

CHAPTER 5: EDUCATION

Table 5.1: Educational Attainment of Persons Ages 25 and Over in the Appalachian Region, 2007-2011

Education (Highest Level Attained)	Total Population Ages 25 and Over, 2007-2011	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	Bachelor's Degree or More
United States	202,048,123	14.6	85.4	49.6	7.6	28.2
Appalachian Region	17,036,098	16.5	83.5	55.0	7.5	21.0
Subregions						
Northern Appalachia	5,776,891	11.8	88.2	57.9	8.4	21.9
North Central Appalachia	1,651,606	16.5	83.5	59.3	6.5	17.7
Central Appalachia	1,319,918	27.2	72.8	55.0	5.7	12.2
South Central Appalachia	3,222,852	17.8	82.2	53.2	7.4	21.7
Southern Appalachia	5,064,831	18.3	81.7	51.5	7.2	23.0
County Types						
Large Metros (pop. 1 million +)	3,861,361	12.2	87.8	51.7	8.0	28.1
Small Metros (pop. <1 million)	6,835,850	15.3	84.7	54.5	7.6	22.6
Nonmetro, Adjacent to Large Metros	1,138,814	17.2	82.8	59.1	7.6	16.1
Nonmetro, Adjacent to Small Metros	3,466,949	19.6	80.4	58.0	7.3	15.1
Rural (nonmetro, not adj. to a metro)	1,733,124	24.0	76.0	55.7	6.4	14.0
Alabama	3,138,078	18.1	81.9	52.9	7.0	22.0
Appalachian Alabama	2,030,318	18.0	82.0	52.6	6.9	22.5
Non-Appalachian Alabama	1,107,760	18.2	81.8	53.6	7.2	21.0
Georgia	6,152,481	16.0	84.0	49.9	6.6	27.5
Appalachian Georgia	1,863,055	17.6	82.4	50.7	6.9	24.8
Non-Appalachian Georgia	4,289,426	15.3	84.7	49.5	6.5	28.7
Kentucky	2,881,383	18.3	81.7	54.3	6.7	20.6
Appalachian Kentucky	803,719	27.4	72.6	54.1	5.7	12.7
Non-Appalachian Kentucky	2,077,664	14.8	85.2	54.4	7.1	23.7
Maryland	3,828,550	11.8	88.2	45.8	6.3	36.1
Appalachian Maryland	173,326	15.1	84.9	59.3	7.7	17.9
Non-Appalachian Maryland	3,655,224	11.7	88.3	45.2	6.2	36.9
Mississippi	1,892,687	19.7	80.3	52.9	7.8	19.7
Appalachian Mississippi	404,459	23.1	76.9	53.3	7.6	16.1
Non-Appalachian Mississippi	1,488,228	18.7	81.3	52.8	7.9	20.6
New York	12,999,473	15.4	84.6	43.9	8.2	32.5
Appalachian New York	702,920	11.7	88.3	53.1	11.4	23.7
Non-Appalachian New York	12,296,553	15.6	84.4	43.4	8.1	33.0
North Carolina	6,229,136	15.9	84.1	49.1	8.5	26.5
Appalachian North Carolina	1,167,782	17.2	82.8	51.1	8.7	23.0
Non-Appalachian North Carolina	5,061,354	15.6	84.4	48.6	8.5	27.3
Ohio	7,688,501	12.2	87.8	55.8	7.5	24.5
Appalachian Ohio	1,387,220	15.3	84.7	61.9	7.1	15.7
Non-Appalachian Ohio	6,301,281	11.5	88.5	54.5	7.6	26.4
Pennsylvania	8,611,136	12.1	87.9	53.8	7.4	26.7
Appalachian Pennsylvania	4,017,485	11.1	88.9	57.5	8.2	23.1
Non-Appalachian Pennsylvania	4,593,651	12.9	87.1	50.6	6.6	29.8
South Carolina	3,031,432	16.4	83.6	51.0	8.4	24.2
Appalachian South Carolina	766,999	17.8	82.2	49.8	8.7	23.7
Non-Appalachian South Carolina	2,264,433	16.0	84.0	51.4	8.3	24.4
Tennessee	4,205,976	16.8	83.2	54.1	6.0	23.0
Appalachian Tennessee	1,903,914	18.7	81.3	55.1	6.1	20.0
Non-Appalachian Tennessee	2,302,062	15.3	84.7	53.3	6.0	25.5
Virginia	5,279,997	13.4	86.6	45.5	6.7	34.4
Appalachian Virginia	527,163	21.8	78.2	52.6	8.0	17.5
Non-Appalachian Virginia	4,752,834	12.5	87.5	44.7	6.6	36.2
West Virginia (entire state)	1,287,738	17.4	82.6	59.0	6.0	17.6

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey.

Table 5.2: Educational Attainment of Persons Ages 25 to 64 in the Appalachian Region, 2007-2011

Education (Highest Level Attained)	Total Population Ages 25-64, 2007-2011	Percent of Population Ages 25-64				
		Less than High School Diploma	High School Diploma or More			
			Total	H.S. Grad, No Postsecondary Degree	Associate's Degree	Bachelor's Degree or More
United States	162,439,303	12.5	87.5	49.0	8.4	30.0
Appalachian Region	13,269,994	13.1	86.9	55.3	8.7	22.9
Subregions						
Northern Appalachia	4,377,838	8.4	91.6	56.9	10.1	24.6
North Central Appalachia	1,285,383	12.6	87.4	60.3	7.6	19.4
Central Appalachia	1,034,698	21.5	78.5	58.6	6.8	13.2
South Central Appalachia	2,468,167	14.1	85.9	54.2	8.6	23.1
Southern Appalachia	4,103,908	15.5	84.5	51.8	8.1	24.6
County Types						
Large Metros (pop. 1 million +)	3,104,046	9.6	90.4	50.4	9.1	30.9
Small Metros (pop. <1 million)	5,315,478	12.2	87.8	54.5	8.7	24.5
Nonmetro, Adjacent to Large Metros	878,405	13.7	86.3	59.9	9.0	17.4
Nonmetro, Adjacent to Small Metros	2,644,096	15.5	84.5	59.6	8.6	16.2
Rural (nonmetro, not adj. to a metro)	1,327,969	19.5	80.5	58.1	7.5	14.9
Alabama	2,490,744	15.1	84.9	53.4	8.0	23.5
Appalachian Alabama	1,614,298	15.1	84.9	52.9	7.9	24.2
Non-Appalachian Alabama	876,446	15.3	84.7	54.3	8.2	22.2
Georgia	5,146,372	13.8	86.2	49.9	7.2	29.2
Appalachian Georgia	1,563,809	15.6	84.4	50.5	7.5	26.4
Non-Appalachian Georgia	3,582,563	13.0	87.0	49.6	7.1	30.4
Kentucky	2,310,527	14.3	85.7	55.6	7.7	22.4
Appalachian Kentucky	634,735	21.8	78.2	57.7	6.7	13.8
Non-Appalachian Kentucky	1,675,792	11.5	88.5	54.8	8.1	25.7
Maryland	3,133,932	9.7	90.3	45.5	6.8	38.0
Appalachian Maryland	133,911	11.5	88.5	60.1	8.9	19.5
Non-Appalachian Maryland	3,000,021	9.6	90.4	44.8	6.7	38.9
Mississippi	1,517,496	16.6	83.4	53.7	8.9	20.7
Appalachian Mississippi	316,858	19.4	80.6	54.8	8.9	17.0
Non-Appalachian Mississippi	1,200,638	15.9	84.1	53.5	8.9	21.7
New York	10,408,574	12.8	87.2	42.8	9.3	35.1
Appalachian New York	538,061	9.2	90.8	51.9	13.2	25.7
Non-Appalachian New York	9,870,513	13.0	87.0	42.3	9.1	35.6
North Carolina	5,024,997	13.2	86.8	49.0	9.5	28.3
Appalachian North Carolina	888,365	14.2	85.8	51.7	10.0	24.1
Non-Appalachian North Carolina	4,136,632	13.0	87.0	48.5	9.3	29.2
Ohio	6,081,641	9.4	90.6	55.2	8.7	26.7
Appalachian Ohio	1,071,039	11.8	88.2	62.3	8.6	17.3
Non-Appalachian Ohio	5,010,602	8.9	91.1	53.7	8.7	28.7
Pennsylvania	6,666,563	8.8	91.2	52.8	8.6	29.7
Appalachian Pennsylvania	3,037,085	7.6	92.4	56.3	9.9	26.2
Non-Appalachian Pennsylvania	3,629,478	9.9	90.1	49.9	7.5	32.6
South Carolina	2,414,936	13.6	86.4	51.8	9.3	25.3
Appalachian South Carolina	608,943	14.6	85.4	50.3	9.8	25.2
Non-Appalachian South Carolina	1,805,993	13.3	86.7	52.3	9.2	25.3
Tennessee	3,369,729	13.4	86.6	54.9	6.8	24.8
Appalachian Tennessee	1,470,350	14.7	85.3	56.6	7.1	21.6
Non-Appalachian Tennessee	1,899,379	12.4	87.6	53.6	6.6	27.4
Virginia	4,323,957	10.8	89.2	45.2	7.4	36.6
Appalachian Virginia	399,273	16.1	83.9	54.9	9.7	19.3
Non-Appalachian Virginia	3,924,684	10.3	89.7	44.2	7.2	38.3
West Virginia (entire state)	993,267	13.3	86.7	60.2	7.0	19.4

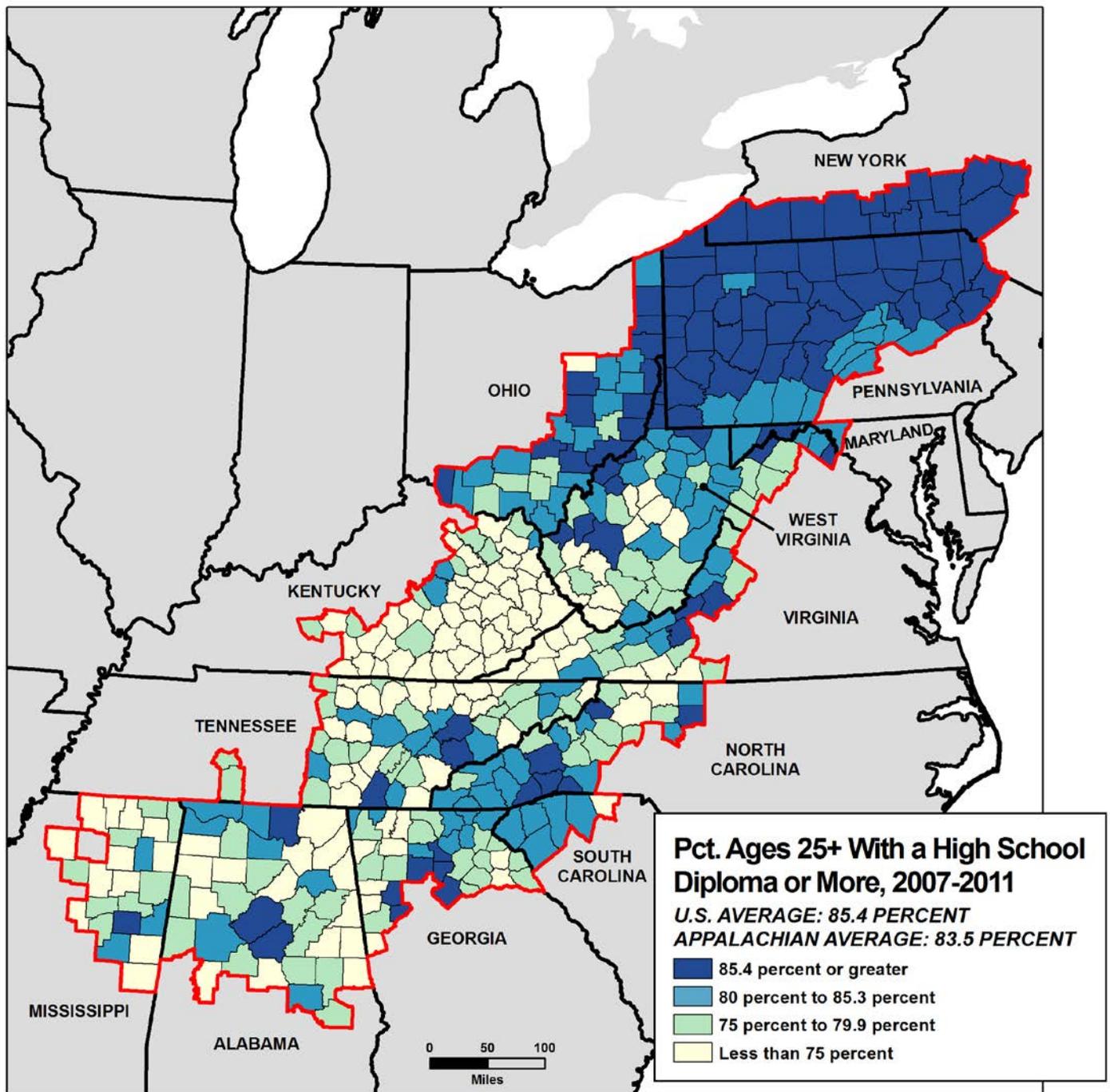
Data Source: U.S. Census Bureau, 2007-2011 American Community Survey.

Table 5.3: Educational Attainment of Persons Ages 65 and Over in the Appalachian Region, 2007-2011

Education (Highest Level Attained)	Total Population Ages 65 and Over, 2007-2011	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	Bachelor's Degree or More
United States	39,608,820	23.2	76.8	52.0	4.1	20.7
Appalachian Region	3,766,104	28.5	71.5	54.1	3.2	14.2
Subregions						
Northern Appalachia	1,399,053	22.4	77.6	61.0	3.2	13.4
North Central Appalachia	366,223	29.9	70.1	56.0	2.4	11.7
Central Appalachia	285,220	47.8	52.2	41.8	1.9	8.4
South Central Appalachia	754,685	29.9	70.1	49.8	3.5	16.8
Southern Appalachia	960,923	29.9	70.1	50.4	3.5	16.1
County Types						
Large Metros (pop. 1 million +)	757,315	22.8	77.2	57.2	3.4	16.5
Small Metros (pop. <1 million)	1,520,372	26.1	73.9	54.6	3.5	15.8
Nonmetro, Adjacent to Large Metros	260,409	28.9	71.1	56.5	3.0	11.5
Nonmetro, Adjacent to Small Metros	822,853	32.7	67.3	52.9	2.8	11.6
Rural (nonmetro, not adj. to a metro)	405,155	38.9	61.1	47.6	2.7	10.8
Alabama	647,334	29.5	70.5	51.2	3.3	16.0
Appalachian Alabama	416,020	29.7	70.3	51.4	3.2	15.8
Non-Appalachian Alabama	231,314	29.2	70.8	50.9	3.4	16.5
Georgia	1,006,109	27.4	72.6	49.9	3.7	19.0
Appalachian Georgia	299,246	28.4	71.6	51.4	3.6	16.6
Non-Appalachian Georgia	706,863	27.0	73.0	49.3	3.7	20.0
Kentucky	570,856	34.8	65.2	49.2	2.6	13.4
Appalachian Kentucky	168,984	48.8	51.2	40.6	1.9	8.7
Non-Appalachian Kentucky	401,872	28.8	71.2	52.8	2.9	15.4
Maryland	694,618	21.6	78.4	47.5	3.8	27.1
Appalachian Maryland	39,415	27.2	72.8	56.8	3.6	12.5
Non-Appalachian Maryland	655,203	21.3	78.7	46.9	3.8	28.0
Mississippi	375,191	31.9	68.1	49.5	3.4	15.3
Appalachian Mississippi	87,601	36.7	63.3	47.7	2.8	12.8
Non-Appalachian Mississippi	287,590	30.4	69.6	50.0	3.5	16.1
New York	2,590,899	25.5	74.5	48.4	4.1	22.0
Appalachian New York	164,859	20.0	80.0	57.0	5.6	17.4
Non-Appalachian New York	2,426,040	25.9	74.1	47.8	4.0	22.3
North Carolina	1,204,139	27.0	73.0	49.2	4.5	19.3
Appalachian North Carolina	279,417	26.8	73.2	49.4	4.3	19.6
Non-Appalachian North Carolina	924,722	27.1	72.9	49.1	4.5	19.2
Ohio	1,606,860	22.6	77.4	58.2	3.0	16.2
Appalachian Ohio	316,181	26.9	73.1	60.8	2.1	10.2
Non-Appalachian Ohio	1,290,679	21.6	78.4	57.5	3.2	17.7
Pennsylvania	1,944,573	23.3	76.7	57.3	3.1	16.3
Appalachian Pennsylvania	980,400	22.1	77.9	61.4	3.0	13.5
Non-Appalachian Pennsylvania	964,173	24.5	75.5	53.1	3.2	19.1
South Carolina	616,496	27.3	72.7	47.9	4.8	20.0
Appalachian South Carolina	158,056	29.7	70.3	47.6	4.7	18.0
Non-Appalachian South Carolina	458,440	26.5	73.5	48.0	4.8	20.7
Tennessee	836,247	30.6	69.4	50.8	2.8	15.8
Appalachian Tennessee	433,564	32.1	67.9	50.1	2.9	14.9
Non-Appalachian Tennessee	402,683	28.9	71.1	51.6	2.8	16.7
Virginia	956,040	25.0	75.0	47.1	3.6	24.3
Appalachian Virginia	127,890	39.6	60.4	45.5	3.0	12.0
Non-Appalachian Virginia	828,150	22.8	77.2	47.3	3.7	26.2
West Virginia (entire state)	294,471	31.1	68.9	54.8	2.6	11.5

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey.

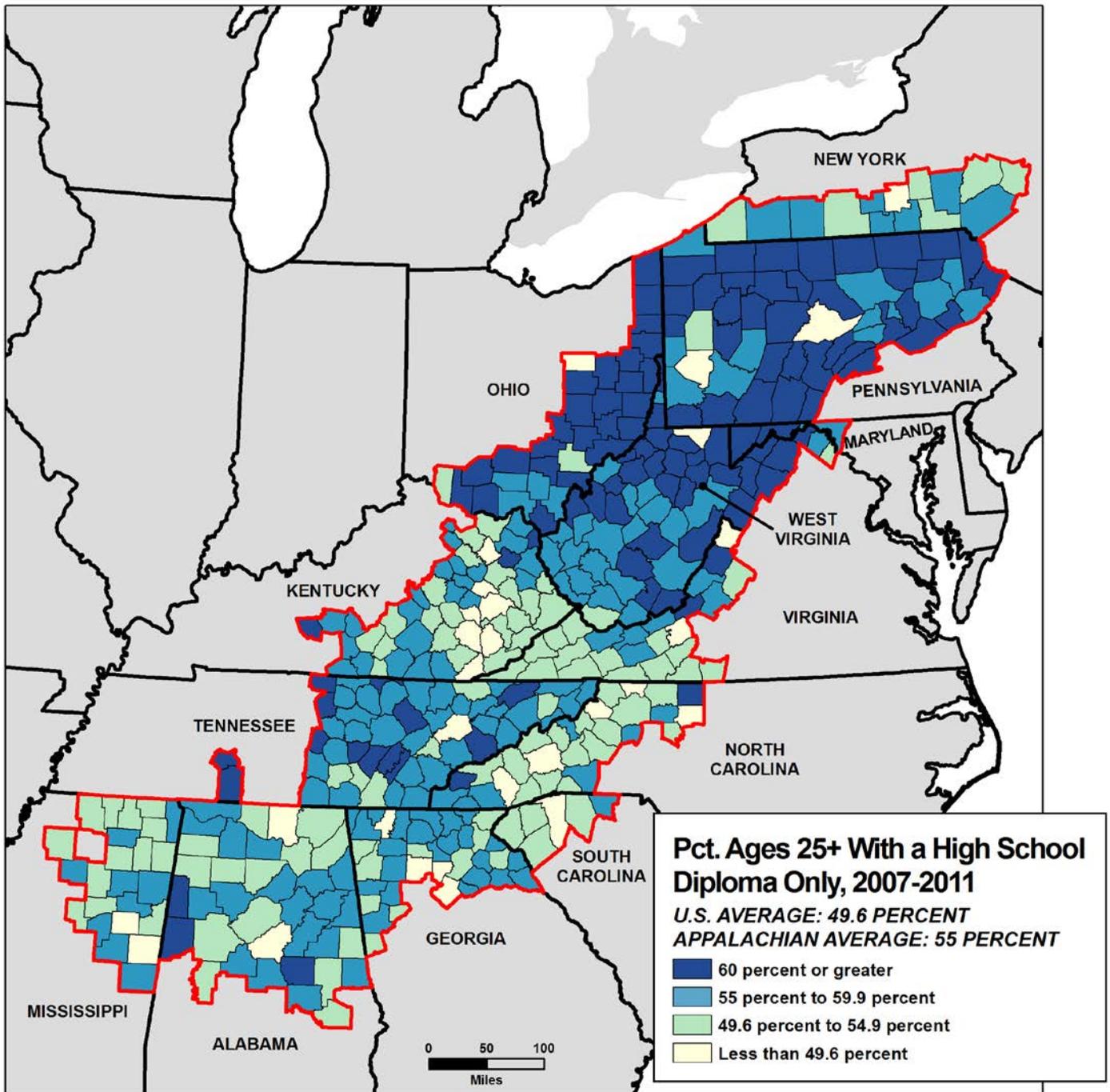
Figure 5.1: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2007-2011



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2007-2011
 Data Source: U.S. Census Bureau, 2007-2011 American Community Survey.

Although the share of Appalachian adults with at least a high school diploma was slightly below the national average over the 2007-2011 period, it matched or exceeded the national share in 102 counties in the region—two-thirds of them in northern Appalachia and three-fifths in metro areas. And the regional share was nearly seven percentage points higher than it was in the 2000 Census, suggesting a continued trend toward increased high school completion. Yet in 123 counties, less than three-fourths of adults had completed high school; 100 of those were nonmetropolitan counties located in central, south central, and southern Appalachia.

Figure 5.2: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2007-2011

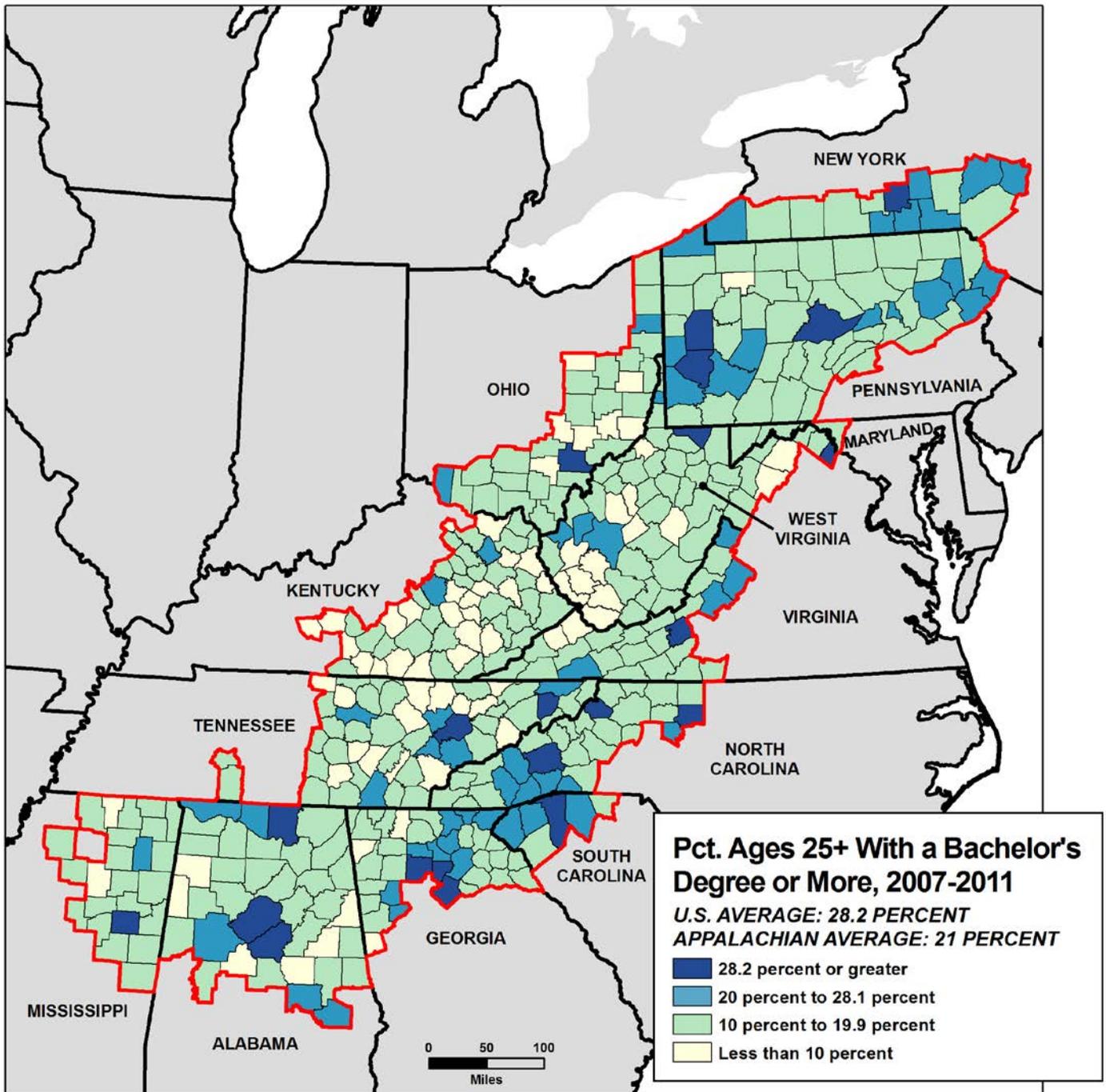


Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2007-2011

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey.

In nine out of 10 Appalachian counties, at least half of the adult population had a high school diploma, but no postsecondary degree (including an associate's degree) during the 2007-2011 period. Many of these adults had attended college but did not graduate, while others acquired vocational training. Conversely, many of the adults outside of this group did earn an associate's or bachelor's degree, while others never finished high school at all.

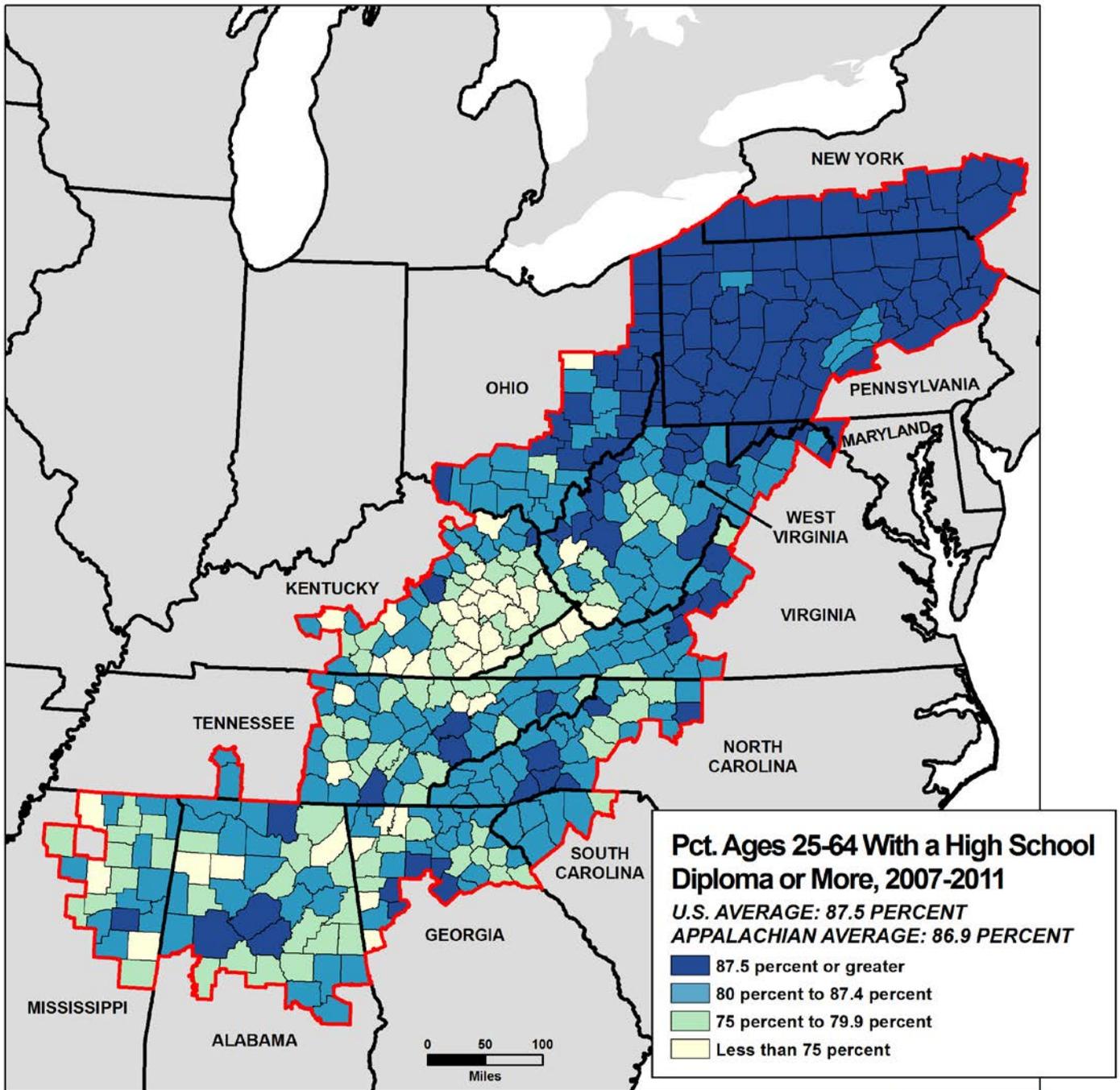
Figure 5.3: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2007-2011



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2007-2011
 Data Source: U.S. Census Bureau, 2007-2011 American Community Survey.

In 399 of Appalachia's 420 counties, the share of adults with a bachelor's degree or more in the 2007-2011 period was lower than the national average of 28 percent. In fact, less than one-fifth of persons ages 25 and over were graduates of a four-year college or university in 339 Appalachian counties. And in 71 counties—mostly outside metropolitan areas and/or in central Appalachia—less than one in 10 adults had at least a bachelor's degree. The 21 counties where the percentage of college graduates matched or surpassed the national average were either in metropolitan areas or home to a well-known college or university. Most of these counties also experienced higher than average residential mobility rates. On a positive note, the share of adults (both in Appalachia and nationwide) with a four-year degree was three percentage points higher in the 2007-2011 period than it was in 2000, suggesting a continued trend toward greater educational attainment among cohorts entering this age group.

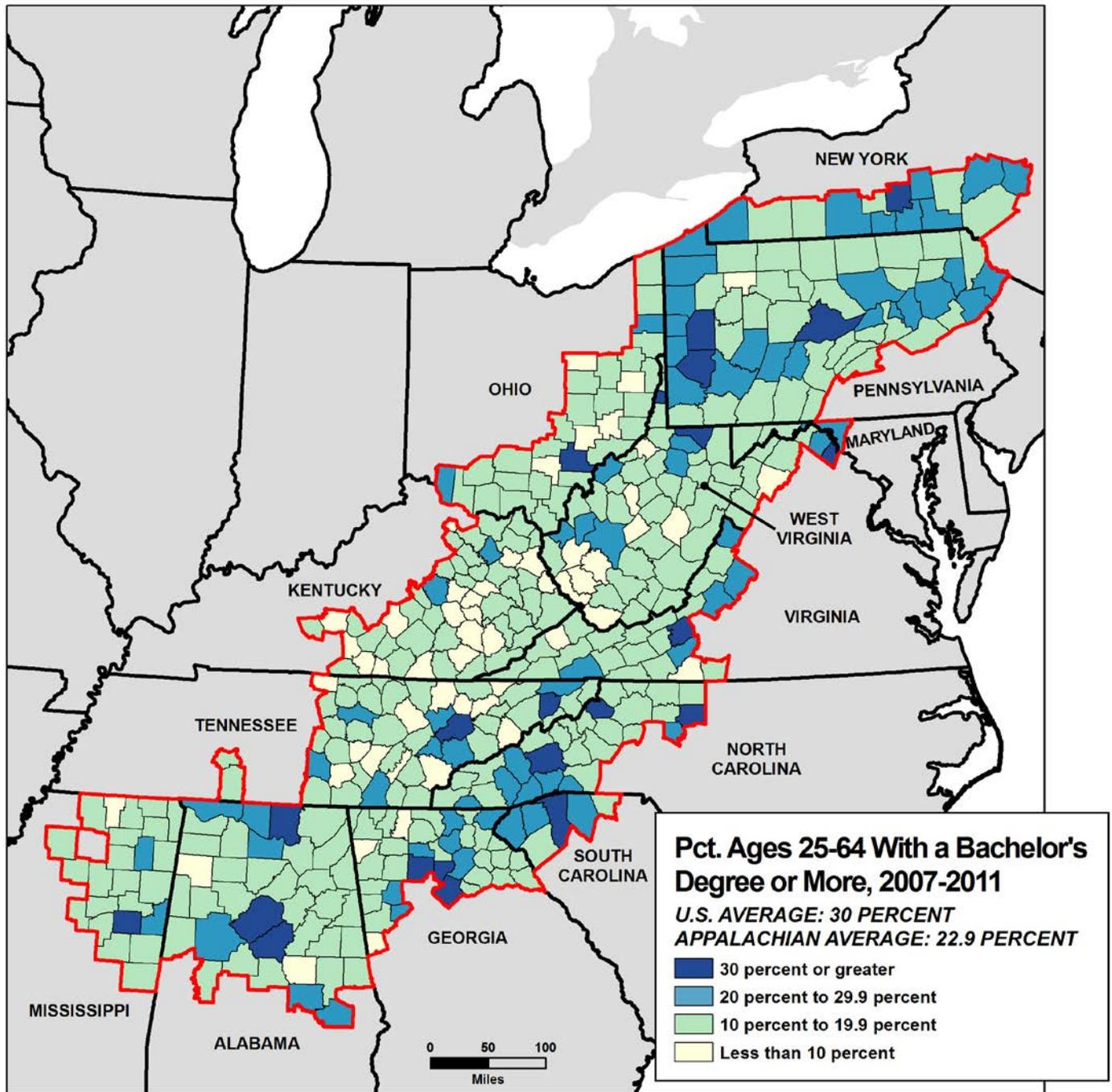
Figure 5.4: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2007-2011



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2007-2011
 Data Source: U.S. Census Bureau, 2007-2011 American Community Survey.

In the 2007-2011 period, the percentage of working-age adults (ages 25 to 64) in the Appalachian region with at least a high school diploma was only slightly below the share for the United States as a whole. The share matched or exceeded the national average in 126 Appalachian counties; they were almost equally divided between metropolitan and non-metropolitan counties, and most were in northern or north central Appalachia. At the other end of the spectrum, less than three in four working-age adults had finished high school in 41 counties in the region. Almost all of these counties were outside metropolitan areas, and more than half were in central Appalachia.

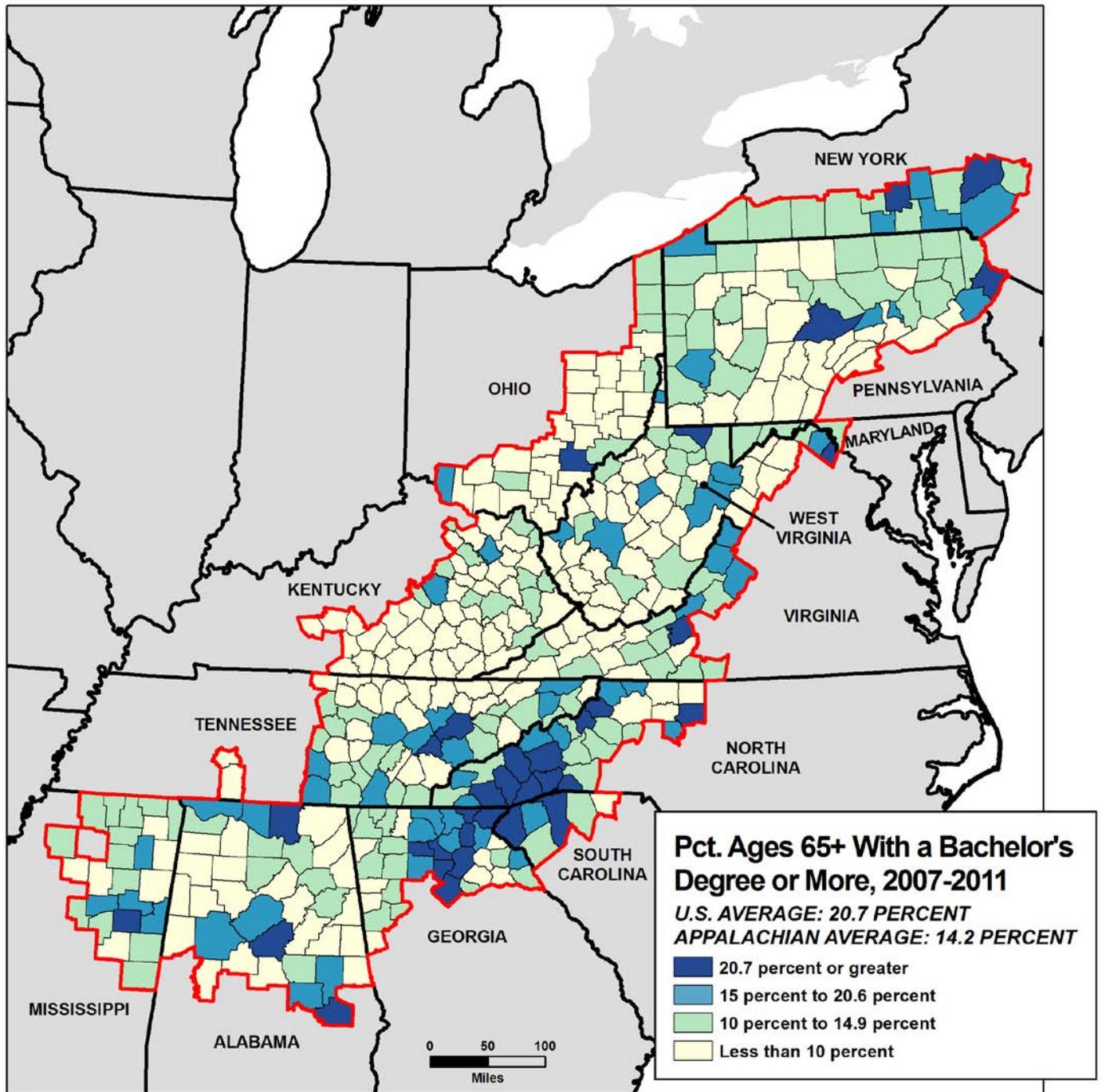
Figure 5.5: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2007-2011



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2007-2011
 Data Source: U.S. Census Bureau, 2007-2011 American Community Survey.

Only 23 percent of the working-age population in Appalachia had a bachelor's degree or more in 2007-2011—seven percentage points lower than the U.S. average of 30 percent. This is a striking indicator of the lower educational level of the Appalachian workforce. Just 13 percent of working-age adults in central Appalachia had a bachelor's degree, as did only 15 percent of residents of rural Appalachian counties that were not adjacent to metro areas. In just 22 Appalachian counties—all either in metropolitan areas or home to a four-year college or university—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, there were 54 counties where less than one in 10 adults had a four-year degree, and almost all were outside metropolitan areas.

Figure 5.6: Percent of Persons Ages 65 and Over in the Appalachian Region With a Bachelor's Degree or More, 2007-2011



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region With a Bachelor's Degree or More, 2007-2011
 Data Source: U.S. Census Bureau, 2007-2011 American Community Survey.

While one in five older Americans (ages 65 and over) had attained at least a bachelor's degree in the 2007-2011 period, less than one in 10 older adults had done so in nearly half of Appalachia's 420 counties. Not surprisingly, most of these were outside metropolitan areas and one-third were in central Appalachia. (Just 8 percent of central Appalachia's older adults were college graduates.) Yet in 34 Appalachian counties, the share of older adults with a bachelor's degree or higher was at or above the national average. These were either counties in metropolitan areas, counties that had a college or university, or counties with significant retirement or seasonal activity (the latter suggested by the fact that much, if not most, of their vacant housing is for seasonal or occasional use).