

Demographic and Socioeconomic Change in Appalachia

APPALACHIA AT THE MILLENNIUM: AN OVERVIEW OF RESULTS FROM CENSUS 2000

by

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About This Series

“Demographic and Socioeconomic Change in Appalachia” is a series of reports that examine demographic, social, and economic levels and trends in the 13-state Appalachian region. Each report uses data from the decennial censuses of 1990 and 2000, plus supplemental information from other data sources.

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Appalachian Regional Commission

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The Appalachian Regional Commission’s mission is to be an advocate for and partner with the people of Appalachia to create opportunities for self-sustaining economic development and improved quality of life.

An area that was among the focal points of President Lyndon Johnson's "War on Poverty" in the 1960s, the region known as Appalachia has received occasional attention since then—mainly for its economic hardship. Indeed, a landmark 1964 report by the President's Appalachian Regional Commission concluded that the region was different from other parts of the country. Not only did it suffer from geographic isolation, but its social and economic development lagged behind that of the rest of the United States. Although the original report discussed the diversity within the Appalachian region, it stressed Appalachia as a single entity (Isserman, 1996a).

Although it remains a distinct part of America, the Appalachian region is far from being homogeneous. What is now considered Appalachia stretches from the Northeast to parts of the old Confederacy. It includes pockets of rural isolation and parts of large (and sometimes rapidly growing) metropolitan areas. The beginning of the new millennium provides as good an opportunity as any to consider (1) the extent to which it is a single, unique region apart from the rest of America, and (2) the variation and diversity within its geographic boundaries. Results from the 2000 decennial census, the major tool for gleaning information about small areas, will help us provide some answers to these questions.

As its title indicates, this report provides a general overview of how Appalachia fared demographically, economically, and socially at the turn of the 21st century—as well as how its status changed during the 1990s. The report is the first of a series of studies that will provide great detail on these trends. Upcoming reports will examine in greater detail such phenomena as population growth, labor markets, poverty, racial and ethnic diversity, and education (see Table 1, page 2). This overview provides a summary look at the region and a preview of what will follow in future reports released in the coming months.

About the Appalachian Region

Appalachia, not surprisingly, refers to the area around the Appalachian Mountains. The Appalachian chain is the major mountain system of eastern North America, covering more than 1,500 miles of territory from the Canadian province of Quebec to northern Alabama. Included in the Appalachian chain are many smaller sections, including the Green Mountains in Vermont, the Allegheny Plateau in Pennsylvania, the Blue Ridge Mountains of the Virginias, and the Great Smoky Mountains along the North Carolina-Tennessee border.

The definition of Appalachia has varied through the years—focused mainly on economic types (Bogue and Beale, 1961; Beale, 1990, Bagi et. al., 1999). The one used in this report comes from the Appalachian Regional Commission (ARC). Created by the Appalachian Regional Development Act of 1965 (and most recently reauthorized in 2002), the ARC

Table 1

This overview is the first of a series of reports examining trends in Appalachia during the 1990s. The reports will cover the subjects listed below.

Population Change and Distribution
Labor Market Performance, Poverty, and Income Inequality
Geographic Concentration of Poverty
Migration and Immigration
Race and Ethnicity
Households and Families
Changing Age Structures
Educational Attainment
Housing and Commuting Patterns

is a partnership between the federal government and the governments of 13 states, whose purpose is to improve conditions in the Appalachian region. The region covers 410 counties¹ in 13 states (see Figure 1, page 3)—all of West Virginia, as well as southern New York; most of Pennsylvania; southeastern Ohio; the western portions of Maryland, Virginia, and the Carolinas; the eastern portions of Tennessee and Kentucky; the northern portions of Georgia and Alabama; and northeastern Mississippi (Appalachian Regional Commission, 2002a).

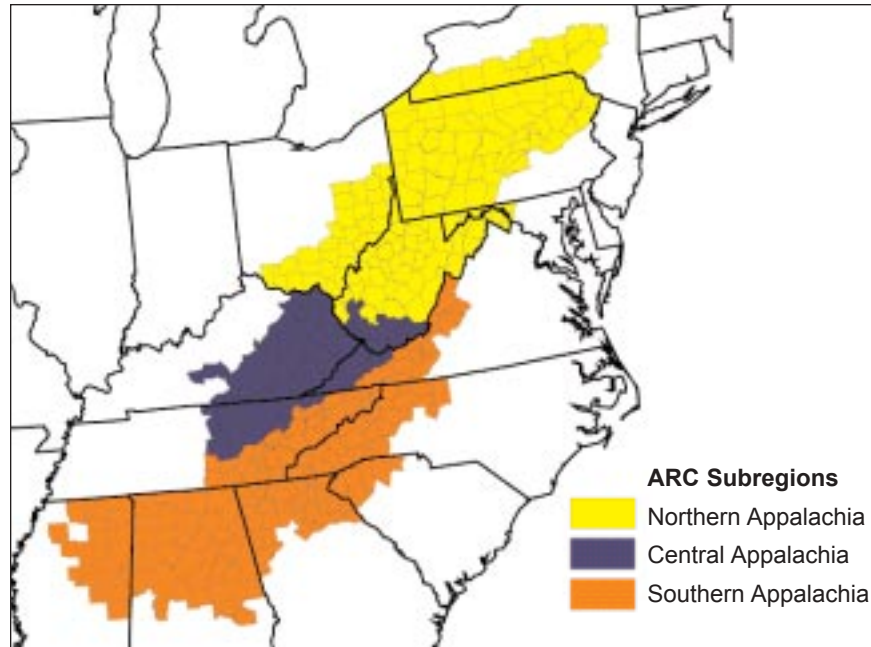
As defined by the ARC, the Appalachian region is divided into three major subregions. Northern Appalachia contains every Appalachian county in New York, Pennsylvania, Maryland, and Ohio, as well as 46 of West Virginia's 55 counties. Central Appalachia includes West Virginia's nine southernmost counties, all of Appalachian Kentucky, the southwestern tip of Virginia, and the northwest part of Tennessee's Appalachian area. Finally, southern Appalachia includes most of the Appalachian portion of Virginia and Tennessee, as well as the entire Appalachian sections of the Carolinas, Georgia, Alabama, and Mississippi (Appalachian Regional Commission, 2002b).²

¹ In addition to the 410 counties, the Appalachian region contains eight Virginia cities that are independent of any county authority (that is, they function like counties). For analytical purposes, the Appalachian Regional Commission—following the practice of the U.S. Bureau of Economic Analysis (BEA)—incorporates each independent city within an adjacent county, and this report follows that practice.

² The ARC created the current subregions in 1974 as a result of an analysis of several geographic, economic, and demographic factors. For a detailed analysis of the criteria used to define the three subregions, see the article, "The New Appalachian Subregions and their Development Strategies" (Appalachian Regional Commission, 1974). An earlier classification of Appalachia into four subregions is available in another article, "Experiment in Appalachia" (Appalachian Regional Commission, 1967).

Figure 1

Appalachia is a diverse region—one that encompasses all or part of 13 states and can be separated into three different subregions

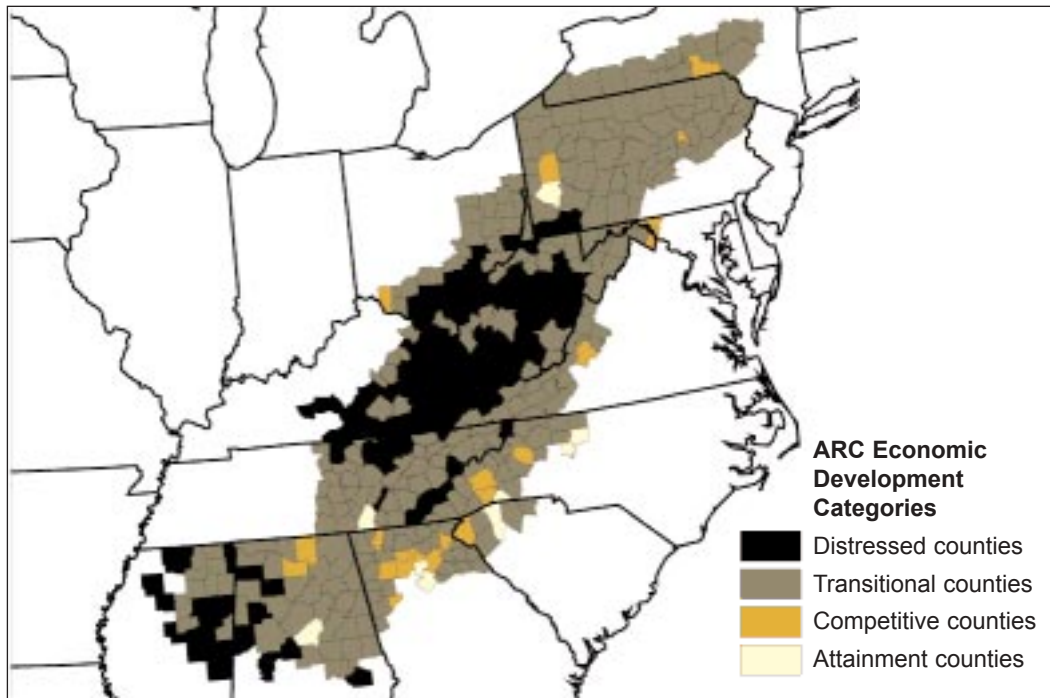


Source: Appalachian Regional Commission, 2002.

Of the 410 Appalachian counties, 109 are in metropolitan areas; these metropolitan counties comprise three-fifths of the region's population. Some of these are part of large metropolitan areas (areas of at least 1 million persons)—for example, Pittsburgh, Atlanta, and Washington, D.C. Others are part of mid-size metropolitan areas (areas between 250,000 and 1 million population), such as Knoxville, Tenn.; Scranton-Wilkes-Barre-Hazleton, Pa.; and Charleston, W. Va. And others are part of small metros (of less than 250,000 persons), virtually all of which consist of one or two counties. State College, Pa.; and Florence, Ala., are examples of this last type (Economic Research Service, U.S. Department of Agriculture, 2001). Roughly half of these metropolitan counties (55 in all) are in southern Appalachia, which includes parts of Atlanta and Birmingham within its boundaries. Another 47 counties are in northern Appalachia—home to Pittsburgh; Charleston, W. Va.; and the western exurbs of Washington, D.C. Central Appalachia is the most rural of the three sub-regions, with just seven metropolitan counties among the 87 in the region. The three metropolitan areas that have components in central Appalachia are Knoxville, Tenn.; Louisville, Ky.; and Huntington, W. Va.-Ashland, Ky., metro.

Figure 2

Based on their levels of economic development, Appalachian counties can be classified into four categories



Source: Appalachian Regional Commission, 2002.

The Appalachian region also has had a variety of economic experiences. Many areas continue to be almost as economically depressed as they were during the Johnson administration. Many other areas, however, have an economic status that approaches—and in some cases surpasses—that of the United States as a whole. Recognizing this fact, the ARC has developed a system that classifies Appalachia into four categories of economic development (see Figure 2). Each of these categories is based on three indicators of economic viability—per capita income, poverty, and unemployment.

As the category's name implies, *Distressed* counties are experiencing the greatest economic hardships. Counties in the Distressed category have per capita incomes no greater than 67 percent of the national average, and rates of poverty and unemployment at least 150 percent of the respective rates for the country as a whole. Counties with poverty rates at least 200 percent of the national average need only match one of the two remaining criteria to be classified as Distressed. As Figure 2 shows, Distressed counties are mostly in central Appalachia, although there are pockets elsewhere—notably in Ohio, Alabama, and Mississippi.

Counties classified as *Transitional* are noticeably worse off than the nation as a whole on at least one of the three economic indicators, but do not meet all of the criteria necessary to classify them as Distressed. As the name indicates, Transitional counties can be considered in an “intermediate” phase of economic development. Such areas have some characteristics that clearly are problematic, yet might also be close to (or even be better than) the national average on another key economic indicator. For example, Pickens County, S.C. (home to Clemson University), had a 1999 per capita income of slightly less than \$18,000—just 72 percent of the national average. Yet both its unemployment and poverty rates were better than those for the nation as a whole. The vast majority of Appalachian counties (259, predominately in northern and southern Appalachia) find themselves in this category.

Competitive counties are those that have per capita incomes between 80 percent and 99 percent of the national average, but have poverty and income rates at or lower than (i.e., better than) the national average. Competitive counties are those that increasingly resemble the rest of the country economically, yet have not achieved total economic parity. As the per capita income threshold indicates, however, Competitive counties are reasonably close even on this measure. (Indeed, the wide gap between its per capita income and the national average is what caused Pickens County, S.C., to be classified as Transitional rather than Competitive.) Most of the 21 Competitive counties are in southern Appalachia.

Finally, there are the counties in the *Attainment* category. Attainment counties have rates at or better than the national average on all three indicators—income, poverty, and unemployment. As the name implies, Attainment counties have achieved total economic parity with the nation as a whole; some of them would be among the most economically advanced counties in the nation. For example, 2000 census data show that Forsyth County, Ga., in suburban Atlanta, ranked among the top 100 counties nationally (out of 3,110)³ on income and unemployment, and among the top 150 on the poverty indicator. Nine counties are in the Attainment category, and all but one is part of a metropolitan area, such as Atlanta; Winston-Salem, N.C.; and Pittsburgh. (Allegheny County, Pa., which contains Pittsburgh, is the only Attainment county outside southern Appalachia.)

³ The 2000 census reports data for 3,141 counties and county equivalents (including independent cities that function as counties). That number shrinks to 3,110 when we follow the BEA practice of incorporating many independent cities into their adjacent counties.

Using data from the 2000 census, this report will provide a preliminary overview of selected demographic, social, economic, and housing patterns within the Appalachian region. Besides comparing Appalachia with the rest of the country, the report will examine (where applicable) the Appalachian counties with the non-Appalachian areas in their individual states. Comparisons also will be made between metropolitan and nonmetropolitan areas; between northern, central, and southern Appalachia; and among the ARC's four economic development categories.

The 2000 Decennial Census

The decennial census provides a detailed look at demographic, social, and economic characteristics for small areas. Besides being required by the U.S. Constitution to provide data for congressional apportionment, the census also provides the informational source for the distribution of nearly \$200 billion in federal funds. Many people in the public and private sector—including local officials and business people—rely on census data to make key decisions in such areas as transportation, housing, and economic development. And, the results from the 2000 census allow researchers to analyze the “state of the U.S. population”—how it (or various subgroups within the population) is faring at a given time.

Data from the Census 2000 “short form”—items that the census asked of every household in the country—include statistics on six items: age, sex, race, Hispanic origin, household relationship, and owner/renter status (tenure). From these data, one can analyze such characteristics as age structure, racial and ethnic diversity, composition of households, rate of homeownership, and vacancy status. Items from the census “long form” (asked of one-sixth of households nationwide) contain data on a variety of other characteristics—including labor force, industry, income and poverty, education, nativity, and housing costs. As these data are available for small areas, they can allow users to study not only individual areas, but different combinations of such areas, depending on the user's needs.

Demographic Characteristics

Population in 2000. The Appalachian region had 22.9 million people in 2000—8 percent of the total U.S. population of 281.4 million. Nine of 10 Appalachian residents live in either the

region's northern section (which had 10.1 million residents) or its southern one (with 10.7 million persons). In fact, the 2000 census marked the first time where more persons were counted in southern Appalachia than in northern Appalachia. Central Appalachia, by contrast, had about 2.2 million persons in 2000—just 9 percent of the region's population.

Among the states, the greatest number of Appalachian residents called Pennsylvania home; the Keystone State's 52 counties in the region had 5.8 million people in 2000 (see Table 2). That figure is more than twice the number of Appalachia's people who lived in Alabama, which had 2.8 million residents in its 37 counties in its region. The Appalachian sections of Tennessee and Georgia also had more than 2 million persons each—both surpassing the 1.8 million residents of West Virginia, the only state entirely in the Appalachian region. The fewest number of Appalachians lived in Maryland; just 236,000 lived in the Old Line State's three westernmost counties.

Table 2

Of Appalachia's 22.9 million residents in 2000, the greatest number lived in Pennsylvania, the fewest in Maryland.

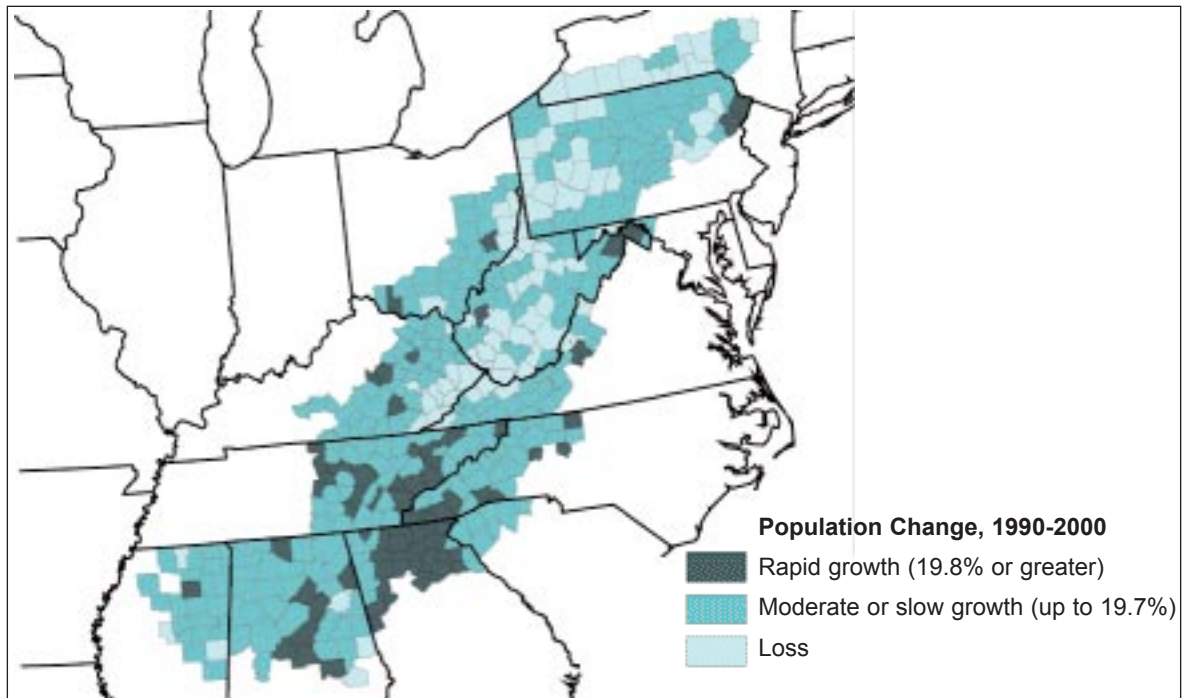
Area	2000 Population (in thousands)
APPALACHIA	22,894
Alabama	2,837
Georgia	2,208
Kentucky	1,142
Maryland	237
Mississippi	615
New York	1,073
North Carolina	1,526
Ohio	1,455
Pennsylvania	5,820
South Carolina	1,029
Tennessee	2,479
Virginia	665
West Virginia	1,808

Source: U.S. Census Bureau, 2000 Census.

About 13.2 million Appalachian residents—58 percent of the total—lived in the region's 109 metropolitan counties. About 62 percent of persons in both northern and southern Appalachia lived in metropolitan areas, compared to just 14 percent (312,000) of central Appalachia's residents. Among the economic development categories, the Transitional counties had the greatest number of residents—14.7 million, or 64 percent of Appalachia's total population. The nine Attainment counties had 3.2 million persons, nearly 400,000 more than the region's 121 Distressed counties. This is because all but one of the Attainment counties were part of metropolitan areas, while the Distressed counties were predominately rural in character. In fact, 82 of the Distressed counties had fewer than 25,000 residents in

Figure 3

Appalachia's 9 percent population growth in the 1990s masks rapid growth in some areas and population loss in others.



Source: U.S. Census Bureau, 2000 Census.

2000; 17 of those had populations under 10,000. As for the 21 Competitive counties, they were home to roughly 2.2 million Appalachian residents.

Population change in the 1990s. Taken in its entirety, the Appalachian region grew 9 percent in the 1990s, which was slower than the rest of the nation, which grew almost 14 percent. As was the case nationwide, however, Appalachia's growth pattern during the past decade was not uniform (see Figure 3). Southern Appalachia grew 18 percent (twice the regional average), and a number of counties in Georgia, Tennessee, North Carolina, and Alabama grew even faster. In all, 76 counties (58 of which were in southern Appalachia, but also including Pike and Monroe counties in northeastern Pennsylvania and Menifee County in Kentucky) were particular growth magnets, increasing their population at least 20 percent during the past decade—1.5 times the national average. (Forsyth County, Ga.—mentioned earlier as among the wealthiest counties nationwide—more than doubled its population between 1990 and 2000.)

By contrast, growth was slower in much of Appalachia's northern and central portions. Central Appalachia grew slightly less than 6 percent, which was less than one-third southern Appalachia's rate. Northern Appalachia barely grew at all; it had less than 2 percent more people in 2000 than it did in 1990. The situation was particularly stark for 83 Appalachia counties. These areas—mostly in New York, Pennsylvania, West Virginia, and the southeastern corner of Kentucky—all lost people during the 1990s. New York's Appalachian region was especially hard hit; 10 of its 14 counties lost population. So did 27 of West Virginia's 55 counties (although Putnam County outside Charleston, Monroe County in the southeast, and five counties in the state's panhandle all grew at least 15 percent—faster than the United States as a whole). And, although Pike and Morgan counties each grew more than 40 percent, 18 of Pennsylvania's 52 Appalachian counties had population losses in the 1990s.

Among the states, Appalachian Georgia grew the fastest—not really surprising considering that the Peach State was among the nation's growth leaders in the past decade. The Appalachian counties in Georgia (which include outlying portions of Atlanta's metropolitan area as well as some retirement areas) had especially rapid growth—43 percent between 1990 and 2000, which was twice the growth rate the rest of the state enjoyed. (Of Georgia's 37 Appalachian counties, 27 grew at least 20 percent during the decade.) The Appalachian sections of North Carolina (17 percent), South Carolina (16 percent), and Tennessee (15 percent) also proved to be attractive growth areas—although the non-Appalachian portions of all three states had faster rates of growth. (Conversely, Alabama's and Ohio's Appalachian sections—at 10 percent and 6 percent, respectively—had relatively low growth rates, but growth in these states was even slower outside those areas.)

By contrast, some states had particularly sluggish growth in their Appalachian sections. Maryland's Appalachian counties, for example, grew barely 5 percent—less than half the 11 percent growth in the rest of the state. The 4 percent increase in Virginia's Appalachian population was just one-fourth of the growth rate the rest of the Old Dominion experienced during the 1990s. Appalachian Pennsylvania and West Virginia each grew less than 1 percent, and the Appalachian portion of New York State actually lost people.

Appalachia's metropolitan counties grew slightly faster than its nonmetropolitan ones during the 1990s (9.5 percent vs. 8.6 percent). In northern Appalachia, however, it was the nonmetropolitan counties that grew faster—they grew nearly 4 percent, which was nearly 10

times the paltry 0.4 percent growth rate for the subregion's metropolitan counties. However, population growth in nonmetro northern Appalachia still lagged behind the growth that both metro and nonmetro counties in southern and central Appalachia experienced.

Among the economic development categories, the Competitive counties actually had the fastest rate of growth, increasing nearly 19 percent during the 1990s. The Attainment counties also grew faster than the non-Appalachian United States, collectively increasing their population 15 percent. Growth was more sluggish in the Transitional and Distressed counties; the population in those two categories increased 8 percent and 4 percent, respectively. An examination of rapidly growing counties (those that increased their population at least 20 percent during the 1990s) and counties that lost population highlights the contrasting fortunes of the Transitional and Distressed counties, however. Among the Transitional counties, 57 experienced rapid growth while 49 lost population. By contrast, just five of the Distressed counties grew at least 20 percent while 32 others shrunk.⁴

Racial and ethnic diversity. One of the major demographic stories of the 2000 census has been the growing racial and ethnic diversity of the country. Nearly one in three Americans (31 percent) was a member of a minority group (defined here as anyone who identified with a racial or ethnic group *other than* “non-Hispanic white”).⁵ The country's diversity is not universal, however, and one can understand that by looking at Appalachia. Racial and ethnic minorities made up only one in eight Appalachians (12 percent); they made up an even smaller share of northern and central Appalachians (7 percent and 4 percent, respectively). Southern Appalachia, with a 19 percent minority population, was more diverse than the region as a whole; in fact, southern Appalachia was home to 2 million of the region's 2.8 million residents who were members of minority groups. Of the 2.8 million minority Appalachians, two-thirds (1.8 million) were non-Hispanic black⁶, with Hispanics making up another one-sixth (465,000).

⁴ Two of the five Distressed counties that grew at least 20 percent (Cherokee County, N.C., and Meigs County, Tenn.) are among 32 Distressed counties that the ARC might reclassify as Transitional counties for Fiscal Year 2004 (FY2004). Five other Distressed counties targeted for reclassification (Hart and Lincoln in Kentucky, Jackson and Morgan in Tennessee, and Swain in North Carolina) also grew faster than the national growth rate of 13.2 percent. However, four Distressed counties that might go to the Transitional category in FY2004 (Pike County, Ky.; Benton County, Miss.; Monroe County, Ohio; and Lee County, Va.) actually lost people during the 1990s.

⁵ In Census 2000, persons were allowed to select more than one race. “Multiracial” persons—including non-Hispanic whites who also identified with another racial group—are included here among minorities.

⁶ Those persons who did not identify with another racial group.

Despite the relative lack of racial and ethnic diversity compared with the rest of the country, Appalachia is more diverse at the dawn of the 21st century than it was a decade earlier. In 1990, just 9 percent of Appalachians (1.9 million persons) were members of minority groups, compared with 25 percent of persons living outside the region. During the 1990s, in fact, the number of minorities in Appalachia increased nearly 50 percent—even faster than the 43 percent increase in the rest of the country. The number of Hispanics in Appalachia more than tripled between 1990 and 2000, and Hispanics accounted for more than one-third of the region's 929,000 additional minority residents in the region during that time.

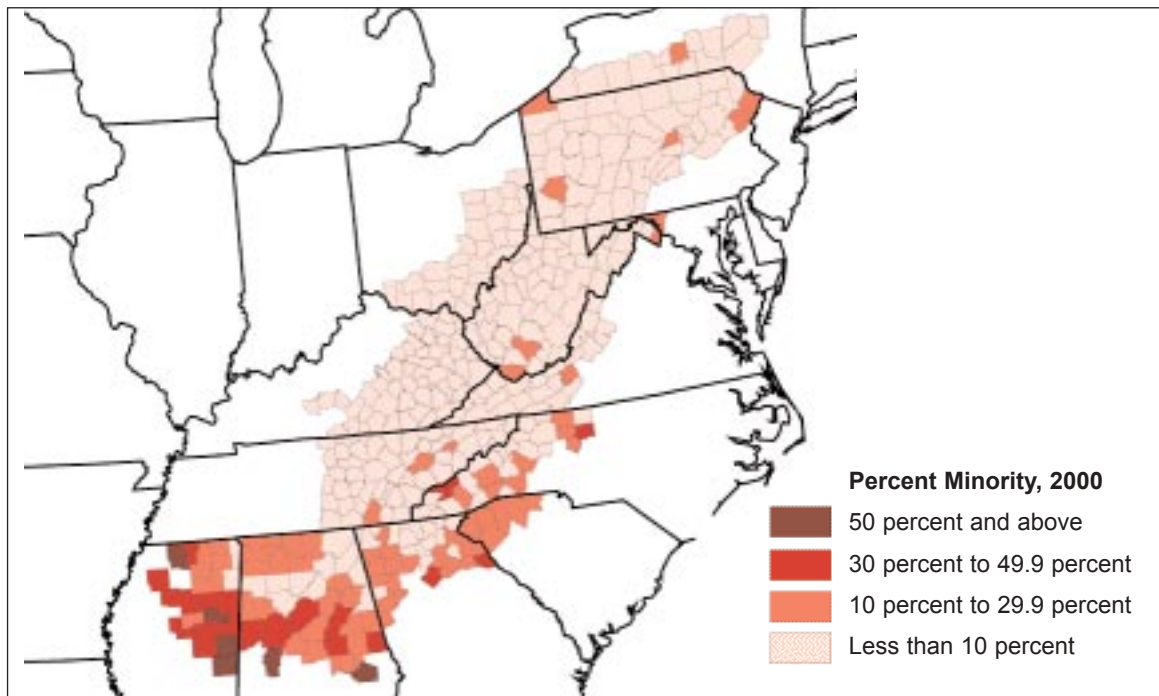
Just as is the case in the rest of the nation, children have been at the forefront of minorities' increasing presence in Appalachia. Of the region's 5.4 million children, 16 percent (869,000) were members of minority groups, compared with 41 percent for the non-Appalachian United States. In southern Appalachia, minorities are 24 percent of the under-18 population. While Appalachia clearly is not as racially or ethnically diverse as the rest of the country, the above figures suggest that minorities can expect to play an increased role in the region's future.

Among individual counties, the relative lack of racial and ethnic diversity is even starker (see Figure 4, page 12). Non-Hispanic whites are at least 90 percent of the total population in 310 of the region's 410 counties, and at least 95 percent in 215. Of Appalachia's 27 counties with minority populations of at least 30 percent, all but four are in either Alabama or Mississippi. In most of these counties—indeed, in most of the region's counties that are at least 5 percent minority—non-Hispanic African Americans are the predominant minority group.

Among the states in the Appalachian region, Alabama's Appalachian counties had the largest number of minorities (718,000); Mississippi's had the highest percentage (34 percent). Among states with Appalachian and non-Appalachian portions, Alabama was the only state where more minorities resided inside Appalachia than outside it. Minorities in 2000 were more than 20 percent of residents in Alabama's and South Carolina's Appalachian sections, and were nearly 20 percent of the population in Georgia's. These, however, were the exceptions; more than 90 percent of Appalachian residents in almost all the other states in the region were non-Hispanic white. In four states—Maryland, New York, Tennessee, and Virginia—the contrast was especially stark. Minorities were less than 10 percent of the population in the Appalachian portions of these states, but at least 30 percent outside the

Figure 4

Three-fourths of the counties in Appalachia were less than 10 percent minority.



Source: U.S. Census Bureau, 2000 Census.

region. Even in Mississippi and Alabama, minorities made up a smaller share in the Appalachian portion than in the rest of the state.

Most minority Appalachian residents (1.5 million of 2.8 million) lived in the Transitional counties—not surprising given the large number of Appalachians in those areas. Minorities, however, made up just 10 percent in those counties as a whole—the same percentage as in the Distressed counties. Minorities were a significantly greater presence in the Competitive and Attainment counties, where they were 14 percent and 22 percent of the population, respectively. It is perhaps no coincidence that virtually all the counties in these groups were in southern Appalachia, or that they were in metropolitan areas. Indeed, Appalachian counties in metro areas had larger minority concentrations than those in nonmetro areas—14 percent to 9 percent.

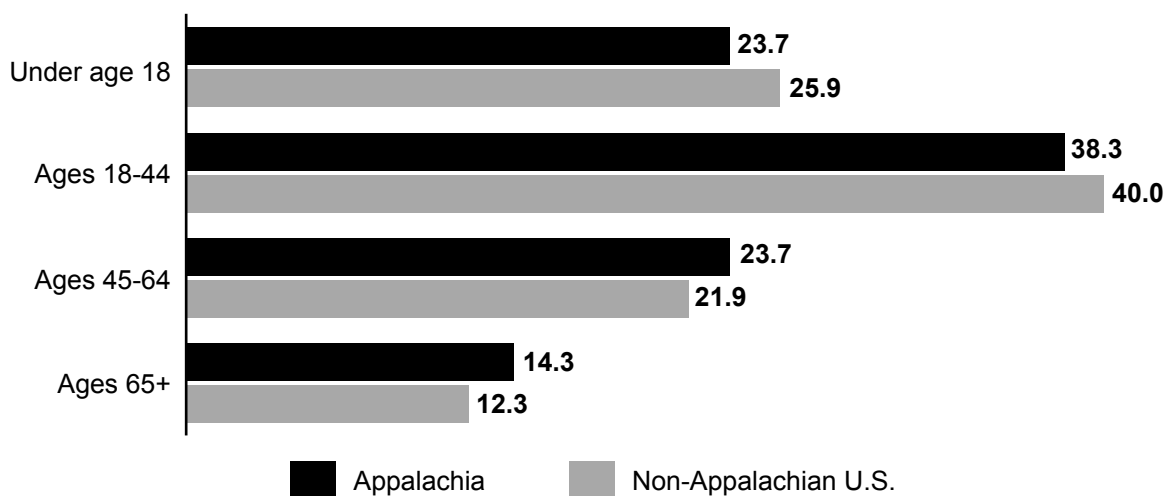
The 2000 census counted 219,000 multiracial persons—those who identified with more than one race—in Appalachia. While the multiracial population is less than 1 percent of the region's total population (and not even 3 percent of the rest of the country's), the very existence of a

“more than one race” option in the 2000 census form—and the fact that 219,000 Appalachian residents exercised that option—presages a significant change in the way Americans think about race. Additionally, children (who are at the forefront of the country’s diversity) make up 43 percent of Appalachia’s multiracial population. Those two facts suggest that persons identifying with more than one race will become a greater part of the Appalachian (and the total U.S.) population in future decades.

Age structure. Appalachian areas tend to have older populations than the country as a whole (see Figure 5). The region’s 5.4 million children under age 18 and 8.8 million younger working-age adults ages 18 to 44 made up smaller shares of the population in 2000 (24 percent and 38 percent, respectively), than children and younger adults do outside Appalachia (26 percent and 40 percent, respectively). At the other end of the age spectrum, Appalachia’s 3.3 million persons age 65 and older were 14 percent of the region’s population, compared to 12 percent in the rest of the country. All three Appalachian subregions and all four economic development categories followed this general pattern, although older people made up 16 percent of northern Appalachians and 13 percent of southern Appalachians. Moreover, this phenomenon is present in every state except Georgia, where both the Appalachian and non-Appalachian sections are

Figure 5

The population in the Appalachian region tended to be older than that of rest of the nation.



Source: U.S. Census Bureau, 2000 Census.

growing much faster than the national average due to high in-migration, which favors young adults.

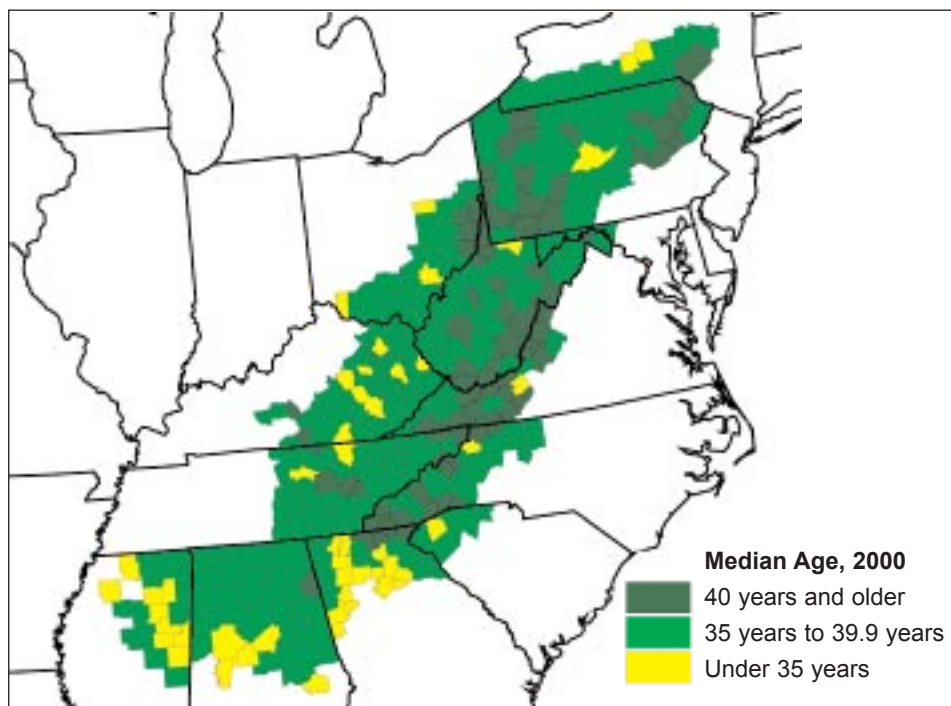
In some states, the gap between the Appalachian section and the rest of the state is particularly noticeable. In Appalachian Virginia, for example, children made up less than 21 percent and older people nearly 15 percent of the area's populace. By contrast, the respective shares were 25 percent and 11 percent in the Old Dominion's non-Appalachian portion. Pennsylvania, which has a greater concentration of older people than any other state except Florida (nearly 16 percent of the Keystone State's population was age 65 or older), illustrates this point further. In the state's Appalachian region, older people made up 17 percent of the population, compared to barely 14 percent for the rest of the state. At the local level, children made up less than 25 percent in about three-quarters of Appalachia's counties (289 out of 410); older people were at least 15 percent of the population in nearly half (180).

An examination of median age—the age at which half the population is older and the other half younger—also illustrates the point about Appalachia's older age structure. Appalachia's median age was 37.3 years in 2000, compared with 35.1 years in the rest of the country. Northern Appalachia had the highest median age (38.6); southern Appalachia, the lowest (36.2). The median age exceeded 39 years in Appalachian Pennsylvania (and almost did so in West Virginia), but was just 34 years in Georgia's Appalachian section. In 358 of the region's 410 counties, the median age was greater than 35 years (see Figure 6, page 15). It was at least 40 years in 83 of these counties—nearly every one in either the Distressed or Transitional category. Most of the counties where the median age was in the late 20s or early 30s were dominated by a major college or university, including Oktibbeha County, Miss. (Mississippi State University); Montgomery County, Va. (Virginia Tech and Radford University); Athens County, Ohio (Ohio University); Tompkins County, N.Y. (Cornell University and Ithaca College); and Centre County, Pa. (Pennsylvania State University).⁷

⁷ Other examples included: Rowan County, Ky. (Morehead State University); Watauga County, N.C. (Appalachian State University); Monongalia County, W.Va. (West Virginia University); Tuscaloosa County, Ala. (University of Alabama); and Pickens County, S.C. (Clemson University).

Figure 6

In one-fifth of Appalachia's 410 counties, the median age of the population was older than 40 years.



Source: U.S. Census Bureau, 2000 Census.

Economic Characteristics

Income and poverty. It was Appalachia's income and poverty levels in the 1960s that helped get the federal government to pay attention to the region in the first place—which ultimately led to the formation of the ARC. In 1960, per capita market income in the region was \$1,267, 77 percent of the U.S. average.⁸ Nearly one-third (31.1 percent) of the region's residents lived in poverty, compared with just over one-fifth (22.1 percent) of all Americans (Wood and Bischak, 2000).

The 2000 census found that Appalachian residents continued to have lower incomes than residents in the rest of the country, although the gap has narrowed some. Per capita income in 1999, for example, in the Appalachia region was \$18,200, 84 percent of the national average

⁸ The figure is in 1960 dollars.

(\$21,600). Ten years earlier, Appalachian residents' per capita income was 81 percent that of all Americans.⁹

Income differences were even greater within Appalachia. Central Appalachia, for example, had a per capita income of \$14,300, which was just 66 percent of the national average. By contrast, per capita income in southern Appalachia stood at \$19,200—89 percent that of the country as a whole. And of course (since income is one of the three criteria the ARC uses for economic development classification), income was significantly lower in the Distressed counties than in any of the other categories. For example, per capita income in the Distressed counties was \$13,800, nearly \$4,000 less than in the Transitional counties and about \$10,000 less than in the Attainment areas.

The poverty news from Census 2000 was more favorable for Appalachia. Just over 3 million Appalachian residents lived below the poverty level in 1999, 102,000 fewer than 10 years earlier. The region's poverty rate of 13.6 percent is nearly two percentage points lower than the 15.4 percent rate in 1989. And because the poverty rate in the rest of the nation dropped just 0.6 percentage points to 12.3 percent in 1999, the gap between Appalachia and the rest of the country is at its smallest in recent years.

As has been the case with other characteristics, there was a great deal of variation within Appalachia. More than one in five central Appalachians (22.1 percent) was poor in 1999, compared with one in eight residents of both northern and southern Appalachia (12.8 percent each). Poverty was more prevalent in nonmetropolitan counties (16.4 percent) than in metro ones (11.6 percent). And as expected, given poverty's inclusion as a criterion the ARC uses in its economic classification system, areas under greater economic stress had the highest poverty rates. Distressed counties in Appalachia had a poverty rate of 23.1 percent—nearly 10 percentage points higher than the rate in Transitional areas. In both Competitive and Attainment areas, just 10 percent of persons were poor—rates well below the overall national average. (Even in the Transitional counties, the poverty rate was slightly below that for all of Appalachia.)

⁹ There are major differences between the way the Census Bureau calculates per capita income and the method used by the Bureau of Economic Analysis (BEA). While the population estimates differ slightly, the major differences lie in the fact that the Census Bureau's income measure excludes employer contributions to pension and health funds, as well as some transfer payments (such as food stamps and Medicare). The BEA measure, by contrast, includes these sources. As a result, the 1999 per capita income levels as calculated by the BEA—\$27,800 for the United States, \$23,400 for Appalachia—are much higher than those in Census 2000. Even using the BEA numbers, however, per capita income in the Appalachian region is still 84 percent that of the national average (Bernat, 2003).

In six of the 12 states with Appalachian and non-Appalachian sections, poverty was less prevalent in the Appalachian counties (see Table 3). Fast-growing Appalachian Georgia, for example, had a poverty rate of just 9.2 percent, compared to 12.4 percent in the rest of the Peach State. And although the Appalachian sections of Alabama and Mississippi had higher poverty rates (14.4 percent and 19.4 percent, respectively) than Appalachia as a whole, the non-Appalachian sections of both states had higher rates.¹⁰ By contrast, poverty in Kentucky's and Virginia's Appalachian sections was noticeably higher than in the rest of their respective states. A staggering 24.4 percent of the Bluegrass State's Appalachian residents were poor, compared to just 12.4 percent elsewhere; in the Old Dominion, poverty was 15.7 percent inside

Table 3

Although poverty was higher in Appalachia than outside the region, the reverse was true in some states.

Number and percent of persons in poverty, 1999

AREA	APPALACHIA		NON-APPALACHIA SECTION	
	Number (1000s)	Percent of total population	Number (1000s)	Percent of total population
UNITED STATES	3,031	13.6	30,869	12.3
Alabama	397	14.4	301	19.2
Georgia	201	9.2	833	14.4
Kentucky	271	24.4	350	12.4
Maryland	261	1.7	413	8.4
Mississippi	116	19.4	432	20.1
New York	139	13.6	2,554	14.6
North Carolina	174	11.7	785	12.4
Ohio	192	13.6	979	10.2
Pennsylvania	640	11.4	664	10.6
South Carolina	117	11.7	431	14.9
Tennessee	343	14.2	404	13.0
Virginia	1001	5.7	556	9.0
West Virginia	316	17.9	—	—

Source: U.S. Census Bureau, 2000 Census.

¹⁰ Conversely, poverty in Maryland's Appalachian section (11.7 percent) was lower than that of the non-Appalachian United States, but was more than three percentage points higher than in the rest of the state (8.4 percent).

Appalachia and just 9 percent outside the region. Locally, Appalachia had five of the nation's poorest 25 counties (Owsley, Clay, Martin, and Magoffin counties in Kentucky, as well as McDowell County, W.Va.)—all with poverty rates above 36 percent (Mather, 2002). In 44 other Appalachian counties, however, poverty was less than 10 percent, with a low of 5.2 percent in Botetourt County, Va.

For the most part, poverty patterns among children and older people were consistent with those mentioned above. One finding, though, serves as an example of central Appalachia's depressed economic state. For the Appalachian region as a whole the poverty rate among persons age 65 and older (12 percent) was nearly six percentage points lower than the rate for children under age 18 (17.7 percent). However, a greater percentage of central Appalachia's *older people* (18 percent) were poorer than the percentage of *children* in either northern (16.9 percent) or southern Appalachia (16.2 percent).

Labor force and unemployment. According to McLaughlin, Litcher, and Matthews (1999), three characteristics related to the working world—labor force participation, occupation, and industry—are crucial in assessing the overall economic vitality of a locality. These measures provide information on a community's "human capital": whether that local area relies on older or less-skilled workers, or has a foothold in the new industries driving the American economy.

It would be hard to overstate the profound changes in the nation's economic structure over the last 100 years. At the dawn of the 20th century, for example, two-fifths of American workers were in agricultural jobs, while about another one-third were in manufacturing and other blue-collar jobs (Riche, 2000). The growing urbanization and industrialization of the country reduced the share of workers in farm-related jobs to less than 10 percent by 1960 (U.S. Census Bureau, 1975). Over the last half-century, and particularly in the last 30 years, the United States has undergone another transformation. More workers have moved into white-collar occupations, and a diverse service sector (which includes information specialists as well as convenience store clerks) increasingly drives the American economy. These profound economic shifts particularly have been felt at the regional and local level.

During the 1990s, labor force participation in Appalachia declined slightly for men, yet rose for women. About 67 percent of males age 16 and older were part of the Appalachian labor force in 2000, down from nearly 70 percent in 1990. Among Appalachian women, labor force participation was 53 percent, up from 51 percent 10 years earlier. Outside Appalachia,

participation remained slightly higher in 2000 for both sexes—71 percent for men, 58 percent for women.

As with many other characteristics, the differences were often greater within the region. In central Appalachia, for example, 58 percent of men and 45 percent of women were in the civilian labor force, compared with 71 percent of men and 56 percent of women in southern Appalachia. Participation was greater in metropolitan areas (70 percent for men, 55 percent for women) than in nonmetro ones (64 percent and 50 percent, respectively). Among the economic development categories, labor force participation rates ranged from 73 percent for men and 58 percent for women in the Attainment counties to 57 percent for men and 45 percent for women in the Distressed counties. In most states (Alabama, Georgia, and South Carolina being key exceptions), participation was higher outside the Appalachian regions than inside them (see Table 4). In Appalachian Kentucky, for example, 57 percent of men and 45 percent of women

Table 4

In most cases, labor force participation was lower in Appalachia than in the rest of the country.

Labor force participation of men and women ages 16 and older, 2000

AREA	APPALACHIA		NON-APPALACHIAN SECTION	
	Percent men in labor force	Percent women in labor force	Percent men in labor force	Percent women in labor force
UNITED STATES	67.5	53.3	71.0	57.9
Alabama	68.6	53.3	65.3	52.0
Georgia	75.9	59.8	72.1	59.3
Kentucky	57.3	45.3	72.2	58.1
Maryland	62.2	54.7	73.9	63.2
Mississippi	66.2	52.6	65.9	53.8
New York	67.3	56.5	67.8	55.1
North Carolina	69.6	56.1	73.5	59.8
Ohio	66.7	52.6	72.4	59.4
Pennsylvania	66.9	52.7	71.3	57.7
South Carolina	72.1	57.5	69.0	57.5
Tennessee	68.7	53.4	72.9	59.0
Virginia	62.0	49.7	74.7	61.8
West Virginia	61.9	47.6	—	—

Source: U.S. Census Bureau, 2000 Census.

were in the labor force. In the rest of the Bluegrass State, labor force participation was 72 percent for men and 58 percent for women—just above the national average.

Unemployment in Appalachia reflected two things: increasing parity on this measure with the rest of the country and the improved economic conditions nationwide during the 1990s. About 5.8 percent of the region’s civilian labor force (623,000 persons ages 16 and older) was unemployed in 2000, just barely about the 5.7 percent rate for the rest of the country. Ten years earlier, the unemployment rates were 6.8 percent for Appalachia and 6.2 percent for the non-Appalachian U.S.¹¹

While overall unemployment in Appalachia had reached near parity with the rest of the nation in 2000, there were significant intraregional variations. For example, the unemployment rate in 2000 was just 5.0 percent in southern Appalachia—significantly below the regional and national averages. By comparison, the rate was 6.2 percent in northern Appalachia and 7.5 percent in central Appalachia. Among the ARC’s economic development regions, unemployment patterns ranged from a low of 4.8 percent in the Attainment counties (and 4.3 in the Competitive counties) to a high of 8.6 percent in the Distressed counties. Among the states, unemployment varied significantly, ranging from less than 5 percent in Georgia and the Carolinas to 7 percent or higher in Mississippi’s, West Virginia’s, and Kentucky’s Appalachian sections.

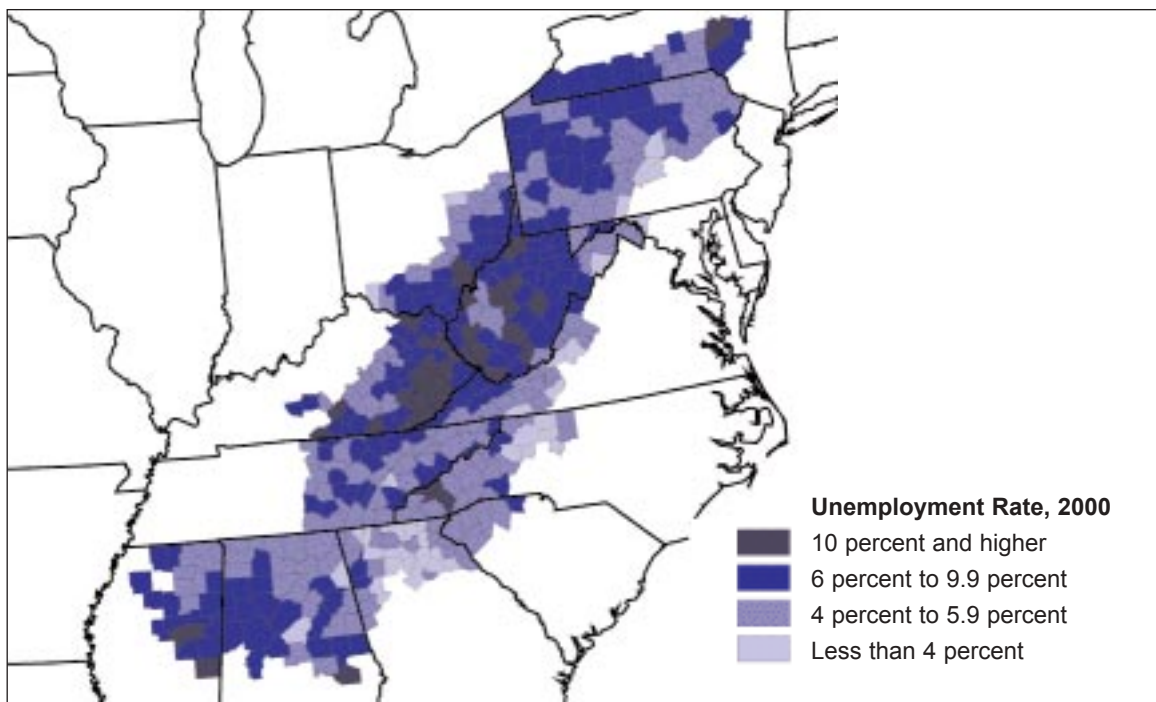
But it was among the Appalachian counties where unemployment variations were the greatest (see Figure 7, page 21). Unemployment was less than 5 percent in 107 of Appalachia’s 410 counties. Eighty of these counties were in southern Appalachia; 42 were in metropolitan areas. Fast-growing Georgia was especially noteworthy—30 of the Peach State’s 37 Appalachian counties had unemployment rates below 5 percent, and 18 had rates below 4 percent. (The latter figure represents nearly half of the 40 counties in all of Appalachia with less than 4 percent unemployment in 2000.) Conversely, 40 Appalachian counties—31 of which were in either Kentucky or West Virginia—had unemployment rates of 10 percent or more.

Occupation and industry. Of the 10.2 million persons in Appalachia’s work force, more than 2.9 million (29 percent) were managers or professionals, about 933,000 more (and seven

¹¹ Unemployment data as calculated in the census differs from the Local Area Unemployment Statistics (LAUS), calculated monthly by the Bureau of Labor Statistics and used in developing annualized rates. The LAUS data—which are the statistics most often in news reports on unemployment—are derived from household surveys, establishment surveys, and unemployment claims. By contrast, the Census 2000 figures are based on figures from a household survey at a single point in time. ARC uses the LAUS data to determine counties with persistent unemployment. More information is available at the LAUS website (www.bls.gov/lau).

Figure 7

At 5.7 percent in 2000, unemployment in Appalachia was on par with that in the rest of the country. But there were significant intraregional differences.



Source: U.S. Census Bureau, 2000 Census.

percentage points higher) than a decade earlier. Workers in these occupations were a smaller share of the Appalachian work force than of the work force elsewhere; in the rest of the United States, managers and professionals were 34 percent of workers. At the other end of the occupational spectrum, 20 percent of Appalachian workers—barely more than 2 million—were in the production-transport-moving occupations (i.e., lower-skilled, lower-paying jobs), compared to 14 percent of workers elsewhere.

Central Appalachia had a smaller share of its work force in the managerial and professional occupations (24 percent) than the other two subregions (29 percent each); conversely, central and southern Appalachia (22 percent and 21 percent of their respective work forces) were more likely to have workers in the lower-skilled jobs than northern Appalachia (18 percent of its work force). The economic development categories produced even greater contrasts. Managers and professionals represented 37 percent of the workers in Appalachia's Attainment counties, for example, compared with 24 percent in the Distressed counties. The share of workers in the

production-transport-moving occupations ranged from just 12 percent in the Attainment counties to 22 percent in the Distressed counties. Not surprisingly, the greatest differentials were at the local level. For example, managers and professionals were at least one-third of the work force in 24 Appalachian counties (all of which were part of major metro areas and/or housed major colleges and universities), but less than one-fifth of workers in 60 counties. Conversely, workers in the production-transport-moving occupations were at least one-fourth of the work force in 174 of the 410 counties in the region. These counties were largely rural in character—93 had fewer than 25,000 persons in 2000.

Appalachia's industrial structure at the dawn of the millennium resembled that of the rest of the country. That is, a large percentage of working-age adults were employed in a fast-growing and diverse service sector. This report defines this sector as including information services, finance, insurance, real estate, education, health and social services, entertainment and recreation, food service, public administration, and a host of other services. Persons employed in the service sector work in a variety of occupations—from those requiring college and advanced degrees (such as attorneys, bank managers, and teachers) to jobs requiring relatively few skills and no more than a high school diploma (for example, convenience store clerks, office couriers, and restaurant servers). Readers should consider these matters when considering information about the service industry.

In 2000, slightly more than 50 percent of Appalachian workers were in the service sector, compared with 38 percent of workers just a decade earlier (see Table 5, page 23). In the rest of the country, 57 percent of workers were in the service sector. Even in central Appalachia, 47 percent of workers were employed in the service sector. And in the Distressed counties, 48 percent of workers were similarly employed. By comparison, the service industries employed 58 percent of workers in the Attainment counties. Service-sector workers were at least 40 percent of employed persons in 309 of the 410 Appalachian counties and were at least 50 percent of workers in 124 counties.

Also like the rest of the country, Appalachia has become less dependent on manufacturing than it was 10 years earlier. Slightly less than 2 million workers were in manufacturing in 2000—178,000 fewer than was the case a decade earlier. Similarly, manufacturing employed a smaller share of Appalachia's workers in 2000 (19 percent) than in 1990 (23 percent). And, the share of workers working in the manufacturing sector declined in 357 of the region's 410

counties. Despite the declining numbers, however, Appalachia remained more dependent on manufacturing than the rest of the country, where just 14 percent of the workers were employed in the manufacturing industries (see Table 5). This was the case in virtually every state in the region (with Kentucky being the exception). In Mississippi's Appalachian section, nearly one-third of workers (31 percent) were employed in manufacturing, compared with just one-seventh of workers (15 percent) in the rest of the Magnolia State.

Within the Appalachian region, there is some variation. For example, manufacturing is more important to the economy outside metropolitan areas (employing 23 percent of workers) than within them, and more important in southern Appalachia (22 percent of workers) than in northern and central Appalachia (17 percent each). (A synergistic effect: In southern Appalachia's nonmetropolitan counties, manufacturing employed 28 percent of the workers.) Among the economic development categories, the Transitional counties and Competitive counties had a greater share of workers in manufacturing (21 percent and 20 percent, respectively) than the Distressed counties (17 percent, thanks partly to a relatively high share of workers in agriculture) and Attainment counties (13 percent, largely the result of their high percentage of service-sector workers). And despite its falling share in most Appalachian

Table 5

The Appalachian economy has become increasingly service-based and less dependent on manufacturing. However, Appalachia remains more dependent on manufacturing than the rest of the country.

Workers ages 16 and older in service and manufacturing sectors, 1990 and 2000

YEAR/SECTOR	APPALACHIA		NON-APPALACHIAN U.S.	
	Number (1000s)	Percent	Number (1000s)	Percent
1990				
Services	3,475	38.1	47,929	45.0
Manufacturing	2,140	23.4	18,322	17.2
2000				
Services	5,148	50.3	68,431	57.3
Manufacturing	1,962	19.2	16,324	13.7

Note: Included among "services" are finance, insurance, real estate, professional services, information, entertainment, recreation, education, health and social services, and public administration.

Source: U.S. Census Bureau, 2000 Census.

counties during the 1990s, manufacturing still employed at least one-fifth of the workers in 236 of them, and at least one-fourth of the workers in 141 counties. Conversely, in 112 counties in the region, less than 15 percent of workers were in manufacturing.

As Appalachia has become less dependent on manufacturing during the 1990s, so has it become equally less dependent on the “extractive” industrial sectors of agriculture, forestry, fishing, and mining. Just 219,000 workers—about 133,000 fewer than in 1990 and just 2 percent of Appalachia’s work force—were employed in these four sectors in 2000. The percentage of Appalachian workers in these industries matched the share in the rest of the country. There were, however, some noticeable differences within Appalachia. In central Appalachia, 6 percent of workers were in the four “extractive” industries—mainly in mining. The share in these industries was at least 10 percent in 21 counties, all of which were rural counties in Kentucky and the Virginias. In Wyoming County in southern West Virginia, 21 percent of workers remained employed in agriculture, forestry, fishing, or mining. Even in these counties, however, a much larger share of workers—more than half in many counties—were in the professional services, emphasizing the transition of Appalachia (and the rest of the country) to a service-driven economy.

Education and Other Social Characteristics

Education. Education has long been seen as the major ticket to upward mobility in American society. A well-educated populace is best prepared to meet the demands of a complex and changing society, as well as to participate fully in today’s global economy. Over the last 20 years, that increasingly has meant education beyond the high school level; indeed, more high-paying jobs today require at least some college education. During his administration, former President Bill Clinton stated his desire to see most Americans complete at least two years of college in order to take advantage of these jobs (Public Broadcasting Service, NewsHour Online, 2002). President George W. Bush likewise has made educational achievement a hallmark of his administration (White House, 2002).

Adults in Appalachia are more likely to have completed high school and college than ever before. In 2000, 77 percent of Appalachian residents age 25 and older have completed high school, up from 68 percent in 1990. Likewise, the share of Appalachians with at least a bachelor’s degree rose from 14 percent to 18 percent during the 1990s. However, educational

attainment remains lower in Appalachia than in the rest of the country. Outside Appalachia, about 81 percent of adults had at least a high school education in 2000; 25 percent had at least a college degree. And although the high-school gap between Appalachia and the rest of the country narrowed during the 1990s (from seven percentage points to four percentage points), the college degree gap remained as wide in 2000 as in 1990.

As noticeable as the differences were between Appalachia and the rest of the country, however, they often were more pronounced within Appalachia (see Table 6, page 26). For example, 81 percent of northern Appalachian adults had a high school diploma in 2000, compared with 75 percent of southern Appalachians and just 64 percent of central Appalachians. College graduates were more prevalent in southern and northern Appalachia (19 percent and 18 percent, respectively) than in central Appalachia (11 percent). Educational attainment was higher in metropolitan counties (81 percent high school, 21 percent college) than in nonmetropolitan areas (72 percent high school, 13 percent college). And as one would expect, high school completion varied significantly among the ARC's four economic development categories. High school completion rates ranged from 85 percent of adults in the Attainment counties to just 66 percent of adults in the Distressed counties. Additionally, 29 percent of adults in the Attainment counties had at least a bachelor's degree in 2000—19 points higher than the rate among adults in the Distressed counties and four percentage points higher than in the non-Appalachian U.S.

Among most of the states in the region, high school and college completion was lower than in their Appalachian sections than in the rest of the state. In some cases, the gap was quite wide. For example, 70 percent of adults in Appalachian Virginia had finished high school and 15 percent had at least a college degree in 2000, compared to 83 percent and 31 percent, respectively, in the rest of the Old Dominion. In Maryland and Ohio, the share of adults with a bachelor's degree was at least 10 percentage points lower in their Appalachian sections than outside them. There were a few exceptions, however. Appalachian residents in Alabama, New York, and Pennsylvania had higher high school completion rates in 2000 than each state's non-Appalachian residents, and Alabama's Appalachian section also had a higher share of college graduates than the rest of the Yellowhammer State. Housing a major college or university helped, as many of the counties where both the high school and college attainment rates were above the national average contain a well-known institution of higher learning. Included in this group were Tompkins County, N.Y. (Cornell University and Ithaca College); Centre County, Pa.

Table 6

Educational attainment was lower in Appalachia than in the rest of the country. This was especially true in some parts of the region.

Number and percent of persons ages 25 and older who are high school and college graduates, 2000

AREA	HIGH SCHOOL GRADUATES		COLLEGE GRADUATES	
	Number (1000s)	Percent	Number (1000s)	Percent
APPALACHIA	11,744	76.8	2,712	17.7
NON-APPALACHIAN U.S.	134,752	80.7	41,750	25.0
Northern Appalachia	5,523	81.2	1,204	17.7
Central Appalachia	926	64.1	154	10.7
Southern Appalachia	5,295	75.2	1,354	19.2
Distressed counties	1,191	65.3	186	10.2
Transitional counties	7,500	76.8	1,561	16.0
Competitive counties	1,016	78.4	259	20.0
Attainment counties	2,037	84.6	707	29.4
Appalachian sections of:				
Alabama	1,408	75.4	360	19.3
Georgia	1,088	76.7	298	21.0
Kentucky	470	62.5	79	10.5
Maryland	127	78.6	23	14.4
Mississippi	262	68.1	54	14.0
New York	574	83.1	144	20.8
North Carolina	795	75.8	201	19.1
Ohio	743	78.2	117	12.3
Pennsylvania	3,293	82.7	759	19.1
South Carolina	509	75.3	139	20.6
Tennessee	1,234	73.4	290	17.2
Virginia	312	69.8	66	14.8
West Virginia	928	75.2	183	14.8

Source: U.S. Census Bureau, 2000 Census.

(Pennsylvania State University); Montgomery County, Va. (Virginia Tech and Radford University); Monongalia County, W.Va. (West Virginia University); and Knox County, Tenn. (University of Tennessee).

In-state ties. Because of its relative geographic isolation, Appalachia has not been a top destination for people from outside the region to settle down. As a result, many Appalachian residents retain long-standing ties to the region.

In 2000, nearly three-fourths (73 percent, or 16.8 million) of Appalachia's persons were born in their state of residence, compared with less than three-fifths (59 percent) of non-Appalachians (see Table 7). In-state nativity actually was less common in Appalachia than it was in 1990, when 77 percent of the region's residents were born in their state of residence. Some of these residents might have been born outside the Appalachian region (and vice-versa for non-Appalachian residents of the ARC states). However, even when only the 13 ARC states are considered, 64 percent of non-Appalachian residents are native to their home states—a full nine percentage points lower than the share for their Appalachian counterparts.

In-state nativity was more common in northern and central Appalachia, where 79 percent and 77 percent of the residents, respectively, were born in their state of residence. In Appalachian Pennsylvania alone, 83 percent of the population was born in the Keystone State. Similarly, Kentucky was the birthplace of almost 80 percent of the Bluegrass State's Appalachian residents (see Table 7). In southern Appalachia, by contrast, just 67 percent of the

Table 7

Appalachian residents were more likely to have long-standing ties to the region than persons in the rest of the country.

Persons born in their state of residence, 2000

AREA	APPALACHIA		NON-APPALACHIAN SECTION	
	Number (1000s)	Percent of total population	Number (1000s)	Percent of total population
UNITED STATES	16,811	73.4	151,919	58.8
Alabama	2,118	74.7	1,144	71.1
Georgia	1,230	55.7	3,505	58.6
Kentucky	909	79.6	2,071	71.4
Maryland	162	68.3	2,449	48.4
Mississippi	475	77.1	1,639	73.5
New York	822	76.6	11,563	64.6
North Carolina	1,023	67.0	4,050	62.1
Ohio	1,112	76.4	7,373	74.5
Pennsylvania	4,809	82.6	4,735	73.3
South Carolina	679	66.0	1,890	63.4
Tennessee	1,667	67.2	2,012	62.7
Virginia	463	69.6	3,213	50.1
West Virginia	1,343	74.2	—	—

Source: U.S. Census Bureau, 2000 Census.

population was born in their state of residence. In Georgia's fast-growing Appalachian region, that percentage was just 56 percent. (In Gwinnett County in suburban Atlanta, as well as in Catoosa and Dade counties on the Tennessee border, less than 40 percent of the residents were native to the Peach State.)

In nearly every state in the region, in-state nativity was more common in the Appalachian counties than elsewhere. While the gap was relatively narrow in some states, it was quite wide in others. In Virginia, for example, nearly 70 percent of Appalachian residents were born in the Old Dominion, compared to 50 percent of persons in the rest of the state. Maryland provides another contrast—68 percent of the residents of the three Appalachian counties were born in the Old Line State, versus 48 percent of non-Appalachian Marylanders. Georgia was the one state where in-state nativity was higher outside Appalachia (59 percent) than inside the region (56 percent).

Among the economic development areas, in-state nativity is more common among the economically disadvantaged counties. Four in five residents of the Distressed counties (80 percent) and three in four residents in the Transitional counties (76 percent) were born in their state of residence. By contrast, fewer than two in three residents of the Competitive and Attainment counties (67 percent and 64 percent, respectively) could say the same. This suggests the relative attraction that areas that are stronger economically have on potential migrants. In-state nativity was more prevalent in Appalachia's nonmetropolitan areas (76 percent) than its metro ones (72 percent). And locally, in-state nativity was at least 85 percent in 73 of Appalachia's 410 counties, less than 50 percent in 21 others.

An examination of migration patterns during the latter half of the 1990s suggests similar patterns. For example, about 8 percent of Appalachian residents had migrated from another state between 1995 and 2000. While this is about the same as the share for persons in the rest of the United States, certain parts of the region proved more attractive to internal migrants. For example, about 10 percent of the residents of the Appalachian counties of North Carolina, South Carolina, and Tennessee had lived in another state in 1995, as had 12 percent of Appalachian Georgia's population. In Pike County, Pa., an outpost of the New York City megalopolis, that share was an incredible 24 percent. Conversely, fewer than 5 percent of the residents of 130 of the region's 410 counties had migrated from another state.

Foreign-born persons and linguistic ability. Appalachia's geographic isolation also makes it less attractive for immigrants than the "gateway" areas of the country's borders. Just 611,000

Appalachian residents (3 percent of the total population) were born outside the United States in 2000. While this represents a sizeable increase from 1990, when just 292,000 Appalachians (just 1.4 percent) were foreign-born, it pales in comparison with the rest of the country, where the foreign-born made up 12 percent of the residents—and 9 percent of the residents of the non-Appalachian portions of the 13 ARC states. Although this percentage is low throughout the region, there are some variations. For example, nearly 7 percent of persons in the Attainment counties were foreign-born, compared with less than 1 percent of those in the Distressed counties. In Georgia’s Appalachian counties, the foreign-born were 8 percent of the populace, more than double the share in any other state’s Appalachian section. (Georgia also was one of just three Appalachian states—Alabama and South Carolina were the others—where people born abroad were more prevalent within the region than outside it.)

Given the region’s low share of foreign-born persons, one should not be surprised that Appalachian residents are much less likely than Americans elsewhere (5 percent vs. 19 percent) to speak a language other than English at home. Within the region, the patterns are about the same as the ones for the foreign-born population: Speakers of another language were most prevalent in the Attainment counties and in Georgia (9 percent and 11 percent, respectively), least so in the Distressed counties and in Appalachian Kentucky (2 percent each). About 2 percent of Appalachian residents reported problems with English proficiency (defined as an inability to speak English “very well”), compared with 9 percent in the rest of the United States—and there was little variation within the region.

Households and Families

Families. Of Appalachia’s nearly 9 million household units in 2000, 6.2 million (69 percent) were family households, or households where at least one of the members was related to the household head. About 2.8 million of these family households had at least one of their own children present in the home. “Traditional families”—families headed by a married couple with at least one of their own children at home—numbered just over 2 million in 2000, 23 percent of the total number of Appalachian households. Numerically and proportionally, this actually represented a decrease from 1990, when the region had slightly less than 2.2 million two-parent families—27 percent of all households. (In the rest of the nation, the number of two-parent families increased from 22.1 million to 22.8 million during the decade, although their

share of all households declined from 26 percent to 24 percent.) Northern Appalachia, where married couples with children were 22 percent of all households, skewed the region's overall average: two-parent families' share of households in central and southern Appalachia was roughly the same as the proportion of households in the non-Appalachian U.S. that had this living arrangement (see Table 8).

Two-parent families were most common in Appalachian Georgia, comprising nearly 30 percent of all households. Kentucky was next among states in the region; nearly 25 percent of the Bluegrass State's Appalachian households consisted of married couples with children. However, married couples with kids were just 21 percent of all households in the Appalachian portions of several other states (New York, North Carolina, Pennsylvania, Virginia, and West Virginia).

Traditional families were equally common in metropolitan and nonmetropolitan areas for Appalachia as a whole, but there were different patterns in each of the subregions. In northern and central Appalachia, traditional families were more common outside metropolitan areas, but in southern Appalachia, they were more common within the metro areas. Among the economic development categories, two-parent families had the greatest presence in the

Table 8

Traditional two-parent families were less common in Appalachia than in the rest of the country. There were some exceptions, however.

Two-parent families with children, number and percent of all households, 2000

AREA	NUMBER (1000s)	PERCENT OF HOUSEHOLDS
APPALACHIA	2,046	22.7
NON-APPALACHIAN U.S.	22,790	23.6
Northern Appalachia	864	21.7
Central Appalachia	202	23.7
Southern Appalachia	980	23.6
Distressed counties	251	23.0
Transitional counties	1,297	22.3
Competitive counties	211	24.9
Attainment counties	288	23.1
Appalachian sections of:		
Alabama	257	23.0
Georgia	234	29.5
Kentucky	111	24.8
Maryland	20	21.6
Mississippi	53	22.8
New York	88	21.1
North Carolina	131	21.2
Ohio	136	24.3
Pennsylvania	492	21.2
South Carolina	91	22.6
Tennessee	220	22.0
Virginia	57	21.4
West Virginia	157	21.3

Source: U.S. Census Bureau, 2000 Census.

Competitive counties (25 percent of all households) and the smallest presence in the Transitional counties (22 percent).

The tendency of traditional families to be relatively uncommon in the Appalachian sections of so many states—and their proportional decline since 1990—partly lies in the age structure of these areas. In West Virginia, as well as in the Appalachian portions of Pennsylvania, North Carolina, and Maryland, at least 15 percent of the total population consisted of persons ages 65 and over, who are not as likely as younger persons to have their own children under age 18 living at home. In each of these areas, the share of households consisting of married couples with children was at least two percentage points smaller than the national average. Contrast this with Georgia's Appalachian section, where two-parent families were the most common in the region. There, persons age 65 or older were just 9 percent of the 2000 population.¹²

Remember as well that Georgia's Appalachian counties grew an impressive 43 percent during the 1990s. Fast-growth places tend to attract young persons—persons who sometimes have young children or who are about to start families. By contrast, the areas in Appalachia with larger-than-average elderly populations tended to grow more slowly than the United States as a whole. In such slow-growth places, young people tend to move out.

An examination of the situation at the county level lends some support to this “rapid growth” hypothesis. Traditional families were at least 25 percent of all households in 96 Appalachian counties; 62 of those had grown faster during the 1990s than the nation as a whole. (Forty-three of these counties had grown at least 20 percent—roughly 1.5 times the national growth rate.) In 48 counties, by contrast, less than 20 percent of all households were married couples with children. Eighteen of those 48 had lost people between 1990 and 2000.

Appalachia had 726,000 single-parent families in 2000, roughly 205,000 more than in 1990 and 8 percent of all households in the region. Single mothers headed slightly more than 552,000 of these families, or 6 percent of all Appalachian households. (In the rest of the country, single-parent families were 9 percent of households; single-mother families, 7 percent.) By and large, single-parent families were equally common in northern, central, and southern Appalachia, as among metropolitan and nonmetropolitan counties. They were slightly more common among the Distressed counties (9 percent of households) than among any of the other economic

¹² A similar case occurred in 1990, when older persons made up more than 15 percent of the population in Pennsylvania's and Maryland's Appalachian sections. These were the only two states in the region where two-parent families were less than 26 percent of households that year.

development categories (8 percent). Among the states, they were most common in Mississippi (11 percent) and least common in Virginia (7 percent). In every Appalachian state, single-parent households were less common in the Appalachian portion than in the non-Appalachian part. Locally, single-parent families were at least 10 percent of households in 33 counties (27 in southern Appalachia), but less than 5 percent in five others. Generally, families headed by single mothers accounted for most of any differences; single-father families were about 2 percent of all households in the vast majority of areas throughout Appalachia.

Single-person households. More than 2.3 million Appalachians lived alone in 2000, an increase of about 449,000 persons from 1990. (These individuals made up the overwhelming majority of the area's 2.7 million nonfamily households.) Thanks partly to the increase in persons living alone, Appalachia now has more single-person households than traditional families—a circumstance that was definitely not the case in 1990. That year, two-parent families outnumbered single-person households in Appalachia by about 269,000; by 2000, they had been outnumbered by nearly 299,000.

Single-person households were more prevalent than two-parent families throughout the Appalachian region—in all three subregions, among three of the four economic development categories (the Competitive counties being the exception), 11 of the 13 states (all but Georgia and Kentucky), and 272 of the region's 410 counties. In fact, persons living alone made up at least 30 percent of households in 13 Appalachian counties (see Table 9, page 33). (By contrast, they were less than 20 percent in 15 others—12 of them in Georgia.)

Some people think of single-person households in terms of young persons making a major step in the transition to adulthood. Appalachia's case, however, suggests another scenario—older people aging at home after the departure of their adult children and/or the death of their spouse. More than 968,000 Appalachians who lived alone in 2000 were age 65 or older—41 percent of the total. (Outside Appalachia, older persons were 35 percent of those living by themselves.) Although the number of older Appalachians in single-person households increased by 84,000 since 1990, their share among all persons living by themselves actually declined; 10 years earlier, persons ages 65 and older headed 47 percent of all single-person Appalachian households (and 38 percent of those outside the region).

Older persons who lived alone were most prevalent in northern Appalachia, maintaining 45 percent of single-person households in the subregion. By contrast, 37 percent of southern

Table 9

Persons living alone were 30 percent of all households in 13 Appalachian counties; they were less than 20 percent in 15 others.

Counties where persons living alone were at least 30 percent of all households, 2000		Counties where persons living alone were less than 20 percent of all households, 2000	
Ohio County, W.Va.	33.7	Union County, Tenn.	19.8
Macon County, Ala.	33.0	Jackson County, Ga.	19.7
Allegheny County, Pa.	32.7	Banks County, Ga.	19.2
Tompkins County, N.Y.	32.5	Botetourt County, Va.	19.2
Luzerne County, Pa.	31.3	Hall County, Ga.	19.2
Monongalia County, W.Va.	31.3	Murray County, Ga.	18.8
Cabell County, W.Va.	31.3	Bartow County, Ga.	18.7
Lackawanna County, Pa.	31.3	Barrow County, Ga.	18.6
Broome County, N.Y.	31.0	Dawson County, Ga.	18.6
Kanawha County, W.Va.	30.8	Gwinnett County, Ga.	18.4
Northumberland County, Pa.	30.2	Douglas County, Ga.	18.4
Cameron County, Pa.	30.1	Holmes County, Ohio	16.1
Allegany County, Md.	30.1	Cherokee County, Ga.	16.0
		Forsyth County, Ga.	14.8
		Paulding County, Ga.	14.6

Source: U.S. Census Bureau, 2000 Census.

Appalachians who lived alone in 2000 were age 65 or older. Appalachians who lived alone were more likely than non-Appalachians to be older in every state in the region—including fast-growing Georgia (see Table 10, page 34). (In Maryland’s three Appalachian counties—Garrett, Alleghany, and Washington—46 percent of residents who lived alone were 65 or older, compared to just 32 percent in the rest of the Old Line State.) In 43 Appalachian counties, more than half of the persons living alone in 2000 were over 65; northern Appalachia had 29 of these counties.

Single-person households in Appalachia were more common in metropolitan areas (27 percent) than in nonmetro areas (25 percent); this was the case in all three Appalachian subregions. Among metropolitan-area counties, they were most common in the small areas. However, metro and nonmetro counties did not seem to follow any pattern between the prevalence of single-person households and the share of those living alone who were age 65 and over. For example, although single-person households were more prevalent in metro

counties than in nonmetro counties, metro persons who lived alone actually were less likely to be older.

Single-person households were most common in the Transitional counties (28 percent of all households), least prevalent in the Competitive counties (24 percent). However, persons living alone in counties that were worse off economically were more likely to be 65 or older than those in more advanced counties. For example, older people were 44 percent of those living alone in the Distressed counties; that percentage was 34 percent in the Attainment counties.

Unmarried-partner households. Appalachia had 392,000 unmarried partner households—households that, according to the Census Bureau, consist of the householder and “a person who is not related to the householder, who shares living quarters, and who has a close personal relationship with the householder” (U.S. Census Bureau, 2001: B-11). These “cohabitating” households, some of which have children, were 4 percent of all households in the region,

Table 10

In most states in the Appalachian region, at least two-fifths of persons living alone were age 65 or older.

Persons age 65 or older living alone, number and percent of all persons living alone, 2000

AREA	APPALACHIA		NON-APPALACHIAN SECTION	
	Number (1000s)	Percent of total population	Number (1000s)	Percent of total population
UNITED STATES	968	41.3	8,754	35.2
Alabama	109	37.5	61	37.2
Georgia	51	32.5	159	28.8
Kentucky	46	41.9	110	36.2
Maryland	11	45.9	149	31.7
Mississippi	25	42.1	76	38.1
New York	48	41.1	668	35.8
North Carolina	65	39.8	205	32.4
Ohio	60	43.9	386	35.8
Pennsylvania	301	45.8	254	38.3
South Carolina	36	35.4	96	34.2
Tennessee	100	38.4	102	32.3
Virginia	29	42.4	187	30.8
West Virginia	88	43.9	—	—

Source: U.S. Census Bureau, 2000 Census.

compared to 5 percent in the rest of the nation. Unmarried partners were most common in Appalachian New York, which had eight of the 10 counties in which this formation represented at least 7 percent of all households. (The other two counties were Berkeley and Jefferson counties in West Virginia, both of which are on the outskirts of the Washington, D.C., area.) In no county in Appalachia, however, did cohabitating couples represent more than 8 percent of all households.

Housing Characteristics

Housing vacancy. The presence or absence of vacant housing suggests different things, depending on the nature of the vacant units. The presence of vacant homes designed for everyday use is a reflection of the desirability of a community as a place to live and/or work. By contrast, the presence of vacant homes designed for seasonal or occasional use suggests that the community might have significant recreational, resort, or retirement activity. Therefore, persons examining housing vacancy rates would be prudent to look at these two components—the vacancy rate for nonseasonal reasons and the seasonal vacancy rate.

In 2000, 746,000 housing units in the Appalachian region (slightly more than 7 percent of all housing units) were vacant for nonseasonal reasons, 133,000 more than 10 years earlier. This percentage was slightly higher than the 6 percent rate for the rest of the country, which actually saw its number of nonseasonal vacancies decrease during the 1990s. Nonseasonal vacancy was particularly acute in central Appalachia and the Distressed counties; in both cases, 9 percent of the units were vacant. (In northern and southern Appalachia, and in the other three economic development categories, the nonseasonal vacancy rate hovered around 7 percent, although just 6 percent of units in the Competitive counties were vacant.) Nonseasonal vacancy was more prevalent outside metropolitan areas than within them (8 percent vs. 7 percent).

Among the states, nonseasonal vacancy rates varied noticeably. Georgia's Appalachian section—a boom area during the 1990s—had a vacancy rate of just over 5 percent. By contrast, the rate approached 9 percent in Kentucky, West Virginia, and Alabama. Whether nonseasonal vacancy was higher within or outside the Appalachian portion of the ARC states depended on the state. In New York, Ohio, and Virginia, for example (plus four other states), the Appalachian portions had higher rates. (Nonseasonal vacancy rates were 8 percent in Virginia's Appalachian section while just 5 percent in the rest of the state.) But in Alabama and Georgia, nonseasonal vacancy was more prevalent outside the Appalachian regions. For example, 10 percent of the

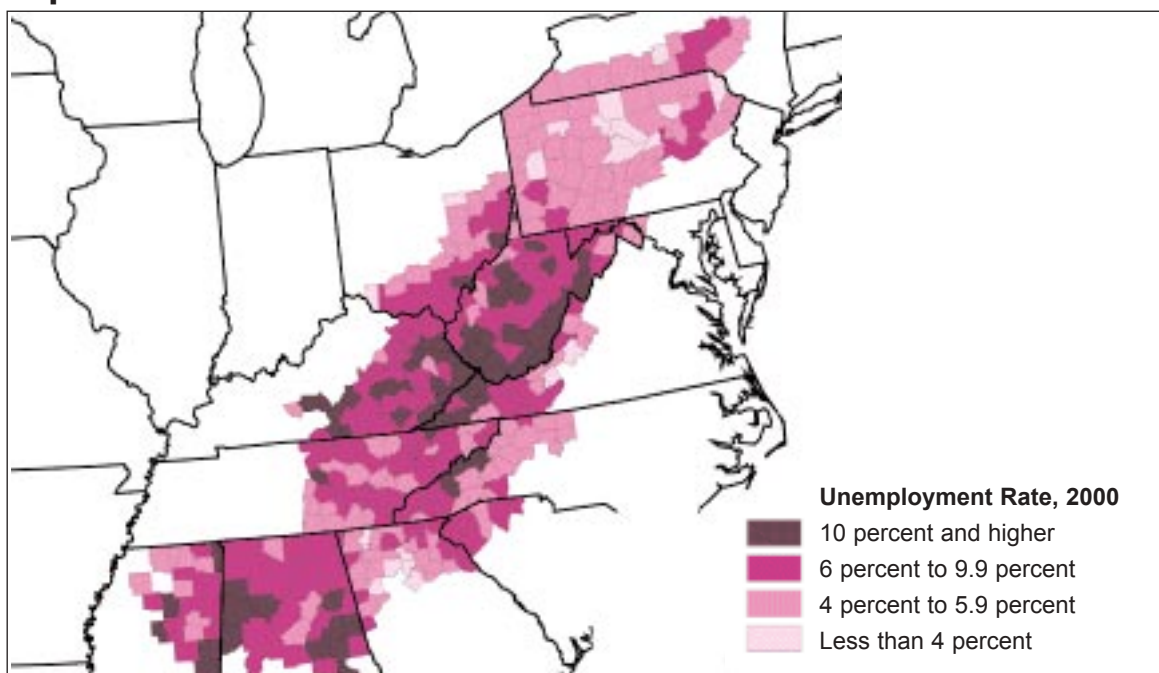
housing units in Alabama's non-Appalachian section were vacant, compared with just 9 percent in the state's Appalachian portion.

Nonseasonal vacancy was especially high in several central and southern Appalachian counties. In about one-sixth of Appalachia's 410 counties (71 in all), at least 10 percent of housing units were vacant for nonseasonal reasons (see Figure 8). Forty-seven of these counties were in three states—West Virginia, Kentucky, and Alabama. Forty-nine of the 71 were in the Distressed category; 67 were outside metropolitan areas; and 27 lost population between 1990 and 2000. By contrast, the nonseasonal vacancy rate was less than 5 percent in 20 Appalachian counties—mostly in northern Appalachia but including several counties in the Atlanta area.

Almost 4 percent of Appalachia's housing units (376,000 in all) were vacant for seasonal reasons, a slightly higher rate than the 3 percent rate for the rest of the country.¹³ Three-fifths of these units were in northern Appalachia; its seasonal vacancy rate was 5 percent, compared with

Figure 8

One in six Appalachian counties had nonseasonal vacancy rates of at least 10 percent.



Source: U.S. Census Bureau, 2000 Census.

¹³ In 1990, about 313,000 housing units in Appalachia were vacant for seasonal reasons, about 3.5 percent of the total.

3 percent in southern Appalachia and 2 percent in central Appalachia. Seasonal vacancy also was more common among the Transitional and Distressed counties (5 percent and 4 percent, respectively) than among the Competitive and Attainment counties (less than 2 percent and less than 1 percent, respectively). Given that many nonmetropolitan areas have seen tourism as a means to revitalize their economies, it probably is not very surprising that the seasonal vacancy in these localities was relatively high at 6 percent. (In northern Appalachia, 9 percent of housing outside metro areas was vacant for seasonal reasons.) By contrast, the rate is less than 2 percent in metro areas.

Among the states in the region, seasonal vacancy rates were highest in New York (8 percent), North Carolina (7 percent), Pennsylvania (5 percent), and Maryland (5 percent). By contrast, less than 2 percent of the housing units in Alabama's, Mississippi's and South Carolina's Appalachian areas were vacant for seasonal reasons; these were the only three states where seasonal vacancy was not more common in the Appalachian section than outside it. In 75 of Appalachia's 410 counties, at least one in 10 units was vacant for seasonal reasons. By and large, this group was quite diverse in character. Eighteen of these counties grew at least 20 percent during the 1990s, while 12 lost population. Several, not surprisingly, were recreational havens—such as Sullivan and Wayne counties in Pennsylvania; Avery and Macon counties in North Carolina; Pocahontas County, W.Va.; Highland County, Va.; and Rabun County, Ga. (Johnson and Beale, 2001). Seasonal vacancy rates exceeded 30 percent in each of the above counties.¹⁴

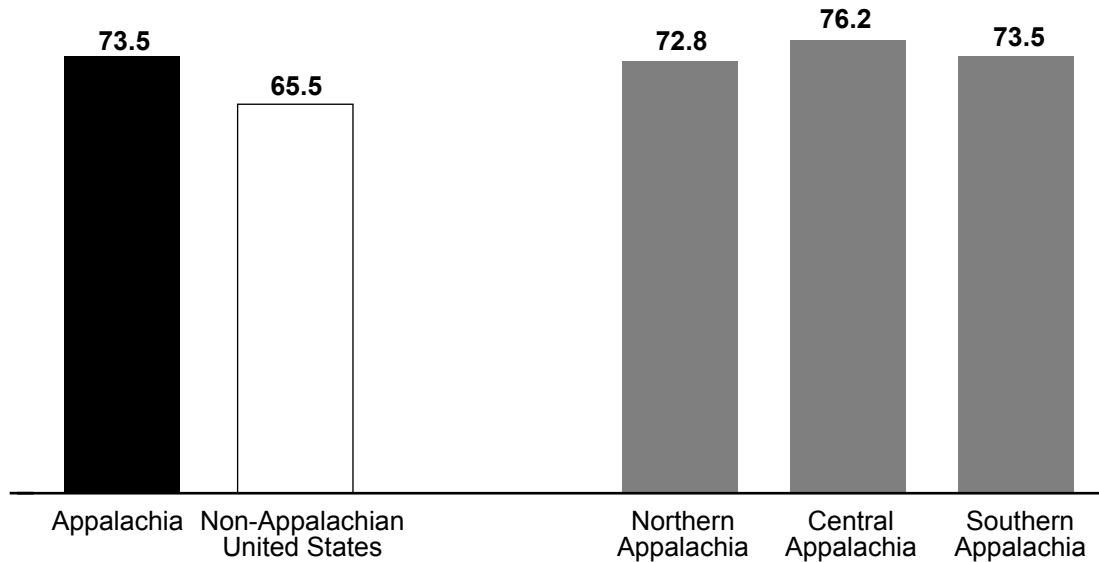
Tenure. Homeownership is more common in Appalachia than in the rest of the country. Just as in 1990, nearly three-fourths of Appalachian households (6.6 million in all) owned their own homes in 2000, compared to less than two-thirds in the non-Appalachian United States (see Figure 9, page 38). Homeownership was higher in central Appalachia (76 percent) than in the northern or southern subregions; among the economic development categories, it was highest in the Distressed counties (76 percent) and lowest in the Attainment counties (69 percent). The fact that the Distressed counties are predominately rural and the Attainment counties mostly urban might be a factor: Appalachia's nonmetropolitan areas had higher ownership rates than its metropolitan areas (76 percent vs. 72 percent).

¹⁴ Forest County, Pa., where half the land area is occupied by Allegheny National Forest (Forest County Industrial Development Corporation, 2003), had Appalachia's highest seasonal vacancy rate in 2000, at 75 percent

Figure 9

Homeownership was more common in Appalachia than in the rest of the country.

Percent homeowners, 2000



Source: U.S. Census Bureau, 2000 Census.

Among the Appalachian states, homeownership rates were below 72 percent in only Maryland and New York (69 percent each, still higher than the national average). In every state but South Carolina (where homeownership rates were about equal), homeownership was more common in the Appalachian counties than in the rest of the state. More than 100 counties in the region (102, to be exact) had homeownership rates of at least 80 percent. By contrast, the rate was below 65 percent in just 11 counties—each of which is home to a college or university where students make up a fairly sizeable share of the populations.¹⁵ Population growth does not seem to be highly correlated with ownership rates. For example, about one-third of the counties with high ownership rates grew at least 20 percent during the 1990s, but another one-eighth actually lost population.¹⁶

¹⁵ Some examples of Appalachian counties with ownership rates below 65 percent include Montgomery County, Va. (Virginia Tech and Radford University); Tompkins County, N.Y. (Cornell University and Ithaca College); Oktibbeha County, Miss. (Mississippi State University); Madison County, Ky. (Eastern Kentucky University); Athens County, Ohio (Ohio University); and Tuscaloosa County, Ala. (University of Alabama).

¹⁶ Conversely, one of the counties with low ownership rates (Madison County, Ky.) grew 23 percent, while two others (Cortland County, N.Y. and Cabell County, W.Va.) lost population.

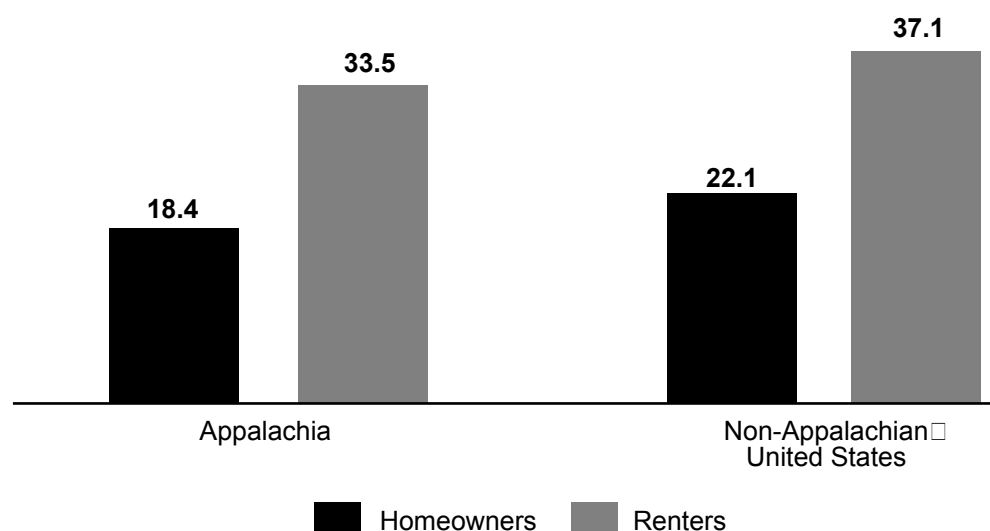
Affordable housing. One area where Appalachia fares favorably with the rest of the country is in housing affordability. According to the U.S. Department of Housing and Urban Development, housing is considered affordable if costs (rent or mortgage payments, taxes, insurance, and related expenses) do not reach or exceed 30 percent of a household's income. If a household must allocate 30 percent or more of its income to housing costs, it is less likely to have enough resources for food, clothing, medical care, or other needs—a problem similar to that faced by a household living in poverty (U.S. Housing and Urban Development, 2002).

In 2000, 23 percent of Appalachian households (nearly 1.7 million) lacked affordable housing, compared with 28 percent of households in the rest of the country. This pattern held for both homeowners (18 percent vs. 22 percent) and renters (33 percent vs. 37 percent). (See Figure 10) There was little variation among the three subregions, although renters in northern Appalachia were more likely to lack affordable housing than renters elsewhere (35 percent vs. 32 percent in central and southern Appalachia). Among the economic development categories, the housing burden was greater in the Attainment counties (where nearly 25 percent of

Figure 10

Affordable housing is one area where Appalachians—both homeowners and renters—fare favorably relative to other Americans.

Percent of owner and renter households spending at least 30 percent of their income on housing costs



Source: U.S. Census Bureau, 2000 Census.

households lack affordable housing) than elsewhere. Metropolitan and nonmetropolitan counties in Appalachia had similar housing burdens.

Among the states, the share of households lacking affordable housing mostly ranged from 22 percent to 24 percent. The exception was Appalachian New York, where affordable housing was a problem for 27 percent of households—and 41 percent of renters. However, the rest of the Empire State had an even greater overall housing burden, with nearly 35 percent without affordable housing. Indeed, in every ARC state except Kentucky, the non-Appalachian section had a greater overall housing burden than the Appalachian portion. (And even in Kentucky, the gap was small; 23 percent of households in Appalachian Kentucky lacked affordable housing, compared with 22 percent in the rest of the Bluegrass State). In 96 of Appalachia's 410 counties, affordable housing was a problem for fewer than 20 percent of households; it was a problem for more than 30 percent of households in just 11 others.

Telephone service and plumbing facilities. Telephone service and plumbing facilities are two amenities that Americans generally take for granted. Telephone service provides households with a link to the outside world, especially in case of an emergency. Plumbing facilities promotes good public health by preventing groundwater contamination.

Just 3 percent of Appalachian households (296,000 total) lacked telephone service, compared with just over 2 percent of households outside the region. This is a noticeable improvement from 1990, when 7 percent of homes in the region (528,000) were without a telephone.¹⁷ In 57 Appalachian counties, fewer than 2 percent of households were without phone service. In certain parts of the region, however, the percentage of homes without the ability to make and receive calls remained noticeably higher. For example, 7 percent of households in central Appalachia and in the Distressed counties had no phone service. And in 23 counties, phone service was absent in at least 10 percent of households; in Holmes County in east central Ohio, an astonishing 28 percent of households lacked telephone service.

Less than 1 percent of Appalachian households (only 62,000 in all) lacked full plumbing facilities—hot and cold running water, a flush toilet, and a bathtub or shower. This percentage was the same as the rest of the country and varied little among the states and the

¹⁷ The 1990 census question asked about the presence of a telephone in the home. In the 2000 census question, however, just having a telephone was not enough. The focus instead was on the presence of telephone service in the home—service through which occupants could make and receive calls.

three subregions.¹⁸ Even among economically distressed areas, less than 2 percent of households lacked complete plumbing. There were, however, 21 counties (16 of which were classified as Distressed by the ARC) where plumbing was incomplete in at least 3 percent of households; the percentage was nearly 8 percent in rural Hancock County in northeastern Tennessee.

Commuting patterns. Like Americans in general, Appalachian residents spent more time commuting from their homes to their jobs over the 1990s. In 2000, the average worker in the Appalachian region spent 24.8 minutes commuting to work—almost four minutes longer than in 1990, when the average journey to work took just 20.9 minutes. Still, Appalachian workers spent slightly less time traveling to work than workers in the rest of the country, who traveled an average of 25.6 minutes to their jobs.

Workers in central Appalachia spent more time commuting than those in either of the other two subregions (26.9 minutes, compared to 25.1 minutes in southern Appalachia and 24.2 minutes in northern Appalachia). Among the ARC's economic development categories, workers in the Distressed counties had the longest commutes (28.1 minutes, on average), but those in the Attainment counties had the next longest (25.9 minutes). Commutes were slightly longer outside metropolitan areas than inside metro areas, particularly in central Appalachia. Among the Appalachian states, however, workers commuted for as long as nearly 30 minutes in Georgia (partly a byproduct of the counties in suburban Atlanta) and as short as just under 21 minutes in New York.

As one might expect, the greatest variation was at the county level. Workers commuted at least 30 minutes in 100 of the region's 410 counties, but less than 20 minutes in just 20 others. Residents of Elliott County in eastern Kentucky (which borders the Huntington, W. Va.-Ashland, Ky., metropolitan area) had the longest commutes, with an average of nearly 49 minutes.¹⁹ In fact, many of the counties whose residents had the longest commutes were either at the edges of or adjacent to metropolitan areas (for example, Pike and Monroe counties in Pennsylvania; Clay, Hampshire, Lincoln, and Jefferson counties in West Virginia; and Paulding and Heard counties in Georgia). Commuting times also were long for residents in some of the

¹⁸ In 1990, 1.4 percent of households in Appalachia (117,000 total) lacked complete plumbing facilities, compared to 0.7 percent in the rest of the country. In central Appalachia, that percentage approached 5 percent.

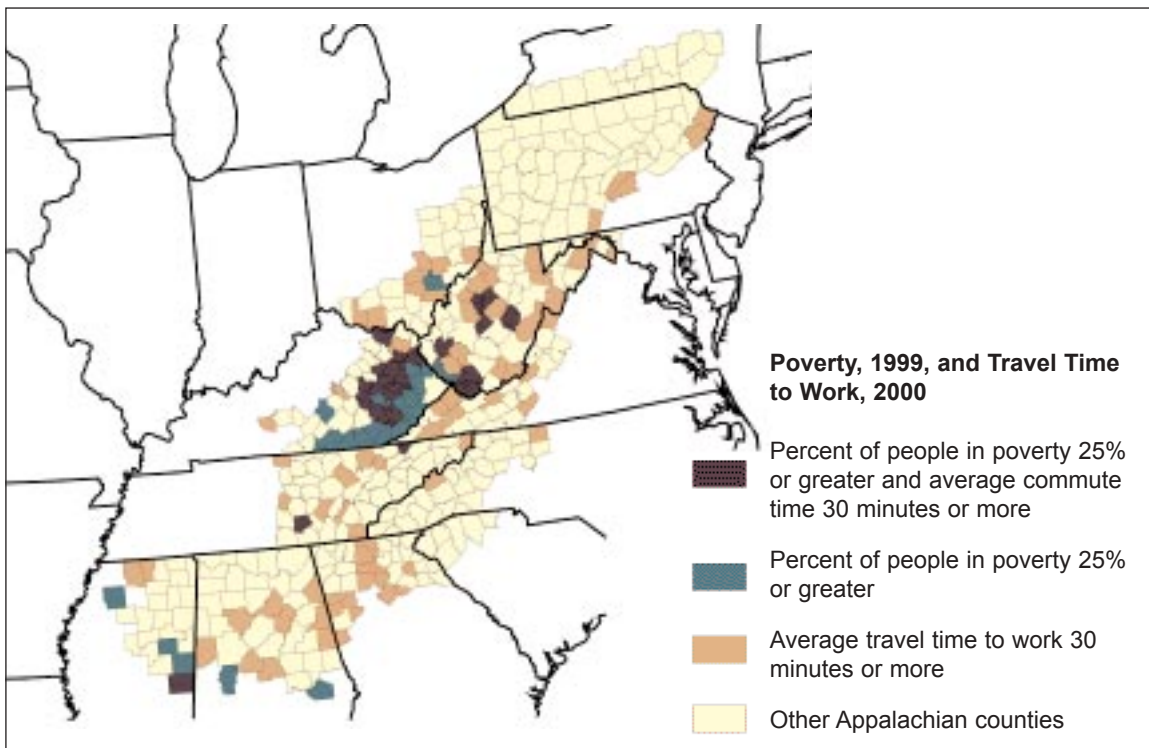
¹⁹ In fact, residents in Elliott County had the two longest average commutes not only in Appalachia, but in the whole country as well. Workers in Pike County, Pa. (46 minutes) had the second longest commutes—both regionally and nationally.

more isolated rural counties, however. (Workers in Magoffin County, Ky., and Brandon and Doddridge counties in West Virginia, for example, commuted between 38 and 39 minutes to their jobs, on average.)

Nearly half (48) of the counties whose workers commuted at least 30 minutes were classified as Distressed by the ARC; this, combined with the fact that many counties with long commutes were not adjacent to metropolitan areas, suggests a disconnect between low-income workers and areas of job growth. This “spatial mismatch” between the new jobs for low-skilled workers and the residences of the poor, usually considered a problem for inner cities, also is an acute problem for rural areas (Fisher and Weber, 2002). In 2000, there were 46 counties nationwide where average commuting times were more than 30 minutes and at least 25 percent of the residents lived in poverty. The Appalachian region accounted for 23 of these counties, and most of these were in central Appalachia (see Figure 11).

Figure 11

In one-fourth of the counties in Appalachia, workers commuted at least a half-hour to their jobs. Many of these counties are economically stressed.



Source: U.S. Census Bureau, 2000 Census.

Drawing Conclusions About Appalachia—and Digging Beneath the Surface

In many ways, the Appalachian region as a whole continues to be distinct from the rest of the United States. Although it added nearly 2 million persons between 1990 and 2000, its rate of growth remained slower than that of the rest of the nation. The country's racial and ethnic diversity remains virtually nonexistent in nearly half of Appalachia's 410 counties. With a higher median age and disproportionately fewer children and more elderly, Appalachia's population is aging earlier than the rest of the country. Despite some improvements, Appalachians still lag behind other Americans on a variety of economic, labor force, and education measures—although their economy is less dependent on manufacturing and more dependent on a very diverse service sector, and they have reached near parity on unemployment (thanks to the 1990s economic boom). Appalachian residents are more likely than other Americans to be natives of their home states, and much less likely to have been born in another country. Traditional families are slightly less prevalent in Appalachia than elsewhere, most likely as a result of this older age structure. There are proportionately more persons living alone in the region, and these people tend to be age 65 or older. Housing vacancy is more common in Appalachia, but so is homeownership; moreover, both owners and renters are more likely to live in affordable housing than their non-Appalachian counterparts. And although Appalachian workers are experiencing longer commutes to their jobs than in 1990, those commutes remain shorter than in the rest of the United States.

But the data from Census 2000 also shows the great variation within the Appalachian region. Southern Appalachia tended to grow faster than the national average (several counties grew at least 20 percent), while significant portions of northern and central Appalachia lost population during the 1990s. Appalachia contains many economically distressed areas that suffer a shortage of skilled, well-educated workers who needed to take advantage of a growing postindustrial economy. Yet in many other areas, the educational and labor force structure approaches—and occasionally surpasses—that outside the Appalachian region. Younger populations and married-couple families with children were more common in rapidly growing areas than in their slow-growth counterparts. Although vacant housing (especially for nonseasonal reasons) continues to be an issue in parts of central Appalachia, it is much less of an issue in the areas on the outskirts of Atlanta. And while the average worker in Appalachia commutes less than 25 minutes to their job, workers in several rural areas—some of which are economically stressed—encounter commutes of more than 30 minutes.

As rich as the data in this report are in helping us understand the state of Appalachia, they only scratch the surface. Upcoming reports examine these characteristics and trends in much greater detail than this overview allows:

- The report on population growth and distribution will analyze historical and regional patterns of Appalachia's demographic change.
- The report on labor markets, poverty, and income inequality will investigate Appalachia's macroeconomic status and trends over the 1990s, and what it means for the region's residents.
- The report on poverty concentration will examine spatial trends in poverty during the 1990s and provide a look at the poverty population.
- In the report on migration and immigration, the focus will be on the contribution of these components to Appalachia's population change in the last 20 years, and characteristics of the new arrivals.
- The race and ethnicity report will examine Appalachia's growing diversity, where it is occurring most strongly, and its effects on selected economic and social patterns.
- Changes in the composition of the Appalachian household, plus an examination of the various household types, will be the focus of the report on households and families.
- In the report on changing age structures, the emphasis will be on trends and the reasons behind them.
- The educational attainment report will examine levels of high school and college completion among various cohorts of adults, as well as the effects of in- and out-migration.
- The report on housing and commuting patterns will focus on such issues as homeownership, housing vacancy, and travel time to work.

Studies that were done after the 1990 census yielded interesting findings about the Appalachian region. For example, McLaughlin, Lichter, and Matthews (1999) noted the diversity within the Appalachian region and the challenges that remain. Isserman (1996a, 1996b) found that although Appalachian social and economic conditions had improved greatly between the mid-1960s and the early 1990s (even surpassing conditions in parts of the

southeastern and southwestern United States), it still lagged behind most of the rest of the nation on a variety of indicators. Wood and Bischak (2000) found that more than half the counties classified as economically distressed in 1960 were no longer so in 1990. And Obermiller and Howe (2000) noticed that migration patterns in the late 1980s had transformed the populations of all three Appalachian subregions. The thematic reports in this Census 2000 series will show whether the above patterns continued, where they continued, and how they were different. Moreover, they will allow data users to better assess the region's economic and social standing at the dawn of a new millennium—and prospects for beyond.

REFERENCES

- Appalachian Regional Commission. 1967. "Experiment in Appalachia." *Appalachia, a Journal of the Appalachian Regional Commission* 1:1 (September): 3-5.
- _____. 1974. "The New Appalachian Subregions and their Development Strategies." *Appalachia, a Journal of the Appalachian Regional Commission* 8:1 (September): 11-27.
- _____. 2002a. Accessed at www.arc.gov, on Aug. 30, 2002.
- _____. 2002b. Unpublished data not available on their website.
- Bagi, Faqir S., Richard J. Reeder, and Samuel D. Calhoun. 1999. "Federal Funding's Unique Role in Appalachia." *Rural Development Perspectives* 14:1 (May): 14-21.
- Beale, Calvin L. 1990. "A Characterization of Types of Metropolitan Areas." Pp. 59-75 in *A Taste of the Country: A Collection of Calvin Beale's Writings*, edited by Peter A. Morrison. University Park, Pa., and London: The Pennsylvania State University Press.
- Bernat, G. Andrew. 2003. "State Personal Income and Per Capita Personal Income, 2002." *Survey of Current Business* 83:5 (May): 16-41. Accessed at www.bea.gov/bea/ARTICLES/2003/05May/0503SPI.pdf, on May 30, 2003.
- Bogue, Donald J. and Calvin L. Beale. 1961. *Economic Areas of the United States*. New York: The Free Press of Glencoe, Inc.
- Economic Research Service, U.S. Department of Agriculture. 2001. "Measuring Rurality: Rural-Urban Continuum Codes." Accessed at www.ers.usda.gov/briefing/rurality/RuralUrbCon, on May 23, 2001.
- Fisher, Monica G., and Bruce A. Weber. 2002. "The Importance of Place in Welfare Reform: Common Challenges for Central Cities and Remote-Rural Areas." Center on Urban and Metropolitan Policy, Research Brief 1. Washington, D.C.: The Brookings Institution.
- Forest County Industrial Development Commission. 2003. Forest County, Pennsylvania, website. Accessed at www.forestcounty.com, on Feb. 19, 2003.
- Isserman, Andrew M. 1996a. "Socioeconomic Review of Appalachia-Appalachia Then and Now: An Update of 'The Realities of Deprivation' Reported to the President in 1964." Appalachian Regional Commission, Regional Research Report.
- _____. 1996b. "Socioeconomic Review of Appalachia-The Evolving Appalachian Economy." Appalachian Regional Commission, Regional Research Report.
- Johnson, Kenneth M., and Calvin L. Beale. 2001. "Recreational Counties in Nonmetro America." Accessed at www.luc.edu/depts/sociology/johnson/p99webr.html, on Sept. 6, 2001.
- Mather, Mark. 2002. "Patterns of Poverty in America." Accessed at www.prb.org/AmeristatTemplate.cfm?Section=IncomeandPoverty&template=/ContentManagement/ContentDisplay.cfm&ContentID=5985, on Nov. 5, 2002. Accompanying table accessed at www.prb.org/pdf/povertytable.pdf, on Nov. 5, 2002.

McLaughlin, Diane K., Daniel T. Lichter, and Stephen A. Matthews. 1999. "Demographic Diversity and Economic Change in Appalachia." Population Research Institute, Pennsylvania State University, July 31.

Obermiller, Phillip J., and Steven R. Howe. 2000. "Appalachian Migration Patterns, 1975 to 1980 and 1985 to 1990." Appalachian Regional Commission, Regional Research Report.

Public Broadcasting Service, NewsHour Online. 2002. "Clinton on Education." Transcript of President Bill Clinton's address to the graduating class of Princeton University on June 4, 1996. Accessed at www.pbs.org/newshour/bb/election/june96/clinton_6-4.html, on Nov. 19, 2002.

Riche, Martha Farnsworth. 2000. "America's Diversity and Growth: Signposts for the 21st Century." *Population Bulletin* 55:2 (June).

U.S. Census Bureau. 1975. *Historical Statistics of the United States: Colonial Times to 1970*. Volumes 1 and 2. Washington, D.C.: U.S. Government Printing Office.

_____. 2001. *Census 2000 Summary File 1, Technical Documentation*. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Housing and Urban Development. 2002. "Affordable Housing." Accessed at www.hud.gov/offices/cpd/affordablehousing/index.cfm, on Nov. 13, 2002.

White House. 2002. "President Bush Signs Landmark Education Reforms into Law: Bipartisan Effort Reaps Historic Freedom and Flexibility for America's Schools." Accessed at www.whitehouse.gov/infocus/education/, on Nov. 27, 2002.

Wood, Lawrence E., and Gregory A. Bischak. 2000. "Progress and Challenges in Reducing Economic Distress in Appalachia: An Analysis of National and Regional Trends Since 1960." Appalachian Regional Commission, Regional Research Report.