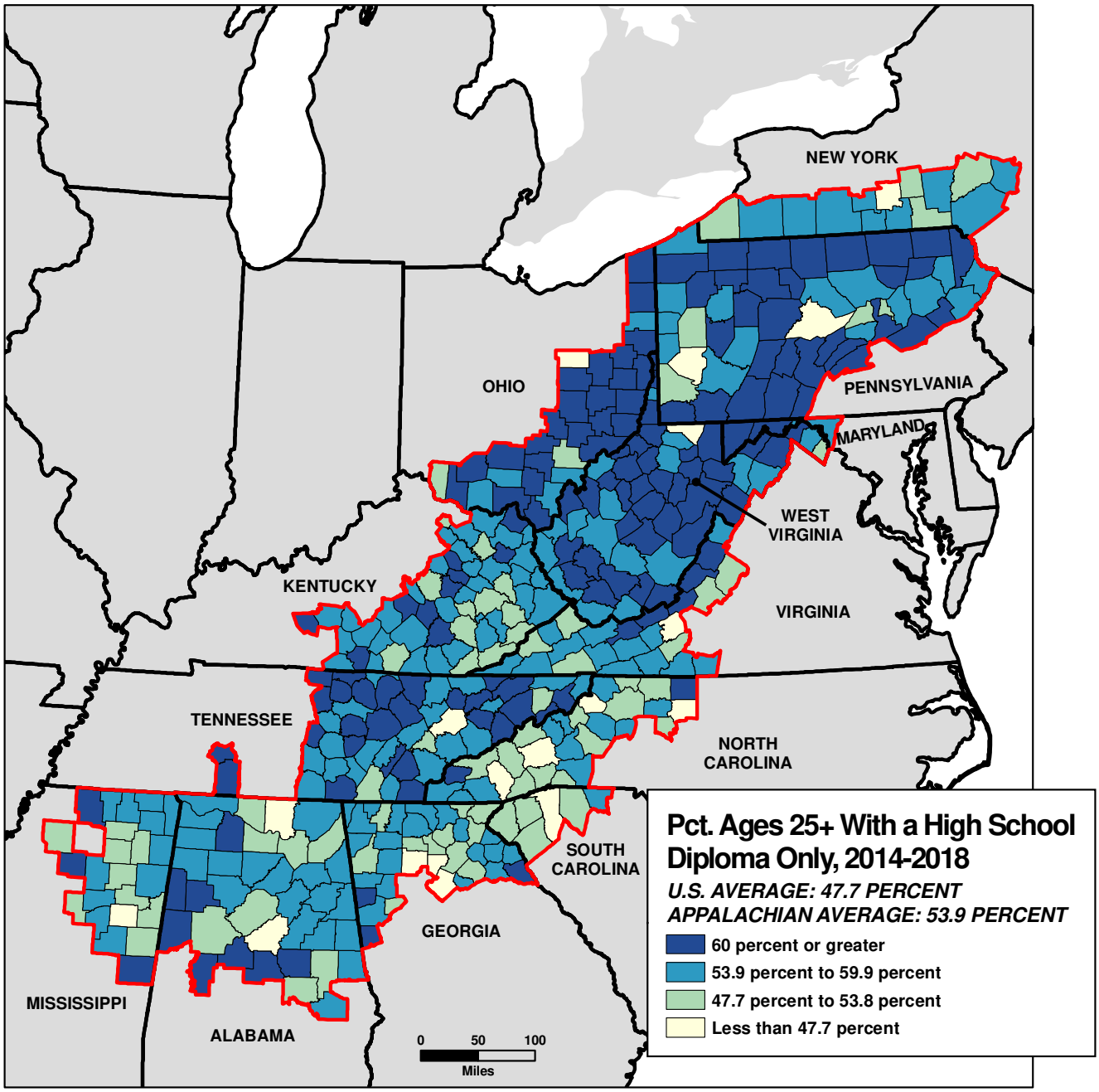
Figure 5.1: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2014-2018



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Although the share of Appalachian adults with at least a high school diploma was slightly below the national average over the 2014-2018 period, it matched or exceeded the national share in 121 counties in the Region—102 of which were either in Northern Appalachia or in metropolitan areas. The rates were especially high in the Appalachian sections of Pennsylvania and New York, where the share of adults who had completed high school was 91 percent and 90 percent, respectively. Yet in 32 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 29 were outside metropolitan areas. Nearly two-thirds of these 32 counties were in Kentucky alone; just 78 percent of adults in the state's Appalachian counties had a high school diploma or more in 2014-2018.

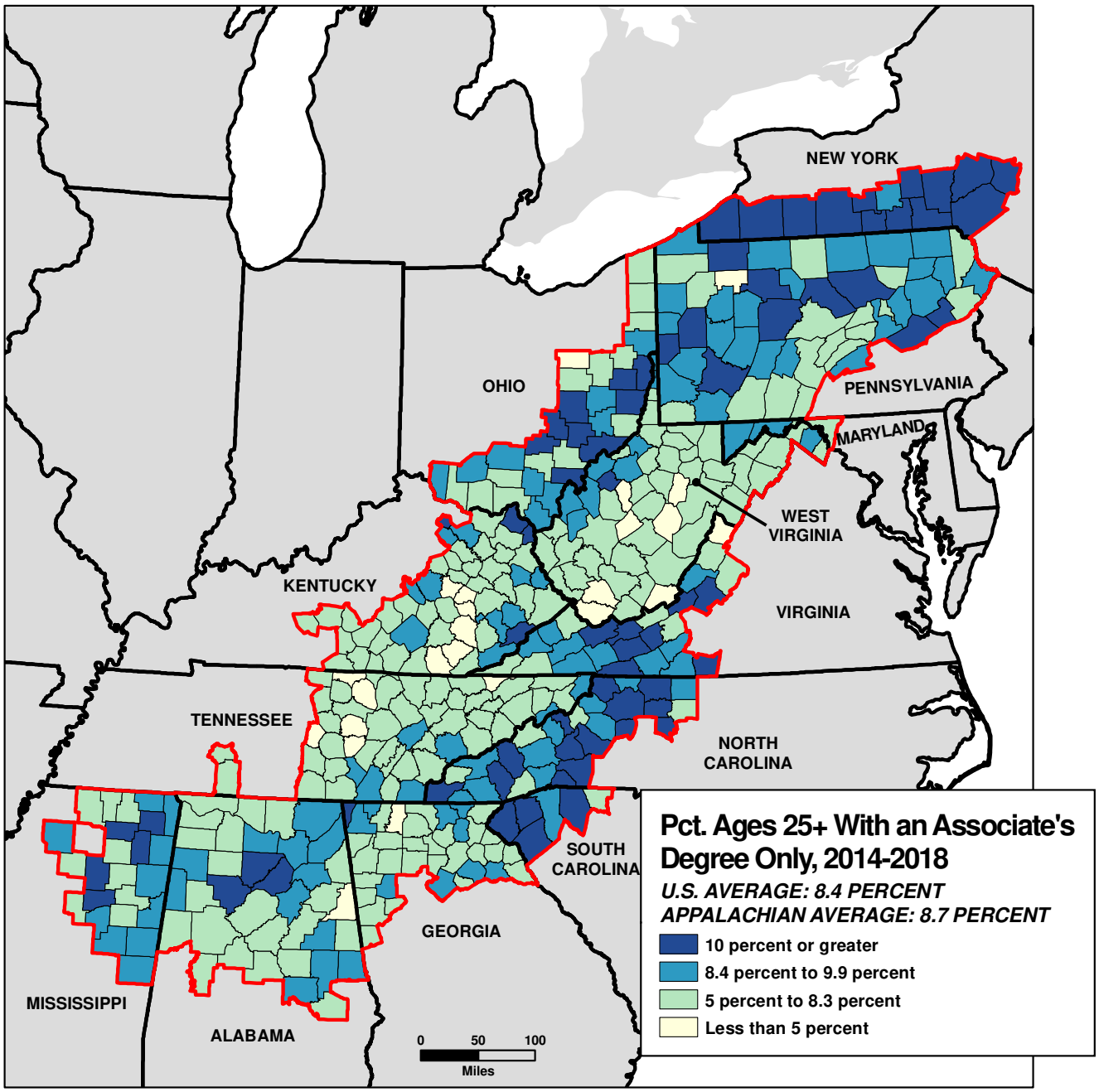
Figure 5.2: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2014-2018



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

During the 2014-2018 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—118 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, 33 percent of adults in Appalachia did earn an associate's or bachelor's degree, while 13 percent never finished high school.

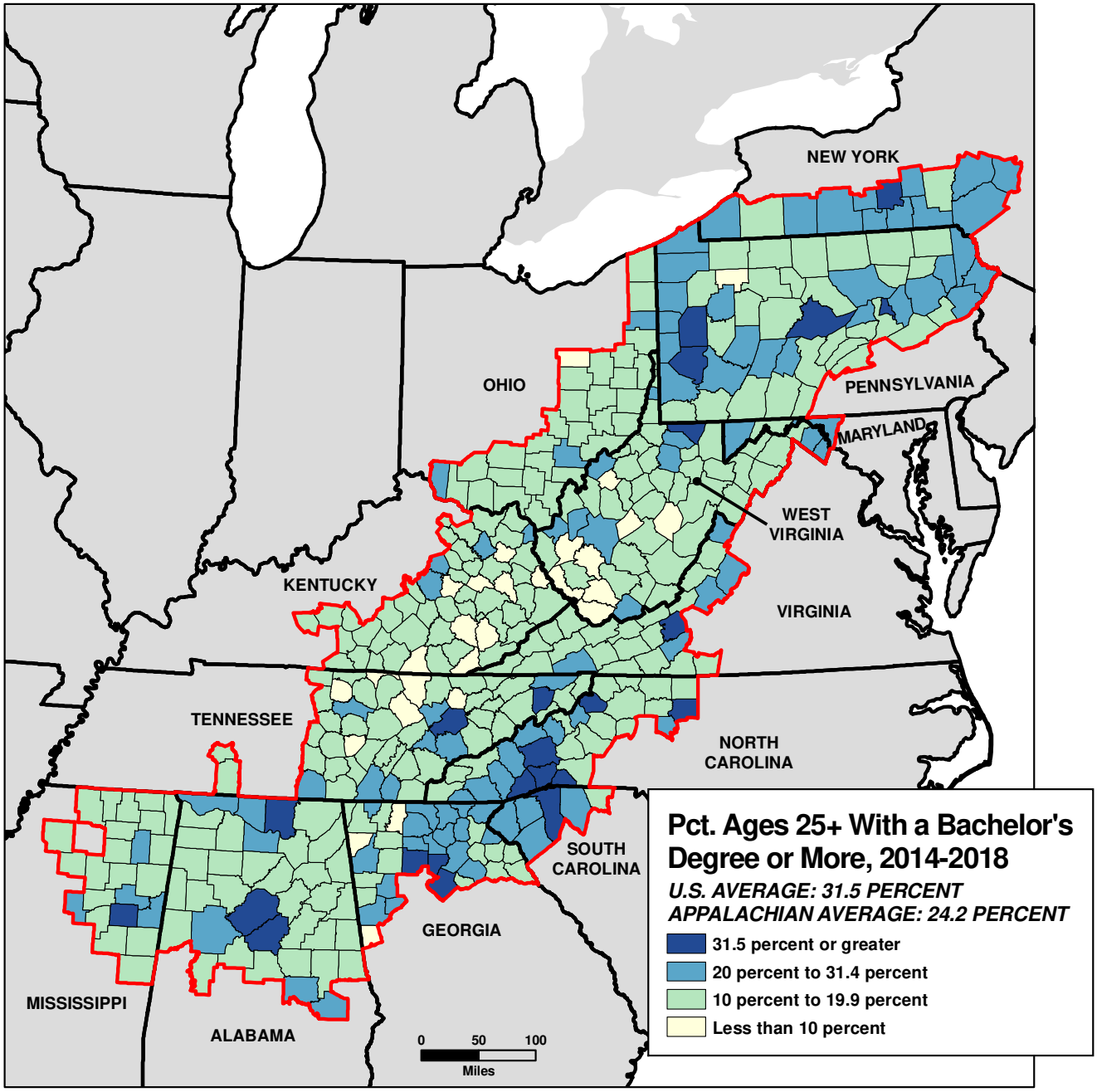
Figure 5.3: Percent of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree but Without a Bachelor's Degree, 2014-2018



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree but Without a Bachelor's Degree, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 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 8.7 percent in 2014-2018, just above the national rate (8.4 percent). And it was even higher in some parts of the Region—12 percent in Appalachian New York and almost 10 percent in both North and South Carolina, for example. Indeed, those three states alone accounted for 31 of the 72 counties where the share matched or exceeded 10 percent. In contrast, the share was less than 5 percent in 24 other Appalachian counties—19 of which were in West Virginia, Kentucky, or Tennessee. In the Appalachian portion of each of these states, less than 7.5 percent of adults had an associate's degree as their highest level of education.

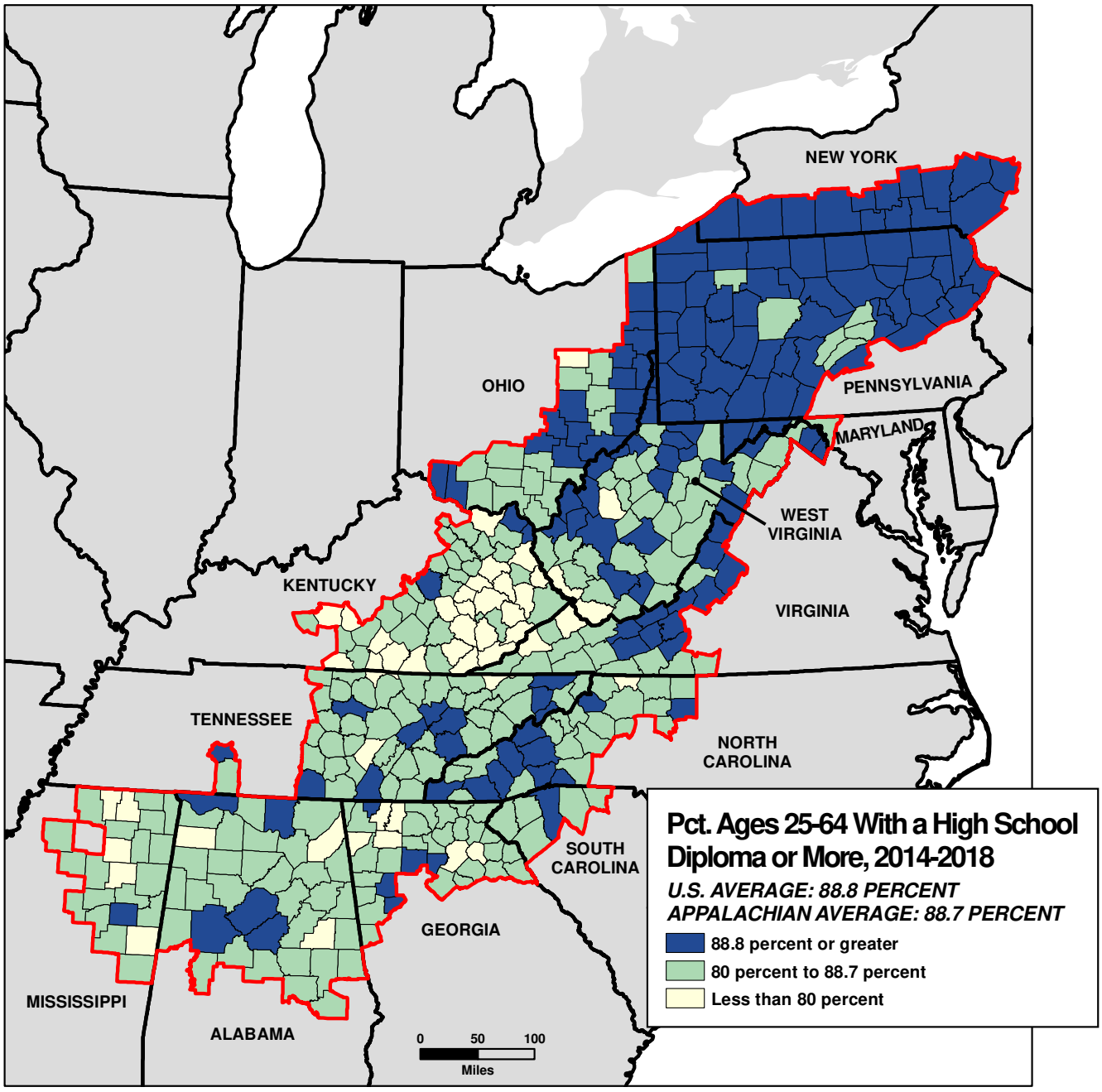
Figure 5.4: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2014-2018



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 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 2014-2018 period than in the nation as a whole. Indeed, the rate was lower than the national average in 397 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 296 Appalachian counties. And in 28 counties—all but four of which were either outside metropolitan areas or in Central Appalachia—the share was less than one in 10. The 23 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 Watauga County, North Carolina, where Appalachian State University is located).

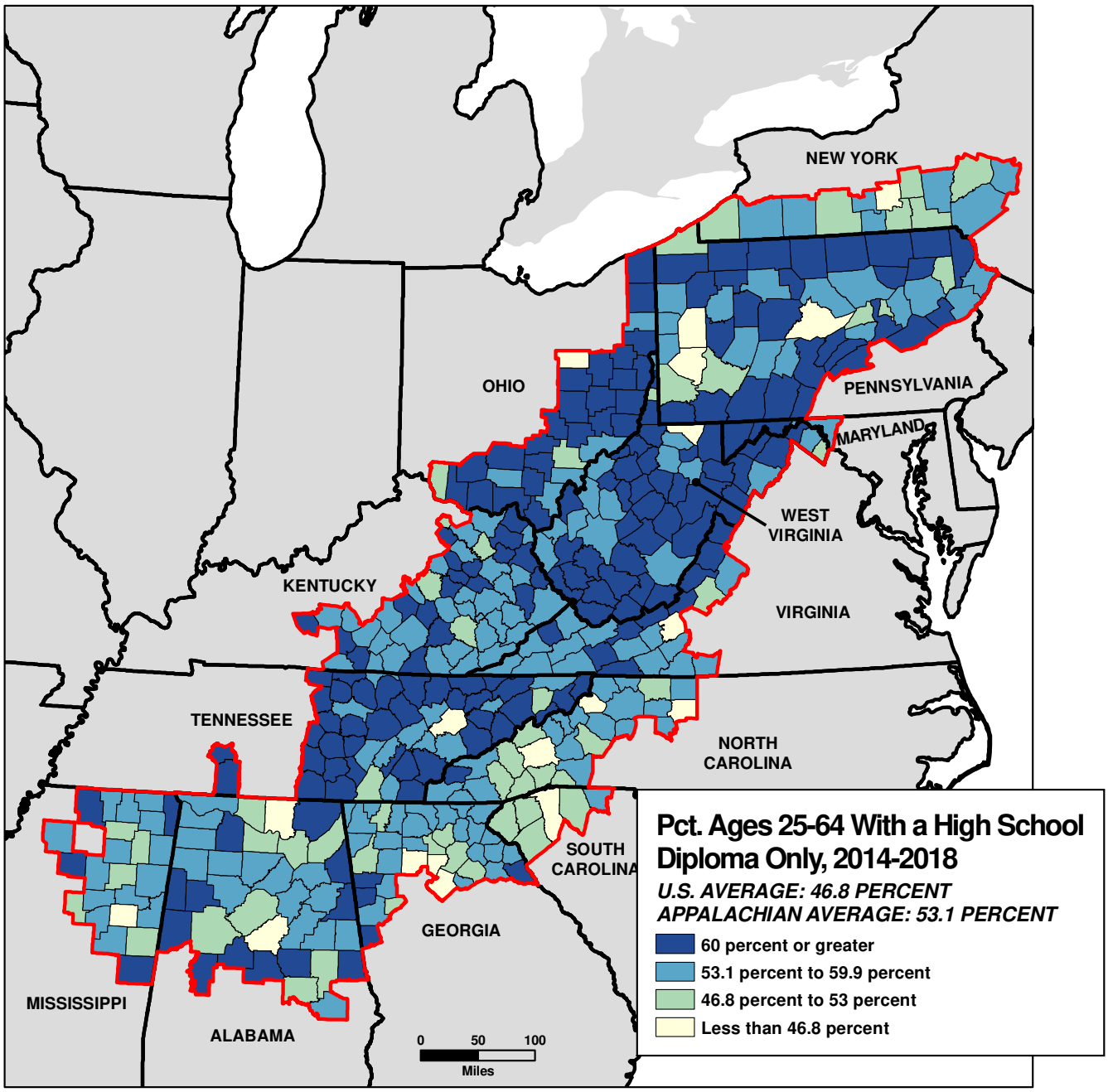
Figure 5.5: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2014-2018



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In 2014-2018, the percentage of working-age adults (ages 25 to 64) in the Appalachian Region with at least a high school diploma was almost at the national average of 88.8 percent, and the share matched or exceeded the national rate in 150 counties. More than half of these counties were in metropolitan areas, and 103 of them were in Northern or North Central Appalachia. Two-fifths of these 150 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. At the other end of the spectrum, less than 80 percent of working-age adults had finished high school in 49 Appalachian counties. Almost all of these counties were outside metropolitan areas, and 25 of them were in Kentucky alone.

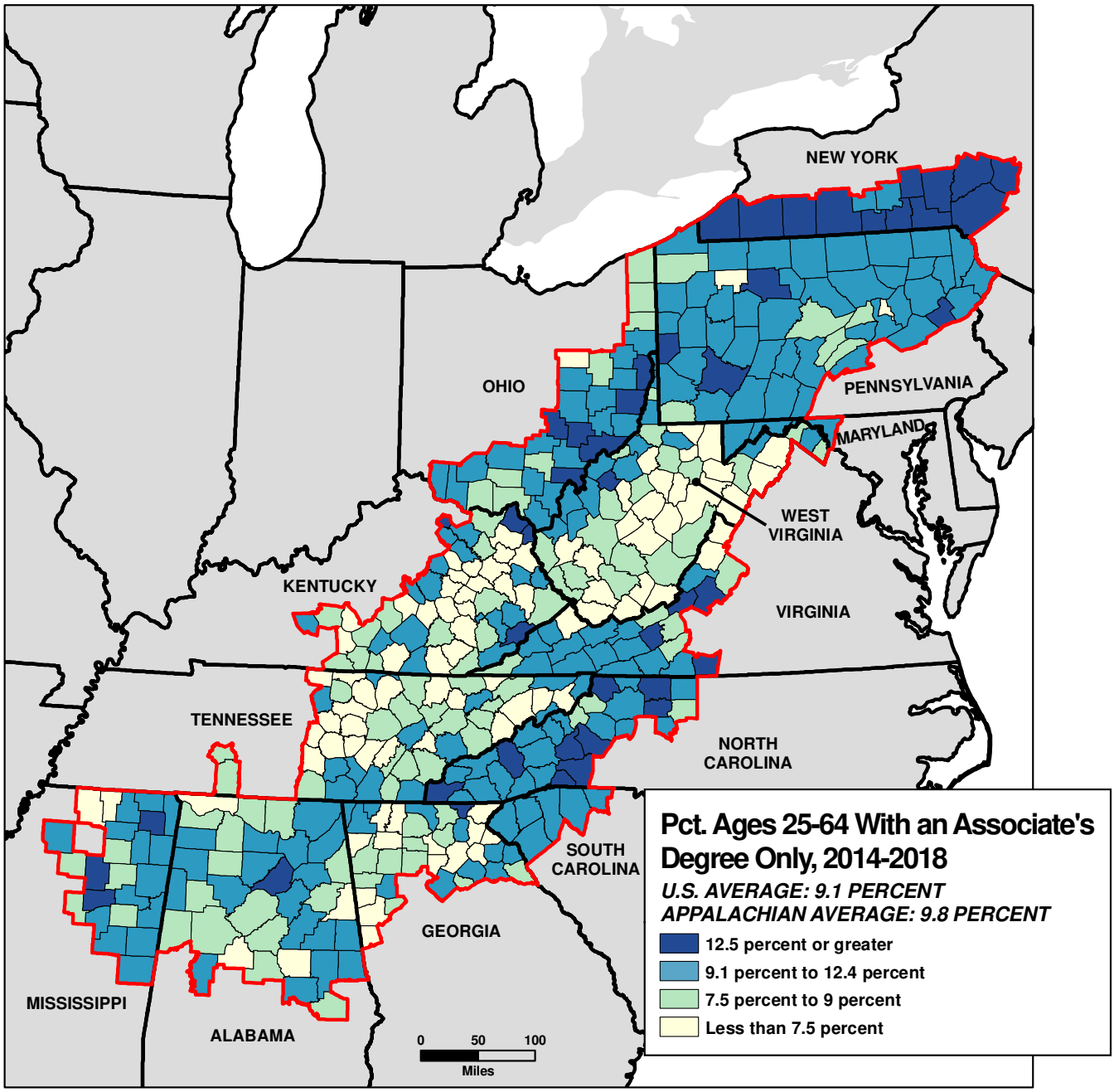
Figure 5.6: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2014-2018



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In 2014-2018, 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 47 percent nationally. And the share was at least 60 percent in 179 of Appalachia's 420 counties. Two-thirds of these counties were in five states—Kentucky, Maryland, Ohio, Tennessee, and West Virginia. (The share with just a high school diploma was at least 56 percent in the Appalachian portion of each of those 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.

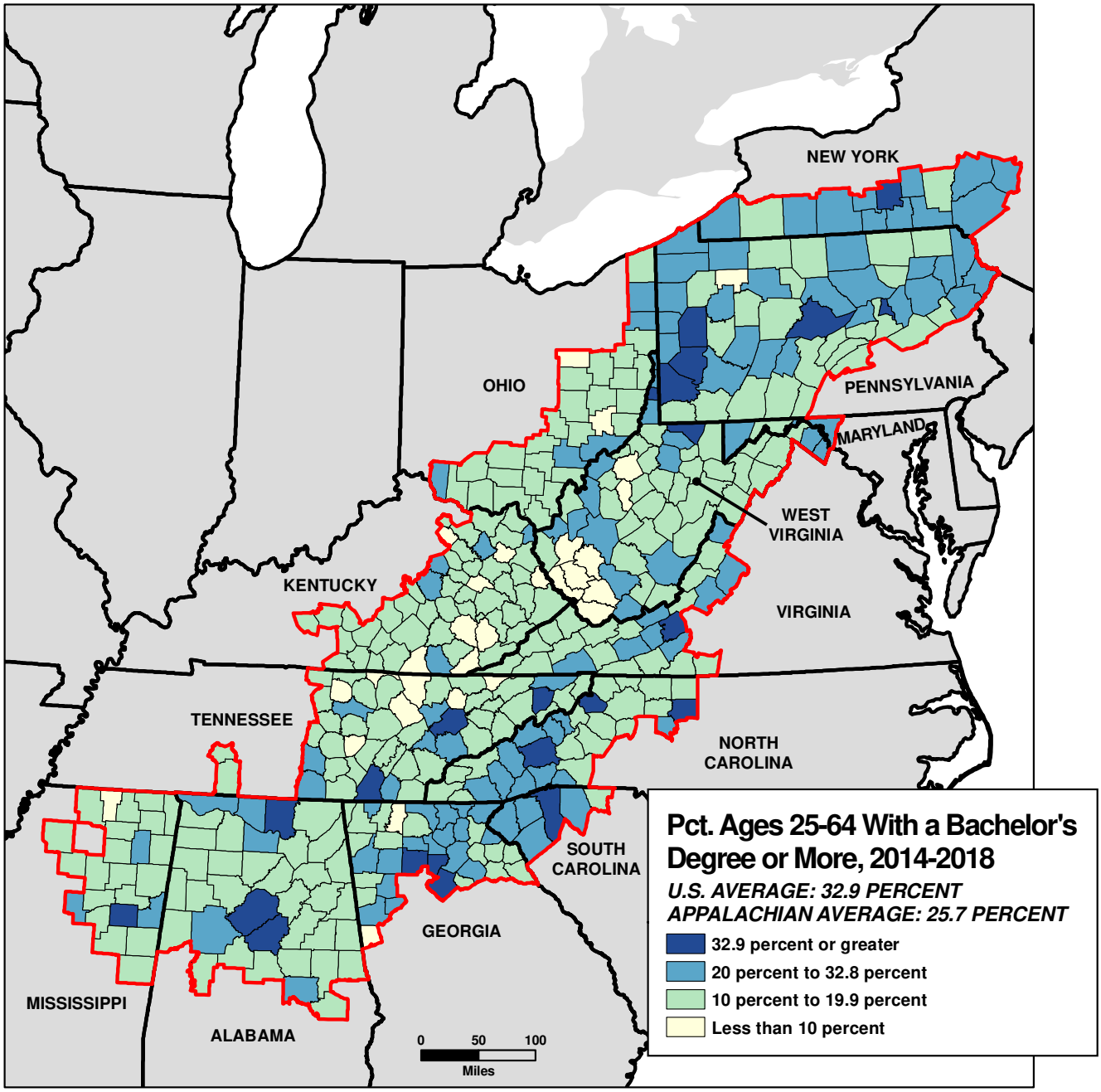
Figure 5.7: Percent of Persons Ages 25 to 64 in the Appalachian Region With an Associate's Degree but Without a Bachelor's Degree, 2014-2018



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With an Associate's Degree but Without a Bachelor's Degree, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In 2014-2018, nearly 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 9 percent nationally. And the share was even higher in much of the Region: In 45 Appalachian counties (18 of which were in Northern Appalachia), at least one in eight working-age adults had an associate's degree as their highest level of education. In contrast, there were 92 counties where less than 7.5 percent of 25-to-64-year-olds had attained an associate's degree only. All but 12 of the counties in the latter group were in four states—Georgia, Kentucky, Tennessee, and West Virginia.

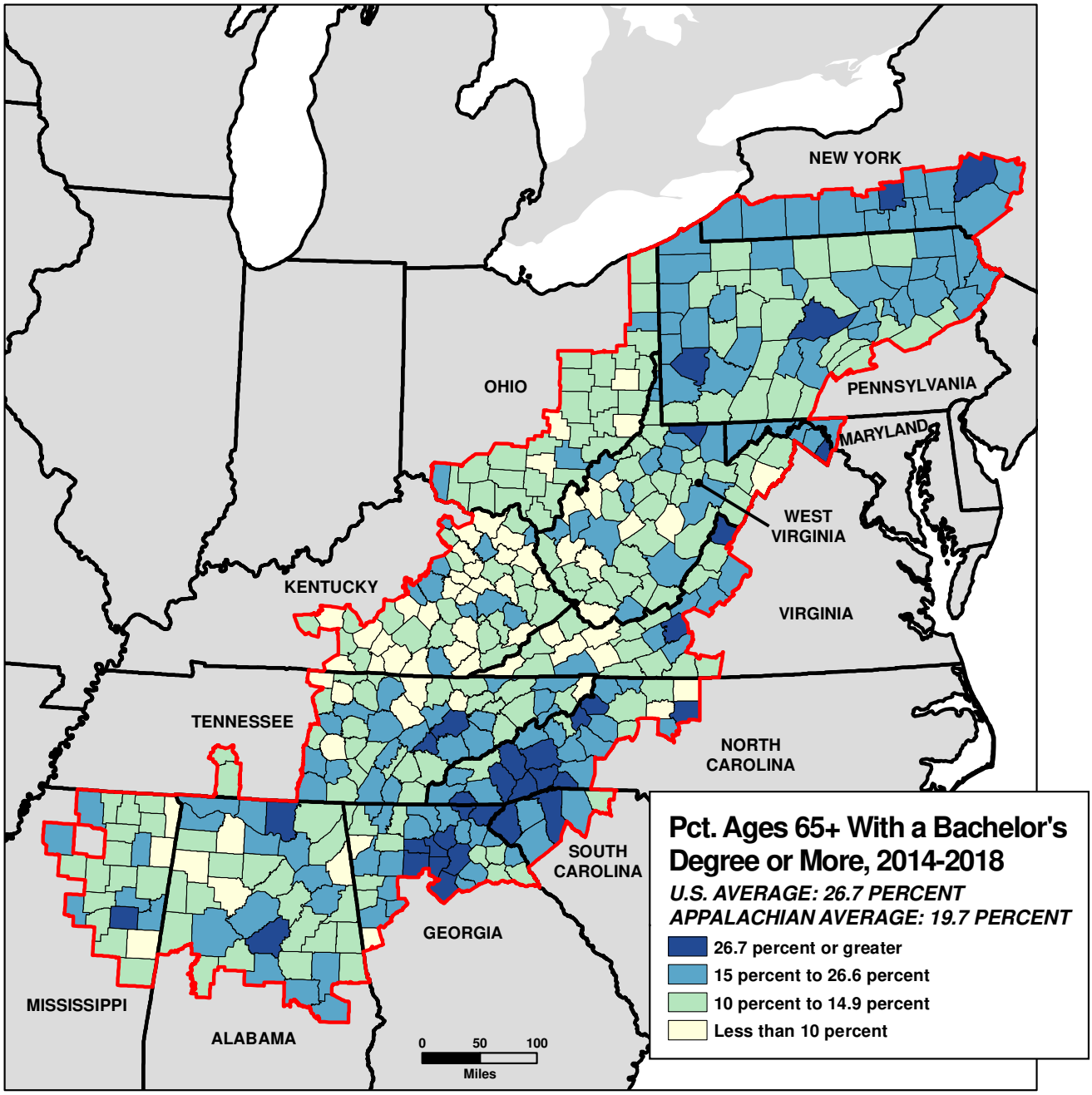
Figure 5.8: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2014-2018



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Nearly 26 percent of Appalachia's working-age population had a bachelor's degree or more in 2014-2018—seven percentage points lower than the U.S. average of 33 percent. This is a striking indicator of the lower educational level of the Appalachian workforce. Indeed, just under 15 percent of working-age adults in Central Appalachia had a bachelor's degree, as did 17 percent of residents in the Region's most rural counties. There were only 23 Appalachian counties—all either in metro areas (e.g., suburban Atlanta) and/or housing a four-year college or university (e.g., Oktibbeha County, Mississippi, home to Mississippi State University)—where the share of working-age adults ages 25 to 64 with at least a bachelor's degree matched or exceeded the national average. In contrast, less than one in 10 adults had a four-year degree in 29 counties. Of the counties in this latter group, 22 were outside metropolitan areas and 14 were not even adjacent to a metro, suggesting a lack of employment opportunities for college-educated adults in such areas.

Figure 5.9: Percent of Persons Ages 65 and Over in the Appalachian Region With a Bachelor's Degree or More, 2014-2018



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region With a Bachelor's Degree or More, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

While just under 27 percent of older Americans (ages 65 and over) had at least a bachelor's degree in 2014-2018, less than 10 percent had one in 62 of Appalachia's 420 counties. (And in most of these counties, less than two-thirds of older adults had completed high school.) Four-fifths of these counties were outside metropolitan areas, and nearly two-thirds were in Central Appalachia—Kentucky alone had 26 of these counties. Yet in 34 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 Jackson County, North Carolina, home to Western Carolina University), or counties with significant retirement or seasonal activity (the latter suggested by the fact that much of their vacant housing is for seasonal or occasional use—such as Rabun and Towns counties in Georgia and Oconee County in South Carolina, all part of the Chattahoochee-Oconee National Forest).

Table 5.4: Percentage Point Change in Educational Attainment of Persons Ages 25 and Over in the Appalachian Region, 2009-2013 to 2014-2018

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

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Table 5.5: Percentage Point Change in Educational Attainment of Persons Ages 25 to 64 in the Appalachian Region, 2009-2013 to 2014-2018

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

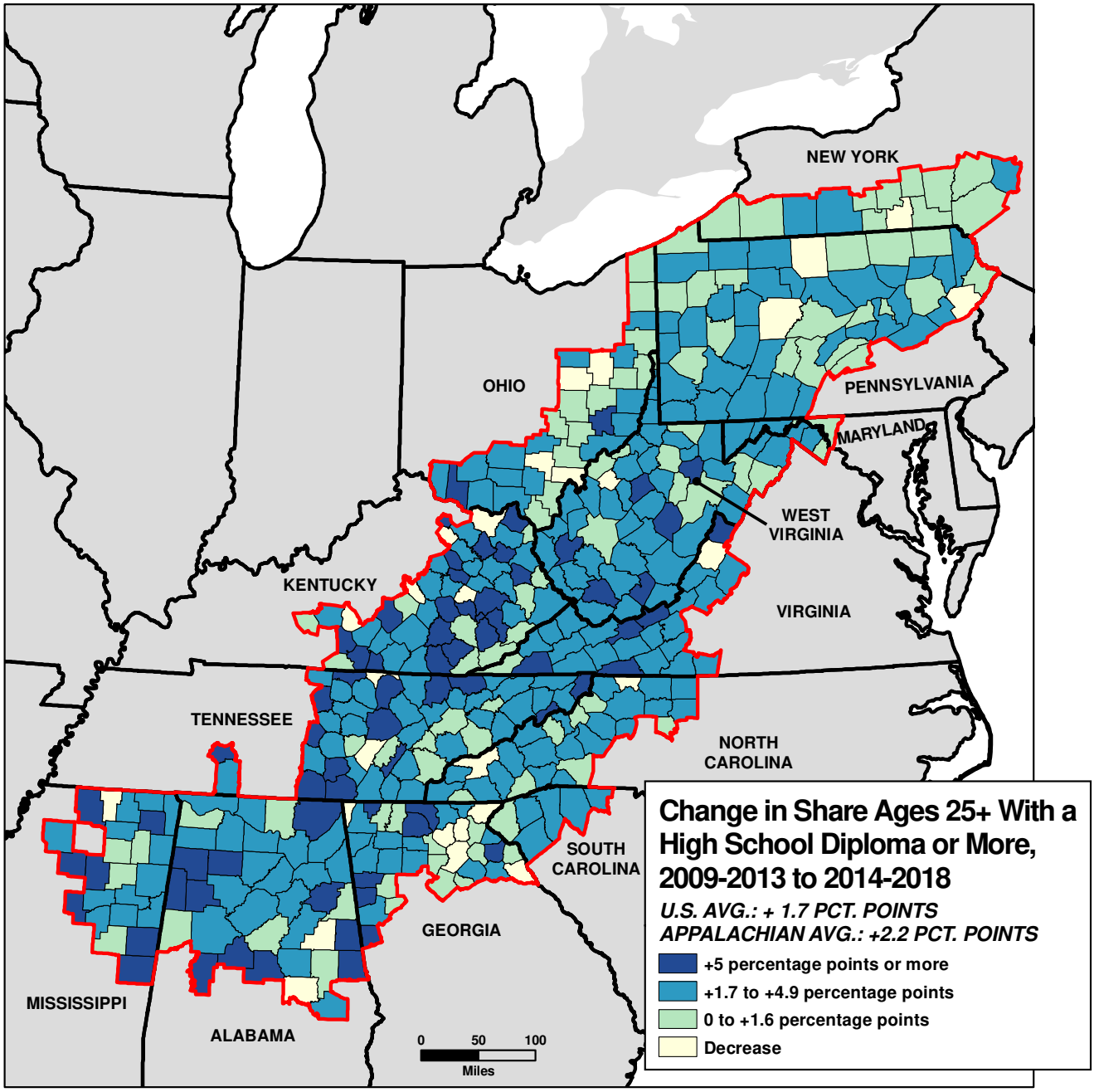
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Table 5.6: Percentage Point Change in Educational Attainment of Persons Ages 65 and Over in the Appalachian Region, 2009-2013 to 2014-2018

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	**- 4.6**	**+ 4.6**	**- 1.2**	**+ 5.8**	**+ 1.4**	**+ 4.4**
Appalachian Region	**- 6.8**	**+ 6.8**	**+ 1.0**	**+ 5.8**	**+ 1.6**	**+ 4.2**
Subregions						
Northern Appalachia	- 6.0	+ 6.0	- 0.3	+ 6.2	+ 1.8	+ 4.4
North Central Appalachia	- 6.9	+ 6.9	+ 1.8	+ 5.1	+ 1.5	+ 3.6
Central Appalachia	- 9.7	+ 9.7	+ 6.2	+ 3.4	+ 1.2	+ 2.2
South Central Appalachia	- 7.4	+ 7.4	+ 1.4	+ 6.0	+ 1.6	+ 4.3
Southern Appalachia	- 6.8	+ 6.8	+ 1.2	+ 5.6	+ 1.4	+ 4.2
County Types						
Large Metros (pop. 1 million +)	- 6.3	+ 6.3	- 0.9	+ 7.1	+ 1.7	+ 5.4
Small Metros (pop. <1 million)	- 6.2	+ 6.2	+ 0.3	+ 5.9	+ 1.5	+ 4.5
Nonmetro, Adjacent to Large Metros	- 7.3	+ 7.3	+ 2.0	+ 5.1	+ 1.7	+ 3.4
Nonmetro, Adjacent to Small Metros	- 7.2	+ 7.2	+ 2.5	+ 4.8	+ 1.7	+ 3.1
Rural (nonmetro, not adj. to a metro)	- 8.2	+ 8.2	+ 4.0	+ 4.2	+ 1.3	+ 2.9
Alabama	**- 6.3**	**+ 6.3**	**+ 1.2**	**+ 5.1**	**+ 1.5**	**+ 3.7**
Appalachian Alabama	- 6.8	+ 6.8	+ 1.3	+ 5.3	+ 1.4	+ 3.9
Non-Appalachian Alabama	- 5.8	+ 5.8	+ 0.9	+ 4.8	+ 1.5	+ 3.4
Georgia	**- 6.1**	**+ 6.1**	**+ 0.4**	**+ 5.8**	**+ 1.4**	**+ 4.3**
Appalachian Georgia	- 6.4	+ 6.4	+ 0.2	+ 6.2	+ 1.3	+ 5.0
Non-Appalachian Georgia	- 6.0	+ 6.0	+ 0.4	+ 5.5	+ 1.5	+ 4.0
Kentucky	**- 8.5**	**+ 8.5**	**+ 3.1**	**+ 5.3**	**+ 1.4**	**+ 4.0**
Appalachian Kentucky	- 9.9	+ 9.9	+ 6.4	+ 3.6	+ 1.3	+ 2.3
Non-Appalachian Kentucky	- 7.7	+ 7.7	+ 1.7	+ 6.0	+ 1.4	+ 4.6
Maryland	**- 4.9**	**+ 4.9**	**- 0.9**	**+ 5.8**	**+ 1.0**	**+ 4.9**
Appalachian Maryland	- 6.7	+ 6.7	+ 0.1	+ 6.5	+ 1.4	+ 5.1
Non-Appalachian Maryland	- 4.9	+ 4.9	- 0.9	+ 5.8	+ 1.0	+ 4.8
Mississippi	**- 6.0**	**+ 6.0**	**+ 1.2**	**+ 4.9**	**+ 1.6**	**+ 3.2**
Appalachian Mississippi	- 6.7	+ 6.7	+ 3.6	+ 3.1	+ 1.0	+ 2.1
Non-Appalachian Mississippi	- 5.8	+ 5.8	+ 0.6	+ 5.3	+ 1.7	+ 3.5
New York	**- 3.7**	**+ 3.7**	**- 2.0**	**+ 5.7**	**+ 1.5**	**+ 4.3**
Appalachian New York	- 5.2	+ 5.2	- 1.4	+ 6.6	+ 2.1	+ 4.4
Non-Appalachian New York	- 3.6	+ 3.6	- 2.1	+ 5.7	+ 1.4	+ 4.3
North Carolina	**- 6.5**	**+ 6.5**	**+ 0.1**	**+ 6.3**	**+ 1.9**	**+ 4.5**
Appalachian North Carolina	- 6.8	+ 6.8	+ 0.3	+ 6.6	+ 1.8	+ 4.8
Non-Appalachian North Carolina	- 6.3	+ 6.3	+ 0.0	+ 6.3	+ 1.9	+ 4.4
Ohio	**- 5.3**	**+ 5.3**	**- 0.1**	**+ 5.4**	**+ 1.5**	**+ 3.9**
Appalachian Ohio	- 6.4	+ 6.4	+ 1.4	+ 4.8	+ 1.6	+ 3.3
Non-Appalachian Ohio	- 5.0	+ 5.0	- 0.5	+ 5.5	+ 1.5	+ 4.0
Pennsylvania	**- 5.7**	**+ 5.7**	**- 0.6**	**+ 6.4**	**+ 1.5**	**+ 4.8**
Appalachian Pennsylvania	- 6.2	+ 6.2	- 0.2	+ 6.5	+ 1.7	+ 4.7
Non-Appalachian Pennsylvania	- 5.4	+ 5.4	- 0.8	+ 6.2	+ 1.2	+ 5.0
South Carolina	**- 6.9**	**+ 6.9**	**+ 1.1**	**+ 5.8**	**+ 2.0**	**+ 3.8**
Appalachian South Carolina	- 7.2	+ 7.2	+ 1.6	+ 5.7	+ 1.8	+ 3.8
Non-Appalachian South Carolina	- 6.8	+ 6.8	+ 1.0	+ 5.8	+ 1.9	+ 3.9
Tennessee	**- 7.1**	**+ 7.1**	**+ 1.4**	**+ 5.7**	**+ 1.3**	**+ 4.3**
Appalachian Tennessee	- 7.4	+ 7.4	+ 2.1	+ 5.3	+ 1.4	+ 4.0
Non-Appalachian Tennessee	- 6.8	+ 6.8	+ 0.7	+ 6.1	+ 1.4	+ 4.7
Virginia	**- 5.7**	**+ 5.7**	**- 0.7**	**+ 6.5**	**+ 1.4**	**+ 5.0**
Appalachian Virginia	- 9.5	+ 9.5	+ 4.5	+ 5.0	+ 2.0	+ 3.0
Non-Appalachian Virginia	- 5.1	+ 5.1	- 1.4	+ 6.5	+ 1.4	+ 5.2
West Virginia (entire state)	**- 6.9**	**+ 6.9**	**+ 1.8**	**+ 5.1**	**+ 1.4**	**+ 3.7**

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

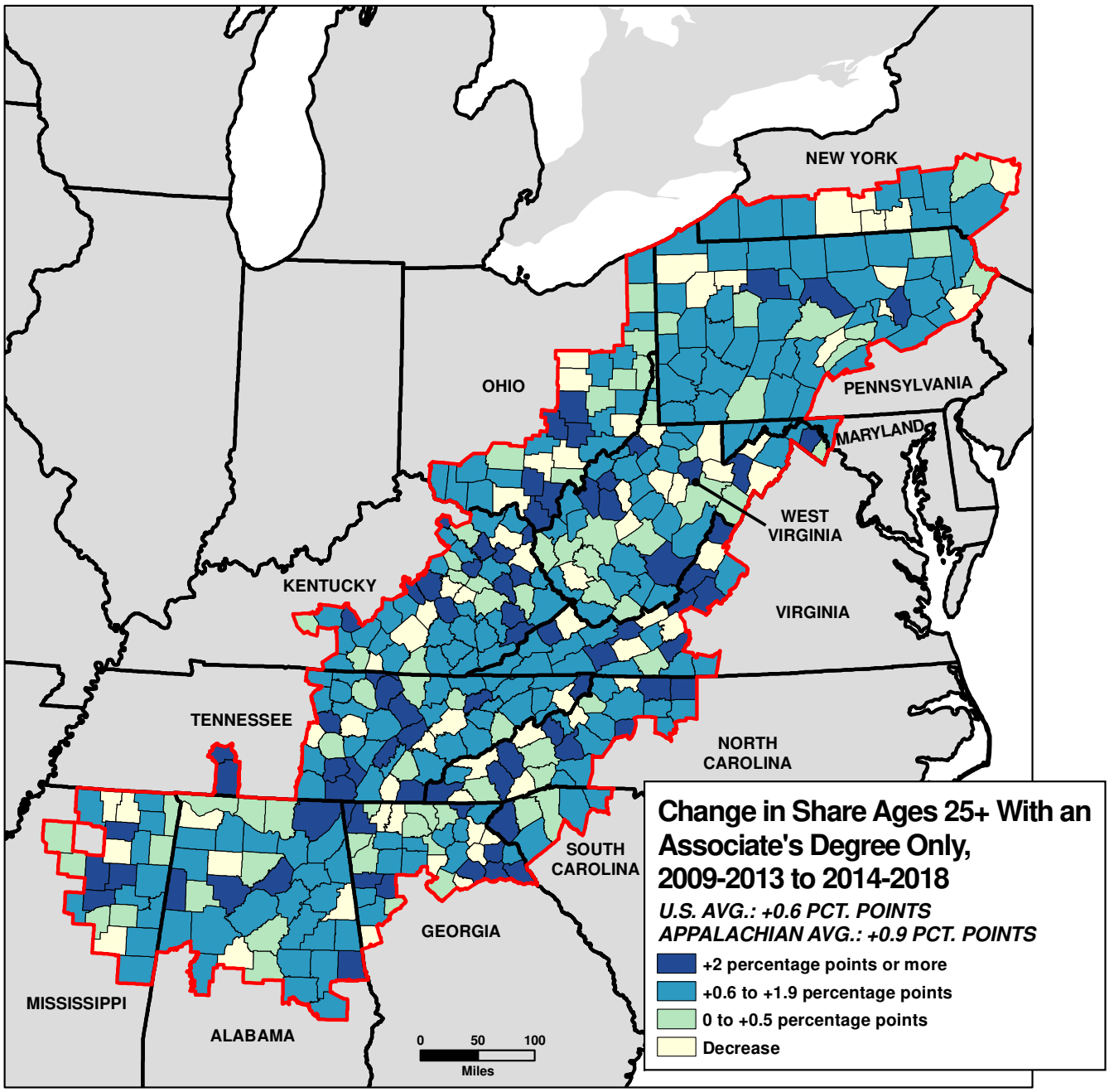
Figure 5.10: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2009-2013 to 2014-2018



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, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Since the 2009-2013 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 3.5 percentage points in the Appalachian counties of Kentucky and Virginia. In 71 Appalachian counties—all but six in Central, South Central, and Southern Appalachia—the share of adults with a high school diploma or more rose by at least five percentage points (three times the national average) between 2009-2013 and 2014-2018. In about one-third of these 71 counties, however, less than 80 percent of adult residents have completed high school.

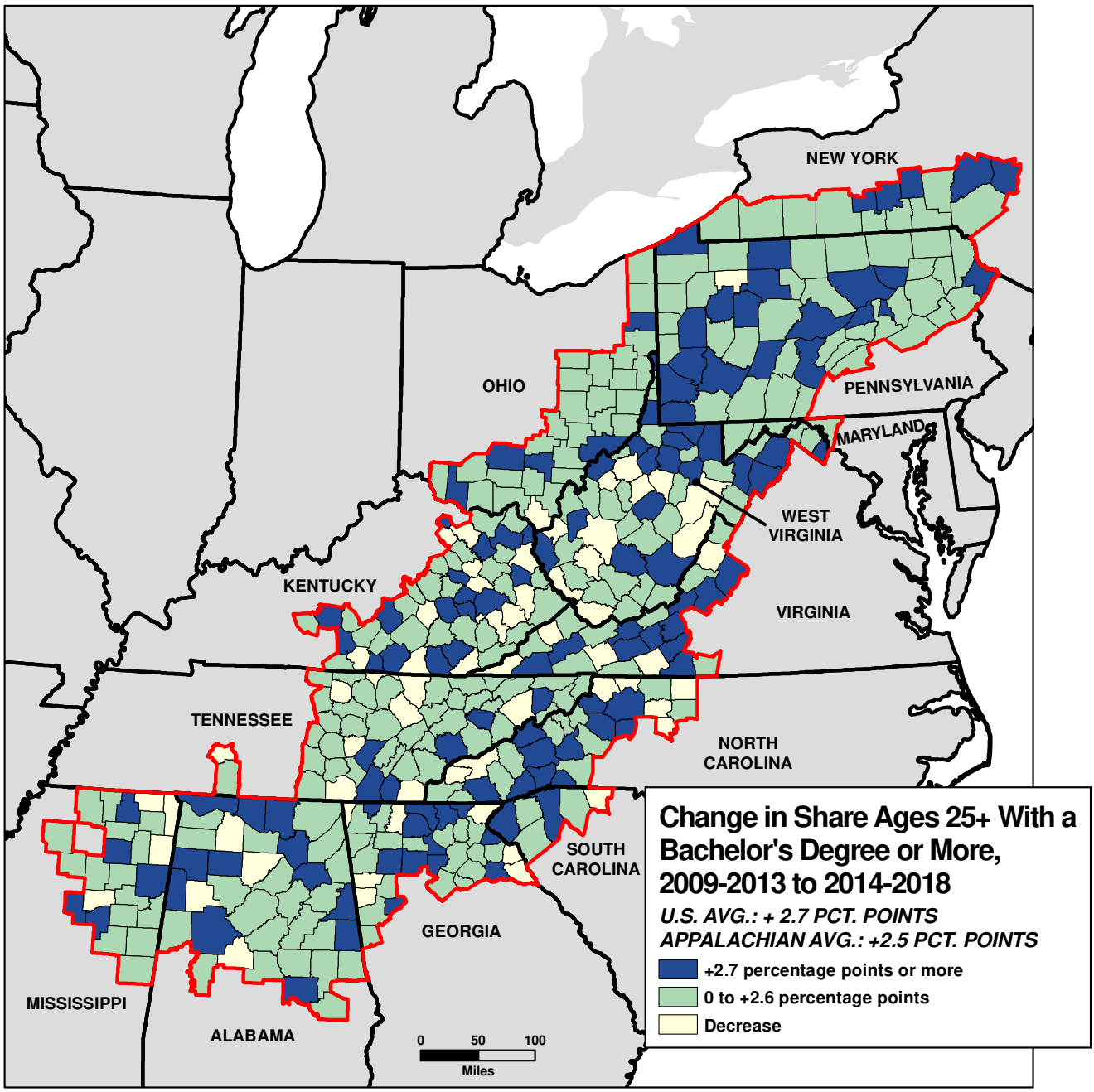
Figure 5.11: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree but Without a Bachelor's Degree, 2009-2013 to 2014-2018



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, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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 2009-2013 and 2014-2018, slightly above the national average. And in 79 Appalachian counties, the share rose at least two percentage points. Yet it either stayed the same or increased less than the national average in 74 of the Region's counties, and actually decreased in 68 others. However, the decrease in the share with only an associate's degree may be due 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, 2009-2013 to 2014-2018



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, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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 2014-2018 than it was in 2009-2013, suggesting a continued trend toward greater educational attainment. And in 123 of the Region's 420 counties (scattered throughout the Region), the increased share matched or exceeded the national average of 2.7 points. Conversely, the share of adults ages 25 and over with at least a four-year degree decreased in 62 counties. All but 10 counties in the latter group were in Central, South Central, and Southern Appalachia.

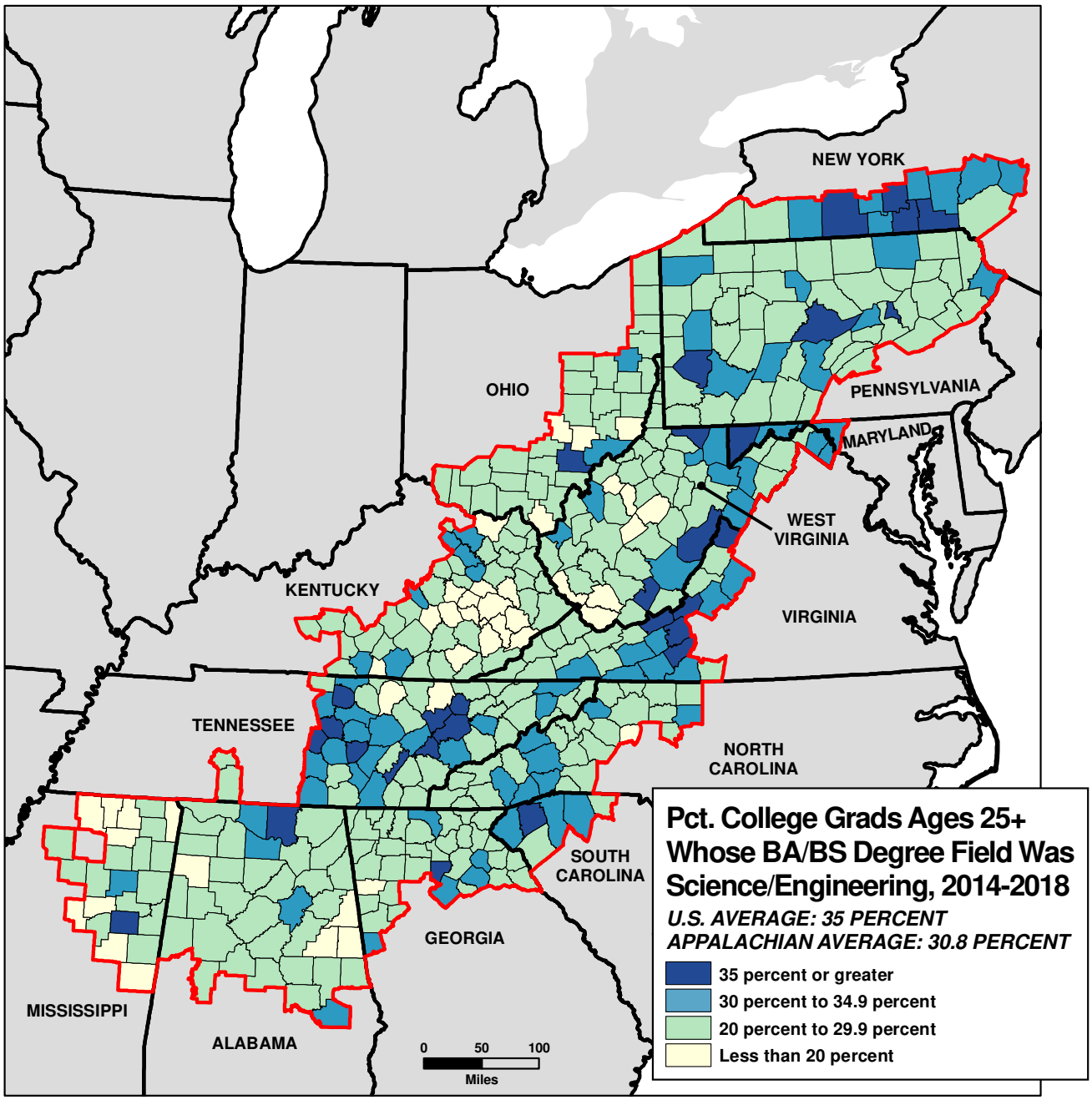
Table 5.7: Bachelor's Degree Field (First Major) for Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2014-2018

Bachelor's Degree Field (First Major)	Total Population Ages 25 and Over With a Bachelor's Degree or More, 2014-2018	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	**68,867,051**	**35.0**	**9.4**	**20.4**	**12.5**	**22.8**
Appalachian Region	**4,277,673**	**30.8**	**11.0**	**20.1**	**17.5**	**20.6**
Subregions						
Northern Appalachia	1,476,358	31.8	11.4	18.1	18.0	20.7
North Central Appalachia	341,133	28.7	12.8	18.9	20.1	19.6
Central Appalachia	184,524	25.7	14.0	15.5	26.0	18.7
South Central Appalachia	839,877	31.9	10.8	18.9	15.9	22.6
Southern Appalachia	1,435,781	30.4	9.9	23.9	16.1	19.7
County Types						
Large Metros (pop. 1 million +)	1,330,686	31.9	10.1	23.7	14.0	20.4
Small Metros (pop. <1 million)	1,912,174	32.1	11.0	19.4	16.5	21.0
Nonmetro, Adjacent to Large Metros	268,802	27.6	11.7	17.3	23.5	20.0
Nonmetro, Adjacent to Small Metros	476,645	27.7	12.2	17.2	22.8	20.1
Rural (nonmetro, not adj. to a metro)	289,366	26.1	12.2	16.5	25.4	19.8
Alabama	**822,595**	**29.3**	**10.6**	**23.4**	**16.9**	**19.9**
Appalachian Alabama	544,844	29.9	10.5	23.6	16.3	19.7
Non-Appalachian Alabama	277,751	27.9	10.9	22.9	18.0	20.3
Georgia	**2,080,116**	**32.2**	**9.2**	**24.4**	**13.0**	**21.2**
Appalachian Georgia	583,558	30.8	9.3	25.6	14.7	19.6
Non-Appalachian Georgia	1,496,558	32.7	9.1	23.9	12.4	21.8
Kentucky	**709,603**	**28.9**	**11.7**	**19.8**	**16.8**	**22.8**
Appalachian Kentucky	119,237	24.6	13.7	14.4	26.7	20.6
Non-Appalachian Kentucky	590,366	29.8	11.3	20.9	14.7	23.2
Maryland	**1,630,565**	**41.0**	**8.8**	**18.0**	**9.7**	**22.4**
Appalachian Maryland	35,864	33.2	10.1	16.1	18.6	21.9
Non-Appalachian Maryland	1,594,701	41.2	8.8	18.1	9.5	22.5
Mississippi	**429,177**	**25.3**	**12.5**	**21.2**	**21.3**	**19.7**
Appalachian Mississippi	77,084	24.9	12.2	19.0	25.8	18.1
Non-Appalachian Mississippi	352,093	25.4	12.6	21.6	20.3	20.1
New York	**4,888,138**	**34.3**	**8.8**	**18.9**	**11.2**	**26.9**
Appalachian New York	184,473	36.5	9.6	12.8	18.2	23.0
Non-Appalachian New York	4,703,665	34.2	8.7	19.1	11.0	27.0
North Carolina	**2,099,206**	**34.0**	**9.4**	**20.3**	**13.1**	**23.2**
Appalachian North Carolina	328,265	30.7	10.9	17.4	16.0	25.0
Non-Appalachian North Carolina	1,770,941	34.6	9.1	20.9	12.6	22.8
Ohio	**2,205,570**	**30.7**	**11.1**	**21.5**	**16.0**	**20.6**
Appalachian Ohio	248,174	25.6	13.3	19.1	22.5	19.5
Non-Appalachian Ohio	1,957,396	31.4	10.9	21.9	15.2	20.7
Pennsylvania	**2,745,317**	**33.3**	**10.6**	**19.7**	**14.9**	**21.5**
Appalachian Pennsylvania	1,100,604	31.9	11.4	18.8	17.3	20.6
Non-Appalachian Pennsylvania	1,644,713	34.2	10.1	20.2	13.3	22.2
South Carolina	**927,823**	**31.5**	**9.4**	**22.5**	**15.6**	**21.1**
Appalachian South Carolina	230,295	32.3	9.3	22.0	15.8	20.5
Non-Appalachian South Carolina	697,528	31.2	9.4	22.6	15.5	21.3
Tennessee	**1,206,051**	**30.1**	**10.5**	**22.4**	**14.7**	**22.3**
Appalachian Tennessee	455,342	31.6	11.2	20.4	16.4	20.3
Non-Appalachian Tennessee	750,709	29.2	10.0	23.7	13.7	23.5
Virginia	**2,186,863**	**40.6**	**7.6**	**18.9**	**9.6**	**23.4**
Appalachian Virginia	108,183	35.7	10.2	16.4	16.2	21.5
Non-Appalachian Virginia	2,078,680	40.8	7.5	19.0	9.2	23.4
West Virginia (entire state)	**261,750**	**28.7**	**13.0**	**18.9**	**20.3**	**19.1**

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

Data Source: U.S. Census Bureau, 2014-2018 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, 2014-2018



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, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 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 30 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 43 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.

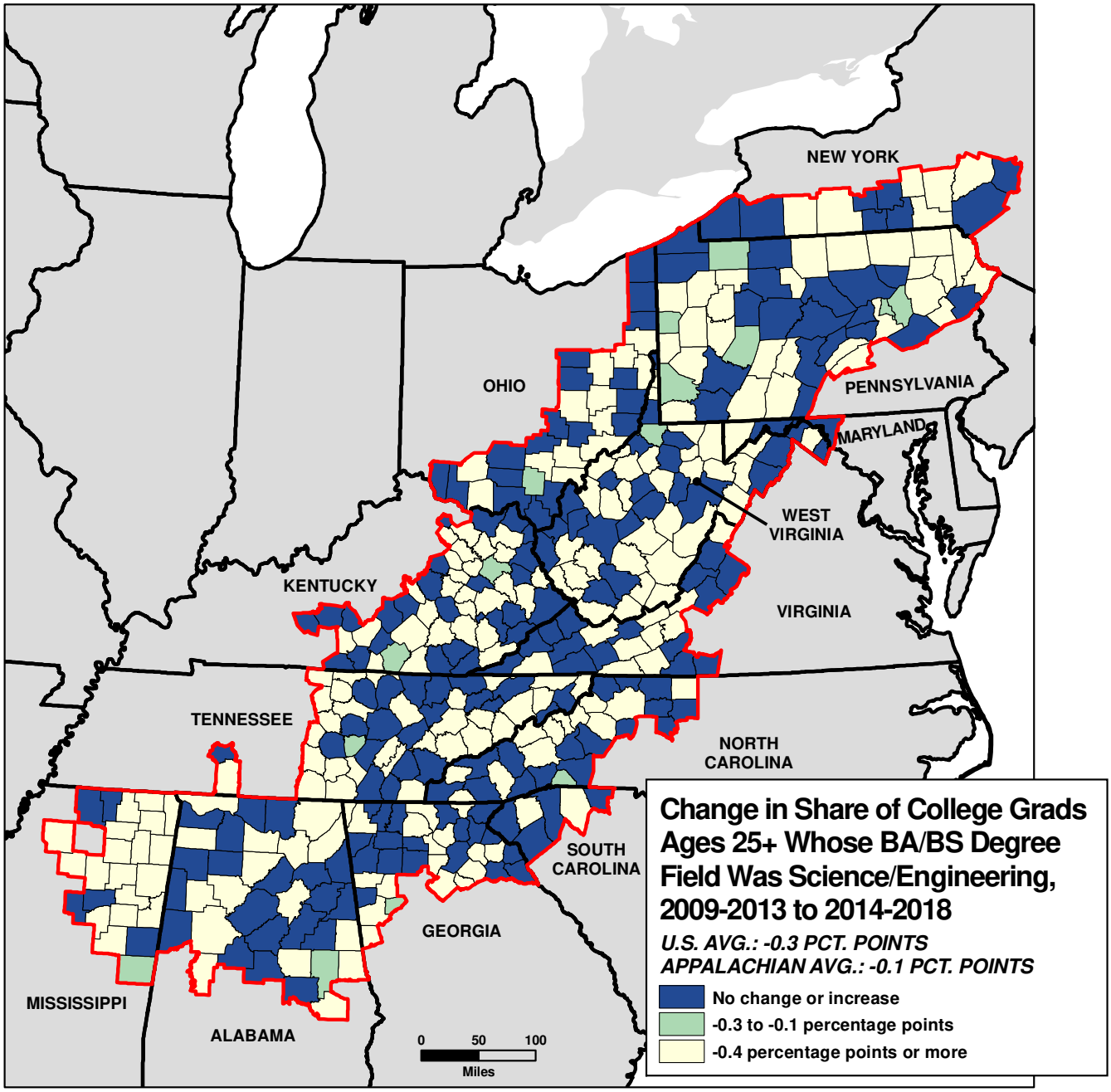
Table 5.8: Percentage Point Change in Bachelor's Degree Field (First Major) for Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2009-2013 to 2014-2018

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

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

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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, 2009-2013 to 2014-2018



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, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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 about the same in 2014-2018 as it was in 2009-2013—only declining one-tenth of a percentage point. (By contrast, it fell 0.3 points nationwide between the two periods.) Yet in 194 of the Region's counties, the share either increased or stayed the same—including 25 of the 43 counties where less than one-fifth of adult college graduates had a science and engineering degree. In another 211 Appalachian counties, however, the share decreased more than the national average.

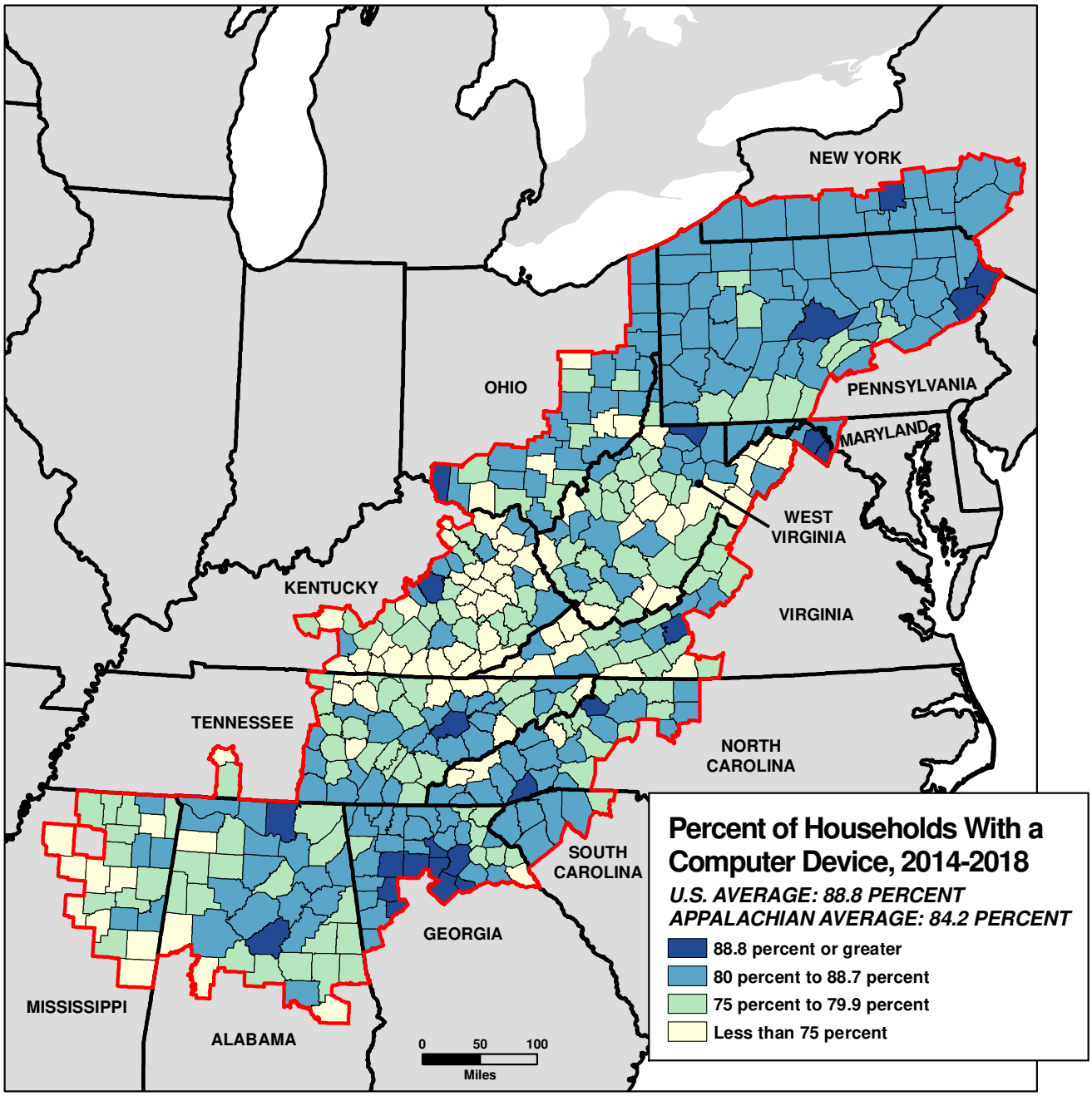
Table 5.9: Households in the Appalachian Region With a Computer Device, By Type of Device, 2014-2018

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	**119,730,128**	**88.8**	**77.9**	**75.9**	**57.2**	**4.3**	**11.2**
Appalachian Region	**9,997,235**	**84.2**	**71.9**	**69.0**	**52.0**	**3.2**	**15.8**
Subregions							
Northern Appalachia	3,353,979	84.4	74.1	66.8	51.4	3.0	15.6
North Central Appalachia	952,066	82.9	70.1	66.0	50.2	3.1	17.1
Central Appalachia	738,405	77.2	63.0	60.2	45.9	3.0	22.8
South Central Appalachia	1,944,090	83.7	71.2	68.9	50.9	2.9	16.3
Southern Appalachia	3,008,695	86.2	72.8	74.5	55.4	3.9	13.8
County Types							
Large Metros (pop. 1 million +)	2,333,958	88.5	78.0	75.4	58.1	3.7	11.5
Small Metros (pop. <1 million)	4,252,286	85.1	72.8	70.5	52.9	3.6	14.9
Nonmetro, Adjacent to Large Metros	855,750	82.0	68.8	65.2	48.5	2.4	18.0
Nonmetro, Adjacent to Small Metros	1,570,305	80.1	66.8	62.4	46.7	2.6	19.9
Rural (nonmetro, not adj. to a metro)	984,936	78.2	64.3	61.2	45.5	2.4	21.8
Alabama	**1,860,269**	**83.4**	**68.3**	**70.9**	**51.1**	**3.4**	**16.6**
Appalachian Alabama	1,196,775	84.4	69.7	72.3	52.7	3.2	15.6
Non-Appalachian Alabama	663,494	81.5	65.9	68.3	48.3	3.6	18.5
Georgia	**3,709,488**	**88.6**	**76.8**	**77.5**	**57.8**	**4.3**	**11.4**
Appalachian Georgia	1,095,656	89.9	79.3	78.6	60.8	5.0	10.1
Non-Appalachian Georgia	2,613,832	88.1	75.8	77.0	56.6	4.1	11.9
Kentucky	**1,728,681**	**84.3**	**71.0**	**70.8**	**53.3**	**3.7**	**15.7**
Appalachian Kentucky	456,309	77.9	64.0	61.5	46.7	3.1	22.1
Non-Appalachian Kentucky	1,272,372	86.7	73.5	74.1	55.6	3.9	13.3
Maryland	**2,192,518**	**91.3**	**82.9**	**79.2**	**61.7**	**5.5**	**8.7**
Appalachian Maryland	95,774	82.8	71.9	66.8	51.5	2.9	17.2
Non-Appalachian Maryland	2,096,744	91.7	83.4	79.8	62.2	5.6	8.3
Mississippi	**1,105,576**	**81.5**	**63.6**	**70.8**	**48.6**	**3.4**	**18.5**
Appalachian Mississippi	236,092	79.0	58.8	68.8	45.7	1.9	21.0
Non-Appalachian Mississippi	869,484	82.2	64.9	71.4	49.3	3.8	17.8
New York	**7,316,537**	**88.2**	**78.8**	**74.5**	**56.6**	**5.3**	**11.8**
Appalachian New York	415,285	85.9	76.6	65.2	50.9	2.8	14.1
Non-Appalachian New York	6,901,252	88.4	78.9	75.0	56.9	5.4	11.6
North Carolina	**3,918,597**	**87.4**	**75.9**	**74.6**	**55.6**	**4.0**	**12.6**
Appalachian North Carolina	708,685	84.0	72.0	68.2	50.0	2.9	16.0
Non-Appalachian North Carolina	3,209,912	88.1	76.8	76.0	56.9	4.3	11.9
Ohio	**4,654,075**	**87.4**	**75.7**	**73.0**	**55.7**	**3.3**	**12.6**
Appalachian Ohio	792,296	82.8	69.6	66.4	50.2	2.5	17.2
Non-Appalachian Ohio	3,861,779	88.4	76.9	74.3	56.8	3.5	11.6
Pennsylvania	**5,025,132**	**86.5**	**76.6**	**70.9**	**54.5**	**3.4**	**13.5**
Appalachian Pennsylvania	2,342,021	84.7	74.8	67.4	52.0	3.1	15.3
Non-Appalachian Pennsylvania	2,683,111	88.0	78.2	73.9	56.8	3.8	12.0
South Carolina	**1,894,711**	**86.2**	**72.9**	**73.9**	**54.1**	**5.6**	**13.8**
Appalachian South Carolina	480,172	85.8	72.7	73.3	54.9	3.8	14.2
Non-Appalachian South Carolina	1,414,539	86.4	72.9	74.1	53.9	6.3	13.6
Tennessee	**2,567,061**	**85.2**	**71.9**	**72.7**	**53.9**	**4.3**	**14.8**
Appalachian Tennessee	1,142,136	83.3	69.9	69.2	51.2	2.8	16.7
Non-Appalachian Tennessee	1,424,925	86.7	73.5	75.5	56.0	5.5	13.3
Virginia	**3,128,415**	**89.9**	**80.7**	**77.6**	**59.7**	**4.4**	**10.1**
Appalachian Virginia	301,358	79.7	66.9	62.7	47.2	2.8	20.3
Non-Appalachian Virginia	2,827,057	90.9	82.2	79.2	61.0	4.6	9.1
West Virginia (entire state)	**734,676**	**81.8**	**69.1**	**64.2**	**49.2**	**3.5**	**18.2**

Note: Device percentages are not mutually exclusive.

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Figure 5.15: Percent of Households in the Appalachian Region With a Computer Device, 2014-2018



Map Title: Percent of Households in the Appalachian Region With a Computer Device, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In 2014-2018, 84 percent of households in the Appalachian Region had one or more computer devices (desktop or laptop, smartphone, tablet, or other device)—slightly less than five points below the national average. And the share is even lower in most of the Region: it was below 80 percent in 206 of Appalachia's 420 counties and less than 75 percent in 82 of these. All but eight of the counties in the latter group were outside metropolitan areas and 43 were in the most rural areas. Central Appalachia had exactly half of these counties. Yet there were 24 Appalachian counties where the share of households with a computer was at or above the national average; all but three of these were in metropolitan areas. With computer devices now commonly used for such activities as school work, entertainment, online banking, health care access, and socializing, these data suggest aspects of a "digital divide"—particularly between urban and rural areas in Appalachia.

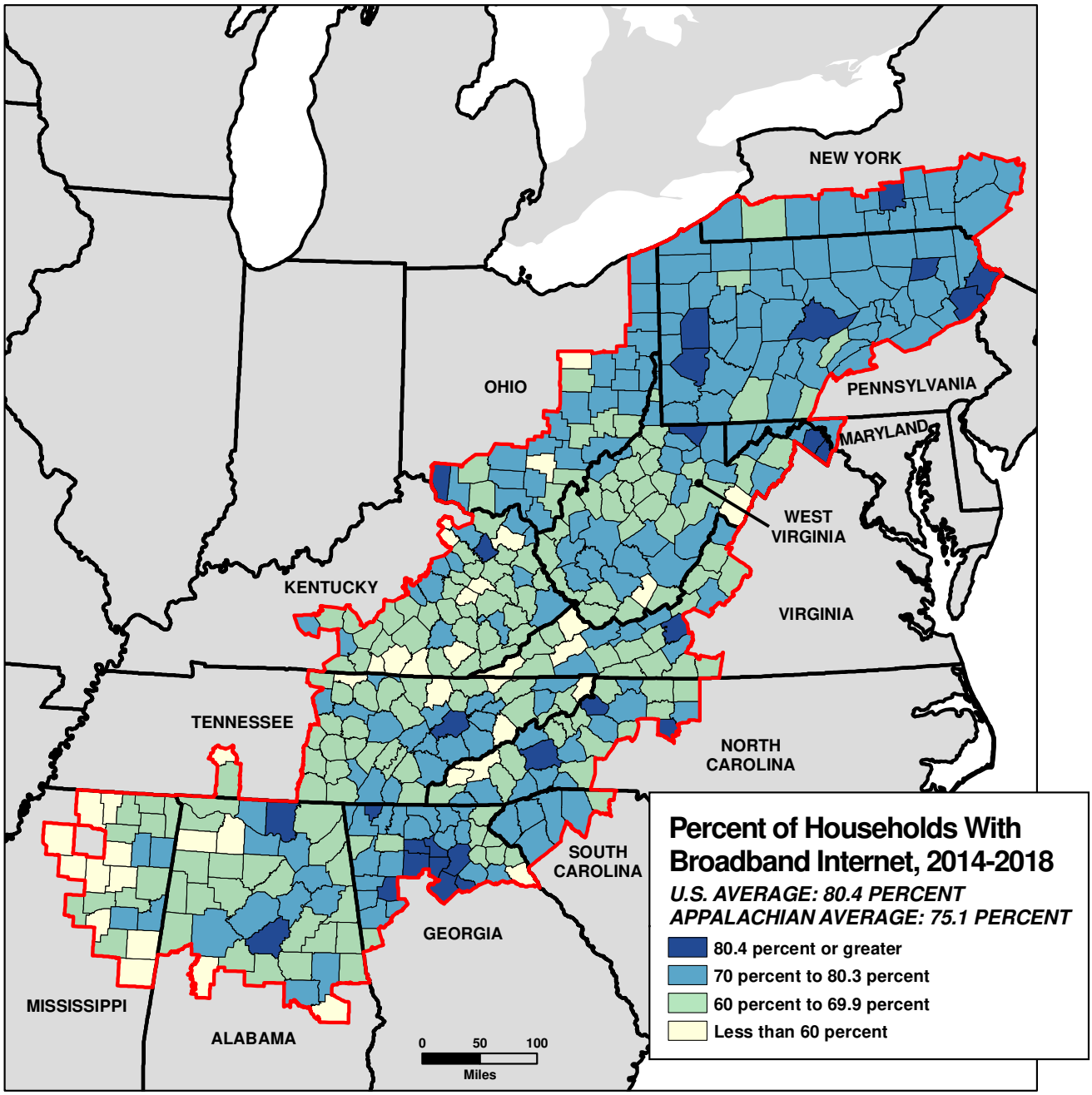
Table 5.10: Households in the Appalachian Region With an Internet Subscription, By Type of Subscription, 2014-2018

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	**119,730,128**	**80.9**	**0.5**	**80.4**	**67.9**	**57.8**	**5.9**
Appalachian Region	**9,997,235**	**75.7**	**0.6**	**75.1**	**61.8**	**51.1**	**5.9**
Subregions							
Northern Appalachia	3,353,979	77.4	0.8	76.6	65.4	50.7	4.7
North Central Appalachia	952,066	74.1	0.7	73.5	59.6	47.9	6.8
Central Appalachia	738,405	67.6	0.7	67.0	54.3	41.7	6.3
South Central Appalachia	1,944,090	74.5	0.6	74.0	59.9	49.8	5.8
Southern Appalachia	3,008,695	77.1	0.4	76.6	61.7	55.8	7.0
County Types							
Large Metros (pop. 1 million +)	2,333,958	81.3	0.4	80.9	70.1	58.0	5.2
Small Metros (pop. <1 million)	4,252,286	76.8	0.5	76.3	63.7	52.2	5.3
Nonmetro, Adjacent to Large Metros	855,750	72.5	0.9	71.6	55.4	47.3	7.0
Nonmetro, Adjacent to Small Metros	1,570,305	70.5	0.8	69.7	54.1	45.5	7.2
Rural (nonmetro, not adj. to a metro)	984,936	68.4	0.7	67.8	52.3	42.6	7.5
Alabama	**1,860,269**	**73.8**	**0.5**	**73.3**	**56.4**	**53.3**	**6.9**
Appalachian Alabama	1,196,775	75.0	0.4	74.5	58.0	54.1	6.8
Non-Appalachian Alabama	663,494	71.8	0.6	71.2	53.5	52.0	7.0
Georgia	**3,709,488**	**79.4**	**0.3**	**79.0**	**66.4**	**57.5**	**6.5**
Appalachian Georgia	1,095,656	82.2	0.4	81.8	70.0	59.6	6.9
Non-Appalachian Georgia	2,613,832	78.2	0.3	77.9	64.8	56.6	6.3
Kentucky	**1,728,681**	**76.1**	**0.5**	**75.5**	**61.5**	**54.4**	**6.3**
Appalachian Kentucky	456,309	68.6	0.7	67.9	55.4	44.3	6.5
Non-Appalachian Kentucky	1,272,372	78.7	0.5	78.2	63.7	58.0	6.2
Maryland	**2,192,518**	**85.0**	**0.4**	**84.6**	**74.9**	**61.9**	**4.1**
Appalachian Maryland	95,774	74.8	0.8	74.0	60.3	52.0	6.1
Non-Appalachian Maryland	2,096,744	85.5	0.4	85.1	75.6	62.3	4.0
Mississippi	**1,105,576**	**68.5**	**0.5**	**68.0**	**46.8**	**49.5**	**8.8**
Appalachian Mississippi	236,092	64.9	0.5	64.4	38.9	47.4	9.4
Non-Appalachian Mississippi	869,484	69.4	0.5	69.0	49.0	50.0	8.7
New York	**7,316,537**	**81.2**	**0.4**	**80.9**	**72.2**	**54.3**	**3.4**
Appalachian New York	415,285	77.3	0.8	76.5	63.1	47.4	6.8
Non-Appalachian New York	6,901,252	81.5	0.4	81.1	72.7	54.8	3.2
North Carolina	**3,918,597**	**78.7**	**0.4**	**78.3**	**66.4**	**55.7**	**5.5**
Appalachian North Carolina	708,685	74.9	0.6	74.3	60.9	48.9	6.0
Non-Appalachian North Carolina	3,209,912	79.5	0.4	79.1	67.6	57.2	5.4
Ohio	**4,654,075**	**80.2**	**0.5**	**79.7**	**67.5**	**56.3**	**5.3**
Appalachian Ohio	792,296	74.2	0.8	73.5	58.3	47.6	6.7
Non-Appalachian Ohio	3,861,779	81.5	0.5	81.0	69.3	58.1	5.0
Pennsylvania	**5,025,132**	**79.9**	**0.7**	**79.2**	**69.8**	**54.9**	**3.6**
Appalachian Pennsylvania	2,342,021	78.2	0.8	77.4	67.2	52.0	4.1
Non-Appalachian Pennsylvania	2,683,111	81.3	0.5	80.8	72.1	57.4	3.2
South Carolina	**1,894,711**	**75.8**	**0.4**	**75.3**	**62.1**	**54.2**	**6.1**
Appalachian South Carolina	480,172	76.4	0.3	76.1	63.1	55.6	6.4
Non-Appalachian South Carolina	1,414,539	75.5	0.5	75.1	61.8	53.7	6.1
Tennessee	**2,567,061**	**75.8**	**0.4**	**75.4**	**60.6**	**54.8**	**6.1**
Appalachian Tennessee	1,142,136	73.7	0.5	73.1	58.9	49.5	5.5
Non-Appalachian Tennessee	1,424,925	77.5	0.4	77.2	62.0	59.0	6.6
Virginia	**3,128,415**	**82.5**	**0.5**	**82.0**	**69.2**	**61.1**	**5.5**
Appalachian Virginia	301,358	70.4	0.8	69.6	53.7	45.4	7.4
Non-Appalachian Virginia	2,827,057	83.8	0.4	83.3	70.8	62.8	5.3
West Virginia (entire state)	**734,676**	**73.4**	**0.5**	**72.9**	**61.3**	**45.9**	**6.0**

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, 2014-2018 American Community Survey.

Figure 5.16: Percent of Households in the Appalachian Region With a Broadband Internet Subscription, 2014-2018



Map Title: Percent of Households in the Appalachian Region With a Broadband Internet Subscription, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Access to broadband or high-speed Internet service (cable, fiber optic, DSL, cellular, or satellite) enhances people's ability to pay bills, pursue formal and informal learning, telework, and connect with friends and family. During the 2014-2018 period, three in four Appalachian households (75 percent) had a broadband Internet subscription, compared to four in five households nationwide (80 percent). Yet there are signs of a rural-urban "digital divide" within the Region: In 39 Appalachian counties—34 of which were outside metropolitan areas—less than 60 percent of households had a broadband subscription. (Nearly half of these 39 counties were in the Region's most rural areas.) In contrast, all but two of the 28 counties with subscription rates at or above the national average were in metro areas—and the two exceptions (Watauga County, North Carolina and Rowan County, Kentucky) are home to major universities (Appalachian State and Morehead State, respectively). With high-speed Internet access being credited as enhancing economic growth and development, these are signs that many communities in the Region may be at risk of being left behind.

TRENDS IN EDUCATION

- Since the 2009-2013 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 2014-2018 (see Tables 5.1 and 5.4). The increase is 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 2014-2018 has surpassed 78 percent in Central Appalachia and 80 percent in the Region's rural areas. The Appalachian sections of Kentucky and Virginia had the largest increases among the states—3.5 percentage points each.

- The share of Appalachian adults ages 25 and over with an associate's degree but no bachelor's degree was 8.7 percent in 2014-2018—almost a full percentage point higher than in 2009-2013. The increase between the two periods occurred throughout the Region. In most cases, the improvement ranged from 0.8 to 1.2 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 2009-2013 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 Georgia, North Carolina, Pennsylvania, South Carolina, and Virginia. In Central Appalachia, the Region's nonmetropolitan counties, and the Appalachian sections of Kentucky, Maryland, 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: 1.2 percentage points for high school completion, 0.7 points for completion of an associate's degree without a bachelor's degree, and 2.2 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, the most rural counties, 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 Northern Appalachia, counties in large metros, and the Appalachian sections of Georgia, Pennsylvania, and Virginia experienced the largest gains in the share of adults with at least a bachelor's degree.

- The greatest improvement since 2009-2013 has been among adults ages 65 and over. The share of older adults in Appalachia with at least a high school diploma has risen almost seven percentage points; the share with at least a bachelor's degree has increased four points (see Table 5.6). Possible factors fueling this increase include both the influx of younger, more educated cohorts into the older ages, and the arrival of well-educated older adults moving into the Region upon retirement. Within Appalachia's subregions, county types, and states, the patterns of improvement that were present among working-age adults generally—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 2014-2018—about the same as it was in 2009-2013 (see Tables 5.7 and 5.8). Some areas, however, had more noticeable changes: For example, the share increased nearly a full percentage point in Central Appalachia yet fell more than two points in Appalachian Mississippi.

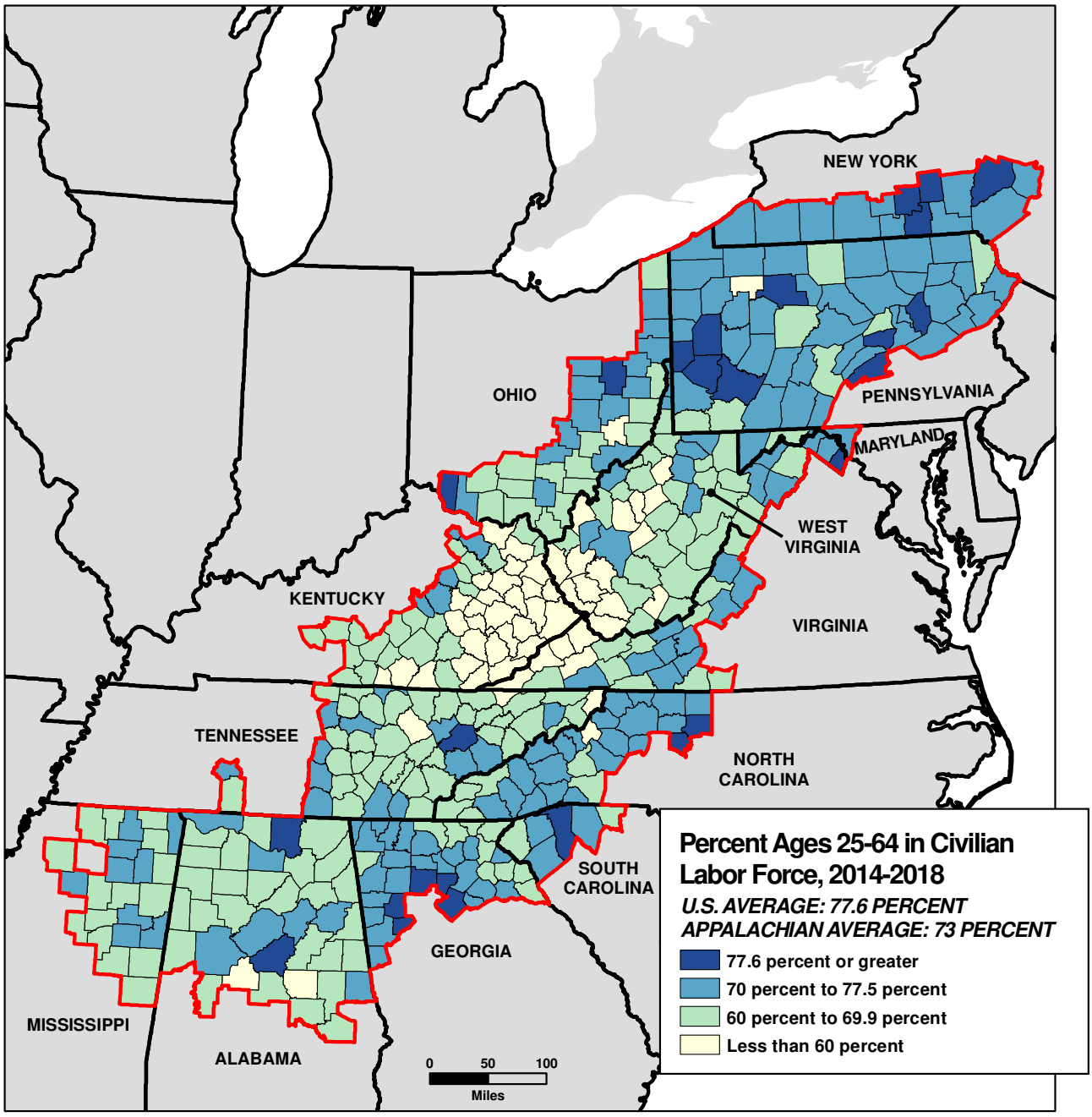
CHAPTER 6: LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Table 6.1: Labor Force, Employment, and Unemployment Status of Persons Ages 25 to 64 in the Appalachian Region, 2014-2018

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	**168,582,676**	**130,853,387**	**77.6**	**95.2**	**4.8**
Appalachian Region	**13,174,648**	**9,618,375**	**73.0**	**95.2**	**4.8**
Subregions					
Northern Appalachia	4,236,397	3,207,882	75.7	95.4	4.6
North Central Appalachia	1,245,820	862,693	69.2	94.8	5.2
Central Appalachia	977,826	583,016	59.6	93.1	6.9
South Central Appalachia	2,468,969	1,802,421	73.0	95.3	4.7
Southern Appalachia	4,245,636	3,162,363	74.5	95.3	4.7
County Types					
Large Metros (pop. 1 million +)	3,226,589	2,523,703	78.2	95.6	4.4
Small Metros (pop. <1 million)	5,554,111	4,103,018	73.9	95.2	4.8
Nonmetro, Adjacent to Large Metros	1,115,898	787,457	70.6	94.9	5.1
Nonmetro, Adjacent to Small Metros	2,009,754	1,385,695	68.9	94.8	5.2
Rural (nonmetro, not adj. to a metro)	1,268,296	818,502	64.5	94.1	5.9
Alabama	**2,506,021**	**1,785,883**	**71.3**	**94.7**	**5.3**
Appalachian Alabama	1,622,767	1,166,692	71.9	94.9	5.1
Non-Appalachian Alabama	883,254	619,191	70.1	94.3	5.7
Georgia	**5,405,060**	**4,117,918**	**76.2**	**94.9**	**5.1**
Appalachian Georgia	1,668,629	1,291,177	77.4	95.8	4.2
Non-Appalachian Georgia	3,736,431	2,826,741	75.7	94.4	5.6
Kentucky	**2,304,746**	**1,653,003**	**71.7**	**95.0**	**5.0**
Appalachian Kentucky	606,575	363,346	59.9	93.0	7.0
Non-Appalachian Kentucky	1,698,171	1,289,657	75.9	95.5	4.5
Maryland	**3,220,397**	**2,642,295**	**82.0**	**95.4**	**4.6**
Appalachian Maryland	130,836	93,479	71.4	94.7	5.3
Non-Appalachian Maryland	3,089,561	2,548,816	82.5	95.5	4.5
Mississippi	**1,512,183**	**1,078,078**	**71.3**	**93.4**	**6.6**
Appalachian Mississippi	311,153	219,447	70.5	93.8	6.2
Non-Appalachian Mississippi	1,201,030	858,631	71.5	93.3	6.7
New York	**10,524,533**	**8,256,520**	**78.5**	**95.1**	**4.9**
Appalachian New York	508,403	383,641	75.5	95.3	4.7
Non-Appalachian New York	10,016,130	7,872,879	78.6	95.0	5.0
North Carolina	**5,261,581**	**4,033,272**	**76.7**	**95.0**	**5.0**
Appalachian North Carolina	888,561	657,225	74.0	95.5	4.5
Non-Appalachian North Carolina	4,373,020	3,376,047	77.2	94.9	5.1
Ohio	**6,037,598**	**4,684,178**	**77.6**	**95.3**	**4.7**
Appalachian Ohio	1,027,800	735,241	71.5	94.9	5.1
Non-Appalachian Ohio	5,009,798	3,948,937	78.8	95.4	4.6
Pennsylvania	**6,687,126**	**5,246,385**	**78.5**	**95.3**	**4.7**
Appalachian Pennsylvania	2,965,822	2,269,895	76.5	95.6	4.4
Non-Appalachian Pennsylvania	3,721,304	2,976,490	80.0	95.1	4.9
South Carolina	**2,540,497**	**1,906,745**	**75.1**	**94.8**	**5.2**
Appalachian South Carolina	643,087	485,047	75.4	95.6	4.4
Non-Appalachian South Carolina	1,897,410	1,421,698	74.9	94.5	5.5
Tennessee	**3,471,620**	**2,587,673**	**74.5**	**95.2**	**4.8**
Appalachian Tennessee	1,475,388	1,057,788	71.7	95.0	5.0
Non-Appalachian Tennessee	1,996,232	1,529,885	76.6	95.3	4.7
Virginia	**4,425,679**	**3,521,986**	**79.6**	**96.0**	**4.0**
Appalachian Virginia	379,232	256,456	67.6	94.8	5.2
Non-Appalachian Virginia	4,046,447	3,265,530	80.7	96.1	3.9
West Virginia (entire state)	**946,395**	**638,941**	**67.5**	**94.5**	**5.5**

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

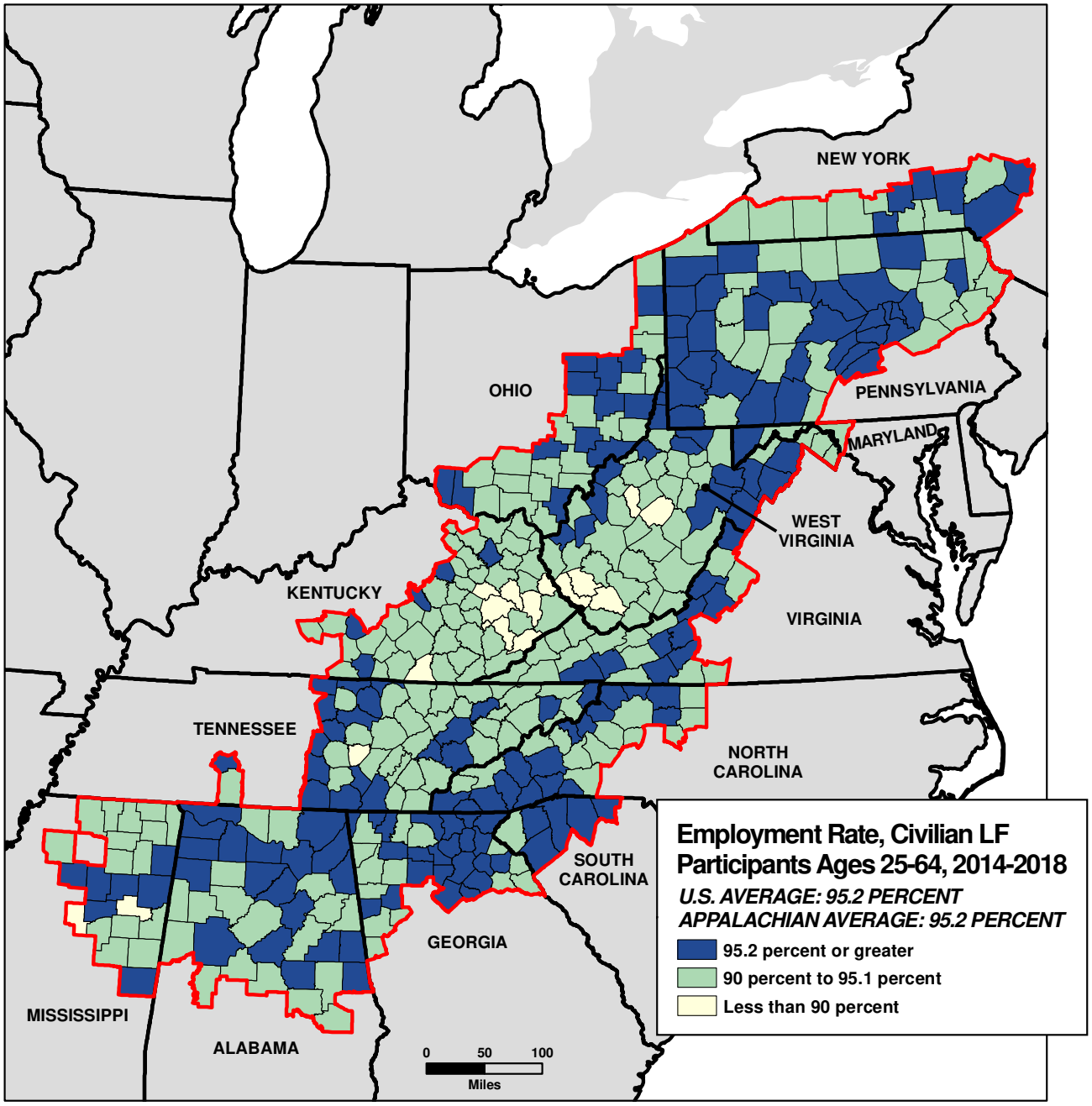
Figure 6.1: Percent of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Civilian Labor Force, 2014-2018



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Civilian Labor Force, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In the 2014-2018 period, 73 percent of Appalachia's civilian population in the prime working ages (ages 25 to 64) were in the civilian labor force, slightly below the U.S. average of 77.6 percent. In 26 Appalachian counties (21 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 under 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 26 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.

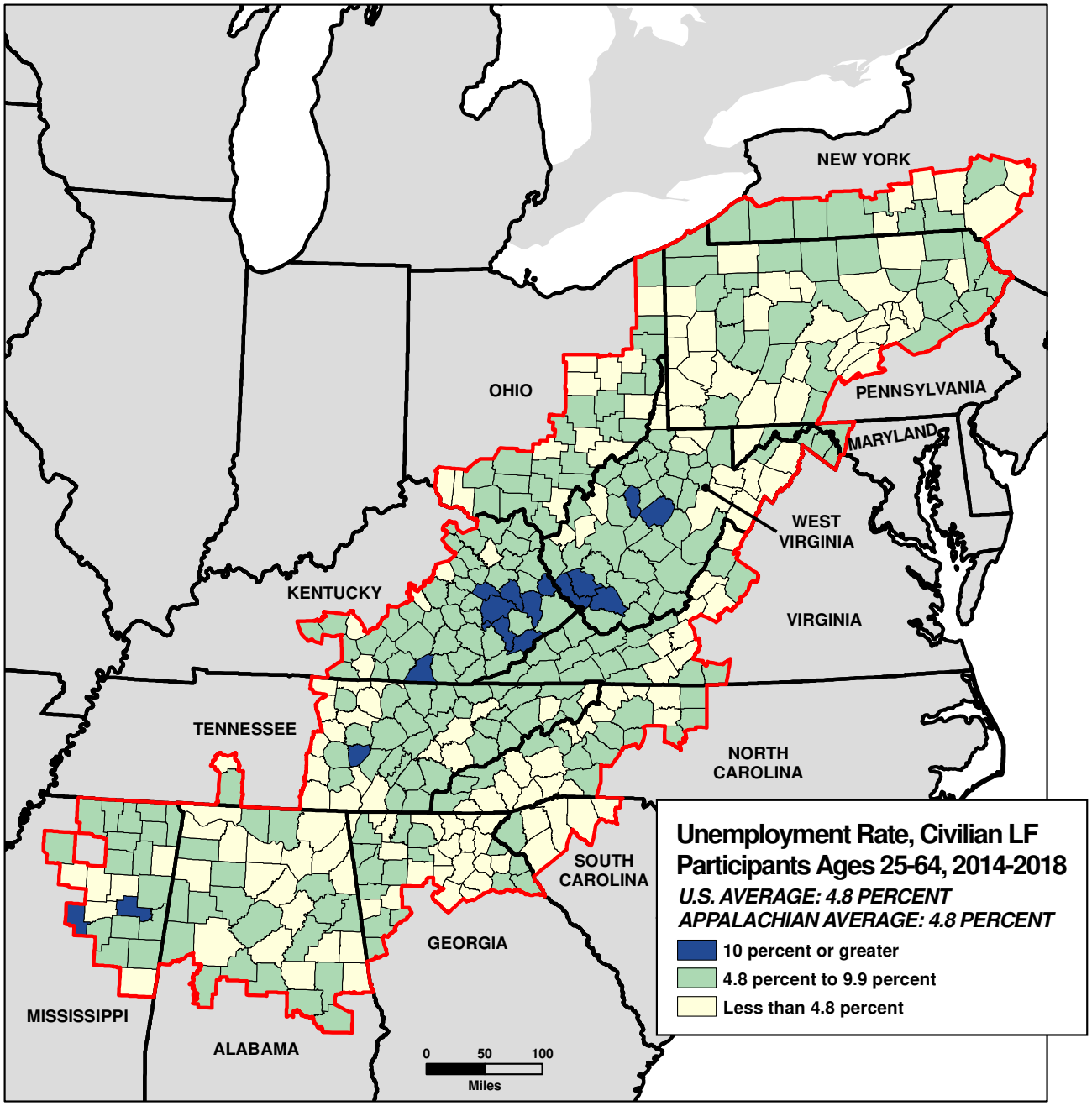
Figure 6.2: Employment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2014-2018



Map Title: Employment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 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 2014-2018 period. Although there were only slight differences among subregions and urban/rural county types, there was some variation at the county level. In 171 of the Region's 420 counties, the employment rate matched or exceeded the national average, yet there were 16 counties in the Region (11 of which were in Central Appalachia) where employment among 25-to-64-year-olds was less than 90 percent. And all 16 of these counties with low employment rates were outside metropolitan areas. While many of the counties with the lowest employment rates also had similarly low employment in 2009-2013, the rate had been at least 92 percent in four of them—suggesting that these four counties may not have fully recovered economically from the recent recession.

Figure 6.3: Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2014-2018



Map Title: Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

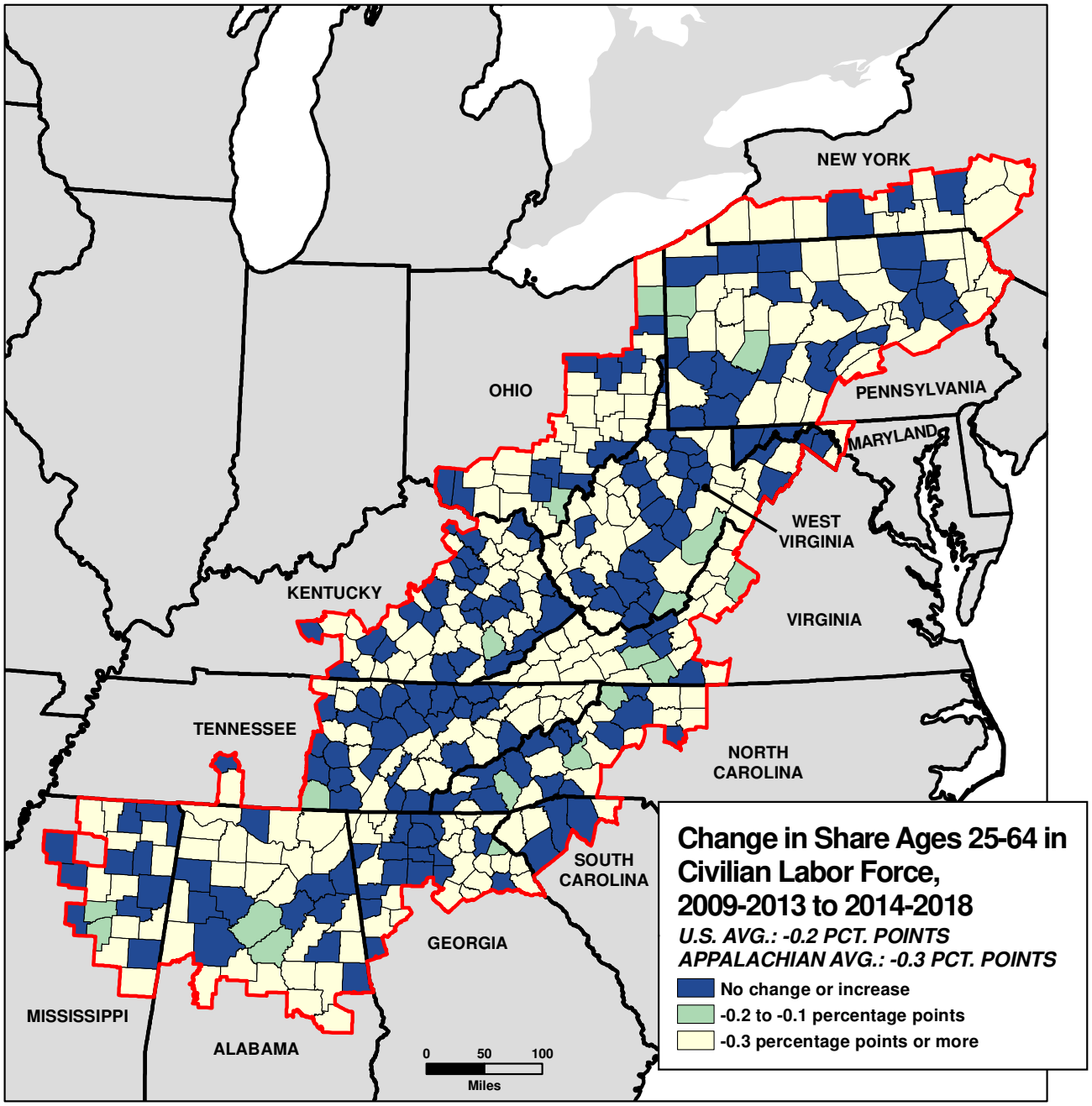
Unemployment in the Appalachian Region among persons ages 25 to 64 matched the national average of 4.8 percent during the 2014-2018 period. Within Appalachia, the jobless rate was at least 10 percent in 16 counties—all of which were outside metropolitan areas and 11 of which were in Central Appalachia. (Unemployment was 6.9 percent in Central Appalachia.) Conversely, the unemployment rate was below the national average in 159 other counties, with 132 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 each of the 16 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 eight 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, 2009-2013 to 2014-2018

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	**- 0.2**	**+ 3.3**	**- 3.3**
Appalachian Region	**- 0.3**	**+ 3.3**	**- 3.3**
Subregions			
Northern Appalachia	- 0.2	+ 2.5	- 2.5
North Central Appalachia	- 0.6	+ 2.5	- 2.5
Central Appalachia	- 0.4	+ 2.2	- 2.2
South Central Appalachia	- 0.6	+ 3.7	- 3.7
Southern Appalachia	- 0.1	+ 4.2	- 4.2
County Types			
Large Metros (pop. 1 million +)	+ 0.2	+ 3.4	- 3.4
Small Metros (pop. <1 million)	- 0.4	+ 3.1	- 3.1
Nonmetro, Adjacent to Large Metros	- 0.8	+ 3.8	- 3.8
Nonmetro, Adjacent to Small Metros	- 0.6	+ 3.3	- 3.3
Rural (nonmetro, not adj. to a metro)	- 0.5	+ 2.8	- 2.8
Alabama	**- 1.0**	**+ 3.4**	**- 3.4**
Appalachian Alabama	- 0.7	+ 3.4	- 3.4
Non-Appalachian Alabama	- 1.7	+ 3.5	- 3.5
Georgia	**+ 0.0**	**+ 4.3**	**- 4.3**
Appalachian Georgia	+ 0.0	+ 4.8	- 4.8
Non-Appalachian Georgia	+ 0.1	+ 4.0	- 4.0
Kentucky	**+ 0.0**	**+ 3.2**	**- 3.2**
Appalachian Kentucky	- 0.5	+ 2.4	- 2.4
Non-Appalachian Kentucky	+ 0.0	+ 3.3	- 3.3
Maryland	**- 0.5**	**+ 2.0**	**- 2.0**
Appalachian Maryland	- 1.7	+ 2.3	- 2.3
Non-Appalachian Maryland	- 0.4	+ 2.1	- 2.1
Mississippi	**- 0.4**	**+ 2.0**	**- 2.0**
Appalachian Mississippi	- 0.1	+ 3.2	- 3.2
Non-Appalachian Mississippi	- 0.5	+ 1.8	- 1.8
New York	**+ 0.1**	**+ 2.8**	**- 2.8**
Appalachian New York	- 0.9	+ 2.2	- 2.2
Non-Appalachian New York	+ 0.1	+ 2.8	- 2.8
North Carolina	**- 0.2**	**+ 4.3**	**- 4.3**
Appalachian North Carolina	- 0.3	+ 4.6	- 4.6
Non-Appalachian North Carolina	- 0.3	+ 4.2	- 4.2
Ohio	**- 0.1**	**+ 3.6**	**- 3.6**
Appalachian Ohio	- 0.5	+ 3.8	- 3.8
Non-Appalachian Ohio	- 0.1	+ 3.6	- 3.6
Pennsylvania	**+ 0.2**	**+ 2.7**	**- 2.7**
Appalachian Pennsylvania	+ 0.1	+ 2.5	- 2.5
Non-Appalachian Pennsylvania	+ 0.1	+ 2.9	- 2.9
South Carolina	**+ 0.1**	**+ 4.4**	**- 4.4**
Appalachian South Carolina	+ 0.5	+ 4.7	- 4.7
Non-Appalachian South Carolina	- 0.1	+ 4.2	- 4.2
Tennessee	**- 0.2**	**+ 3.7**	**- 3.7**
Appalachian Tennessee	- 0.5	+ 3.5	- 3.5
Non-Appalachian Tennessee	+ 0.0	+ 3.8	- 3.8
Virginia	**+ 0.2**	**+ 1.7**	**- 1.7**
Appalachian Virginia	- 1.3	+ 1.7	- 1.7
Non-Appalachian Virginia	+ 0.2	+ 1.7	- 1.7
West Virginia (entire state)	**- 0.5**	**+ 1.4**	**- 1.4**

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

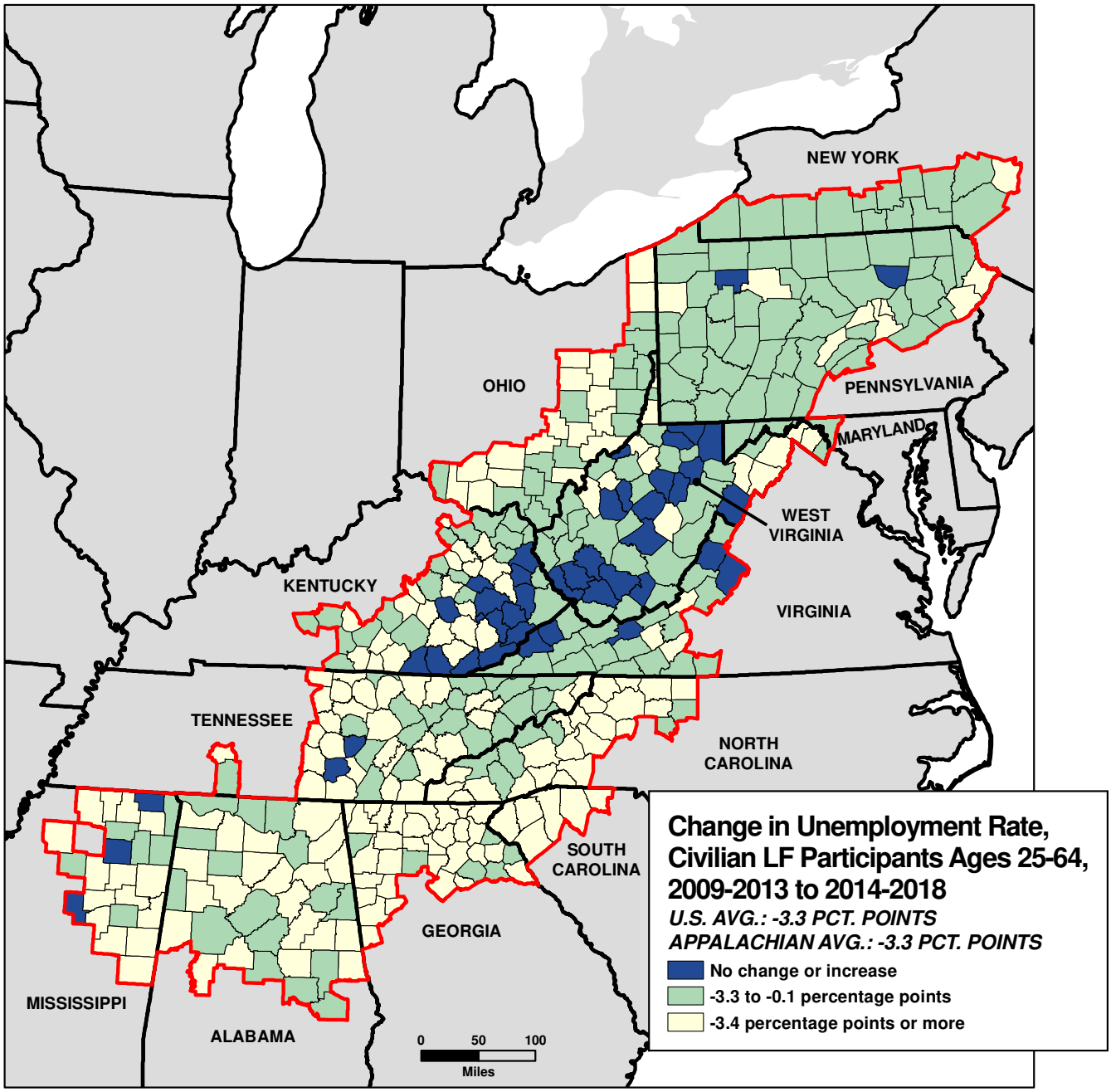
Figure 6.4: Percentage Point Change in the Share of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Civilian Labor Force, 2009-2013 to 2014-2018



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, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Between 2009-2013 and 2014-2018, the labor force participation rate among civilians ages 25 to 64 fell 0.3 percentage points in the Appalachian Region, compared with 0.2 percentage points for the nation as a whole. The decline was present in most of the Region—in fact, more than half of Appalachia's 420 counties had decreases in labor force participation rates that exceeded the U.S. average. But participation rates did not fall in some parts of Appalachia—there were 167 counties in the Region where the share of adults in the labor force either remained the same or increased.

Figure 6.5: Percentage Point Change in the Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2009-2013 to 2014-2018



Map Title: Percentage Point Change in the Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Unemployment among civilian labor force participants declined by more than three percentage points between 2009-2013 and 2014-2018, both in Appalachia and nationwide. And in 187 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 "Great Recession" of 2007-2009, given that the 2009-2013 period includes the final six months of the economic downturn. Yet in 43 Appalachian counties, the unemployment rate either remained the same or increased between 2009-2013 and 2014-2018, with 31 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 8.1 percent in 2009-2013, unemployment in the earlier period had been less than 5 percent in 10 others. This suggests that more recent economic forces—in addition to a slow recovery—may be at play in some areas.

TRENDS IN LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

- Among working-age adults (ages 25 to 64), Appalachia's labor force participation rate in 2014-2018 was 73 percent, 0.3 percentage points lower than its rate in 2009-2013 (see Tables 6.1 and 6.2). The decline was even greater in North Central and South Central Appalachia and in nonmetropolitan counties, where the rates fell at least half a percentage point. Among the states, the Appalachian sections of Maryland and Virginia registered the largest declines, falling more than a full percentage point in each case.

- Within the civilian labor force, the employment rate in Appalachia was 95.2 percent, which was more than three percentage points higher than the employment rate in 2009-2013. Among the subregions, the increase was greatest in Southern Appalachia, where employment rose four percentage points. Employment in Central Appalachia, however, only rose by just over two points, the lowest among the subregions. Elsewhere in the Region, the employment rate rose less than three points among the most rural Appalachian counties—the smallest increase among the five urban-rural county types. Among the states, employment increased the most in the Appalachian sections of Georgia (4.8 percentage points), South Carolina (4.7 points), and North Carolina (4.6 points). Virginia and West Virginia had the smallest increases, at 1.7 and 1.4 percentage points, respectively.

- As Appalachia's employment rate rose between 2009-2013 and 2014-2018, its unemployment rate fell. The Region's unemployment rate of 4.8 percent in the later period is 3.3 percentage points lower than its rate in 2009-2013.

- The labor force and employment data provide a mixed picture. On one hand, the lower labor force rates in 2014-2018 for both Appalachia and the United States suggest that labor force levels among the working-age population may not yet have rebounded from the economic downturn of 2007-2009. Yet the higher employment rates (and thus the lower rates of unemployment) support the idea of an economic recovery in most of the Region.

CHAPTER 7: TRANSPORTATION AND COMMUTING PATTERNS

Table 7.1: Means of Transportation for Workers Ages 16 and Over in the Appalachian Region, 2014-2018

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	**150,571,044**	**76.4**	**9.1**	**5.0**	**2.7**	**1.8**	**4.9**
Appalachian Region	**11,094,867**	**82.1**	**9.2**	**1.2**	**2.2**	**1.2**	**4.1**
Subregions							
Northern Appalachia	3,723,867	79.6	8.9	2.5	3.6	1.2	4.1
North Central Appalachia	992,211	82.8	9.1	0.8	2.7	1.1	3.5
Central Appalachia	654,924	83.4	10.2	0.3	1.9	1.1	3.1
South Central Appalachia	2,103,611	83.1	8.9	0.6	1.7	1.2	4.6
Southern Appalachia	3,620,254	83.6	9.5	0.5	1.1	1.1	4.2
County Types							
Large Metros (pop. 1 million +)	2,869,040	80.0	9.1	2.7	1.9	1.1	5.1
Small Metros (pop. <1 million)	4,771,645	82.9	8.8	0.9	2.2	1.2	4.0
Nonmetro, Adjacent to Large Metros	909,249	82.9	9.4	0.4	2.6	1.2	3.5
Nonmetro, Adjacent to Small Metros	1,601,886	82.6	10.0	0.3	2.5	1.1	3.5
Rural (nonmetro, not adj. to a metro)	943,047	82.3	9.9	0.4	2.5	1.4	3.5
Alabama	**2,051,445**	**85.8**	**8.5**	**0.3**	**1.1**	**1.0**	**3.3**
Appalachian Alabama	1,335,639	85.9	8.8	0.4	1.1	0.9	3.1
Non-Appalachian Alabama	715,806	85.7	8.0	0.3	1.2	1.1	3.6
Georgia	**4,667,378**	**79.5**	**9.8**	**2.1**	**1.5**	**1.7**	**5.5**
Appalachian Georgia	1,469,219	81.0	10.4	0.6	1.0	1.3	5.7
Non-Appalachian Georgia	3,198,159	78.7	9.5	2.8	1.7	1.9	5.3
Kentucky	**1,929,677**	**82.1**	**9.6**	**1.1**	**2.2**	**1.4**	**3.6**
Appalachian Kentucky	411,341	82.4	10.8	0.3	2.2	1.3	3.1
Non-Appalachian Kentucky	1,518,336	82.0	9.2	1.3	2.2	1.4	3.8
Maryland	**3,021,967**	**73.9**	**9.0**	**8.6**	**2.3**	**1.5**	**4.7**
Appalachian Maryland	107,725	81.0	9.9	1.3	2.8	1.1	4.1
Non-Appalachian Maryland	2,914,242	73.6	9.0	8.8	2.3	1.5	4.7
Mississippi	**1,215,697**	**85.3**	**9.2**	**0.3**	**1.4**	**1.6**	**2.3**
Appalachian Mississippi	250,408	86.2	8.8	0.2	1.0	1.1	2.7
Non-Appalachian Mississippi	965,289	85.1	9.3	0.3	1.5	1.7	2.2
New York	**9,246,571**	**53.1**	**6.5**	**28.0**	**6.2**	**2.0**	**4.2**
Appalachian New York	455,989	77.9	9.2	1.9	5.7	1.3	4.0
Non-Appalachian New York	8,790,582	51.9	6.4	29.4	6.2	2.0	4.2
North Carolina	**4,660,377**	**81.1**	**9.3**	**1.0**	**1.8**	**1.3**	**5.4**
Appalachian North Carolina	759,904	82.0	9.2	0.5	1.7	1.2	5.3
Non-Appalachian North Carolina	3,900,473	81.0	9.3	1.1	1.8	1.3	5.4
Ohio	**5,442,764**	**83.2**	**7.8**	**1.6**	**2.2**	**1.2**	**4.0**
Appalachian Ohio	849,134	84.2	8.1	0.5	2.3	1.4	3.5
Non-Appalachian Ohio	4,593,630	83.0	7.7	1.8	2.2	1.1	4.1
Pennsylvania	**6,032,013**	**76.1**	**8.5**	**5.6**	**3.7**	**1.4**	**4.6**
Appalachian Pennsylvania	2,628,276	78.9	9.0	3.1	3.5	1.1	4.3
Non-Appalachian Pennsylvania	3,403,737	74.0	8.1	7.5	3.9	1.6	4.9
South Carolina	**2,215,014**	**82.4**	**9.4**	**0.5**	**2.1**	**1.4**	**4.1**
Appalachian South Carolina	564,988	83.8	9.6	0.5	1.3	1.0	3.8
Non-Appalachian South Carolina	1,650,026	81.9	9.3	0.6	2.3	1.6	4.3
Tennessee	**3,003,226**	**83.4**	**9.0**	**0.7**	**1.3**	**1.3**	**4.4**
Appalachian Tennessee	1,231,210	84.0	8.8	0.4	1.4	1.1	4.2
Non-Appalachian Tennessee	1,772,016	82.9	9.1	0.9	1.3	1.4	4.4
Virginia	**4,152,433**	**77.2**	**9.2**	**4.4**	**2.4**	**1.7**	**5.0**
Appalachian Virginia	303,242	83.1	8.8	1.1	2.4	1.2	3.5
Non-Appalachian Virginia	3,849,191	76.7	9.2	4.7	2.4	1.8	5.1
West Virginia (entire state)	**727,792**	**82.6**	**9.2**	**0.9**	**2.9**	**1.2**	**3.3**

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Table 7.2: Means of Transportation for Workers Ages 16 and Over in the Appalachian Region Below the Poverty Level, 2014-2018

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	**9,740,761**	**65.0**	**12.8**	**8.1**	**6.1**	**3.5**	**4.5**
Appalachian Region	**776,809**	**71.3**	**13.5**	**2.9**	**5.8**	**2.6**	**3.9**
Subregions							
Northern Appalachia	230,750	64.1	12.6	6.3	10.2	2.7	4.2
North Central Appalachia	76,037	69.6	12.8	2.2	8.6	2.8	4.0
Central Appalachia	61,956	75.5	14.0	0.7	4.5	2.0	3.3
South Central Appalachia	164,852	73.7	13.4	2.1	3.3	2.8	4.7
Southern Appalachia	243,214	75.9	14.5	1.1	2.8	2.6	3.1
County Types							
Large Metros (pop. 1 million +)	154,402	66.7	15.1	6.0	6.2	2.2	3.7
Small Metros (pop. <1 million)	342,401	71.7	12.7	3.1	5.8	2.9	3.8
Nonmetro, Adjacent to Large Metros	71,194	71.2	13.2	1.0	7.2	3.0	4.4
Nonmetro, Adjacent to Small Metros	124,948	72.6	14.7	0.8	5.2	2.4	4.2
Rural (nonmetro, not adj. to a metro)	83,864	75.8	12.3	1.1	4.9	2.2	3.8
Alabama	**156,179**	**78.7**	**12.8**	**1.2**	**2.7**	**2.0**	**2.6**
Appalachian Alabama	95,746	77.8	13.6	1.2	2.9	2.0	2.5
Non-Appalachian Alabama	60,433	80.2	11.4	1.1	2.5	2.1	2.8
Georgia	**341,630**	**68.9**	**14.8**	**4.9**	**3.4**	**3.8**	**4.2**
Appalachian Georgia	87,229	72.5	16.5	0.8	2.8	3.4	4.0
Non-Appalachian Georgia	254,401	67.6	14.2	6.3	3.6	4.0	4.3
Kentucky	**149,471**	**71.0**	**13.5**	**3.1**	**5.9**	**3.0**	**3.5**
Appalachian Kentucky	41,989	74.7	14.5	0.6	5.1	2.1	3.0
Non-Appalachian Kentucky	107,482	69.6	13.2	4.1	6.2	3.3	3.7
Maryland	**119,083**	**57.3**	**13.2**	**14.6**	**6.4**	**3.1**	**5.3**
Appalachian Maryland	6,322	65.5	15.1	4.0	8.2	3.1	4.2
Non-Appalachian Maryland	112,761	56.8	13.1	15.2	6.3	3.1	5.4
Mississippi	**108,394**	**79.8**	**12.3**	**0.5**	**2.2**	**3.0**	**2.1**
Appalachian Mississippi	21,286	84.0	9.4	0.1	1.4	2.1	3.0
Non-Appalachian Mississippi	87,108	78.8	13.0	0.6	2.4	3.2	1.9
New York	**553,862**	**34.7**	**7.9**	**36.7**	**12.9**	**2.9**	**5.0**
Appalachian New York	34,505	61.6	11.2	6.4	12.9	3.1	4.8
Non-Appalachian New York	519,357	32.9	7.7	38.7	12.8	2.9	5.0
North Carolina	**341,710**	**71.8**	**15.7**	**2.8**	**3.2**	**2.4**	**4.0**
Appalachian North Carolina	60,007	73.7	13.4	1.8	3.1	2.8	5.3
Non-Appalachian North Carolina	281,703	71.5	16.2	3.0	3.3	2.3	3.8
Ohio	**362,666**	**68.6**	**12.7**	**5.6**	**6.6**	**3.0**	**3.5**
Appalachian Ohio	63,558	73.4	12.1	1.4	6.2	3.1	3.8
Non-Appalachian Ohio	299,108	67.6	12.8	6.5	6.7	3.0	3.5
Pennsylvania	**324,779**	**57.6**	**12.9**	**12.6**	**9.9**	**2.8**	**4.2**
Appalachian Pennsylvania	151,476	62.0	13.0	7.5	10.9	2.5	4.1
Non-Appalachian Pennsylvania	173,303	53.8	12.8	17.1	8.9	3.1	4.3
South Carolina	**164,429**	**73.7**	**14.6**	**1.7**	**3.6**	**3.1**	**3.3**
Appalachian South Carolina	38,953	74.4	15.0	1.9	3.2	2.6	2.9
Non-Appalachian South Carolina	125,476	73.5	14.5	1.6	3.7	3.3	3.4
Tennessee	**218,987**	**74.5**	**14.2**	**2.3**	**2.7**	**2.5**	**3.8**
Appalachian Tennessee	96,038	75.0	13.8	1.4	3.0	2.3	4.6
Non-Appalachian Tennessee	122,949	74.2	14.5	3.0	2.5	2.6	3.2
Virginia	**203,804**	**65.6**	**13.1**	**6.9**	**5.3**	**4.4**	**4.8**
Appalachian Virginia	23,977	70.9	12.8	4.4	4.2	3.6	4.0
Non-Appalachian Virginia	179,827	64.9	13.1	7.2	5.4	4.5	4.9
West Virginia (entire state)	**55,723**	**69.1**	**12.4**	**3.0**	**8.9**	**2.5**	**4.1**

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2018, the poverty threshold for a family of two adults and two children was $25,465. 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, 2014-2018 American Community Survey.

Table 7.3: Availability of Vehicles for Households in the Appalachian Region, 2014-2018

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	**119,730,128**	**8.7**	**33.0**	**37.3**	**14.4**	**6.6**
Appalachian Region	**9,997,235**	**7.3**	**31.9**	**37.5**	**15.8**	**7.5**
Subregions						
Northern Appalachia	3,353,979	9.4	34.3	36.9	13.5	5.8
North Central Appalachia	952,066	7.8	32.1	37.1	15.6	7.4
Central Appalachia	738,405	8.4	32.5	35.9	15.9	7.4
South Central Appalachia	1,944,090	5.7	31.0	37.3	17.3	8.7
Southern Appalachia	3,008,695	5.4	29.8	38.9	17.4	8.6
County Types						
Large Metros (pop. 1 million +)	2,333,958	7.1	31.5	39.0	15.4	7.0
Small Metros (pop. <1 million)	4,252,286	7.2	32.6	37.4	15.5	7.4
Nonmetro, Adjacent to Large Metros	855,750	7.5	31.2	37.1	16.2	8.0
Nonmetro, Adjacent to Small Metros	1,570,305	7.0	31.0	36.6	17.0	8.4
Rural (nonmetro, not adj. to a metro)	984,936	8.2	32.4	36.2	15.8	7.4
Alabama	**1,860,269**	**6.2**	**32.4**	**36.9**	**16.4**	**8.0**
Appalachian Alabama	1,196,775	5.8	31.3	37.2	17.0	8.7
Non-Appalachian Alabama	663,494	6.9	34.4	36.5	15.4	6.9
Georgia	**3,709,488**	**6.6**	**32.8**	**38.2**	**15.3**	**7.0**
Appalachian Georgia	1,095,656	4.1	27.2	41.3	18.4	9.1
Non-Appalachian Georgia	2,613,832	7.7	35.1	36.9	14.1	6.2
Kentucky	**1,728,681**	**7.4**	**33.0**	**37.8**	**15.0**	**6.8**
Appalachian Kentucky	456,309	8.5	33.1	36.0	15.5	7.0
Non-Appalachian Kentucky	1,272,372	7.1	32.9	38.4	14.8	6.8
Maryland	**2,192,518**	**9.0**	**32.1**	**37.1**	**14.7**	**7.1**
Appalachian Maryland	95,774	8.5	32.2	35.2	15.7	8.4
Non-Appalachian Maryland	2,096,744	9.0	32.1	37.2	14.6	7.0
Mississippi	**1,105,576**	**6.5**	**33.1**	**36.9**	**16.0**	**7.5**
Appalachian Mississippi	236,092	6.4	30.9	36.8	17.5	8.4
Non-Appalachian Mississippi	869,484	6.5	33.7	36.9	15.6	7.2
New York	**7,316,537**	**29.1**	**32.7**	**26.1**	**8.5**	**3.6**
Appalachian New York	415,285	10.3	35.8	36.6	12.4	4.8
Non-Appalachian New York	6,901,252	30.2	32.6	25.5	8.3	3.5
North Carolina	**3,918,597**	**5.9**	**31.9**	**38.4**	**16.3**	**7.5**
Appalachian North Carolina	708,685	5.6	31.6	37.3	17.1	8.4
Non-Appalachian North Carolina	3,209,912	6.0	32.0	38.6	16.1	7.3
Ohio	**4,654,075**	**8.2**	**33.1**	**37.6**	**14.5**	**6.6**
Appalachian Ohio	792,296	7.8	30.8	36.4	16.5	8.4
Non-Appalachian Ohio	3,861,779	8.3	33.6	37.9	14.0	6.2
Pennsylvania	**5,025,132**	**11.0**	**34.0**	**36.3**	**13.1**	**5.6**
Appalachian Pennsylvania	2,342,021	9.5	34.3	37.1	13.4	5.6
Non-Appalachian Pennsylvania	2,683,111	12.3	33.6	35.6	12.9	5.5
South Carolina	**1,894,711**	**6.5**	**33.0**	**38.5**	**15.3**	**6.7**
Appalachian South Carolina	480,172	6.5	31.3	38.7	15.9	7.5
Non-Appalachian South Carolina	1,414,539	6.5	33.6	38.5	15.1	6.4
Tennessee	**2,567,061**	**5.9**	**31.7**	**38.1**	**16.4**	**7.9**
Appalachian Tennessee	1,142,136	5.7	30.8	37.5	17.2	8.8
Non-Appalachian Tennessee	1,424,925	6.1	32.5	38.5	15.8	7.1
Virginia	**3,128,415**	**6.2**	**30.3**	**38.0**	**17.0**	**8.5**
Appalachian Virginia	301,358	6.9	30.0	35.3	18.4	9.4
Non-Appalachian Virginia	2,827,057	6.2	30.3	38.3	16.8	8.4
West Virginia (entire state)	**734,676**	**8.7**	**34.5**	**37.1**	**13.9**	**5.8**

Data Source: U.S. Census Bureau, 2014-2018 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, 2014-2018

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	**6,428,553**	**1,341,476**	**708,850**	**2,633,169**	**933,958**	**527,159**	**283,941**
Appalachian Region	**289,124**	**102,007**	**60,521**	**37,060**	**47,973**	**27,711**	**13,852**
Subregions							
Northern Appalachia	143,088	38,640	26,334	27,704	29,503	12,288	8,619
North Central Appalachia	25,616	9,546	4,896	2,469	5,297	2,326	1,082
Central Appalachia	13,345	5,664	3,519	137	2,190	1,263	572
South Central Appalachia	38,171	17,021	7,702	3,569	4,162	4,144	1,573
Southern Appalachia	68,904	31,136	18,070	3,181	6,821	7,690	2,006
County Types							
Large Metros (pop. 1 million +)	77,769	22,726	13,867	20,410	12,638	5,304	2,824
Small Metros (pop. <1 million)	116,202	43,892	22,503	14,762	19,411	11,313	4,321
Nonmetro, Adjacent to Large Metros	26,379	9,531	5,882	705	5,134	2,985	2,142
Nonmetro, Adjacent to Small Metros	41,051	16,561	10,854	624	6,358	3,953	2,701
Rural (nonmetro, not adj. to a metro)	27,723	9,297	7,415	559	4,432	4,156	1,864
Alabama	**39,431**	**19,714**	**8,961**	**1,996**	**4,256**	**3,296**	**1,208**
Appalachian Alabama	23,655	12,096	5,086	1,425	2,620	1,711	717
Non-Appalachian Alabama	15,776	7,618	3,875	571	1,636	1,585	491
Georgia	**140,054**	**40,889**	**31,891**	**32,712**	**13,041**	**16,667**	**4,854**
Appalachian Georgia	28,110	11,169	8,404	1,057	2,461	4,028	991
Non-Appalachian Georgia	111,944	29,720	23,487	31,655	10,580	12,639	3,863
Kentucky	**49,510**	**15,216**	**10,547**	**8,142**	**7,523**	**5,973**	**2,109**
Appalachian Kentucky	8,835	3,231	2,533	130	1,559	1,028	354
Non-Appalachian Kentucky	40,675	11,985	8,014	8,012	5,964	4,945	1,755
Maryland	**122,878**	**26,704**	**14,072**	**57,850**	**13,382**	**7,413**	**3,457**
Appalachian Maryland	3,347	1,333	474	396	724	226	194
Non-Appalachian Maryland	119,531	25,371	13,598	57,454	12,658	7,187	3,263
Mississippi	**25,528**	**12,712**	**7,112**	**359**	**2,256**	**2,628**	**461**
Appalachian Mississippi	4,723	2,293	1,273	28	354	644	131
Non-Appalachian Mississippi	20,805	10,419	5,839	331	1,902	1,984	330
New York	**2,001,636**	**119,880**	**64,658**	**1,359,357**	**287,140**	**84,980**	**85,621**
Appalachian New York	19,376	5,125	3,246	3,136	5,377	1,607	885
Non-Appalachian New York	1,982,260	114,755	61,412	1,356,221	281,763	83,373	84,736
North Carolina	**102,875**	**40,073**	**25,312**	**12,921**	**10,270**	**10,648**	**3,651**
Appalachian North Carolina	14,663	6,692	2,916	1,235	1,332	1,846	642
Non-Appalachian North Carolina	88,212	33,381	22,396	11,686	8,938	8,802	3,009
Ohio	**164,532**	**49,392**	**34,341**	**33,986**	**22,791**	**15,502**	**8,520**
Appalachian Ohio	28,421	9,047	7,761	1,045	4,069	4,266	2,233
Non-Appalachian Ohio	136,111	40,345	26,580	32,941	18,722	11,236	6,287
Pennsylvania	**304,997**	**59,760**	**42,648**	**108,328**	**54,075**	**23,101**	**17,085**
Appalachian Pennsylvania	98,664	26,664	16,027	23,169	20,269	6,874	5,661
Non-Appalachian Pennsylvania	206,333	33,096	26,621	85,159	33,806	16,227	11,424
South Carolina	**50,583**	**17,731**	**15,612**	**3,498**	**6,308**	**6,174**	**1,260**
Appalachian South Carolina	12,416	5,578	3,307	671	1,386	1,307	167
Non-Appalachian South Carolina	38,167	12,153	12,305	2,827	4,922	4,867	1,093
Tennessee	**57,437**	**24,029**	**11,982**	**7,593**	**6,282**	**5,277**	**2,274**
Appalachian Tennessee	20,557	9,352	4,350	1,744	2,439	1,787	885
Non-Appalachian Tennessee	36,880	14,677	7,632	5,849	3,843	3,490	1,389
Virginia	**111,310**	**34,134**	**19,213**	**29,354**	**12,192**	**11,859**	**4,558**
Appalachian Virginia	6,106	2,702	1,254	590	679	623	258
Non-Appalachian Virginia	105,204	31,432	17,959	28,764	11,513	11,236	4,300
West Virginia (entire state)	**20,251**	**6,725**	**3,890**	**2,434**	**4,704**	**1,764**	**734**

Data Source: U.S. Census Bureau, 2014-2018 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, 2014-2018

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**	**5.2**	**35.1**	**27.0**	**19.6**	**3.9**
Appalachian Region	**2.6**	**1.1**	**6.0**	**28.8**	**23.7**	**21.7**	**3.1**
Subregions							
Northern Appalachia	3.9	1.3	8.0	29.9	26.7	27.1	5.9
North Central Appalachia	2.6	1.2	5.5	33.3	22.6	21.9	3.2
Central Appalachia	2.1	1.0	5.3	8.2	22.4	17.2	2.9
South Central Appalachia	1.8	1.0	4.2	32.1	15.4	16.9	1.7
Southern Appalachia	1.9	1.0	5.3	19.9	21.4	19.4	1.3
County Types							
Large Metros (pop. 1 million +)	2.7	1.0	5.3	27.0	26.3	16.7	1.9
Small Metros (pop. <1 million)	2.5	1.1	5.4	34.8	23.5	20.8	2.4
Nonmetro, Adjacent to Large Metros	2.9	1.3	6.9	24.4	24.6	28.8	7.0
Nonmetro, Adjacent to Small Metros	2.6	1.3	6.8	14.2	19.5	22.0	5.0
Rural (nonmetro, not adj. to a metro)	3.0	1.2	8.0	16.5	23.7	31.8	6.0
Alabama	**1.9**	**1.1**	**5.2**	**29.9**	**22.8**	**16.5**	**1.9**
Appalachian Alabama	1.8	1.1	4.4	31.3	22.6	14.3	1.8
Non-Appalachian Alabama	2.2	1.2	6.8	26.8	23.1	19.7	2.0
Georgia	**3.0**	**1.1**	**7.0**	**34.3**	**23.6**	**21.4**	**2.0**
Appalachian Georgia	1.9	0.9	5.5	12.3	19.3	21.0	1.2
Non-Appalachian Georgia	3.5	1.2	7.8	36.4	24.9	21.5	2.4
Kentucky	**2.6**	**1.0**	**5.8**	**41.0**	**23.0**	**22.1**	**3.1**
Appalachian Kentucky	2.2	1.0	5.8	11.1	22.7	19.5	2.9
Non-Appalachian Kentucky	2.7	1.0	5.8	42.9	23.1	22.8	3.2
Maryland	**4.1**	**1.2**	**5.2**	**22.5**	**22.0**	**16.9**	**2.5**
Appalachian Maryland	3.1	1.5	4.5	31.9	26.7	20.3	4.5
Non-Appalachian Maryland	4.1	1.2	5.2	22.5	21.8	16.8	2.5
Mississippi	**2.1**	**1.2**	**6.4**	**11.2**	**18.6**	**14.0**	**1.7**
Appalachian Mississippi	1.9	1.1	5.8	7.3	17.5	23.5	2.0
Non-Appalachian Mississippi	2.2	1.3	6.6	11.7	18.8	12.4	1.6
New York	**21.9**	**2.4**	**10.9**	**52.8**	**54.2**	**47.5**	**22.8**
Appalachian New York	4.4	1.5	7.8	39.2	27.2	26.7	5.3
Non-Appalachian New York	22.8	2.5	11.1	52.8	55.2	48.2	23.6
North Carolina	**2.2**	**1.1**	**6.0**	**28.5**	**17.4**	**18.4**	**1.5**
Appalachian North Carolina	1.9	1.1	4.2	34.5	12.7	20.1	1.6
Non-Appalachian North Carolina	2.3	1.1	6.3	27.9	18.5	18.1	1.5
Ohio	**3.0**	**1.1**	**8.2**	**40.3**	**22.6**	**24.7**	**4.0**
Appalachian Ohio	3.4	1.3	11.3	26.0	24.6	37.0	7.7
Non-Appalachian Ohio	3.0	1.1	7.6	41.0	22.1	21.9	3.4
Pennsylvania	**5.1**	**1.3**	**8.4**	**32.4**	**28.2**	**27.3**	**6.4**
Appalachian Pennsylvania	3.8	1.3	6.8	28.8	26.1	23.2	5.2
Non-Appalachian Pennsylvania	6.1	1.3	9.8	33.6	29.6	29.5	7.2
South Carolina	**2.3**	**1.0**	**7.6**	**33.0**	**24.2**	**19.9**	**1.4**
Appalachian South Carolina	2.2	1.2	6.2	27.7	25.3	22.6	0.8
Non-Appalachian South Carolina	2.4	0.9	8.1	34.5	23.8	19.2	1.6
Tennessee	**1.9**	**1.0**	**4.5**	**36.4**	**19.6**	**14.2**	**1.8**
Appalachian Tennessee	1.7	0.9	4.0	35.3	18.4	13.7	1.7
Non-Appalachian Tennessee	2.1	1.0	4.8	36.7	20.6	14.4	1.8
Virginia	**2.7**	**1.1**	**5.1**	**16.2**	**17.1**	**16.8**	**2.3**
Appalachian Virginia	2.0	1.1	4.8	20.1	13.9	17.1	2.7
Non-Appalachian Virginia	2.8	1.1	5.1	16.1	17.3	16.8	2.2
West Virginia (entire state)	**2.8**	**1.1**	**5.9**	**38.0**	**25.1**	**21.2**	**3.1**

Data Source: U.S. Census Bureau, 2014-2018 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, 2014-2018

Availability of Vehicles	Total Households With One or More Workers	Percent of Households With One or More Workers			
		Households With Zero Vehicles	Households Where Workers Exceed Vehicles	Households Where Workers Equal Vehicles	Households Where Vehicles Exceed Workers
United States	**87,947,845**	**5.1**	**6.6**	**51.9**	**36.4**
Appalachian Region	**6,744,941**	**3.2**	**4.7**	**49.3**	**42.8**
Subregions					
Northern Appalachia	2,272,099	4.7	5.8	52.5	37.0
North Central Appalachia	613,050	3.2	4.5	47.9	44.5
Central Appalachia	419,242	2.4	4.1	43.1	50.4
South Central Appalachia	1,289,214	2.2	3.8	47.6	46.3
Southern Appalachia	2,151,336	2.3	4.3	48.6	44.7
County Types					
Large Metros (pop. 1 million +)	1,716,849	3.3	5.1	52.7	38.9
Small Metros (pop. <1 million)	2,897,219	3.0	4.7	50.2	42.0
Nonmetro, Adjacent to Large Metros	555,850	3.4	4.5	46.7	45.5
Nonmetro, Adjacent to Small Metros	986,876	3.1	4.3	45.0	47.6
Rural (nonmetro, not adj. to a metro)	588,147	3.3	4.4	44.9	47.4
Alabama	**1,259,334**	**2.3**	**3.8**	**48.2**	**45.7**
Appalachian Alabama	819,322	2.2	3.7	47.8	46.3
Non-Appalachian Alabama	440,012	2.6	3.9	49.0	44.6
Georgia	**2,774,914**	**3.5**	**5.7**	**51.6**	**39.2**
Appalachian Georgia	837,345	2.2	5.0	49.5	43.4
Non-Appalachian Georgia	1,937,569	4.1	6.0	52.5	37.5
Kentucky	**1,173,001**	**3.2**	**5.1**	**51.0**	**40.7**
Appalachian Kentucky	261,114	2.6	4.5	44.3	48.7
Non-Appalachian Kentucky	911,887	3.4	5.3	52.9	38.4
Maryland	**1,708,682**	**5.0**	**7.8**	**53.8**	**33.4**
Appalachian Maryland	65,137	3.7	5.4	49.4	41.5
Non-Appalachian Maryland	1,643,545	5.0	7.9	54.0	33.1
Mississippi	**748,338**	**2.6**	**4.4**	**48.0**	**45.0**
Appalachian Mississippi	153,955	2.4	3.4	45.4	48.8
Non-Appalachian Mississippi	594,383	2.7	4.6	48.7	44.1
New York	**5,355,057**	**24.3**	**12.2**	**42.1**	**21.5**
Appalachian New York	277,358	5.4	6.7	53.1	34.8
Non-Appalachian New York	5,077,699	25.3	12.5	41.5	20.7
North Carolina	**2,828,841**	**2.7**	**4.7**	**50.4**	**42.2**
Appalachian North Carolina	468,090	2.3	4.0	48.3	45.4
Non-Appalachian North Carolina	2,360,751	2.8	4.9	50.8	41.6
Ohio	**3,309,832**	**3.7**	**4.6**	**54.0**	**37.7**
Appalachian Ohio	521,028	3.7	3.7	47.0	45.6
Non-Appalachian Ohio	2,788,804	3.7	4.8	55.3	36.2
Pennsylvania	**3,579,259**	**6.1**	**6.9**	**53.3**	**33.7**
Appalachian Pennsylvania	1,600,120	4.6	6.0	53.2	36.1
Non-Appalachian Pennsylvania	1,979,139	7.3	7.6	53.4	31.7
South Carolina	**1,328,113**	**2.9**	**5.0**	**50.7**	**41.4**
Appalachian South Carolina	340,714	2.9	4.8	49.8	42.5
Non-Appalachian South Carolina	987,399	2.9	5.1	51.1	41.0
Tennessee	**1,825,029**	**2.4**	**4.5**	**50.1**	**43.0**
Appalachian Tennessee	757,020	2.0	3.7	47.2	47.1
Non-Appalachian Tennessee	1,068,009	2.6	5.1	52.2	40.1
Virginia	**2,386,456**	**3.3**	**5.9**	**51.2**	**39.6**
Appalachian Virginia	185,901	2.4	3.8	43.2	50.6
Non-Appalachian Virginia	2,200,555	3.4	6.1	51.8	38.7
West Virginia (entire state)	**457,837**	**3.5**	**4.9**	**49.3**	**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, 2014-2018 American Community Survey.

Table 7.7: Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, by Amount of Time, 2014-2018

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	**143,148,111**	**25.9**	**36.1**	**28.9**	**9.1**	**26.6**
Appalachian Region	**10,635,965**	**28.4**	**37.1**	**26.7**	**7.8**	**25.4**
Subregions						
Northern Appalachia	3,570,238	31.8	36.0	24.8	7.5	24.6
North Central Appalachia	957,019	28.9	35.6	26.2	9.3	26.4
Central Appalachia	634,545	30.5	33.0	27.3	9.2	26.2
South Central Appalachia	2,006,758	29.6	41.1	24.1	5.2	23.1
Southern Appalachia	3,467,405	23.8	37.1	30.1	9.0	27.0
County Types						
Large Metros (pop. 1 million +)	2,722,363	21.0	33.4	34.5	11.2	29.5
Small Metros (pop. <1 million)	4,580,456	29.2	41.7	23.6	5.5	23.4
Nonmetro, Adjacent to Large Metros	877,740	34.0	33.4	23.9	8.7	24.8
Nonmetro, Adjacent to Small Metros	1,545,363	32.3	33.6	25.9	8.2	25.2
Rural (nonmetro, not adj. to a metro)	910,043	34.9	34.6	23.0	7.5	24.0
Alabama	**1,984,564**	**26.1**	**39.4**	**28.3**	**6.2**	**24.7**
Appalachian Alabama	1,294,734	25.2	39.3	29.0	6.4	25.1
Non-Appalachian Alabama	689,830	27.7	39.5	27.0	5.7	24.1
Georgia	**4,412,876**	**22.4**	**35.5**	**31.3**	**10.8**	**28.4**
Appalachian Georgia	1,385,747	19.9	32.6	33.7	13.8	31.0
Non-Appalachian Georgia	3,027,129	23.6	36.8	30.2	9.4	27.3
Kentucky	**1,859,975**	**30.5**	**39.3**	**24.6**	**5.7**	**23.3**
Appalachian Kentucky	398,742	33.0	33.1	25.4	8.5	25.2
Non-Appalachian Kentucky	1,461,233	29.8	41.0	24.4	4.9	22.8
Maryland	**2,879,542**	**16.7**	**31.2**	**36.5**	**15.6**	**32.9**
Appalachian Maryland	103,320	29.7	37.1	22.1	11.2	26.8
Non-Appalachian Maryland	2,776,222	16.3	31.0	37.0	15.8	33.1
Mississippi	**1,187,918**	**30.2**	**37.5**	**25.5**	**6.8**	**24.6**
Appalachian Mississippi	243,541	31.8	37.4	24.8	6.0	23.7
Non-Appalachian Mississippi	944,377	29.8	37.5	25.7	7.0	24.8
New York	**8,857,402**	**19.7**	**29.3**	**33.1**	**17.9**	**33.3**
Appalachian New York	437,767	39.6	36.4	18.9	5.1	21.1
Non-Appalachian New York	8,419,635	18.7	28.9	33.9	18.6	34.0
North Carolina	**4,407,339**	**27.0**	**40.0**	**27.0**	**6.1**	**24.5**
Appalachian North Carolina	719,259	30.0	42.1	22.9	5.0	22.8
Non-Appalachian North Carolina	3,688,080	26.4	39.5	27.7	6.3	24.8
Ohio	**5,222,449**	**28.7**	**40.5**	**25.8**	**5.0**	**23.5**
Appalachian Ohio	819,332	30.4	36.2	25.2	8.1	25.4
Non-Appalachian Ohio	4,403,117	28.4	41.2	25.9	4.5	23.1
Pennsylvania	**5,751,589**	**26.4**	**35.3**	**29.2**	**9.2**	**26.9**
Appalachian Pennsylvania	2,514,781	30.2	35.4	26.5	7.8	25.4
Non-Appalachian Pennsylvania	3,236,808	23.4	35.2	31.2	10.2	28.1
South Carolina	**2,123,114**	**26.1**	**39.5**	**28.5**	**6.0**	**24.6**
Appalachian South Carolina	543,383	26.9	43.0	25.9	4.2	23.2
Non-Appalachian South Carolina	1,579,731	25.8	38.2	29.3	6.6	25.1
Tennessee	**2,872,574**	**25.6**	**39.5**	**28.5**	**6.4**	**25.0**
Appalachian Tennessee	1,179,004	28.2	40.5	25.6	5.6	23.8
Non-Appalachian Tennessee	1,693,570	23.8	38.8	30.5	7.0	25.8
Virginia	**3,944,712**	**22.0**	**36.1**	**31.5**	**10.4**	**28.4**
Appalachian Virginia	292,776	32.4	35.8	25.1	6.7	23.9
Non-Appalachian Virginia	3,651,936	21.1	36.1	32.1	10.7	28.8
West Virginia (entire state)	**703,579**	**29.9**	**36.5**	**24.5**	**9.1**	**25.8**

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

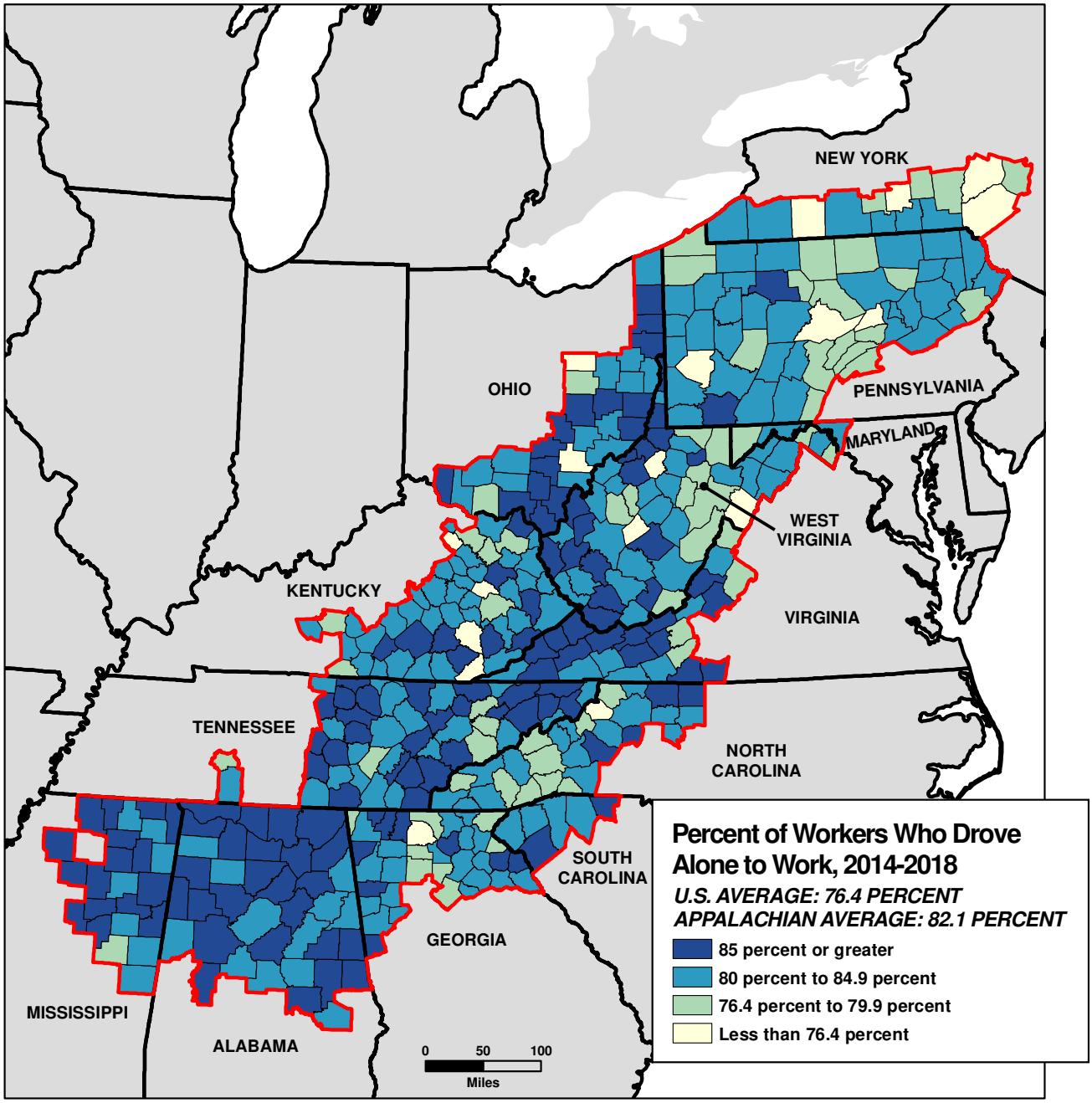
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Table 7.8: Place of Work (State and County Level) for Workers Ages 16 and Over in the Appalachian Region, 2014-2018

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	**150,571,044**	**72.3**	**27.7**	**24.0**	**3.7**
Appalachian Region	**11,094,867**	**68.1**	**31.9**	**27.4**	**4.5**
Subregions					
Northern Appalachia	3,723,867	73.5	26.5	22.2	4.3
North Central Appalachia	992,211	63.2	36.8	25.8	11.0
Central Appalachia	654,924	60.3	39.7	33.7	6.0
South Central Appalachia	2,103,611	70.7	29.3	26.2	3.1
Southern Appalachia	3,620,254	63.8	36.2	32.9	3.3
County Types					
Large Metros (pop. 1 million +)	2,869,040	63.5	36.5	33.9	2.6
Small Metros (pop. <1 million)	4,771,645	72.2	27.8	22.6	5.2
Nonmetro, Adjacent to Large Metros	909,249	66.8	33.2	29.2	4.0
Nonmetro, Adjacent to Small Metros	1,601,886	64.7	35.3	29.2	6.1
Rural (nonmetro, not adj. to a metro)	943,047	68.4	31.6	27.5	4.1
Alabama	**2,051,445**	**72.5**	**27.5**	**23.0**	**4.5**
Appalachian Alabama	1,335,639	71.1	28.9	26.0	2.9
Non-Appalachian Alabama	715,806	75.0	25.0	17.4	7.6
Georgia	**4,667,378**	**58.2**	**41.8**	**39.1**	**2.7**
Appalachian Georgia	1,469,219	52.8	47.2	43.4	3.8
Non-Appalachian Georgia	3,198,159	60.6	39.4	37.1	2.2
Kentucky	**1,929,677**	**67.8**	**32.2**	**25.7**	**6.5**
Appalachian Kentucky	411,341	62.6	37.4	32.8	4.7
Non-Appalachian Kentucky	1,518,336	69.2	30.8	23.8	7.0
Maryland	**3,021,967**	**53.8**	**46.2**	**29.4**	**16.8**
Appalachian Maryland	107,725	71.8	28.2	15.9	12.3
Non-Appalachian Maryland	2,914,242	53.1	46.9	29.9	17.0
Mississippi	**1,215,697**	**63.4**	**36.6**	**28.3**	**8.4**
Appalachian Mississippi	250,408	63.3	36.7	31.1	5.6
Non-Appalachian Mississippi	965,289	63.4	36.6	27.6	9.1
New York	**9,246,571**	**64.0**	**36.0**	**33.5**	**2.5**
Appalachian New York	455,989	76.9	23.1	20.5	2.6
Non-Appalachian New York	8,790,582	63.4	36.6	34.2	2.5
North Carolina	**4,660,377**	**71.3**	**28.7**	**26.1**	**2.6**
Appalachian North Carolina	759,904	71.8	28.2	25.7	2.5
Non-Appalachian North Carolina	3,900,473	71.1	28.9	26.2	2.7
Ohio	**5,442,764**	**69.6**	**30.4**	**27.7**	**2.7**
Appalachian Ohio	849,134	61.4	38.6	30.2	8.4
Non-Appalachian Ohio	4,593,630	71.1	28.9	27.2	1.7
Pennsylvania	**6,032,013**	**70.3**	**29.7**	**24.5**	**5.2**
Appalachian Pennsylvania	2,628,276	74.5	25.5	22.1	3.4
Non-Appalachian Pennsylvania	3,403,737	67.0	33.0	26.4	6.6
South Carolina	**2,215,014**	**70.2**	**29.8**	**24.4**	**5.4**
Appalachian South Carolina	564,988	75.1	24.9	22.7	2.2
Non-Appalachian South Carolina	1,650,026	68.5	31.5	25.0	6.5
Tennessee	**3,003,226**	**71.5**	**28.5**	**24.9**	**3.7**
Appalachian Tennessee	1,231,210	70.8	29.2	26.2	3.0
Non-Appalachian Tennessee	1,772,016	71.9	28.1	24.0	4.1
Virginia	**4,152,433**	**48.4**	**51.6**	**42.8**	**8.8**
Appalachian Virginia	303,242	58.9	41.1	32.8	8.3
Non-Appalachian Virginia	3,849,191	47.6	52.4	43.6	8.8
West Virginia (entire state)	**727,792**	**66.5**	**33.5**	**21.2**	**12.4**

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

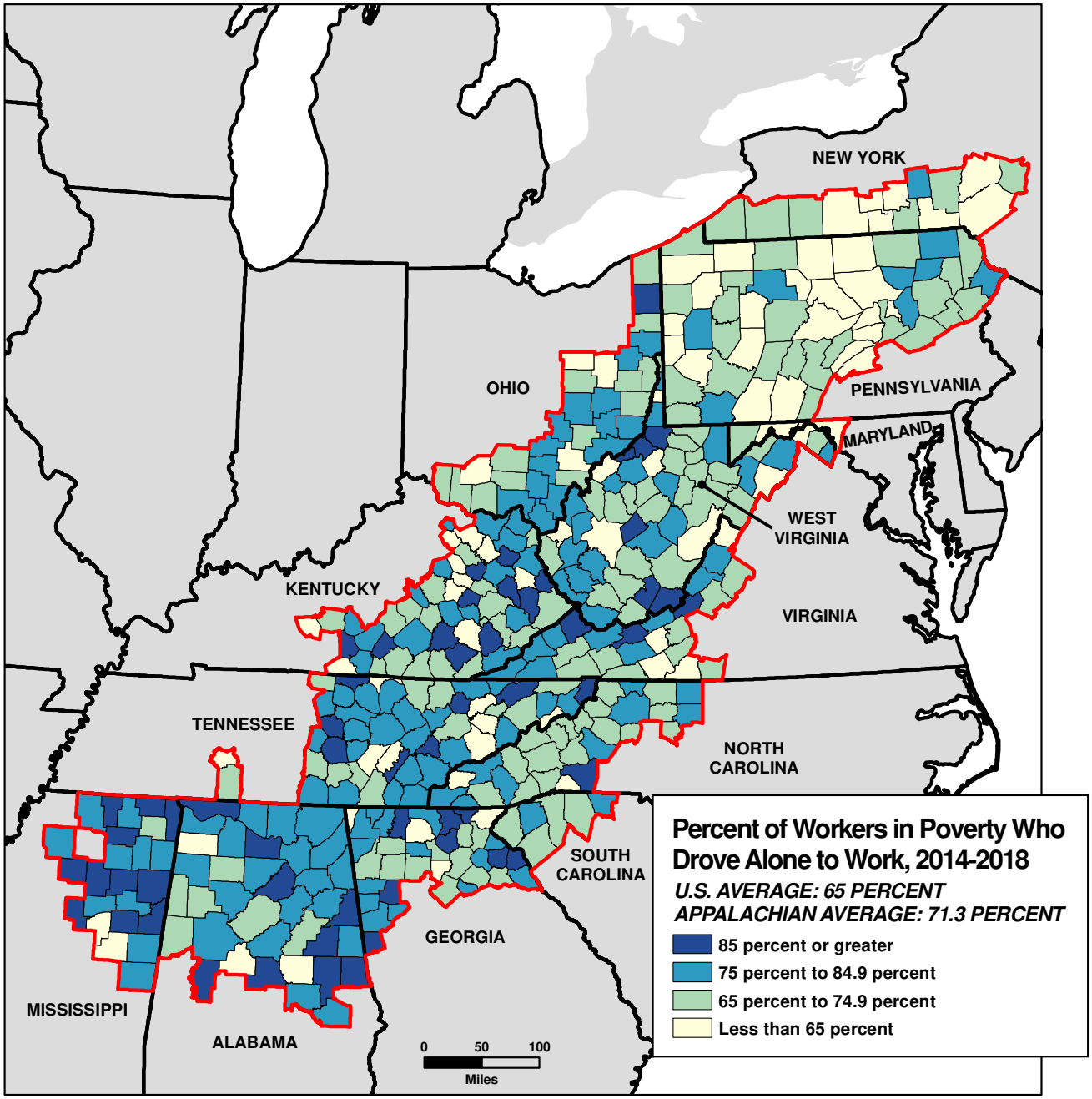
Figure 7.1: Percent of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2014-2018



Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In the 2014-2018 period, 82 percent of workers in the Appalachian Region drove alone to their jobs, which is nearly six percentage points higher than the nationwide share. And the percentage is even greater in much of Appalachia: In 139 Appalachian counties, at least 85 percent of workers drove alone. Central, South Central, and Southern Appalachia accounted for 110 of these counties, including 41 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 18 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.

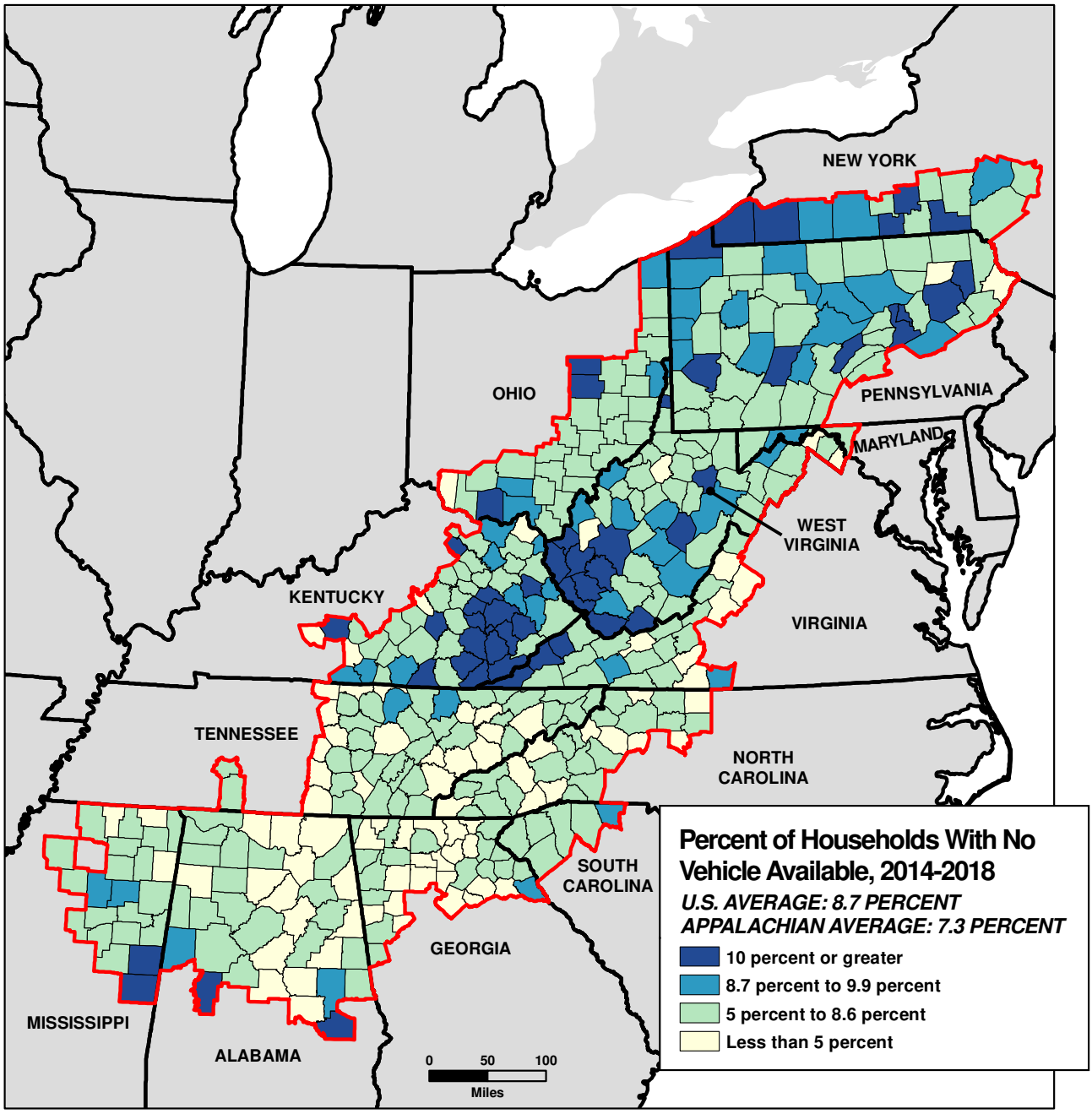
Figure 7.2: Percent of Workers Ages 16 and Over Below the Poverty Level in the Appalachian Region Who Drove Alone to Work, 2014-2018



Map Title: Percent of Workers Ages 16 and Over Below the Poverty Level in the Appalachian Region Who Drove Alone to Work, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Among workers with incomes below the poverty level ($25,465 for a family of two adults and two children in 2018), the share who drove alone to their places of employment was 71 percent in Appalachia, compared to just 65 percent in the nation as a whole. The share was at least 75 percent in nearly half of the Region's 420 counties, and at least 85 percent in 58 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, nearly half of the 75 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.

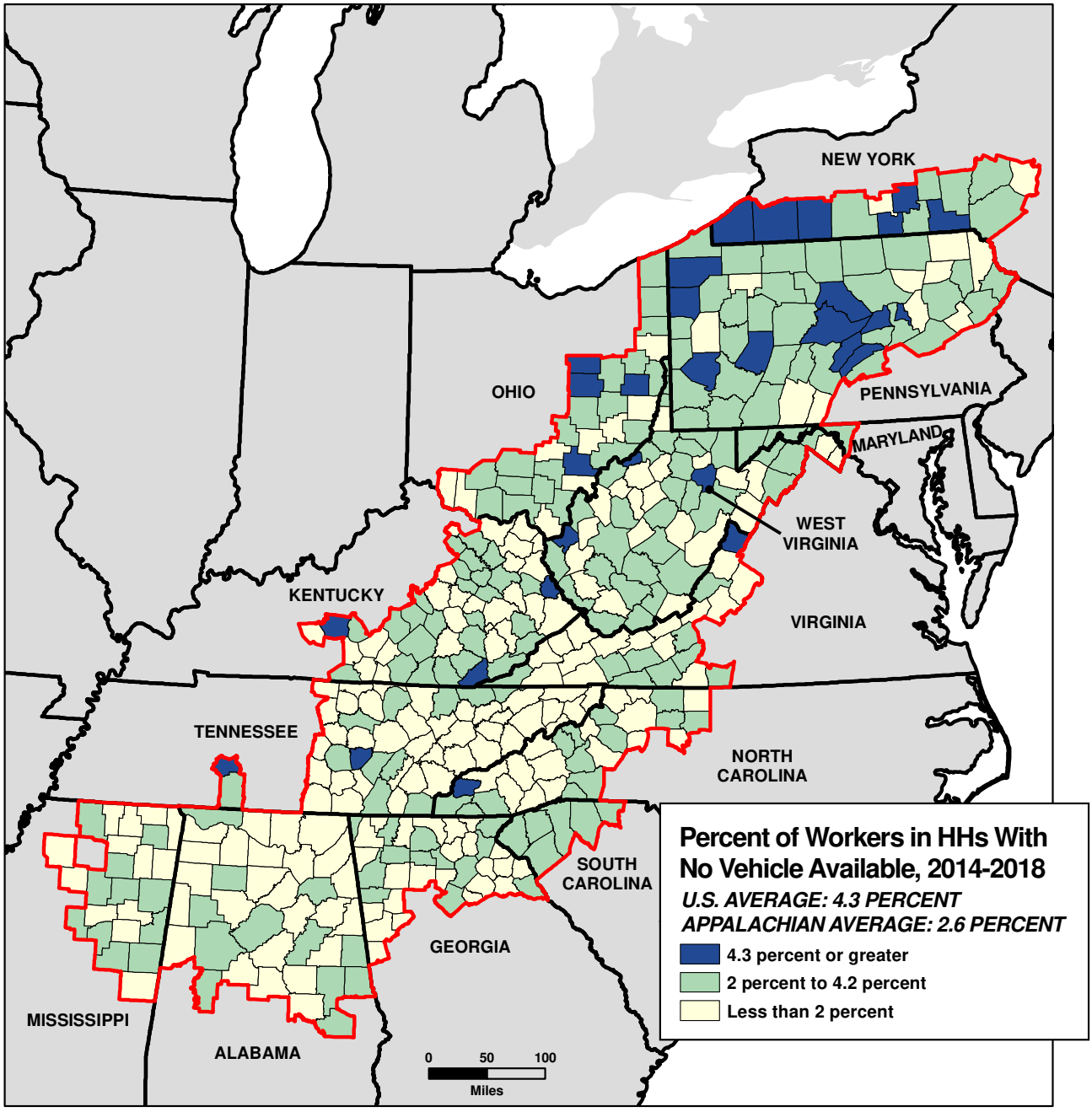
Figure 7.3: Percent of Households in the Appalachian Region With No Vehicle Available, 2014-2018



Map Title: Percent of Households in the Appalachian Region With No Vehicle Available, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Having a reliable mode of transportation is an important part of many household members' ability to gain and keep employment. Yet in Appalachia, just over 7 percent of households have no vehicle available to get to current and/or potential employment. While this is lower than the national average of almost 9 percent, that is not the case in much of the Region. In fact, there were 51 Appalachian counties where at least one in 10 households had no vehicle available; 41 of these counties were in four states—New York, Pennsylvania, West Virginia, and Kentucky. In contrast, there were 84 counties in the Region where less than 5 percent of households were without any motor vehicle. All but 16 of the counties in the latter group were in South Central and Southern Appalachia.

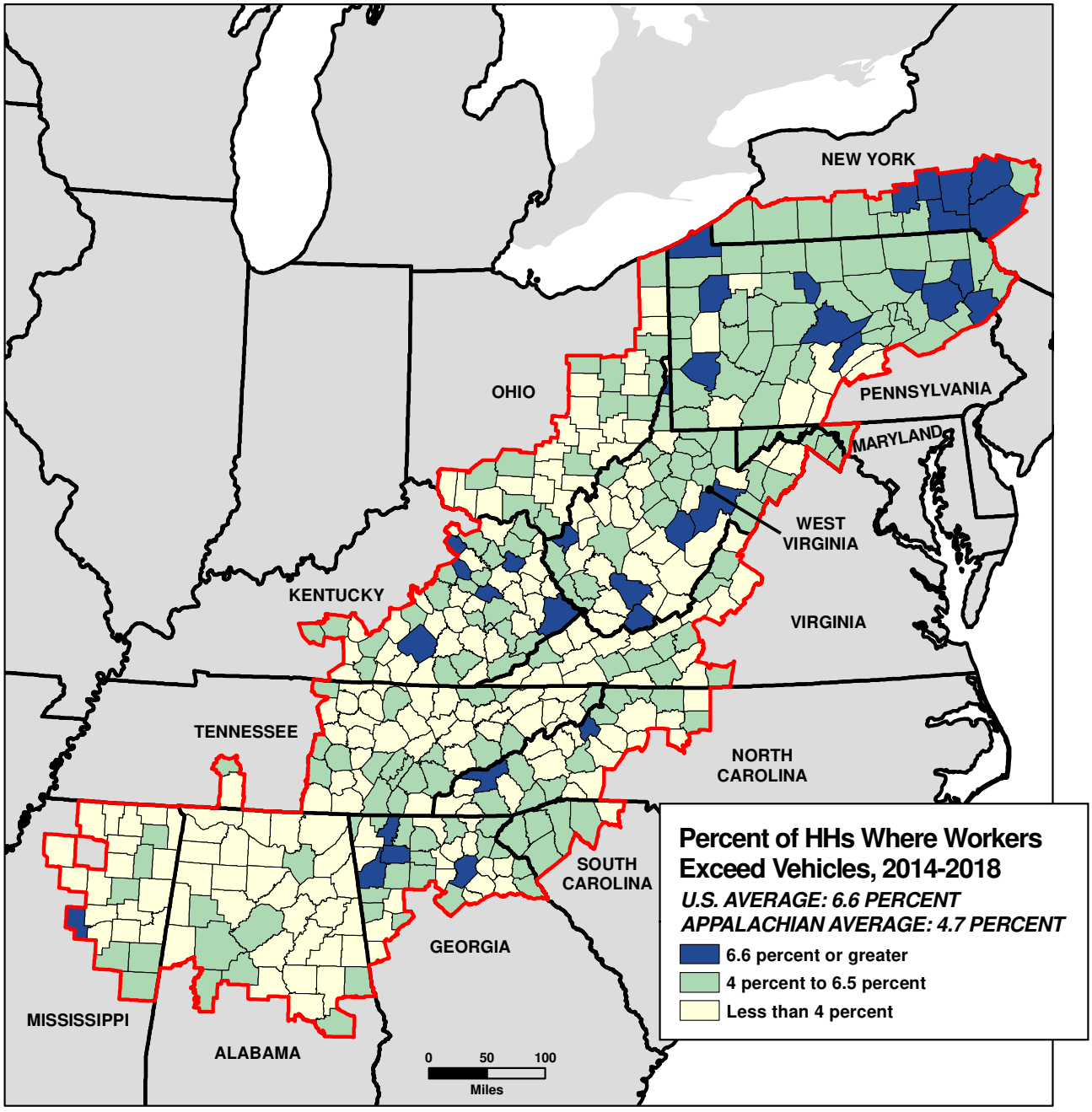
Figure 7.4: Percent of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2014-2018



Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 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 198 of Appalachia's 420 counties, less than 2 percent of the work force did not have a vehicle in their household. These counties were concentrated in Central, South Central, and Southern Appalachia; the share of workers without a vehicle was around 2 percent in all three subregions. In contrast, Northern Appalachia had 19 of the Region's 30 counties where the share of workers in zero-vehicle households was at or above the U.S. average.

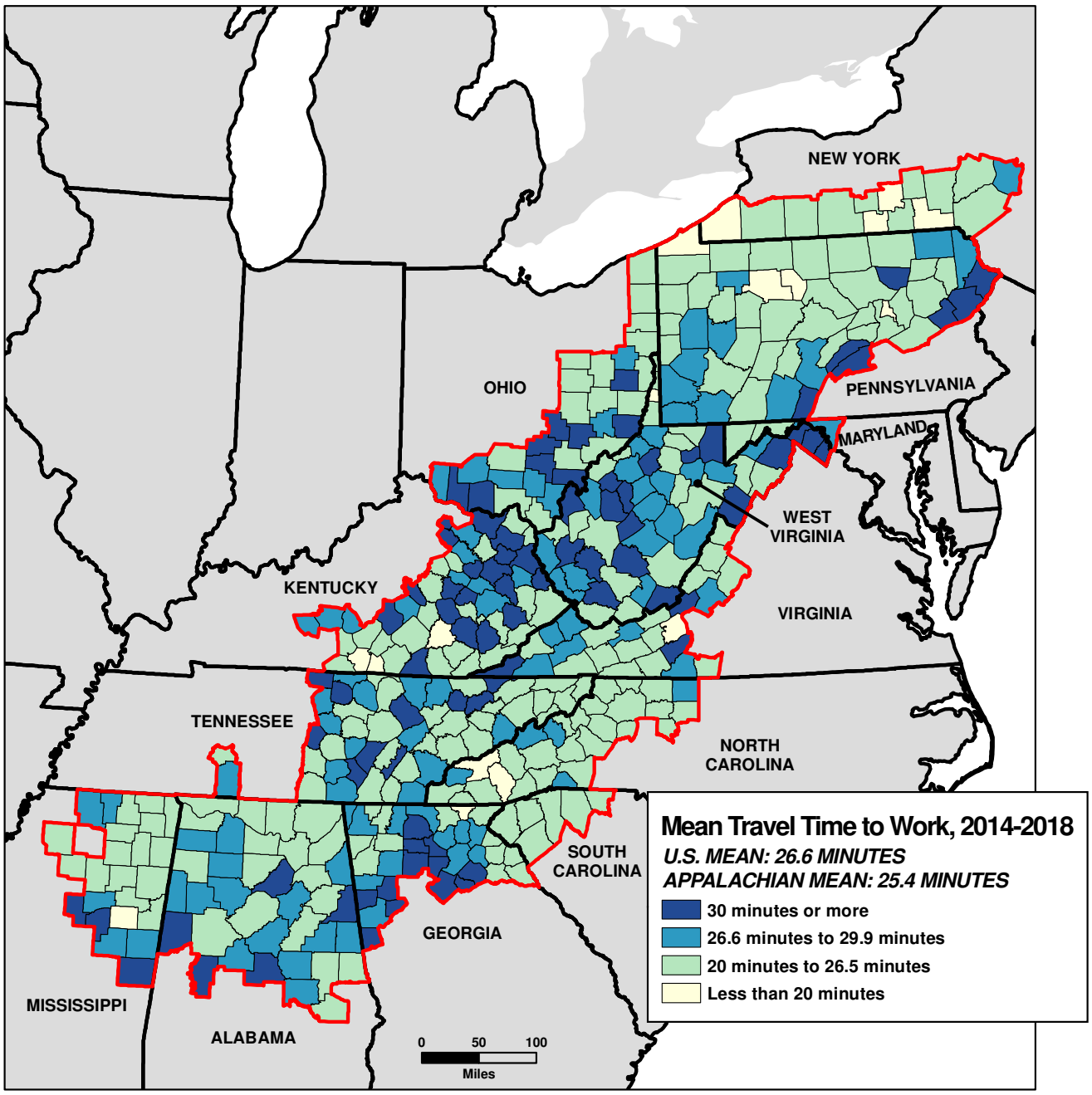
Figure 7.5: Percent of Households With One or More Workers in the Appalachian Region Where the Number of Workers Exceeds the Number of Vehicles Available, 2014-2018



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, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 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 half of Appalachia's 420 counties, mostly in Central, South Central, and Southern Appalachia. Yet in 35 Appalachian counties, the share of households with more workers than vehicles matched or exceeded the national average. Nearly half of the counties in the latter group were in two states: New York and Pennsylvania.

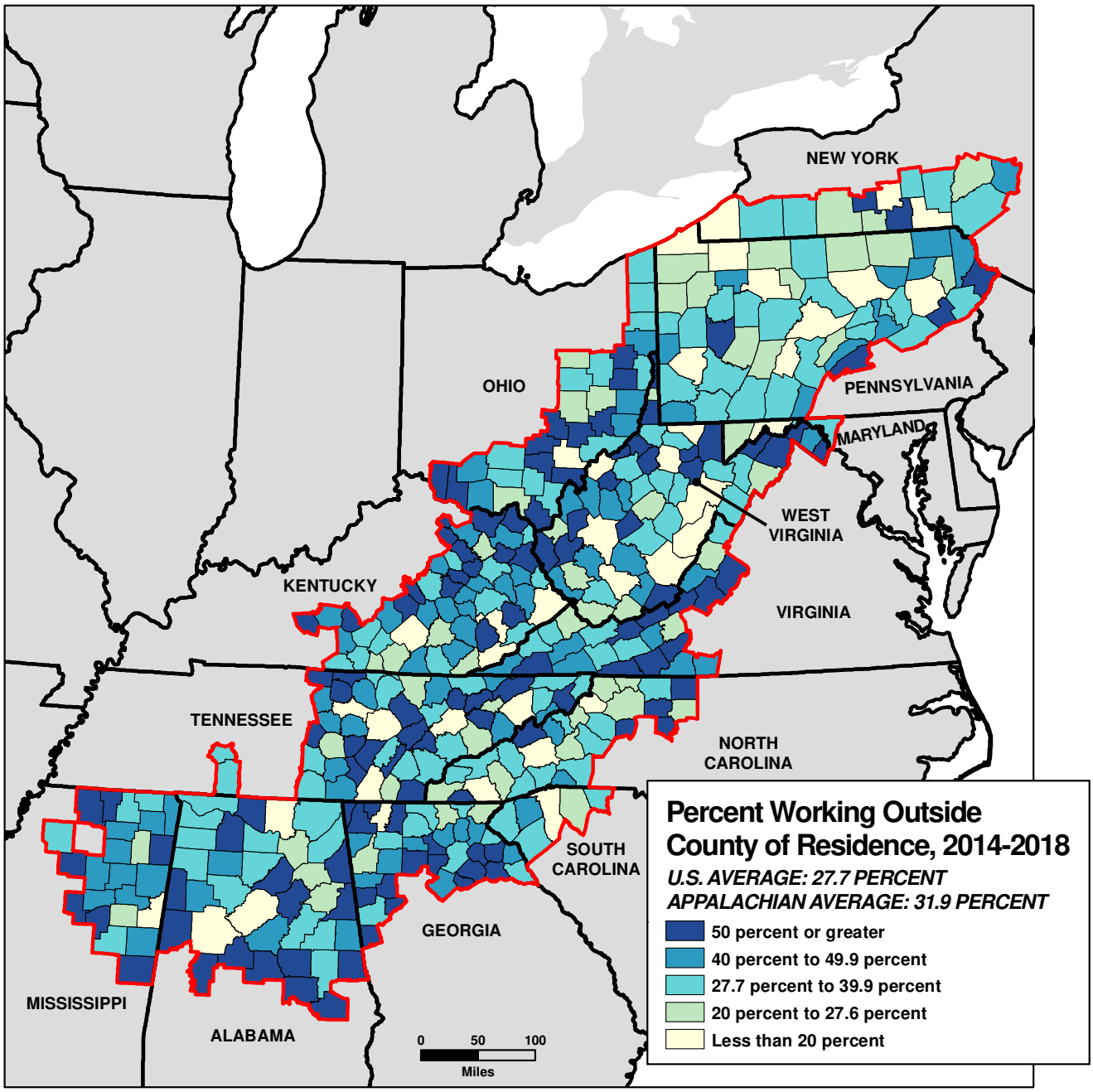
Figure 7.6: Mean Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, 2014-2018



Map Title: Mean Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In the Appalachian Region, workers ages 16 and older took, on average, 25.4 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 190 of the Region's 420 counties, the mean travel time to work was at or above the national average. And in 86 Appalachian counties, workers averaged a half hour or more to get to their jobs. Nearly half of these 86 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 48 nonmetropolitan counties—34 of which were in Kentucky, West Virginia, and Ohio—faced similarly lengthy commutes. By comparison, workers in just 17 Appalachian counties had average commutes lasting less than 20 minutes. Some of these counties were home to colleges and universities (for example, Tompkins County, New York, home to Cornell University and Ithaca College).

Figure 7.7: Percent of Workers Ages 16 and Over in the Appalachian Region Who Work Outside Their County of Residence, 2014-2018



Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Work Outside Their County of Residence, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

About 32 percent of Appalachian workers ages 16 and older had jobs outside their county of residence during 2014-2018, four percentage points above the average nationwide. And the share is even higher in much of the Region: In 207 of Appalachia's 420 counties, at least 40 percent of workers had their primary employment outside their county of residence. And in 122 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 Putnam County, Tennessee, home to Tennessee Technological University).

Table 7.9: Percentage Point Change in Means of Transportation for Workers Ages 16 and Over in the Appalachian Region, 2009-2013 to 2014-2018

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

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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, 2009-2013 to 2014-2018

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	**+ 1.5**	**- 1.1**	**- 0.2**	**- 0.3**	**- 0.1**	**+ 0.2**
Appalachian Region	**+ 0.6**	**- 0.9**	**+ 0.2**	**- 0.3**	**- 0.1**	**+ 0.3**
Subregions						
Northern Appalachia	+ 0.2	+ 0.3	+ 0.7	- 0.9	- 0.2	+ 0.1
North Central Appalachia	- 0.9	+ 0.6	+ 0.3	- 1.1	+ 1.0	+ 0.1
Central Appalachia	+ 0.3	- 0.7	+ 0.3	- 0.4	- 0.1	+ 0.7
South Central Appalachia	- 0.5	- 0.7	+ 0.1	- 0.1	+ 0.3	+ 0.8
Southern Appalachia	+ 2.4	- 2.5	- 0.1	+ 0.3	- 0.3	+ 0.2
County Types						
Large Metros (pop. 1 million +)	+ 0.2	- 0.6	+ 0.7	+ 0.4	- 1.0	+ 0.1
Small Metros (pop. <1 million)	+ 0.2	- 0.6	+ 0.1	- 0.4	+ 0.2	+ 0.4
Nonmetro, Adjacent to Large Metros	+ 0.3	- 0.9	+ 0.0	- 0.3	+ 0.5	+ 0.4
Nonmetro, Adjacent to Small Metros	+ 0.7	- 0.5	+ 0.1	- 0.6	- 0.1	+ 0.3
Rural (nonmetro, not adj. to a metro)	+ 2.4	- 2.8	+ 0.1	- 0.4	+ 0.4	+ 0.4
Alabama	**+ 2.7**	**- 2.3**	**- 0.4**	**- 0.1**	**- 0.3**	**+ 0.4**
Appalachian Alabama	+ 2.1	- 2.1	- 0.3	+ 0.1	- 0.1	+ 0.3
Non-Appalachian Alabama	+ 3.7	- 2.8	- 0.6	- 0.4	- 0.5	+ 0.6
Georgia	**+ 2.0**	**- 2.8**	**+ 0.2**	**- 0.1**	**+ 0.0**	**+ 0.7**
Appalachian Georgia	+ 2.8	- 2.3	+ 0.0	+ 0.6	- 1.0	- 0.1
Non-Appalachian Georgia	+ 1.7	- 2.9	+ 0.1	- 0.4	+ 0.5	+ 1.0
Kentucky	**- 0.4**	**- 0.9**	**+ 0.2**	**- 0.1**	**+ 0.6**	**+ 0.6**
Appalachian Kentucky	+ 1.9	- 1.3	+ 0.1	- 0.9	+ 0.1	+ 0.1
Non-Appalachian Kentucky	- 1.2	- 0.6	+ 0.2	+ 0.1	+ 0.8	+ 0.8
Maryland	**+ 2.8**	**- 0.2**	**- 2.5**	**- 0.8**	**+ 0.2**	**+ 0.5**
Appalachian Maryland	+ 2.0	- 0.8	+ 0.8	- 2.2	+ 0.1	+ 0.3
Non-Appalachian Maryland	+ 2.8	- 0.2	- 2.8	- 0.7	+ 0.2	+ 0.5
Mississippi	**+ 5.0**	**- 4.3**	**- 0.7**	**- 0.6**	**+ 0.5**	**+ 0.0**
Appalachian Mississippi	+ 8.0	- 7.8	- 0.8	- 0.7	+ 0.5	+ 0.9
Non-Appalachian Mississippi	+ 4.3	- 3.5	- 0.6	- 0.6	+ 0.4	- 0.2
New York	**+ 1.4**	**+ 0.0**	**- 0.1**	**- 0.7**	**- 0.2**	**- 0.3**
Appalachian New York	+ 2.5	- 1.3	+ 0.6	- 2.1	+ 0.0	+ 0.3
Non-Appalachian New York	+ 1.3	+ 0.1	- 0.2	- 0.7	- 0.2	- 0.3
North Carolina	**+ 2.8**	**- 1.9**	**- 0.6**	**- 0.5**	**- 0.3**	**+ 0.4**
Appalachian North Carolina	+ 1.1	- 1.5	- 0.3	- 0.4	+ 0.2	+ 1.0
Non-Appalachian North Carolina	+ 3.4	- 2.1	- 0.7	- 0.5	- 0.4	+ 0.3
Ohio	**- 0.4**	**- 0.1**	**- 0.1**	**- 0.1**	**+ 0.8**	**+ 0.0**
Appalachian Ohio	+ 0.0	+ 0.5	- 0.2	- 0.5	+ 0.9	- 0.7
Non-Appalachian Ohio	- 0.5	- 0.2	+ 0.0	- 0.1	+ 0.8	+ 0.2
Pennsylvania	**- 0.4**	**+ 1.0**	**+ 0.6**	**- 0.8**	**- 0.2**	**- 0.2**
Appalachian Pennsylvania	- 0.6	+ 0.8	+ 0.9	- 0.9	- 0.3	+ 0.1
Non-Appalachian Pennsylvania	+ 0.1	+ 1.2	- 0.1	- 0.7	+ 0.0	- 0.5
South Carolina	**+ 1.2**	**- 0.6**	**+ 0.0**	**- 0.3**	**- 0.6**	**+ 0.3**
Appalachian South Carolina	- 1.7	- 0.4	+ 0.5	+ 0.5	+ 0.3	+ 0.8
Non-Appalachian South Carolina	+ 2.1	- 0.7	- 0.2	- 0.5	- 0.8	+ 0.2
Tennessee	**+ 0.9**	**- 1.1**	**- 0.1**	**- 0.4**	**+ 0.3**	**+ 0.4**
Appalachian Tennessee	- 1.8	+ 0.6	- 0.1	+ 0.2	+ 0.1	+ 1.0
Non-Appalachian Tennessee	+ 3.3	- 2.5	- 0.2	- 0.8	+ 0.3	- 0.1
Virginia	**+ 0.9**	**- 1.4**	**+ 0.2**	**- 0.5**	**+ 0.9**	**+ 0.0**
Appalachian Virginia	- 1.5	- 2.1	+ 1.7	- 0.1	+ 0.8	+ 1.0
Non-Appalachian Virginia	+ 1.4	- 1.3	- 0.2	- 0.6	+ 0.9	- 0.1
West Virginia (entire state)	**- 1.1**	**- 0.1**	**+ 0.6**	**- 0.4**	**+ 0.3**	**+ 0.7**

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2018, the poverty threshold for a family of two adults and two children was $25,465. 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, 2009-2013 and 2014-2018 American Community Surveys.

Table 7.11: Percentage Point Change in Availability of Vehicles for Households in the Appalachian Region, 2009-2013 to 2014-2018

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

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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, 2009-2013 to 2014-2018

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	**- 0.1**	**+ 0.0**	**- 0.2**	**- 1.3**	**+ 0.4**	**+ 0.5**	**- 0.4**
Appalachian Region	**+ 0.0**	**- 0.1**	**+ 0.5**	**+ 2.8**	**+ 2.0**	**+ 3.1**	**- 0.3**
Subregions							
Northern Appalachia	+ 0.2	+ 0.0	+ 1.3	+ 2.9	+ 2.6	+ 1.5	- 0.1
North Central Appalachia	+ 0.2	+ 0.1	+ 0.3	+ 5.0	+ 2.7	+ 3.1	- 0.3
Central Appalachia	+ 0.1	- 0.1	+ 0.7	+ 0.0	+ 1.9	+ 0.4	+ 0.6
South Central Appalachia	- 0.1	- 0.1	+ 0.2	- 2.5	- 0.8	+ 2.7	- 0.3
Southern Appalachia	+ 0.0	- 0.1	- 0.2	+ 4.1	+ 2.2	+ 6.1	- 0.1
County Types							
Large Metros (pop. 1 million +)	+ 0.0	- 0.2	+ 0.7	+ 2.9	+ 1.3	+ 5.2	+ 0.0
Small Metros (pop. <1 million)	+ 0.0	- 0.1	+ 0.1	+ 1.7	+ 1.3	+ 2.0	- 0.3
Nonmetro, Adjacent to Large Metros	+ 0.3	+ 0.1	+ 0.7	+ 7.1	+ 5.6	+ 3.8	+ 1.2
Nonmetro, Adjacent to Small Metros	+ 0.2	+ 0.2	+ 1.2	- 1.4	+ 1.1	+ 1.5	+ 0.4
Rural (nonmetro, not adj. to a metro)	+ 0.0	+ 0.0	- 0.2	+ 7.0	+ 2.7	+ 2.6	- 1.9
Alabama	**- 0.2**	**- 0.1**	**- 0.9**	**+ 3.7**	**+ 3.1**	**+ 3.4**	**+ 0.2**
Appalachian Alabama	- 0.2	- 0.1	- 1.0	+ 4.9	+ 3.1	+ 2.5	+ 0.2
Non-Appalachian Alabama	- 0.1	+ 0.0	- 0.6	+ 1.1	+ 3.3	+ 4.7	+ 0.2
Georgia	**+ 0.0**	**+ 0.0**	**+ 0.3**	**+ 2.6**	**- 1.7**	**+ 1.7**	**+ 0.1**
Appalachian Georgia	+ 0.1	- 0.1	+ 0.6	+ 5.5	+ 1.2	+ 8.6	+ 0.0
Non-Appalachian Georgia	+ 0.0	+ 0.0	+ 0.2	+ 2.3	- 2.5	- 1.2	+ 0.1
Kentucky	**+ 0.1**	**+ 0.0**	**+ 0.5**	**+ 3.1**	**+ 0.3**	**+ 1.6**	**- 0.1**
Appalachian Kentucky	+ 0.0	- 0.1	+ 0.7	+ 2.0	- 0.5	- 0.2	+ 0.4
Non-Appalachian Kentucky	+ 0.1	+ 0.0	+ 0.4	+ 2.2	+ 0.6	+ 2.1	- 0.1
Maryland	**- 0.3**	**- 0.1**	**- 0.2**	**- 1.6**	**- 1.4**	**- 3.1**	**- 0.1**
Appalachian Maryland	+ 0.1	+ 0.0	+ 0.0	+ 2.8	+ 3.3	- 10.7	+ 1.0
Non-Appalachian Maryland	- 0.4	- 0.1	- 0.3	- 1.5	- 1.5	- 2.8	+ 0.0
Mississippi	**- 0.2**	**+ 0.0**	**- 0.2**	**- 6.7**	**- 4.3**	**- 3.8**	**- 0.4**
Appalachian Mississippi	- 0.3	- 0.1	- 1.9	+ 7.3	- 4.6	+ 12.6	- 0.1
Non-Appalachian Mississippi	- 0.2	+ 0.1	+ 0.3	- 10.0	- 4.3	- 6.6	- 0.5
New York	**+ 0.0**	**- 0.2**	**- 0.4**	**- 1.2**	**+ 0.2**	**+ 0.7**	**- 1.1**
Appalachian New York	+ 0.1	+ 0.1	+ 1.5	+ 6.2	+ 0.0	- 4.2	+ 0.6
Non-Appalachian New York	+ 0.0	- 0.2	- 0.5	- 1.3	+ 0.0	+ 0.8	- 1.4
North Carolina	**- 0.4**	**- 0.1**	**- 1.0**	**- 5.7**	**- 0.7**	**+ 1.1**	**- 0.1**
Appalachian North Carolina	- 0.4	- 0.2	- 0.9	- 4.8	- 2.3	+ 1.8	+ 0.4
Non-Appalachian North Carolina	- 0.3	+ 0.0	- 1.0	- 5.9	- 0.3	+ 1.0	- 0.1
Ohio	**+ 0.1**	**+ 0.0**	**+ 0.9**	**+ 1.7**	**+ 0.7**	**+ 3.6**	**- 0.3**
Appalachian Ohio	+ 0.3	+ 0.1	+ 1.3	+ 9.4	+ 4.0	+ 1.3	- 1.2
Non-Appalachian Ohio	+ 0.1	+ 0.0	+ 0.9	+ 1.3	- 0.1	+ 4.0	- 0.1
Pennsylvania	**+ 0.2**	**- 0.1**	**+ 1.3**	**- 0.7**	**+ 1.9**	**+ 2.4**	**- 0.4**
Appalachian Pennsylvania	+ 0.3	+ 0.0	+ 1.1	+ 2.4	+ 3.1	+ 2.7	- 0.2
Non-Appalachian Pennsylvania	+ 0.0	- 0.1	+ 1.5	- 1.6	+ 0.7	+ 1.7	- 0.6
South Carolina	**- 0.2**	**- 0.1**	**+ 0.1**	**- 3.4**	**+ 1.0**	**- 2.3**	**- 0.9**
Appalachian South Carolina	+ 0.1	+ 0.1	- 0.2	- 1.5	+ 5.9	+ 0.7	- 0.8
Non-Appalachian South Carolina	- 0.3	- 0.2	+ 0.3	- 3.2	- 0.4	- 3.0	- 0.9
Tennessee	**- 0.1**	**+ 0.0**	**+ 0.0**	**+ 0.5**	**+ 1.5**	**+ 0.9**	**- 0.5**
Appalachian Tennessee	+ 0.0	- 0.1	+ 1.1	- 1.9	+ 2.1	+ 1.6	- 0.6
Non-Appalachian Tennessee	- 0.1	+ 0.0	- 0.8	+ 1.2	+ 1.2	+ 0.2	- 0.6
Virginia	**+ 0.0**	**+ 0.0**	**+ 0.2**	**- 1.5**	**- 2.0**	**+ 2.7**	**+ 0.0**
Appalachian Virginia	+ 0.0	+ 0.1	+ 0.1	+ 0.3	- 2.5	+ 5.3	- 1.1
Non-Appalachian Virginia	+ 0.0	+ 0.0	+ 0.2	- 1.5	- 2.0	+ 2.6	+ 0.0
West Virginia (entire state)	**+ 0.2**	**+ 0.0**	**+ 0.5**	**+ 3.6**	**+ 2.0**	**+ 2.3**	**+ 0.0**

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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, 2009-2013 to 2014-2018

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

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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, 2009-2013 to 2014-2018

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**	**- 0.3**	**+ 1.3**	**+ 1.0**	**+ 1.1**
Appalachian Region	**- 1.7**	**+ 0.2**	**+ 1.0**	**+ 0.6**	**+ 0.8**
Subregions					
Northern Appalachia	- 1.7	+ 0.3	+ 1.0	+ 0.5	+ 0.7
North Central Appalachia	- 1.1	+ 0.4	+ 0.7	- 0.1	+ 0.2
Central Appalachia	- 0.8	- 0.2	+ 0.6	+ 0.4	+ 0.5
South Central Appalachia	- 1.3	+ 0.1	+ 1.0	+ 0.1	+ 0.3
Southern Appalachia	- 2.0	+ 0.0	+ 0.8	+ 1.2	+ 1.1
County Types					
Large Metros (pop. 1 million +)	- 1.5	- 0.5	+ 0.8	+ 1.4	+ 1.2
Small Metros (pop. <1 million)	- 2.1	+ 0.8	+ 1.2	+ 0.2	+ 0.6
Nonmetro, Adjacent to Large Metros	- 0.8	- 0.6	+ 1.0	+ 0.5	+ 0.6
Nonmetro, Adjacent to Small Metros	- 0.9	- 0.1	+ 0.7	+ 0.3	+ 0.4
Rural (nonmetro, not adj. to a metro)	- 1.1	+ 0.4	+ 0.4	+ 0.3	+ 0.6
Alabama	**- 1.7**	**+ 0.2**	**+ 1.2**	**+ 0.2**	**+ 0.5**
Appalachian Alabama	- 1.2	+ 0.4	+ 0.6	+ 0.1	+ 0.4
Non-Appalachian Alabama	- 2.5	- 0.2	+ 2.2	+ 0.3	+ 1.0
Georgia	**- 1.6**	**- 1.0**	**+ 0.8**	**+ 1.8**	**+ 1.4**
Appalachian Georgia	- 1.8	- 0.8	+ 0.1	+ 2.5	+ 1.8
Non-Appalachian Georgia	- 1.5	- 1.0	+ 1.1	+ 1.4	+ 1.3
Kentucky	**- 1.3**	**- 0.4**	**+ 1.4**	**+ 0.4**	**+ 0.5**
Appalachian Kentucky	- 0.7	- 0.7	+ 0.9	+ 0.4	+ 0.5
Non-Appalachian Kentucky	- 1.4	- 0.4	+ 1.6	+ 0.3	+ 0.6
Maryland	**- 1.2**	**- 0.5**	**+ 0.7**	**+ 1.0**	**+ 0.9**
Appalachian Maryland	- 2.8	+ 1.3	+ 0.5	+ 1.1	+ 1.1
Non-Appalachian Maryland	- 1.0	- 0.5	+ 0.6	+ 1.0	+ 0.9
Mississippi	**- 1.7**	**+ 0.6**	**+ 0.9**	**+ 0.2**	**+ 0.7**
Appalachian Mississippi	- 4.6	+ 3.9	+ 1.1	- 0.4	+ 0.7
Non-Appalachian Mississippi	- 1.0	- 0.3	+ 0.9	+ 0.4	+ 0.7
New York	**- 2.0**	**- 0.8**	**+ 1.1**	**+ 1.7**	**+ 1.7**
Appalachian New York	- 1.7	+ 1.2	+ 0.5	+ 0.1	+ 0.5
Non-Appalachian New York	- 2.0	- 0.9	+ 1.2	+ 1.8	+ 1.8
North Carolina	**- 1.7**	**- 0.4**	**+ 1.5**	**+ 0.7**	**+ 0.9**
Appalachian North Carolina	- 1.7	+ 0.4	+ 1.2	+ 0.1	+ 0.5
Non-Appalachian North Carolina	- 1.7	- 0.6	+ 1.4	+ 0.8	+ 1.0
Ohio	**- 1.3**	**+ 0.2**	**+ 1.1**	**+ 0.1**	**+ 0.5**
Appalachian Ohio	- 0.9	+ 0.4	+ 0.5	- 0.1	+ 0.4
Non-Appalachian Ohio	- 1.4	+ 0.0	+ 1.2	+ 0.2	+ 0.4
Pennsylvania	**- 2.0**	**- 0.3**	**+ 1.5**	**+ 0.8**	**+ 1.0**
Appalachian Pennsylvania	- 1.7	- 0.1	+ 1.2	+ 0.5	+ 0.8
Non-Appalachian Pennsylvania	- 2.2	- 0.4	+ 1.7	+ 0.9	+ 1.1
South Carolina	**- 2.3**	**- 0.6**	**+ 2.3**	**+ 0.7**	**+ 1.1**
Appalachian South Carolina	- 2.2	- 0.9	+ 2.7	+ 0.4	+ 1.0
Non-Appalachian South Carolina	- 2.3	- 0.6	+ 2.0	+ 0.8	+ 1.1
Tennessee	**- 1.4**	**- 0.3**	**+ 0.9**	**+ 0.7**	**+ 0.7**
Appalachian Tennessee	- 1.0	+ 0.0	+ 0.8	+ 0.1	+ 0.3
Non-Appalachian Tennessee	- 1.5	- 0.4	+ 0.8	+ 1.2	+ 1.0
Virginia	**- 1.3**	**- 0.4**	**+ 1.2**	**+ 0.5**	**+ 0.7**
Appalachian Virginia	- 0.9	+ 0.2	+ 0.5	+ 0.3	+ 0.4
Non-Appalachian Virginia	- 1.4	- 0.5	+ 1.3	+ 0.5	+ 0.8
West Virginia (entire state)	**- 1.6**	**+ 0.9**	**+ 0.8**	**+ 0.0**	**+ 0.3**

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

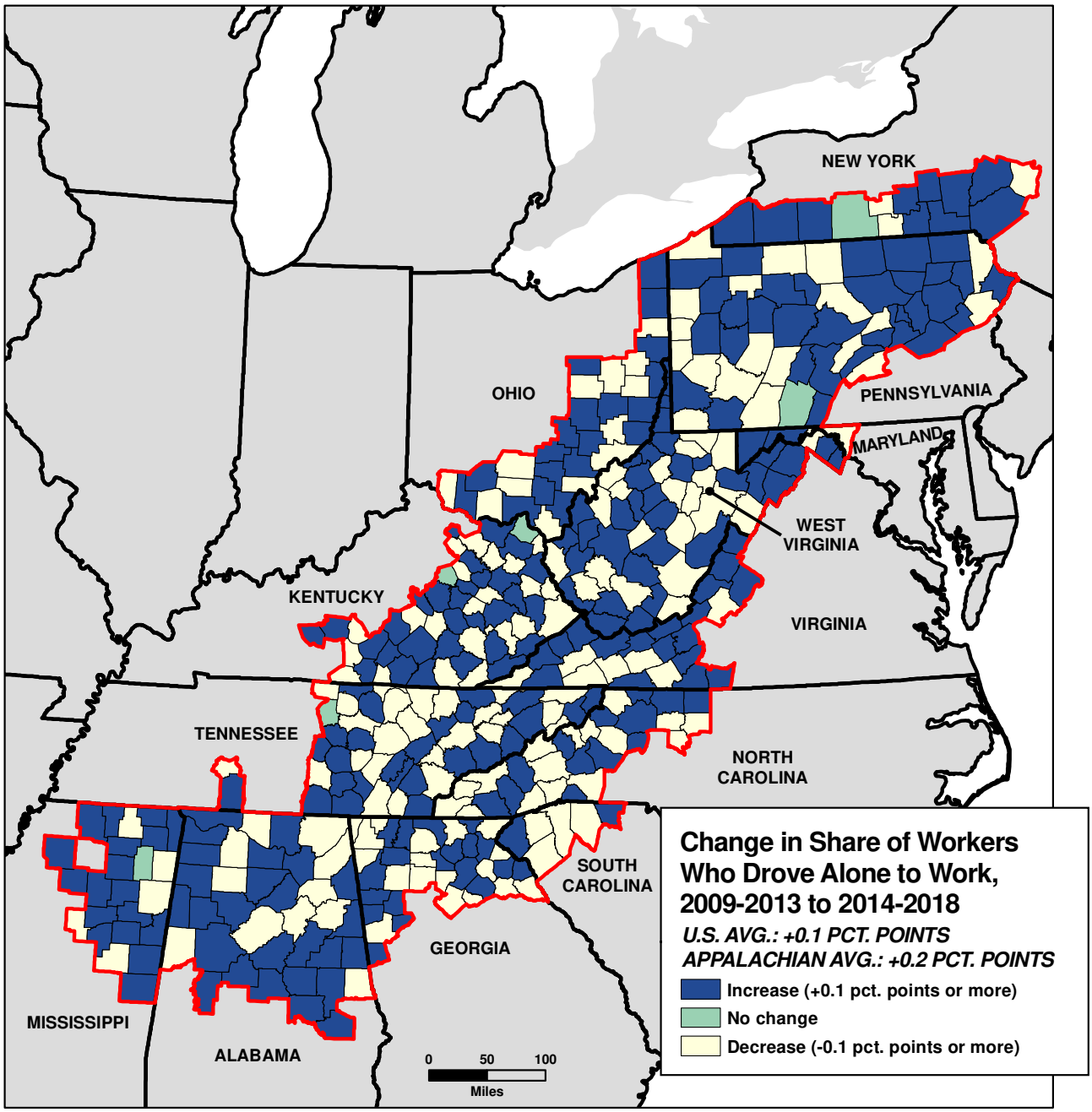
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

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), 2009-2013 to 2014-2018

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

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

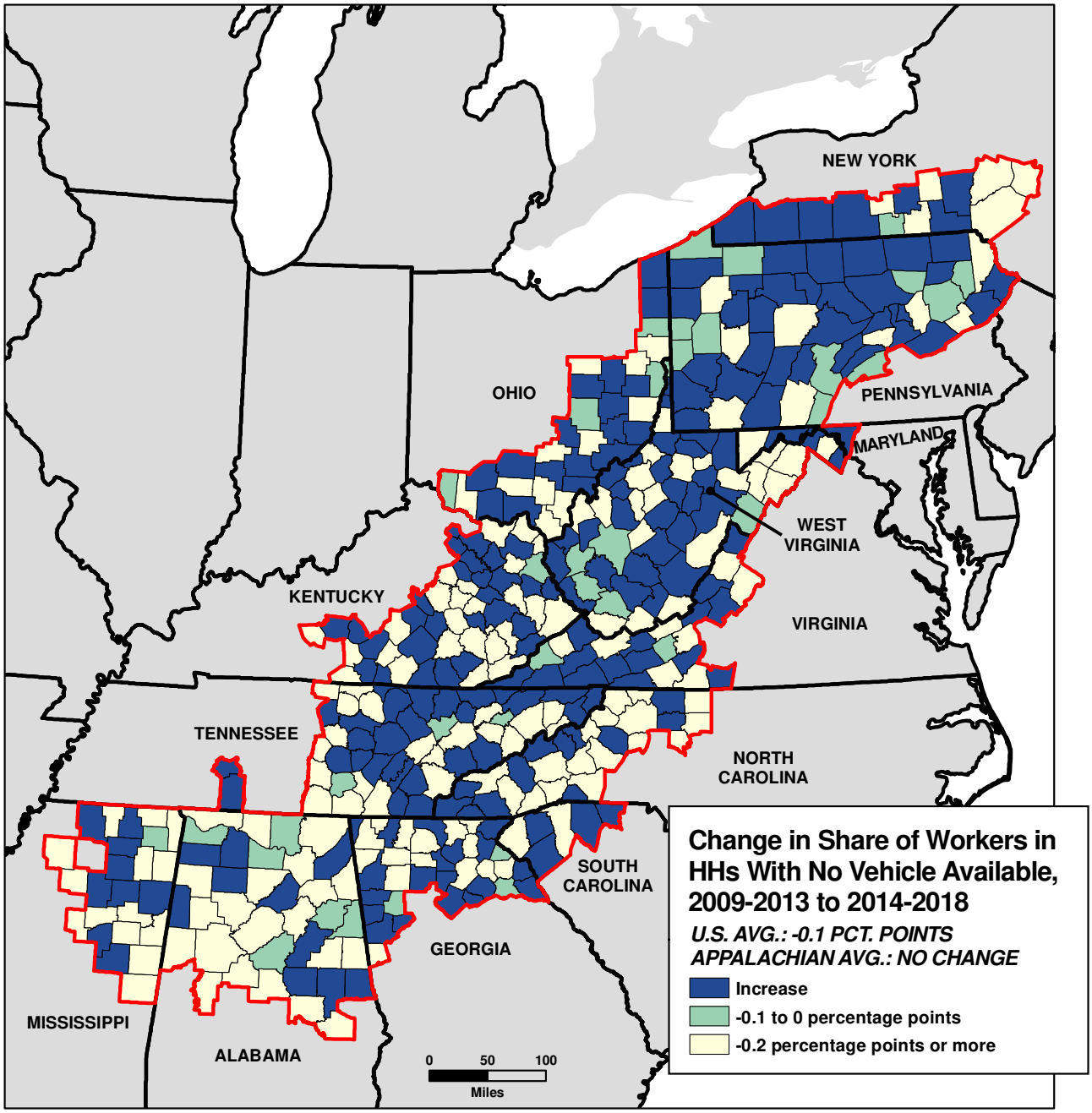
Figure 7.8: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2009-2013 to 2014-2018



Map Title: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

The share of Appalachian workers who drove alone to work barely increased between 2009-2013 and 2014-2018, as was the case nationwide. But while the share also increased in 249 Appalachian counties, there were 165 counties where the percentage driving alone fell between the two periods. Counties in both groups were scattered throughout the Region and across all rural-urban county types.

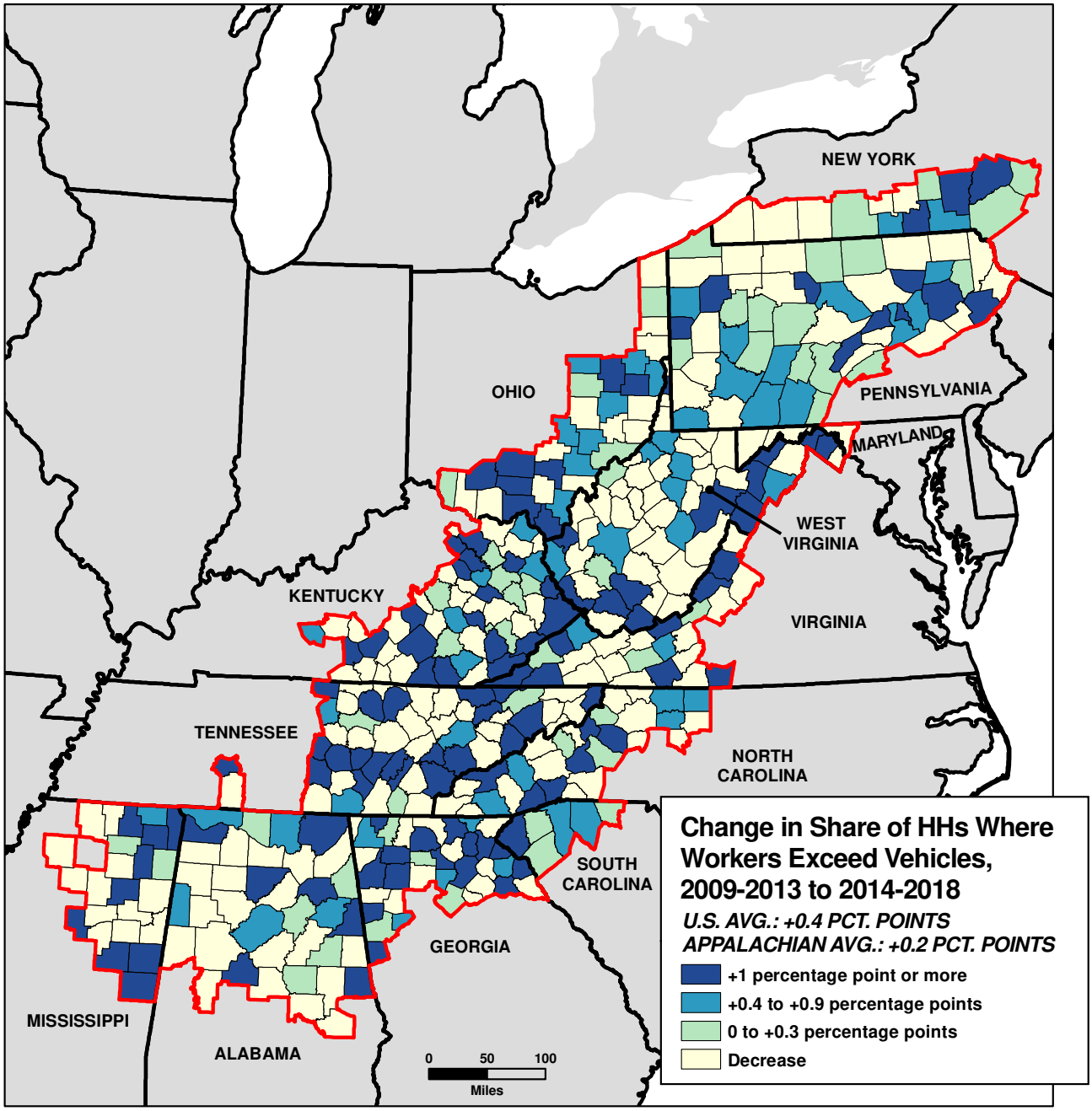
Figure 7.9: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2009-2013 to 2014-2018



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, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Between the 2009-2013 and 2014-2018 periods, the share of workers in households with no vehicle available remained unchanged in Appalachia and barely declined nationwide. Yet the percentage actually increased in more than half of the Region's 420 counties.

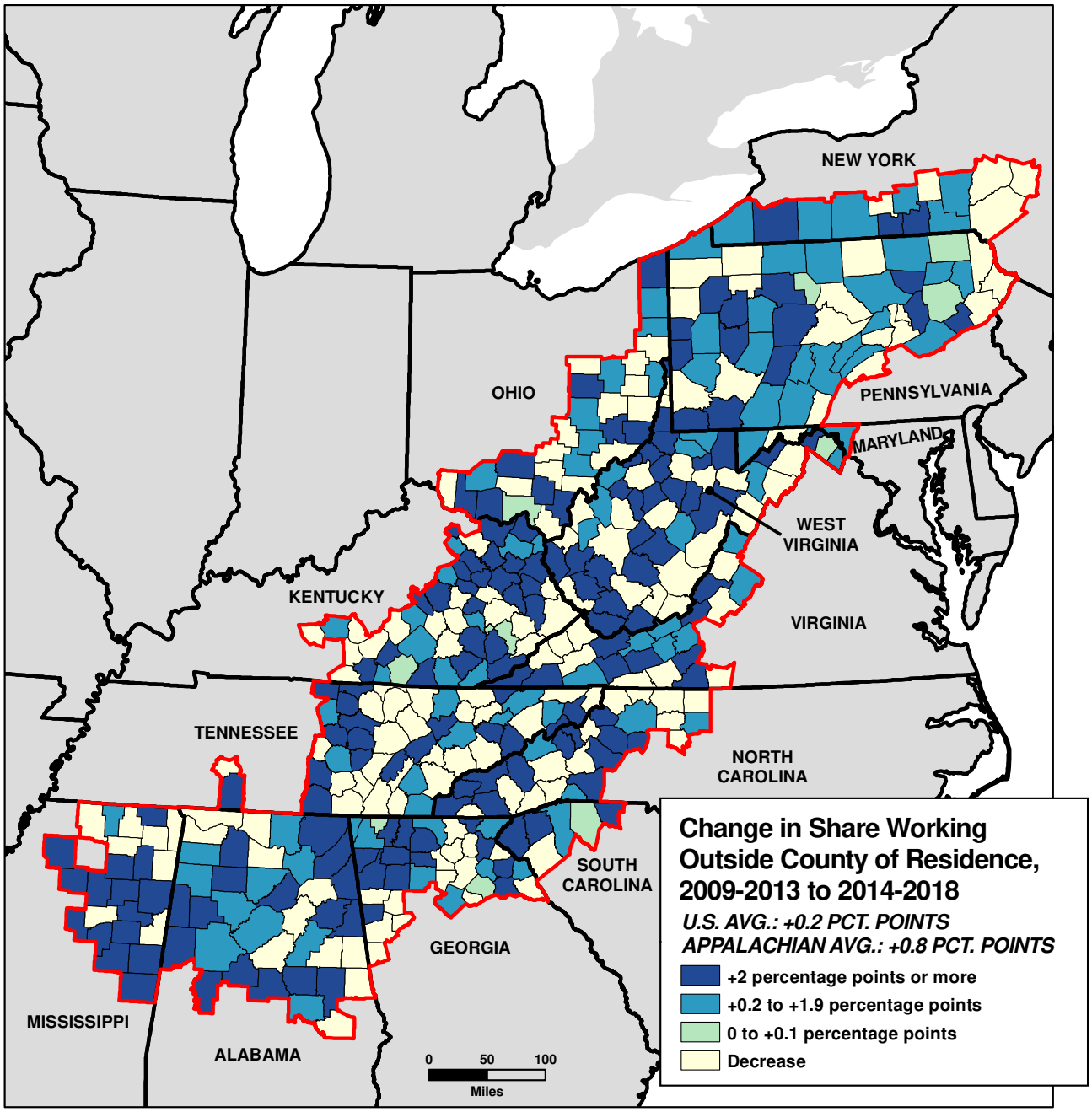
Figure 7.10: Percentage Point Change in Share of Households With One or More Workers in the Appalachian Region Where the Number of Workers Exceeds the Number of Vehicles Available, 2009-2013 to 2014-2018



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, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Between 2009-2013 and 2014-2018, the percentage of Appalachian households where the number of workers exceeded the number of available vehicles barely increased (0.2 percentage points), compared to a more noticeable (but still modest) increase nationwide (0.4 points). Yet in 175 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 117 of these counties, mostly in Central, South Central, and Southern Appalachia. Meanwhile, there were 192 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, 2009-2013 to 2014-2018



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, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

The share of Appalachian residents working outside their county of residence was 0.8 percentage points greater in 2014-2018 than in 2009-2013; 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 155 Appalachian counties where the share working outside their residential county was lower in 2014-2018 than in the earlier period.

TRENDS IN TRANSPORTATION AND COMMUTING PATTERNS

- At just over 82 percent, the share of Appalachian workers who drove alone to work in 2014-2018 was just 0.2 percentage points higher than it was in 2009-2013 (see Tables 7.1 and 7.9). Yet the increase was more noticeable in much of the Appalachian Region. For example, this share rose by more than a half a percentage point in the Region's nonmetropolitan counties and more than a full point in the Appalachian sections of Mississippi and New York. (Conversely, it fell more than a full point in Appalachian South Carolina.) Meanwhile, the share of persons who carpooled to work fell 0.7 percentage points between the 2009-2013 and 2014-2018 periods. The growth of telework and home-based businesses was also evident, as the share of workers who worked at home increased 0.6 percentage points between the two periods.

- Although the share of Appalachian workers below the poverty level ($25,465 for a family of two adults and two children in 2018) who drove alone to their jobs (71 percent in 2014-2018) was not as high as it was for all workers (see Tables 7.2 and 7.10), it did increase more than half a percentage point from its level in 2009-2013. And the increase was even greater in Southern Appalachia: It rose more than two percentage points in the subregion as a whole and eight points in Mississippi. And similar to the pattern for all workers, the share of poor workers carpooling to their jobs fell almost a full percentage point from 2009-2013 to 2014-2018.

- In 2014-2018, 7.3 percent of Appalachian households lacked an available vehicle to get to current and/or potential employment, down 0.2 points from 2009-2013 (see Tables 7.3 and 7.11). Yet trends between the two periods varied within the Region: In South Central Appalachia and the Appalachian sections of Mississippi, North Carolina, and Virginia, for example, the share fell at least half a percentage point. On the other hand, the share of households with no vehicle available increased slightly in North Central Appalachia, as well as in New York, Ohio, and West Virginia.

- The share of workers in households with no vehicle available (2.6 percent) remained unchanged in Appalachia between the 2009-2013 and the 2014-2018 periods (see Tables 7.5 and 7.12). And among the subregions, county types, and states, the share neither rose nor fell more than 0.4 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 2014-2018, the number of workers exceeded the number of vehicles available in 4.7 percent of Appalachian households—a figure that rose just 0.2 percentage points from its 2009-2013 level (see Tables 7.6 and 7.13). And the change was slight in most of the Region: In virtually every subregion, urban-rural county type, and state, the share of households with more workers than vehicles rose less than half a percentage point. The Appalachian sections of Kentucky, South Carolina (increases of 0.5 points each), and Maryland (a decline of 0.6 points) were the most notable exceptions.

- On average, Appalachian workers traveled 25.4 minutes to their jobs in 2014-2018, almost a minute longer than they did in 2009-2013 (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 2009-2013 and 2014-2018 periods. And the share who took at least an hour to get to work rose 0.6 points in Appalachia—and 1.4 points in counties that were part of large metro areas.

- Almost 32 percent of employed Appalachian residents ages 16 and over worked outside their county of residence in 2014-2018, representing an increase of 0.8 percentage points from the 2009-2013 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, Mississippi, and the Carolinas. In Mississippi, the increase exceeded two points.

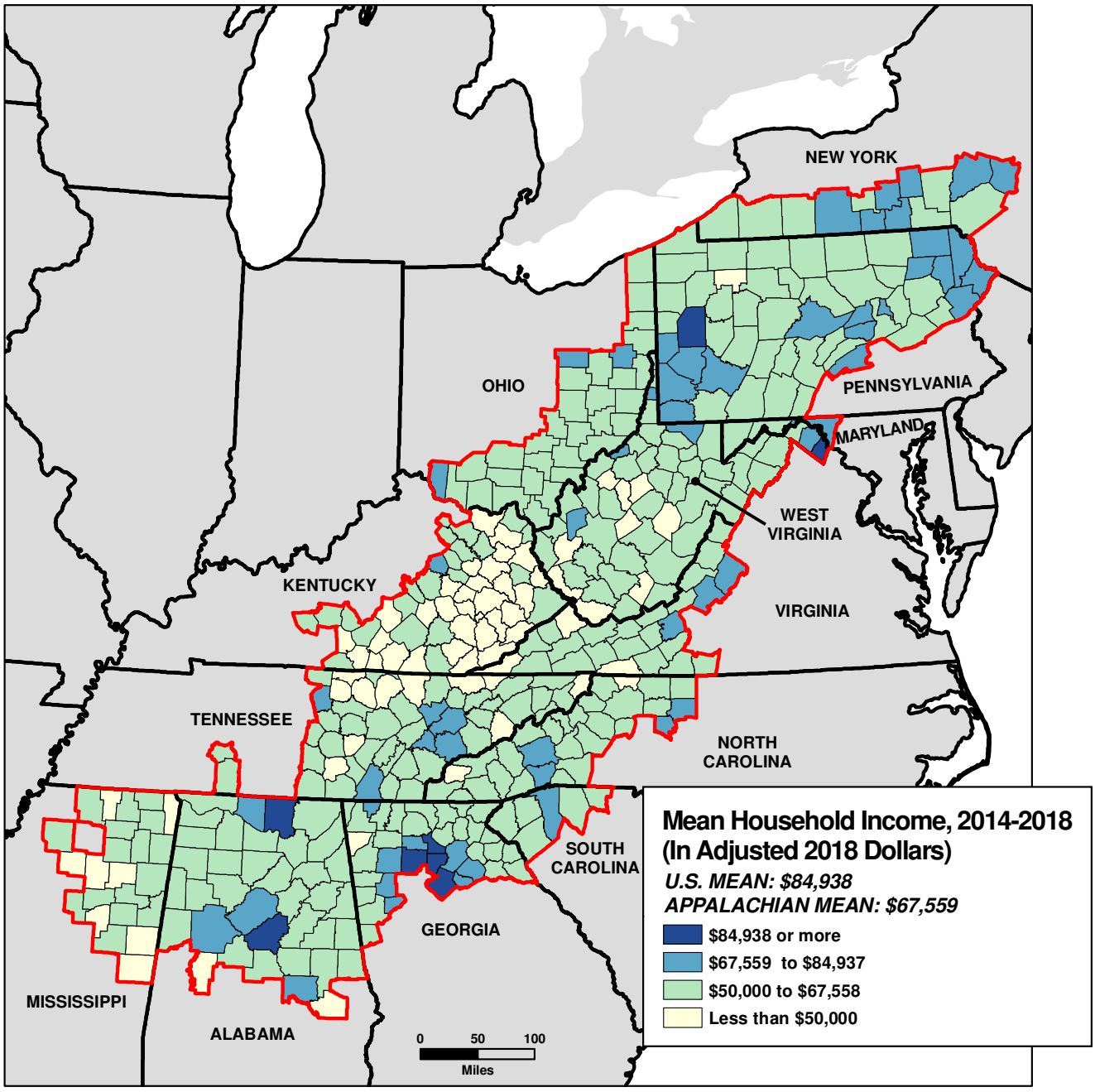
CHAPTER 8: INCOME AND POVERTY

Table 8.1: Household, Family, and Per Capita Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018

Income	Household Income, 2014-2018 (2018 Dollars)		Family Income, 2014-2018 (2018 Dollars)		Per Capita Income, 2014-2018 (2018 Dollars)
	Mean HH Income	Median HH Income	Mean Family Income	Median Family Income	
United States	**84,938**	**60,293**	**99,436**	**73,965**	**32,621**
Appalachian Region	**67,559**	**49,747**	**80,314**	**63,037**	**27,251**
Subregions					
Northern Appalachia	69,713	52,507	84,101	67,645	29,030
North Central Appalachia	63,356	47,022	75,321	60,264	25,855
Central Appalachia	51,668	36,993	60,916	47,162	20,961
South Central Appalachia	65,023	46,669	77,847	59,523	26,950
Southern Appalachia	72,025	53,358	84,108	65,546	27,493
County Types					
Large Metros (pop. 1 million +)	80,826	60,553	95,550	75,695	31,852
Small Metros (pop. <1 million)	68,188	50,320	81,714	64,359	27,711
Nonmetro, Adjacent to Large Metros	60,218	45,296	71,266	57,280	24,218
Nonmetro, Adjacent to Small Metros	58,557	43,877	68,854	55,459	23,970
Rural (nonmetro, not adj. to a metro)	54,134	39,590	64,123	50,199	21,986
Alabama	**67,243**	**48,486**	**80,678**	**62,030**	**26,846**
Appalachian Alabama	69,506	50,474	82,838	63,908	27,702
Non-Appalachian Alabama	63,162	44,899	76,636	58,872	25,320
Georgia	**78,574**	**55,679**	**91,173**	**67,405**	**29,523**
Appalachian Georgia	79,300	60,451	89,300	70,513	28,327
Non-Appalachian Georgia	78,269	54,106	92,070	66,220	30,058
Kentucky	**67,110**	**48,392**	**79,553**	**61,059**	**26,948**
Appalachian Kentucky	51,104	36,412	59,912	46,275	20,553
Non-Appalachian Kentucky	72,850	53,427	86,908	67,636	29,234
Maryland	**107,482**	**81,868**	**125,351**	**99,403**	**40,517**
Appalachian Maryland	70,839	53,448	84,010	67,201	27,720
Non-Appalachian Maryland	109,156	83,912	127,197	101,329	41,076
Mississippi	**60,640**	**43,567**	**71,577**	**54,933**	**23,434**
Appalachian Mississippi	55,487	40,506	65,923	51,545	21,834
Non-Appalachian Mississippi	62,039	44,625	73,097	56,403	23,858
New York	**97,424**	**65,323**	**114,090**	**80,419**	**37,470**
Appalachian New York	66,921	51,320	80,411	65,873	27,452
Non-Appalachian New York	99,260	66,964	116,051	82,113	38,028
North Carolina	**73,753**	**52,413**	**87,271**	**65,097**	**29,456**
Appalachian North Carolina	64,588	46,237	77,035	59,318	27,059
Non-Appalachian North Carolina	75,777	54,126	89,469	67,049	29,952
Ohio	**74,109**	**54,533**	**89,168**	**69,837**	**30,304**
Appalachian Ohio	63,045	47,573	74,566	60,762	25,583
Non-Appalachian Ohio	76,379	56,445	92,294	72,194	31,286
Pennsylvania	**81,549**	**59,445**	**97,993**	**75,477**	**32,889**
Appalachian Pennsylvania	71,844	54,070	87,025	69,760	30,092
Non-Appalachian Pennsylvania	90,020	65,263	107,221	82,030	35,142
South Carolina	**70,093**	**51,015**	**82,909**	**63,437**	**27,986**
Appalachian South Carolina	69,837	51,137	83,055	64,616	27,690
Non-Appalachian South Carolina	70,180	51,110	82,858	63,315	28,086
Tennessee	**71,458**	**50,972**	**84,434**	**63,096**	**28,511**
Appalachian Tennessee	64,759	46,182	77,259	58,600	26,599
Non-Appalachian Tennessee	76,829	55,109	90,150	67,472	29,962
Virginia	**98,000**	**71,564**	**114,218**	**86,628**	**37,763**
Appalachian Virginia	59,325	43,431	72,039	56,637	24,721
Non-Appalachian Virginia	102,122	75,495	118,509	91,361	39,044
West Virginia (entire state)	**61,225**	**44,921**	**73,168**	**57,598**	**25,479**

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

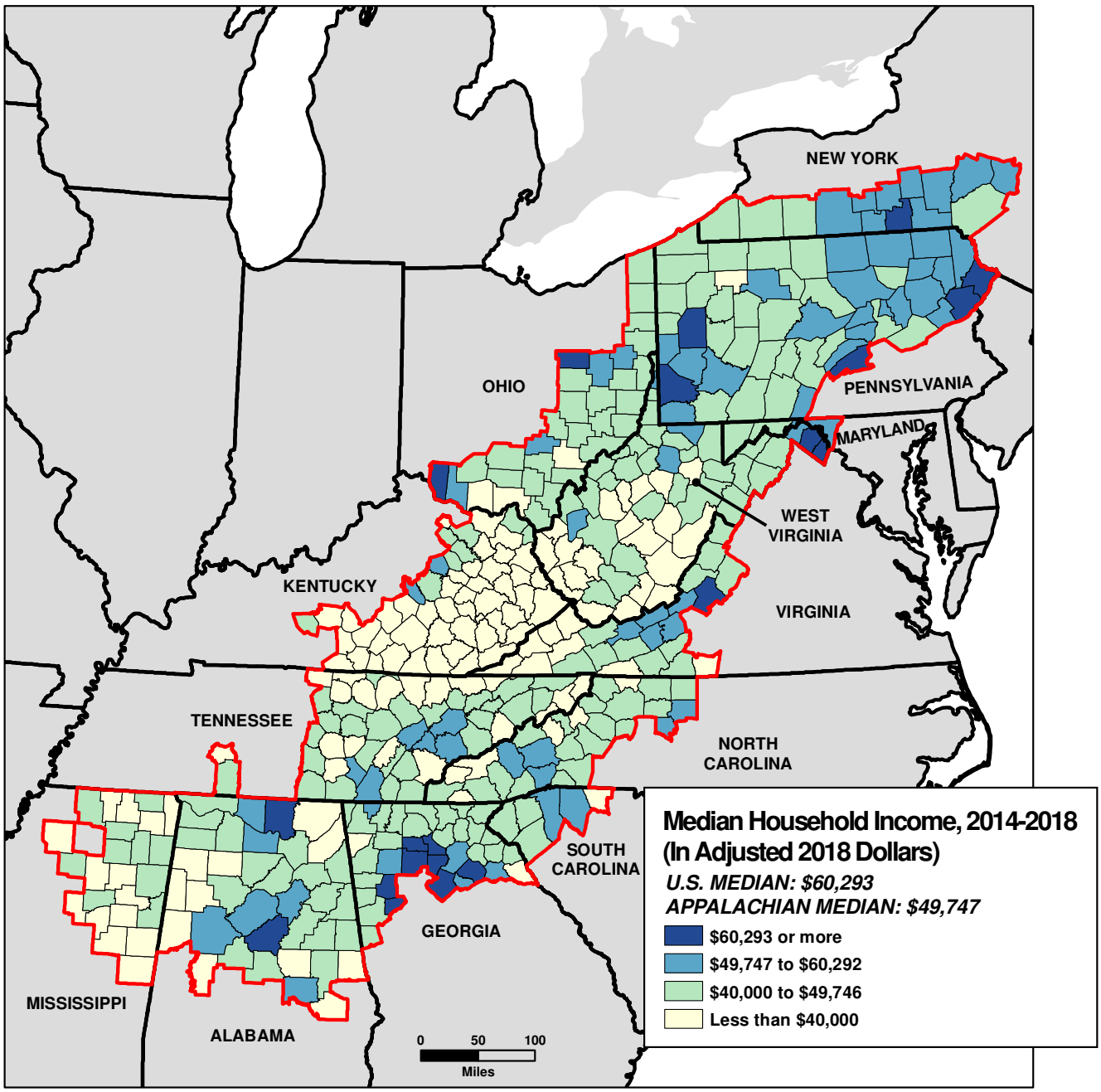
Figure 8.1: Mean Household Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018



Map Title: Mean Household Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In the 2014-2018 period, the mean income of Appalachian households was $67,559, just 80 percent of the U.S. average ($84,938). In just eight of the Region's counties (all of which were in metropolitan areas), average household income matched or exceeded the national mean. And in only 59 additional counties (47 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 68 counties—all but five of which were outside metro areas, and 43 of which were in Central Appalachia (31 in Kentucky alone).

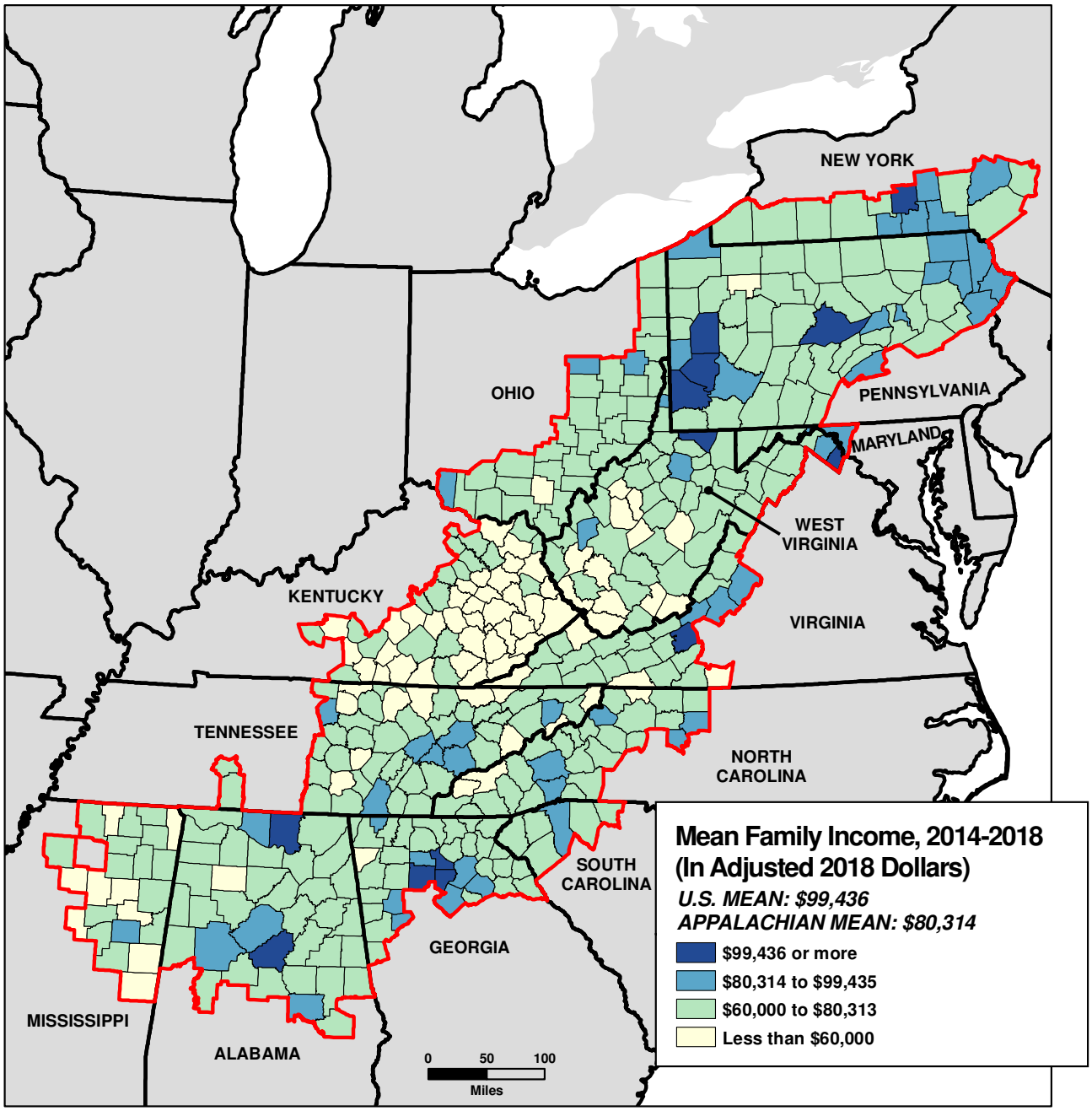
Figure 8.2: Median Household Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018



Map Title: Median Household Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

At $49,747, 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 ($60,293) during the 2014-2018 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 71 had incomes at or above the regional median. On the other hand, 129 counties in the Region had median household incomes below $40,000—all but 13 of which were outside metro areas and 65 of which were in Central Appalachia. This distribution is not surprising: median household income was $39,590 for the most rural counties and $36,993 for Central Appalachia. It is useful to note that the income levels displayed here reflect income received at least five years after the end of the 2007-2009 economic downturn.

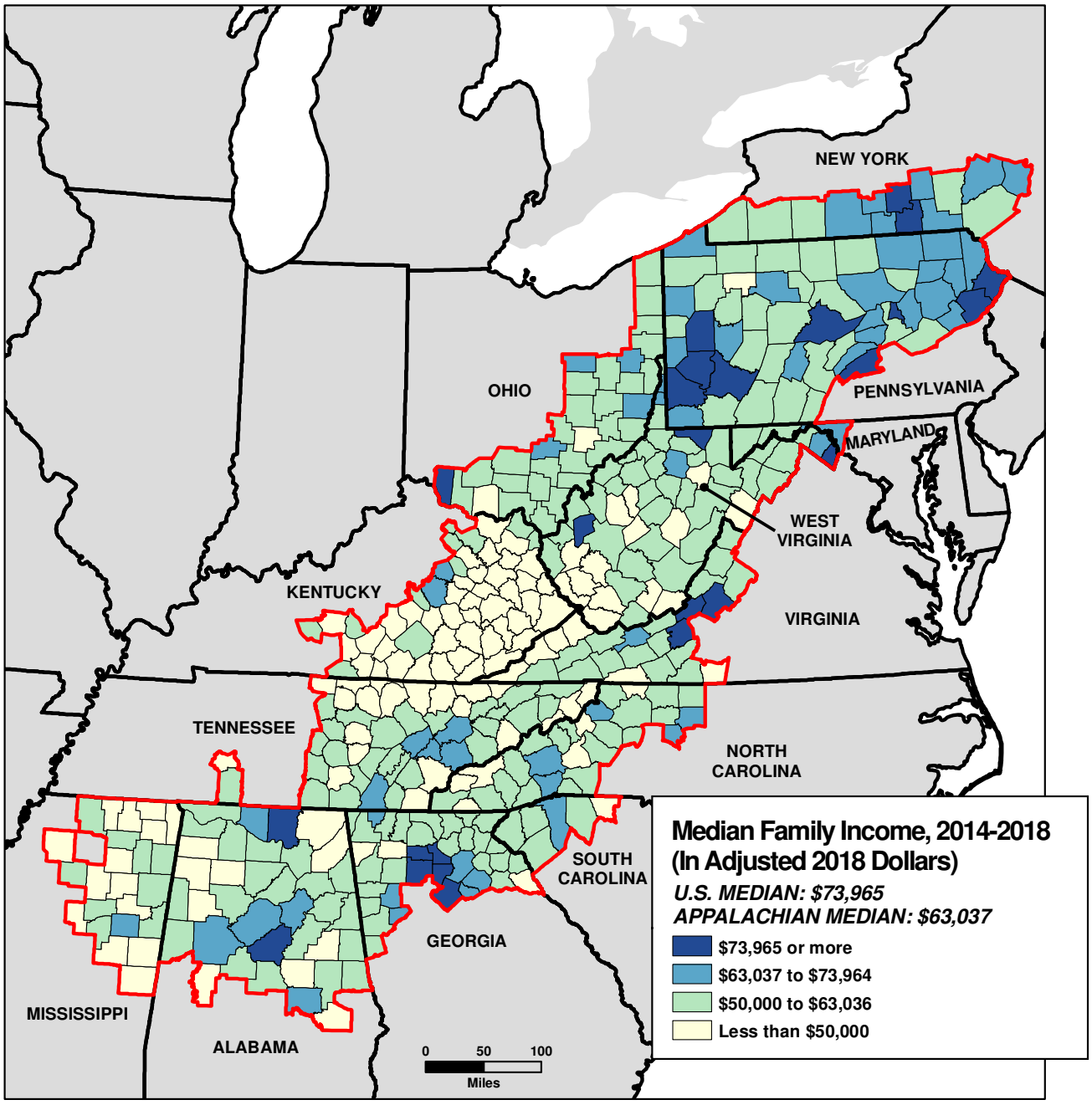
Figure 8.3: Mean Family Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018



Map Title: Mean Family Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In only 13 Appalachian counties (all of which were in metropolitan areas), the average income of families matched or surpassed the U.S. mean of $99,436 for the 2014-2018 period. And there were just an additional 53 counties (42 of which were part of metro areas) where mean family income was equal to or greater than the average for the Appalachian Region ($80,314). In contrast, mean family income was less than $60,000 in 78 Appalachian counties. All but six of these counties were outside metropolitan areas; more than half did not border any metro. Additionally, 48 of the counties in the lowest income group were in Central Appalachia and 35 were in Kentucky alone. Overall, mean family income over the 2014-2018 period was just $64,123 for the most rural counties, $60,916 for Central Appalachia, and $59,912 for Appalachian Kentucky.

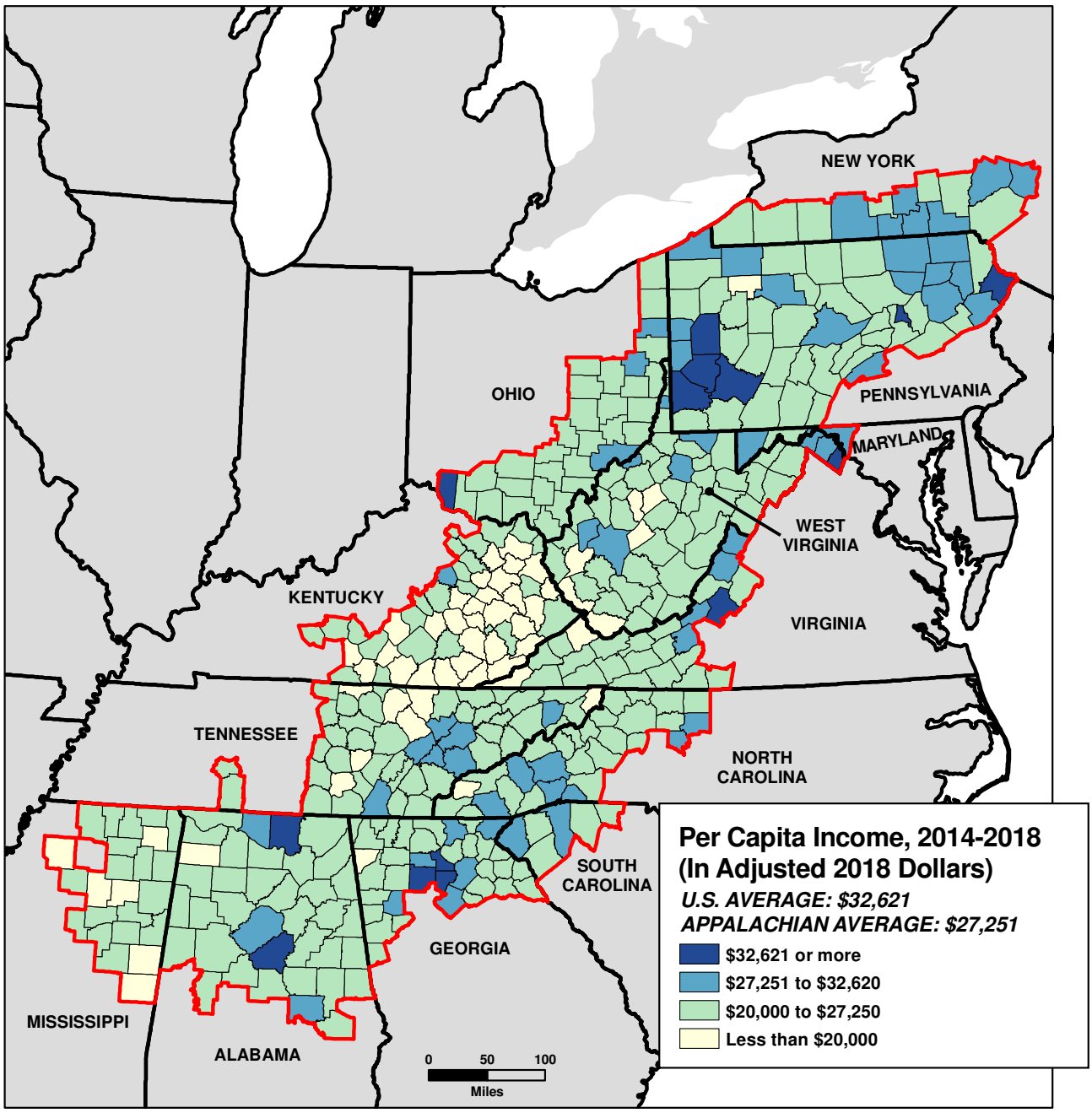
Figure 8.4: Median Family Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018



Map Title: Median Family Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In 25 Appalachian counties—all of which were in metro areas—median family income (the level where half of all families have higher incomes while the other half have lower incomes) matched or exceeded the U.S. median of $73,965 during the 2014-2018 period. In another 61 counties (42 of which were in metros), median income was at or above the median for families in the Appalachian Region ($63,037). In contrast, median family income was less than $50,000 in 119 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 $50,199), and 41 were in Appalachian Kentucky (where median family income was $46,275).

Figure 8.5: Per Capita Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018



Map Title: Per Capita Income in the Appalachian Region (In Adjusted 2018 Dollars), 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

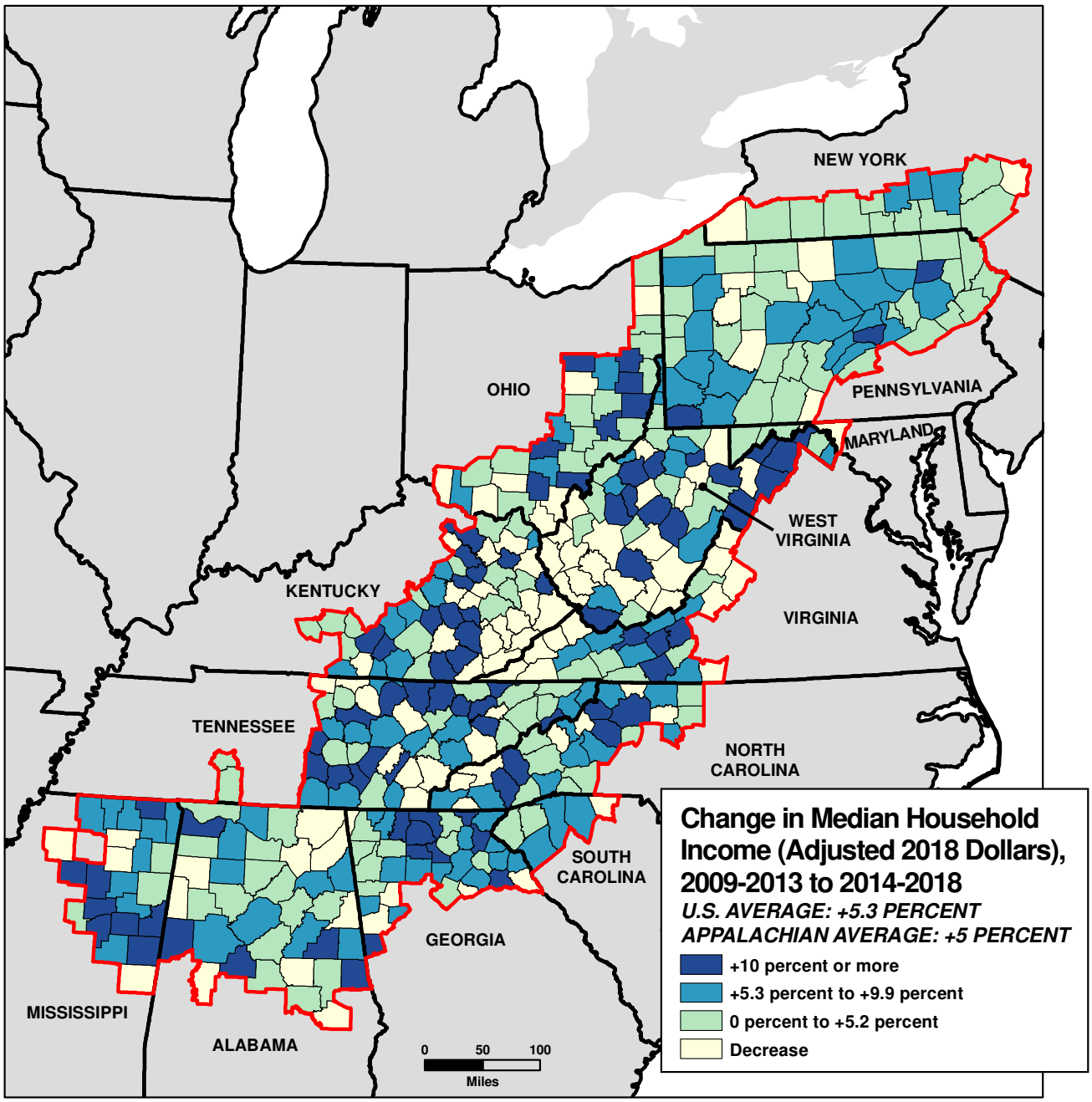
At $27,251, per capita income in the Appalachian Region was 84 percent that of the U.S. average of $32,621 during the 2014-2018 period. And there was considerable variation within the Region. Per capita income was the same or higher than the national average in 14 Appalachian counties, including Pittsburgh, suburban Atlanta, and Clermont County, Ohio (which is part of metropolitan Cincinnati). In 64 other counties, per capita income was at or above the regional average; while nearly half of these were in Northern Appalachia, there were pockets in the South Central and Southern subregions. Yet in 55 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 2014-2018 was only $21,986 in the most rural Appalachian counties as a whole, and just $20,961 in Central Appalachia.

Table 8.2: Change in Household, Family, and Per Capita Income in the Appalachian Region (In Adjusted 2018 Dollars), 2009-2013 to 2014-2018

Income	Percent Change in Household Income (In 2018 Dollars)		Percent Change in Family Income (in 2018 Dollars)		Percent Change in Per Capita Income (In 2018 Dollars)
	Mean HH Income	Median HH Income	Mean Family Income	Median Family Income	
United States	**+ 7.0**	**+ 5.3**	**+ 7.6**	**+ 5.8**	**+ 7.3**
Appalachian Region	**+ 6.0**	**+ 5.0**	**+ 6.5**	**+ 5.8**	**+ 6.6**
Subregions					
Northern Appalachia	+ 5.7	+ 4.5	+ 6.2	+ 5.9	+ 6.7
North Central Appalachia	+ 4.0	+ 3.1	+ 4.1	+ 4.3	+ 4.7
Central Appalachia	+ 2.8	+ 1.9	+ 2.9	+ 1.8	+ 3.7
South Central Appalachia	+ 6.9	+ 5.1	+ 7.4	+ 5.6	+ 7.3
Southern Appalachia	+ 6.9	+ 6.6	+ 7.7	+ 7.4	+ 7.3
County Types					
Large Metros (pop. 1 million +)	+ 6.7	+ 5.7	+ 7.3	+ 6.9	+ 7.4
Small Metros (pop. <1 million)	+ 5.4	+ 4.6	+ 5.8	+ 5.2	+ 5.9
Nonmetro, Adjacent to Large Metros	+ 6.1	+ 3.7	+ 6.8	+ 5.2	+ 7.1
Nonmetro, Adjacent to Small Metros	+ 5.7	+ 3.6	+ 5.9	+ 5.1	+ 6.3
Rural (nonmetro, not adj. to a metro)	+ 5.2	+ 5.0	+ 5.6	+ 4.5	+ 5.9
Alabama	**+ 4.4**	**+ 3.8**	**+ 5.7**	**+ 5.7**	**+ 5.0**
Appalachian Alabama	+ 4.7	+ 5.2	+ 5.5	+ 5.7	+ 5.1
Non-Appalachian Alabama	+ 3.9	+ 0.7	+ 6.1	+ 4.3	+ 4.9
Georgia	**+ 7.7**	**+ 4.9**	**+ 8.4**	**+ 6.3**	**+ 8.6**
Appalachian Georgia	+ 8.5	+ 6.8	+ 9.1	+ 8.3	+ 8.9
Non-Appalachian Georgia	+ 7.4	+ 4.9	+ 8.2	+ 5.5	+ 8.5
Kentucky	**+ 6.0**	**+ 4.1**	**+ 6.2**	**+ 4.2**	**+ 6.4**
Appalachian Kentucky	+ 2.6	+ 2.6	+ 1.7	+ 1.6	+ 3.4
Non-Appalachian Kentucky	+ 6.7	+ 4.9	+ 7.2	+ 5.1	+ 6.8
Maryland	**+ 3.6**	**+ 3.1**	**+ 3.9**	**+ 3.7**	**+ 3.2**
Appalachian Maryland	+ 3.7	+ 0.7	+ 4.8	+ 0.5	+ 3.6
Non-Appalachian Maryland	+ 3.6	+ 3.5	+ 3.8	+ 3.1	+ 3.2
Mississippi	**+ 3.8**	**+ 3.4**	**+ 5.0**	**+ 5.0**	**+ 5.3**
Appalachian Mississippi	+ 6.7	+ 6.6	+ 7.6	+ 6.8	+ 7.1
Non-Appalachian Mississippi	+ 3.0	+ 2.8	+ 4.2	+ 5.2	+ 4.8
New York	**+ 6.9**	**+ 4.3**	**+ 7.9**	**+ 5.4**	**+ 7.2**
Appalachian New York	+ 3.5	+ 2.4	+ 3.8	+ 3.9	+ 4.6
Non-Appalachian New York	+ 6.9	+ 4.8	+ 8.0	+ 5.8	+ 7.2
North Carolina	**+ 7.2**	**+ 4.8**	**+ 8.0**	**+ 5.9**	**+ 7.9**
Appalachian North Carolina	+ 7.3	+ 4.7	+ 7.4	+ 6.2	+ 8.1
Non-Appalachian North Carolina	+ 7.1	+ 5.0	+ 8.0	+ 6.2	+ 7.8
Ohio	**+ 6.5**	**+ 4.6**	**+ 7.0**	**+ 5.4**	**+ 7.8**
Appalachian Ohio	+ 6.3	+ 4.0	+ 7.0	+ 5.5	+ 7.7
Non-Appalachian Ohio	+ 6.5	+ 5.2	+ 6.9	+ 5.0	+ 7.7
Pennsylvania	**+ 6.2**	**+ 4.8**	**+ 6.0**	**+ 4.9**	**+ 6.9**
Appalachian Pennsylvania	+ 6.0	+ 5.2	+ 6.4	+ 6.5	+ 7.1
Non-Appalachian Pennsylvania	+ 6.2	+ 4.4	+ 5.4	+ 3.7	+ 6.5
South Carolina	**+ 7.1**	**+ 5.5**	**+ 8.3**	**+ 6.7**	**+ 8.3**
Appalachian South Carolina	+ 7.3	+ 6.8	+ 8.4	+ 7.5	+ 8.4
Non-Appalachian South Carolina	+ 7.0	+ 5.3	+ 8.3	+ 6.2	+ 8.2
Tennessee	**+ 8.0**	**+ 6.6**	**+ 8.4**	**+ 6.7**	**+ 8.2**
Appalachian Tennessee	+ 7.1	+ 5.4	+ 7.8	+ 5.8	+ 7.2
Non-Appalachian Tennessee	+ 8.3	+ 6.7	+ 8.5	+ 6.5	+ 8.7
Virginia	**+ 4.2**	**+ 3.7**	**+ 5.0**	**+ 4.5**	**+ 4.4**
Appalachian Virginia	+ 4.5	+ 2.6	+ 5.8	+ 4.8	+ 5.2
Non-Appalachian Virginia	+ 3.9	+ 2.7	+ 4.6	+ 4.0	+ 4.1
West Virginia (entire state)	**+ 2.5**	**+ 1.4**	**+ 2.4**	**+ 2.3**	**+ 2.8**

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Figure 8.6: Percent Change in Median Household Income in the Appalachian Region (In Adjusted 2018 Dollars), 2009-2013 to 2014-2018



Map Title: Percent Change in Median Household Income in the Appalachian Region (In Adjusted 2018 Dollars), 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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 5 percent higher in 2014-2018 than it was in 2009-2013, suggesting that incomes have recovered from the recent economic downturn. While this was slightly less than the national increase of 5.3 percent, household income rose at or above the national average in nearly half of Appalachia's 420 counties. Moreover, median household income rose at least 10 percent in 87 Appalachian counties between the two periods. But not all the news was positive: In 98 Appalachian counties (nearly half of which were in Kentucky, Virginia, or West Virginia), real median household income fell between 2009-2013 and 2014-2018.

Table 8.3: Number of Persons in the Appalachian Region in Poverty, by Age Group, 2014-2018

Poverty Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	**44,257,979**	**14,117,014**	**25,692,073**	**6,229,572**	**19,462,501**	**4,448,892**
Appalachian Region	**3,904,113**	**1,176,395**	**2,322,932**	**537,298**	**1,785,634**	**404,786**
Subregions						
Northern Appalachia	1,098,315	317,437	659,278	168,682	490,596	121,600
North Central Appalachia	405,307	115,336	250,197	59,068	191,129	39,774
Central Appalachia	432,344	125,177	261,290	44,000	217,290	45,877
South Central Appalachia	772,309	221,979	467,950	115,501	352,449	82,380
Southern Appalachia	1,195,838	396,466	684,217	150,047	534,170	115,155
County Types						
Large Metros (pop. 1 million +)	718,572	223,577	418,094	88,019	330,075	76,901
Small Metros (pop. <1 million)	1,628,886	485,470	985,268	257,518	727,750	158,148
Nonmetro, Adjacent to Large Metros	366,574	113,964	215,726	50,519	165,207	36,884
Nonmetro, Adjacent to Small Metros	669,796	200,019	393,363	76,044	317,319	76,414
Rural (nonmetro, not adj. to a metro)	520,285	153,365	310,481	65,198	245,283	56,439
Alabama	**829,400**	**271,470**	**478,951**	**111,699**	**367,252**	**78,979**
Appalachian Alabama	492,760	159,439	285,376	62,006	223,370	47,945
Non-Appalachian Alabama	336,640	112,031	193,575	49,693	143,882	31,034
Georgia	**1,607,714**	**564,594**	**907,163**	**209,278**	**697,885**	**135,957**
Appalachian Georgia	399,422	140,047	221,515	42,385	179,130	37,860
Non-Appalachian Georgia	1,208,292	424,547	685,648	166,893	518,755	98,097
Kentucky	**772,080**	**241,325**	**458,199**	**99,766**	**358,433**	**72,556**
Appalachian Kentucky	285,129	83,506	172,844	30,472	142,372	28,779
Non-Appalachian Kentucky	486,951	157,819	285,355	69,294	216,061	43,777
Maryland	**553,496**	**164,213**	**324,357**	**74,704**	**249,653**	**64,926**
Appalachian Maryland	31,248	9,461	18,243	4,309	13,934	3,544
Non-Appalachian Maryland	522,248	154,752	306,114	70,395	235,719	61,382
Mississippi	**599,795**	**206,763**	**337,531**	**78,173**	**259,358**	**55,501**
Appalachian Mississippi	125,039	41,163	71,249	18,751	52,498	12,627
Non-Appalachian Mississippi	474,756	165,600	266,282	59,422	206,860	42,874
New York	**2,797,985**	**835,815**	**1,621,435**	**343,352**	**1,278,083**	**340,735**
Appalachian New York	157,578	42,848	100,591	31,979	68,612	14,139
Non-Appalachian New York	2,640,407	792,967	1,520,844	311,373	1,209,471	326,596
North Carolina	**1,523,949**	**498,013**	**884,618**	**210,468**	**674,150**	**141,318**
Appalachian North Carolina	272,799	79,989	162,277	36,594	125,683	30,533
Non-Appalachian North Carolina	1,251,150	418,024	722,341	173,874	548,467	110,785
Ohio	**1,645,986**	**533,838**	**964,658**	**229,289**	**735,369**	**147,490**
Appalachian Ohio	330,386	104,550	193,769	39,495	154,274	32,067
Non-Appalachian Ohio	1,315,600	429,288	770,889	189,794	581,095	115,423
Pennsylvania	**1,578,949**	**475,463**	**929,345**	**225,637**	**703,708**	**174,141**
Appalachian Pennsylvania	714,097	201,011	428,855	111,899	316,956	84,231
Non-Appalachian Pennsylvania	864,852	274,452	500,490	113,738	386,752	89,910
South Carolina	**770,632**	**255,186**	**440,484**	**100,886**	**339,598**	**74,962**
Appalachian South Carolina	178,617	55,817	106,077	26,905	79,172	16,723
Non-Appalachian South Carolina	592,015	199,369	334,407	73,981	260,426	58,239
Tennessee	**1,046,508**	**344,360**	**606,267**	**135,839**	**470,428**	**95,881**
Appalachian Tennessee	466,059	137,944	278,740	60,445	218,295	49,375
Non-Appalachian Tennessee	580,449	206,416	327,527	75,394	252,133	46,506
Virginia	**893,580**	**266,487**	**535,593**	**143,560**	**392,033**	**91,500**
Appalachian Virginia	135,515	32,546	87,552	27,885	59,667	15,417
Non-Appalachian Virginia	758,065	233,941	448,041	115,675	332,366	76,083
West Virginia (entire state)	**315,464**	**88,074**	**195,844**	**44,173**	**151,671**	**31,546**

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2018, the poverty threshold for a family of two adults and two children was $25,465. 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, 2014-2018 American Community Survey.

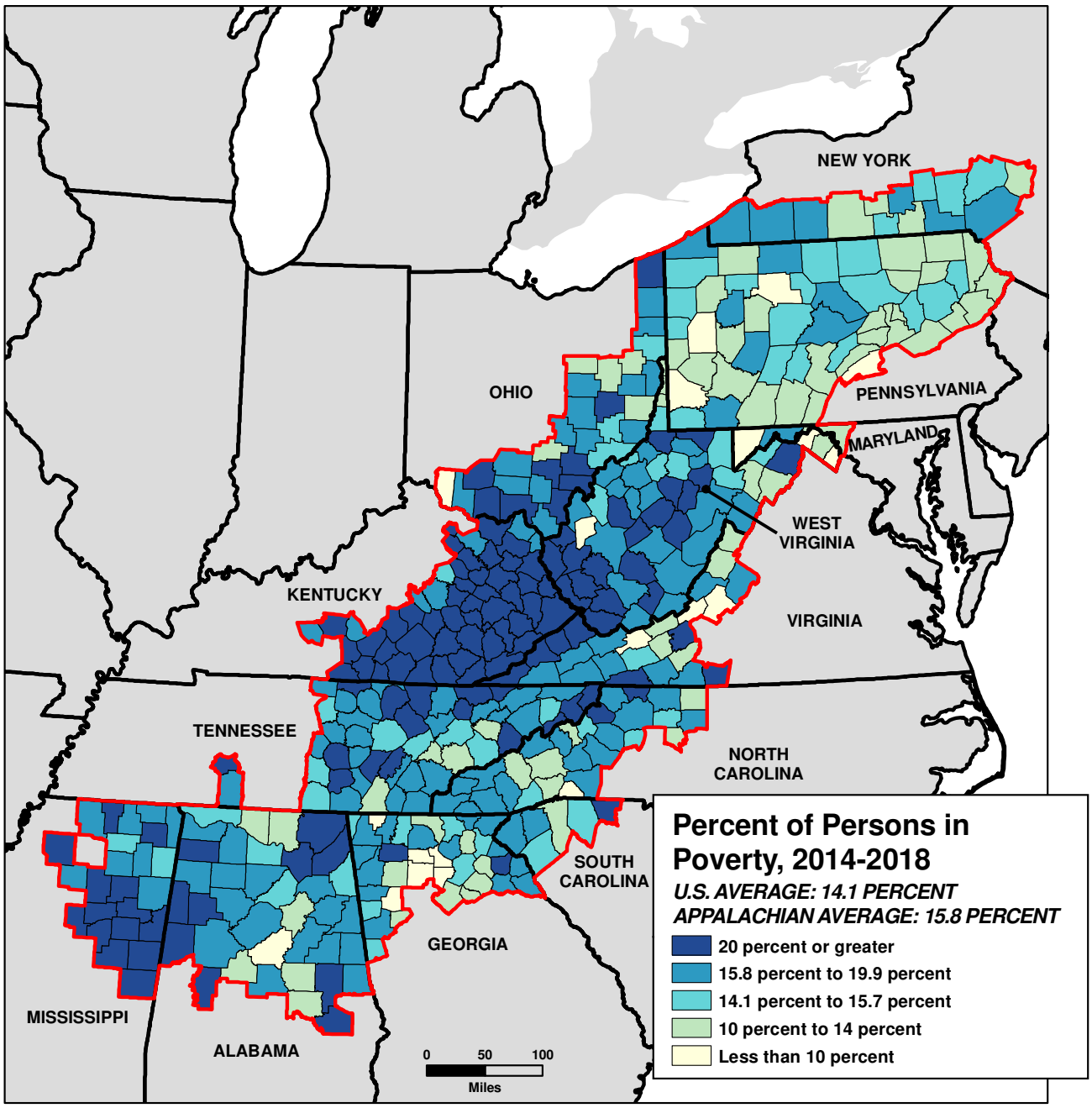
Table 8.4: Percent of Persons in the Appalachian Region in Poverty, by Age Group, 2014-2018

Poverty Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	**14.1**	**19.5**	**13.2**	**22.5**	**11.7**	**9.3**
Appalachian Region	**15.8**	**21.9**	**15.4**	**25.8**	**13.8**	**9.3**
Subregions						
Northern Appalachia	13.9	19.9	13.7	25.9	11.8	8.1
North Central Appalachia	17.4	23.3	17.6	30.0	15.6	9.5
Central Appalachia	23.8	31.7	23.8	30.4	22.8	14.2
South Central Appalachia	16.4	23.0	16.5	29.1	14.4	9.2
Southern Appalachia	14.9	20.8	14.0	21.6	12.7	9.6
County Types						
Large Metros (pop. 1 million +)	12.1	16.5	11.4	18.4	10.3	8.4
Small Metros (pop. <1 million)	15.6	21.9	15.4	28.0	13.3	8.6
Nonmetro, Adjacent to Large Metros	17.3	24.7	17.0	27.9	15.1	9.6
Nonmetro, Adjacent to Small Metros	17.5	24.9	17.4	25.2	16.2	10.1
Rural (nonmetro, not adj. to a metro)	21.6	29.5	21.6	32.0	19.8	12.5
Alabama	**17.5**	**25.1**	**16.5**	**26.6**	**14.8**	**10.3**
Appalachian Alabama	16.2	23.2	15.3	23.8	14.0	9.8
Non-Appalachian Alabama	19.8	28.4	18.7	31.1	16.4	11.3
Georgia	**16.0**	**22.9**	**14.5**	**23.3**	**13.1**	**10.3**
Appalachian Georgia	12.7	17.5	11.5	15.7	10.8	9.2
Non-Appalachian Georgia	17.5	25.5	15.9	26.6	14.1	10.8
Kentucky	**17.9**	**24.4**	**17.3**	**26.7**	**15.8**	**10.8**
Appalachian Kentucky	25.3	33.2	25.2	32.5	24.0	15.1
Non-Appalachian Kentucky	15.3	21.4	14.6	24.8	12.9	9.2
Maryland	**9.4**	**12.4**	**8.8**	**15.5**	**7.8**	**7.6**
Appalachian Maryland	13.4	18.8	12.9	21.6	11.5	8.3
Non-Appalachian Maryland	9.3	12.1	8.6	15.2	7.6	7.6
Mississippi	**20.8**	**29.2**	**19.3**	**29.8**	**17.5**	**12.7**
Appalachian Mississippi	20.6	28.5	19.5	32.1	17.1	12.9
Non-Appalachian Mississippi	20.8	29.3	19.3	29.1	17.6	12.7
New York	**14.6**	**20.6**	**13.4**	**21.0**	**12.2**	**11.5**
Appalachian New York	16.1	21.7	16.8	33.7	13.7	7.8
Non-Appalachian New York	14.6	20.5	13.3	20.2	12.2	11.7
North Carolina	**15.4**	**22.0**	**14.5**	**24.9**	**12.8**	**9.2**
Appalachian North Carolina	16.1	23.3	16.0	27.1	14.3	9.1
Non-Appalachian North Carolina	15.3	21.8	14.2	24.5	12.6	9.3
Ohio	**14.5**	**20.8**	**13.9**	**23.9**	**12.3**	**8.1**
Appalachian Ohio	17.0	24.4	16.6	24.9	15.3	9.2
Non-Appalachian Ohio	14.0	20.0	13.4	23.7	11.7	7.8
Pennsylvania	**12.8**	**18.1**	**12.2**	**22.4**	**10.7**	**8.1**
Appalachian Pennsylvania	13.0	18.4	12.8	25.3	10.9	8.0
Non-Appalachian Pennsylvania	12.5	17.8	11.8	20.1	10.5	8.2
South Carolina	**16.0**	**23.7**	**15.1**	**24.8**	**13.5**	**9.2**
Appalachian South Carolina	14.6	20.0	14.3	25.6	12.4	8.4
Non-Appalachian South Carolina	16.5	24.9	15.3	24.5	13.9	9.5
Tennessee	**16.1**	**23.3**	**15.2**	**24.4**	**13.7**	**9.4**
Appalachian Tennessee	16.7	23.4	16.5	25.9	15.0	9.6
Non-Appalachian Tennessee	15.7	23.2	14.2	23.3	12.7	9.3
Virginia	**10.9**	**14.5**	**10.5**	**20.8**	**8.9**	**7.6**
Appalachian Virginia	18.9	24.0	20.0	41.5	16.1	10.6
Non-Appalachian Virginia	10.2	13.7	9.6	18.6	8.2	7.2
West Virginia (entire state)	**17.8**	**24.2**	**18.2**	**30.3**	**16.3**	**9.4**

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2018, the poverty threshold for a family of two adults and two children was $25,465. 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, 2014-2018 American Community Survey.

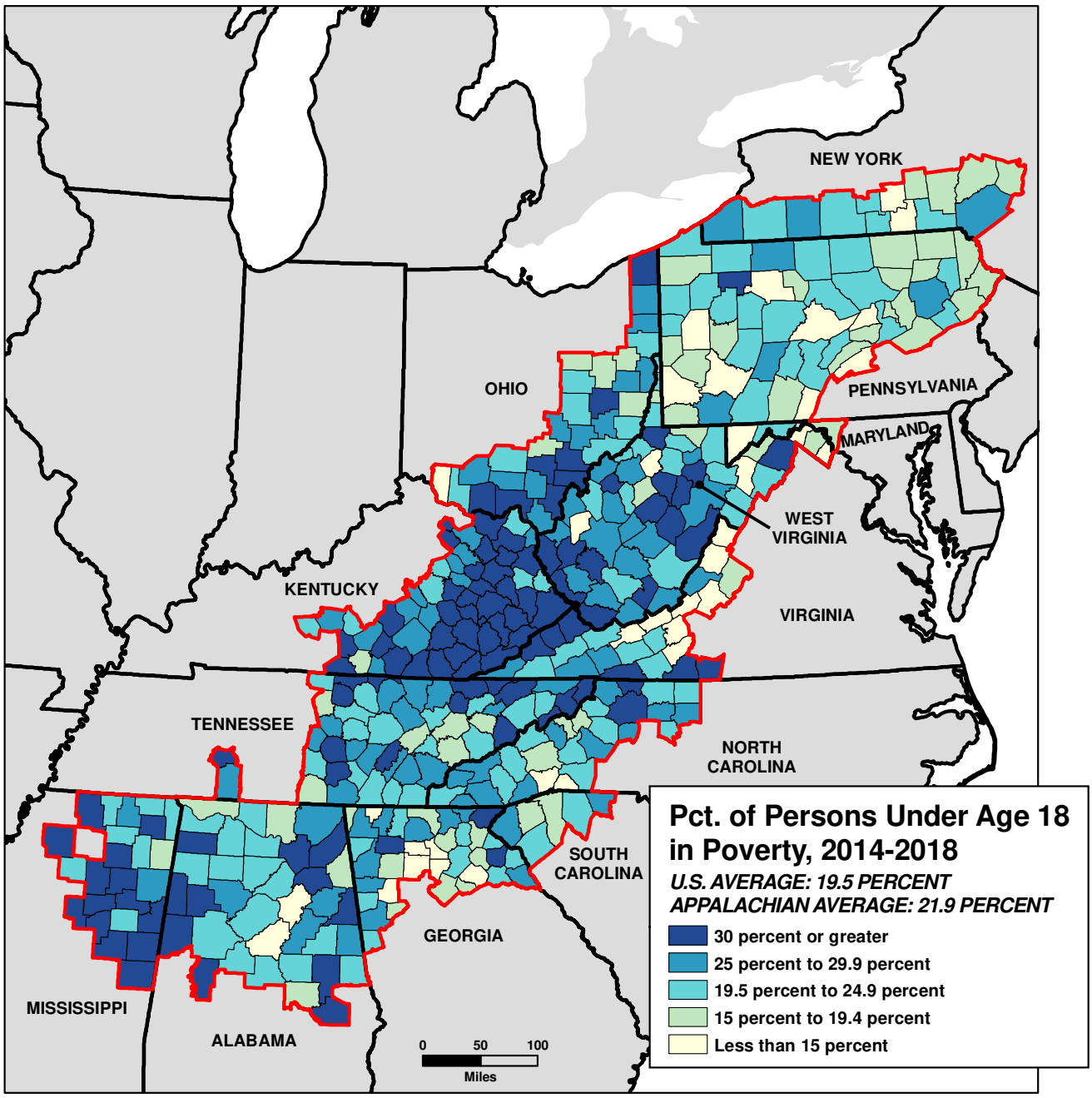
Figure 8.7: Percent of Persons in the Appalachian Region in Poverty, 2014-2018



Map Title: Percent of Persons in the Appalachian Region in Poverty, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Over the 2014-2018 period, 15.8 percent of Appalachian residents lived below the poverty level (income below $25,465 for a family of two adults and two children in 2018)—nearly two percentage points above the U.S. average. But there is a great deal of variation within the Region: In 127 counties, at least 20 percent of persons were poor, yet in another 91 counties the poverty rate was lower than the national average of 14.1 percent. And there was a geographic and urban/rural pattern: All but 16 of the counties with poverty rates at or above 20 percent were outside metropolitan areas, and they were overwhelmingly in Central and Southern Appalachia. (Kentucky alone had 46 of these counties.) In contrast, the counties where poverty was below the U.S. rate were mostly in Northern Appalachia and in metropolitan areas.

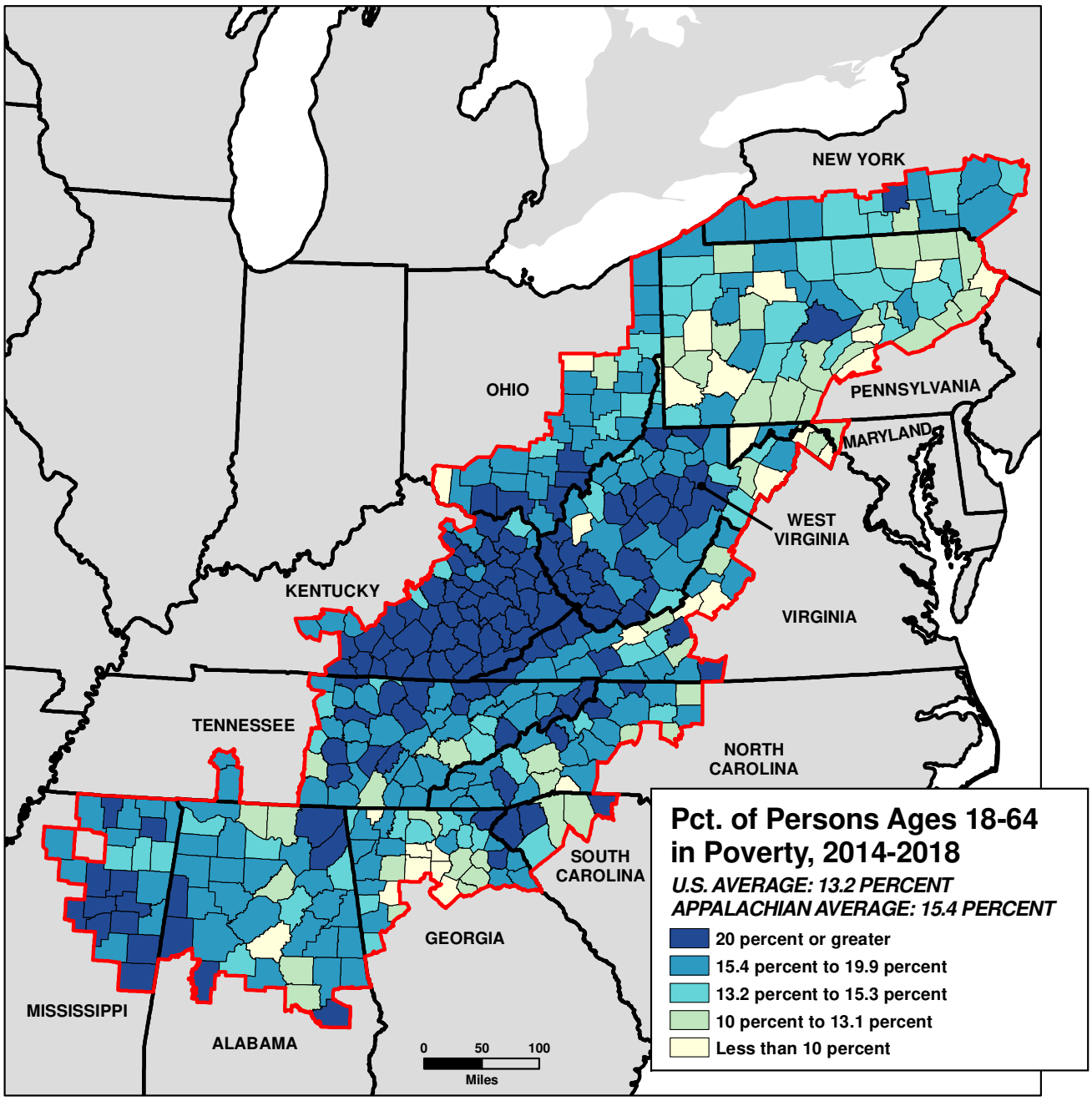
Figure 8.8: Percent of Persons Under Age 18 in the Appalachian Region in Poverty, 2014-2018



Map Title: Percent of Persons Under Age 18 in the Appalachian Region in Poverty, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Child poverty in the Appalachian Region was just under 22 percent in 2014-2018—more than two percentage points above the national rate of 19.5 percent. And the problem is even more acute in some parts of Appalachia. In 109 counties, at least 30 percent of children under age 18 lived below the poverty level (income below $25,465 for a family of two adults and two children in 2018). All but 13 of these counties were outside metropolitan areas and nearly half were in the most isolated rural areas. Central Appalachia was home to 48 of the counties with the highest poverty rates, while another 28 were in Southern Appalachia. However, there were 97 counties (primarily in Northern Appalachia and in metropolitan areas) where child poverty rates were below the national average. Indeed, 24 of the 36 Appalachian counties where child poverty was less than 15 percent were in metro areas, and 11 were in Northern Appalachia.

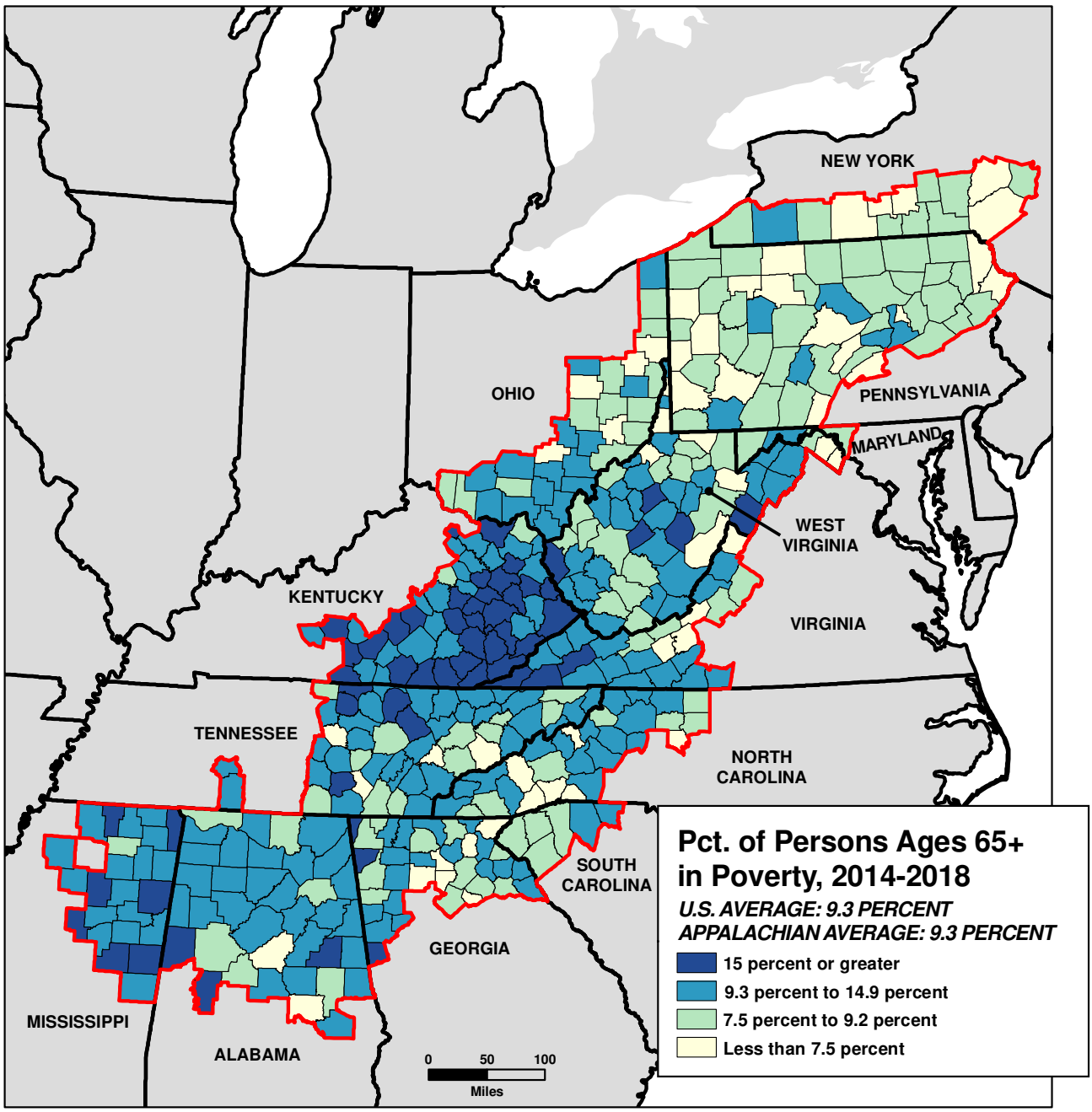
Figure 8.9: Percent of Persons Ages 18 to 64 in the Appalachian Region in Poverty, 2014-2018



Map Title: Percent of Persons Ages 18 to 64 in the Appalachian Region in Poverty, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 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 2014-2018 period. Just over 15 percent of Appalachian residents in this age group were below poverty (income of less than $25,465 for a family of two adults and two children in 2018), and this rate was two percentage points above the U.S. average of 13.2 percent. Within the Region, there were rural/urban and geographic patterns of poverty concentration. Of the 123 counties where at least one in five 18-to-64-year-olds were poor, 105 were outside metropolitan areas; 100 were in Central, South Central, and Southern Appalachia; and 44 were in Kentucky alone. Conversely, 66 of the 77 counties with rates below the national average were either in metro areas or in Northern Appalachia.

Figure 8.10: Percent of Persons Ages 65 and Over in the Appalachian Region in Poverty, 2014-2018



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region in Poverty, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

The poverty rate for the oldest residents of Appalachia matched the national average of 9.3 percent in 2014-2018. Yet the rate was even lower in 171 counties, 73 of which were in Northern Appalachia alone. But as with other age groups, poverty was especially prevalent among the senior population in Appalachian Kentucky, where 15 percent of residents ages 65 and over were poor in 2014-2018. Moreover, the state had more than half of Appalachia's 57 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 2018 was $15,178 for a family of two adults headed by someone age 65 or older.)

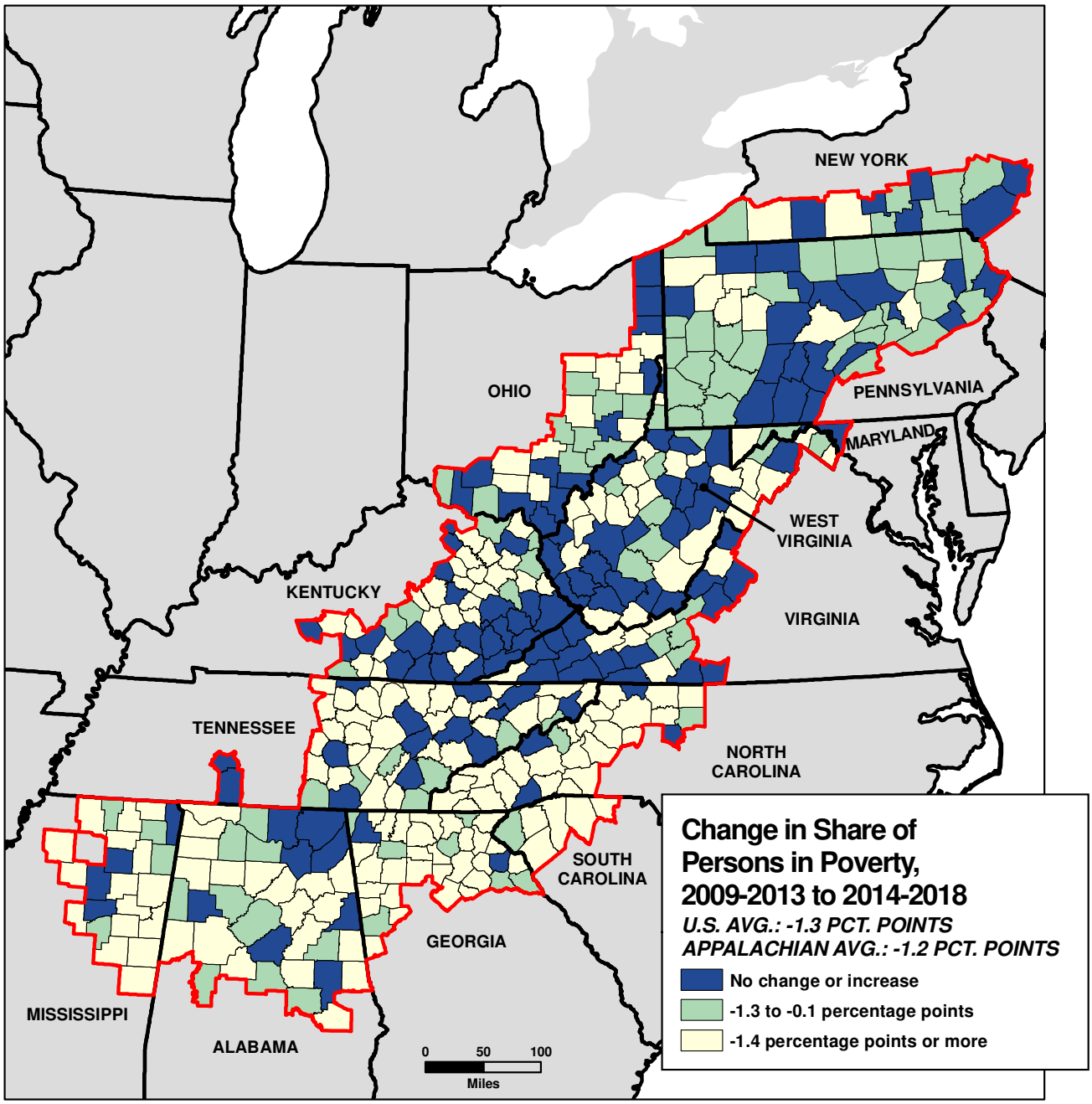
Table 8.5: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, by Age Group, 2009-2013 to 2014-2018

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	**- 1.3**	**- 2.1**	**- 1.1**	**- 2.8**	**- 0.7**	**- 0.1**
Appalachian Region	**- 1.2**	**- 2.2**	**- 0.9**	**- 3.0**	**- 0.4**	**- 0.5**
Subregions						
Northern Appalachia	- 0.5	- 1.3	- 0.2	- 1.9	+ 0.2	- 0.1
North Central Appalachia	- 0.3	- 0.8	+ 0.2	- 2.2	+ 0.6	+ 0.0
Central Appalachia	- 0.2	- 0.9	+ 0.7	- 1.2	+ 1.0	- 1.1
South Central Appalachia	- 1.8	- 2.6	- 1.3	- 4.5	- 0.8	- 0.6
Southern Appalachia	- 2.3	- 3.3	- 1.8	- 3.6	- 1.5	- 0.9
County Types						
Large Metros (pop. 1 million +)	- 1.4	- 2.4	- 1.1	- 3.4	- 0.8	- 0.1
Small Metros (pop. <1 million)	- 1.1	- 1.9	- 0.7	- 2.6	- 0.3	- 0.3
Nonmetro, Adjacent to Large Metros	- 2.0	- 2.8	- 1.6	- 4.6	- 1.2	- 0.9
Nonmetro, Adjacent to Small Metros	- 0.9	- 2.2	- 0.1	- 2.5	+ 0.3	- 0.8
Rural (nonmetro, not adj. to a metro)	- 0.9	- 1.5	- 0.3	- 2.5	+ 0.0	- 0.9
Alabama	**- 1.1**	**- 1.8**	**- 0.7**	**- 2.2**	**- 0.3**	**- 0.5**
Appalachian Alabama	- 1.1	- 2.1	- 0.6	- 2.1	- 0.3	- 0.5
Non-Appalachian Alabama	- 1.0	- 1.3	- 0.7	- 2.6	- 0.3	- 0.5
Georgia	**- 2.2**	**- 2.4**	**- 2.0**	**- 4.5**	**- 1.5**	**- 0.9**
Appalachian Georgia	- 2.9	- 3.8	- 2.7	- 4.7	- 2.4	- 0.6
Non-Appalachian Georgia	- 1.8	- 1.7	- 1.6	- 4.1	- 1.1	- 1.0
Kentucky	**- 0.9**	**- 1.7**	**- 0.3**	**- 2.7**	**+ 0.1**	**- 0.9**
Appalachian Kentucky	+ 0.1	- 0.3	+ 1.1	- 1.1	+ 1.3	- 1.5
Non-Appalachian Kentucky	- 1.2	- 2.0	- 0.6	- 3.2	- 0.2	- 0.5
Maryland	**- 0.4**	**- 0.5**	**- 0.3**	**- 1.3**	**- 0.1**	**+ 0.0**
Appalachian Maryland	- 0.6	- 1.7	- 0.2	- 1.8	+ 0.1	- 0.6
Non-Appalachian Maryland	- 0.3	- 0.5	- 0.3	- 1.3	- 0.2	+ 0.0
Mississippi	**- 1.9**	**- 3.2**	**- 1.2**	**- 3.2**	**- 0.7**	**- 1.3**
Appalachian Mississippi	- 2.9	- 4.1	- 2.4	- 4.3	- 2.0	- 1.4
Non-Appalachian Mississippi	- 1.7	- 3.0	- 0.8	- 2.8	- 0.4	- 1.2
New York	**- 0.7**	**- 1.1**	**- 0.5**	**- 2.0**	**- 0.2**	**+ 0.2**
Appalachian New York	- 0.3	- 0.9	+ 0.3	- 2.3	+ 0.8	+ 0.1
Non-Appalachian New York	- 0.6	- 1.1	- 0.5	- 2.0	- 0.2	+ 0.1
North Carolina	**- 2.1**	**- 2.9**	**- 1.8**	**- 4.5**	**- 1.3**	**- 0.8**
Appalachian North Carolina	- 2.7	- 4.3	- 2.3	- 7.0	- 1.6	- 0.6
Non-Appalachian North Carolina	- 1.9	- 2.6	- 1.6	- 4.0	- 1.1	- 0.8
Ohio	**- 1.3**	**- 2.0**	**- 1.0**	**- 4.0**	**- 0.5**	**+ 0.1**
Appalachian Ohio	- 0.6	- 1.5	- 0.1	- 3.0	+ 0.4	+ 0.3
Non-Appalachian Ohio	- 1.4	- 2.2	- 1.1	- 4.2	- 0.6	+ 0.0
Pennsylvania	**- 0.5**	**- 0.7**	**- 0.4**	**- 2.4**	**+ 0.0**	**- 0.2**
Appalachian Pennsylvania	- 0.5	- 1.1	- 0.2	- 1.7	+ 0.1	- 0.3
Non-Appalachian Pennsylvania	- 0.6	- 0.4	- 0.5	- 3.0	- 0.1	- 0.1
South Carolina	**- 2.1**	**- 2.7**	**- 1.7**	**- 4.2**	**- 1.2**	**- 1.1**
Appalachian South Carolina	- 2.7	- 4.7	- 1.9	- 2.6	- 1.7	- 1.6
Non-Appalachian South Carolina	- 1.8	- 2.0	- 1.7	- 4.7	- 0.9	- 0.8
Tennessee	**- 1.5**	**- 2.0**	**- 1.2**	**- 3.2**	**- 0.9**	**- 0.8**
Appalachian Tennessee	- 1.6	- 2.4	- 1.3	- 4.3	- 0.8	- 0.8
Non-Appalachian Tennessee	- 1.4	- 1.8	- 1.1	- 2.4	- 0.9	- 0.7
Virginia	**- 0.4**	**- 0.4**	**- 0.2**	**- 1.4**	**+ 0.0**	**- 0.1**
Appalachian Virginia	+ 0.4	+ 0.0	+ 1.0	+ 1.6	+ 1.0	- 0.1
Non-Appalachian Virginia	- 0.4	- 0.4	- 0.3	- 1.5	- 0.1	+ 0.0
West Virginia (entire state)	**- 0.1**	**- 0.8**	**+ 0.6**	**- 1.4**	**+ 0.9**	**- 0.2**

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2018, the poverty threshold for a family of two adults and two children was $25,465. 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, 2009-2013 and 2014-2018 American Community Surveys.

Figure 8.11: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, 2009-2013 to 2014-2018



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

The share of Appalachian residents living below the poverty level (income of less than $25,465 for a family of two adults and two children in 2018) decreased 1.2 percentage points between the 2009-2013 and 2014-2018 periods, almost the same as the 1.3 point decline for the nation as a whole. And the decrease in the poverty rate was even greater than the national average in 197 of Appalachia's 420 counties (scattered throughout the Region, but with the highest concentrations in South Central and Southern Appalachia). Conversely, there were 130 counties—mostly in Northern, North Central, and Central Appalachia—where poverty rates either stayed the same or increased between the two periods. The overall picture nevertheless suggests an improved economic climate in much of Appalachia in the aftermath of the Great Recession of 2007-2009 and the recovery that followed.

Table 8.6: Income-to-Poverty Ratio for Persons in the Appalachian Region, 2014-2018

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	**314,943,184**	**6.2**	**7.8**	**17.9**	**68.1**
Appalachian Region	**24,758,971**	**6.8**	**9.0**	**20.2**	**64.0**
Subregions					
Northern Appalachia	7,901,206	6.2	7.7	18.2	67.9
North Central Appalachia	2,334,930	7.6	9.8	20.4	62.3
Central Appalachia	1,815,008	10.2	13.7	23.8	52.3
South Central Appalachia	4,703,851	7.1	9.3	21.6	62.0
Southern Appalachia	8,003,976	6.3	8.7	20.4	64.6
County Types					
Large Metros (pop. 1 million +)	5,954,554	5.3	6.8	16.8	71.1
Small Metros (pop. <1 million)	10,447,031	6.9	8.7	19.7	64.7
Nonmetro, Adjacent to Large Metros	2,119,122	7.3	10.0	22.4	60.3
Nonmetro, Adjacent to Small Metros	3,826,875	7.3	10.2	23.2	59.3
Rural (nonmetro, not adj. to a metro)	2,411,389	9.3	12.3	23.7	54.7
Alabama	**4,742,208**	**7.6**	**9.9**	**20.3**	**62.2**
Appalachian Alabama	3,038,330	6.7	9.5	20.0	63.7
Non-Appalachian Alabama	1,703,878	9.2	10.6	20.8	59.4
Georgia	**10,024,689**	**7.3**	**8.8**	**19.6**	**64.4**
Appalachian Georgia	3,137,027	5.2	7.5	19.8	67.5
Non-Appalachian Georgia	6,887,662	8.2	9.4	19.5	63.0
Kentucky	**4,302,315**	**7.8**	**10.2**	**19.7**	**62.3**
Appalachian Kentucky	1,128,997	10.9	14.4	23.7	51.1
Non-Appalachian Kentucky	3,173,318	6.7	8.7	18.4	66.3
Maryland	**5,862,050**	**4.6**	**4.9**	**12.8**	**77.7**
Appalachian Maryland	233,931	5.7	7.7	18.6	68.0
Non-Appalachian Maryland	5,628,119	4.5	4.8	12.6	78.1
Mississippi	**2,890,347**	**9.5**	**11.2**	**22.3**	**56.9**
Appalachian Mississippi	608,053	8.3	12.3	24.8	54.7
Non-Appalachian Mississippi	2,282,294	9.8	11.0	21.7	57.5
New York	**19,108,993**	**6.6**	**8.0**	**16.1**	**69.2**
Appalachian New York	977,515	7.5	8.6	19.4	64.5
Non-Appalachian New York	18,131,478	6.5	8.0	15.9	69.5
North Carolina	**9,881,292**	**6.7**	**8.7**	**20.1**	**64.4**
Appalachian North Carolina	1,694,665	6.7	9.4	21.9	62.0
Non-Appalachian North Carolina	8,186,627	6.7	8.6	19.8	65.0
Ohio	**11,319,092**	**6.6**	**7.9**	**17.4**	**68.0**
Appalachian Ohio	1,941,714	7.5	9.5	20.1	62.9
Non-Appalachian Ohio	9,377,378	6.5	7.6	16.9	69.1
Pennsylvania	**12,380,149**	**5.8**	**7.0**	**16.3**	**71.0**
Appalachian Pennsylvania	5,487,525	5.8	7.2	17.5	69.5
Non-Appalachian Pennsylvania	6,892,624	5.8	6.8	15.3	72.2
South Carolina	**4,814,032**	**7.2**	**8.8**	**20.4**	**63.6**
Appalachian South Carolina	1,220,566	6.7	7.9	20.8	64.5
Non-Appalachian South Carolina	3,593,466	7.4	9.1	20.3	63.2
Tennessee	**6,488,786**	**7.0**	**9.2**	**20.3**	**63.6**
Appalachian Tennessee	2,796,656	7.0	9.6	21.9	61.4
Non-Appalachian Tennessee	3,692,130	6.9	8.8	19.0	65.3
Virginia	**8,162,107**	**5.2**	**5.7**	**14.5**	**74.5**
Appalachian Virginia	717,491	9.1	9.7	21.2	59.9
Non-Appalachian Virginia	7,444,616	4.8	5.3	13.9	75.9
West Virginia (entire state)	**1,776,501**	**7.6**	**10.1**	**21.2**	**61.1**

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2018, the poverty threshold for a family of two adults and two children was $25,465. 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, 2014-2018 American Community Survey.

Table 8.7: Number of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2014-2018

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	**19,682,659**	**6,223,659**	**12,065,950**	**3,411,280**	**8,654,670**	**1,393,050**
Appalachian Region	**1,686,311**	**523,017**	**1,050,784**	**311,291**	**739,493**	**112,510**
Subregions						
Northern Appalachia	490,223	144,379	308,252	102,566	205,686	37,592
North Central Appalachia	176,355	53,076	113,692	35,276	78,416	9,587
Central Appalachia	184,251	62,050	112,231	23,306	88,925	9,970
South Central Appalachia	334,558	98,450	214,510	68,809	145,701	21,598
Southern Appalachia	500,924	165,062	302,099	81,334	220,765	33,763
County Types						
Large Metros (pop. 1 million +)	312,970	97,055	190,131	48,547	141,584	25,784
Small Metros (pop. <1 million)	715,653	215,453	455,445	154,907	300,538	44,755
Nonmetro, Adjacent to Large Metros	154,686	48,785	95,666	28,980	66,686	10,235
Nonmetro, Adjacent to Small Metros	278,198	89,116	170,403	40,335	130,068	18,679
Rural (nonmetro, not adj. to a metro)	224,804	72,608	139,139	38,522	100,617	13,057
Alabama	**360,959**	**125,493**	**214,055**	**61,473**	**152,582**	**21,411**
Appalachian Alabama	204,223	68,617	122,440	33,289	89,151	13,166
Non-Appalachian Alabama	156,736	56,876	91,615	28,184	63,431	8,245
Georgia	**727,406**	**251,498**	**432,053**	**115,594**	**316,459**	**43,855**
Appalachian Georgia	164,366	53,948	98,024	21,490	76,534	12,394
Non-Appalachian Georgia	563,040	197,550	334,029	94,104	239,925	31,461
Kentucky	**334,537**	**112,699**	**204,140**	**54,670**	**149,470**	**17,698**
Appalachian Kentucky	122,601	41,141	75,366	16,399	58,967	6,094
Non-Appalachian Kentucky	211,936	71,558	128,774	38,271	90,503	11,604
Maryland	**267,774**	**79,101**	**164,154**	**41,512**	**122,642**	**24,519**
Appalachian Maryland	13,341	4,221	7,933	2,179	5,754	1,187
Non-Appalachian Maryland	254,433	74,880	156,221	39,333	116,888	23,332
Mississippi	**275,272**	**103,982**	**156,634**	**42,802**	**113,832**	**14,656**
Appalachian Mississippi	50,523	16,646	30,679	10,577	20,102	3,198
Non-Appalachian Mississippi	224,749	87,336	125,955	32,225	93,730	11,458
New York	**1,260,700**	**383,202**	**774,909**	**188,227**	**586,682**	**102,589**
Appalachian New York	73,677	18,945	50,460	21,200	29,260	4,272
Non-Appalachian New York	1,187,023	364,257	724,449	167,027	557,422	98,317
North Carolina	**663,550**	**217,917**	**406,719**	**116,791**	**289,928**	**38,914**
Appalachian North Carolina	113,898	34,025	71,730	20,970	50,760	8,143
Non-Appalachian North Carolina	549,652	183,892	334,989	95,821	239,168	30,771
Ohio	**750,715**	**252,823**	**451,901**	**124,620**	**327,281**	**45,991**
Appalachian Ohio	145,484	49,603	86,332	21,484	64,848	9,549
Non-Appalachian Ohio	605,231	203,220	365,569	103,136	262,433	36,442
Pennsylvania	**715,672**	**219,126**	**440,601**	**132,984**	**307,617**	**55,945**
Appalachian Pennsylvania	317,884	90,907	200,776	68,738	132,038	26,201
Non-Appalachian Pennsylvania	397,788	128,219	239,825	64,246	175,579	29,744
South Carolina	**346,252**	**117,053**	**207,574**	**55,266**	**152,308**	**21,625**
Appalachian South Carolina	81,812	25,851	50,956	15,978	34,978	5,005
Non-Appalachian South Carolina	264,440	91,202	156,618	39,288	117,330	16,620
Tennessee	**451,092**	**154,889**	**270,426**	**70,894**	**199,532**	**25,777**
Appalachian Tennessee	197,056	62,031	122,295	32,314	89,981	12,730
Non-Appalachian Tennessee	254,036	92,858	148,131	38,580	109,551	13,047
Virginia	**425,969**	**126,598**	**270,078**	**89,912**	**180,166**	**29,293**
Appalachian Virginia	65,577	16,242	45,620	20,254	25,366	3,715
Non-Appalachian Virginia	360,392	110,356	224,458	69,658	154,800	25,578
West Virginia (entire state)	**135,869**	**40,840**	**88,173**	**26,419**	**61,754**	**6,856**

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2018, the poverty threshold for a family of two adults and two children was $25,465. 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, 2014-2018 American Community Survey.

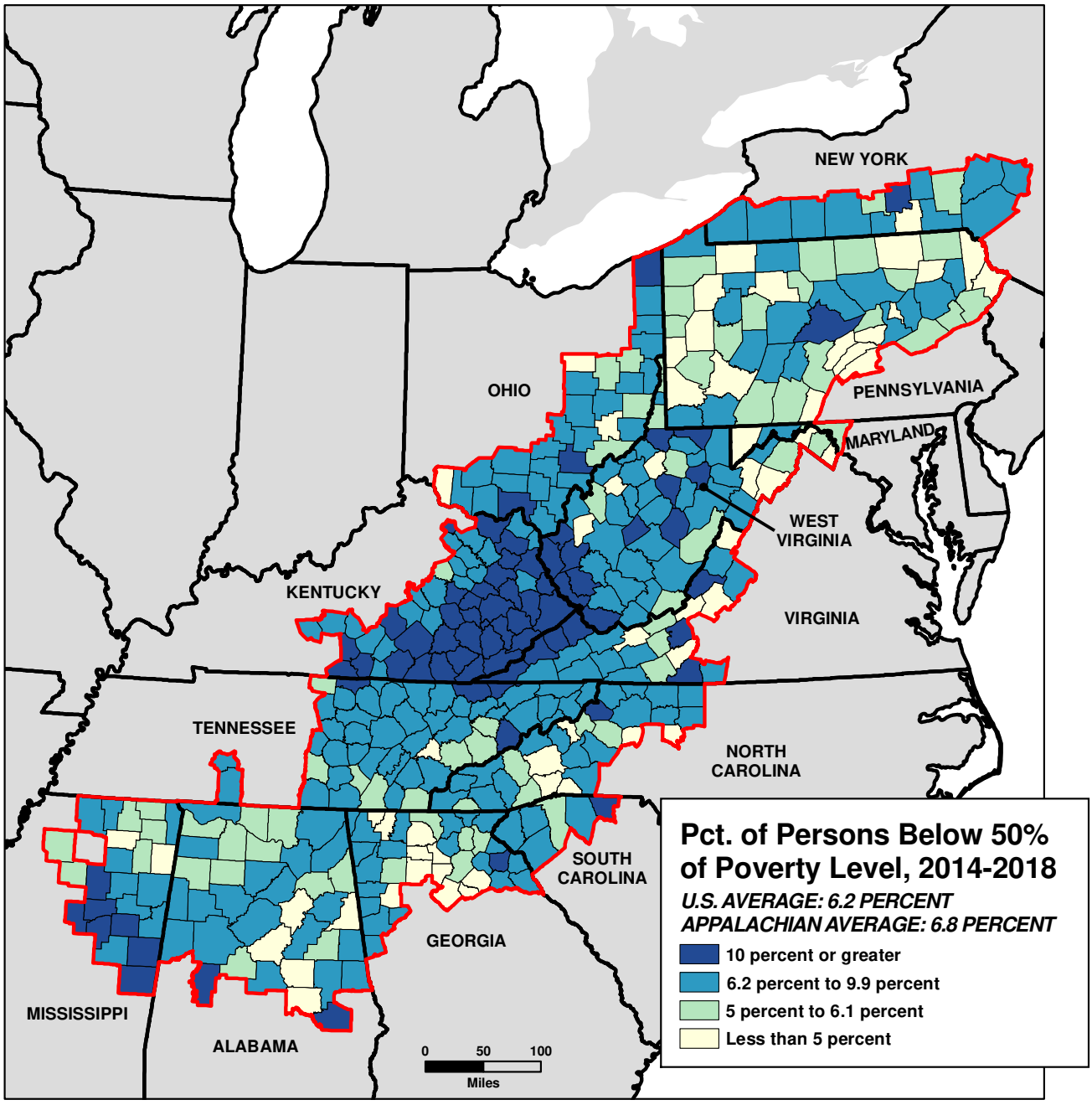
Table 8.8: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2014-2018

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	**6.2**	**8.6**	**6.2**	**12.3**	**5.2**	**2.9**
Appalachian Region	**6.8**	**9.8**	**7.0**	**14.9**	**5.7**	**2.6**
Subregions						
Northern Appalachia	6.2	9.0	6.4	15.7	5.0	2.5
North Central Appalachia	7.6	10.7	8.0	17.9	6.4	2.3
Central Appalachia	10.2	15.7	10.2	16.1	9.3	3.1
South Central Appalachia	7.1	10.2	7.6	17.3	6.0	2.4
Southern Appalachia	6.3	8.6	6.2	11.7	5.3	2.8
County Types						
Large Metros (pop. 1 million +)	5.3	7.1	5.2	10.1	4.4	2.8
Small Metros (pop. <1 million)	6.9	9.7	7.1	16.9	5.5	2.4
Nonmetro, Adjacent to Large Metros	7.3	10.6	7.5	16.0	6.1	2.7
Nonmetro, Adjacent to Small Metros	7.3	11.1	7.5	13.3	6.6	2.5
Rural (nonmetro, not adj. to a metro)	9.3	14.0	9.7	18.9	8.1	2.9
Alabama	**7.6**	**11.6**	**7.4**	**14.6**	**6.2**	**2.8**
Appalachian Alabama	6.7	10.0	6.6	12.8	5.6	2.7
Non-Appalachian Alabama	9.2	14.4	8.9	17.6	7.2	3.0
Georgia	**7.3**	**10.2**	**6.9**	**12.9**	**5.9**	**3.3**
Appalachian Georgia	5.2	6.8	5.1	8.0	4.6	3.0
Non-Appalachian Georgia	8.2	11.9	7.7	15.0	6.5	3.5
Kentucky	**7.8**	**11.4**	**7.7**	**14.6**	**6.6**	**2.6**
Appalachian Kentucky	10.9	16.3	11.0	17.5	10.0	3.2
Non-Appalachian Kentucky	6.7	9.7	6.6	13.7	5.4	2.4
Maryland	**4.6**	**6.0**	**4.5**	**8.6**	**3.8**	**2.9**
Appalachian Maryland	5.7	8.4	5.6	10.9	4.8	2.8
Non-Appalachian Maryland	4.5	5.9	4.4	8.5	3.8	2.9
Mississippi	**9.5**	**14.7**	**9.0**	**16.3**	**7.7**	**3.4**
Appalachian Mississippi	8.3	11.5	8.4	18.1	6.5	3.3
Non-Appalachian Mississippi	9.8	15.5	9.1	15.8	8.0	3.4
New York	**6.6**	**9.4**	**6.4**	**11.5**	**5.6**	**3.5**
Appalachian New York	7.5	9.6	8.4	22.3	5.8	2.3
Non-Appalachian New York	6.5	9.4	6.3	10.8	5.6	3.5
North Carolina	**6.7**	**9.6**	**6.7**	**13.8**	**5.5**	**2.5**
Appalachian North Carolina	6.7	9.9	7.1	15.6	5.8	2.4
Non-Appalachian North Carolina	6.7	9.6	6.6	13.5	5.5	2.6
Ohio	**6.6**	**9.8**	**6.5**	**13.0**	**5.5**	**2.5**
Appalachian Ohio	7.5	11.6	7.4	13.5	6.4	2.7
Non-Appalachian Ohio	6.5	9.5	6.3	12.9	5.3	2.5
Pennsylvania	**5.8**	**8.3**	**5.8**	**13.2**	**4.7**	**2.6**
Appalachian Pennsylvania	5.8	8.3	6.0	15.5	4.6	2.5
Non-Appalachian Pennsylvania	5.8	8.3	5.6	11.4	4.8	2.7
South Carolina	**7.2**	**10.9**	**7.1**	**13.6**	**6.1**	**2.7**
Appalachian South Carolina	6.7	9.3	6.9	15.2	5.5	2.5
Non-Appalachian South Carolina	7.4	11.4	7.2	13.0	6.2	2.7
Tennessee	**7.0**	**10.5**	**6.8**	**12.7**	**5.8**	**2.5**
Appalachian Tennessee	7.0	10.5	7.2	13.9	6.2	2.5
Non-Appalachian Tennessee	6.9	10.5	6.4	11.9	5.5	2.6
Virginia	**5.2**	**6.9**	**5.3**	**13.0**	**4.1**	**2.4**
Appalachian Virginia	9.1	12.0	10.4	30.2	6.9	2.6
Non-Appalachian Virginia	4.8	6.5	4.8	11.2	3.8	2.4
West Virginia (entire state)	**7.6**	**11.2**	**8.2**	**18.1**	**6.6**	**2.0**

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2018, the poverty threshold for a family of two adults and two children was $25,465. 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, 2014-2018 American Community Survey.

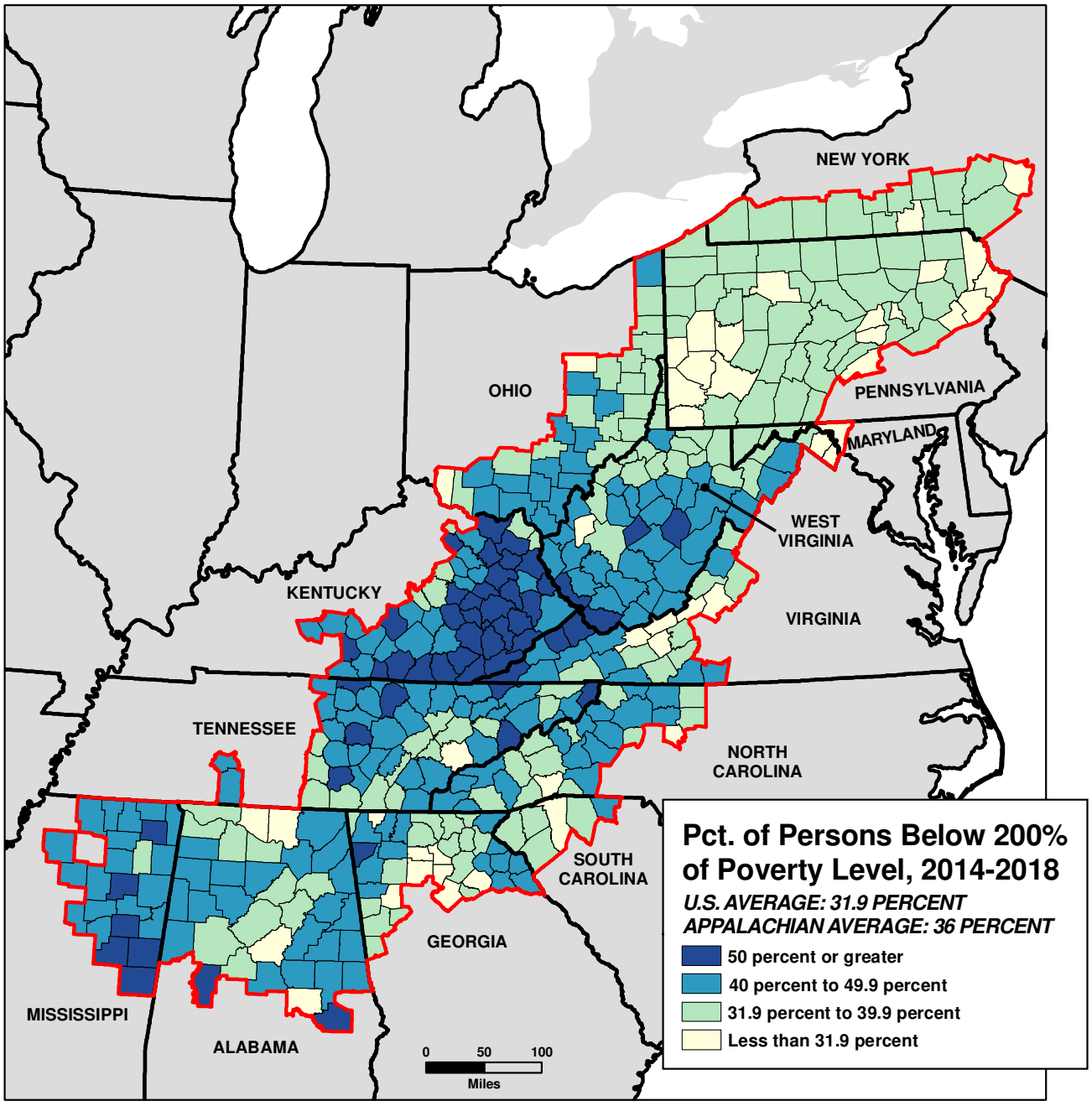
Figure 8.12: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, 2014-2018



Map Title: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In the 2014-2018 period, 6.8 percent of Appalachian residents were in extreme poverty (incomes below 50 percent of the poverty level, or less than $12,733 for a family of two adults and two children in 2018). While this was slightly higher than the national average of 6.2 percent, the situation was even worse in much of the Region. For example, in 73 Appalachian counties at least one in 10 residents were extremely poor. All but nine of these counties were outside metropolitan areas, and 45 of them were in Central Appalachia. (Kentucky alone had 33 counties in this group.) In contrast, there were 59 counties in the Region where less than 5 percent of the population had incomes below 50 percent of the poverty level. Northern Appalachia had one-third of these counties, although the group included several Georgia counties that were outside Atlanta.

Figure 8.13: Percent of Persons in the Appalachian Region Below 200% of Poverty Level, 2014-2018



Map Title: Percent of Persons in the Appalachian Region Below 200% of Poverty Level, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

More than one-third (36 percent) of persons in the Appalachian Region had incomes less than twice the poverty level in 2014-2018, four percentage points higher than the national rate of just under 32 percent. (In 2018, a family of two adults and two children fell in this category if their income was less than $50,930.) 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 221 of Appalachia's 420 counties, mostly in Central, South Central, and Southern Appalachia. And in 53 Appalachian counties, at least half of residents had incomes below 200 percent of poverty; 38 of these counties were in Central Appalachia and 30 were in Kentucky alone. In contrast, there were 46 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, 2009-2013 to 2014-2018

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	**- 0.6**	**- 0.8**	**- 1.0**	**+ 2.3**
Appalachian Region	**- 0.4**	**- 0.8**	**- 1.0**	**+ 2.2**
Subregions				
Northern Appalachia	- 0.1	- 0.5	- 1.4	+ 1.9
North Central Appalachia	- 0.1	- 0.2	- 1.0	+ 1.3
Central Appalachia	+ 0.6	- 0.7	- 1.1	+ 1.2
South Central Appalachia	- 0.7	- 1.1	- 0.6	+ 2.4
Southern Appalachia	- 0.9	- 1.3	- 0.9	+ 3.0
County Types				
Large Metros (pop. 1 million +)	- 0.6	- 0.8	- 1.3	+ 2.7
Small Metros (pop. <1 million)	- 0.4	- 0.7	- 0.9	+ 2.0
Nonmetro, Adjacent to Large Metros	- 0.8	- 1.2	- 0.5	+ 2.5
Nonmetro, Adjacent to Small Metros	+ 0.0	- 0.9	- 0.8	+ 1.7
Rural (nonmetro, not adj. to a metro)	+ 0.1	- 1.1	- 1.3	+ 2.3
Alabama	**- 0.4**	**- 0.7**	**- 1.0**	**+ 2.1**
Appalachian Alabama	- 0.6	- 0.5	- 0.9	+ 1.9
Non-Appalachian Alabama	+ 0.0	- 1.0	- 1.4	+ 2.4
Georgia	**- 1.0**	**- 1.1**	**- 0.9**	**+ 3.1**
Appalachian Georgia	- 1.1	- 1.8	- 0.8	+ 3.7
Non-Appalachian Georgia	- 1.0	- 0.8	- 1.0	+ 2.8
Kentucky	**- 0.2**	**- 0.6**	**- 1.0**	**+ 1.9**
Appalachian Kentucky	+ 0.6	- 0.5	- 1.4	+ 1.3
Non-Appalachian Kentucky	- 0.5	- 0.6	- 0.7	+ 1.9
Maryland	**- 0.1**	**- 0.2**	**- 0.2**	**+ 0.5**
Appalachian Maryland	- 0.7	+ 0.1	- 0.6	+ 1.2
Non-Appalachian Maryland	- 0.1	- 0.2	- 0.1	+ 0.4
Mississippi	**- 0.3**	**- 1.7**	**- 1.1**	**+ 3.0**
Appalachian Mississippi	- 1.4	- 1.5	- 1.1	+ 4.1
Non-Appalachian Mississippi	+ 0.0	- 1.6	- 1.0	+ 2.7
New York	**- 0.2**	**- 0.5**	**- 0.7**	**+ 1.3**
Appalachian New York	+ 0.1	- 0.4	- 0.4	+ 0.7
Non-Appalachian New York	- 0.3	- 0.4	- 0.7	+ 1.4
North Carolina	**- 1.0**	**- 1.1**	**- 0.8**	**+ 2.8**
Appalachian North Carolina	- 1.3	- 1.4	- 0.4	+ 3.2
Non-Appalachian North Carolina	- 0.9	- 1.0	- 0.8	+ 2.8
Ohio	**- 0.7**	**- 0.6**	**- 0.9**	**+ 2.1**
Appalachian Ohio	+ 0.0	- 0.5	- 1.4	+ 2.0
Non-Appalachian Ohio	- 0.8	- 0.5	- 0.8	+ 2.2
Pennsylvania	**- 0.1**	**- 0.4**	**- 0.9**	**+ 1.5**
Appalachian Pennsylvania	+ 0.0	- 0.5	- 1.6	+ 2.1
Non-Appalachian Pennsylvania	- 0.1	- 0.4	- 0.4	+ 1.0
South Carolina	**- 1.0**	**- 1.1**	**- 1.1**	**+ 3.2**
Appalachian South Carolina	- 1.0	- 1.7	- 0.6	+ 3.2
Non-Appalachian South Carolina	- 1.0	- 0.8	- 1.2	+ 3.1
Tennessee	**- 0.7**	**- 0.7**	**- 1.0**	**+ 2.5**
Appalachian Tennessee	- 0.6	- 1.1	- 0.7	+ 2.3
Non-Appalachian Tennessee	- 0.9	- 0.6	- 1.3	+ 2.7
Virginia	**+ 0.0**	**- 0.4**	**- 0.9**	**+ 1.2**
Appalachian Virginia	+ 1.3	- 1.0	- 1.9	+ 1.5
Non-Appalachian Virginia	- 0.1	- 0.4	- 0.7	+ 1.0
West Virginia (entire state)	**- 0.1**	**+ 0.0**	**- 0.3**	**+ 0.5**

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2018, the poverty threshold for a family of two adults and two children was $25,465. 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, 2009-2013 and 2014-2018 American Community Surveys.

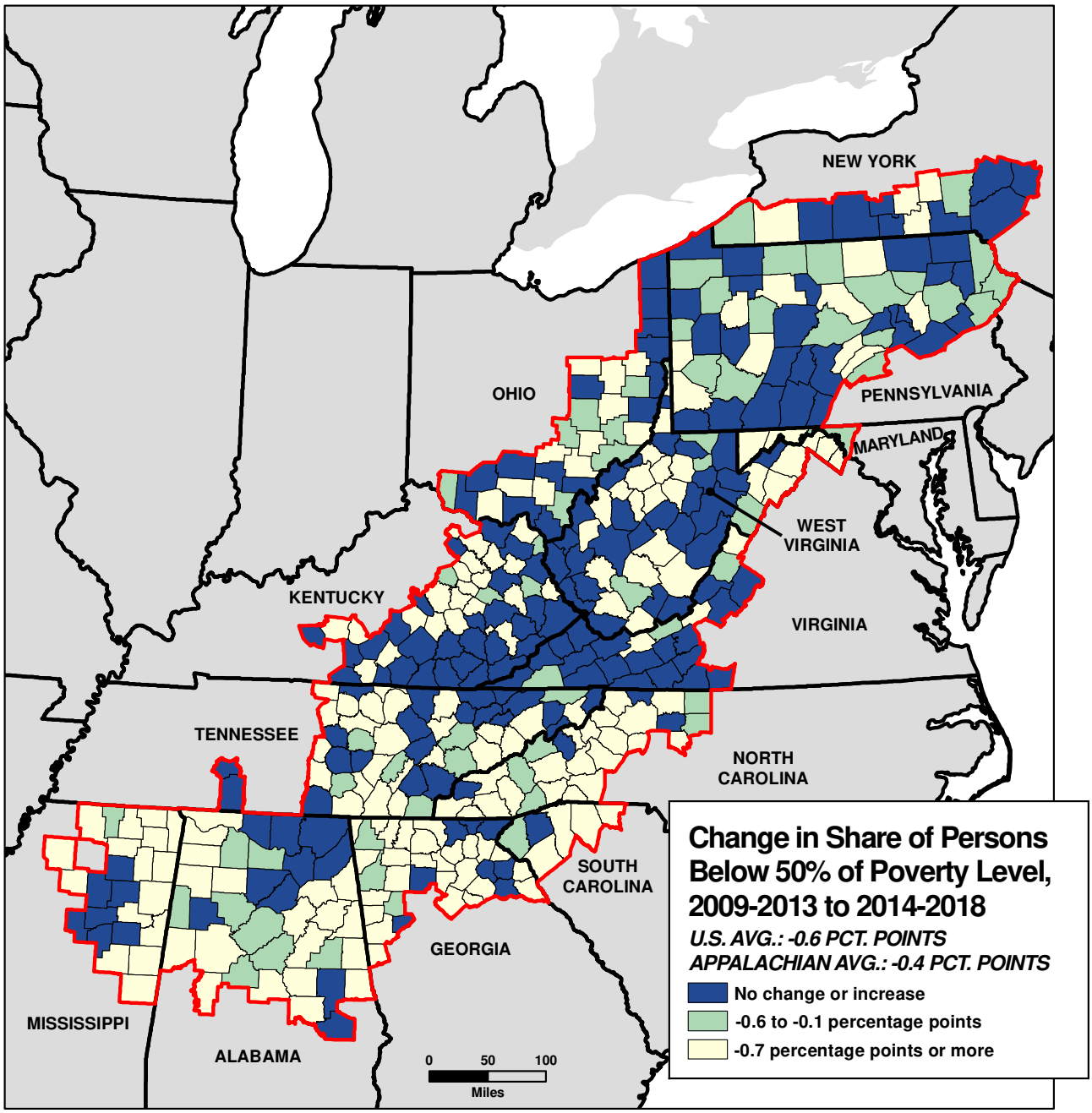
Table 8.10: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2009-2013 to 2014-2018

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	**- 0.6**	**- 1.0**	**- 0.4**	**- 1.5**	**- 0.2**	**+ 0.4**
Appalachian Region	**- 0.4**	**- 0.9**	**- 0.2**	**- 1.4**	**+ 0.0**	**+ 0.4**
Subregions						
Northern Appalachia	- 0.1	- 0.4	+ 0.1	- 0.9	+ 0.3	+ 0.4
North Central Appalachia	- 0.1	- 0.6	+ 0.1	- 1.3	+ 0.3	+ 0.6
Central Appalachia	+ 0.6	+ 0.4	+ 1.0	- 0.1	+ 1.1	+ 0.4
South Central Appalachia	- 0.7	- 0.9	- 0.5	- 2.3	- 0.3	+ 0.3
Southern Appalachia	- 0.9	- 1.9	- 0.7	- 1.6	- 0.5	+ 0.4
County Types						
Large Metros (pop. 1 million +)	- 0.6	- 1.4	- 0.4	- 1.6	- 0.3	+ 0.5
Small Metros (pop. <1 million)	- 0.4	- 0.9	- 0.3	- 1.3	- 0.1	+ 0.4
Nonmetro, Adjacent to Large Metros	- 0.8	- 1.2	- 0.8	- 2.3	- 0.5	+ 0.4
Nonmetro, Adjacent to Small Metros	+ 0.0	- 0.6	+ 0.2	- 1.3	+ 0.4	+ 0.3
Rural (nonmetro, not adj. to a metro)	+ 0.1	- 0.2	+ 0.6	+ 0.0	+ 0.6	+ 0.4
Alabama	**- 0.4**	**- 1.0**	**- 0.1**	**- 0.6**	**+ 0.0**	**+ 0.4**
Appalachian Alabama	- 0.6	- 1.6	- 0.3	- 0.9	- 0.1	+ 0.3
Non-Appalachian Alabama	+ 0.0	+ 0.0	+ 0.2	- 0.1	+ 0.2	+ 0.5
Georgia	**- 1.0**	**- 1.4**	**- 1.0**	**- 3.0**	**- 0.7**	**+ 0.5**
Appalachian Georgia	- 1.1	- 1.6	- 1.0	- 1.9	- 0.9	+ 0.5
Non-Appalachian Georgia	- 1.0	- 1.3	- 1.0	- 3.2	- 0.5	+ 0.6
Kentucky	**- 0.2**	**- 0.8**	**+ 0.1**	**- 0.8**	**+ 0.3**	**+ 0.1**
Appalachian Kentucky	+ 0.6	+ 0.0	+ 1.2	- 0.1	+ 1.5	+ 0.2
Non-Appalachian Kentucky	- 0.5	- 1.0	- 0.2	- 1.0	- 0.1	+ 0.1
Maryland	**- 0.1**	**- 0.4**	**- 0.1**	**- 1.2**	**+ 0.0**	**+ 0.6**
Appalachian Maryland	- 0.7	- 2.3	- 0.4	- 1.9	- 0.1	+ 0.5
Non-Appalachian Maryland	- 0.1	- 0.3	- 0.1	- 1.1	+ 0.1	+ 0.6
Mississippi	**- 0.3**	**- 0.7**	**+ 0.0**	**- 1.2**	**+ 0.3**	**+ 0.5**
Appalachian Mississippi	- 1.4	- 3.5	- 0.9	- 1.4	- 0.7	+ 0.8
Non-Appalachian Mississippi	+ 0.0	- 0.1	+ 0.2	- 1.1	+ 0.6	+ 0.4
New York	**- 0.2**	**- 0.6**	**- 0.2**	**- 0.9**	**+ 0.0**	**+ 0.5**
Appalachian New York	+ 0.1	+ 0.0	+ 0.3	- 0.5	+ 0.5	+ 0.4
Non-Appalachian New York	- 0.3	- 0.6	- 0.2	- 1.0	+ 0.0	+ 0.5
North Carolina	**- 1.0**	**- 1.7**	**- 0.8**	**- 2.3**	**- 0.5**	**+ 0.3**
Appalachian North Carolina	- 1.3	- 1.9	- 1.3	- 3.9	- 0.8	+ 0.2
Non-Appalachian North Carolina	- 0.9	- 1.7	- 0.7	- 1.9	- 0.4	+ 0.4
Ohio	**- 0.7**	**- 1.2**	**- 0.6**	**- 2.5**	**- 0.2**	**+ 0.3**
Appalachian Ohio	+ 0.0	- 0.2	+ 0.0	- 1.8	+ 0.3	+ 0.7
Non-Appalachian Ohio	- 0.8	- 1.4	- 0.7	- 2.6	- 0.3	+ 0.2
Pennsylvania	**- 0.1**	**- 0.1**	**- 0.1**	**- 1.4**	**+ 0.2**	**+ 0.3**
Appalachian Pennsylvania	+ 0.0	- 0.4	+ 0.1	- 0.8	+ 0.4	+ 0.4
Non-Appalachian Pennsylvania	- 0.1	+ 0.1	- 0.2	- 1.7	+ 0.1	+ 0.3
South Carolina	**- 1.0**	**- 1.8**	**- 0.8**	**- 2.6**	**- 0.3**	**+ 0.3**
Appalachian South Carolina	- 1.0	- 2.1	- 0.6	- 1.3	- 0.5	+ 0.3
Non-Appalachian South Carolina	- 1.0	- 1.7	- 0.8	- 3.2	- 0.4	+ 0.3
Tennessee	**- 0.7**	**- 1.2**	**- 0.6**	**- 2.1**	**- 0.4**	**+ 0.2**
Appalachian Tennessee	- 0.6	- 0.7	- 0.7	- 2.8	- 0.2	+ 0.4
Non-Appalachian Tennessee	- 0.9	- 1.6	- 0.6	- 1.5	- 0.5	+ 0.0
Virginia	**+ 0.0**	**+ 0.1**	**+ 0.1**	**- 0.3**	**+ 0.2**	**+ 0.5**
Appalachian Virginia	+ 1.3	+ 1.8	+ 1.7	+ 4.8	+ 1.3	+ 0.7
Non-Appalachian Virginia	- 0.1	+ 0.0	- 0.1	- 0.7	+ 0.0	+ 0.5
West Virginia (entire state)	**- 0.1**	**- 0.6**	**+ 0.3**	**- 0.6**	**+ 0.4**	**+ 0.2**

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2018, the poverty threshold for a family of two adults and two children was $25,465. 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, 2009-2013 and 2014-2018 American Community Surveys.

Figure 8.14: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, 2009-2013 to 2014-2018



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

The share of Appalachian residents living in extreme poverty (50 percent of the poverty level, or earning less than $12,733 for a family of two adults and two children in 2018) fell 0.4 percentage points between the 2009-2013 and 2014-2018 periods. But there was much variation within the Region. On one hand, the rate of extreme poverty went down by more than 0.6 percentage points (the national rate) in 185 counties. Yet in 171 other counties, extreme poverty rates either increased or remained constant. More than half of the counties in the latter group were in Northern and Central Appalachia, although there were also pockets of concentration in the other subregions.

TRENDS IN INCOME AND POVERTY

- Adjusting for inflation, income trends in the Appalachian Region were positive between the 2009-2013 and 2014-2018 periods (see Tables 8.1 and 8.2).
    - The mean income measures all increased noticeably during the two periods. Mean household income, for example, rose 6 percent to $67,559 in 2014-2018. Mean family and per capita income had even greater increases, reaching $80,314 and $27,251, respectively. (All monetary figures are in 2018 Dollars.)
    - Meanwhile, the two median income measures—which are not affected by extreme values—both registered slightly more modest increases since 2009-2013. Median household income (the level where half of all households have higher incomes while the other half have lower incomes) rose 5 percent to $49,747 in 2014-2018. Median family income increased 5.8 percent to $63,037.

- Despite these increases, the post 2009-2013 income gains were generally not quite as great in Appalachia as they were nationally. The exception was in median family income, where Appalachia's growth matched the national average.

- Within the Appalachian Region, all income measures increased for the subregions and county types, even after adjusting for inflation. Among the subregions, income growth was highest in Southern and (in some cases) South Central Appalachia and lowest in Central Appalachia. Among the county types, the increases were largest for counties in large metropolitan areas and smallest in the Region's most rural counties—although there were exceptions. For example, median household income increased less than 4 percent among nonmetropolitan counties adjacent to metro areas. Even given the overall increases, there were still some counties throughout the Region that experienced declines in income between 2009-2013 and 2014-2018.

- Since 2009-2013, the share of Appalachian residents in poverty (incomes below $25,465 for a family of two adults and two children in 2018) has fallen 1.2 percentage points to 15.8 percent in 2014-2018 (see Tables 8.4 and 8.5). Poverty decreased in all subregions and county types. The decline in poverty was greatest in the Appalachian portions of Georgia, Mississippi, North Carolina, and South Carolina: Poverty fell by more than two percentage points in each state. In contrast, the poverty rate in Appalachian Kentucky and Virginia increased slightly between 2009-2013 and 2014-2018.

- Both child poverty and poverty among young adults (ages 18 to 24) have fallen noticeably since 2009-2013: Child poverty dropped more than two percentage points to 21.9 percent in 2014-2018, while poverty among 18-to-24-year-olds fell three points to 25.8 percent. And while South Carolina had the largest decrease in child poverty (almost five points), North Carolina had the largest decrease for young adults (seven points). Poverty rates among working-age adults (ages 25 to 64) had a more modest decline to 13.8 percent. Within this age group, however, the decrease was not uniform throughout the Region. For example, poverty among working-age adults fell at least two percentage points in Georgia and Mississippi, but rose by at least one point in Kentucky and Virginia.

- Poverty declined half a percentage point for older residents (ages 65 and over) between 2009-2013 and 2014-2018 in the Region, although some parts of Appalachia either stayed the same (North Central Appalachia) or rose slightly (the Appalachian sections of New York and Ohio). Central Appalachia, the Region's nonmetro counties, and the Appalachian portions of Kentucky, Mississippi, and South Carolina had the biggest drops in the poverty rate for persons ages 65 and over.

- In 2014-2018, the share of Appalachian residents below 50 percent of poverty (income below $12,733 for a family of two adults and two children in 2018) was 6.8 percent, 0.4 percentage points lower than it was in 2009-2013 (see Tables 8.6 through 8.10). Within the Region, however, some parts had greater decreases while others showed increases. And the share decreased 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 2009-2013 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.

CHAPTER 9: HEALTH INSURANCE COVERAGE

Table 9.1: Number of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2014-2018

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	**29,752,767**	**15,518,388**	**4,062,804**	**4,810,642**	**6,644,942**	**13,841,058**	**393,321**
Appalachian Region	**2,221,766**	**1,118,343**	**279,977**	**359,460**	**478,906**	**1,086,471**	**16,952**
Subregions							
Northern Appalachia	468,680	254,900	81,776	75,852	97,272	209,077	4,703
North Central Appalachia	156,702	76,142	17,192	26,130	32,820	79,596	964
Central Appalachia	138,866	67,761	17,202	22,232	28,327	70,114	991
South Central Appalachia	495,622	228,380	46,197	77,091	105,092	264,225	3,017
Southern Appalachia	961,896	491,160	117,610	158,155	215,395	463,459	7,277
County Types							
Large Metros (pop. 1 million +)	525,912	269,854	68,850	80,720	120,284	251,263	4,795
Small Metros (pop. <1 million)	907,396	453,211	98,169	151,426	203,616	447,926	6,259
Nonmetro, Adjacent to Large Metros	195,650	101,049	31,418	31,316	38,315	93,346	1,255
Nonmetro, Adjacent to Small Metros	357,126	173,262	46,312	55,410	71,540	180,895	2,969
Rural (nonmetro, not adj. to a metro)	235,682	120,967	35,228	40,588	45,151	113,041	1,674
Alabama	**477,474**	**243,232**	**38,671**	**89,394**	**115,167**	**231,101**	**3,141**
Appalachian Alabama	292,392	147,817	24,410	51,545	71,862	142,694	1,881
Non-Appalachian Alabama	185,082	95,415	14,261	37,849	43,305	88,407	1,260
Georgia	**1,389,541**	**736,176**	**196,064**	**228,800**	**311,312**	**642,010**	**11,355**
Appalachian Georgia	454,473	233,476	69,853	67,941	95,682	216,581	4,416
Non-Appalachian Georgia	935,068	502,700	126,211	160,859	215,630	425,429	6,939
Kentucky	**265,416**	**145,708**	**41,127**	**44,370**	**60,211**	**117,739**	**1,969**
Appalachian Kentucky	72,605	37,569	11,072	12,010	14,487	34,461	575
Non-Appalachian Kentucky	192,811	108,139	30,055	32,360	45,724	83,278	1,394
Maryland	**382,130**	**197,229**	**50,588**	**56,297**	**90,344**	**176,202**	**8,699**
Appalachian Maryland	14,027	7,401	2,501	1,932	2,968	6,480	146
Non-Appalachian Maryland	368,103	189,828	48,087	54,365	87,376	169,722	8,553
Mississippi	**370,357**	**191,807**	**37,863**	**74,576**	**79,368**	**176,910**	**1,640**
Appalachian Mississippi	77,850	40,029	7,273	16,247	16,509	37,567	254
Non-Appalachian Mississippi	292,507	151,778	30,590	58,329	62,859	139,343	1,386
New York	**1,255,168**	**629,574**	**118,899**	**180,052**	**330,623**	**601,736**	**23,858**
Appalachian New York	51,579	30,028	9,926	9,372	10,730	21,232	319
Non-Appalachian New York	1,203,589	599,546	108,973	170,680	319,893	580,504	23,539
North Carolina	**1,100,719**	**545,701**	**121,153**	**174,603**	**249,945**	**546,928**	**8,090**
Appalachian North Carolina	198,784	91,740	18,628	31,088	42,024	105,889	1,155
Non-Appalachian North Carolina	901,935	453,961	102,525	143,515	207,921	441,039	6,935
Ohio	**743,259**	**398,534**	**122,956**	**117,195**	**158,383**	**335,838**	**8,887**
Appalachian Ohio	151,854	81,029	29,936	24,044	27,049	69,117	1,708
Non-Appalachian Ohio	591,405	317,505	93,020	93,151	131,334	266,721	7,179
Pennsylvania	**785,624**	**429,447**	**127,886**	**124,002**	**177,559**	**347,016**	**9,161**
Appalachian Pennsylvania	303,904	162,255	46,592	48,858	66,805	138,686	2,963
Non-Appalachian Pennsylvania	481,720	267,192	81,294	75,144	110,754	208,330	6,198
South Carolina	**535,224**	**265,765**	**54,583**	**88,446**	**122,736**	**266,452**	**3,007**
Appalachian South Carolina	137,181	69,838	16,074	22,422	31,342	66,617	726
Non-Appalachian South Carolina	398,043	195,927	38,509	66,024	91,394	199,835	2,281
Tennessee	**660,872**	**320,434**	**72,022**	**103,515**	**144,897**	**335,751**	**4,687**
Appalachian Tennessee	279,685	127,697	25,148	42,335	60,214	150,299	1,689
Non-Appalachian Tennessee	381,187	192,737	46,874	61,180	84,683	185,452	2,998
Virginia	**755,739**	**389,721**	**103,440**	**120,236**	**166,045**	**354,071**	**11,947**
Appalachian Virginia	70,606	32,949	6,894	11,734	14,321	37,139	518
Non-Appalachian Virginia	685,133	356,772	96,546	108,502	151,724	316,932	11,429
West Virginia (entire state)	**116,826**	**56,515**	**11,670**	**19,932**	**24,913**	**59,709**	**602**

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

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

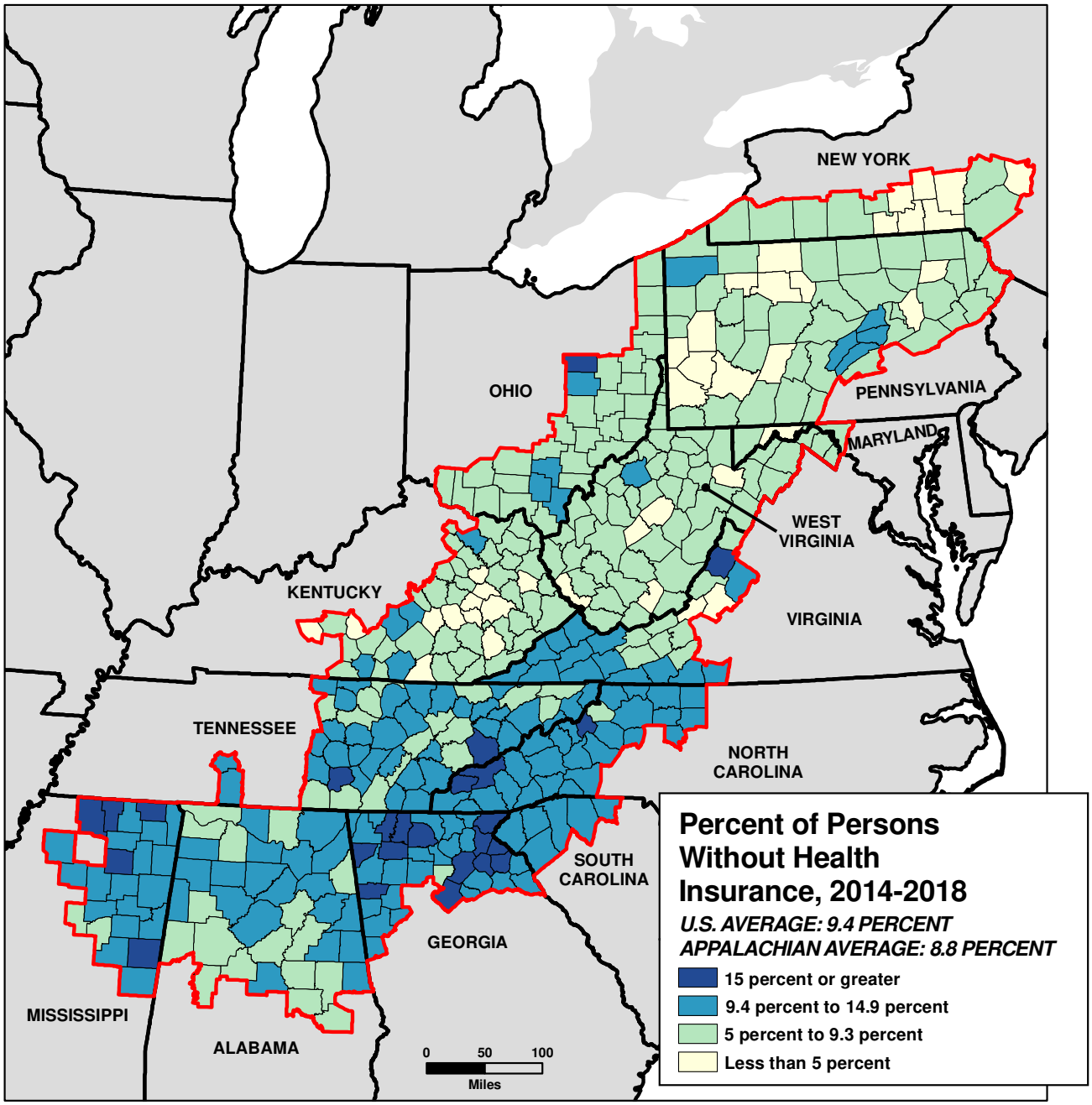
Table 9.2: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2014-2018

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	**9.4**	**10.6**	**5.2**	**15.8**	**17.1**	**11.3**	**0.8**
Appalachian Region	**8.8**	**10.3**	**4.8**	**15.4**	**17.7**	**10.9**	**0.4**
Subregions							
Northern Appalachia	5.8	7.6	4.7	9.9	11.4	6.6	0.3
North Central Appalachia	6.6	7.6	3.2	11.9	13.2	8.4	0.2
Central Appalachia	7.6	8.8	4.0	14.1	15.2	9.4	0.3
South Central Appalachia	10.4	11.4	4.4	17.1	21.0	14.0	0.3
Southern Appalachia	11.9	13.2	5.7	21.2	23.6	14.6	0.6
County Types							
Large Metros (pop. 1 million +)	8.8	10.1	4.7	15.6	17.3	10.4	0.5
Small Metros (pop. <1 million)	8.5	9.8	4.1	14.4	17.6	10.8	0.3
Nonmetro, Adjacent to Large Metros	9.1	11.0	6.3	15.6	17.6	11.0	0.3
Nonmetro, Adjacent to Small Metros	9.2	10.9	5.3	16.6	18.9	11.8	0.4
Rural (nonmetro, not adj. to a metro)	9.6	11.6	6.2	17.5	18.3	11.8	0.4
Alabama	**10.0**	**11.2**	**3.3**	**19.6**	**21.1**	**12.5**	**0.4**
Appalachian Alabama	9.5	10.7	3.3	18.1	20.4	11.9	0.4
Non-Appalachian Alabama	10.8	12.1	3.4	22.0	22.4	13.6	0.5
Georgia	**13.7**	**15.2**	**7.4**	**23.7**	**25.4**	**16.3**	**0.9**
Appalachian Georgia	14.4	15.8	8.2	24.7	27.4	17.1	1.1
Non-Appalachian Georgia	13.4	14.9	7.0	23.2	24.7	15.9	0.8
Kentucky	**6.1**	**7.4**	**3.8**	**10.8**	**12.1**	**6.9**	**0.3**
Appalachian Kentucky	6.3	7.6	4.1	11.5	12.1	7.5	0.3
Non-Appalachian Kentucky	6.0	7.3	3.8	10.5	12.1	6.7	0.3
Maryland	**6.5**	**7.4**	**3.6**	**10.5**	**12.6**	**7.4**	**1.0**
Appalachian Maryland	5.9	7.3	4.6	8.9	12.1	6.9	0.3
Non-Appalachian Maryland	6.5	7.4	3.5	10.6	12.6	7.4	1.1
Mississippi	**12.7**	**13.9**	**5.0**	**25.9**	**24.0**	**16.0**	**0.4**
Appalachian Mississippi	12.6	13.9	4.7	24.8	24.6	16.3	0.3
Non-Appalachian Mississippi	12.7	13.9	5.0	26.2	23.9	16.0	0.4
New York	**6.5**	**7.2**	**2.7**	**9.5**	**13.1**	**7.9**	**0.8**
Appalachian New York	5.1	6.7	4.4	7.6	10.5	5.5	0.2
Non-Appalachian New York	6.6	7.2	2.6	9.6	13.2	8.0	0.8
North Carolina	**11.1**	**12.1**	**5.0**	**18.9**	**21.8**	**14.0**	**0.5**
Appalachian North Carolina	11.6	13.1	5.0	20.5	24.0	15.5	0.3
Non-Appalachian North Carolina	11.0	11.9	5.0	18.5	21.4	13.6	0.6
Ohio	**6.5**	**7.7**	**4.4**	**10.9**	**12.0**	**7.5**	**0.5**
Appalachian Ohio	7.7	9.7	6.5	14.0	13.5	8.8	0.5
Non-Appalachian Ohio	6.2	7.3	4.0	10.4	11.8	7.2	0.5
Pennsylvania	**6.2**	**7.8**	**4.5**	**10.6**	**12.2**	**7.0**	**0.4**
Appalachian Pennsylvania	5.4	7.0	3.9	9.5	11.0	6.2	0.3
Non-Appalachian Pennsylvania	6.9	8.4	4.9	11.5	13.0	7.6	0.6
South Carolina	**11.0**	**12.3**	**4.7**	**19.6**	**22.0**	**14.2**	**0.4**
Appalachian South Carolina	11.1	12.4	5.3	18.5	22.1	13.9	0.4
Non-Appalachian South Carolina	11.0	12.2	4.5	20.0	22.0	14.3	0.4
Tennessee	**10.1**	**10.8**	**4.5**	**16.8**	**18.7**	**13.1**	**0.5**
Appalachian Tennessee	9.9	10.7	4.0	16.3	19.8	13.4	0.3
Non-Appalachian Tennessee	10.3	10.9	4.9	17.1	18.0	12.9	0.6
Virginia	**9.2**	**10.4**	**5.2**	**15.7**	**16.7**	**10.9**	**1.0**
Appalachian Virginia	9.6	10.9	4.6	14.7	20.1	12.9	0.4
Non-Appalachian Virginia	9.2	10.4	5.3	15.8	16.5	10.7	1.1
West Virginia (entire state)	**6.5**	**7.6**	**3.0**	**12.3**	**13.3**	**8.3**	**0.2**

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

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

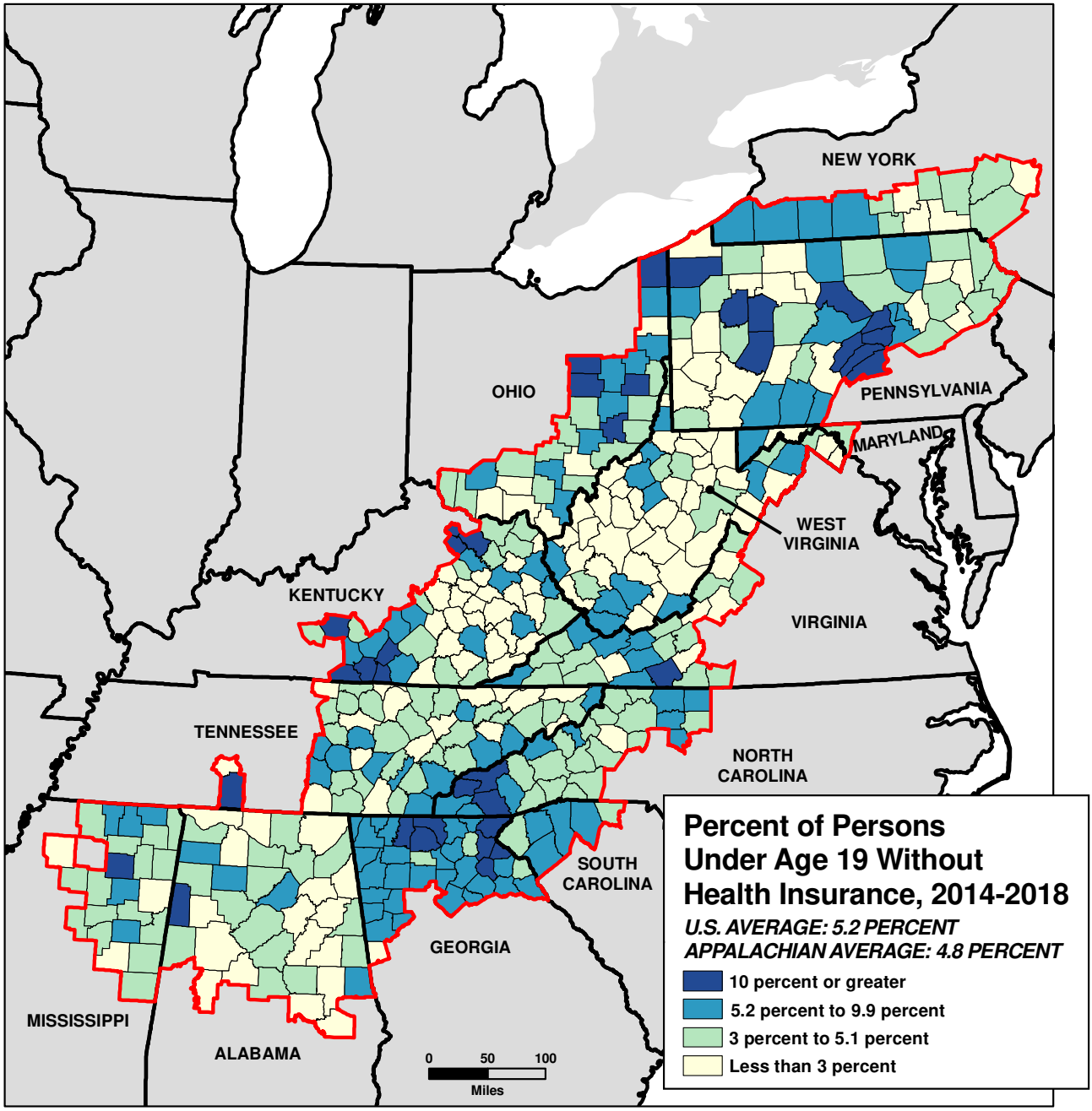
Figure 9.1: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, 2014-2018



Map Title: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

About 2.2 million persons in the Appalachian Region lacked any kind of health insurance coverage in the 2014-2018 period—a figure representing just under 9 percent of Appalachia's residents. Although the percentage for the Region is slightly lower than the U.S. share of 9.4 percent, 179 of the 420 Appalachian counties had non-coverage rates that matched or exceeded the national average. In 25 Appalachian counties—more than half of which were in Georgia—at least 15 percent of residents were not covered by insurance. (Indeed, just over 14 percent of residents in Appalachian Georgia were not covered by health insurance.) At the other end of the spectrum, 39 counties had uninsured rates below 5 percent, and all but two 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 6.5 percent or lower).

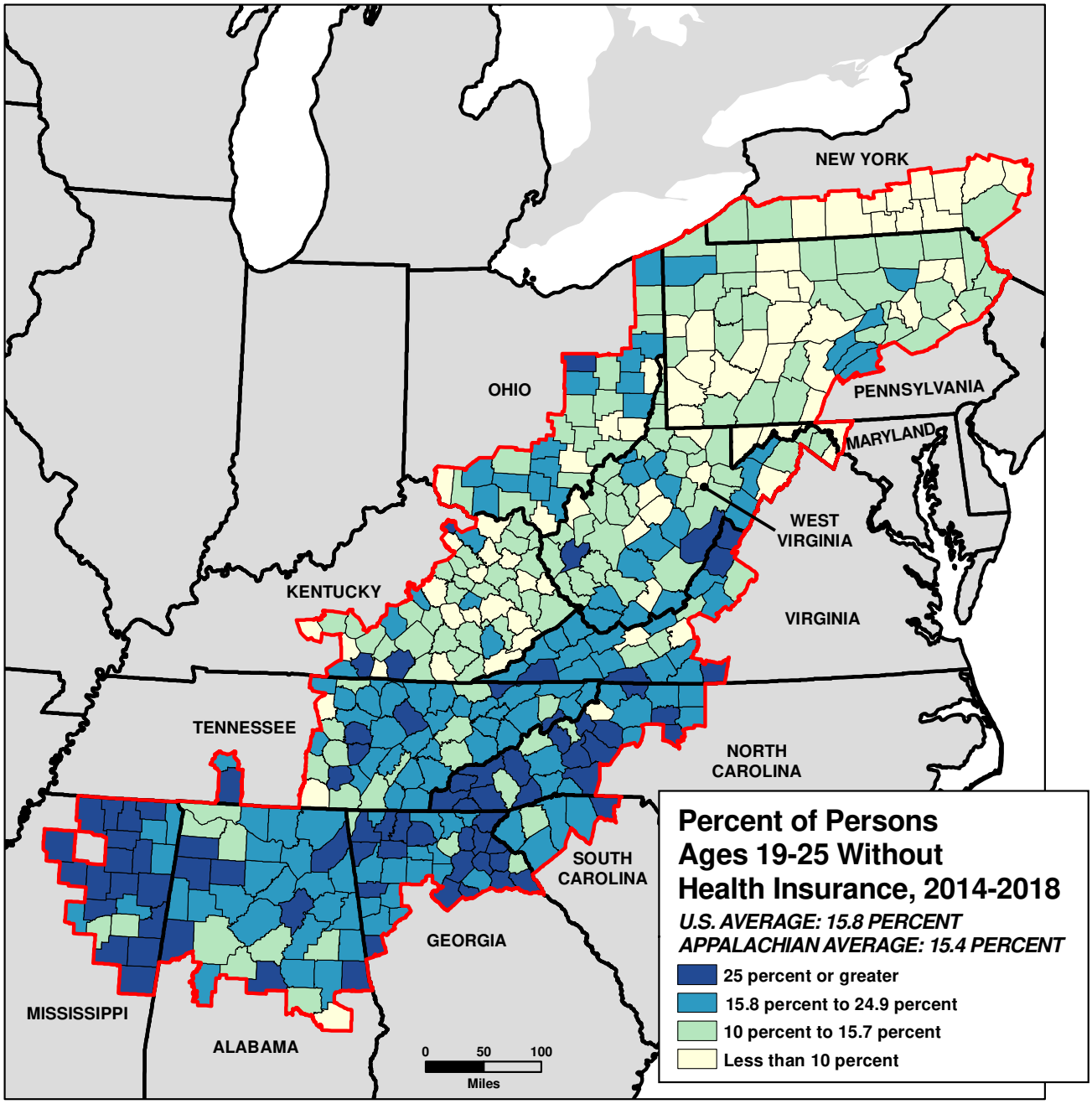
Figure 9.2: Percent of Persons Under Age 19 in the Appalachian Region Not Covered by Health Insurance, 2014-2018



Map Title: Percent of Persons Under Age 19 in the Appalachian Region Not Covered by Health Insurance, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Just under 5 percent of Appalachia's children and youth under age 19 were uninsured during 2014-2018, nearly half a percentage point below the national average. But the rate varied throughout the Region. On one hand, 130 counties had non-coverage rates under 3 percent; more than half were in West Virginia, Alabama, and Pennsylvania—the three 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 37 other counties. While the counties in the latter group were scattered throughout Appalachia, all but two of them were outside metropolitan areas, and seven of them were in Appalachian Georgia, where the uninsured rate for children and youth was 8.2 percent—more than three percentage points above the national average.

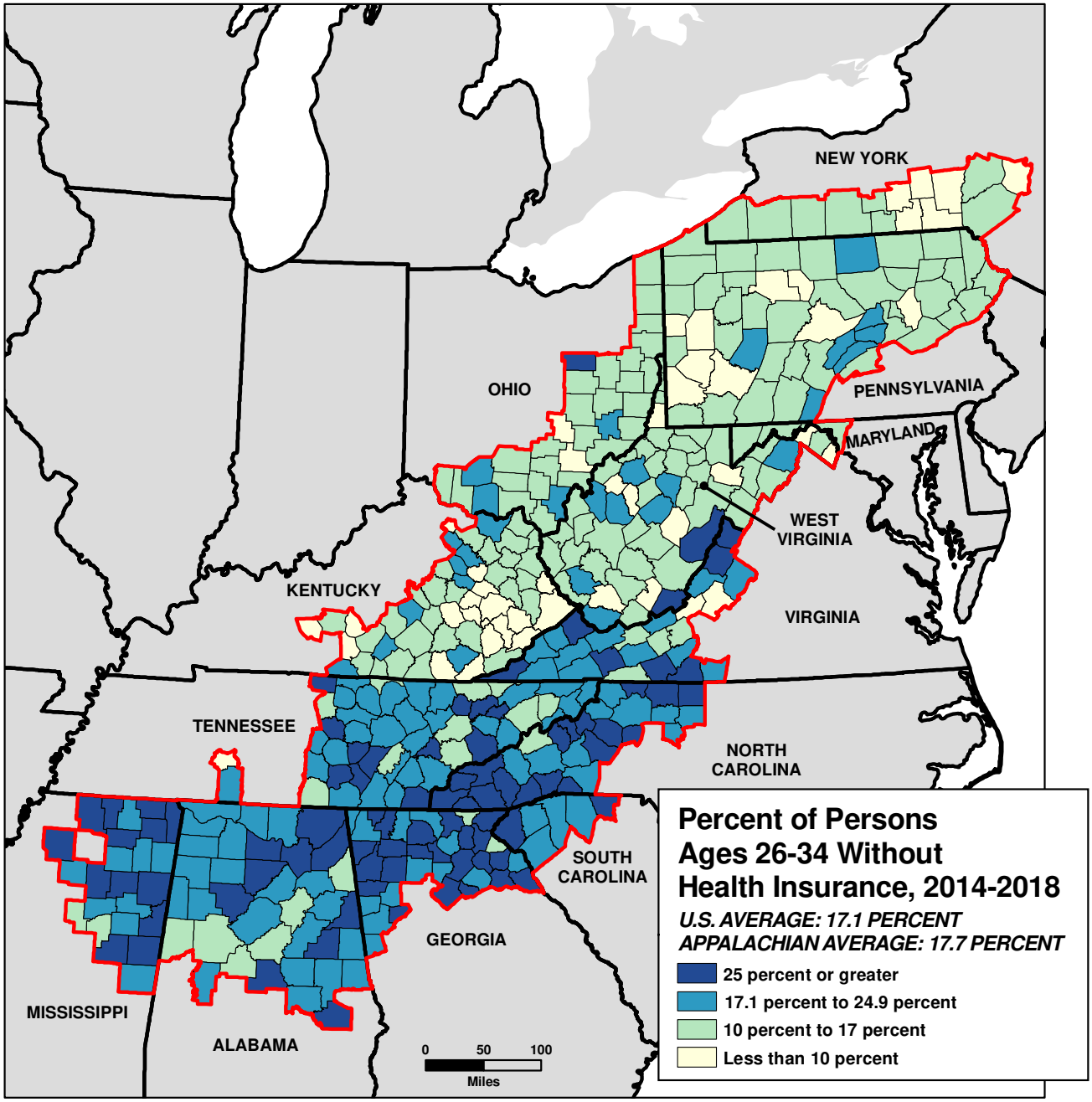
Figure 9.3: Percent of Persons Ages 19 to 25 in the Appalachian Region Not Covered by Health Insurance, 2014-2018



Map Title: Percent of Persons Ages 19 to 25 in the Appalachian Region Not Covered by Health Insurance, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

During the 2014-2018 period, more than 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, the non-coverage problem was especially prevalent in much of Southern Appalachia; in that subregion, more than one-fifth of 19-to-25-year-olds did not have coverage. This situation was especially dire in 79 counties, where non-coverage rates reached at least 25 percent. Among these counties, 52 were in either Georgia, Mississippi, or North Carolina—the three states where uninsured rates for young adults exceeded 20 percent. Additionally, 57 of those 79 counties were outside metropolitan areas. In contrast, 74 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.

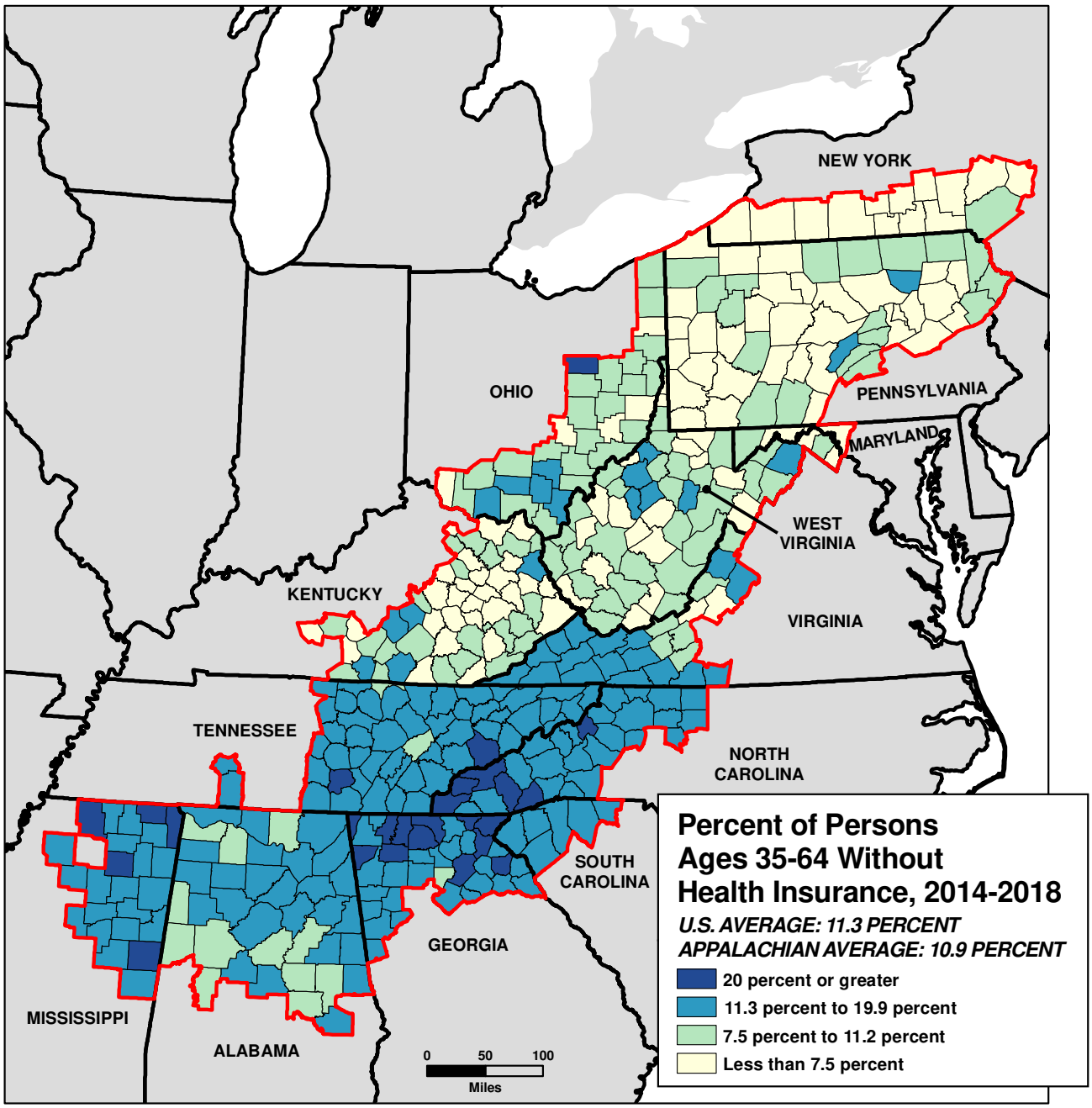
Figure 9.4: Percent of Persons Ages 26 to 34 in the Appalachian Region Not Covered by Health Insurance, 2014-2018



Map Title: Percent of Persons Ages 26 to 34 in the Appalachian Region Not Covered by Health Insurance, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Lack of health insurance coverage was highest among young adults ages 26 to 34—nearly 18 percent of Appalachian residents in this group were uninsured during the 2014-2018 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 79 of the 87 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 17 percent; these were overwhelmingly in the Northern, North Central, and Central subregions. And there were 47 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, 2014-2018



Map Title: Percent of Persons Ages 35 to 64 in the Appalachian Region Not Covered by Health Insurance, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In 2014-2018, 10.9 percent of Appalachia's working-age population ages 35 to 64 were not covered by health insurance. While this rate was slightly below that for the nation, there was great variation within the Region. For example, more than 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 23 of the 26 counties with non-coverage rates of at least 20 percent for this age group. (Georgia alone had 12 of these counties.) By comparison, there were 102 Appalachian counties where less than 7.5 percent of working-age residents were not insured; nearly three-fourths of the counties in this latter group were in New York, Pennsylvania, Maryland, or Kentucky; the rate was 7.5 percent or lower in the Appalachian sections of those four states.

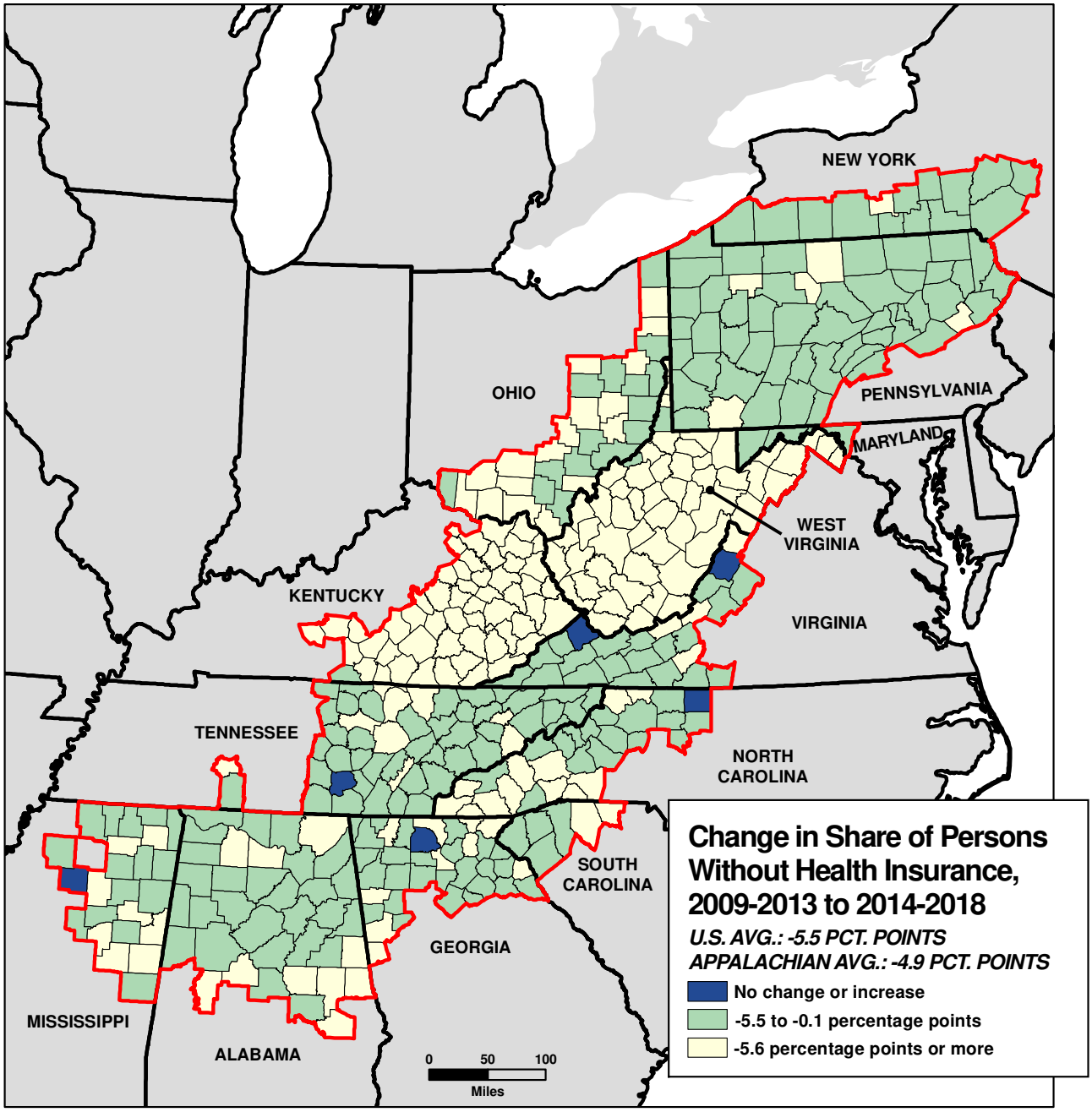
Table 9.3: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2009-2013 to 2014-2018

Health Insurance Status	All Ages	Under Age 35	Ages 35-64	Ages 65 and Over
United States	**- 5.5**	**- 6.4**	**- 5.6**	**- 0.2**
Appalachian Region	**- 4.9**	**- 5.8**	**- 5.1**	**+ 0.0**
Subregions				
Northern Appalachia	- 4.1	- 4.6	- 4.9	- 0.1
North Central Appalachia	- 7.3	- 8.4	- 8.3	- 0.1
Central Appalachia	- 8.4	- 9.7	- 9.9	+ 0.0
South Central Appalachia	- 4.3	- 5.6	- 4.1	+ 0.0
Southern Appalachia	- 4.4	- 5.6	- 3.9	- 0.1
County Types				
Large Metros (pop. 1 million +)	- 3.9	- 4.8	- 3.8	- 0.2
Small Metros (pop. <1 million)	- 4.6	- 5.7	- 4.6	+ 0.0
Nonmetro, Adjacent to Large Metros	- 4.7	- 5.3	- 5.3	- 0.1
Nonmetro, Adjacent to Small Metros	- 5.5	- 6.6	- 6.2	+ 0.1
Rural (nonmetro, not adj. to a metro)	- 6.7	- 7.7	- 7.6	- 0.1
Alabama	**- 3.9**	**- 4.9**	**- 3.6**	**+ 0.0**
Appalachian Alabama	- 3.9	- 5.1	- 3.4	+ 0.0
Non-Appalachian Alabama	- 4.0	- 4.6	- 4.0	+ 0.1
Georgia	**- 5.3**	**- 6.1**	**- 4.7**	**- 0.2**
Appalachian Georgia	- 4.9	- 5.8	- 4.3	- 0.1
Non-Appalachian Georgia	- 5.4	- 6.3	- 4.9	- 0.3
Kentucky	**- 8.3**	**- 9.3**	**- 9.5**	**- 0.1**
Appalachian Kentucky	- 10.8	- 12.0	- 12.8	+ 0.0
Non-Appalachian Kentucky	- 7.4	- 8.4	- 8.3	- 0.1
Maryland	**- 4.0**	**- 4.6**	**- 4.2**	**- 0.3**
Appalachian Maryland	- 3.9	- 3.5	- 5.4	- 0.5
Non-Appalachian Maryland	- 4.0	- 4.7	- 4.2	- 0.2
Mississippi	**- 4.7**	**- 5.8**	**- 4.4**	**+ 0.1**
Appalachian Mississippi	- 3.9	- 5.1	- 3.1	+ 0.0
Non-Appalachian Mississippi	- 5.0	- 6.0	- 4.6	+ 0.1
New York	**- 4.6**	**- 5.8**	**- 4.5**	**- 0.2**
Appalachian New York	- 4.0	- 4.6	- 4.7	- 0.1
Non-Appalachian New York	- 4.7	- 5.9	- 4.5	- 0.3
North Carolina	**- 5.1**	**- 6.1**	**- 5.0**	**- 0.1**
Appalachian North Carolina	- 5.0	- 6.6	- 4.7	+ 0.0
Non-Appalachian North Carolina	- 5.1	- 6.1	- 5.1	+ 0.0
Ohio	**- 5.1**	**- 5.4**	**- 6.2**	**+ 0.0**
Appalachian Ohio	- 5.6	- 5.8	- 7.1	- 0.1
Non-Appalachian Ohio	- 5.0	- 5.3	- 6.0	+ 0.1
Pennsylvania	**- 3.6**	**- 4.3**	**- 3.9**	**- 0.1**
Appalachian Pennsylvania	- 3.9	- 4.5	- 4.6	+ 0.0
Non-Appalachian Pennsylvania	- 3.3	- 4.1	- 3.4	- 0.1
South Carolina	**- 5.6**	**- 6.8**	**- 5.4**	**- 0.1**
Appalachian South Carolina	- 5.4	- 6.5	- 5.5	- 0.1
Non-Appalachian South Carolina	- 5.7	- 6.9	- 5.3	- 0.2
Tennessee	**- 4.0**	**- 4.7**	**- 4.0**	**+ 0.0**
Appalachian Tennessee	- 3.9	- 5.0	- 3.8	+ 0.0
Non-Appalachian Tennessee	- 4.0	- 4.5	- 4.1	- 0.1
Virginia	**- 3.1**	**- 3.8**	**- 2.8**	**+ 0.1**
Appalachian Virginia	- 3.5	- 4.5	- 3.2	+ 0.2
Non-Appalachian Virginia	- 3.1	- 3.7	- 2.8	+ 0.0
West Virginia (entire state)	**- 7.8**	**- 9.5**	**- 8.8**	**- 0.1**

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

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Figure 9.6: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, 2009-2013 to 2014-2018



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

The share of Appalachian residents not covered by health insurance fell almost five percentage points between the 2009-2013 and 2014-2018 periods. While the improvement is slightly less than in the nation as a whole, it was above the national average in many parts of the Region: Non-coverage rates fell at least seven percentage points in North Central and Central Appalachia, almost eight points in West Virginia, and nearly 11 points in Appalachian Kentucky. Indeed, those two states alone accounted for 106 of the 184 Appalachian counties where the decline in non-coverage rates was greater than the national average. But this did not happen everywhere in Appalachia: In fact, there were six counties where the share of residents who lacked health insurance in 2014-2018 matched or exceeded the share without insurance in the earlier period. Analysts cite programs designed to increase coverage, including expansion of the Children's Health Insurance Program (CHIP) and provisions of the Affordable Care Act, as factors in the decreased share of persons—particularly those under age 65—without health insurance.

TRENDS IN HEALTH INSURANCE COVERAGE

- Between the 2009-2013 and 2014-2018 periods, the share of Appalachian residents not covered by health insurance fell almost five percentage points to just under 9 percent (see Tables 9.2 and 9.3). And this improvement was even greater in many parts of the Region: Non-coverage rates fell at least seven percentage points in North Central and Central Appalachia and almost that much in the Region's most rural counties. As for the states, uninsured rates fell nearly 11 points in Kentucky, almost eight points in West Virginia, and at least five points in Ohio and the Carolinas. 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 nearly six percentage points lower in 2014-2018 than in 2009-2013. Provisions to expand health coverage, particularly among children and adults under age 26, have been cited as factors for this decline. As with the general population, declines in non-coverage among children and young adults were the greatest in North Central and Central Appalachia, rural counties, West Virginia, and the Appalachian sections of Kentucky, the Carolinas, Georgia, and Ohio. (The uninsured rate among persons under age 35 fell by 12 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 5.1 percentage points, compared with 5.6 points for the nation. 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 2014-2018 than in 2009-2013. And the areas with the largest declines for the younger groups (North Central and Central Appalachia, rural counties, Kentucky, West Virginia, and Ohio) 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 2014-2018.

CHAPTER 10: DISABILITY STATUS

Table 10.1: Number of Persons in the Appalachian Region With a Disability, by Age Group, 2014-2018

Disability Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-34	Ages 35-64	
United States	**40,071,666**	**3,065,179**	**20,240,504**	**4,557,891**	**15,682,613**	**16,765,983**
Appalachian Region	**4,056,255**	**275,128**	**2,122,319**	**420,272**	**1,702,047**	**1,658,808**
Subregions						
Northern Appalachia	1,236,156	91,785	615,675	132,378	483,297	528,696
North Central Appalachia	441,239	29,176	238,286	46,388	191,898	173,777
Central Appalachia	433,259	25,804	250,399	41,739	208,660	157,056
South Central Appalachia	796,182	48,021	408,402	77,758	330,644	339,759
Southern Appalachia	1,149,419	80,342	609,557	122,009	487,548	459,520
County Types						
Large Metros (pop. 1 million +)	774,562	58,315	400,051	83,570	316,481	316,196
Small Metros (pop. <1 million)	1,670,229	114,601	867,141	177,394	689,747	688,487
Nonmetro, Adjacent to Large Metros	375,713	25,917	200,142	40,273	159,869	149,654
Nonmetro, Adjacent to Small Metros	737,746	46,620	383,644	71,705	311,939	307,482
Rural (nonmetro, not adj. to a metro)	498,005	29,675	271,341	47,330	224,011	196,989
Alabama	**780,618**	**51,993**	**416,469**	**84,968**	**331,501**	**312,156**
Appalachian Alabama	496,868	32,650	265,400	53,742	211,658	198,818
Non-Appalachian Alabama	283,750	19,343	151,069	31,226	119,843	113,338
Georgia	**1,244,186**	**100,608**	**666,095**	**141,673**	**524,422**	**477,483**
Appalachian Georgia	363,099	28,172	190,503	38,735	151,768	144,424
Non-Appalachian Georgia	881,087	72,436	475,592	102,938	372,654	333,059
Kentucky	**758,234**	**56,898**	**425,376**	**83,842**	**341,534**	**275,960**
Appalachian Kentucky	265,727	16,626	155,790	26,874	128,916	93,311
Non-Appalachian Kentucky	492,507	40,272	269,586	56,968	212,618	182,649
Maryland	**645,237**	**53,130**	**325,210**	**76,076**	**249,134**	**266,897**
Appalachian Maryland	39,402	3,187	21,093	4,542	16,551	15,122
Non-Appalachian Maryland	605,835	49,943	304,117	71,534	232,583	251,775
Mississippi	**476,720**	**33,163**	**260,090**	**51,010**	**209,080**	**183,467**
Appalachian Mississippi	107,027	6,205	58,500	11,715	46,785	42,322
Non-Appalachian Mississippi	369,693	26,958	201,590	39,295	162,295	141,145
New York	**2,222,712**	**162,241**	**1,079,794**	**243,812**	**835,982**	**980,677**
Appalachian New York	152,227	12,221	77,584	18,409	59,175	62,422
Non-Appalachian New York	2,070,485	150,020	1,002,210	225,403	776,807	918,255
North Carolina	**1,350,533**	**99,583**	**702,834**	**146,329**	**556,505**	**548,116**
Appalachian North Carolina	266,297	15,246	131,299	24,247	107,052	119,752
Non-Appalachian North Carolina	1,084,236	84,337	571,535	122,082	449,453	428,364
Ohio	**1,601,403**	**131,602**	**838,090**	**184,634**	**653,456**	**631,711**
Appalachian Ohio	330,872	23,203	178,433	36,093	142,340	129,236
Non-Appalachian Ohio	1,270,531	108,399	659,657	148,541	511,116	502,475
Pennsylvania	**1,751,584**	**141,251**	**877,368**	**199,585**	**677,783**	**732,965**
Appalachian Pennsylvania	855,121	64,253	420,769	91,302	329,467	370,099
Non-Appalachian Pennsylvania	896,463	76,998	456,599	108,283	348,316	362,866
South Carolina	**713,395**	**50,627**	**371,632**	**73,060**	**298,572**	**291,136**
Appalachian South Carolina	182,425	13,315	95,154	17,817	77,337	73,956
Non-Appalachian South Carolina	530,970	37,312	276,478	55,243	221,235	217,180
Tennessee	**1,009,918**	**71,062**	**545,168**	**110,029**	**435,139**	**393,688**
Appalachian Tennessee	504,754	31,424	267,535	48,795	218,740	205,795
Non-Appalachian Tennessee	505,164	39,638	277,633	61,234	216,399	187,893
Virginia	**954,220**	**74,398**	**483,606**	**110,455**	**373,151**	**396,216**
Appalachian Virginia	140,557	7,557	74,243	14,766	59,477	58,757
Non-Appalachian Virginia	813,663	66,841	409,363	95,689	313,674	337,459
West Virginia (entire state)	**351,879**	**21,069**	**186,016**	**33,235**	**152,781**	**144,794**

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, 2014-2018 American Community Survey.

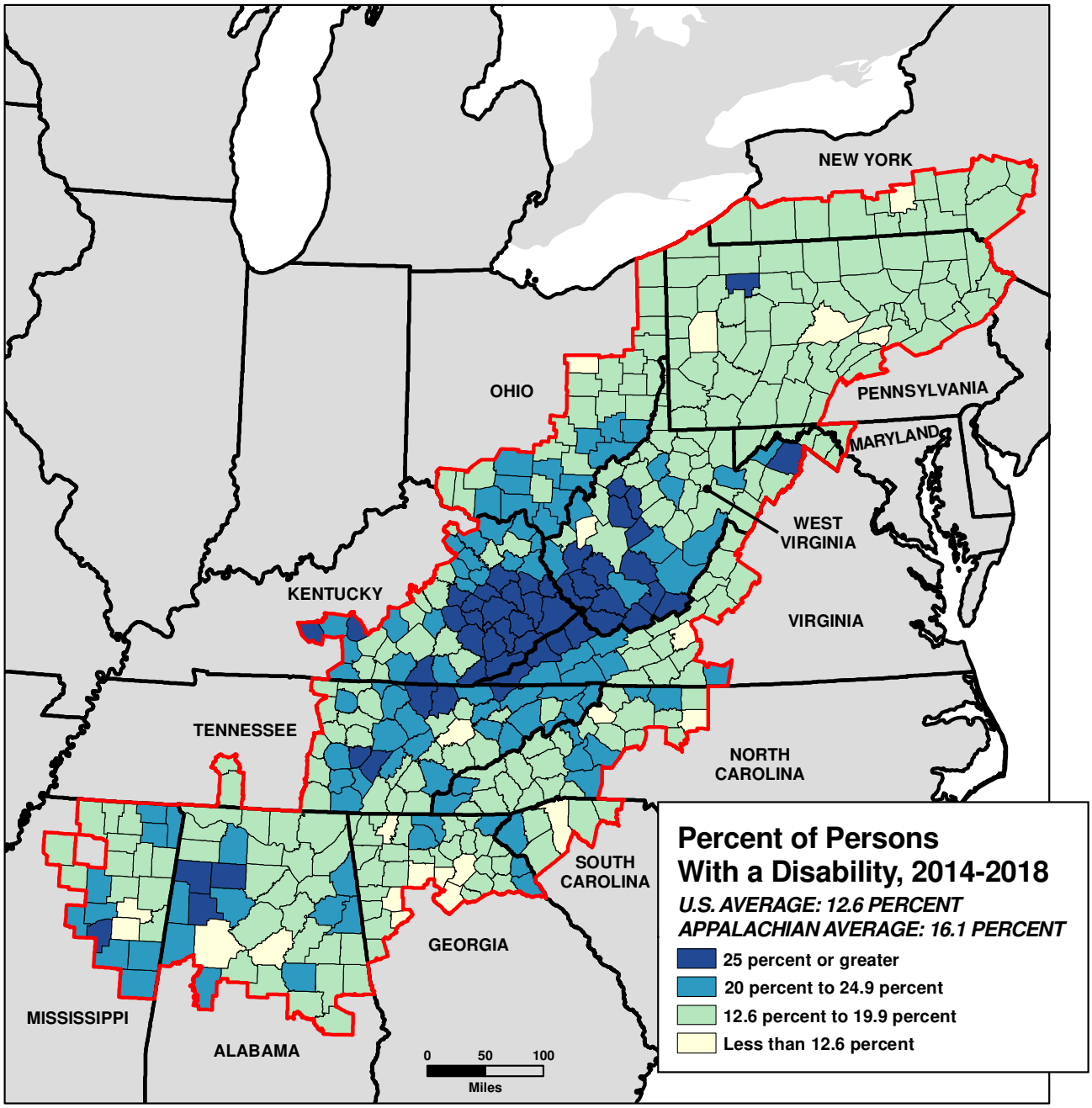
Table 10.2: Percent of Persons in the Appalachian Region With a Disability, by Age Group, 2014-2018

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**	**6.2**	**12.8**	**35.0**
Appalachian Region	**16.1**	**5.0**	**13.8**	**7.8**	**17.1**	**38.1**
Subregions						
Northern Appalachia	15.3	5.6	12.5	7.6	15.1	35.0
North Central Appalachia	18.6	5.8	16.5	9.3	20.4	41.3
Central Appalachia	23.6	6.4	22.6	11.4	28.1	48.6
South Central Appalachia	16.7	4.9	14.1	7.6	17.6	37.7
Southern Appalachia	14.2	4.2	12.3	6.9	15.3	38.4
County Types						
Large Metros (pop. 1 million +)	12.9	4.2	10.8	6.5	13.0	34.6
Small Metros (pop. <1 million)	15.7	5.1	13.3	7.5	16.6	37.4
Nonmetro, Adjacent to Large Metros	17.5	5.5	15.4	9.0	18.9	38.8
Nonmetro, Adjacent to Small Metros	19.0	5.7	16.7	9.4	20.3	40.5
Rural (nonmetro, not adj. to a metro)	20.3	5.6	18.4	9.2	23.4	43.6
Alabama	**16.3**	**4.7**	**14.2**	**7.9**	**17.9**	**40.9**
Appalachian Alabama	16.2	4.7	14.1	7.9	17.6	40.7
Non-Appalachian Alabama	16.5	4.8	14.5	8.0	18.4	41.2
Georgia	**12.3**	**4.0**	**10.6**	**6.0**	**13.3**	**36.1**
Appalachian Georgia	11.5	3.5	9.8	5.8	12.0	35.0
Non-Appalachian Georgia	12.7	4.3	10.9	6.2	13.9	36.6
Kentucky	**17.4**	**5.6**	**15.9**	**8.6**	**20.0**	**41.3**
Appalachian Kentucky	23.2	6.5	22.3	11.2	28.1	48.9
Non-Appalachian Kentucky	15.3	5.4	13.6	7.8	17.0	38.2
Maryland	**10.9**	**4.0**	**8.8**	**5.7**	**10.5**	**31.3**
Appalachian Maryland	16.6	6.2	14.7	9.1	17.7	35.5
Non-Appalachian Maryland	10.7	3.9	8.5	5.6	10.2	31.1
Mississippi	**16.3**	**4.6**	**14.7**	**7.7**	**18.9**	**42.1**
Appalachian Mississippi	17.3	4.2	15.7	8.2	20.3	43.4
Non-Appalachian Mississippi	16.0	4.7	14.5	7.5	18.6	41.7
New York	**11.5**	**3.9**	**8.8**	**5.2**	**11.0**	**33.0**
Appalachian New York	14.9	6.0	12.2	7.5	15.2	34.3
Non-Appalachian New York	11.3	3.8	8.6	5.1	10.8	32.9
North Carolina	**13.6**	**4.4**	**11.5**	**6.6**	**14.2**	**35.8**
Appalachian North Carolina	15.5	4.4	12.7	6.9	15.7	35.6
Non-Appalachian North Carolina	13.2	4.3	11.2	6.5	13.9	35.9
Ohio	**14.0**	**5.0**	**11.9**	**7.2**	**14.6**	**34.6**
Appalachian Ohio	16.9	5.3	15.1	9.1	18.2	37.1
Non-Appalachian Ohio	13.4	5.0	11.3	6.9	13.8	34.1
Pennsylvania	**13.9**	**5.3**	**11.3**	**7.1**	**13.7**	**34.1**
Appalachian Pennsylvania	15.3	5.8	12.3	7.6	14.8	35.1
Non-Appalachian Pennsylvania	12.8	4.9	10.5	6.7	12.7	33.1
South Carolina	**14.7**	**4.6**	**12.6**	**6.8**	**15.9**	**35.9**
Appalachian South Carolina	14.7	4.7	12.5	6.3	16.2	37.3
Non-Appalachian South Carolina	14.7	4.6	12.6	7.0	15.8	35.4
Tennessee	**15.4**	**4.7**	**13.5**	**7.5**	**17.0**	**38.7**
Appalachian Tennessee	17.8	5.2	15.6	8.2	19.6	39.8
Non-Appalachian Tennessee	13.6	4.4	12.0	7.0	15.0	37.6
Virginia	**11.6**	**4.0**	**9.4**	**5.9**	**11.5**	**32.9**
Appalachian Virginia	19.1	5.5	16.4	9.0	20.6	40.5
Non-Appalachian Virginia	10.9	3.9	8.8	5.6	10.6	31.9
West Virginia (entire state)	**19.5**	**5.7**	**17.0**	**8.9**	**21.2**	**43.1**

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, 2014-2018 American Community Survey.

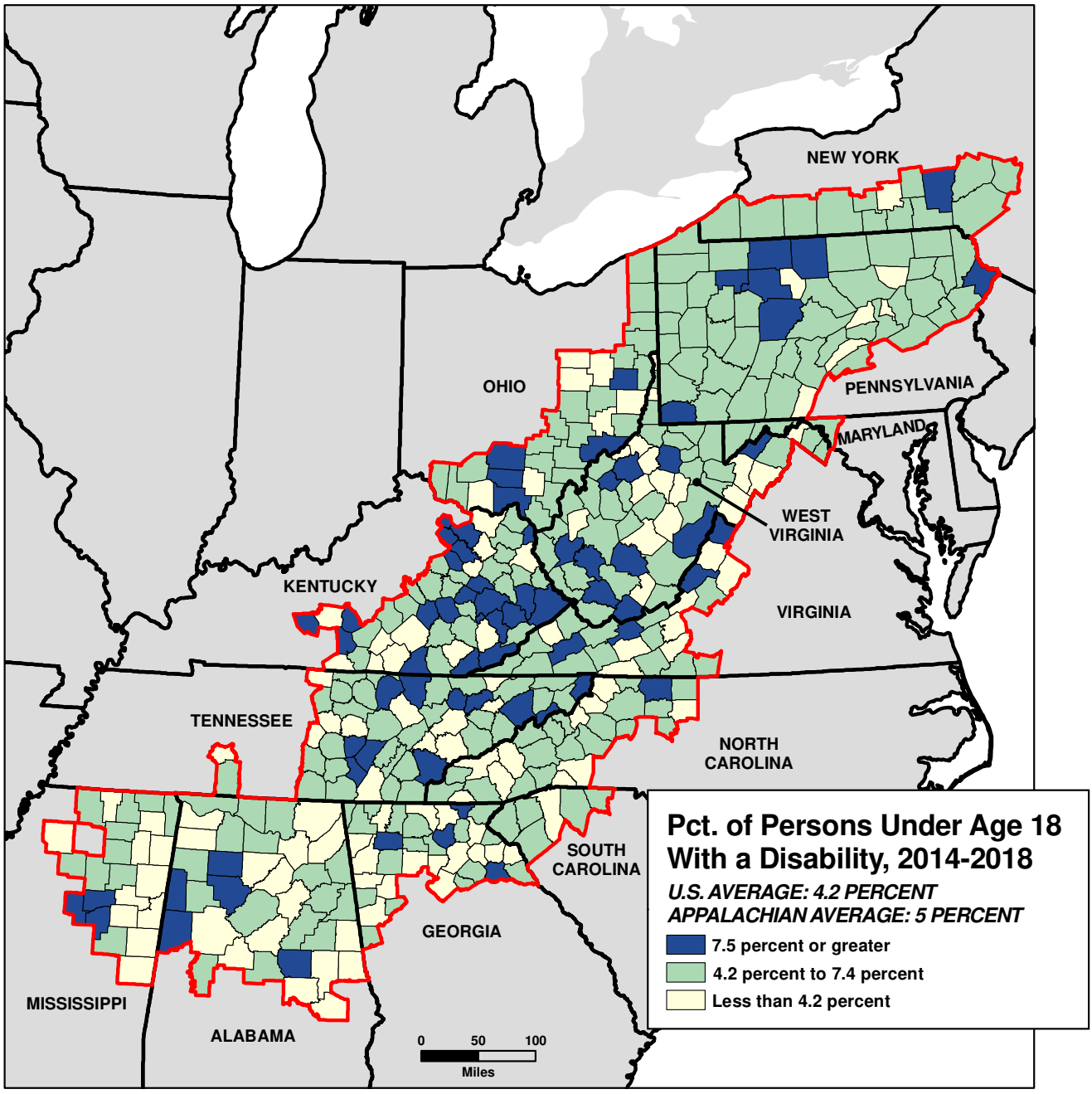
Figure 10.1: Percent of Persons in the Appalachian Region With a Disability, 2014-2018



Map Title: Percent of Persons in the Appalachian Region With a Disability, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In the 2014-2018 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 51 counties, 28 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 37 of these counties. Appalachia's relatively high disability rate corresponds to the population's older age structure: Among the 51 counties with the highest disability prevalence levels, the share of residents age 65 or older exceeded the national average (16 percent in mid-2018) in all but two of them. And in 26 of these counties, the share of older persons was at least 20 percent.

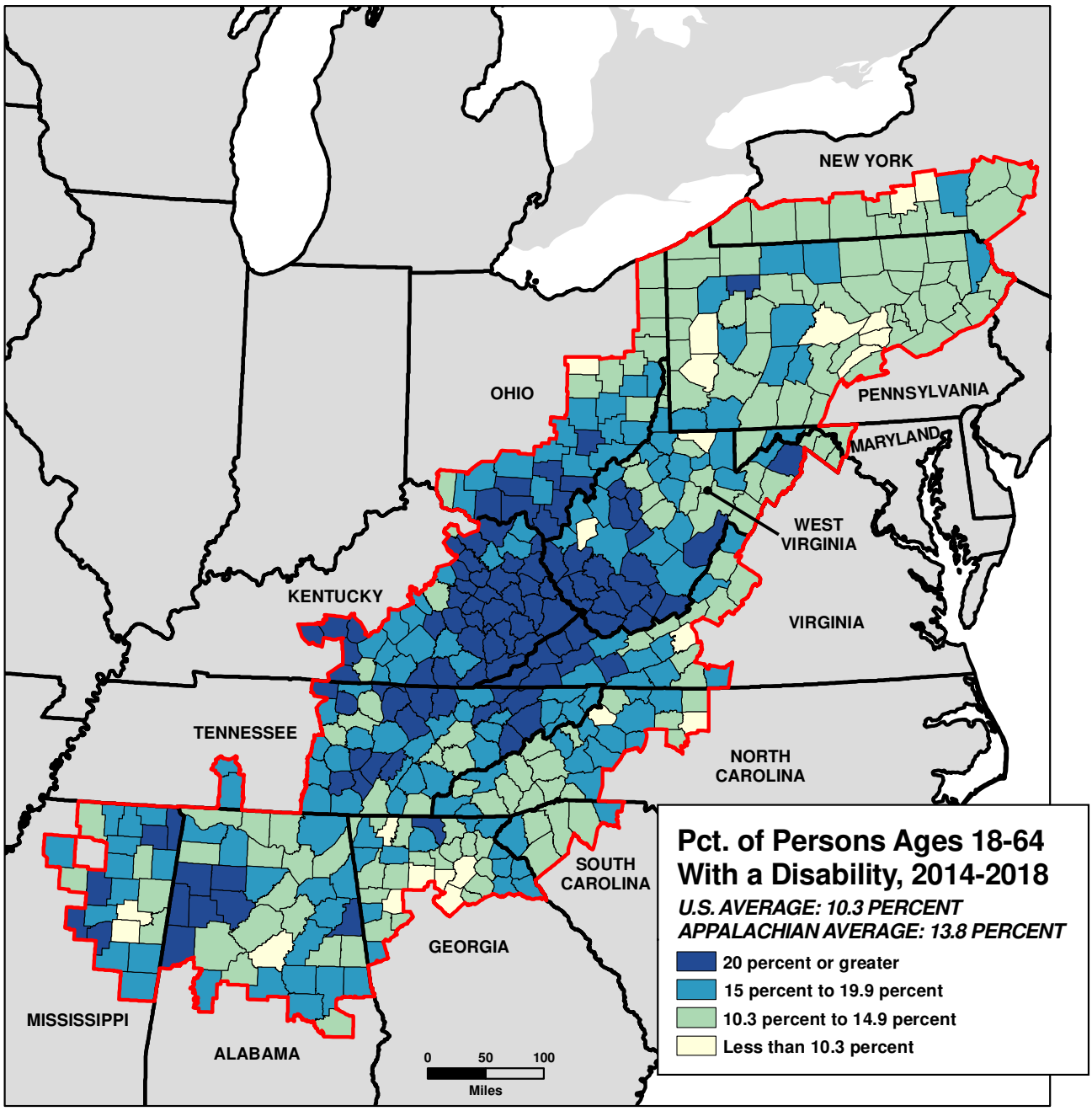
Figure 10.2: Percent of Persons Under Age 18 in the Appalachian Region With a Disability, 2014-2018



Map Title: Percent of Persons Under Age 18 in the Appalachian Region With a Disability, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

At 5 percent, the prevalence of disability among children under age 18 in Appalachia was slightly higher than the national average during the 2014-2018 period. But there was variation within the Region. For example, the rate was at least 7.5 percent in 72 counties, 57 of which were outside metropolitan areas. In 116 other counties, however, the disability prevalence was below the national average of 4.2 percent. More than one-third of the counties in the latter group were in Southern Appalachia—the only subregion where the disability rate among the under-18 population (4.2 percent) did not exceed the national average.

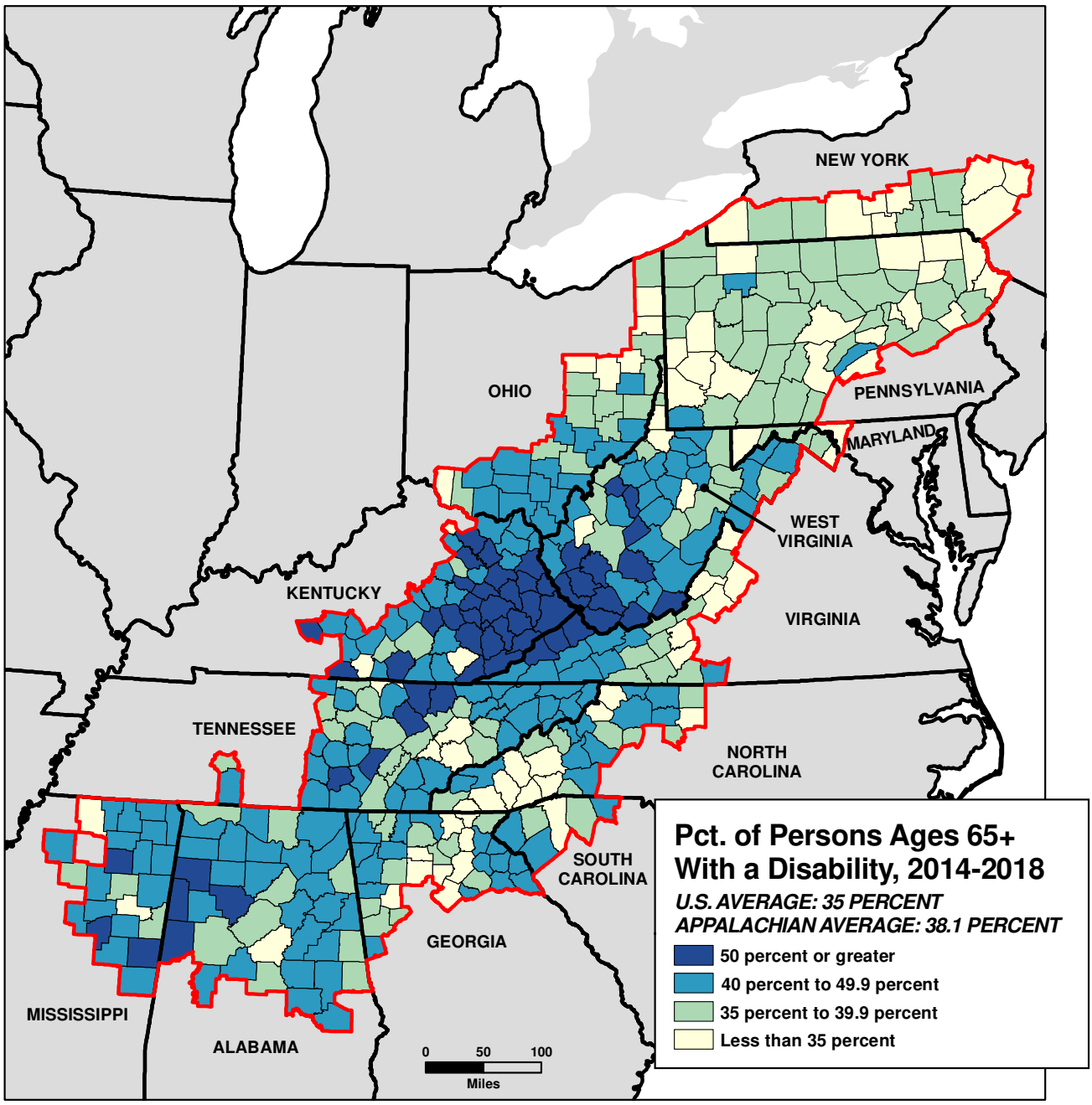
Figure 10.3: Percent of Persons Ages 18 to 64 in the Appalachian Region With a Disability, 2014-2018



Map Title: Percent of Persons Ages 18 to 64 in the Appalachian Region With a Disability, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In the 2014-2018 period, nearly one in seven adults ages 18 to 64 in Appalachia reported a disability, compared with about one in 10 nationally. Disability prevalence was particularly high in some parts of the Region: In Central Appalachia, for example, more than one-fifth of working-age adults had a disability. Indeed, Central Appalachia had 59 of the 101 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, 2014-2018



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region With a Disability, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Almost two-fifths of adults ages 65 and over in the Appalachian Region reported a disability in the 2014-2018 period, three percentage points above the national share. And the prevalence was even greater in some parts of the Region: Nearly half of the older residents in Central Appalachia—and in Appalachian Kentucky—had at least one disability. Indeed, Central Appalachia had 39 of the 54 counties where at least half of older residents reported a disability. (Kentucky alone had 27 of these counties.) And there are signs that disabled adults in the Region may be aging in place: In 26 of these 54 counties, the share of 18-to-64-year-olds with a disability was at or above 25 percent—more than twice the national average for that age group. Yet there are 76 other Appalachian counties where the disability rate for the older population was actually 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 35 percent, was not above the national average.

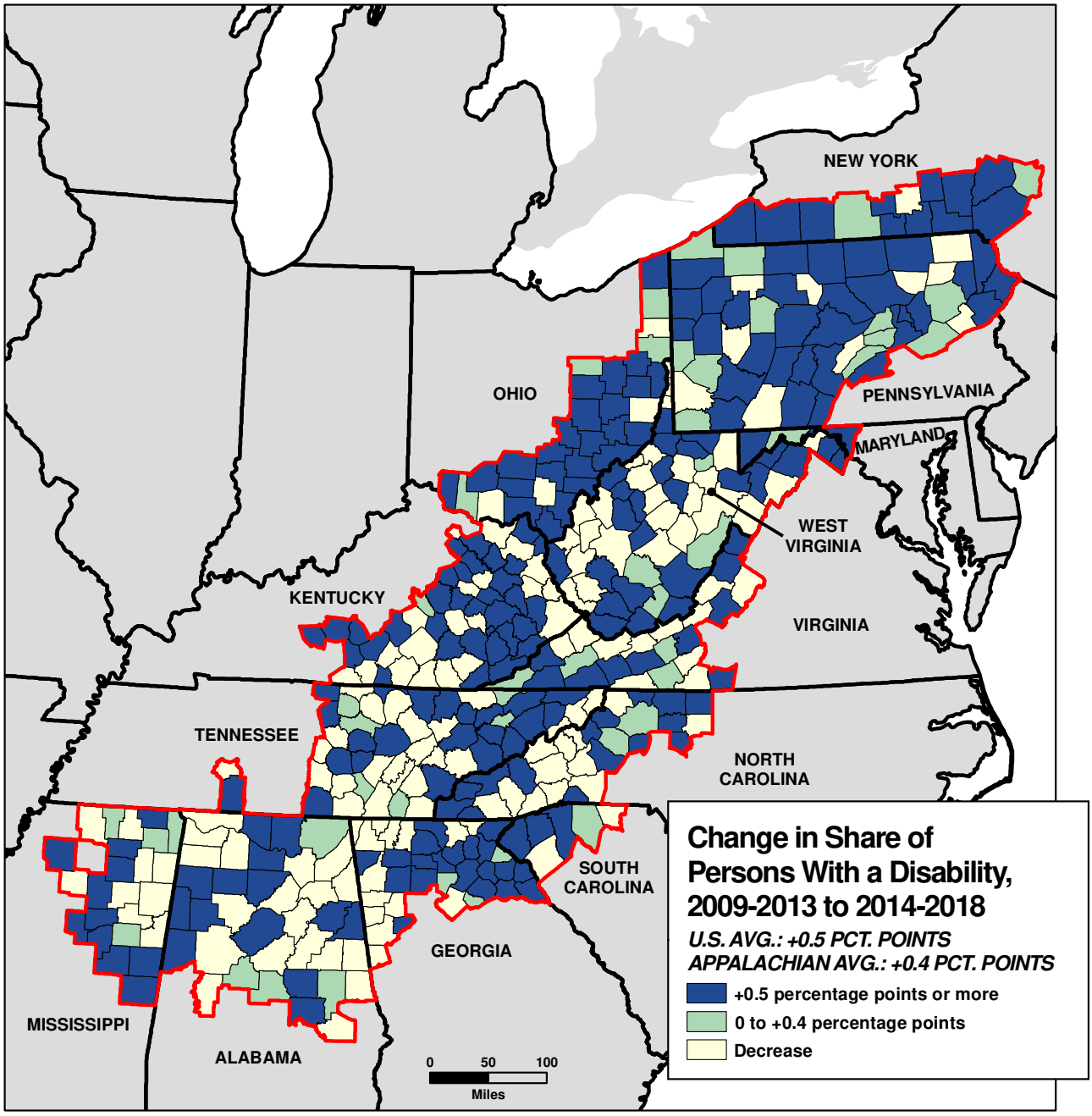
Table 10.3: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, by Age Group, 2009-2013 to 2014-2018

Disability Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-34	Ages 35-64	
United States	**+ 0.5**	**+ 0.2**	**+ 0.2**	**+ 0.6**	**+ 0.1**	**- 1.5**
Appalachian Region	**+ 0.4**	**+ 0.1**	**+ 0.0**	**+ 0.5**	**+ 0.0**	**- 1.6**
Subregions						
Northern Appalachia	+ 0.7	+ 0.3	+ 0.5	+ 0.6	+ 0.6	- 1.1
North Central Appalachia	+ 0.9	+ 0.4	+ 0.6	+ 0.7	+ 0.7	- 1.2
Central Appalachia	+ 0.5	+ 0.3	+ 0.0	+ 0.4	- 0.2	- 1.4
South Central Appalachia	+ 0.3	+ 0.0	- 0.1	+ 0.4	- 0.2	- 1.6
Southern Appalachia	+ 0.1	+ 0.1	- 0.3	+ 0.4	- 0.6	- 2.5
County Types						
Large Metros (pop. 1 million +)	+ 0.2	+ 0.0	+ 0.0	+ 0.4	- 0.1	- 2.2
Small Metros (pop. <1 million)	+ 0.4	+ 0.2	+ 0.1	+ 0.4	+ 0.1	- 1.5
Nonmetro, Adjacent to Large Metros	+ 1.1	+ 0.1	+ 1.0	+ 1.5	+ 0.9	- 1.0
Nonmetro, Adjacent to Small Metros	+ 0.7	+ 0.1	+ 0.3	+ 0.8	+ 0.2	- 0.9
Rural (nonmetro, not adj. to a metro)	+ 0.2	+ 0.2	- 0.3	+ 0.1	- 0.3	- 1.9
Alabama	**+ 0.1**	**- 0.2**	**- 0.4**	**+ 0.5**	**- 0.8**	**- 2.1**
Appalachian Alabama	+ 0.3	+ 0.1	- 0.1	+ 0.8	- 0.6	- 1.9
Non-Appalachian Alabama	- 0.3	- 0.6	- 0.7	+ 0.2	- 1.1	- 2.6
Georgia	**+ 0.4**	**+ 0.1**	**+ 0.1**	**+ 0.3**	**- 0.1**	**- 2.6**
Appalachian Georgia	+ 0.0	- 0.2	- 0.4	+ 0.1	- 0.5	- 3.5
Non-Appalachian Georgia	+ 0.6	+ 0.3	+ 0.2	+ 0.5	+ 0.1	- 2.2
Kentucky	**+ 0.6**	**+ 0.0**	**+ 0.3**	**+ 0.2**	**+ 0.5**	**- 1.2**
Appalachian Kentucky	+ 0.6	+ 0.0	+ 0.0	+ 0.0	+ 0.2	- 0.6
Non-Appalachian Kentucky	+ 0.7	+ 0.2	+ 0.5	+ 0.3	+ 0.7	- 1.3
Maryland	**+ 0.6**	**+ 0.3**	**+ 0.6**	**+ 0.9**	**+ 0.4**	**- 1.8**
Appalachian Maryland	+ 0.9	- 0.1	+ 1.1	+ 0.1	+ 1.7	- 1.2
Non-Appalachian Maryland	+ 0.7	+ 0.3	+ 0.5	+ 1.0	+ 0.3	- 1.8
Mississippi	**+ 0.0**	**- 0.2**	**- 0.2**	**+ 0.3**	**- 0.6**	**- 3.5**
Appalachian Mississippi	- 0.4	- 0.2	- 0.6	+ 0.6	- 1.2	- 3.3
Non-Appalachian Mississippi	+ 0.0	- 0.1	- 0.1	+ 0.1	- 0.3	- 3.5
New York	**+ 0.6**	**+ 0.2**	**+ 0.3**	**+ 0.6**	**+ 0.2**	**- 1.2**
Appalachian New York	+ 1.1	+ 0.3	+ 0.9	+ 1.0	+ 1.0	- 0.3
Non-Appalachian New York	+ 0.6	+ 0.2	+ 0.3	+ 0.6	+ 0.2	- 1.2
North Carolina	**+ 0.3**	**+ 0.0**	**+ 0.1**	**+ 0.6**	**- 0.2**	**- 2.3**
Appalachian North Carolina	+ 0.4	- 0.2	+ 0.0	+ 0.3	- 0.1	- 1.5
Non-Appalachian North Carolina	+ 0.3	- 0.1	+ 0.1	+ 0.6	- 0.2	- 2.5
Ohio	**+ 0.7**	**+ 0.2**	**+ 0.4**	**+ 0.5**	**+ 0.5**	**- 1.3**
Appalachian Ohio	+ 1.1	+ 0.1	+ 0.9	+ 1.1	+ 1.0	- 0.9
Non-Appalachian Ohio	+ 0.6	+ 0.3	+ 0.4	+ 0.5	+ 0.4	- 1.4
Pennsylvania	**+ 0.7**	**+ 0.3**	**+ 0.6**	**+ 0.8**	**+ 0.6**	**- 1.0**
Appalachian Pennsylvania	+ 0.7	+ 0.5	+ 0.5	+ 0.7	+ 0.5	- 1.2
Non-Appalachian Pennsylvania	+ 0.8	+ 0.2	+ 0.7	+ 0.9	+ 0.6	- 0.8
South Carolina	**+ 0.8**	**+ 0.6**	**+ 0.4**	**+ 0.7**	**+ 0.2**	**- 1.9**
Appalachian South Carolina	+ 0.7	+ 0.6	+ 0.2	+ 0.1	+ 0.4	- 0.9
Non-Appalachian South Carolina	+ 0.8	+ 0.6	+ 0.4	+ 0.9	+ 0.2	- 2.2
Tennessee	**+ 0.3**	**+ 0.2**	**- 0.1**	**+ 0.6**	**- 0.2**	**- 2.0**
Appalachian Tennessee	+ 0.2	+ 0.0	- 0.2	+ 0.2	- 0.2	- 1.5
Non-Appalachian Tennessee	+ 0.4	+ 0.3	+ 0.2	+ 0.8	- 0.1	- 2.5
Virginia	**+ 0.6**	**+ 0.4**	**+ 0.4**	**+ 0.9**	**+ 0.2**	**- 1.7**
Appalachian Virginia	+ 0.4	+ 1.1	+ 0.0	+ 1.6	- 0.8	- 2.9
Non-Appalachian Virginia	+ 0.7	+ 0.4	+ 0.6	+ 0.8	+ 0.4	- 1.3
West Virginia (entire state)	**+ 0.4**	**+ 0.4**	**- 0.2**	**- 0.1**	**- 0.2**	**- 1.2**

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, 2009-2013 and 2014-2018 American Community Surveys.

Figure 10.5: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, 2009-2013 to 2014-2018



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, 2009-2013 to 2014-2018

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

The share of Appalachian residents reporting a disability was nearly half a percentage point higher in 2014-2018 than it was in 2009-2013, slightly below the national average. However, the increase matched or exceeded the national average in 221 of the Region'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 more than half 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 152 of the Region's counties.

TRENDS IN DISABILITY STATUS

- At 16 percent in 2014-2018, the share of Appalachian residents reporting a disability was nearly half a percentage point higher than it was in 2009-2013 (see Tables 10.2 and 10.3). Although the increase in disability prevalence was slightly below the national average, that was not the case everywhere in the Region. For example, while the share went up nearly a full percentage point in North Central Appalachia and more than that in nonmetropolitan counties adjacent to large metro areas, it only rose 0.1 points in Southern Appalachia. And while disability prevalence increased the most in the Appalachian sections of New York, Ohio, and Maryland, it stayed the same in Appalachian Georgia and actually decreased in Appalachian Mississippi.

- Disability prevalence in Appalachia increased slightly for adults ages 18-34, but barely rose for children and remained the same for persons ages 35-64. And there were variations within the Region in each case. In Maryland's Appalachian section, for example, disability rates rose 1.7 percentage points for adults ages 35-64, but fell slightly among children under age 18 and barely rose for adults ages 18-34. In Appalachian Georgia, disability prevalence fell 0.2 points for children and 0.5 points for adults ages 35-64, but barely rose (0.1 points) among young adults (ages 18-34).

- In contrast, the prevalence of disability fell 1.6 percentage points among persons ages 65 and over. The decline was greatest in Southern Appalachia (2.5 points) and in large metropolitan areas (just over two points), while the decrease was much more modest in Northern and North Central Appalachia (just over one point). Among the states, Georgia, Mississippi, and Virginia had the largest decreases among older persons (more than 2.5 percentage points in each case), while the rate fell just 0.3 points in Appalachian New York.

- 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.

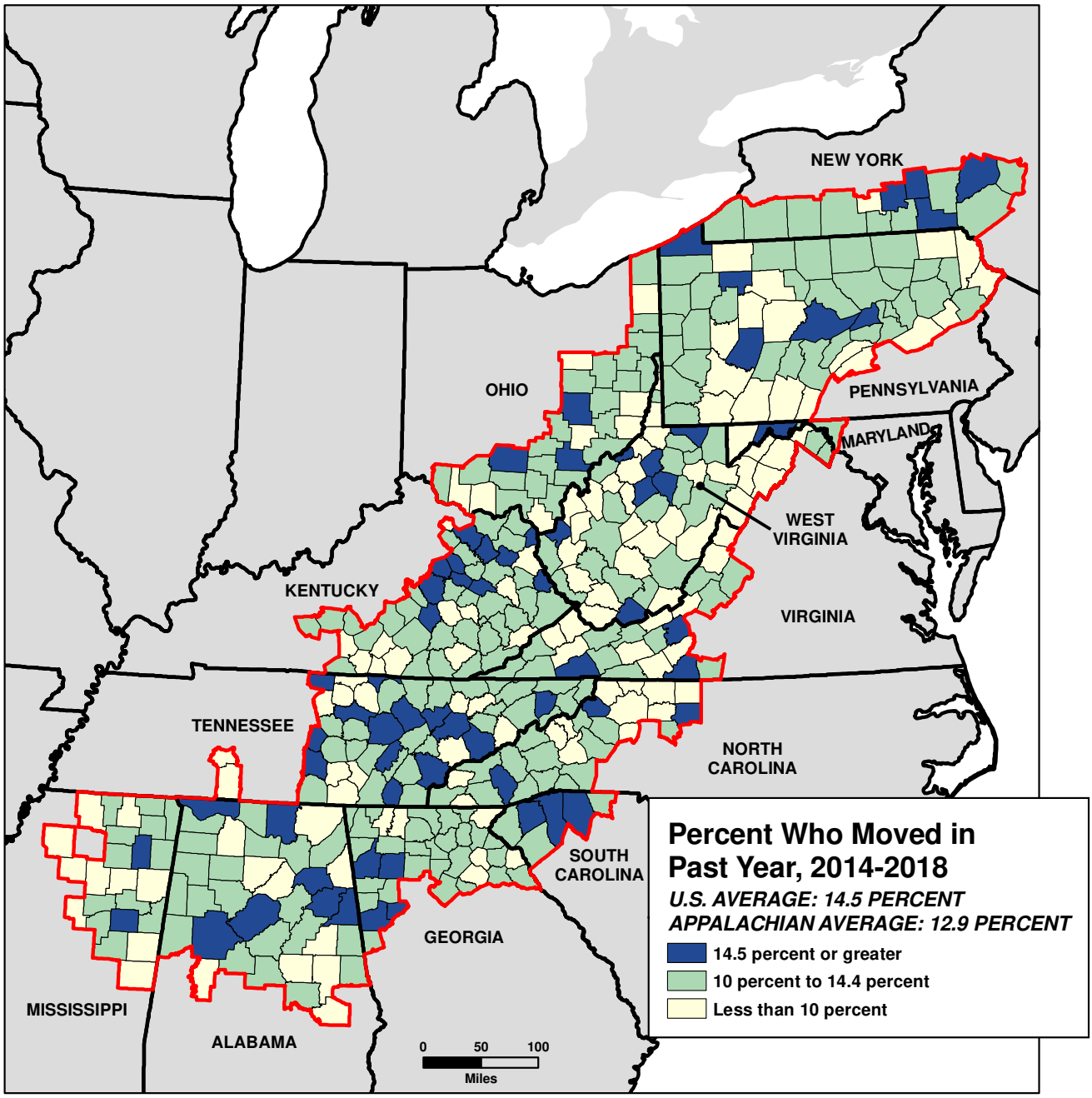
CHAPTER 11: MIGRATION

Table 11.1: Mobility Status of Persons Ages 1 and Over in the Appalachian Region, 2014-2018

Mobility Status in the Last Year	Total Population Ages 1 and Over, 2014-2018	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	**319,157,088**	**85.5**	**14.5**	**8.2**	**6.2**	**3.2**	**3.0**
Appalachian Region	**25,269,528**	**87.1**	**12.9**	**7.2**	**5.8**	**3.4**	**2.4**
Subregions							
Northern Appalachia	8,149,595	87.7	12.3	7.3	5.0	2.9	2.1
North Central Appalachia	2,385,925	87.5	12.5	6.8	5.7	3.3	2.4
Central Appalachia	1,855,945	87.9	12.1	6.5	5.6	3.7	1.9
South Central Appalachia	4,795,490	86.4	13.6	7.2	6.4	3.6	2.8
Southern Appalachia	8,082,573	86.5	13.5	7.3	6.2	3.7	2.6
County Types							
Large Metros (pop. 1 million +)	5,996,030	87.3	12.7	7.0	5.7	3.3	2.4
Small Metros (pop. <1 million)	10,695,754	86.2	13.8	7.7	6.1	3.3	2.8
Nonmetro, Adjacent to Large Metros	2,176,014	87.6	12.4	7.1	5.3	3.8	1.5
Nonmetro, Adjacent to Small Metros	3,917,417	88.3	11.7	6.4	5.3	3.3	2.0
Rural (nonmetro, not adj. to a metro)	2,484,313	88.1	11.9	6.4	5.5	3.7	1.8
Alabama	**4,809,280**	**86.1**	**13.9**	**8.2**	**5.7**	**3.1**	**2.6**
Appalachian Alabama	3,080,632	86.0	14.0	8.2	5.7	3.4	2.3
Non-Appalachian Alabama	1,728,648	86.1	13.9	8.2	5.8	2.6	3.2
Georgia	**10,171,713**	**84.6**	**15.4**	**7.3**	**8.1**	**4.7**	**3.3**
Appalachian Georgia	3,144,329	87.4	12.6	5.9	6.7	4.1	2.6
Non-Appalachian Georgia	7,027,384	83.4	16.6	8.0	8.6	5.0	3.6
Kentucky	**4,387,410**	**84.5**	**15.5**	**8.7**	**6.8**	**3.9**	**2.9**
Appalachian Kentucky	1,156,075	87.2	12.8	6.8	6.0	4.1	1.9
Non-Appalachian Kentucky	3,231,335	83.6	16.4	9.4	7.0	3.8	3.2
Maryland	**5,935,995**	**86.2**	**13.8**	**7.4**	**6.4**	**2.9**	**3.5**
Appalachian Maryland	248,822	86.1	13.9	8.2	5.7	3.2	2.5
Non-Appalachian Maryland	5,687,173	86.2	13.8	7.4	6.4	2.9	3.5
Mississippi	**2,953,805**	**86.6**	**13.4**	**7.2**	**6.2**	**3.6**	**2.6**
Appalachian Mississippi	619,712	87.3	12.7	7.2	5.5	3.6	1.9
Non-Appalachian Mississippi	2,334,093	86.4	13.6	7.2	6.4	3.6	2.8
New York	**19,401,482**	**89.5**	**10.5**	**6.0**	**4.6**	**2.5**	**2.1**
Appalachian New York	1,025,328	86.1	13.9	8.0	5.9	3.6	2.3
Non-Appalachian New York	18,376,154	89.7	10.3	5.9	4.5	2.4	2.1
North Carolina	**10,041,403**	**84.8**	**15.2**	**8.0**	**7.3**	**3.7**	**3.6**
Appalachian North Carolina	1,726,204	87.3	12.7	6.5	6.2	3.5	2.7
Non-Appalachian North Carolina	8,315,199	84.2	15.8	8.3	7.5	3.7	3.8
Ohio	**11,507,938**	**85.2**	**14.8**	**9.2**	**5.5**	**3.4**	**2.1**
Appalachian Ohio	1,982,803	87.7	12.3	7.3	5.0	3.3	1.6
Non-Appalachian Ohio	9,525,135	84.7	15.3	9.6	5.7	3.5	2.2
Pennsylvania	**12,654,296**	**87.7**	**12.3**	**7.2**	**5.1**	**2.7**	**2.4**
Appalachian Pennsylvania	5,650,744	87.9	12.1	7.2	4.9	2.8	2.1
Non-Appalachian Pennsylvania	7,003,552	87.5	12.5	7.2	5.3	2.6	2.7
South Carolina	**4,899,989**	**85.3**	**14.7**	**7.6**	**7.1**	**3.2**	**3.9**
Appalachian South Carolina	1,237,900	84.9	15.1	8.4	6.7	3.3	3.4
Non-Appalachian South Carolina	3,662,089	85.4	14.6	7.3	7.3	3.1	4.1
Tennessee	**6,575,703**	**85.2**	**14.8**	**8.4**	**6.4**	**3.2**	**3.3**
Appalachian Tennessee	2,841,834	86.2	13.8	7.7	6.2	3.4	2.8
Non-Appalachian Tennessee	3,733,869	84.5	15.5	8.9	6.6	3.0	3.6
Virginia	**8,314,115**	**84.5**	**15.5**	**6.6**	**9.0**	**5.0**	**4.0**
Appalachian Virginia	745,180	86.6	13.4	6.3	7.2	4.5	2.7
Non-Appalachian Virginia	7,568,935	84.2	15.8	6.6	9.2	5.0	4.2
West Virginia (entire state)	**1,809,965**	**88.4**	**11.6**	**6.3**	**5.3**	**2.7**	**2.6**

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

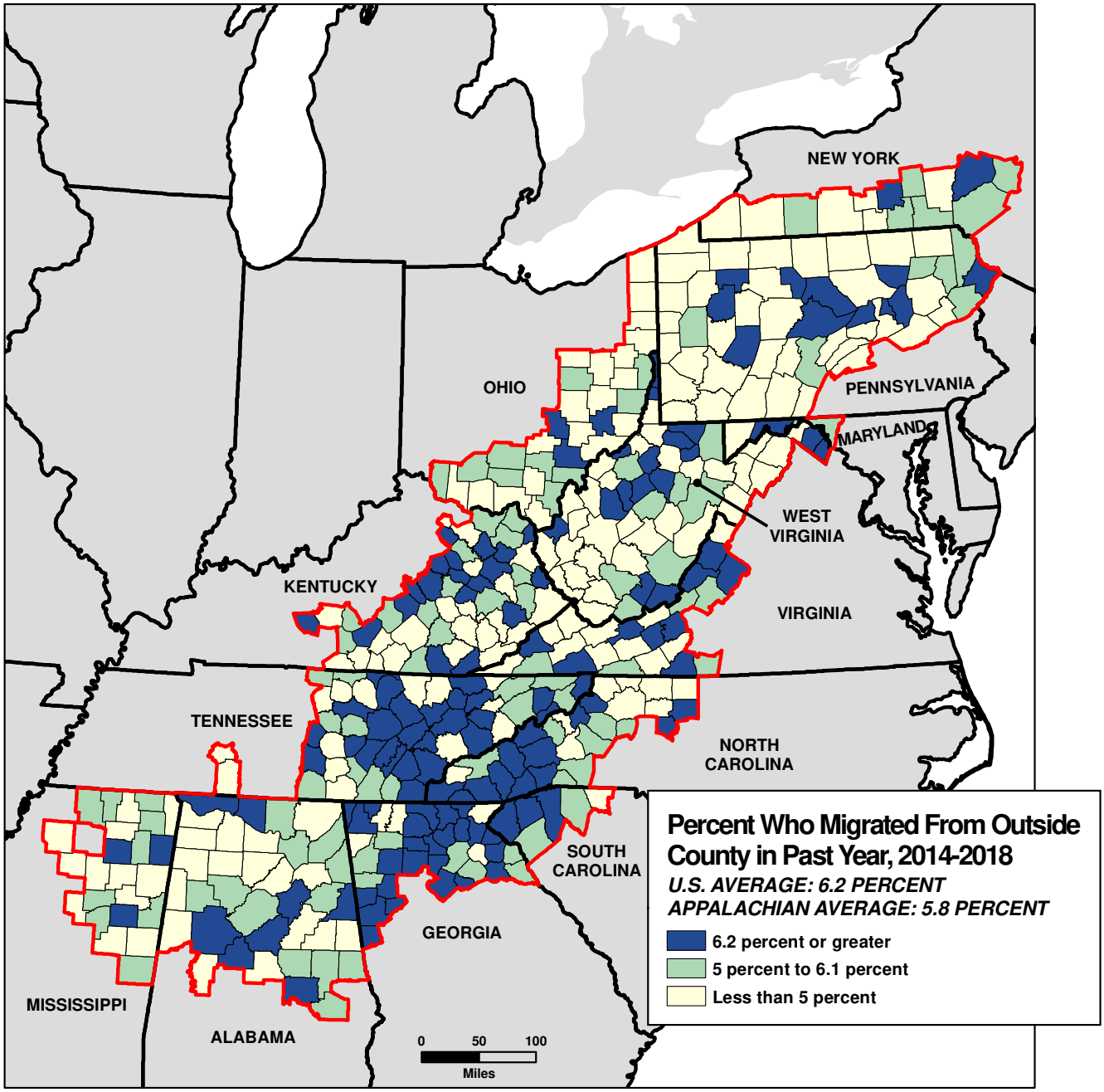
Figure 11.1: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Moved in the Past Year, 2014-2018



Map Title: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Moved in the Past Year, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 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 67 of the Region's counties. Most of these counties were in major metropolitan areas, housed a four-year college or university, or were rural counties that were likely retirement or recreational destinations. Yet in 128 Appalachian counties, less than 10 percent of the residents had moved in the previous 12 months; almost three-fourths of these counties were outside metro areas.

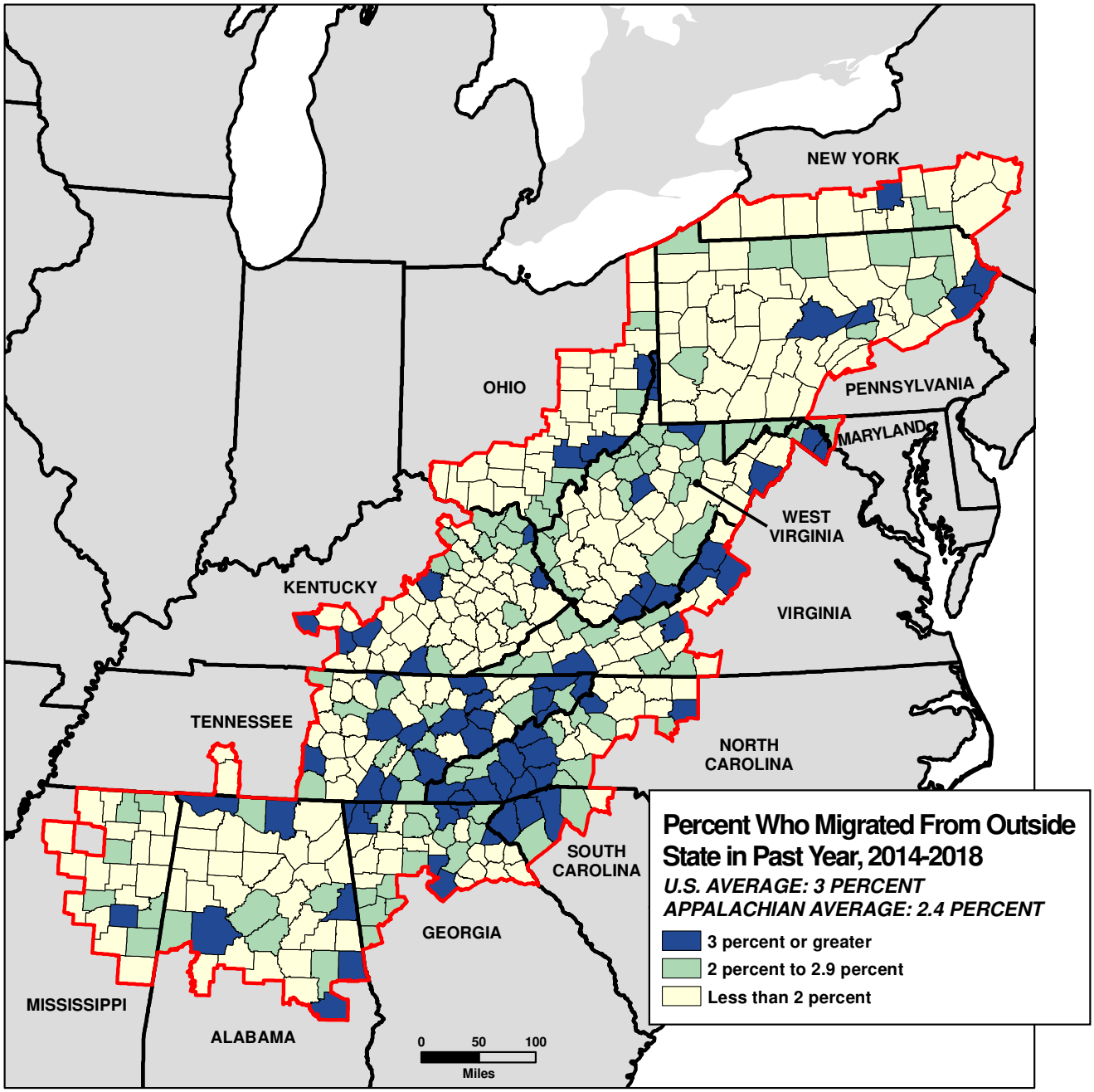
Figure 11.2: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their County of Residence in the Past Year, 2014-2018



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, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

While people in Appalachia were slightly less likely to have migrated from outside their county of residence in the 2014-2018 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. 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 181 counties, however, less than 5 percent of the residents had migrated from another county. Almost three-fourths of these counties were outside metropolitan areas, and more than two-fifths of those nonmetro counties were rural counties not adjacent to a metro area.

Figure 11.3: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their State of Residence in the Past Year, 2014-2018



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, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

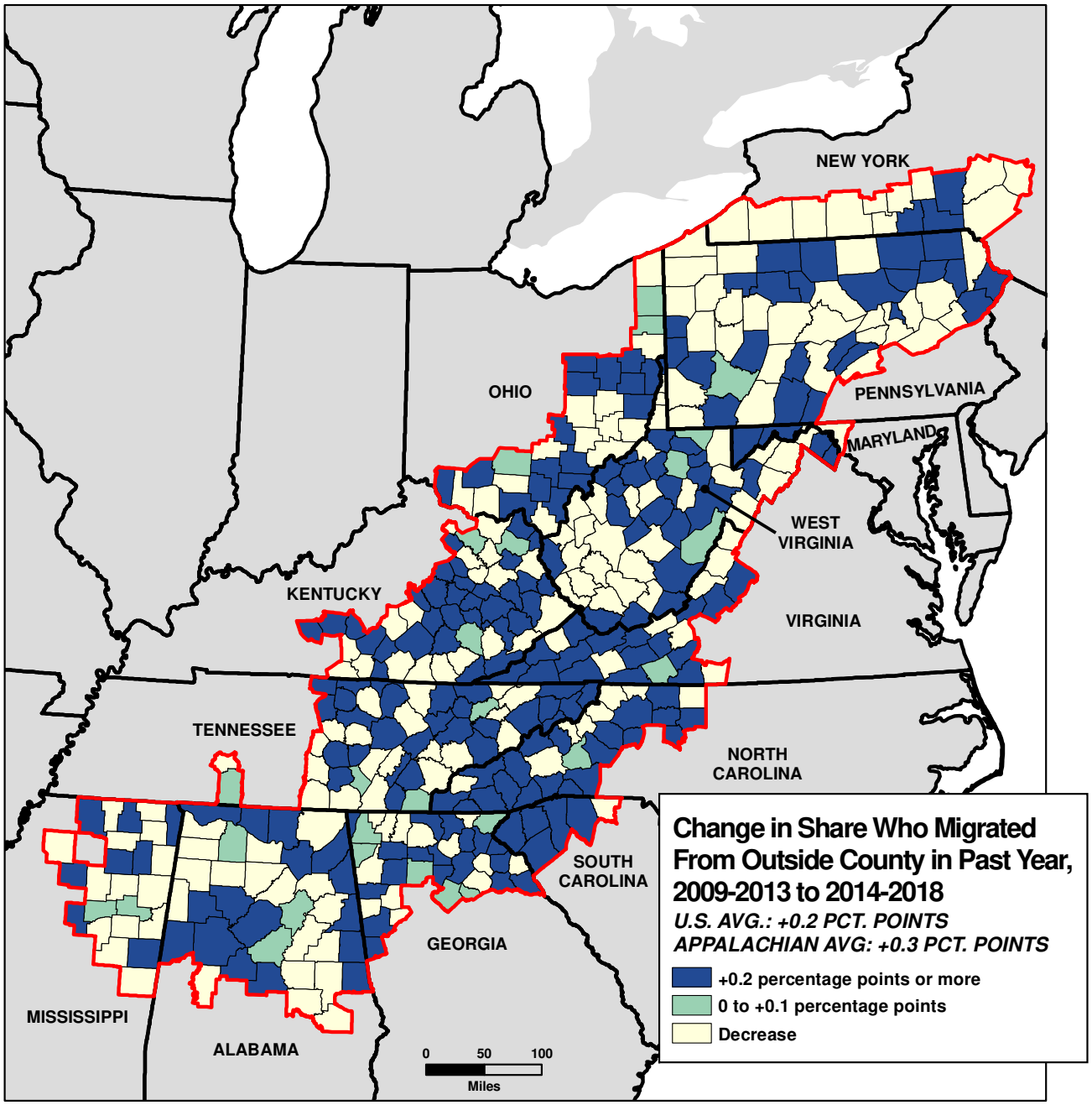
The share of people in the Appalachian Region who had migrated from outside their state of residence was 2.4 percent in the 2014-2018 period, compared with 3 percent of all Americans. Yet in 76 of Appalachia's 420 counties, out-of-state migration levels were at or above the U.S. average. Almost two-thirds of these counties were in South Central and Southern Appalachia, and more than half were in metropolitan areas. Some of these counties are also home to four-year colleges or universities, such as Tompkins County, New York (Cornell University, Ithaca College); Rockbridge County, Virginia (Virginia Military Institute, Washington and Lee University); and Union County, Pennsylvania (Bucknell University). In contrast, there were 246 counties in the Region where less than 2 percent of residents had come from out of state. More than two-thirds 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, 2009-2013 to 2014-2018

Mobility Status in the Last Year	Percentage Point Change in Share of Population Ages 1 and Over					
	Did Not Move in Past Year	Moved from a Different Residence in the Past Year				
			Within the County	Outside the County		
					Within the State	Outside the State
United States	**+ 0.6**	**- 0.6**	**- 0.9**	**+ 0.2**	**+ 0.0**	**+ 0.1**
Appalachian Region	**+ 0.3**	**- 0.3**	**- 0.5**	**+ 0.3**	**+ 0.2**	**+ 0.1**
Subregions						
Northern Appalachia	+ 0.1	- 0.1	- 0.1	+ 0.1	+ 0.1	+ 0.0
North Central Appalachia	+ 0.1	- 0.1	- 0.3	+ 0.1	+ 0.3	- 0.1
Central Appalachia	+ 0.0	+ 0.0	- 0.5	+ 0.5	+ 0.5	+ 0.0
South Central Appalachia	+ 0.2	- 0.2	- 0.7	+ 0.5	+ 0.3	+ 0.2
Southern Appalachia	+ 0.9	- 0.9	- 1.1	+ 0.2	+ 0.1	+ 0.2
County Types						
Large Metros (pop. 1 million +)	+ 0.4	- 0.4	- 0.8	+ 0.3	+ 0.1	+ 0.2
Small Metros (pop. <1 million)	+ 0.2	- 0.2	- 0.5	+ 0.3	+ 0.2	+ 0.1
Nonmetro, Adjacent to Large Metros	+ 1.0	- 1.0	- 1.0	+ 0.0	+ 0.3	- 0.2
Nonmetro, Adjacent to Small Metros	+ 0.2	- 0.2	- 0.4	+ 0.2	+ 0.2	+ 0.0
Rural (nonmetro, not adj. to a metro)	+ 0.5	- 0.5	- 0.5	+ 0.0	+ 0.1	- 0.1
Alabama	**+ 1.1**	**- 1.1**	**- 0.9**	**- 0.2**	**- 0.2**	**+ 0.0**
Appalachian Alabama	+ 0.4	- 0.4	- 0.6	+ 0.1	+ 0.0	+ 0.1
Non-Appalachian Alabama	+ 2.2	- 2.2	- 1.4	- 0.7	- 0.4	- 0.3
Georgia	**+ 1.0**	**- 1.0**	**- 1.1**	**+ 0.1**	**+ 0.0**	**+ 0.0**
Appalachian Georgia	+ 1.4	- 1.4	- 1.7	+ 0.3	+ 0.1	+ 0.2
Non-Appalachian Georgia	+ 0.8	- 0.8	- 0.8	+ 0.0	+ 0.0	- 0.1
Kentucky	**- 0.3**	**+ 0.3**	**+ 0.0**	**+ 0.3**	**+ 0.4**	**- 0.1**
Appalachian Kentucky	+ 0.2	- 0.2	- 0.8	+ 0.6	+ 0.7	+ 0.0
Non-Appalachian Kentucky	- 0.4	+ 0.4	+ 0.3	+ 0.1	+ 0.3	- 0.2
Maryland	**- 0.5**	**+ 0.5**	**+ 0.2**	**+ 0.3**	**+ 0.3**	**+ 0.0**
Appalachian Maryland	+ 0.1	- 0.1	+ 0.0	- 0.2	+ 0.2	- 0.4
Non-Appalachian Maryland	- 0.5	+ 0.5	+ 0.2	+ 0.3	+ 0.3	+ 0.0
Mississippi	**+ 0.8**	**- 0.8**	**- 0.6**	**- 0.2**	**- 0.2**	**+ 0.0**
Appalachian Mississippi	+ 1.2	- 1.2	- 0.8	- 0.4	- 0.4	+ 0.0
Non-Appalachian Mississippi	+ 0.7	- 0.7	- 0.6	- 0.1	- 0.1	+ 0.0
New York	**+ 0.7**	**- 0.7**	**- 0.6**	**+ 0.0**	**+ 0.1**	**- 0.1**
Appalachian New York	+ 0.8	- 0.8	- 0.4	- 0.4	- 0.1	- 0.3
Non-Appalachian New York	+ 0.7	- 0.7	- 0.6	+ 0.0	+ 0.0	- 0.1
North Carolina	**+ 0.1**	**- 0.1**	**- 0.5**	**+ 0.5**	**+ 0.2**	**+ 0.3**
Appalachian North Carolina	+ 0.1	- 0.1	- 0.8	+ 0.7	+ 0.3	+ 0.4
Non-Appalachian North Carolina	+ 0.0	+ 0.0	- 0.4	+ 0.4	+ 0.1	+ 0.3
Ohio	**- 0.3**	**+ 0.3**	**- 0.2**	**+ 0.4**	**+ 0.2**	**+ 0.2**
Appalachian Ohio	- 0.1	+ 0.1	- 0.3	+ 0.4	+ 0.3	- 0.1
Non-Appalachian Ohio	- 0.3	+ 0.3	- 0.2	+ 0.5	+ 0.3	+ 0.2
Pennsylvania	**- 0.3**	**+ 0.3**	**+ 0.0**	**+ 0.3**	**+ 0.2**	**+ 0.1**
Appalachian Pennsylvania	+ 0.0	+ 0.0	+ 0.0	+ 0.1	+ 0.1	+ 0.0
Non-Appalachian Pennsylvania	- 0.5	+ 0.5	- 0.1	+ 0.5	+ 0.2	+ 0.3
South Carolina	**+ 0.6**	**- 0.6**	**- 0.8**	**+ 0.2**	**+ 0.0**	**+ 0.1**
Appalachian South Carolina	+ 0.3	- 0.3	- 0.8	+ 0.5	+ 0.3	+ 0.2
Non-Appalachian South Carolina	+ 0.7	- 0.7	- 0.8	+ 0.1	- 0.1	+ 0.1
Tennessee	**+ 0.6**	**- 0.6**	**- 1.0**	**+ 0.4**	**+ 0.2**	**+ 0.2**
Appalachian Tennessee	+ 0.0	+ 0.0	- 0.5	+ 0.6	+ 0.4	+ 0.2
Non-Appalachian Tennessee	+ 1.2	- 1.2	- 1.4	+ 0.3	+ 0.1	+ 0.2
Virginia	**- 0.2**	**+ 0.2**	**+ 0.0**	**+ 0.3**	**+ 0.2**	**+ 0.1**
Appalachian Virginia	+ 0.4	- 0.4	- 0.3	+ 0.0	+ 0.0	+ 0.0
Non-Appalachian Virginia	- 0.4	+ 0.4	+ 0.1	+ 0.3	+ 0.2	+ 0.1
West Virginia (entire state)	**+ 0.3**	**- 0.3**	**- 0.2**	**+ 0.0**	**+ 0.2**	**- 0.2**

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 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, 2009-2013 to 2014-2018



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, 2009-2013 to 2014-2018
Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

Both in Appalachia and the nation as a whole, the share of individuals migrating from outside their county of residence increased only slightly (0.3 and 0.2 percentage points, respectively) from 2009-2013 to 2014-2018. Yet the patterns varied within the Region. In 212 of Appalachia's 420 counties, for example, the share of residents who migrated from another county increased at or above the national average. Yet in 181 other counties, the share of migrants from another county decreased between the two periods. The Appalachian sections of Kentucky, the Carolinas, and Tennessee all had increases of at least half a percentage point, while the share migrating from another county declined in Appalachian Maryland, Mississippi, and New York.

TRENDS IN MIGRATION

- Like Americans as a whole, Appalachian residents were slightly less mobile in 2014-2018 than they were in 2009-2013. 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 2014-2018 (see Tables 11.1 and 11.2). However, this decline occurred in within-county movement; the share of residents who migrated from outside their county and their state of residence increased by 0.3 points between the two periods.

- Within the Region, the decline in residential mobility was greatest among nonmetropolitan counties adjacent to large metro areas, where the share of residents who had moved in the previous year fell a full percentage point between 2009-2013 and 2014-2018. The decline was almost as great in Southern Appalachia, where the share fell 0.9 points. Yet in the Appalachian section of Ohio, mobility shares actually increased—albeit by just one-tenth of a percentage point.

- Appalachia's small increase (0.3 percentage points) in the percentage of residents migrating from outside their county of residence between 2009-2013 and 2014-2018 actually masked changes within the Region. For example, the share rose more noticeably in Central Appalachia, South Central Appalachia, and the Appalachian sections of Kentucky, the Carolinas, and Tennessee (by at least half a percentage point in each case). Meanwhile, the share fell 0.4 points in Maryland and Mississippi, and 0.2 points in New York.

CHAPTER 12: VETERAN STATUS

Table 12.1: Number of Adult Civilians in the Appalachian Region Who Are Veterans, by Age Group and Gender, 2014-2018

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	**18,611,432**	**1,645,406**	**7,753,383**	**9,212,643**	**17,003,235**	**1,608,197**
Appalachian Region	**1,695,353**	**115,054**	**683,536**	**896,763**	**1,576,506**	**118,847**
Subregions						
Northern Appalachia	586,444	36,831	220,241	329,372	549,950	36,494
North Central Appalachia	174,946	11,905	71,821	91,220	163,566	11,380
Central Appalachia	108,154	7,068	43,188	57,898	102,074	6,080
South Central Appalachia	335,996	21,379	129,960	184,657	312,396	23,600
Southern Appalachia	489,813	37,871	218,326	233,616	448,520	41,293
County Types						
Large Metros (pop. 1 million +)	368,249	26,728	154,431	187,090	339,155	29,094
Small Metros (pop. <1 million)	746,105	51,769	306,245	388,091	692,968	53,137
Nonmetro, Adjacent to Large Metros	151,732	9,750	61,437	80,545	141,913	9,819
Nonmetro, Adjacent to Small Metros	280,979	17,849	106,276	156,854	263,032	17,947
Rural (nonmetro, not adj. to a metro)	148,288	8,958	55,147	84,183	139,438	8,850
Alabama	**335,599**	**26,663**	**154,773**	**154,163**	**303,309**	**32,290**
Appalachian Alabama	206,050	15,767	93,000	97,283	187,889	18,161
Non-Appalachian Alabama	129,549	10,896	61,773	56,880	115,420	14,129
Georgia	**636,725**	**61,011**	**315,574**	**260,140**	**562,253**	**74,472**
Appalachian Georgia	172,866	13,291	79,098	80,477	157,368	15,498
Non-Appalachian Georgia	463,859	47,720	236,476	179,663	404,885	58,974
Kentucky	**273,675**	**22,842**	**121,034**	**129,799**	**252,464**	**21,211**
Appalachian Kentucky	63,970	4,369	26,005	33,596	60,056	3,914
Non-Appalachian Kentucky	209,705	18,473	95,029	96,203	192,408	17,297
Maryland	**372,462**	**34,650**	**177,236**	**160,576**	**326,808**	**45,654**
Appalachian Maryland	18,165	1,301	7,849	9,015	16,841	1,324
Non-Appalachian Maryland	354,297	33,349	169,387	151,561	309,967	44,330
Mississippi	**168,996**	**14,046**	**77,816**	**77,134**	**152,411**	**16,585**
Appalachian Mississippi	30,944	2,112	13,082	15,750	28,705	2,239
Non-Appalachian Mississippi	138,052	11,934	64,734	61,384	123,706	14,346
New York	**730,557**	**53,081**	**260,754**	**416,722**	**681,746**	**48,811**
Appalachian New York	70,212	4,269	28,311	37,632	65,368	4,844
Non-Appalachian New York	660,345	48,812	232,443	379,090	616,378	43,967
North Carolina	**667,696**	**66,256**	**303,120**	**298,320**	**600,057**	**67,639**
Appalachian North Carolina	118,175	7,139	43,072	67,964	110,532	7,643
Non-Appalachian North Carolina	549,521	59,117	260,048	230,356	489,525	59,996
Ohio	**729,649**	**53,990**	**304,034**	**371,625**	**676,174**	**53,475**
Appalachian Ohio	141,802	9,122	56,359	76,321	133,558	8,244
Non-Appalachian Ohio	587,847	44,868	247,675	295,304	542,616	45,231
Pennsylvania	**782,682**	**50,009**	**290,805**	**441,868**	**731,001**	**51,681**
Appalachian Pennsylvania	407,406	25,839	149,659	231,908	382,027	25,379
Non-Appalachian Pennsylvania	375,276	24,170	141,146	209,960	348,974	26,302
South Carolina	**366,862**	**33,221**	**161,530**	**172,111**	**333,011**	**33,851**
Appalachian South Carolina	79,953	6,701	33,146	40,106	74,558	5,395
Non-Appalachian South Carolina	286,909	26,520	128,384	132,005	258,453	28,456
Tennessee	**435,040**	**37,638**	**191,376**	**206,026**	**396,626**	**38,414**
Appalachian Tennessee	204,300	13,954	82,298	108,048	189,682	14,618
Non-Appalachian Tennessee	230,740	23,684	109,078	97,978	206,944	23,796
Virginia	**684,480**	**77,305**	**350,242**	**256,933**	**592,608**	**91,872**
Appalachian Virginia	47,002	2,531	17,753	26,718	43,880	3,122
Non-Appalachian Virginia	637,478	74,774	332,489	230,215	548,728	88,750
West Virginia (entire state)	**134,508**	**8,659**	**53,904**	**71,945**	**126,042**	**8,466**

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, 2014-2018 American Community Survey.

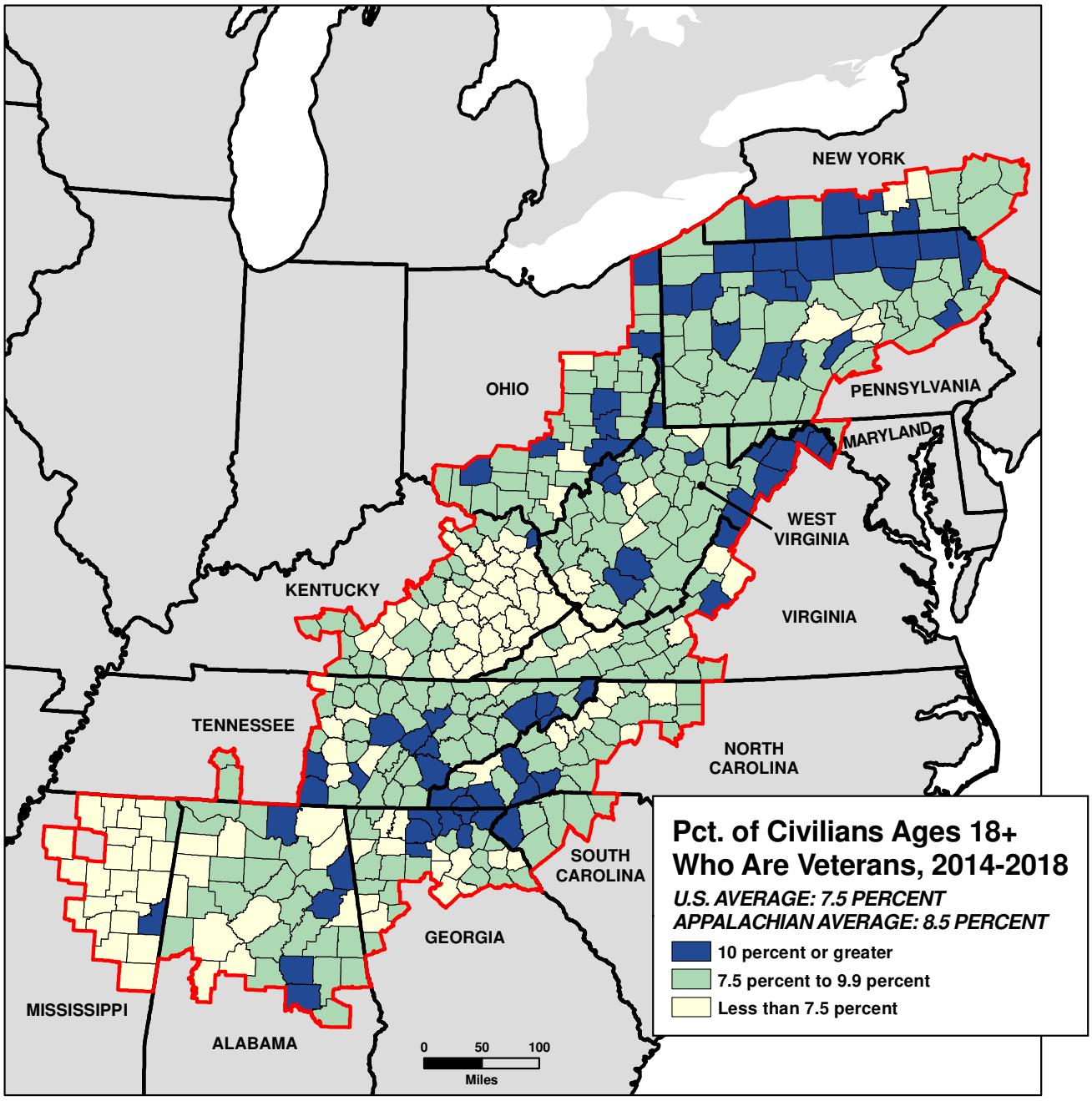
Table 12.2: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, by Age Group and Gender, 2014-2018

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	**7.5**	**2.2**	**6.2**	**18.7**	**14.1**	**1.3**
Appalachian Region	**8.5**	**2.1**	**6.8**	**20.0**	**16.2**	**1.2**
Subregions						
Northern Appalachia	8.9	2.1	6.8	21.0	17.0	1.1
North Central Appalachia	9.2	2.3	7.5	21.0	17.5	1.2
Central Appalachia	7.3	1.9	5.7	17.3	14.1	0.8
South Central Appalachia	8.7	2.1	6.8	20.0	16.8	1.2
Southern Appalachia	7.9	2.1	6.8	19.1	15.0	1.3
County Types						
Large Metros (pop. 1 million +)	7.9	2.0	6.3	20.0	15.1	1.2
Small Metros (pop. <1 million)	8.7	2.1	7.3	20.5	16.8	1.2
Nonmetro, Adjacent to Large Metros	8.8	2.1	7.1	20.2	16.7	1.1
Nonmetro, Adjacent to Small Metros	9.0	2.3	6.8	20.0	17.1	1.1
Rural (nonmetro, not adj. to a metro)	7.5	1.7	5.6	18.0	14.4	0.9
Alabama	**8.9**	**2.4**	**8.2**	**19.7**	**17.0**	**1.6**
Appalachian Alabama	8.5	2.3	7.6	19.4	16.3	1.4
Non-Appalachian Alabama	9.7	2.7	9.4	20.2	18.3	2.0
Georgia	**8.2**	**2.5**	**7.9**	**19.2**	**15.2**	**1.8**
Appalachian Georgia	7.3	2.0	6.2	19.2	13.7	1.3
Non-Appalachian Georgia	8.6	2.8	8.7	19.3	15.9	2.1
Kentucky	**8.0**	**2.3**	**7.0**	**18.8**	**15.3**	**1.2**
Appalachian Kentucky	7.0	1.8	5.6	17.0	13.5	0.8
Non-Appalachian Kentucky	8.4	2.5	7.5	19.5	15.9	1.3
Maryland	**8.0**	**2.6**	**7.4**	**18.3**	**14.8**	**1.9**
Appalachian Maryland	9.1	2.4	7.9	20.0	16.6	1.4
Non-Appalachian Maryland	8.0	2.6	7.4	18.3	14.8	1.9
Mississippi	**7.5**	**2.1**	**6.9**	**17.2**	**14.2**	**1.4**
Appalachian Mississippi	6.5	1.5	5.6	15.6	12.6	0.9
Non-Appalachian Mississippi	7.8	2.2	7.3	17.6	14.6	1.5
New York	**4.7**	**1.1**	**3.4**	**13.6**	**9.2**	**0.6**
Appalachian New York	8.5	1.7	7.2	19.9	16.0	1.1
Non-Appalachian New York	4.5	1.1	3.2	13.2	8.8	0.6
North Carolina	**8.6**	**3.0**	**7.7**	**19.0**	**16.3**	**1.7**
Appalachian North Carolina	8.5	2.0	6.2	19.7	16.6	1.1
Non-Appalachian North Carolina	8.6	3.1	8.0	18.8	16.2	1.8
Ohio	**8.1**	**2.1**	**6.7**	**19.6**	**15.5**	**1.1**
Appalachian Ohio	9.0	2.2	7.1	21.0	17.4	1.0
Non-Appalachian Ohio	7.9	2.1	6.6	19.3	15.1	1.2
Pennsylvania	**7.7**	**1.7**	**5.8**	**19.8**	**15.0**	**1.0**
Appalachian Pennsylvania	8.9	2.1	6.6	21.2	17.0	1.1
Non-Appalachian Pennsylvania	6.8	1.5	5.1	18.5	13.2	0.9
South Carolina	**9.6**	**3.0**	**8.5**	**20.8**	**18.3**	**1.7**
Appalachian South Carolina	8.3	2.4	6.9	19.8	16.1	1.1
Non-Appalachian South Carolina	10.0	3.3	9.0	21.1	19.0	1.9
Tennessee	**8.5**	**2.5**	**7.4**	**19.7**	**16.1**	**1.4**
Appalachian Tennessee	9.0	2.3	7.3	20.3	17.3	1.2
Non-Appalachian Tennessee	8.1	2.7	7.5	19.1	15.2	1.6
Virginia	**10.6**	**4.1**	**10.6**	**20.9**	**19.2**	**2.7**
Appalachian Virginia	7.7	1.5	6.0	17.9	14.4	1.0
Non-Appalachian Virginia	11.0	4.3	11.1	21.3	19.7	2.9
West Virginia (entire state)	**9.2**	**2.3**	**7.4**	**20.9**	**17.7**	**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, 2014-2018 American Community Survey.

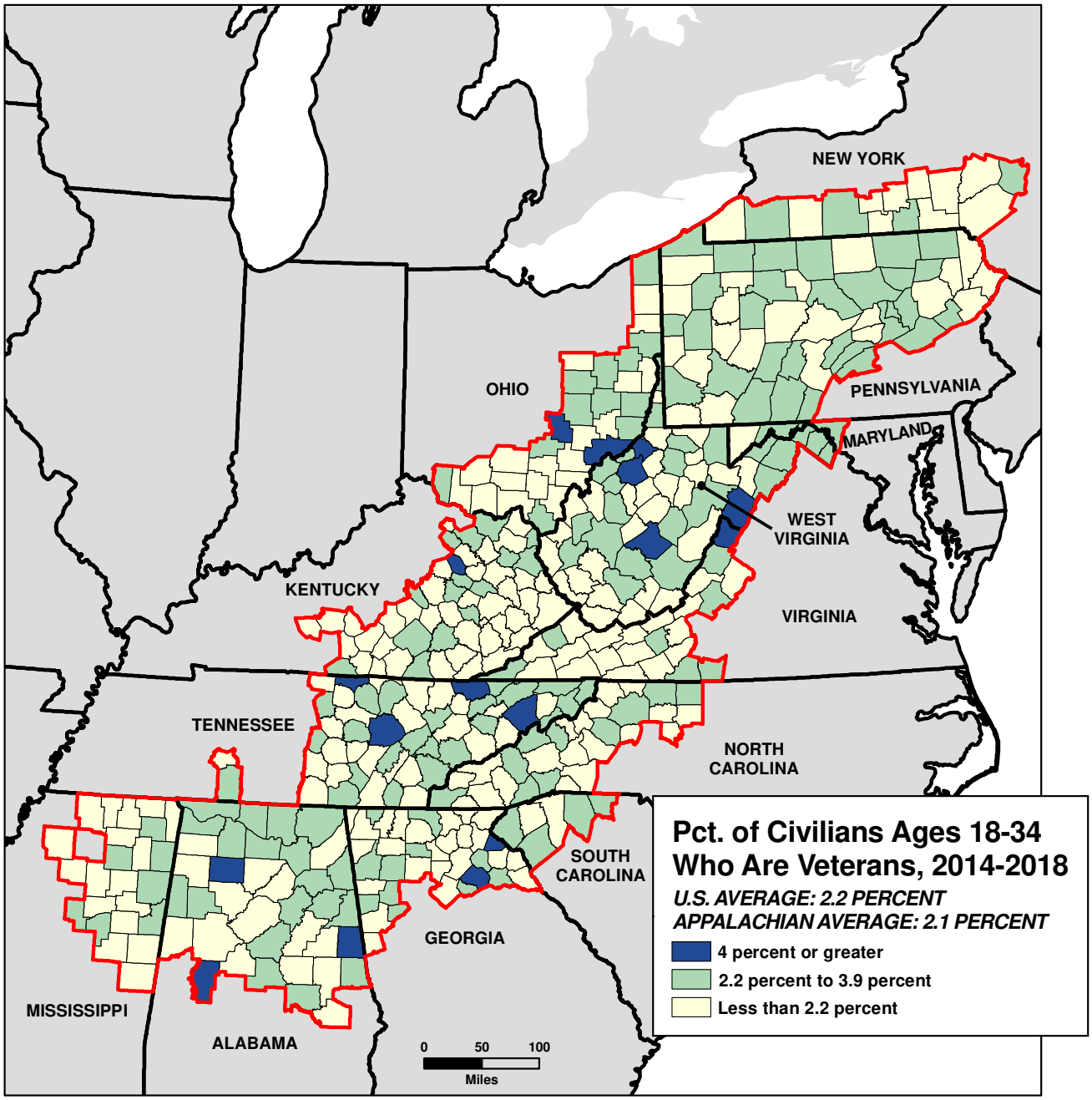
Figure 12.1: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, 2014-2018



Map Title: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In 2014-2018, nearly 1.7 million adult civilians ages 18 and over in the Appalachian Region (8.5 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 7.5 percent, there was considerable variation throughout the Region. In 78 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 118 counties; nearly half the counties in this group were in Kentucky and Mississippi—the two states that had the Region's lowest share of veterans among adult civilians.

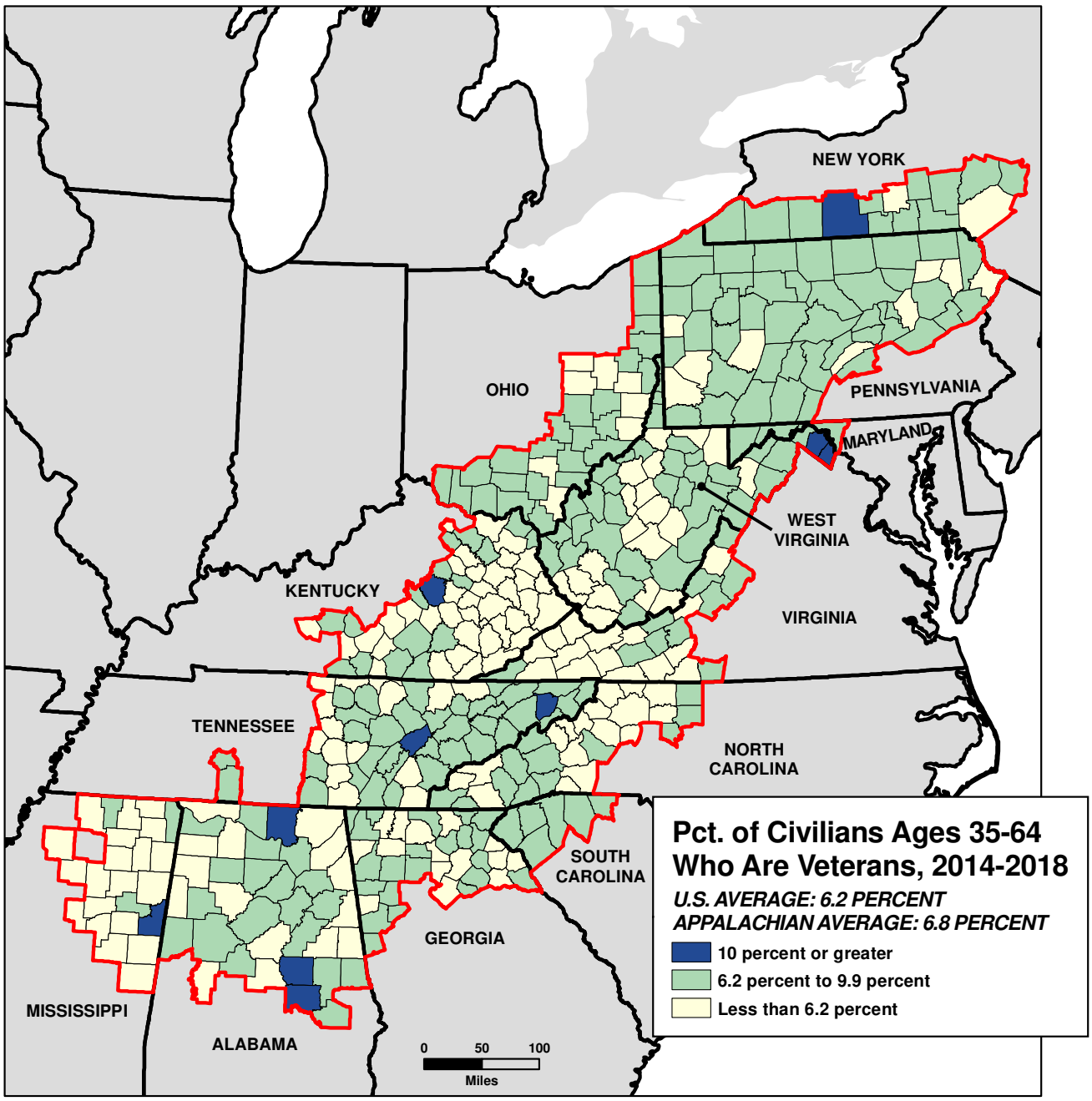
Figure 12.2: Percent of Civilians Ages 18 to 34 in the Appalachian Region Who Are Veterans, 2014-2018



Map Title: Percent of Civilians Ages 18 to 34 in the Appalachian Region Who Are Veterans, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

Military veterans accounted for just 2.1 percent of Appalachia's young adult (ages 18-34) civilian population in the 2014-2018 period, compared to 2.2 percent for the nation as a whole. Yet in 185 of the Region's 420 counties, the prevalence was at or above the national rate. In fact, there were 17 Appalachian counties where at least 4 percent of 18-to-34-year-old civilians were veterans. Most veterans of the wars in Iraq and Afghanistan fall in this age group.

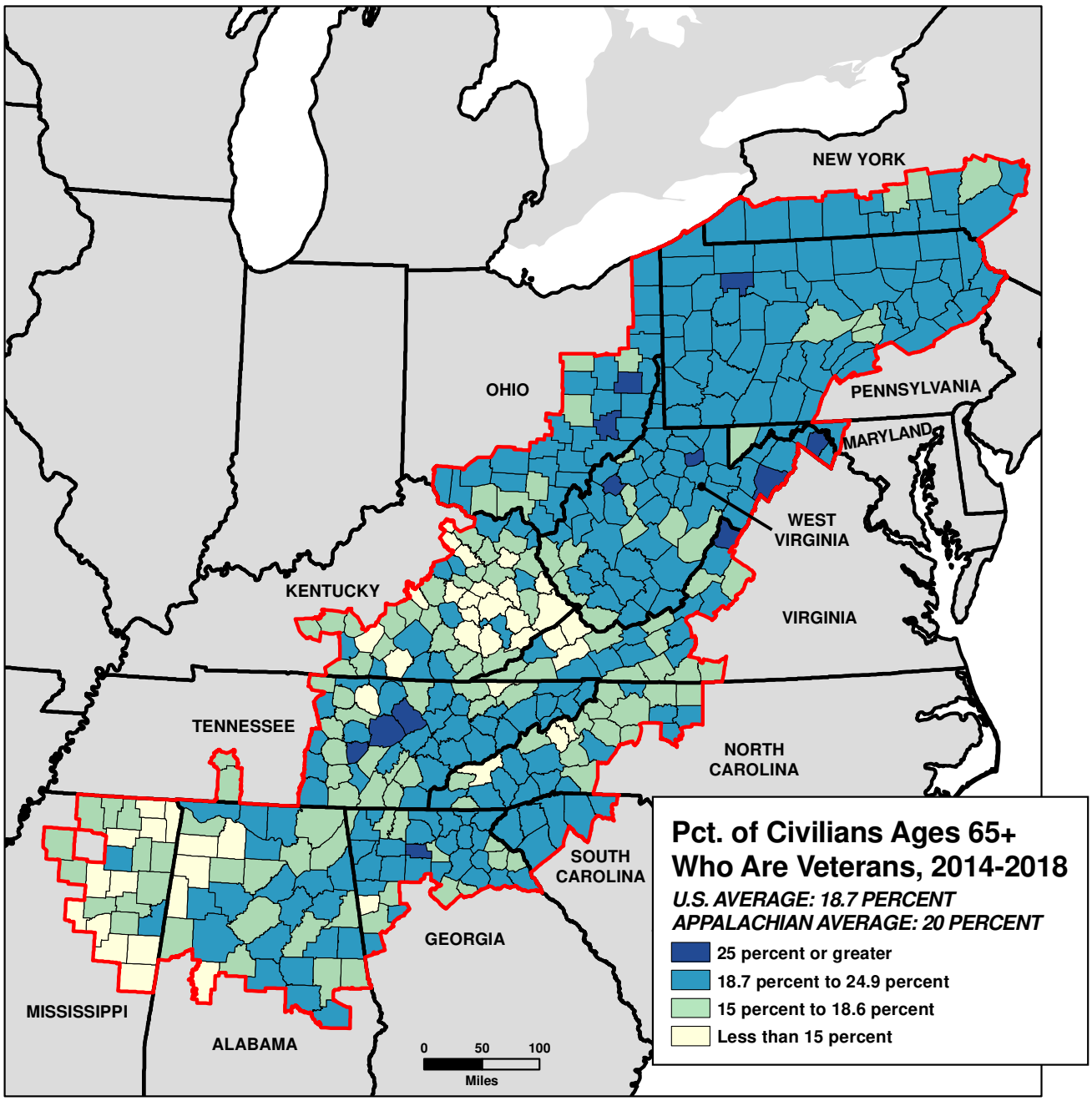
Figure 12.3: Percent of Civilians Ages 35 to 64 in the Appalachian Region Who Are Veterans, 2014-2018



Map Title: Percent of Civilians Ages 35 to 64 in the Appalachian Region Who Are Veterans, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In the Appalachian Region, 6.8 percent of 35-to-64-year-old civilian residents were military veterans in 2014-2018, slightly above the U.S. rate of 6.2 percent. The prevalence was even higher in some counties: In 10 of them, veterans comprised at least one in 10 civilians ages 35 to 64. These counties were scattered throughout the Region. In 172 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 5.7 percent of 35-to-64-year-old civilians were veterans—the lowest share among the subregions. Most veterans of the 1991 Gulf War fall in this age group, as do the youngest Vietnam veterans.

Figure 12.4: Percent of Civilians Ages 65 and Over in the Appalachian Region Who Are Veterans, 2014-2018



Map Title: Percent of Civilians Ages 65 and Over in the Appalachian Region Who Are Veterans, 2014-2018
Data Source: U.S. Census Bureau, 2014-2018 American Community Survey.

In 2014-2018, 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 12 counties—10 of which were in Northern, North Central, and South Central Appalachia, the subregions with the highest prevalence rates in this age group. By contrast, there were 44 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 just 17 percent of older civilians. (Only Appalachian Mississippi had an even lower share, at just under 16 percent.)

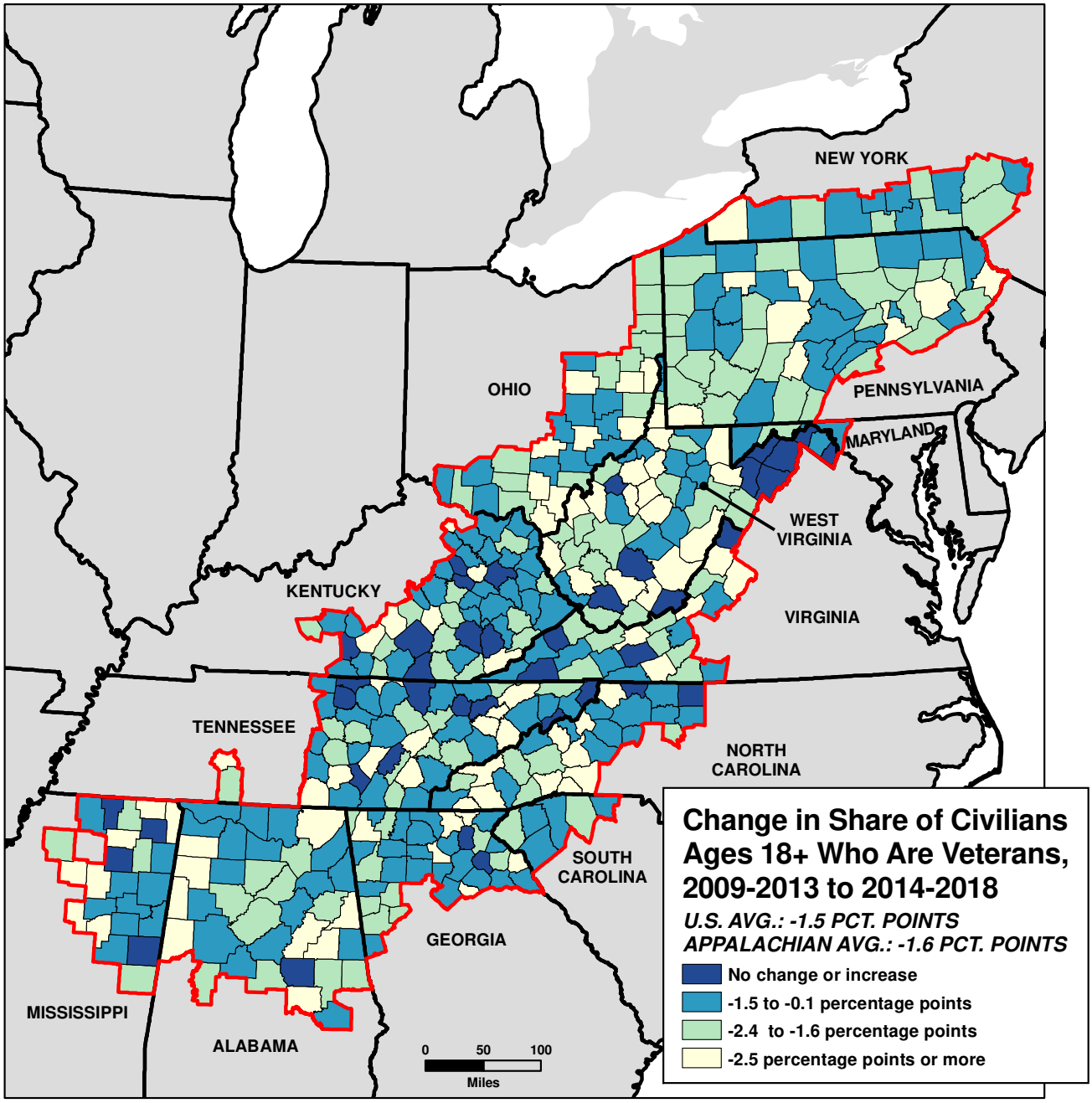
Table 12.3: Percentage Point Change in Veteran Status of Adult Civilians in the Appalachian Region, by Age Group and Gender, 2009-2013 to 2014-2018

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	**- 1.5**	**- 0.2**	**- 2.2**	**- 3.5**	**- 3.1**	**+ 0.0**
Appalachian Region	**- 1.6**	**- 0.2**	**- 2.5**	**- 2.8**	**- 3.4**	**+ 0.1**
Subregions						
Northern Appalachia	- 1.8	- 0.3	- 2.6	- 3.3	- 3.8	+ 0.0
North Central Appalachia	- 1.6	- 0.4	- 2.8	- 2.4	- 3.4	+ 0.1
Central Appalachia	- 1.2	- 0.1	- 2.0	- 1.7	- 2.4	+ 0.0
South Central Appalachia	- 1.5	- 0.1	- 2.5	- 2.5	- 3.2	+ 0.0
Southern Appalachia	- 1.5	- 0.2	- 2.4	- 2.9	- 3.2	+ 0.1
County Types						
Large Metros (pop. 1 million +)	- 1.6	- 0.2	- 2.4	- 3.4	- 3.5	+ 0.1
Small Metros (pop. <1 million)	- 1.6	- 0.2	- 2.4	- 2.8	- 3.3	+ 0.0
Nonmetro, Adjacent to Large Metros	- 1.6	- 0.2	- 2.6	- 2.4	- 3.3	+ 0.0
Nonmetro, Adjacent to Small Metros	- 1.6	- 0.2	- 2.6	- 2.7	- 3.4	+ 0.0
Rural (nonmetro, not adj. to a metro)	- 1.6	- 0.6	- 2.4	- 2.4	- 3.2	+ 0.0
Alabama	**- 1.7**	**- 0.5**	**- 2.5**	**- 2.9**	**- 3.6**	**+ 0.0**
Appalachian Alabama	- 1.7	- 0.1	- 2.7	- 2.8	- 3.6	+ 0.0
Non-Appalachian Alabama	- 1.7	- 1.1	- 2.2	- 3.0	- 3.7	+ 0.1
Georgia	**- 1.3**	**- 0.2**	**- 2.0**	**- 3.0**	**- 2.6**	**- 0.1**
Appalachian Georgia	- 1.4	- 0.1	- 2.2	- 3.1	- 3.0	+ 0.1
Non-Appalachian Georgia	- 1.2	- 0.1	- 1.9	- 2.9	- 2.4	+ 0.0
Kentucky	**- 1.4**	**- 0.2**	**- 2.2**	**- 2.4**	**- 2.9**	**+ 0.0**
Appalachian Kentucky	- 1.1	- 0.2	- 1.9	- 1.3	- 2.2	+ 0.0
Non-Appalachian Kentucky	- 1.5	- 0.2	- 2.3	- 2.8	- 3.2	- 0.1
Maryland	**- 1.6**	**- 0.4**	**- 1.9**	**- 4.0**	**- 3.2**	**- 0.1**
Appalachian Maryland	- 1.6	+ 0.0	- 2.3	- 2.9	- 2.9	- 0.1
Non-Appalachian Maryland	- 1.5	- 0.4	- 1.9	- 3.9	- 3.1	- 0.1
Mississippi	**- 1.6**	**- 0.6**	**- 2.0**	**- 3.4**	**- 3.4**	**+ 0.1**
Appalachian Mississippi	- 1.6	- 0.9	- 1.8	- 3.2	- 3.4	+ 0.0
Non-Appalachian Mississippi	- 1.5	- 0.6	- 2.0	- 3.5	- 3.4	+ 0.0
New York	**- 1.3**	**- 0.2**	**- 1.6**	**- 3.6**	**- 2.7**	**+ 0.0**
Appalachian New York	- 1.7	- 0.7	- 2.2	- 3.6	- 3.6	+ 0.0
Non-Appalachian New York	- 1.3	- 0.2	- 1.5	- 3.5	- 2.7	+ 0.0
North Carolina	**- 1.3**	**+ 0.1**	**- 2.2**	**- 2.9**	**- 2.8**	**+ 0.0**
Appalachian North Carolina	- 1.6	+ 0.1	- 2.8	- 2.7	- 3.3	- 0.1
Non-Appalachian North Carolina	- 1.3	+ 0.0	- 2.0	- 2.9	- 2.7	+ 0.0
Ohio	**- 1.7**	**+ 0.0**	**- 2.5**	**- 3.3**	**- 3.6**	**+ 0.0**
Appalachian Ohio	- 1.8	- 0.1	- 2.9	- 2.7	- 3.7	+ 0.0
Non-Appalachian Ohio	- 1.7	+ 0.0	- 2.4	- 3.5	- 3.6	+ 0.0
Pennsylvania	**- 1.8**	**- 0.4**	**- 2.3**	**- 3.5**	**- 3.6**	**+ 0.0**
Appalachian Pennsylvania	- 1.8	- 0.3	- 2.6	- 3.3	- 3.9	+ 0.0
Non-Appalachian Pennsylvania	- 1.6	- 0.3	- 2.1	- 3.5	- 3.4	- 0.1
South Carolina	**- 1.4**	**- 0.3**	**- 2.4**	**- 2.6**	**- 2.8**	**- 0.1**
Appalachian South Carolina	- 1.3	+ 0.1	- 2.3	- 2.8	- 2.7	- 0.1
Non-Appalachian South Carolina	- 1.4	- 0.3	- 2.5	- 2.6	- 2.9	- 0.1
Tennessee	**- 1.4**	**- 0.1**	**- 2.3**	**- 2.5**	**- 3.1**	**+ 0.0**
Appalachian Tennessee	- 1.3	+ 0.0	- 2.2	- 2.2	- 2.8	+ 0.0
Non-Appalachian Tennessee	- 1.5	- 0.1	- 2.4	- 2.8	- 3.2	+ 0.0
Virginia	**- 1.3**	**- 0.5**	**- 1.6**	**- 2.9**	**- 2.6**	**+ 0.0**
Appalachian Virginia	- 1.6	- 0.6	- 2.4	- 2.9	- 3.4	+ 0.1
Non-Appalachian Virginia	- 1.1	- 0.5	- 1.6	- 2.9	- 2.6	+ 0.0
West Virginia (entire state)	**- 1.7**	**- 0.4**	**- 2.7**	**- 2.3**	**- 3.4**	**+ 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, 2009-2013 and 2014-2018 American Community Surveys.

Figure 12.5: Percentage Point Change in the Share of Adult Civilians in the Appalachian Region Who Are Veterans, 2009-2013 to 2014-2018



Map Title: Percentage Point Change in the Share of Adult Civilians in the Appalachian Region Who Are Veterans, 2009-2013 to 2014-2018

Data Sources: U.S. Census Bureau, 2009-2013 and 2014-2018 American Community Surveys.

The share of Appalachia's adult civilians ages 18 and over who were military veterans was almost two percentage points lower in the 2014-2018 period than it was in 2009-2013. And the magnitude of the decrease varied little among the county types and the Appalachian versus non-Appalachian portions of most of the 13 states—Kentucky, New York, and Virginia being notable exceptions. Among the subregions, the decrease was largest in Northern Appalachia (1.8 percentage points) and smallest in Central Appalachia (1.2 points). Yet there was significant variation at the county level. For example, in 89 Appalachian counties (spread throughout the Region), veterans' share of the population fell by at least 2.5 percentage points. Yet the share actually increased or stayed the same in 40 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-seventh of the counties with the largest decreases.

TRENDS IN VETERAN STATUS

- In Appalachia, the share of adult civilians who were military veterans declined almost two percentage points between 2009-2013 and 2014-2018, falling to 8.5 percent (see Tables 12.2 and 12.3). There was little difference in the decrease among the county types, and the Appalachian versus non-Appalachian portions of the 13 states. Virginia was a notable exception: The veteran prevalence rate fell 1.6 percentage points in that state's Appalachian portion, compared to a decrease of 1.1 points in the rest of the state. (Kentucky had a similar discrepancy, but in reverse: The share of veterans among adult civilians declined 1.1 points in the Appalachian section but 1.5 points in the rest of the state.) And among the subregions, the decline in veteran prevalence ranged from 1.8 percentage points in Northern Appalachia to 1.2 points in Central Appalachia.

- The decrease in veteran status was more pronounced among middle-aged and older civilians than among younger ones. While the share of veterans fell just 0.2 percentage points among younger civilians ages 18 to 34, it declined 2.5 points among civilians ages 35 to 64, and almost 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 2009-2013 and 2014-2018, 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 16 percent and 1 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 2018 than rural counties outside the Region—2.4 percent versus 0.3 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—20.9 percent versus 22.5 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—7.7 percent compared with 6.6 percent, while there is a much smaller share of Hispanics—2.3 percent versus 11 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 had completed high school or more, compared with almost 89 percent of rural residents outside the Region. Less than one-fifth (17 percent) of working-age adults in rural Appalachia had completed a bachelor’s degree or more, compared with nearly 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—9.3 percent versus 10.7 percent. Among adults ages 25 to 64 with a bachelor’s degree, slightly more than one-fourth (26 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—20.4 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. More than one-fourth (28 percent) of rural Appalachian households had no access to the Internet, compared with more than one-fifth (23 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—5.9 percent versus 4.5 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 less than 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, about 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 19 minutes.

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 was about $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 (seven percentage points) and both young adults ages 18 to 24 and older working-age adults ages 25 to 64 (six percentage points each). Although the gap is smaller, even rural Appalachian adults ages 65 and over had a poverty rate that was two percentage points higher than for older adults in other rural counties. A higher share of rural Appalachian residents also had incomes below 50 percent of the poverty level or were classified as low-income because their income was 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 (almost seven percentage points) between 2009-2013 and 2014-2018 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 2.5 percentage points lower than for young adults in rural areas outside the Region, it is important to note that more than one-sixth (17.5 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.

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 (20.3 percent) of rural Appalachian residents had a disability compared with about 16 percent of residents of rural counties outside the Region. However, this gap widens to nearly seven percentage points among adults ages 35 to 64 and more than five percentage points among those ages 65 and older. In rural Appalachia, nearly one-quarter (23.4 percent) of working-age adults ages 35 to 64 and almost 44 percent of adults ages 65 and older had a disability. By comparison, the respective shares were only 16.5 percent and 38 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.

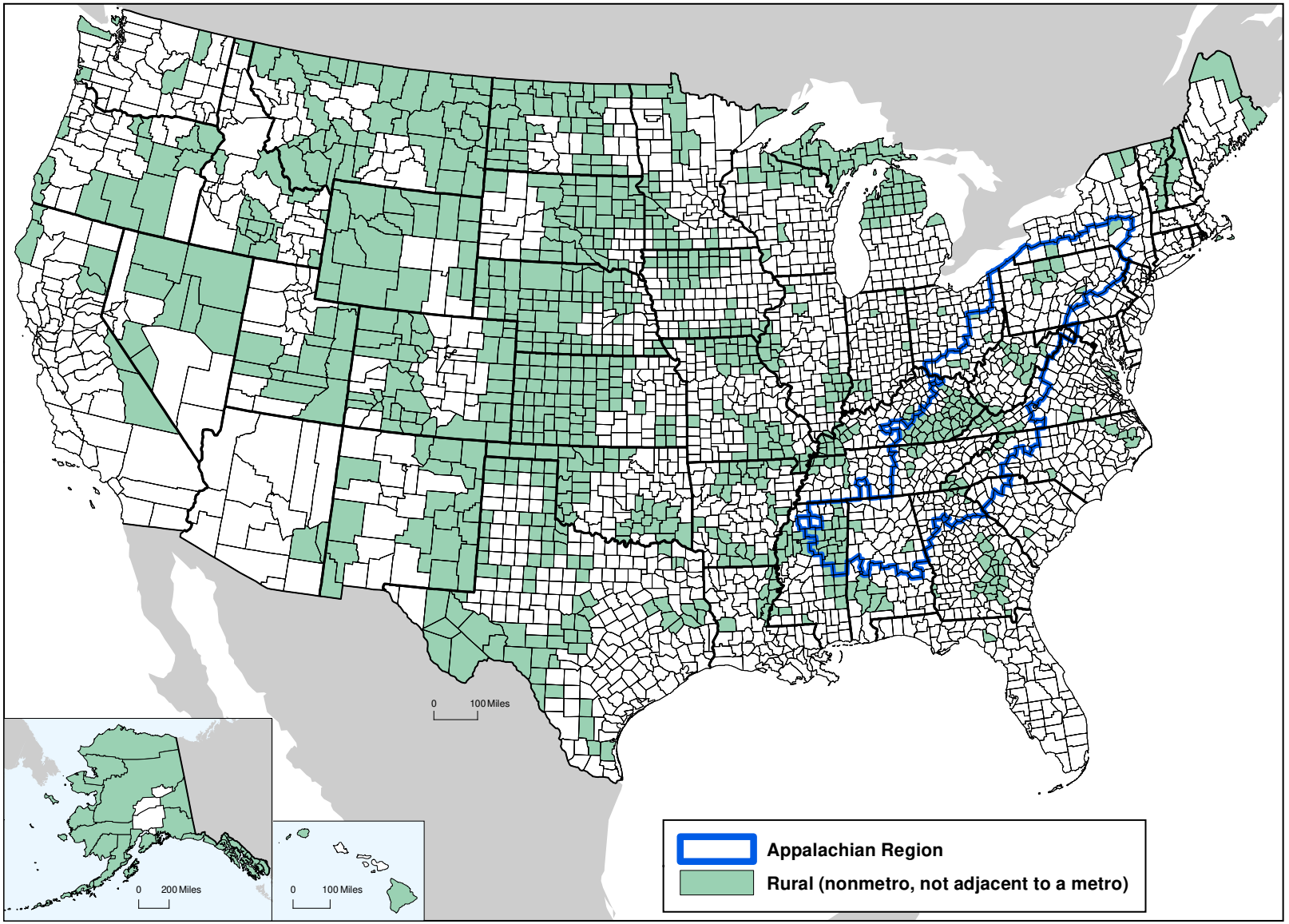
Veteran Status

A smaller share of the civilian population ages 65 and over in rural Appalachia were veterans (18 percent) than the share in rural counties in the rest of the country (almost 21 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 were veterans compared with nearly 17 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 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.

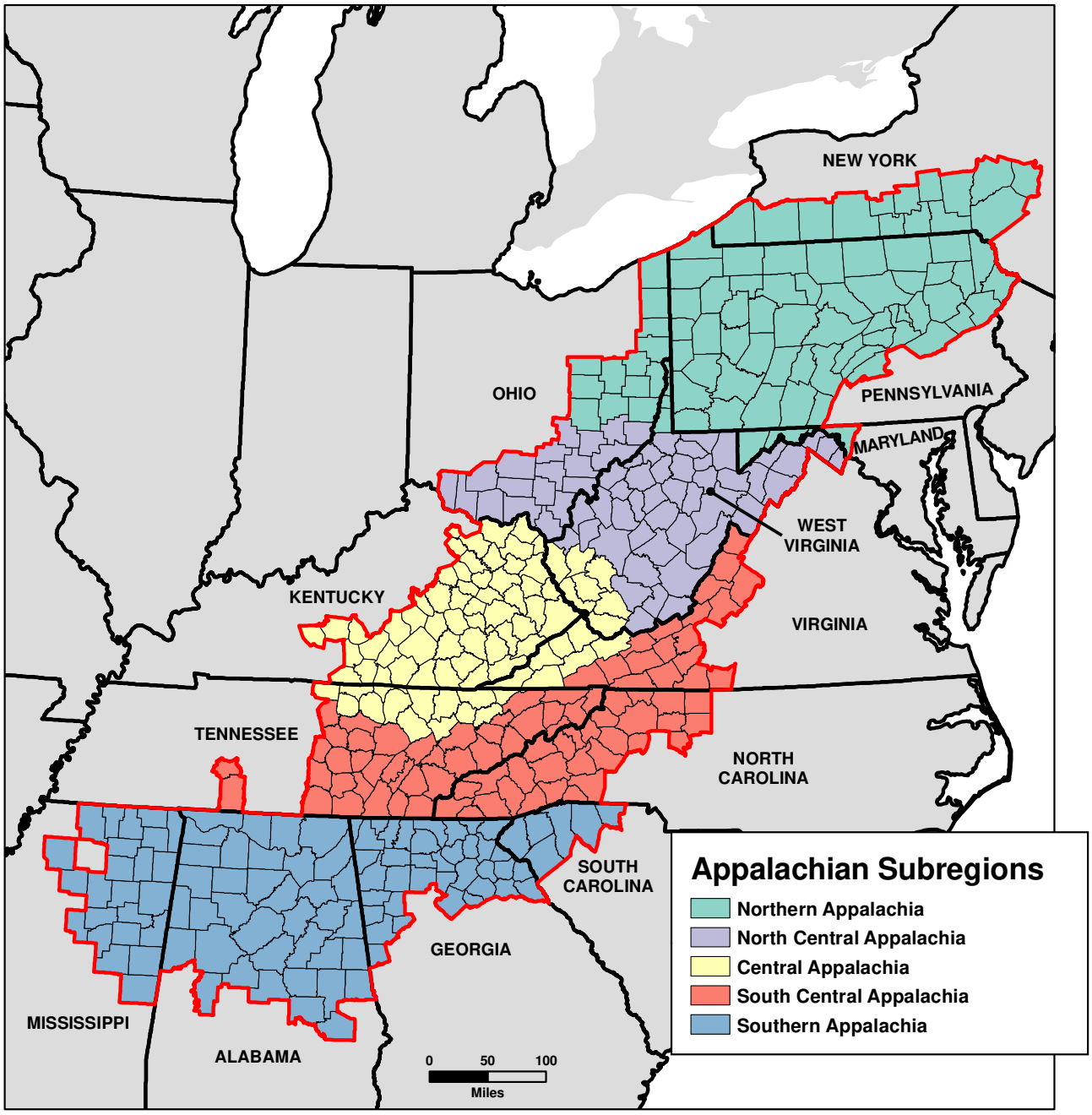
Table A.1: Selected Measures for Rural Appalachia and Rural Areas Outside Appalachia

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, 2018	2,495,501	13,228,435
Percent change (2010 to 2018), population	-2.4	-0.3
Median age, July 1, 2018	42.0	40.5
Percent of population under age 18, July 1, 2018	20.9	22.5
Percent of population that is minority, July 1, 2018	12.0	25.2
Percent of population that is black alone, not Hispanic, July 1, 2018	7.7	6.6
Percent of population that is Hispanic or Latino, July 1, 2018	2.3	11.1
Percent of population that is American Indian or Alaska Native alone, not Hispanic, July 1, 2018	0.3	3.3
Percent of persons ages 25-64 with a high school diploma or more, 2014-18	83.8	88.5
Percent of persons ages 25-64 with an associate's degree but without a bachelor's degree, 2014-18	9.3	10.7
Percent of persons ages 25-64 with a bachelor's degree or more, 2014-18	17.2	21.8
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, 2014-18	26.1	30.6
Percent of all housing units that are single-unit dwellings, 2014-18	69.6	74.8
Percent of all housing units that are mobile homes, 2014-18	20.4	12.0
Percent of households with one or more computer devices (including smartphone and tablet), 2014-18	78.2	83.6
Percent of households with a broadband (high-speed) Internet subscription, 2014-18	67.8	72.6
Percent of households with no access to the Internet, 2014-18	27.7	22.6
Labor Force and Commuting		
Percent of civilian labor force universe ages 25-64 (excludes Armed Forces personnel) in civilian labor force, 2014-18	64.5	73.6
Unemployment rate, persons ages 25-64 (percent of civilian labor force), 2014-18	5.9	4.5
Percent of households with no vehicle available, 2014-18	8.2	6.3
Percent of workers ages 16 and over who drove alone to work, 2014-18	82.3	78.7
Percent of workers ages 16 and over who worked outside their county of residence, 2014-18	31.6	19.4
Percent of workers ages 16 and over (not working at home) whose travel time to work was 30 minutes or more, 2014-18	30.5	21.5
Mean travel time to work in minutes for all workers ages 16 and over who didn't work at home, 2014-18	24.0	19.4
Income and Poverty		
Median household income (in adjusted 2018 dollars), 2014-18	39,590	48,633
Percent of persons in poverty, 2014-18	21.6	16.3
Percent of persons under age 18 in poverty, 2014-18	29.5	22.5
Percent of persons ages 18-24 in poverty, 2014-18	32.0	25.8
Percent of persons ages 25-64 in poverty, 2014-18	19.8	14.1
Percent of persons ages 65 and over in poverty, 2014-18	12.5	10.1
Percent of persons with income below 50 percent of poverty level, 2014-18	9.3	6.9
Percent of persons with income below 200 percent of poverty level, 2014-18	45.3	37.7
Health Insurance and Disability		
Percent of persons without health insurance coverage, 2014-18	9.6	10.7
Percentage point change (2009-13 to 2014-18), percent of persons without health insurance coverage	-6.7	-5.1
Percent of persons ages 19-25 without health insurance coverage, 2014-18	17.5	20.0
Percent of persons ages 26-34 without health insurance coverage, 2014-18	18.3	20.2
Percent of persons ages 35-64 without health insurance coverage, 2014-18	11.8	13.1
Percent of persons with a disability, 2014-18	20.3	15.9
Percent of persons ages 35-64 with a disability, 2014-18	23.4	16.5
Percent of persons ages 65 and over with a disability, 2014-18	43.6	38.2
Veteran Status		
Percent of civilian population ages 65 and over who are veterans, 2014-18	18.0	20.6
Percent of male civilian population ages 18 and over who are veterans, 2014-18	14.4	16.8

Data Sources: U.S. Census Bureau, Vintage 2018 Population Estimates; and 2009-2013 and 2014-2018 American Community Surveys.

APPENDIX B: REFERENCE MAPS

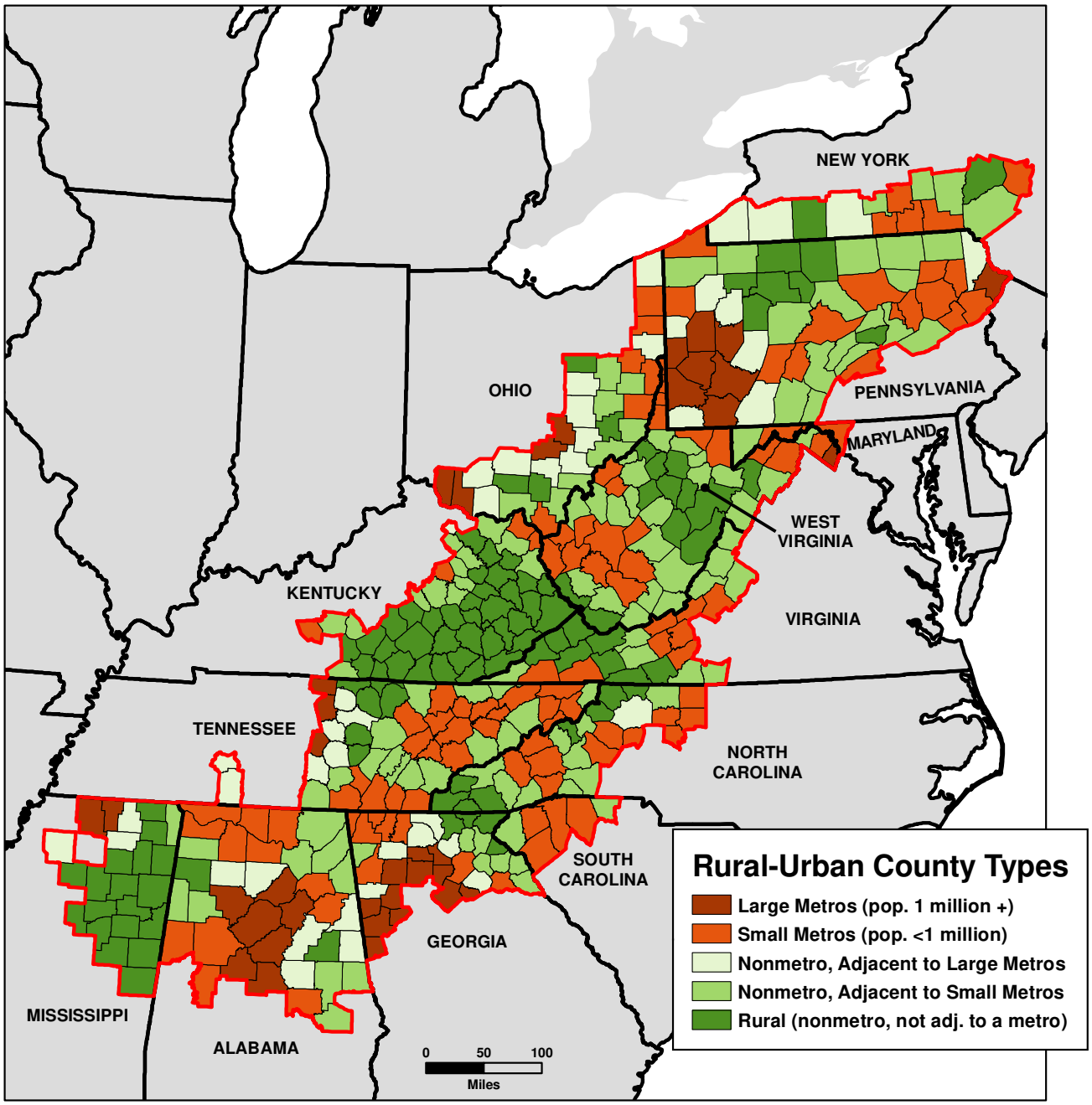
Figure B.1: Appalachian Subregions



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.