

CHAPTER 5: EDUCATION

Table 5.1: Educational Attainment of Persons Ages 25 and Over in the Appalachian Region, 2008-2012

Education (Highest Level Attained)	Total Population Ages 25 and Over, 2008-2012	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	204,336,017	14.3	85.7	49.5	7.7	28.5
Appalachian Region	17,137,010	15.9	84.1	55.1	7.6	21.3
Subregions						
Northern Appalachia	5,789,253	11.4	88.6	57.9	8.6	22.1
North Central Appalachia	1,658,794	15.8	84.2	59.5	6.7	18.0
Central Appalachia	1,321,641	26.2	73.8	55.6	5.9	12.3
South Central Appalachia	3,247,160	17.1	82.9	53.4	7.5	21.9
Southern Appalachia	5,120,162	17.7	82.3	51.5	7.4	23.4
County Types						
Large Metros (pop. 1 million +)	3,896,692	11.7	88.3	51.6	8.2	28.5
Small Metros (pop. <1 million)	6,886,207	14.8	85.2	54.5	7.7	22.9
Nonmetro, Adjacent to Large Metros	1,141,334	16.7	83.3	59.3	7.8	16.2
Nonmetro, Adjacent to Small Metros	3,476,534	18.9	81.1	58.4	7.4	15.3
Rural (nonmetro, not adj. to a metro)	1,736,243	23.2	76.8	56.0	6.5	14.2
Alabama	3,166,424	17.4	82.6	53.2	7.2	22.3
Appalachian Alabama	2,046,735	17.4	82.6	52.8	7.1	22.8
Non-Appalachian Alabama	1,119,689	17.5	82.5	53.9	7.3	21.3
Georgia	6,242,508	15.6	84.4	49.9	6.8	27.8
Appalachian Georgia	1,891,696	17.2	82.8	50.6	7.1	25.1
Non-Appalachian Georgia	4,350,812	14.9	85.1	49.6	6.6	28.9
Kentucky	2,902,296	17.6	82.4	54.6	6.9	21.0
Appalachian Kentucky	804,996	26.3	73.7	54.8	6.0	12.8
Non-Appalachian Kentucky	2,097,300	14.2	85.8	54.5	7.2	24.1
Maryland	3,875,282	11.5	88.5	45.9	6.2	36.3
Appalachian Maryland	174,501	14.5	85.5	59.8	7.8	17.8
Non-Appalachian Maryland	3,700,781	11.4	88.6	45.3	6.2	37.2
Mississippi	1,904,849	19.0	81.0	53.0	8.0	20.0
Appalachian Mississippi	405,470	22.6	77.4	53.1	7.6	16.7
Non-Appalachian Mississippi	1,499,379	18.0	82.0	53.0	8.2	20.9
New York	13,101,982	15.1	84.9	43.8	8.3	32.8
Appalachian New York	705,001	11.4	88.6	53.2	11.6	23.8
Non-Appalachian New York	12,396,981	15.3	84.7	43.2	8.1	33.3
North Carolina	6,324,119	15.5	84.5	49.1	8.6	26.8
Appalachian North Carolina	1,176,507	16.8	83.2	51.2	8.6	23.4
Non-Appalachian North Carolina	5,147,612	15.2	84.8	48.6	8.6	27.6
Ohio	7,715,893	11.8	88.2	55.8	7.7	24.7
Appalachian Ohio	1,388,475	14.8	85.2	61.9	7.5	15.8
Non-Appalachian Ohio	6,327,418	11.1	88.9	54.4	7.7	26.7
Pennsylvania	8,658,872	11.7	88.3	53.7	7.5	27.0
Appalachian Pennsylvania	4,027,562	10.7	89.3	57.5	8.4	23.4
Non-Appalachian Pennsylvania	4,631,310	12.6	87.4	50.5	6.7	30.2
South Carolina	3,075,655	16.0	84.0	50.9	8.6	24.6
Appalachian South Carolina	776,261	17.3	82.7	49.5	8.9	24.2
Non-Appalachian South Carolina	2,299,394	15.5	84.5	51.4	8.4	24.7
Tennessee	4,250,890	16.1	83.9	54.2	6.2	23.5
Appalachian Tennessee	1,919,339	17.9	82.1	55.4	6.4	20.4
Non-Appalachian Tennessee	2,331,551	14.7	85.3	53.2	6.1	26.1
Virginia	5,356,571	13.1	86.9	45.4	6.9	34.7
Appalachian Virginia	528,193	21.1	78.9	53.4	8.1	17.4
Non-Appalachian Virginia	4,828,378	12.2	87.8	44.5	6.7	36.6
West Virginia (entire state)	1,292,274	16.6	83.4	59.4	6.1	17.9

Data Source: U.S. Census Bureau, 2008-2012 American Community Survey.

Table 5.2: Educational Attainment of Persons Ages 25 to 64 in the Appalachian Region, 2008-2012

Education (Highest Level Attained)	Total Population Ages 25-64, 2008-2012	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	163,664,576	12.3	87.7	48.9	8.5	30.2
Appalachian Region	13,290,719	12.7	87.3	55.2	8.9	23.2
Subregions						
Northern Appalachia	4,375,098	8.2	91.8	56.7	10.3	24.8
North Central Appalachia	1,285,649	12.1	87.9	60.2	7.8	19.8
Central Appalachia	1,030,910	20.6	79.4	59.1	7.0	13.3
South Central Appalachia	2,471,160	13.6	86.4	54.3	8.7	23.4
Southern Appalachia	4,127,902	15.2	84.8	51.6	8.3	25.0
County Types						
Large Metros (pop. 1 million +)	3,122,096	9.3	90.7	50.2	9.3	31.3
Small Metros (pop. <1 million)	5,332,574	11.9	88.1	54.3	8.9	24.9
Nonmetro, Adjacent to Large Metros	875,830	13.3	86.7	60.0	9.2	17.5
Nonmetro, Adjacent to Small Metros	2,637,200	15.1	84.9	59.8	8.8	16.3
Rural (nonmetro, not adj. to a metro)	1,323,019	18.9	81.1	58.3	7.7	15.1
Alabama	2,503,119	14.7	85.3	53.4	8.2	23.7
Appalachian Alabama	1,620,879	14.6	85.4	52.9	8.1	24.4
Non-Appalachian Alabama	882,240	14.9	85.1	54.3	8.4	22.4
Georgia	5,195,882	13.5	86.5	49.8	7.3	29.3
Appalachian Georgia	1,577,784	15.3	84.7	50.3	7.7	26.7
Non-Appalachian Georgia	3,618,098	12.7	87.3	49.6	7.2	30.5
Kentucky	2,319,219	13.8	86.2	55.6	7.9	22.7
Appalachian Kentucky	632,997	20.9	79.1	58.2	7.1	13.9
Non-Appalachian Kentucky	1,686,222	11.1	88.9	54.6	8.2	26.1
Maryland	3,159,556	9.5	90.5	45.5	6.8	38.2
Appalachian Maryland	134,336	11.4	88.6	60.2	9.0	19.4
Non-Appalachian Maryland	3,025,220	9.5	90.5	44.8	6.7	39.0
Mississippi	1,521,008	16.1	83.9	53.7	9.2	21.0
Appalachian Mississippi	316,208	19.0	81.0	54.5	8.9	17.6
Non-Appalachian Mississippi	1,204,800	15.3	84.7	53.5	9.3	21.9
New York	10,461,348	12.8	87.2	42.6	9.3	35.3
Appalachian New York	537,600	9.0	91.0	52.1	13.3	25.7
Non-Appalachian New York	9,923,748	13.0	87.0	42.1	9.1	35.9
North Carolina	5,076,150	13.0	87.0	48.9	9.6	28.5
Appalachian North Carolina	889,088	14.0	86.0	51.6	10.0	24.5
Non-Appalachian North Carolina	4,187,062	12.8	87.2	48.3	9.5	29.4
Ohio	6,081,291	9.2	90.8	55.0	8.9	26.9
Appalachian Ohio	1,067,716	11.7	88.3	62.0	9.0	17.4
Non-Appalachian Ohio	5,013,575	8.7	91.3	53.5	8.9	28.9
Pennsylvania	6,686,525	8.7	91.3	52.6	8.7	30.0
Appalachian Pennsylvania	3,037,480	7.4	92.6	56.0	10.1	26.5
Non-Appalachian Pennsylvania	3,649,045	9.7	90.3	49.8	7.6	32.9
South Carolina	2,435,557	13.3	86.7	51.6	9.5	25.6
Appalachian South Carolina	613,031	14.4	85.6	49.8	10.0	25.8
Non-Appalachian South Carolina	1,822,526	13.0	87.0	52.1	9.4	25.5
Tennessee	3,389,471	12.9	87.1	54.8	7.0	25.3
Appalachian Tennessee	1,472,663	14.1	85.9	56.7	7.3	21.9
Non-Appalachian Tennessee	1,916,808	11.9	88.1	53.4	6.8	27.9
Virginia	4,368,066	10.6	89.4	45.0	7.5	36.8
Appalachian Virginia	398,015	15.6	84.4	55.6	9.7	19.1
Non-Appalachian Virginia	3,970,051	10.1	89.9	44.0	7.3	38.6
West Virginia (entire state)	992,922	12.7	87.3	60.4	7.1	19.8

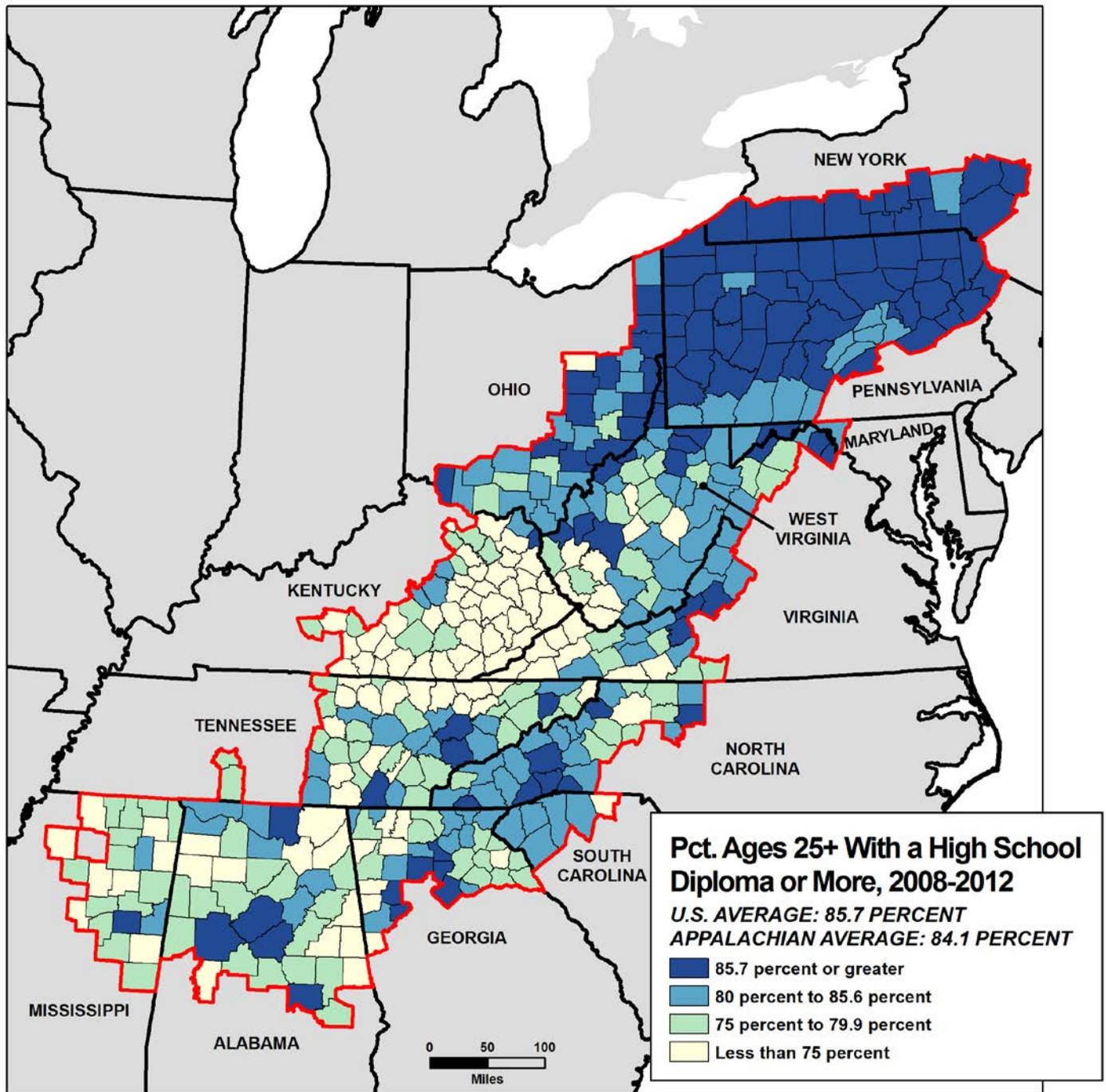
Data Source: U.S. Census Bureau, 2008-2012 American Community Survey.

Table 5.3: Educational Attainment of Persons Ages 65 and Over in the Appalachian Region, 2008-2012

Education (Highest Level Attained)	Total Population Ages 65 and Over, 2008-2012	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	40,671,441	22.1	77.9	52.1	4.3	21.5
Appalachian Region	3,846,291	27.0	73.0	54.8	3.4	14.8
Subregions						
Northern Appalachia	1,414,155	21.1	78.9	61.6	3.4	13.9
North Central Appalachia	373,145	28.5	71.5	57.0	2.7	11.9
Central Appalachia	290,731	45.7	54.3	43.2	2.1	9.0
South Central Appalachia	776,000	28.4	71.6	50.6	3.8	17.2
Southern Appalachia	992,260	28.2	71.8	51.1	3.8	16.8
County Types						
Large Metros (pop. 1 million +)	774,596	21.6	78.4	57.4	3.7	17.3
Small Metros (pop. <1 million)	1,553,633	24.6	75.4	55.3	3.7	16.4
Nonmetro, Adjacent to Large Metros	265,504	27.9	72.1	57.0	3.2	12.0
Nonmetro, Adjacent to Small Metros	839,334	31.1	68.9	54.0	3.0	11.9
Rural (nonmetro, not adj. to a metro)	413,224	37.0	63.0	48.6	2.9	11.4
Alabama	663,305	27.6	72.4	52.2	3.5	16.7
Appalachian Alabama	425,856	27.8	72.2	52.2	3.4	16.6
Non-Appalachian Alabama	237,449	27.3	72.7	52.2	3.6	17.0
Georgia	1,046,626	25.9	74.1	50.4	3.8	19.9
Appalachian Georgia	313,912	26.8	73.2	52.1	3.8	17.3
Non-Appalachian Georgia	732,714	25.5	74.5	49.6	3.8	21.1
Kentucky	583,077	32.7	67.3	50.5	2.8	14.0
Appalachian Kentucky	171,999	46.5	53.5	42.4	2.1	9.0
Non-Appalachian Kentucky	411,078	26.9	73.1	53.9	3.1	16.0
Maryland	715,726	20.2	79.8	47.8	3.9	28.1
Appalachian Maryland	40,165	25.0	75.0	58.7	3.6	12.7
Non-Appalachian Maryland	675,561	19.9	80.1	47.2	4.0	29.0
Mississippi	383,841	30.4	69.6	50.2	3.5	16.0
Appalachian Mississippi	89,262	35.4	64.6	48.0	3.0	13.6
Non-Appalachian Mississippi	294,579	28.9	71.1	50.8	3.6	16.7
New York	2,640,634	24.4	75.6	48.5	4.3	22.7
Appalachian New York	167,401	19.3	80.7	56.8	6.0	17.9
Non-Appalachian New York	2,473,233	24.8	75.2	47.9	4.2	23.0
North Carolina	1,247,969	25.5	74.5	49.9	4.7	19.9
Appalachian North Carolina	287,419	25.6	74.4	50.0	4.4	20.0
Non-Appalachian North Carolina	960,550	25.5	74.5	49.8	4.8	19.9
Ohio	1,634,602	21.3	78.7	58.6	3.3	16.8
Appalachian Ohio	320,759	25.4	74.6	61.6	2.5	10.5
Non-Appalachian Ohio	1,313,843	20.4	79.6	57.9	3.4	18.3
Pennsylvania	1,972,347	22.0	78.0	57.6	3.3	17.0
Appalachian Pennsylvania	990,082	20.9	79.1	61.9	3.2	14.0
Non-Appalachian Pennsylvania	982,265	23.2	76.8	53.4	3.4	20.1
South Carolina	640,098	26.0	74.0	48.5	5.0	20.6
Appalachian South Carolina	163,230	28.2	71.8	48.3	5.1	18.4
Non-Appalachian South Carolina	476,868	25.2	74.8	48.5	4.9	21.4
Tennessee	861,419	28.9	71.1	51.5	3.1	16.5
Appalachian Tennessee	446,676	30.5	69.5	50.9	3.2	15.4
Non-Appalachian Tennessee	414,743	27.2	72.8	52.1	2.9	17.8
Virginia	988,505	23.9	76.1	47.2	3.9	25.1
Appalachian Virginia	130,178	38.1	61.9	46.5	3.1	12.4
Non-Appalachian Virginia	858,327	21.7	78.3	47.3	4.0	27.0
West Virginia (entire state)	299,352	29.4	70.6	56.1	2.7	11.7

Data Source: U.S. Census Bureau, 2008-2012 American Community Survey.

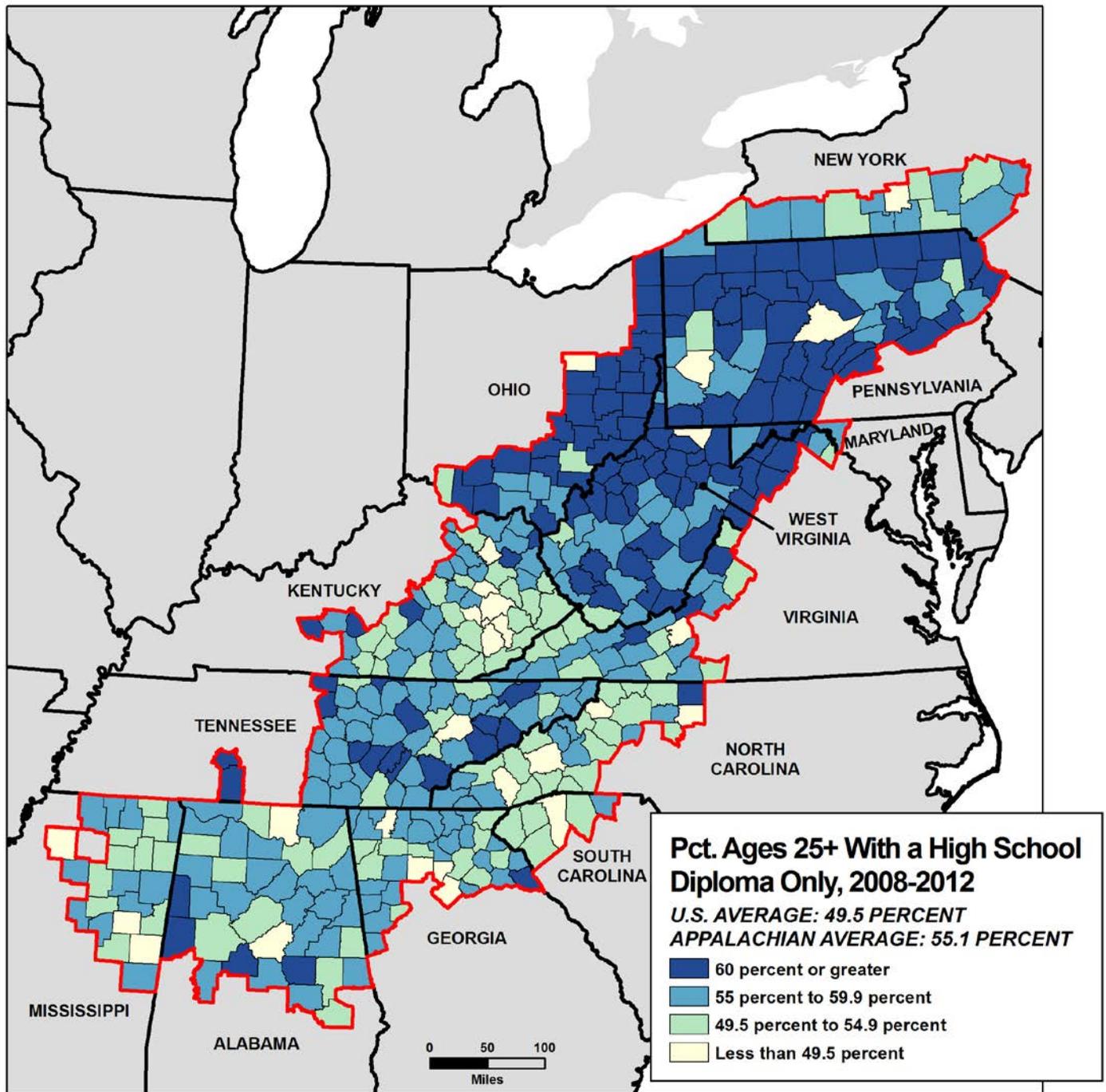
Figure 5.1: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2008-2012



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma or More, 2008-2012
 Data Source: U.S. Census Bureau, 2008-2012 American Community Survey.

Although the share of Appalachian adults with at least a high school diploma was slightly below the national average over the 2008-2012 period, it matched or exceeded the national share in 110 counties in the Region—all but 10 of them either in Northern Appalachia or in metropolitan areas. And the regional share was seven percentage points higher than it was in the 2000 Census, suggesting a continued trend toward increased high school completion. Yet in 102 counties, less than three-fourths of adults had completed high school; 98 of those counties were 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, 2008-2012

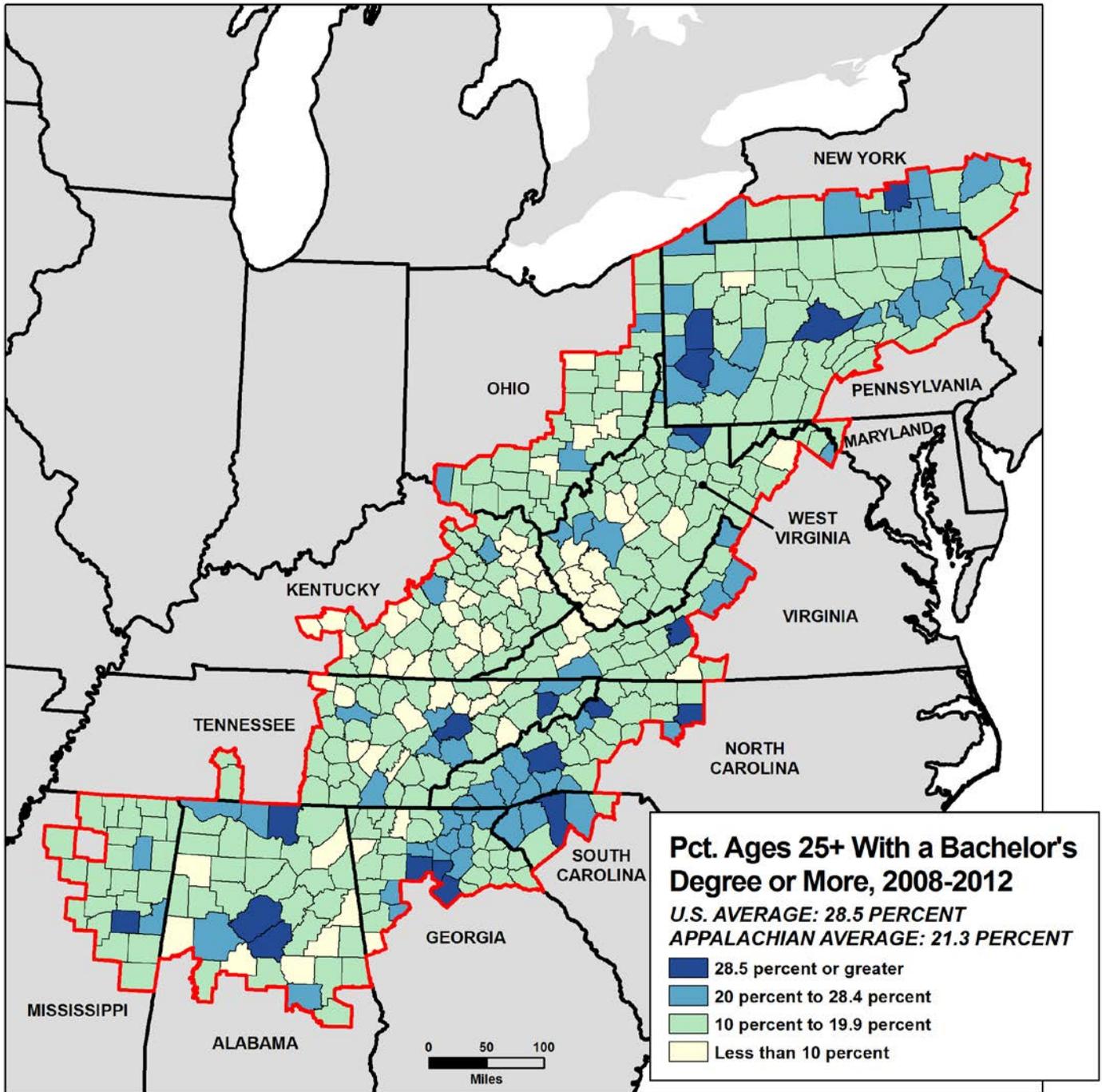


Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a High School Diploma but With No Postsecondary Degree, 2008-2012

Data Source: U.S. Census Bureau, 2008-2012 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 2008-2012 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.

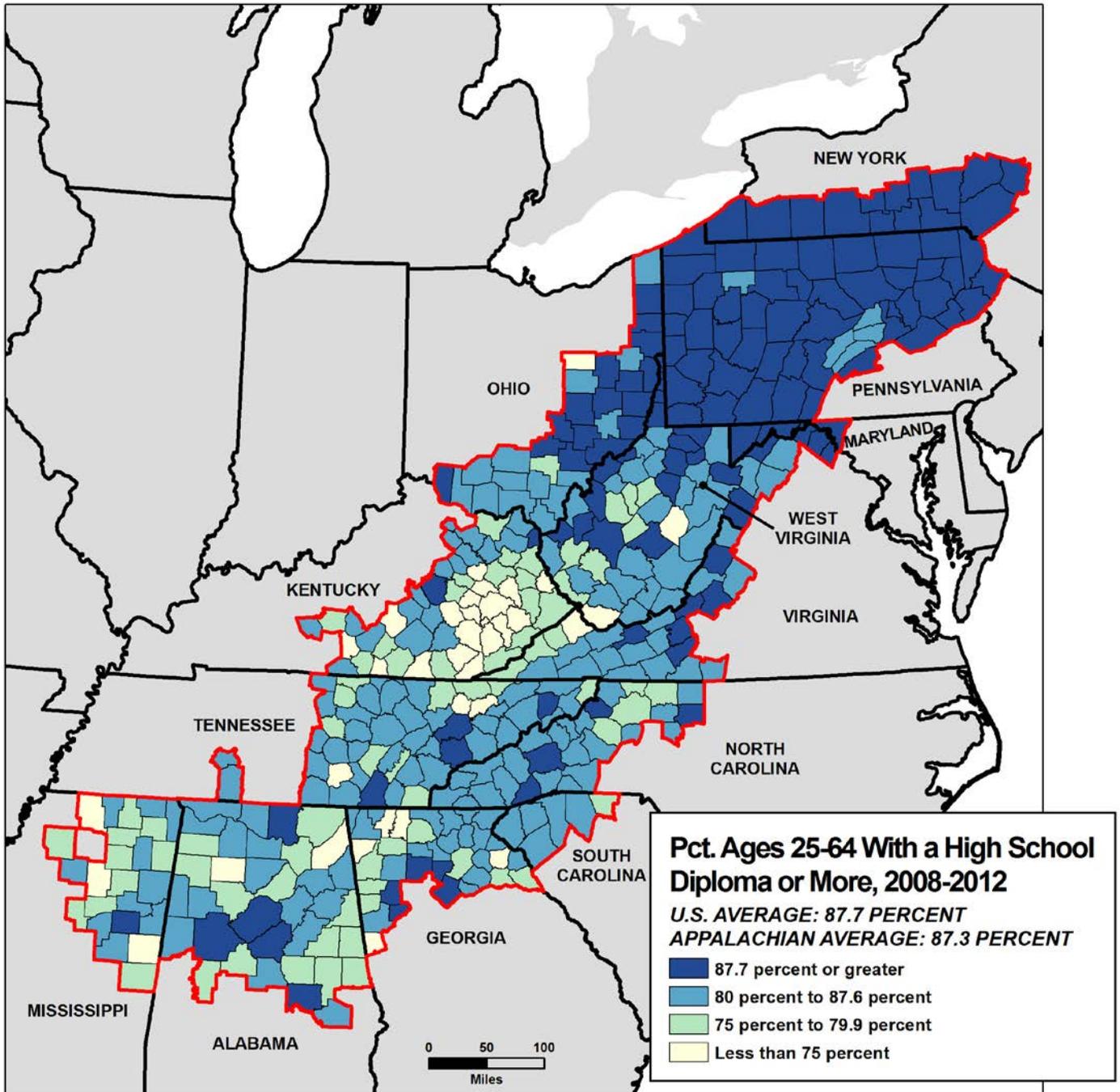
Figure 5.3: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2008-2012



Map Title: Percent of Persons Ages 25 and Over in the Appalachian Region With a Bachelor's Degree or More, 2008-2012
 Data Source: U.S. Census Bureau, 2008-2012 American Community Survey.

The share of adults with a bachelor's degree or more was seven percentage points lower in Appalachia during the 2008-2012 period than in the nation as a whole. And the rate was lower than the national average in 401 of the Region's 420 counties. In fact, there were 332 Appalachian counties where fewer than one in five residents ages 25 and over were graduates of a four-year college or university, and 61 counties—nearly all of which were either outside metropolitan areas or in Central Appalachia—where the share was less than one in 10. The 19 counties where the percentage of college graduates matched or surpassed the national average were either in metro areas or home to a college or university; many also had high residential mobility rates. On a positive note, the share of adults (both in Appalachia and nationwide) with a four-year degree was four percentage points higher in 2008-2012 than it was in 2000, suggesting a continued trend toward greater educational attainment among cohorts entering this age group.

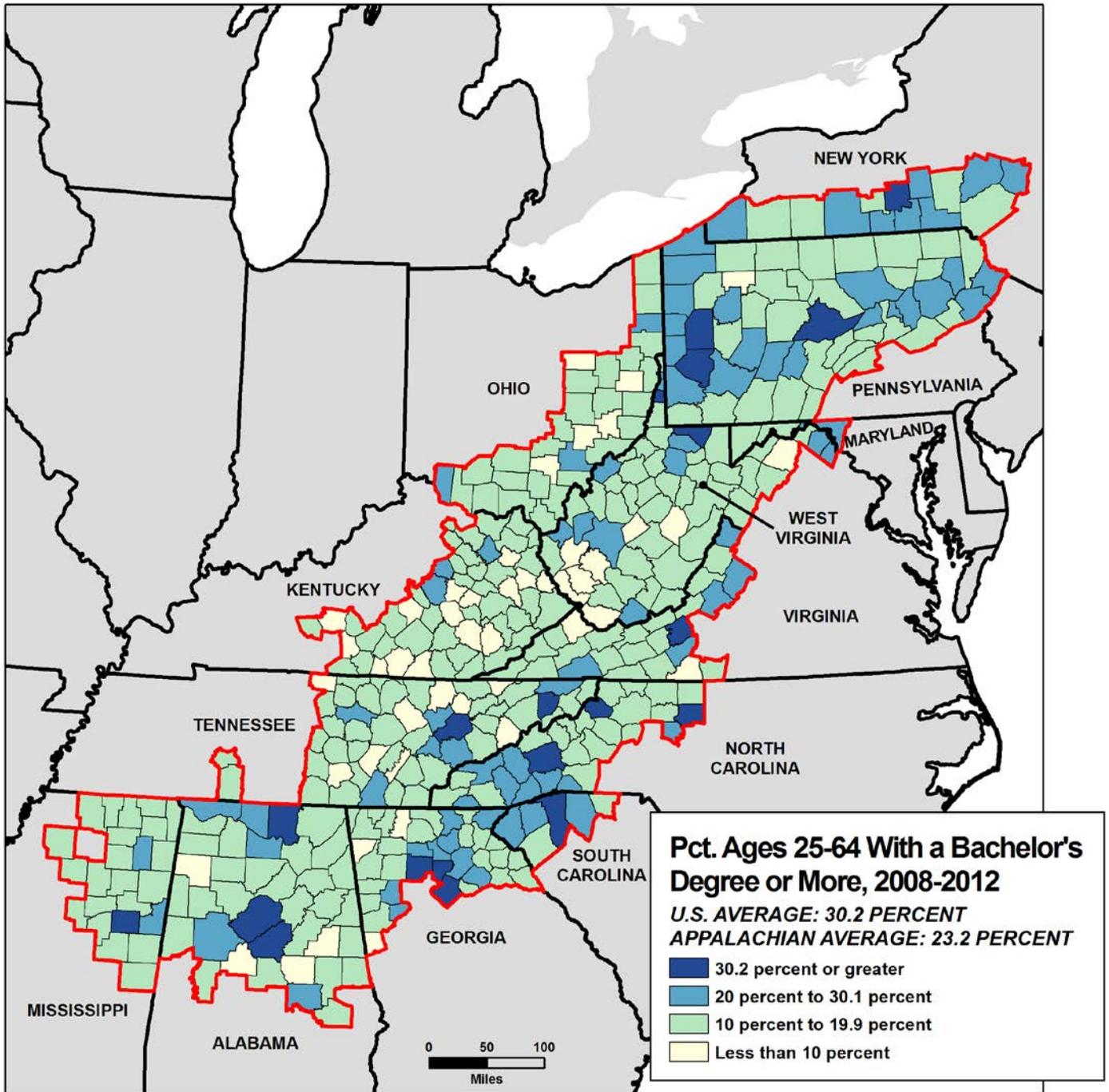
Figure 5.4: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2008-2012



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a High School Diploma or More, 2008-2012
 Data Source: U.S. Census Bureau, 2008-2012 American Community Survey.

In the 2008-2012 period, the percentage of working-age adults (ages 25 to 64) in the Appalachian Region with at least a high school diploma was almost at the national average of nearly 88 percent, and the share did match or exceed the national rate in 129 counties. These counties 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 35 Appalachian counties. Almost all of these counties were outside metropolitan areas, and more than half were in Central Appalachia.

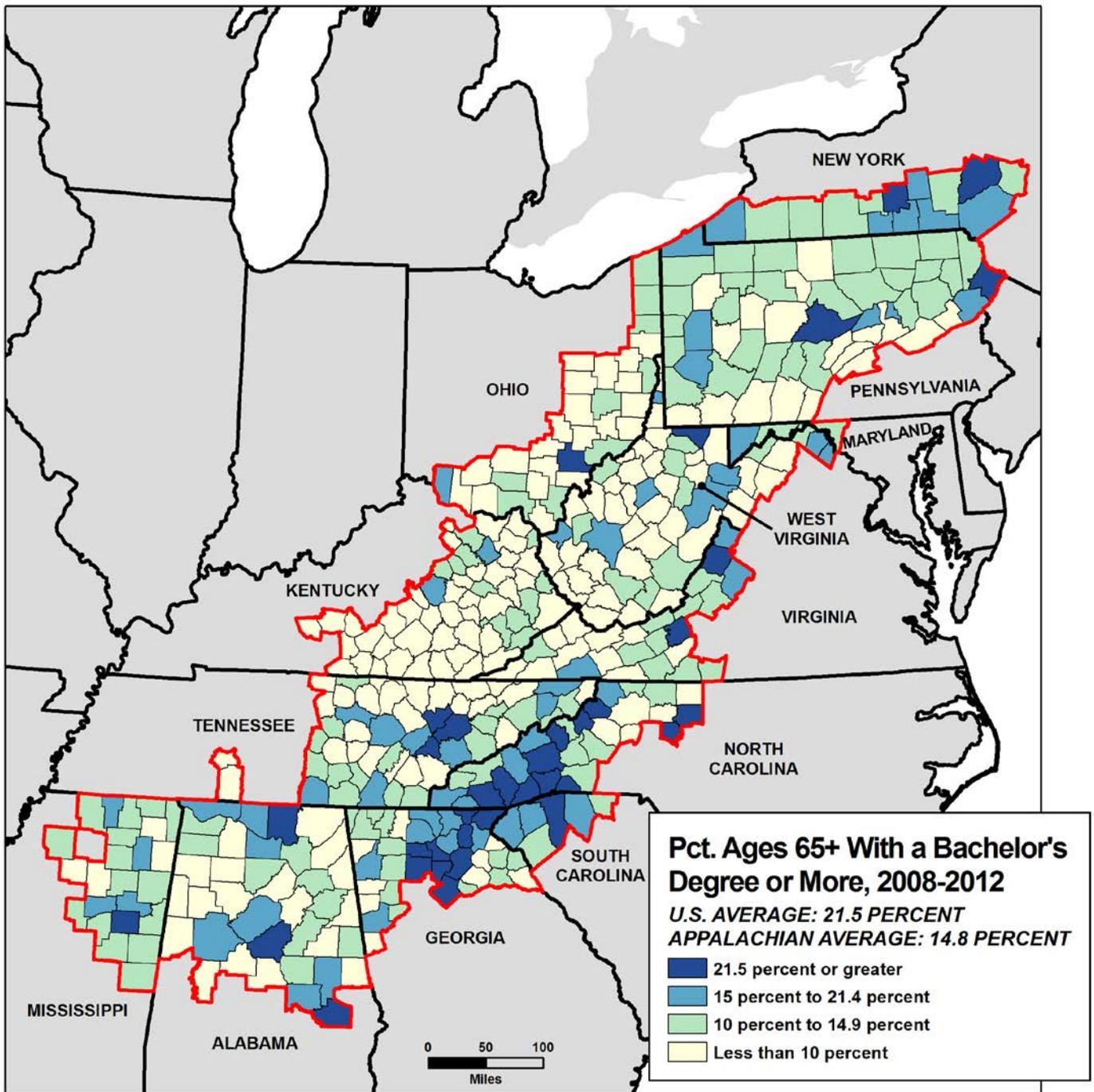
Figure 5.5: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2008-2012



Map Title: Percent of Persons Ages 25 to 64 in the Appalachian Region With a Bachelor's Degree or More, 2008-2012
 Data Source: U.S. Census Bureau, 2008-2012 American Community Survey.

Only 23 percent of the working-age population in Appalachia had a bachelor's degree or more in 2008-2012—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. Indeed, 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. There were only 20 Appalachian counties—all either in metropolitan areas or home to a four-year college or 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 47 counties, 38 of which 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, 2008-2012



Map Title: Percent of Persons Ages 65 and Over in the Appalachian Region With a Bachelor's Degree or More, 2008-2012
 Data Source: U.S. Census Bureau, 2008-2012 American Community Survey.

While one in five older Americans (ages 65 and over) had attained at least a bachelor's degree in the 2008-2012 period, less than one in 10 older adults had done so in nearly half of Appalachia's 420 counties. Most of these counties were outside metropolitan areas, and one-third were in Central Appalachia. (Only 9 percent of Central Appalachia's older adults were college graduates.) Yet in 36 Appalachian counties, the share of older adults with a four-year degree was at or above the national average. These were either counties in metropolitan areas, 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).