

**THE APPALACHIAN REGION:
A DATA OVERVIEW FROM THE
2016-2020 AMERICAN COMMUNITY SURVEY
Chartbook**

**Kelvin Pollard
Linda A. Jacobsen
Population Reference Bureau**

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**Appalachian
Regional
Commission**



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FOREWORD

The data contained in this Chartbook describe how residents in the Appalachian Region were faring before and during the initial 10 months of the COVID-19 pandemic that began in March 2020. As such, these numbers do not measure the social and economic impact of the outbreak beyond 2020. As data from the pandemic and post-pandemic period are released in the coming years, these figures can serve as a point of comparison that ultimately can enable data users to better measure the pandemic's effect on Appalachia's social and economic dynamics.

Most of the data come from the 2016-2020 American Community Survey. While the types of demographic and housing data included in Chapters 1 through 4 were also collected in the 2010 and 2020 decennial censuses, 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 and 2020 censuses 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The decennial long form has been replaced by the American Community Survey (ACS), a nationwide study collected continuously every year in every county in the United States.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 2016-2020 ACS data to have comparable statistics for all 423 counties in the Region.

The ACS five-year estimates for 2016-2020 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 2016 through December 2020. 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 (2016-2020 and 2011-2015), 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, 2011-2015 data for these items are not available to measure trends. And for the 2016-2020 ACS, the Census Bureau refined its methodology to minimize the effect of nonresponse bias on the data collected in 2020 due to the COVID-19 pandemic. More information about comparing the 2011-2015 and 2016-2020 ACS data is available on the Web page, ["Comparing 2011-2015 ACS 5-year and 2016-2020 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 2016-2020 ACS data illustrates this problem, as they are for a time period that covers two distinct periods of economic activity: the four years and two months prior to the outbreak of the COVID-19 pandemic in the United States (January 2016 through February 2020), and the first 10 months after the pandemic hit (March through December 2020). Since the 2016-2020 ACS pools data from both periods, it will smooth

out the extreme variations in the social and economic measures that would be evident in annual data from this five-year period.

The data in Chapters 1 through 3 come not from the ACS, but instead from the postcensal population estimates from the Census Bureau's Population Division. Every year, the Census Bureau produces July 1 estimates for years following the most recent decennial census, using current data on births, deaths, and migration. These estimates, which the Census Bureau revises and updates every year, are available for every U.S. county by age, sex, race, and Hispanic origin. And not only are the Population Estimates data more timely than the five-year ACS estimates, they also are considered the official population estimates for the geographic areas shown in this chartbook. In fact, the data from the Population Estimates Program serve as the control totals for the ACS estimates.

This year's Chartbook includes two appendices. Appendix A uses selected demographic and socioeconomic measures to provide an overview comparing rural Appalachia (defined here as nonmetropolitan counties not adjacent to any metropolitan area) to rural areas outside the Appalachian Region. (It also includes a map showing the location of these rural counties.) Appendix B contains two reference maps—one of the five Appalachian subregions, and one of the five rural-urban county types. Both the subregions and county types are referenced throughout the report.

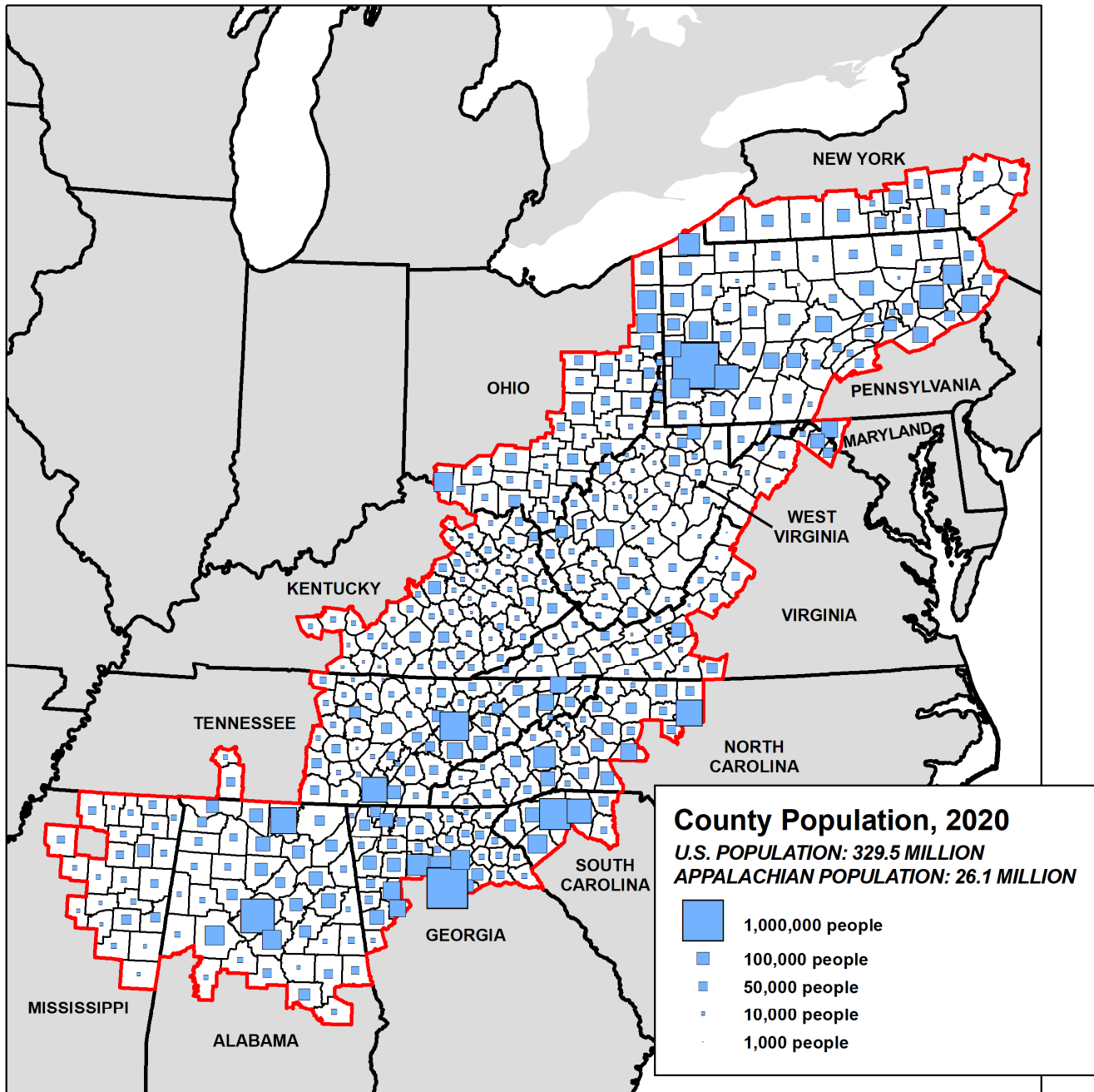
CHAPTER 1: POPULATION BASICS

Table 1.1: Population, Land Area, and Population Density in the Appalachian Region, July 1, 2020

Population, Land Area, and Density	Population, July 1, 2020	Change Since July 1, 2010		Land Area (Square Miles)	Population per Square Mile of Land Area, July 1, 2020
		Number	Percent		
United States	329,484,123	+ 20,156,980	+ 6.5	3,533,038	93.3
Appalachian Region	26,058,734	+ 514,165	+ 2.0	205,840	126.6
Subregions					
Northern Appalachia	7,968,148	- 283,725	- 3.4	56,396	141.3
North Central Appalachia	2,501,851	- 55,923	- 2.2	29,923	83.6
Central Appalachia	1,850,418	- 69,397	- 3.6	29,773	62.2
South Central Appalachia	5,226,870	+ 251,846	+ 5.1	35,866	145.7
Southern Appalachia	8,511,447	+ 671,364	+ 8.6	53,883	158.0
County Types					
Large Metros (pop. 1 million +)	6,195,990	+ 342,157	+ 5.8	18,817	329.3
Small Metros (pop. <1 million)	11,134,272	+ 308,169	+ 2.8	55,213	201.7
Nonmetro, Adjacent to Large Metros	2,304,132	- 9,747	- 0.4	25,847	89.1
Nonmetro, Adjacent to Small Metros	3,945,158	- 49,863	- 1.2	58,598	67.3
Rural (nonmetro, not adj. to a metro)	2,479,182	- 76,551	- 3.0	47,364	52.3
Alabama	4,921,532	+ 136,018	+ 2.8	50,647	97.2
Appalachian Alabama	3,159,772	+ 92,143	+ 3.0	25,763	122.6
Non-Appalachian Alabama	1,761,760	+ 43,875	+ 2.6	24,884	70.8
Georgia	10,710,017	+ 997,808	+ 10.3	57,717	185.6
Appalachian Georgia	3,375,098	+ 434,287	+ 14.8	11,380	296.6
Non-Appalachian Georgia	7,334,919	+ 563,521	+ 8.3	46,337	158.3
Kentucky	4,477,251	+ 128,787	+ 3.0	39,492	113.4
Appalachian Kentucky	1,156,745	- 29,008	- 2.4	18,230	63.5
Non-Appalachian Kentucky	3,320,506	+ 157,795	+ 5.0	21,261	156.2
Maryland	6,055,802	+ 267,018	+ 4.6	9,711	623.6
Appalachian Maryland	250,055	- 2,784	- 1.1	1,529	163.5
Non-Appalachian Maryland	5,805,747	+ 269,802	+ 4.9	8,182	709.6
Mississippi	2,966,786	- 3,829	- 0.1	46,924	63.2
Appalachian Mississippi	621,228	- 7,722	- 1.2	12,401	50.1
Non-Appalachian Mississippi	2,345,558	+ 3,893	+ 0.2	34,523	67.9
New York	19,336,776	- 63,180	- 0.3	47,124	410.3
Appalachian New York	1,008,502	- 57,364	- 5.4	11,682	86.3
Non-Appalachian New York	18,328,274	- 5,816	+ 0.0	35,442	517.1
North Carolina	10,600,823	+ 1,026,237	+ 10.7	48,623	218.0
Appalachian North Carolina	2,043,154	+ 90,746	+ 4.6	12,752	160.2
Non-Appalachian North Carolina	8,557,669	+ 935,491	+ 12.3	35,871	238.6
Ohio	11,693,217	+ 153,768	+ 1.3	40,859	286.2
Appalachian Ohio	1,979,210	- 62,844	- 3.1	15,978	123.9
Non-Appalachian Ohio	9,714,007	+ 216,612	+ 2.3	24,881	390.4
Pennsylvania	12,783,254	+ 71,848	+ 0.6	44,742	285.7
Appalachian Pennsylvania	5,619,275	- 173,440	- 3.0	36,443	154.2
Non-Appalachian Pennsylvania	7,163,979	+ 245,288	+ 3.5	8,299	863.2
South Carolina	5,218,040	+ 582,194	+ 12.6	30,064	173.6
Appalachian South Carolina	1,355,349	+ 152,656	+ 12.7	4,338	312.4
Non-Appalachian South Carolina	3,862,691	+ 429,538	+ 12.5	25,726	150.1
Tennessee	6,886,834	+ 531,316	+ 8.4	41,232	167.0
Appalachian Tennessee	2,964,813	+ 176,450	+ 6.3	20,123	147.3
Non-Appalachian Tennessee	3,922,021	+ 354,866	+ 9.9	21,110	185.8
Virginia	8,590,563	+ 566,559	+ 7.1	39,482	217.6
Appalachian Virginia	740,746	- 29,477	- 3.8	11,180	66.3
Non-Appalachian Virginia	7,849,817	+ 596,036	+ 8.2	28,302	277.4
West Virginia (entire state)	1,784,787	- 69,478	- 3.7	24,041	74.2

Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

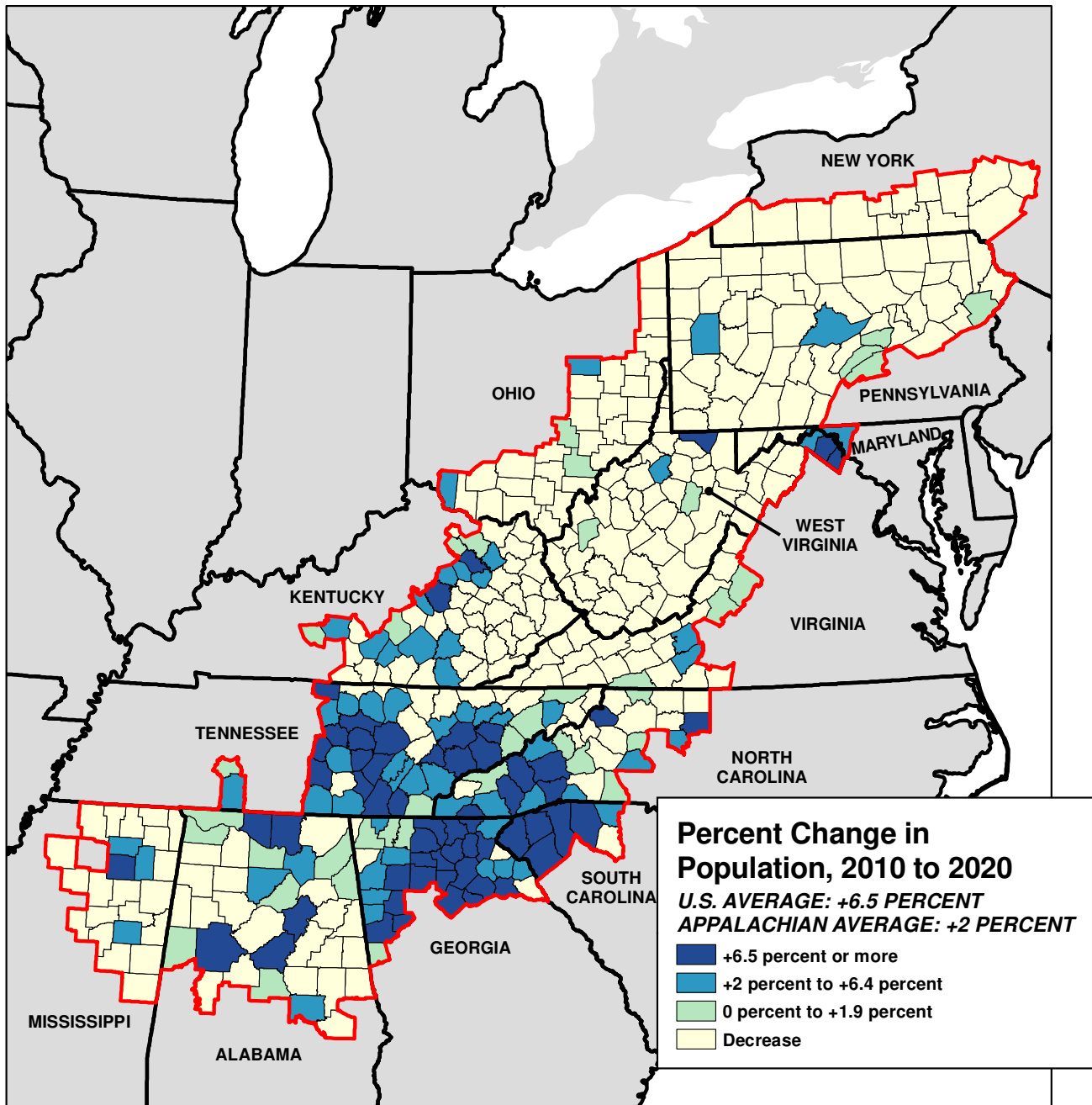
Figure 1.1: Population Distribution in the Appalachian Region, July 1, 2020



Map Title: Population Distribution in the Appalachian Region, July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

Of the 329.5 million persons in the United States as of July 1, 2020, 26.1 million lived in the Appalachian Region—514,000 more than on July 1, 2010. Yet the population of the Region’s 423 counties varied greatly. On one hand, almost two-thirds of the counties had populations of fewer than 50,000 people, and 127 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 2020.

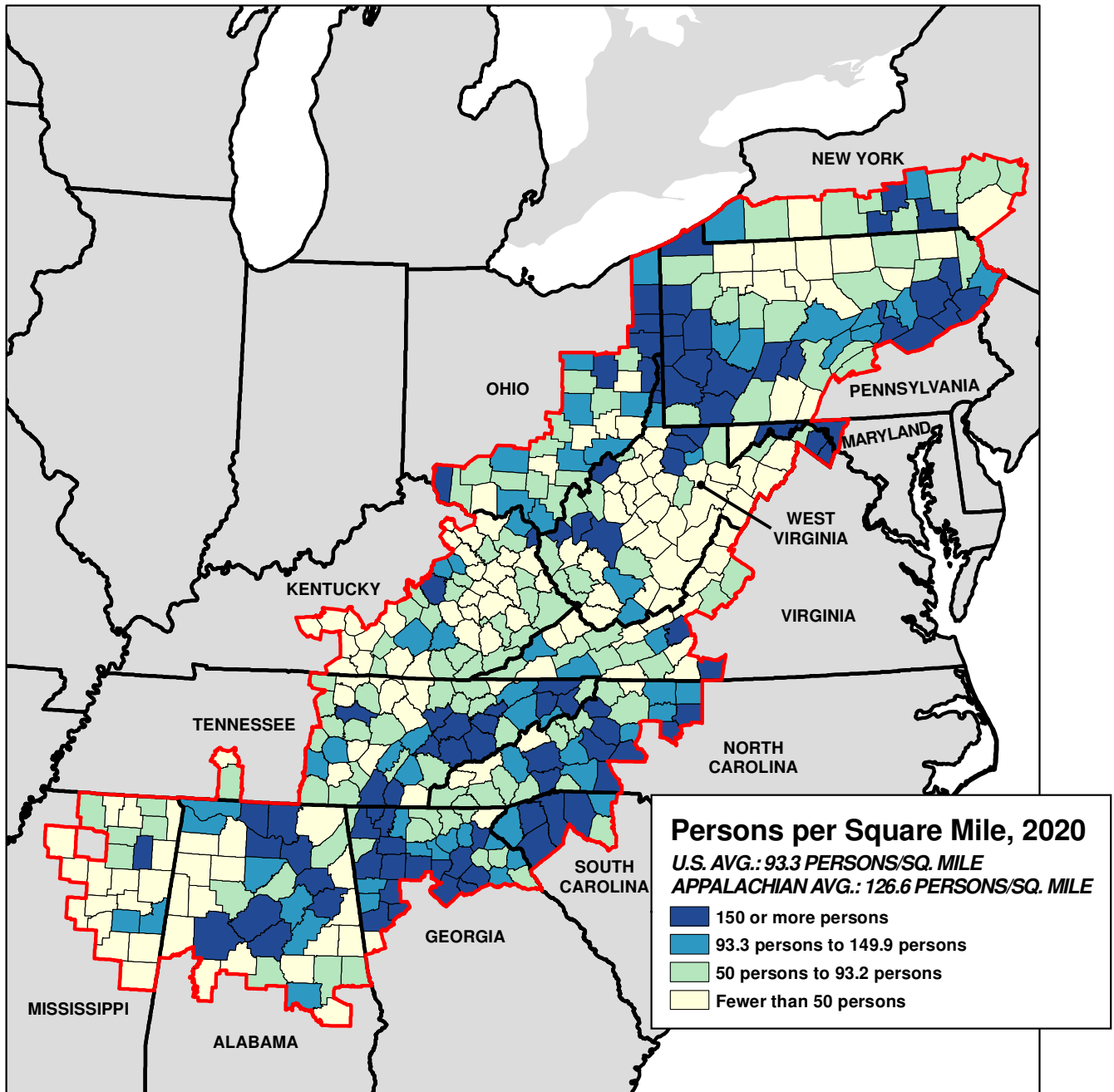
Figure 1.2: Population Change in the Appalachian Region, July 1, 2010 to July 1, 2020



Map Title: Population Change in the Appalachian Region, July 1, 2010 to July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

The Appalachian Region’s population grew by 2 percent between 2010 and 2020—less than one-third the national average of 6.5 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 219 of the 269 Appalachian counties that lost residents since 2010. On the other hand, 60 counties in Appalachia grew at or above the national rate during this period. Of these counties, 54 were in the five Southern states (Alabama, Georgia, the Carolinas, and Tennessee) whose Appalachian sections gained population. Indeed, at 8.6 percent, Southern Appalachia was the only subregion where the rate of population growth exceeded the national average. Population growth was particularly high in the Appalachian parts of Georgia and South Carolina, with increases of 14.8 percent and 12.7 percent, respectively. Many counties with college towns—such as Tuscaloosa County, Alabama (Tuscaloosa); Pickens County, South Carolina (Clemson); and Monongalia County, West Virginia (Morgantown)—also experienced rapid growth since 2010.

Figure 1.3: Population per Square Mile of Land Area in the Appalachian Region, July 1, 2020



Map Title: Population per Square Mile of Land Area in the Appalachian Region, July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

While Appalachia’s population density was noticeably greater than the United States as a whole in 2020, less than 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 (Huntington, West Virginia-Ashland, Kentucky; Greenville, South Carolina).

BASIC POPULATION TRENDS

- Appalachia had a population of 26.1 million in 2020—just over 514,000 more residents than it had in mid-2010 (see Table 1.1). Although this was a larger increase than between 2010 and 2019, growth in the Region as a whole has still been slow at 2 percent; by comparison, the United States as a whole grew 6.5 percent between 2010 and 2020.
- Most of Appalachia, in fact, has lost population since 2010. West Virginia and the Appalachian portions of seven other states had fewer residents in 2020 than they did 10 years earlier. And in five of those states—New York, Ohio, Pennsylvania, Virginia, and West Virginia—the population loss was at least 3 percent. Appalachian counties outside metropolitan areas also lost people between 2010 and 2020—indeed, 191 of the 269 counties classified in one of the three nonmetropolitan county types suffered population declines. And as a group, the most rural Appalachian counties lost 3 percent of their 2010 population. In many counties, post-2010 population losses have continued longstanding demographic trends going back several decades.
- In contrast to the other three subregions, South Central and Southern Appalachia added residents between 2010 and 2020. Population growth in Southern Appalachia, in fact, was 8.6 percent—more than two percentage points above the national rate. The five states whose Appalachian sections have grown since 2010 were all in the South—Alabama, Georgia, North Carolina, South Carolina, and Tennessee. Georgia’s and South Carolina’s Appalachian sections have grown especially rapidly since 2010, with increases exceeding 12 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 60 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 the University of Tennessee (Knox County), West Virginia University (Monongalia County), or Clemson University (Pickens County, South Carolina). Yet the major single factor may well be a diversified economy. Of the 60 rapid-growth Appalachian counties, 37 are part of metropolitan areas, and 25 (including 22 of the 37 in metros) have been classified as “nonspecialized” by ERS—meaning that they weren’t dependent on a single economic sector.

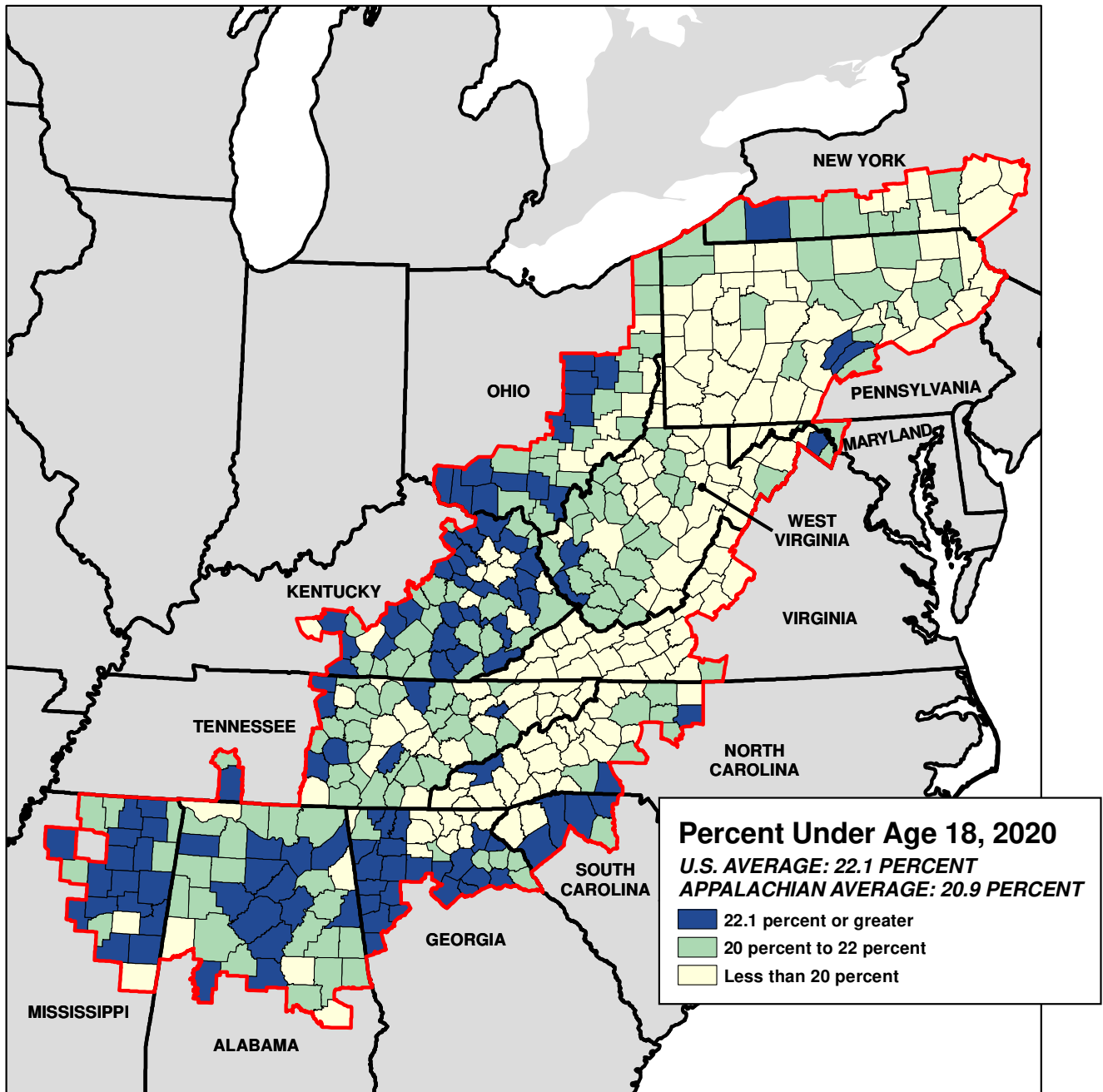
CHAPTER 2: AGE

Table 2.1: Population in the Appalachian Region by Age Group, July 1, 2020

Population by Age Group	Total Population, July 1, 2020	Percent of Population				Median Age (Years)
		Under Age 18	Ages 18-24	Ages 25-64	Ages 65 and over	
United States	329,484,123	22.1	9.1	51.9	16.9	38.6
Appalachian Region	26,058,734	20.9	9.0	50.8	19.2	41.4
Subregions						
Northern Appalachia	7,968,148	19.4	9.2	50.5	20.9	42.9
North Central Appalachia	2,501,851	20.4	8.9	50.6	20.1	42.3
Central Appalachia	1,850,418	21.2	8.2	50.9	19.7	42.4
South Central Appalachia	5,226,870	19.8	9.1	50.4	20.7	42.8
Southern Appalachia	8,511,447	23.0	9.1	51.5	16.5	38.9
County Types						
Large Metros (pop. 1 million +)	6,195,990	22.1	8.3	52.5	17.1	40.0
Small Metros (pop. <1 million)	11,134,272	20.5	9.6	50.7	19.2	41.1
Nonmetro, Adjacent to Large Metros	2,304,132	21.0	9.1	50.0	19.9	42.0
Nonmetro, Adjacent to Small Metros	3,945,158	20.2	8.3	49.9	21.6	43.9
Rural (nonmetro, not adj. to a metro)	2,479,182	20.7	9.2	49.6	20.6	42.4
Alabama	4,921,532	22.1	9.1	51.0	17.8	39.5
Appalachian Alabama	3,159,772	22.0	8.9	51.5	17.7	39.7
Non-Appalachian Alabama	1,761,760	22.3	9.4	50.3	18.0	39.2
Georgia	10,710,017	23.3	9.5	52.4	14.7	37.3
Appalachian Georgia	3,375,098	24.3	8.9	52.1	14.7	38.2
Non-Appalachian Georgia	7,334,919	22.9	9.8	52.6	14.7	36.9
Kentucky	4,477,251	22.4	9.2	51.2	17.2	39.2
Appalachian Kentucky	1,156,745	21.9	8.7	50.8	18.6	41.2
Non-Appalachian Kentucky	3,320,506	22.6	9.4	51.3	16.7	38.6
Maryland	6,055,802	22.0	8.6	53.1	16.3	39.2
Appalachian Maryland	250,055	20.0	9.1	51.6	19.4	41.7
Non-Appalachian Maryland	5,805,747	22.1	8.6	53.1	16.2	39.1
Mississippi	2,966,786	23.4	9.4	50.4	16.9	38.3
Appalachian Mississippi	621,228	22.9	10.2	49.3	17.6	38.5
Non-Appalachian Mississippi	2,345,558	23.5	9.2	50.6	16.6	38.2
New York	19,336,776	20.6	8.9	53.0	17.4	39.4
Appalachian New York	1,008,502	19.2	12.4	48.2	20.3	41.4
Non-Appalachian New York	18,328,274	20.7	8.7	53.3	17.3	39.3
North Carolina	10,600,823	21.8	9.4	51.7	17.1	39.2
Appalachian North Carolina	2,043,154	19.6	8.6	50.4	21.4	43.6
Non-Appalachian North Carolina	8,557,669	22.3	9.6	52.1	16.1	38.3
Ohio	11,693,217	22.0	9.0	51.1	17.9	39.6
Appalachian Ohio	1,979,210	21.3	8.4	50.2	20.0	42.2
Non-Appalachian Ohio	9,714,007	22.1	9.1	51.3	17.5	39.1
Pennsylvania	12,783,254	20.5	8.8	51.6	19.1	40.9
Appalachian Pennsylvania	5,619,275	19.1	8.9	51.0	21.1	43.2
Non-Appalachian Pennsylvania	7,163,979	21.6	8.7	52.0	17.7	39.4
South Carolina	5,218,040	21.4	9.0	50.9	18.7	40.1
Appalachian South Carolina	1,355,349	22.2	9.3	50.9	17.5	39.1
Non-Appalachian South Carolina	3,862,691	21.2	8.9	50.9	19.1	40.5
Tennessee	6,886,834	22.0	8.9	52.0	17.1	39.1
Appalachian Tennessee	2,964,813	20.4	8.7	51.0	20.0	42.1
Non-Appalachian Tennessee	3,922,021	23.2	9.0	52.8	15.0	37.1
Virginia	8,590,563	21.7	9.3	52.7	16.3	38.7
Appalachian Virginia	740,746	18.0	10.9	49.1	22.0	44.0
Non-Appalachian Virginia	7,849,817	22.1	9.2	53.0	15.8	38.3
West Virginia (entire state)	1,784,787	20.0	8.6	50.5	20.9	43.0

Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

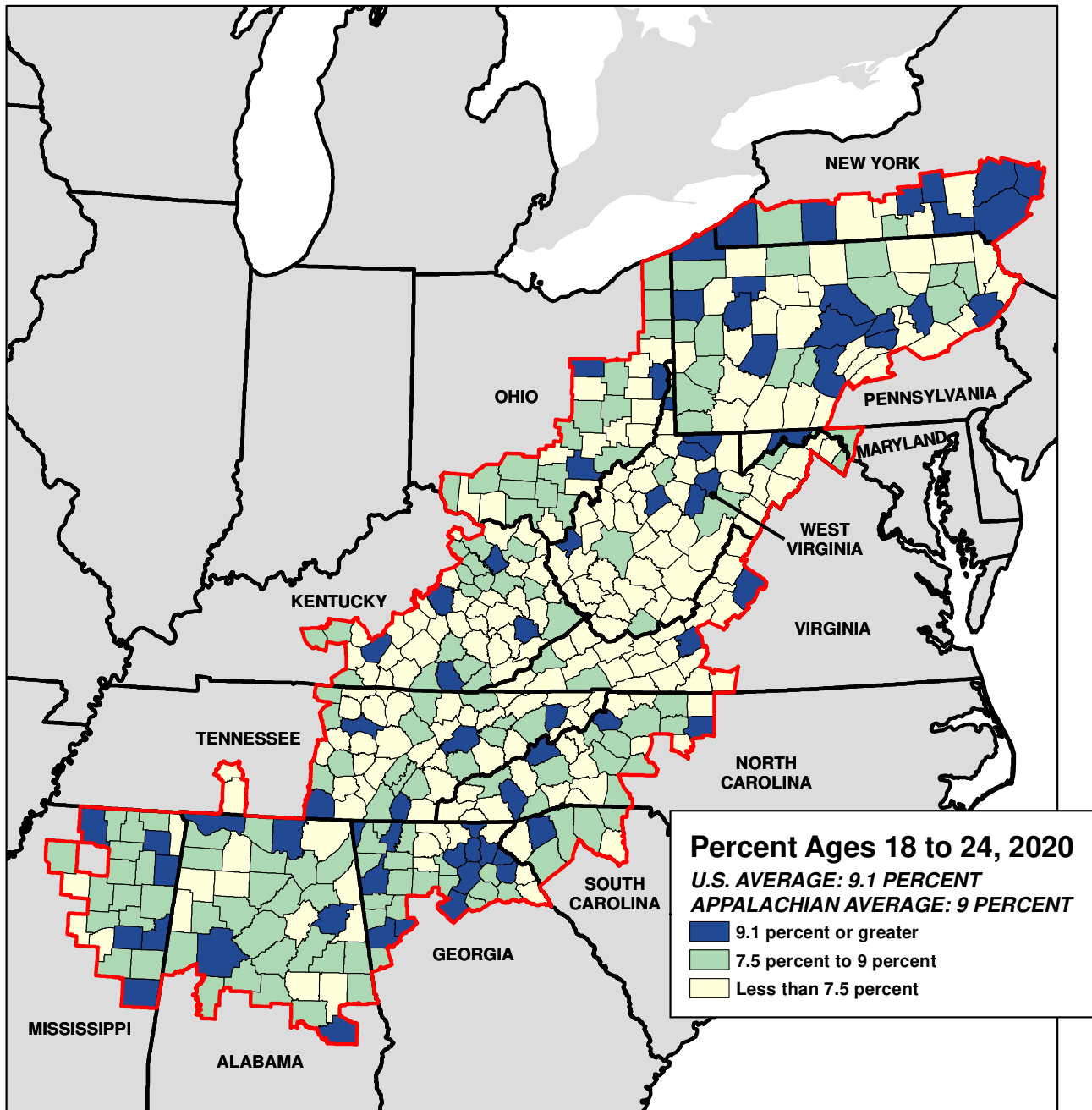
Figure 2.1: Percent of Population in the Appalachian Region Under Age 18, July 1, 2020



Map Title: Percent of Population in the Appalachian Region Under Age 18, July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

As of mid-2020, the share of children and youth under age 18 in the Appalachian population was slightly below the national average of 22.1 percent. And the share was actually less than 20 percent in 175 of the Region's 423 counties. Most of these counties were outside metropolitan areas, with concentrations in Pennsylvania, West Virginia, Virginia, North Carolina, and Tennessee. Yet in another 110 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.

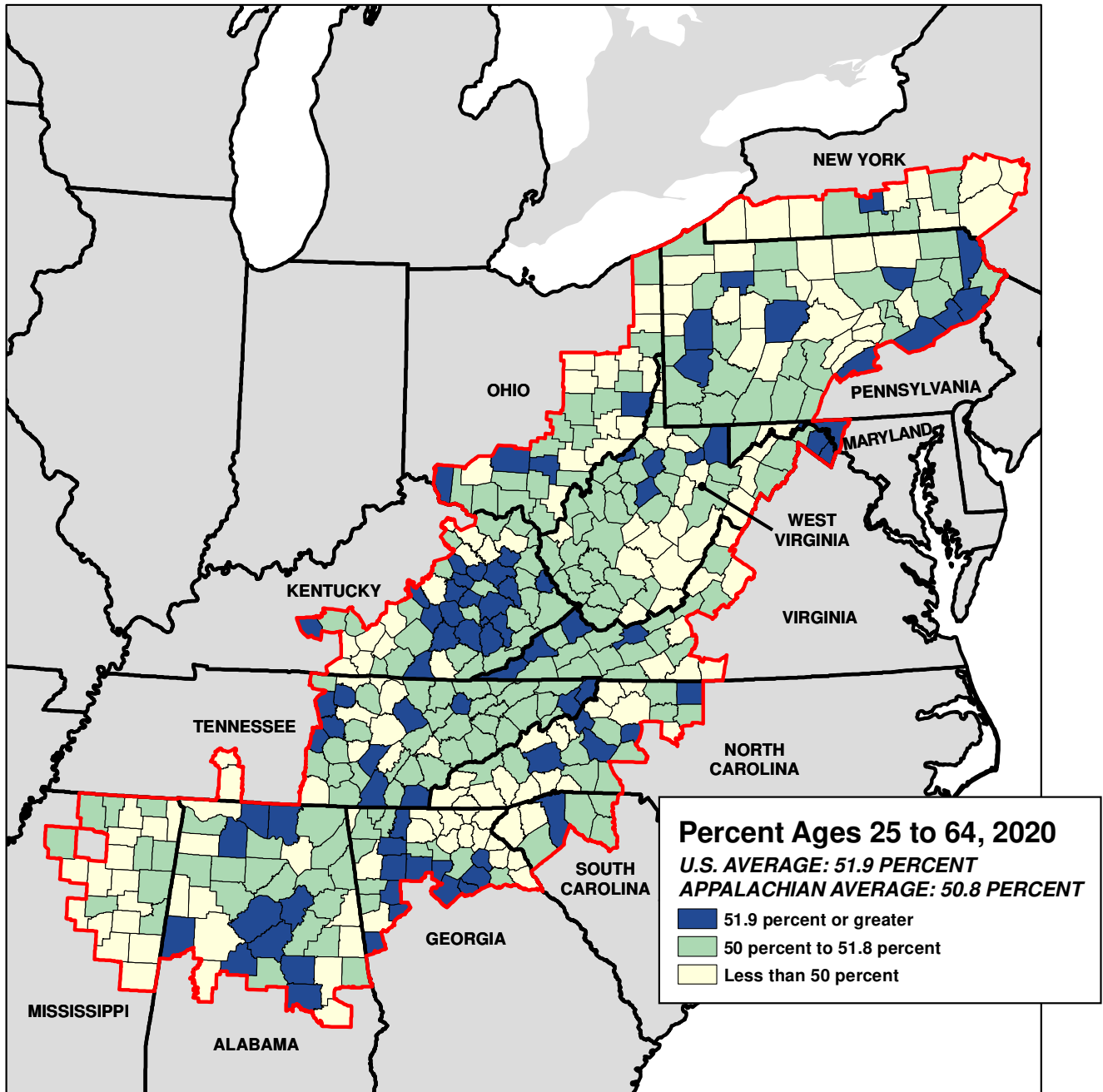
Figure 2.2: Percent of Population in the Appalachian Region Ages 18 to 24, July 1, 2020



Map Title: Percent of Population in the Appalachian Region Ages 18 to 24, July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

Although the share of young adults (ages 18 to 24) in Appalachia roughly equaled the national average in 2020, 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 Mississippi State University (Oktibbeha County, Mississippi); Ohio University (Athens County, Ohio); and Virginia Tech (Montgomery County, Virginia). In contrast, 18-to-24-year-olds made up less than 7.5 percent of the population in 209 Appalachian counties. Of the counties in this latter group, 149 were outside metropolitan areas and 62 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. However, among the county types, the lowest shares in this age group (8.3 percent) were found in large metropolitan areas and in nonmetropolitan areas that were adjacent to small metros.

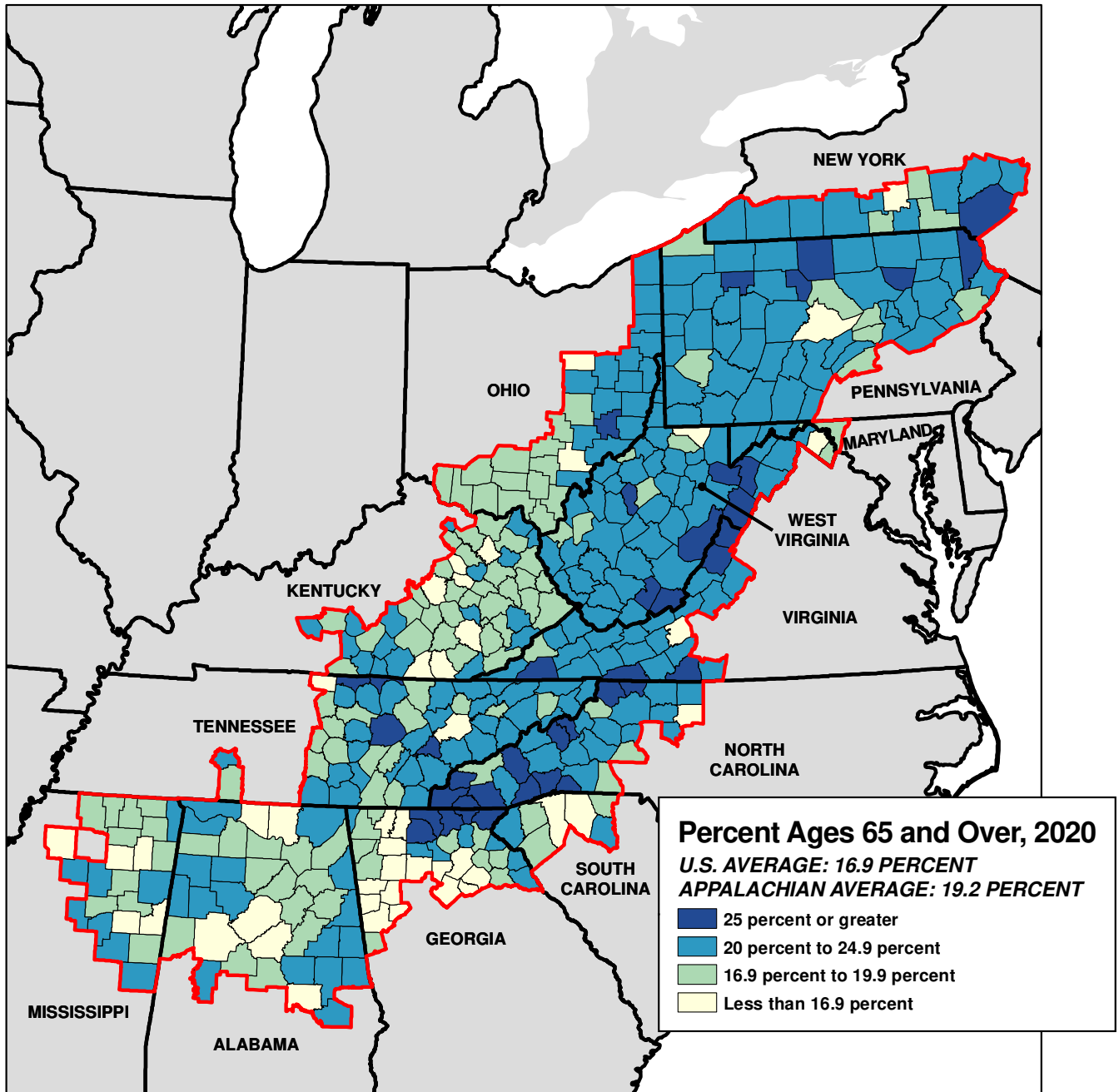
Figure 2.3: Percent of Population in the Appalachian Region Ages 25 to 64, July 1, 2020



Map Title: Percent of Population in the Appalachian Region Ages 25 to 64, July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 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 2020. And in 85 of the 423 Appalachian counties, the percentage of persons in this age group matched or exceeded the national average. But there were 150 counties in the Region (120 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 Tompkins County, New York, home to Cornell University and Ithaca College—house colleges and universities (and thus had a high share of their populations in the 18-to-24 age range).

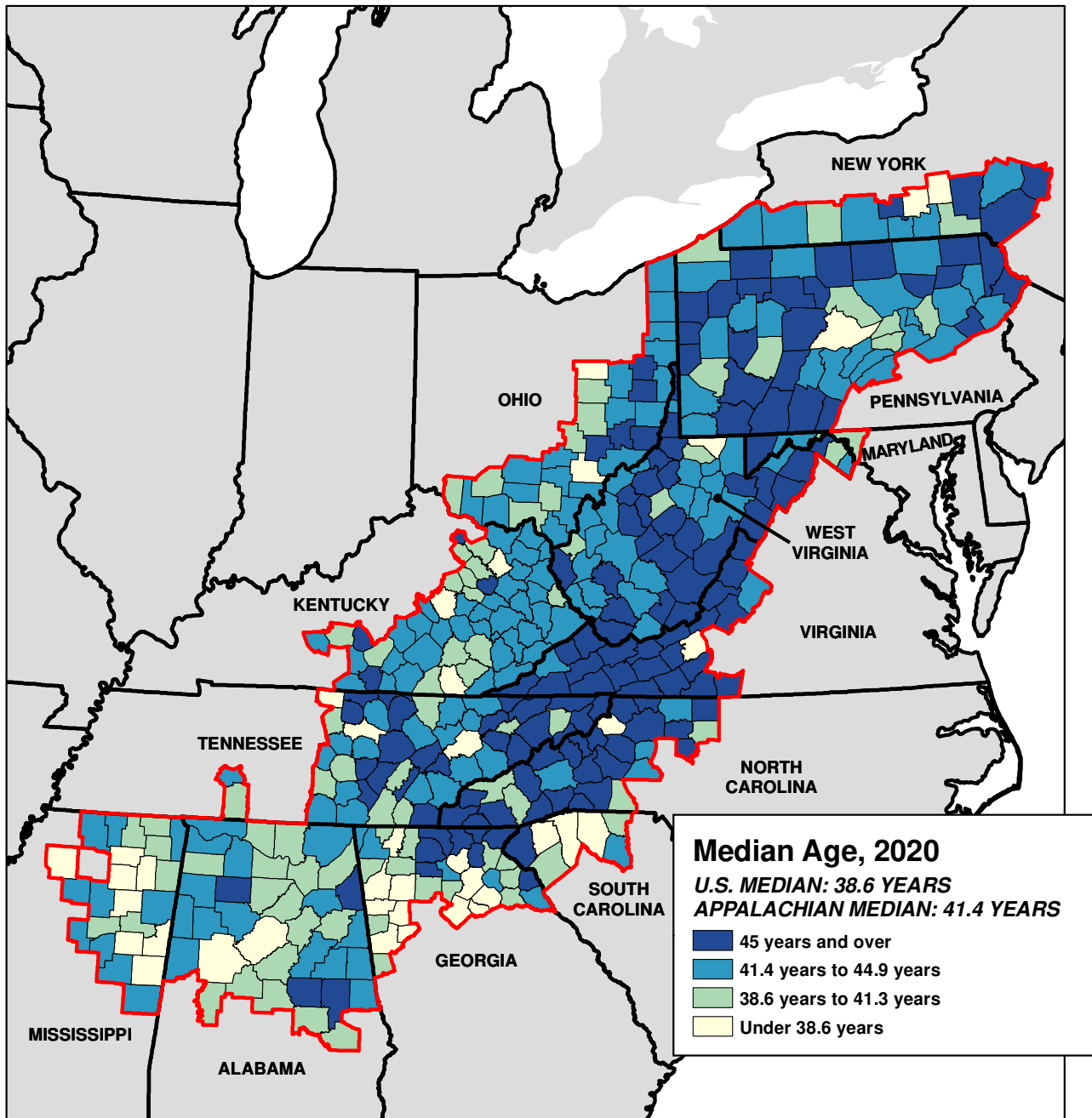
Figure 2.4: Percent of Population in the Appalachian Region Ages 65 and Over, July 1, 2020



Map Title: Percent of Population in the Appalachian Region Ages 65 and Over, July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 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 2020. Moreover, the percentage of persons in this age group matched or exceeded the U.S. share in 378 of the 423 Appalachian counties—and was at least 20 percent in 258 of them. In fact, there were 40 counties in the Region where older persons made up 25 percent or more of the population, and all but four of these were outside metropolitan areas. In contrast, most of the 45 Appalachian counties with older population shares below the national average were either in metro areas or home to colleges and universities. Southern Appalachia was the only subregion where the share of older persons was below the national average of 16.9 percent. 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, 2020



Map Title: Median Age of Persons in the Appalachian Region, July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

At 41.4 years, the median age of the Appalachian population was nearly three years older than that of the United States as of mid-2020. 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 145 counties—100 of which were outside metro areas—the median age was at least 45 years. Of the 39 counties with populations whose median age was younger than the national median, 25 were in Southern Appalachia—the only subregion where the overall age structure roughly resembled that of the nation. (Appalachian Georgia alone had 12 of these counties.) As the U.S. and Appalachian populations grow older, median age will almost certainly continue to rise in most of the Region’s counties—with the possible exception of counties where a college or university is a major presence (such as Centre County, Pennsylvania, home to Penn State).

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, 2020

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	- 1.9	- 0.8	- 1.1	+ 3.8	+ 1.4
Appalachian Region	- 1.5	- 0.7	- 2.0	+ 4.0	+ 1.5
Subregions					
Northern Appalachia	- 1.5	- 0.9	- 1.8	+ 4.1	+ 1.2
North Central Appalachia	- 1.3	- 0.6	- 2.7	+ 4.6	+ 1.8
Central Appalachia	- 1.0	- 0.5	- 3.1	+ 4.6	+ 2.0
South Central Appalachia	- 1.7	- 0.6	- 2.2	+ 4.4	+ 2.0
Southern Appalachia	- 1.9	- 0.4	- 1.5	+ 3.8	+ 1.7
County Types					
Large Metros (pop. 1 million +)	- 1.7	- 0.5	- 1.6	+ 3.8	+ 1.4
Small Metros (pop. <1 million)	- 1.4	- 0.8	- 1.8	+ 4.0	+ 1.5
Nonmetro, Adjacent to Large Metros	- 1.5	- 0.7	- 2.0	+ 4.3	+ 1.8
Nonmetro, Adjacent to Small Metros	- 1.5	- 0.5	- 2.6	+ 4.6	+ 2.1
Rural (nonmetro, not adj. to a metro)	- 1.4	- 0.6	- 2.6	+ 4.7	+ 2.0
Alabama	- 1.5	- 0.9	- 1.5	+ 4.0	+ 1.6
Appalachian Alabama	- 1.4	- 0.9	- 1.5	+ 3.9	+ 1.5
Non-Appalachian Alabama	- 1.8	- 1.1	- 1.4	+ 4.2	+ 2.0
Georgia	- 2.3	- 0.5	- 1.2	+ 4.0	+ 1.9
Appalachian Georgia	- 2.8	+ 0.3	- 1.6	+ 4.1	+ 2.2
Non-Appalachian Georgia	- 2.1	- 0.9	- 1.0	+ 3.9	+ 1.8
Kentucky	- 1.1	- 0.4	- 2.3	+ 3.9	+ 1.1
Appalachian Kentucky	- 0.8	- 0.5	- 2.9	+ 4.2	+ 1.7
Non-Appalachian Kentucky	- 1.3	- 0.3	- 2.2	+ 3.7	+ 1.2
Maryland	- 1.4	- 1.1	- 1.6	+ 4.0	+ 1.2
Appalachian Maryland	- 1.3	- 0.6	- 1.7	+ 3.6	+ 1.3
Non-Appalachian Maryland	- 1.4	- 1.1	- 1.6	+ 4.1	+ 1.3
Mississippi	- 2.0	- 0.9	- 1.1	+ 4.0	+ 2.3
Appalachian Mississippi	- 1.7	- 0.6	- 1.2	+ 3.5	+ 1.5
Non-Appalachian Mississippi	- 2.1	- 1.0	- 1.1	+ 4.1	+ 2.5
New York	- 1.7	- 1.3	- 1.0	+ 3.8	+ 1.4
Appalachian New York	- 1.8	- 0.4	- 2.4	+ 4.7	+ 1.3
Non-Appalachian New York	- 1.6	- 1.4	- 0.9	+ 3.9	+ 1.5
North Carolina	- 2.0	- 0.6	- 1.5	+ 4.1	+ 1.8
Appalachian North Carolina	- 2.2	- 0.4	- 2.2	+ 4.8	+ 2.4
Non-Appalachian North Carolina	- 2.1	- 0.6	- 1.3	+ 4.0	+ 1.9
Ohio	- 1.6	- 0.6	- 1.7	+ 3.8	+ 0.8
Appalachian Ohio	- 1.6	- 0.6	- 2.2	+ 4.4	+ 1.6
Non-Appalachian Ohio	- 1.6	- 0.6	- 1.5	+ 3.7	+ 0.8
Pennsylvania	- 1.4	- 1.1	- 1.1	+ 3.7	+ 0.7
Appalachian Pennsylvania	- 1.4	- 1.1	- 1.5	+ 4.1	+ 1.2
Non-Appalachian Pennsylvania	- 1.5	- 1.2	- 0.8	+ 3.6	+ 0.8
South Carolina	- 1.9	- 1.3	- 1.8	+ 5.0	+ 2.2
Appalachian South Carolina	- 1.4	- 0.9	- 1.4	+ 3.6	+ 1.0
Non-Appalachian South Carolina	- 2.0	- 1.4	- 1.9	+ 5.4	+ 2.8
Tennessee	- 1.5	- 0.7	- 1.4	+ 3.6	+ 1.0
Appalachian Tennessee	- 1.4	- 0.5	- 2.0	+ 4.0	+ 1.5
Non-Appalachian Tennessee	- 1.6	- 0.8	- 1.0	+ 3.4	+ 1.1
Virginia	- 1.4	- 0.7	- 1.9	+ 4.0	+ 1.2
Appalachian Virginia	- 1.5	- 0.8	- 2.9	+ 5.2	+ 2.7
Non-Appalachian Virginia	- 1.4	- 0.6	- 1.9	+ 4.0	+ 1.3
West Virginia (entire state)	- 0.9	- 0.5	- 3.4	+ 4.8	+ 1.7

Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

TRENDS IN AGE

- Like the United States as a whole, Appalachia’s population became older between 2010 and 2020 (see Table 2.2). And it has 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 1.5 years to 41.4 years over the 10-year period.
- Some parts of the Appalachian Region are aging faster than others. For example, the median age rose by at least two years in the Appalachian sections of Georgia, North Carolina, and Virginia. Yet while the median age in 2020 was about 44 years in Appalachian North Carolina and Virginia, it was just 38.2 years in Georgia—still slightly below the U.S. median of 38.6 years (see Table 2.1). Meanwhile, the median age in Appalachian counties outside metropolitan areas rose slightly faster than in the Region’s metropolitan counties. Excluding Northern Appalachia and counties in large metros, the median age increased faster than the national average among all other subregions and county types as well as in the Appalachian portions of all states except Maryland, New York, Pennsylvania, and South Carolina.
- 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 is 1.5 percentage points lower in mid-2020 than it was in mid-2010, and the share ages 25 to 64 is two points lower. 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 2020, the share of residents in the oldest age group increased by four percentage points in the Region—and by almost that amount nationally. The largest increases for the oldest age group were in North Central and Central Appalachia (4.6 points) and in the most rural counties (4.7 points).
- 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; Transylvania 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.

CHAPTER 3: RACE AND HISPANIC ORIGIN

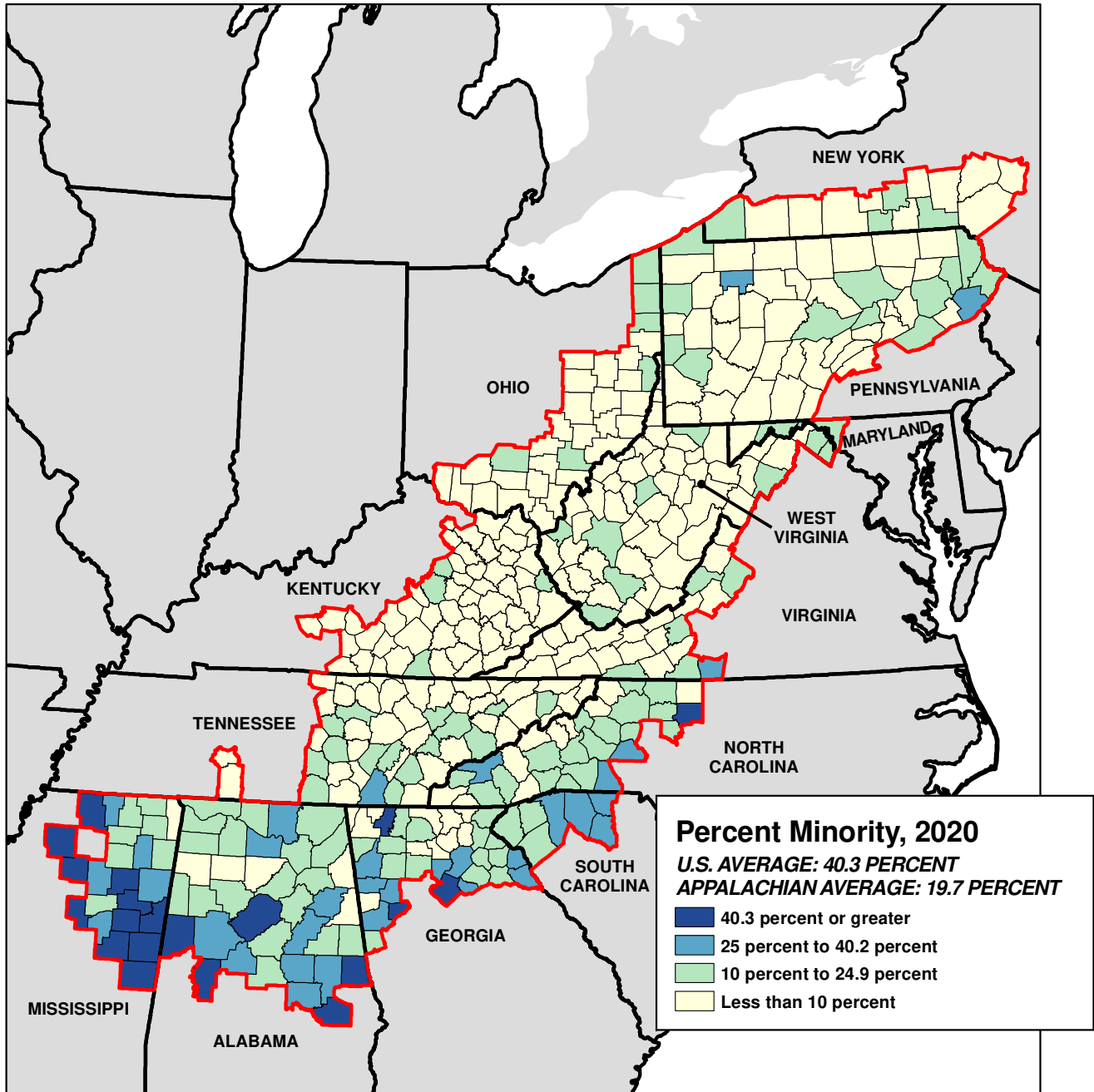
Table 3.1: Population in the Appalachian Region by Race and Hispanic Origin, July 1, 2020

Population by Race and Hispanic Origin	Total Population, July 1, 2020	Percent of Population				
		White Alone, Not Hispanic	Minority			
			Total	Black Alone, Not Hispanic	Hispanic or Latino	Other, Not Hispanic
United States	329,484,123	59.7	40.3	12.6	18.6	9.1
Appalachian Region	26,058,734	80.3	19.7	10.0	5.6	4.1
Subregions						
Northern Appalachia	7,968,148	86.8	13.2	5.6	3.8	3.8
North Central Appalachia	2,501,851	92.2	7.8	3.1	1.7	3.0
Central Appalachia	1,850,418	94.2	5.8	1.9	1.8	2.0
South Central Appalachia	5,226,870	83.1	16.9	7.3	5.9	3.7
Southern Appalachia	8,511,447	66.0	34.0	19.6	9.0	5.3
County Types						
Large Metros (pop. 1 million +)	6,195,990	70.0	30.0	16.5	7.1	6.4
Small Metros (pop. <1 million)	11,134,272	80.0	20.0	9.7	6.3	4.0
Nonmetro, Adjacent to Large Metros	2,304,132	86.9	13.1	6.0	4.2	2.9
Nonmetro, Adjacent to Small Metros	3,945,158	88.9	11.1	4.5	4.0	2.6
Rural (nonmetro, not adj. to a metro)	2,479,182	87.7	12.3	7.8	2.4	2.1
Alabama	4,921,532	65.1	34.9	26.5	4.6	3.8
Appalachian Alabama	3,159,772	68.9	31.1	22.4	5.1	3.5
Non-Appalachian Alabama	1,761,760	58.4	41.6	33.8	3.6	4.2
Georgia	10,710,017	51.6	48.4	31.8	10.0	6.7
Appalachian Georgia	3,375,098	61.6	38.4	15.9	14.6	8.0
Non-Appalachian Georgia	7,334,919	47.0	53.0	39.1	7.9	6.0
Kentucky	4,477,251	83.9	16.1	8.3	4.0	3.9
Appalachian Kentucky	1,156,745	94.2	5.8	1.9	1.9	2.0
Non-Appalachian Kentucky	3,320,506	80.2	19.8	10.5	4.7	4.5
Maryland	6,055,802	49.5	50.5	30.1	10.8	9.6
Appalachian Maryland	250,055	81.6	18.4	9.8	4.4	4.2
Non-Appalachian Maryland	5,805,747	48.1	51.9	31.0	11.1	9.8
Mississippi	2,966,786	56.3	43.7	37.5	3.4	2.9
Appalachian Mississippi	621,228	63.0	37.0	31.9	2.9	2.2
Non-Appalachian Mississippi	2,345,558	54.5	45.5	39.0	3.5	3.0
New York	19,336,776	55.0	45.0	14.4	19.3	11.2
Appalachian New York	1,008,502	87.8	12.2	3.0	4.0	5.2
Non-Appalachian New York	18,328,274	53.2	46.8	15.0	20.2	11.6
North Carolina	10,600,823	62.3	37.7	21.3	9.9	6.5
Appalachian North Carolina	2,043,154	78.4	21.6	9.4	8.1	4.1
Non-Appalachian North Carolina	8,557,669	58.5	41.5	24.2	10.4	7.0
Ohio	11,693,217	78.0	22.0	12.7	4.2	5.1
Appalachian Ohio	1,979,210	90.5	9.5	4.3	2.4	2.8
Non-Appalachian Ohio	9,714,007	75.5	24.5	14.4	4.5	5.5
Pennsylvania	12,783,254	75.3	24.7	10.9	8.1	5.7
Appalachian Pennsylvania	5,619,275	86.7	13.3	5.7	3.9	3.7
Non-Appalachian Pennsylvania	7,163,979	66.4	33.6	14.9	11.4	7.3
South Carolina	5,218,040	63.5	36.5	26.2	6.1	4.1
Appalachian South Carolina	1,355,349	71.7	28.3	16.9	7.2	4.2
Non-Appalachian South Carolina	3,862,691	60.7	39.3	29.5	5.7	4.1
Tennessee	6,886,834	73.3	26.7	16.7	5.9	4.1
Appalachian Tennessee	2,964,813	86.7	13.3	5.5	4.5	3.3
Non-Appalachian Tennessee	3,922,021	63.2	36.8	25.1	6.9	4.8
Virginia	8,590,563	60.8	39.2	19.1	10.0	10.1
Appalachian Virginia	740,746	88.7	11.3	5.5	2.7	3.1
Non-Appalachian Virginia	7,849,817	58.1	41.9	20.4	10.6	10.8
West Virginia (entire state)	1,784,787	91.8	8.2	3.5	1.8	2.9

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 2020 Population Estimates.

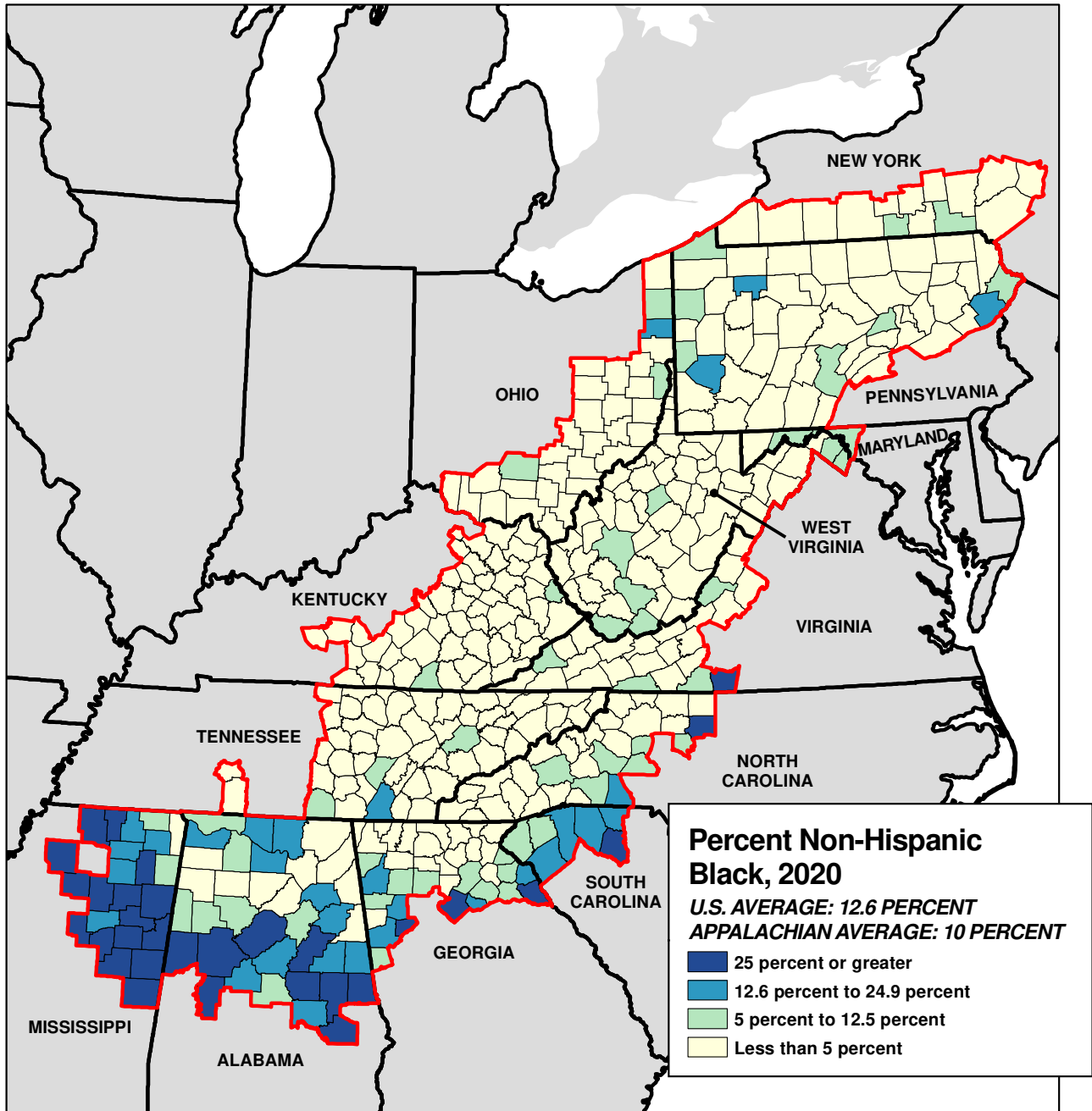
Figure 3.1: Percent of Population in the Appalachian Region That Is Minority, July 1, 2020



Map Title: Percent of Population in the Appalachian Region That Is Minority, July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 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 almost 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-2020. There were just 20 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 40.3 percent.

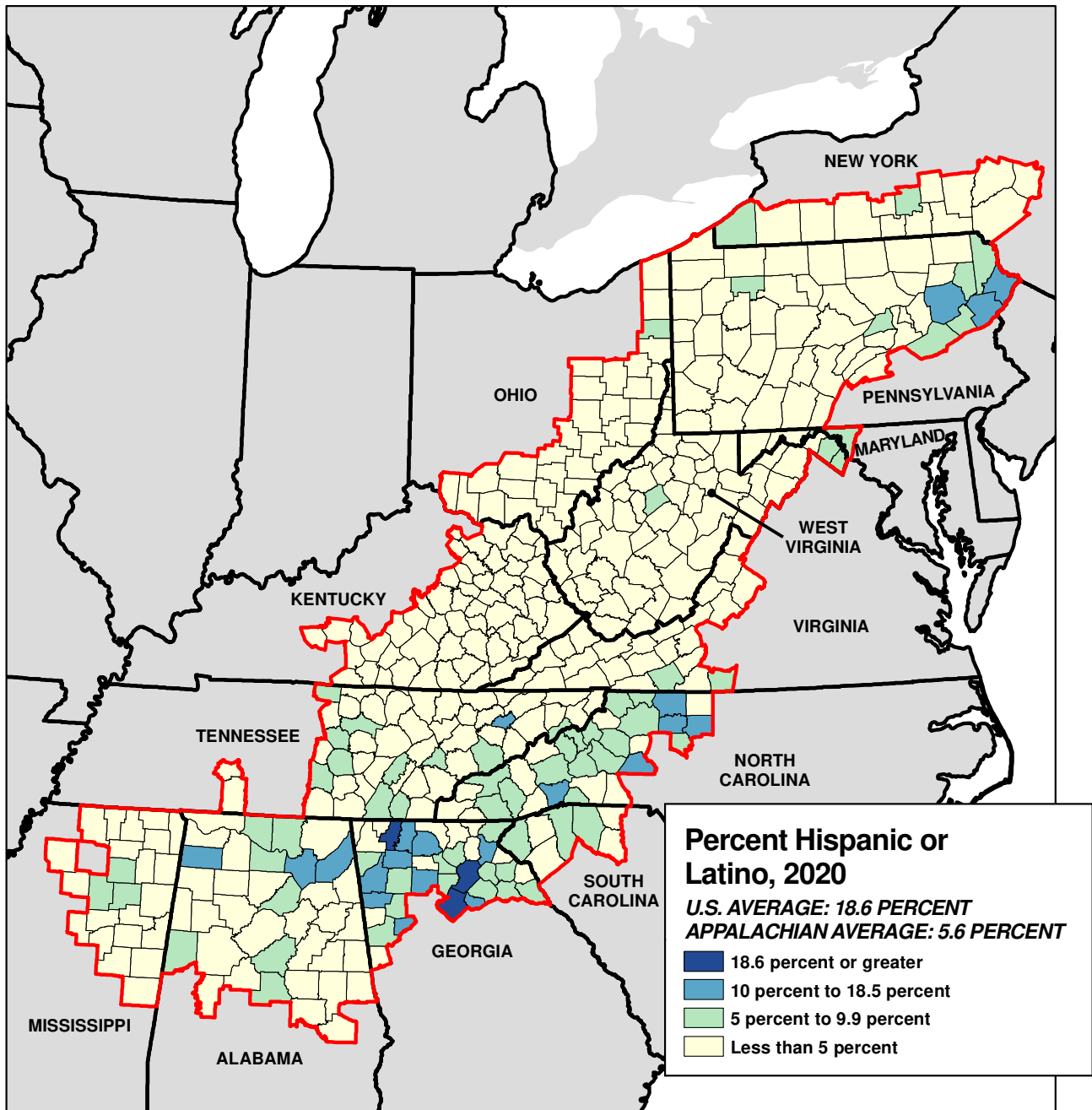
Figure 3.2: Percent of Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2020



Map Title: Percent of Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

While non-Hispanic African Americans have remained the largest single minority group in Appalachia as of 2020, 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 54 of the Region’s 62 counties where the black share of the population matched or surpassed that of the nation—as well as 29 of the 31 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, 2020



Map Title: Percent of Population in the Appalachian Region That Is Hispanic or Latino, July 1, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

Although Hispanics are now the largest minority group in the United States, they made up only one in 18 residents in the Appalachian Region in 2020. The county patterns reflect this fact, as Hispanics were at least 5 percent of the population in just 91 of Appalachia’s 423 counties, 74 of which were in Southern and South Central Appalachia. Moreover, those two subregions had 21 of the 24 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.

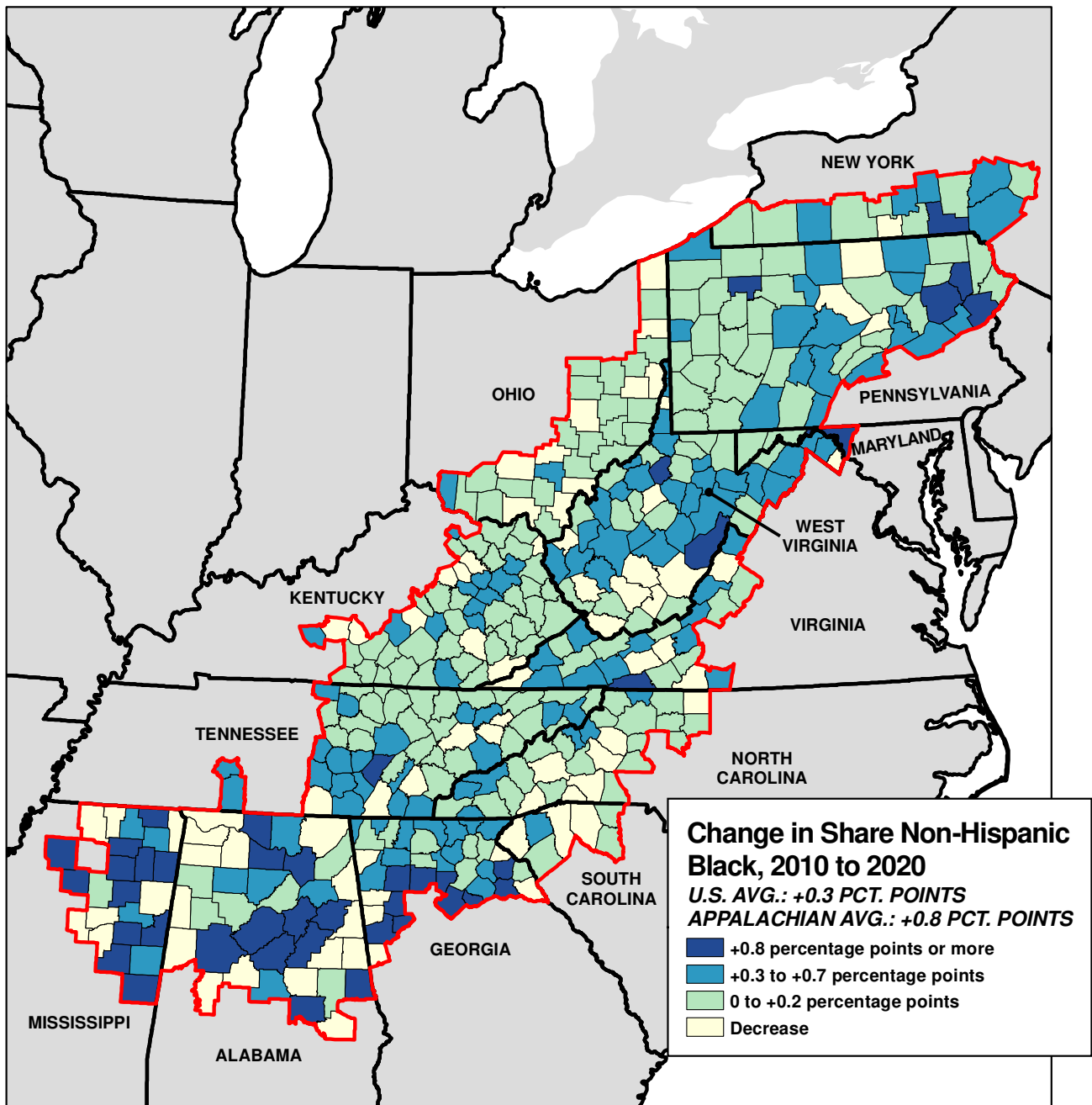
Table 3.2: Percentage Point Change in the Share of the Population in the Appalachian Region, by Race and Hispanic Origin, July 1, 2010 to July 1, 2020

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	- 4.1	+ 4.1	+ 0.3	+ 2.2	+ 1.6
Appalachian Region	- 3.2	+ 3.2	+ 0.8	+ 1.4	+ 1.1
Subregions					
Northern Appalachia	- 2.7	+ 2.7	+ 0.4	+ 1.3	+ 1.0
North Central Appalachia	- 1.3	+ 1.3	+ 0.1	+ 0.5	+ 0.7
Central Appalachia	- 1.3	+ 1.3	+ 0.1	+ 0.5	+ 0.6
South Central Appalachia	- 2.1	+ 2.1	+ 0.1	+ 1.2	+ 0.8
Southern Appalachia	- 4.0	+ 4.0	+ 1.0	+ 1.5	+ 1.4
County Types					
Large Metros (pop. 1 million +)	- 5.1	+ 5.1	+ 1.7	+ 1.4	+ 2.0
Small Metros (pop. <1 million)	- 3.1	+ 3.1	+ 0.5	+ 1.6	+ 0.9
Nonmetro, Adjacent to Large Metros	- 1.9	+ 1.9	+ 0.2	+ 1.0	+ 0.7
Nonmetro, Adjacent to Small Metros	- 1.7	+ 1.7	+ 0.1	+ 1.0	+ 0.6
Rural (nonmetro, not adj. to a metro)	- 1.6	+ 1.6	+ 0.4	+ 0.7	+ 0.5
Alabama	- 2.0	+ 2.0	+ 0.4	+ 0.7	+ 0.9
Appalachian Alabama	- 2.2	+ 2.2	+ 0.7	+ 0.7	+ 0.7
Non-Appalachian Alabama	- 1.5	+ 1.5	- 0.1	+ 0.6	+ 1.0
Georgia	- 4.3	+ 4.3	+ 1.6	+ 1.2	+ 1.7
Appalachian Georgia	- 6.6	+ 6.6	+ 2.7	+ 1.9	+ 2.2
Non-Appalachian Georgia	- 3.6	+ 3.6	+ 1.5	+ 0.8	+ 1.3
Kentucky	- 2.5	+ 2.5	+ 0.6	+ 0.9	+ 1.1
Appalachian Kentucky	- 1.2	+ 1.2	+ 0.1	+ 0.5	+ 0.6
Non-Appalachian Kentucky	- 2.8	+ 2.8	+ 0.5	+ 1.0	+ 1.2
Maryland	- 5.2	+ 5.2	+ 1.0	+ 2.6	+ 1.6
Appalachian Maryland	- 4.8	+ 4.8	+ 1.8	+ 1.8	+ 1.2
Non-Appalachian Maryland	- 5.2	+ 5.2	+ 0.9	+ 2.6	+ 1.6
Mississippi	- 1.7	+ 1.7	+ 0.6	+ 0.6	+ 0.6
Appalachian Mississippi	- 1.8	+ 1.8	+ 0.6	+ 0.6	+ 0.6
Non-Appalachian Mississippi	- 1.7	+ 1.7	+ 0.6	+ 0.6	+ 0.5
New York	- 3.4	+ 3.4	- 0.2	+ 1.6	+ 1.9
Appalachian New York	- 2.3	+ 2.3	+ 0.4	+ 0.9	+ 1.0
Non-Appalachian New York	- 3.4	+ 3.4	- 0.3	+ 1.7	+ 2.0
North Carolina	- 3.0	+ 3.0	+ 0.1	+ 1.5	+ 1.5
Appalachian North Carolina	- 2.3	+ 2.3	+ 0.2	+ 1.3	+ 0.8
Non-Appalachian North Carolina	- 2.9	+ 2.9	- 0.1	+ 1.6	+ 1.6
Ohio	- 3.2	+ 3.2	+ 0.6	+ 1.1	+ 1.5
Appalachian Ohio	- 1.4	+ 1.4	+ 0.0	+ 0.8	+ 0.6
Non-Appalachian Ohio	- 3.4	+ 3.4	+ 0.6	+ 1.1	+ 1.6
Pennsylvania	- 4.2	+ 4.2	+ 0.4	+ 2.4	+ 1.4
Appalachian Pennsylvania	- 2.9	+ 2.9	+ 0.3	+ 1.5	+ 1.1
Non-Appalachian Pennsylvania	- 4.7	+ 4.7	+ 0.1	+ 2.9	+ 1.6
South Carolina	- 0.6	+ 0.6	- 1.5	+ 1.0	+ 1.1
Appalachian South Carolina	- 2.6	+ 2.6	+ 0.0	+ 1.5	+ 1.1
Non-Appalachian South Carolina	+ 0.1	- 0.1	- 2.0	+ 0.8	+ 1.1
Tennessee	- 2.4	+ 2.4	+ 0.1	+ 1.3	+ 1.0
Appalachian Tennessee	- 2.1	+ 2.1	+ 0.1	+ 1.2	+ 0.8
Non-Appalachian Tennessee	- 2.2	+ 2.2	- 0.3	+ 1.3	+ 1.2
Virginia	- 4.1	+ 4.1	+ 0.0	+ 2.1	+ 2.0
Appalachian Virginia	- 1.8	+ 1.8	+ 0.2	+ 0.8	+ 0.8
Non-Appalachian Virginia	- 4.1	+ 4.1	- 0.2	+ 2.0	+ 2.1
West Virginia (entire state)	- 1.4	+ 1.4	+ 0.1	+ 0.6	+ 0.7

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

Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

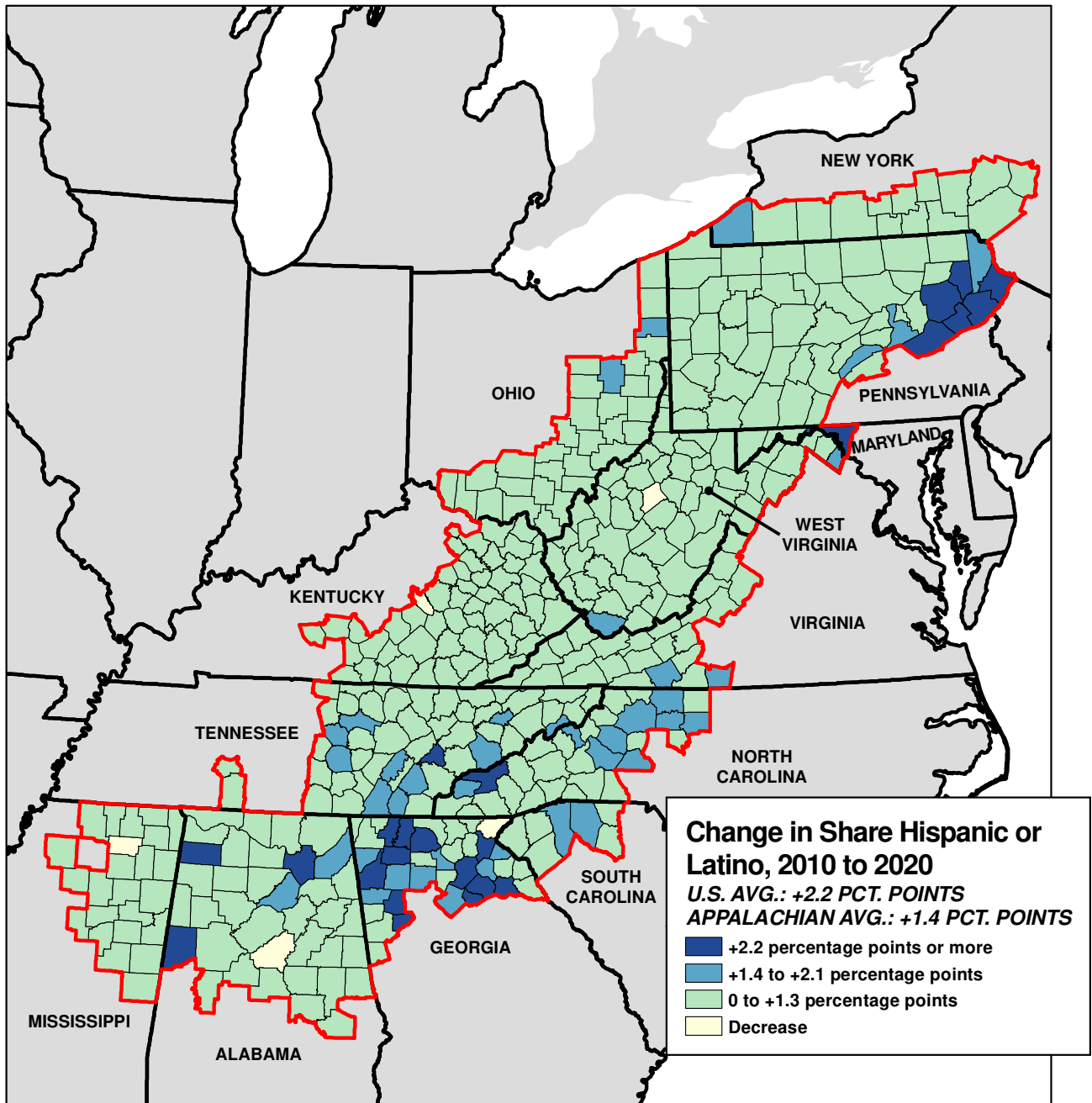
Figure 3.4: Percentage Point Change in the Share of the Population in the Appalachian Region That Is Black Alone, not Hispanic, July 1, 2010 to July 1, 2020



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, 2020
 Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

Although African Americans' share of the U.S. population barely changed between 2010 and 2020, their share of the Appalachian population increased almost a full percentage point, from 9.2 percent to 10 percent. And there were 43 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.) The share in Appalachian Georgia alone increased by nearly three percentage points. Yet in 82 of Appalachia's 423 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, 2020



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, 2020

Data Source: U.S. Census Bureau, Vintage 2020 Population Estimates.

The Hispanic/Latino share of the Appalachian population rose by 1.4 percentage points from 2010 to 2020—although this increase was noticeably below the national average over the past decade. Still, there were 24 counties (21 of which were in Georgia, Alabama, or Pennsylvania) where the Hispanic share of the population grew at or above the national rate of 2.2 percentage points. 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, 2020, the share of the population that is minority (defined as anyone who identifies with a racial or ethnic group *other than* “white alone, not Hispanic”) rose more than three percentage points to 19.7 percent (see Tables 3.1 and 3.2). The pace of this increased diversity, however, is not as great as that of the nation, where the increase was more than four 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 at least four percentage points—increasing more than five points in large metros. And Georgia’s Appalachian section has grown even faster: The minority share of the population increased 6.6 percentage points between 2010 and 2020. Not surprisingly, these three areas have minority concentrations that come close to the national minority share of just over 40 percent (34 percent for Southern Appalachia, 30 percent for counties in large metros, and 38 percent for Appalachian Georgia).
- Although African Americans comprise the largest minority group in Appalachia, Hispanics generally have fueled much (and in some areas, most) of the minority increase. The Hispanic/Latino share of the Appalachian population rose 1.4 percentage points between mid-2010 and mid-2020, compared with a 0.8 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.)

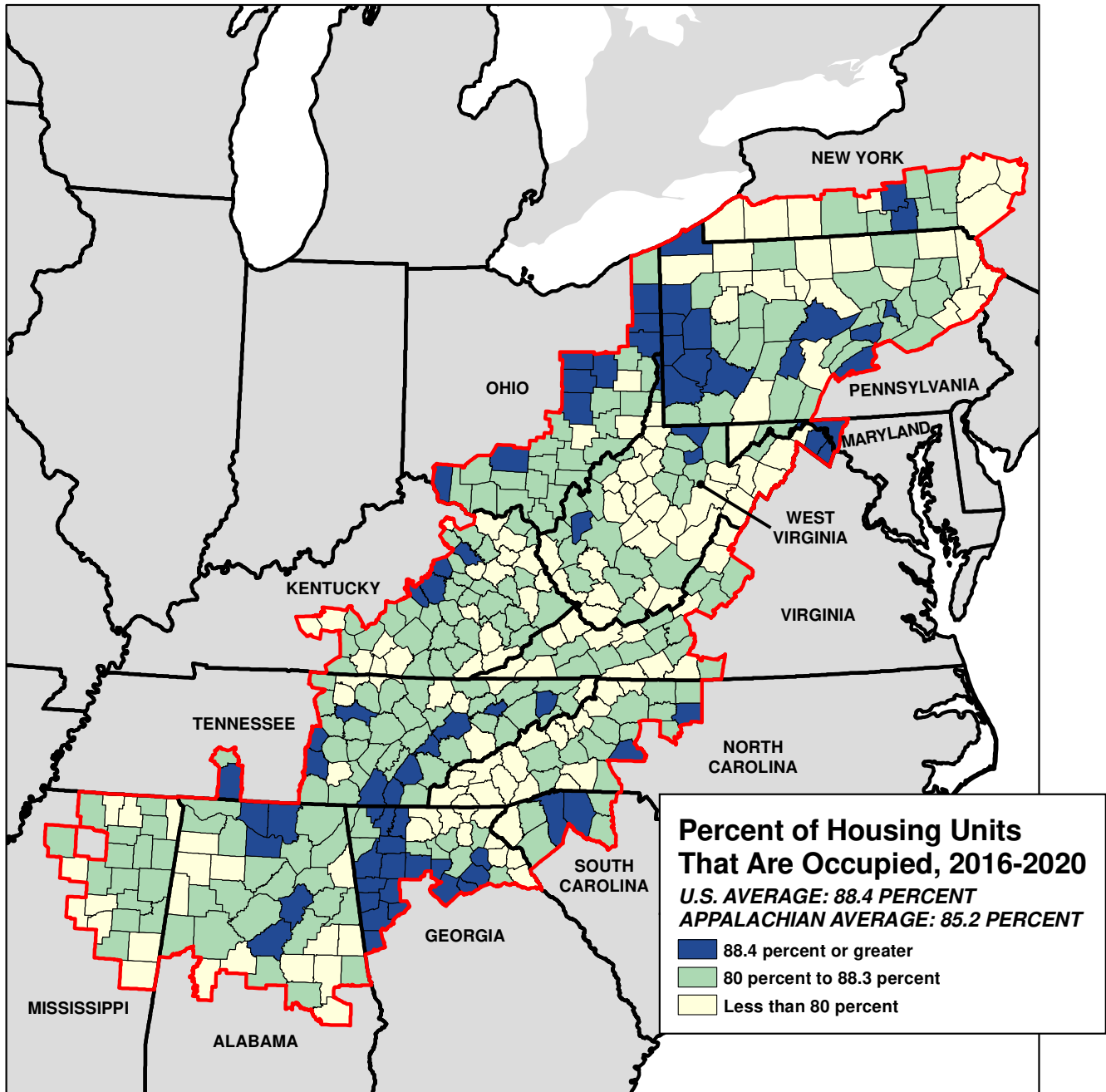
CHAPTER 4: HOUSING OCCUPANCY, TENURE, AND TYPE

Table 4.1: Occupancy and Tenure of Housing Units in the Appalachian Region, 2016-2020

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	138,432,751	122,354,219	88.4	11.6	64.4	35.6
Appalachian Region	12,042,770	10,255,943	85.2	14.8	70.9	29.1
Subregions						
Northern Appalachia	3,924,037	3,338,263	85.1	14.9	70.7	29.3
North Central Appalachia	1,196,333	1,006,396	84.1	15.9	72.9	27.1
Central Appalachia	897,888	734,208	81.8	18.2	72.3	27.7
South Central Appalachia	2,471,598	2,078,744	84.1	15.9	70.0	30.0
Southern Appalachia	3,552,914	3,098,332	87.2	12.8	70.7	29.3
County Types						
Large Metros (pop. 1 million +)	2,651,876	2,390,988	90.2	9.8	70.7	29.3
Small Metros (pop. <1 million)	5,043,944	4,395,532	87.1	12.9	69.4	30.6
Nonmetro, Adjacent to Large Metros	1,089,844	902,250	82.8	17.2	71.9	28.1
Nonmetro, Adjacent to Small Metros	1,985,030	1,582,099	79.7	20.3	73.6	26.4
Rural (nonmetro, not adj. to a metro)	1,272,076	985,074	77.4	22.6	72.8	27.2
Alabama	2,270,398	1,888,504	83.2	16.8	69.2	30.8
Appalachian Alabama	1,434,357	1,215,227	84.7	15.3	70.6	29.4
Non-Appalachian Alabama	836,041	673,277	80.5	19.5	66.5	33.5
Georgia	4,329,675	3,830,264	88.5	11.5	64.0	36.0
Appalachian Georgia	1,261,938	1,138,451	90.2	9.8	71.4	28.6
Non-Appalachian Georgia	3,067,737	2,691,813	87.7	12.3	61.0	39.0
Kentucky	1,994,554	1,748,053	87.6	12.4	67.6	32.4
Appalachian Kentucky	549,499	454,072	82.6	17.4	71.4	28.6
Non-Appalachian Kentucky	1,445,055	1,293,981	89.5	10.5	66.2	33.8
Maryland	2,459,650	2,230,527	90.7	9.3	67.1	32.9
Appalachian Maryland	113,872	96,481	84.7	15.3	69.0	31.0
Non-Appalachian Maryland	2,345,778	2,134,046	91.0	9.0	67.0	33.0
Mississippi	1,330,867	1,116,649	83.9	16.1	68.8	31.2
Appalachian Mississippi	286,508	235,767	82.3	17.7	69.5	30.5
Non-Appalachian Mississippi	1,044,359	880,882	84.3	15.7	68.6	31.4
New York	8,362,971	7,417,224	88.7	11.3	54.1	45.9
Appalachian New York	519,062	420,761	81.1	18.9	69.0	31.0
Non-Appalachian New York	7,843,909	6,996,463	89.2	10.8	53.2	46.8
North Carolina	4,687,122	4,031,592	86.0	14.0	65.7	34.3
Appalachian North Carolina	1,009,851	818,301	81.0	19.0	70.1	29.9
Non-Appalachian North Carolina	3,677,271	3,213,291	87.4	12.6	64.6	35.4
Ohio	5,217,090	4,717,226	90.4	9.6	66.3	33.7
Appalachian Ohio	909,001	794,547	87.4	12.6	71.7	28.3
Non-Appalachian Ohio	4,308,089	3,922,679	91.1	8.9	65.2	34.8
Pennsylvania	5,713,345	5,106,601	89.4	10.6	69.0	31.0
Appalachian Pennsylvania	2,777,175	2,371,292	85.4	14.6	70.9	29.1
Non-Appalachian Pennsylvania	2,936,170	2,735,309	93.2	6.8	67.3	32.7
South Carolina	2,319,112	1,961,481	84.6	15.4	70.1	29.9
Appalachian South Carolina	570,111	508,887	89.3	10.7	70.0	30.0
Non-Appalachian South Carolina	1,749,001	1,452,594	83.1	16.9	70.1	29.9
Tennessee	2,996,127	2,639,455	88.1	11.9	66.5	33.5
Appalachian Tennessee	1,348,331	1,169,561	86.7	13.3	70.1	29.9
Non-Appalachian Tennessee	1,647,796	1,469,894	89.2	10.8	63.7	36.3
Virginia	3,537,788	3,184,121	90.0	10.0	66.7	33.3
Appalachian Virginia	369,450	298,361	80.8	19.2	71.6	28.4
Non-Appalachian Virginia	3,168,338	2,885,760	91.1	8.9	66.2	33.8
West Virginia (entire state)	893,615	734,235	82.2	17.8	73.7	26.3

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

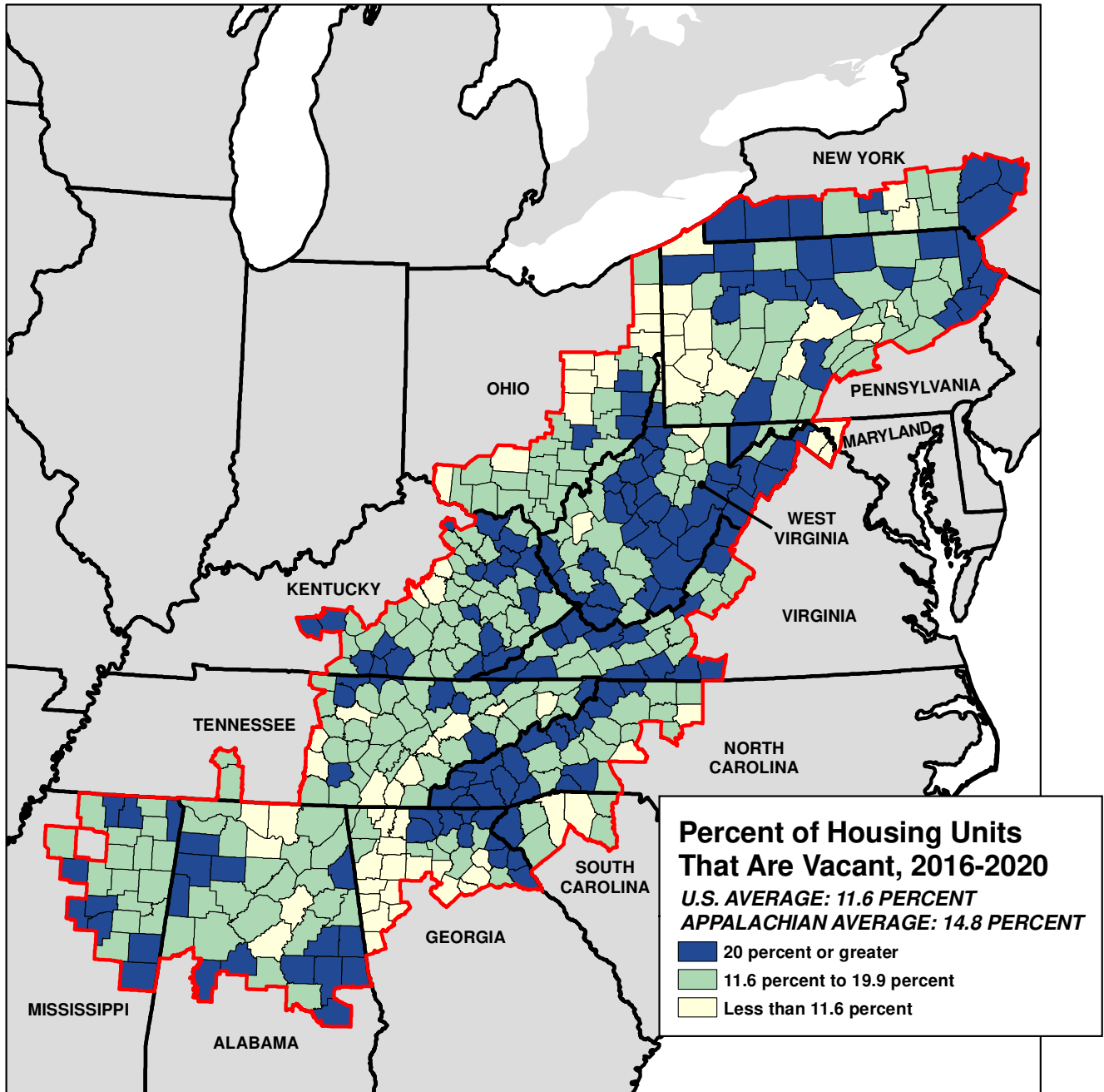
Figure 4.1: Percent of Housing Units in the Appalachian Region That Are Occupied, 2016-2020



Map Title: Percent of Housing Units in the Appalachian Region That Are Occupied, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Although the home occupancy rate during the 2016-2020 period was slightly lower in Appalachia than in the United States as a whole, there were 74 counties in the Region that had occupancy rates matching or exceeding the national average. And while they were scattered throughout the Region, 54 of these counties were in metropolitan areas, such as Pittsburgh, the Atlanta and Birmingham suburbs, exurban Cincinnati, and Chattanooga, Tennessee. Conversely, less than four-fifths of housing units were occupied in 145 Appalachian counties—125 of which were located outside metropolitan areas.

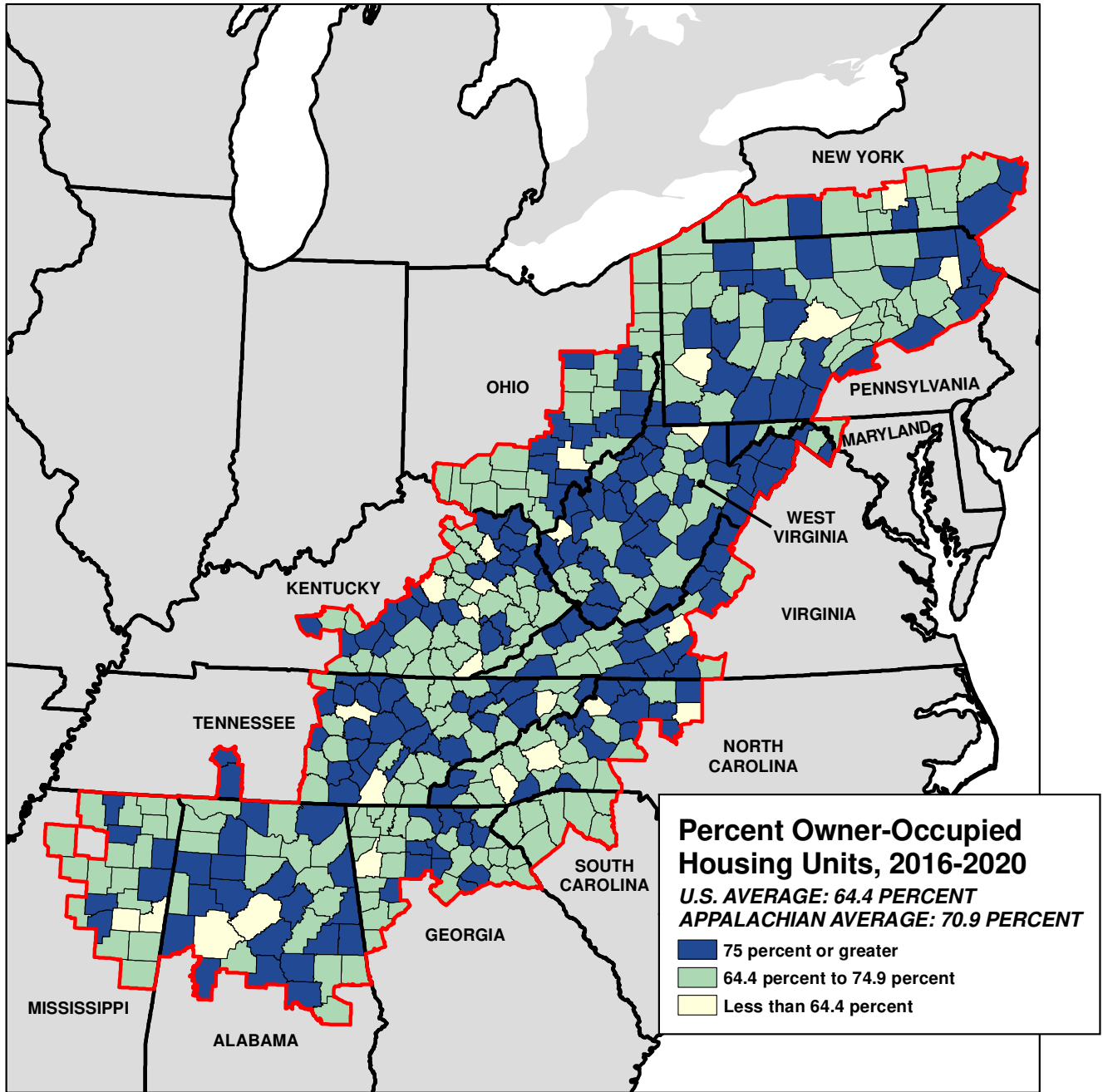
Figure 4.2: Percent of Housing Units in the Appalachian Region That Are Vacant, 2016-2020



Map Title: Percent of Housing Units in the Appalachian Region That Are Vacant, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Nearly 15 percent of housing units in Appalachia were vacant during the 2016-2020 period, compared with just 11.6 percent for the nation as a whole. Vacancy rates varied within the Region, however. While 149 of the 423 Appalachian counties (all but 21 of which were outside metropolitan areas) had vacancy rates at or above 20 percent, another 71 counties (mostly in metro areas) had rates below the national average of 11.6 percent. It is important to note that in 137 of the 352 Appalachian counties with vacancy rates of 11.6 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.

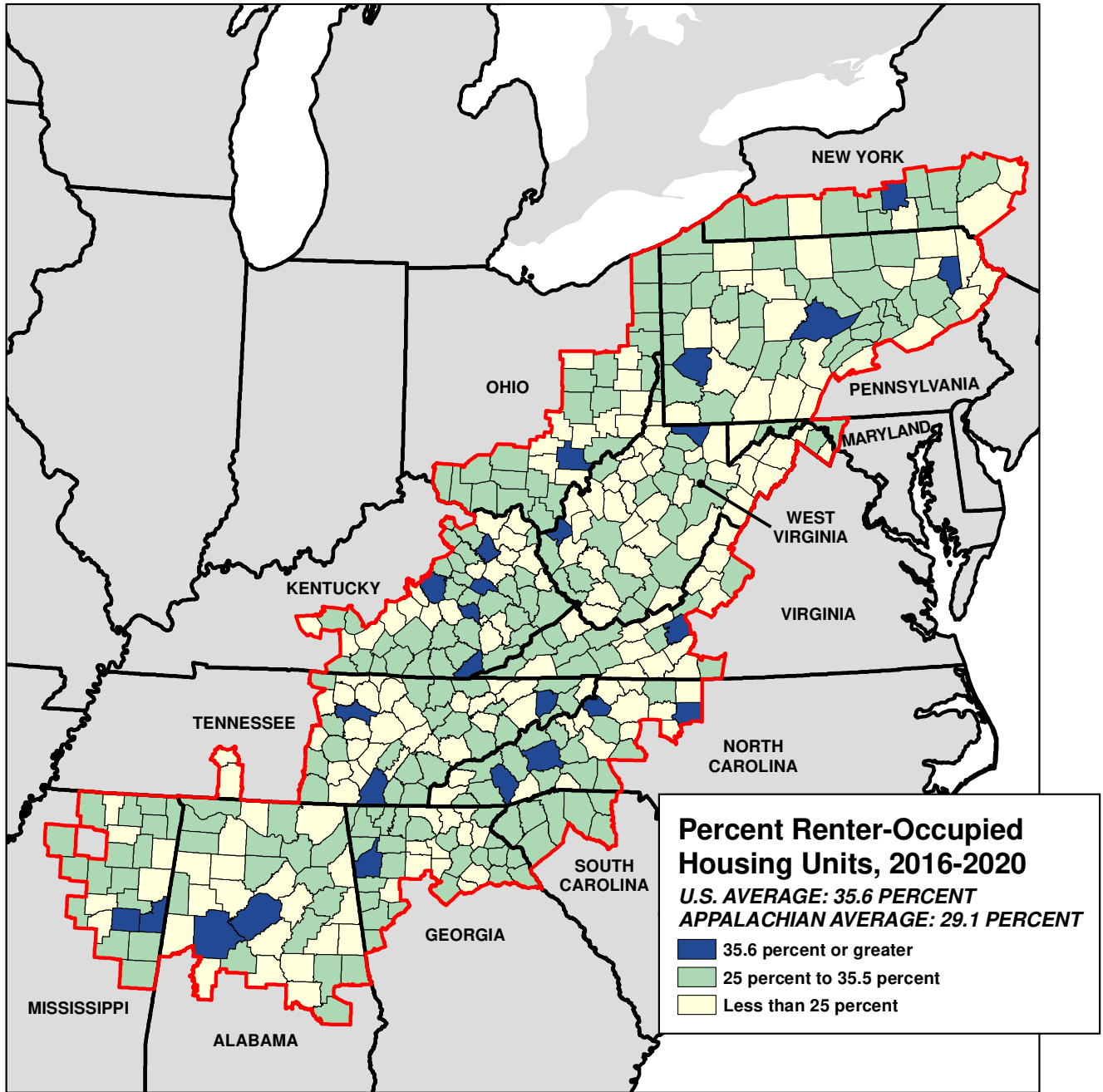
Figure 4.3: Percent Owner-Occupied Housing Units in the Appalachian Region, 2016-2020



Map Title: Percent Owner-Occupied Housing Units in the Appalachian Region, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Homeownership was more common in the Appalachian Region than in the rest of the country in the 2016-2020 period. In all but 25 counties, the share of owner-occupied housing units matched or exceeded the national average. Indeed, the homeownership rate was at least 75 percent in 184 of Appalachia’s 423 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, 2016-2020



Map Title: Percent Renter-Occupied Housing Units in the Appalachian Region, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

The share of renter-occupied housing units during the 2016-2020 period was well below the national average throughout Appalachia; in fact, it was less than 25 percent in 180 of the Region’s 423 counties. Among the 25 Appalachian counties where the share of renter-occupied units matched or exceeded the national average of 35.6 percent, most all are home to colleges or universities, where students make up a sizeable share of the population. Examples of these counties include Tuscaloosa County, Alabama (University of Alabama); Watauga County, North Carolina (Appalachian State University); and Cabell County, West Virginia (Marshall University).

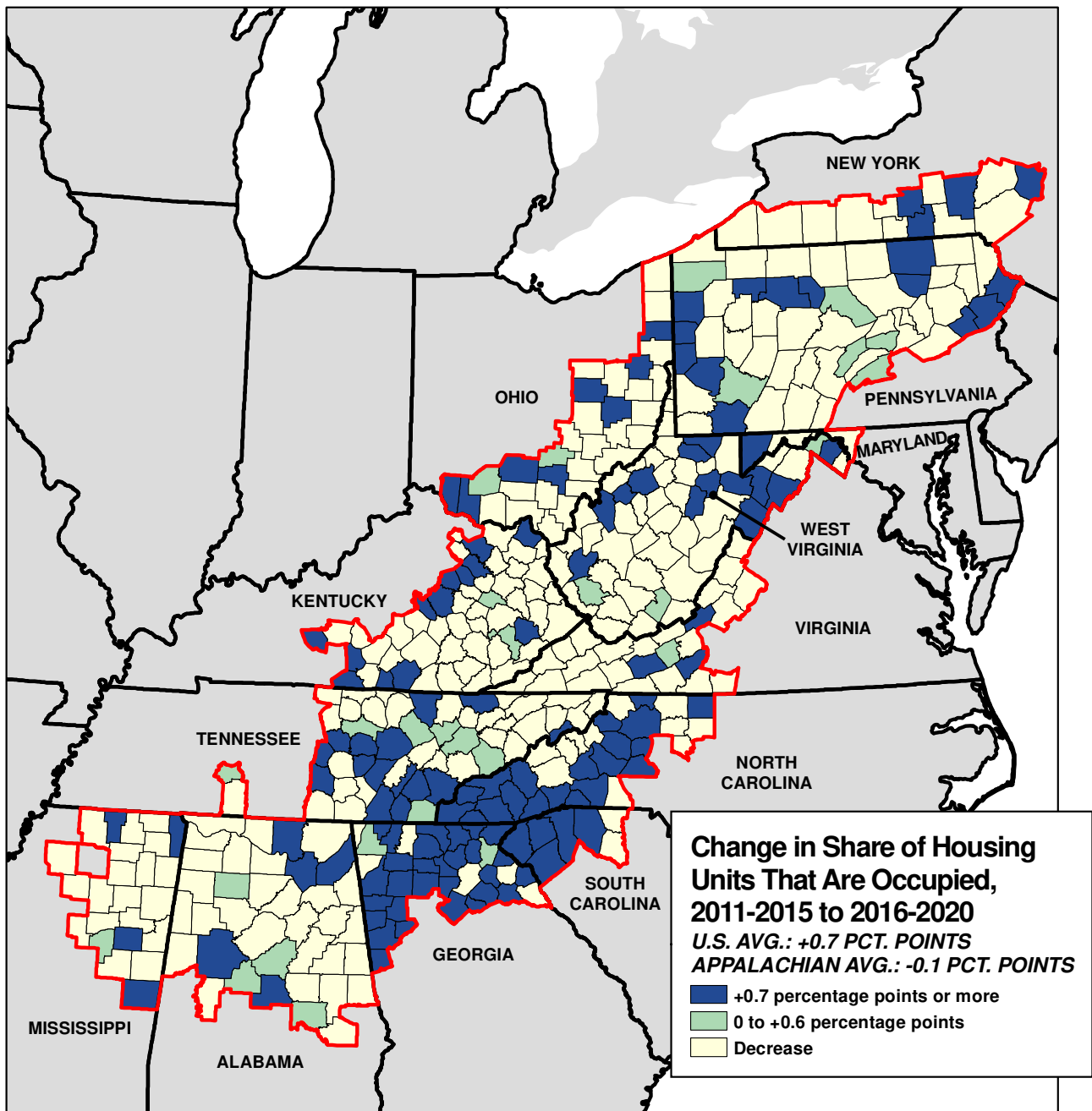
Table 4.2: Percentage Point Change in Occupancy and Tenure of Housing Units in the Appalachian Region, 2011-2015 to 2016-2020

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

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Figure 4.5: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Occupied, 2011-2015 to 2016-2020

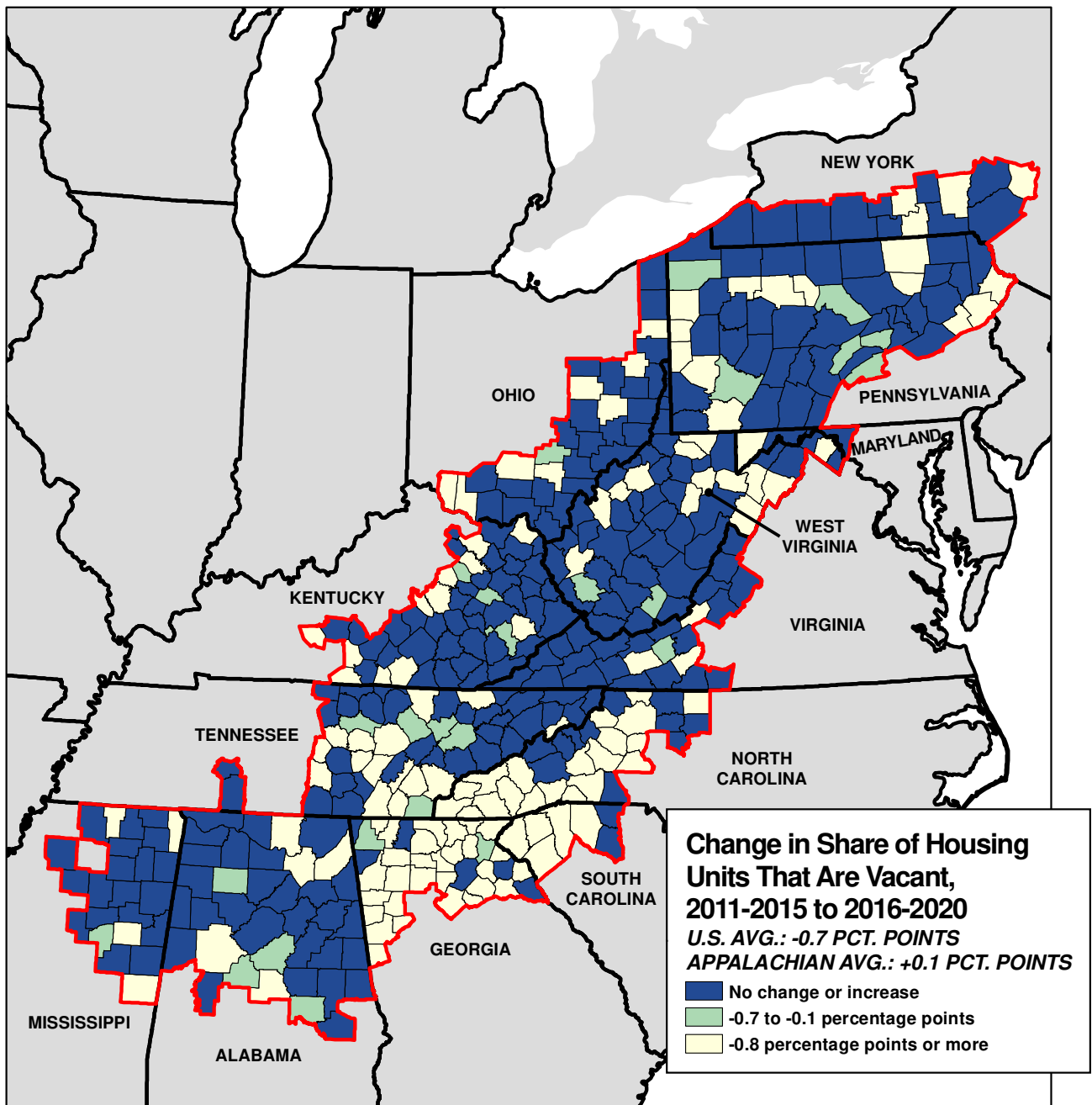


Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Occupied, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Although home occupancy had risen 0.7 percentage points nationally during the period, Appalachia's home occupancy rate in 2016-2020 was actually lower than it was in 2011-2015. Indeed, decreased home occupancy was also present in 262 of the Region's 423 counties. Yet factors other than the aftermath of the Great Recession of 2007-2009 may also be at play. For example, severe weather events like the outbreak of tornadoes that swept through parts of Alabama and Tennessee in November 2016 caused extreme structural damage and displaced families and (in some cases) entire communities. On the other hand, the occupancy rate rose at or above the national average in 133 counties. While they were spread throughout the Region, there were concentrations in a few states, including Georgia, the Carolinas, and Tennessee; indeed, the occupancy rate in the Appalachian sections of those four 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, 2011-2015 to 2016-2020

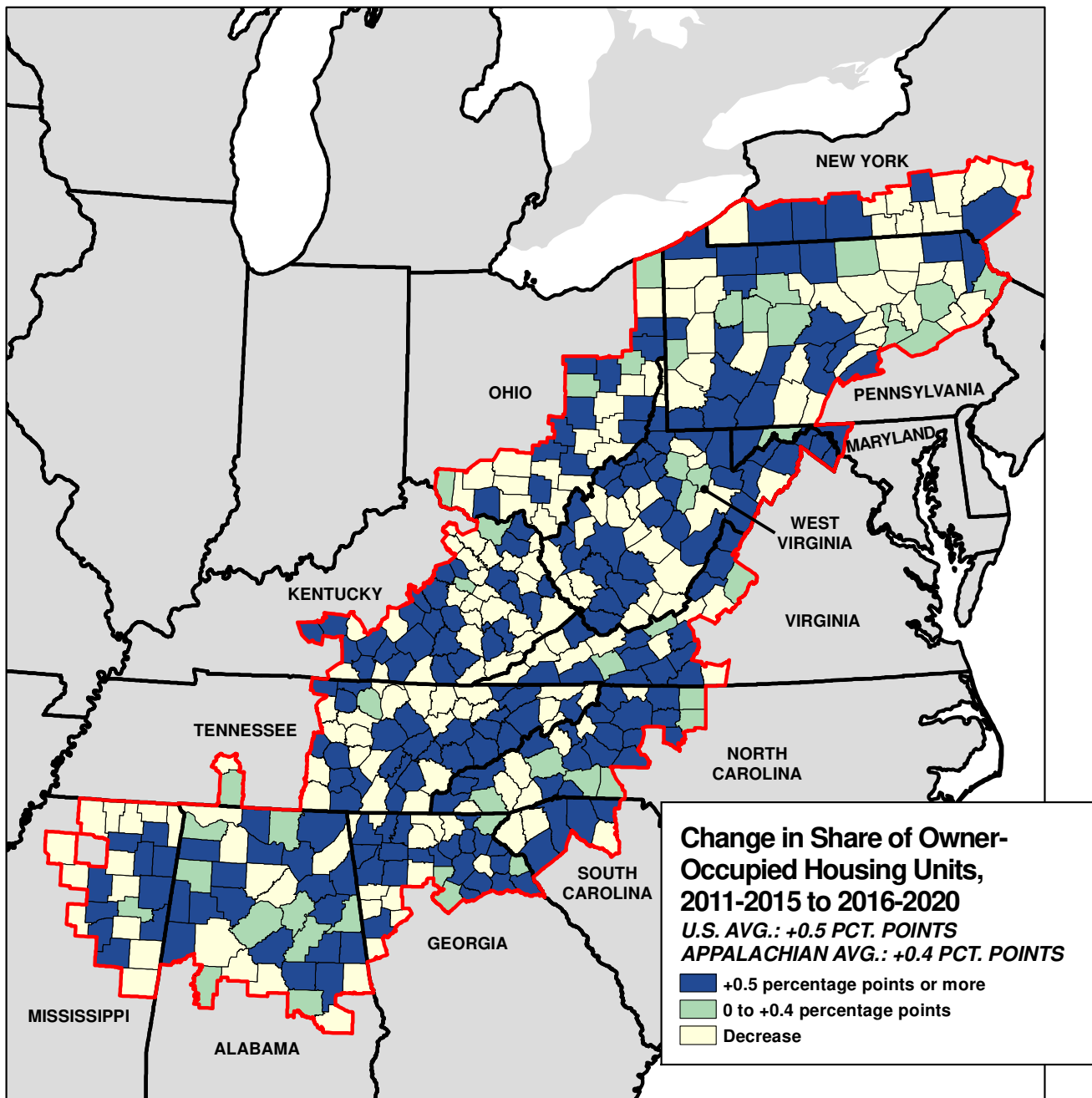


Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Vacant, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Between 2011-2015 and 2016-2020, the share of vacant housing units rose 0.1 percentage points in Appalachia, while declining 0.7 points in the nation as a whole. Indeed, housing vacancy remained constant or increased in 266 of the Region's 423 counties. This at least partly suggests the failure of occupancy rates in Appalachia to return to pre-recessionary levels (as well as the effects of severe weather events). Yet another potential factor could be the fact that some parts of the Region had an increase in the share of vacant units that were designated for seasonal or occasional use (which could indicate significant recreational or retirement activity, such as in much of Appalachian Virginia, Tennessee, and North Carolina). In 81 Appalachian counties where overall vacancy rates remained the same or increased between the 2011-2015 and 2016-2020 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, 2011-2015 to 2016-2020

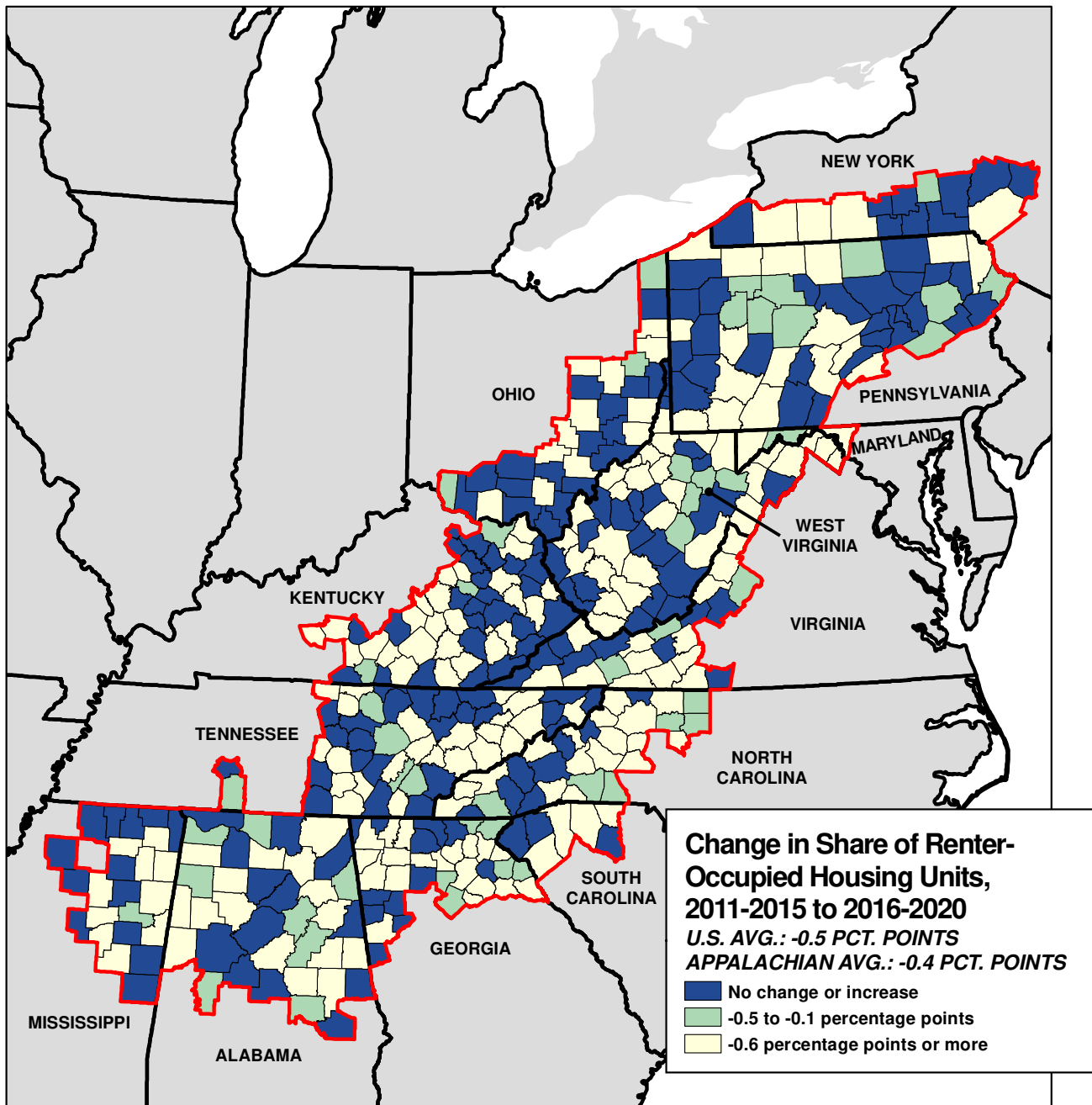


Map Title: Percentage Point Change in the Share of Owner-Occupied Housing Units in the Appalachian Region, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

The share of owner-occupied housing units in Appalachia rose 0.4 percentage points between 2011-2015 and 2016-2020, just below the 0.5 point increase nationally. In fact, the increase was at or above the national average in almost half of the Region’s 423 counties. Still, there were 174 Appalachian counties—115 of which were outside metropolitan areas—where homeownership decreased between these two periods. Counties in both groups were scattered throughout Appalachia.

Figure 4.8: Percentage Point Change in the Share of Renter-Occupied Housing Units in the Appalachian Region, 2011-2015 to 2016-2020



Map Title: Percentage Point Change in the Share of Renter-Occupied Housing Units in the Appalachian Region, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

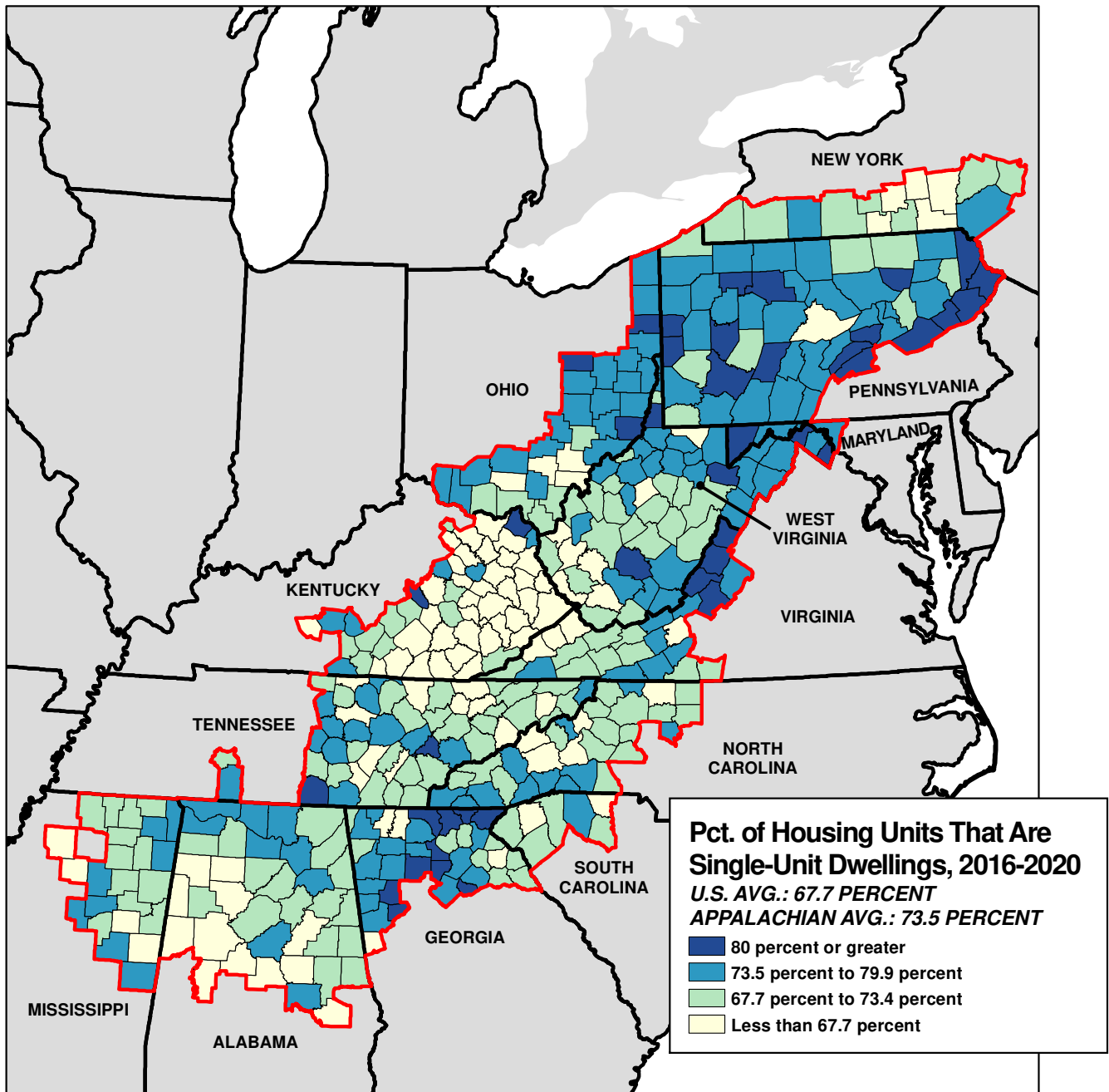
The share of renter-occupied housing units decreased at about the same rate in Appalachia as it did nationwide between 2011-2015 and 2016-2020. Yet variations were present within the Region: For example, there were 191 Appalachian counties where the decrease in rental shares exceeded the national average of 0.5 percentage points. These counties were scattered throughout the Region. Conversely, the percentage of units occupied by renters remained the same or increased in 181 counties between the two periods.

Table 4.3: Housing Units in the Appalachian Region, by Type of Housing, 2016-2020

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	138,432,751	67.7	26.2	7.8	18.4	6.0	0.1
Appalachian Region	12,042,770	73.5	15.0	5.9	9.1	11.4	0.1
Subregions							
Northern Appalachia	3,924,037	75.8	17.8	8.5	9.3	6.3	0.0
North Central Appalachia	1,196,333	73.7	12.6	4.8	7.7	13.6	0.1
Central Appalachia	897,888	66.7	9.2	4.2	5.0	24.0	0.1
South Central Appalachia	2,471,598	71.6	14.8	5.1	9.7	13.5	0.1
Southern Appalachia	3,552,914	73.8	14.4	4.3	10.0	11.7	0.1
County Types							
Large Metros (pop. 1 million +)	2,651,876	76.9	17.5	5.2	12.3	5.5	0.0
Small Metros (pop. <1 million)	5,043,944	72.7	17.3	6.7	10.7	9.8	0.1
Nonmetro, Adjacent to Large Metros	1,089,844	73.2	12.5	6.4	6.1	14.2	0.1
Nonmetro, Adjacent to Small Metros	1,985,030	73.0	10.5	5.2	5.2	16.4	0.1
Rural (nonmetro, not adj. to a metro)	1,272,076	70.1	9.9	4.8	5.1	19.9	0.1
Alabama	2,270,398	70.3	16.5	4.9	11.6	13.0	0.1
Appalachian Alabama	1,434,357	71.5	16.0	4.6	11.4	12.4	0.1
Non-Appalachian Alabama	836,041	68.3	17.3	5.5	11.9	14.2	0.1
Georgia	4,329,675	70.6	20.6	5.1	15.5	8.6	0.1
Appalachian Georgia	1,261,938	78.6	12.6	3.5	9.1	8.7	0.1
Non-Appalachian Georgia	3,067,737	67.4	23.9	5.7	18.2	8.6	0.1
Kentucky	1,994,554	70.1	18.3	7.3	11.0	11.5	0.1
Appalachian Kentucky	549,499	65.8	10.0	4.8	5.2	24.1	0.1
Non-Appalachian Kentucky	1,445,055	71.8	21.4	8.2	13.2	6.7	0.1
Maryland	2,459,650	72.9	25.7	3.7	22.0	1.3	0.0
Appalachian Maryland	113,872	79.6	16.3	6.1	10.2	4.0	0.0
Non-Appalachian Maryland	2,345,778	72.6	26.2	3.6	22.6	1.2	0.0
Mississippi	1,330,867	70.5	14.6	5.6	9.0	14.8	0.1
Appalachian Mississippi	286,508	70.0	12.2	6.2	6.1	17.7	0.1
Non-Appalachian Mississippi	1,044,359	70.7	15.2	5.5	9.7	14.0	0.1
New York	8,362,971	47.1	50.6	17.0	33.6	2.3	0.0
Appalachian New York	519,062	67.5	22.4	13.6	8.8	10.1	0.0
Non-Appalachian New York	7,843,909	45.8	52.4	17.2	35.2	1.8	0.0
North Carolina	4,687,122	69.6	18.0	4.7	13.3	12.4	0.1
Appalachian North Carolina	1,009,851	70.6	13.6	4.6	9.0	15.6	0.1
Non-Appalachian North Carolina	3,677,271	69.3	19.2	4.7	14.4	11.5	0.0
Ohio	5,217,090	73.5	22.8	8.4	14.3	3.7	0.0
Appalachian Ohio	909,001	76.1	13.7	5.8	7.9	10.1	0.1
Non-Appalachian Ohio	4,308,089	73.0	24.7	9.0	15.7	2.3	0.0
Pennsylvania	5,713,345	75.7	20.5	8.4	12.1	3.8	0.0
Appalachian Pennsylvania	2,777,175	76.7	17.6	7.9	9.6	5.7	0.0
Non-Appalachian Pennsylvania	2,936,170	74.7	23.2	8.8	14.5	2.0	0.0
South Carolina	2,319,112	67.0	17.1	4.5	12.6	15.8	0.1
Appalachian South Carolina	570,111	71.0	15.4	4.5	10.9	13.6	0.1
Non-Appalachian South Carolina	1,749,001	65.6	17.7	4.5	13.1	16.6	0.1
Tennessee	2,996,127	71.9	19.1	5.8	13.3	8.9	0.1
Appalachian Tennessee	1,348,331	71.8	15.4	5.5	9.9	12.6	0.2
Non-Appalachian Tennessee	1,647,796	71.9	22.1	6.1	16.0	5.9	0.1
Virginia	3,537,788	72.8	22.2	4.3	17.9	4.9	0.0
Appalachian Virginia	369,450	71.1	11.8	4.1	7.8	17.0	0.0
Non-Appalachian Virginia	3,168,338	73.0	23.4	4.4	19.1	3.5	0.0
West Virginia (entire state)	893,615	73.3	12.0	4.8	7.2	14.6	0.1

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Figure 4.9: Percent of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2016-2020



Map Title: Percent of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

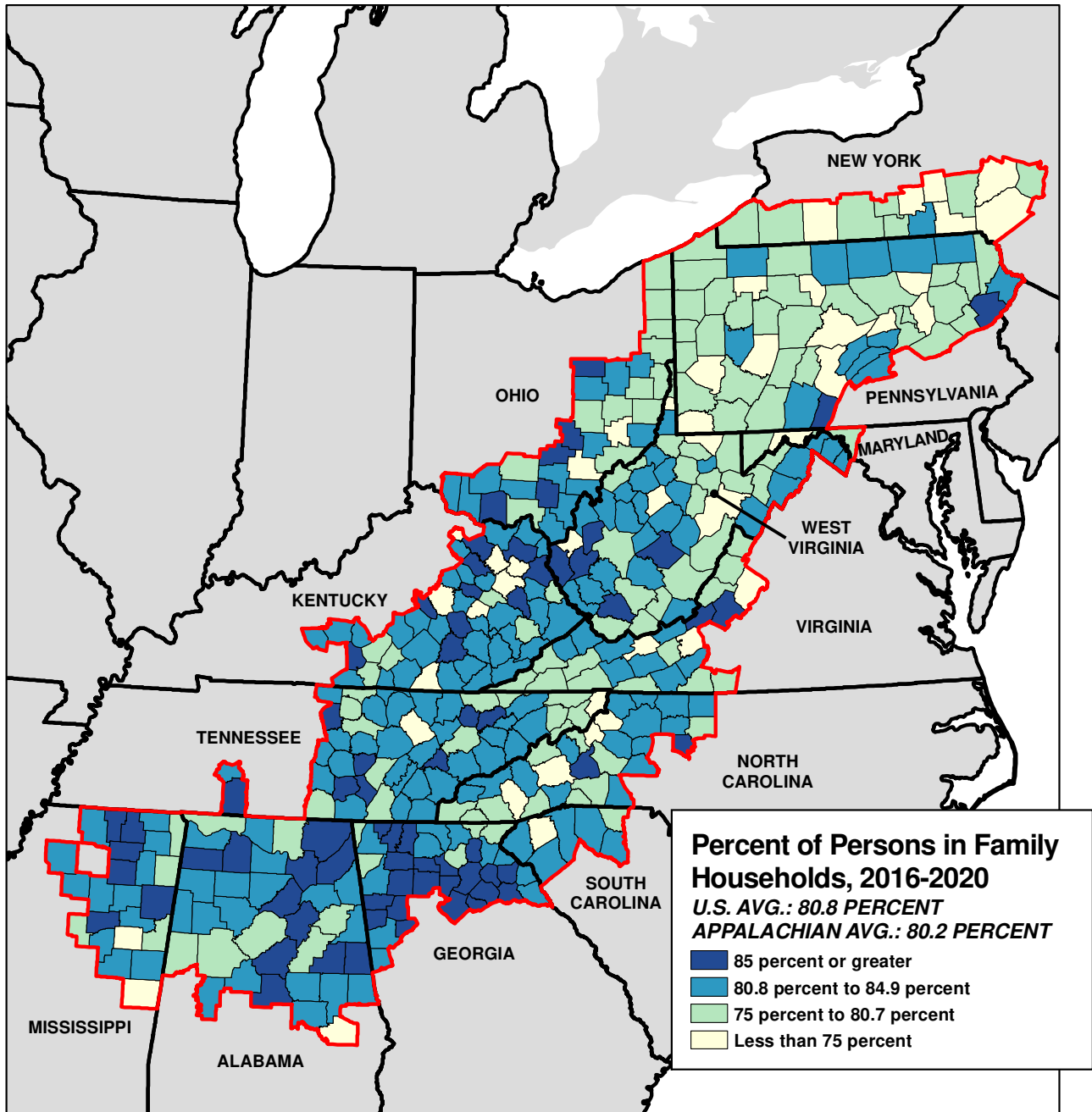
In 2016-2020, 73.5 percent of housing units in the Appalachian Region were single-unit dwellings (either attached or detached)—a larger share than the national average of 67.7 percent. And the share was even greater in much of Appalachia: In 188 of the 423 counties, the share of single-unit homes was at or above the average for the Region. (Most of these counties were in Northern or North Central Appalachia—with 43 in Pennsylvania alone.) And there were 43 Appalachian counties where single-unit dwellings accounted for at least 80 percent of the housing stock. In contrast, there were 95 counties in the Region (slightly more than half in Central Appalachia) where the share of single-unit homes was lower than the U.S. average. In these low prevalence counties, mobile homes tended to comprise most of the remaining housing stock: They accounted for at least 25 percent of housing units in 65 of the counties where the share of single-unit homes was less than the national share.

Table 4.4: Population in Households and Group Quarters in the Appalachian Region, 2016-2020

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	326,569,308	97.5	80.8	16.7	2.5
Appalachian Region	25,948,061	97.1	80.2	16.8	2.9
Subregions					
Northern Appalachia	8,036,750	96.0	76.8	19.2	4.0
North Central Appalachia	2,521,339	97.0	79.6	17.5	3.0
Central Appalachia	1,863,297	96.9	81.6	15.3	3.1
South Central Appalachia	5,163,870	97.3	79.4	17.8	2.7
Southern Appalachia	8,362,805	98.1	84.0	14.0	1.9
County Types					
Large Metros (pop. 1 million +)	6,136,208	98.2	82.3	15.9	1.8
Small Metros (pop. <1 million)	11,065,169	96.8	79.1	17.7	3.2
Nonmetro, Adjacent to Large Metros	2,298,165	96.6	80.1	16.5	3.4
Nonmetro, Adjacent to Small Metros	3,953,089	96.8	80.7	16.2	3.2
Rural (nonmetro, not adj. to a metro)	2,495,430	96.2	79.9	16.3	3.8
Alabama	4,893,186	97.6	81.6	16.0	2.4
Appalachian Alabama	3,137,267	97.6	81.9	15.7	2.4
Non-Appalachian Alabama	1,755,919	97.6	81.0	16.6	2.4
Georgia	10,516,579	97.5	82.3	15.2	2.5
Appalachian Georgia	3,282,877	98.8	87.5	11.3	1.2
Non-Appalachian Georgia	7,233,702	96.9	79.9	17.0	3.1
Kentucky	4,461,952	97.0	80.1	17.0	3.0
Appalachian Kentucky	1,163,447	96.7	81.5	15.2	3.3
Non-Appalachian Kentucky	3,298,505	97.2	79.5	17.6	2.8
Maryland	6,037,624	97.7	81.8	15.8	2.3
Appalachian Maryland	250,732	92.8	76.7	16.1	7.2
Non-Appalachian Maryland	5,786,892	97.9	82.1	15.8	2.1
Mississippi	2,981,835	96.8	81.7	15.1	3.2
Appalachian Mississippi	624,431	97.2	81.2	15.9	2.8
Non-Appalachian Mississippi	2,357,404	96.7	81.8	14.9	3.3
New York	19,514,849	97.1	79.2	17.9	2.9
Appalachian New York	1,021,754	94.4	73.9	20.6	5.6
Non-Appalachian New York	18,493,095	97.2	79.5	17.7	2.8
North Carolina	10,386,227	97.3	80.3	17.0	2.7
Appalachian North Carolina	2,021,533	97.4	79.5	17.9	2.6
Non-Appalachian North Carolina	8,364,694	97.3	80.5	16.8	2.7
Ohio	11,675,275	97.3	78.7	18.6	2.7
Appalachian Ohio	1,992,679	97.0	80.1	16.9	3.0
Non-Appalachian Ohio	9,682,596	97.4	78.4	19.0	2.6
Pennsylvania	12,794,885	96.7	78.8	17.9	3.3
Appalachian Pennsylvania	5,663,338	96.1	76.7	19.4	3.9
Non-Appalachian Pennsylvania	7,131,547	97.2	80.5	16.7	2.8
South Carolina	5,091,517	97.3	80.6	16.7	2.7
Appalachian South Carolina	1,318,230	97.7	81.7	16.0	2.3
Non-Appalachian South Carolina	3,773,287	97.2	80.2	17.0	2.8
Tennessee	6,772,268	97.7	80.8	16.8	2.3
Appalachian Tennessee	2,917,809	97.6	80.5	17.1	2.4
Non-Appalachian Tennessee	3,854,459	97.7	81.1	16.7	2.3
Virginia	8,509,358	97.1	80.5	16.6	2.9
Appalachian Virginia	746,538	95.3	76.1	19.3	4.7
Non-Appalachian Virginia	7,762,820	97.3	81.0	16.3	2.7
West Virginia (entire state)	1,807,426	97.4	79.5	17.9	2.6

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Figure 4.10: Percent of Persons in the Appalachian Region Living in Family Households, 2016-2020



Map Title: Percent of Persons in the Appalachian Region Living in Family Households, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

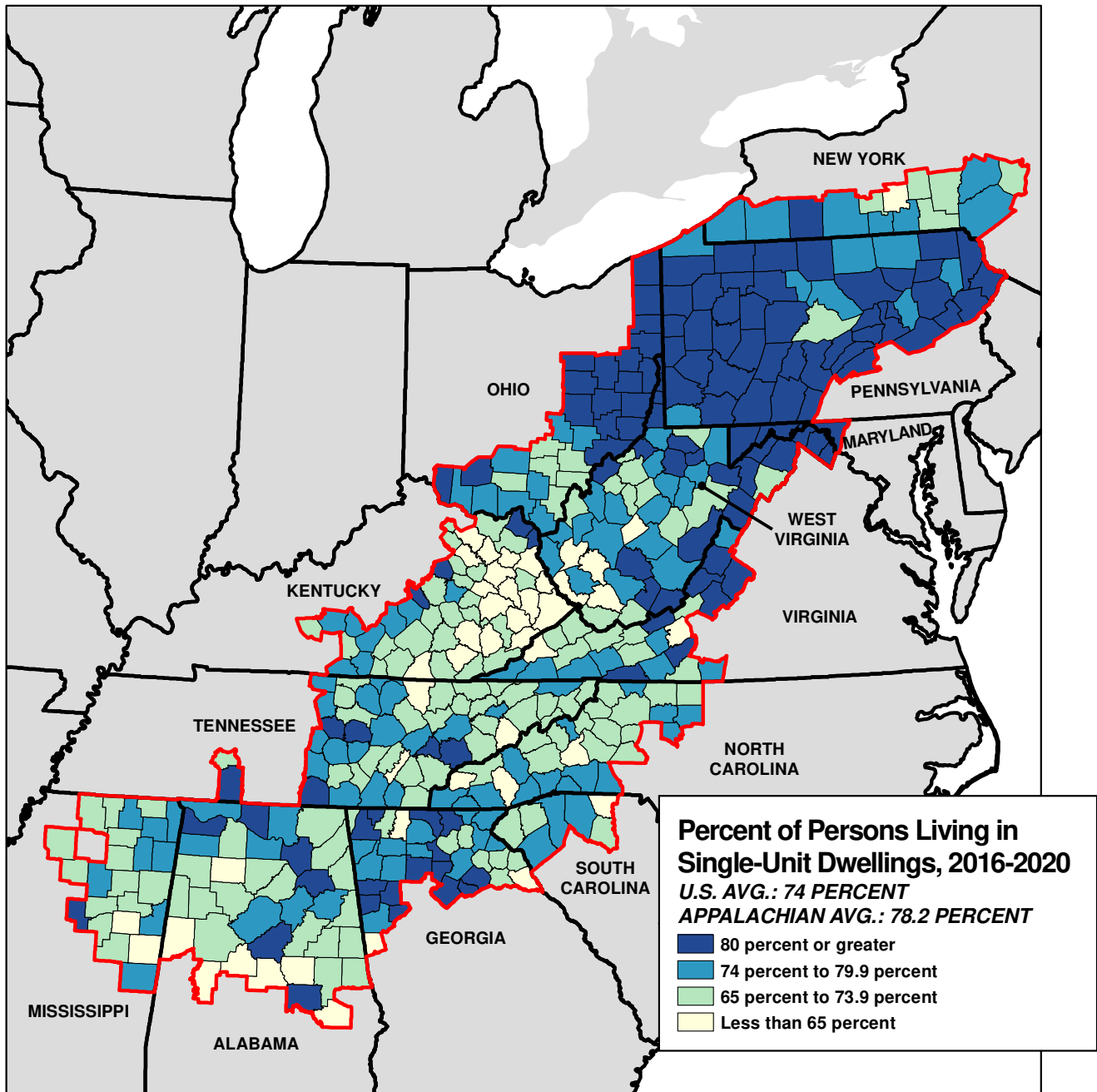
Just over 80 percent of Appalachia’s residents lived in family households during 2016-2020, which was just below the national average. Yet in 72 counties in the Region, at least 85 percent lived in family households. More than half of these counties were in Southern Appalachia, although there were pockets elsewhere in the Region. In contrast, there were 44 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 45.5 percent of the county’s residents. But a more typical example is Rockbridge County, Virginia, home to Virginia Military Institute and Washington and Lee University with 10.3 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, 2016-2020

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	318,495,974	74.0	20.6	6.9	13.6	5.4	0.1
Appalachian Region	25,185,531	78.2	10.9	4.5	6.5	10.8	0.1
Subregions							
Northern Appalachia	7,711,511	82.0	12.7	6.5	6.2	5.2	0.0
North Central Appalachia	2,446,474	78.1	9.1	3.5	5.6	12.8	0.0
Central Appalachia	1,805,625	69.7	7.1	3.3	3.7	23.2	0.1
South Central Appalachia	5,022,069	75.2	11.3	4.0	7.2	13.5	0.1
Southern Appalachia	8,199,852	78.3	10.5	3.4	7.1	11.1	0.1
County Types							
Large Metros (pop. 1 million +)	6,026,427	82.8	11.9	3.7	8.2	5.2	0.0
Small Metros (pop. <1 million)	10,710,924	77.7	12.7	5.1	7.6	9.5	0.1
Nonmetro, Adjacent to Large Metros	2,219,727	77.5	9.2	5.0	4.2	13.1	0.1
Nonmetro, Adjacent to Small Metros	3,828,255	75.7	7.7	4.0	3.6	16.5	0.1
Rural (nonmetro, not adj. to a metro)	2,400,198	72.9	7.6	3.8	3.8	19.5	0.1
Alabama	4,776,007	75.6	11.5	3.8	7.7	12.7	0.1
Appalachian Alabama	3,061,353	76.3	11.4	3.6	7.8	12.2	0.1
Non-Appalachian Alabama	1,714,654	74.5	11.7	4.1	7.6	13.7	0.1
Georgia	10,253,888	76.2	15.5	4.3	11.3	8.2	0.1
Appalachian Georgia	3,243,809	82.4	9.6	2.9	6.6	8.0	0.0
Non-Appalachian Georgia	7,010,079	73.4	18.3	4.9	13.4	8.3	0.1
Kentucky	4,330,127	75.7	13.7	5.9	7.8	10.5	0.0
Appalachian Kentucky	1,125,368	69.1	7.8	3.8	4.0	23.1	0.0
Non-Appalachian Kentucky	3,204,759	78.0	15.8	6.6	9.2	6.1	0.0
Maryland	5,897,417	80.0	18.9	2.7	16.2	1.1	0.0
Appalachian Maryland	232,586	84.5	11.6	4.3	7.4	3.8	0.0
Non-Appalachian Maryland	5,664,831	79.8	19.2	2.6	16.5	1.0	0.0
Mississippi	2,887,405	74.2	11.3	4.6	6.6	14.4	0.1
Appalachian Mississippi	606,678	73.0	9.3	4.7	4.6	17.6	0.1
Non-Appalachian Mississippi	2,280,727	74.6	11.8	4.6	7.2	13.6	0.1
New York	18,945,673	52.2	46.0	17.4	28.7	1.8	0.0
Appalachian New York	964,994	73.1	18.1	11.6	6.5	8.8	0.0
Non-Appalachian New York	17,980,679	51.0	47.5	17.7	29.8	1.4	0.0
North Carolina	10,106,940	74.0	13.6	3.7	9.9	12.4	0.0
Appalachian North Carolina	1,968,664	73.2	10.3	3.4	6.9	16.3	0.1
Non-Appalachian North Carolina	8,138,276	74.2	14.4	3.7	10.6	11.4	0.0
Ohio	11,361,029	81.0	15.9	6.2	9.7	3.1	0.0
Appalachian Ohio	1,932,317	81.5	9.4	4.1	5.3	9.0	0.1
Non-Appalachian Ohio	9,428,712	80.9	17.2	6.6	10.6	1.9	0.0
Pennsylvania	12,374,980	82.6	14.3	6.3	8.0	3.0	0.0
Appalachian Pennsylvania	5,443,160	83.0	12.4	6.0	6.4	4.6	0.0
Non-Appalachian Pennsylvania	6,931,820	82.4	15.9	6.6	9.3	1.7	0.0
South Carolina	4,956,293	71.8	11.8	3.5	8.3	16.3	0.1
Appalachian South Carolina	1,288,012	75.4	11.2	3.2	8.0	13.3	0.1
Non-Appalachian South Carolina	3,668,281	70.5	12.0	3.6	8.4	17.4	0.1
Tennessee	6,614,088	77.3	14.1	4.7	9.4	8.5	0.1
Appalachian Tennessee	2,846,567	75.9	11.4	4.5	6.9	12.6	0.1
Non-Appalachian Tennessee	3,767,521	78.4	16.2	4.9	11.3	5.4	0.1
Virginia	8,264,926	79.0	16.9	3.4	13.5	4.0	0.0
Appalachian Virginia	711,803	74.8	9.8	3.1	6.7	15.4	0.0
Non-Appalachian Virginia	7,553,123	79.4	17.6	3.4	14.2	3.0	0.0
West Virginia (entire state)	1,760,220	77.5	8.6	3.5	5.1	13.9	0.0

Data Source: U.S. Census Bureau, 2016-2020 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), 2016-2020



Map Title: Among Persons in the Appalachian Region in Occupied Housing Units, Percent Living in Single-Unit Dwellings (Attached or Detached), 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

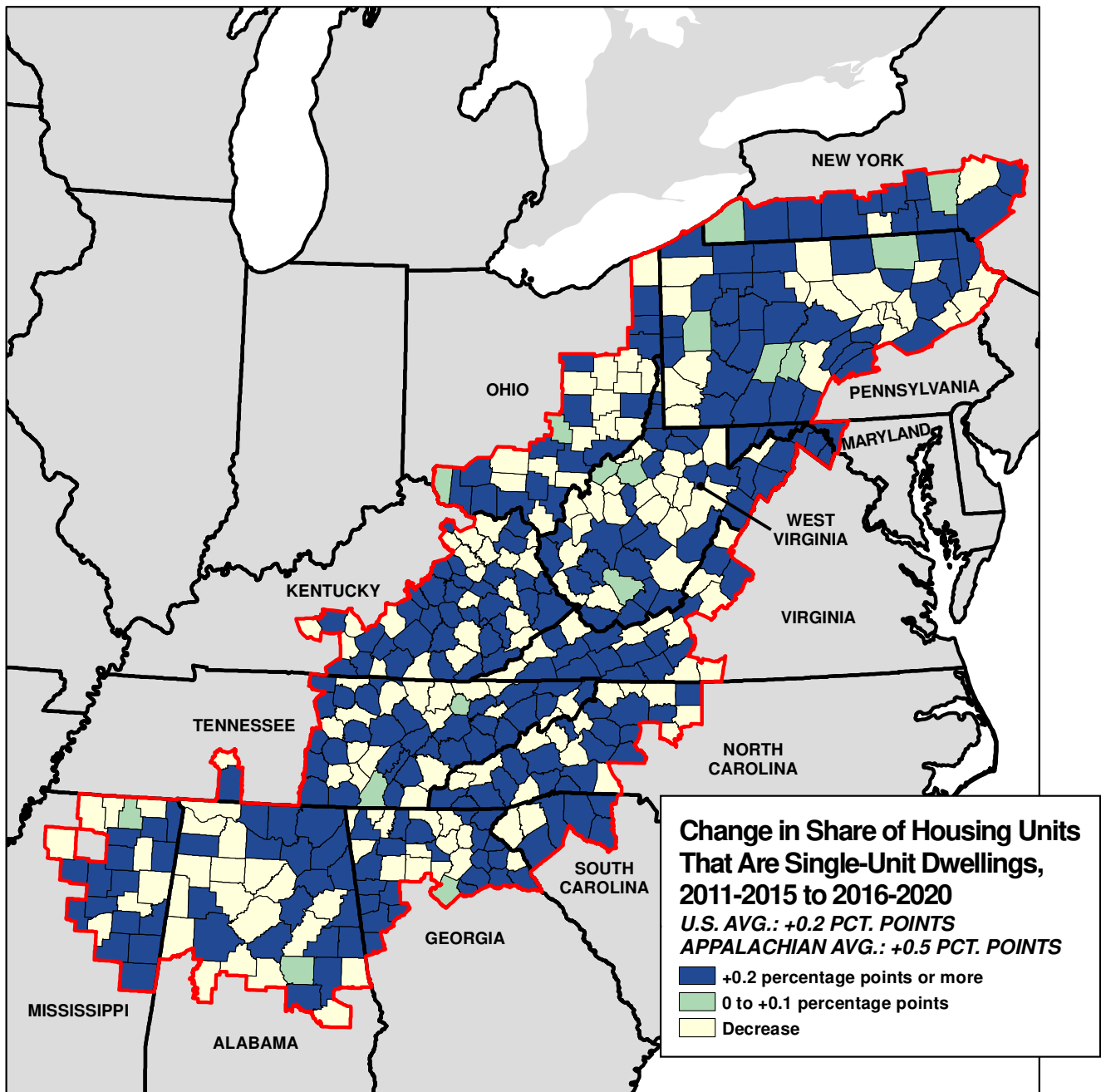
Of the Appalachian population who live in occupied housing units, 78.2 percent lived in single-unit dwellings during the 2016-2020 period, more than four percentage points above the national average. And the share was even greater in much of the Region: In 124 counties, at least four in five residents lived in single-unit homes. Almost half of these were in Northern Appalachia; 43 were in Pennsylvania alone. (There were concentrations in other states, including Ohio, Georgia, Maryland, and West Virginia.) Yet in 182 of Appalachia’s 423 counties, the share living in single-unit dwellings was below the U.S. average of 74 percent; in 45 counties (most of which were in Central Appalachia), the percentage was below 65 percent. And in 38 of the counties that had the lowest prevalence of persons in single-unit homes, at least one in four residents lived in mobile homes.

Table 4.6: Percentage Point Change in the Share of Housing Units in the Appalachian Region, by Type of Housing, 2011-2015 to 2016-2020

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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), 2011-2015 to 2016-2020



Map Title: Percentage Point Change in the Share of Housing Units in the Appalachian Region That Are Single-Unit Dwellings (Attached or Detached), 2011-2015 to 2016-2020
 Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

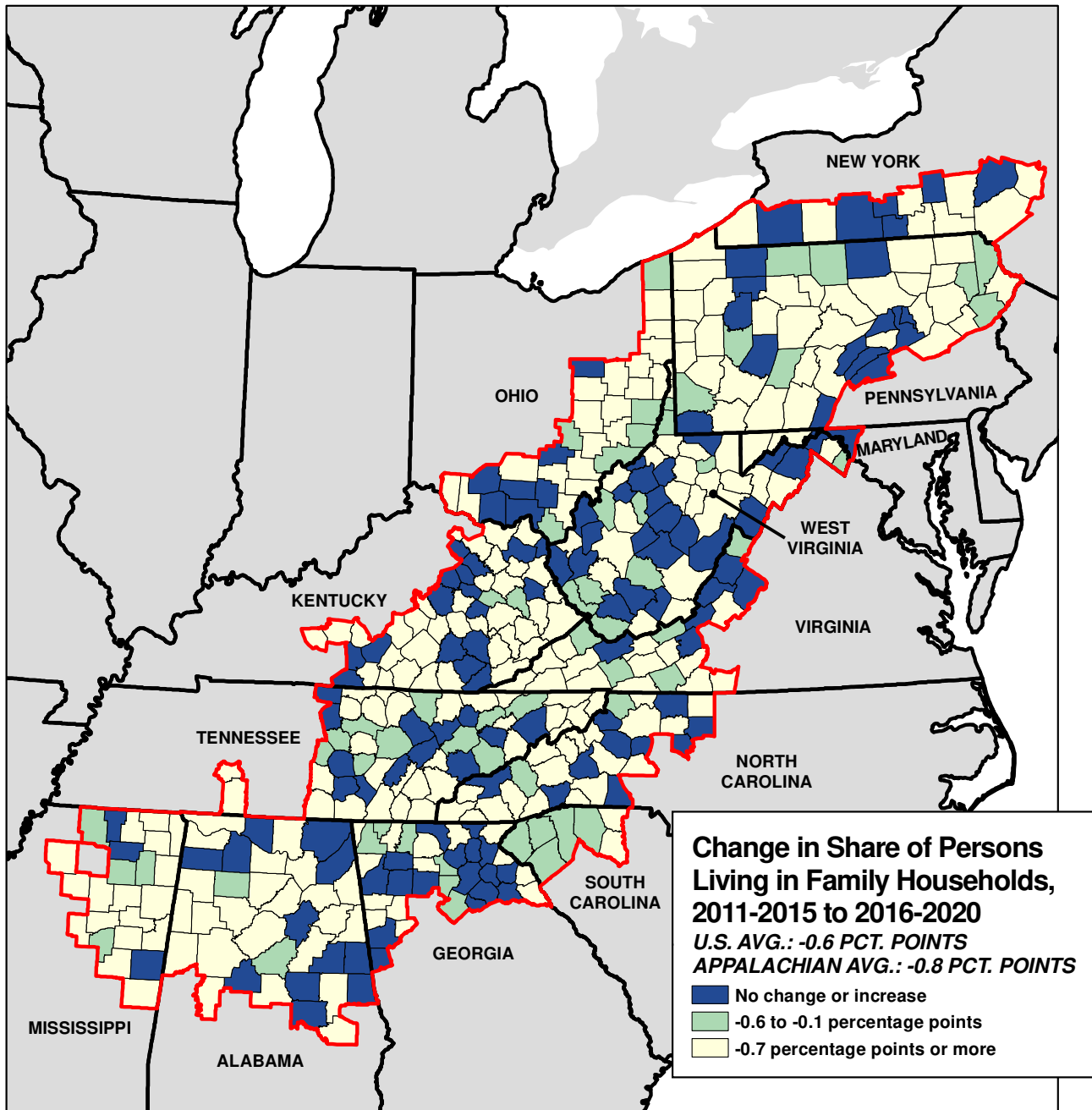
The share of single-unit dwellings among the housing stock increased 0.5 percentage points in Appalachia between the 2011-2015 and 2016-2020 periods, compared with 0.2 points nationwide. And the share likewise rose at or above the national average in 224 of the Region’s 423 counties. Yet there were 163 other Appalachian counties where the share of single-unit homes was lower in 2016-2020 than in the earlier period. The slight rise in the share of single-unit homes in Appalachia seems to have come at the expense of mobile homes, the share of which fell 0.6 percentage points in the Region between 2011-2015 and 2016-2020.

Table 4.7: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Households and Group Quarters, 2011-2015 to 2016-2020

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Figure 4.13: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Family Households, 2011-2015 to 2016-2020



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Living in Family Households, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

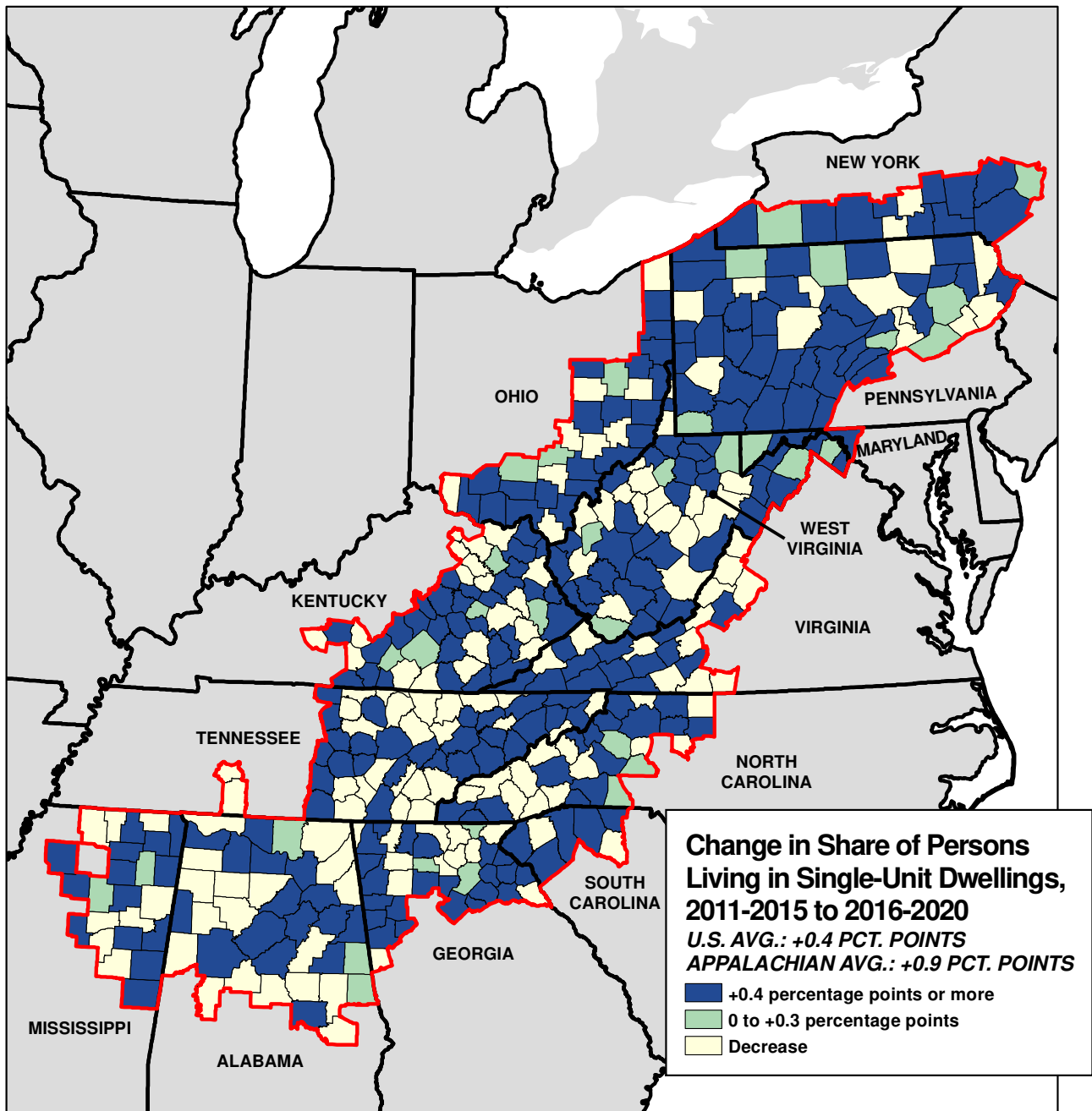
In the Appalachian Region, the share of persons living in family households fell 0.8 percentage points between 2011-2015 and 2016-2020—slightly more than in the nation as a whole (0.6 points). And there were 236 Appalachian counties—scattered throughout the Region—where the decrease in the share living in family households likewise exceeded the national average. Yet the declining prevalence of family households was not universal: there were 127 Appalachian counties where the share remained the same or increased.

Table 4.8: Percentage Point Change in the Share of the Population in Occupied Housing Units in the Appalachian Region, by Type of Housing, 2011-2015 to 2016-2020

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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), 2011-2015 to 2016-2020



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), 2011-2015 to 2016-2020
 Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

The share of Appalachian residents living in single-unit homes was nearly a full percentage point higher in 2016-2020 than in 2011-2015, well above the national average of 0.4 points. Likewise, the share increased at or above the national average in 240 of the Region’s 423 counties. Yet the share living in single-unit dwellings declined in another 149 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 0.8 points between 2011-2015 and 2016-2020.

TRENDS IN HOUSING OCCUPANCY, TENURE, AND TYPE

- At 85.2 percent in 2016-2020, Appalachia's home occupancy rate was 0.1 percentage points lower than it was in 2011-2015 (see Tables 4.1 and 4.2). Within the Region, home occupancy decreased in three of the five subregions (increasing only in Southern Appalachia), all county types except the ones in large metropolitan areas, and the Appalachian portions of every state except Georgia, the Carolinas, and Tennessee. And although the drop suggests that occupancy rates in the Region (in contrast to the nation as a whole) have not yet returned to pre-recession levels, other factors might be at play—for example, the displacement caused by severe weather events like the November 2016 outbreak of tornadoes that struck parts of Alabama and Tennessee.
- One factor behind the decline in Appalachia's occupancy rates from 2011-2015 to 2016-2020 may be an increase in some parts of the Region 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 79 of the 262 Appalachian counties where the overall vacancy rates increased.
- Homeownership rates in Appalachia rose slightly (0.4 percentage points) between 2011-2015 and 2016-2020. Among subregions, the increases were greatest in North Central, South Central, and Southern Appalachia, while among county types, the rise in homeownership was greatest among nonmetropolitan counties adjacent to large metro areas. Among the states, homeownership increased most in Appalachian Maryland (2.2 percentage points).
- Single-unit dwellings accounted for 73.5 percent of Appalachia's housing stock in 2016-2020, which represents an increase of 0.5 percentage points from 2011-2015 (see Tables 4.3 and 4.6). Within the Region, the share increased for all county types and for all subregions. The greatest increases were in North Central Appalachia, nonmetropolitan counties adjacent to large metro areas, and the most rural counties. The share also increased in the Appalachian section of most states, particularly in Kentucky, Maryland, and South Carolina. But the percentage did fall in Appalachian Mississippi, where the share dropped 0.2 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 0.6 percentage points overall since 2011-2015, with slightly larger drops in Southern and South Central Appalachia—and even more pronounced ones in the Carolinas.
- At 80.2 percent, the share of Appalachian residents living in family households was 0.8 percentage points lower in 2016-2020 than in 2011-2015 (see Tables 4.4 and 4.7), and the decline was present throughout the Region. The greatest drops—at least a full percentage point in each case—occurred in Northern Appalachia, the most rural counties, and the Appalachian sections of five states.
- The share of Appalachian residents living in single-unit homes was 78.2 percent in 2016-2020, almost a full percentage point higher than in 2011-2015 (see Tables 4.5 and 4.8). Although the share rose in every subregion and county type, there was greater divergence among the states. For example, the share rose 2.5 percentage points in South Carolina's Appalachian section, but only 0.5 points in Appalachian Pennsylvania. 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 2016-2020 was 0.8 percentage points lower than it was in 2011-2015.

CHAPTER 5: EDUCATION, DEVICE OWNERSHIP, AND INTERNET ACCESS

Table 5.1: Educational Attainment of Persons Ages 25 and Over in the Appalachian Region, 2016-2020

Education (Highest Level Attained)	Total Population Ages 25 and Over, 2016-2020	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	222,836,834	11.5	88.5	47.0	41.6	8.6	32.9
Appalachian Region	18,076,844	12.2	87.8	53.4	34.5	9.1	25.4
Subregions							
Northern Appalachia	5,706,574	8.8	91.2	54.6	36.6	10.0	26.7
North Central Appalachia	1,770,921	11.8	88.2	58.7	29.6	8.3	21.3
Central Appalachia	1,309,906	19.7	80.3	57.6	22.8	7.8	14.9
South Central Appalachia	3,646,748	12.5	87.5	52.6	34.9	9.1	25.7
Southern Appalachia	5,642,695	13.7	86.3	50.0	36.3	8.7	27.6
County Types							
Large Metros (pop. 1 million +)	4,241,631	9.0	91.0	48.3	42.7	9.3	33.4
Small Metros (pop. <1 million)	7,691,546	11.5	88.5	52.7	35.9	9.1	26.7
Nonmetro, Adjacent to Large Metros	1,596,545	13.7	86.3	57.9	28.5	9.6	18.9
Nonmetro, Adjacent to Small Metros	2,807,851	14.6	85.4	58.6	26.9	8.8	18.1
Rural (nonmetro, not adj. to a metro)	1,739,271	17.6	82.4	56.1	26.3	8.7	17.6
Alabama	3,344,006	13.1	86.9	51.9	35.0	8.7	26.2
Appalachian Alabama	2,156,390	13.0	87.0	51.5	35.5	8.6	26.9
Non-Appalachian Alabama	1,187,616	13.3	86.7	52.7	34.0	9.0	25.0
Georgia	6,996,425	12.1	87.9	47.7	40.2	8.0	32.2
Appalachian Georgia	2,174,181	13.9	86.1	48.6	37.4	8.1	29.3
Non-Appalachian Georgia	4,822,244	11.3	88.7	47.2	41.4	7.9	33.5
Kentucky	3,034,491	12.8	87.2	53.6	33.6	8.6	25.0
Appalachian Kentucky	804,568	19.8	80.2	56.5	23.7	8.0	15.7
Non-Appalachian Kentucky	2,229,923	10.3	89.7	52.5	37.2	8.8	28.4
Maryland	4,164,698	9.4	90.6	42.9	47.7	6.8	40.9
Appalachian Maryland	176,974	11.1	88.9	58.8	30.0	8.3	21.7
Non-Appalachian Maryland	3,987,724	9.4	90.6	42.2	48.5	6.7	41.7
Mississippi	1,983,112	14.7	85.3	52.3	33.0	10.2	22.8
Appalachian Mississippi	414,728	17.9	82.1	53.1	29.0	9.6	19.4
Non-Appalachian Mississippi	1,568,384	13.8	86.2	52.1	34.1	10.4	23.6
New York	13,649,157	12.8	87.2	40.9	46.3	8.9	37.5
Appalachian New York	694,119	9.3	90.7	50.7	40.0	12.7	27.3
Non-Appalachian New York	12,955,038	13.0	87.0	40.4	46.7	8.7	38.0
North Carolina	7,096,773	11.5	88.5	46.6	41.9	9.9	32.0
Appalachian North Carolina	1,440,228	12.7	87.3	50.0	37.3	10.4	26.9
Non-Appalachian North Carolina	5,656,545	11.2	88.8	45.7	43.1	9.8	33.3
Ohio	8,014,966	9.2	90.8	53.1	37.7	8.8	28.9
Appalachian Ohio	1,392,764	12.1	87.9	60.2	27.7	9.0	18.6
Non-Appalachian Ohio	6,622,202	8.6	91.4	51.6	39.8	8.7	31.0
Pennsylvania	8,989,998	9.0	91.0	50.0	41.0	8.6	32.3
Appalachian Pennsylvania	4,057,831	8.0	92.0	53.8	38.2	9.8	28.4
Non-Appalachian Pennsylvania	4,932,167	9.8	90.2	46.9	43.2	7.6	35.6
South Carolina	3,512,626	11.7	88.3	49.4	38.9	9.9	29.0
Appalachian South Carolina	897,396	12.8	87.2	48.1	39.1	10.2	28.9
Non-Appalachian South Carolina	2,615,230	11.3	88.7	49.9	38.8	9.8	29.0
Tennessee	4,649,847	11.8	88.2	52.6	35.7	7.5	28.2
Appalachian Tennessee	2,056,103	13.0	87.0	55.1	31.9	7.9	24.0
Non-Appalachian Tennessee	2,593,744	10.8	89.2	50.6	38.6	7.2	31.4
Virginia	5,831,949	9.7	90.3	42.9	47.4	7.9	39.5
Appalachian Virginia	527,693	14.8	85.2	54.4	30.8	9.7	21.1
Non-Appalachian Virginia	5,304,256	9.2	90.8	41.8	49.0	7.7	41.3
West Virginia (entire state)	1,283,869	12.4	87.6	58.7	28.9	7.6	21.3

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Table 5.2: Educational Attainment of Persons Ages 25 to 64 in the Appalachian Region, 2016-2020

Education (Highest Level Attained)	Total Population Ages 25 to 64, 2016-2020	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	170,474,017	10.5	89.5	45.9	43.6	9.3	34.3
Appalachian Region	13,313,572	10.7	89.3	52.2	37.0	10.2	26.9
Subregions							
Northern Appalachia	4,106,431	7.6	92.4	52.1	40.4	11.4	29.0
North Central Appalachia	1,288,986	9.8	90.2	58.1	32.1	9.4	22.6
Central Appalachia	961,615	16.3	83.7	58.9	24.8	9.1	15.8
South Central Appalachia	2,625,823	10.9	89.1	52.4	36.7	10.1	26.6
Southern Appalachia	4,330,717	12.6	87.4	49.1	38.3	9.5	28.7
County Types							
Large Metros (pop. 1 million +)	3,246,641	8.0	92.0	46.1	45.9	10.1	35.8
Small Metros (pop. <1 million)	5,662,597	10.2	89.8	51.5	38.2	10.1	28.1
Nonmetro, Adjacent to Large Metros	1,161,204	12.5	87.5	57.2	30.3	10.8	19.5
Nonmetro, Adjacent to Small Metros	1,992,194	12.7	87.3	58.6	28.7	10.0	18.6
Rural (nonmetro, not adj. to a metro)	1,250,936	15.2	84.8	56.7	28.2	10.0	18.2
Alabama	2,516,572	11.8	88.2	51.2	36.9	9.7	27.2
Appalachian Alabama	1,627,635	11.8	88.2	50.6	37.6	9.5	28.1
Non-Appalachian Alabama	888,937	11.8	88.2	52.4	35.8	10.0	25.8
Georgia	5,537,064	11.1	88.9	46.8	42.1	8.5	33.6
Appalachian Georgia	1,718,147	13.2	86.8	47.7	39.1	8.7	30.4
Non-Appalachian Georgia	3,818,917	10.1	89.9	46.4	43.4	8.4	35.1
Kentucky	2,304,563	11.0	89.0	52.8	36.2	9.7	26.5
Appalachian Kentucky	598,564	16.5	83.5	57.5	25.9	9.2	16.7
Non-Appalachian Kentucky	1,705,999	9.0	91.0	51.2	39.8	9.8	29.9
Maryland	3,233,823	8.4	91.6	42.0	49.6	7.2	42.4
Appalachian Maryland	130,251	9.5	90.5	58.4	32.1	9.5	22.6
Non-Appalachian Maryland	3,103,572	8.3	91.7	41.3	50.3	7.1	43.3
Mississippi	1,508,842	13.0	87.0	52.2	34.8	11.6	23.2
Appalachian Mississippi	309,396	15.7	84.3	53.2	31.1	11.1	20.0
Non-Appalachian Mississippi	1,199,446	12.3	87.7	52.0	35.8	11.7	24.1
New York	10,427,455	11.1	88.9	39.5	49.4	9.5	39.9
Appalachian New York	497,810	8.5	91.5	49.2	42.2	13.9	28.3
Non-Appalachian New York	9,929,645	11.2	88.8	39.0	49.8	9.3	40.5
North Carolina	5,408,419	10.4	89.6	45.5	44.1	10.5	33.6
Appalachian North Carolina	1,027,752	11.7	88.3	49.8	38.5	11.4	27.1
Non-Appalachian North Carolina	4,380,667	10.0	90.0	44.5	45.5	10.3	35.2
Ohio	6,024,345	8.0	92.0	51.4	40.6	9.8	30.8
Appalachian Ohio	1,013,692	10.9	89.1	58.9	30.3	10.4	19.9
Non-Appalachian Ohio	5,010,653	7.4	92.6	49.9	42.7	9.6	33.1
Pennsylvania	6,654,894	7.6	92.4	47.8	44.6	9.6	35.0
Appalachian Pennsylvania	2,921,927	6.6	93.4	50.9	42.4	11.2	31.2
Non-Appalachian Pennsylvania	3,732,967	8.4	91.6	45.3	46.4	8.4	38.0
South Carolina	2,611,930	10.7	89.3	49.1	40.2	10.6	29.6
Appalachian South Carolina	675,539	11.7	88.3	47.2	41.1	10.9	30.2
Non-Appalachian South Carolina	1,936,391	10.4	89.6	49.7	39.9	10.5	29.4
Tennessee	3,542,283	10.1	89.9	51.9	38.0	8.2	29.8
Appalachian Tennessee	1,497,275	11.0	89.0	55.0	34.0	8.8	25.2
Non-Appalachian Tennessee	2,045,008	9.4	90.6	49.6	40.9	7.7	33.2
Virginia	4,517,604	8.3	91.7	41.9	49.8	8.4	41.4
Appalachian Virginia	371,961	11.2	88.8	55.1	33.7	11.0	22.7
Non-Appalachian Virginia	4,145,643	8.1	91.9	40.7	51.3	8.2	43.1
West Virginia (entire state)	923,623	10.2	89.8	58.4	31.4	8.7	22.7

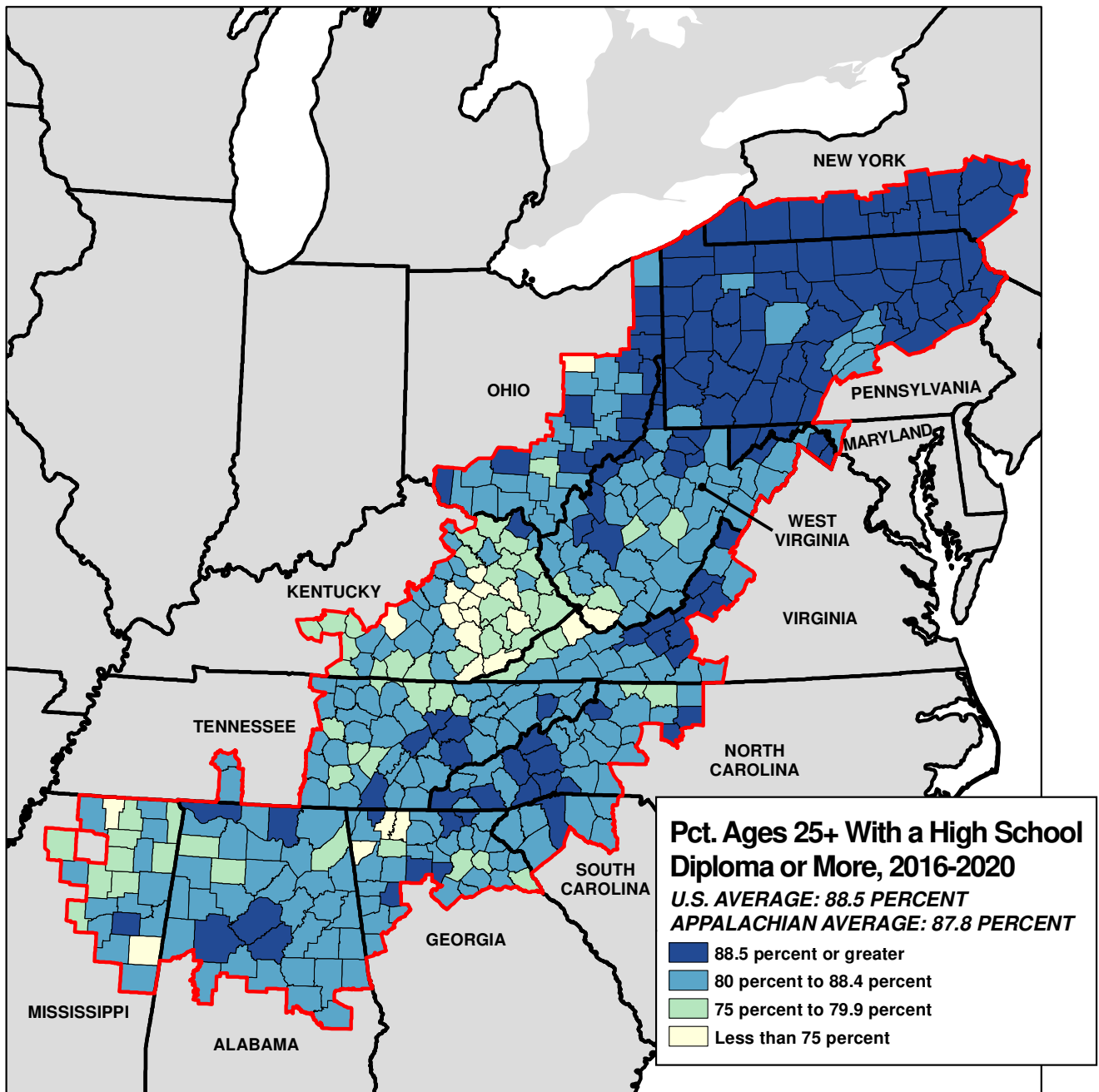
Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Table 5.3: Educational Attainment of Persons Ages 65 and Over in the Appalachian Region, 2016-2020

Education (Highest Level Attained)	Total Population Ages 65 and Over, 2016-2020	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	52,362,817	14.6	85.4	50.4	35.0	6.6	28.3
Appalachian Region	4,763,272	16.2	83.8	56.4	27.4	6.1	21.2
Subregions							
Northern Appalachia	1,600,143	12.0	88.0	60.9	27.1	6.4	20.7
North Central Appalachia	481,935	17.0	83.0	60.2	22.8	5.3	17.5
Central Appalachia	348,291	28.9	71.1	54.0	17.0	4.4	12.6
South Central Appalachia	1,020,925	16.8	83.2	53.1	30.1	6.6	23.4
Southern Appalachia	1,311,978	17.2	82.8	52.8	30.0	6.2	23.8
County Types							
Large Metros (pop. 1 million +)	994,990	12.2	87.8	55.7	32.1	6.4	25.6
Small Metros (pop. <1 million)	2,028,949	15.0	85.0	55.8	29.2	6.3	22.9
Nonmetro, Adjacent to Large Metros	435,341	16.9	83.1	59.5	23.6	6.4	17.2
Nonmetro, Adjacent to Small Metros	815,657	19.1	80.9	58.4	22.5	5.7	16.7
Rural (nonmetro, not adj. to a metro)	488,335	23.9	76.1	54.6	21.5	5.2	16.3
Alabama	827,434	17.1	82.9	54.0	28.9	5.8	23.1
Appalachian Alabama	528,755	16.8	83.2	54.1	29.1	5.7	23.4
Non-Appalachian Alabama	298,679	17.6	82.4	53.7	28.7	6.0	22.7
Georgia	1,459,361	16.0	84.0	51.0	33.0	6.2	26.8
Appalachian Georgia	456,034	16.6	83.4	52.2	31.3	6.0	25.2
Non-Appalachian Georgia	1,003,327	15.8	84.2	50.4	33.8	6.3	27.5
Kentucky	729,928	18.7	81.3	55.9	25.4	5.1	20.4
Appalachian Kentucky	206,004	29.5	70.5	53.4	17.1	4.4	12.6
Non-Appalachian Kentucky	523,924	14.4	85.6	56.8	28.7	5.4	23.4
Maryland	930,875	13.1	86.9	45.9	41.0	5.4	35.6
Appalachian Maryland	46,723	15.7	84.3	60.1	24.2	5.2	19.0
Non-Appalachian Maryland	884,152	13.0	87.0	45.1	41.9	5.4	36.5
Mississippi	474,270	20.1	79.9	52.7	27.2	6.0	21.2
Appalachian Mississippi	105,332	24.2	75.8	53.0	22.8	5.2	17.6
Non-Appalachian Mississippi	368,938	18.9	81.1	52.6	28.5	6.3	22.3
New York	3,221,702	18.2	81.8	45.5	36.3	6.7	29.6
Appalachian New York	196,309	11.1	88.9	54.6	34.3	9.4	24.9
Non-Appalachian New York	3,025,393	18.6	81.4	44.9	36.4	6.5	29.9
North Carolina	1,688,354	15.1	84.9	50.1	34.8	7.9	26.9
Appalachian North Carolina	412,476	15.1	84.9	50.6	34.3	7.9	26.4
Non-Appalachian North Carolina	1,275,878	15.1	84.9	50.0	35.0	7.9	27.1
Ohio	1,990,621	12.9	87.1	58.4	28.7	5.7	23.0
Appalachian Ohio	379,072	15.5	84.5	63.8	20.7	5.3	15.4
Non-Appalachian Ohio	1,611,549	12.3	87.7	57.1	30.6	5.8	24.7
Pennsylvania	2,335,104	13.0	87.0	56.5	30.4	5.8	24.7
Appalachian Pennsylvania	1,135,904	11.5	88.5	61.1	27.3	6.2	21.1
Non-Appalachian Pennsylvania	1,199,200	14.5	85.5	52.2	33.4	5.4	28.0
South Carolina	900,696	14.5	85.5	50.5	35.1	7.8	27.3
Appalachian South Carolina	221,857	16.1	83.9	50.9	33.0	8.1	24.9
Non-Appalachian South Carolina	678,839	13.9	86.1	50.3	35.8	7.7	28.0
Tennessee	1,107,564	17.2	82.8	54.7	28.2	5.3	22.8
Appalachian Tennessee	558,828	18.4	81.6	55.3	26.3	5.4	20.9
Non-Appalachian Tennessee	548,736	15.9	84.1	54.1	30.0	5.3	24.8
Virginia	1,314,345	14.3	85.7	46.6	39.1	6.0	33.1
Appalachian Virginia	155,732	23.3	76.7	52.7	24.0	6.6	17.4
Non-Appalachian Virginia	1,158,613	13.1	86.9	45.8	41.1	5.9	35.2
West Virginia (entire state)	360,246	17.9	82.1	59.6	22.5	4.9	17.6

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

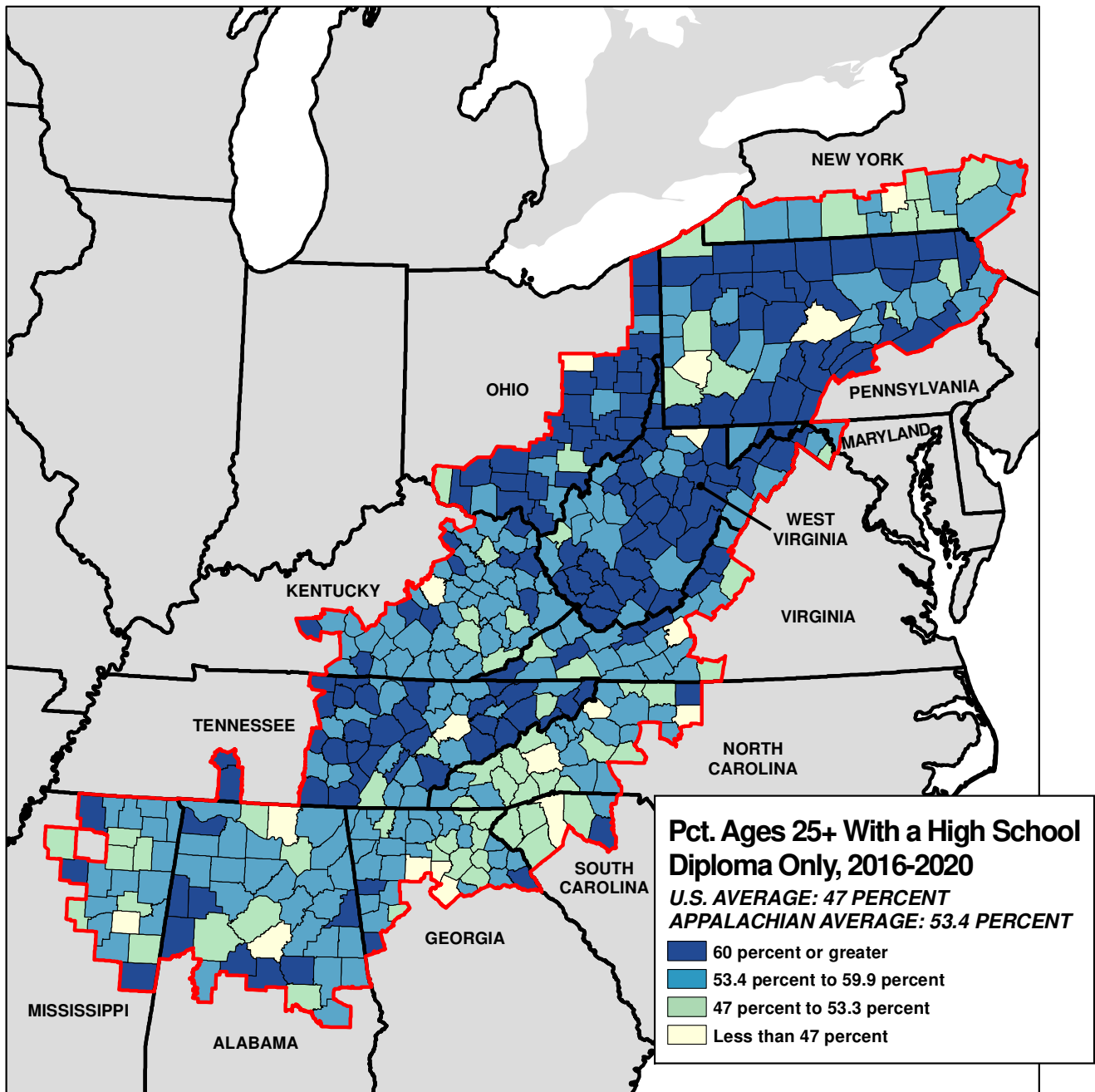
Figure 5.1: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2016-2020



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Although the share of Appalachian adults with at least a high school diploma was slightly below the national average for the 2016-2020 period, it matched or exceeded the national share in 129 counties in the Region—108 of which were either in Northern Appalachia or in metropolitan areas. The rates were especially high in the Appalachian sections of Pennsylvania and New York, where the share of adults who had completed high school was 92 percent and nearly 91 percent, respectively. Yet in 20 counties, less than three-fourths of adults had completed high school; all but three of those counties were outside metropolitan areas. Kentucky alone had 12 of these 20 counties; just 80 percent of adults in the state’s Appalachian counties had a high school diploma or more in 2016-2020.

Figure 5.2: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2016-2020

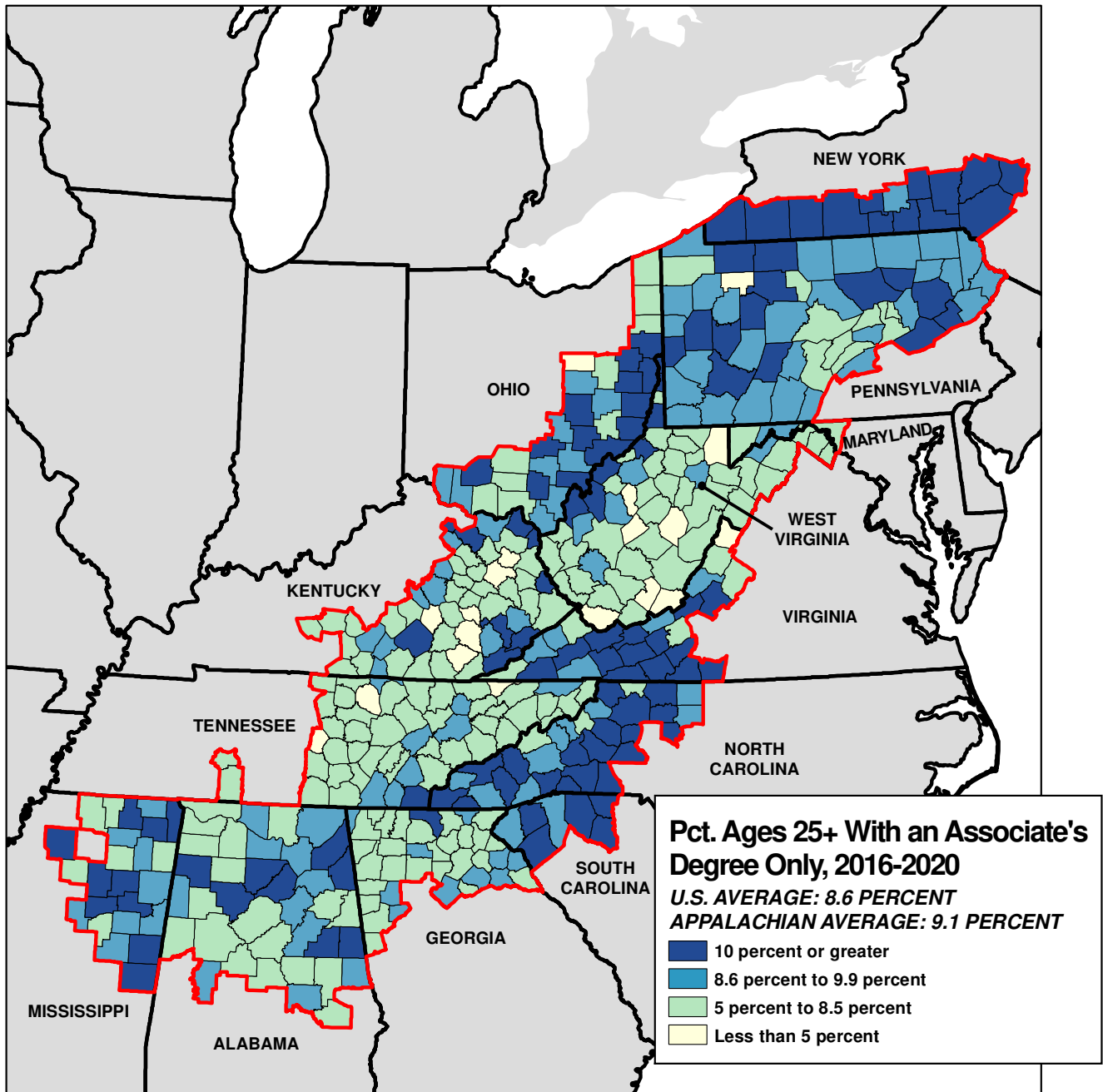


Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

During the 2016-2020 period, 53.4 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 155 of the Region’s 423 counties—122 of which were in four states: Ohio, Pennsylvania, Tennessee, and West Virginia. Many of these adults had attended college but did not graduate, while others acquired vocational training. Conversely, 34.5 percent of adults in Appalachia did earn an associate’s or bachelor’s degree, while 12.2 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, 2016-2020

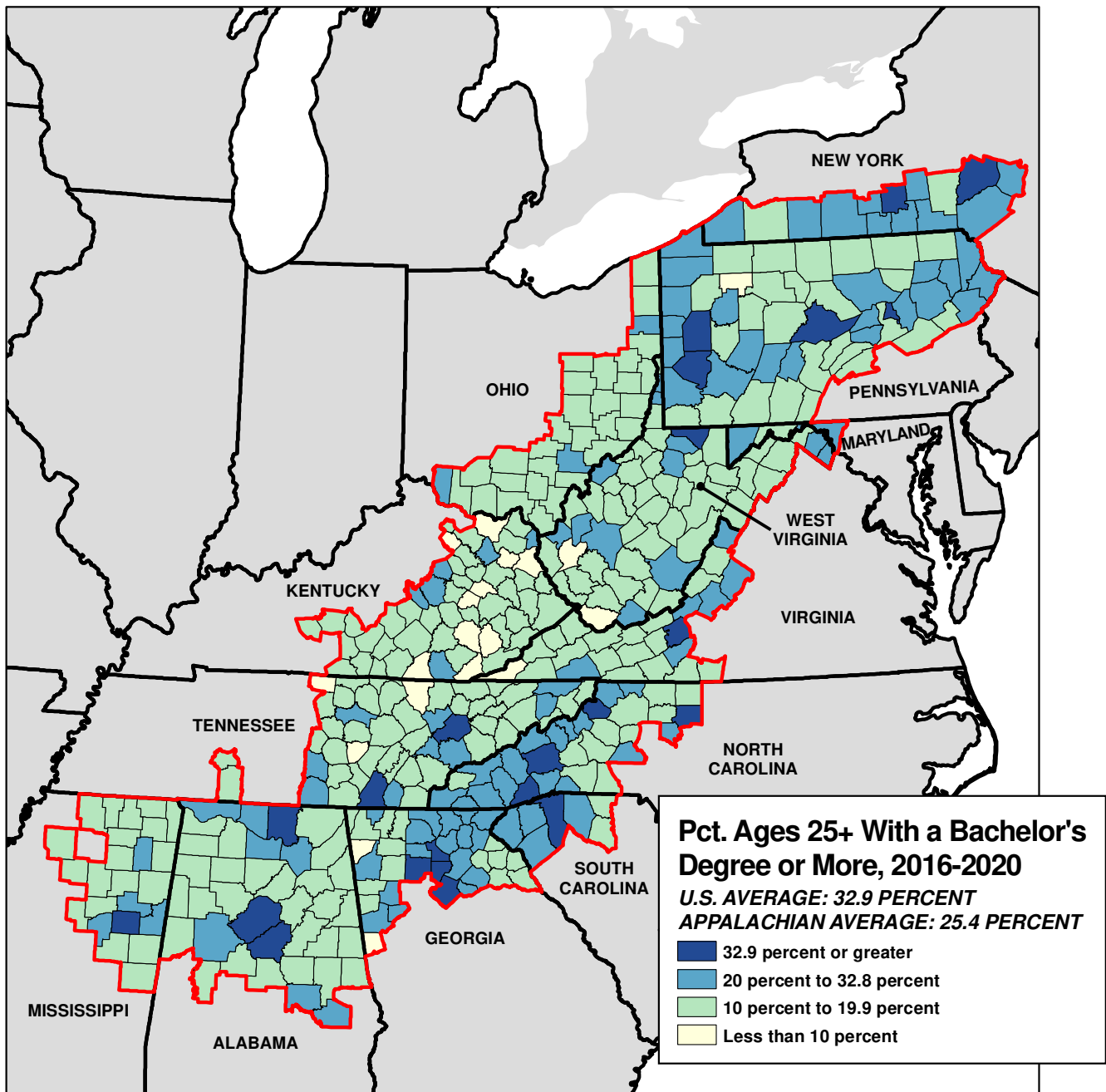


Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With an Associate’s Degree but Without a Bachelor’s Degree, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 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 9.1 percent in 2016-2020, just above the national rate (8.6 percent). And it was even higher in some parts of the Region—12.7 percent in Appalachian New York and just over 10 percent in both North and South Carolina, for example. Indeed, those three states alone accounted for 37 of the 114 counties where the share matched or exceeded 10 percent. In contrast, the share was less than 5 percent in 19 other Appalachian counties—16 of which were in West Virginia, Kentucky, or Tennessee. In the Appalachian portion of each of these states, the share of adults who had an associate’s degree as their highest level of education was no more than 8 percent.

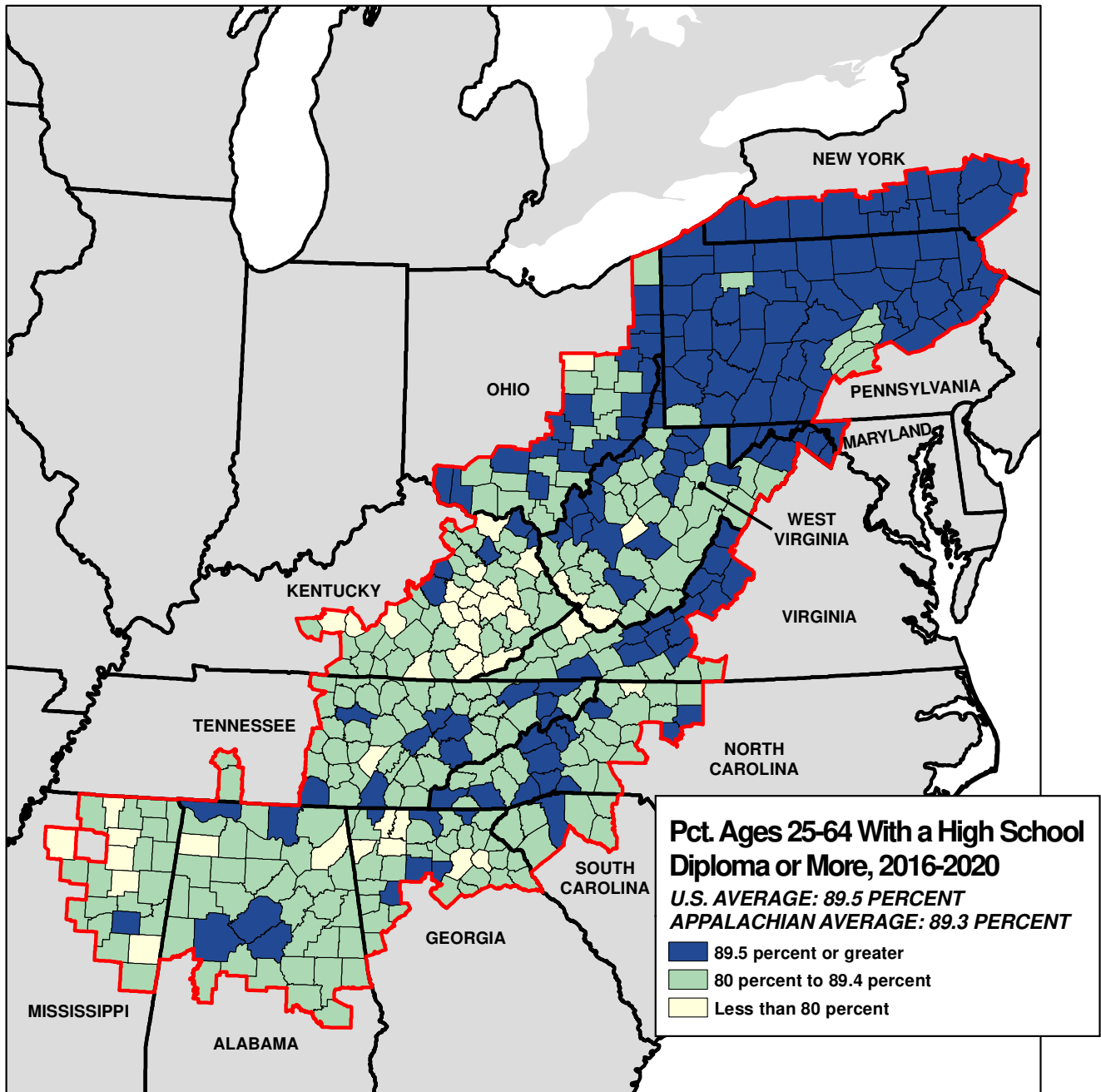
Figure 5.4: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2016-2020



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

The share of adults ages 25 and over with a bachelor's degree or more was 7.5 percentage points lower in Appalachia during the 2016-2020 period than in the nation as a whole. Indeed, the rate was lower than the national average in 400 of the Region's 423 counties. In fact, less than one in five residents ages 25 and over were graduates of a four-year college or university in 283 Appalachian counties. And in 19 counties—all but one 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 Knox County, Tennessee, where the University of Tennessee is located).

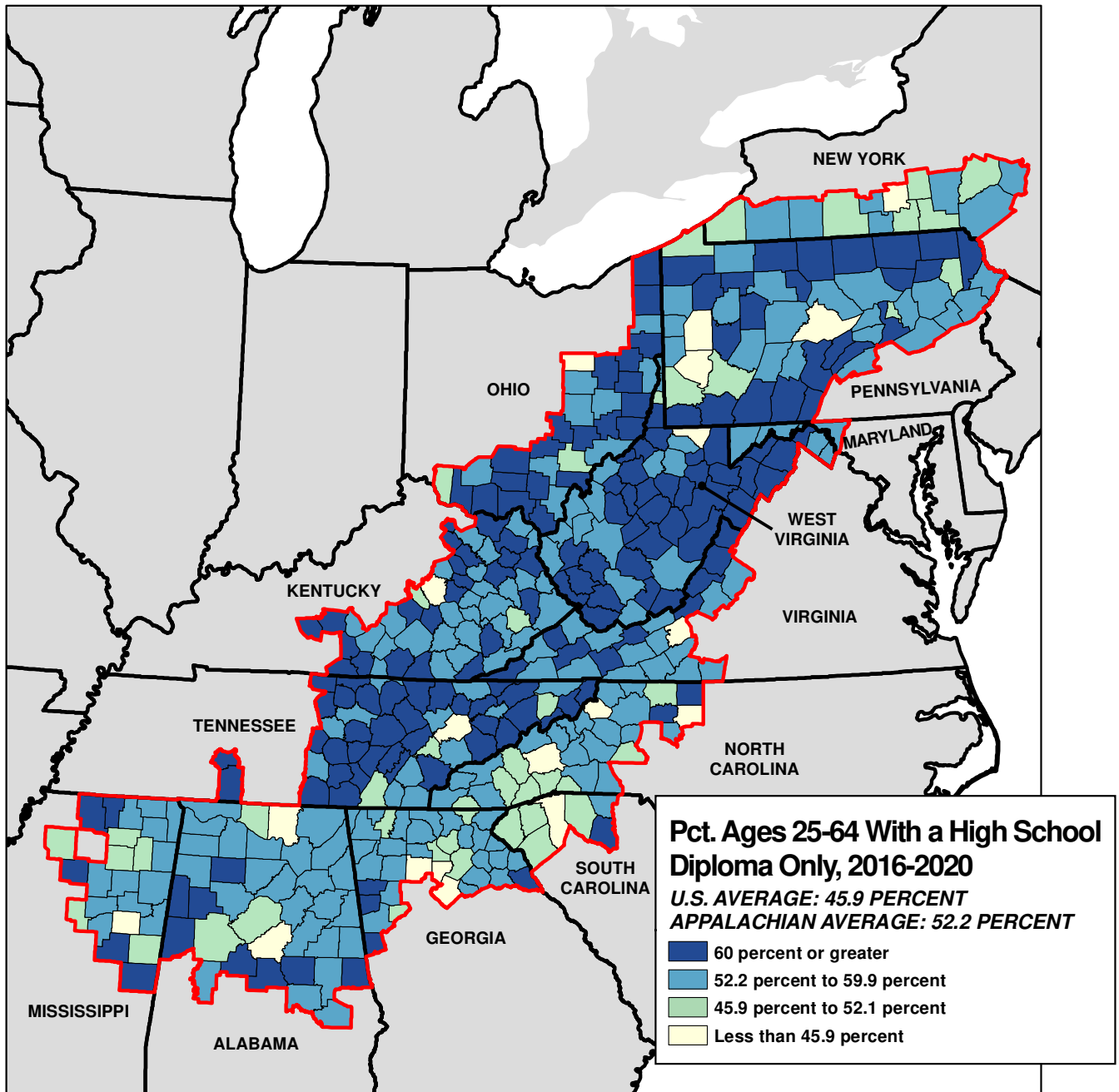
Figure 5.5: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2016-2020



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In 2016-2020, the percentage of working-age adults (ages 25 to 64) in the Appalachian Region with at least a high school diploma was almost equal to the national average of 89.5 percent, and the share matched or exceeded the national rate in 157 counties. More than half of these counties were in metropolitan areas, and 103 of them were in Northern or North Central Appalachia. More than one-third of these 157 counties were in New York or Pennsylvania; the share of working-age adults with a high school diploma or more exceeded 91 percent in both states' Appalachian sections. (The share in Appalachian Pennsylvania was 93.4 percent.) At the other end of the spectrum, less than 80 percent of working-age adults had finished high school in 40 Appalachian counties. All but five of these counties were outside metropolitan areas, and 19 of them were in Kentucky alone.

Figure 5.6: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2016-2020

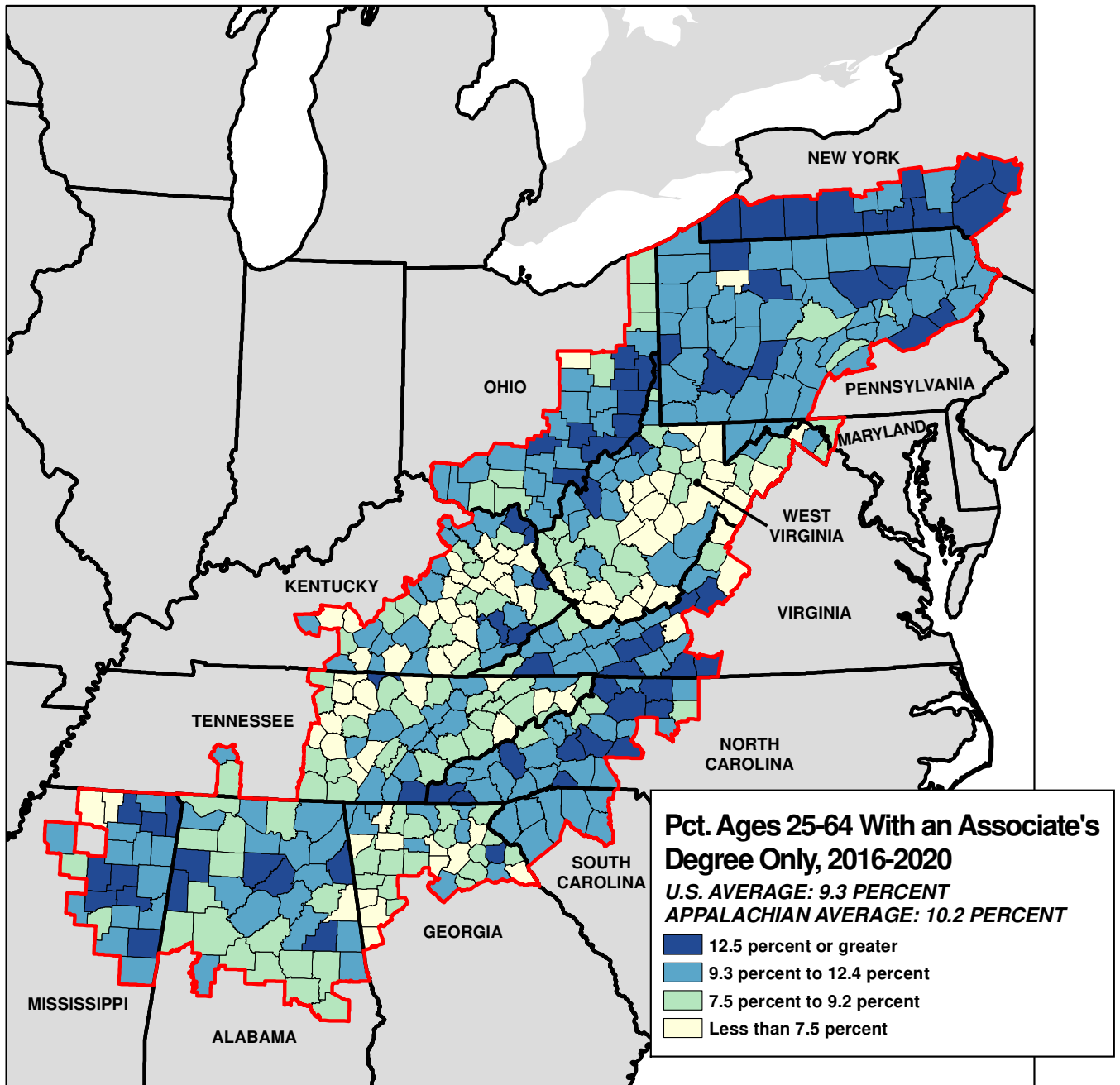


Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In 2016-2020, 52 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 46 percent nationally. And the share was at least 60 percent in 167 of Appalachia's 423 counties. One-third of these counties were in Ohio and West Virginia; the share with just a high school diploma was more than 58 percent in the Appalachian portion of both states. In contrast, there were 19 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, 2016-2020

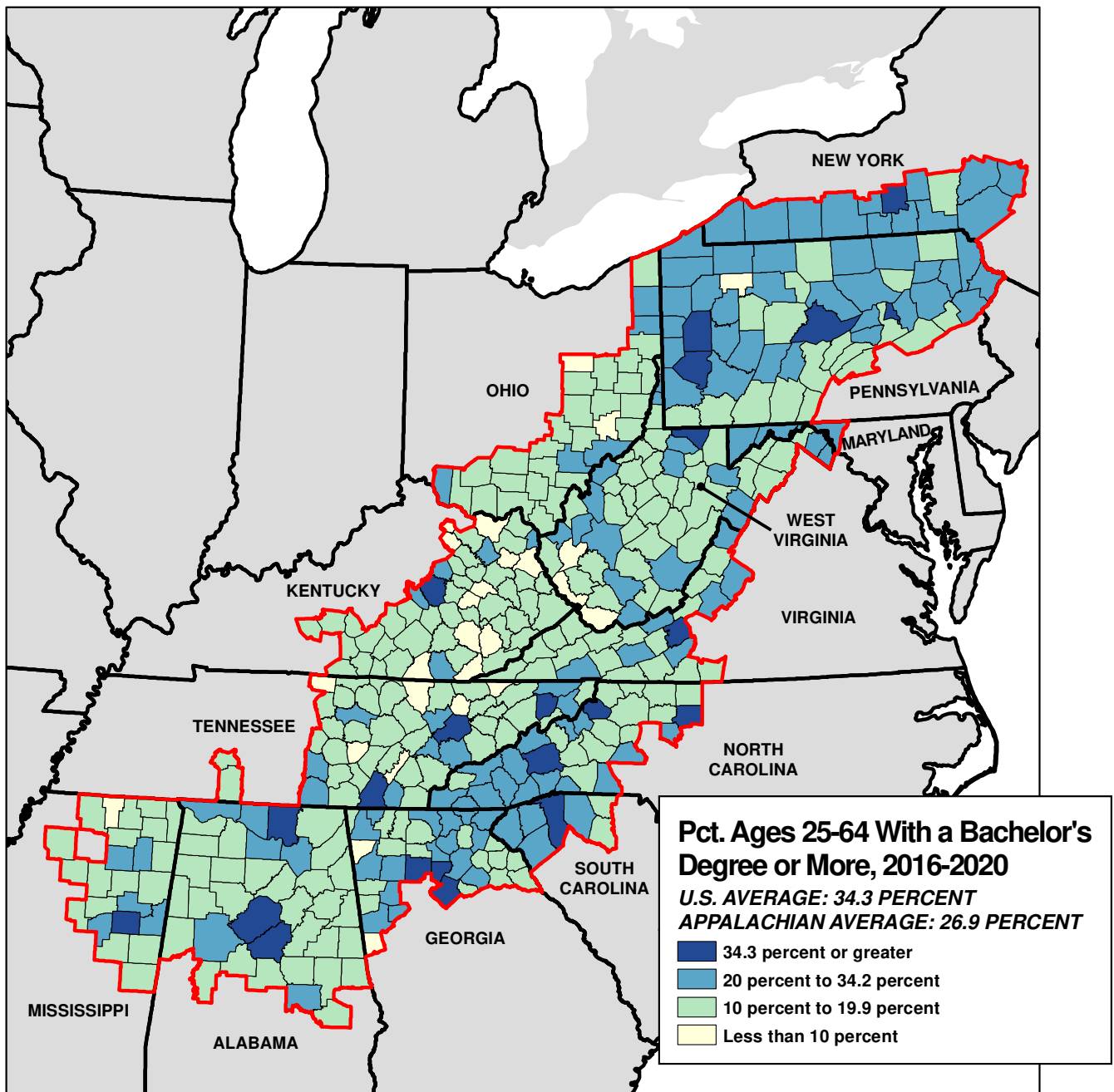


Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With an Associate’s Degree but Without a Bachelor’s Degree, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In 2016-2020, 10.2 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 9.3 percent nationally. And the share was even higher in much of the Region: In 74 Appalachian counties, at least one in eight working-age adults had an associate’s degree as their highest level of education. The share with an associate’s degree only was 11 percent or more in the Appalachian sections of Mississippi, New York, North Carolina, Pennsylvania, and Virginia. In contrast, there were 74 other counties where less than 7.5 percent of 25-to-64-year-olds had attained an associate’s degree only. All but eight of the counties in the latter group were in four states—Georgia, Kentucky, Tennessee, and West Virginia.

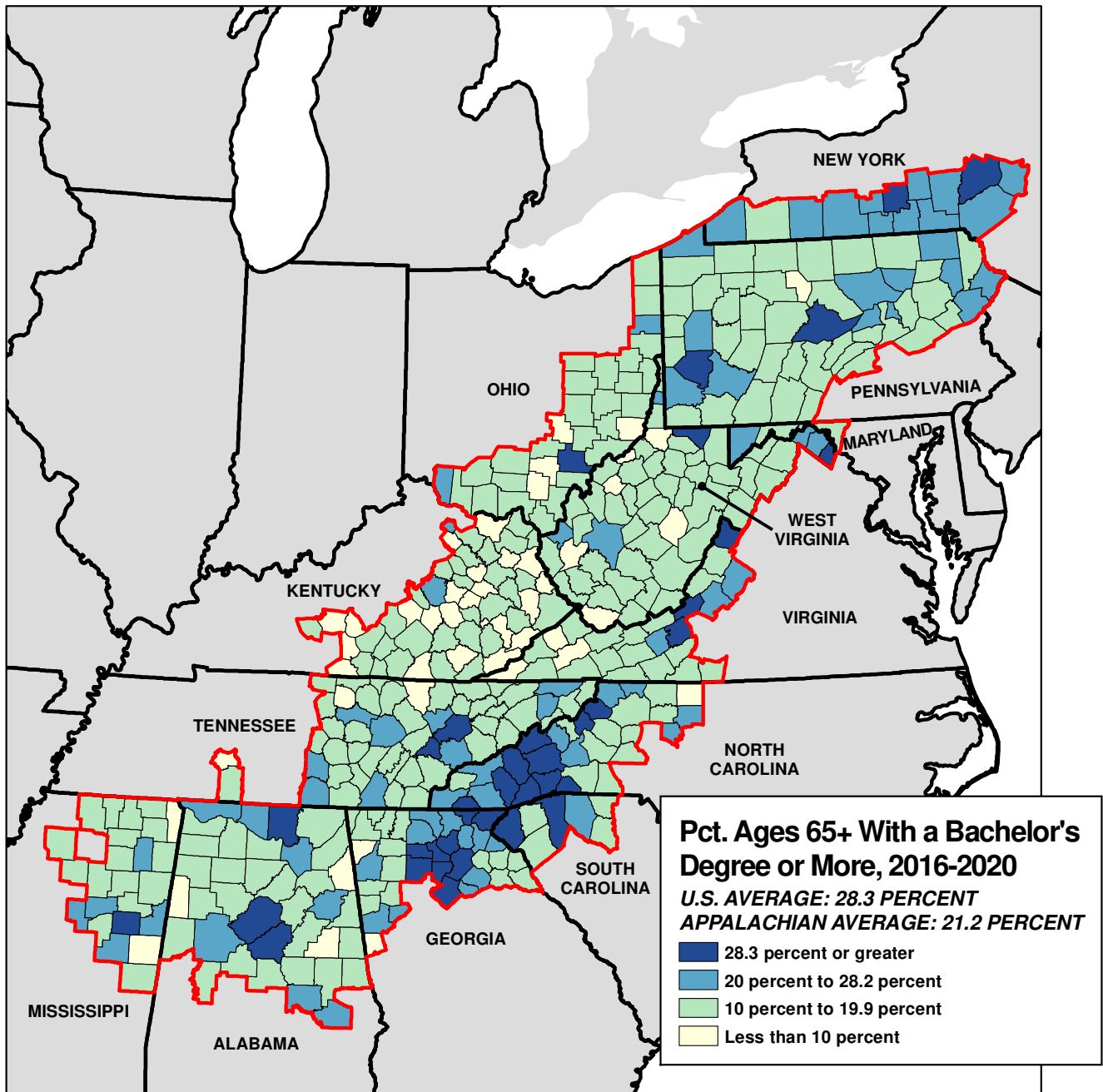
Figure 5.8: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2016-2020



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Almost 27 percent of Appalachia's working-age population had a bachelor's degree or more in 2016-2020—more than seven percentage points lower than the U.S. average of 34.3 percent. This is a striking indicator of the lower educational level of the Appalachian workforce. Indeed, just 15.8 percent of working-age adults in Central Appalachia had a bachelor's degree, as did 18.2 percent of residents in the Region's most rural counties, although the share exceeded the national average among counties in large metro areas. There were only 22 Appalachian counties—all either in metro areas (e.g., suburban Atlanta) and/or housing a four-year college or university (e.g., Madison County, Kentucky, home to Eastern Kentucky University)—where the share of working-age adults ages 25 to 64 with at least a bachelor's degree matched or exceeded the national average. In contrast, less than one in 10 adults had a four-year degree in 26 counties. Of the counties in this latter group, 21 were outside metropolitan areas and 13 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, 2016-2020



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region With a Bachelor's Degree or More, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

While 28.3 percent of older Americans (ages 65 and over) had at least a bachelor's degree in 2016-2020, less than 10 percent had one in 47 of Appalachia's 423 counties. (And in one-third of these counties, less than two-thirds of older adults had completed high school.) Of these 47 counties, 42 were outside metropolitan areas, and more than three-fifths were in Central Appalachia—Kentucky alone had 22 of these counties. Yet in 37 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 Athens County, Ohio, home to Ohio University), or counties with significant retirement or seasonal activity (the latter suggested by the fact that much of their vacant housing is for seasonal or occasional use—such as Avery, Transylvania, and other western North Carolina counties that lie along the Blue Ridge Parkway).

Table 5.4: Percentage Point Change in Educational Attainment of Persons Ages 25 and Over in the Appalachian Region, 2011-2015 to 2016-2020

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Table 5.5: Percentage Point Change in Educational Attainment of Persons Ages 25 to 64 in the Appalachian Region, 2011-2015 to 2016-2020

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

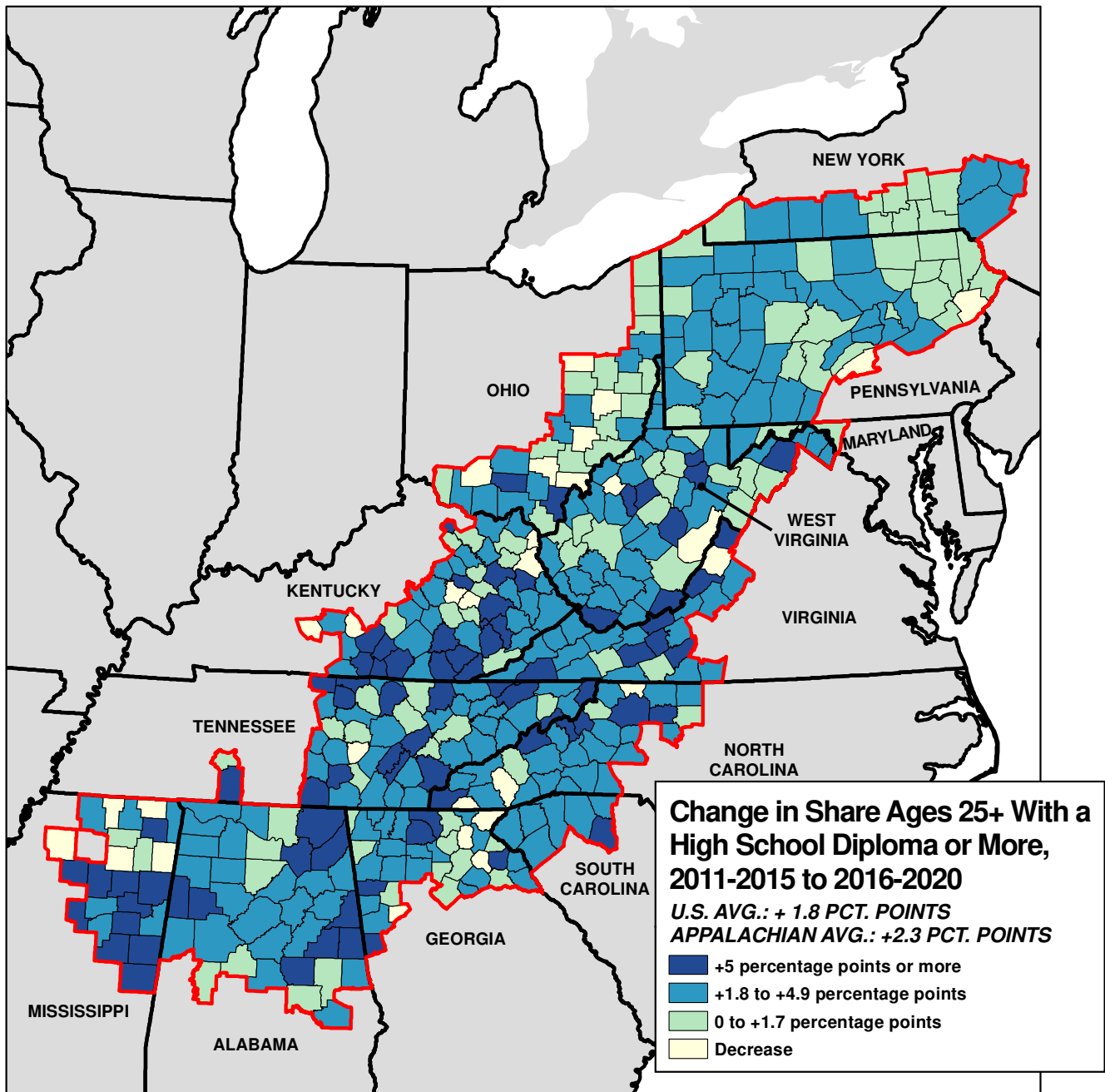
Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Table 5.6: Percentage Point Change in Educational Attainment of Persons Ages 65 and Over in the Appalachian Region, 2011-2015 to 2016-2020

Education (Highest Level Attained)	Percentage Point Change in Share of Population Ages 65 and Over					
	Less than High School Diploma	High School Diploma or More				
		Total	H.S. Grad, No Postsecondary Degree	Associate's Degree or More		
				Total	Associate's Degree	Bachelor's Degree or More
United States	- 4.4	+ 4.4	- 1.3	+ 5.8	+ 1.5	+ 4.2
Appalachian Region	- 6.4	+ 6.4	+ 0.5	+ 5.9	+ 1.8	+ 4.0
Subregions						
Northern Appalachia	- 5.3	+ 5.3	- 1.1	+ 6.3	+ 2.1	+ 4.2
North Central Appalachia	- 6.4	+ 6.4	+ 1.1	+ 5.3	+ 1.8	+ 3.5
Central Appalachia	- 10.7	+ 10.7	+ 6.9	+ 3.7	+ 1.8	+ 1.9
South Central Appalachia	- 7.1	+ 7.1	+ 1.3	+ 5.8	+ 1.8	+ 3.9
Southern Appalachia	- 6.3	+ 6.3	+ 0.4	+ 6.0	+ 1.5	+ 4.4
County Types						
Large Metros (pop. 1 million +)	- 5.2	+ 5.2	- 2.0	+ 7.2	+ 1.8	+ 5.3
Small Metros (pop. <1 million)	- 6.0	+ 6.0	+ 0.1	+ 5.9	+ 1.8	+ 4.1
Nonmetro, Adjacent to Large Metros	- 7.2	+ 7.2	+ 1.5	+ 5.6	+ 2.2	+ 3.4
Nonmetro, Adjacent to Small Metros	- 7.2	+ 7.2	+ 2.3	+ 4.9	+ 1.8	+ 3.0
Rural (nonmetro, not adj. to a metro)	- 8.1	+ 8.1	+ 3.8	+ 4.3	+ 1.5	+ 2.7
Alabama	- 5.9	+ 5.9	+ 0.6	+ 5.3	+ 1.4	+ 3.9
Appalachian Alabama	- 6.0	+ 6.0	+ 0.4	+ 5.7	+ 1.3	+ 4.3
Non-Appalachian Alabama	- 5.8	+ 5.8	+ 0.9	+ 4.9	+ 1.7	+ 3.2
Georgia	- 6.0	+ 6.0	- 0.1	+ 6.0	+ 1.8	+ 4.2
Appalachian Georgia	- 5.8	+ 5.8	- 0.6	+ 6.5	+ 1.3	+ 5.1
Non-Appalachian Georgia	- 6.0	+ 6.0	+ 0.1	+ 5.9	+ 2.0	+ 3.9
Kentucky	- 8.8	+ 8.8	+ 3.5	+ 5.3	+ 1.6	+ 3.8
Appalachian Kentucky	- 10.3	+ 10.3	+ 6.9	+ 3.4	+ 1.8	+ 1.6
Non-Appalachian Kentucky	- 8.0	+ 8.0	+ 2.0	+ 5.9	+ 1.5	+ 4.5
Maryland	- 3.9	+ 3.9	- 1.8	+ 5.7	+ 1.0	+ 4.7
Appalachian Maryland	- 4.0	+ 4.0	- 1.4	+ 5.4	+ 1.1	+ 4.4
Non-Appalachian Maryland	- 3.9	+ 3.9	- 1.8	+ 5.7	+ 1.0	+ 4.7
Mississippi	- 6.3	+ 6.3	+ 1.6	+ 4.7	+ 1.7	+ 3.1
Appalachian Mississippi	- 6.1	+ 6.1	+ 2.6	+ 3.5	+ 1.3	+ 2.1
Non-Appalachian Mississippi	- 6.4	+ 6.4	+ 1.3	+ 5.1	+ 1.8	+ 3.4
New York	- 3.9	+ 3.9	- 1.9	+ 5.8	+ 1.5	+ 4.3
Appalachian New York	- 5.1	+ 5.1	- 1.2	+ 6.3	+ 2.3	+ 4.0
Non-Appalachian New York	- 3.9	+ 3.9	- 1.9	+ 5.7	+ 1.4	+ 4.3
North Carolina	- 6.0	+ 6.0	- 0.6	+ 6.6	+ 2.2	+ 4.4
Appalachian North Carolina	- 6.9	+ 6.9	+ 0.1	+ 6.8	+ 2.4	+ 4.4
Non-Appalachian North Carolina	- 5.7	+ 5.7	- 0.8	+ 6.6	+ 2.1	+ 4.5
Ohio	- 4.9	+ 4.9	- 0.6	+ 5.5	+ 1.5	+ 4.0
Appalachian Ohio	- 5.5	+ 5.5	+ 0.8	+ 4.6	+ 1.8	+ 2.8
Non-Appalachian Ohio	- 4.8	+ 4.8	- 1.0	+ 5.7	+ 1.5	+ 4.1
Pennsylvania	- 5.2	+ 5.2	- 1.5	+ 6.7	+ 1.7	+ 5.0
Appalachian Pennsylvania	- 5.5	+ 5.5	- 1.3	+ 6.7	+ 2.2	+ 4.5
Non-Appalachian Pennsylvania	- 5.0	+ 5.0	- 1.5	+ 6.6	+ 1.3	+ 5.3
South Carolina	- 7.0	+ 7.0	+ 0.9	+ 6.3	+ 1.9	+ 4.4
Appalachian South Carolina	- 8.0	+ 8.0	+ 1.5	+ 6.4	+ 2.4	+ 4.1
Non-Appalachian South Carolina	- 6.8	+ 6.8	+ 0.6	+ 6.2	+ 1.7	+ 4.4
Tennessee	- 6.9	+ 6.9	+ 1.6	+ 5.5	+ 1.6	+ 3.8
Appalachian Tennessee	- 7.4	+ 7.4	+ 2.7	+ 4.7	+ 1.4	+ 3.3
Non-Appalachian Tennessee	- 6.4	+ 6.4	+ 0.4	+ 6.0	+ 1.8	+ 4.3
Virginia	- 6.0	+ 6.0	- 0.3	+ 6.3	+ 1.2	+ 5.1
Appalachian Virginia	- 8.9	+ 8.9	+ 3.5	+ 5.4	+ 1.9	+ 3.5
Non-Appalachian Virginia	- 5.5	+ 5.5	- 0.8	+ 6.3	+ 1.1	+ 5.2
West Virginia (entire state)	- 7.1	+ 7.1	+ 1.7	+ 5.3	+ 1.6	+ 3.8

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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, 2011-2015 to 2016-2020

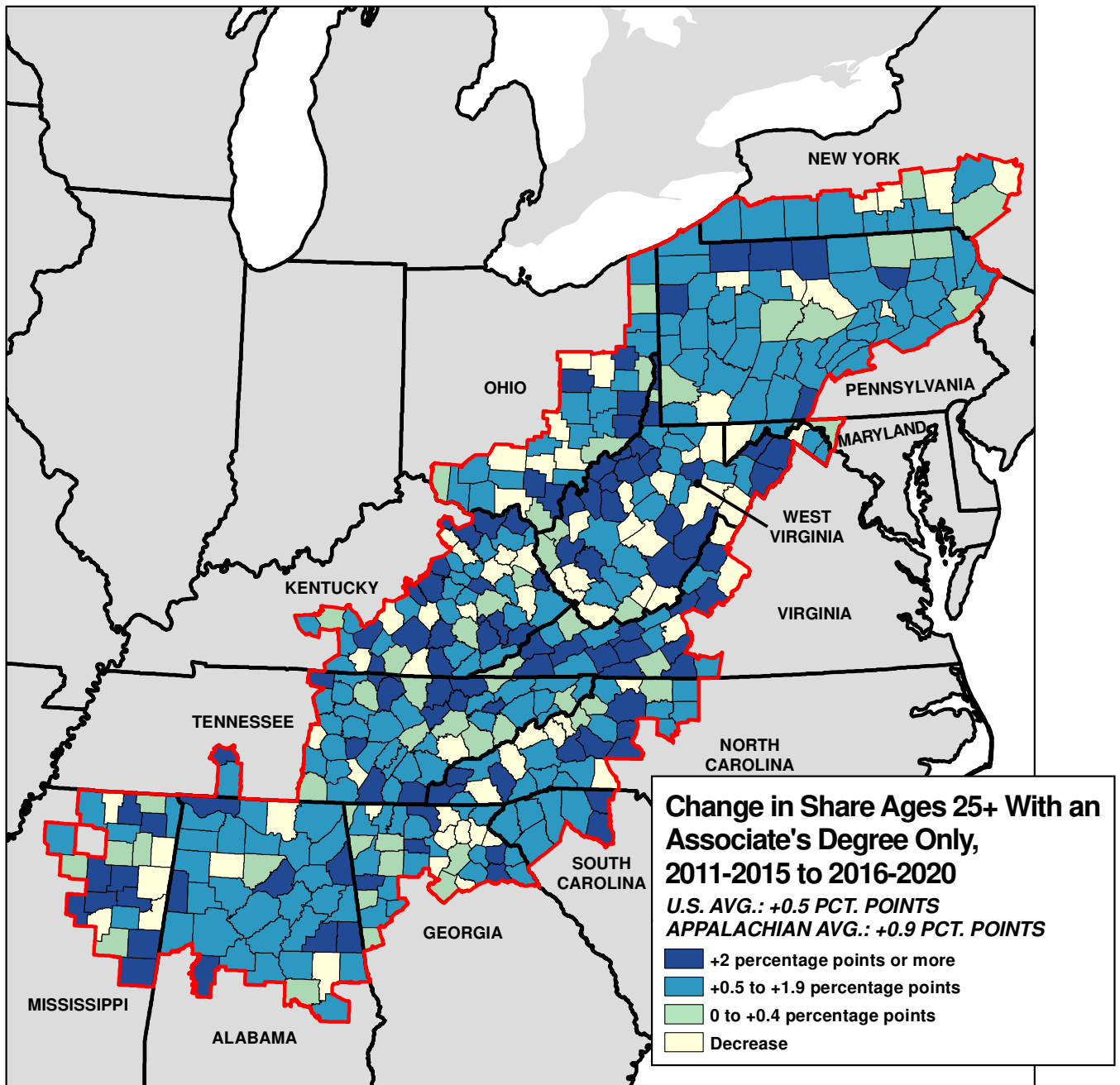


Map Title: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Since the 2011-2015 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 1.8 points, has continued a longstanding trend in the Region. And that increase has been even greater in some places: The share of adults with at least a high school diploma rose more than three percentage points in the Appalachian counties of Kentucky, North Carolina, Tennessee, and Virginia. In 81 Appalachian counties—all but nine 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 (almost three times the national average) between 2011-2015 and 2016-2020. In about one-fifth of these 81 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, 2011-2015 to 2016-2020

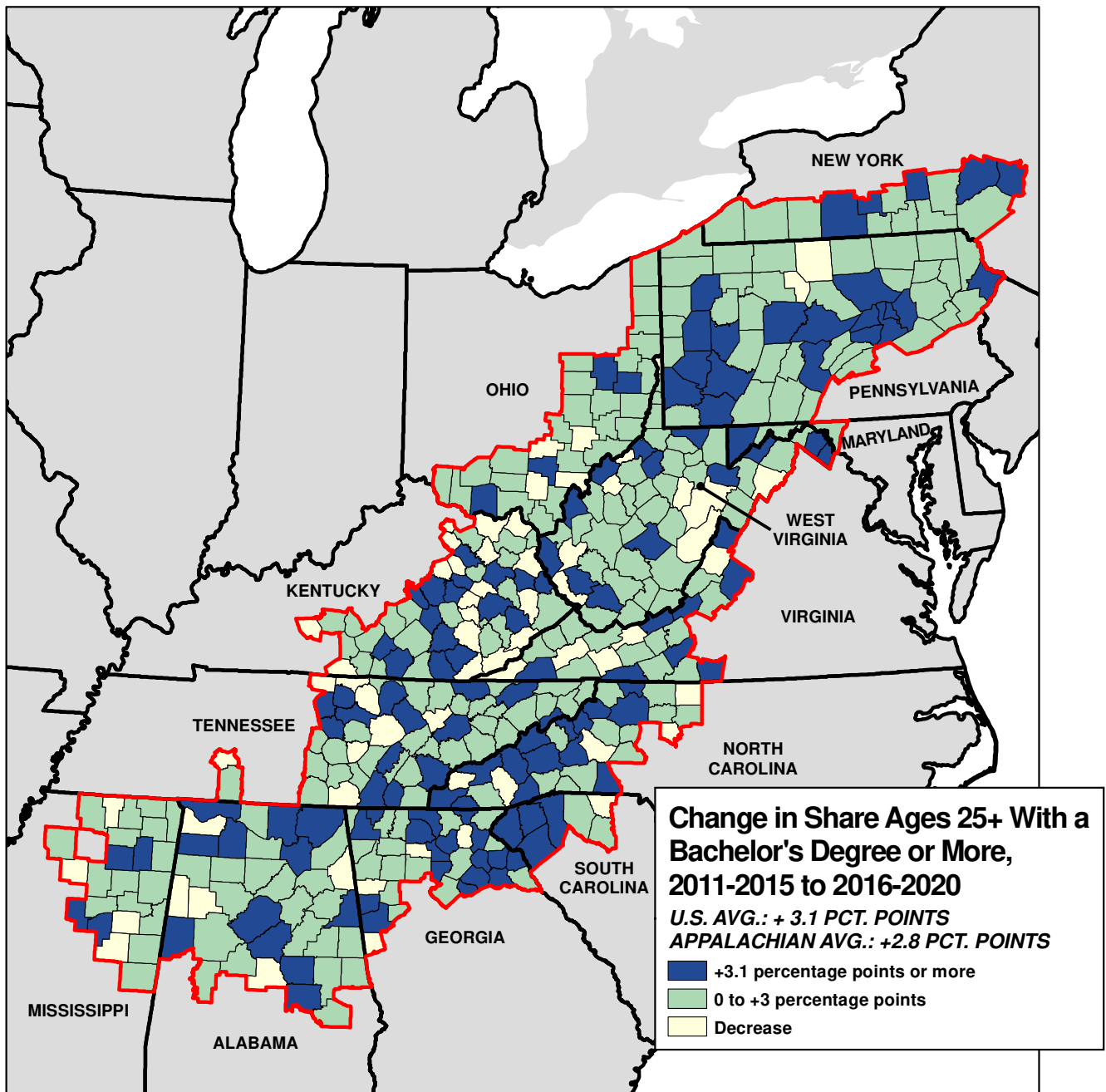


Map Title: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With an Associate's Degree but Without a Bachelor's Degree, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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 2011-2015 and 2016-2020, slightly above the national average of 0.5 points. And in 105 Appalachian counties, the share rose at least two percentage points. Yet it either stayed the same or increased less than the national average in 53 of the Region's counties, and actually decreased in 72 others. Among most of the counties in this latter group, however, the decrease in the share with only an associate's degree may be related to an increase in the share who have gone on to complete a bachelor's degree or more.

Figure 5.12: Percentage Point Change in the Share of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2011-2015 to 2016-2020



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, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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 more than two and a half percentage points higher in 2016-2020 than it was in 2011-2015, suggesting a continued trend toward greater educational attainment. And in 129 of the Region's 423 counties (scattered throughout the Region), the share increase matched or exceeded the national average of 3.1 points. Conversely, the share of adults ages 25 and over with at least a four-year degree decreased in 65 counties. All but 13 counties in the latter group were in Central, South Central, and Southern Appalachia.

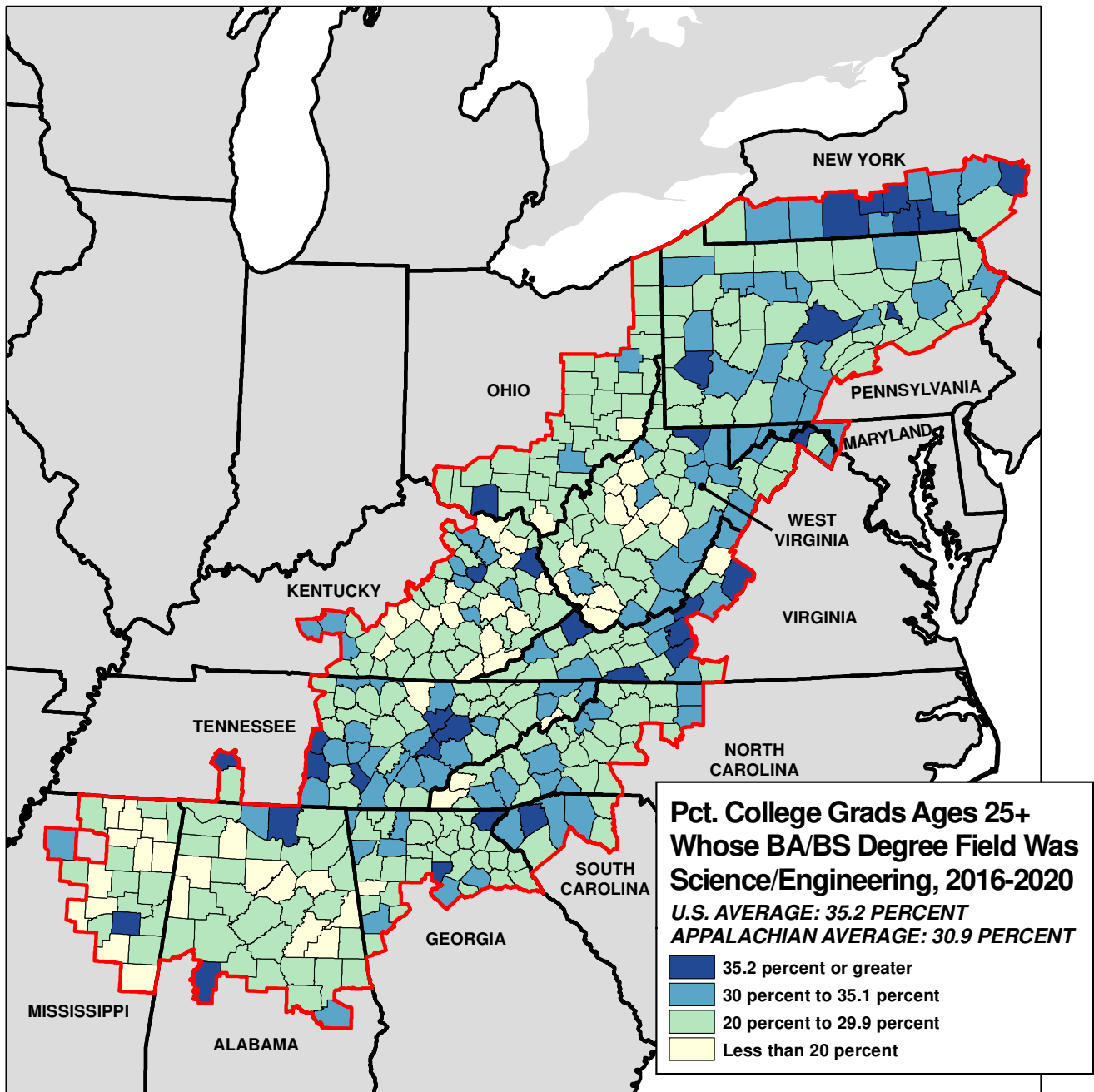
Table 5.7: Bachelor's Degree Field (First Major) for Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2016-2020

Bachelor's Degree Field (First Major)	Total Population Ages 25 and Over With a Bachelor's Degree or More, 2016-2020	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	73,356,319	35.2	9.7	20.3	11.9	22.9
Appalachian Region	4,588,557	30.9	11.4	20.0	17.0	20.7
Subregions						
Northern Appalachia	1,521,230	32.1	11.7	17.8	17.2	21.2
North Central Appalachia	376,505	28.4	13.1	18.6	20.1	19.9
Central Appalachia	195,469	26.3	13.7	16.1	25.1	18.8
South Central Appalachia	938,937	31.4	11.3	18.8	15.5	23.0
Southern Appalachia	1,556,416	30.7	10.4	23.7	15.9	19.3
County Types						
Large Metros (pop. 1 million +)	1,417,216	32.3	10.5	23.2	13.6	20.4
Small Metros (pop. <1 million)	2,055,167	31.9	11.5	19.2	16.0	21.4
Nonmetro, Adjacent to Large Metros	301,663	27.5	11.9	17.8	23.0	19.8
Nonmetro, Adjacent to Small Metros	507,915	27.8	12.5	17.0	22.5	20.3
Rural (nonmetro, not adj. to a metro)	306,596	26.1	12.7	17.4	24.1	19.7
Alabama	877,044	29.2	10.8	23.5	16.6	19.9
Appalachian Alabama	580,250	29.5	10.7	23.9	16.5	19.4
Non-Appalachian Alabama	296,794	28.6	10.9	22.7	16.9	20.9
Georgia	2,252,662	32.5	9.5	24.0	12.5	21.5
Appalachian Georgia	636,623	31.8	10.1	24.9	14.4	18.8
Non-Appalachian Georgia	1,616,039	32.8	9.3	23.6	11.8	22.5
Kentucky	759,332	29.3	11.8	19.7	16.1	23.1
Appalachian Kentucky	126,158	24.9	13.5	15.7	25.5	20.4
Non-Appalachian Kentucky	633,174	30.2	11.5	20.5	14.3	23.6
Maryland	1,703,178	41.2	8.9	18.0	9.3	22.6
Appalachian Maryland	38,328	33.5	10.6	16.3	16.5	23.1
Non-Appalachian Maryland	1,664,850	41.4	8.8	18.1	9.2	22.6
Mississippi	451,199	25.8	13.1	21.4	20.4	19.3
Appalachian Mississippi	80,381	24.0	12.4	20.6	25.6	17.3
Non-Appalachian Mississippi	370,818	26.2	13.3	21.6	19.2	19.7
New York	5,112,792	34.6	9.1	18.7	10.8	26.8
Appalachian New York	189,808	37.1	9.8	12.1	18.2	22.9
Non-Appalachian New York	4,922,984	34.5	9.1	18.9	10.5	27.0
North Carolina	2,273,890	34.3	9.6	20.2	12.6	23.3
Appalachian North Carolina	387,735	30.1	11.4	17.4	15.8	25.4
Non-Appalachian North Carolina	1,886,155	35.1	9.2	20.8	11.9	22.9
Ohio	2,315,539	30.8	11.6	21.3	15.4	20.9
Appalachian Ohio	259,569	26.0	13.5	18.9	21.8	19.8
Non-Appalachian Ohio	2,055,970	31.5	11.3	21.6	14.6	21.0
Pennsylvania	2,906,517	33.6	10.7	19.6	14.3	21.9
Appalachian Pennsylvania	1,151,922	32.1	11.8	18.6	16.4	21.1
Non-Appalachian Pennsylvania	1,754,595	34.5	10.0	20.2	12.9	22.5
South Carolina	1,018,306	31.8	9.8	22.4	15.1	20.9
Appalachian South Carolina	259,162	32.5	10.1	20.9	15.4	21.1
Non-Appalachian South Carolina	759,144	31.5	9.7	22.9	15.0	20.8
Tennessee	1,308,972	30.2	10.8	22.3	13.8	23.0
Appalachian Tennessee	493,683	31.5	11.6	20.4	15.8	20.6
Non-Appalachian Tennessee	815,289	29.4	10.3	23.4	12.6	24.4
Virginia	2,304,490	40.4	7.9	18.7	9.2	23.8
Appalachian Virginia	111,513	35.4	11.0	15.5	15.8	22.3
Non-Appalachian Virginia	2,192,977	40.6	7.8	18.9	8.9	23.9
West Virginia (entire state)	273,425	28.5	13.5	18.4	20.2	19.3

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

Data Source: U.S. Census Bureau, 2016-2020 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, 2016-2020



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, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Among the 4.6 million adults in the Appalachian Region with a bachelor’s degree or more, 30.9 percent held a degree in the science and engineering field—slightly lower than the national share of 35.2 percent. But there was much variation within the Region. In 33 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 55 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.

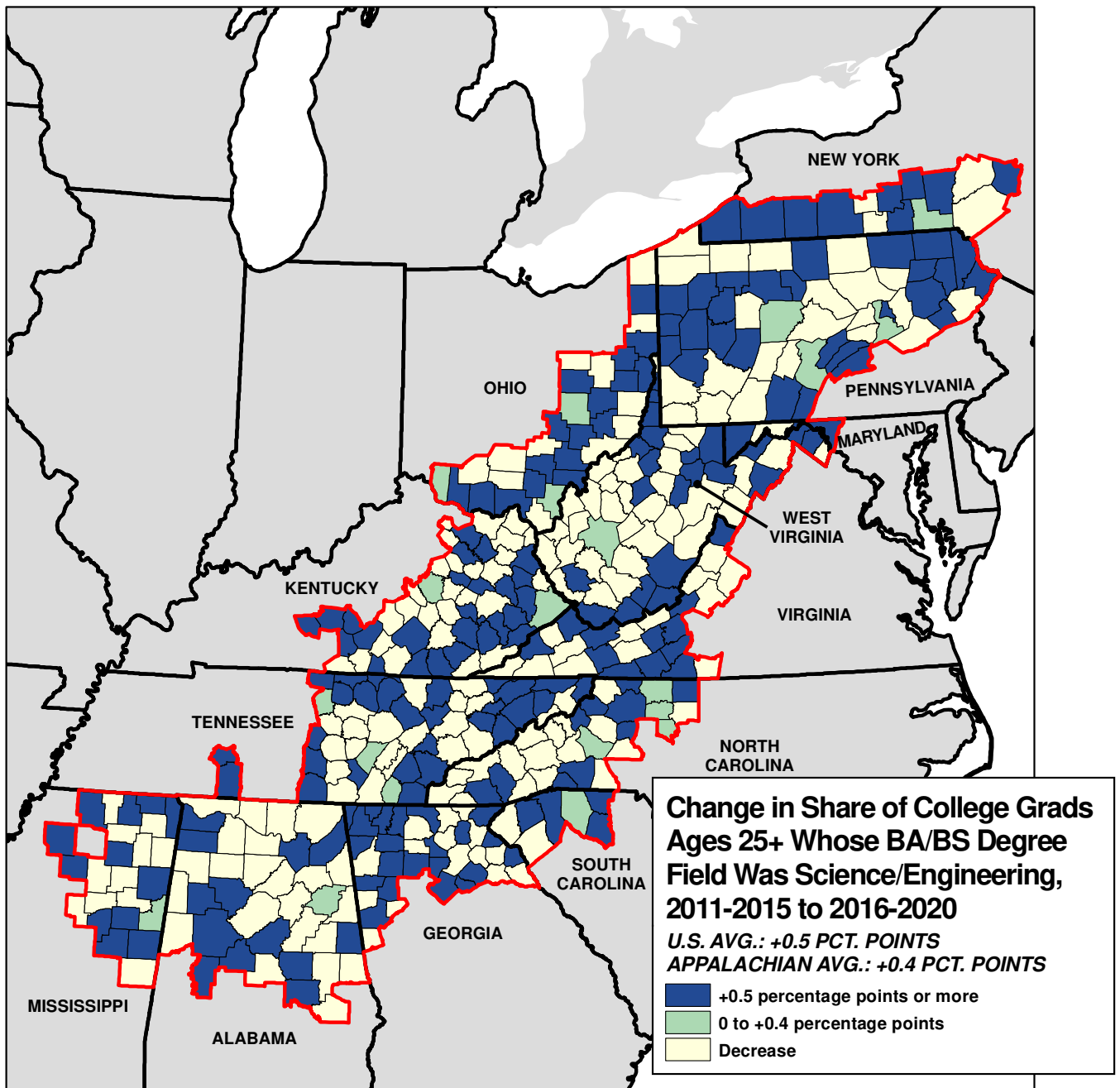
Table 5.8: Percentage Point Change in Bachelor's Degree Field (First Major) for Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2011-2015 to 2016-2020

Bachelor's Degree Field (First Major)	Percentage Point Change in Share of Population Ages 25 and Over With a Bachelor's Degree or More				
	Science and Engineering	Science- and Engineering-Related Fields	Business	Education	Arts, Humanities, and Other
United States	+ 0.5	+ 0.5	- 0.2	- 1.3	+ 0.4
Appalachian Region	+ 0.4	+ 0.8	- 0.3	- 1.3	+ 0.4
Subregions					
Northern Appalachia	+ 0.6	+ 0.6	- 0.4	- 1.6	+ 0.8
North Central Appalachia	+ 0.2	+ 0.7	- 0.2	- 1.0	+ 0.4
Central Appalachia	+ 0.3	+ 1.8	+ 0.1	- 2.5	+ 0.4
South Central Appalachia	- 0.3	+ 1.0	- 0.2	- 1.4	+ 0.8
Southern Appalachia	+ 0.8	+ 0.9	- 0.6	- 0.9	- 0.1
County Types					
Large Metros (pop. 1 million +)	+ 0.7	+ 0.5	- 0.6	- 0.9	+ 0.4
Small Metros (pop. <1 million)	+ 0.1	+ 0.9	- 0.3	- 1.3	+ 0.6
Nonmetro, Adjacent to Large Metros	+ 1.1	+ 0.5	+ 0.2	- 1.6	- 0.2
Nonmetro, Adjacent to Small Metros	+ 0.1	+ 1.1	- 0.5	- 1.5	+ 0.9
Rural (nonmetro, not adj. to a metro)	+ 0.4	+ 1.8	+ 0.7	- 3.0	+ 0.1
Alabama	+ 0.1	+ 0.6	+ 0.1	- 1.2	+ 0.4
Appalachian Alabama	- 0.3	+ 0.7	+ 0.0	- 0.3	- 0.1
Non-Appalachian Alabama	+ 0.8	+ 0.2	+ 0.2	- 2.7	+ 1.5
Georgia	+ 0.6	+ 0.8	- 0.6	- 1.3	+ 0.5
Appalachian Georgia	+ 1.5	+ 0.9	- 1.1	- 1.1	- 0.3
Non-Appalachian Georgia	+ 0.2	+ 0.8	- 0.5	- 1.3	+ 0.8
Kentucky	+ 0.1	+ 0.7	- 0.2	- 1.5	+ 1.0
Appalachian Kentucky	+ 0.1	+ 1.5	+ 0.8	- 2.8	+ 0.5
Non-Appalachian Kentucky	+ 0.1	+ 0.6	- 0.5	- 1.1	+ 1.0
Maryland	+ 0.3	+ 0.5	- 0.3	- 1.0	+ 0.6
Appalachian Maryland	+ 0.8	+ 1.2	- 1.3	- 2.6	+ 2.0
Non-Appalachian Maryland	+ 0.3	+ 0.4	- 0.3	- 1.0	+ 0.5
Mississippi	+ 0.9	+ 1.2	- 0.4	- 2.0	+ 0.3
Appalachian Mississippi	+ 1.0	+ 1.5	- 0.2	- 1.2	- 1.3
Non-Appalachian Mississippi	+ 0.8	+ 1.1	- 0.4	- 2.2	+ 0.6
New York	+ 0.4	+ 0.5	- 0.2	- 1.0	+ 0.3
Appalachian New York	+ 0.8	+ 0.4	- 0.4	- 0.7	+ 0.0
Non-Appalachian New York	+ 0.4	+ 0.5	- 0.3	- 1.1	+ 0.3
North Carolina	+ 0.3	+ 0.5	- 0.2	- 1.2	+ 0.5
Appalachian North Carolina	- 0.8	+ 1.0	- 0.4	- 0.8	+ 1.0
Non-Appalachian North Carolina	+ 0.4	+ 0.4	- 0.1	- 1.3	+ 0.5
Ohio	+ 0.1	+ 1.1	- 0.3	- 1.3	+ 0.5
Appalachian Ohio	+ 0.5	+ 0.4	- 0.1	- 1.6	+ 0.8
Non-Appalachian Ohio	+ 0.1	+ 1.1	- 0.3	- 1.3	+ 0.4
Pennsylvania	+ 0.4	+ 0.5	- 0.2	- 1.3	+ 0.7
Appalachian Pennsylvania	+ 0.6	+ 0.6	- 0.4	- 1.7	+ 0.9
Non-Appalachian Pennsylvania	+ 0.2	+ 0.5	- 0.2	- 1.0	+ 0.6
South Carolina	- 0.1	+ 1.2	+ 0.0	- 0.8	- 0.2
Appalachian South Carolina	+ 0.7	+ 1.2	- 1.4	- 1.2	+ 0.6
Non-Appalachian South Carolina	- 0.5	+ 1.1	+ 0.4	- 0.6	- 0.5
Tennessee	+ 0.3	+ 0.9	- 0.4	- 1.9	+ 1.2
Appalachian Tennessee	+ 0.2	+ 0.9	- 0.1	- 2.0	+ 0.8
Non-Appalachian Tennessee	+ 0.3	+ 0.9	- 0.6	- 1.8	+ 1.4
Virginia	+ 0.0	+ 0.5	- 0.3	- 0.8	+ 0.6
Appalachian Virginia	+ 0.2	+ 1.7	- 0.9	- 1.7	+ 0.7
Non-Appalachian Virginia	- 0.1	+ 0.5	- 0.3	- 0.7	+ 0.6
West Virginia (entire state)	+ 0.0	+ 1.1	- 0.5	- 0.8	+ 0.1

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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, 2011-2015 to 2016-2020



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, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Among adults in the Appalachian Region with a bachelor’s degree or more, the share with a degree in the science and engineering field was 0.4 percentage points greater in 2016-2020 than it was in 2011-2015, almost equal to the increase of 0.5 points nationally. Yet in 200 of the Region’s counties, the share actually decreased—including 49 of the 55 counties where less than one-fifth of adult college graduates had a science and engineering degree. In another 203 Appalachian counties, however, the share increase matched or exceeded the national average. The share with a degree in science and engineering increased most in the Northern and Southern subregions and among counties in large metros and in nonmetro areas adjacent to large metros.

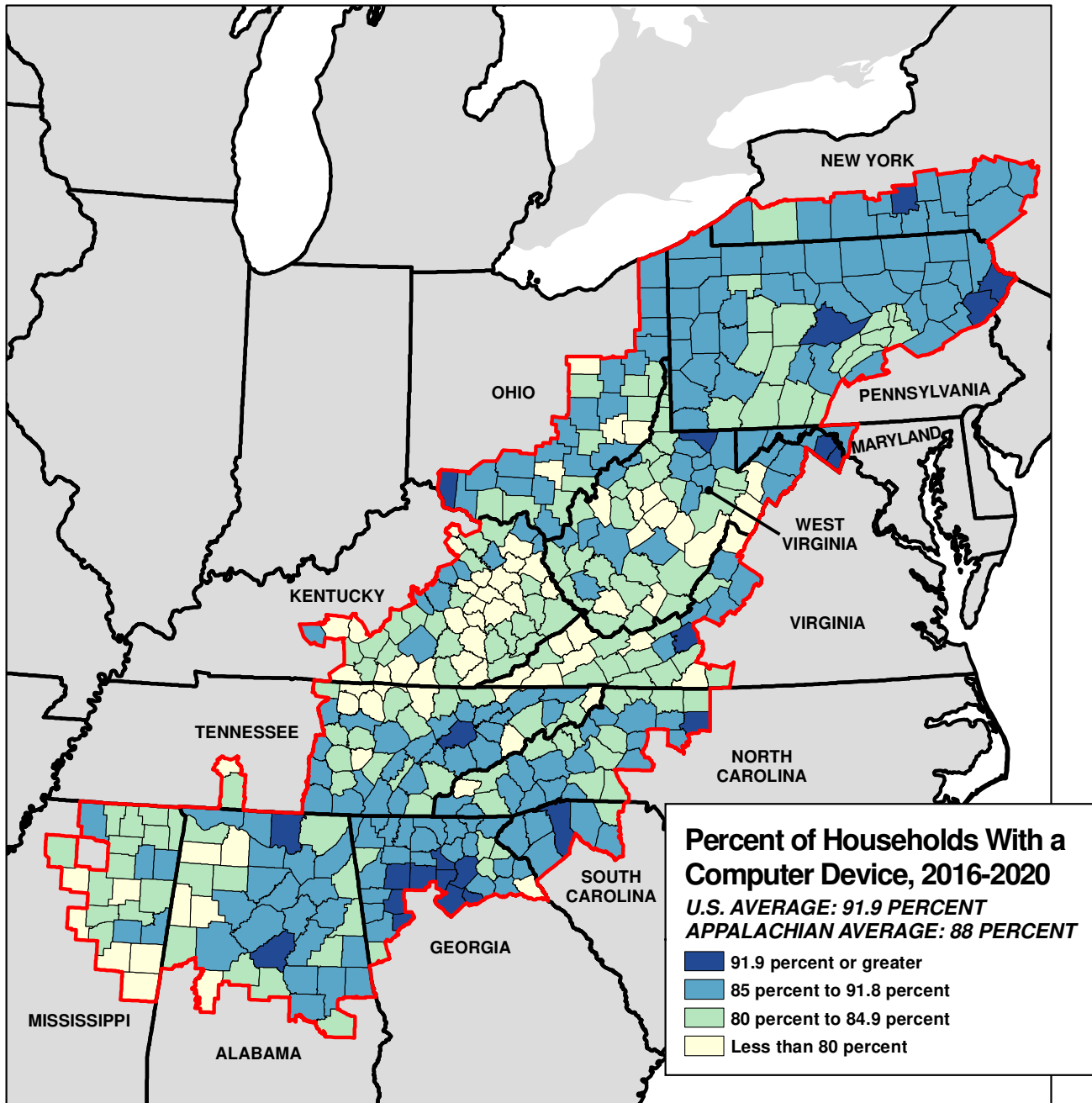
Table 5.9: Households in the Appalachian Region With a Computer Device, By Type of Device, 2016-2020

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	122,354,219	91.9	78.3	83.7	61.9	2.7	8.1
Appalachian Region	10,255,943	88.0	71.9	77.5	57.0	2.1	12.0
Subregions							
Northern Appalachia	3,338,263	87.8	73.6	75.2	57.0	1.9	12.2
North Central Appalachia	1,006,396	86.7	69.5	74.5	55.4	1.7	13.3
Central Appalachia	734,208	82.7	62.8	70.5	51.9	1.7	17.3
South Central Appalachia	2,078,744	87.7	71.1	77.8	55.3	2.1	12.3
Southern Appalachia	3,098,332	90.0	73.5	82.6	59.9	2.4	10.0
County Types							
Large Metros (pop. 1 million +)	2,390,988	91.3	78.3	82.6	63.2	2.4	8.7
Small Metros (pop. <1 million)	4,395,532	88.8	72.8	78.9	57.6	2.2	11.2
Nonmetro, Adjacent to Large Metros	902,250	86.0	68.6	74.2	54.0	1.7	14.0
Nonmetro, Adjacent to Small Metros	1,582,099	84.8	66.6	72.3	51.9	1.7	15.2
Rural (nonmetro, not adj. to a metro)	985,074	82.9	63.9	70.9	50.5	1.6	17.1
Alabama	1,888,504	87.9	68.9	79.9	55.2	2.2	12.1
Appalachian Alabama	1,215,227	88.5	70.2	80.7	56.7	2.1	11.5
Non-Appalachian Alabama	673,277	86.7	66.6	78.5	52.4	2.3	13.3
Georgia	3,830,264	92.0	77.7	85.2	62.5	2.6	8.0
Appalachian Georgia	1,138,451	92.9	80.2	86.1	65.8	3.0	7.1
Non-Appalachian Georgia	2,691,813	91.6	76.6	84.8	61.0	2.4	8.4
Kentucky	1,748,053	88.5	71.3	79.4	58.1	2.7	11.5
Appalachian Kentucky	454,072	83.0	63.8	71.5	52.6	1.8	17.0
Non-Appalachian Kentucky	1,293,981	90.5	73.9	82.2	60.0	3.0	9.5
Maryland	2,230,527	93.6	83.3	85.7	67.4	3.2	6.4
Appalachian Maryland	96,481	87.9	72.9	75.7	58.2	2.0	12.1
Non-Appalachian Maryland	2,134,046	93.9	83.8	86.2	67.9	3.3	6.1
Mississippi	1,116,649	86.5	64.2	79.7	51.1	2.3	13.5
Appalachian Mississippi	235,767	83.5	58.3	77.1	46.2	1.4	16.5
Non-Appalachian Mississippi	880,882	87.3	65.8	80.5	52.4	2.5	12.7
New York	7,417,224	91.1	78.6	82.0	61.7	3.0	8.9
Appalachian New York	420,761	89.0	75.6	74.1	57.6	1.9	11.0
Non-Appalachian New York	6,996,463	91.2	78.8	82.5	62.0	3.0	8.8
North Carolina	4,031,592	90.7	76.4	82.5	59.8	2.4	9.3
Appalachian North Carolina	818,301	87.9	72.0	77.3	54.3	2.2	12.1
Non-Appalachian North Carolina	3,213,291	91.4	77.6	83.8	61.2	2.5	8.6
Ohio	4,717,226	90.7	75.7	80.8	60.5	2.2	9.3
Appalachian Ohio	794,547	86.4	69.0	74.9	55.5	1.5	13.6
Non-Appalachian Ohio	3,922,679	91.5	77.1	81.9	61.5	2.3	8.5
Pennsylvania	5,106,601	89.6	76.7	78.8	60.2	2.2	10.4
Appalachian Pennsylvania	2,371,292	87.9	74.3	75.5	57.3	2.0	12.1
Non-Appalachian Pennsylvania	2,735,309	90.9	78.8	81.6	62.6	2.5	9.1
South Carolina	1,961,481	90.2	73.5	82.2	58.8	3.9	9.8
Appalachian South Carolina	508,887	90.1	73.6	81.9	60.4	2.4	9.9
Non-Appalachian South Carolina	1,452,594	90.3	73.5	82.3	58.3	4.4	9.7
Tennessee	2,639,455	89.1	72.5	81.2	58.4	3.0	10.9
Appalachian Tennessee	1,169,561	87.6	70.1	78.3	56.0	2.0	12.4
Non-Appalachian Tennessee	1,469,894	90.3	74.3	83.4	60.4	3.8	9.7
Virginia	3,184,121	92.3	80.6	84.4	64.7	3.0	7.7
Appalachian Virginia	298,361	83.8	65.7	72.0	51.6	1.9	16.2
Non-Appalachian Virginia	2,885,760	93.2	82.2	85.6	66.0	3.1	6.8
West Virginia (entire state)	734,235	86.2	68.6	73.0	54.5	1.8	13.8

Note: Device percentages are not mutually exclusive.

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Figure 5.15: Percent of Households in the Appalachian Region With a Computer Device, 2016-2020



Map Title: Percent of Households in the Appalachian Region With a Computer Device, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In 2016-2020, 88 percent of households in the Appalachian Region had one or more computer devices (desktop or laptop, smartphone, tablet, or other device)—four points below the national average. And the share is even lower in much of the Region: it was below 80 percent in 70 of Appalachia’s 423 counties. All but four of these counties were outside metropolitan areas and 36 were in the most rural areas. Central Appalachia had more than half of these counties. Yet there were 23 Appalachian counties where the share of households with a computer was at or above the national average, all of which were in metropolitan areas. Even before the COVID-19 pandemic hit, computer devices had become commonly used for such activities as school work, entertainment, online banking, health care access, and socializing—and the pandemic’s effects have magnified the importance of such devices. As a result, these data indicate an ongoing “digital divide” between urban and rural areas in Appalachia as well as between the Region and the rest of the nation.

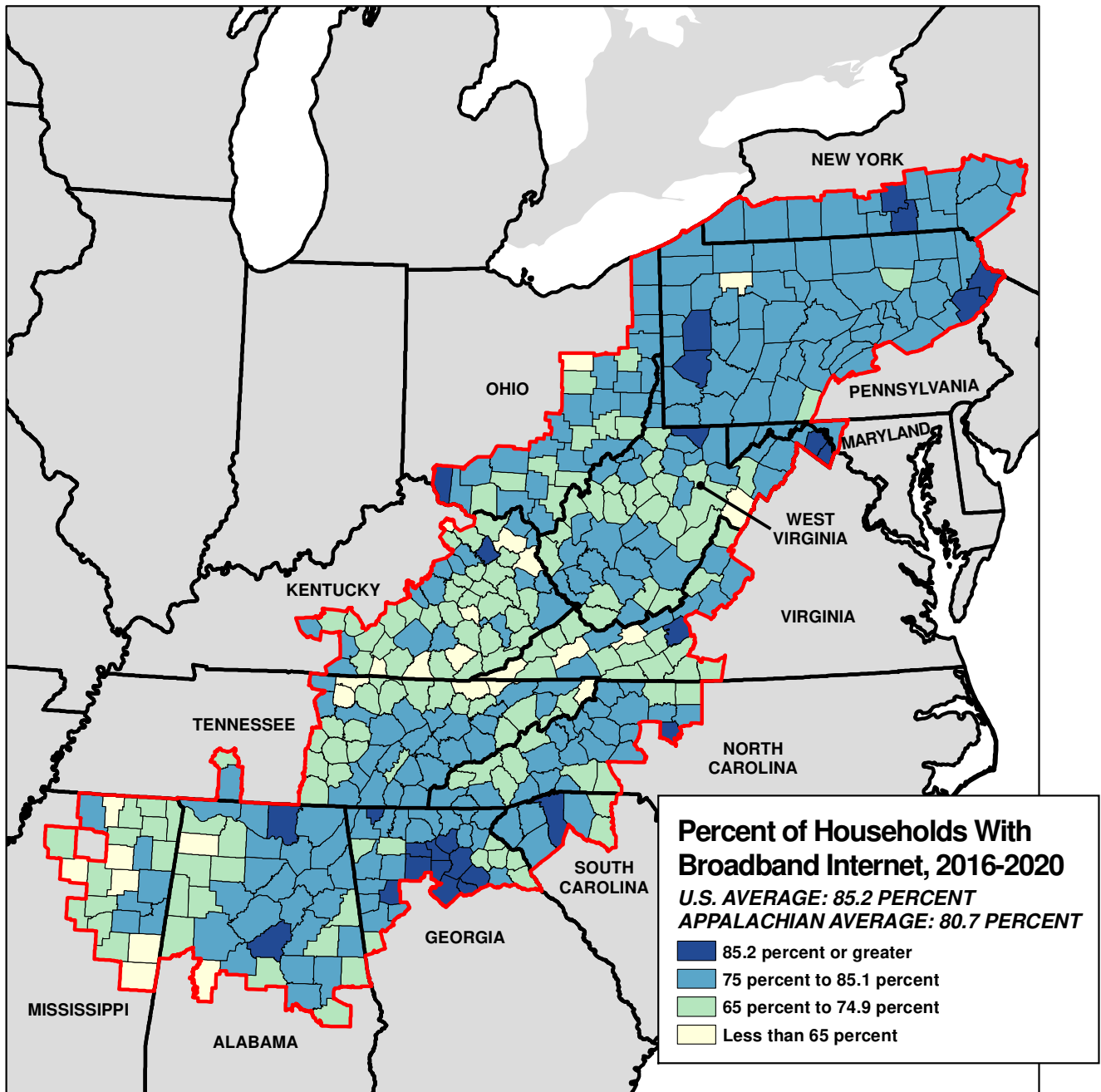
Table 5.10: Households in the Appalachian Region With an Internet Subscription, By Type of Subscription, 2016-2020

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	122,354,219	85.5	0.3	85.2	70.3	75.6	6.7
Appalachian Region	10,255,943	81.1	0.4	80.7	64.5	68.7	6.7
Subregions							
Northern Appalachia	3,338,263	82.3	0.5	81.8	67.6	68.5	5.2
North Central Appalachia	1,006,396	79.5	0.4	79.1	62.4	64.4	7.4
Central Appalachia	734,208	74.0	0.4	73.6	58.1	58.7	6.9
South Central Appalachia	2,078,744	79.7	0.3	79.4	62.7	66.6	6.5
Southern Appalachia	3,098,332	82.9	0.2	82.7	64.4	74.0	8.3
County Types							
Large Metros (pop. 1 million +)	2,390,988	86.0	0.3	85.7	72.4	76.2	6.1
Small Metros (pop. <1 million)	4,395,532	82.1	0.3	81.7	66.1	69.5	6.1
Nonmetro, Adjacent to Large Metros	902,250	78.3	0.4	77.9	58.3	64.4	8.0
Nonmetro, Adjacent to Small Metros	1,582,099	76.7	0.5	76.2	56.9	62.9	7.9
Rural (nonmetro, not adj. to a metro)	985,074	74.4	0.4	74.0	55.5	60.0	8.3
Alabama	1,888,504	80.3	0.4	79.9	59.2	71.1	8.3
Appalachian Alabama	1,215,227	81.4	0.2	81.1	61.1	71.7	8.1
Non-Appalachian Alabama	673,277	78.4	0.7	77.7	55.7	69.9	8.7
Georgia	3,830,264	84.6	0.2	84.4	69.3	75.7	7.7
Appalachian Georgia	1,138,451	86.7	0.2	86.5	72.0	78.5	8.1
Non-Appalachian Georgia	2,691,813	83.7	0.2	83.5	68.2	74.5	7.5
Kentucky	1,748,053	81.9	0.3	81.6	64.5	71.3	7.0
Appalachian Kentucky	454,072	75.1	0.4	74.7	59.3	61.8	7.1
Non-Appalachian Kentucky	1,293,981	84.3	0.3	84.1	66.3	74.6	6.9
Maryland	2,230,527	88.8	0.2	88.5	76.5	79.9	4.6
Appalachian Maryland	96,481	81.5	0.4	81.1	62.9	69.9	6.4
Non-Appalachian Maryland	2,134,046	89.1	0.2	88.9	77.1	80.4	4.6
Mississippi	1,116,649	76.1	0.3	75.8	50.1	67.9	10.4
Appalachian Mississippi	235,767	72.8	0.2	72.6	41.6	65.5	11.2
Non-Appalachian Mississippi	880,882	77.0	0.3	76.7	52.3	68.6	10.2
New York	7,417,224	85.5	0.3	85.2	73.4	74.0	3.9
Appalachian New York	420,761	82.2	0.5	81.6	66.1	65.7	7.3
Non-Appalachian New York	6,996,463	85.7	0.2	85.4	73.8	74.5	3.7
North Carolina	4,031,592	83.7	0.3	83.4	69.7	72.6	6.3
Appalachian North Carolina	818,301	79.7	0.3	79.4	63.5	66.3	6.8
Non-Appalachian North Carolina	3,213,291	84.7	0.2	84.5	71.2	74.2	6.1
Ohio	4,717,226	84.9	0.3	84.5	70.4	73.6	6.1
Appalachian Ohio	794,547	79.5	0.4	79.0	60.8	64.9	7.5
Non-Appalachian Ohio	3,922,679	86.0	0.3	85.7	72.4	75.4	5.8
Pennsylvania	5,106,601	84.5	0.4	84.0	71.9	73.2	4.2
Appalachian Pennsylvania	2,371,292	82.8	0.6	82.3	69.1	69.7	4.6
Non-Appalachian Pennsylvania	2,735,309	85.9	0.3	85.5	74.2	76.2	4.0
South Carolina	1,961,481	81.5	0.2	81.2	65.1	71.9	7.5
Appalachian South Carolina	508,887	82.8	0.2	82.6	66.1	73.6	7.9
Non-Appalachian South Carolina	1,452,594	81.0	0.2	80.7	64.7	71.3	7.4
Tennessee	2,639,455	81.7	0.2	81.5	64.2	71.8	6.8
Appalachian Tennessee	1,169,561	79.4	0.2	79.2	62.1	66.2	6.0
Non-Appalachian Tennessee	1,469,894	83.6	0.2	83.4	65.9	76.2	7.5
Virginia	3,184,121	86.3	0.3	86.1	71.0	77.4	6.1
Appalachian Virginia	298,361	74.7	0.5	74.2	55.7	60.2	8.4
Non-Appalachian Virginia	2,885,760	87.5	0.3	87.3	72.6	79.2	5.9
West Virginia (entire state)	734,235	79.2	0.4	78.9	64.3	62.9	6.5

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

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Figure 5.16: Percent of Households in the Appalachian Region With a Broadband Internet Subscription, 2016-2020



Map Title: Percent of Households in the Appalachian Region With a Broadband Internet Subscription, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 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 online, pursue learning, telework, and connect with friends and family. Indeed, it has become a tool for promoting economic development. During the 2016-2020 period, 80.7 percent of Appalachian households had a broadband Internet subscription, compared with 85.2 percent of households nationwide. Yet there are signs of a rural-urban “digital divide” within the Region: In 26 Appalachian counties, less than 65 percent of households had a broadband subscription. All but two of these counties were outside metropolitan areas, and exactly half were in the Region’s most rural counties. In contrast, almost all of the 27 counties with subscription rates at or above the national average were in metro areas (Pittsburgh, Birmingham, suburban Atlanta) and/or home to a four-year university (Rowan County, Kentucky, where Morehead State University is located). With high-speed Internet access becoming even more important as the COVID-19 pandemic has increased remote interaction, these are signs that many communities in the Region continue to be at risk of being left behind.

TRENDS IN EDUCATION

- Since the 2011-2015 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 nearly 88 percent in 2016-2020 (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 at least 3.4 percentage points in each case). With these improvements, the share of adults completing high school as of 2016-2020 has reached 80.3 percent in Central Appalachia and 82.4 percent in the Region's rural areas. The Appalachian sections of Virginia and Kentucky had the largest increases among the states—3.7 and 3.6 percentage points, respectively.
- The share of Appalachian adults ages 25 and over with an associate's degree but no bachelor's degree was 9.1 percent in 2016-2020—almost a full percentage point higher than in 2011-2015. The increase between the two periods occurred throughout the Region, reaching as high as 1.5 points in Central Appalachia and Appalachian Kentucky.
- The share of adults ages 25 and over in the Region with at least a bachelor's degree has risen 2.8 percentage points since 2011-2015 and now exceeds 25 percent. The increase was at least three points in Northern and Southern Appalachia, as well as in large metropolitan areas and in the Appalachian portions of Georgia, Pennsylvania, and South Carolina. Yet in North Central and Central Appalachia, as well as in the Appalachian sections of Kentucky, Ohio and Virginia, the improvement has been noticeably smaller—less than two percentage points.
- The pattern of improvement among working-age adults ages 25 to 64 has been similar to that for all adults, except the overall improvement was smaller: 1.3 percentage points for high school completion, 0.8 points for completion of an associate's degree without a bachelor's degree, and 2.7 points for attainment of a four-year degree (see Table 5.5). Central Appalachia, the Region's most rural counties, and the Appalachian sections of Virginia and Mississippi had the greatest improvements in the share with at least a high school diploma. Central Appalachia and Kentucky's Appalachian section likewise showed the greatest gains in the share of working-age adults whose highest education level was an associate's degree. And Northern and Southern Appalachia, counties in large metros, and the Appalachian sections of Georgia, Pennsylvania, and South Carolina experienced the largest gains in the share of adults with at least a bachelor's degree.
- The greatest improvement since 2011-2015 has been among adults ages 65 and over. The share of older adults in Appalachia with at least a high school diploma has risen more than six percentage points; the share with at least a bachelor's degree has increased four points (see Table 5.6). Possible factors fueling this increase include both the influx of younger, more educated cohorts into the older ages, and the arrival of well-educated older adults moving into the Region upon retirement. Within Appalachia's subregions, county types, and states, the patterns of improvement that were present among working-age adults generally—but not universally—held among older adults as well.
- Even with the improvements cited above, however, it is important to note that regardless of age, the prevalence of four-year college completion among adults remains well below the U.S. average in many parts of the Region (see Tables 5.1 through 5.3). For example, the percentage of persons ages 25 and over with a bachelor's degree or more remained at least 10 percentage points below the national share in the Appalachian sections of six states (Kentucky, Maryland, Mississippi, Ohio, Virginia, and West Virginia).
- Among adults in Appalachia with a bachelor's degree or more, the share with a degree in the science and engineering field was nearly 31 percent in 2016-2020—almost half a percentage point higher than it was in 2011-2015 (see Tables 5.7 and 5.8). While the share rose in most parts of the Region, the increase was especially noticeable in some areas—for example, rising 1.5 percentage points in Appalachian Georgia. Conversely, the share fell 0.8 points in North Carolina's Appalachian section and 0.3 points in Appalachian Alabama.

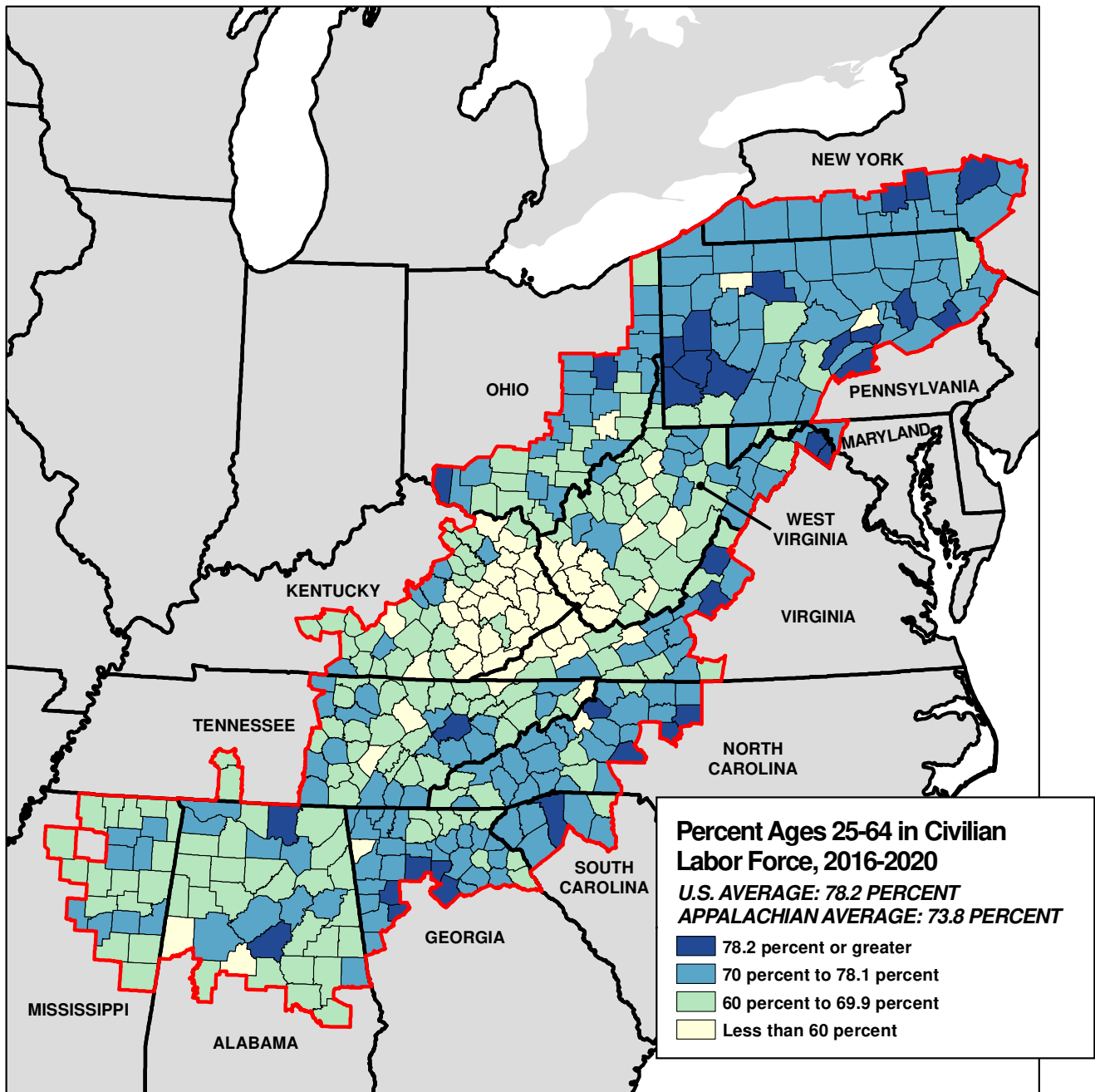
CHAPTER 6: LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Table 6.1: Labor Force, Employment, and Unemployment Status of Persons Ages 25 to 64 in the Appalachian Region, 2016-2020

Labor Force, Employment, and Unemployment	Total Number of Civilian Persons Ages 25-64	Total Persons Ages 25-64 in Civilian Labor Force		Employment Rate (Pct. of Civ. Labor Force)	Unemployment Rate (Pct. of Civ. Labor Force)
		Number	Percent		
United States	169,760,192	132,711,519	78.2	95.6	4.4
Appalachian Region	13,297,292	9,809,407	73.8	95.6	4.4
Subregions					
Northern Appalachia	4,102,612	3,132,489	76.4	95.6	4.4
North Central Appalachia	1,287,246	906,718	70.4	95.2	4.8
Central Appalachia	961,157	581,355	60.5	93.9	6.1
South Central Appalachia	2,622,717	1,936,604	73.8	95.9	4.1
Southern Appalachia	4,323,560	3,252,241	75.2	95.9	4.1
County Types					
Large Metros (pop. 1 million +)	3,243,157	2,550,168	78.6	96.0	4.0
Small Metros (pop. <1 million)	5,653,661	4,224,843	74.7	95.7	4.3
Nonmetro, Adjacent to Large Metros	1,160,197	828,264	71.4	95.4	4.6
Nonmetro, Adjacent to Small Metros	1,991,008	1,389,992	69.8	95.3	4.7
Rural (nonmetro, not adj. to a metro)	1,249,269	816,140	65.3	94.7	5.3
Alabama	2,504,717	1,803,103	72.0	95.4	4.6
Appalachian Alabama	1,624,108	1,182,334	72.8	95.6	4.4
Non-Appalachian Alabama	880,609	620,769	70.5	95.1	4.9
Georgia	5,503,052	4,231,771	76.9	95.4	4.6
Appalachian Georgia	1,716,456	1,335,142	77.8	96.4	3.6
Non-Appalachian Georgia	3,786,596	2,896,629	76.5	95.0	5.0
Kentucky	2,296,418	1,662,173	72.4	95.6	4.4
Appalachian Kentucky	598,360	363,358	60.7	94.3	5.7
Non-Appalachian Kentucky	1,698,058	1,298,815	76.5	96.0	4.0
Maryland	3,211,424	2,644,798	82.4	95.8	4.2
Appalachian Maryland	130,023	93,126	71.6	95.1	4.9
Non-Appalachian Maryland	3,081,401	2,551,672	82.8	95.9	4.1
Mississippi	1,500,390	1,075,952	71.7	94.3	5.7
Appalachian Mississippi	308,156	217,961	70.7	94.6	5.4
Non-Appalachian Mississippi	1,192,234	857,991	72.0	94.2	5.8
New York	10,413,258	8,219,401	78.9	95.2	4.8
Appalachian New York	497,444	377,015	75.8	95.3	4.7
Non-Appalachian New York	9,915,814	7,842,386	79.1	95.2	4.8
North Carolina	5,357,429	4,127,425	77.0	95.6	4.4
Appalachian North Carolina	1,026,658	767,440	74.8	96.1	3.9
Non-Appalachian North Carolina	4,330,771	3,359,985	77.6	95.5	4.5
Ohio	6,016,627	4,698,563	78.1	95.6	4.4
Appalachian Ohio	1,013,134	730,641	72.1	95.3	4.7
Non-Appalachian Ohio	5,003,493	3,967,922	79.3	95.7	4.3
Pennsylvania	6,648,044	5,259,487	79.1	95.6	4.4
Appalachian Pennsylvania	2,919,035	2,253,427	77.2	95.7	4.3
Non-Appalachian Pennsylvania	3,729,009	3,006,060	80.6	95.5	4.5
South Carolina	2,593,777	1,960,196	75.6	95.5	4.5
Appalachian South Carolina	674,840	516,804	76.6	96.0	4.0
Non-Appalachian South Carolina	1,918,937	1,443,392	75.2	95.4	4.6
Tennessee	3,527,600	2,653,541	75.2	95.6	4.4
Appalachian Tennessee	1,495,543	1,084,592	72.5	95.5	4.5
Non-Appalachian Tennessee	2,032,057	1,568,949	77.2	95.7	4.3
Virginia	4,433,605	3,546,991	80.0	96.3	3.7
Appalachian Virginia	371,554	252,724	68.0	95.8	4.2
Non-Appalachian Virginia	4,062,051	3,294,267	81.1	96.4	3.6
West Virginia (entire state)	921,981	634,843	68.9	94.5	5.5

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

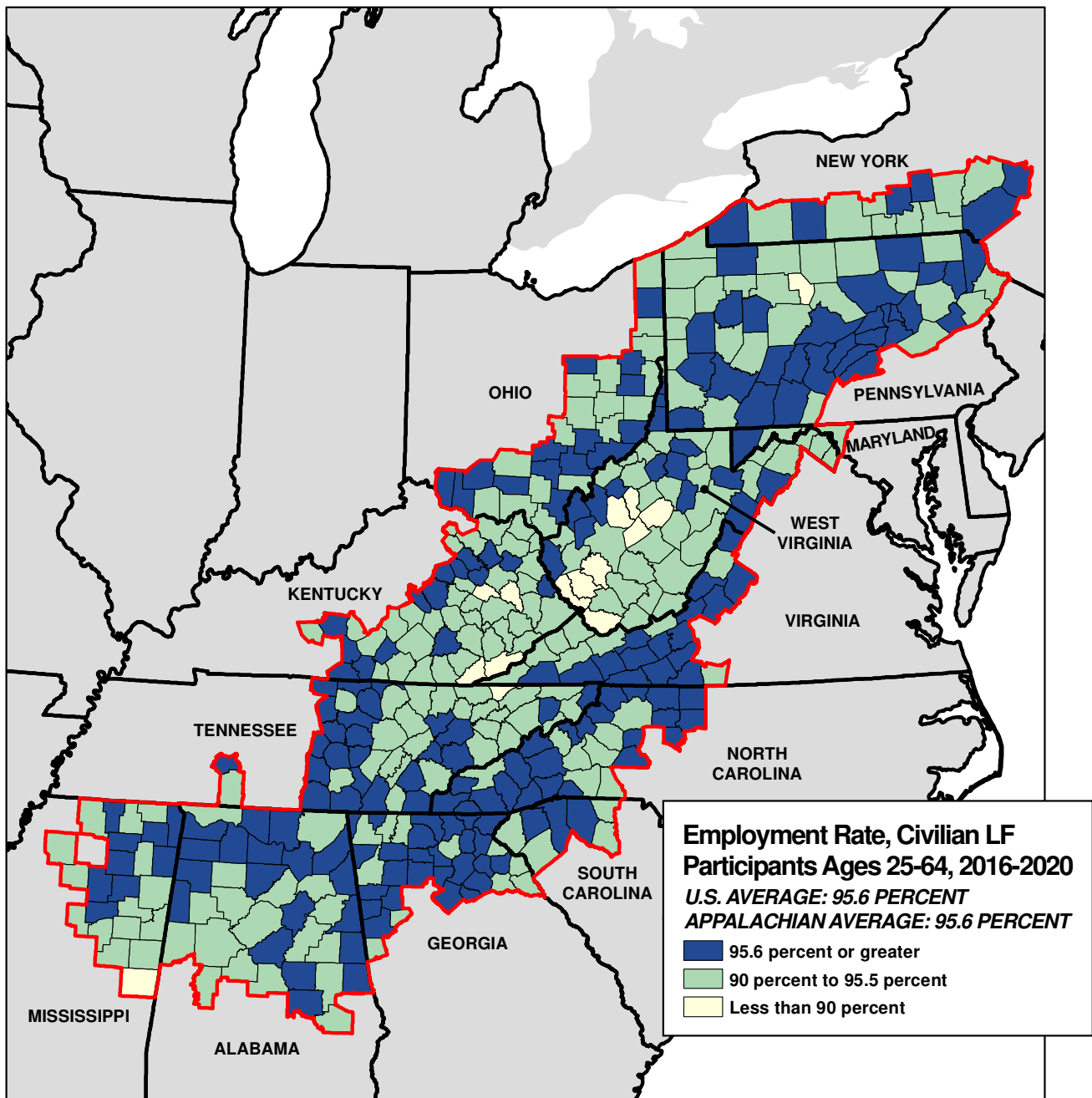
Figure 6.1: Percent of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Civilian Labor Force, 2016-2020



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Civilian Labor Force, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In the 2016-2020 period, 73.8 percent of Appalachia’s civilian population in the prime working ages (ages 25 to 64) were in the civilian labor force, more than four percentage points below the U.S. average of 78.2 percent. In 33 Appalachian counties (25 of which were in metropolitan areas), the share was at or above the national average, yet there were 54 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 39 were in Central Appalachia. Indeed, just 60.5 percent of working-age residents in Central Appalachia and 65.3 percent of those in the most isolated rural areas were in the labor force. And there are indications of a possible connection between educational attainment and labor force participation. For example, in 24 of the 33 counties where labor force participation levels were at or above the national rate, 90 percent or more of working-age adults had attained at least a high school diploma.

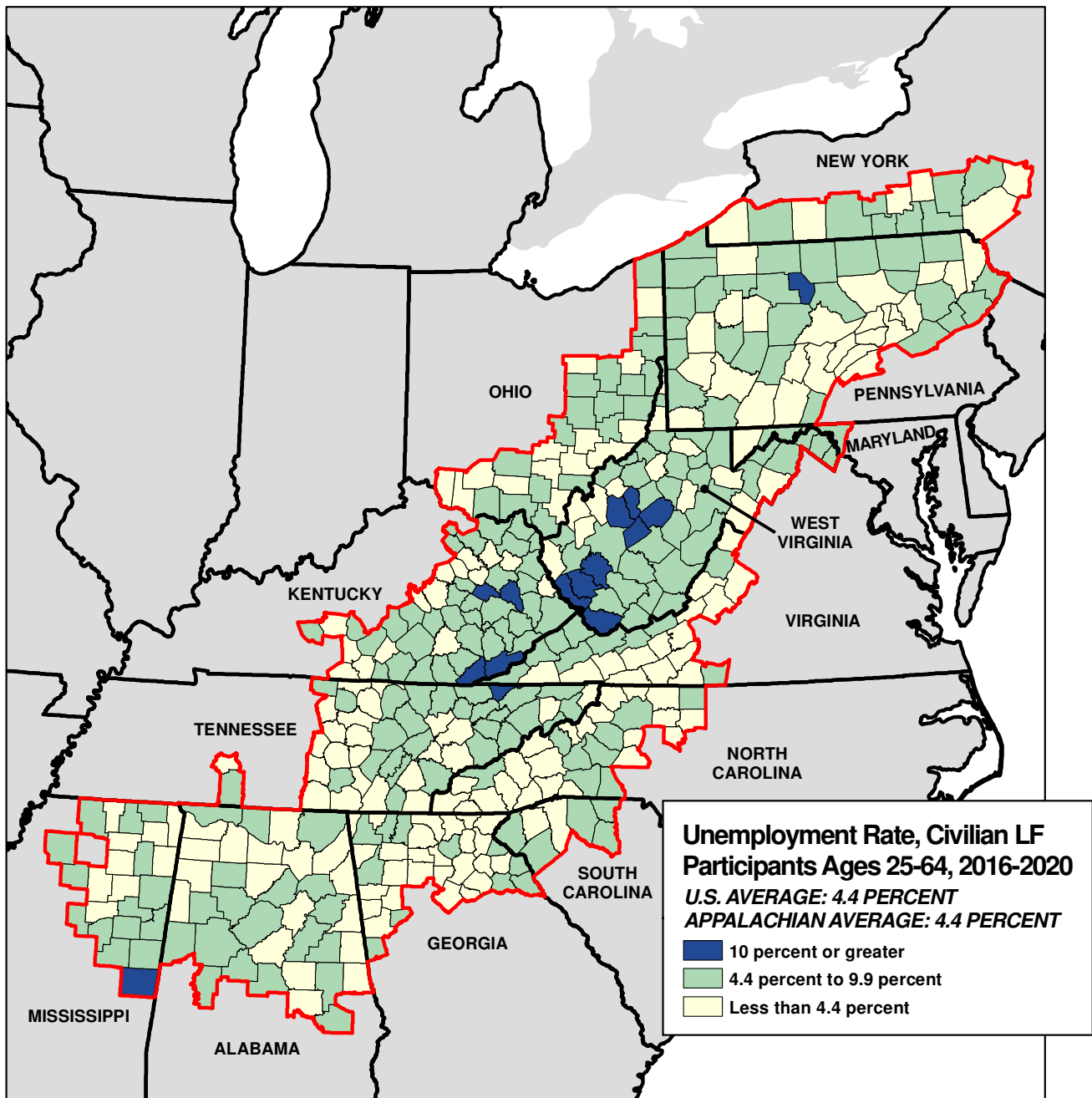
Figure 6.2: Employment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2016-2020



Map Title: Employment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

At 95.6 percent, the employment rate in Appalachia among members of the civilian labor force ages 25 to 64 was identical to the national rate during the 2016-2020 period. Although there were only slight differences among subregions and urban/rural county types, there was some variation at the county level. In 200 of the Region's 423 counties, the employment rate matched or exceeded the national average, yet there were 15 counties in the Region (nine of which were in Central Appalachia) where employment among 25-to-64-year-olds was less than 90 percent—all but two of which were outside metropolitan areas. While many of the 15 counties with the lowest employment rates also had similarly low employment in 2011-2015, the rate had been at least 92 percent in five of them—suggesting continued economic hardship for these counties long after the end of the 2007-2009 recession. Because the 2016-2020 period only includes the first 10 months of the COVID-19 pandemic, the above numbers reflect little of the pandemic's economic impact.

Figure 6.3: Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2016-2020



Map Title: Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

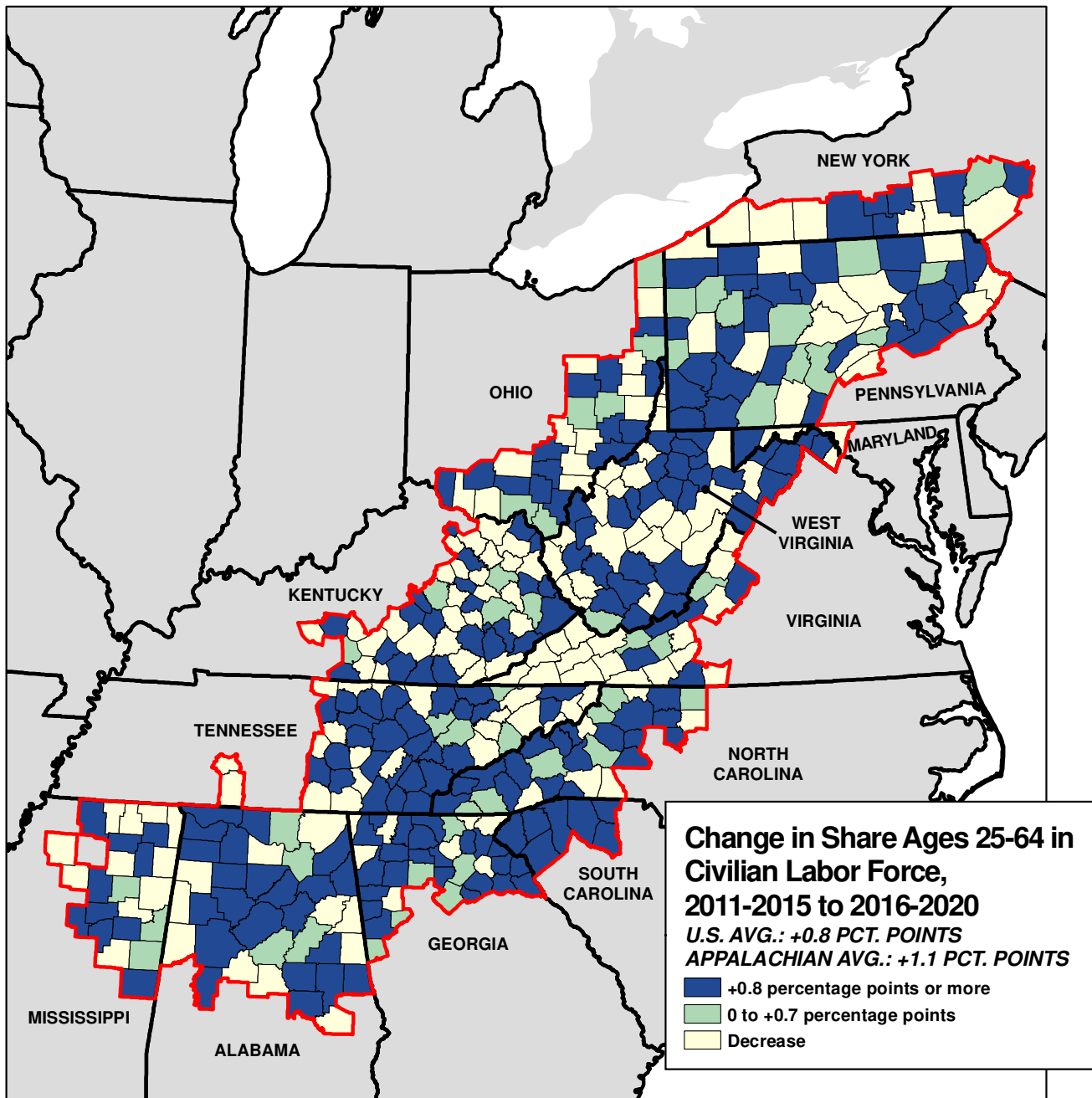
Unemployment in the Appalachian Region among persons ages 25 to 64 matched the national average of 4.4 percent during the 2016-2020 period. Within Appalachia, the jobless rate was at least 10 percent in 15 counties—all but two of which were outside metropolitan areas and nine of which were in Central Appalachia. (Unemployment was 6.1 percent in Central Appalachia.) Conversely, the unemployment rate was below the national average in 189 other counties, with 111 of these located in 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 14 of the 15 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 of 89.5 percent; in seven of these counties, the share was below 80 percent.

Table 6.2: Percentage Point Change in Civilian Labor Force, Employment, and Unemployment Status of Persons Ages 25 to 64 in the Appalachian Region, 2011-2015 to 2016-2020

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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, 2011-2015 to 2016-2020

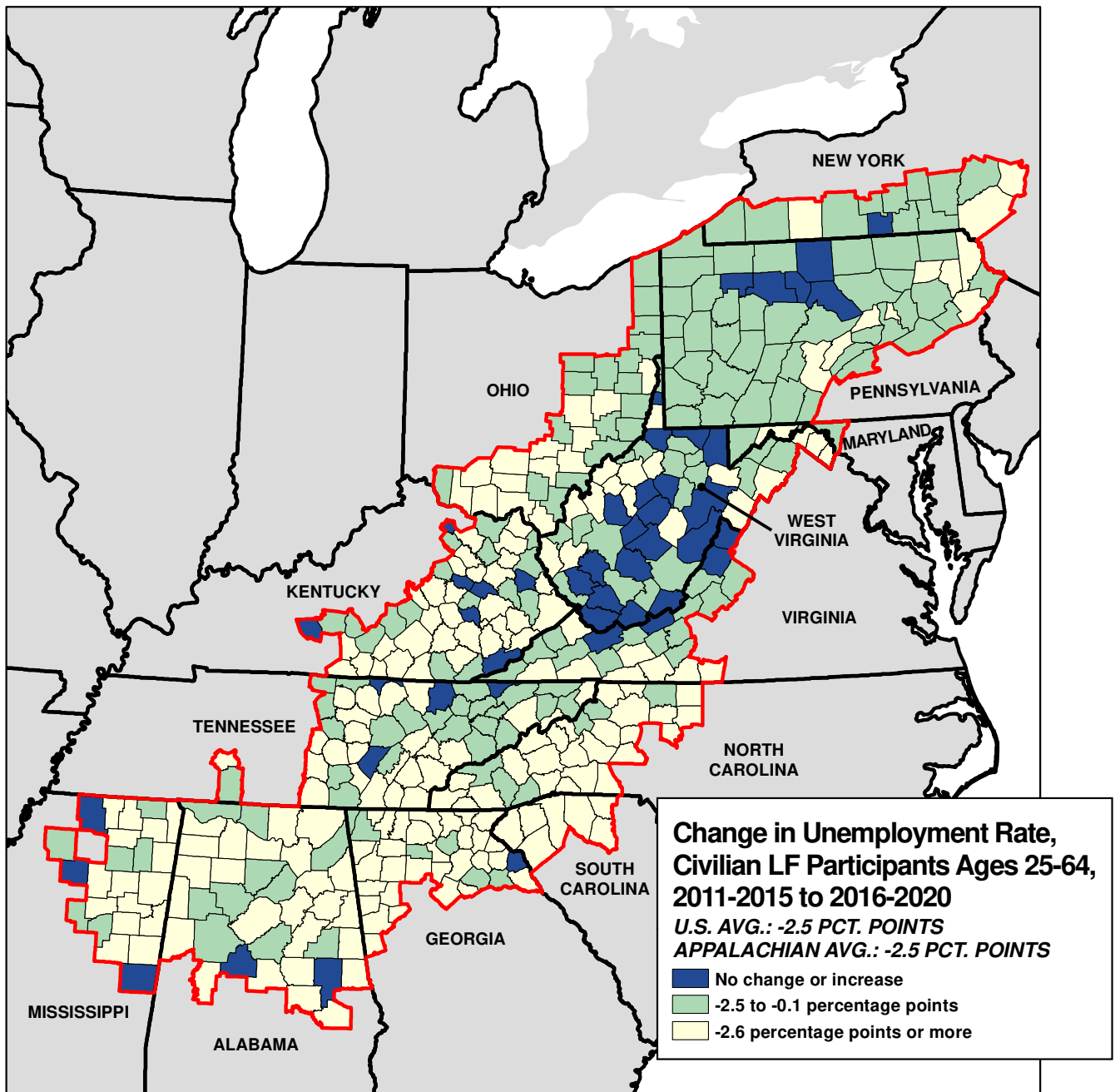


Map Title: Percentage Point Change in the Share of Persons Ages 25 to 64 in the Appalachian Region Who Are In the Civilian Labor Force, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

In the Appalachian Region, the labor force participation rate among civilians ages 25 to 64 was 1.1 percentage points higher in 2016-2020 than it was in 2011-2015, outpacing the national increase of 0.8 points. And the increase was present in much of the Region—212 of Appalachia’s 423 counties had increases in labor force participation rates that matched or exceeded the U.S. average. Included in this group are all seven of South Carolina’s counties; that state’s Appalachian section saw an increase of 2.2 percentage points. Yet participation rates also fell in some parts of Appalachia—there were 160 counties in the Region where the share of adults in the labor force decreased between the two periods. In Appalachian Maryland, the labor force participation rate declined by 1.3 points between 2011-2015 and 2016-2020.

Figure 6.5: Percentage Point Change in the Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2011-2015 to 2016-2020



Map Title: Percentage Point Change in the Unemployment Rate for Civilian Labor Force Participants Ages 25 to 64 in the Appalachian Region, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Unemployment among civilian labor force participants declined by 2.5 percentage points between 2011-2015 and 2016-2020, both in Appalachia and nationwide. And in 209 of the Region’s 423 counties, unemployment declined even further. (More than three-fifths of these counties were in South Central and Southern Appalachia.) These numbers support a continued economic rebound from the recession of 2007-2009. Yet in 46 other Appalachian counties, the unemployment rate either remained the same or increased between 2011-2015 and 2016-2020, with 19 of these counties in West Virginia alone. (There was another concentration in north central Pennsylvania.) While 14 of these 46 counties already had jobless rates at or above the national average of 6.9 percent in 2011-2015, unemployment in the earlier period had been less than 5 percent in 14 others. This suggests that more recent economic forces—in addition to a slow recovery—may be at play in some areas. And the economic effects of the COVID-19 pandemic are muted in these results, given that more than four years of the 2016-2020 period pre-date the start of the pandemic.

TRENDS IN LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

- Among working-age adults (ages 25 to 64), Appalachia's labor force participation rate in 2016-2020 was 73.8 percent, 1.1 percentage points higher than its rate in 2011-2015 (see Tables 6.1 and 6.2). This share increased in all five subregions, all five urban-rural county types, and the Appalachian sections of 11 states. The largest increase was in South Carolina's Appalachian section, where labor force participation increased more than two percentage points. Meanwhile, the participation rate fell 1.3 percentage points in Appalachian Maryland and 0.5 points in Virginia's Appalachian section.
- Within the civilian labor force, the employment rate in Appalachia was 95.6 percent, which was 2.5 percentage points higher than the employment rate in 2011-2015. Among the subregions, the increase was greatest in South Central and Southern Appalachia, where employment rose at least three percentage points. Employment in Northern and North Central Appalachia, however, only rose by less than two points, well below the national and regional average. Elsewhere in the Region, the employment rate rose at least 2.4 points among all five urban-rural county types. And among the states, employment increased the most in the Appalachian sections of North Carolina and Georgia (3.7 and 3.6 percentage points, respectively). Conversely, West Virginia had the smallest increase, at just a single percentage point.
- As Appalachia's employment rate rose between 2011-2015 and 2016-2020, its unemployment rate fell. The Region's unemployment rate of 4.4 percent in the later period is 2.5 percentage points lower than its rate in 2011-2015.
- Although there are some parts of the Appalachian Region that likely have not yet rebounded from the economic downturn of 2007-2009, the rise in labor force participation and employment (along with the corresponding lower rates of unemployment) support the idea of an economic recovery in much of the Region. Most of these labor force and employment patterns occurred before the onset of the coronavirus pandemic in March 2020, which mutes the economic impact of the first months of the pandemic.

CHAPTER 7: TRANSPORTATION AND COMMUTING PATTERNS

Table 7.1: Means of Transportation for Workers Ages 16 and Over in the Appalachian Region, 2016-2020

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	153,665,654	74.9	8.9	4.6	2.6	1.8	7.3
Appalachian Region	11,418,033	80.9	9.0	1.1	2.1	1.2	5.7
Subregions							
Northern Appalachia	3,664,050	78.2	8.8	2.4	3.4	1.4	5.9
North Central Appalachia	1,055,654	82.3	8.6	0.7	2.7	1.0	4.7
Central Appalachia	661,018	83.0	10.1	0.2	1.8	0.8	4.0
South Central Appalachia	2,280,953	82.3	8.6	0.5	1.7	1.2	5.8
Southern Appalachia	3,756,358	82.1	9.4	0.4	1.0	1.1	6.0
County Types							
Large Metros (pop. 1 million +)	2,922,272	78.1	8.8	2.4	1.8	1.1	7.7
Small Metros (pop. <1 million)	4,956,322	81.8	8.7	0.8	2.1	1.2	5.5
Nonmetro, Adjacent to Large Metros	969,819	82.0	9.4	0.3	2.6	1.2	4.5
Nonmetro, Adjacent to Small Metros	1,619,798	82.2	9.6	0.3	2.4	1.1	4.4
Rural (nonmetro, not adj. to a metro)	949,822	81.8	9.6	0.3	2.6	1.4	4.3
Alabama	2,095,195	84.9	8.3	0.3	1.1	0.9	4.4
Appalachian Alabama	1,367,490	84.8	8.5	0.3	1.0	0.8	4.5
Non-Appalachian Alabama	727,705	85.0	8.0	0.3	1.3	1.1	4.3
Georgia	4,852,255	77.7	9.3	1.9	1.5	1.8	7.8
Appalachian Georgia	1,530,952	79.0	10.2	0.6	1.0	1.2	8.1
Non-Appalachian Georgia	3,321,303	77.2	8.9	2.6	1.7	2.1	7.6
Kentucky	1,962,584	81.2	9.2	0.9	2.1	1.3	5.3
Appalachian Kentucky	415,139	82.2	10.6	0.2	2.1	0.8	4.0
Non-Appalachian Kentucky	1,547,445	80.9	8.8	1.1	2.1	1.4	5.7
Maryland	3,047,112	72.1	8.6	7.4	2.1	1.6	8.1
Appalachian Maryland	108,545	79.7	9.3	1.2	2.2	0.9	6.7
Non-Appalachian Maryland	2,938,567	71.8	8.6	7.7	2.1	1.6	8.2
Mississippi	1,230,952	84.6	9.2	0.3	1.3	1.5	3.0
Appalachian Mississippi	252,123	86.4	8.3	0.1	0.9	1.1	3.2
Non-Appalachian Mississippi	978,829	84.1	9.5	0.3	1.4	1.6	3.0
New York	9,219,025	52.3	6.4	26.2	5.9	2.2	6.9
Appalachian New York	451,679	76.6	9.1	1.7	5.4	1.5	5.6
Non-Appalachian New York	8,767,346	51.1	6.3	27.5	6.0	2.2	6.9
North Carolina	4,829,643	79.3	9.0	1.0	1.7	1.3	7.7
Appalachian North Carolina	898,395	81.5	8.8	0.4	1.7	1.4	6.2
Non-Appalachian North Carolina	3,931,248	78.8	9.0	1.1	1.8	1.3	8.0
Ohio	5,496,532	81.5	7.6	1.4	2.2	1.2	6.1
Appalachian Ohio	853,872	82.9	8.3	0.5	2.3	1.5	4.6
Non-Appalachian Ohio	4,642,660	81.3	7.5	1.6	2.1	1.2	6.3
Pennsylvania	6,085,959	74.4	8.2	5.2	3.5	1.6	7.1
Appalachian Pennsylvania	2,627,797	77.6	8.8	2.9	3.3	1.2	6.2
Non-Appalachian Pennsylvania	3,458,162	72.1	7.7	6.9	3.6	1.8	7.8
South Carolina	2,304,196	81.5	8.9	0.5	1.9	1.4	5.6
Appalachian South Carolina	605,793	82.1	9.5	0.4	1.3	1.3	5.5
Non-Appalachian South Carolina	1,698,403	81.4	8.7	0.6	2.2	1.5	5.7
Tennessee	3,103,430	81.9	8.8	0.6	1.3	1.2	6.3
Appalachian Tennessee	1,274,142	83.0	8.6	0.4	1.4	1.0	5.6
Non-Appalachian Tennessee	1,829,288	81.2	8.8	0.8	1.2	1.4	6.7
Virginia	4,224,874	74.9	8.9	4.0	2.4	1.8	8.1
Appalachian Virginia	301,711	82.5	8.7	0.7	2.4	1.2	4.5
Non-Appalachian Virginia	3,923,163	74.3	9.0	4.2	2.4	1.8	8.4
West Virginia (entire state)	730,395	82.0	8.6	0.8	2.8	1.2	4.6

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Table 7.2: Means of Transportation for Workers Ages 16 and Over in the Appalachian Region Below the Poverty Level, 2016-2020

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	8,863,530	65.3	12.6	7.2	5.8	3.5	5.6
Appalachian Region	738,594	70.6	13.5	2.8	5.6	2.6	4.9
Subregions							
Northern Appalachia	218,081	63.7	12.1	6.2	9.6	2.9	5.5
North Central Appalachia	76,089	69.7	12.2	2.6	8.1	2.6	4.7
Central Appalachia	56,847	75.0	14.3	0.6	4.3	1.8	4.1
South Central Appalachia	158,786	73.2	13.4	1.9	3.6	2.6	5.4
Southern Appalachia	228,791	74.7	15.1	0.9	2.8	2.4	4.1
County Types							
Large Metros (pop. 1 million +)	140,661	66.2	14.8	5.8	5.7	2.1	5.4
Small Metros (pop. <1 million)	333,394	71.0	12.9	3.1	5.4	2.8	4.8
Nonmetro, Adjacent to Large Metros	70,758	71.6	12.5	1.1	7.0	3.0	4.8
Nonmetro, Adjacent to Small Metros	115,728	71.8	15.2	0.9	5.5	2.1	4.6
Rural (nonmetro, not adj. to a metro)	78,053	74.3	12.0	0.8	5.5	2.8	4.7
Alabama	142,889	78.8	12.4	1.4	2.6	1.9	3.0
Appalachian Alabama	87,935	78.3	13.2	1.3	2.7	1.7	2.8
Non-Appalachian Alabama	54,954	79.6	11.2	1.4	2.3	2.2	3.2
Georgia	309,178	67.8	15.3	4.0	3.4	3.8	5.6
Appalachian Georgia	81,404	70.0	18.6	0.6	3.2	2.5	5.1
Non-Appalachian Georgia	227,774	67.0	14.1	5.3	3.5	4.3	5.8
Kentucky	137,884	70.7	13.7	2.8	5.3	3.3	4.2
Appalachian Kentucky	38,697	74.3	15.0	0.3	4.8	1.7	3.9
Non-Appalachian Kentucky	99,187	69.3	13.2	3.8	5.5	3.9	4.3
Maryland	112,360	59.4	12.5	12.6	5.5	3.7	6.3
Appalachian Maryland	6,356	67.8	13.4	4.1	7.1	1.6	6.0
Non-Appalachian Maryland	106,004	58.9	12.4	13.1	5.4	3.8	6.4
Mississippi	104,376	79.5	12.2	0.5	2.3	3.1	2.3
Appalachian Mississippi	20,160	80.5	9.4	0.1	1.9	3.6	4.4
Non-Appalachian Mississippi	84,216	79.3	12.8	0.7	2.4	3.0	1.8
New York	489,631	36.5	8.0	33.5	12.3	3.4	6.3
Appalachian New York	33,858	59.9	11.1	6.1	13.2	3.2	6.3
Non-Appalachian New York	455,773	34.8	7.8	35.5	12.2	3.4	6.3
North Carolina	312,643	70.8	15.0	2.8	2.9	2.8	5.7
Appalachian North Carolina	63,114	71.6	15.2	1.4	3.3	2.6	5.8
Non-Appalachian North Carolina	249,529	70.6	15.0	3.1	2.8	2.9	5.6
Ohio	337,682	68.6	12.7	4.8	6.5	2.8	4.6
Appalachian Ohio	60,963	73.0	12.0	1.5	5.9	2.8	4.7
Non-Appalachian Ohio	276,719	67.6	12.8	5.5	6.7	2.7	4.6
Pennsylvania	306,900	57.3	12.2	12.2	9.1	3.5	5.7
Appalachian Pennsylvania	143,339	61.9	12.5	7.3	10.0	2.7	5.5
Non-Appalachian Pennsylvania	163,561	53.3	12.0	16.5	8.3	4.2	5.8
South Carolina	153,848	73.7	14.5	1.5	3.2	3.2	3.9
Appalachian South Carolina	39,292	73.3	15.0	1.4	2.5	3.3	4.5
Non-Appalachian South Carolina	114,556	73.8	14.3	1.6	3.5	3.1	3.7
Tennessee	198,626	74.0	13.6	2.0	2.7	2.5	5.1
Appalachian Tennessee	88,077	75.4	12.4	1.4	3.4	2.2	5.2
Non-Appalachian Tennessee	110,549	72.9	14.6	2.5	2.2	2.8	5.0
Virginia	186,696	65.4	13.3	6.0	5.1	4.5	5.7
Appalachian Virginia	21,701	70.6	12.2	4.3	4.3	3.5	5.2
Non-Appalachian Virginia	164,995	64.7	13.5	6.2	5.2	4.7	5.8
West Virginia (entire state)	53,698	69.2	11.7	3.4	8.3	3.2	4.2

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2016-2020 American Community Survey.

Table 7.3: Availability of Vehicles for Households in the Appalachian Region, 2016-2020

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	122,354,219	8.5	32.5	37.1	14.8	7.2
Appalachian Region	10,255,943	7.0	31.4	37.3	16.3	8.0
Subregions						
Northern Appalachia	3,338,263	9.4	34.1	36.7	13.8	6.0
North Central Appalachia	1,006,396	7.6	31.9	36.9	15.8	7.7
Central Appalachia	734,208	7.8	31.6	35.4	16.8	8.4
South Central Appalachia	2,078,744	5.5	30.1	37.2	17.7	9.5
Southern Appalachia	3,098,332	5.0	29.2	38.6	18.0	9.3
County Types						
Large Metros (pop. 1 million +)	2,390,988	6.9	31.1	38.8	15.7	7.4
Small Metros (pop. <1 million)	4,395,532	6.9	32.1	37.2	16.0	7.9
Nonmetro, Adjacent to Large Metros	902,250	7.1	30.5	37.1	16.6	8.8
Nonmetro, Adjacent to Small Metros	1,582,099	6.7	30.4	36.3	17.5	9.1
Rural (nonmetro, not adj. to a metro)	985,074	7.9	31.5	36.3	16.4	7.9
Alabama	1,888,504	5.9	31.7	36.8	16.9	8.7
Appalachian Alabama	1,215,227	5.5	30.6	36.9	17.6	9.3
Non-Appalachian Alabama	673,277	6.7	33.5	36.6	15.6	7.6
Georgia	3,830,264	6.3	32.2	38.0	15.8	7.6
Appalachian Georgia	1,138,451	3.8	27.0	40.9	18.8	9.6
Non-Appalachian Georgia	2,691,813	7.4	34.5	36.8	14.6	6.8
Kentucky	1,748,053	7.0	32.0	37.7	15.9	7.5
Appalachian Kentucky	454,072	7.9	31.7	35.9	16.4	8.0
Non-Appalachian Kentucky	1,293,981	6.6	32.1	38.3	15.7	7.3
Maryland	2,230,527	8.8	32.2	36.5	15.0	7.5
Appalachian Maryland	96,481	8.1	30.9	35.6	17.1	8.2
Non-Appalachian Maryland	2,134,046	8.8	32.3	36.5	14.9	7.5
Mississippi	1,116,649	6.4	32.6	36.5	16.4	8.1
Appalachian Mississippi	235,767	6.2	30.2	37.1	17.6	8.9
Non-Appalachian Mississippi	880,882	6.4	33.2	36.3	16.1	7.9
New York	7,417,224	29.0	32.5	26.0	8.7	3.8
Appalachian New York	420,761	10.1	35.4	36.9	12.6	5.0
Non-Appalachian New York	6,996,463	30.1	32.4	25.4	8.4	3.7
North Carolina	4,031,592	5.6	31.4	38.1	16.7	8.2
Appalachian North Carolina	818,301	5.5	30.4	37.1	17.6	9.3
Non-Appalachian North Carolina	3,213,291	5.6	31.7	38.4	16.5	7.9
Ohio	4,717,226	7.8	33.0	37.6	14.7	6.9
Appalachian Ohio	794,547	7.7	30.6	36.5	16.7	8.5
Non-Appalachian Ohio	3,922,679	7.8	33.5	37.9	14.2	6.6
Pennsylvania	5,106,601	10.7	34.0	36.2	13.4	5.8
Appalachian Pennsylvania	2,371,292	9.4	34.4	36.8	13.6	5.9
Non-Appalachian Pennsylvania	2,735,309	11.8	33.6	35.7	13.2	5.8
South Carolina	1,961,481	6.0	32.2	38.6	16.0	7.2
Appalachian South Carolina	508,887	5.9	30.1	38.3	17.2	8.5
Non-Appalachian South Carolina	1,452,594	6.1	33.0	38.6	15.5	6.8
Tennessee	2,639,455	5.5	30.9	37.8	17.1	8.6
Appalachian Tennessee	1,169,561	5.4	29.7	37.3	17.9	9.7
Non-Appalachian Tennessee	1,469,894	5.7	31.9	38.2	16.4	7.8
Virginia	3,184,121	6.1	30.0	37.8	17.2	9.0
Appalachian Virginia	298,361	6.5	30.1	35.2	18.2	10.0
Non-Appalachian Virginia	2,885,760	6.0	30.0	38.1	17.0	8.8
West Virginia (entire state)	734,235	8.5	34.0	36.9	14.4	6.3

Data Source: U.S. Census Bureau, 2016-2020 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, 2016-2020

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	6,425,655	1,403,395	677,529	2,432,383	889,063	560,439	462,846
Appalachian Region	298,207	106,768	60,775	35,645	46,585	30,790	17,644
Subregions							
Northern Appalachia	144,417	38,301	25,837	27,169	27,404	14,956	10,750
North Central Appalachia	26,683	10,424	4,944	2,429	5,211	2,238	1,437
Central Appalachia	13,329	6,008	3,379	213	2,110	959	660
South Central Appalachia	42,076	19,116	7,792	2,933	4,824	5,210	2,201
Southern Appalachia	71,702	32,919	18,823	2,901	7,036	7,427	2,596
County Types							
Large Metros (pop. 1 million +)	79,182	24,840	13,545	19,911	11,548	5,410	3,928
Small Metros (pop. <1 million)	120,614	46,732	23,034	13,607	18,717	12,684	5,840
Nonmetro, Adjacent to Large Metros	28,848	10,041	6,050	889	5,289	3,404	3,175
Nonmetro, Adjacent to Small Metros	40,873	16,096	10,920	747	6,140	4,305	2,665
Rural (nonmetro, not adj. to a metro)	28,690	9,059	7,226	491	4,891	4,987	2,036
Alabama	40,200	21,120	8,731	1,837	4,091	2,933	1,488
Appalachian Alabama	23,869	12,980	4,677	1,210	2,616	1,572	814
Non-Appalachian Alabama	16,331	8,140	4,054	627	1,475	1,361	674
Georgia	146,213	44,951	31,991	29,674	12,518	19,171	7,908
Appalachian Georgia	30,182	12,172	9,847	903	2,448	3,568	1,244
Non-Appalachian Georgia	116,031	32,779	22,144	28,771	10,070	15,603	6,664
Kentucky	48,509	15,999	9,032	7,058	7,641	6,134	2,645
Appalachian Kentucky	8,989	3,748	2,432	102	1,555	633	519
Non-Appalachian Kentucky	39,520	12,251	6,600	6,956	6,086	5,501	2,126
Maryland	121,072	27,444	14,109	52,003	12,044	9,290	6,182
Appalachian Maryland	3,005	1,148	598	369	517	169	204
Non-Appalachian Maryland	118,067	26,296	13,511	51,634	11,527	9,121	5,978
Mississippi	26,338	12,367	6,748	318	2,651	3,270	984
Appalachian Mississippi	5,131	2,227	1,149	11	755	800	189
Non-Appalachian Mississippi	21,207	10,140	5,599	307	1,896	2,470	795
New York	1,980,582	125,393	61,492	1,264,354	273,976	96,041	159,326
Appalachian New York	20,334	5,077	2,914	2,967	5,177	2,214	1,985
Non-Appalachian New York	1,960,248	120,316	58,578	1,261,387	268,799	93,827	157,341
North Carolina	103,082	41,729	21,259	12,527	10,104	11,452	6,011
Appalachian North Carolina	18,529	8,567	3,442	974	1,979	2,679	888
Non-Appalachian North Carolina	84,553	33,162	17,817	11,553	8,125	8,773	5,123
Ohio	164,123	47,458	33,386	31,988	23,266	17,895	10,130
Appalachian Ohio	29,386	8,472	7,443	1,330	3,888	5,870	2,383
Non-Appalachian Ohio	134,737	38,986	25,943	30,658	19,378	12,025	7,747
Pennsylvania	301,007	61,917	40,246	98,874	51,214	26,689	22,067
Appalachian Pennsylvania	99,731	27,412	16,408	22,822	19,017	7,400	6,672
Non-Appalachian Pennsylvania	201,276	34,505	23,838	76,052	32,197	19,289	15,395
South Carolina	52,124	19,493	14,886	3,596	5,633	6,566	1,950
Appalachian South Carolina	12,520	5,540	3,150	777	1,217	1,487	349
Non-Appalachian South Carolina	39,604	13,953	11,736	2,819	4,416	5,079	1,601
Tennessee	56,774	24,580	10,442	6,505	5,556	6,207	3,484
Appalachian Tennessee	20,512	9,130	4,017	1,633	2,395	2,179	1,158
Non-Appalachian Tennessee	36,262	15,450	6,425	4,872	3,161	4,028	2,326
Virginia	114,947	36,048	18,016	28,905	12,521	11,200	8,257
Appalachian Virginia	6,274	3,178	1,101	405	748	557	285
Non-Appalachian Virginia	108,673	32,870	16,915	28,500	11,773	10,643	7,972
West Virginia (entire state)	19,745	7,117	3,597	2,142	4,273	1,662	954

Data Source: U.S. Census Bureau, 2016-2020 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, 2016-2020

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	4.2	1.2	5.0	35.0	26.5	20.5	4.2
Appalachian Region	2.6	1.2	6.0	29.8	23.7	23.6	2.8
Subregions							
Northern Appalachia	4.0	1.3	8.1	31.5	26.7	30.3	5.1
North Central Appalachia	2.6	1.2	5.5	34.1	22.1	20.8	3.0
Central Appalachia	2.0	1.1	5.1	14.4	21.6	18.2	2.5
South Central Appalachia	1.9	1.0	4.0	30.7	16.6	20.2	1.7
Southern Appalachia	1.9	1.1	5.4	19.2	22.3	18.8	1.2
County Types							
Large Metros (pop. 1 million +)	2.7	1.1	5.3	28.2	26.0	16.7	1.7
Small Metros (pop. <1 million)	2.5	1.2	5.4	34.7	23.4	22.5	2.2
Nonmetro, Adjacent to Large Metros	3.0	1.3	6.7	29.9	24.6	30.8	7.5
Nonmetro, Adjacent to Small Metros	2.5	1.2	7.0	18.4	19.5	24.5	3.8
Rural (nonmetro, not adj. to a metro)	3.1	1.2	8.0	18.3	25.3	37.7	5.2
Alabama	1.9	1.2	5.0	27.0	22.1	15.5	1.6
Appalachian Alabama	1.8	1.1	4.0	26.5	23.3	14.3	1.4
Non-Appalachian Alabama	2.3	1.3	7.0	28.0	20.2	17.2	2.2
Georgia	3.0	1.2	7.1	32.7	22.1	22.2	2.1
Appalachian Georgia	2.0	1.0	6.3	11.0	19.0	19.9	1.0
Non-Appalachian Georgia	3.5	1.3	7.6	34.9	23.0	22.7	2.7
Kentucky	2.5	1.0	5.1	40.1	24.4	24.4	2.6
Appalachian Kentucky	2.2	1.1	5.6	11.5	22.8	18.7	3.2
Non-Appalachian Kentucky	2.6	1.0	4.9	41.6	24.8	25.3	2.5
Maryland	4.0	1.3	5.4	23.1	21.4	19.1	2.5
Appalachian Maryland	2.8	1.3	5.9	33.1	23.3	17.0	2.8
Non-Appalachian Maryland	4.0	1.3	5.4	23.1	21.4	19.1	2.5
Mississippi	2.2	1.2	6.0	10.0	22.1	17.4	2.7
Appalachian Mississippi	2.0	1.0	5.5	6.3	37.7	28.4	2.5
Non-Appalachian Mississippi	2.2	1.2	6.1	10.2	19.0	15.4	2.8
New York	21.7	2.6	10.5	52.6	53.7	47.9	25.7
Appalachian New York	4.6	1.5	7.2	40.4	27.6	33.0	8.4
Non-Appalachian New York	22.6	2.7	10.7	52.7	54.7	48.4	26.4
North Carolina	2.2	1.1	5.1	28.4	17.0	18.2	1.7
Appalachian North Carolina	2.1	1.2	4.4	28.5	15.9	22.2	1.6
Non-Appalachian North Carolina	2.2	1.1	5.2	28.4	17.2	17.2	1.7
Ohio	3.0	1.1	8.1	42.0	23.8	27.5	3.1
Appalachian Ohio	3.5	1.2	10.6	32.7	24.0	47.1	6.2
Non-Appalachian Ohio	2.9	1.0	7.5	42.5	23.7	22.9	2.7
Pennsylvania	5.0	1.4	8.1	31.7	28.3	28.3	5.2
Appalachian Pennsylvania	3.8	1.3	7.2	30.4	26.2	23.3	4.2
Non-Appalachian Pennsylvania	5.9	1.4	9.0	32.1	29.7	30.8	5.9
South Carolina	2.3	1.0	7.3	34.5	23.1	20.4	1.5
Appalachian South Carolina	2.1	1.1	5.6	36.0	22.2	19.2	1.1
Non-Appalachian South Carolina	2.4	1.0	8.0	34.1	23.4	20.7	1.7
Tennessee	1.8	1.0	3.9	36.4	18.2	17.1	1.8
Appalachian Tennessee	1.6	0.9	3.7	35.5	17.3	18.4	1.6
Non-Appalachian Tennessee	2.0	1.0	4.0	36.6	18.9	16.5	1.9
Virginia	2.8	1.1	4.8	17.5	17.9	15.5	2.5
Appalachian Virginia	2.1	1.3	4.3	20.4	16.8	15.9	2.2
Non-Appalachian Virginia	2.8	1.1	4.9	17.4	18.0	15.5	2.5
West Virginia (entire state)	2.7	1.2	5.7	36.9	24.2	19.7	2.9

Data Source: U.S. Census Bureau, 2016-2020 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, 2016-2020

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	89,772,603	5.0	6.5	51.7	36.8
Appalachian Region	6,933,924	3.2	4.6	49.1	43.2
Subregions					
Northern Appalachia	2,261,259	4.8	5.8	52.4	37.1
North Central Appalachia	648,242	3.2	4.4	47.9	44.5
Central Appalachia	416,879	2.4	4.0	42.3	51.3
South Central Appalachia	1,386,253	2.2	3.7	47.2	46.8
Southern Appalachia	2,221,291	2.2	4.1	48.6	45.1
County Types					
Large Metros (pop. 1 million +)	1,754,773	3.3	5.0	52.8	39.0
Small Metros (pop. <1 million)	3,006,026	3.0	4.6	50.0	42.3
Nonmetro, Adjacent to Large Metros	587,132	3.4	4.3	46.3	45.9
Nonmetro, Adjacent to Small Metros	998,919	3.0	4.3	44.2	48.5
Rural (nonmetro, not adj. to a metro)	587,074	3.3	4.1	44.5	48.1
Alabama	1,280,204	2.3	3.6	47.9	46.3
Appalachian Alabama	833,827	2.1	3.5	47.5	46.9
Non-Appalachian Alabama	446,377	2.6	3.7	48.6	45.2
Georgia	2,868,168	3.5	5.7	51.3	39.4
Appalachian Georgia	870,577	2.1	4.8	49.7	43.4
Non-Appalachian Georgia	1,997,591	4.2	6.1	52.0	37.7
Kentucky	1,189,994	3.1	4.9	50.5	41.5
Appalachian Kentucky	260,097	2.6	4.4	43.1	49.9
Non-Appalachian Kentucky	929,897	3.2	5.0	52.6	39.2
Maryland	1,733,289	4.9	7.6	54.1	33.4
Appalachian Maryland	65,517	3.4	4.4	50.0	42.3
Non-Appalachian Maryland	1,667,772	5.0	7.7	54.3	33.1
Mississippi	755,881	2.6	4.3	47.4	45.6
Appalachian Mississippi	153,097	2.5	3.3	45.4	48.8
Non-Appalachian Mississippi	602,784	2.7	4.5	47.9	44.8
New York	5,398,360	24.3	12.4	41.7	21.5
Appalachian New York	280,511	5.5	6.8	52.3	35.4
Non-Appalachian New York	5,117,849	25.3	12.7	41.2	20.8
North Carolina	2,910,575	2.6	4.6	50.2	42.6
Appalachian North Carolina	544,238	2.5	3.8	47.7	45.9
Non-Appalachian North Carolina	2,366,337	2.6	4.8	50.7	41.8
Ohio	3,352,714	3.7	4.5	53.7	38.1
Appalachian Ohio	522,274	3.7	3.8	46.7	45.8
Non-Appalachian Ohio	2,830,440	3.7	4.6	55.0	36.7
Pennsylvania	3,640,617	6.0	7.1	53.2	33.7
Appalachian Pennsylvania	1,619,423	4.7	6.0	53.2	36.0
Non-Appalachian Pennsylvania	2,021,194	7.1	7.9	53.2	31.8
South Carolina	1,370,602	2.8	4.8	50.3	42.1
Appalachian South Carolina	363,790	2.6	4.3	49.4	43.6
Non-Appalachian South Carolina	1,006,812	2.9	5.0	50.6	41.5
Tennessee	1,881,575	2.3	4.3	49.7	43.8
Appalachian Tennessee	779,787	1.9	3.5	46.7	47.8
Non-Appalachian Tennessee	1,101,788	2.5	4.8	51.7	41.0
Virginia	2,416,060	3.3	5.9	51.0	39.8
Appalachian Virginia	182,901	2.4	3.6	43.3	50.6
Non-Appalachian Virginia	2,233,159	3.4	6.1	51.6	38.9
West Virginia (entire state)	457,885	3.5	4.8	49.0	42.8

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, 2016-2020 American Community Survey.

Table 7.7: Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, by Amount of Time, 2016-2020

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	142,512,559	25.5	36.0	29.2	9.3	26.9
Appalachian Region	10,765,504	28.0	36.8	27.1	8.0	25.8
Subregions						
Northern Appalachia	3,446,395	31.4	35.7	25.2	7.6	25.0
North Central Appalachia	1,006,055	28.8	35.5	26.4	9.3	26.6
Central Appalachia	634,461	30.3	32.5	27.4	9.8	26.9
South Central Appalachia	2,148,360	29.2	40.8	24.5	5.5	23.5
Southern Appalachia	3,530,233	23.4	36.5	30.8	9.3	27.5
County Types						
Large Metros (pop. 1 million +)	2,696,334	20.7	32.9	35.1	11.4	29.8
Small Metros (pop. <1 million)	4,685,394	28.8	41.3	24.2	5.8	23.8
Nonmetro, Adjacent to Large Metros	926,432	33.4	33.0	24.5	9.1	25.2
Nonmetro, Adjacent to Small Metros	1,548,270	31.7	33.5	26.2	8.6	25.7
Rural (nonmetro, not adj. to a metro)	909,074	34.2	34.6	23.3	7.8	24.4
Alabama	2,002,359	26.1	38.6	28.5	6.8	25.2
Appalachian Alabama	1,306,165	25.3	38.1	29.6	7.0	25.5
Non-Appalachian Alabama	696,194	27.7	39.6	26.4	6.3	24.5
Georgia	4,475,685	22.1	35.3	31.7	10.9	28.7
Appalachian Georgia	1,407,506	19.6	32.3	34.2	13.9	31.3
Non-Appalachian Georgia	3,068,179	23.3	36.7	30.5	9.5	27.6
Kentucky	1,858,458	30.3	39.2	24.5	6.0	23.7
Appalachian Kentucky	398,705	32.6	32.5	25.6	9.3	26.3
Non-Appalachian Kentucky	1,459,753	29.7	41.0	24.2	5.1	23.1
Maryland	2,799,889	16.6	31.2	36.6	15.6	33.0
Appalachian Maryland	101,305	28.5	37.2	23.1	11.2	27.4
Non-Appalachian Maryland	2,698,584	16.1	31.0	37.1	15.8	33.3
Mississippi	1,193,668	29.4	37.2	26.3	7.1	25.2
Appalachian Mississippi	244,162	30.7	36.9	26.1	6.3	23.9
Non-Appalachian Mississippi	949,506	29.0	37.2	26.4	7.3	25.5
New York	8,584,828	19.6	29.3	33.1	18.0	33.5
Appalachian New York	426,295	39.5	35.6	19.4	5.5	21.4
Non-Appalachian New York	8,158,533	18.6	28.9	33.9	18.6	34.1
North Carolina	4,458,769	26.5	39.6	27.5	6.4	24.9
Appalachian North Carolina	842,774	30.1	41.5	22.9	5.5	23.2
Non-Appalachian North Carolina	3,615,995	25.7	39.1	28.5	6.7	25.3
Ohio	5,163,570	28.6	40.4	25.8	5.3	23.7
Appalachian Ohio	814,790	30.1	36.0	25.5	8.5	25.8
Non-Appalachian Ohio	4,348,780	28.3	41.2	25.9	4.6	23.4
Pennsylvania	5,652,158	26.0	35.3	29.5	9.2	27.1
Appalachian Pennsylvania	2,463,698	29.9	35.2	26.9	7.9	25.7
Non-Appalachian Pennsylvania	3,188,460	23.0	35.3	31.5	10.1	28.3
South Carolina	2,174,285	25.2	39.4	29.1	6.3	25.1
Appalachian South Carolina	572,400	25.2	42.9	27.2	4.6	24.2
Non-Appalachian South Carolina	1,601,885	25.2	38.1	29.8	6.9	25.5
Tennessee	2,909,026	24.9	39.3	29.1	6.7	25.4
Appalachian Tennessee	1,202,529	27.5	40.3	26.4	5.8	24.1
Non-Appalachian Tennessee	1,706,497	23.1	38.6	30.9	7.4	26.3
Virginia	3,883,690	21.8	35.9	32.0	10.3	28.6
Appalachian Virginia	288,133	32.3	35.8	25.1	6.8	24.1
Non-Appalachian Virginia	3,595,557	21.0	35.9	32.5	10.6	28.9
West Virginia (entire state)	697,042	29.5	36.4	24.8	9.3	26.1

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

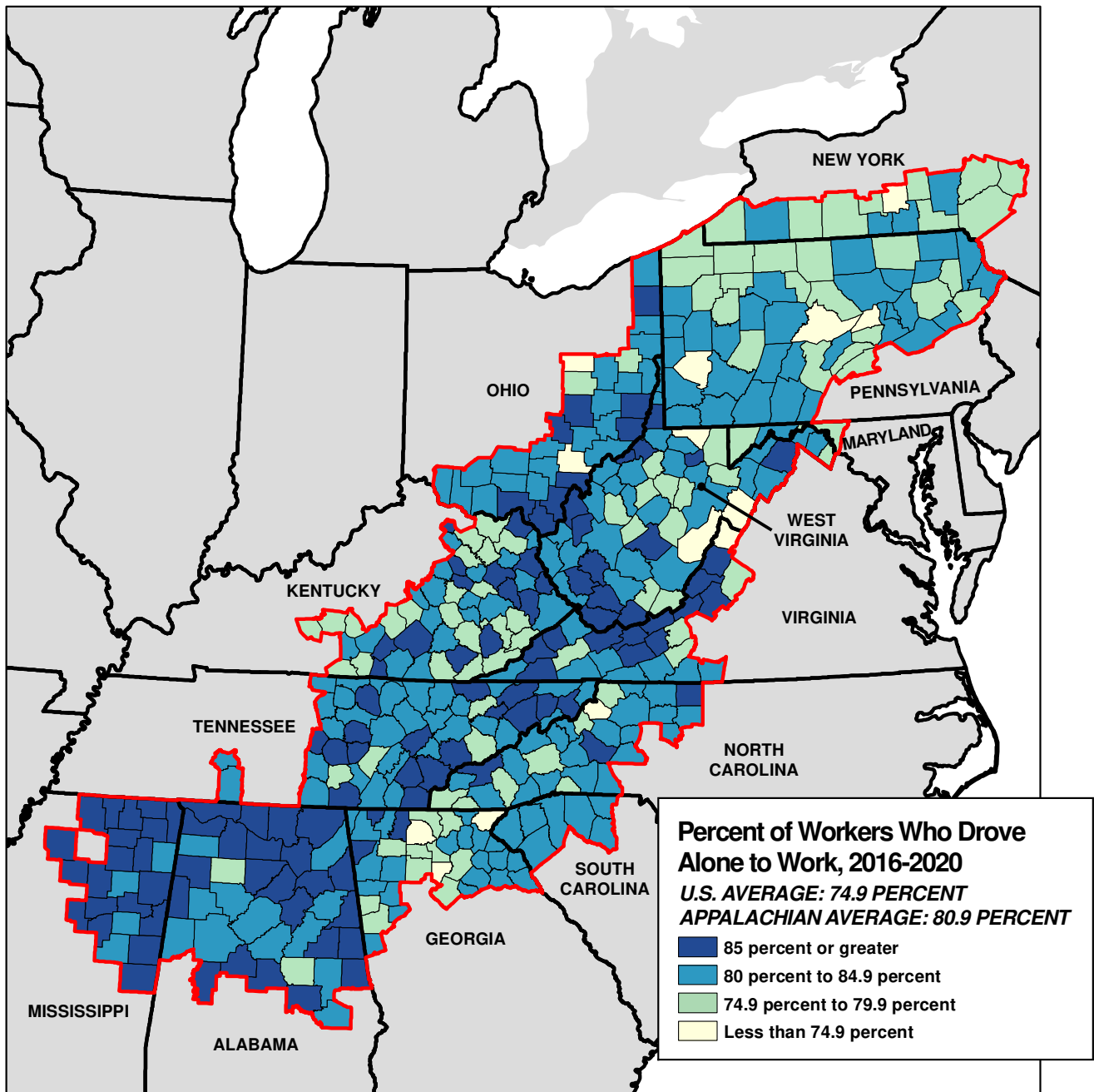
Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Table 7.8: Place of Work (State and County Level) for Workers Ages 16 and Over in the Appalachian Region, 2016-2020

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	153,665,654	72.8	27.2	23.6	3.6
Appalachian Region	11,418,033	68.2	31.8	27.4	4.4
Subregions					
Northern Appalachia	3,664,050	73.9	26.1	22.1	4.0
North Central Appalachia	1,055,654	62.6	37.4	25.4	12.0
Central Appalachia	661,018	59.6	40.4	34.3	6.1
South Central Appalachia	2,280,953	70.8	29.2	26.2	3.0
Southern Appalachia	3,756,358	64.2	35.8	32.5	3.3
County Types					
Large Metros (pop. 1 million +)	2,922,272	64.2	35.8	33.3	2.5
Small Metros (pop. <1 million)	4,956,322	72.2	27.8	22.6	5.2
Nonmetro, Adjacent to Large Metros	969,819	66.6	33.4	29.4	3.9
Nonmetro, Adjacent to Small Metros	1,619,798	64.3	35.7	29.6	6.1
Rural (nonmetro, not adj. to a metro)	949,822	68.0	32.0	28.0	4.0
Alabama	2,095,195	72.5	27.5	23.1	4.5
Appalachian Alabama	1,367,490	71.1	28.9	26.1	2.8
Non-Appalachian Alabama	727,705	75.0	25.0	17.3	7.6
Georgia	4,852,255	59.0	41.0	38.3	2.7
Appalachian Georgia	1,530,952	54.1	45.9	42.1	3.7
Non-Appalachian Georgia	3,321,303	61.3	38.7	36.5	2.2
Kentucky	1,962,584	67.8	32.2	25.7	6.5
Appalachian Kentucky	415,139	61.6	38.4	33.4	5.0
Non-Appalachian Kentucky	1,547,445	69.5	30.5	23.7	6.9
Maryland	3,047,112	55.3	44.7	28.7	16.0
Appalachian Maryland	108,545	71.2	28.8	15.7	13.0
Non-Appalachian Maryland	2,938,567	54.8	45.2	29.1	16.1
Mississippi	1,230,952	62.9	37.1	28.5	8.6
Appalachian Mississippi	252,123	62.2	37.8	32.3	5.5
Non-Appalachian Mississippi	978,829	63.1	36.9	27.5	9.4
New York	9,219,025	65.2	34.8	32.5	2.3
Appalachian New York	451,679	77.5	22.5	20.1	2.5
Non-Appalachian New York	8,767,346	64.6	35.4	33.1	2.3
North Carolina	4,829,643	71.4	28.6	26.0	2.6
Appalachian North Carolina	898,395	72.1	27.9	25.6	2.3
Non-Appalachian North Carolina	3,931,248	71.2	28.8	26.1	2.7
Ohio	5,496,532	70.1	29.9	27.2	2.7
Appalachian Ohio	853,872	61.5	38.5	30.0	8.5
Non-Appalachian Ohio	4,642,660	71.7	28.3	26.7	1.6
Pennsylvania	6,085,959	70.8	29.2	24.1	5.1
Appalachian Pennsylvania	2,627,797	74.7	25.3	22.0	3.3
Non-Appalachian Pennsylvania	3,458,162	67.9	32.1	25.7	6.4
South Carolina	2,304,196	70.5	29.5	24.2	5.4
Appalachian South Carolina	605,793	74.8	25.2	22.9	2.4
Non-Appalachian South Carolina	1,698,403	68.9	31.1	24.6	6.4
Tennessee	3,103,430	71.5	28.5	25.0	3.5
Appalachian Tennessee	1,274,142	70.5	29.5	26.5	3.0
Non-Appalachian Tennessee	1,829,288	72.2	27.8	24.0	3.8
Virginia	4,224,874	50.3	49.7	41.6	8.1
Appalachian Virginia	301,711	59.1	40.9	32.6	8.3
Non-Appalachian Virginia	3,923,163	49.6	50.4	42.3	8.1
West Virginia (entire state)	730,395	66.0	34.0	21.2	12.8

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

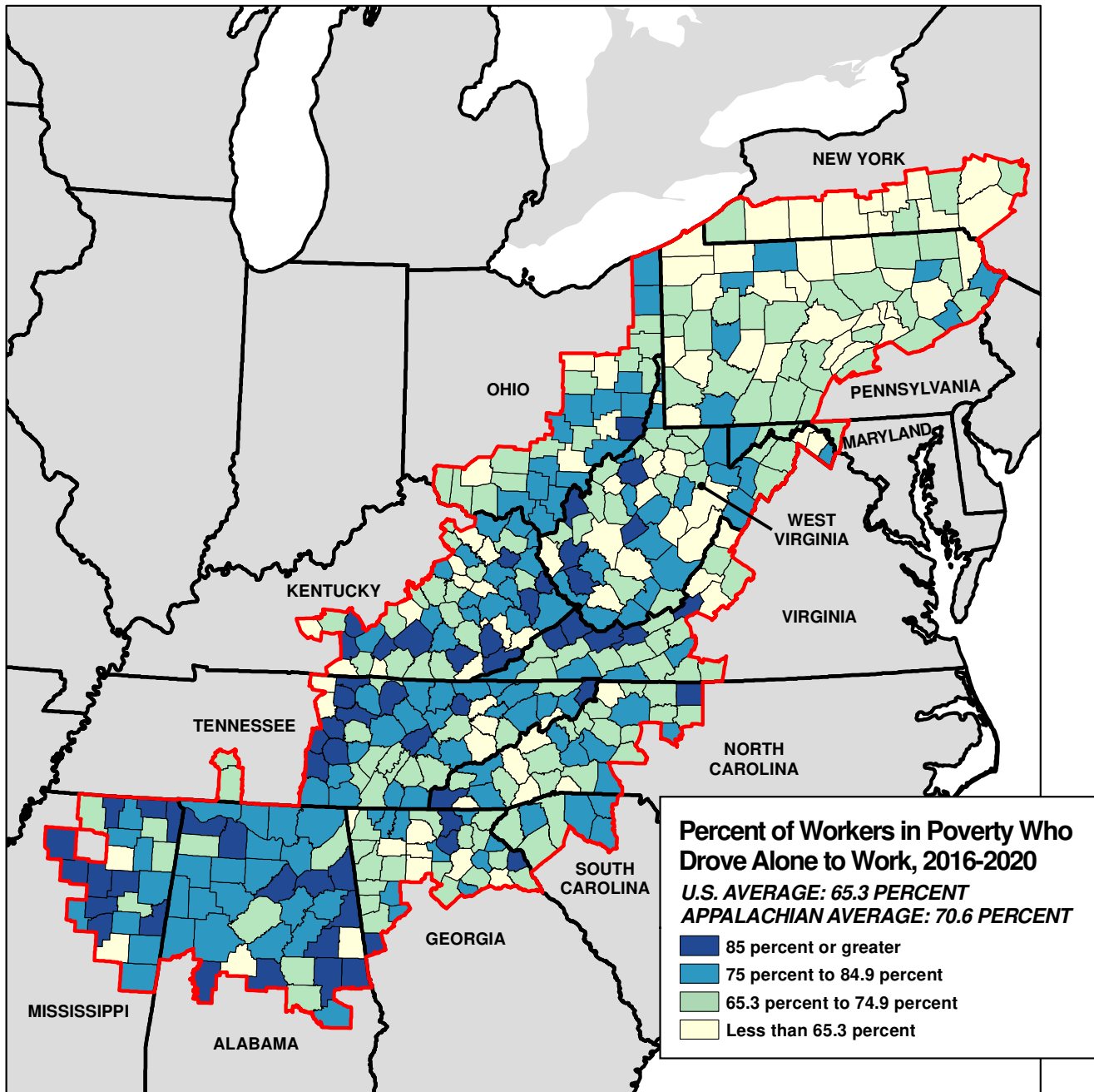
Figure 7.1: Percent of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2016-2020



Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In the 2016-2020 period, 80.9 percent of workers in the Appalachian Region drove alone to their jobs, which is six percentage points higher than the nationwide share. And the percentage is even greater in much of Appalachia: In 114 Appalachian counties, at least 85 percent of workers drove alone. Central, South Central, and Southern Appalachia accounted for 96 of these counties, including 43 in Alabama and Mississippi alone. (The share of workers driving alone exceeded 84 percent in the Appalachian sections of both states.) In contrast, Northern Appalachia had five of the 14 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. Among the county types, only counties in large metros had less than 80 percent of workers driving alone to work.

Figure 7.2: Percent of Workers Ages 16 and Over Below the Poverty Level in the Appalachian Region Who Drove Alone to Work, 2016-2020

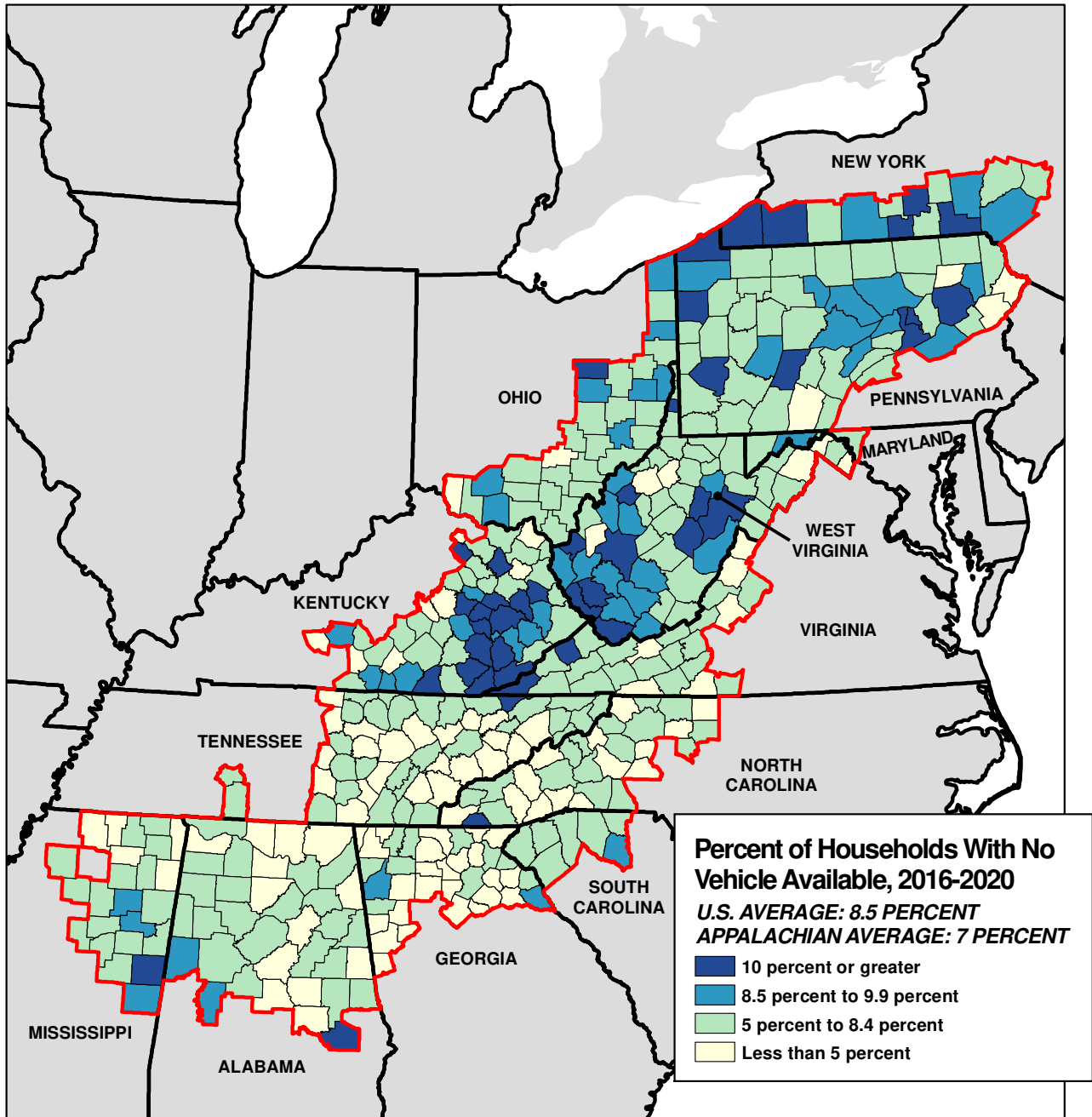


Map Title: Percent of Workers Ages 16 and Over Below the Poverty Level in the Appalachian Region Who Drove Alone to Work, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Among workers with incomes below the poverty level (\$26,246 for a family of two adults and two children in 2020), the share who drove alone to their places of employment was almost 71 percent in Appalachia, compared to just over 65 percent nationally. The share was at least 75 percent in 189 of the Region’s 423 counties, and at least 85 percent in 59 of them. Central, South Central, and Southern Appalachia had the vast majority of counties in both groups; the share of poor workers who drove alone exceeded 73 percent in all three subregions. In contrast, 34 of the 89 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, 2016-2020

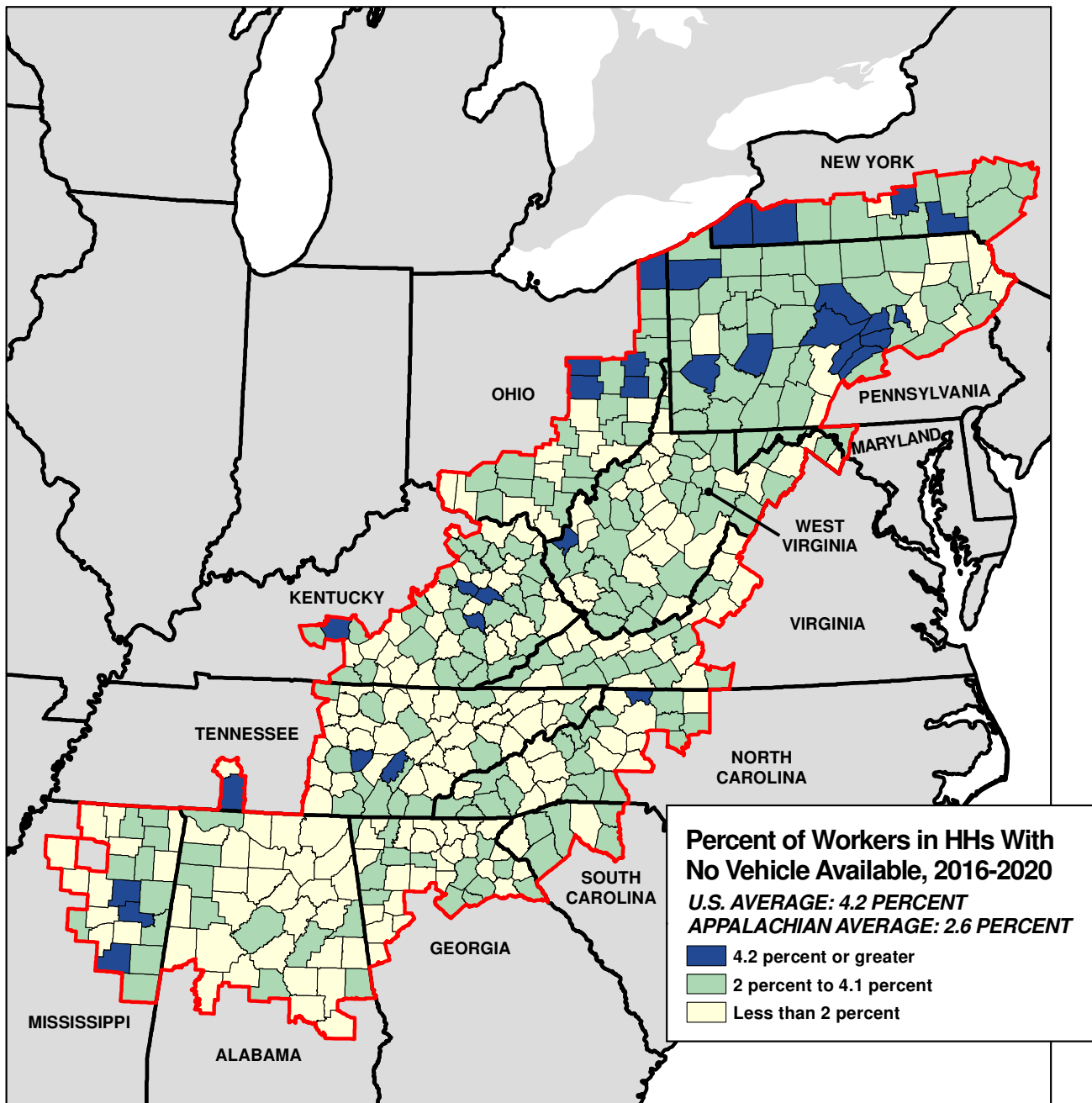


Map Title: Percent of Households in the Appalachian Region With No Vehicle Available, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Having a reliable mode of transportation is an important part of many household members' ability to gain and keep employment. Yet in Appalachia, 7 percent of households have no vehicle available to get to current and/or potential employment. While this is lower than the national average of 8.5 percent, that is not the case in much of the Region. In fact, there were 44 Appalachian counties where at least one in 10 households had no vehicle available; 37 of these counties were in four states—New York, Pennsylvania, West Virginia, and Kentucky. Yet in 105 other counties in the Region, less than 5 percent of households were without any motor vehicle. South Central and Southern Appalachia had 80 of the counties in the latter group.

Figure 7.4: Percent of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2016-2020

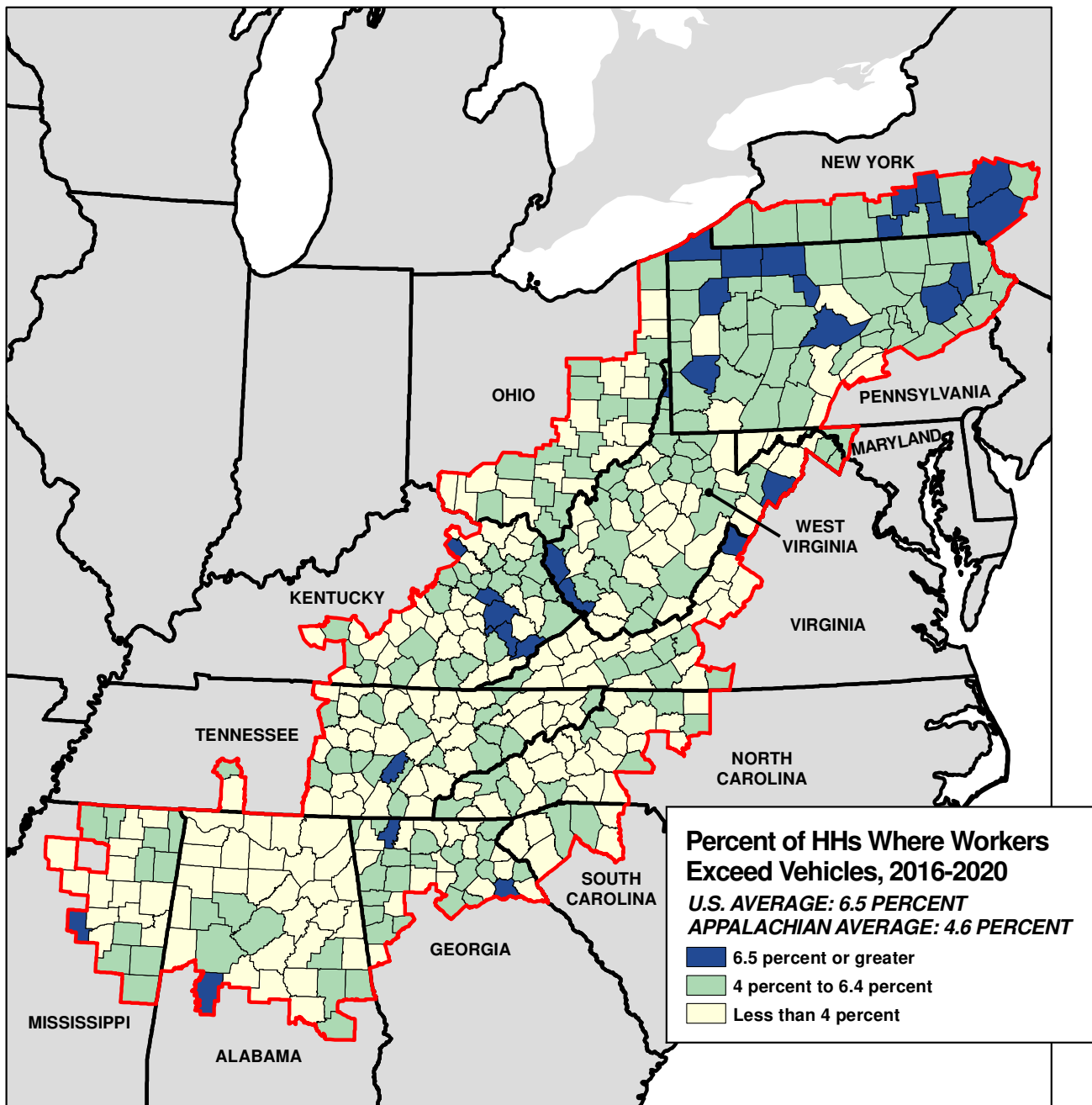


Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Just 2.6 percent of Appalachian workers live in households with no vehicle available, compared to 4.2 percent of workers nationally. And the share is even lower in a large part of the Region: in 198 of Appalachia's 423 counties, less than 2 percent of the work force did not have a vehicle in their household. These counties were heavily concentrated in Central, South Central, and Southern Appalachia; the share of workers without a vehicle was around 2 percent in all three subregions. In contrast, Northern Appalachia had 19 of the Region's 31 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, 2016-2020

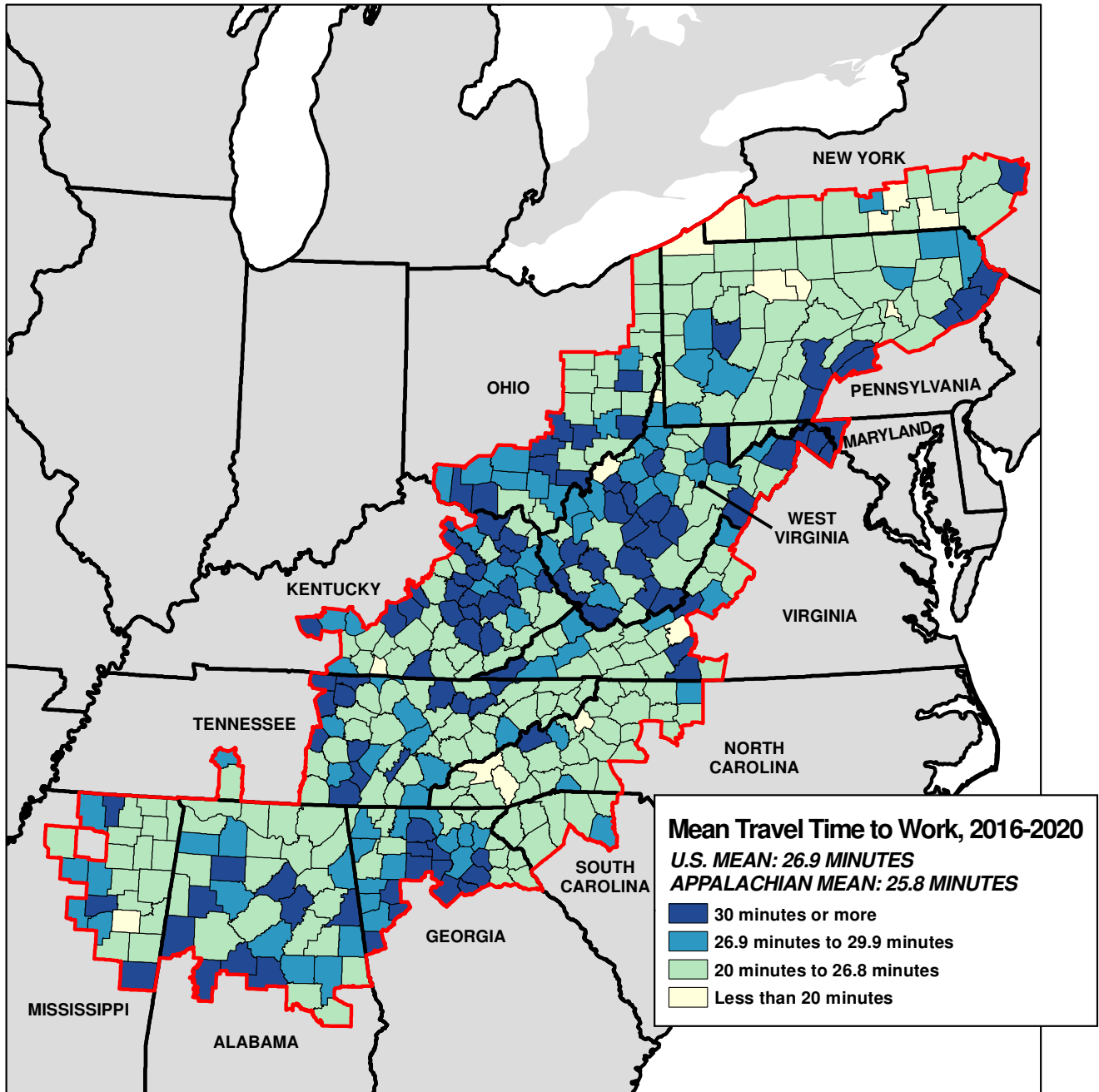


Map Title: Percent of Households With One or More Workers in the Appalachian Region Where the Number of Workers Exceeds the Number of Vehicles Available, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In 4.6 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 6.5 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 more than half of Appalachia’s 423 counties, mostly in Central, South Central, and Southern Appalachia. Yet in 30 Appalachian counties, the share of households with more workers than vehicles matched or exceeded the national average. Half of the counties in the latter group were in New York and Pennsylvania: In the Appalachian sections of these two states, workers exceeded available vehicles in at least 6 percent of the households.

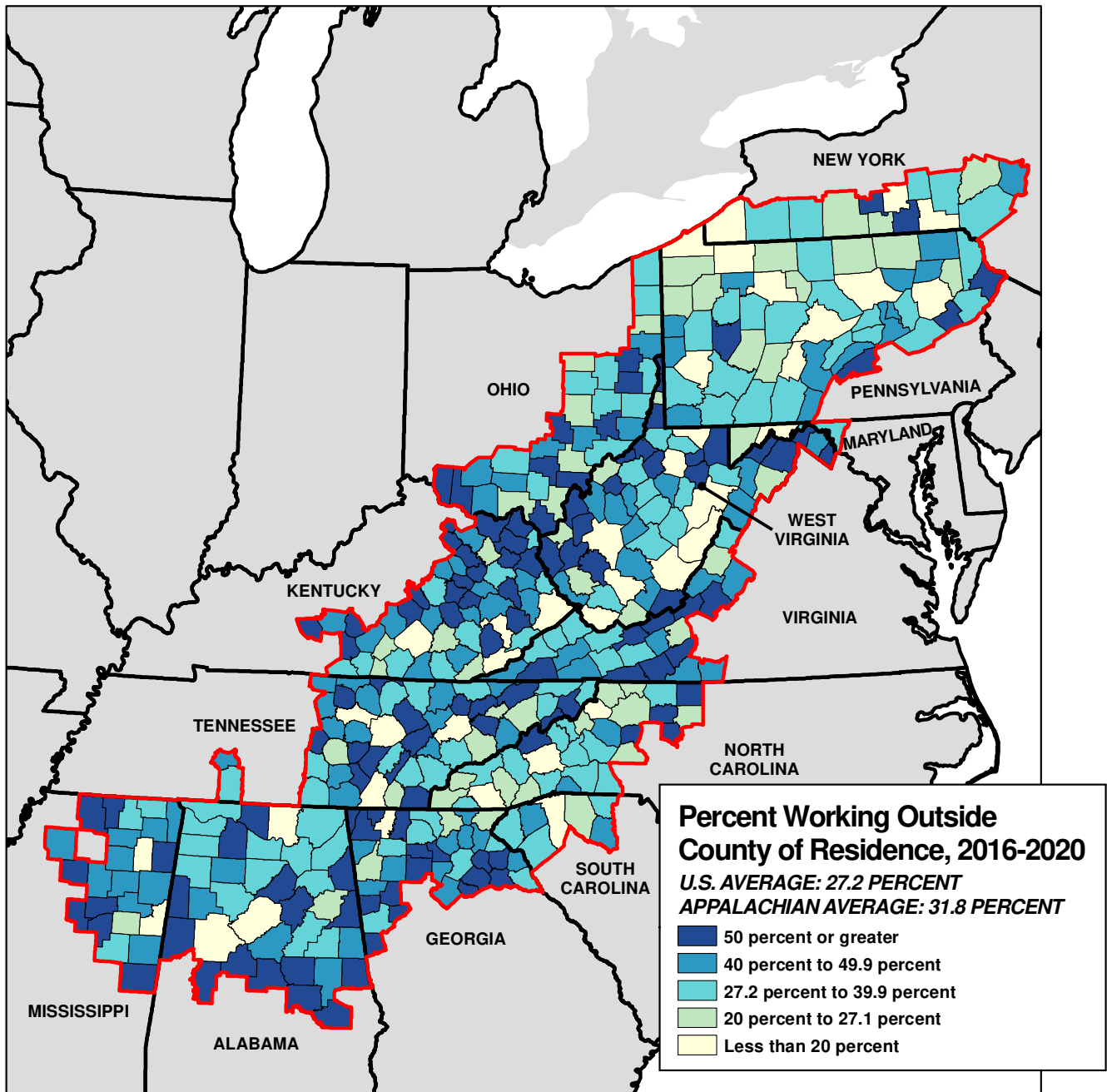
Figure 7.6: Mean Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, 2016-2020



Map Title: Mean Travel Time to Work for Workers Ages 16 and Over in the Appalachian Region, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In the Appalachian Region, workers ages 16 and older took, on average, 25.8 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 189 of the Region’s 423 counties, the mean travel time to work was at or above the national average. And in 104 Appalachian counties, workers averaged a half hour or more to get to their jobs. Just under half of these 104 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 57 nonmetropolitan counties—39 of which were in Kentucky, Ohio, and West Virginia—faced similarly lengthy commutes. By comparison, workers in just 16 Appalachian counties had average commutes lasting less than 20 minutes. Some of these counties were home to colleges and universities (for example, Oktibbeha County, Mississippi, home to Mississippi State University). It is important to note, however, that these data cover the 2016-2020 period, so most of these commuting patterns pre-date the onset of the COVID-19 pandemic.

Figure 7.7: Percent of Workers Ages 16 and Over in the Appalachian Region Who Work Outside Their County of Residence, 2016-2020



Map Title: Percent of Workers Ages 16 and Over in the Appalachian Region Who Work Outside Their County of Residence, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

About 32 percent of Appalachian workers ages 16 and older had jobs outside their county of residence during 2016-2020, more than four percentage points above the average nationwide. And the share is even higher in most of the Region: In 220 of Appalachia's 423 counties, at least 40 percent of workers had their primary employment outside their county of residence. And in 124 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 38 Appalachian counties had fewer than one in five workers employed outside their residential county. Many of these were central counties in metro areas (such as Allegheny County, Pennsylvania, where Pittsburgh is located) and counties that housed colleges and universities (like Greenville County, South Carolina, home to Furman University).

Table 7.9: Percentage Point Change in Means of Transportation for Workers Ages 16 and Over in the Appalachian Region, 2011-2015 to 2016-2020

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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, 2011-2015 to 2016-2020

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	+ 1.3	- 0.8	- 1.3	- 0.5	+ 0.0	+ 1.4
Appalachian Region	- 0.7	- 0.5	+ 0.1	- 0.3	+ 0.0	+ 1.4
Subregions						
Northern Appalachia	- 0.1	- 0.5	+ 0.4	- 1.3	+ 0.0	+ 1.5
North Central Appalachia	- 0.5	- 0.1	+ 0.5	- 1.4	+ 0.2	+ 1.3
Central Appalachia	- 0.7	+ 0.6	+ 0.0	- 0.5	- 0.5	+ 1.2
South Central Appalachia	- 1.1	- 0.4	- 0.2	+ 0.2	+ 0.0	+ 1.5
Southern Appalachia	- 0.2	- 0.8	- 0.3	+ 0.3	- 0.2	+ 1.2
County Types						
Large Metros (pop. 1 million +)	- 0.9	- 1.1	+ 0.5	+ 0.0	- 0.5	+ 1.9
Small Metros (pop. <1 million)	- 0.9	- 0.1	+ 0.1	- 0.7	+ 0.0	+ 1.6
Nonmetro, Adjacent to Large Metros	+ 0.8	- 1.4	+ 0.3	- 0.6	+ 0.3	+ 0.6
Nonmetro, Adjacent to Small Metros	- 0.8	+ 0.5	+ 0.1	+ 0.0	- 0.5	+ 0.9
Rural (nonmetro, not adj. to a metro)	- 0.8	- 1.7	- 0.4	+ 0.6	+ 1.0	+ 1.4
Alabama	+ 1.0	- 1.6	+ 0.0	+ 0.0	- 0.1	+ 0.8
Appalachian Alabama	+ 1.5	- 1.9	- 0.2	+ 0.3	- 0.4	+ 0.7
Non-Appalachian Alabama	+ 0.3	- 1.1	+ 0.1	- 0.6	+ 0.3	+ 1.0
Georgia	- 0.6	- 0.8	- 0.8	+ 0.0	+ 0.3	+ 1.8
Appalachian Georgia	- 2.2	+ 1.8	- 0.3	+ 0.7	- 0.8	+ 0.8
Non-Appalachian Georgia	+ 0.0	- 1.7	- 0.9	- 0.3	+ 0.7	+ 2.2
Kentucky	- 0.6	+ 0.3	- 0.3	- 1.3	+ 0.7	+ 1.2
Appalachian Kentucky	+ 0.0	+ 1.0	- 0.4	- 1.0	- 0.8	+ 1.2
Non-Appalachian Kentucky	- 0.9	+ 0.1	- 0.3	- 1.4	+ 1.3	+ 1.2
Maryland	+ 3.0	- 0.8	- 3.5	- 1.3	+ 1.1	+ 1.6
Appalachian Maryland	+ 1.6	- 3.8	+ 1.3	+ 0.7	- 1.5	+ 1.8
Non-Appalachian Maryland	+ 3.0	- 0.7	- 3.8	- 1.5	+ 1.2	+ 1.7
Mississippi	+ 2.8	- 2.5	- 0.7	- 0.4	+ 0.4	+ 0.4
Appalachian Mississippi	+ 1.2	- 5.1	- 0.5	+ 0.0	+ 1.9	+ 2.4
Non-Appalachian Mississippi	+ 3.3	- 1.9	- 0.7	- 0.5	+ 0.0	- 0.1
New York	+ 3.5	+ 0.1	- 4.4	- 1.1	+ 0.4	+ 1.5
Appalachian New York	- 0.4	- 0.9	+ 0.5	- 1.4	+ 0.4	+ 1.6
Non-Appalachian New York	+ 3.5	+ 0.1	- 4.4	- 1.1	+ 0.4	+ 1.5
North Carolina	+ 0.3	- 1.5	- 0.6	- 0.6	+ 0.2	+ 2.3
Appalachian North Carolina	- 2.4	+ 1.7	- 0.7	+ 0.0	- 0.1	+ 1.5
Non-Appalachian North Carolina	+ 1.0	- 2.3	- 0.6	- 0.8	+ 0.3	+ 2.4
Ohio	- 0.1	- 0.1	- 0.9	- 0.3	+ 0.1	+ 1.4
Appalachian Ohio	+ 0.4	+ 0.0	+ 0.1	- 1.3	- 0.3	+ 1.0
Non-Appalachian Ohio	- 0.3	- 0.2	- 1.1	+ 0.0	+ 0.0	+ 1.5
Pennsylvania	- 0.1	- 0.4	- 0.3	- 1.4	+ 0.5	+ 1.6
Appalachian Pennsylvania	- 0.3	- 0.1	+ 0.3	- 1.7	+ 0.0	+ 1.7
Non-Appalachian Pennsylvania	+ 0.2	- 0.6	- 0.9	- 1.1	+ 1.0	+ 1.5
South Carolina	+ 1.3	- 0.7	- 0.4	- 0.7	- 0.4	+ 1.0
Appalachian South Carolina	- 0.9	- 1.3	+ 0.0	- 1.0	+ 0.5	+ 2.7
Non-Appalachian South Carolina	+ 2.0	- 0.6	- 0.5	- 0.6	- 0.8	+ 0.4
Tennessee	- 0.2	- 1.1	- 0.4	- 0.3	+ 0.1	+ 1.8
Appalachian Tennessee	- 0.7	- 1.3	+ 0.0	+ 0.6	- 0.1	+ 1.5
Non-Appalachian Tennessee	+ 0.2	- 1.0	- 0.7	- 0.9	+ 0.4	+ 2.1
Virginia	+ 0.0	- 0.4	- 1.3	- 0.5	+ 1.0	+ 1.2
Appalachian Virginia	- 0.7	- 2.4	+ 0.6	- 0.8	+ 0.9	+ 2.4
Non-Appalachian Virginia	+ 0.1	- 0.1	- 1.6	- 0.5	+ 1.1	+ 1.1
West Virginia (entire state)	- 1.0	- 1.0	+ 0.7	- 0.5	+ 0.8	+ 1.0

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2011-2015 and 2016-2020 American Community Surveys.

Table 7.11: Percentage Point Change in Availability of Vehicles for Households in the Appalachian Region, 2011-2015 to 2016-2020

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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, 2011-2015 to 2016-2020

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	- 0.3	+ 0.0	- 0.4	- 1.1	- 0.7	+ 1.5	- 0.1
Appalachian Region	- 0.1	+ 0.0	+ 0.2	+ 2.7	+ 0.4	+ 3.3	- 0.7
Subregions							
Northern Appalachia	+ 0.2	+ 0.0	+ 0.8	+ 3.1	+ 1.1	+ 2.3	- 1.1
North Central Appalachia	+ 0.0	+ 0.0	+ 0.1	+ 3.7	+ 0.2	- 1.9	- 0.7
Central Appalachia	- 0.2	+ 0.0	- 0.3	+ 3.4	+ 0.1	+ 2.1	- 1.0
South Central Appalachia	+ 0.0	- 0.1	+ 0.0	- 0.7	- 1.2	+ 6.3	- 0.5
Southern Appalachia	- 0.1	+ 0.0	- 0.2	+ 1.7	+ 1.5	+ 3.3	- 0.2
County Types							
Large Metros (pop. 1 million +)	- 0.1	+ 0.0	+ 0.4	+ 2.9	- 1.3	+ 3.5	- 0.3
Small Metros (pop. <1 million)	- 0.1	+ 0.0	- 0.3	+ 1.1	+ 0.3	+ 2.3	- 0.5
Nonmetro, Adjacent to Large Metros	+ 0.3	+ 0.1	+ 0.2	+ 14.9	+ 5.0	+ 5.4	+ 1.1
Nonmetro, Adjacent to Small Metros	- 0.1	+ 0.0	+ 1.1	- 0.7	- 1.4	+ 2.3	- 1.5
Rural (nonmetro, not adj. to a metro)	+ 0.1	+ 0.0	- 0.2	+ 4.8	+ 3.1	+ 6.5	- 2.8
Alabama	- 0.1	+ 0.0	- 1.0	+ 2.2	+ 1.9	+ 2.2	+ 0.2
Appalachian Alabama	- 0.1	- 0.1	- 1.4	- 0.2	+ 4.0	+ 2.6	+ 0.3
Non-Appalachian Alabama	+ 0.1	+ 0.1	+ 0.0	+ 6.4	- 1.3	+ 1.3	+ 0.4
Georgia	- 0.1	+ 0.0	+ 0.0	+ 1.3	- 3.4	+ 2.6	- 0.2
Appalachian Georgia	+ 0.1	- 0.1	+ 1.3	- 0.9	- 1.2	+ 5.5	- 0.4
Non-Appalachian Georgia	- 0.1	+ 0.1	- 0.4	+ 1.6	- 4.2	+ 1.3	+ 0.0
Kentucky	- 0.2	+ 0.0	- 0.7	- 1.4	+ 1.0	+ 4.8	- 1.3
Appalachian Kentucky	- 0.2	+ 0.0	- 0.3	- 1.6	+ 1.0	- 0.2	- 0.6
Non-Appalachian Kentucky	- 0.2	+ 0.0	- 0.9	- 2.5	+ 0.9	+ 5.5	- 1.4
Maryland	- 0.3	+ 0.0	- 0.3	+ 0.4	- 1.1	+ 0.6	+ 0.1
Appalachian Maryland	- 0.6	- 0.6	+ 1.0	+ 1.6	- 1.6	- 20.6	- 0.6
Non-Appalachian Maryland	- 0.4	+ 0.1	- 0.3	+ 0.4	- 1.0	+ 1.2	+ 0.1
Mississippi	- 0.2	- 0.1	- 0.2	- 11.2	+ 0.5	+ 1.3	+ 0.9
Appalachian Mississippi	- 0.1	- 0.1	- 1.2	+ 3.2	+ 15.1	+ 12.7	+ 1.3
Non-Appalachian Mississippi	- 0.2	- 0.2	+ 0.0	- 13.9	- 2.4	- 0.8	+ 0.8
New York	- 0.5	+ 0.1	- 1.1	- 1.2	- 0.7	+ 0.4	+ 1.6
Appalachian New York	+ 0.2	+ 0.0	- 0.1	+ 3.7	+ 0.7	+ 4.8	+ 3.0
Non-Appalachian New York	- 0.6	+ 0.1	- 1.2	- 1.1	- 0.8	+ 0.2	+ 1.3
North Carolina	- 0.3	- 0.1	- 1.7	- 2.8	- 2.0	+ 0.5	+ 0.1
Appalachian North Carolina	+ 0.0	+ 0.0	+ 0.0	- 4.5	- 2.0	+ 4.6	+ 0.0
Non-Appalachian North Carolina	- 0.4	- 0.1	- 2.1	- 2.6	- 2.1	- 0.5	+ 0.1
Ohio	+ 0.0	+ 0.0	+ 0.6	+ 2.9	+ 0.7	+ 4.6	- 1.3
Appalachian Ohio	+ 0.2	- 0.1	- 0.3	+ 12.2	+ 2.3	+ 7.6	- 3.1
Non-Appalachian Ohio	- 0.1	- 0.1	+ 0.7	+ 2.5	+ 0.3	+ 3.6	- 0.9
Pennsylvania	- 0.1	+ 0.0	+ 0.6	- 1.7	+ 1.0	+ 3.8	- 1.2
Appalachian Pennsylvania	+ 0.1	+ 0.0	+ 1.1	+ 3.0	+ 1.2	+ 0.6	- 1.1
Non-Appalachian Pennsylvania	- 0.3	+ 0.0	+ 0.1	- 3.2	+ 0.7	+ 5.2	- 1.2
South Carolina	- 0.2	- 0.1	- 0.5	+ 1.5	- 1.6	- 1.6	+ 0.0
Appalachian South Carolina	- 0.2	- 0.1	- 1.4	+ 15.5	- 1.9	- 8.8	- 0.6
Non-Appalachian South Carolina	- 0.2	+ 0.0	+ 0.0	- 1.5	- 1.5	- 0.1	+ 0.3
Tennessee	- 0.3	- 0.1	- 1.0	- 0.8	- 1.1	+ 4.2	- 0.4
Appalachian Tennessee	- 0.2	- 0.2	+ 0.1	- 0.6	- 1.8	+ 6.6	- 0.6
Non-Appalachian Tennessee	- 0.3	- 0.1	- 1.9	- 0.9	- 0.5	+ 2.8	- 0.3
Virginia	+ 0.1	+ 0.0	- 0.2	+ 0.7	+ 0.3	+ 0.4	+ 0.1
Appalachian Virginia	+ 0.1	+ 0.3	- 0.6	+ 0.3	+ 3.0	+ 6.4	- 2.5
Non-Appalachian Virginia	+ 0.0	+ 0.0	- 0.1	+ 0.7	+ 0.1	+ 0.1	+ 0.3
West Virginia (entire state)	- 0.1	+ 0.0	+ 0.0	+ 1.3	- 1.8	- 4.3	- 0.6

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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, 2011-2015 to 2016-2020

Availability of Vehicles	Percentage Point Change in Share of Households With One or More Workers			
	Households With Zero Vehicles	Households Where Workers Exceed Vehicles	Households Where Workers Equal Vehicles	Households Where Vehicles Exceed Workers
United States	- 0.2	+ 0.1	- 0.2	+ 0.4
Appalachian Region	+ 0.0	- 0.1	- 0.1	+ 0.3
Subregions				
Northern Appalachia	+ 0.2	+ 0.0	+ 0.1	- 0.2
North Central Appalachia	+ 0.0	+ 0.0	- 0.6	+ 0.6
Central Appalachia	- 0.1	+ 0.1	- 1.5	+ 1.5
South Central Appalachia	- 0.1	- 0.2	- 0.3	+ 0.6
Southern Appalachia	- 0.2	- 0.1	+ 0.2	+ 0.1
County Types				
Large Metros (pop. 1 million +)	- 0.1	- 0.1	+ 0.4	- 0.1
Small Metros (pop. <1 million)	- 0.2	- 0.1	- 0.1	+ 0.3
Nonmetro, Adjacent to Large Metros	+ 0.2	- 0.2	- 0.6	+ 0.6
Nonmetro, Adjacent to Small Metros	+ 0.0	+ 0.0	- 0.7	+ 0.7
Rural (nonmetro, not adj. to a metro)	+ 0.0	- 0.1	- 0.7	+ 0.7
Alabama	- 0.1	- 0.3	+ 0.0	+ 0.5
Appalachian Alabama	- 0.2	- 0.2	+ 0.2	+ 0.3
Non-Appalachian Alabama	- 0.1	- 0.6	- 0.3	+ 1.1
Georgia	+ 0.0	+ 0.3	- 0.4	+ 0.1
Appalachian Georgia	- 0.1	+ 0.0	+ 0.3	- 0.1
Non-Appalachian Georgia	+ 0.1	+ 0.4	- 0.7	+ 0.2
Kentucky	- 0.1	+ 0.1	- 0.7	+ 0.7
Appalachian Kentucky	- 0.1	+ 0.2	- 1.7	+ 1.6
Non-Appalachian Kentucky	- 0.1	+ 0.0	- 0.4	+ 0.5
Maryland	- 0.4	- 0.1	+ 0.5	+ 0.0
Appalachian Maryland	- 0.9	- 1.9	+ 2.9	+ 0.0
Non-Appalachian Maryland	- 0.3	- 0.1	+ 0.5	+ 0.0
Mississippi	- 0.2	+ 0.0	- 1.4	+ 1.5
Appalachian Mississippi	+ 0.1	+ 0.1	- 1.0	+ 0.8
Non-Appalachian Mississippi	- 0.2	+ 0.0	- 1.6	+ 1.7
New York	- 0.2	+ 0.9	- 0.6	- 0.2
Appalachian New York	+ 0.0	+ 0.0	- 0.4	+ 0.4
Non-Appalachian New York	- 0.2	+ 0.9	- 0.5	- 0.2
North Carolina	- 0.4	- 0.2	+ 0.1	+ 0.5
Appalachian North Carolina	+ 0.0	- 0.4	+ 0.6	- 0.3
Non-Appalachian North Carolina	- 0.6	- 0.1	- 0.1	+ 0.7
Ohio	+ 0.0	+ 0.0	- 0.2	+ 0.3
Appalachian Ohio	+ 0.1	- 0.1	- 0.4	+ 0.5
Non-Appalachian Ohio	+ 0.0	- 0.1	- 0.2	+ 0.3
Pennsylvania	- 0.1	+ 0.5	+ 0.0	- 0.4
Appalachian Pennsylvania	+ 0.2	+ 0.0	+ 0.3	- 0.6
Non-Appalachian Pennsylvania	- 0.2	+ 0.8	- 0.3	- 0.3
South Carolina	- 0.3	- 0.2	- 0.1	+ 0.6
Appalachian South Carolina	- 0.3	- 0.2	- 0.2	+ 0.6
Non-Appalachian South Carolina	- 0.3	- 0.2	+ 0.0	+ 0.5
Tennessee	- 0.2	+ 0.2	- 0.8	+ 0.9
Appalachian Tennessee	- 0.2	- 0.1	- 1.2	+ 1.4
Non-Appalachian Tennessee	- 0.3	+ 0.3	- 0.6	+ 0.7
Virginia	+ 0.1	+ 0.2	+ 0.1	- 0.4
Appalachian Virginia	- 0.1	- 0.3	+ 0.1	+ 0.3
Non-Appalachian Virginia	+ 0.1	+ 0.3	+ 0.0	- 0.3
West Virginia (entire state)	+ 0.0	+ 0.0	- 1.2	+ 1.2

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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, 2011-2015 to 2016-2020

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	- 1.5	- 0.4	+ 1.1	+ 0.8	+ 1.0
Appalachian Region	- 1.5	- 0.3	+ 1.1	+ 0.6	+ 1.0
Subregions					
Northern Appalachia	- 1.3	- 0.2	+ 1.0	+ 0.4	+ 0.8
North Central Appalachia	- 0.9	+ 0.0	+ 0.9	+ 0.1	+ 0.5
Central Appalachia	- 1.0	- 0.9	+ 0.6	+ 1.3	+ 1.4
South Central Appalachia	- 1.2	- 0.2	+ 1.2	+ 0.2	+ 0.6
Southern Appalachia	- 1.8	- 0.7	+ 1.3	+ 1.3	+ 1.3
County Types					
Large Metros (pop. 1 million +)	- 1.3	- 1.1	+ 1.3	+ 1.2	+ 1.2
Small Metros (pop. <1 million)	- 1.8	+ 0.1	+ 1.4	+ 0.4	+ 0.8
Nonmetro, Adjacent to Large Metros	- 0.8	- 1.2	+ 1.1	+ 0.9	+ 0.8
Nonmetro, Adjacent to Small Metros	- 1.1	- 0.2	+ 0.7	+ 0.6	+ 0.9
Rural (nonmetro, not adj. to a metro)	- 1.5	+ 0.1	+ 0.7	+ 0.6	+ 0.9
Alabama	- 0.9	- 0.8	+ 0.9	+ 0.8	+ 0.8
Appalachian Alabama	- 0.5	- 1.3	+ 1.2	+ 0.7	+ 0.6
Non-Appalachian Alabama	- 1.5	+ 0.2	+ 0.3	+ 1.0	+ 1.1
Georgia	- 1.5	- 1.0	+ 1.0	+ 1.5	+ 1.3
Appalachian Georgia	- 1.7	- 1.1	+ 0.7	+ 2.2	+ 1.8
Non-Appalachian Georgia	- 1.3	- 0.9	+ 1.1	+ 1.1	+ 1.2
Kentucky	- 1.0	- 0.3	+ 0.7	+ 0.5	+ 0.7
Appalachian Kentucky	- 1.0	- 1.3	+ 0.8	+ 1.4	+ 1.7
Non-Appalachian Kentucky	- 0.9	- 0.1	+ 0.7	+ 0.3	+ 0.6
Maryland	- 0.8	- 0.2	+ 0.3	+ 0.7	+ 0.7
Appalachian Maryland	- 3.5	+ 0.4	+ 2.4	+ 0.7	+ 1.7
Non-Appalachian Maryland	- 0.8	- 0.2	+ 0.2	+ 0.8	+ 0.8
Mississippi	- 2.2	+ 0.5	+ 1.2	+ 0.5	+ 1.1
Appalachian Mississippi	- 4.5	+ 2.4	+ 1.8	+ 0.3	+ 0.6
Non-Appalachian Mississippi	- 1.7	- 0.1	+ 1.2	+ 0.5	+ 1.2
New York	- 1.3	- 0.5	+ 0.5	+ 1.2	+ 1.2
Appalachian New York	- 1.0	- 0.2	+ 0.8	+ 0.4	+ 0.6
Non-Appalachian New York	- 1.2	- 0.6	+ 0.6	+ 1.2	+ 1.2
North Carolina	- 1.7	- 0.7	+ 1.6	+ 0.8	+ 1.0
Appalachian North Carolina	- 0.9	- 0.6	+ 1.2	+ 0.3	+ 0.6
Non-Appalachian North Carolina	- 1.9	- 0.7	+ 1.6	+ 1.0	+ 1.1
Ohio	- 0.9	+ 0.2	+ 0.5	+ 0.3	+ 0.5
Appalachian Ohio	- 1.1	+ 0.0	+ 0.8	+ 0.4	+ 0.8
Non-Appalachian Ohio	- 0.9	+ 0.2	+ 0.5	+ 0.2	+ 0.5
Pennsylvania	- 1.5	- 0.2	+ 1.2	+ 0.5	+ 0.8
Appalachian Pennsylvania	- 1.1	- 0.4	+ 1.1	+ 0.4	+ 0.8
Non-Appalachian Pennsylvania	- 1.7	- 0.1	+ 1.2	+ 0.5	+ 0.9
South Carolina	- 2.5	- 0.4	+ 2.1	+ 0.8	+ 1.2
Appalachian South Carolina	- 3.6	+ 0.3	+ 2.6	+ 0.7	+ 1.7
Non-Appalachian South Carolina	- 2.1	- 0.7	+ 1.9	+ 0.8	+ 1.1
Tennessee	- 1.6	- 0.2	+ 1.0	+ 0.7	+ 0.9
Appalachian Tennessee	- 1.3	+ 0.0	+ 1.1	+ 0.2	+ 0.5
Non-Appalachian Tennessee	- 1.7	- 0.4	+ 0.8	+ 1.2	+ 1.1
Virginia	- 0.9	- 0.7	+ 1.5	+ 0.2	+ 0.7
Appalachian Virginia	- 0.6	- 0.4	+ 0.5	+ 0.5	+ 0.5
Non-Appalachian Virginia	- 0.9	- 0.8	+ 1.5	+ 0.2	+ 0.6
West Virginia (entire state)	- 1.4	+ 0.5	+ 0.7	+ 0.2	+ 0.5

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

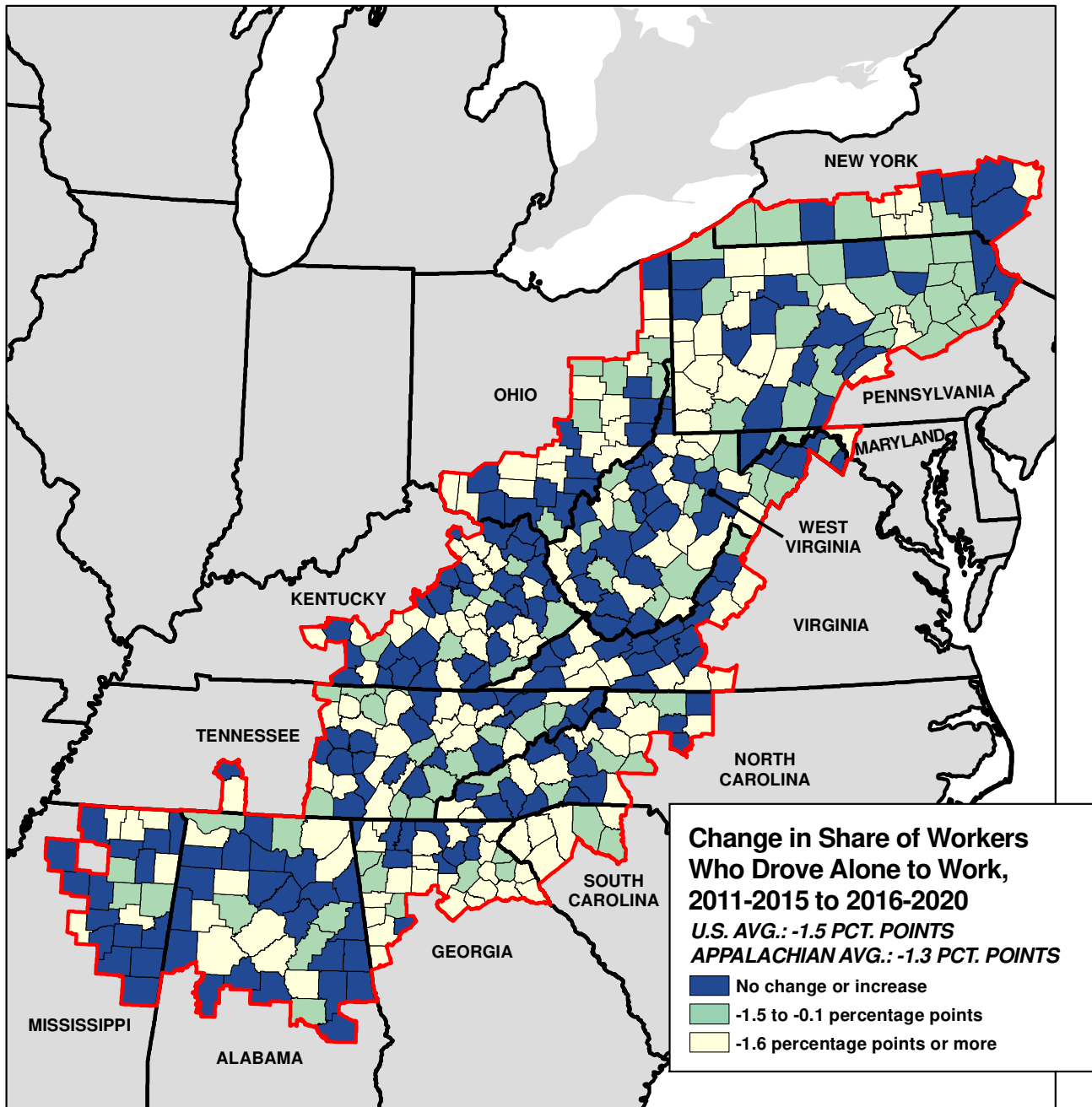
Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

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), 2011-2015 to 2016-2020

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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, 2011-2015 to 2016-2020

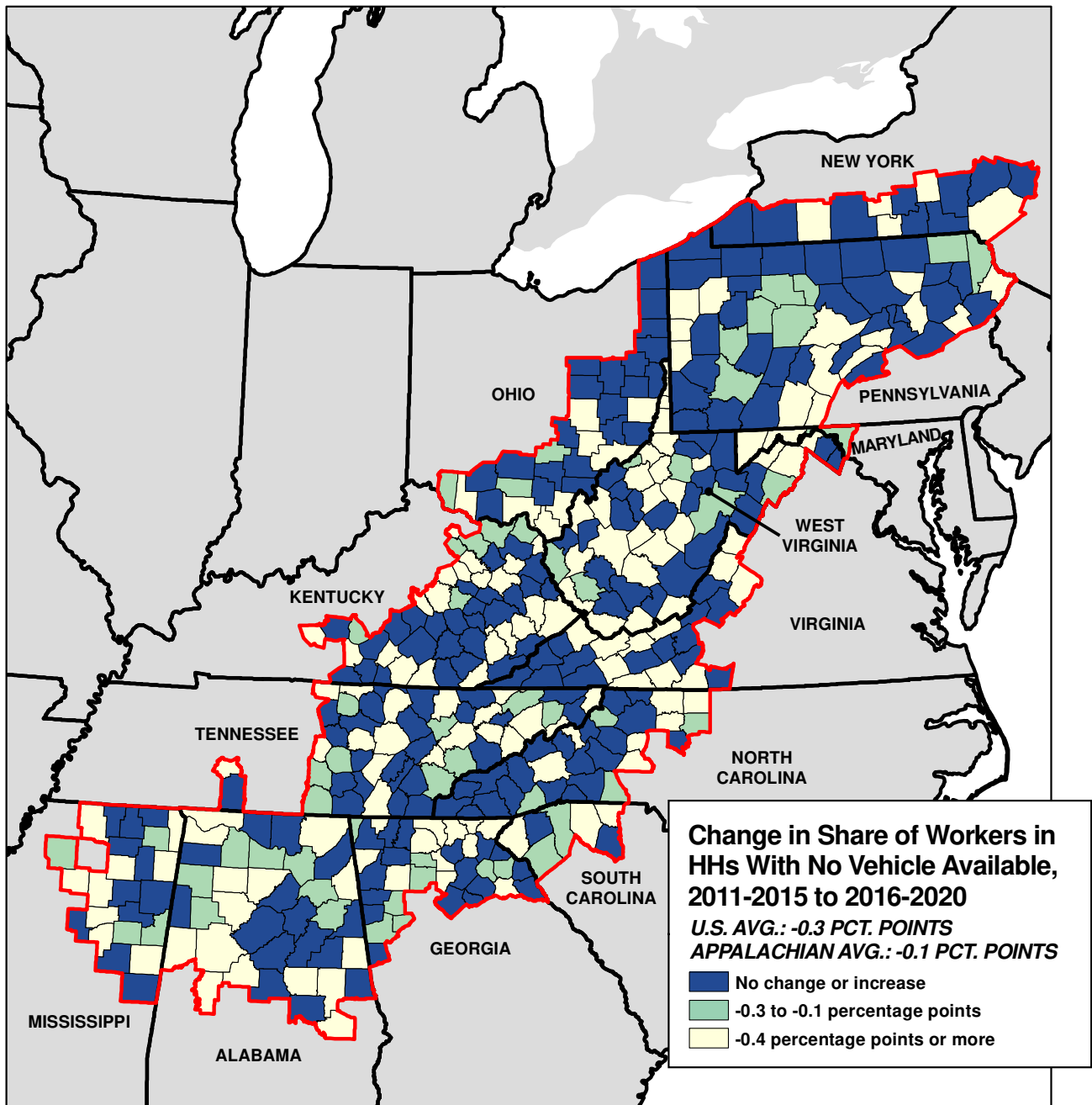


Map Title: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Drove Alone to Work, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

The share of Appalachian workers who drove alone to work fell by 1.3 percentage points between 2011-2015 and 2016-2020, compared with a decrease of 1.5 points nationwide. Although more than four years of the latter period pre-date the onset of the COVID-19 pandemic, early mitigation efforts (such as lockdown measures) may have had a minor impact on the change. Within the Region, the decrease between the two periods was greater than the national average of 1.5 points in 155 of Appalachia’s 423 counties. Yet in 179 other counties, the percentage driving alone remained constant or increased between the two periods. Counties in both groups were scattered throughout the Region and across all rural-urban county types. Among the states, the Appalachian sections of South Carolina and Georgia had the largest declines (2.9 and 2.4 points, respectively).

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, 2011-2015 to 2016-2020

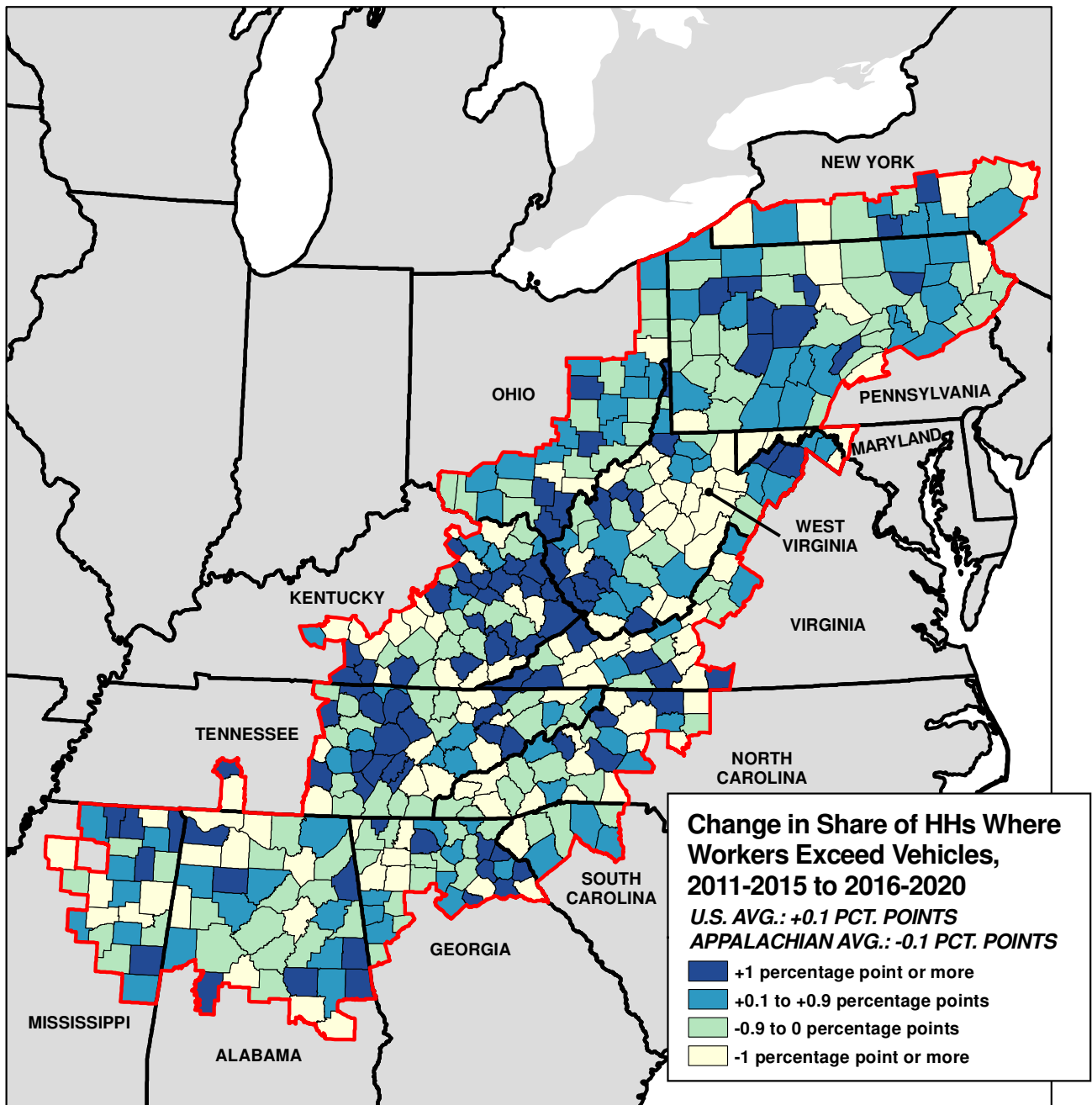


Map Title: Percentage Point Change in Share of Workers Ages 16 and Over in the Appalachian Region Who Live in Households With No Vehicle Available, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Between the 2011-2015 and 2016-2020 periods, the share of workers in households with no vehicle available barely declined in Appalachia (0.1 percentage points), compared with a more noticeable (but still minor) decrease nationwide (0.3 points). Yet in 152 of the Region's 423 counties, the decrease was greater than the national average. By contrast, the percentage remained constant or increased in another 213 counties throughout the Region, as well as in the Appalachian portions of Georgia, New York, North Carolina, Ohio, Pennsylvania, and Virginia. The share also increased slightly in Northern Appalachia and two of the three county types outside metropolitan areas.

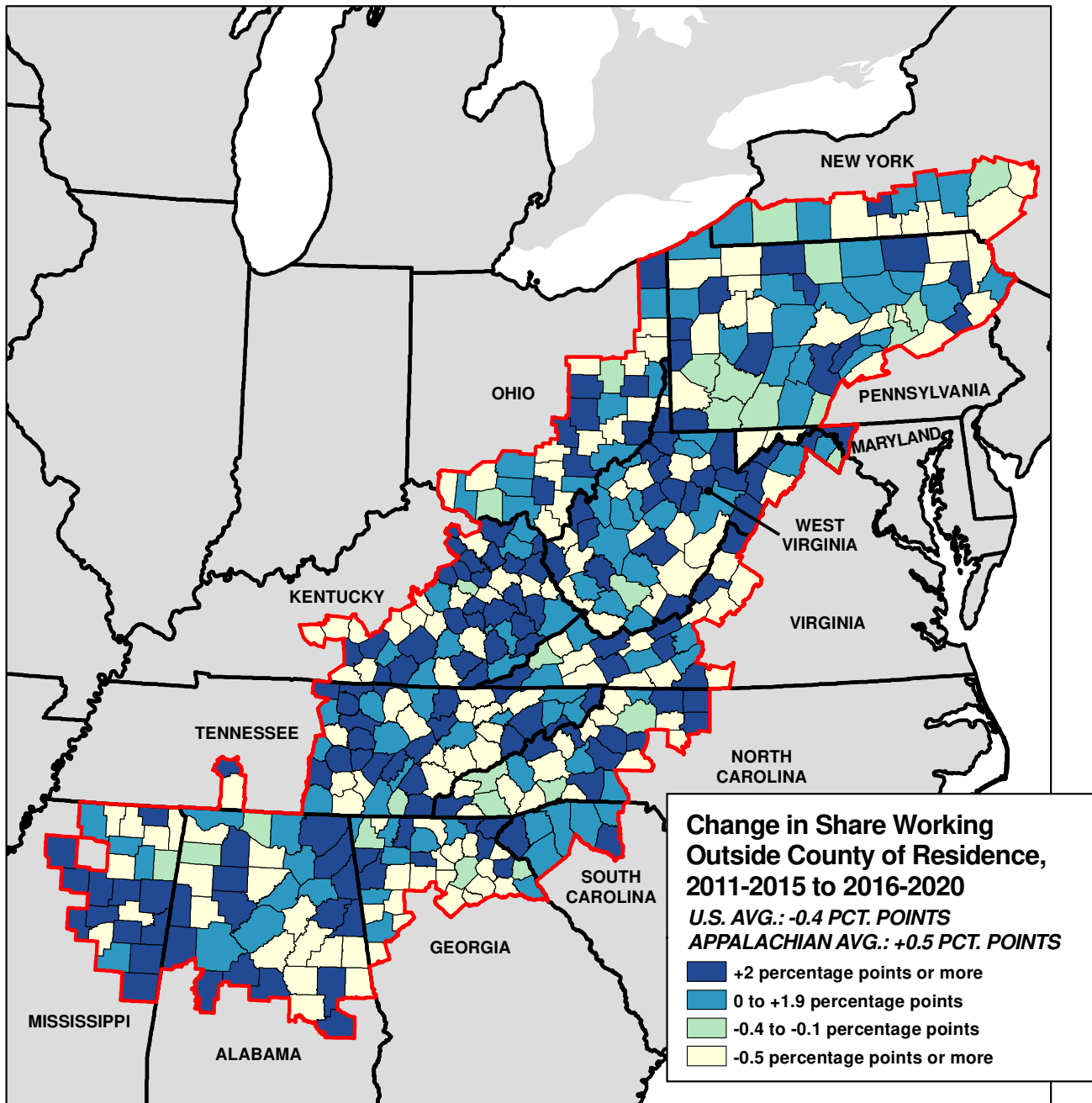
Figure 7.10: Percentage Point Change in Share of Households With One or More Workers in the Appalachian Region Where the Number of Workers Exceeds the Number of Vehicles Available, 2011-2015 to 2016-2020



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, 2011-2015 to 2016-2020
 Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Between 2011-2015 and 2016-2020, the percentage of Appalachian households where the number of workers exceeded the number of available vehicles barely decreased in Appalachia, compared to a similarly miniscule increase nationwide. Within the Region, however, changes were more noticeable. In 109 of the Region's 423 counties, for example, the share of households where workers exceeded vehicles decreased by at least a full percentage point. Meanwhile, the share increased by a full point or more in another 97 Appalachian counties.

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, 2011-2015 to 2016-2020



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, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

The share of Appalachian residents working outside their county of residence was 0.5 percentage points greater in 2016-2020 than in 2011-2015. And the increase was even greater in much of the Region: the share increased by at least two percentage points in 147 of Appalachia's 423 counties. Still, there were 174 Appalachian counties where the share working outside their residential county was lower in 2016-2020 than in the earlier period. In 147 of these counties, the decrease was greater than the national average of 0.4 points.

TRENDS IN TRANSPORTATION AND COMMUTING PATTERNS

- At just under 81 percent, the share of Appalachian workers who drove alone to work in 2016-2020 was 1.3 percentage points lower than it was in 2011-2015 (see Tables 7.1 and 7.9), and likewise decreased in most parts of the Region. The decreases were greatest in Southern Appalachia (1.7 points), counties in large metropolitan areas (2.3 points), and the Appalachian sections of South Carolina and Georgia (2.9 and 2.4 points, respectively). Conversely, only Appalachian Mississippi showed a noticeable increase (1.2 percentage points). Decreases were similarly felt in the percentage of Appalachian workers carpooling to their jobs; that share fell 0.5 percentage points between 2011-2015 and 2016-2020. The growth of telework and home-based businesses was also evident, as the share of workers who worked at home increased 2.1 percentage points between the two periods. And although most of the 2016-2020 period pre-dated the COVID-19 pandemic, it may have had some effect on this commuting trend.
- The share of Appalachian workers below the poverty level (\$26,246 for a family of two adults and two children in 2020) who drove alone to their jobs (70.6 percent in 2016-2020) was lower than it was for all workers, and the change from 2011-2015 was not as pronounced (see Tables 7.2 and 7.10). Still, the general patterns between the two periods were similar to that found for all workers—decreases in workers driving alone and carpooling (0.7 and 0.5 percentage points, respectively), increases in working from home (1.4 points). However, the share of workers in poverty who drove alone did rise in some parts of the Region, such as the Appalachian parts of Alabama, Maryland, Mississippi, and Ohio.
- In 2016-2020, 7 percent of Appalachian households lacked an available vehicle to get to current and/or potential employment, down 0.6 points from 2011-2015 (see Tables 7.3 and 7.11). Within the Region, the decline occurred among every subregion, every urban-rural county type, and in the Appalachian portions of every state. The decline was largest in Appalachian Kentucky and South Carolina, where the share fell by 1.1 and 1.0 percentage points, respectively.
- The share of workers in households with no vehicle available (2.6 percent) was virtually unchanged in Appalachia between the 2011-2015 and the 2016-2020 periods, falling just 0.1 percentage points (see Tables 7.5 and 7.12). And among the subregions, county types, and states, the share generally neither rose nor fell more than 0.3 percentage points. (Appalachian Maryland was an exception, as the share there fell 0.6 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 2016-2020, the number of workers exceeded the number of vehicles available in 4.6 percent of Appalachian households—a figure that fell just 0.1 percentage points from its 2011-2015 level (see Tables 7.6 and 7.13). And the change was slight in most of Appalachia: In virtually every subregion, urban-rural county type, and state, the share of households with more workers than vehicles changed no more than 0.3 percentage points. The only exceptions within the Region were in the Appalachian sections of Maryland (decrease of 1.9 percentage points) and North Carolina (decrease of 0.4 points).
- On average, Appalachian workers traveled 25.8 minutes to their jobs in 2016-2020, a full minute longer than they did in 2011-2015 (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 taking between 30 minutes and 59 minutes to get to their jobs rose 1.1 percentage points between the 2011-2015 and 2016-2020 periods. And the share who took at least an hour to get to work rose 0.6 points in Appalachia—and 1.3 points in the Central and Southern subregions and 1.2 points in counties that were part of large metro areas.
- Just under 32 percent of employed Appalachian residents ages 16 and over worked outside their county of residence in 2016-2020, representing an increase of 0.5 percentage points from the 2011-2015 period (see Tables 7.8 and 7.15). Within the Region, 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 more than one full percentage point in West Virginia and the Appalachian sections of Kentucky, Maryland, and Mississippi. The increase exceeded two points in Mississippi and was nearly that high in Kentucky.

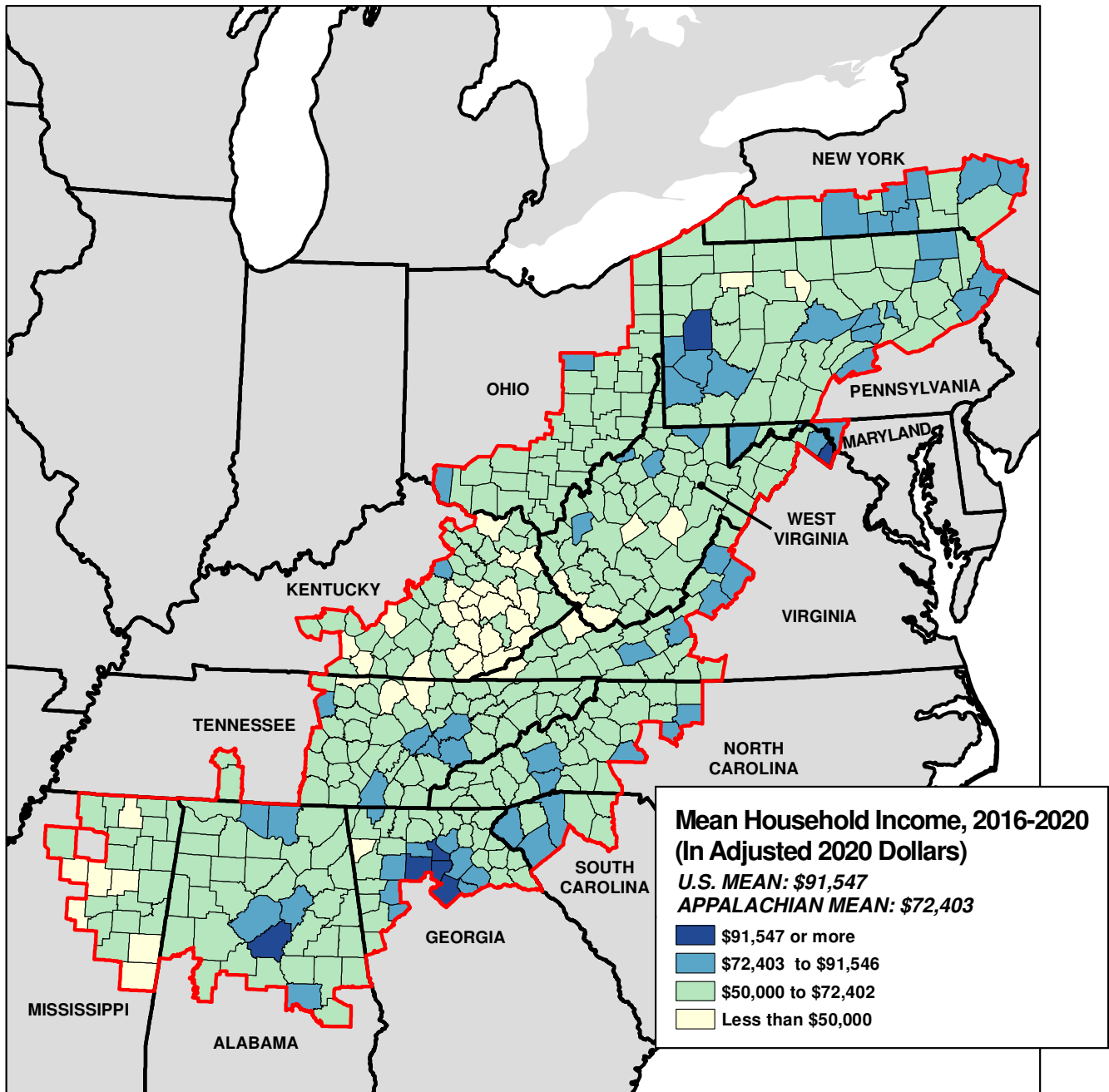
CHAPTER 8: INCOME AND POVERTY

Table 8.1: Household, Family, and Per Capita Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020

Income	Household Income, 2016-2020 (2020 Dollars)		Family Income, 2016-2020 (2020 Dollars)		Per Capita Income, 2016-2020 (2020 Dollars)
	Mean HH Income	Median HH Income	Mean Family Income	Median Family Income	
United States	91,547	64,994	107,335	80,069	35,384
Appalachian Region	72,403	53,546	86,235	67,841	29,409
Subregions					
Northern Appalachia	73,949	55,765	89,358	71,785	31,197
North Central Appalachia	67,635	50,367	80,727	64,429	27,820
Central Appalachia	55,637	39,927	65,610	51,060	22,685
South Central Appalachia	69,802	50,773	83,713	64,837	29,000
Southern Appalachia	78,005	57,726	91,238	71,102	29,920
County Types					
Large Metros (pop. 1 million +)	86,725	65,357	102,884	82,016	34,470
Small Metros (pop. <1 million)	72,872	53,946	87,426	68,866	29,806
Nonmetro, Adjacent to Large Metros	63,980	48,463	75,820	61,647	25,909
Nonmetro, Adjacent to Small Metros	62,908	47,392	74,047	59,506	25,891
Rural (nonmetro, not adj. to a metro)	58,511	42,403	69,475	54,533	23,997
Alabama	71,964	52,035	86,610	66,772	28,934
Appalachian Alabama	74,437	54,265	88,874	68,905	29,903
Non-Appalachian Alabama	67,500	48,413	82,383	63,644	27,203
Georgia	85,691	61,224	99,832	74,127	32,427
Appalachian Georgia	86,242	66,228	97,102	76,909	30,911
Non-Appalachian Georgia	85,459	59,297	101,166	72,946	33,115
Kentucky	72,318	52,238	85,749	65,893	29,123
Appalachian Kentucky	55,539	39,501	64,935	50,683	22,387
Non-Appalachian Kentucky	78,206	57,419	93,418	72,696	31,499
Maryland	114,236	87,063	133,817	105,790	43,352
Appalachian Maryland	76,224	57,854	90,841	73,387	29,902
Non-Appalachian Maryland	115,954	89,320	135,727	108,177	43,935
Mississippi	65,156	46,511	77,072	58,923	25,444
Appalachian Mississippi	59,452	43,111	70,989	55,758	23,598
Non-Appalachian Mississippi	66,683	47,623	78,670	59,908	25,933
New York	105,304	71,117	123,221	87,270	40,898
Appalachian New York	71,200	54,156	85,188	69,492	29,617
Non-Appalachian New York	107,355	72,709	125,430	89,519	41,521
North Carolina	79,620	56,642	94,483	70,978	31,993
Appalachian North Carolina	69,128	50,197	82,375	64,142	28,878
Non-Appalachian North Carolina	82,292	58,747	97,522	73,101	32,746
Ohio	78,797	58,116	95,193	74,391	32,465
Appalachian Ohio	66,716	50,599	79,119	64,183	27,296
Non-Appalachian Ohio	81,245	59,982	98,593	77,140	33,529
Pennsylvania	87,262	63,627	105,058	80,996	35,518
Appalachian Pennsylvania	76,120	57,318	92,467	74,050	32,348
Non-Appalachian Pennsylvania	96,922	70,554	115,447	88,474	38,035
South Carolina	76,390	54,864	90,694	68,813	30,727
Appalachian South Carolina	76,693	55,687	91,479	69,900	30,485
Non-Appalachian South Carolina	76,284	55,137	90,411	68,878	30,812
Tennessee	76,937	54,833	91,215	68,793	30,869
Appalachian Tennessee	69,596	50,331	83,272	63,952	28,704
Non-Appalachian Tennessee	82,778	59,276	97,541	73,184	32,507
Virginia	106,023	76,398	123,883	93,284	41,255
Appalachian Virginia	63,354	46,428	77,897	61,205	26,706
Non-Appalachian Virginia	110,435	81,005	128,375	97,922	42,654
West Virginia (entire state)	65,332	48,037	78,106	61,707	27,346

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

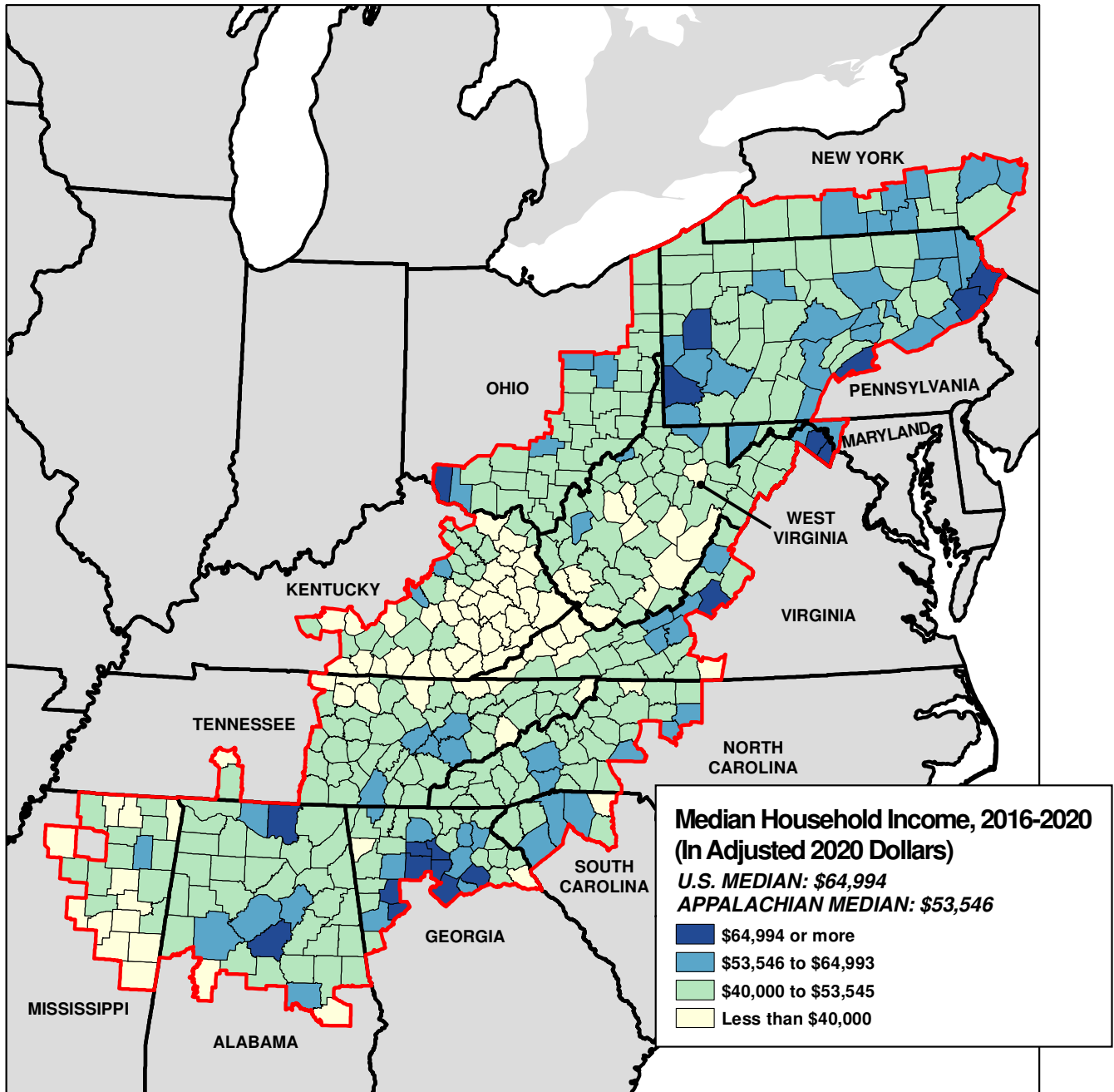
Figure 8.1: Mean Household Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020



Map Title: Mean Household Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In the 2016-2020 period, the mean income of Appalachian households was \$72,403, just 79 percent of the U.S. average (\$91,547). In just seven of the Region's counties (all of which were in metropolitan areas), average household income matched or exceeded the national mean. And in only 63 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 41 counties—all but one of which were outside metro areas, and 29 of which were in Central Appalachia (22 in Kentucky alone).

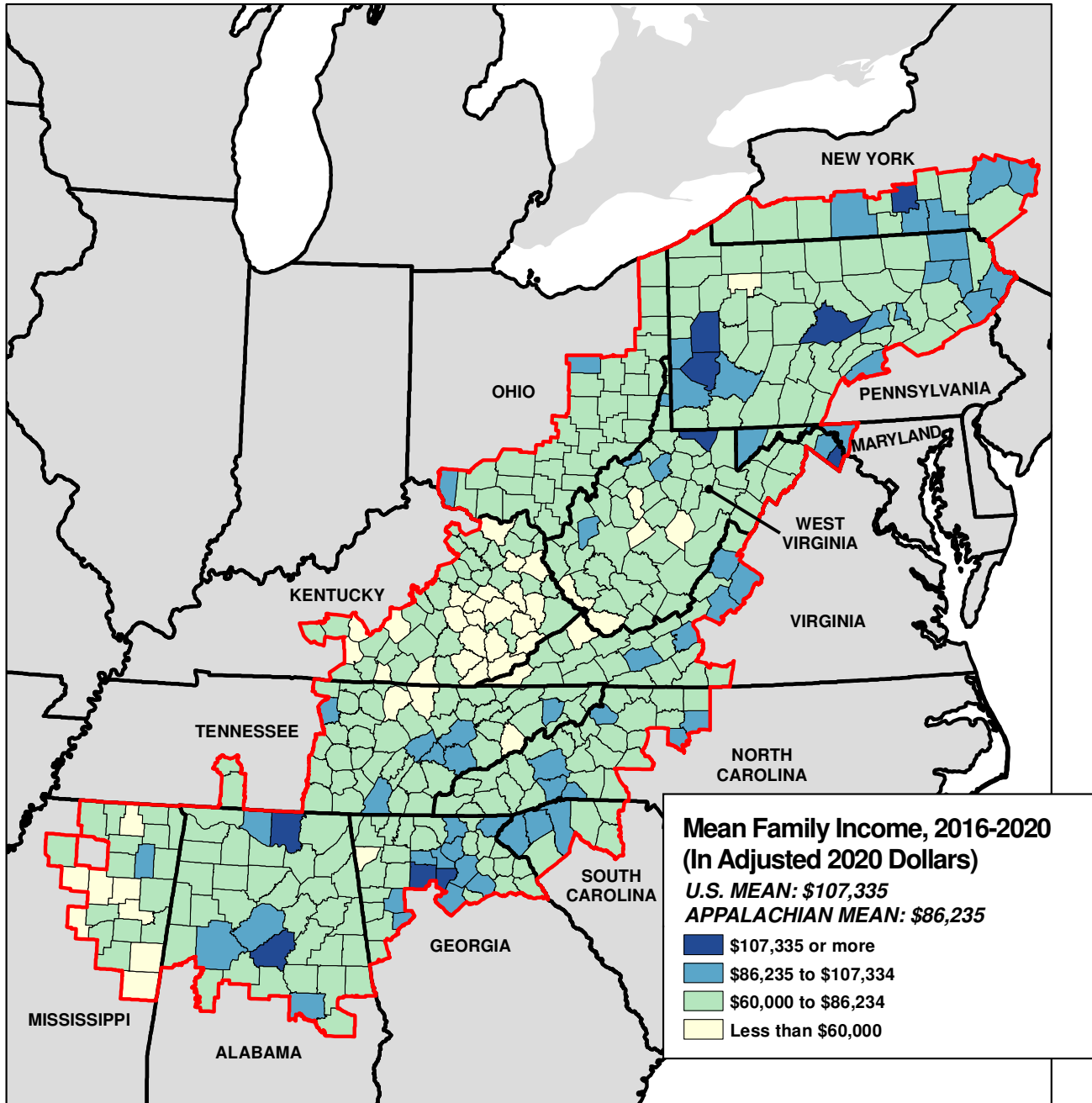
Figure 8.2: Median Household Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020



Map Title: Median Household Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

At \$53,546, median household income in Appalachia (the level at which half the households have higher incomes and the other half have lower incomes) was 82 percent that of the United States (\$64,994) during the 2016-2020 period. There were 19 counties in the Region (18 of which were in metropolitan areas) that had household incomes at or above the national median, while another 69 had incomes at or above the regional median. On the other hand, 78 counties in the Region had median household incomes below \$40,000—74 of which were outside metro areas and 48 of which were in Central Appalachia. This distribution is not surprising: median household income was \$42,403 for the most rural counties and \$39,927 for Central Appalachia. It is useful to note that the income levels displayed here reflect income received during a five-year period that includes the first 10 months of the coronavirus pandemic in 2020.

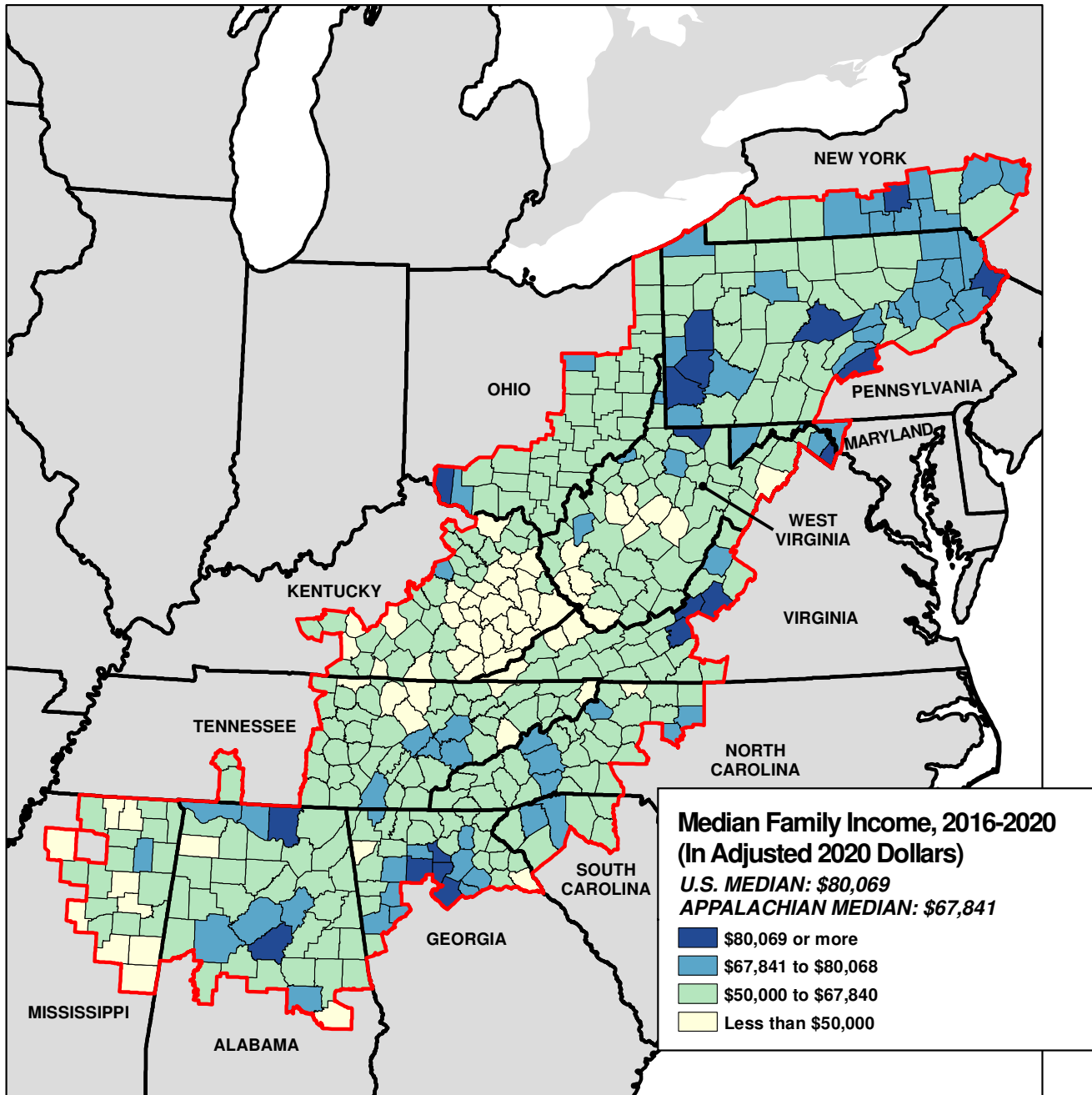
Figure 8.3: Mean Family Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020



Map Title: Mean Family Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In only 10 Appalachian counties (all of which were in metropolitan areas), the average income of families matched or surpassed the U.S. mean of \$107,335 for the 2016-2020 period. And there were just an additional 61 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 (\$86,235). In contrast, mean family income was less than \$60,000 in 43 Appalachian counties. All but one of these counties were outside metropolitan areas; nearly three-fourths of them did not border any metro. Additionally, 29 of the counties in the lowest income group were in Central Appalachia and 23 were in Kentucky alone. Overall, mean family income over the 2016-2020 period was just \$69,475 for the most rural counties, \$65,610 for Central Appalachia, and \$64,935 for Appalachian Kentucky.

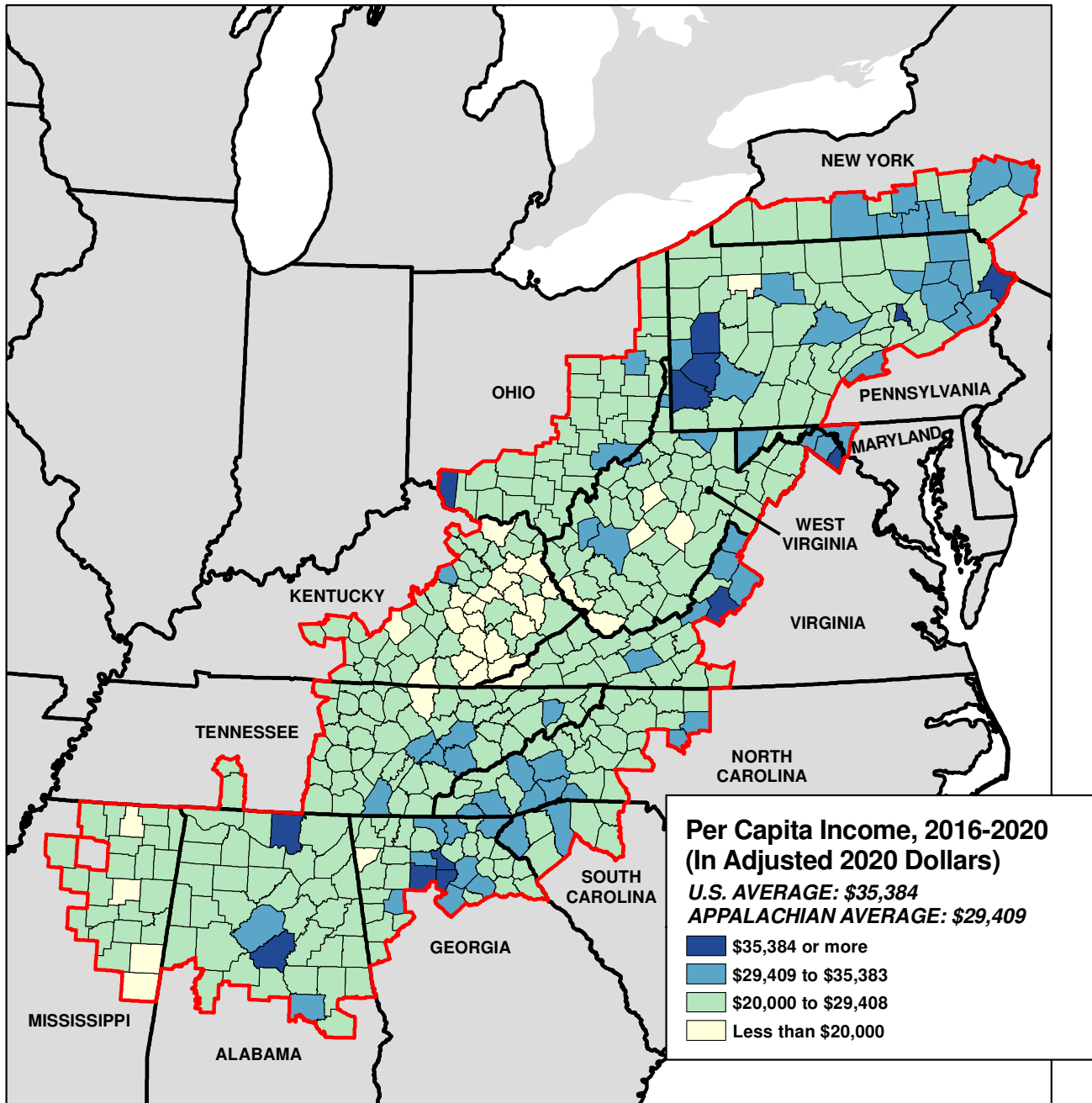
Figure 8.4: Median Family Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020



Map Title: Median Family Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Median family income in Appalachia was 85 percent of the U.S. median of \$80,069 during the 2016-2020 period. Yet in 19 Appalachian counties—all of which were in metro areas—median family income (the level where half of all families have higher incomes while the other half have lower incomes) matched or exceeded the U.S. median. In another 66 counties (46 of which were in metros), median income was at or above the median for families in the Appalachian Region (\$67,841). In contrast, median family income was less than \$50,000 in 61 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 \$54,533), and 27 were in Appalachian Kentucky (where median family income was \$50,683).

Figure 8.5: Per Capita Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020



Map Title: Per Capita Income in the Appalachian Region (In Adjusted 2020 Dollars), 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

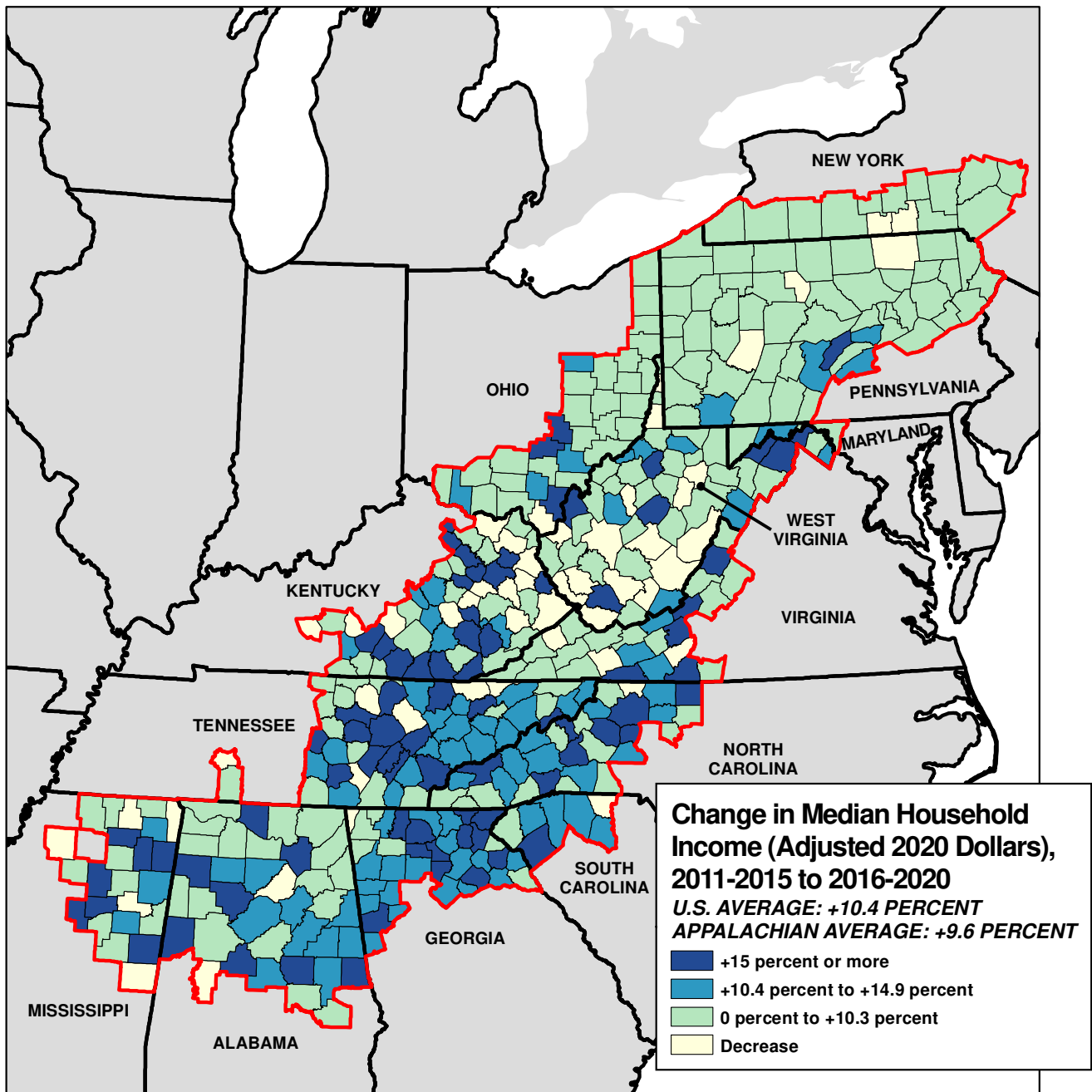
At \$29,409, per capita income in the Appalachian Region was 83 percent that of the U.S. average of \$35,384 during the 2016-2020 period. And there was considerable variation within the Region. Per capita income was the same or higher than the national average in 13 Appalachian counties, including Pittsburgh, suburban Atlanta, and Clermont County, Ohio (which is part of metropolitan Cincinnati). In 63 other counties, per capita income was at or above the regional average; while more than a third of these were in Northern Appalachia, there were pockets in the South Central and Southern subregions as well. Yet in 33 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 2016-2020 was only \$23,997 in the most rural Appalachian counties as a whole, and just \$22,685 in Central Appalachia.

Table 8.2: Change in Household, Family, and Per Capita Income in the Appalachian Region (In Adjusted 2020 Dollars), 2011-2015 to 2016-2020

Income	Percent Change in Household Income (In 2020 Dollars)		Percent Change in Family Income (in 2020 Dollars)		Percent Change in Per Capita Income (In 2020 Dollars)
	Mean HH Income	Median HH Income	Mean Family Income	Median Family Income	
United States	+ 10.9	+ 10.4	+ 11.4	+ 11.0	+ 11.9
Appalachian Region	+ 9.6	+ 9.6	+ 10.1	+ 10.0	+ 10.9
Subregions					
Northern Appalachia	+ 7.0	+ 6.4	+ 7.4	+ 7.2	+ 9.5
North Central Appalachia	+ 7.4	+ 7.1	+ 7.8	+ 7.5	+ 8.4
Central Appalachia	+ 7.1	+ 7.2	+ 7.1	+ 7.2	+ 8.0
South Central Appalachia	+ 10.8	+ 11.0	+ 11.4	+ 11.5	+ 11.6
Southern Appalachia	+ 12.4	+ 12.2	+ 13.2	+ 13.0	+ 13.1
County Types					
Large Metros (pop. 1 million +)	+ 10.2	+ 10.0	+ 11.0	+ 11.5	+ 11.7
Small Metros (pop. <1 million)	+ 9.0	+ 9.0	+ 9.4	+ 9.2	+ 10.2
Nonmetro, Adjacent to Large Metros	+ 8.4	+ 7.7	+ 9.1	+ 9.5	+ 9.8
Nonmetro, Adjacent to Small Metros	+ 9.1	+ 8.5	+ 9.5	+ 9.0	+ 10.2
Rural (nonmetro, not adj. to a metro)	+ 9.6	+ 8.1	+ 10.1	+ 9.6	+ 11.2
Alabama	+ 8.8	+ 9.2	+ 10.1	+ 10.4	+ 9.9
Appalachian Alabama	+ 9.3	+ 10.4	+ 10.1	+ 10.5	+ 10.3
Non-Appalachian Alabama	+ 7.9	+ 6.6	+ 10.1	+ 9.3	+ 9.2
Georgia	+ 13.7	+ 12.9	+ 14.7	+ 14.2	+ 15.3
Appalachian Georgia	+ 14.1	+ 14.0	+ 14.6	+ 14.9	+ 15.0
Non-Appalachian Georgia	+ 13.5	+ 12.7	+ 14.8	+ 13.8	+ 15.5
Kentucky	+ 10.3	+ 9.3	+ 10.3	+ 8.9	+ 10.8
Appalachian Kentucky	+ 8.6	+ 7.9	+ 7.7	+ 8.1	+ 9.1
Non-Appalachian Kentucky	+ 10.3	+ 9.0	+ 10.7	+ 9.0	+ 10.9
Maryland	+ 6.9	+ 6.9	+ 7.8	+ 7.5	+ 7.5
Appalachian Maryland	+ 7.5	+ 6.3	+ 8.2	+ 7.5	+ 8.2
Non-Appalachian Maryland	+ 6.8	+ 7.3	+ 7.7	+ 7.5	+ 7.5
Mississippi	+ 8.6	+ 7.3	+ 9.7	+ 9.4	+ 10.6
Appalachian Mississippi	+ 9.1	+ 8.3	+ 10.9	+ 11.8	+ 10.2
Non-Appalachian Mississippi	+ 8.4	+ 7.2	+ 9.3	+ 8.7	+ 10.7
New York	+ 11.0	+ 9.8	+ 11.7	+ 11.1	+ 12.6
Appalachian New York	+ 6.2	+ 5.2	+ 5.2	+ 4.9	+ 8.8
Non-Appalachian New York	+ 11.2	+ 10.3	+ 12.0	+ 12.1	+ 12.7
North Carolina	+ 11.5	+ 10.6	+ 12.2	+ 12.3	+ 13.0
Appalachian North Carolina	+ 11.5	+ 10.8	+ 11.4	+ 11.9	+ 12.7
Non-Appalachian North Carolina	+ 11.4	+ 10.6	+ 12.3	+ 12.0	+ 12.9
Ohio	+ 8.6	+ 7.6	+ 9.1	+ 8.4	+ 10.2
Appalachian Ohio	+ 8.1	+ 6.7	+ 8.5	+ 6.8	+ 9.8
Non-Appalachian Ohio	+ 8.6	+ 7.8	+ 9.0	+ 8.1	+ 10.2
Pennsylvania	+ 9.1	+ 8.7	+ 9.3	+ 8.8	+ 11.0
Appalachian Pennsylvania	+ 7.2	+ 6.7	+ 7.6	+ 7.6	+ 9.8
Non-Appalachian Pennsylvania	+ 10.3	+ 9.9	+ 10.0	+ 9.5	+ 11.5
South Carolina	+ 12.8	+ 10.4	+ 14.2	+ 11.8	+ 14.3
Appalachian South Carolina	+ 14.9	+ 13.6	+ 16.1	+ 12.9	+ 15.8
Non-Appalachian South Carolina	+ 12.1	+ 10.3	+ 13.5	+ 11.2	+ 13.8
Tennessee	+ 11.2	+ 11.0	+ 11.8	+ 12.2	+ 12.0
Appalachian Tennessee	+ 10.5	+ 11.2	+ 11.6	+ 11.6	+ 11.3
Non-Appalachian Tennessee	+ 11.4	+ 10.9	+ 11.7	+ 11.7	+ 12.4
Virginia	+ 9.1	+ 7.6	+ 10.1	+ 8.9	+ 10.6
Appalachian Virginia	+ 6.7	+ 6.9	+ 8.4	+ 8.3	+ 8.1
Non-Appalachian Virginia	+ 8.9	+ 7.2	+ 9.9	+ 8.2	+ 10.5
West Virginia (entire state)	+ 6.0	+ 5.3	+ 6.0	+ 6.8	+ 6.7

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Figure 8.6: Percent Change in Median Household Income in the Appalachian Region (In Adjusted 2020 Dollars), 2011-2015 to 2016-2020



Map Title: Percent Change in Median Household Income in the Appalachian Region (In Adjusted 2020 Dollars), 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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 9.6 percent higher in 2016-2020 than it was in 2011-2015, suggesting that incomes have recovered from the 2007-2009 economic downturn. While this was slightly less than the national increase of 10.4 percent, household income rose at or above the national average in two-fifths of Appalachia's 423 counties. Moreover, median household income rose at least 15 percent in 83 Appalachian counties between the two periods. But not all the news was positive: In 53 Appalachian counties (more than half of which were in Kentucky or West Virginia), real median household income fell between 2011-2015 and 2016-2020. And it is important to note that the overall income improvements in 2016-2020 include the economic impact resulting from the first months of the coronavirus pandemic (from March through December 2020).

Table 8.3: Number of Persons in the Appalachian Region in Poverty, by Age Group, 2016-2020

Poverty Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	40,910,326	12,598,699	23,554,920	5,534,538	18,020,382	4,756,707
Appalachian Region	3,692,672	1,087,889	2,171,396	492,133	1,679,263	433,387
Subregions						
Northern Appalachia	1,020,740	289,512	605,570	151,584	453,986	125,658
North Central Appalachia	400,502	110,926	244,443	55,772	188,671	45,133
Central Appalachia	403,326	113,560	240,888	39,299	201,589	48,878
South Central Appalachia	752,003	214,321	448,133	106,392	341,741	89,549
Southern Appalachia	1,116,101	359,570	632,362	139,086	493,276	124,169
County Types						
Large Metros (pop. 1 million +)	668,253	201,253	384,976	80,261	304,715	82,024
Small Metros (pop. <1 million)	1,566,810	459,034	937,586	242,513	695,073	170,190
Nonmetro, Adjacent to Large Metros	355,415	106,867	207,175	45,110	162,065	41,373
Nonmetro, Adjacent to Small Metros	622,852	186,057	356,816	66,593	290,223	79,979
Rural (nonmetro, not adj. to a metro)	479,342	134,678	284,843	57,656	227,187	59,821
Alabama	762,642	244,726	435,202	100,904	334,298	82,714
Appalachian Alabama	450,590	141,261	258,501	56,167	202,334	50,828
Non-Appalachian Alabama	312,052	103,465	176,701	44,737	131,964	31,886
Georgia	1,461,572	495,477	821,046	186,983	634,063	145,049
Appalachian Georgia	375,220	129,247	205,636	39,859	165,777	40,337
Non-Appalachian Georgia	1,086,352	366,230	615,410	147,124	468,286	104,712
Kentucky	717,895	218,023	421,831	91,937	329,894	78,041
Appalachian Kentucky	263,740	75,437	157,861	27,645	130,216	30,442
Non-Appalachian Kentucky	454,155	142,586	263,970	64,292	199,678	47,599
Maryland	531,553	153,356	306,634	66,871	239,763	71,563
Appalachian Maryland	29,872	8,568	17,630	3,838	13,792	3,674
Non-Appalachian Maryland	501,681	144,788	289,004	63,033	225,971	67,889
Mississippi	564,439	191,339	314,225	70,880	243,345	58,875
Appalachian Mississippi	116,001	35,135	67,154	17,817	49,337	13,712
Non-Appalachian Mississippi	448,438	156,204	247,071	53,063	194,008	45,163
New York	2,581,048	746,203	1,475,003	303,834	1,171,169	359,842
Appalachian New York	151,495	41,185	95,489	30,080	65,409	14,821
Non-Appalachian New York	2,429,553	705,018	1,379,514	273,754	1,105,760	345,021
North Carolina	1,411,939	452,423	807,496	183,615	623,881	152,020
Appalachian North Carolina	292,030	86,175	169,142	35,619	133,523	36,713
Non-Appalachian North Carolina	1,119,909	366,248	638,354	147,996	490,358	115,307
Ohio	1,546,011	486,835	900,767	203,572	697,195	158,409
Appalachian Ohio	312,389	96,331	182,099	34,999	147,100	33,959
Non-Appalachian Ohio	1,233,622	390,504	718,668	168,573	550,095	124,450
Pennsylvania	1,480,430	434,413	860,604	200,132	660,472	185,413
Appalachian Pennsylvania	668,384	183,660	396,179	100,922	295,257	88,545
Non-Appalachian Pennsylvania	812,046	250,753	464,425	99,210	365,215	96,868
South Carolina	726,470	231,061	410,346	90,491	319,855	85,063
Appalachian South Carolina	174,290	53,927	101,071	25,243	75,828	19,292
Non-Appalachian South Carolina	552,180	177,134	309,275	65,248	244,027	65,771
Tennessee	965,213	308,226	556,149	116,492	439,657	100,838
Appalachian Tennessee	432,381	125,601	255,719	52,220	203,499	51,061
Non-Appalachian Tennessee	532,832	182,625	300,430	64,272	236,158	49,777
Virginia	826,708	241,637	488,619	127,807	360,812	96,452
Appalachian Virginia	126,128	29,144	81,283	26,736	54,547	15,701
Non-Appalachian Virginia	700,580	212,493	407,336	101,071	306,265	80,751
West Virginia (entire state)	300,152	82,218	183,632	40,988	142,644	34,302

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2016-2020 American Community Survey.

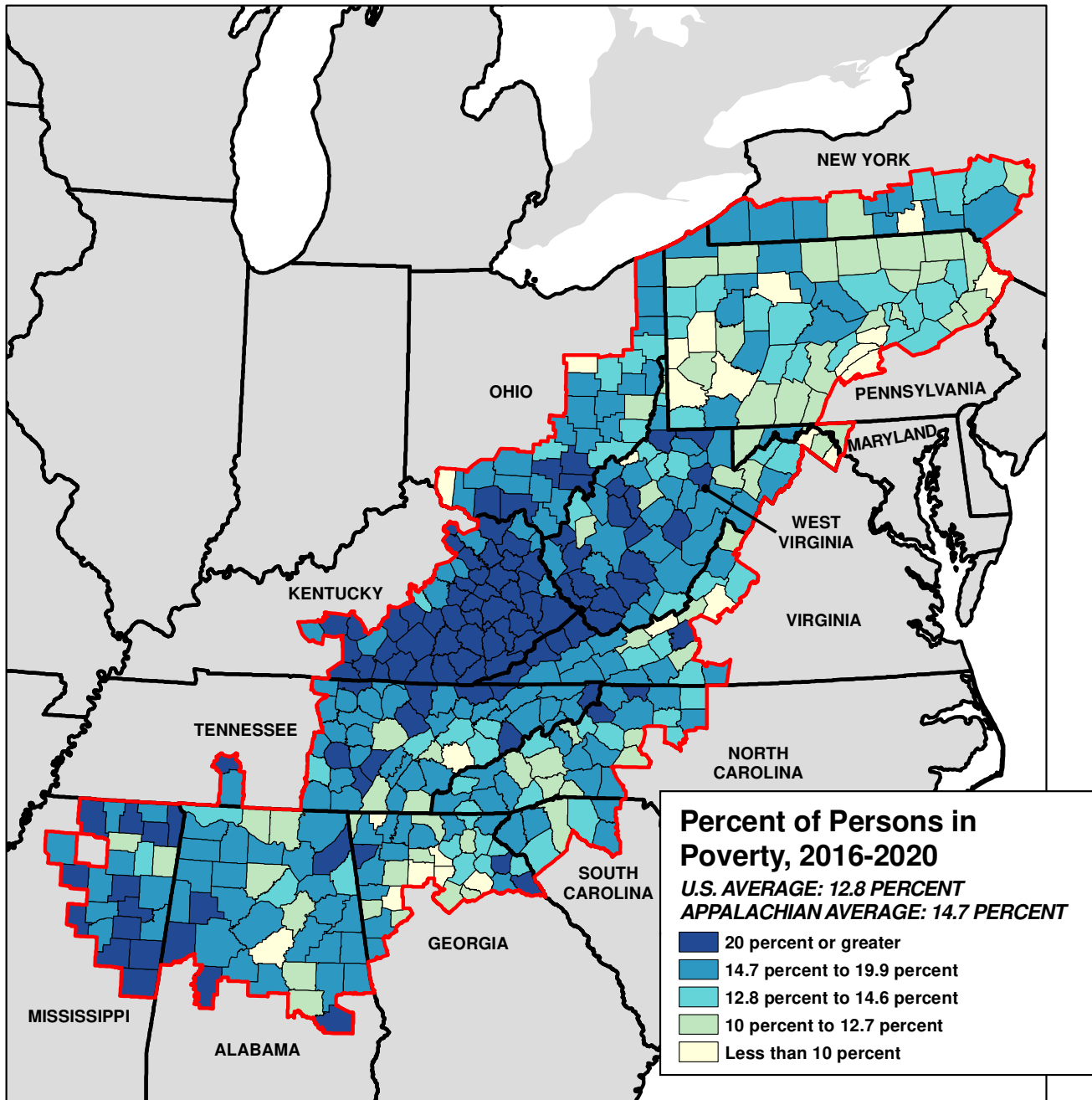
Table 8.4: Percent of Persons in the Appalachian Region in Poverty, by Age Group, 2016-2020

Poverty Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	12.8	17.5	12.1	20.3	10.7	9.3
Appalachian Region	14.7	20.2	14.3	23.8	12.8	9.4
Subregions						
Northern Appalachia	13.2	18.8	13.1	24.5	11.3	8.1
North Central Appalachia	16.4	21.8	16.7	27.9	14.9	9.6
Central Appalachia	22.4	29.3	22.4	28.3	21.5	14.5
South Central Appalachia	15.0	21.1	14.9	25.8	13.2	9.0
Southern Appalachia	13.6	18.7	12.7	19.9	11.5	9.7
County Types						
Large Metros (pop. 1 million +)	11.1	14.8	10.4	16.8	9.5	8.4
Small Metros (pop. <1 million)	14.6	20.4	14.5	26.5	12.5	8.6
Nonmetro, Adjacent to Large Metros	16.0	22.4	15.7	24.4	14.3	9.8
Nonmetro, Adjacent to Small Metros	16.3	23.5	15.9	22.6	14.9	10.1
Rural (nonmetro, not adj. to a metro)	20.0	26.5	20.1	29.2	18.6	12.7
Alabama	16.0	22.7	15.1	24.5	13.5	10.2
Appalachian Alabama	14.7	20.6	13.9	22.0	12.6	9.9
Non-Appalachian Alabama	18.2	26.5	17.2	28.8	15.1	10.9
Georgia	14.3	20.1	12.9	20.7	11.7	10.1
Appalachian Georgia	11.6	16.0	10.4	14.3	9.7	9.0
Non-Appalachian Georgia	15.5	22.1	14.1	23.6	12.5	10.7
Kentucky	16.6	22.2	16.0	24.9	14.6	11.0
Appalachian Kentucky	23.5	30.3	23.4	30.7	22.3	15.3
Non-Appalachian Kentucky	14.2	19.4	13.5	23.0	11.9	9.4
Maryland	9.0	11.6	8.4	14.2	7.5	7.9
Appalachian Maryland	12.8	17.3	12.7	19.9	11.5	8.3
Non-Appalachian Maryland	8.9	11.4	8.2	13.9	7.3	7.9
Mississippi	19.6	27.6	18.2	27.6	16.5	12.8
Appalachian Mississippi	19.2	24.9	18.5	31.0	16.2	13.5
Non-Appalachian Mississippi	19.7	28.2	18.1	26.6	16.6	12.6
New York	13.6	18.7	12.4	19.4	11.3	11.5
Appalachian New York	15.7	21.4	16.4	32.8	13.3	7.8
Non-Appalachian New York	13.5	18.5	12.2	18.6	11.2	11.8
North Carolina	14.0	20.0	13.0	21.7	11.7	9.2
Appalachian North Carolina	14.8	21.8	14.5	23.3	13.1	9.1
Non-Appalachian North Carolina	13.8	19.6	12.7	21.4	11.3	9.3
Ohio	13.6	19.1	13.1	21.6	11.7	8.2
Appalachian Ohio	16.2	23.0	15.9	22.7	14.8	9.3
Non-Appalachian Ohio	13.1	18.4	12.5	21.4	11.1	8.0
Pennsylvania	12.0	16.7	11.4	20.5	10.1	8.2
Appalachian Pennsylvania	12.3	17.2	12.1	23.8	10.3	8.1
Non-Appalachian Pennsylvania	11.7	16.4	10.9	18.0	9.9	8.4
South Carolina	14.7	21.2	13.8	22.5	12.4	9.6
Appalachian South Carolina	13.6	18.5	13.0	23.4	11.3	8.9
Non-Appalachian South Carolina	15.1	22.2	14.1	22.1	12.8	9.9
Tennessee	14.6	20.8	13.8	21.1	12.6	9.3
Appalachian Tennessee	15.2	21.3	15.0	22.6	13.8	9.4
Non-Appalachian Tennessee	14.2	20.5	12.9	20.0	11.7	9.3
Virginia	10.0	13.1	9.5	18.7	8.1	7.5
Appalachian Virginia	17.7	21.9	19.0	40.8	15.1	10.4
Non-Appalachian Virginia	9.3	12.5	8.7	16.4	7.5	7.1
West Virginia (entire state)	17.1	23.1	17.5	29.0	15.7	9.8

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2016-2020 American Community Survey.

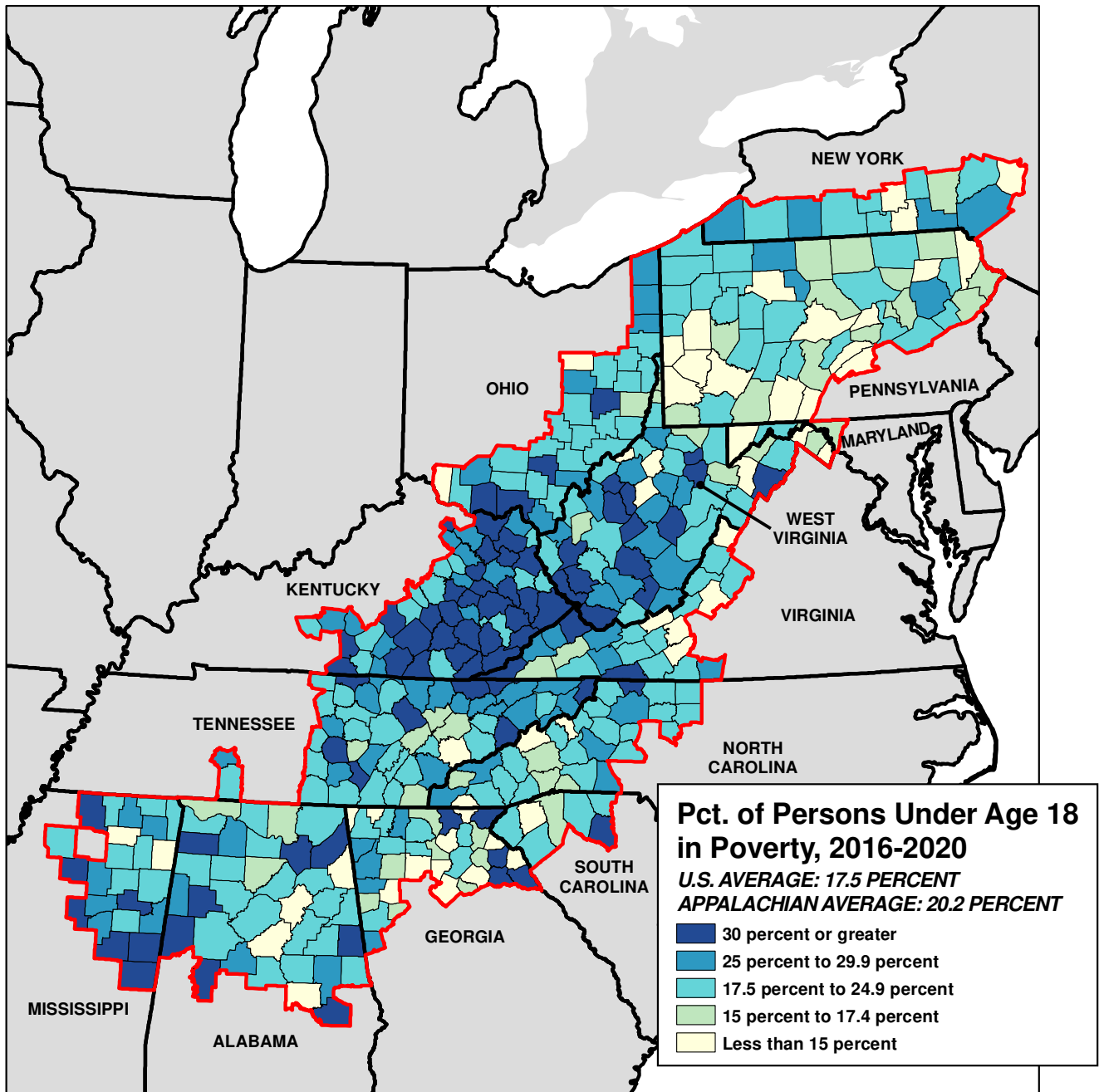
Figure 8.7: Percent of Persons in the Appalachian Region in Poverty, 2016-2020



Map Title: Percent of Persons in the Appalachian Region in Poverty, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Over the 2016-2020 period, 14.7 percent of Appalachian residents lived below the poverty level (income below \$26,246 for a family of two adults and two children in 2020)—nearly two percentage points above the U.S. average. But there is a great deal of variation within the Region: In 103 counties, at least 20 percent of persons were poor, yet in another 88 counties the poverty rate was lower than the national average of 12.8 percent. And there was a geographic and urban/rural pattern: All but 13 of the counties with poverty rates at or above 20 percent were outside metropolitan areas, and most of them were in Central Appalachia. (Kentucky alone had 44 of these counties, and West Virginia, Tennessee, and Mississippi also had high poverty clusters.) In contrast, the counties where poverty was below the U.S. rate were mostly in Northern Appalachia and/or in metropolitan areas.

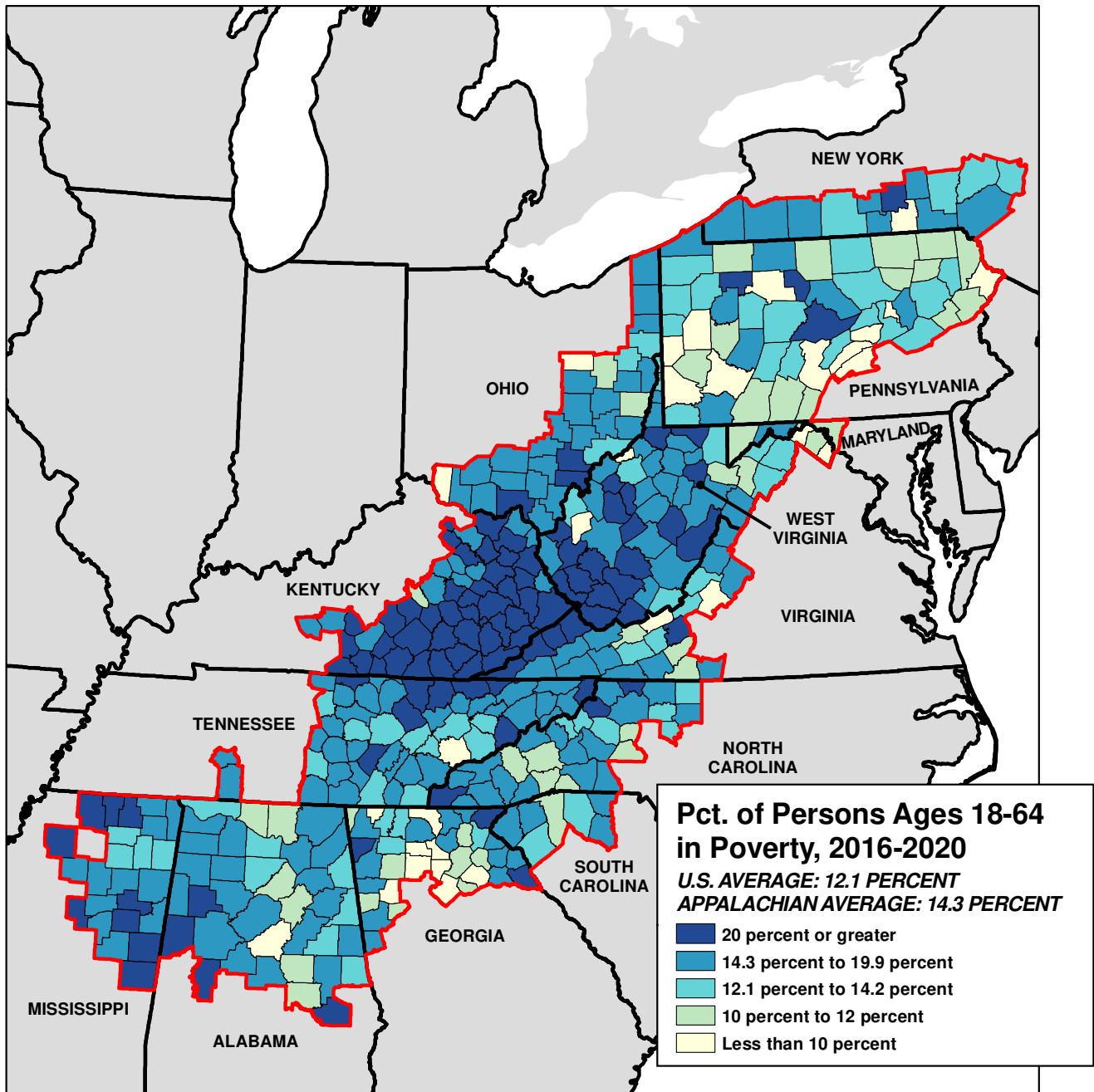
Figure 8.8: Percent of Persons Under Age 18 in the Appalachian Region in Poverty, 2016-2020



Map Title: Percent of Persons Under Age 18 in the Appalachian Region in Poverty, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Child poverty in the Appalachian Region was 20.2 percent in 2016-2020—almost three percentage points above the national rate of 17.5 percent. And the problem is even more acute in some parts of Appalachia. In 81 counties, at least 30 percent of children under age 18 lived below the poverty level (income below \$26,246 for a family of two adults and two children in 2020). All but 11 of these counties were outside metropolitan areas and nearly half were in the most isolated rural areas. Central Appalachia was home to 40 of the counties with the highest child poverty rates, while another 21 were in Southern Appalachia. However, there were 100 counties (primarily in Northern Appalachia and in metropolitan areas) where child poverty rates were below the national average. Indeed, 29 of the 53 Appalachian counties where child poverty was less than 15 percent were in metro areas, and 19 were in Northern Appalachia.

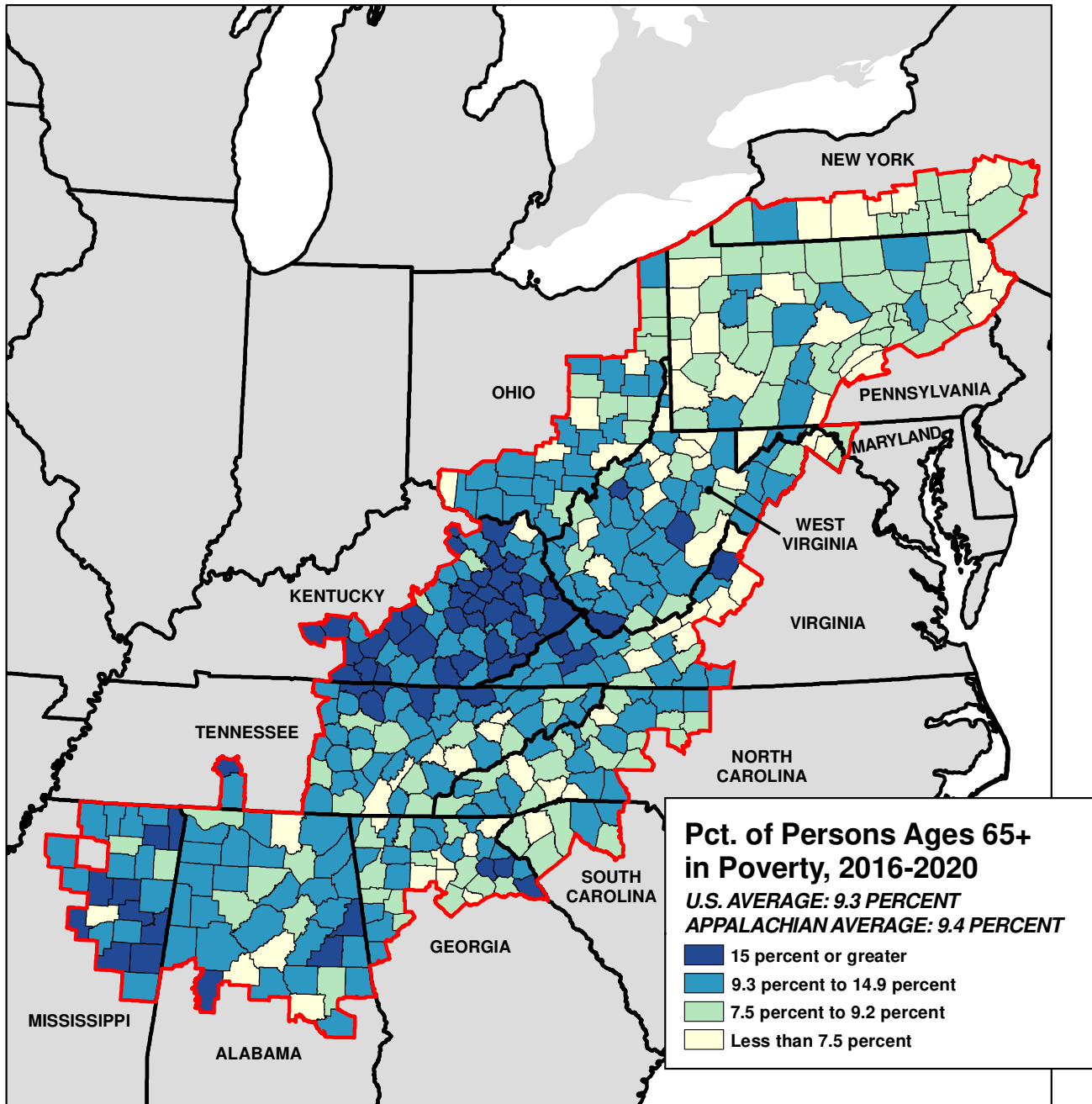
Figure 8.9: Percent of Persons Ages 18 to 64 in the Appalachian Region in Poverty, 2016-2020



Map Title: Percent of Persons Ages 18 to 64 in the Appalachian Region in Poverty, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 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 2016-2020 period. More than 14 percent of Appalachian residents in this age group had incomes below the poverty level (income of less than \$26,246 for a family of two adults and two children in 2020), and this rate was more than two percentage points above the U.S. average of 12.1 percent. Within the Region, there were rural/urban and geographic patterns of poverty concentration. Of the 100 counties where at least one in five 18-to-64-year-olds were poor, 83 were outside metropolitan areas; 80 were in Central, South Central, and Southern Appalachia; and 41 were in Kentucky alone. Conversely, 64 of the 77 counties with rates below the national average were in metro areas and/or in Northern Appalachia.

Figure 8.10: Percent of Persons Ages 65 and Over in the Appalachian Region in Poverty, 2016-2020



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region in Poverty, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

The poverty rate for the oldest residents of Appalachia was 9.4 percent in 2016-2020, just above the national rate of 9.3 percent. Yet poverty among the 65-plus population was below the U.S. average in 179 counties, 66 of which were in Northern Appalachia alone. But as with other age groups, poverty was especially prevalent among the senior population in Appalachian Kentucky, where more than 15 percent of residents ages 65 and over were poor in 2016-2020. Moreover, the state had 34 of the 61 Appalachian counties where the poverty rate among seniors was 15 percent or higher. (Determined by a series of income thresholds based on family size and composition, the poverty level in 2020 was \$15,644 for a family of two adults headed by someone age 65 or older.)

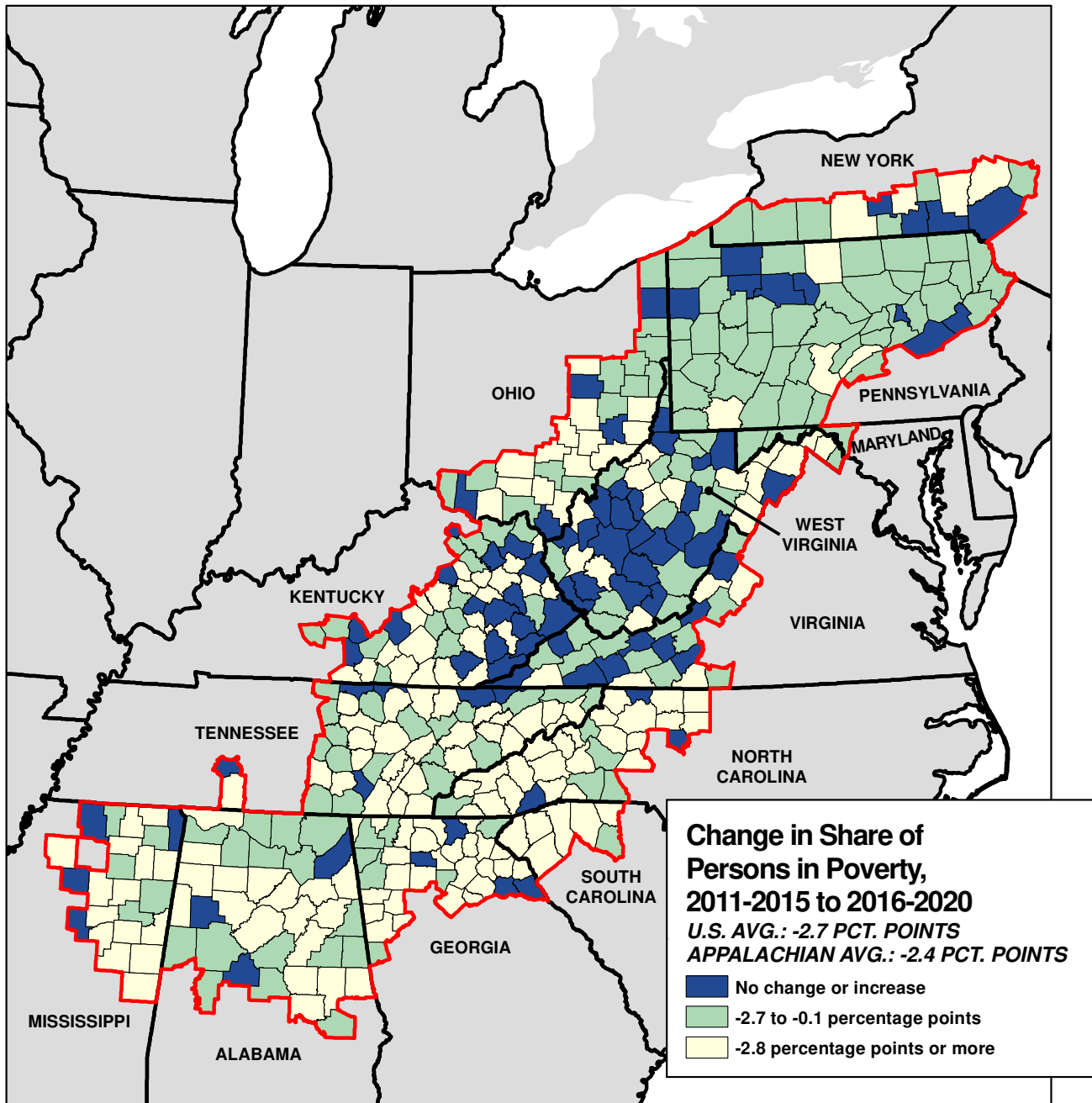
Table 8.5: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, by Age Group, 2011-2015 to 2016-2020

Poverty Status	Percentage Point Change in Share of Persons in Poverty					
	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	- 2.7	- 4.2	- 2.4	- 4.8	- 2.0	- 0.1
Appalachian Region	- 2.4	- 4.2	- 2.2	- 4.5	- 1.8	- 0.2
Subregions						
Northern Appalachia	- 1.3	- 2.6	- 1.0	- 2.9	- 0.7	+ 0.1
North Central Appalachia	- 1.4	- 2.6	- 1.2	- 3.4	- 0.8	+ 0.4
Central Appalachia	- 2.0	- 4.1	- 1.4	- 3.9	- 1.0	- 0.2
South Central Appalachia	- 3.2	- 4.8	- 3.1	- 6.4	- 2.5	- 0.8
Southern Appalachia	- 3.5	- 5.5	- 3.2	- 4.9	- 2.9	- 0.4
County Types						
Large Metros (pop. 1 million +)	- 2.6	- 4.6	- 2.3	- 4.6	- 1.9	+ 0.0
Small Metros (pop. <1 million)	- 2.3	- 3.7	- 1.9	- 3.4	- 1.6	- 0.2
Nonmetro, Adjacent to Large Metros	- 3.3	- 5.4	- 3.0	- 6.6	- 2.3	- 0.4
Nonmetro, Adjacent to Small Metros	- 2.1	- 3.4	- 1.9	- 4.6	- 1.5	- 0.3
Rural (nonmetro, not adj. to a metro)	- 2.6	- 4.7	- 2.2	- 6.2	- 1.5	- 0.1
Alabama	- 2.8	- 4.6	- 2.5	- 4.4	- 2.1	- 0.5
Appalachian Alabama	- 2.9	- 5.2	- 2.5	- 4.0	- 2.1	- 0.2
Non-Appalachian Alabama	- 2.8	- 3.2	- 2.7	- 4.9	- 2.1	- 0.9
Georgia	- 4.1	- 5.9	- 3.9	- 6.8	- 3.2	- 0.5
Appalachian Georgia	- 3.8	- 5.1	- 3.7	- 5.1	- 3.5	- 0.4
Non-Appalachian Georgia	- 4.2	- 6.2	- 3.9	- 7.1	- 3.2	- 0.4
Kentucky	- 2.3	- 3.9	- 1.9	- 4.1	- 1.5	- 0.6
Appalachian Kentucky	- 2.3	- 4.0	- 1.7	- 4.2	- 1.2	- 0.9
Non-Appalachian Kentucky	- 2.2	- 3.8	- 1.8	- 4.0	- 1.5	- 0.3
Maryland	- 1.0	- 1.7	- 0.9	- 2.1	- 0.7	+ 0.4
Appalachian Maryland	- 1.5	- 3.7	- 0.8	- 3.5	- 0.3	- 0.3
Non-Appalachian Maryland	- 0.9	- 1.6	- 0.9	- 2.1	- 0.7	+ 0.5
Mississippi	- 2.9	- 4.2	- 2.5	- 5.3	- 2.0	- 0.9
Appalachian Mississippi	- 3.6	- 7.1	- 3.0	- 5.7	- 2.2	+ 0.2
Non-Appalachian Mississippi	- 2.8	- 3.6	- 2.4	- 5.2	- 1.9	- 1.2
New York	- 2.1	- 3.5	- 2.0	- 3.6	- 1.6	+ 0.0
Appalachian New York	- 1.1	- 1.8	- 0.9	- 2.5	- 0.5	+ 0.3
Non-Appalachian New York	- 2.1	- 3.7	- 2.0	- 3.6	- 1.7	+ 0.0
North Carolina	- 3.4	- 4.7	- 3.3	- 6.9	- 2.6	- 0.6
Appalachian North Carolina	- 3.8	- 5.5	- 3.6	- 7.7	- 3.0	- 0.6
Non-Appalachian North Carolina	- 3.3	- 4.6	- 3.2	- 6.6	- 2.5	- 0.6
Ohio	- 2.2	- 3.7	- 1.9	- 5.4	- 1.4	+ 0.2
Appalachian Ohio	- 1.6	- 3.1	- 1.3	- 4.4	- 0.8	+ 0.5
Non-Appalachian Ohio	- 2.2	- 3.7	- 2.1	- 5.6	- 1.4	+ 0.2
Pennsylvania	- 1.5	- 2.5	- 1.5	- 3.8	- 1.0	+ 0.1
Appalachian Pennsylvania	- 1.3	- 2.6	- 1.2	- 2.8	- 0.8	+ 0.1
Non-Appalachian Pennsylvania	- 1.6	- 2.4	- 1.6	- 4.4	- 1.1	+ 0.1
South Carolina	- 3.2	- 5.1	- 3.0	- 5.7	- 2.5	- 0.2
Appalachian South Carolina	- 3.7	- 6.2	- 3.5	- 4.8	- 3.2	- 0.7
Non-Appalachian South Carolina	- 3.0	- 4.6	- 2.8	- 6.1	- 2.2	+ 0.0
Tennessee	- 3.0	- 4.8	- 2.6	- 5.9	- 2.1	- 0.7
Appalachian Tennessee	- 3.3	- 5.0	- 3.0	- 6.9	- 2.3	- 0.9
Non-Appalachian Tennessee	- 2.8	- 4.6	- 2.4	- 5.2	- 1.9	- 0.5
Virginia	- 1.5	- 2.1	- 1.5	- 3.4	- 1.1	- 0.1
Appalachian Virginia	- 1.3	- 2.3	- 0.8	- 0.1	- 0.8	- 0.1
Non-Appalachian Virginia	- 1.5	- 2.0	- 1.4	- 3.6	- 1.1	+ 0.0
West Virginia (entire state)	- 0.9	- 2.0	- 0.6	- 2.2	- 0.3	+ 0.7

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2011-2015 and 2016-2020 American Community Surveys.

Figure 8.11: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, 2011-2015 to 2016-2020



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region in Poverty, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

The share of Appalachian residents living below the poverty level (income of less than \$26,246 for a family of two adults and two children in 2020) decreased by 2.4 percentage points between the 2011-2015 and 2016-2020 periods, slightly lower than the 2.7 point decline nationally. Yet the decrease in the poverty rate was even greater than the national average in 182 of Appalachia’s 423 counties (most of which were in South Central and Southern Appalachia). Conversely, there were 85 counties—39 of which were in either Kentucky or West Virginia—where poverty rates either stayed the same or increased between the two periods. Although the overall picture suggests an improved economic climate in much of Appalachia, economic concerns that have emerged in 2022 may ultimately negate much of this improvement in future years.

Table 8.6: Income-to-Poverty Ratio for Persons in the Appalachian Region, 2016-2020

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	318,564,128	5.8	7.1	16.9	70.2
Appalachian Region	25,160,590	6.4	8.3	19.4	66.0
Subregions					
Northern Appalachia	7,714,892	5.9	7.3	17.7	69.1
North Central Appalachia	2,440,311	7.1	9.3	19.6	64.0
Central Appalachia	1,800,577	9.5	12.9	23.4	54.2
South Central Appalachia	5,017,049	6.5	8.5	20.6	64.4
Southern Appalachia	8,187,761	5.8	7.8	19.2	67.1
County Types					
Large Metros (pop. 1 million +)	6,025,518	5.0	6.1	15.8	73.1
Small Metros (pop. <1 million)	10,701,014	6.5	8.1	18.9	66.5
Nonmetro, Adjacent to Large Metros	2,217,873	6.9	9.2	21.8	62.2
Nonmetro, Adjacent to Small Metros	3,820,116	6.7	9.6	22.4	61.3
Rural (nonmetro, not adj. to a metro)	2,396,069	8.5	11.5	23.3	56.7
Alabama	4,771,614	7.1	8.9	19.6	64.4
Appalachian Alabama	3,059,344	6.3	8.4	19.1	66.2
Non-Appalachian Alabama	1,712,270	8.4	9.8	20.4	61.3
Georgia	10,238,369	6.4	7.8	18.6	67.1
Appalachian Georgia	3,237,533	4.8	6.8	18.2	70.2
Non-Appalachian Georgia	7,000,836	7.2	8.3	18.8	65.7
Kentucky	4,322,881	7.4	9.2	19.0	64.4
Appalachian Kentucky	1,122,650	10.1	13.3	23.2	53.3
Non-Appalachian Kentucky	3,200,231	6.4	7.8	17.6	68.3
Maryland	5,894,835	4.4	4.6	11.9	79.0
Appalachian Maryland	232,838	5.3	7.5	17.4	69.8
Non-Appalachian Maryland	5,661,997	4.4	4.5	11.7	79.4
Mississippi	2,883,074	8.8	10.7	21.8	58.6
Appalachian Mississippi	604,805	8.2	11.0	24.1	56.8
Non-Appalachian Mississippi	2,278,269	9.0	10.7	21.2	59.1
New York	19,009,098	6.2	7.4	15.2	71.2
Appalachian New York	965,904	7.3	8.3	18.8	65.5
Non-Appalachian New York	18,043,194	6.1	7.3	15.0	71.5
North Carolina	10,098,330	6.2	7.8	19.0	67.0
Appalachian North Carolina	1,967,668	6.4	8.5	21.0	64.2
Non-Appalachian North Carolina	8,130,662	6.1	7.7	18.5	67.7
Ohio	11,350,378	6.1	7.5	16.9	69.5
Appalachian Ohio	1,929,503	7.0	9.2	19.5	64.3
Non-Appalachian Ohio	9,420,875	5.9	7.2	16.3	70.6
Pennsylvania	12,387,061	5.4	6.5	15.6	72.4
Appalachian Pennsylvania	5,446,157	5.5	6.8	17.1	70.7
Non-Appalachian Pennsylvania	6,940,904	5.3	6.4	14.5	73.8
South Carolina	4,950,181	6.7	8.0	19.5	65.9
Appalachian South Carolina	1,286,079	6.2	7.4	19.6	66.8
Non-Appalachian South Carolina	3,664,102	6.9	8.2	19.4	65.5
Tennessee	6,603,468	6.3	8.3	19.2	66.2
Appalachian Tennessee	2,841,160	6.3	8.9	20.9	63.9
Non-Appalachian Tennessee	3,762,308	6.3	7.8	17.8	68.0
Virginia	8,255,575	4.8	5.3	13.9	76.1
Appalachian Virginia	711,358	8.5	9.2	21.0	61.3
Non-Appalachian Virginia	7,544,217	4.4	4.9	13.2	77.5
West Virginia (entire state)	1,755,591	7.5	9.6	20.3	62.7

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2016-2020 American Community Survey.

Table 8.7: Number of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2016-2020

Income-to-Poverty Ratio (Below 50%)	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-24	Ages 25-64	
United States	18,400,877	5,585,954	11,259,996	3,056,311	8,203,685	1,554,927
Appalachian Region	1,606,499	479,502	1,000,312	285,746	714,566	126,685
Subregions						
Northern Appalachia	456,148	130,023	285,584	91,324	194,260	40,541
North Central Appalachia	174,411	50,949	111,629	32,667	78,962	11,833
Central Appalachia	171,618	55,818	104,635	20,942	83,693	11,165
South Central Appalachia	326,473	92,410	210,074	62,929	147,145	23,989
Southern Appalachia	477,849	150,302	288,390	77,884	210,506	39,157
County Types						
Large Metros (pop. 1 million +)	300,969	89,866	182,929	44,290	138,639	28,174
Small Metros (pop. <1 million)	694,705	200,505	443,768	146,963	296,805	50,432
Nonmetro, Adjacent to Large Metros	152,008	46,250	93,106	26,441	66,665	12,652
Nonmetro, Adjacent to Small Metros	256,076	80,714	155,182	34,745	120,437	20,180
Rural (nonmetro, not adj. to a metro)	202,741	62,167	125,327	33,307	92,020	15,247
Alabama	337,706	111,978	200,980	57,411	143,569	24,748
Appalachian Alabama	193,376	61,429	116,409	31,528	84,881	15,538
Non-Appalachian Alabama	144,330	50,549	84,571	25,883	58,688	9,210
Georgia	658,547	213,634	397,429	104,003	293,426	47,484
Appalachian Georgia	155,368	49,915	92,244	20,190	72,054	13,209
Non-Appalachian Georgia	503,179	163,719	305,185	83,813	221,372	34,275
Kentucky	318,888	106,046	192,477	49,800	142,677	20,365
Appalachian Kentucky	113,880	37,433	69,304	15,157	54,147	7,143
Non-Appalachian Kentucky	205,008	68,613	123,173	34,643	88,530	13,222
Maryland	261,713	75,665	158,067	37,297	120,770	27,981
Appalachian Maryland	12,316	3,220	7,925	2,078	5,847	1,171
Non-Appalachian Maryland	249,397	72,445	150,142	35,219	114,923	26,810
Mississippi	254,570	93,158	143,924	39,085	104,839	17,488
Appalachian Mississippi	49,501	15,172	30,139	10,792	19,347	4,190
Non-Appalachian Mississippi	205,069	77,986	113,785	28,293	85,492	13,298
New York	1,178,863	345,522	726,996	169,349	557,647	106,345
Appalachian New York	70,922	18,033	48,180	20,344	27,836	4,709
Non-Appalachian New York	1,107,941	327,489	678,816	149,005	529,811	101,636
North Carolina	621,154	200,739	376,138	101,350	274,788	44,277
Appalachian North Carolina	125,371	36,997	77,908	20,014	57,894	10,466
Non-Appalachian North Carolina	495,783	163,742	298,230	81,336	216,894	33,811
Ohio	695,173	224,783	418,686	112,016	306,670	51,704
Appalachian Ohio	135,776	44,953	79,958	18,611	61,347	10,865
Non-Appalachian Ohio	559,397	179,830	338,728	93,405	245,323	40,839
Pennsylvania	669,658	197,860	409,779	116,739	293,040	62,019
Appalachian Pennsylvania	298,370	82,701	187,518	61,161	126,357	28,151
Non-Appalachian Pennsylvania	371,288	115,159	222,261	55,578	166,683	33,868
South Carolina	330,854	104,288	198,696	51,500	147,196	27,870
Appalachian South Carolina	79,604	23,786	49,598	15,374	34,224	6,220
Non-Appalachian South Carolina	251,250	80,502	149,098	36,126	112,972	21,650
Tennessee	416,918	136,735	250,904	60,297	190,607	29,279
Appalachian Tennessee	179,401	53,802	112,403	27,284	85,119	13,196
Non-Appalachian Tennessee	237,517	82,933	138,501	33,013	105,488	16,083
Virginia	393,228	113,778	250,694	80,694	170,000	28,756
Appalachian Virginia	60,458	13,670	43,292	19,393	23,899	3,496
Non-Appalachian Virginia	332,770	100,108	207,402	61,301	146,101	25,260
West Virginia (entire state)	132,156	38,391	85,434	23,820	61,614	8,331

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2016-2020 American Community Survey.

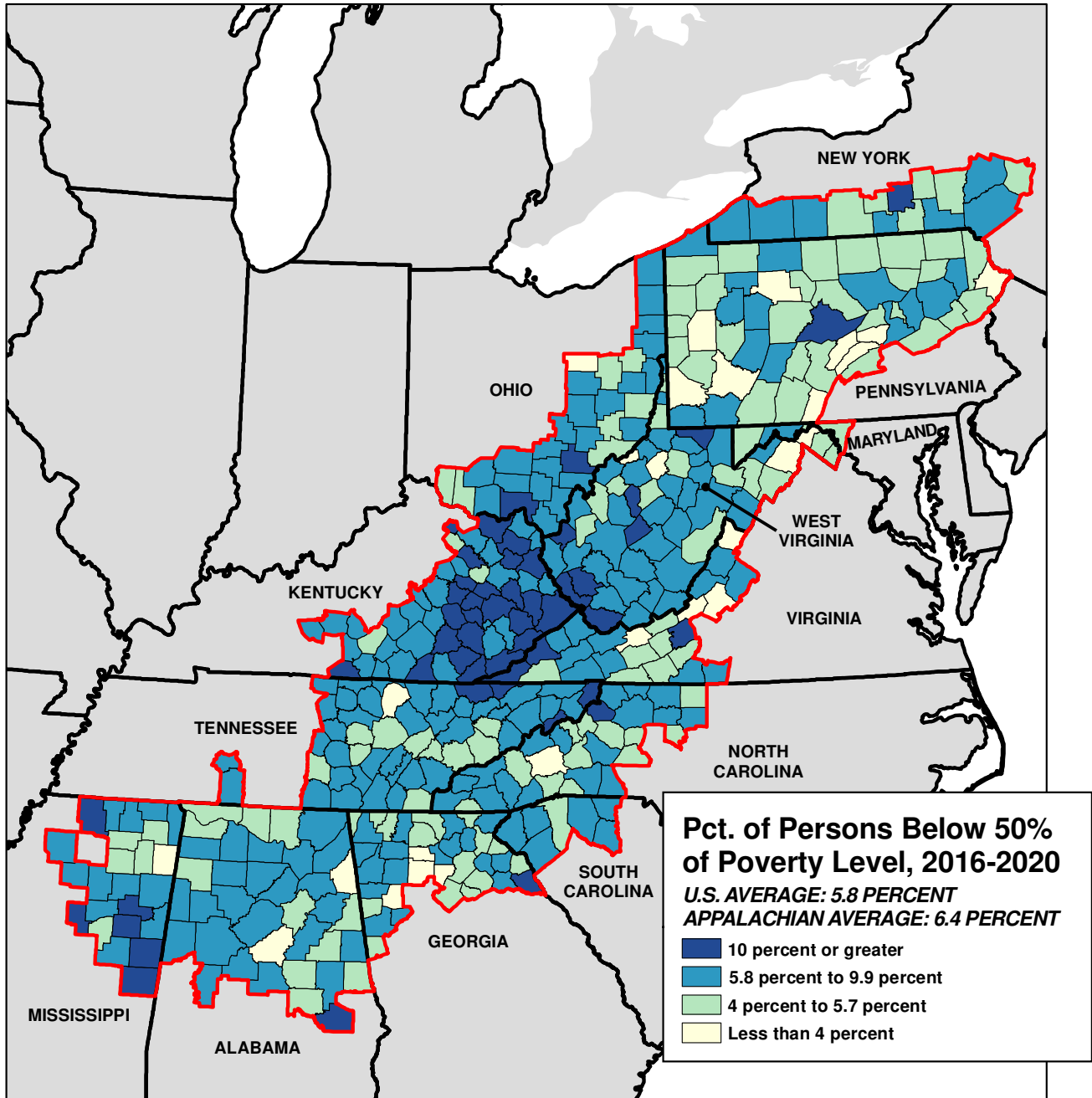
Table 8.8: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2016-2020

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	5.8	7.8	5.8	11.2	4.9	3.0
Appalachian Region	6.4	8.9	6.6	13.8	5.5	2.7
Subregions						
Northern Appalachia	5.9	8.4	6.2	14.8	4.8	2.6
North Central Appalachia	7.1	10.0	7.6	16.3	6.2	2.5
Central Appalachia	9.5	14.4	9.7	15.1	8.9	3.3
South Central Appalachia	6.5	9.1	7.0	15.3	5.7	2.4
Southern Appalachia	5.8	7.8	5.8	11.1	4.9	3.0
County Types						
Large Metros (pop. 1 million +)	5.0	6.6	4.9	9.3	4.3	2.9
Small Metros (pop. <1 million)	6.5	8.9	6.8	16.0	5.3	2.6
Nonmetro, Adjacent to Large Metros	6.9	9.7	7.1	14.3	5.9	3.0
Nonmetro, Adjacent to Small Metros	6.7	10.2	6.9	11.8	6.2	2.5
Rural (nonmetro, not adj. to a metro)	8.5	12.2	8.9	16.9	7.6	3.2
Alabama	7.1	10.4	7.0	14.0	5.8	3.1
Appalachian Alabama	6.3	9.0	6.3	12.3	5.3	3.0
Non-Appalachian Alabama	8.4	12.9	8.2	16.6	6.7	3.2
Georgia	6.4	8.7	6.3	11.5	5.4	3.3
Appalachian Georgia	4.8	6.2	4.7	7.2	4.2	2.9
Non-Appalachian Georgia	7.2	9.9	7.0	13.5	5.9	3.5
Kentucky	7.4	10.8	7.3	13.5	6.3	2.9
Appalachian Kentucky	10.1	15.0	10.3	16.8	9.3	3.6
Non-Appalachian Kentucky	6.4	9.3	6.3	12.4	5.3	2.6
Maryland	4.4	5.7	4.3	7.9	3.8	3.1
Appalachian Maryland	5.3	6.5	5.7	10.8	4.9	2.6
Non-Appalachian Maryland	4.4	5.7	4.3	7.8	3.7	3.1
Mississippi	8.8	13.4	8.3	15.2	7.1	3.8
Appalachian Mississippi	8.2	10.8	8.3	18.8	6.4	4.1
Non-Appalachian Mississippi	9.0	14.1	8.3	14.2	7.3	3.7
New York	6.2	8.6	6.1	10.8	5.4	3.4
Appalachian New York	7.3	9.4	8.3	22.2	5.7	2.5
Non-Appalachian New York	6.1	8.6	6.0	10.1	5.4	3.5
North Carolina	6.2	8.9	6.1	12.0	5.1	2.7
Appalachian North Carolina	6.4	9.4	6.7	13.1	5.7	2.6
Non-Appalachian North Carolina	6.1	8.8	5.9	11.8	5.0	2.7
Ohio	6.1	8.8	6.1	11.9	5.2	2.7
Appalachian Ohio	7.0	10.7	7.0	12.1	6.2	3.0
Non-Appalachian Ohio	5.9	8.5	5.9	11.9	5.0	2.6
Pennsylvania	5.4	7.6	5.4	12.0	4.5	2.7
Appalachian Pennsylvania	5.5	7.7	5.7	14.4	4.4	2.6
Non-Appalachian Pennsylvania	5.3	7.5	5.2	10.1	4.5	2.9
South Carolina	6.7	9.6	6.7	12.8	5.7	3.2
Appalachian South Carolina	6.2	8.2	6.4	14.3	5.1	2.9
Non-Appalachian South Carolina	6.9	10.1	6.8	12.3	5.9	3.3
Tennessee	6.3	9.2	6.2	10.9	5.5	2.7
Appalachian Tennessee	6.3	9.1	6.6	11.8	5.8	2.4
Non-Appalachian Tennessee	6.3	9.3	5.9	10.3	5.2	3.0
Virginia	4.8	6.2	4.9	11.8	3.8	2.2
Appalachian Virginia	8.5	10.3	10.1	29.6	6.6	2.3
Non-Appalachian Virginia	4.4	5.9	4.4	9.9	3.6	2.2
West Virginia (entire state)	7.5	10.8	8.1	16.9	6.8	2.4

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2016-2020 American Community Survey.

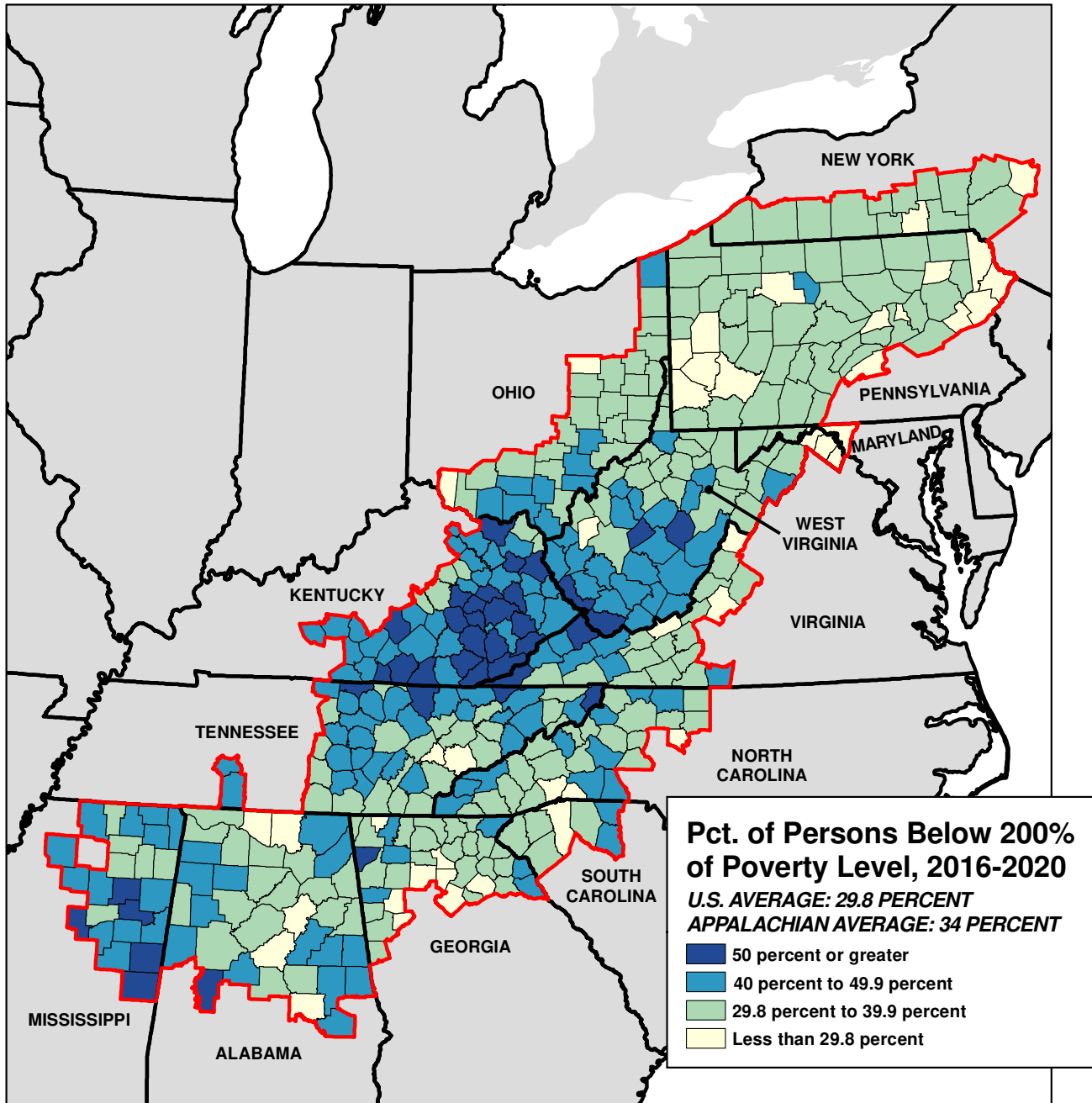
Figure 8.12: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, 2016-2020



Map Title: Percent of Persons in the Appalachian Region Below 50% of Poverty Level, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In the 2016-2020 period, 6.4 percent of Appalachian residents were in extreme poverty (incomes below 50 percent of the poverty level, or less than \$13,123 for a family of two adults and two children in 2020). While this was slightly higher than the national average of 5.8 percent, the situation was even worse in much of the Region. For example, at least one in 10 residents were extremely poor in 52 Appalachian counties. All but eight of these counties were outside metropolitan areas, and 32 of them were in Central Appalachia. (Kentucky alone had 25 counties in this group.) In contrast, there were 27 counties in the Region where less than 4 percent of the population had incomes below 50 percent of the poverty level. Northern Appalachia had 10 of these counties, although the group also included Buncombe County, North Carolina (Asheville), and suburban counties outside Atlanta and Birmingham.

Figure 8.13: Percent of Persons in the Appalachian Region Below 200% of Poverty Level, 2016-2020



Map Title: Percent of Persons in the Appalachian Region Below 200% of Poverty Level, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

More than one-third (34 percent) of persons in the Appalachian Region had incomes less than twice the poverty level in 2016-2020, four percentage points higher than the national rate of just under 30 percent. (In 2020, a family of two adults and two children fell in this category if their income was less than \$52,492.) 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 173 of Appalachia's 423 counties; these were overwhelmingly in the Central, South Central, and Southern subregions. And in 38 Appalachian counties, at least half of residents had incomes below 200 percent of poverty; 28 of these counties were in Central Appalachia and 21 were in Kentucky alone. In contrast, there were 45 counties in the Region where the share of persons who were poor and low-income was below the national average. Two-fifths of the counties in the latter group were in Northern Appalachia, although several were also outside Atlanta and Birmingham.

Table 8.9: Percentage Point Change in Share of Persons in the Appalachian Region, by Income-to-Poverty Ratio, 2011-2015 to 2016-2020

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	- 1.0	- 1.5	- 1.9	+ 4.5
Appalachian Region	- 0.9	- 1.5	- 1.6	+ 4.2
Subregions				
Northern Appalachia	- 0.6	- 0.8	- 1.4	+ 2.7
North Central Appalachia	- 0.7	- 0.7	- 1.6	+ 3.0
Central Appalachia	- 0.5	- 1.5	- 0.9	+ 2.9
South Central Appalachia	- 1.3	- 1.9	- 1.7	+ 4.9
Southern Appalachia	- 1.3	- 2.2	- 2.2	+ 5.6
County Types				
Large Metros (pop. 1 million +)	- 0.9	- 1.7	- 2.0	+ 4.6
Small Metros (pop. <1 million)	- 0.9	- 1.4	- 1.7	+ 3.9
Nonmetro, Adjacent to Large Metros	- 1.3	- 1.9	- 1.0	+ 4.3
Nonmetro, Adjacent to Small Metros	- 0.8	- 1.3	- 1.5	+ 3.6
Rural (nonmetro, not adj. to a metro)	- 1.0	- 1.6	- 1.3	+ 3.9
Alabama	- 1.1	- 1.8	- 1.5	+ 4.4
Appalachian Alabama	- 1.1	- 1.8	- 1.8	+ 4.7
Non-Appalachian Alabama	- 1.2	- 1.6	- 1.2	+ 3.9
Georgia	- 1.9	- 2.2	- 1.9	+ 6.0
Appalachian Georgia	- 1.4	- 2.4	- 2.7	+ 6.5
Non-Appalachian Georgia	- 2.1	- 2.1	- 1.5	+ 5.7
Kentucky	- 0.7	- 1.6	- 1.5	+ 3.8
Appalachian Kentucky	- 0.5	- 1.8	- 1.1	+ 3.4
Non-Appalachian Kentucky	- 0.7	- 1.5	- 1.5	+ 3.8
Maryland	- 0.4	- 0.6	- 1.4	+ 2.3
Appalachian Maryland	- 1.1	- 0.4	- 1.2	+ 2.7
Non-Appalachian Maryland	- 0.3	- 0.5	- 1.4	+ 2.2
Mississippi	- 1.3	- 1.7	- 1.5	+ 4.5
Appalachian Mississippi	- 0.9	- 2.7	- 1.8	+ 5.4
Non-Appalachian Mississippi	- 1.4	- 1.4	- 1.5	+ 4.2
New York	- 0.7	- 1.3	- 1.6	+ 3.7
Appalachian New York	- 0.4	- 0.8	- 1.0	+ 2.1
Non-Appalachian New York	- 0.8	- 1.4	- 1.6	+ 3.7
North Carolina	- 1.4	- 2.0	- 2.1	+ 5.5
Appalachian North Carolina	- 1.4	- 2.2	- 1.7	+ 5.5
Non-Appalachian North Carolina	- 1.4	- 1.9	- 2.2	+ 5.5
Ohio	- 1.2	- 1.0	- 1.2	+ 3.4
Appalachian Ohio	- 0.9	- 0.7	- 1.6	+ 3.2
Non-Appalachian Ohio	- 1.3	- 1.0	- 1.2	+ 3.5
Pennsylvania	- 0.6	- 0.9	- 1.5	+ 3.0
Appalachian Pennsylvania	- 0.5	- 0.8	- 1.4	+ 2.8
Non-Appalachian Pennsylvania	- 0.8	- 0.9	- 1.5	+ 3.2
South Carolina	- 1.4	- 1.8	- 2.0	+ 5.3
Appalachian South Carolina	- 1.6	- 2.2	- 2.0	+ 5.7
Non-Appalachian South Carolina	- 1.3	- 1.7	- 2.0	+ 5.0
Tennessee	- 1.3	- 1.7	- 2.0	+ 5.1
Appalachian Tennessee	- 1.5	- 1.8	- 1.6	+ 4.8
Non-Appalachian Tennessee	- 1.2	- 1.7	- 2.5	+ 5.3
Virginia	- 0.5	- 0.9	- 1.4	+ 2.9
Appalachian Virginia	- 0.1	- 1.2	- 1.5	+ 2.8
Non-Appalachian Virginia	- 0.6	- 0.8	- 1.4	+ 2.9
West Virginia (entire state)	- 0.4	- 0.4	- 1.3	+ 2.3

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2011-2015 and 2016-2020 American Community Surveys.

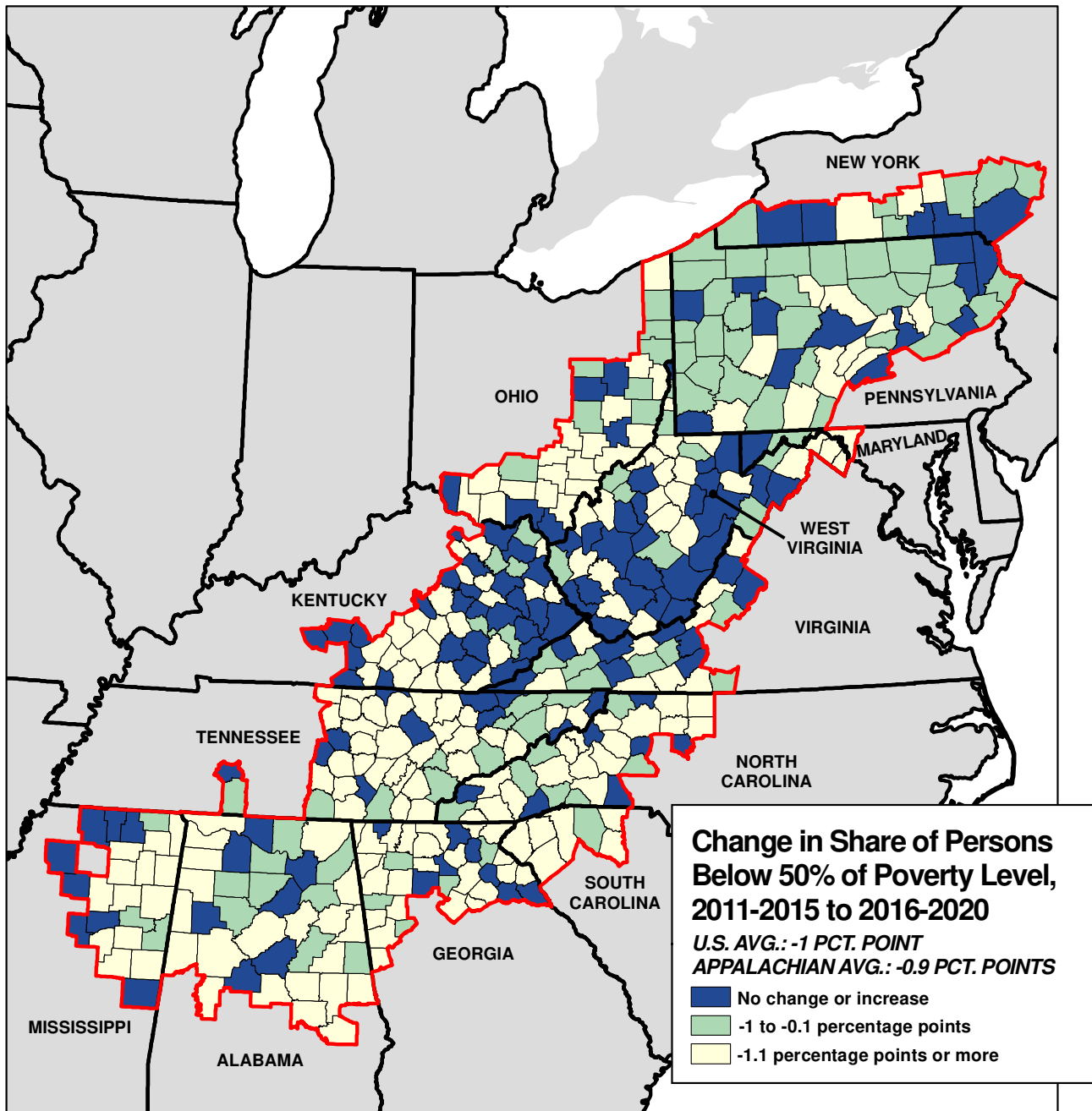
Table 8.10: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, by Age Group, 2011-2015 to 2016-2020

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	- 1.0	- 1.9	- 0.9	- 2.4	- 0.6	+ 0.4
Appalachian Region	- 0.9	- 2.0	- 0.8	- 2.5	- 0.4	+ 0.4
Subregions						
Northern Appalachia	- 0.6	- 1.5	- 0.4	- 1.8	- 0.1	+ 0.5
North Central Appalachia	- 0.7	- 1.6	- 0.5	- 2.3	- 0.2	+ 0.5
Central Appalachia	- 0.5	- 1.8	+ 0.0	- 1.5	+ 0.2	+ 0.6
South Central Appalachia	- 1.3	- 2.2	- 1.2	- 4.0	- 0.7	+ 0.1
Southern Appalachia	- 1.3	- 2.4	- 1.1	- 2.2	- 1.0	+ 0.5
County Types						
Large Metros (pop. 1 million +)	- 0.9	- 1.9	- 0.8	- 2.5	- 0.5	+ 0.4
Small Metros (pop. <1 million)	- 0.9	- 1.9	- 0.8	- 2.0	- 0.5	+ 0.4
Nonmetro, Adjacent to Large Metros	- 1.3	- 2.4	- 1.2	- 3.3	- 0.9	+ 0.7
Nonmetro, Adjacent to Small Metros	- 0.8	- 1.5	- 0.6	- 2.6	- 0.3	+ 0.3
Rural (nonmetro, not adj. to a metro)	- 1.0	- 2.5	- 0.7	- 3.5	- 0.2	+ 0.7
Alabama	- 1.1	- 2.4	- 0.8	- 1.5	- 0.6	+ 0.6
Appalachian Alabama	- 1.1	- 2.6	- 0.7	- 1.3	- 0.6	+ 0.6
Non-Appalachian Alabama	- 1.2	- 1.9	- 1.0	- 2.0	- 0.7	+ 0.4
Georgia	- 1.9	- 3.2	- 1.7	- 4.0	- 1.2	+ 0.4
Appalachian Georgia	- 1.4	- 1.7	- 1.4	- 2.7	- 1.3	+ 0.1
Non-Appalachian Georgia	- 2.1	- 3.8	- 1.8	- 4.2	- 1.3	+ 0.5
Kentucky	- 0.7	- 1.4	- 0.5	- 1.9	- 0.3	+ 0.3
Appalachian Kentucky	- 0.5	- 1.8	+ 0.0	- 1.1	+ 0.2	+ 0.5
Non-Appalachian Kentucky	- 0.7	- 1.3	- 0.6	- 2.1	- 0.3	+ 0.3
Maryland	- 0.4	- 0.7	- 0.4	- 1.4	- 0.2	+ 0.6
Appalachian Maryland	- 1.1	- 3.6	- 0.5	- 2.4	- 0.1	+ 0.2
Non-Appalachian Maryland	- 0.3	- 0.6	- 0.4	- 1.3	- 0.3	+ 0.6
Mississippi	- 1.3	- 2.4	- 1.1	- 2.7	- 0.7	+ 0.8
Appalachian Mississippi	- 0.9	- 2.9	- 0.6	- 0.9	- 0.4	+ 1.6
Non-Appalachian Mississippi	- 1.4	- 2.2	- 1.2	- 3.2	- 0.8	+ 0.5
New York	- 0.7	- 1.4	- 0.6	- 1.5	- 0.4	+ 0.3
Appalachian New York	- 0.4	- 0.6	- 0.2	- 0.9	+ 0.0	+ 0.6
Non-Appalachian New York	- 0.8	- 1.4	- 0.6	- 1.5	- 0.4	+ 0.3
North Carolina	- 1.4	- 2.2	- 1.3	- 3.7	- 0.9	+ 0.3
Appalachian North Carolina	- 1.4	- 2.2	- 1.4	- 5.1	- 0.8	+ 0.2
Non-Appalachian North Carolina	- 1.4	- 2.2	- 1.3	- 3.3	- 0.9	+ 0.3
Ohio	- 1.2	- 2.2	- 1.0	- 3.0	- 0.7	+ 0.4
Appalachian Ohio	- 0.9	- 1.8	- 0.7	- 2.9	- 0.3	+ 0.8
Non-Appalachian Ohio	- 1.3	- 2.2	- 1.1	- 3.0	- 0.7	+ 0.3
Pennsylvania	- 0.6	- 1.3	- 0.6	- 2.2	- 0.2	+ 0.4
Appalachian Pennsylvania	- 0.5	- 1.4	- 0.4	- 1.8	- 0.1	+ 0.4
Non-Appalachian Pennsylvania	- 0.8	- 1.2	- 0.8	- 2.6	- 0.4	+ 0.5
South Carolina	- 1.4	- 2.8	- 1.2	- 2.7	- 0.9	+ 0.8
Appalachian South Carolina	- 1.6	- 3.0	- 1.5	- 2.9	- 1.2	+ 0.6
Non-Appalachian South Carolina	- 1.3	- 2.8	- 1.1	- 2.6	- 0.8	+ 0.9
Tennessee	- 1.3	- 2.4	- 1.2	- 3.5	- 0.7	+ 0.3
Appalachian Tennessee	- 1.5	- 2.5	- 1.4	- 4.6	- 0.8	+ 0.1
Non-Appalachian Tennessee	- 1.2	- 2.3	- 1.0	- 2.7	- 0.7	+ 0.5
Virginia	- 0.5	- 0.8	- 0.5	- 1.6	- 0.4	+ 0.2
Appalachian Virginia	- 0.1	- 0.7	+ 0.4	+ 1.2	+ 0.5	+ 0.1
Non-Appalachian Virginia	- 0.6	- 0.8	- 0.6	- 1.8	- 0.4	+ 0.2
West Virginia (entire state)	- 0.4	- 1.5	- 0.1	- 1.8	+ 0.3	+ 0.5

Note: Poverty status is determined by a series of income thresholds that are based on family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2011-2015 and 2016-2020 American Community Surveys.

Figure 8.14: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, 2011-2015 to 2016-2020



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Below 50% of Poverty Level, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

The share of Appalachian residents living in extreme poverty (50 percent of the poverty level, or earning less than \$13,123 for a family of two adults and two children in 2020) fell 0.9 percentage points between the 2011-2015 and 2016-2020 periods. But there was much variation within the Region. On one hand, the rate of extreme poverty went down by more than a full percentage point (the national rate) in 198 counties. Yet in 125 other counties, extreme poverty rates either remained constant or increased. Nearly one-third of the counties in the latter group were in Central Appalachia (which had the smallest overall decrease among the subregions), although there were pockets of concentration throughout the Region.

Table 8.11: Number and Percent of Households in the Appalachian Region Receiving Food Stamps/SNAP, by Poverty Status, 2016-2020

Receipt of Food Stamps/SNAP	ALL HOUSEHOLDS		Households With Income Below Poverty Level		Households With Income At or Above Poverty Level	
	Number Receiving Food Stamps/SNAP	Percent Receiving Food Stamps/SNAP	Number Receiving Food Stamps/SNAP	Percent Receiving Food Stamps/SNAP	Number Receiving Food Stamps/SNAP	Percent Receiving Food Stamps/SNAP
United States	13,892,407	11.4	6,370,420	41.6	7,521,987	7.0
Appalachian Region	1,368,345	13.3	705,614	46.9	662,731	7.6
Subregions						
Northern Appalachia	473,475	14.2	224,316	51.0	249,159	8.6
North Central Appalachia	159,402	15.8	87,152	53.3	72,250	8.6
Central Appalachia	151,726	20.7	93,958	55.4	57,768	10.2
South Central Appalachia	246,850	11.9	128,992	42.3	117,858	6.6
Southern Appalachia	336,892	10.9	171,196	40.2	165,696	6.2
County Types						
Large Metros (pop. 1 million +)	259,573	10.9	116,892	43.0	142,681	6.7
Small Metros (pop. <1 million)	559,489	12.7	287,684	45.7	271,805	7.2
Nonmetro, Adjacent to Large Metros	137,641	15.3	71,639	50.2	66,002	8.7
Nonmetro, Adjacent to Small Metros	244,430	15.4	129,415	50.4	115,015	8.7
Rural (nonmetro, not adj. to a metro)	167,212	17.0	99,984	49.4	67,228	8.6
Alabama	252,316	13.4	135,864	44.8	116,452	7.3
Appalachian Alabama	150,246	12.4	80,515	44.4	69,731	6.7
Non-Appalachian Alabama	102,070	15.2	55,349	45.4	46,721	8.5
Georgia	468,521	12.2	218,672	41.7	249,849	7.6
Appalachian Georgia	104,412	9.2	44,717	34.9	59,695	5.9
Non-Appalachian Georgia	364,109	13.5	173,955	43.9	190,154	8.3
Kentucky	227,276	13.0	135,081	46.8	92,195	6.3
Appalachian Kentucky	94,072	20.7	61,055	55.4	33,017	9.6
Non-Appalachian Kentucky	133,204	10.3	74,026	41.5	59,178	5.3
Maryland	224,592	10.1	83,514	42.0	141,078	6.9
Appalachian Maryland	15,199	15.8	7,110	56.2	8,089	9.6
Non-Appalachian Maryland	209,393	9.8	76,404	41.1	132,989	6.8
Mississippi	162,478	14.6	93,876	43.7	68,602	7.6
Appalachian Mississippi	31,943	13.5	19,533	41.4	12,410	6.6
Non-Appalachian Mississippi	130,535	14.8	74,343	44.3	56,192	7.9
New York	1,057,725	14.3	506,327	50.4	551,398	8.6
Appalachian New York	60,998	14.5	31,345	49.2	29,653	8.3
Non-Appalachian New York	996,727	14.2	474,982	50.5	521,745	8.6
North Carolina	482,394	12.0	228,890	42.3	253,504	7.3
Appalachian North Carolina	92,851	11.3	47,144	40.0	45,707	6.5
Non-Appalachian North Carolina	389,543	12.1	181,746	42.9	207,797	7.4
Ohio	593,108	12.6	311,175	49.3	281,933	6.9
Appalachian Ohio	125,334	15.8	68,688	54.6	56,646	8.5
Non-Appalachian Ohio	467,774	11.9	242,487	48.0	225,287	6.6
Pennsylvania	670,877	13.1	298,992	49.7	371,885	8.3
Appalachian Pennsylvania	329,210	13.9	149,061	50.8	180,149	8.7
Non-Appalachian Pennsylvania	341,667	12.5	149,931	48.5	191,736	7.9
South Carolina	220,503	11.2	113,308	39.8	107,195	6.4
Appalachian South Carolina	50,291	9.9	26,431	37.9	23,860	5.4
Non-Appalachian South Carolina	170,212	11.7	86,877	40.4	83,335	6.7
Tennessee	332,009	12.6	172,204	45.5	159,805	7.1
Appalachian Tennessee	154,907	13.2	83,439	47.0	71,468	7.2
Non-Appalachian Tennessee	177,102	12.0	88,765	44.1	88,337	7.0
Virginia	251,747	7.9	116,542	37.1	135,205	4.7
Appalachian Virginia	37,590	12.6	20,393	39.5	17,197	7.0
Non-Appalachian Virginia	214,157	7.4	96,149	36.6	118,008	4.5
West Virginia (entire state)	121,292	16.5	66,183	52.8	55,109	9.0

Note: SNAP is an acronym for the federal Supplemental Nutrition Assistance Program (formerly known as the Food Stamp Program). Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2016-2020 American Community Survey.

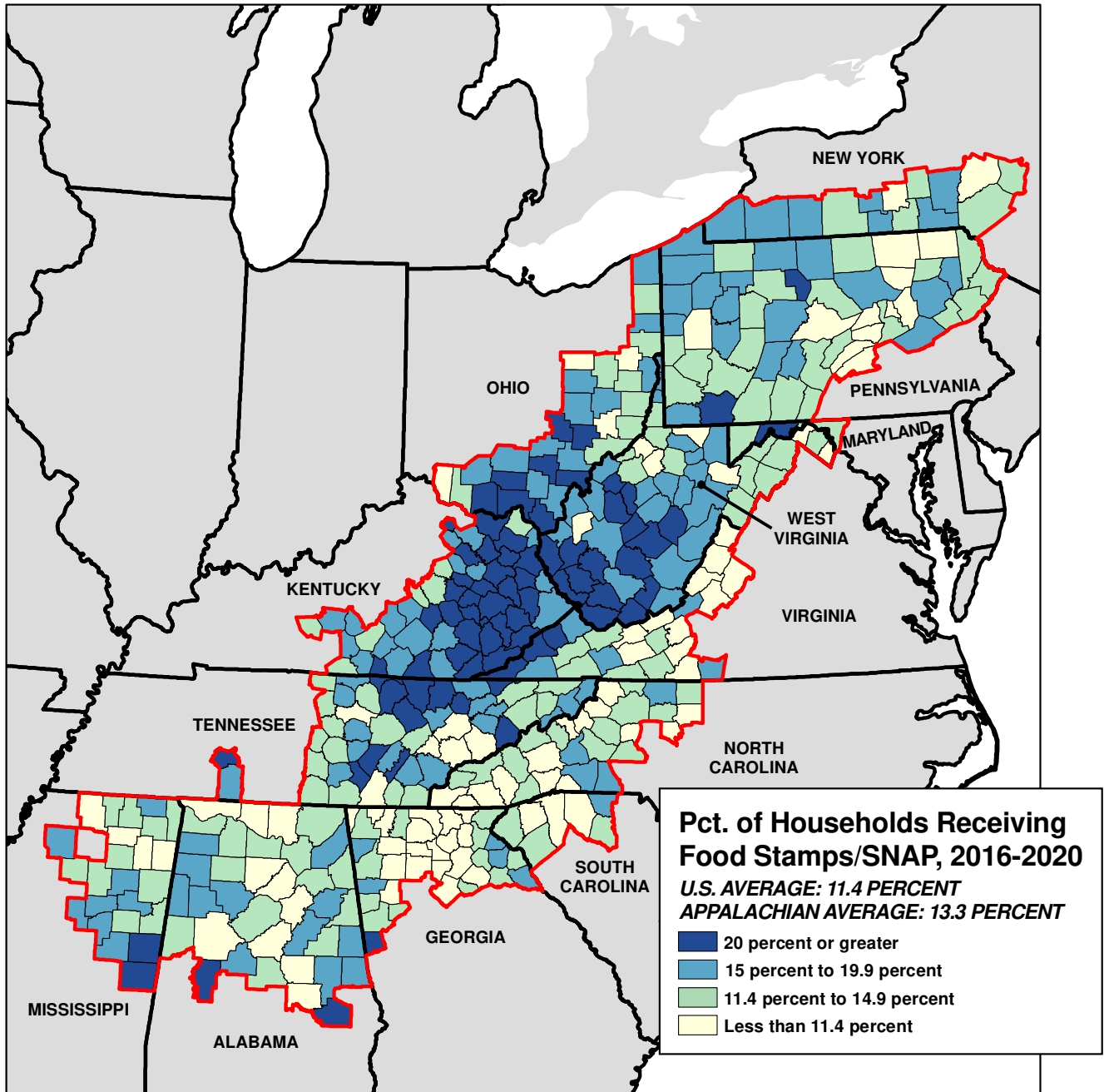
Table 8.12: Number and Percent of Households in the Appalachian Region Receiving Food Stamps/SNAP, by Presence of Children Under Age 18, 2016-2020

Receipt of Food Stamps/SNAP	ALL HOUSEHOLDS		Households With Children Under Age 18		Households Without Children Under Age 18	
	Number Receiving Food Stamps/SNAP	Percent Receiving Food Stamps/SNAP	Number Receiving Food Stamps/SNAP	Percent Receiving Food Stamps/SNAP	Number Receiving Food Stamps/SNAP	Percent Receiving Food Stamps/SNAP
United States	13,892,407	11.4	6,836,559	18.2	7,055,848	8.3
Appalachian Region	1,368,345	13.3	623,290	21.2	745,055	10.2
Subregions						
Northern Appalachia	473,475	14.2	191,047	22.1	282,428	11.4
North Central Appalachia	159,402	15.8	69,936	24.9	89,466	12.3
Central Appalachia	151,726	20.7	68,198	30.7	83,528	16.3
South Central Appalachia	246,850	11.9	118,027	21.0	128,823	8.5
Southern Appalachia	336,892	10.9	176,082	17.4	160,810	7.7
County Types						
Large Metros (pop. 1 million +)	259,573	10.9	118,928	16.1	140,645	8.5
Small Metros (pop. <1 million)	559,489	12.7	263,357	21.3	296,132	9.4
Nonmetro, Adjacent to Large Metros	137,641	15.3	59,962	23.4	77,679	12.0
Nonmetro, Adjacent to Small Metros	244,430	15.4	107,733	24.9	136,697	11.9
Rural (nonmetro, not adj. to a metro)	167,212	17.0	73,310	26.2	93,902	13.3
Alabama	252,316	13.4	125,121	22.4	127,195	9.6
Appalachian Alabama	150,246	12.4	74,705	20.6	75,541	8.9
Non-Appalachian Alabama	102,070	15.2	50,416	25.8	51,654	10.8
Georgia	468,521	12.2	249,184	19.6	219,337	8.6
Appalachian Georgia	104,412	9.2	60,255	14.2	44,157	6.2
Non-Appalachian Georgia	364,109	13.5	188,929	22.3	175,180	9.5
Kentucky	227,276	13.0	112,702	20.8	114,574	9.5
Appalachian Kentucky	94,072	20.7	42,596	30.0	51,476	16.5
Non-Appalachian Kentucky	133,204	10.3	70,106	17.6	63,098	7.1
Maryland	224,592	10.1	109,419	15.5	115,173	7.6
Appalachian Maryland	15,199	15.8	6,793	24.1	8,406	12.3
Non-Appalachian Maryland	209,393	9.8	102,626	15.1	106,767	7.3
Mississippi	162,478	14.6	86,802	24.2	75,676	10.0
Appalachian Mississippi	31,943	13.5	15,635	22.2	16,308	9.9
Non-Appalachian Mississippi	130,535	14.8	71,167	24.7	59,368	10.0
New York	1,057,725	14.3	416,252	19.4	641,473	12.2
Appalachian New York	60,998	14.5	23,345	21.3	37,653	12.1
Non-Appalachian New York	996,727	14.2	392,907	19.3	603,820	12.2
North Carolina	482,394	12.0	244,378	20.0	238,016	8.5
Appalachian North Carolina	92,851	11.3	43,646	20.2	49,205	8.2
Non-Appalachian North Carolina	389,543	12.1	200,732	19.9	188,811	8.6
Ohio	593,108	12.6	270,782	19.8	322,326	9.6
Appalachian Ohio	125,334	15.8	54,712	24.4	70,622	12.4
Non-Appalachian Ohio	467,774	11.9	216,070	18.9	251,704	9.0
Pennsylvania	670,877	13.1	289,367	20.3	381,510	10.4
Appalachian Pennsylvania	329,210	13.9	131,045	21.6	198,165	11.2
Non-Appalachian Pennsylvania	341,667	12.5	158,322	19.4	183,345	9.6
South Carolina	220,503	11.2	113,284	20.0	107,219	7.7
Appalachian South Carolina	50,291	9.9	25,487	16.6	24,804	7.0
Non-Appalachian South Carolina	170,212	11.7	87,797	21.2	82,415	7.9
Tennessee	332,009	12.6	166,485	20.9	165,524	9.0
Appalachian Tennessee	154,907	13.2	75,004	22.7	79,903	9.5
Non-Appalachian Tennessee	177,102	12.0	91,481	19.6	85,621	8.5
Virginia	251,747	7.9	130,218	13.1	121,529	5.6
Appalachian Virginia	37,590	12.6	16,677	22.5	20,913	9.3
Non-Appalachian Virginia	214,157	7.4	113,541	12.3	100,616	5.1
West Virginia (entire state)	121,292	16.5	53,390	26.8	67,902	12.7

Note: SNAP is an acronym for the federal Supplemental Nutrition Assistance Program (formerly known as the Food Stamp Program).

Data source: U.S. Census Bureau, 2016-2020 American Community Survey.

Figure 8.15: Percent of Households in the Appalachian Region Receiving Food Stamps/SNAP, 2016-2020



Map Title: Percent of Households in the Appalachian Region Receiving Food Stamps/SNAP, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In 2016-2020, 13.3 percent of Appalachian households received payments from the federal Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp Program. While the share for the Region is almost two percentage points higher than the national share (11.4 percent), there were 91 Appalachian counties with Food Stamps/SNAP participation rates below the U.S. average. Almost three-fourths of these counties were in Southern and South Central Appalachia—the subregions with the lowest prevalence rates. Conversely, the Food Stamps/SNAP prevalence rate matched or exceeded 20 percent in 76 other Appalachian counties. Most of the counties in the latter group were in Central Appalachia and 33 were in the most rural areas—both of which had the highest Food Stamps/SNAP participation rates among Appalachia’s subregions and urban-rural county types.

Table 8.13: Percentage Point Change in Share of Households in the Appalachian Region Receiving Food Stamps/SNAP, by Poverty Status, 2011-2015 to 2016-2020

Receipt of Food Stamps/SNAP	ALL HOUSEHOLDS	Households With Income Below Poverty Level	Households With Income At or Above Poverty Level
United States	-1.8	-5.3	-0.5
Appalachian Region	-2.2	-5.6	-0.6
Subregions			
Northern Appalachia	+0.1	-1.7	+0.8
North Central Appalachia	-0.6	-1.6	+0.2
Central Appalachia	-3.2	-7.8	-1.0
South Central Appalachia	-3.8	-8.3	-1.8
Southern Appalachia	-3.7	-8.6	-1.7
County Types			
Large Metros (pop. 1 million +)	-1.9	-6.9	-0.5
Small Metros (pop. <1 million)	-2.1	-5.2	-0.6
Nonmetro, Adjacent to Large Metros	-2.2	-3.7	-0.7
Nonmetro, Adjacent to Small Metros	-2.1	-4.6	-0.6
Rural (nonmetro, not adj. to a metro)	-3.4	-7.6	-1.2
Alabama	-2.7	-6.0	-1.1
Appalachian Alabama	-2.7	-6.1	-1.2
Non-Appalachian Alabama	-2.7	-6.0	-0.8
Georgia	-3.3	-7.1	-1.1
Appalachian Georgia	-4.2	-11.1	-2.1
Non-Appalachian Georgia	-2.8	-5.8	-0.8
Kentucky	-4.3	-9.7	-2.1
Appalachian Kentucky	-4.3	-8.9	-1.8
Non-Appalachian Kentucky	-4.2	-10.5	-2.1
Maryland	-0.8	-4.9	-0.3
Appalachian Maryland	-0.5	-1.0	-0.1
Non-Appalachian Maryland	-0.9	-5.0	-0.3
Mississippi	-3.7	-7.8	-1.7
Appalachian Mississippi	-5.3	-11.1	-2.5
Non-Appalachian Mississippi	-3.3	-6.9	-1.4
New York	-1.1	-2.6	-0.3
Appalachian New York	-0.4	-0.6	-0.1
Non-Appalachian New York	-1.3	-2.8	-0.3
North Carolina	-2.6	-6.6	-0.8
Appalachian North Carolina	-3.4	-7.0	-1.4
Non-Appalachian North Carolina	-2.5	-6.5	-0.8
Ohio	-2.4	-6.7	-0.9
Appalachian Ohio	-1.9	-5.5	-0.6
Non-Appalachian Ohio	-2.6	-7.1	-0.9
Pennsylvania	+0.2	-1.3	+1.1
Appalachian Pennsylvania	+0.5	-0.7	+1.2
Non-Appalachian Pennsylvania	+0.1	-2.0	+0.9
South Carolina	-3.9	-9.7	-1.7
Appalachian South Carolina	-3.7	-9.7	-1.6
Non-Appalachian South Carolina	-3.9	-9.7	-1.8
Tennessee	-4.5	-9.9	-2.4
Appalachian Tennessee	-4.5	-8.9	-2.2
Non-Appalachian Tennessee	-4.6	-10.7	-2.6
Virginia	-1.8	-5.7	-0.8
Appalachian Virginia	-2.8	-8.0	-1.0
Non-Appalachian Virginia	-1.6	-5.3	-0.8
West Virginia (entire state)	+0.4	-0.9	+1.0

Note: SNAP is an acronym for the federal Supplemental Nutrition Assistance Program (formerly known as the Food Stamp Program). Poverty status is determined by a series of income thresholds that are determined by family size and composition. In 2020, the poverty threshold for a family of two adults and two children was \$26,246. 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, 2016-2020 American Community Survey.

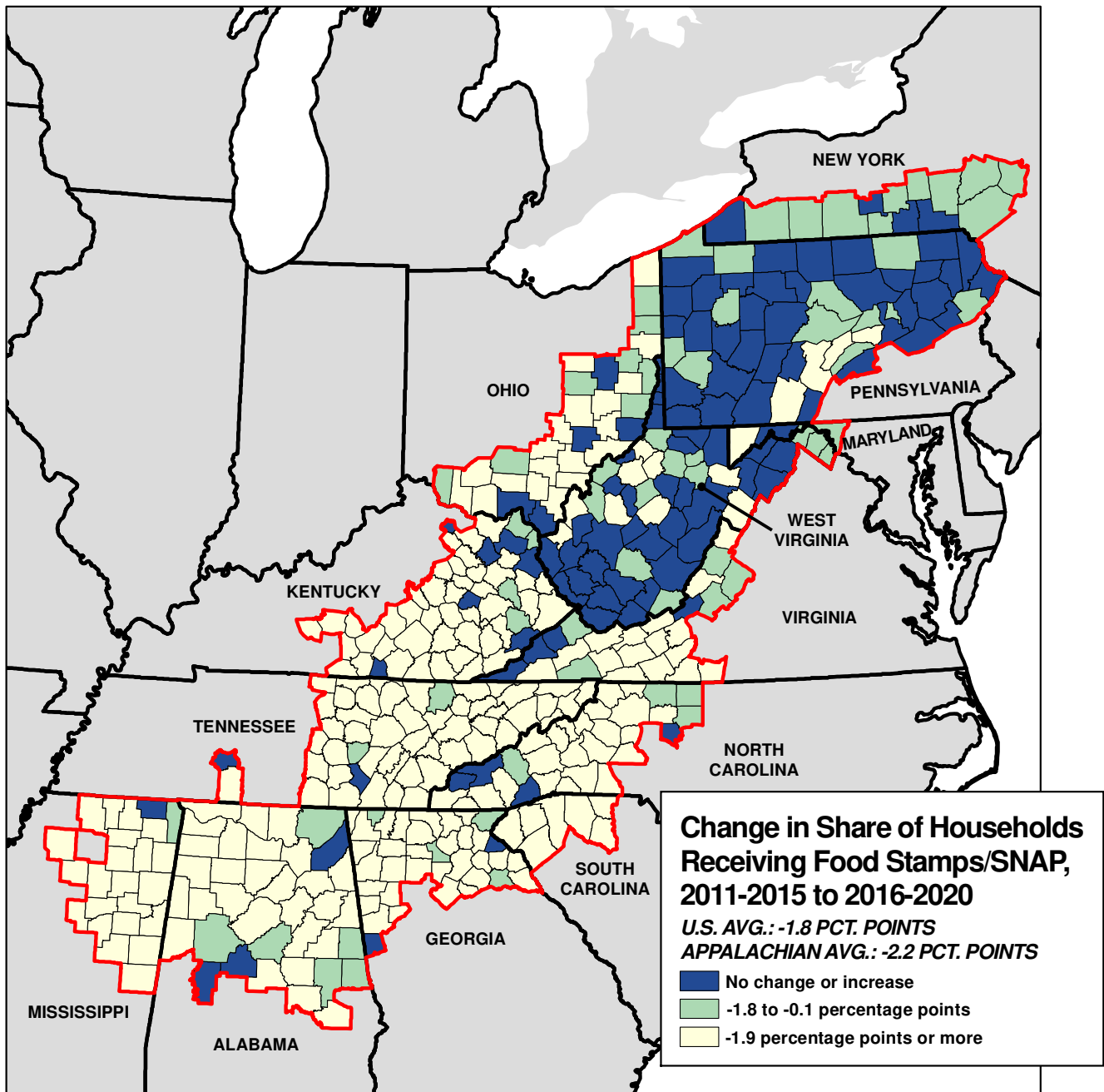
Table 8.14: Percentage Point Change in Share of Households in the Appalachian Region Receiving Food Stamps/SNAP Payments, by Presence of Children Under Age 18, 2011-2015 to 2016-2020

Receipt of Food Stamps/SNAP	ALL HOUSEHOLDS	Households With Children Under Age 18	Households Without Children Under Age 18
United States	-1.8	-3.7	-0.7
Appalachian Region	-2.2	-4.5	-1.0
Subregions			
Northern Appalachia	+0.1	-1.7	+0.9
North Central Appalachia	-0.6	-2.4	+0.2
Central Appalachia	-3.2	-4.9	-2.4
South Central Appalachia	-3.8	-6.4	-2.6
Southern Appalachia	-3.7	-6.4	-2.1
County Types			
Large Metros (pop. 1 million +)	-1.9	-4.7	-0.5
Small Metros (pop. <1 million)	-2.1	-3.9	-1.1
Nonmetro, Adjacent to Large Metros	-2.2	-5.5	-0.7
Nonmetro, Adjacent to Small Metros	-2.1	-4.3	-0.9
Rural (nonmetro, not adj. to a metro)	-3.4	-6.1	-2.0
Alabama	-2.7	-5.3	-1.2
Appalachian Alabama	-2.7	-5.4	-1.3
Non-Appalachian Alabama	-2.7	-4.8	-1.2
Georgia	-3.3	-5.5	-1.6
Appalachian Georgia	-4.2	-6.6	-2.5
Non-Appalachian Georgia	-2.8	-4.9	-1.3
Kentucky	-4.3	-6.1	-3.4
Appalachian Kentucky	-4.3	-6.0	-3.4
Non-Appalachian Kentucky	-4.2	-6.0	-3.2
Maryland	-0.8	-2.3	+0.1
Appalachian Maryland	-0.5	-3.6	+0.9
Non-Appalachian Maryland	-0.9	-2.2	+0.0
Mississippi	-3.7	-5.7	-2.2
Appalachian Mississippi	-5.3	-8.0	-3.3
Non-Appalachian Mississippi	-3.3	-5.1	-1.9
New York	-1.1	-3.2	+0.0
Appalachian New York	-0.4	-1.6	+0.2
Non-Appalachian New York	-1.3	-3.3	+0.0
North Carolina	-2.6	-4.4	-1.6
Appalachian North Carolina	-3.4	-6.1	-2.1
Non-Appalachian North Carolina	-2.5	-4.1	-1.4
Ohio	-2.4	-5.0	-1.2
Appalachian Ohio	-1.9	-4.0	-0.8
Non-Appalachian Ohio	-2.6	-5.2	-1.3
Pennsylvania	+0.2	-0.9	+0.9
Appalachian Pennsylvania	+0.5	-1.1	+1.3
Non-Appalachian Pennsylvania	+0.1	-0.7	+0.6
South Carolina	-3.9	-6.2	-2.3
Appalachian South Carolina	-3.7	-6.5	-2.2
Non-Appalachian South Carolina	-3.9	-6.2	-2.4
Tennessee	-4.5	-7.1	-3.1
Appalachian Tennessee	-4.5	-6.7	-3.3
Non-Appalachian Tennessee	-4.6	-7.3	-3.1
Virginia	-1.8	-3.1	-0.9
Appalachian Virginia	-2.8	-4.7	-1.7
Non-Appalachian Virginia	-1.6	-2.9	-0.8
West Virginia (entire state)	+0.4	-1.1	+1.1

Note: SNAP is an acronym for the federal Supplemental Nutrition Assistance Program (formerly known as the Food Stamp Program).

Data source: U.S. Census Bureau, 2016-2020 American Community Survey.

Figure 8.16: Percentage Point Change in the Share of Households Receiving Food Stamps/SNAP, 2011-2015 to 2016-2020



Map Title: Percentage Point Change in the Share of Households in the Appalachian Region Receiving Food Stamps/SNAP, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

The share of Appalachian households participating in the federal Supplemental Nutrition Assistance Program (SNAP)—formerly the Food Stamps Program—fell 2.2 percentage points between 2011-2015 and 2016-2020, greater than the national decrease of 1.8 points. The decline in Food Stamps/SNAP prevalence likewise was greater than the U.S. decrease in 251 of Appalachia’s 423 counties. All but 33 of these were in Central, South Central, and Southern Appalachia—the subregions that had the greatest declines. Yet Food Stamps/SNAP participation remained the same or increased in 103 Appalachian counties—70 of which were in Pennsylvania and West Virginia. There may be a correlation between the decrease in Food Stamps/SNAP prevalence and the decline in poverty between the two periods. For example, most of the counties that had the greatest declines in participation had poverty declines of at least a full percentage point.

TRENDS IN INCOME AND POVERTY

- Adjusting for inflation, income trends in the Appalachian Region were positive between the 2011-2015 and 2016-2020 periods (see Tables 8.1 and 8.2).
 - The mean income measures all increased noticeably between the two periods. Mean household income, for example, rose 9.6 percent to \$72,403 in 2016-2020. Mean family and per capita income had even greater increases (more than 10 percent each), reaching \$86,235 and \$29,409, respectively. (All monetary figures are in 2020 Dollars.)
 - Although not affected by extreme values, the two median income measures likewise have registered healthy increases since 2011-2015. Median household income (the level where half of all households have higher incomes while the other half have lower incomes) rose 9.6 percent to \$53,546 in 2016-2020. Median family income increased 10 percent to \$67,841.
- Despite these increases, the post 2011-2015 income gains were not quite as great in Appalachia as they were nationally. Appalachia's growth in median household income, however, was within a percentage point of the national average.
- Within the Appalachian Region, all income measures increased for the subregions, county types, and states—even after adjusting for inflation. Among the subregions, income growth was highest in Southern and South Central Appalachia and lowest in Northern or Central Appalachia, depending on the measure. Among the county types, the increases were largest for counties in large metropolitan areas. Income gains among the states were largest in the Appalachian portions of Georgia, the Carolinas, and Tennessee, and smallest in New York and West Virginia. Yet despite the overall increases, there were still counties throughout the Region that experienced income declines between 2011-2015 and 2016-2020.
- Since 2011-2015, the share of Appalachian residents in poverty (incomes below \$26,246 for a family of two adults and two children in 2020) has fallen 2.4 percentage points to 14.7 percent in 2016-2020 (see Tables 8.4 and 8.5). Poverty decreased in all subregions, county types, and states. The decline in poverty was greatest in the Appalachian portions of Georgia, Mississippi, the Carolinas, and Tennessee: Poverty fell by more than three percentage points in each state. In contrast, poverty rates decreased by just 0.9 points in West Virginia and 1.1 points in New York.
- Both child poverty and poverty among young adults (ages 18 to 24) have fallen noticeably since 2011-2015: Child poverty dropped 4.2 percentage points to 20.2 percent in 2016-2020, while poverty among 18-to-24-year-olds fell 4.5 points to 23.8 percent. And while Mississippi had the largest decrease in child poverty (7.1 points), North Carolina had the largest decrease for young adults (7.7 points). Poverty rates among working-age adults (ages 25 to 64) had a more modest decline of only 1.8 points to 12.8 percent. As with the other two age groups, this decrease was uniform throughout the Region. The Appalachian sections of Georgia and the Carolinas had the largest poverty declines among working-age adults (more than three percentage points each), while West Virginia and Appalachian Maryland had the smallest decreases (0.3 points each).
- Poverty declined 0.2 percentage points for older residents (ages 65 and over) between 2011-2015 and 2016-2020 in Appalachia, although some parts of the Region either stayed the same (counties in large metro areas) or rose slightly (Northern and North Central Appalachia, plus the Appalachian portions of several states, including Mississippi, New York, Ohio, Pennsylvania, and West Virginia). Meanwhile, South Central Appalachia and the Appalachian portions of Kentucky and Tennessee had the biggest drops in the poverty rate for persons ages 65 and over.
- In 2016-2020, the share of Appalachian residents with incomes below 50 percent of poverty (income below \$13,123 for a family of two adults and two children in 2020) was 6.4 percent, 0.9 percentage points lower than it was in 2011-2015 (see Tables 8.6 through 8.10). Within the Region, however, some areas including the South Central and Southern subregions and the Appalachian portions of Georgia, the Carolinas, and Tennessee had even greater decreases (1.3 points or more). And the share decreased noticeably among children and young adults ages 18-24 while increasing slightly among adults ages 65 and over.

TRENDS IN INCOME AND POVERTY (continued)

- The share of Appalachian households participating in the federal Supplemental Nutrition Assistance Program (SNAP)—formerly the Food Stamps Program—was 13.3 percent in 2016-2020, a decrease of 2.2 percentage points from the Region’s share in 2011-2015 (Tables 8.11 and 8.13). Several parts of Appalachia registered even greater decreases: For example, the decrease was greater than three points in three of the five subregions, the most rural counties, and the Appalachian portions of six states. (In four of those states—Georgia, Kentucky, Mississippi, and Tennessee—the decline exceeded four percentage points.) However, Food Stamps/SNAP prevalence did increase in some parts of Appalachia—most notably in Pennsylvania and West Virginia.
- Among households with income below the poverty level (\$26,246 for a family of two adults and two children in 2020), Food Stamps/SNAP prevalence rates fell 5.6 percentage points between 2011-2015 and 2016-2020 (Tables 8.11 and 8.13), to 46.9 percent in the latter period. The decrease was far more modest for households at or above poverty (0.6 points to 7.6 percent in 2016-2020). While the decrease in participation among poor households was present throughout Appalachia (with the Appalachian sections of Georgia and Mississippi showing the greatest declines), prevalence among non-poor households increased in some parts of the Region (for example, the rates in Pennsylvania and West Virginia increased by at least a full percentage point).
- Food Stamps/SNAP prevalence among households with children under age 18 was 21.2 percent in 2016-2020, 4.5 percentage points lower than in 2011-2015 (Tables 8.12 and 8.14). Participation for households without children, in contrast, fell just one point to 10.2 percent. As was the case with poor households, the decline in participation for households with children occurred throughout the Region, with two of the subregions, the most rural counties, and the Appalachian sections of Georgia, Kentucky, Mississippi, the Carolinas, and Tennessee all showing decreases of at least six percentage points. Conversely, the Food Stamps/SNAP prevalence among childless households increased in West Virginia and the Appalachian sections of Maryland, New York, and Pennsylvania—the states that showed the smallest decreases among households with children.
- Overall, the income and poverty trends in the Appalachian Region since 2011-2015 show that, for the most part, poverty levels have fallen while incomes have risen, suggesting that much—if not most—of Appalachia has recovered economically from the 2007-2009 recession. However, the economic impact of the COVID-19 pandemic—plus other economic concerns—may end up reversing some of these gains.

CHAPTER 9: HEALTH INSURANCE COVERAGE

Table 9.1: Number of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2016-2020

Health Insurance Status	All Ages	Under Age 35				Ages 35-64	Ages 65 and Over
		Total	Under Age 19	Ages 19-25	Ages 26-34		
United States	28,058,903	14,452,336	4,016,835	4,268,663	6,166,838	13,204,982	401,585
Appalachian Region	2,162,090	1,079,809	292,191	330,368	457,250	1,062,854	19,427
Subregions							
Northern Appalachia	419,635	229,404	80,490	62,750	86,164	185,041	5,190
North Central Appalachia	154,357	74,330	18,529	24,140	31,661	78,552	1,475
Central Appalachia	127,268	61,231	17,419	19,660	24,152	65,364	673
South Central Appalachia	521,753	241,766	53,492	74,753	113,521	276,492	3,495
Southern Appalachia	939,077	473,078	122,261	149,065	201,752	457,405	8,594
County Types							
Large Metros (pop. 1 million +)	504,526	256,216	72,416	76,036	107,764	242,369	5,941
Small Metros (pop. <1 million)	897,573	442,548	105,318	139,449	197,781	448,223	6,802
Nonmetro, Adjacent to Large Metros	198,849	103,035	33,457	29,260	40,318	94,262	1,552
Nonmetro, Adjacent to Small Metros	340,697	165,489	46,332	51,104	68,053	172,035	3,173
Rural (nonmetro, not adj. to a metro)	220,445	112,521	34,668	34,519	43,334	105,965	1,959
Alabama	455,545	227,137	36,714	82,726	107,697	224,992	3,416
Appalachian Alabama	279,992	138,400	23,564	47,278	67,558	139,554	2,038
Non-Appalachian Alabama	175,553	88,737	13,150	35,448	40,139	85,438	1,378
Georgia	1,345,294	704,141	196,271	216,330	291,540	628,375	12,778
Appalachian Georgia	451,555	229,385	74,039	66,830	88,516	216,800	5,370
Non-Appalachian Georgia	893,739	474,756	122,232	149,500	203,024	411,575	7,408
Kentucky	246,078	132,913	41,455	38,014	53,444	111,333	1,832
Appalachian Kentucky	68,330	35,225	11,579	11,078	12,568	32,732	373
Non-Appalachian Kentucky	177,748	97,688	29,876	26,936	40,876	78,601	1,459
Maryland	352,186	177,764	49,465	47,000	81,299	165,075	9,347
Appalachian Maryland	12,148	6,330	2,139	1,461	2,730	5,630	188
Non-Appalachian Maryland	340,038	171,434	47,326	45,539	78,569	159,445	9,159
Mississippi	350,002	181,433	38,289	67,129	76,015	166,994	1,575
Appalachian Mississippi	73,456	38,593	7,825	13,915	16,853	34,518	345
Non-Appalachian Mississippi	276,546	142,840	30,464	53,214	59,162	132,476	1,230
New York	1,037,271	512,679	108,372	132,726	271,581	500,025	24,567
Appalachian New York	46,444	27,366	9,321	8,035	10,010	18,732	346
Non-Appalachian New York	990,827	485,313	99,051	124,691	261,571	481,293	24,221
North Carolina	1,084,103	529,932	129,777	159,887	240,268	544,818	9,353
Appalachian North Carolina	231,462	109,103	24,239	34,229	50,635	121,106	1,253
Non-Appalachian North Carolina	852,641	420,829	105,538	125,658	189,633	423,712	8,100
Ohio	708,532	382,383	121,960	105,657	154,766	316,575	9,574
Appalachian Ohio	142,965	76,529	30,720	20,193	25,616	64,314	2,122
Non-Appalachian Ohio	565,567	305,854	91,240	85,464	129,150	252,261	7,452
Pennsylvania	705,891	386,050	128,825	102,723	154,502	310,278	9,563
Appalachian Pennsylvania	273,126	146,656	47,192	41,209	58,255	123,371	3,099
Non-Appalachian Pennsylvania	432,765	239,394	81,633	61,514	96,247	186,907	6,464
South Carolina	518,723	251,861	58,592	79,673	113,596	263,534	3,328
Appalachian South Carolina	134,074	66,700	16,833	21,042	28,825	66,533	841
Non-Appalachian South Carolina	384,649	185,161	41,759	58,631	84,771	197,001	2,487
Tennessee	649,312	317,114	78,578	92,295	146,241	327,279	4,919
Appalachian Tennessee	277,102	125,646	26,905	38,166	60,575	149,579	1,877
Non-Appalachian Tennessee	372,210	191,468	51,673	54,129	85,666	177,700	3,042
Virginia	681,362	345,472	99,119	102,557	143,796	324,102	11,788
Appalachian Virginia	61,592	27,753	6,718	8,948	12,087	33,222	617
Non-Appalachian Virginia	619,770	317,719	92,401	93,609	131,709	290,880	11,171
West Virginia (entire state)	109,844	52,123	11,117	17,984	23,022	56,763	958

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

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

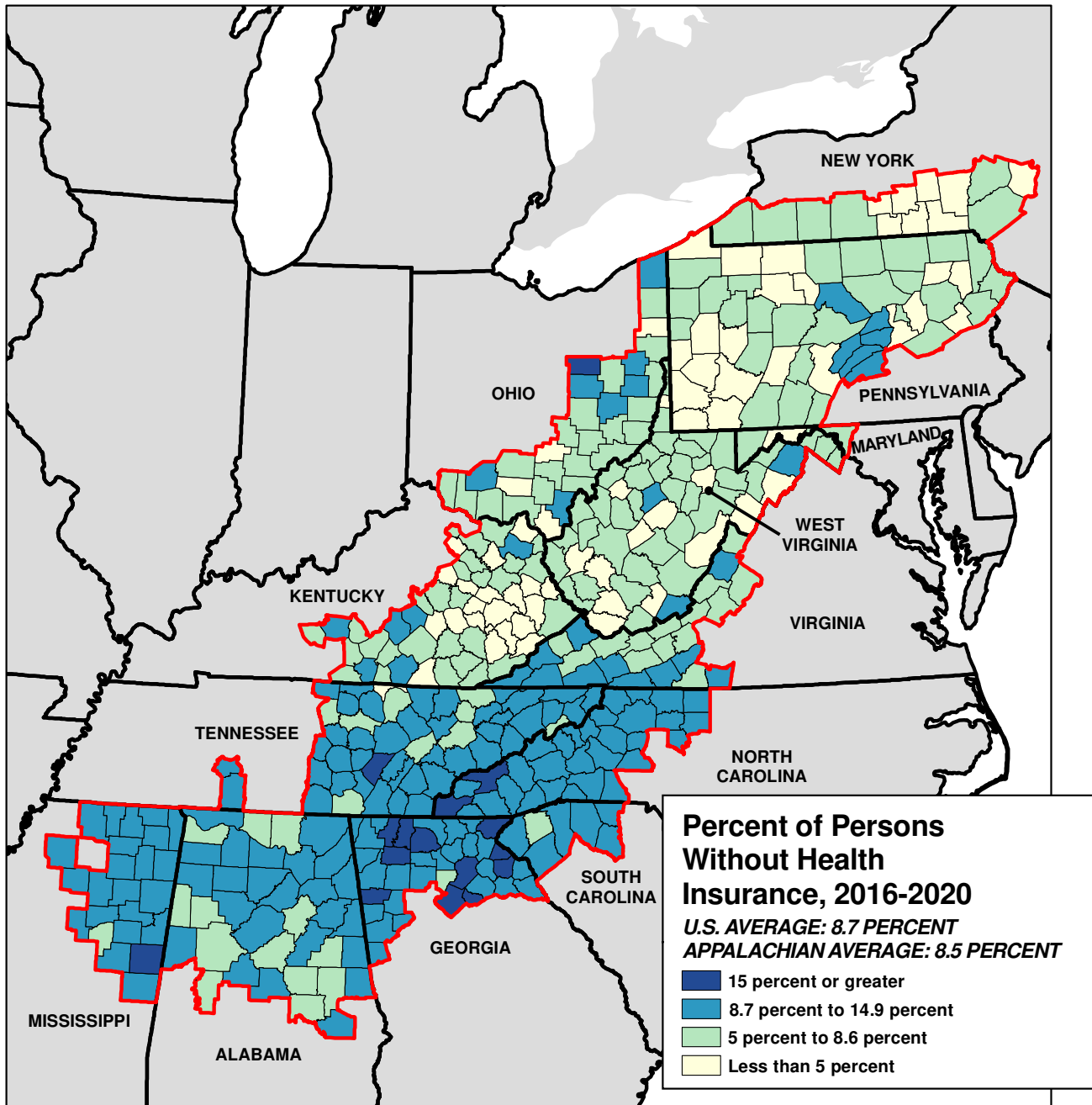
Table 9.2: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2016-2020

Health Insurance Status	All Ages	Under Age 35				Ages 35-64	Ages 65 and Over
		Total	Under Age 19	Ages 19-25	Ages 26-34		
United States	8.7	9.8	5.2	14.3	15.5	10.7	0.8
Appalachian Region	8.5	9.9	5.0	14.2	16.4	10.7	0.4
Subregions							
Northern Appalachia	5.3	7.0	4.8	8.7	10.1	6.0	0.3
North Central Appalachia	6.2	7.2	3.3	10.8	12.1	8.1	0.3
Central Appalachia	7.0	8.0	4.1	13.0	12.8	9.0	0.2
South Central Appalachia	10.2	11.4	4.8	15.9	20.8	14.0	0.4
Southern Appalachia	11.4	12.6	5.9	19.7	21.4	14.2	0.7
County Types							
Large Metros (pop. 1 million +)	8.3	9.6	5.0	14.8	15.2	10.0	0.6
Small Metros (pop. <1 million)	8.2	9.4	4.3	13.2	16.4	10.7	0.3
Nonmetro, Adjacent to Large Metros	8.8	10.8	6.5	14.3	17.2	10.8	0.4
Nonmetro, Adjacent to Small Metros	8.8	10.5	5.4	15.7	17.5	11.4	0.4
Rural (nonmetro, not adj. to a metro)	9.0	10.9	6.3	15.4	17.3	11.3	0.4
Alabama	9.5	10.5	3.2	18.4	19.4	12.2	0.4
Appalachian Alabama	9.1	10.0	3.2	16.8	18.7	11.7	0.4
Non-Appalachian Alabama	10.2	11.3	3.1	21.1	20.7	13.2	0.5
Georgia	13.0	14.4	7.4	22.3	23.1	15.7	0.9
Appalachian Georgia	13.9	15.2	8.6	23.4	24.5	16.7	1.2
Non-Appalachian Georgia	12.6	14.0	6.8	21.8	22.5	15.2	0.8
Kentucky	5.6	6.7	3.9	9.3	10.6	6.6	0.3
Appalachian Kentucky	6.0	7.2	4.3	11.1	10.4	7.3	0.2
Non-Appalachian Kentucky	5.5	6.6	3.8	8.7	10.7	6.3	0.3
Maryland	5.9	6.7	3.5	9.1	11.2	7.0	1.0
Appalachian Maryland	5.1	6.3	4.0	6.9	11.0	6.1	0.4
Non-Appalachian Maryland	6.0	6.7	3.5	9.2	11.2	7.0	1.1
Mississippi	12.0	13.4	5.1	24.0	23.1	15.3	0.3
Appalachian Mississippi	12.0	13.6	5.1	21.6	24.9	15.2	0.3
Non-Appalachian Mississippi	12.0	13.3	5.1	24.7	22.7	15.3	0.3
New York	5.4	5.9	2.5	7.3	10.7	6.7	0.8
Appalachian New York	4.6	6.2	4.3	6.7	9.8	5.0	0.2
Non-Appalachian New York	5.4	5.9	2.4	7.4	10.7	6.8	0.8
North Carolina	10.7	11.6	5.3	17.3	20.1	13.8	0.6
Appalachian North Carolina	11.6	13.4	5.6	19.8	24.2	15.5	0.3
Non-Appalachian North Carolina	10.4	11.2	5.2	16.7	19.2	13.3	0.6
Ohio	6.2	7.4	4.4	10.0	11.5	7.1	0.5
Appalachian Ohio	7.3	9.3	6.8	12.1	12.6	8.4	0.6
Non-Appalachian Ohio	5.9	7.1	4.0	9.6	11.3	6.9	0.5
Pennsylvania	5.6	7.1	4.6	9.1	10.3	6.3	0.4
Appalachian Pennsylvania	4.9	6.4	4.1	8.3	9.5	5.7	0.3
Non-Appalachian Pennsylvania	6.1	7.6	4.9	9.8	10.9	6.9	0.6
South Carolina	10.4	11.5	5.0	17.9	19.6	13.8	0.4
Appalachian South Carolina	10.3	11.3	5.4	16.9	18.8	13.4	0.4
Non-Appalachian South Carolina	10.4	11.5	4.9	18.3	19.9	13.9	0.4
Tennessee	9.7	10.5	4.9	15.1	18.1	12.7	0.5
Appalachian Tennessee	9.6	10.4	4.2	14.8	19.0	13.3	0.3
Non-Appalachian Tennessee	9.8	10.6	5.4	15.3	17.5	12.2	0.6
Virginia	8.2	9.2	5.0	13.6	14.4	10.0	0.9
Appalachian Virginia	8.4	9.3	4.5	11.5	17.0	11.8	0.4
Non-Appalachian Virginia	8.2	9.2	5.0	13.8	14.2	9.8	1.0
West Virginia (entire state)	6.2	7.1	2.9	11.6	12.4	8.1	0.3

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

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

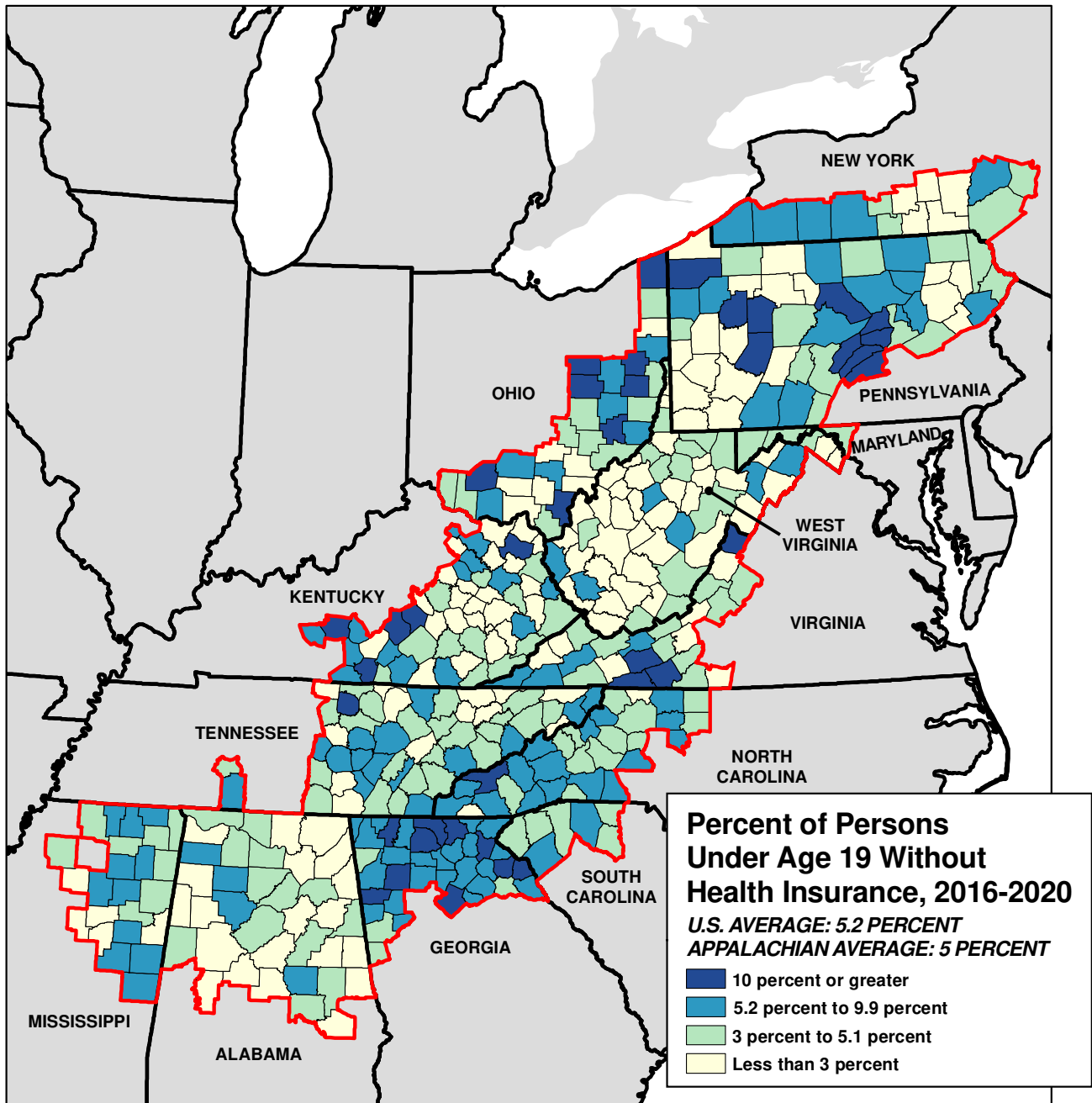
Figure 9.1: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, 2016-2020



Map Title: Percent of Persons in the Appalachian Region Not Covered by Health Insurance, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

About 2.2 million persons in the Appalachian Region lacked any kind of health insurance coverage in the 2016-2020 period—a figure representing 8.5 percent of Appalachia’s residents. Although the percentage for the Region is slightly lower than the U.S. share of 8.7 percent, 196 of the 423 Appalachian counties had non-coverage rates that matched or exceeded the national average. In 16 Appalachian counties—11 of which were in Georgia—at least 15 percent of residents were not covered by insurance. (Indeed, just under 14 percent of residents in Georgia’s Appalachian section were not covered by health insurance.) At the other end of the spectrum, 67 counties had uninsured rates below 5 percent, and all but five of these were in either Kentucky, Maryland, New York, Pennsylvania, or West Virginia—the states with the lowest shares of uninsured residents in Appalachia (each below 6.5 percent).

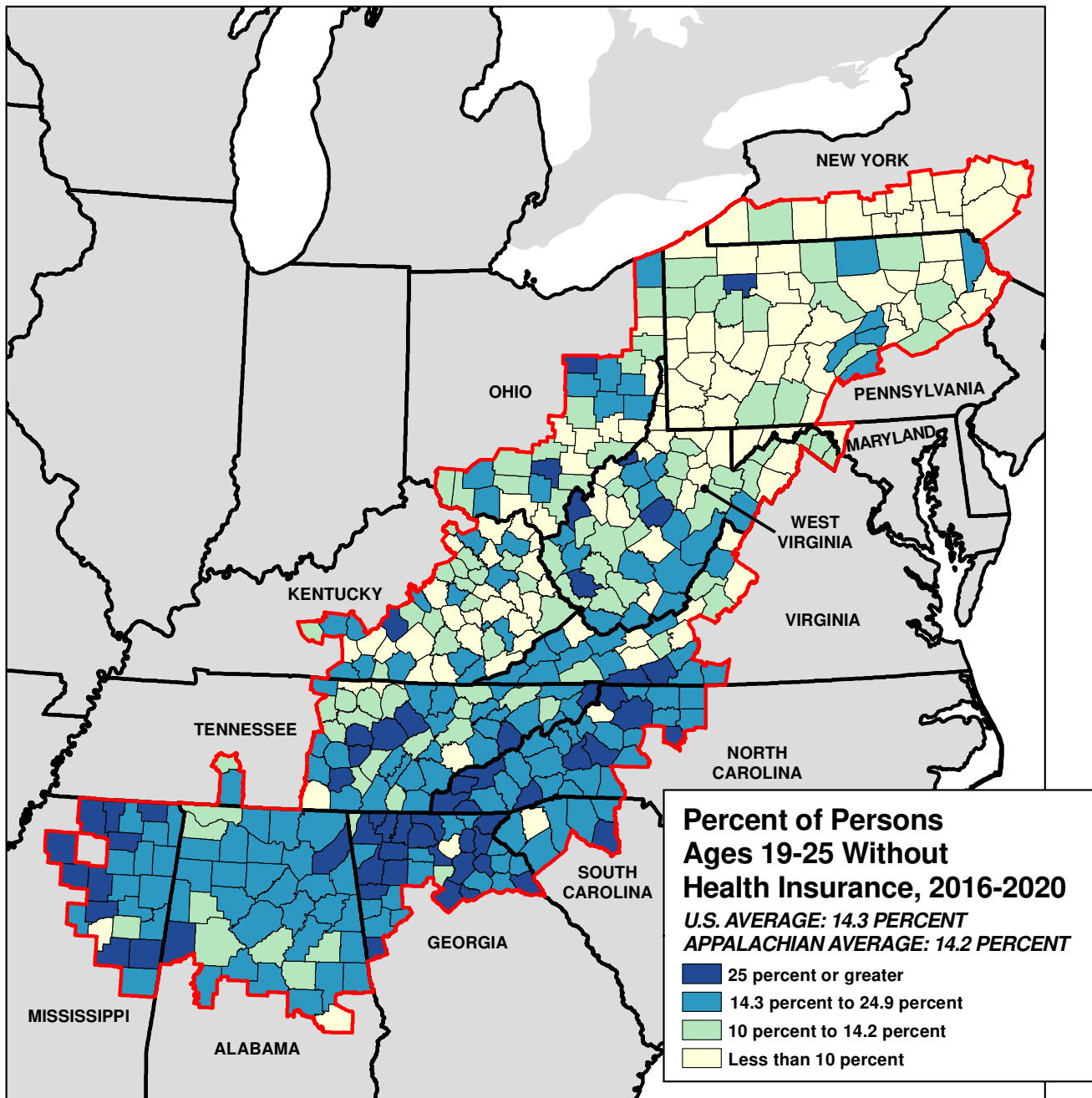
Figure 9.2: Percent of Persons Under Age 19 in the Appalachian Region Not Covered by Health Insurance, 2016-2020



Map Title: Percent of Persons Under Age 19 in the Appalachian Region Not Covered by Health Insurance, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Just 5 percent of Appalachia’s children and youth under age 19 were uninsured during 2016-2020, slightly below the national average of 5.2 percent. But the rate varied throughout the Region. On one hand, 135 counties had non-coverage rates under 3 percent; two-fifths were in either Alabama or West Virginia—the two 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 39 other counties. While the counties in the latter group were scattered throughout various parts of Appalachia (most noticeably in Georgia, Pennsylvania, and Ohio), all but five of them were outside metropolitan areas. In Appalachian Georgia, the uninsured rate for children and youth was 8.6 percent—more than three percentage points above the national average.

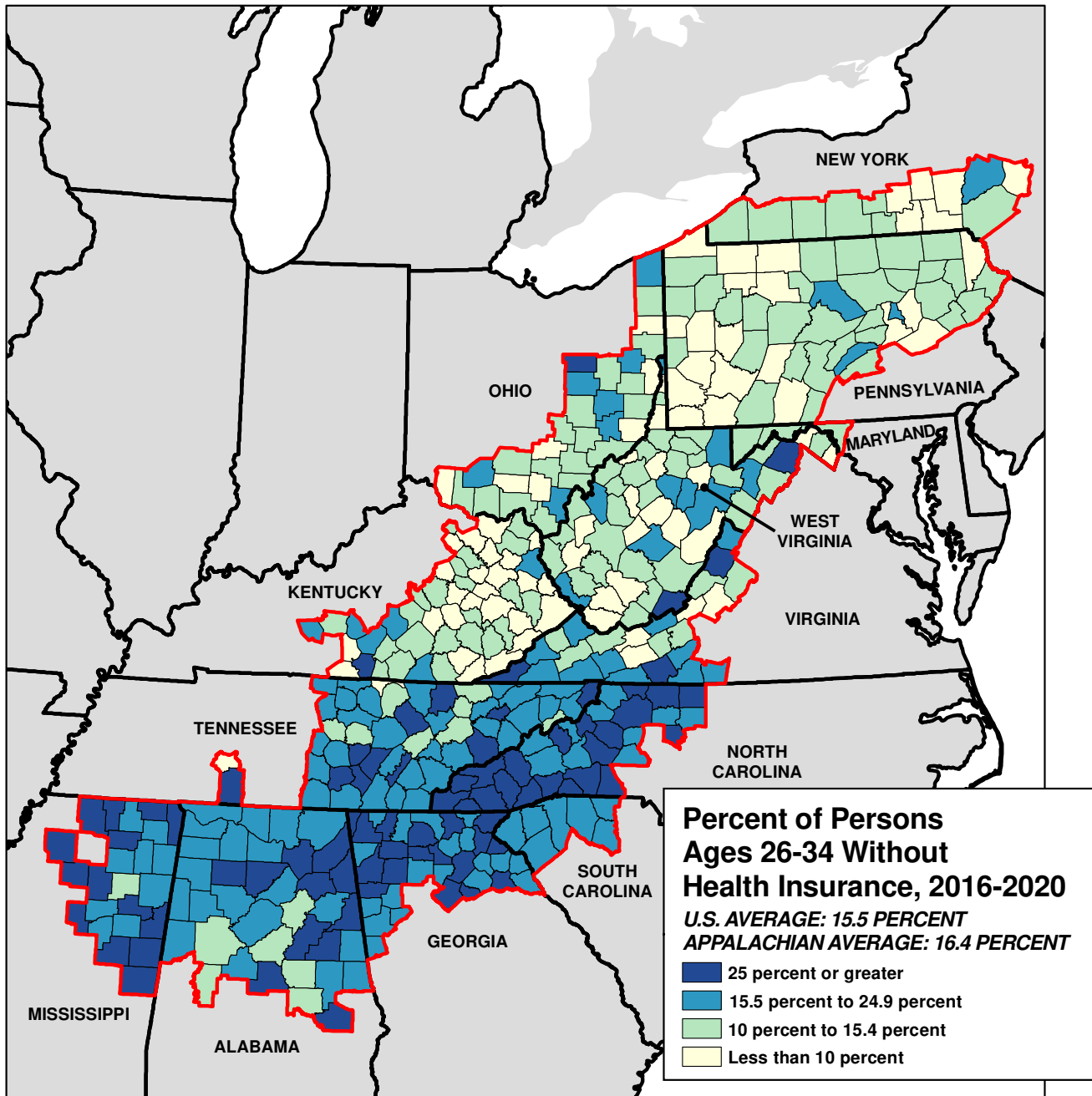
Figure 9.3: Percent of Persons Ages 19 to 25 in the Appalachian Region Not Covered by Health Insurance, 2016-2020



Map Title: Percent of Persons Ages 19 to 25 in the Appalachian Region Not Covered by Health Insurance, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

During the 2016-2020 period, almost one in seven Appalachian residents ages 19 to 25 did not have health insurance coverage. Although Appalachia’s rate for these young adults was just below the national average of 14.3 percent, the non-coverage problem was especially prevalent in much of Southern Appalachia; in that subregion, close to one-fifth of 19-to-25-year-olds did not have coverage. This situation was especially dire in 60 counties, where non-coverage rates reached at least 25 percent. Among these counties, half were in either Georgia or Mississippi—the two states where the uninsured rate for young adults was more than 20 percent. (An additional 10 counties were in North Carolina, where 19.8 percent of 19-to-25-year-olds lacked insurance.) And 42 of those 60 counties were outside metropolitan areas. In contrast, 114 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.

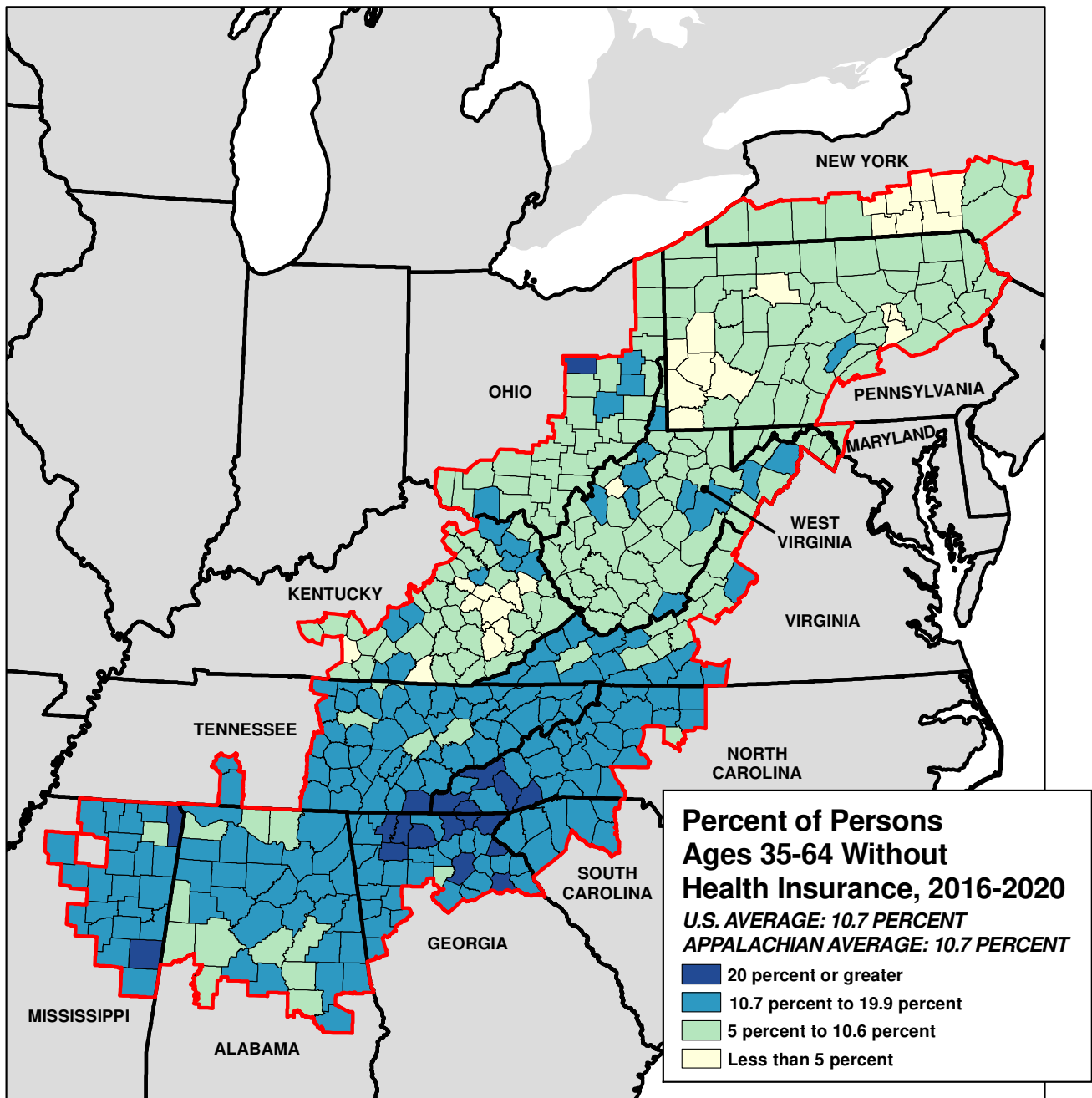
Figure 9.4: Percent of Persons Ages 26 to 34 in the Appalachian Region Not Covered by Health Insurance, 2016-2020



Map Title: Percent of Persons Ages 26 to 34 in the Appalachian Region Not Covered by Health Insurance, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Lack of health insurance coverage was highest among young adults ages 26 to 34—16.4 percent of Appalachian residents in this group were uninsured during the 2016-2020 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 75 of the 82 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 15.5 percent; these were overwhelmingly in the Northern, North Central, and Central subregions. And there were 80 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, 2016-2020



Map Title: Percent of Persons Ages 35 to 64 in the Appalachian Region Not Covered by Health Insurance, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In 2016-2020, 10.7 percent of Appalachia’s working-age population ages 35 to 64 were not covered by health insurance—the same as the national average. Yet there was great variation within the Region. For example, more than 15 percent of 35-to-64-year-olds in the Appalachian sections of Georgia, Mississippi, and North Carolina were uninsured; these three states also accounted for 17 of the 19 counties with non-coverage rates of at least 20 percent for this age group. (Georgia alone had 10 of these counties.) By comparison, there were 27 Appalachian counties where less than 5 percent of working-age residents were not insured; all but one of the counties in this latter group were in New York, Pennsylvania, or Kentucky. (The rate was less than 6 percent in the Appalachian sections of New York and Pennsylvania.)

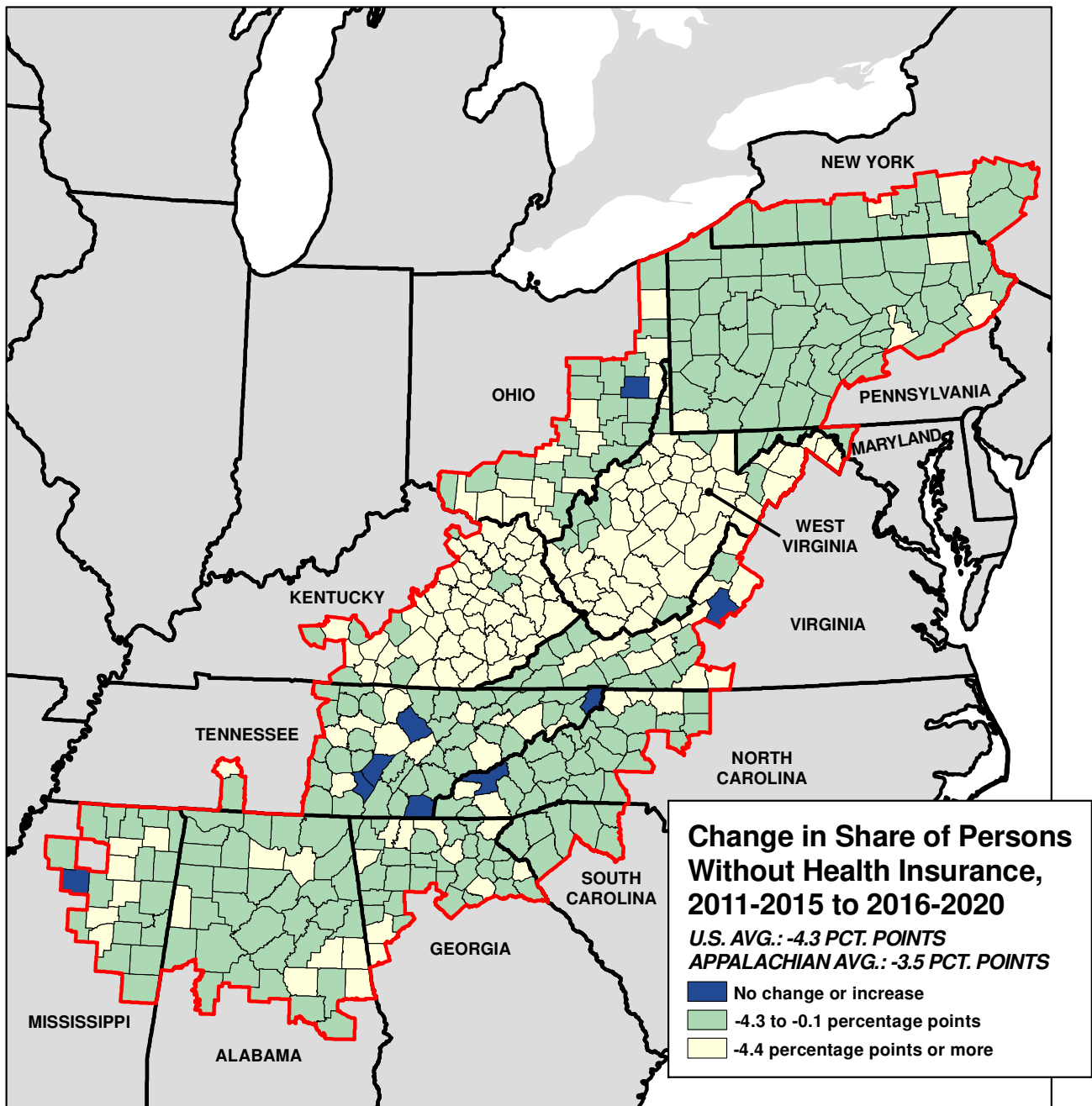
Table 9.3: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, by Age Group, 2011-2015 to 2016-2020

Health Insurance Status	All Ages	Under Age 35	Ages 35-64	Ages 65 and Over
United States	- 4.3	- 4.8	- 4.6	- 0.2
Appalachian Region	- 3.5	- 4.0	- 3.9	+ 0.0
Subregions				
Northern Appalachia	- 3.3	- 3.5	- 4.2	- 0.1
North Central Appalachia	- 4.9	- 5.4	- 5.7	+ 0.0
Central Appalachia	- 6.0	- 7.0	- 6.8	- 0.1
South Central Appalachia	- 3.2	- 3.7	- 3.1	+ 0.1
Southern Appalachia	- 3.3	- 3.9	- 3.3	+ 0.1
County Types				
Large Metros (pop. 1 million +)	- 3.1	- 3.4	- 3.3	+ 0.0
Small Metros (pop. <1 million)	- 3.4	- 4.0	- 3.5	- 0.1
Nonmetro, Adjacent to Large Metros	- 3.6	- 3.6	- 4.3	+ 0.1
Nonmetro, Adjacent to Small Metros	- 4.1	- 4.6	- 4.7	+ 0.0
Rural (nonmetro, not adj. to a metro)	- 4.8	- 5.4	- 5.5	+ 0.0
Alabama	- 3.2	- 3.8	- 3.2	+ 0.0
Appalachian Alabama	- 3.1	- 3.9	- 3.0	+ 0.0
Non-Appalachian Alabama	- 3.3	- 3.7	- 3.4	+ 0.0
Georgia	- 4.1	- 4.5	- 4.0	- 0.2
Appalachian Georgia	- 3.5	- 3.9	- 3.4	+ 0.0
Non-Appalachian Georgia	- 4.4	- 4.8	- 4.4	- 0.2
Kentucky	- 5.8	- 6.6	- 6.4	+ 0.0
Appalachian Kentucky	- 7.1	- 8.0	- 8.3	- 0.1
Non-Appalachian Kentucky	- 5.2	- 6.1	- 5.8	+ 0.0
Maryland	- 3.1	- 3.4	- 3.2	- 0.3
Appalachian Maryland	- 3.2	- 3.1	- 4.3	- 0.3
Non-Appalachian Maryland	- 3.0	- 3.4	- 3.2	- 0.2
Mississippi	- 3.8	- 4.1	- 3.9	- 0.1
Appalachian Mississippi	- 3.0	- 2.9	- 3.5	+ 0.1
Non-Appalachian Mississippi	- 4.1	- 4.5	- 4.0	- 0.1
New York	- 4.3	- 4.9	- 4.7	- 0.2
Appalachian New York	- 3.1	- 3.1	- 3.9	- 0.1
Non-Appalachian New York	- 4.4	- 5.0	- 4.7	- 0.2
North Carolina	- 3.7	- 4.3	- 3.8	+ 0.0
Appalachian North Carolina	- 3.2	- 3.6	- 3.4	- 0.1
Non-Appalachian North Carolina	- 3.9	- 4.4	- 3.9	+ 0.0
Ohio	- 3.5	- 3.5	- 4.6	+ 0.0
Appalachian Ohio	- 4.1	- 4.1	- 5.3	+ 0.0
Non-Appalachian Ohio	- 3.5	- 3.3	- 4.4	+ 0.0
Pennsylvania	- 3.2	- 3.5	- 3.8	- 0.1
Appalachian Pennsylvania	- 3.3	- 3.5	- 4.0	+ 0.0
Non-Appalachian Pennsylvania	- 3.2	- 3.5	- 3.6	- 0.1
South Carolina	- 4.1	- 4.8	- 4.1	- 0.1
Appalachian South Carolina	- 4.0	- 4.9	- 4.0	+ 0.0
Non-Appalachian South Carolina	- 4.2	- 4.8	- 4.2	- 0.2
Tennessee	- 3.1	- 3.3	- 3.4	+ 0.0
Appalachian Tennessee	- 3.0	- 3.6	- 3.0	+ 0.0
Non-Appalachian Tennessee	- 3.2	- 3.1	- 3.7	- 0.1
Virginia	- 3.2	- 3.6	- 3.2	- 0.1
Appalachian Virginia	- 3.6	- 4.8	- 3.2	+ 0.1
Non-Appalachian Virginia	- 3.1	- 3.5	- 3.2	- 0.1
West Virginia (entire state)	- 5.3	- 6.4	- 6.0	+ 0.1

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

Figure 9.6: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, 2011-2015 to 2016-2020



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region Not Covered by Health Insurance, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

The share of Appalachian residents not covered by health insurance fell 3.5 percentage points between the 2011-2015 and 2016-2020 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 six percentage points in Central Appalachia, more than five points in West Virginia, and more than seven points in Appalachian Kentucky. Indeed, those two states alone accounted for more than half of the 163 Appalachian counties where the decrease in non-coverage was greater than the U.S. average. But this did not happen everywhere in Appalachia: In fact, there were nine counties where the share of residents who lacked health insurance in 2016-2020 matched or exceeded the share without insurance in 2011-2015. 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 2011-2015 and 2016-2020 periods, the share of Appalachian residents not covered by health insurance fell 3.5 percentage points to 8.5 percent (see Tables 9.2 and 9.3). And this improvement was even greater in many parts of the Region: Non-coverage rates fell six percentage points in Central Appalachia and almost five points in North Central Appalachia and the Region's most rural counties. As for the Appalachian sections of states, uninsured rates fell more than seven points in Kentucky, more than five points in West Virginia, and at least four points in Ohio and South Carolina. Indeed, non-coverage rates fell by at least three 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 greatest among children and younger adults under age 35. The uninsured rate in the under-35 population was four percentage points lower in 2016-2020 than in 2011-2015. Provisions to expand health insurance coverage, particularly among children and adults under age 26, have been cited as factors for this decline. As with the general population, declines in non-coverage among children and young adults were the greatest in North Central and Central Appalachia, rural counties, West Virginia, and the Appalachian section of Kentucky. (The uninsured rate among persons under age 35 fell by eight 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 3.9 percentage points, compared with 4.6 points nationwide. Yet in every major part of the Region—each subregion, each county type, and each state's Appalachian section—the non-coverage prevalence among residents in this age group was lower in 2016-2020 than in 2011-2015. And most of the areas with the largest declines for the younger age groups (North Central and Central Appalachia, rural counties, Kentucky, and West Virginia) also had the largest declines for 35-to-64-year-olds. Although the share of adults ages 65 and over who lacked health insurance decreased slightly (0.2 percentage points) in the nation, the share remained unchanged in Appalachia. There was also little to no change across subregions and urban-rural county types for this age group.
- 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 2016-2020. But economic concerns in 2022—which ultimately could result in job losses and the resulting loss of employer-based health insurance—may lead to a reversal of some of these improvements in future years.

CHAPTER 10: DISABILITY STATUS

Table 10.1: Number of Persons in the Appalachian Region With a Disability, by Age Group, 2016-2020

Disability Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-34	Ages 35-64	
United States	40,786,461	3,166,556	20,231,217	4,865,509	15,365,708	17,388,688
Appalachian Region	4,132,747	287,706	2,117,203	445,487	1,671,716	1,727,838
Subregions						
Northern Appalachia	1,217,788	91,322	595,768	137,383	458,385	530,698
North Central Appalachia	458,750	30,187	239,880	47,736	192,144	188,683
Central Appalachia	433,229	28,022	245,356	43,244	202,112	159,851
South Central Appalachia	843,737	52,586	421,906	84,590	337,316	369,245
Southern Appalachia	1,179,243	85,589	614,293	132,534	481,759	479,361
County Types						
Large Metros (pop. 1 million +)	797,228	62,805	402,671	90,546	312,125	331,752
Small Metros (pop. <1 million)	1,714,456	122,684	871,494	190,377	681,117	720,278
Nonmetro, Adjacent to Large Metros	393,299	25,832	205,929	44,082	161,847	161,538
Nonmetro, Adjacent to Small Metros	737,896	47,253	376,145	72,970	303,175	314,498
Rural (nonmetro, not adj. to a metro)	489,868	29,132	260,964	47,512	213,452	199,772
Alabama	778,062	49,533	409,216	84,686	324,530	319,313
Appalachian Alabama	498,571	31,791	262,291	54,252	208,039	204,489
Non-Appalachian Alabama	279,491	17,742	146,925	30,434	116,491	114,824
Georgia	1,286,329	109,564	677,890	156,997	520,893	498,875
Appalachian Georgia	381,665	30,944	197,596	44,314	153,282	153,125
Non-Appalachian Georgia	904,664	78,620	480,294	112,683	367,611	345,750
Kentucky	768,194	58,949	425,430	92,155	333,275	283,815
Appalachian Kentucky	261,386	17,534	150,075	27,907	122,168	93,777
Non-Appalachian Kentucky	506,808	41,415	275,355	64,248	211,107	190,038
Maryland	659,640	55,612	327,152	81,805	245,347	276,876
Appalachian Maryland	39,376	3,116	20,087	4,617	15,470	16,173
Non-Appalachian Maryland	620,264	52,496	307,065	77,188	229,877	260,703
Mississippi	481,724	35,739	257,214	55,118	202,096	188,771
Appalachian Mississippi	105,418	6,975	56,348	12,688	43,660	42,095
Non-Appalachian Mississippi	376,306	28,764	200,866	42,430	158,436	146,676
New York	2,226,768	163,365	1,064,712	252,952	811,760	998,691
Appalachian New York	152,943	12,647	77,474	18,887	58,587	62,822
Non-Appalachian New York	2,073,825	150,718	987,238	234,065	753,173	935,869
North Carolina	1,363,146	99,585	695,437	151,227	544,210	568,124
Appalachian North Carolina	308,519	17,812	152,039	30,604	121,435	138,668
Non-Appalachian North Carolina	1,054,627	81,773	543,398	120,623	422,775	429,456
Ohio	1,612,446	129,475	830,144	197,946	632,198	652,827
Appalachian Ohio	334,562	22,965	175,411	37,092	138,319	136,186
Non-Appalachian Ohio	1,277,884	106,510	654,733	160,854	493,879	516,641
Pennsylvania	1,761,383	144,841	865,740	210,367	655,373	750,802
Appalachian Pennsylvania	855,216	64,213	413,378	96,069	317,309	377,625
Non-Appalachian Pennsylvania	906,167	80,628	452,362	114,298	338,064	373,177
South Carolina	725,628	52,153	366,910	76,388	290,522	306,565
Appalachian South Carolina	193,589	15,879	98,058	21,280	76,778	79,652
Non-Appalachian South Carolina	532,039	36,274	268,852	55,108	213,744	226,913
Tennessee	1,031,667	76,513	538,332	113,408	424,924	416,822
Appalachian Tennessee	515,548	34,015	264,101	50,770	213,331	217,432
Non-Appalachian Tennessee	516,119	42,498	274,231	62,638	211,593	199,390
Virginia	979,145	78,390	484,166	117,584	366,582	416,589
Appalachian Virginia	142,615	8,566	73,649	13,995	59,654	60,400
Non-Appalachian Virginia	836,530	69,824	410,517	103,589	306,928	356,189
West Virginia (entire state)	343,339	21,249	176,696	33,012	143,684	145,394

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, 2016-2020 American Community Survey.

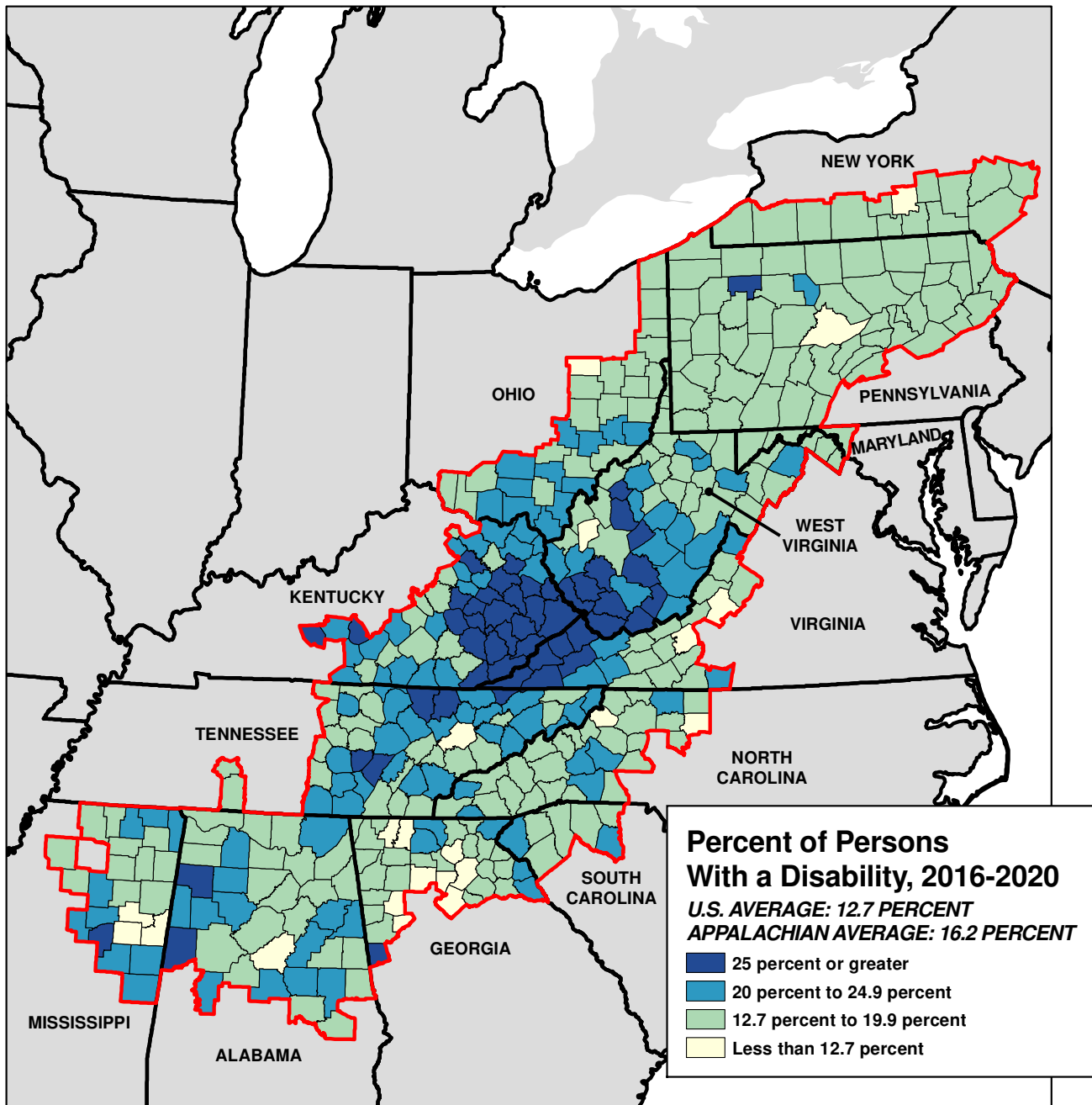
Table 10.2: Percent of Persons in the Appalachian Region With a Disability, by Age Group, 2016-2020

Disability Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-34	Ages 35-64	
United States	12.7	4.3	10.3	6.6	12.5	34.0
Appalachian Region	16.2	5.3	13.7	8.1	16.8	37.3
Subregions						
Northern Appalachia	15.5	5.8	12.5	8.1	15.0	34.4
North Central Appalachia	18.5	5.8	16.1	9.2	19.8	40.3
Central Appalachia	23.8	7.1	22.5	11.9	27.9	47.4
South Central Appalachia	16.6	5.1	13.8	7.8	17.0	37.1
Southern Appalachia	14.3	4.4	12.2	7.3	15.0	37.3
County Types						
Large Metros (pop. 1 million +)	13.1	4.6	10.8	6.9	12.9	34.1
Small Metros (pop. <1 million)	15.7	5.4	13.1	7.9	16.2	36.5
Nonmetro, Adjacent to Large Metros	17.5	5.3	15.3	9.4	18.5	38.3
Nonmetro, Adjacent to Small Metros	19.1	5.9	16.5	9.5	20.1	39.7
Rural (nonmetro, not adj. to a metro)	20.1	5.6	18.0	9.3	22.8	42.3
Alabama	16.2	4.5	14.0	7.9	17.6	39.5
Appalachian Alabama	16.1	4.6	14.0	7.9	17.4	39.6
Non-Appalachian Alabama	16.2	4.5	14.2	7.8	18.0	39.3
Georgia	12.5	4.4	10.6	6.6	13.0	34.9
Appalachian Georgia	11.7	3.8	9.9	6.4	11.8	34.1
Non-Appalachian Georgia	12.8	4.7	10.9	6.6	13.6	35.3
Kentucky	17.5	5.9	16.0	9.5	19.7	40.1
Appalachian Kentucky	22.9	6.9	21.9	11.8	27.2	47.1
Non-Appalachian Kentucky	15.6	5.5	13.9	8.7	17.0	37.4
Maryland	11.1	4.2	8.9	6.2	10.3	30.5
Appalachian Maryland	16.7	6.2	14.2	9.3	16.8	36.5
Non-Appalachian Maryland	10.9	4.1	8.6	6.1	10.1	30.2
Mississippi	16.5	5.1	14.7	8.4	18.5	41.0
Appalachian Mississippi	17.2	4.9	15.3	9.0	19.2	41.4
Non-Appalachian Mississippi	16.4	5.1	14.6	8.3	18.3	40.9
New York	11.6	4.0	8.8	5.5	10.8	31.9
Appalachian New York	15.2	6.4	12.5	7.8	15.5	33.0
Non-Appalachian New York	11.4	3.9	8.6	5.4	10.6	31.9
North Carolina	13.4	4.3	11.2	6.7	13.7	34.5
Appalachian North Carolina	15.5	4.4	12.8	7.5	15.5	34.5
Non-Appalachian North Carolina	12.9	4.3	10.8	6.5	13.3	34.5
Ohio	14.0	5.0	11.9	7.7	14.3	34.0
Appalachian Ohio	17.1	5.4	15.1	9.4	18.1	37.4
Non-Appalachian Ohio	13.4	4.9	11.2	7.4	13.5	33.2
Pennsylvania	14.0	5.5	11.3	7.5	13.4	33.3
Appalachian Pennsylvania	15.4	5.9	12.3	8.1	14.6	34.4
Non-Appalachian Pennsylvania	12.9	5.2	10.4	7.1	12.4	32.2
South Carolina	14.5	4.7	12.2	7.0	15.2	34.7
Appalachian South Carolina	14.8	5.4	12.4	7.2	15.4	36.6
Non-Appalachian South Carolina	14.4	4.5	12.2	6.9	15.1	34.1
Tennessee	15.5	5.1	13.2	7.5	16.5	38.6
Appalachian Tennessee	17.9	5.7	15.2	8.3	19.0	39.9
Non-Appalachian Tennessee	13.6	4.7	11.7	7.0	14.6	37.3
Virginia	11.8	4.2	9.4	6.3	11.3	32.4
Appalachian Virginia	19.5	6.3	16.6	8.6	21.2	39.8
Non-Appalachian Virginia	11.1	4.0	8.8	6.1	10.3	31.4
West Virginia (entire state)	19.3	5.8	16.6	9.0	20.6	41.4

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

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

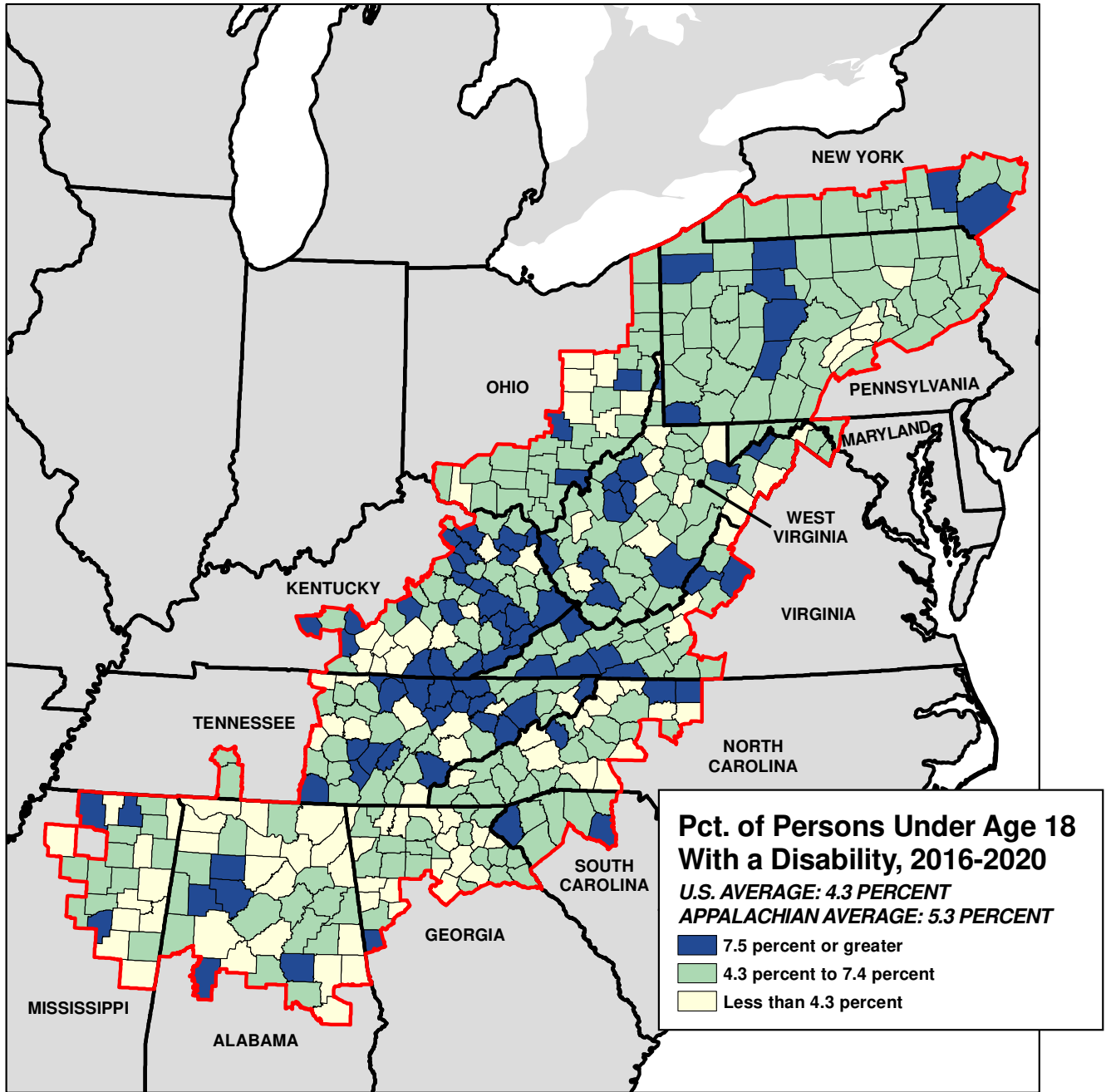
Figure 10.1: Percent of Persons in the Appalachian Region With a Disability, 2016-2020



Map Title: Percent of Persons in the Appalachian Region With a Disability, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In the 2016-2020 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 50 counties, 29 of which were in Appalachia’s most rural counties (where the overall disability rate was just over 20 percent). Kentucky, Virginia, and West Virginia—the three states with the highest levels of disability in the Region—combined for 40 of these counties. Appalachia’s relatively high disability rate corresponds to the population’s older age structure: Among the 50 counties with the highest disability prevalence levels, the share of residents age 65 or older exceeded the national average (16.9 percent in mid-2020) in all but one of them. And in 29 of these counties, the share of older persons was at least 20 percent.

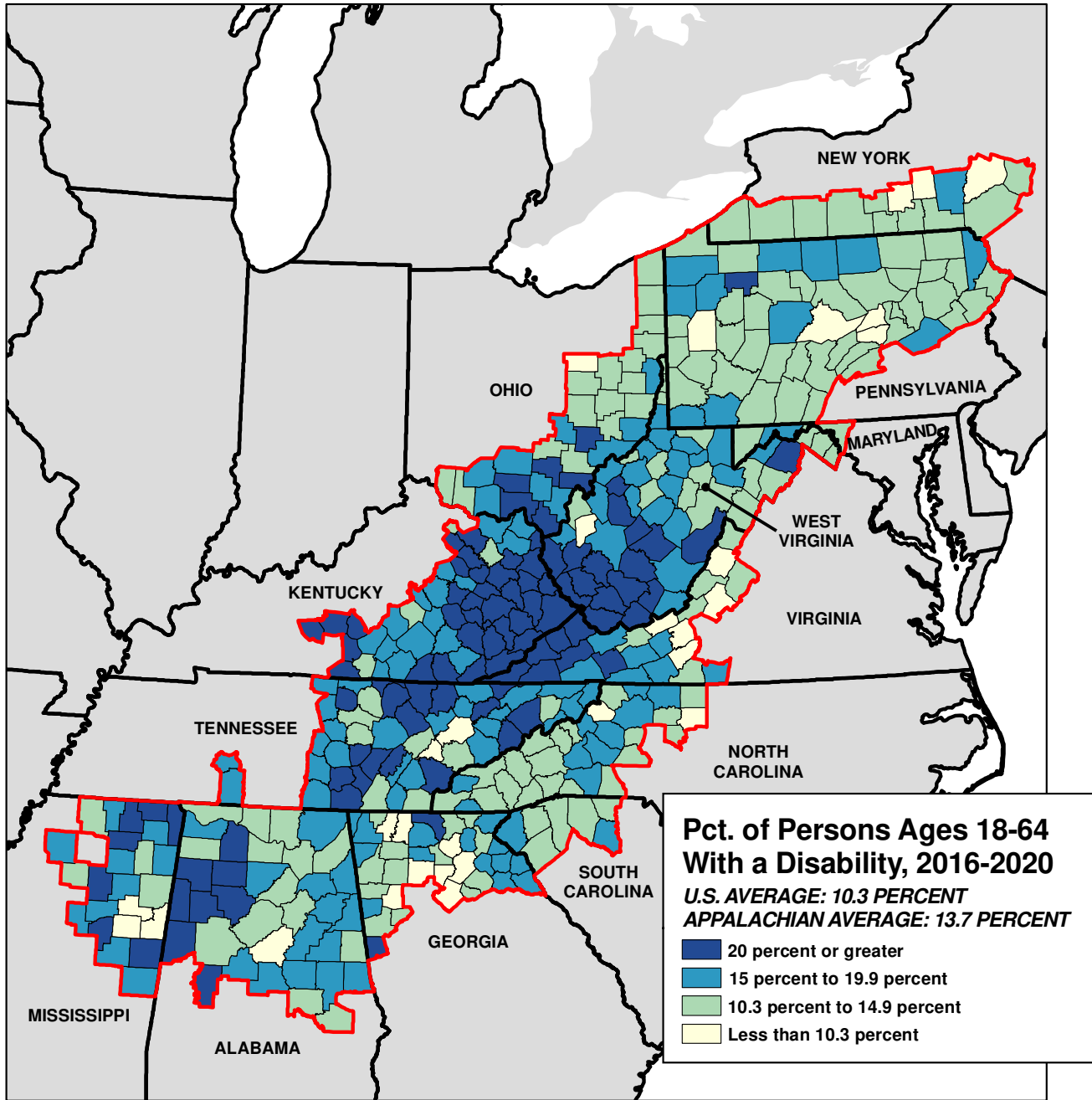
Figure 10.2: Percent of Persons Under Age 18 in the Appalachian Region With a Disability, 2016-2020



Map Title: Percent of Persons Under Age 18 in the Appalachian Region With a Disability, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

At 5.3 percent, the prevalence of disability among children under age 18 in Appalachia was higher than the national average during the 2016-2020 period. But there was variation within the Region. For example, the rate was at least 7.5 percent in 84 counties, 61 of which were outside metropolitan areas. In 107 other counties, however, the disability prevalence was below the national average of 4.3 percent. Two-fifths of the counties in the latter group were in Southern Appalachia—the only subregion where the disability rate among the under-18 population (4.4 percent) was less than 5 percent.

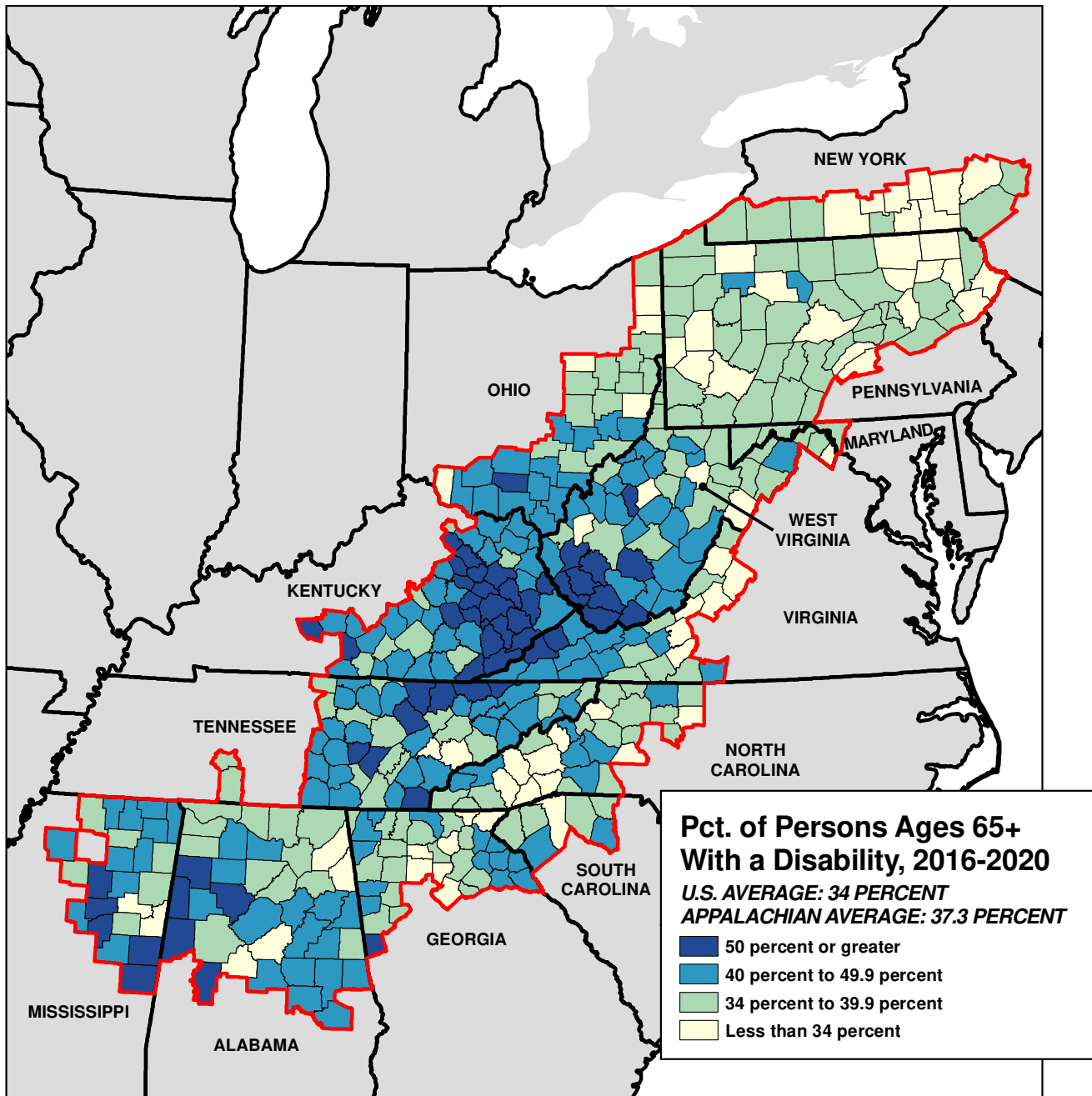
Figure 10.3: Percent of Persons Ages 18 to 64 in the Appalachian Region With a Disability, 2016-2020



Map Title: Percent of Persons Ages 18 to 64 in the Appalachian Region With a Disability, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In the 2016-2020 period, nearly 14 percent of adults ages 18 to 64 in Appalachia reported a disability, compared with just over 10 percent nationally. Disability prevalence was particularly high in some parts of the Region: In Central Appalachia, for example, 22.5 percent of adults ages 18 to 64 had a disability. Indeed, Central Appalachia had 55 of the 99 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, 2016-2020



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region With a Disability, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Just over 37 percent of adults ages 65 and over in the Appalachian Region reported a disability in the 2016-2020 period, more than three percentage points above the national share. And the prevalence was even greater in some parts of the Region: Nearly half of the older residents in Central Appalachia—and in Appalachian Kentucky—had at least one disability. Indeed, Central Appalachia had 35 of the 53 counties where at least half of older residents reported a disability. (Kentucky alone had 22 of these counties.) And there are signs that disabled adults in the Region may be aging in place: In 24 of these 53 counties, the share of 18-to-64-year-olds with a disability was at or above 25 percent—almost 2.5 times the national average for that age group. In 66 other Appalachian counties, however, the disability rate for the older population was actually lower than the national average. Among these low-prevalence counties, 29 were in Northern Appalachia—the only subregion where the disability prevalence rate for older residents, at 34.4 percent, was not at least three percentage points above the national average.

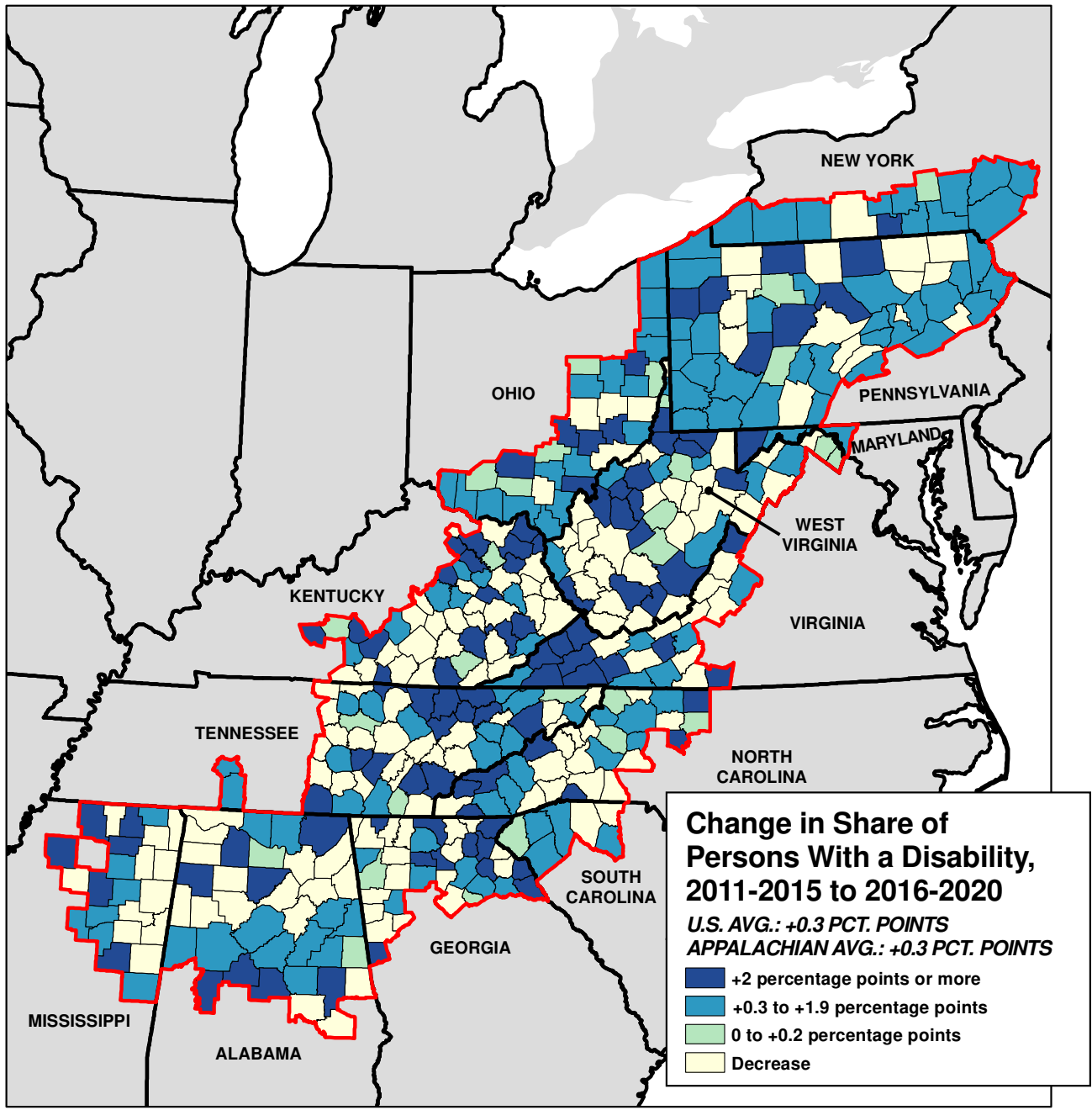
Table 10.3: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, by Age Group, 2011-2015 to 2016-2020

Disability Status	All Ages	Under Age 18	Ages 18-64			Ages 65 and Over
			Total	Ages 18-34	Ages 35-64	
United States	+ 0.3	+ 0.2	+ 0.0	+ 0.8	- 0.4	- 2.0
Appalachian Region	+ 0.3	+ 0.4	- 0.2	+ 0.6	- 0.5	- 1.7
Subregions						
Northern Appalachia	+ 0.7	+ 0.3	+ 0.4	+ 1.0	+ 0.2	- 1.2
North Central Appalachia	+ 0.4	+ 0.3	- 0.1	+ 0.4	- 0.2	- 1.4
Central Appalachia	+ 0.4	+ 1.1	- 0.2	+ 0.7	- 0.4	- 2.4
South Central Appalachia	+ 0.1	+ 0.3	- 0.5	+ 0.4	- 0.9	- 1.6
Southern Appalachia	+ 0.1	+ 0.5	- 0.4	+ 0.7	- 0.9	- 2.5
County Types						
Large Metros (pop. 1 million +)	+ 0.3	+ 0.5	+ 0.0	+ 0.7	- 0.4	- 1.6
Small Metros (pop. <1 million)	+ 0.2	+ 0.6	- 0.2	+ 0.7	- 0.5	- 1.9
Nonmetro, Adjacent to Large Metros	+ 0.7	+ 0.0	+ 0.4	+ 1.5	+ 0.0	- 0.8
Nonmetro, Adjacent to Small Metros	+ 0.5	+ 0.3	- 0.1	+ 0.5	- 0.2	- 1.2
Rural (nonmetro, not adj. to a metro)	- 0.2	+ 0.1	- 0.8	+ 0.2	- 1.1	- 2.8
Alabama	- 0.1	- 0.2	- 0.5	+ 0.4	- 0.9	- 2.5
Appalachian Alabama	+ 0.0	+ 0.2	- 0.3	+ 0.5	- 0.8	- 2.0
Non-Appalachian Alabama	- 0.4	- 0.7	- 0.7	+ 0.1	- 1.2	- 3.2
Georgia	+ 0.3	+ 0.5	- 0.2	+ 0.7	- 0.7	- 2.8
Appalachian Georgia	+ 0.1	+ 0.4	- 0.3	+ 0.6	- 0.7	- 2.7
Non-Appalachian Georgia	+ 0.3	+ 0.6	- 0.1	+ 0.7	- 0.6	- 2.8
Kentucky	+ 0.5	+ 0.4	+ 0.3	+ 1.0	+ 0.0	- 2.1
Appalachian Kentucky	- 0.2	+ 0.6	- 0.6	+ 0.6	- 1.1	- 3.0
Non-Appalachian Kentucky	+ 0.8	+ 0.3	+ 0.7	+ 1.2	+ 0.6	- 1.5
Maryland	+ 0.6	+ 0.5	+ 0.5	+ 1.2	+ 0.0	- 1.9
Appalachian Maryland	+ 0.7	- 0.3	+ 0.2	+ 0.1	+ 0.2	+ 1.2
Non-Appalachian Maryland	+ 0.7	+ 0.5	+ 0.4	+ 1.2	+ 0.1	- 2.0
Mississippi	+ 0.1	+ 0.5	- 0.2	+ 1.1	- 0.9	- 3.6
Appalachian Mississippi	- 0.5	+ 0.8	- 1.0	+ 1.8	- 2.6	- 4.4
Non-Appalachian Mississippi	+ 0.4	+ 0.4	+ 0.1	+ 1.0	- 0.5	- 3.3
New York	+ 0.5	+ 0.2	+ 0.2	+ 0.7	- 0.2	- 2.0
Appalachian New York	+ 0.9	+ 0.7	+ 0.6	+ 0.6	+ 0.7	- 1.2
Non-Appalachian New York	+ 0.5	+ 0.2	+ 0.1	+ 0.7	- 0.1	- 2.0
North Carolina	- 0.1	- 0.1	- 0.4	+ 0.4	- 0.9	- 2.9
Appalachian North Carolina	+ 0.1	- 0.2	- 0.2	+ 0.6	- 0.6	- 2.3
Non-Appalachian North Carolina	- 0.2	- 0.1	- 0.5	+ 0.3	- 0.9	- 3.1
Ohio	+ 0.4	+ 0.1	+ 0.2	+ 0.9	- 0.1	- 1.3
Appalachian Ohio	+ 0.8	+ 0.1	+ 0.4	+ 1.2	+ 0.2	- 0.2
Non-Appalachian Ohio	+ 0.4	+ 0.1	+ 0.1	+ 0.9	- 0.2	- 1.6
Pennsylvania	+ 0.5	+ 0.4	+ 0.3	+ 0.9	+ 0.0	- 1.4
Appalachian Pennsylvania	+ 0.6	+ 0.4	+ 0.4	+ 1.2	+ 0.1	- 1.4
Non-Appalachian Pennsylvania	+ 0.5	+ 0.4	+ 0.1	+ 0.7	- 0.1	- 1.4
South Carolina	+ 0.1	+ 0.4	- 0.3	+ 0.6	- 0.8	- 2.6
Appalachian South Carolina	+ 0.4	+ 1.1	- 0.1	+ 0.9	- 0.7	- 1.6
Non-Appalachian South Carolina	+ 0.0	+ 0.2	- 0.3	+ 0.5	- 0.9	- 2.9
Tennessee	+ 0.2	+ 0.6	- 0.5	+ 0.3	- 0.8	- 1.2
Appalachian Tennessee	+ 0.1	+ 0.7	- 0.7	+ 0.1	- 1.0	- 0.8
Non-Appalachian Tennessee	+ 0.2	+ 0.5	- 0.2	+ 0.4	- 0.5	- 1.5
Virginia	+ 0.6	+ 0.5	+ 0.3	+ 1.0	+ 0.0	- 1.4
Appalachian Virginia	+ 1.1	+ 1.9	+ 0.7	+ 1.1	+ 0.6	- 1.8
Non-Appalachian Virginia	+ 0.7	+ 0.3	+ 0.4	+ 1.0	- 0.1	- 1.3
West Virginia (entire state)	- 0.1	+ 0.3	- 0.7	- 0.2	- 0.9	- 2.5

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, 2011-2015 and 2016-2020 American Community Surveys.

Figure 10.5: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, 2011-2015 to 2016-2020



Map Title: Percentage Point Change in the Share of Persons in the Appalachian Region With a Disability, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

The share of Appalachian residents reporting a disability was 0.3 percentage points higher in 2016-2020 than it was in 2011-2015, matching the national average. However, the increase in disability prevalence between the two periods was higher in much of the Region, rising at least two percentage points in 102 of Appalachia’s 423 counties. The counties in this group were scattered throughout Appalachia, and at least one in five residents were age 65 or older in 69 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 163 of the Region’s counties, as well as in West Virginia and the Appalachian sections of Kentucky and Mississippi.

TRENDS IN DISABILITY STATUS

- At 16.2 percent in 2016-2020, the share of Appalachian residents reporting a disability was 0.3 percentage points higher than it was in 2011-2015 (see Tables 10.2 and 10.3). Within the Region, the greatest increases in disability prevalence (at least 0.7 percentage points) occurred in Northern Appalachia, nonmetropolitan counties adjacent to large metro areas, and the Appalachian sections of Maryland, New York, Ohio, and Virginia. But disability prevalence did not increase everywhere in Appalachia: The disability share remained the same in Alabama's Appalachian section and fell in the most rural counties, West Virginia, and the Appalachian sections of Kentucky and Mississippi. (Mississippi's prevalence rate fell half a percentage point.)
- Disability prevalence in Appalachia increased among both children under age 18 and young adults ages 18-34, but decreased among persons ages 35-64. And there were variations within the Region in each case. In Tennessee's Appalachian section, for example, disability rates rose 0.7 percentage points for children and 0.1 points for adults ages 18-34, but fell a full percentage point among 35-to-64-year-olds. Conversely, disability prevalence rose among all three age groups in Appalachian Virginia: 1.9 points among children, 1.1 points for young adults ages 18-34, and 0.6 points for adults ages 35-64. Disability prevalence rose by at least one percentage point for children in Central Appalachia and the Appalachian sections of South Carolina and Virginia. Among young adults ages 18 to 34, the disability rate increased by one percentage point or more in Northern Appalachia, nonmetro counties adjacent to large metros, and the Appalachian portions of Mississippi, Ohio, Pennsylvania, and Virginia.
- In contrast to the age groups under 35, the prevalence of disability fell 1.7 percentage points among persons ages 65 and over. The decline was greatest in the Southern and Central subregions (2.5 and 2.4 points, respectively) and in the Region's most rural counties (2.8 points), while the decrease was much more modest in nonmetropolitan counties bordering large metros (0.8 points). Among the states, Georgia, Kentucky Mississippi, and West Virginia had the largest decreases among older persons (at least 2.5 percentage points in each case), while the rate fell just 0.2 points in Appalachian Ohio. The Appalachian section of Maryland was the only area showing an increase (1.2 points) in the disability rate among persons age 65 or older.
- 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.

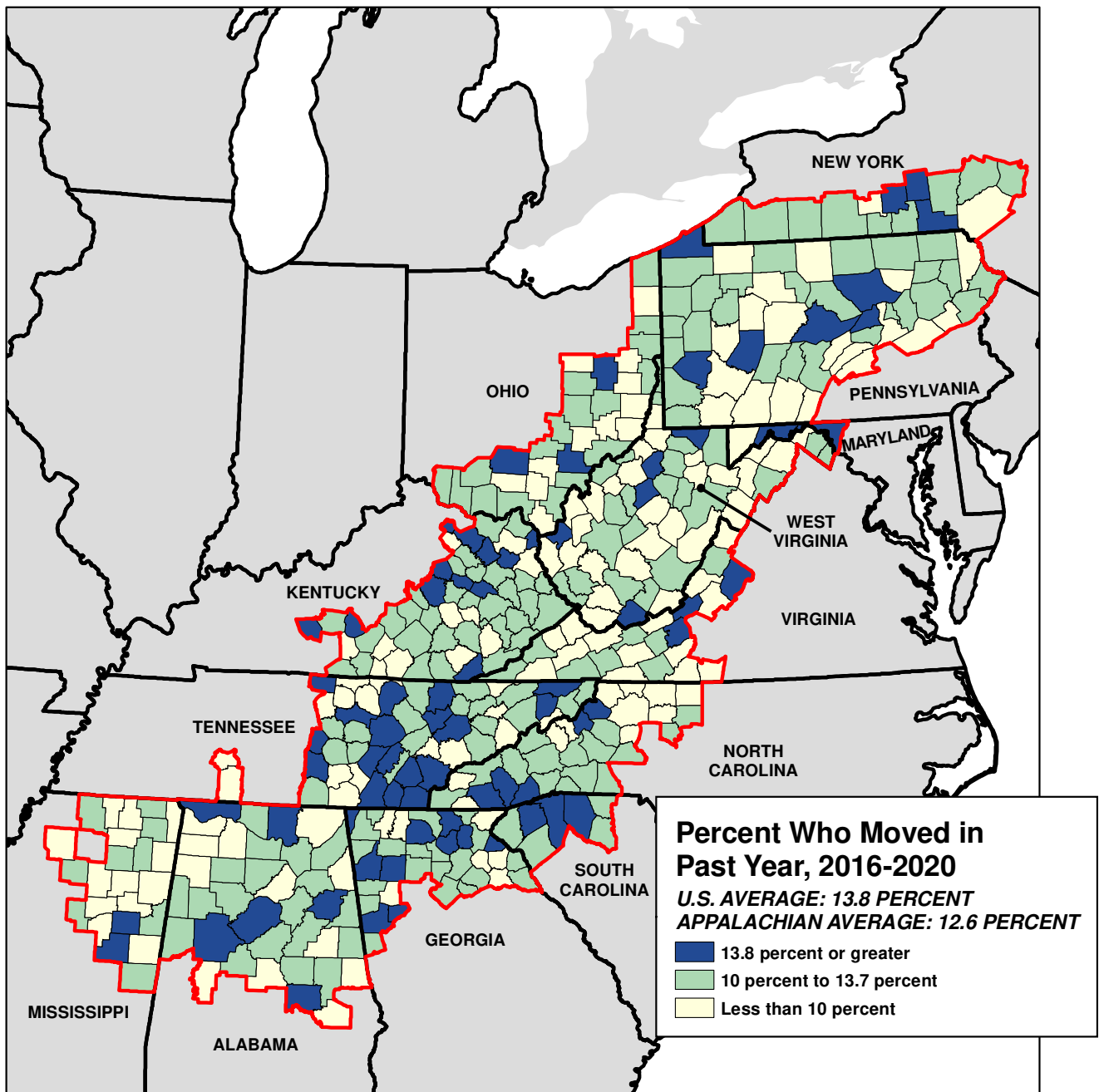
CHAPTER 11: MIGRATION

Table 11.1: Mobility Status of Persons Ages 1 and Over in the Appalachian Region, 2016-2020

Mobility Status in the Last Year	Total Population Ages 1 and Over, 2016-2020	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	322,943,283	86.2	13.8	7.7	6.1	3.2	2.9
Appalachian Region	25,682,661	87.4	12.6	6.8	5.8	3.4	2.4
Subregions							
Northern Appalachia	7,957,626	87.8	12.2	7.1	5.1	2.9	2.1
North Central Appalachia	2,495,389	87.9	12.1	6.5	5.6	3.3	2.3
Central Appalachia	1,844,119	88.3	11.7	6.3	5.5	3.6	1.9
South Central Appalachia	5,117,423	86.8	13.2	6.9	6.3	3.5	2.8
Southern Appalachia	8,268,104	87.1	12.9	6.7	6.2	3.7	2.5
County Types							
Large Metros (pop. 1 million +)	6,070,623	87.6	12.4	6.8	5.6	3.3	2.4
Small Metros (pop. <1 million)	10,953,389	86.6	13.4	7.3	6.1	3.3	2.8
Nonmetro, Adjacent to Large Metros	2,276,093	87.8	12.2	6.7	5.5	3.9	1.7
Nonmetro, Adjacent to Small Metros	3,911,550	88.6	11.4	6.1	5.3	3.2	2.1
Rural (nonmetro, not adj. to a metro)	2,471,006	88.6	11.4	6.0	5.4	3.6	1.8
Alabama	4,838,779	86.8	13.2	7.6	5.6	3.0	2.6
Appalachian Alabama	3,102,852	86.8	13.2	7.7	5.5	3.3	2.3
Non-Appalachian Alabama	1,735,927	86.9	13.1	7.4	5.7	2.5	3.2
Georgia	10,394,332	85.5	14.5	6.6	8.0	4.7	3.2
Appalachian Georgia	3,247,543	87.8	12.2	5.4	6.8	4.2	2.6
Non-Appalachian Georgia	7,146,789	84.4	15.6	7.1	8.5	5.0	3.5
Kentucky	4,411,553	85.5	14.5	8.1	6.4	3.7	2.7
Appalachian Kentucky	1,151,280	87.8	12.2	6.4	5.8	3.9	1.9
Non-Appalachian Kentucky	3,260,273	84.7	15.3	8.7	6.6	3.6	3.0
Maryland	5,971,717	86.8	13.2	6.8	6.4	3.0	3.4
Appalachian Maryland	248,600	86.2	13.8	8.1	5.8	3.5	2.3
Non-Appalachian Maryland	5,723,117	86.8	13.2	6.8	6.4	2.9	3.5
Mississippi	2,946,605	87.5	12.5	6.7	5.9	3.4	2.4
Appalachian Mississippi	617,819	88.7	11.3	6.2	5.2	3.5	1.7
Non-Appalachian Mississippi	2,328,786	87.2	12.8	6.8	6.1	3.4	2.6
New York	19,299,541	89.6	10.4	5.8	4.6	2.6	2.0
Appalachian New York	1,012,753	86.3	13.7	7.6	6.1	3.7	2.4
Non-Appalachian New York	18,286,788	89.8	10.2	5.7	4.5	2.5	2.0
North Carolina	10,273,903	85.4	14.6	7.2	7.3	3.7	3.6
Appalachian North Carolina	2,003,834	87.7	12.3	6.1	6.2	3.5	2.7
Non-Appalachian North Carolina	8,270,069	84.9	15.1	7.5	7.6	3.8	3.8
Ohio	11,540,882	86.0	14.0	8.6	5.4	3.4	2.1
Appalachian Ohio	1,971,674	88.0	12.0	6.9	5.0	3.4	1.6
Non-Appalachian Ohio	9,569,208	85.6	14.4	8.9	5.5	3.4	2.1
Pennsylvania	12,661,101	87.8	12.2	7.0	5.2	2.8	2.4
Appalachian Pennsylvania	5,607,619	88.0	12.0	7.0	5.0	2.8	2.2
Non-Appalachian Pennsylvania	7,053,482	87.6	12.4	7.0	5.4	2.8	2.6
South Carolina	5,029,930	86.2	13.8	6.7	7.1	3.3	3.8
Appalachian South Carolina	1,299,890	85.3	14.7	7.9	6.8	3.5	3.3
Non-Appalachian South Carolina	3,730,040	86.5	13.5	6.3	7.2	3.2	4.0
Tennessee	6,699,065	85.8	14.2	7.8	6.4	3.2	3.2
Appalachian Tennessee	2,890,402	86.3	13.7	7.5	6.2	3.3	2.9
Non-Appalachian Tennessee	3,808,663	85.4	14.6	8.1	6.5	3.0	3.5
Virginia	8,413,940	85.2	14.8	6.0	8.8	4.9	3.9
Appalachian Virginia	739,983	87.6	12.4	6.0	6.5	4.1	2.3
Non-Appalachian Virginia	7,673,957	85.0	15.0	6.0	9.0	5.0	4.1
West Virginia (entire state)	1,788,412	88.6	11.4	6.2	5.2	2.7	2.5

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

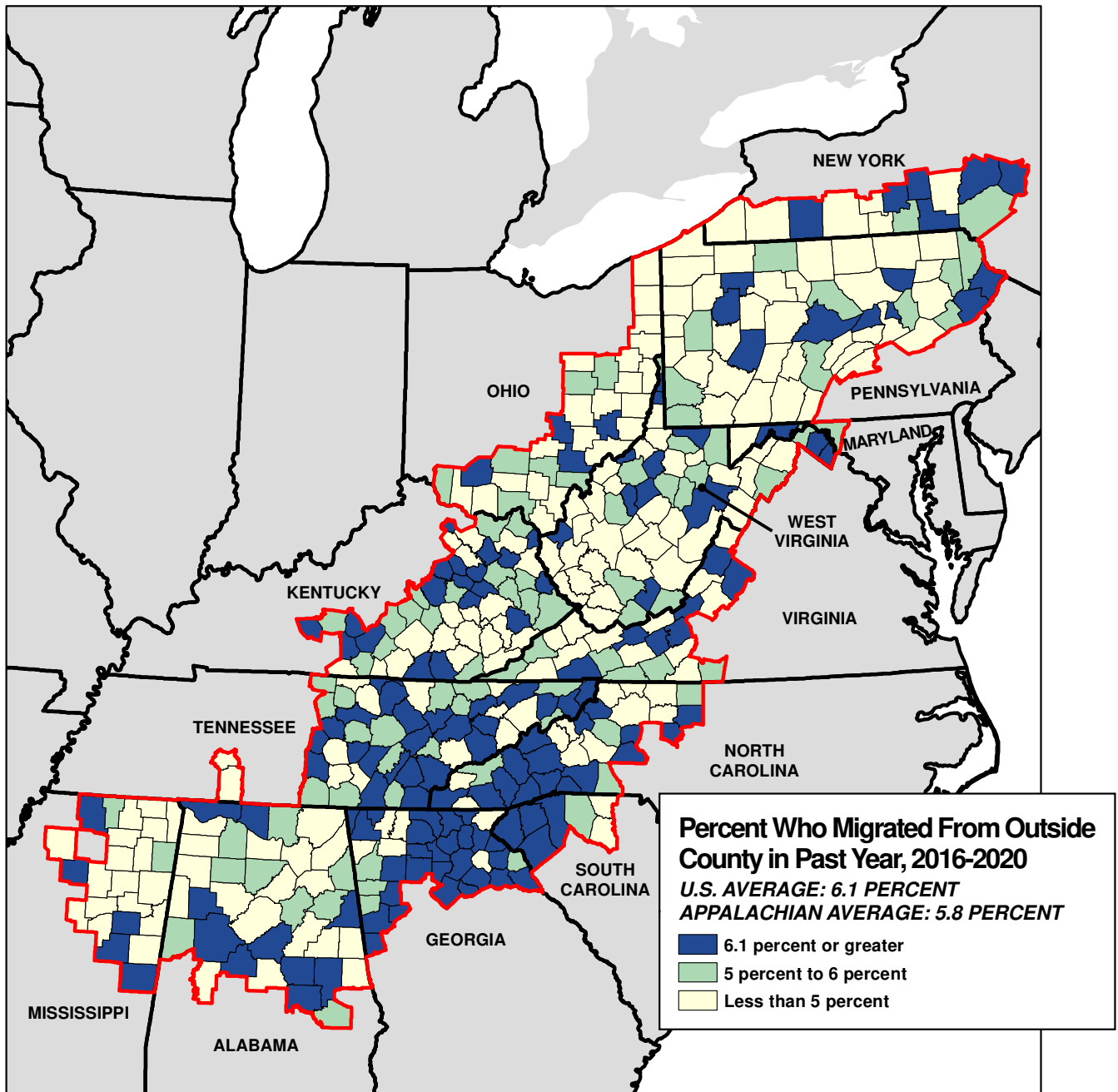
Figure 11.1: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Moved in the Past Year, 2016-2020



Map Title: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Moved in the Past Year, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 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 78 of the Region's counties. Most of these counties were in metropolitan areas, housed a four-year college or university, or were rural counties that were likely retirement or recreational destinations. Yet in 145 Appalachian counties, less than 10 percent of the residents had moved in the previous 12 months. Among these counties with low mobility rates, 103 were outside metro areas and 110 had older population age structures (at least 20 percent of the residents were ages 65 and over).

Figure 11.2: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their County of Residence in the Past Year, 2016-2020

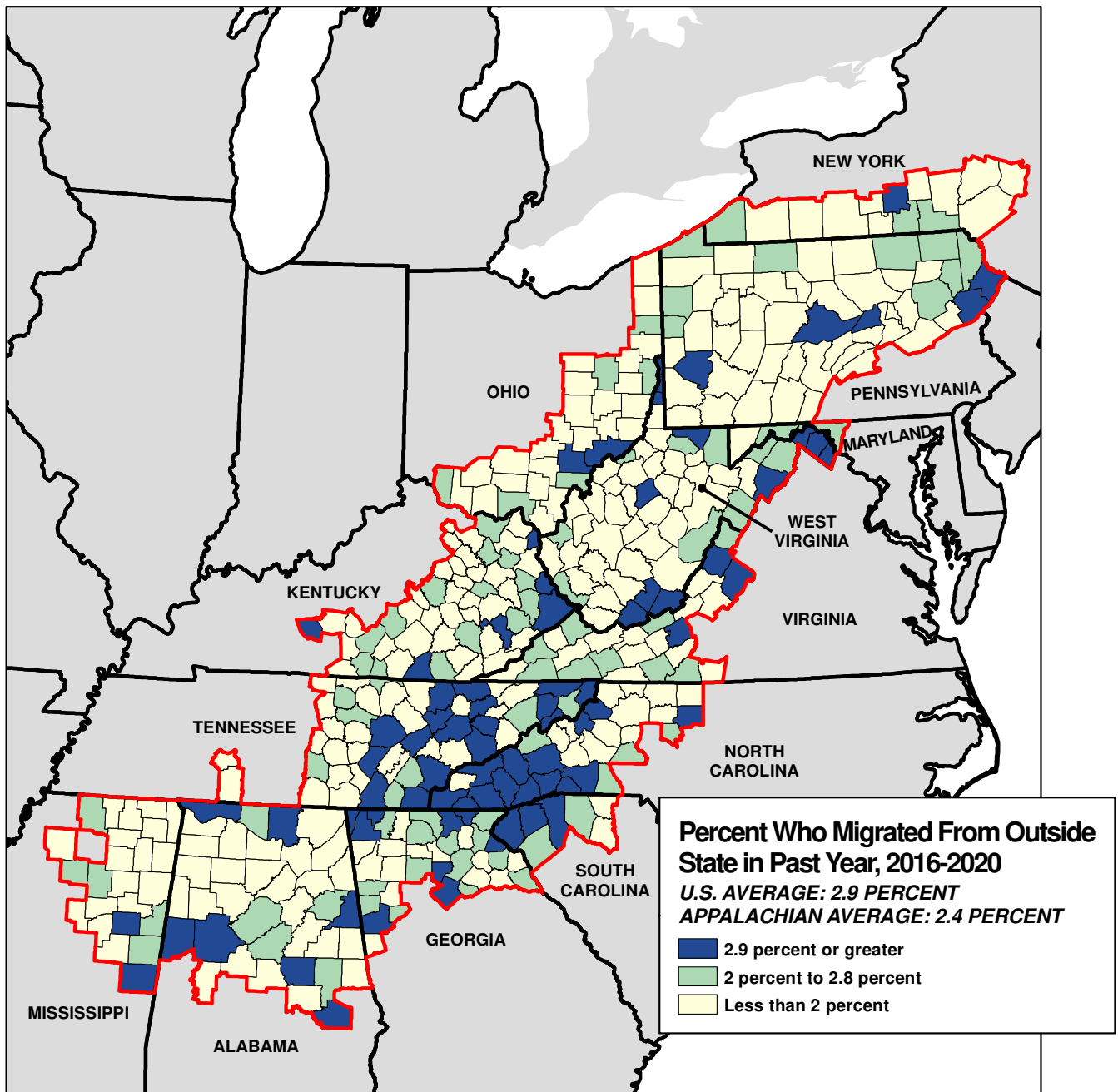


Map Title: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their County of Residence in the Past Year, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

While people in Appalachia were slightly less likely to have migrated from outside their county of residence in the 2016-2020 period than Americans as a whole, residents in one-third of the Region's 423 counties had migration rates at or above the national average of 6.1 percent. These counties were scattered throughout Appalachia (albeit with a greater concentration in the Southern and South Central subregions) and were distributed across all urban/rural types. Migration rates also exceeded the national average in the Appalachian sections of Georgia, the Carolinas, Tennessee, and Virginia. In 189 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 56 of them were rural counties not adjacent to a metro area.

Figure 11.3: Percent of Persons Ages 1 and Over in the Appalachian Region Who Had Migrated From Outside Their State of Residence in the Past Year, 2016-2020



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, 2016-2020

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

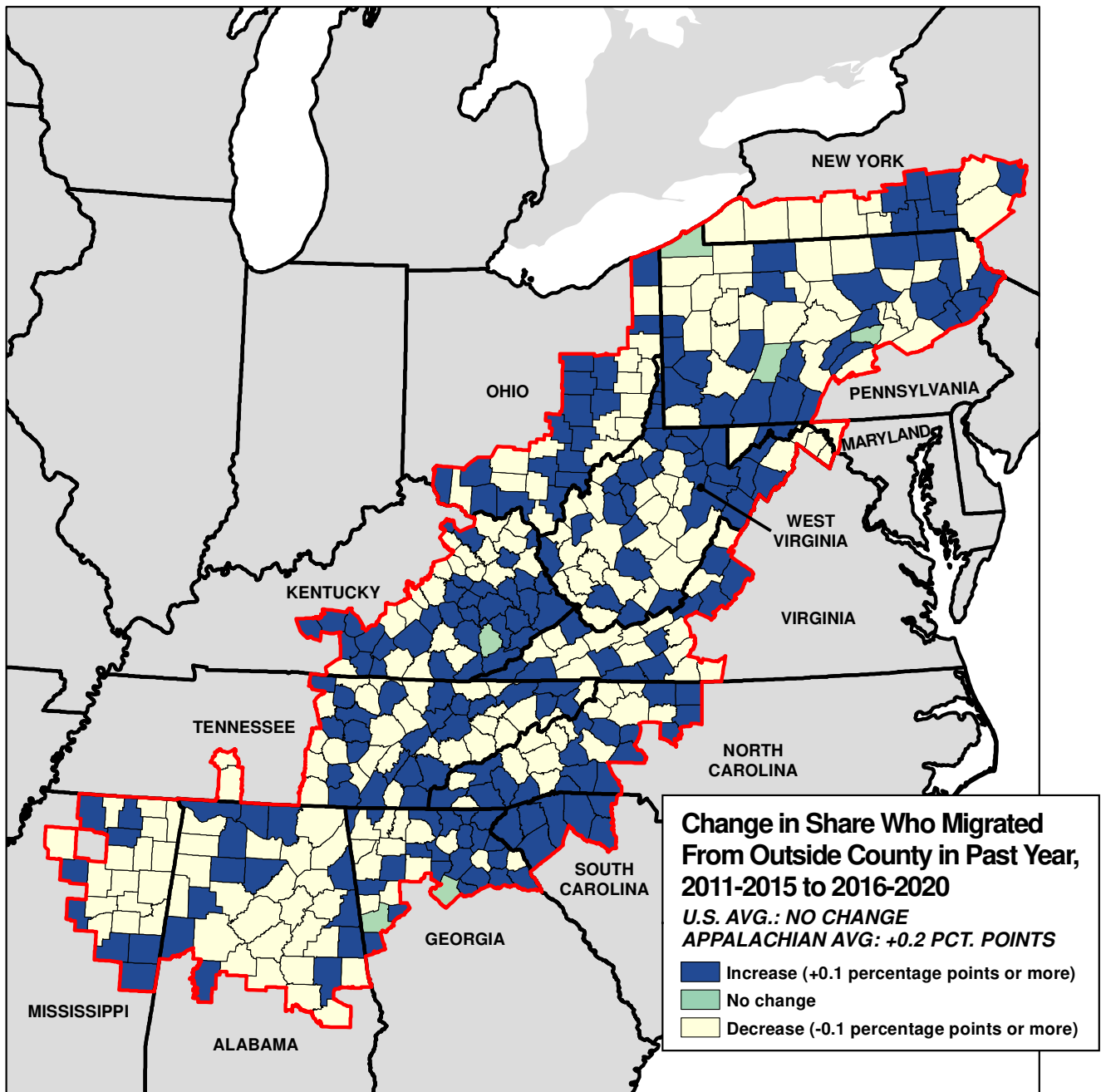
The share of people in the Appalachian Region who had migrated from outside their state of residence was 2.4 percent in the 2016-2020 period, compared with 2.9 percent of all Americans. Yet in 81 of Appalachia’s 423 counties, out-of-state migration levels were at or above the U.S. average. Almost two-thirds 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); Macon County, Alabama (Tuskegee University); and Rockbridge County, Virginia (Washington and Lee University, Virginia Military Institute). In contrast, there were 252 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, 2011-2015 to 2016-2020

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

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 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, 2011-2015 to 2016-2020



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, 2011-2015 to 2016-2020
 Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

In Appalachia, the share of individuals migrating from outside their county of residence barely increased from 2011-2015 to 2016-2020, rising by 0.2 percentage points. The share likewise increased in 209 of Appalachia’s 423 counties. Yet in 208 other counties, the share of migrants from another county decreased between the two periods. (The remaining six counties showed no change between the two periods, matching the U.S. average.) The Appalachian sections of Georgia and the Carolinas had increases of at least 0.3 percentage points (with Appalachian South Carolina showing a rise of 0.6 points), while the share migrating from another county declined in West Virginia and the Appalachian portions of Alabama, Mississippi, and Virginia.

TRENDS IN MIGRATION

- Like Americans as a whole, Appalachian residents were slightly less mobile in 2016-2020 than they were in 2011-2015. Between the two periods, the share of persons in the Region who had moved from a different residence in the past year decreased by 0.6 percentage points to 12.6 percent in 2016-2020 (see Tables 11.1 and 11.2). However, this decline only involved within-county movement; the share of residents who migrated from outside their county of residence increased by 0.2 points between the two periods. The share migrating from out-of-state barely increased.
- Within the Region, the decline in residential mobility was greatest in Appalachian Mississippi, where the share moving in the previous year fell 2.7 percentage points. Other parts of the Region showing noticeable declines included Southern Appalachia as a whole, the most rural counties, and the Appalachian sections of Alabama, Georgia, and Virginia.
- Appalachia's minor increase (0.2 percentage points) in the percentage of residents migrating from outside their county of residence between 2011-2015 and 2016-2020 actually masked changes within the Region. For example, the share rose more noticeably in the Appalachian sections of South Carolina (0.6 percentage points) and North Carolina (0.4 points). Meanwhile, the share fell 0.9 points in Appalachian Virginia and 0.7 points in Mississippi's Appalachian section.
- Vintage 2021 population estimates from the U.S. Census Bureau showed that despite declines in international migration between 2020 and 2021, many counties saw higher net domestic in-migration than they did between 2019 and 2020, often at the expense of more populous locales. Given the possible impact of the COVID-19 pandemic on domestic migration preferences, this could have implications for future migration prevalence in Appalachia—assuming that these most recent trends continue beyond 2021.

CHAPTER 12: VETERAN STATUS

Table 12.1: Number of Adult Civilians in the Appalachian Region Who Are Veterans, by Age Group and Gender, 2016-2020

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	17,835,456	1,568,922	7,351,345	8,915,189	16,207,488	1,627,968
Appalachian Region	1,633,687	116,790	644,349	872,548	1,511,567	122,120
Subregions						
Northern Appalachia	537,987	35,177	198,860	303,950	504,002	33,985
North Central Appalachia	174,000	12,767	68,958	92,275	162,750	11,250
Central Appalachia	102,267	6,431	38,608	57,228	96,115	6,152
South Central Appalachia	340,466	22,650	128,454	189,362	314,504	25,962
Southern Appalachia	478,967	39,765	209,469	229,733	434,196	44,771
County Types						
Large Metros (pop. 1 million +)	351,482	27,344	145,151	178,987	322,038	29,444
Small Metros (pop. <1 million)	717,825	54,404	284,660	378,761	662,586	55,239
Nonmetro, Adjacent to Large Metros	153,146	10,263	61,769	81,114	142,645	10,501
Nonmetro, Adjacent to Small Metros	267,173	15,794	100,361	151,018	249,437	17,736
Rural (nonmetro, not adj. to a metro)	144,061	8,985	52,408	82,668	134,861	9,200
Alabama	324,857	26,378	146,593	151,886	291,222	33,635
Appalachian Alabama	198,203	16,025	88,682	93,496	177,963	20,240
Non-Appalachian Alabama	126,654	10,353	57,911	58,390	113,259	13,395
Georgia	625,251	60,270	305,457	259,524	548,841	76,410
Appalachian Georgia	172,044	14,244	76,308	81,492	156,243	15,801
Non-Appalachian Georgia	453,207	46,026	229,149	178,032	392,598	60,609
Kentucky	257,452	19,887	111,526	126,039	236,584	20,868
Appalachian Kentucky	60,421	4,001	23,477	32,943	56,559	3,862
Non-Appalachian Kentucky	197,031	15,886	88,049	93,096	180,025	17,006
Maryland	357,261	30,700	171,311	155,250	310,701	46,560
Appalachian Maryland	16,993	1,403	7,091	8,499	15,725	1,268
Non-Appalachian Maryland	340,268	29,297	164,220	146,751	294,976	45,292
Mississippi	164,687	13,933	75,787	74,967	147,940	16,747
Appalachian Mississippi	29,402	2,676	11,987	14,739	27,181	2,221
Non-Appalachian Mississippi	135,285	11,257	63,800	60,228	120,759	14,526
New York	676,295	51,967	239,700	384,628	627,361	48,934
Appalachian New York	65,738	4,435	25,347	35,956	61,091	4,647
Non-Appalachian New York	610,557	47,532	214,353	348,672	566,270	44,287
North Carolina	654,365	65,593	290,944	297,828	585,098	69,267
Appalachian North Carolina	127,684	8,432	44,808	74,444	117,960	9,724
Non-Appalachian North Carolina	526,681	57,161	246,136	223,384	467,138	59,543
Ohio	685,905	51,794	277,261	356,850	632,527	53,378
Appalachian Ohio	132,395	8,932	51,119	72,344	124,334	8,061
Non-Appalachian Ohio	553,510	42,862	226,142	284,506	508,193	45,317
Pennsylvania	731,411	48,374	269,044	413,993	681,167	50,244
Appalachian Pennsylvania	381,264	24,850	139,012	217,402	357,531	23,733
Non-Appalachian Pennsylvania	350,147	23,524	130,032	196,591	323,636	26,511
South Carolina	360,355	31,061	156,742	172,552	324,429	35,926
Appalachian South Carolina	79,318	6,820	32,492	40,006	72,809	6,509
Non-Appalachian South Carolina	281,037	24,241	124,250	132,546	251,620	29,417
Tennessee	428,519	37,921	184,928	205,670	387,850	40,669
Appalachian Tennessee	200,562	13,888	79,111	107,563	185,621	14,941
Non-Appalachian Tennessee	227,957	24,033	105,817	98,107	202,229	25,728
Virginia	674,242	71,196	345,745	257,301	581,377	92,865
Appalachian Virginia	44,579	2,321	16,722	25,536	41,451	3,128
Non-Appalachian Virginia	629,663	68,875	329,023	231,765	539,926	89,737
West Virginia (entire state)	125,084	8,763	48,193	68,128	117,099	7,985

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, 2016-2020 American Community Survey.

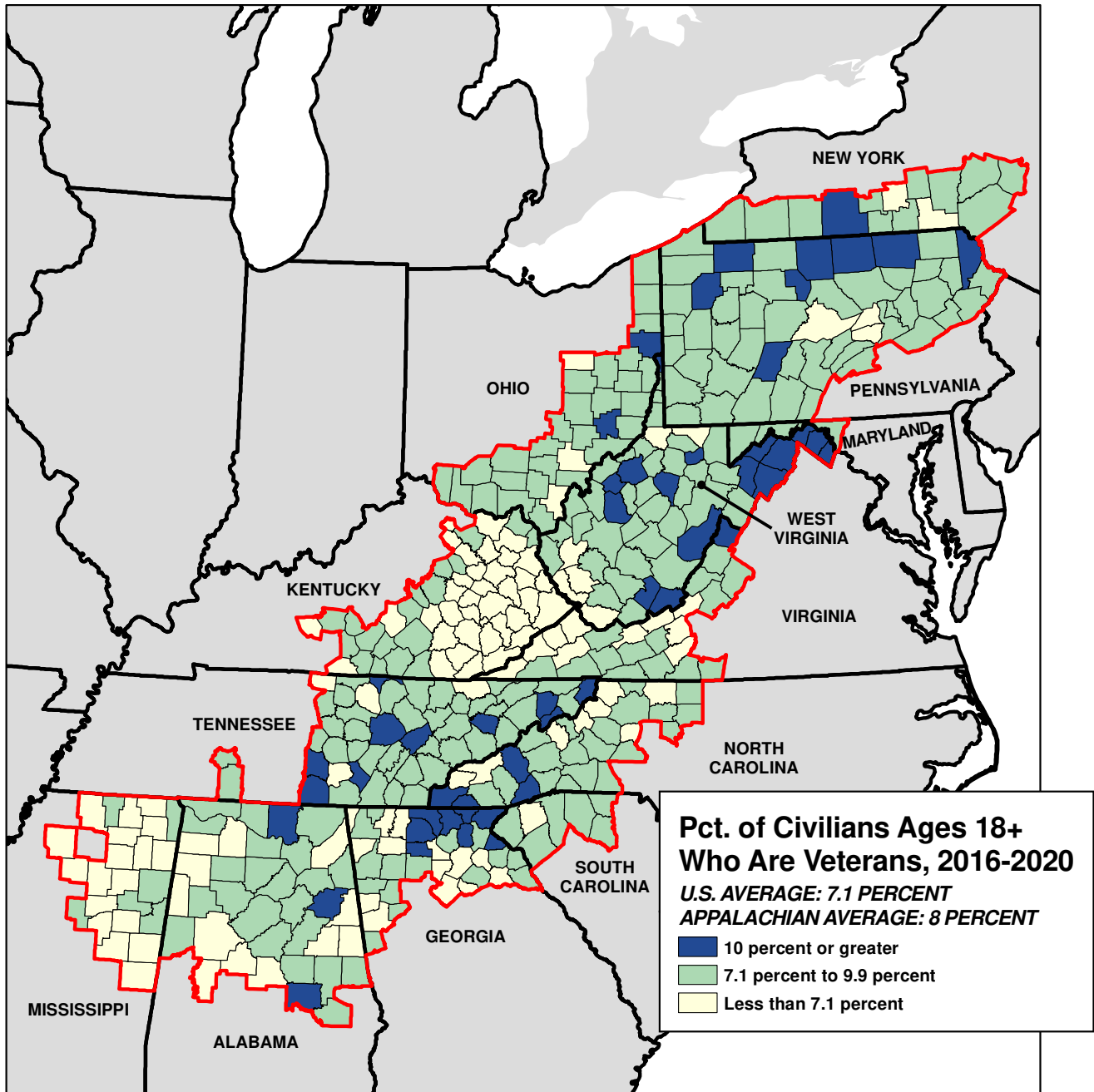
Table 12.2: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, by Age Group and Gender, 2016-2020

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	7.1	2.1	5.9	17.0	13.2	1.3
Appalachian Region	8.0	2.1	6.4	18.3	15.2	1.2
Subregions						
Northern Appalachia	8.3	2.0	6.4	19.0	15.9	1.0
North Central Appalachia	8.7	2.4	7.0	19.1	16.6	1.1
Central Appalachia	7.0	1.7	5.2	16.4	13.4	0.8
South Central Appalachia	8.3	2.1	6.4	18.5	15.8	1.2
Southern Appalachia	7.5	2.2	6.4	17.5	14.2	1.3
County Types						
Large Metros (pop. 1 million +)	7.4	2.1	5.9	18.0	14.1	1.2
Small Metros (pop. <1 million)	8.2	2.2	6.7	18.7	15.6	1.2
Nonmetro, Adjacent to Large Metros	8.5	2.1	6.9	18.6	16.0	1.1
Nonmetro, Adjacent to Small Metros	8.5	2.0	6.5	18.5	16.2	1.1
Rural (nonmetro, not adj. to a metro)	7.3	1.7	5.5	16.9	14.0	0.9
Alabama	8.6	2.4	7.8	18.4	16.2	1.7
Appalachian Alabama	8.1	2.3	7.3	17.7	15.3	1.6
Non-Appalachian Alabama	9.4	2.6	8.8	19.5	17.9	1.9
Georgia	7.9	2.5	7.5	17.8	14.5	1.8
Appalachian Georgia	7.0	2.0	5.8	17.9	13.1	1.2
Non-Appalachian Georgia	8.2	2.6	8.3	17.7	15.1	2.1
Kentucky	7.5	2.0	6.5	17.3	14.2	1.2
Appalachian Kentucky	6.7	1.6	5.1	16.0	12.8	0.8
Non-Appalachian Kentucky	7.8	2.1	7.0	17.8	14.7	1.3
Maryland	7.7	2.3	7.2	16.7	14.0	1.9
Appalachian Maryland	8.5	2.6	7.2	18.2	15.4	1.3
Non-Appalachian Maryland	7.6	2.3	7.2	16.6	14.0	1.9
Mississippi	7.3	2.1	6.8	15.8	13.8	1.4
Appalachian Mississippi	6.1	1.9	5.2	14.0	12.0	0.9
Non-Appalachian Mississippi	7.6	2.1	7.2	16.3	14.3	1.5
New York	4.4	1.1	3.2	11.9	8.5	0.6
Appalachian New York	8.0	1.8	6.6	18.3	15.1	1.1
Non-Appalachian New York	4.2	1.1	3.0	11.5	8.1	0.6
North Carolina	8.2	2.9	7.3	17.6	15.4	1.7
Appalachian North Carolina	7.9	2.0	5.7	18.0	15.2	1.2
Non-Appalachian North Carolina	8.3	3.0	7.7	17.5	15.5	1.8
Ohio	7.6	2.0	6.2	17.9	14.4	1.1
Appalachian Ohio	8.5	2.2	6.6	19.1	16.2	1.0
Non-Appalachian Ohio	7.4	2.0	6.1	17.7	14.0	1.2
Pennsylvania	7.2	1.7	5.4	17.7	13.9	1.0
Appalachian Pennsylvania	8.3	2.0	6.3	19.1	16.0	1.0
Non-Appalachian Pennsylvania	6.3	1.4	4.7	16.4	12.1	0.9
South Carolina	9.1	2.8	8.1	19.2	17.3	1.7
Appalachian South Carolina	7.8	2.3	6.5	18.0	14.9	1.2
Non-Appalachian South Carolina	9.6	3.0	8.7	19.5	18.2	1.9
Tennessee	8.2	2.5	7.1	18.6	15.4	1.5
Appalachian Tennessee	8.7	2.2	7.0	19.2	16.6	1.3
Non-Appalachian Tennessee	7.8	2.6	7.2	17.9	14.5	1.7
Virginia	10.3	3.7	10.5	19.6	18.6	2.7
Appalachian Virginia	7.3	1.4	5.8	16.4	13.7	1.0
Non-Appalachian Virginia	10.7	4.0	10.9	20.0	19.1	2.9
West Virginia (entire state)	8.7	2.4	6.8	18.9	16.6	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, 2016-2020 American Community Survey.

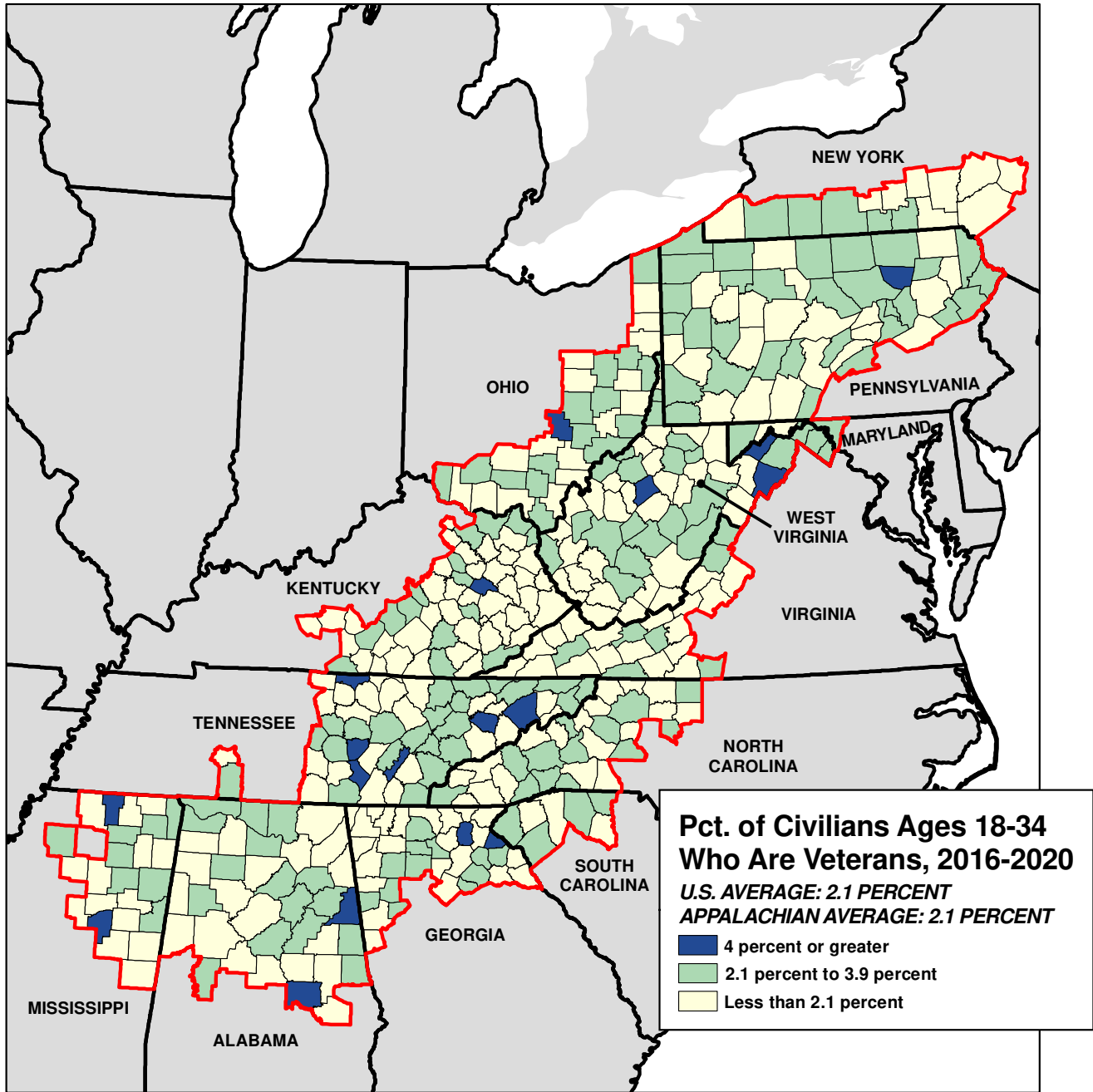
Figure 12.1: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, 2016-2020



Map Title: Percent of Adult Civilians in the Appalachian Region Who Are Veterans, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In 2016-2020, more than 1.6 million adult civilians ages 18 and over in the Appalachian Region (8 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 7.1 percent, there was considerable variation throughout the Region. In 53 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 117 counties; nearly half the counties in this group were in Kentucky and Mississippi—the only two states where the share of veterans among adult civilians was less than 7 percent.

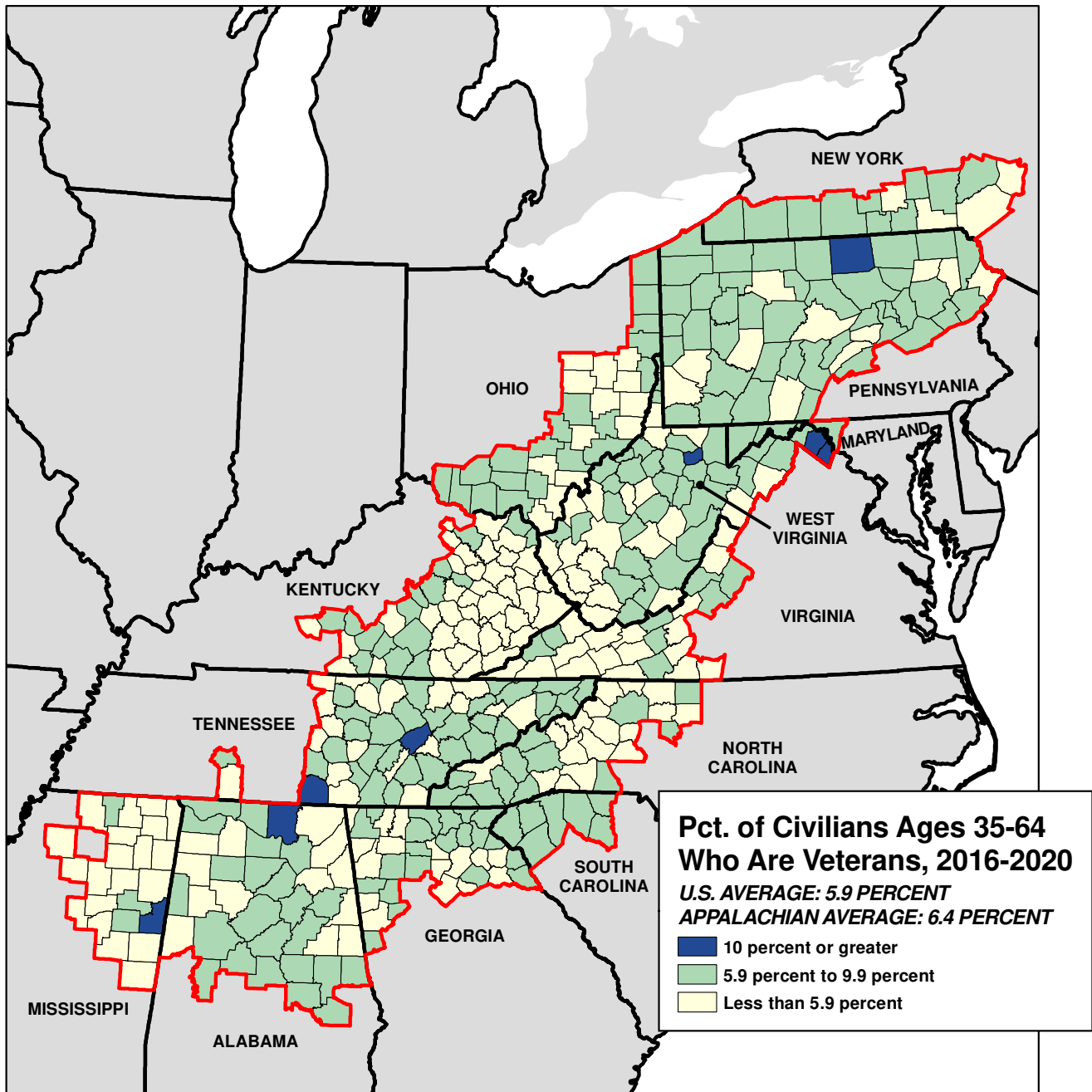
Figure 12.2: Percent of Civilians Ages 18 to 34 in the Appalachian Region Who Are Veterans, 2016-2020



Map Title: Percent of Civilians Ages 18 to 34 in the Appalachian Region Who Are Veterans, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

Military veterans accounted for just 2.1 percent of Appalachia’s young adult (ages 18-34) civilian population in the 2016-2020 period, the same as it was nationally. Yet in 191 of the Region’s 423 counties, the prevalence was at or above the 2.1 percent level. In fact, there were 18 Appalachian counties where at least 4 percent of 18-to-34-year-old civilians were veterans. Most veterans of the wars in Iraq and Afghanistan fall into this age group.

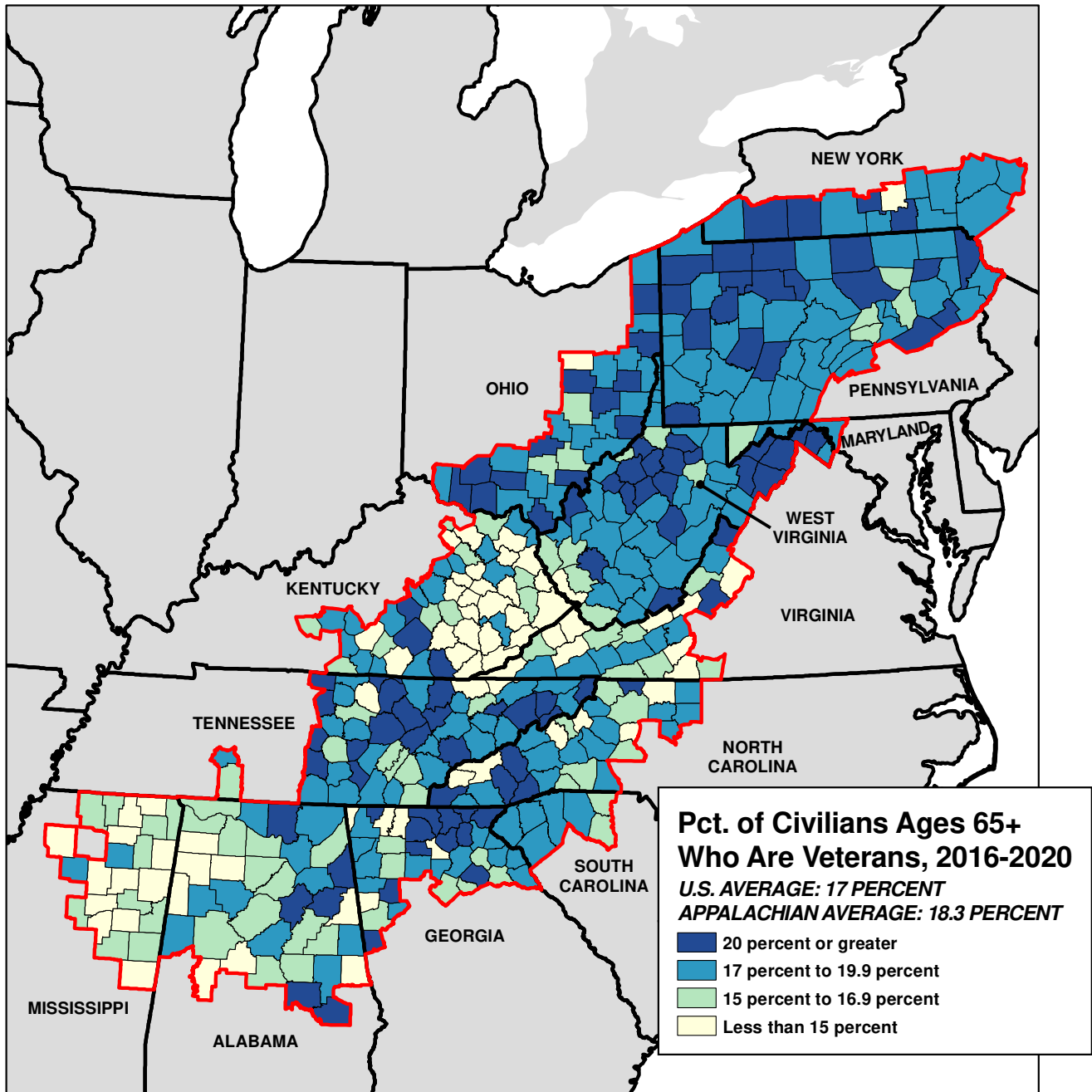
Figure 12.3: Percent of Civilians Ages 35 to 64 in the Appalachian Region Who Are Veterans, 2016-2020



Map Title: Percent of Civilians Ages 35 to 64 in the Appalachian Region Who Are Veterans, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In the Appalachian Region, 6.4 percent of 35-to-64-year-old civilian residents were military veterans in 2016-2020, slightly above the U.S. rate of 5.9 percent. The prevalence was even higher in some counties: In eight of them, veterans comprised at least one in 10 civilians ages 35 to 64. These counties were scattered throughout the Region. In 189 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 5.2 percent of 35-to-64-year-old civilians were veterans—the lowest share among the subregions. Most veterans of the 1991 Gulf War fall into this age group, as do the youngest Vietnam veterans.

Figure 12.4: Percent of Civilians Ages 65 and Over in the Appalachian Region Who Are Veterans, 2016-2020



Map Title: Percent of Civilians Ages 65 and Over in the Appalachian Region Who Are Veterans, 2016-2020
 Data Source: U.S. Census Bureau, 2016-2020 American Community Survey.

In 2016-2020, just over 18 percent 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 20 percent of older civilians were veterans in 102 counties—most in Northern and North Central Appalachia, but with pockets further south. By contrast, there were 71 counties where veterans comprised less than 15 percent of the older civilian residents. Central Appalachia had 33 of the counties in the latter group; 25 were in Kentucky alone. In both places, veterans were less than 16.5 percent of older civilians. (Only Appalachian Mississippi had an even lower share, at 14 percent.)

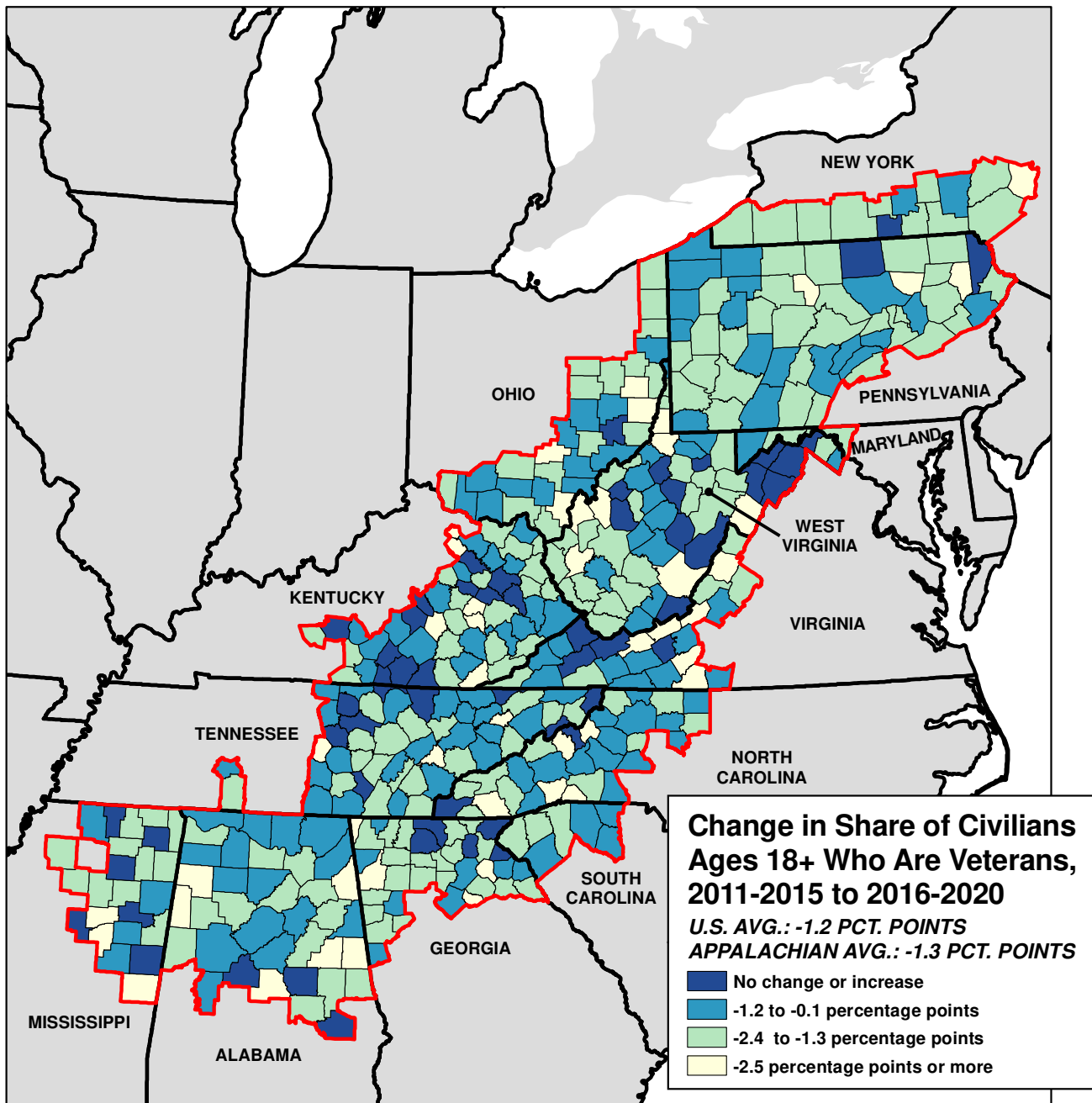
Table 12.3: Percentage Point Change in Veteran Status of Adult Civilians in the Appalachian Region, by Age Group and Gender, 2011-2015 to 2016-2020

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	-1.2	-0.2	-1.4	-4.0	-2.6	+0.0
Appalachian Region	-1.3	-0.1	-1.7	-3.6	-2.8	+0.1
Subregions						
Northern Appalachia	-1.6	-0.2	-1.7	-4.2	-3.2	-0.1
North Central Appalachia	-1.4	+0.0	-2.1	-3.4	-2.9	+0.0
Central Appalachia	-1.0	-0.2	-1.7	-2.0	-2.1	+0.1
South Central Appalachia	-1.2	-0.1	-1.7	-3.0	-2.7	+0.1
Southern Appalachia	-1.2	+0.0	-1.5	-3.7	-2.6	+0.1
County Types						
Large Metros (pop. 1 million +)	-1.4	+0.1	-1.7	-4.3	-3.0	+0.1
Small Metros (pop. <1 million)	-1.4	+0.0	-1.8	-3.6	-3.0	+0.0
Nonmetro, Adjacent to Large Metros	-1.1	+0.0	-1.6	-3.1	-2.4	+0.0
Nonmetro, Adjacent to Small Metros	-1.4	-0.5	-1.6	-3.3	-2.9	+0.1
Rural (nonmetro, not adj. to a metro)	-1.0	-0.4	-1.3	-2.6	-2.0	+0.0
Alabama	-1.2	-0.3	-1.6	-3.2	-2.7	+0.2
Appalachian Alabama	-1.2	-0.1	-1.4	-3.6	-2.8	+0.3
Non-Appalachian Alabama	-1.2	-0.7	-1.8	-2.7	-2.5	+0.0
Georgia	-1.1	-0.1	-1.5	-3.6	-2.3	-0.1
Appalachian Georgia	-1.1	+0.2	-1.6	-3.7	-2.4	+0.0
Non-Appalachian Georgia	-1.2	-0.3	-1.5	-3.6	-2.2	+0.0
Kentucky	-1.3	-0.5	-1.7	-3.1	-2.8	+0.0
Appalachian Kentucky	-1.0	-0.3	-1.7	-2.0	-2.1	+0.0
Non-Appalachian Kentucky	-1.5	-0.6	-1.8	-3.6	-3.1	+0.0
Maryland	-1.2	-0.5	-1.1	-4.2	-2.5	+0.0
Appalachian Maryland	-1.8	+0.1	-2.4	-4.3	-3.3	-0.4
Non-Appalachian Maryland	-1.2	-0.5	-1.1	-4.2	-2.4	-0.1
Mississippi	-0.9	-0.4	-0.9	-3.5	-2.1	+0.1
Appalachian Mississippi	-1.3	-0.3	-1.2	-3.7	-2.4	-0.1
Non-Appalachian Mississippi	-0.9	-0.4	-0.9	-3.5	-2.0	+0.1
New York	-1.0	-0.1	-0.9	-3.9	-2.1	+0.0
Appalachian New York	-1.4	-0.4	-1.7	-3.9	-2.8	-0.1
Non-Appalachian New York	-1.0	-0.1	-0.9	-3.9	-2.1	+0.0
North Carolina	-1.1	+0.0	-1.4	-3.3	-2.4	+0.1
Appalachian North Carolina	-1.4	-0.2	-1.9	-3.1	-3.0	+0.1
Non-Appalachian North Carolina	-1.0	-0.1	-1.3	-3.4	-2.2	+0.0
Ohio	-1.5	-0.1	-1.8	-3.9	-3.2	+0.0
Appalachian Ohio	-1.5	+0.1	-2.2	-3.7	-3.4	+0.1
Non-Appalachian Ohio	-1.4	-0.1	-1.8	-3.9	-3.1	+0.0
Pennsylvania	-1.5	-0.2	-1.6	-4.3	-3.0	+0.0
Appalachian Pennsylvania	-1.6	-0.2	-1.7	-4.3	-3.1	-0.1
Non-Appalachian Pennsylvania	-1.3	-0.2	-1.5	-4.3	-2.9	-0.1
South Carolina	-1.2	-0.4	-1.7	-3.2	-2.5	-0.1
Appalachian South Carolina	-1.2	+0.1	-1.4	-3.9	-2.7	+0.2
Non-Appalachian South Carolina	-1.2	-0.5	-1.7	-3.1	-2.3	-0.1
Tennessee	-1.1	-0.1	-1.5	-2.7	-2.4	+0.1
Appalachian Tennessee	-1.1	-0.1	-1.5	-2.6	-2.4	+0.1
Non-Appalachian Tennessee	-1.1	-0.2	-1.6	-2.9	-2.4	+0.1
Virginia	-0.9	-0.7	-0.8	-3.2	-1.9	+0.0
Appalachian Virginia	-1.0	-0.3	-1.1	-3.3	-2.3	+0.1
Non-Appalachian Virginia	-0.9	-0.6	-0.9	-3.3	-1.9	+0.0
West Virginia (entire state)	-1.5	-0.1	-2.2	-3.5	-3.2	+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, 2011-2015 and 2016-2020 American Community Surveys.

Figure 12.5: Percentage Point Change in the Share of Adult Civilians in the Appalachian Region Who Are Veterans, 2011-2015 to 2016-2020



Map Title: Percentage Point Change in the Share of Adult Civilians in the Appalachian Region Who Are Veterans, 2011-2015 to 2016-2020

Data Sources: U.S. Census Bureau, 2011-2015 and 2016-2020 American Community Surveys.

The share of Appalachia’s adult civilians ages 18 and over who were military veterans was 1.3 percentage points lower in the 2016-2020 period than it was in 2011-2015—almost identical to the national decrease. And the magnitude of the decrease varied only slightly among the county types and the Appalachian portions of most of the 13 states. The largest decrease was in Appalachian Maryland (1.8 points). Among the subregions, the decrease was largest in Northern Appalachia (1.6 percentage points) and smallest in Central Appalachia (one point). Yet there was significant variation at the county level. For example, in 48 Appalachian counties (spread throughout the Region), veterans’ share of the population fell by at least 2.5 percentage points. Yet the share actually stayed the same or increased in 58 counties. Veterans were at least 10 percent of the civilian population in 24 of the counties where the share increased or stayed the same, compared with just one of the counties with the largest decreases.

TRENDS IN VETERAN STATUS

- In Appalachia, the share of adult civilians who were military veterans declined 1.3 percentage points between 2011-2015 and 2016-2020, falling to 8 percent (see Tables 12.2 and 12.3). There was little difference in the decrease among the county types, and the Appalachian portions of most of the 13 states. (Among the states, the magnitude of the decrease ranged from one percentage point in the Appalachian sections of Kentucky and Virginia to 1.8 points in Appalachian Maryland.) And among the subregions, the decline in veteran prevalence ranged from 1.6 percentage points in Northern Appalachia to one point 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 in Appalachia fell just 0.1 percentage points among younger civilians ages 18 to 34, it declined 1.7 points among civilians ages 35 to 64, and 3.6 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 is also 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 nearly three percentage points between 2011-2015 and 2016-2020, while the share among women remained virtually unchanged (rising by just one-tenth of a percentage point). Of course, men remain far more likely than women to be military veterans—the respective rates in Appalachia were 15.2 percent and 1.2 percent (see Table 12.2).

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

Comparing Rural Appalachia with Rural Areas Outside Appalachia

Of the 423 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 841 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 2020 than rural counties outside the Region—3.0 percent versus 0.6 percent (see Table A.1). The population in rural Appalachia is also older with a median age of 42.4 years and a smaller share of residents under age 18—20.7 percent versus 22.3 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 26 percent in the rest of rural America. However, the comparative shares vary among minority groups. For example, there is a slightly higher concentration of non-Hispanic blacks in rural Appalachia than in rural counties outside the Region—7.8 percent compared with 6.5 percent, while there is a much smaller share of Hispanics—2.4 percent versus 11.5 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. However, rural Appalachia is becoming more racially and ethnically diverse, as minorities’ share of the population rose 1.6 percentage points between 2010 and 2020. This compares to an increase of 2.8 points in the rest of rural America.

Education levels are lower in rural Appalachia than in rural areas in the rest of the country. Among adults ages 25 to 64, about 85 percent of rural Appalachian residents have completed high school or more, compared with 89 percent of rural residents outside the Region. About 18 percent of working-age adults in rural Appalachia have completed a bachelor’s degree or more, compared with 23 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—10 percent versus 11 percent. Among adults ages 25 and over 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 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—nearly 20 percent compared with only about 12 percent in rural counties outside the Region. While housing vacancy rates are about the same for both rural Appalachia and the rest of rural America (about 23 percent each), rural Appalachia has a noticeably smaller share of these vacant units that are designed for seasonal or recreational use (40 percent versus 52 percent). 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 is about five percentage points lower than for households in rural counties outside the Region, while the share with a broadband (high-speed) Internet connection is more than four percentage points lower. Slightly less than one-fourth (22.3 percent) of rural Appalachian households had no access to the Internet in 2016-2020, compared with less than one-fifth (17.8 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 almost nine percentage points lower than in rural counties outside the Region, and the unemployment rate is slightly higher—5.3 percent versus 4.2 percent. Commuting patterns among rural Appalachian residents who do not work at home also differ from those elsewhere in rural America. Although a higher share of rural Appalachian households had no vehicle available, workers ages 16 and over in rural counties were more likely to drive alone to work (nearly 82 percent) than workers in rural counties outside the Region (78 percent). Nearly one-third of rural Appalachian workers commuted outside their county of residence compared with only about one-fifth of rural workers in the rest of the country. More than three in 10 workers in rural Appalachian counties had a travel time to work of at least 30 minutes, with an average travel time

of 24 minutes. By comparison, slightly more than two in 10 workers in rural counties outside Appalachia took at least a half-hour to get to their jobs, with an average travel time of only about 20 minutes. These commuting patterns include the first ten months of the coronavirus pandemic beginning in March 2020.

Income and Poverty

The lower levels of education and employment among adults in rural Appalachia are reflected in lower levels of income and higher rates of poverty and receipt of SNAP benefits than in rural counties outside the Region. Median household income in rural Appalachian counties is nearly \$9,500 below that of households in rural counties in the rest of the country. One-fifth of rural Appalachian residents live in poverty compared with only about 15.4 percent of persons in rural counties outside the Region. This gap is even wider among children and young adults ages 18 to 24 (nearly six percentage points) and among older working-age adults ages 25 to 64 (five percentage points). Although the gap is smaller, even rural Appalachian adults ages 65 and over have a poverty rate that is nearly three percentage points higher than for older adults in other rural counties. A higher share of rural Appalachian residents also have incomes below 50 percent of the poverty level and more than four in 10 are classified as low-income because their income is below 200 percent of poverty. While only one-sixth (17 percent) of all rural Appalachian households received Food Stamps/SNAP in 2016-2020, this share rose to nearly half (49.4 percent) among poor households. In rural counties outside Appalachia, both the share of all households and the share of poor households who received Food Stamps/SNAP in 2016-2020 was much lower (five and seven percentage points, respectively). In the Region, more than one-fourth (26.2 percent) of rural households with children received Food Stamps/SNAP compared with only 21 percent of such households in rural areas outside Appalachia.

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 slightly more (almost five percentage points) between 2011-2015 and 2016-2020 than the share in rural areas in the rest of the country (four percentage points). Although the share of young adults ages 19 to 25 in rural Appalachia who lack health insurance coverage is three percentage points lower than for young adults in rural areas outside the Region, it is important to note that about 15 percent of rural Appalachian young adults are still without health insurance. Lack of access to health care among young adults can contribute to the development of chronic conditions and negatively affect health at older ages. It may also have put them at greater risk of not receiving needed medical treatment during the ongoing pandemic.

In contrast to health insurance coverage, levels of disability are much higher among rural Appalachian adults ages 18 and older than among adults in other rural areas. One-fifth of rural Appalachian residents have a disability compared with about 16 percent of residents of rural counties outside the Region. However, this gap widens to more than six percentage points among adults ages 35 to 64 and five percentage points among those ages 65 and older. In rural Appalachia, nearly one-quarter (22.8 percent) of working-age adults ages 35 to 64 and about 42 percent of adults ages 65 and older have a disability. By comparison, the respective shares are only 16.4 percent and 37.3 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 older age structure and lower levels of employment and household income compared with rural areas outside the Region.

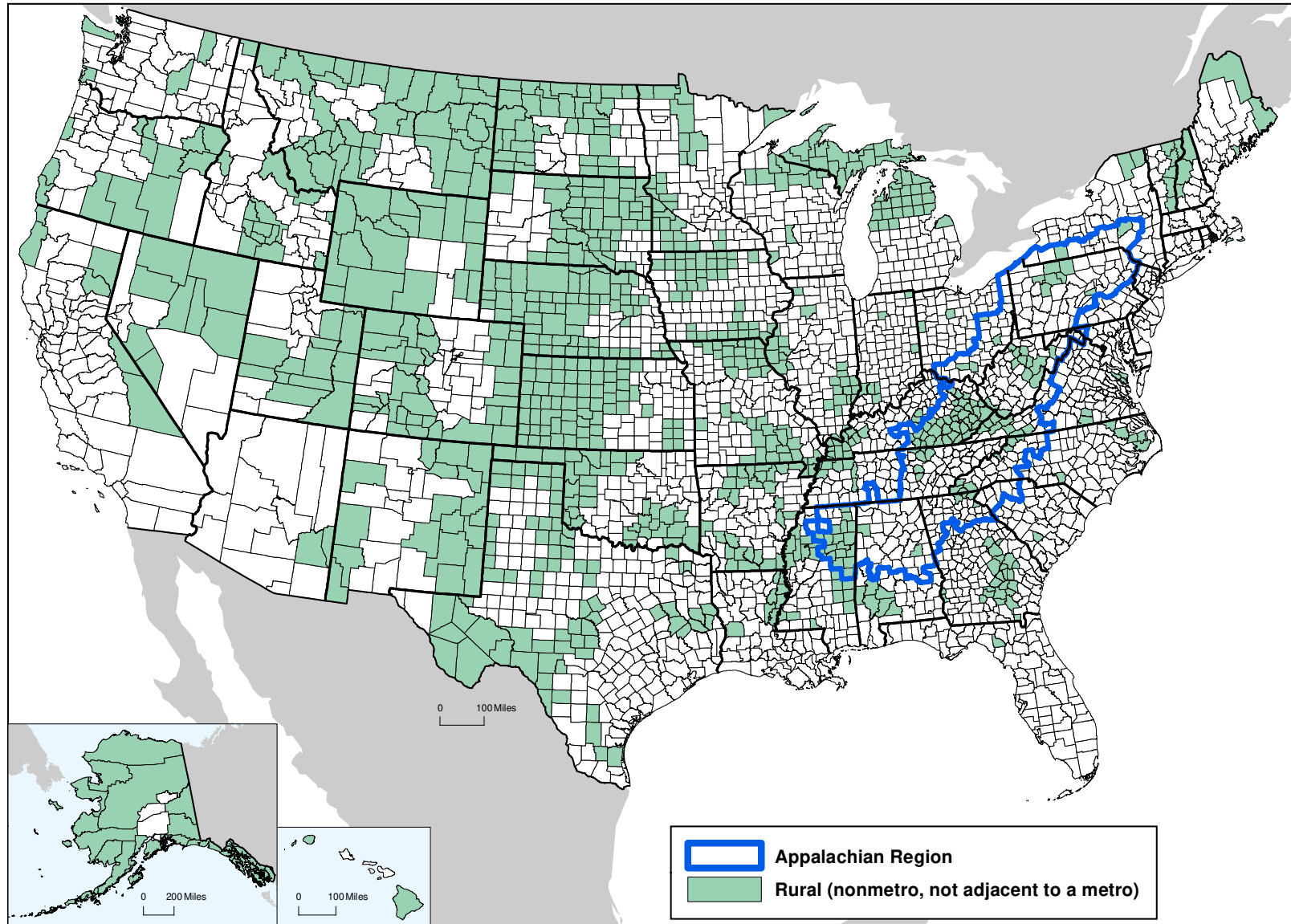
Veteran Status

A slightly smaller share of the civilian population ages 65 and over in rural Appalachia are veterans (17 percent) than the share in rural counties in the rest of the country (19 percent). This gap is about the same between rural areas within and outside Appalachia among civilian males ages 18 and older. Only 14 percent of rural Appalachian adult male civilians are veterans compared with nearly 16 percent of male civilians in rural areas outside the Region.

Summary

A comparison of rural counties within the Appalachian Region with those located outside Appalachia reveals some important contrasts in characteristics and overall levels of well-being between these areas. The population in rural Appalachian counties is older and less diverse and has been declining in number faster since 2010 than the population in rural counties in the rest of the country. With the exception of health insurance coverage, rural Appalachian counties continue to lag behind rural counties in the rest of the country. Rural Appalachian residents have lower levels of education, employment, income, and access to the Internet, and higher levels of poverty, SNAP benefit receipt, 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	841
Demographic and Housing Characteristics		
Population, July 1, 2020	2,479,182	13,182,127
Percent change (2010 to 2020), population	-3.0	-0.6
Median age, July 1, 2020	42.4	40.9
Percent of population under age 18, July 1, 2020	20.7	22.3
Percent of population that is minority, July 1, 2020	12.3	25.6
Percent of population that is black alone, not Hispanic, July 1, 2020	7.8	6.5
Percent of population that is Hispanic or Latino, July 1, 2020	2.4	11.5
Percent of population that is American Indian or Alaska Native alone, not Hispanic, July 1, 2020	0.3	3.3
Percentage point change (2010 to 2020), Percent of population that is minority	+1.6	+2.8
Percent of persons ages 25-64 with a high school diploma or more, 2016-20	84.8	89.0
Percent of persons ages 25-64 with an associate's degree but without a bachelor's degree, 2016-20	10.0	11.1
Percent of persons ages 25-64 with a bachelor's degree or more, 2016-20	18.2	22.7
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, 2016-20	26.1	31.1
Percent of all housing units that are single-unit dwellings, 2016-20	70.1	75.0
Percent of all housing units that are mobile homes, 2016-20	19.9	11.6
Percent of housing units that are vacant, 2016-20	22.6	23.3
Percent of vacant housing units that are for seasonal, recreational, or occasional use, 2016-20	40.2	52.0
Percent of households with one or more computer devices (including smartphone and tablet), 2016-20	82.9	87.6
Percent of households with a broadband (high-speed) Internet subscription, 2016-20	74.0	78.4
Percent of households with no access to the Internet, 2016-20	22.3	17.8
Labor Force and Commuting		
Percent of civilian labor force universe ages 25-64 (excludes Armed Forces personnel) in civilian labor force, 2016-20	65.3	73.9
Unemployment rate, persons ages 25-64 (percent of civilian labor force), 2016-20	5.3	4.2
Percent of households with no vehicle available, 2016-20	7.9	6.2
Percent of workers ages 16 and over who drove alone to work, 2016-20	81.8	78.3
Percent of workers ages 16 and over who worked outside their county of residence, 2016-20	32.0	19.6
Percent of workers ages 16 and over (not working at home) whose travel time to work was 30 minutes or more, 2016-20	31.1	22.4
Mean travel time to work in minutes for all workers ages 16 and over who didn't work at home, 2016-20	24.4	19.8
Income and Poverty		
Median household income (in adjusted 2020 dollars), 2016-20	42,403	51,901
Percent of persons in poverty, 2016-20	20.0	15.4
Percent of persons under age 18 in poverty, 2016-20	26.5	20.8
Percent of persons ages 18-24 in poverty, 2016-20	29.2	23.7
Percent of persons ages 25-64 in poverty, 2016-20	18.6	13.5
Percent of persons ages 65 and over in poverty, 2016-20	12.7	10.2
Percent of persons with income below 50 percent of poverty level, 2016-20	8.5	6.6
Percent of persons with income below 200 percent of poverty level, 2016-20	43.3	36.2
Percent of households receiving Food Stamps/SNAP, 2016-20	17.0	12.5
Percent of poor households receiving Food Stamps/SNAP, 2016-20	49.4	42.8
Percent of households with children receiving Food Stamps/SNAP, 2016-20	26.2	20.8
Health Insurance and Disability		
Percent of persons without health insurance coverage, 2016-20	9.0	10.1
Percentage point change (2011-15 to 2016-20), percent of persons without health insurance coverage	-4.8	-4.0
Percent of persons ages 19-25 without health insurance coverage, 2016-20	15.4	18.5
Percent of persons ages 26-34 without health insurance coverage, 2016-20	17.3	19.0
Percent of persons ages 35-64 without health insurance coverage, 2016-20	11.3	12.8

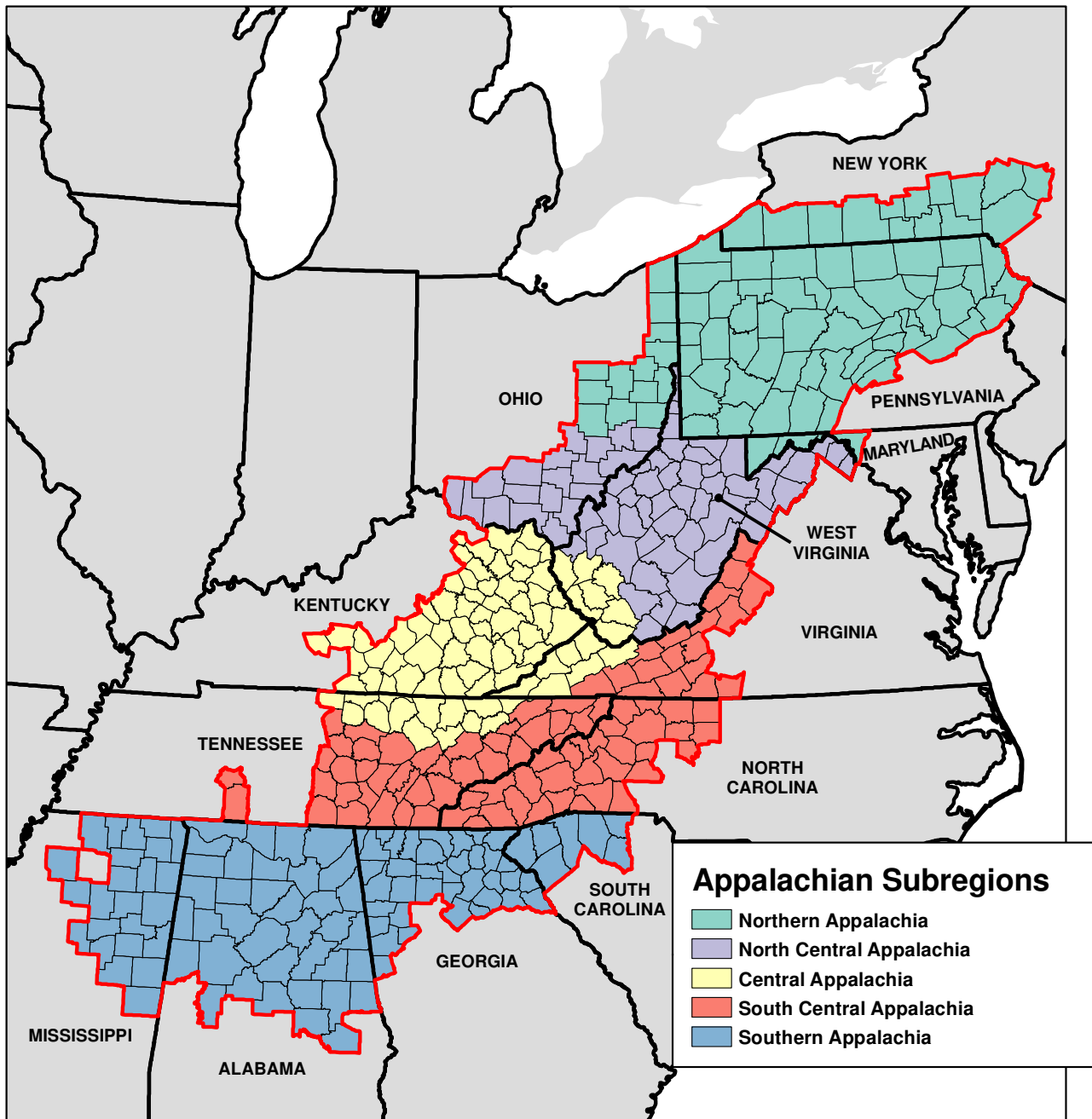
Table A.1: Selected Measures for Rural Appalachia and Rural Areas Outside Appalachia (continued)

Demographic, Social, or Economic Characteristic	Appalachian, Rural (nonmetro, not adjacent to a metro)	Non-Appalachian, Rural (nonmetro, not adjacent to a metro)
<i>Health Insurance and Disability (continued)</i>		
Percent of persons with a disability, 2016-20	20.1	16.1
Percent of persons ages 35-64 with a disability, 2016-20	22.8	16.4
Percent of persons ages 65 and over with a disability, 2016-20	42.3	37.3
<i>Veteran Status</i>		
Percent of civilian population ages 65 and over who are veterans, 2016-20	16.9	19.0
Percent of male civilian population ages 18 and over who are veterans, 2016-20	14.0	15.8

Data Sources: U.S. Census Bureau, Vintage 2020 Population Estimates; and 2011-2015 and 2016-2020 American Community Surveys.

APPENDIX B: REFERENCE MAPS

Figure B.1: Appalachian Subregions

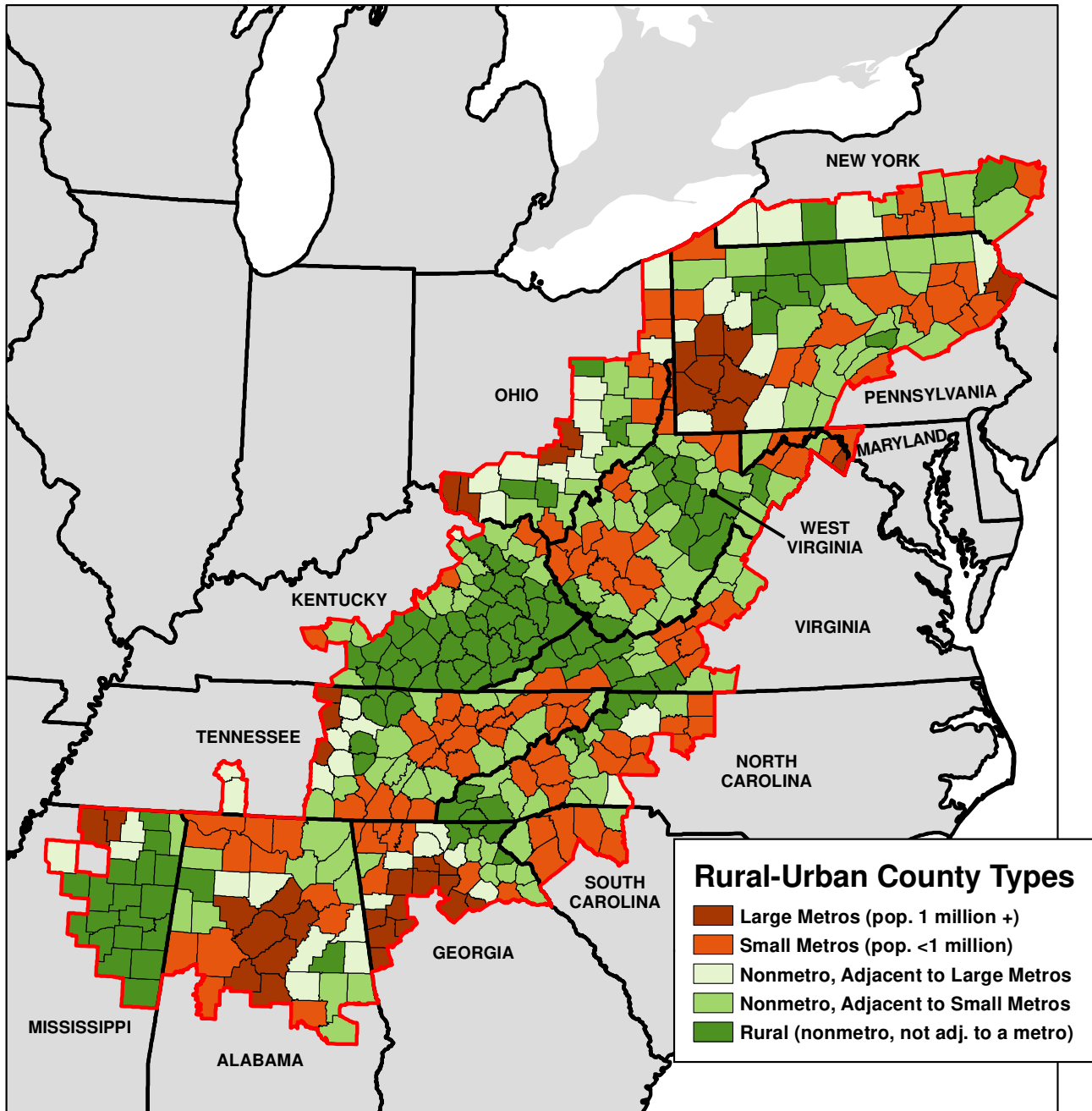


Map Title: Appalachian Subregions

Data Source: Appalachian Regional Commission.

The Appalachian Region covers 206,000 square miles and includes all of West Virginia and portions of 12 other states from New York to Mississippi. The 423 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.