Community Characteristics

Travel Time to Work

Grocery Store Availability

Student-Teacher Ratio

Further Reading

KEY FINDINGS | Average Travel Time to Work

- The average travel time to work in the Appalachian Region is 24.8 minutes, which is comparable to the national average of 25.7 minutes.

- Three of the five Appalachian subregions have commute times roughly equal to the nation, and both Northern and South Central Appalachia have average commute times slightly lower than the national average.

- The average travel time to work for the Appalachian Region's rural counties is five minutes less than for the Region's large metro counties.

- The average travel time to work for the Appalachian Region's distressed counties is nearly one-and-a-half minutes longer than for the Region's non-distressed counties.

Background

The average travel time to work measures the average number of minutes commuting to work using any transportation mode. This measure is collected by the U.S. Census Bureau in the American Community Survey and covers the period 2010–2014. Travel time captures multiple factors that may impact health status, including sedentary behavior, social isolation (from either driving alone or time spent away from family and friends), and risk of injury while commuting.

Research has found that people who spend an extra 60 minutes of their day commuting spend less time sleeping and exercising, suggesting that long commute times may be a predictor of poor health outcomes (Christian T. , 2012). One study found that longer commuting distances were associated with less physical activity and higher body mass index (BMI), waist circumference, and blood pressure (Hoehner, Barlow, Allen, & Schootman, 2012). Long commutes also occur at the expense of time spent at home and other social activities, and are thus associated with stress on family and relationships (Besser, Marcus, & Frumkin, 2008).

Negative effects related to longer commuting times are not limited to those who commute by automobile. The British Office of National Statistics found higher anxiety and lower happiness levels among survey respondents who had time-consuming commutes by public transit, walking, and private motor vehicle.

Overview: Travel Time to Work in the Appalachian Region

Average commute times throughout the Appalachian Region are comparable to the national average. The average travel time to work in the Appalachian Region is 24.8 minutes, which is comparable to the national average of 25.7 minutes. The average commuting times in three of the five Appalachian subregions are at or below the national average. With an average commute time of 22.9 minutes, South Central Appalachia has the lowest average among the five subregions. There is little variation among the subregions in Appalachia, with a difference of only three-and-a-half minutes between the longest and shortest average commutes.

Rural areas in Appalachia have lower average commute times than more urbanized areas. Large metropolitan areas in Appalachia have an average commute of 28.6 minutes, compared to the national average of 25.7 minutes. The Appalachian Region's rural counties have average commute times of 23.7 minutes, which is lower than the average time in the Region's large metro counties, as well as in the nation as a whole. The pattern of commuting times in the Region is consistent with national trends, which show that commuting times are longer in large metropolitan areas. There is little variation between counties of different economic status levels, with just over one minute difference in commute times between the Appalachian Region's distressed counties (26.1 minutes) and its non-distressed counties (24.7 minutes).

At 20.7 minutes, Appalachian New York has the lowest average commute time in the Region, while non-Appalachian New York has the highest average commute of 32.7 minutes—the largest intrastate disparity. With the exceptions of Maryland and New York, differences in the average commuting times between the Appalachian and non-Appalachian portions of the 13 states are relatively small. After Appalachian New York, the Appalachian portions of both North Carolina and South Carolina report the next lowest average commute times among the Appalachian portions of states in the Region, at just over 22 minutes.

Figure 89 shows the average travel time to work for Appalachian counties, grouped by national quintiles. Darker colors indicate higher commute times; for this measure, higher values are associated with worse health. The distribution of commute times varies throughout the Region, although few counties rank in the best-performing quintile. Longer commutes appear near large metro areas, such as Atlanta, Birmingham, Cincinnati, Pittsburgh, and Tuscaloosa. Longer commutes also appear in southeast Ohio, a number of counties in eastern Pennsylvania, and throughout much of West Virginia.

Figure 90 aggregates the data for a variety of geographies useful for comparison: the Region compared to both the U.S. as a whole and the non-Appalachian portion of the country, subregions throughout Appalachia, levels of rurality in Appalachia, and economic status in Appalachia. State-level aggregation is done at three levels: the entire state, and then both the Appalachian and non-Appalachian portions of each state.

Figure 89: Map of Average Travel Time to Work in the Appalachian Region, 2010–2014
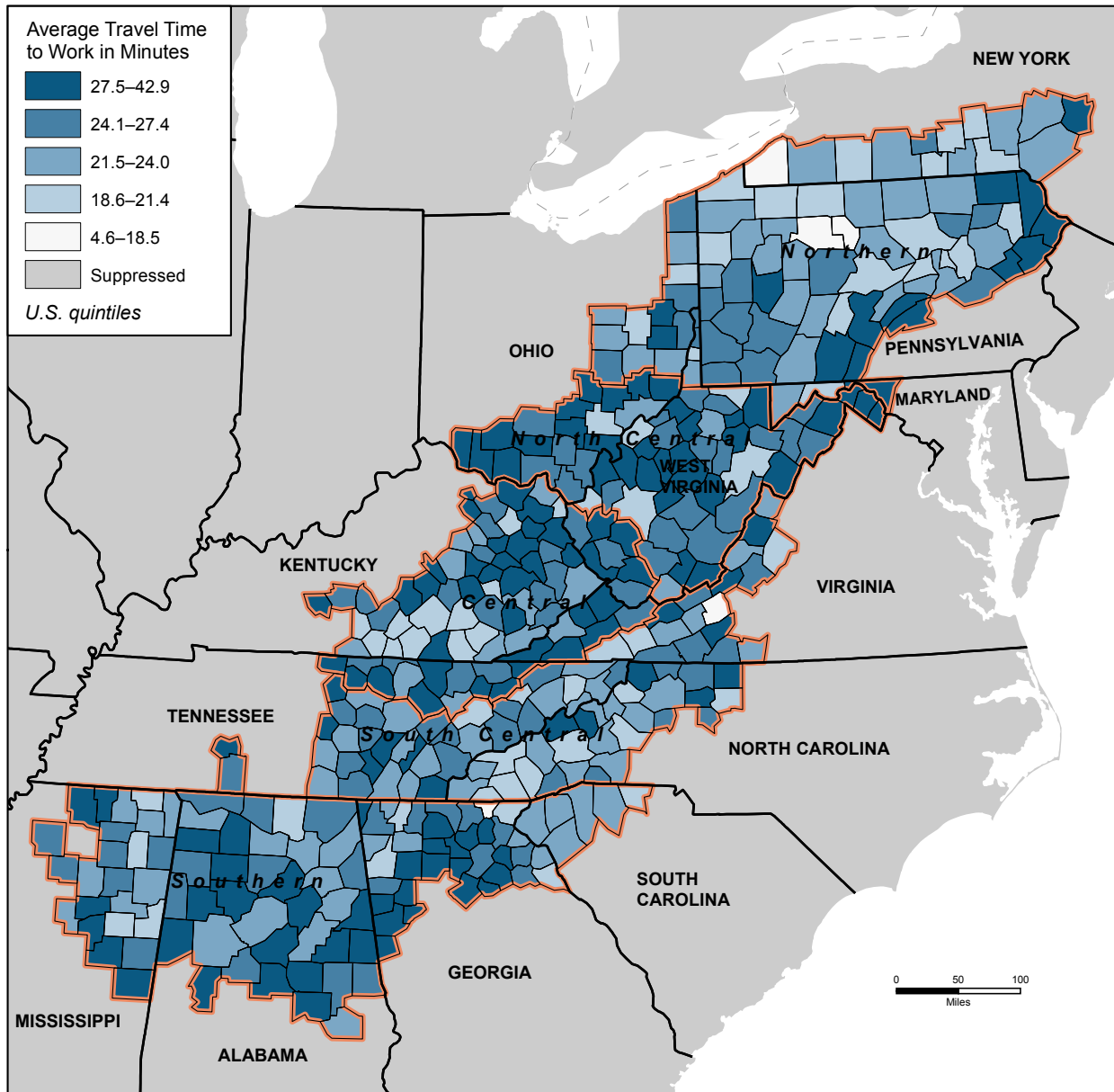
Data source: United States Census Bureau. "Summary File." 2010–2014 American Community Survey. U.S. Census Bureau's American Community Survey Office, 2015. Web. 13 January 2016 https://www.census.gov/programs-surveys/acs/.

Figure 90: Chart of Average Travel Time to Work, 2010–2014

| Category	Value
UNITED STATES	25.7
Appalachian Region	24.8
Non-Appalachian U.S.	25.8
SUBREGIONS IN APPALACHIA	
Northern	24.0
North Central	26.4
Central	25.7
South Central	22.9
Southern	26.0
RURALITY IN APPALACHIA	
Large Metros (pop. 1 million +)	28.6
Small Metros (pop. <1 million)	23.0
Nonmetro, Adjacent to Large Metros	24.4
Nonmetro, Adjacent to Small Metros	24.9
Rural (nonmetro, not adj. to a metro)	23.7
ECONOMIC STATUS IN APPALACHIA	
Distressed	26.1
Non-Distressed	24.7
At-Risk	24.8
Transitional	24.3
Competitive	27.2
Attainment	29.6
STATES IN APPALACHIA	
Alabama	24.3
Appalachian Alabama	24.8
Non-Appalachian Alabama	23.4
Georgia	27.0
Appalachian Georgia	29.2
Non-Appalachian Georgia	26.0
Kentucky	23.0
Appalachian Kentucky	24.7
Non-Appalachian Kentucky	22.3
Maryland	32.0
Appalachian Maryland	25.7
Non-Appalachian Maryland	32.3
Mississippi	24.2
Appalachian Mississippi	23.4
Non-Appalachian Mississippi	24.4
New York	32.1
Appalachian New York	20.7
Non-Appalachian New York	32.7
North Carolina	23.7
Appalachian North Carolina	22.5
Non-Appalachian North Carolina	24.0
Ohio	23.2
Appalachian Ohio	25.1
Non-Appalachian Ohio	22.7
Pennsylvania	26.2
Appalachian Pennsylvania	24.8
Non-Appalachian Pennsylvania	27.4
South Carolina	23.8
Appalachian South Carolina	22.3
Non-Appalachian South Carolina	24.4
Tennessee	24.4
Appalachian Tennessee	23.7
Non-Appalachian Tennessee	25.0
Virginia	27.6
Appalachian Virginia	23.6
Non-Appalachian Virginia	28.1
West Virginia (entire state)	25.8

Data source: United States Census Bureau. "Summary File." 2010–2014 American Community Survey. U.S. Census Bureau's American Community Survey Office, 2015. Web. 13 January 2016 https://www.census.gov/programs-surveys/acs/.

Overview: Travel Time to Work in the United States

Figure 91 shows the variation in average commute times across the United States. Average travel times to work in the Appalachian Region are consistent with the rest of the eastern United States. Average commute times tend to be lower in the Midwest, Upper Midwest, and the Southwest, with averages in the Plains states being particularly low. Each of the national quintiles is represented in the western half of the country. Counties surrounding large metro areas have relatively high commuting times.

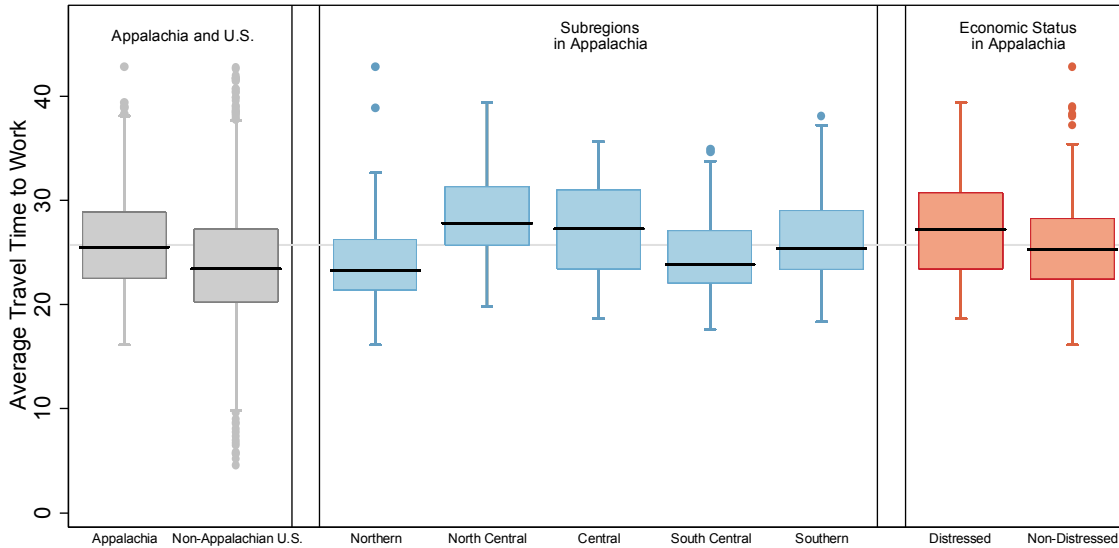**Figure 91: Map of Average Travel Time to Work in the United States, 2010–2014**
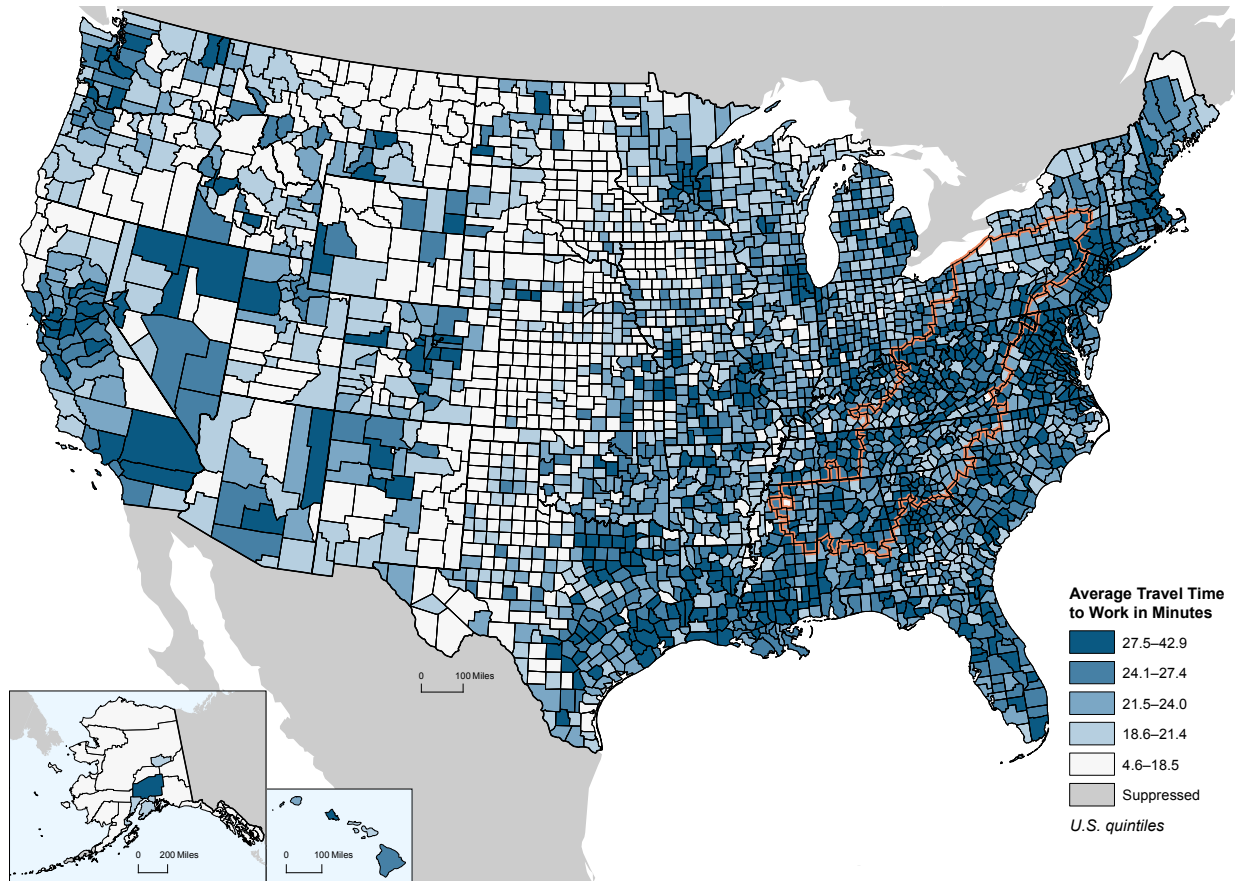
Data source: United States Census Bureau. "Summary File." 2010–2014 American Community Survey. U.S. Census Bureau's American Community Survey Office, 2015. Web. 13 January 2016 https://www.census.gov/programs-surveys/acs/.

Distribution of Travel Time to Work

Figure 92 shows the distribution of average travel times to work by geography and economic status. The shaded boxes show the middle 50 percent of all values for each group, with dots representing unusually high or low values. The gray line stretching across the width of the graph indicates the national average, and the black lines inside the shaded boxes indicate the median for each respective group.

Figure 92: Box Plot of Average Travel Time to Work by Geography and Economic Status, 2010–2014

Grey line denotes national average. 0 of 3113 counties have a missing value for this indicator.
For this indicator, higher values are associated with worse health.

Data source: United States Census Bureau. "Summary File." 2010–2014 American Community Survey. U.S. Census Bureau's American Community Survey Office, 2015. Web. 13 January 2016 https://www.census.gov/programs-surveys/acs/.

The distribution of the average travel time to work among national quintiles for Appalachian counties is shown in Table 34. Of the 420 counties in the Region, 142 (34 percent) rank in the worst-performing national quintile, while 5 (1 percent) rank in the best-performing national quintile.

Table 34: Distribution of Average Travel Time to Work among National Quintiles for Appalachian Counties

Indicator	Best Quintile		2nd Best Quintile		Middle Quintile		2nd Worst Quintile		Worst Quintile	
	#	Pct.	#	Pct.	#	Pct.	#	Pct.	#	Pct.
Travel time to work	5	1%	62	15%	101	24%	110	26%	142	34%

Data source for authors' calculations shown above: Appalachian_Health_Disparities_Data.xlsx. The number of counties across all five quintiles for this indicator may not sum to 420 due to missing or suppressed values.

KEY FINDINGS | Grocery Store Availability

- There are 14 percent fewer grocery stores per 1,000 population in Appalachia than in the United States as a whole.

- Among the five subregions, only Central Appalachia has more grocery stores per 1,000 population than the national average. Southern Appalachia has the lowest rate in the Region, a figure 24 percent lower than the national mark.

- Rural areas throughout the Region have 41 percent more grocery stores per 1,000 population than large metro areas.

- Economically distressed counties in Appalachia have 28 percent more grocery stores per 1,000 population than non-distressed counties.

Background

This indicator measures the number of grocery stores in a county per 1,000 population in 2012, as reported by the U.S. Department of Agriculture. Grocery stores typically offer healthier food options than other outlets such as dollar stores, neighborhood markets, and convenience stores. Making healthy dietary choices is associated with better health outcomes, and as such, the availability of nutritious and affordable foods can have a large impact on community health (Centers for Disease Control and Prevention, Healthy Foods, 2016); (Bell, Mora, Hagan, Rubin, & Karpyn, 2013).

Communities that have limited access to healthier food options—and instead have higher numbers of restaurants and stores that provide processed, sugar- and fat-laden foods—face higher obesity rates and other related health problems (Treuhaft & Karpyn, 2010). Residents of communities with full-service grocery stores often eat more fruits and vegetables, which can help combat obesity and may have other direct health benefits, such as decreasing the risk of cancer (Centers for Disease Control and Prevention, Increase Access to Healthy Foods and Beverages, 2016).

The number of grocery stores is just one way to gauge a community's access to healthy food options; other possibilities include the presence of superstores and farmers markets. While this measure shows the presence (or absence) of grocery stores in a county per 1,000 population, it doesn't indicate the distance to grocery stores or whether the population has transportation to a store, which can be a particularly important consideration in rural areas. Ideally, this variable would include the average distance—and not merely presence/supply—to the nearest healthy food option in any given county.

Overview: Grocery Store Availability in the Appalachian Region

The average number of grocery stores per 1,000 population in the Appalachian Region is 0.18, which is 14 percent less than the national average of 0.21 per 1,000. The number of grocery stores in all five of the Appalachian subregions is below the national average except for Central Appalachia, whose rate of 0.24 is 14 percent above the national average. Southern Appalachia has the lowest rate in the Region with 0.16 grocery stores per 1,000 population, a figure 24 percent less than the national mark.
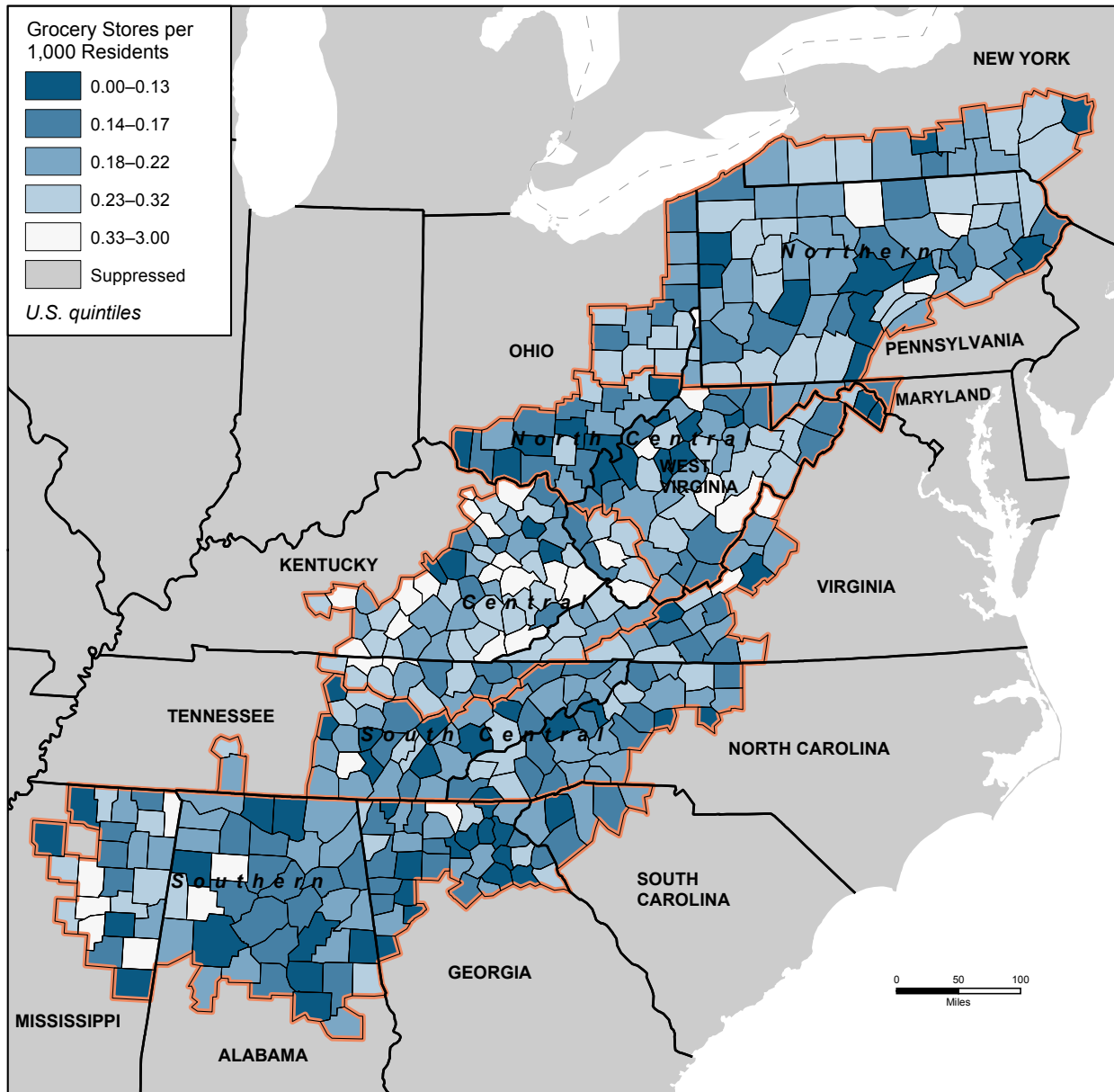
There are higher numbers of grocery stores in rural counties; this may be a function of population, as counties with higher and denser populations may have larger, busier grocery stores leading to lower numbers of grocery stores on a per capita basis. Large metro counties in Appalachia have a rate of 0.17 grocery stores per 1,000 population, versus 0.24 grocery stores per 1,000 population in rural areas. The Appalachian Region's distressed counties have 0.23 grocery stores per 1,000 population, while non-distressed counties have a lower rate of 0.18 stores per 1,000 population.

The Appalachian portions of Georgia, Maryland, New York, Pennsylvania, and South Carolina all have fewer grocery stores than the non-Appalachian portions of those states, while Appalachian Kentucky has more grocery stores than non-Appalachian Kentucky. For the remaining states throughout the Region, intrastate differences are marginal.

Figure 93 shows the number of grocery stores per 1,000 population in the Appalachian Region, grouped by national quintiles. Darker blue indicates a lower number of grocery stores; for this indicator, lower values are associated with worse health. There is considerable variation in the number of grocery stores throughout the Region. There are clusters of counties in Appalachia that have few, if any, grocery stores, while other areas throughout the Region perform quite well.

Figure 94 aggregates the data for a variety of geographies useful for comparison: the Region compared to both the U.S. as a whole and the non-Appalachian portion of the country, subregions throughout Appalachia, levels of rurality in Appalachia, and economic status in Appalachia. State-level aggregation is done at three levels: the entire state, and then both the Appalachian and non-Appalachian portions of each state.

Figure 93: Map of Grocery Stores per 1,000 Population in the Appalachian Region, 2012

Data source: USDA Food Environment Atlas, 2015 edition. U.S. Department of Agriculture. http://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx.

Figure 94: Chart of Grocery Stores per 1,000 Population, 2012

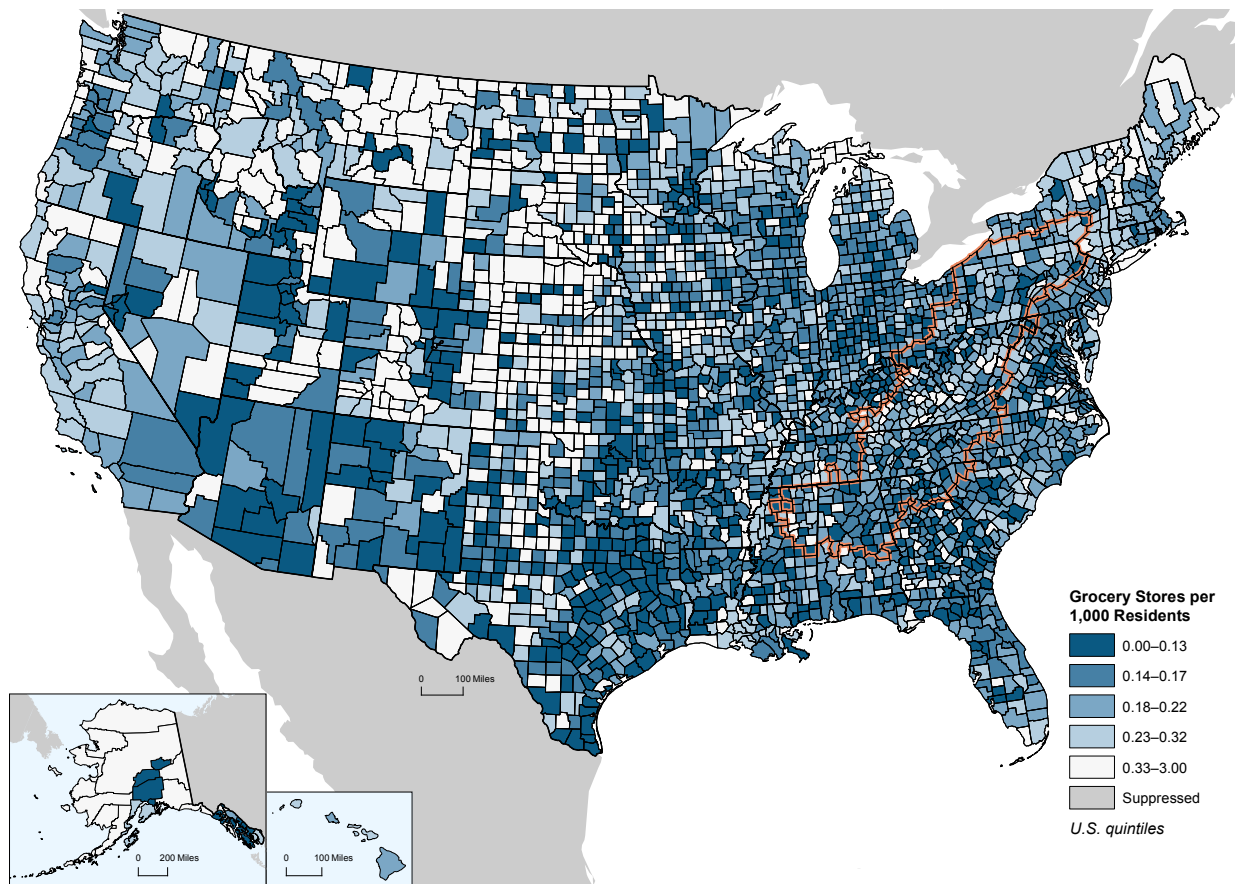|	Value
UNITED STATES	0.21
Appalachian Region	0.18
Non-Appalachian U.S.	0.21
SUBREGIONS IN APPALACHIA	
Northern	0.19
North Central	0.17
Central	0.24
South Central	0.18
Southern	0.16
RURALITY IN APPALACHIA	
Large Metros (pop. 1 million +)	0.17
Small Metros (pop. <1 million)	0.17
Nonmetro, Adjacent to Large Metros	0.19
Nonmetro, Adjacent to Small Metros	0.20
Rural (nonmetro, not adj. to a metro)	0.24
ECONOMIC STATUS IN APPALACHIA	
Distressed	0.23
Non-Distressed	0.18
At-Risk	0.20
Transitional	0.18
Competitive	0.17
Attainment	0.16
STATES IN APPALACHIA	
Alabama	0.16
Appalachian Alabama	0.16
Non-Appalachian Alabama	0.16
Georgia	0.18
Appalachian Georgia	0.16
Non-Appalachian Georgia	0.18
Kentucky	0.19
Appalachian Kentucky	0.24
Non-Appalachian Kentucky	0.17
Maryland	0.20
Appalachian Maryland	0.17
Non-Appalachian Maryland	0.21
Mississippi	0.16
Appalachian Mississippi	0.19
Non-Appalachian Mississippi	0.15
New York	0.51
Appalachian New York	0.21
Non-Appalachian New York	0.53
North Carolina	0.19
Appalachian North Carolina	0.19
Non-Appalachian North Carolina	0.19
Ohio	0.18
Appalachian Ohio	0.19
Non-Appalachian Ohio	0.18
Pennsylvania	0.21
Appalachian Pennsylvania	0.18
Non-Appalachian Pennsylvania	0.23
South Carolina	0.19
Appalachian South Carolina	0.17
Non-Appalachian South Carolina	0.19
Tennessee	0.18
Appalachian Tennessee	0.18
Non-Appalachian Tennessee	0.18
Virginia	0.20
Appalachian Virginia	0.20
Non-Appalachian Virginia	0.19
West Virginia (entire state)	0.19

Data source: USDA Food Environment Atlas, 2015 edition. U.S. Department of Agriculture. http://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx.

Overview: Grocery Store Availability in the United States

Figure 95 shows the variation in the number of grocery stores per 1,000 population across the United States. Much of the eastern United States hovers around the national average. There is less access in the South, throughout parts of Texas, and into the Southwest. Parts of the northern Rocky Mountains, as well as pockets in the Plains states, have high grocery store availability. Overall, there is substantial variation from region to region, as well as within individual states.

Figure 95: Map of Grocery Stores per 1,000 Population in the United States, 2012
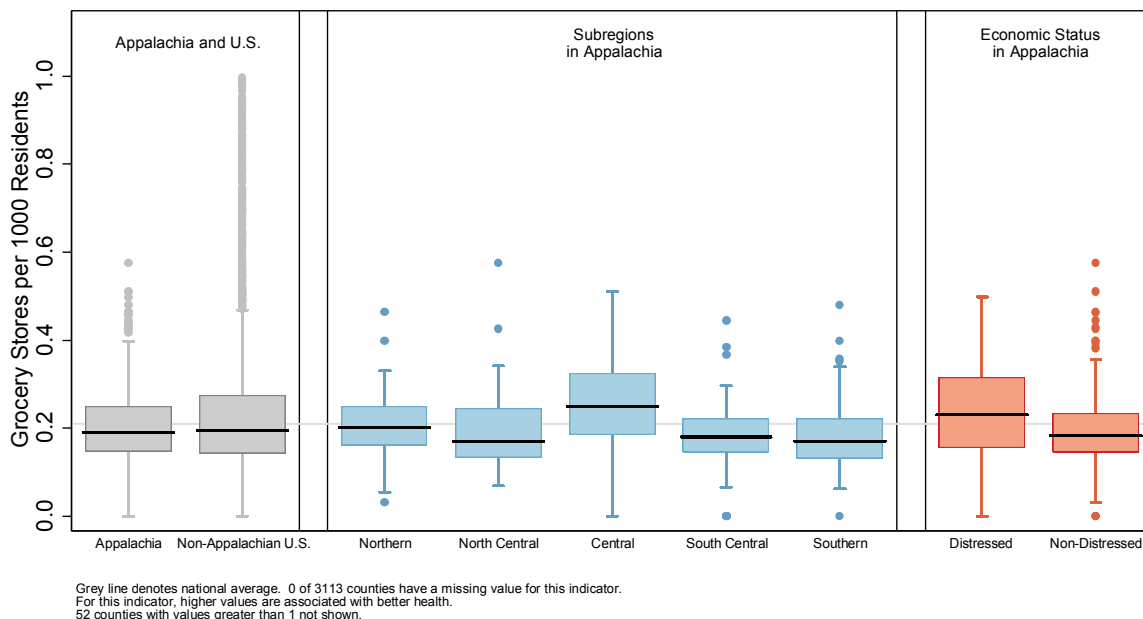

Data source: USDA Food Environment Atlas, 2015 edition. U.S. Department of Agriculture. http://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx.

Distribution of Grocery Store Availability

Figure 96 shows the distribution of grocery stores by geography and economic status. The shaded boxes show the middle 50 percent of all values for each group, with dots representing unusually high or low values. The gray line stretching across the width of the graph indicates the national average, and the black lines inside the shaded boxes indicate the median for each respective group. Of the 3,113 counties in the nation, zero have a missing value for this indicator, and 52 counties with values greater than 1 are not represented in the box plot.

Figure 96: Box Plot of Grocery Stores per 1,000 Population by Geography and Economic Status, 2012

Grey line denotes national average. 0 of 3113 counties have a missing value for this indicator.
For this indicator, higher values are associated with better health.
52 counties with values greater than 1 not shown.

Data source: USDA Food Environment Atlas, 2015 edition. U.S. Department of Agriculture. http://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx.

The distribution of grocery stores among national quintiles for Appalachian counties is shown in Table 35. Of the 420 counties in the Region, 70 (17 percent) rank in the worst-performing national quintile, while 39 (9 percent) rank in the best-performing national quintile.

Table 35: Distribution of Grocery Stores per 1,000 Population among National Quintiles for Appalachian Counties

Indicator	Best Quintile		2nd Best Quintile		Middle Quintile		2nd Worst Quintile		Worst Quintile	
	#	Pct.	#	Pct.	#	Pct.	#	Pct.	#	Pct.
Grocery store availability	39	9%	99	24%	116	28%	96	23%	70	17%

Data source for authors' calculations shown above: Appalachian_Health_Disparities_Data.xlsx. The number of counties across all five quintiles for this indicator may not sum to 420 due to missing or suppressed values.

CREATING A CULTURE OF HEALTH IN APPALACHIA
DISPARITIES AND BRIGHT SPOTS

KEY FINDINGS | Student-Teacher Ratio

- The Appalachian Region's student-teacher ratio is 14.3, which is a lower (better) ratio than the national average of 16.5.

- There is little difference in the student-teacher ratios among the five Appalachian subregions, with values ranging from 13.6 to 15.0, all of which are lower (better) than the national mark.

- The Appalachian Region's student-teacher ratio in rural counties is 13.7, which is better than the 14.7 ratio in the Region's metro counties.

- The Appalachian Region's student-teacher ratio in distressed counties is 14.7, which is only slightly higher than the 14.3 in the Region's non-distressed counties.

Background

The student-teacher ratio measures the supply of teachers per K–12 student. The data cover the 2013–14 period and are reported by the U.S. Department of Education's National Center for Education Statistics. Higher quality education is associated with greater levels of health literacy, which allows students and then adults, to make smarter, more-informed decisions regarding their health.

Research has shown that class size is a significant predictor of student achievement and that lower student-teacher ratios represent better educational systems. These improved educational outcomes—and greater health literacy—can then be expected to lead to better overall health over a lifetime (National Institutes of Health, Office of Behavioral and Social Sciences Research, 2015).

This measure differs from other class size variable calculations, as it includes resource teaching staff members along with teachers. However, it remains comparable in interpretation. The student-teacher ratio gives an approximation of the amount of individualized attention from teachers that is available to each student. Higher values represent lower availability of teaching staff, and thus suggest lower education quality.

Overview: Student-Teacher Ratios in the Appalachian Region

The average student-teacher ratio in the Appalachian Region is 14.3, which is lower (better) than the national average of 16.5. All of the subregions in Appalachia have lower student-teacher ratios than the national average. The Central Appalachian subregion has the highest ratio, at 15.0, while the Northern Appalachian subregion has the lowest ratio, at 13.6.

The Appalachian Region's student-teacher ratio in rural counties is 13.7, which is somewhat better than the 14.7 reported in the Region's metro counties. The Appalachian Region's student-teacher ratio in distressed counties is 14.7, compared to 14.3 in non-distressed counties.

Among the Appalachian portions of states, Appalachian New York has the lowest student-teacher ratio at 11.2 and Appalachian Georgia has the highest student-teacher ratio at 16.1. This ratio in Appalachian Georgia is slightly below the national average. Outside of Georgia and South Carolina, the Appalachian portions of each state in the Region report lower (better) student-teacher ratios than the non-Appalachian portions.

Figure 97 shows the student-teacher ratios for Appalachian counties, grouped by national quintiles. Darker blue indicates higher numbers of students per teacher; for this measure, higher values are associated with worse health. There is considerable variation throughout the Region for this measure. There are concentrations of counties with high student-teacher ratios in all five of the subregions. Likewise, there are counties with low student-teacher ratios in each subregion, with noticeable pockets in both Northern and Southern Appalachia.

Figure 98 aggregates the data for a variety of geographies useful for comparison: the Region compared to both the U.S. as a whole and the non-Appalachian portion of the country, subregions throughout Appalachia, levels of rurality in Appalachia, and economic status in Appalachia. State-level aggregation is done at three levels: the entire state, and then both the Appalachian and non-Appalachian portions of each state.
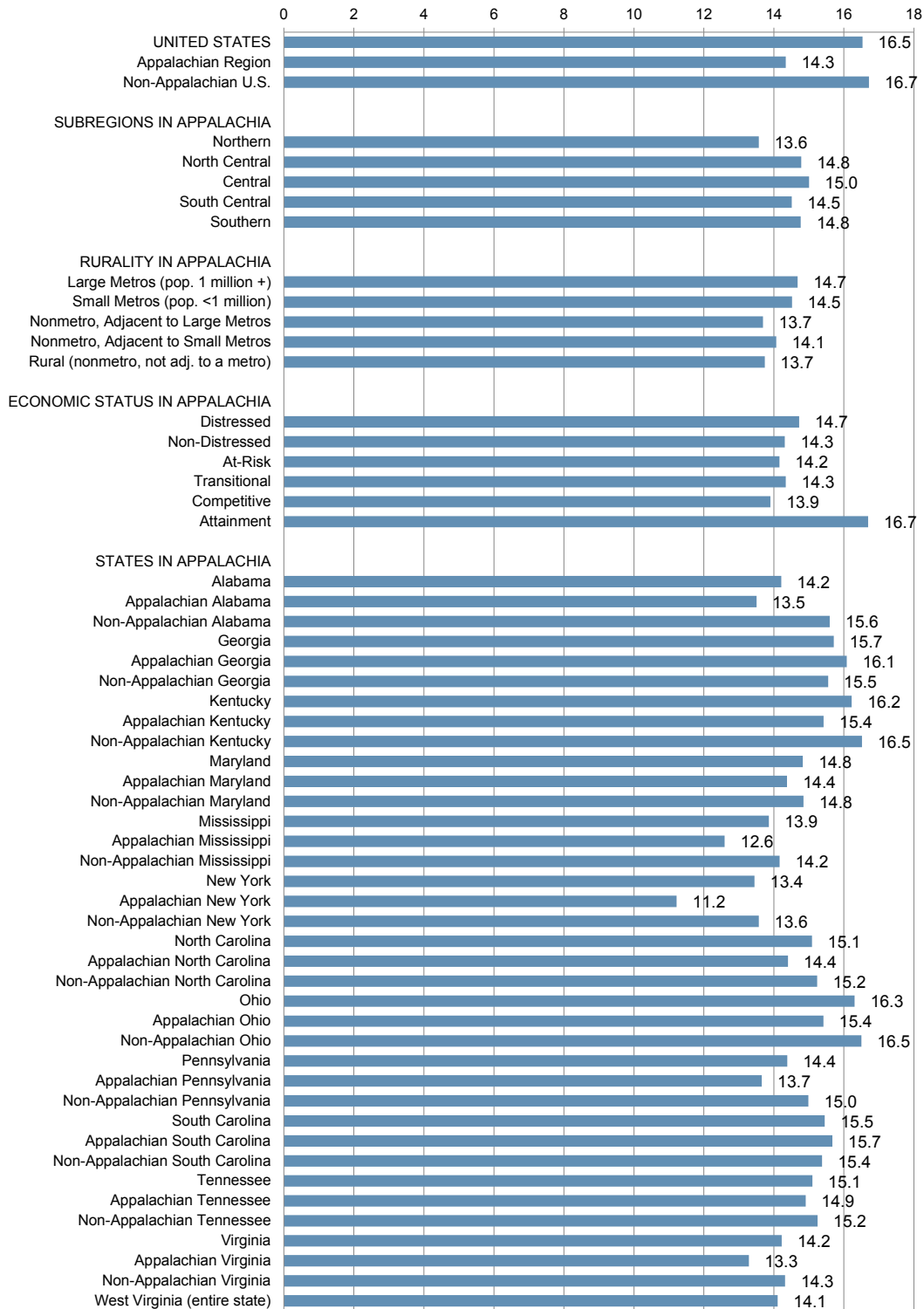
Figure 97: Map of Student-Teacher Ratios in the Appalachian Region, 2013–2014
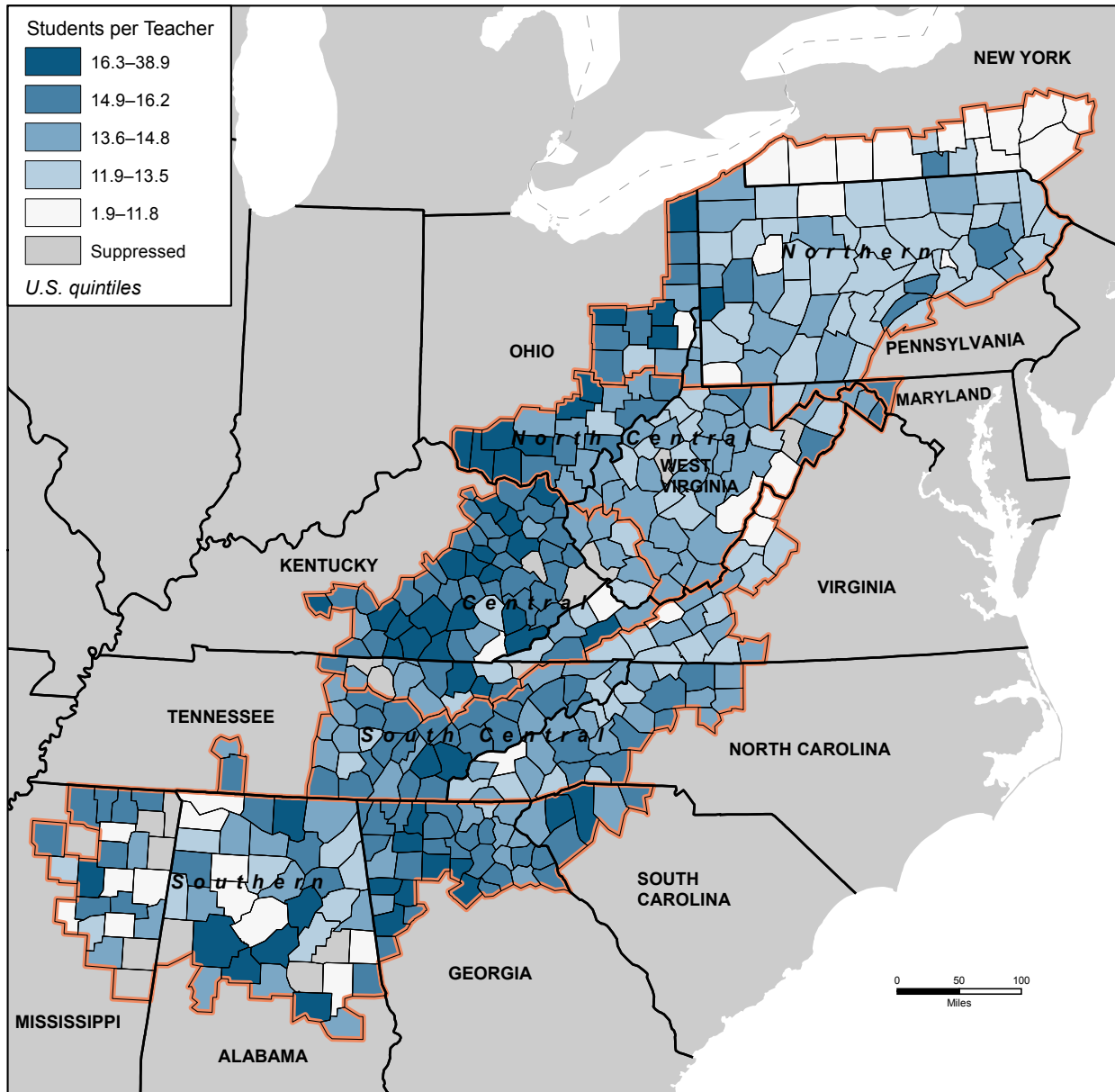
Data source: National Center for Education Statistics. U.S. Department of Education.
https://nces.ed.gov/ccd/elsi/tableGenerator.aspx.

Figure 98: Chart of Student-Teacher Ratios, 2013–2014

Category	Value
UNITED STATES	16.5
Appalachian Region	14.3
Non-Appalachian U.S.	16.7
SUBREGIONS IN APPALACHIA	
Northern	13.6
North Central	14.8
Central	15.0
South Central	14.5
Southern	14.8
RURALITY IN APPALACHIA	
Large Metros (pop. 1 million +)	14.7
Small Metros (pop. <1 million)	14.5
Nonmetro, Adjacent to Large Metros	13.7
Nonmetro, Adjacent to Small Metros	14.1
Rural (nonmetro, not adj. to a metro)	13.7
ECONOMIC STATUS IN APPALACHIA	
Distressed	14.7
Non-Distressed	14.3
At-Risk	14.2
Transitional	14.3
Competitive	13.9
Attainment	16.7
STATES IN APPALACHIA	
Alabama	14.2
Appalachian Alabama	13.5
Non-Appalachian Alabama	15.6
Georgia	15.7
Appalachian Georgia	16.1
Non-Appalachian Georgia	15.5
Kentucky	16.2
Appalachian Kentucky	15.4
Non-Appalachian Kentucky	16.5
Maryland	14.8
Appalachian Maryland	14.4
Non-Appalachian Maryland	14.8
Mississippi	13.9
Appalachian Mississippi	12.6
Non-Appalachian Mississippi	14.2
New York	13.4
Appalachian New York	11.2
Non-Appalachian New York	13.6
North Carolina	15.1
Appalachian North Carolina	14.4
Non-Appalachian North Carolina	15.2
Ohio	16.3
Appalachian Ohio	15.4
Non-Appalachian Ohio	16.5
Pennsylvania	14.4
Appalachian Pennsylvania	13.7
Non-Appalachian Pennsylvania	15.0
South Carolina	15.5
Appalachian South Carolina	15.7
Non-Appalachian South Carolina	15.4
Tennessee	15.1
Appalachian Tennessee	14.9
Non-Appalachian Tennessee	15.2
Virginia	14.2
Appalachian Virginia	13.3
Non-Appalachian Virginia	14.3
West Virginia (entire state)	14.1

Data source: National Center for Education Statistics. U.S. Department of Education.
https://nces.ed.gov/ccd/elsi/tableGenerator.aspx.

Overview: Student-Teacher Ratios in the United States

Figure 99 shows the variation in student-teacher ratios across the United States. Appalachia and much of the eastern half of the country is a blended mix of counties ranking in each of the national quintiles. Non-Appalachian Kentucky, Ohio, and Michigan all report very high ratios, as does much of the West. The western half of the Upper Midwest, Great Plains, and northern Rocky Mountains all have a large number of counties ranking in the best-performing national quintile. New England also reports very low ratios.

Figure 99: Map of Student-Teacher Ratios in the United States, 2013–2014
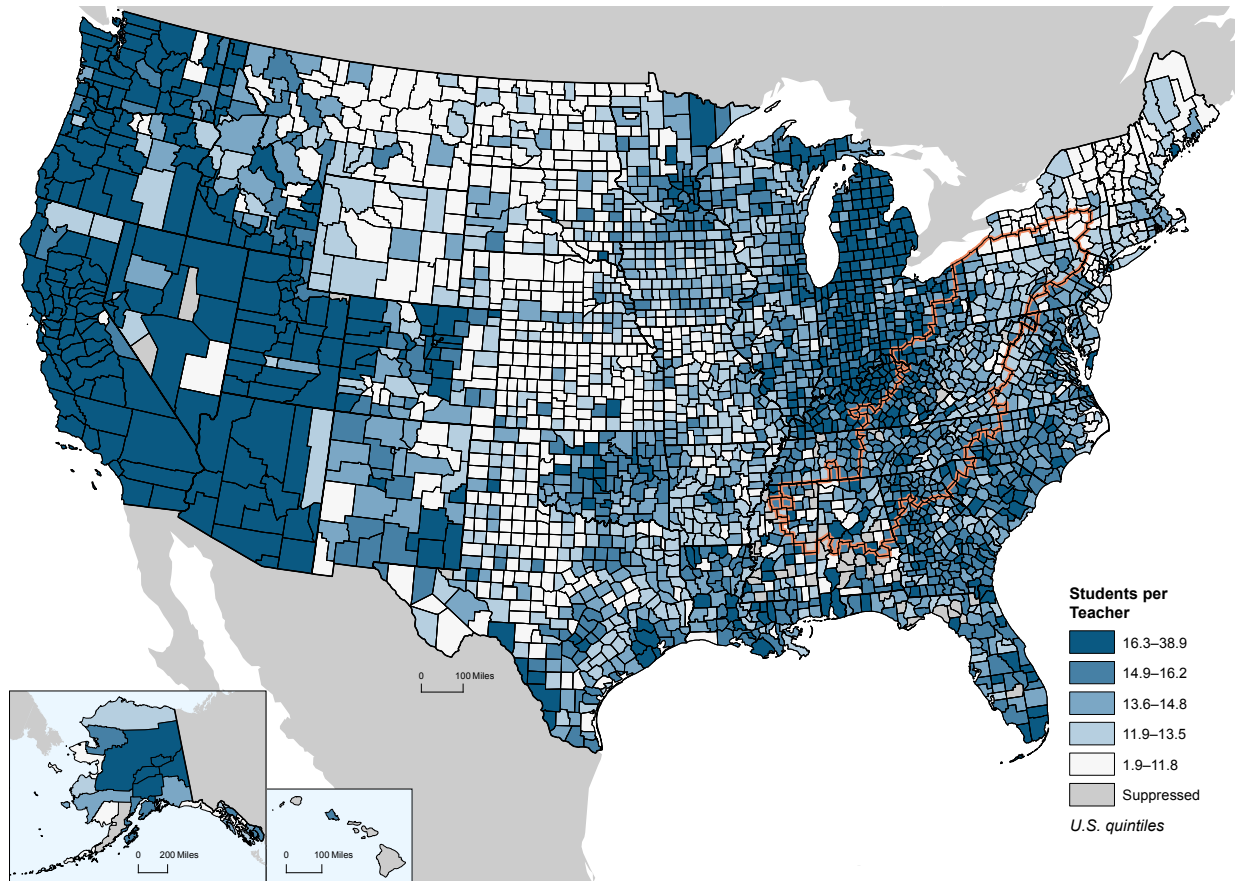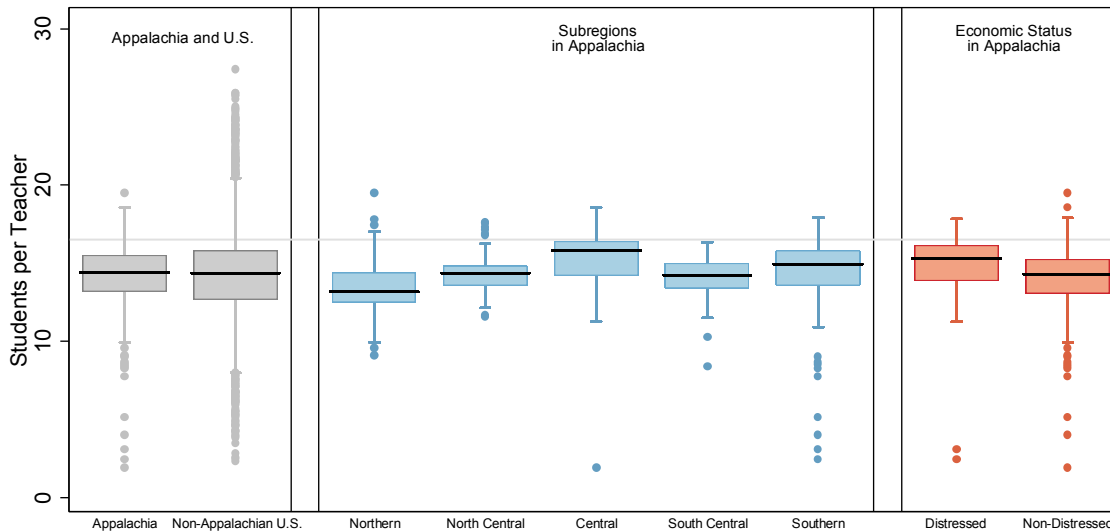

Data source: National Center for Education Statistics. U.S. Department of Education. https://nces.ed.gov/ccd/elsi/tableGenerator.aspx.

Distribution of Student-Teacher Ratios

Figure 100 shows the distribution of student-teacher ratios by geography and economic status. The shaded boxes show the middle 50 percent of all values for each group, with dots representing unusually high or low values. The gray line stretching across the width of the graph indicates the national average, and the black lines inside the shaded boxes indicate the median for each respective group. Of the 3,113 counties in the nation, 58 have a missing value for this indicator, and two counties with values greater than 30 are not represented. For this measure, higher values are associated with worse health.

Figure 100: Box Plot of Student-Teacher Ratios by Geography and Economic Status, 2013–2014

Grey line denotes national average. 58 of 3113 counties have a missing value for this indicator.
For this indicator, higher values are associated with worse health.
2 counties with values greater than 30 not shown.

Data source: National Center for Education Statistics. U.S. Department of Education.
https://nces.ed.gov/ccd/elsi/tableGenerator.aspx.

The distribution of student-teacher ratios among national quintiles for Appalachian counties is shown in Table 36. Of the 420 counties in the Region, 52 (12 percent) rank in the worst-performing national quintile, while 37 (9 percent) rank in the best-performing national quintile.

Table 36: Distribution of Student-Teacher Ratios among National Quintiles for Appalachian Counties

Indicator	Best Quintile		2nd Best Quintile		Middle Quintile		2nd Worst Quintile		Worst Quintile	
	#	Pct.	#	Pct.	#	Pct.	#	Pct.	#	Pct.
Student-teacher ratio	37	9%	85	20%	116	28%	115	27%	52	12%

Data source for authors' calculations shown above: Appalachian_Health_Disparities_Data.xlsx. The number of counties across all five quintiles for this indicator may not sum to 420 due to missing or suppressed values.

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