

# ***Demographic and Socioeconomic Change in Appalachia***

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## **POPULATION GROWTH AND DISTRIBUTION IN APPALACHIA: NEW REALITIES**

by

**Kelvin M. Pollard  
Population Reference Bureau**

**January 2005**



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For more information about the series, please contact either Kelvin Pollard of the Population Reference Bureau (202-939-5424, [kelvinp@prb.org](mailto:kelvinp@prb.org)) or Gregory Bischak of the Appalachian Regional Commission (202-884-7790, [gbischak@arc.gov](mailto:gbischak@arc.gov)).

The authors wish to thank the Appalachian Regional Commission for providing the funding for this series.

### **Population Reference Bureau**

1875 Connecticut Avenue, NW, Suite 520  
Washington, DC 20009-3728

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1666 Connecticut Avenue, NW, Suite 700  
Washington, DC 20009-1068

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## **POPULATION GROWTH AND DISTRIBUTION IN APPALACHIA: NEW REALITIES**

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Population Reference Bureau

Most people see Appalachia as a rural, sparsely populated area. The reality of this region, however, is infinitely more complex. For example, more than three-fifths of the Appalachian population lives in metropolitan areas; about one-fourth resides in large metros such as Atlanta, Pittsburgh, and Birmingham. Nine in 10 Appalachian residents live outside the region's central core. One-sixth of the region's population—mostly in southern Appalachia—lives in one of the 76 counties that grew at least 20 percent during the 1990s. And more Appalachian residents live in counties that are economically on par with the nation as a whole than do residents in Appalachian areas under major economic stress.

Many Appalachian areas remain sparsely populated, however. Nearly half of Appalachia's 410 counties had fewer than 30,000 people in 2000; 33 of those counties had fewer than 10,000 residents. While southern Appalachia's population has grown rapidly over the last 30 years, northern Appalachia's growth has stagnated. Some areas in Appalachia, in fact, have fared even worse demographically: More than one-fourth of the region's population lives in one of the 82 counties (mostly in northern or central Appalachia) that actually lost people during the 1990s. Moreover, about 4 million Appalachian residents live in the 56 counties of the region that lost population for at least four of the five decades between 1950 and 2000. (Those 4 million are more than 1 million, or 21 percent, fewer residents than the number of people who lived in these

counties 50 years earlier.) Seven Appalachian counties have been losing population *every decade* since 1950, with the population in those counties shrinking from 804,000 to 574,000, or 29 percent.

Using data from the decennial census (plus selected other sources), this report will examine Appalachia's population trends between 1990 and 2000. While the focus will be on developments since 1990, the report also will look at the historical trends that helped shape current developments. This study will not only compare Appalachia to the rest of the United States, but it also will examine contrasts within the Appalachian region—looking at the three major subregions, the 13 states that are part of the official Appalachian region, counties at different levels of economic development, and urban and rural Appalachia. Finally, the report will examine the impact of natural increase and net migration on the region, and look at what might lie ahead for Appalachia's demographics beyond 2000.

## **The Appalachian Region and the Decennial Census**

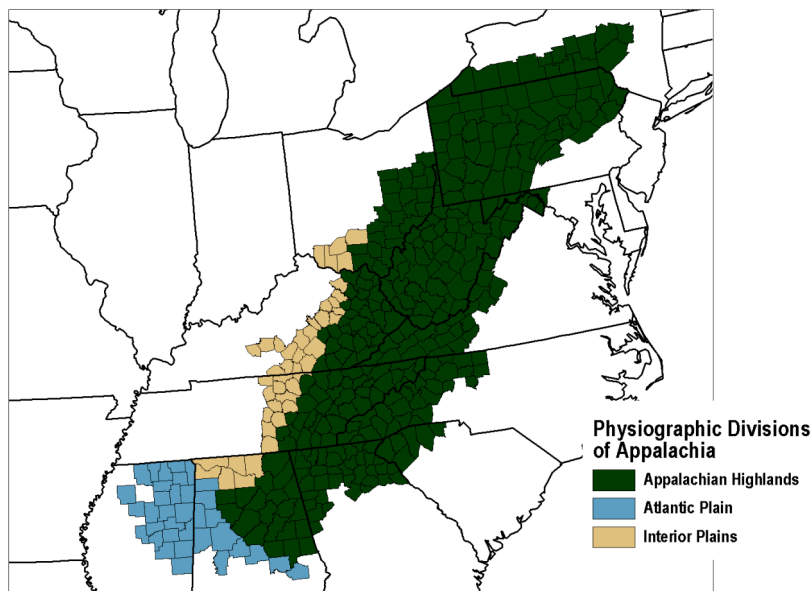
***About Appalachia.*** Appalachia, not surprisingly, refers to the area around the Appalachian Mountains, which cover more than 1,500 miles from the Canadian province of Quebec to northern Alabama, making it the largest mountain system in eastern North America. Included in the Appalachian chain are smaller sections like Vermont's Green Mountains, Pennsylvania's Allegheny Plateau, the Blue Ridge Mountains of the Virginias, and the Great Smoky Mountains along the North Carolina-Tennessee border.

Over the years, analysts have defined Appalachia along various typologies—most of them economic.<sup>1</sup> This report uses the definition employed by the Appalachian

Regional Commission (ARC), a federal-state government partnership designed to improve conditions in the Appalachian region. The region covers 410 counties<sup>2</sup> in 13 states (see Figure 1)—all of West Virginia, as well as parts of New York, Pennsylvania, Ohio, Maryland, Virginia, the Carolinas, Tennessee, Kentucky, Georgia, Alabama, and Mississippi. This vast land mass spreads through three major physiographic divisions—regions designated by the U.S. Geological Service based on such factors as geology type, surface texture, and elevation. Not surprisingly, the Appalachian Highlands division constitutes most of the region. However, two other divisions cover parts of Appalachia. The Atlantic Plain extends from the Atlantic and Gulf coasts up through eastern Mississippi and central Alabama, while the Interior Plains extend eastward to parts of Ohio, Kentucky, Tennessee, and northwestern Alabama.<sup>3</sup>

**Figure 1**

**The physiographic structure of the 410-county Appalachian region consists of three major divisions. Not surprisingly, the Appalachian Highlands cover most of the land area.**

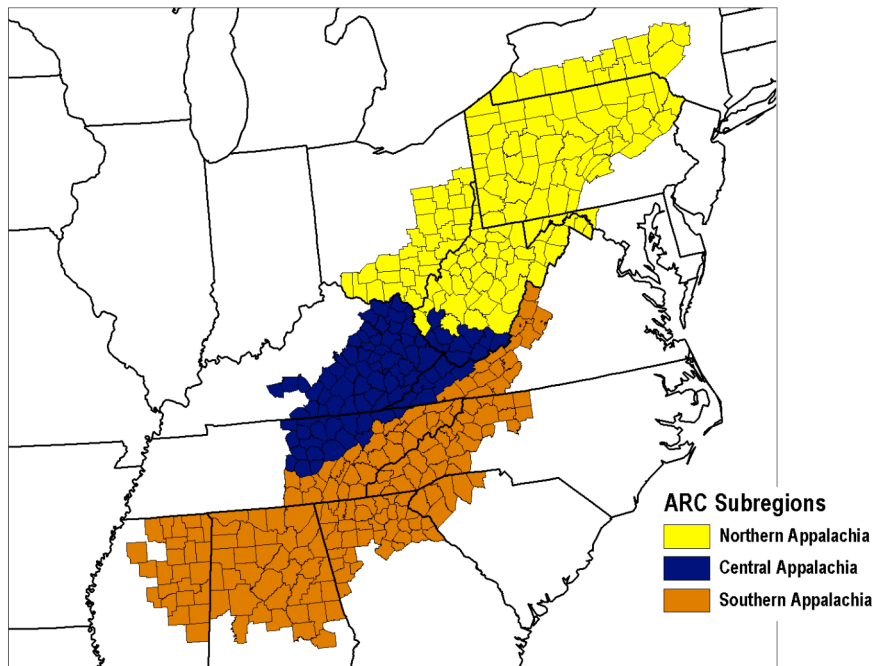


Source: Appalachian Regional Commission, 2004.

Appalachia has three major subregions (see Figure 2). Northern Appalachia contains the Appalachian counties of New York, Pennsylvania, Maryland, and Ohio, plus 46 of West Virginia's 55 counties. Central Appalachia (often known as the region's core) includes the Mountaineer State's nine southernmost counties, as well as eastern Kentucky, Virginia's southwestern tip, and the northwestern portion of Tennessee's Appalachian area. Finally, southern Appalachia includes most of Appalachian Virginia and Tennessee, as well as the western Carolinas and the northern parts of Georgia, Alabama, and Mississippi.<sup>4</sup>

**Figure 2**

**Covering all or part of 13 states, the Appalachian region can be separated into three different subregions.**



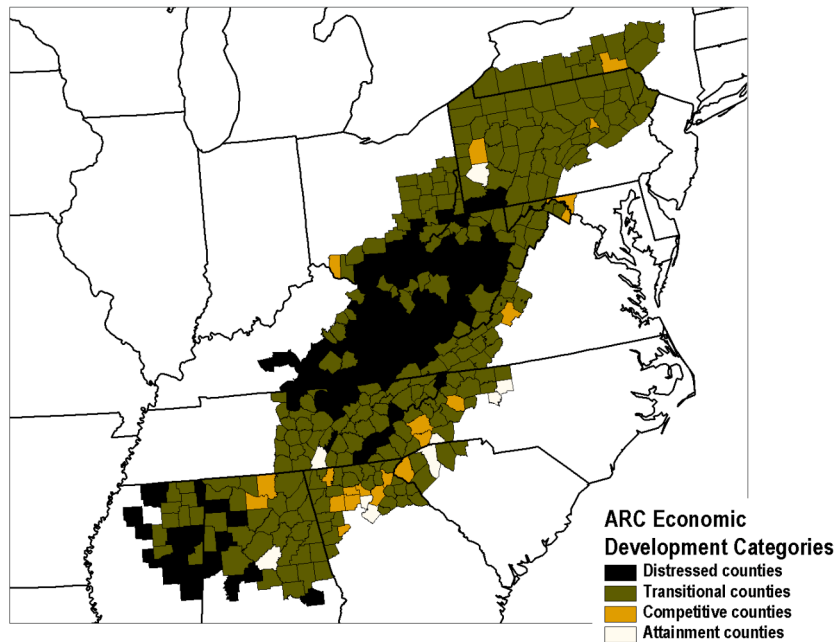
**Source: Appalachian Regional Commission, 2004.**

The economic status of Appalachia varies widely—some areas remain economically depressed, while others are as advanced as the United States as a whole.

Recognizing this fact, the ARC has developed a system that uses three indicators of economic viability—per capita income, poverty, and unemployment—to classify the region into four categories of economic development (see Figure 3).<sup>5</sup>

**Figure 3**

**Appalachian counties are classified into four levels of economic development. The Transitional category covers most of the region; the other three have distinct geographic patterns.**



Source: Appalachian Regional Commission, 2003.

As the category's name implies, *Distressed* counties have the greatest economic hardships. In counties classified as Distressed, per capita income is no greater than 67 percent of the national average, while poverty and unemployment are at least 150 percent of U.S. levels. Counties also fall in the Distressed category if their poverty rates are at least 200 percent of the national average and either of the two remaining criteria also holds. Central Appalachia has most of the 121 Distressed counties, although Ohio, Alabama, and Mississippi also have pockets.

Although *Transitional* counties are noticeably worse off economically than the nation as a whole, they do not meet all of the criteria necessary to be classified as Distressed. Consider Forest County in northwestern Pennsylvania, for example. Unemployment there was twice the national average, while per capita income was barely half that of the nation as a whole. However, Forest County's poverty rate was actually *lower* than the national average—placing it in the Transitional category. Indeed, many Transitional counties fare better than—or at least as well as—the nation as a whole on one of the key economic indicators, which explains why such areas can be considered as being in an “intermediate” phase of economic development. Most Appalachian counties (259 out of 410) are in the Transitional category.

While *Competitive* counties approach national economic levels, they have not yet achieved full economic parity. For counties in this category, income and poverty rates are better than the national average, but per capita incomes—while reasonably close to the national average (between 80 percent and 99 percent)—remain slightly lower. In fact, Pickens County, S.C. (home to Clemson University) was classified as Transitional rather than Competitive because its per capita income was just 72 percent of the national average—even though it had lower unemployment and poverty levels than the United States as a whole. Southern Appalachia has the majority of the region's 21 Competitive counties.

Nine Appalachian counties fall in the highest of the four categories, the *Attainment* level. Attainment counties have income, poverty, and unemployment levels that are all either the same as or better than the national average. In other words, these counties have achieved total economic parity with the nation as a whole. Some of them,



in fact, are 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 (out of 3,110 nationwide) on income and unemployment, and among the top 150 on the poverty indicator. All but one of the Attainment counties are in metropolitan areas (such as Atlanta; Winston Salem, N.C.; and Pittsburgh). Allegheny County, Pa. (which contains Pittsburgh) is the only Attainment county outside the South.

***The 2000 Decennial Census.*** The decennial census provides a detailed examination of demographic, social, and economic characteristics for such areas as counties, cities and towns, and neighborhoods (census tracts). Besides being required by the U.S. Constitution to provide data for congressional apportionment, the census also provides a guideline for the distribution of nearly \$200 billion in federal funds. Local officials, business people, and others in both the public and private sector also rely on census data to make important 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—as well as the state of the nation’s various demographic subgroups. That these data are available for small areas allows users to study not only individual areas, but also different combinations of such areas, depending on the user’s needs.

### **Historical Patterns of Growth and Decline in the 20th Century**

***The first half of the 20th century: 1910-1950.*** Railroads, coal, and (to a lesser extent) textiles were among Appalachia’s dominant industries at the beginning of the 20th century, especially in the region’s north.<sup>6</sup> The coal industry in particular flourished

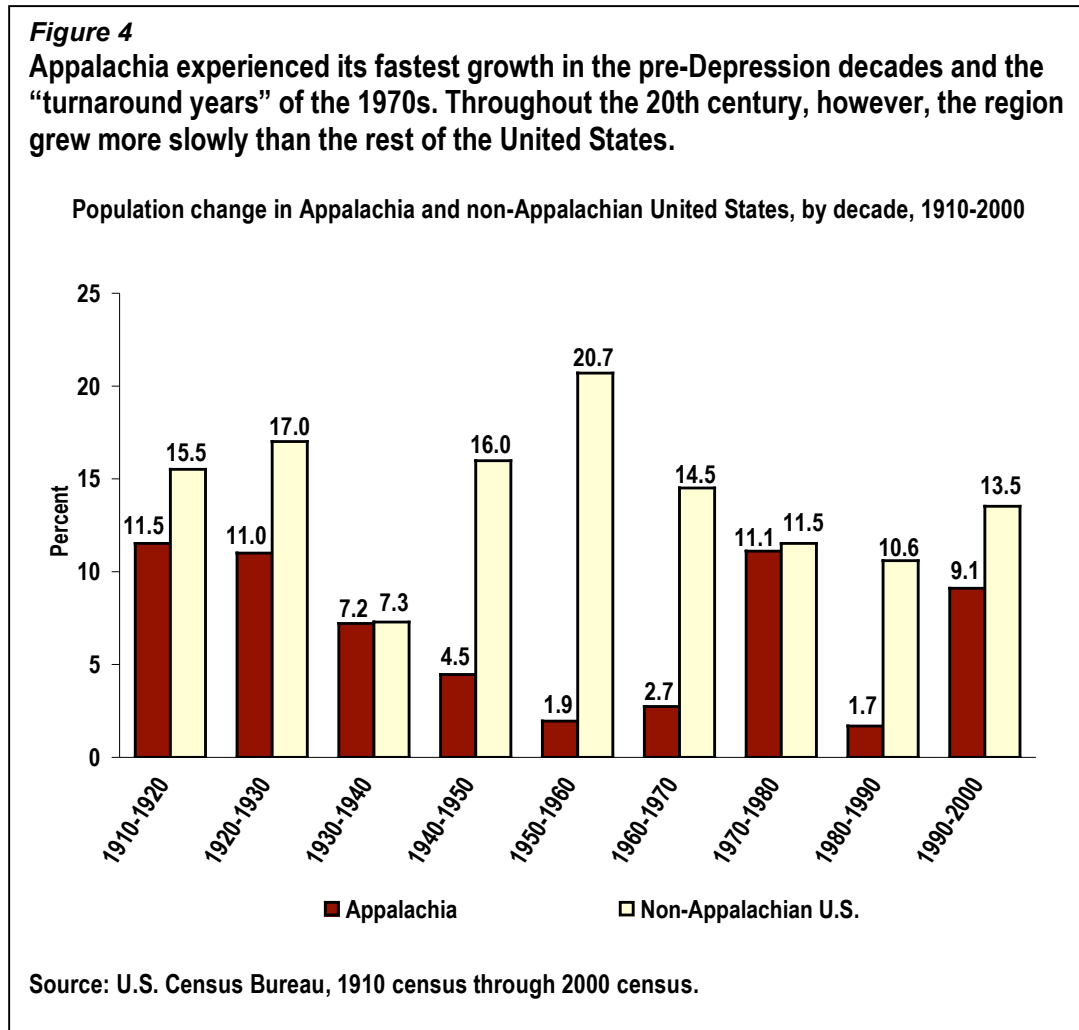
between 1910 and 1930; Pennsylvania, which produced anthracite coal in the northeast and bituminous coal in the west, was the nation's second most populous state (after New York) until 1950. In southern Appalachia—especially in the areas adjacent to the southern Piedmont—textiles became the major industry.<sup>7</sup> While the regional economy grew, however, not all of Appalachia shared in the boom. Rural areas, especially those dependent on agriculture, steadily declined during the early 20th century, as former farmers headed for the mines, the textile mills, or other industrial locations.<sup>8</sup>

Things began to change with the Great Depression, as coal (like many other industries nationwide) declined, taking the fortunes of areas dependent upon coal with it. Paradoxically, Appalachia's rural areas experienced some in-migration during this period, as unemployed industrial workers returned to the family farm to make out a living. But these effects proved temporary; with the United States' entry into World War II, the country's wartime needs renewed the demand for coal and its byproducts—such as steel.<sup>9</sup>

The first half of the 20th century also saw the involvement of the federal government in large-scale resource projects in Appalachia. Millions of acres of land in the Appalachian region—in fact, nationwide—were set aside to establish national parks. Regional projects such as the Tennessee Valley Authority also came into existence. Nevertheless, many parts of Appalachia, particularly in its southern areas, continued to be plagued by extreme poverty.<sup>10</sup>

Appalachia's population grew from 12.8 million in 1910 to 17.7 million in 1950, a 39 percent increase. While impressive, this growth was dwarfed by the 68 percent population growth for the rest of the country.<sup>11</sup> During each decade, Appalachia grew

more slowly than the areas outside of it—even during the high population-growth periods of the 1910s and 1920s (see Figure 4). This disparity especially was true in the 1940s; in the decade that saw the United States enter and win the Second World War, the Appalachian population grew just one-fourth as fast as the population outside the region (4 percent versus 16 percent).



While both central and southern Appalachia each grew more than 50 percent during this period (55 percent and 51 percent, respectively), northern Appalachia increased its population just 29 percent. The respective patterns varied during each decade, however. Central Appalachia’s growth rate of 17 percent outpaced that of the rest

of the region during the 1910s. In the 1920s and 1930s, central and southern Appalachia had double-digit rates of increase, while northern Appalachia's growth lagged behind in both decades (growing 9 percent in the 1920s and just 4 percent in the 1930s). In the 1940s—a decade of very slow population growth for the region—southern Appalachia's 8 percent increase dwarfed the 2 percent growth rate that both northern and central Appalachia experienced.

Among the region's states, the demographic experience during the early 20th century was decidedly mixed. For example, West Virginia and the Appalachian portions of several states grew more than 50 percent between 1910 and 1950. West Virginia's population increased 64 percent from 1.2 million in 1910 to 2 million in 1950 (a figure greater than its 2000 population of 1.8 million, but that's getting ahead of the story); western North Carolina's population grew 76 percent; western South Carolina's rose 74 percent; East Tennessee's saw a 62 percent increase; and northern Alabama's increased 59 percent. By contrast, growth was much slower in the Appalachian sections of other states. In Appalachian Ohio, for example, the population increased just 11 percent between 1910 and 1950, and the 2 percent growth in Mississippi's Appalachian population included population losses of nearly 5 percent in the 1910s and 8 percent in the 1940s.

In eight of the 12 states with both Appalachian and non-Appalachian sections, population growth during the first half of the 20th century was slower in these states' Appalachian areas than in their non-Appalachian ones. (Alabama, Kentucky, South Carolina, and Tennessee were the exceptions.) In most cases, the gap was significant—non-Appalachian Ohio grew 82 percent between 1910 and 1950, more than seven times

the growth rate in the Buckeye State's Appalachian section. Even western North Carolina's rapid growth in that period was slower than the 87 percent increase the rest of the Tar Heel State enjoyed.

Even during the early 20th century, Appalachian counties currently designated as more economically developed (the Competitive and Attainment counties) grew faster than their less economically developed counterparts (the Distressed and Transitional counties). Both the Competitive and Attainment counties grew more than 60 percent between 1910 and 1950—even faster than the rate for the non-Appalachian United States. By contrast, the Distressed and Transitional counties in the region grew less than 40 percent. This overall pattern held true for each decade except the 1930s. During that decade, the Appalachian counties currently in the Distressed category grew 11 percent as a whole, while the Attainment counties grew just 5 percent. (The Competitive counties grew faster in the 1930s than the Transitional counties, however—10 percent to 6 percent.) In the more economically robust 1940s, however, the Distressed counties actually surrendered some of their 1930s gains, *losing* nearly 3 percent of their population.

***Postwar economic and social change: 1950-1970.*** The 1950s and 1960s produced several historical and societal developments that decisively reshaped America's political and socioeconomic landscape. The nation saw the quickening of the Cold War, the rise of the civil rights movement, the growth of the U.S. space program, and America's involvement in conflicts in Korea and Vietnam. Meanwhile, rapid social and economic change posed both unprecedented opportunities and challenges as the nation enjoyed tremendous economic prosperity, the start of the suburban boom, and the

beginning of the national migration southward as well as westward. It was also during this period when economic conditions in the Appalachian region received even more government attention, leading partly to the War on Poverty during Lyndon Johnson's administration and, more directly, to the formation of the Appalachian Regional Commission in 1965.

Unfortunately, the 1950s and 1960s marked the beginning of a protracted economic decline in the Appalachian region. The national demand for the coal produced in Appalachia was subsiding in favor of oil and other energy sources. And where there remained a demand for coal, it was for the type that could be strip-mined—rather than deep-mined, which was the technique used to gather much of the coal in the Appalachians.<sup>12</sup> Moreover, the growth of the defense industry that occurred with the height of the Cold War largely bypassed Appalachia with a few exceptions.<sup>13</sup> And the region's agricultural counties continued their steady decline as well.<sup>14</sup>

Given this backdrop, the 1950-1970 period was, unsurprisingly, not very kind to Appalachia demographically (see Table 1, page 13). The region's population grew only 5 percent, from 17.7 million to 18.6 million. By contrast, the rest of the United States increased its population 38 percent. Appalachia's population grew just 2 percent in the 1950s (compared to 21 percent in the rest of the country) and 3 percent in the 1960s (versus 15 percent elsewhere—see Figure 4, page 9).

Appalachia's three subregions had vastly different demographic experiences during the 1950s and 1960s. Southern Appalachia's population increased 16 percent over the period—more than three times Appalachia's overall rate. Southern Appalachia's metropolitan areas—as currently defined by the U.S. Office of Management and Budget

**Table 1**

**Appalachia's population grew just 5 percent during the 1950s and 1960s. But trends varied within the region—with rapid growth in several states and declines in a few others.**

**Population change in Appalachian region, 1950-1970**

AREA	NUMBER (1000s)	PERCENT
APPALACHIA	840	4.7
NON-APPALACHIAN U.S.	51,046	38.2
Northern Appalachia	297	3.1
Central Appalachia	-430	-19.6
Southern Appalachia	972	16.2
Distressed counties	-621	-20.2
Transitional counties	711	6.2
Competitive counties	416	42.4
Attainment counties	334	15.6
Appalachian sections of:		
Alabama	266	13.9
Georgia	194	29.7
Kentucky	-199	-18.1
Maryland	20	10.4
Mississippi	-20	-4.0
New York	139	15.1
North Carolina	156	17.7
Ohio	104	9.1
Pennsylvania	146	2.5
South Carolina	133	25.4
Tennessee	204	13.3
Virginia	-40	-6.6
West Virginia	-261	-13.0

**Source: U.S. Census Bureau, 1950 census through 1970 census.**

(OMB)—grew even faster, at 25 percent.

Northern Appalachia, by contrast, grew very slowly between 1950 and 1970, at just 3 percent. During the 1960s, in fact, northern Appalachia added just 29,000 people to its 1960 population of 9.8 million (a growth rate of 0.3 percent). But if northern Appalachia's population experienced stagnation in the 1950–1970 period, central Appalachia's took an outright nosedive. From a population of 2.2 million in 1950, central Appalachia lost nearly 430,000 people (almost 20 percent) over the next 20 years. In the 1950s alone, central Appalachia lost 13 percent of its residents. The situation was even worse in central Appalachia's outlying rural areas (those counties lying outside metropolitan and micropolitan areas as defined by the OMB).<sup>15</sup> These rural areas lost more than one-fourth of their residents between 1950 and 1970.

The experiences of the Appalachian states were as varied as those of the subregions (see Table 1, page 13). Georgia's Appalachian section, for example, grew nearly 30 percent in the 1950s and 1960s—faster than the 23 percent increase it experienced between 1910 and 1950. Appalachian South Carolina continued its rapid growth from earlier in the century, increasing its population 25 percent in the 1950–1970 period. The Appalachian sections of North Carolina and New York also grew at least 15 percent over that time. By contrast, population growth stagnated in Appalachian Pennsylvania (at a 3 percent rate); and West Virginia and the Appalachian sections of Kentucky, Virginia, and Mississippi all lost population. West Virginia's story between 1950 and 1970 contrasted greatly with that state's experiences earlier in the century. After growing 64 percent to just over 2 million residents between 1910 and 1950, the Mountaineer State's population declined 13 percent (losing 261,000 residents) in the next two decades, with population losses in both the 1950s and the 1960s. The shrinkages of the Appalachian population in Kentucky (18 percent) and Virginia (7 percent) were similar to West Virginia's experience, while the 4 percent loss in northeastern Mississippi more closely resembled its own stagnant growth rate prior to 1950.

In every state except Alabama and South Carolina, population growth was greater outside Appalachia in the 1950–1970 period. Not surprisingly, the non-Appalachian portions of Kentucky, Mississippi, and Virginia (all of which lost people in their Appalachian sections) grew. However, the rest of Mississippi grew slowly (at just over 3 percent) during the 1950s and 1960s, while growth in the non-Appalachian counties of Kentucky (26 percent) and especially Virginia (50 percent) was much more rapid. And even in many of the states whose Appalachian portions grew during the 1950s and 1960s,



growth was much more rapid in the rest of the state. For example, while Appalachian Maryland grew 10 percent in the 20-year period, the rest of the Old Line State grew 72 percent—nearly twice the rate of the non-Appalachian United States.

Among the four economic development categories, Appalachia's Competitive and Attainment counties—most of which were either in metropolitan areas or on their way to attaining metro status—had the fastest growth during this period. The Competitive counties grew an impressive 42 percent during the 1950s and 1960s (continuing their experiences from earlier in the century), while the Attainment counties grew more slowly, at 16 percent. Growth was slow among the Transitional counties; the 1970 population in this group was only 6 percent greater than the 1950 population. But as expected, it was the Distressed counties that had the worst demographic experience in the 1950s and 1960s: These counties lost one-fifth of their collective 1950 population of 3.1 million during the two-decade period as their economic fortunes declined.

***After the Sixties: 1970-1990.*** It was during the 1970s and 1980s that many of the demographic trends that had started during the 1950s and 1960s intensified (for example, increased suburbanization and a movement to the South and West). But there was one major difference between the periods: the renewed attraction of rural areas, mostly in the 1970s.

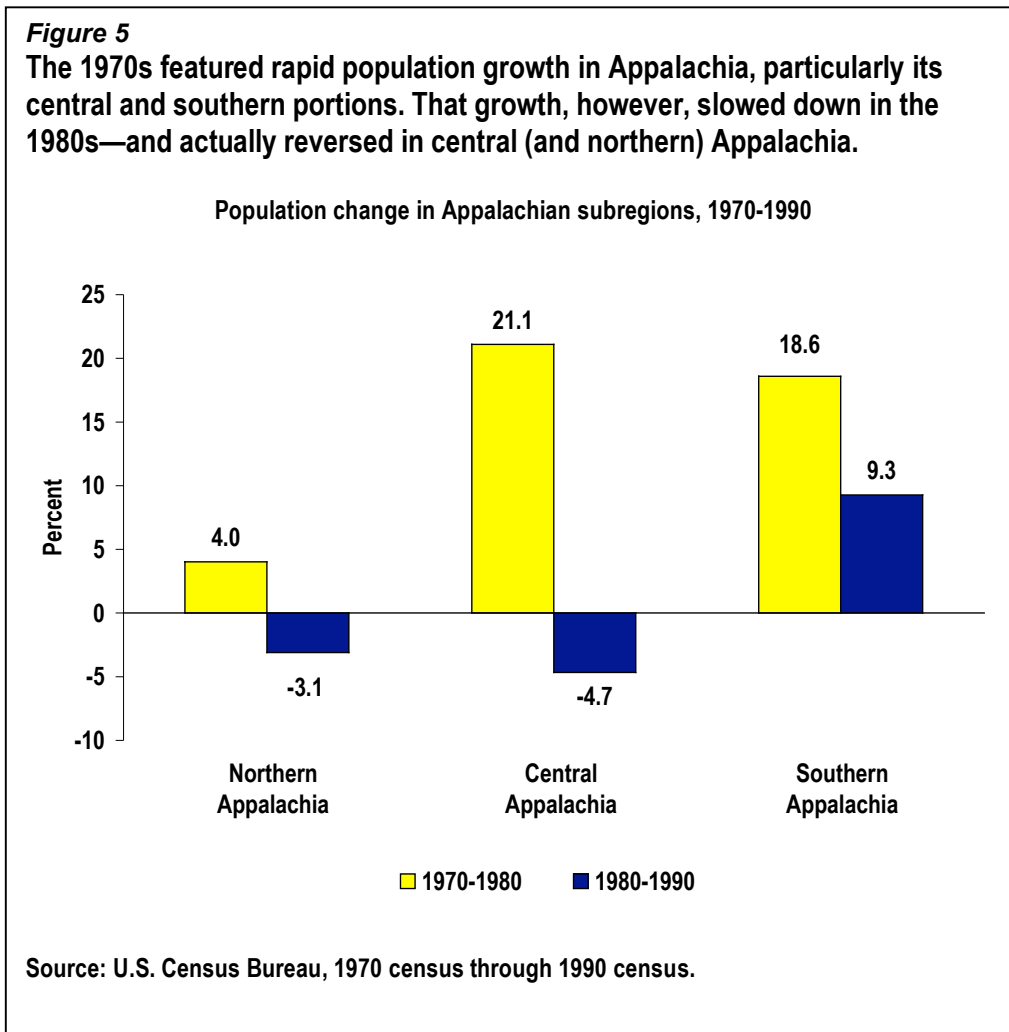
Americans' preference for living in more open spaces already was present, fueled partly by the unrest (much of which was racially charged) in many large cities during the late 1960s. A 1968 Gallup Poll, for example, found that, although 32 percent of adults actually lived in rural and small-town America, 56 percent wanted to live in such areas—provided that good jobs were available. Additionally, slight majorities of respondents

called for the federal government to encourage the growth of small towns and discourage the continued expansion of large metropolitan areas.<sup>16</sup> And many Americans had already begun to act on those preferences. During the 1950s, for example, the share of Americans living in places of between 10,000 and 100,000 people had increased from 20 percent to 26 percent, while the share living in cities of 1 million or more fell from 12 percent to 10 percent. Moreover, suburban growth between 1960 and 1968 averaged 2.8 percent per annum, compared to annual growth rates of 1 percent for nonmetropolitan areas and just 0.1 percent for central cities.<sup>17</sup>

But it was during the 1970s that Americans' residential choices matched their preferences for less-concentrated areas in a way that extended to rural areas. The combination of cheap land, an increased sense of environmentalism, and (in Appalachia's case) some interest in the region's traditions and amenities resulted in the arrival of newcomers to rural and small-town Appalachia. Although many of the newcomers would leave after a few years, others would stay.<sup>18</sup>

During the 20-year period between 1970 and 1990, Appalachia added an additional 2.4 million people to its population, an increase of 13 percent. While the region's rate of growth was significantly slower than the 23 percent increase in the rest of the country, it was nearly three times Appalachia's growth rate during the previous 20-year period. But the region's pattern of growth over this period resembled rural America's pattern. During the 1970s, Appalachia's population increased nearly 2.1 million, the largest number during any 10-year period in the 20th century. And not only was the region's 11 percent growth rate the highest in 50 years, it came close to matching the 12 percent growth rate in the rest of the country (see Figure 4, page 9). The 1980s,

however, saw Appalachia experience its smallest rate of growth over the century—well under 2 percent (347,000 people).



Just as the country continued its move southward (and westward) during the 1970s and 1980s, so did Appalachia. Southern Appalachia grew nearly 30 percent during the 1970–1990 period, more than twice the regional rate and even more than the rest of the United States. And even though the subregion grew faster during the 1970s than the 1980s (see Figure 5), its 1980s growth rate of 9 percent was only slightly less than the 10 percent increase nationally. Central Appalachia also experienced healthy growth between 1970 and 1990, gaining 273,000 of the people it lost between 1950 and 1970 to surpass

the 2 million mark once again. However, the two decades tell different demographic stories for the Appalachian core. In the 1970s, central Appalachia fully participated in the rural rebound, adding 373,000 people to its population—the largest single-decade increase for the subregion in the 20th century. Moreover, central Appalachia’s 21 percent population growth in the 1970s nearly doubled the regional (and national) average and even exceeded southern Appalachia’s growth rate. The 1980s, however, saw not merely a demographic slowdown, but an outright reversal. Central Appalachia lost nearly 100,000 people that decade—5 percent of its population. And its most rural counties (those outside core-based statistical areas), which had grown 21 percent during the 1970s, lost 7 percent of their population during the 1980s.

But even with the 1980s decline, central Appalachia did have a double-digit growth rate increase during the 1970–1990 period. The same cannot be said for northern Appalachia, whose population total barely budged in that same time frame, growing less than 1 percent. In the 1970s, Appalachia’s northern areas grew just 4 percent, well below the rate for the region as a whole. (However, the rural rebound was present even in northern Appalachia; counties outside its core-based areas grew 13 percent during the 1970s.) In the 1980s, northern Appalachia lost 318,000 people, or 3 percent of its population.

Every state in the region except Pennsylvania gained people in its Appalachian section between 1970 and 1990. Georgia’s Appalachian section, thanks to the boom in suburban Atlanta, nearly doubled its population in that time, growing 83 percent. The Appalachian counties of South Carolina (35 percent), North Carolina (26 percent), and Tennessee (24 percent) also had sizeable increases. By contrast, population increases in

West Virginia (3 percent) and the Appalachian sections of New York (3 percent) and Maryland (7 percent) were more modest, while Appalachian Pennsylvania lost 3 percent of its population. In almost every case, the population increase was greater in the 1970s than in the 1980s. (Appalachian Georgia was an exception, growing about 35 percent in each decade.) Also, every state in the region grew during the 1970s, while West Virginia and the Appalachian portions of Kentucky, Ohio, Pennsylvania, and Virginia suffered population losses in the 1980s.

Whether growth was faster inside or outside a state's Appalachian section between 1970 and 1990 depended on the state. For example, the population growth rate in Georgia's Appalachian counties was more than double that in the rest of the Peach State. Appalachian Kentucky, Ohio, and New York also had greater population increases than the non-Appalachian areas of those states—thanks largely to population growth during the 1970s. (For example, Ohio's Appalachian counties grew a modest 11 percent between 1970 and 1990, but the population in the rest of the Buckeye State rose less than 1 percent.) By contrast, North Carolina, Virginia, Maryland, and Pennsylvania saw noticeably greater increases outside their Appalachian sections than within them. While Appalachian Pennsylvania lost people in the 1970–1990 period, for instance, the rest of the Keystone State grew 4 percent—modest, but growing all the same.

Appalachian counties in all four economic development categories grew on average at least 10 percent between 1970 and 1990. The Competitive counties, at 33 percent, grew especially fast, while the counties in the other three categories grew between 10 percent and 12 percent. At 17 percent, the population growth in the Distressed counties in the 1970s provides a particularly remarkable illustration of the

attractiveness of rural areas during that decade. Not only did that rate reverse a 30-year pattern of steady decline, but it also exceeded the growth rates of the Transitional and Attainment counties. The 1980s, however, saw the Distressed counties return to their mid-20th century demographic pattern, as their aggregate population fell 5 percent. (Nevertheless, the Distressed counties' population in 1990, at 2.7 million, remained larger than the 1960 population in that group of Appalachian counties.) The story of the Attainment counties during this period is interesting in its own right. In a rarity for the Appalachian region, the nine mostly metropolitan counties in this group actually grew faster during the 1980s (7 percent) than the 1970s (4 percent).

### **Demographic Patterns During the 1990s**

During most of the 1990s, the United States experienced a prolonged period of economic growth. Most of that growth can be traced to the increased dominance of a service sector, which includes such diverse occupations as attorneys, teachers, convenience store clerks, and office couriers. With the end of the Cold War, the country gained the benefits (and the responsibilities) of an even greater international leadership role than before. With the United States serving as a more attractive destination, immigration levels continued to remain steady. Fertility levels also continued their post-1980 increase—an increase attributable to three factors: the optimism produced by U.S. economic growth and leadership, the higher fertility patterns of the newly-arrived immigrants, and the fact that many women of the post-World War II “baby boom” generation began starting their own families.<sup>19</sup> Indeed, the country grew an impressive 13

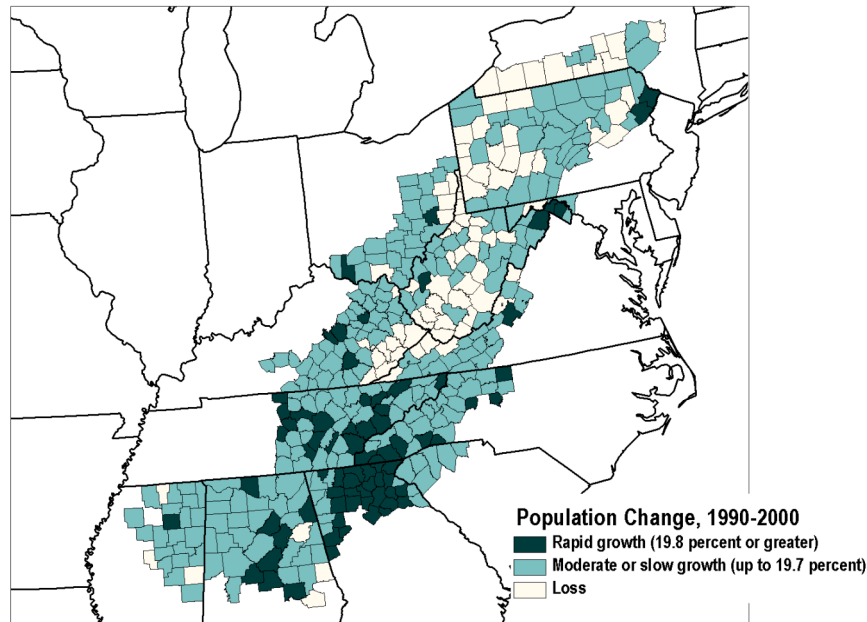
percent during the decade, to a total of 281.4 million people; that rate of growth was the fastest for the United States in 30 years.

Appalachia was not untouched by these developments. For example, the economic boom in the 1990s contributed to parity between unemployment in Appalachia and unemployment elsewhere. Moreover, the service sector expanded in the region—employing more than half of Appalachian workers in 2000.<sup>20</sup> And just as was the case nationwide, the region rebounded demographically from the stagnant growth of the 1980s. Between 1990 and 2000, the Appalachian region added 1.9 million people to reach its 2000 total of almost 22.9 million. Despite this growth, however, Appalachia's 9 percent population growth rate during the 1990s was slower than that of the rest of the nation, which grew almost 14 percent. Still, Appalachia's growth in the 1990s more resembled that of the 1970s boom than the stagnation of the 1980s—not to mention the several decades prior to 1970 (see Figure 4, page 9). Save for the 1970s, in fact, the region grew at a faster rate during the 1990s than in any decade since the 1920s—when the coal, railroad, and textile industries were booming. (And only in the 1970s did the region gain more residents than the 1.9 million added in the 1990s.)

But just as throughout the past century, Appalachia's population growth was uneven (see Figure 6, page 22). For example, 76 of Appalachia's 410 counties were major growth magnets, increasing their population at least 20 percent between 1990 and 2000. By contrast, 83 Appalachian counties lost people during the 1990s—in many cases, continuing patterns of decline that have existed since World War II. The next few sections examine the region's recent growth patterns more closely.

**Figure 6**

**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.

*Northern, Central, and Southern Appalachia.* As has been the case for almost every decade for the last 60 years except the 1970s, southern Appalachia was the epicenter of the region's growth during the 1990s. In fact, southern Appalachia's 18 percent growth rate was not only twice the regional average, but also greater than the rate for the non-Appalachian United States. Parts of southern Appalachia grew even faster. Nearly one-third of the subregion's 179 counties grew at least 20 percent during the 1990s; nine counties increased their population 50 percent or more. Nearly half of southern Appalachia's fast-growing counties were in metropolitan areas of at least 250,000 people. By contrast, just eight southern Appalachian counties had fewer people in 2000 than in 1990. These tended to be more rural in character—seven of the eight were



outside metropolitan areas—and to have had population losses persisting over several decades.

After reverting to its mid-century pattern of population loss during the 1980s, central Appalachia rebounded demographically as the last century ended. The Appalachian core grew slightly less than 6 percent in the 1990s, which was less than one-third of both southern Appalachia's rate and the 21 percent increase central Appalachia itself experienced during the rural renaissance of two decades earlier. Nevertheless, central Appalachia added nearly 115,000 people between 1990 and 2000, enough to increase its population to slightly less than 2.2 million—the subregion's highest population total since 1950.

Although central Appalachia's growth in the 1990s was significantly below both the regional and national average, this area did have its share of growth magnets. Fully one-third of the 87 counties in the Appalachian core grew faster than the national average of 13.2 percent; 10 counties actually had increases of at least 20 percent. Most of the fast-growth counties were outside metropolitan areas—not surprising given the fact that 86 percent of central Appalachians live in such places. North-central Tennessee was a major center of subregional growth; 16 of the Volunteer State's 20 counties in central Appalachia grew at least 13 percent, while six had increases of at least 20 percent. Interestingly, some of central Appalachia's fast-growth counties in the 1990s (Menifee County, Ky., and Smith County, Tenn., for example) actually had lost population in the 1980s.

The 20 central Appalachian counties that lost population tended to be in more isolated rural areas; 16 did not border any part of a metropolitan area. Major economic

hardship was another general characteristic, as 17 of these counties had been classified as economically distressed by the ARC. And for most of the central Appalachian counties that lost people, the 1990s continued a downward spiral going as far back as the 1950s and interrupted only by the nonmetro turnaround of the 1970s. In some cases, the losses were steep; central Appalachia had all five of the counties in the region that by 2000 had lost at least 10 percent of their 1990 population.

But while some parts of central Appalachia continued to lose population, its overall demographic story was better than northern Appalachia's. Collectively, the Appalachian region's 144 northern counties had less than 2 percent more people in 2000 than it did in 1990. When combined with the continued rapid growth in southern Appalachia, this development made the 2000 census the first one where southern Appalachian residents outnumbered northern Appalachian ones—10.7 million to 10.1 million.

The demographic news was not totally bad for northern Appalachia. Its slow 1990s growth did reverse the subregion's 3 percent population decline from the previous decade. And 18 counties did add people at a rate that was above the national average of 13.2 percent. Eight northern Appalachian counties actually grew faster than 20 percent in the 1990s—two, Pike and Monroe in northeastern Pennsylvania, added more than 40 percent to their 1990 populations. Most of these fast-growth counties were either in metropolitan areas or adjacent to metros; several were outlying counties in large metros.<sup>21</sup>

But while northern Appalachia had areas of solid population growth, it had even more areas of demographic decline. Of northern Appalachia's 144 counties, 55 lost people during the 1990s. Put another way, two-thirds of the 83 Appalachian counties that

lost population between 1990 and 2000 were in northern Appalachia. These counties represented virtually all residential types—counties in large metros, counties in smaller metros, counties bordering metropolitan areas, and more isolated counties. Although population declines were present in 11 of northern Appalachia’s 33 economically distressed counties, the subregion’s 104 counties classified as Transitional also were hit hard. Forty-two Transitional counties in northern Appalachia had fewer people in 2000 than in 1990; six lost more than 5 percent of their populations. (By comparison, only three Distressed counties suffered population declines that steep.)

***The states.*** Between 1990 and 2000, Georgia was the nation’s sixth fastest growing state—and the fastest outside the Rocky Mountain West. Fueling much of the Peach State’s growth were the 37 counties in the Appalachian region, which include much of metropolitan Atlanta plus some resort and retirement areas. Georgia’s Appalachian counties grew an astounding 43 percent during the 1990s, to 2.2 million people in 2000; this growth rate was twice that of the rest of the state—strong in its own right (see Table 2, page 26). The 1990s marked the third consecutive decade where northern Georgia grew by more than 30 percent; the 1990s rate was the highest of the three. Moreover, 27 northern Georgia counties added at least 20 percent to their 1990 population—nearly one-third of the 76 Appalachian counties that grew so rapidly. All but one of Appalachia’s 11 fastest growing counties during the 1990s were in the Peach State.<sup>22</sup> Forsyth County, outside Atlanta, more than doubled its population between 1990 and 2000; another Atlanta-area county, Paulding, nearly doubled its population.

Other Appalachian states also attracted growth, increasing their populations at rates above the national (not just regional) average. Western North Carolina, for example,

grew 17 percent between 1990 and 2000. Northwestern South Carolina grew 16 percent. And the Appalachian counties of East Tennessee collectively added 15 percent to their population during the 1990s. The rates for all three states (in fact, for the Appalachian sections in every state but one) exceeded those of the previous decade; growth in the 1990s more than doubled that in the 1980s for the Tar Heel and Volunteer states.

**Table 2**

**The Appalachian sections of several states had especially strong growth during the 1990s. Often, however, growth in the rest of those states was even stronger.**

**Population change in United States and Appalachian states, 1990-2000**

AREA	APPALACHIAN SECTION		NON-APPALACHIAN SECTION	
	Number (1000s)	Percent	Number (1000s)	Percent
UNITED STATES TOTAL	1,912	9.1	30,800	13.5
Alabama	267	10.4	139	9.5
Georgia	661	42.7	1,047	21.2
Kentucky	71	6.6	286	10.9
Maryland	12	5.4	503	11.0
Mississippi	50	8.9	221	11.0
New York	-16	-1.4	1,002	5.9
North Carolina	220	16.8	1,201	22.6
Ohio	82	6.0	424	4.5
Pennsylvania	50	0.9	349	5.7
South Carolina	141	15.8	385	14.8
Tennessee	332	15.5	480	17.6
Virginia	26	4.0	865	15.6
West Virginia	15	0.8	---	---

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

As in Georgia, many of the Appalachian counties in these states grew even faster. Of the 50 Appalachian counties in East Tennessee, 18 grew at least 20 percent during the 1990s. So did nine of North Carolina's 29 Appalachian counties. And while none of the

six counties in northwestern South Carolina increased their populations at that magnitude, the growth rates for five of them exceeded the national average of 13.2 percent—and the sixth (Spartanburg County) grew by nearly 12 percent.

But while South Carolina's Appalachian counties grew faster than the rest of the Palmetto State, population growth in North Carolina and Tennessee was greater *outside* their Appalachian sections (see Table 2, page 26). The 71 non-Appalachian counties of the Tar Heel State increased their total population 23 percent during the 1990s, while the Volunteer State's 45 counties outside Appalachia grew nearly 18 percent.

Population growth was slower in some other states. Northern Alabama and northeastern Mississippi grew 10 percent and 9 percent, respectively—at or above the regional average, but below the national one. Southeastern Ohio's 6 percent growth was less than half the national rate, although it did reverse a slight (0.2 percent) decline from the 1980s. In Alabama and Ohio, however, growth outside the Appalachian section was even slower. And growth for some individual counties was much greater than the overall rate in these states. Eight of Alabama's Appalachian counties grew at least 20 percent during the 1990s, as did Pontotoc County in Mississippi and Noble and Brown counties in Ohio. In fact, Shelby County, Ala. (outside Birmingham) had 44 percent more people in 2000 than in 1990; two other Appalachian counties in the Yellowhammer State (Elmore and Blount) each grew 30 percent or more.

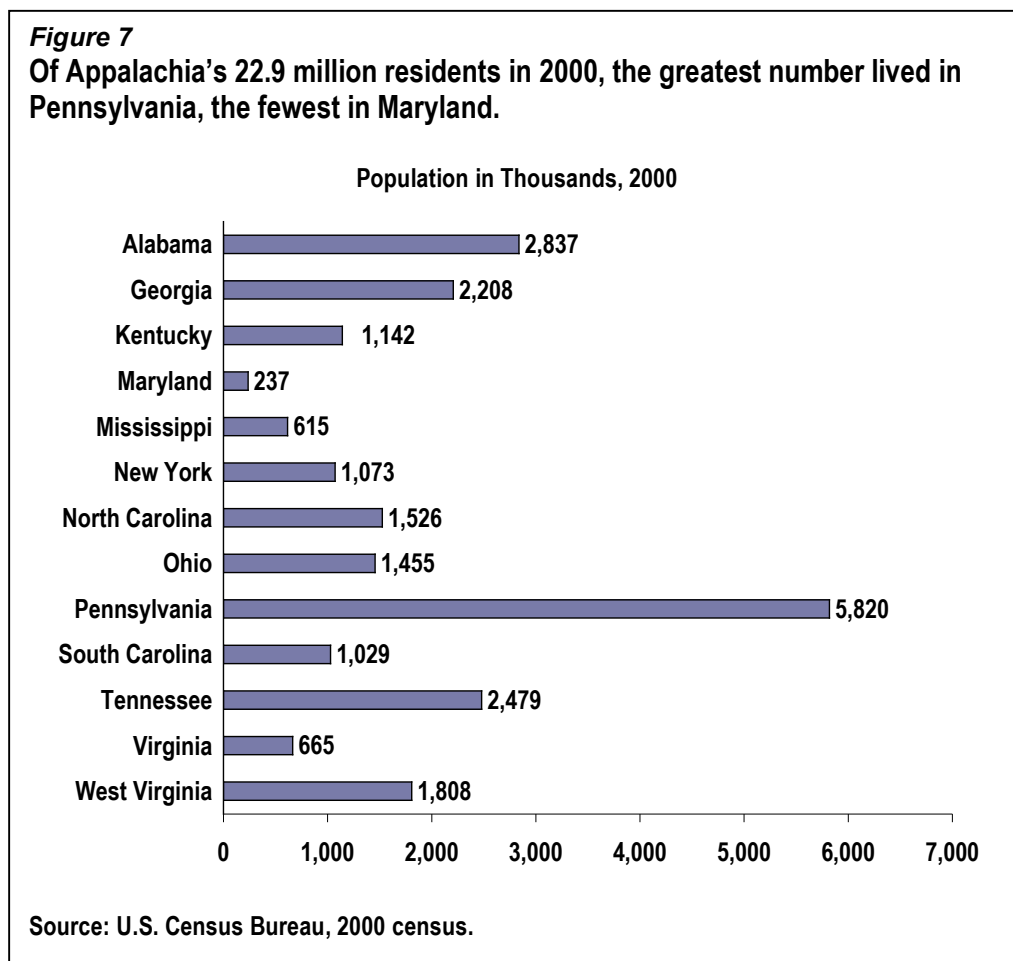
The other states in the region had population growth rates that were slower than both the region as a whole *and* the non-Appalachian counties in those states. The 5 percent growth in western Maryland, for example, was less than half the 11 percent growth in the rest of the Old Line State. The Appalachian sections of Kentucky, Virginia,

and Pennsylvania, along with West Virginia, all had similarly sluggish growth—even though they reversed population losses from the 1980s. Growth in Kentucky’s 51 Appalachian counties during the 1990s (at 7 percent) was noticeably below the 11 percent growth rate for the rest of the Bluegrass State—to say nothing of the 23 percent growth eastern Kentucky enjoyed in the 1970s. Appalachian Virginia’s 4 percent increase was just one-fourth the growth rate the rest of the Old Dominion experienced. And West Virginia and the Appalachian counties of Pennsylvania each had overall growth of less than 1 percent between 1990 and 2000. In fact, 2000 census results show that West Virginia still had fewer people than it did in 1980, while Appalachian Pennsylvania had fewer residents than it had in 1960. Moreover, many Appalachian counties in each state (27 of 55 for West Virginia, 18 of 52 for Pennsylvania) lost population during the 1990s.

But it was Appalachian New York State’s population growth that was hardest hit in the 1990s. Collectively, the 14 Appalachian counties in the Empire State’s southern portion actually had lost 1 percent of their 1990 population by 2000. And unlike any of the other states in the region, the rate of change for the 1990s was not better than it had been for the 1980s. In fact, the last decade of the 20th century was the first where Appalachian New York endured a decline in population. (By contrast, the rest of New York State—helped somewhat by an additional 686,000 people in New York City—grew 6 percent during the 1990s.) How thorough was this demographic decline? Ten of the 14 Empire State counties in the region had fewer residents in 2000 than in 1990. Additionally, none of the four other counties saw population increases of more than 3 percent—and only two (Schuyler and Tompkins) grew by even that much.

Yet even in Appalachia's slow-growth states, there were some counties that had rapid increases in population. As mentioned earlier in this report, Pike and Morgan counties in Pennsylvania added more than 40 percent to their 1990 populations; Pike County's 66 percent growth rate made it the sixth fastest growing county in the entire Appalachian region. Four eastern Kentucky counties grew at least 20 percent, as did Botetourt County in southwestern Virginia. And, several West Virginia counties—five in the state's panhandle, plus Putnam (outside Charleston) and Monroe (in the southeast)—grew at least 15 percent, faster than the national average.

Despite having fewer people in 2000 than it had 40 years earlier, Pennsylvania remained home to the largest number of Appalachian residents (see Figure 7). In 2000,



the Keystone State's 52 counties in the region had 5.8 million people in 2000, about one-fourth of the region's total population. In 1960, however, nearly one-third of Appalachian residents lived in Pennsylvania, and the state's Appalachian population was nearly three times the number living in the next most populous state, Alabama. Pennsylvania's 2000 Appalachian population was still more than twice that of Alabama's; more than 2.8 million people resided in the Yellowhammer State's 37 Appalachian counties. The Appalachian sections of Tennessee and Georgia also had more than 2 million people each—both surpassing the 1.8 million residents of West Virginia, the only state entirely in the Appalachian region. (As recently as 1950, West Virginia had trailed only Pennsylvania in the number of Appalachian residents.) As has been the case throughout the past century, the fewest number of Appalachians lived in Maryland, as just 236,000 lived in the Old Line State's three westernmost counties.

***Economic development categories.*** Among the economic development categories, the Competitive and Attainment counties grew in population by at least 15 percent—faster than the national rate and above their 1970s growth rate. By contrast, although the Distressed and Transitional Appalachian counties also saw population increases, their rate of increase during the 1990s was below the national average and did not reach the levels they had in the 1970s. Further examination of these patterns, however, shows the distinctive fortunes that counties in each group experienced in the 1990s—and particularly highlights the contrasting situations in the Distressed and Transitional counties.

The good news for the Distressed counties was that they increased their population to nearly 2.8 million during the 1990s, reversing their population declines of



the previous decade (see Table 3). The bad news, however, was that these counties as a whole grew only 3 percent between 1990 and 2000—about one-third the regional average and one-fourth the national rate. And not only did their growth rate in the 1990s fail to approach their 17 percent increase during the 1970s, but the 2000 population for the Distressed counties remained nearly 62,000 people below its 1980 level. Many of the Distressed counties did grow faster than the regional average—in fact, five counties actually increased at least 20 percent.<sup>23</sup> Indeed, 86 of the 121 Distressed counties fared better demographically—either by growing faster or reversing population decline—in the 1990s than in the previous decade. Of those 86 counties, 57 had lost population in the 1980s.

**Table 3**

**As a whole, Appalachia's more economically stressed areas had relatively sluggish population growth in the 1990s. All but two of the region's counties that lost population were in either the Distressed or Transitional categories.**

**Population change in Appalachia, by economic development category, 1990-2000**

<b>ECONOMIC DEVELOPMENT CATEGORY</b>	<b>NUMBER OF COUNTIES</b>	<b>2000 POPULATION (in thousands)</b>	<b>PERCENT CHANGE, 1990-2000</b>	<b>NUMBER OF COUNTIES THAT LOST POPULATION</b>
APPALACHIA	410	22,894	9.1	83
Distressed counties	121	2,791	3.4	32
Transitional counties	259	14,735	7.8	49
Competitive counties	21	2,210	18.7	1
Attainment counties	9	3,159	15.0	1

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

Still, 32 Distressed counties had smaller populations in 2000 than in 1990.<sup>24</sup> All but one of these counties were outside metropolitan areas; 20 of those were relatively isolated—that is, not bordering a metropolitan area. Two states—West Virginia and Kentucky—accounted for 23 of the 32 Distressed counties that lost people in the 1990s.

Most of the Distressed counties that lost population have had a recent history of such declines. In the five decades from 1950 to 2000, 27 had lost population for at least four of these 10-year periods, with the “turnaround” decade of the 1970s being the exception in most cases.

Growth was not as sluggish in the Transitional counties. Between 1990 and 2000, their population increased 8 percent to 14.7 million. While this was much better than the 1980s rate of less than 1 percent, it was not as good as the 11 percent increase of the 1970s. Of the 210 Transitional counties that gained people during the 1990s, 188 grew at faster rates than in the 1980s; 59 of those counties reversed population losses suffered during the previous decade. Rapid growth was more prevalent among Transitional counties than among their Distressed counterparts: 57 Transitional counties grew at least 20 percent in the past decade. Most of these counties—as one might expect—were in the South; 34 counties were in Georgia or Tennessee alone.<sup>25</sup> Interestingly, many rapid-growth Transitional counties (31 of 57) actually grew at rates that exceeded the rates of both the 1980s *and* the 1970s.

Of the 49 Transitional counties that lost population during the 1990s, 39 were in three states—Pennsylvania, West Virginia, and New York. Unlike their counterparts in the Distressed category, these counties were not as geographically isolated; more than half either were in smaller metropolitan areas (fewer than 250,000 population) or were adjacent to metros. Seven of the 49 counties fell at faster rates during the 1990s than in the 1980s, while 27 of them had lost population in at least four of the five decades between 1950 and 2000.

As has been the case throughout most of the 20th century, Appalachia's Competitive counties actually had the fastest rate of growth among the economic development categories. The 21 counties in this category collectively increased their population nearly 19 percent during the 1990s, surpassing the 2 million mark for the first time. The 10-year growth rate was the fastest since the 1960s, and the 348,000 people added to the Competitive counties were the most ever for any single decade.

That 15 of the Competitive counties were in southern Appalachia and 18 were in metropolitan areas accounts for some explanation behind the rapid growth in the 1990s. Indeed, southern Appalachia had all nine of the counties in this group that grew at least 20 percent during the 1990s. Three counties in Atlanta's outer suburbs (Dawson, Pickens, and Cherokee) increased their population more than 50 percent. However, some Competitive counties outside the South had solid population growth in the 1990s. For example, Clermont County, Ohio (in suburban Cincinnati) and Jefferson County, W.Va. (in the outer suburbs of Washington, D.C.) increased their respective populations 19 percent and 17 percent. Overall, 16 of the 21 Appalachian counties in the Competitive group grew faster than the national average. Only one Competitive county—Broome County, N.Y. (Binghamton)—lost people during the 1990s; it was the third consecutive decade of population loss for the county.

Seven of Appalachia's nine Attainment counties are in southern metros of at least 250,000 population, so it is no surprise that the counties in this category (as with Competitive counties) grew faster than the nation as a whole. Almost 3.2 million Appalachian residents called an Attainment county home in 2000, 412,000 more (or 15 percent) than had done so a decade earlier. The growth rate during the 1990s was more

than double that of the 1980s; in fact, the Attainment counties grew faster than in any single decade since the 1920s—the decade after the United States officially became an “urban” country.

How well did the Attainment counties do demographically? Two Attainment counties (Forsyth and Gwinnett in suburban Atlanta) were among Appalachia’s five fastest growing counties between 1990 and 2000. A third (Shelby County, Ala., in suburban Birmingham) was among the region’s top 15 growth magnets. Even the single nonmetropolitan county in the Attainment group (Polk County, N.C.) grew 27 percent between 1990 and 2000. As it turns out, the one Attainment county that lost population during the 1990s was the one outside the South—Allegheny County, Pa. (Pittsburgh), which saw its population decrease 4 percent during the 1990s, the fourth consecutive decade of demographic loss.

***Metropolitan patterns.*** Despite its image as a rural area, 14.2 million (62 percent) of Appalachia’s 22.9 million residents in 2000 lived in metropolitan areas, as defined by the U.S. Office of Management and Budget (OMB) in 2003.<sup>26</sup> Almost all of these residents lived in the region’s northern and southern portions; just 299,000 central Appalachians (14 percent of the subregion’s population) called metro areas home. By contrast, southern Appalachia’s population was more metropolitan than the region as a whole: 72 percent resided in metro areas.

About 5.2 million Appalachian residents (23 percent of the total population, and 36 percent of metropolitan residents) lived in large metropolitan areas with populations of at least 1 million (Pittsburgh; Birmingham; suburban Atlanta; and outlying parts of non-Appalachian metros such as Nashville and Washington, D.C.). Another 5.3 million live in

mid-size metros with populations between 250,000 and 999,999—including such metros as Winston-Salem, N.C.; Knoxville, Tenn.; Erie, Pa.; and Charleston, W.Va. About 3.7 million residents live in small metropolitan areas of less than 250,000 people. Many of these metros—for example, State College, Pa. (Centre County); Spartanburg, S.C. (Spartanburg County); and Ithaca, N.Y. (Tompkins County)—consist of a single county; some (such as Ithaca and Dalton, Ga.) were newly created by OMB.

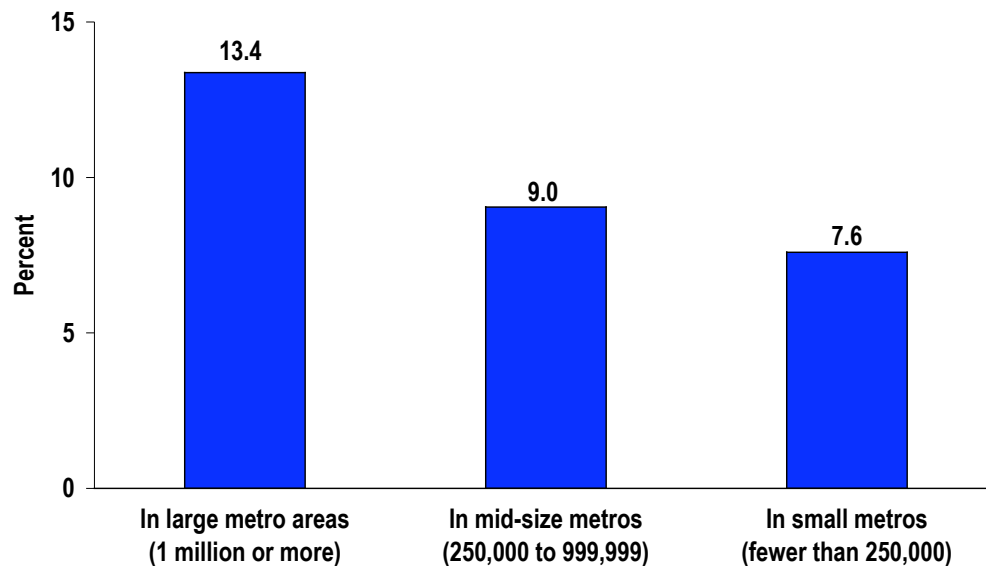
Overall, the region's metropolitan counties grew 10 percent during the 1990s—not only well above the 3 percent growth rate during the 1980s, but also at a faster clip than in any single decade since the 1920s. Metro counties in southern Appalachia grew almost 20 percent, eclipsing the growth rate for southern Appalachia as a whole. Central Appalachian counties in metro areas increased at a more modest 6 percent clip, while metro counties in northern Appalachia rose less than 1 percent during the 1990s. (In both cases, however, these relatively slow growth patterns reversed declines in the previous decade.) Counties in large metropolitan areas grew slightly above the national rate of 13.2 percent, which was noticeably higher than that the growth rate for counties in less populous metros (see Figure 8, page 36). The 54 Appalachian counties located in metros of fewer than 250,000 people, for example, grew less than 8 percent on average. Moreover, the 1990s growth rate for Appalachian counties in small and mid-size metros fell short of growth patterns in the 1970s—which was not the case for those counties of the region in large metros.

Suburban counties of large metropolitan areas (especially those in southern Appalachia) experienced the region's fastest population growth during the 1990s. Of Appalachia's 34 counties in metros of at least 1 million population, 21 grew at least 20

**Figure 8**

**Overall, Appalachia's metropolitan areas grew 10 percent during the 1990s. Counties in the region's largest metros grew the fastest.**

Population change in Appalachia's metropolitan counties, by size of metropolitan area, 1990-2000



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

percent between 1990 and 2000. Eleven of those grew 30 percent or more. Led by Forsyth and Paulding counties, Atlanta's suburbs had six of Appalachia's nine fastest-growing counties during the decade. Other growth magnets in large metros included Pike County, Pa. (at the edge of New York's sprawling metropolis); plus counties in suburban Birmingham (Shelby, Blount, and St. Clair); and Nashville's outer suburbs (Macon and Smith). Counties in mid-size and small metros also were growth magnets; 22 of them grew at least 20 percent during the 1990s. Perhaps not surprisingly, most of these were also in southern Appalachia.

Some metropolitan counties in Appalachia did lose people during the 20th century's final decade. Of the 83 Appalachian counties that had fewer residents in 2000 than in 1990, 27 of them were in metropolitan areas. Almost all of these counties (25, in

fact) were in northern Appalachia; most (22) were in mid-size and smaller metros—such as Wheeling, W.Va.; Binghamton, N.Y.; and Weirton, W.Va.-Steubenville, Ohio. One interesting tidbit: All five Appalachian counties in large metros that lost population were in the Pittsburgh area. Indeed, five of the seven counties in metro Pittsburgh lost people in the 1990s, although the losses were not as large as they were in the 1980s.

***Nonmetropolitan Appalachia.*** Rural and small-town Appalachia grew faster during the 1990s than in the 1980s—and in many cases, reversed many of their population declines during the previous decade. After growing by an average of fewer than 4,000 people during the 1980s, counties in the region’s micropolitan areas<sup>27</sup> (the rough equivalent of small-town areas) increased their collective population from slightly less than 4.6 million in 1990 to more than 4.9 million a decade later—an increase of nearly 8 percent. Appalachian counties outside core-based statistical areas (CBSAs),<sup>28</sup> which had lost 2 percent of their population during the 1980s, grew 7 percent in the 1990s to 3.8 million (see Table 4, page 38). In both numerical and percentage terms, however, rural and small-town Appalachia’s growth in 1990s remained significantly lower than that during the 1970s rural rebound (when growth rates were 12 percent for Appalachia’s micropolitan areas and 16 percent outside CBSAs).

Moreover, the share of the region’s population outside metropolitan areas essentially remained unchanged from 1990. About 21 percent of the Appalachian population lived in micropolitan areas in 2000, while 17 percent lived outside CBSAs. There were some subregional differences; for example, more than half (52 percent) of central Appalachian residents lived outside CBSAs, while another one-third (35 percent) lived in micropolitan areas.

**Table 4**

**In rural and small-town Appalachia, counties that bordered metropolitan areas generally grew faster than their more isolated counterparts.**

TYPE OF NONMETROPOLITAN AREA	2000 POPULATION (in thousands)	PERCENT CHANGE, 1990-2000
APPALACHIAN COUNTIES OUTSIDE METROPOLITAN AREAS	8,719	7.4
In micropolitan areas <sup>1</sup>	4,914	7.5
Outside core-based statistical areas <sup>2</sup>	3,805	7.2
Urban population of 20,000 or more		
Adjacent to a metropolitan area	2,743	6.8
Not adjacent to a metropolitan area	368	6.0
Urban population of 2,500 to 19,999		
Adjacent to a metropolitan area	2,938	9.1
Not adjacent to a metropolitan area	1,562	4.5
Urban population of fewer than 2,500		
Adjacent to a metropolitan area	549	12.6
Not adjacent to a metropolitan area	559	6.1

<sup>1</sup> Areas with an urban cluster of between 10,000 and 49,999 population, plus surrounding areas.

<sup>2</sup> Any area (metropolitan or micropolitan) containing an urban core and surrounding areas with strong economic ties to the core.

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

Within rural and small-town Appalachia, there were varying demographic experiences during the 1990s. Generally, nonmetropolitan<sup>29</sup> counties that bordered metropolitan areas—counties that accounted for 71 percent of the region’s 8.8 million nonmetro residents—grew at faster rates than those not adjacent to metros (8 percent to 5 percent). This disparity in growth rate was the case regardless of the size of a county’s urban<sup>30</sup> population (see Table 4). For example, among Appalachian counties with an urban population under 2,500, the ones bordering a metropolitan area collectively increased their population nearly 13 percent during the decade, compared with just a 6 percent growth rate for their more isolated counterparts. Moreover, 58 of Appalachia’s 82



nonmetropolitan counties that grew at or above the national rate of 13.2 percent were adjacent to metropolitan areas, while just 27 of the region's 56 nonmetro counties that lost population in the decade bordered metros. Still, every category of nonmetropolitan county in Appalachia grew faster in the 1990s than in the 1980s—reversing population losses in some cases.

***Counties of persistent growth and decline.*** In the past half-century, some U.S. areas have been persistent magnets of growth. Nevada comes to mind: The Silver State has been the fastest growing in the nation in each of the last four decades, growing at rates more than four times the national average. Many other states and communities (mostly, but not exclusively, in the South and West) also have consistently grown faster than the country as a whole for the last several decades.

Some areas in Appalachia fit this growth-magnet pattern. Of the 410 counties in the Appalachian region, 34 increased their populations faster than the national average in at least four of the past five decades. Seven of these “persistent growth” counties did so in all five decades. Moreover, 30 Appalachian counties—including 23 that grew at least 20 percent in the 1990s—have had above-average growth in each decade since the 1960s. And for a handful of the persistent-growth counties in Appalachia, the last 40 to 50 years have dramatically reversed earlier patterns of population decline. For example, the suburban Atlanta counties of Forsyth and Paulding—the two fastest-growing counties in the Appalachian region during the 1990s—actually had fewer people in 1950 than they did in 1920.

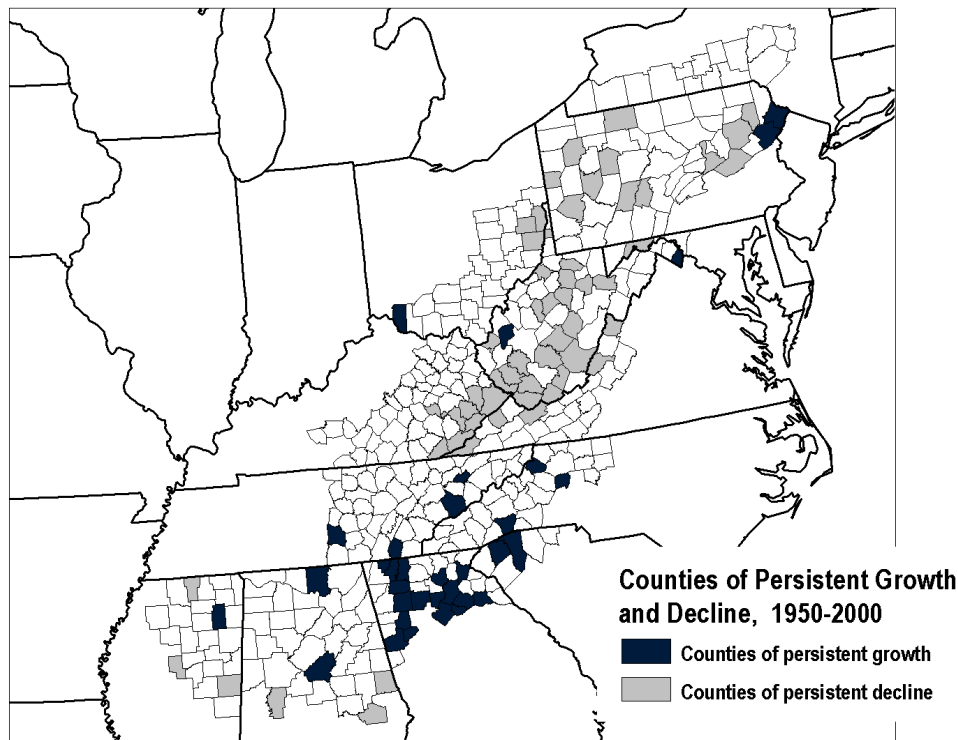
Not surprisingly, most of the persistent-growth counties (29 out of 34) were in southern Appalachia (see Figure 9, page 40). Exactly half (17) were in Georgia alone,

including eight in metropolitan Atlanta. Indeed, 25 of the 34 persistent-growth counties—including four of the five that were outside the South—had become part of metropolitan areas by 2003; another eight bordered metros.<sup>31</sup> None of the persistent-growth counties were economically distressed; indeed, four of Appalachia's nine Attainment counties and 10 of its 21 Competitive counties grew faster than the national average for at least four of the last five decades.

By contrast, 56 Appalachian counties had lost population for at least four of the five decades between 1950 and 2000. Not unexpectedly, many characteristics of the

**Figure 9**

**Over the last half century, a number of Appalachian counties have experienced persistent patterns of population growth and decline. Not surprisingly, both sets of counties followed overall regional patterns.**



*Persistent growth:* Growth above the national average in at least four of the past five decades.

*Persistent decline:* Population loss in at least four of the past five decades.

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

“persistent decline” counties were different from those in the persistent growth counties. Whereas southern Appalachia had most of Appalachia’s persistent growth counties, most of the region’s persistent decline counties were in northern or central Appalachia (31 counties and 17 counties, respectively). In fact, three states accounted for 41 counties of persistent decline—West Virginia (21); Pennsylvania (12); and Kentucky (eight). Forty-three of the persistent decline counties were outside metropolitan areas, and 26 of those did not even border a metro. Most of the 13 metropolitan counties were in small or mid-size metropolitan areas<sup>32</sup>; in fact, the two counties that were in large metros were in metropolitan Pittsburgh.<sup>33</sup> Half the persistent-decline counties were economically distressed, and all but one of the rest were in the Transitional category. (Allegheny County, Pa., an Attainment county that contains Pittsburgh, was the exception.)

### **Factors Driving Population Change in the 1990s**

*Natural increase.* According to pre-2000 Census Bureau estimates, the Appalachian region gained about 557,000 people through natural increase—the excess of births over deaths—between 1990 and 1999.<sup>34</sup> The region’s 2.7 percent rate of natural increase was less than one-half the 6.7 percent rate for the rest of the country. Within the region, there are equally pronounced differentials. For example, southern Appalachia accounted for most of Appalachia’s natural increase, with 394,000 more births than deaths. The resulting rate of natural increase (4.4 percent) was double the rate for central Appalachia, and almost four times northern Appalachia’s rate. The Appalachian counties of northern Georgia added nearly 140,000 people through natural increase, yielding an astounding 9 percent growth rate during the 1990-99 period; the Appalachian sections of

South Carolina, Mississippi, and Alabama likewise had rates well about the regional average (if also lower than the national rate). Conversely, West Virginia and the Appalachian sections of Pennsylvania and Virginia had rates of natural increase that fell below 1 percent. The rates of natural increase in the Competitive and Attainment counties were more than double those in the Distressed and Transitional counties, and the rates of natural increase in Appalachia's metropolitan areas were noticeably above the rates outside those areas. In 79 of Appalachia's 410 counties, deaths actually exceeded births between 1990 and 1999; 40 of those were in northern Appalachia.

Perhaps the major factor in the differential rates of natural increase lies in the age structure of the total Appalachian population—as well as that of its various areas. On one hand, Appalachia has a slightly smaller share of women of reproductive age (ages 15 to 44) in its population than does the rest of the country—21 percent versus 22 percent in 2000. (The greater the share of reproductive-age women in a population, the higher the higher the birth rate would be for that population.) Indeed, women ages 15 to 44 made up 23 percent of the population in Georgia's Appalachian section in 2000, compared to just 20 percent of the population of in Pennsylvania's. On the other hand, Appalachia has a larger share of people age 65 and older in its population than the rest of the country—14 percent versus 12 percent in 2000. Since the likelihood of mortality in America increases with age, an older age structure affects death rates. Revisiting the Georgia and Pennsylvania examples, just 9 percent of people in the Peach State's northern counties were age 65 and older, compared with 17 percent of the population of the Keystone State's Appalachian section. (Similarly, roughly 15 percent of the population in West Virginia, western Maryland, and western Virginia—all areas with low rates of natural

increase—were age 65 and older.) An examination of county-level data further illuminates the link between age structure (particularly in the older ages) and natural increase (or decrease). In 77 of the 79 Appalachian counties where deaths exceeded births between 1990 and 1999, for example, older people were at least 15 percent of the total population. Moreover, eight of the region's 10 counties in which at least 20 percent of the population was age 65 or older experienced natural decrease in the 1990s.

***Net internal migration.*** Throughout its history, the United States has been a mobile society—a dynamic that has profoundly affected the size and distribution of its population. And in Appalachia, net migration (particularly internal migration) has been key to the changes in the Appalachian region during the past decade. For example, 18 percent of Appalachian residents (age 5 and older) had migrated to their county of residence between 1995 and 2000; this figure was slightly lower than the 21 percent average for the rest of the country. Although some of the movement was from one Appalachian county to another, this figure does illustrate the level of mobility within the region.

County-level mobility was more prevalent in southern Appalachia, where 22 percent of the residents had moved to their county of residence in the late 1990s, and less so in the north, where less than 15 percent had migrated from another county. Among the states, 31 percent of northern Georgia's residents had called another county home in 1995. By contrast, just 13 percent of people in Pennsylvania's Appalachian counties had moved between counties. Not unexpectedly, there were some differences among counties' economic development levels; more than 21 percent of the 5-and-older population in the Competitive and Attainment counties lived outside their home counties

in 1995, compared with just 14 percent of Distressed county residents. (The figure was 17 percent for residents of the Transitional counties.)

The level of net internal-migration flows between counties says even more about the relative attraction of Appalachia and its components during the 1990s. Between 1995 and 2000, approximately 325,000 more residents (age 5 and older) moved to an Appalachian county than moved out of one. While this figure includes movement between counties in the region, it does suggest that the counties in the Appalachian region were desirable destinations.

Most parts of the region had positive migration flows during the 1990s (see Table 5). The 179 counties in southern Appalachia gained 418,000 more people through net migration between 1995 and 2000. Part of central Appalachia's reversal from population losses in the 1980s to demographic gains in the 1990s can be illustrated by the (albeit modest) 14,000 more people who moved to one of its 87 counties than who moved out. By contrast, northern

**Table 5**

**In the latter half of the 1990s, 325,000 more Americans moved into an Appalachian county than moved out of one. Most parts of the region had similar net in-migration.**

**County-level internal migration flows in Appalachian region, 1995-2000**

AREA	NET INTERNAL MIGRATION OF PEOPLE AGE 5 AND OLDER (1000s)
APPALACHIA	+325
NON-APPALACHIAN U.S.	-325
Northern Appalachia	-107
Central Appalachia	+14
Southern Appalachia	+418
Distressed counties	-14
Transitional counties	+173
Competitive counties	+78
Attainment counties	+88
Appalachian sections of:	
Alabama	+30
Georgia	+214
Kentucky	+7
Maryland	+8
Mississippi	-2
New York	-45
North Carolina	+63
Ohio	+9
Pennsylvania	-77
South Carolina	+38
Tennessee	+81
Virginia	+10
West Virginia	-11

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

Appalachia's 144 counties collectively lost almost 107,000 residents through net migration during the latter half of the 1990s. Nine of the 13 Appalachian states gained population through net migration; not surprisingly, more than 214,000 people moved into one of Georgia's 37 Appalachian counties than moved out. The counties in Tennessee's and North Carolina's Appalachian sections had gains of more than 60,000 people through net migration. Conversely, net migration cost the 52 counties in Appalachian Pennsylvania nearly 77,000 residents between 1995 and 2000; likewise, about 45,000 more people migrated out of southern New York State than came in.

Among the ARC's four economic development categories, only the Distressed counties collectively lost people through net migration in the late 1990s; the Transitional, Competitive, and Attainment counties each gained more than 75,000 people. And both metropolitan counties and nonmetropolitan counties adjacent to a metro area had more people move to them than move out. By contrast, Appalachia's more isolated nonmetropolitan counties collectively lost people through net migration.

Even though more people moved into Appalachian counties than moved out between 1995 and 2000, the phenomenon was far from uniform among the individual counties—both in the region as a whole and its various parts. Of Appalachia's 410 counties, 235 of them gained residents through net migration in the late 1990s, while 174 lost people. (Tyler County, in northwestern West Virginia, gained as many people through net migration as it lost—yielding a net total of zero.) Not surprisingly, the overwhelming majority of counties in the fast-growing areas had net in-migration from other counties. Of southern Appalachia's 179 counties, for example, 134 added people from elsewhere in the United States. Likewise, 32 of the 37 Appalachian counties in

northern Georgia gained people through net migration in the late 1990s, as did 45 of the 50 counties in eastern Tennessee; 28 of the 29 counties in western North Carolina; and every Appalachian county in South Carolina (six) and Maryland (three). And 16 of the region's 21 Competitive counties, seven of its nine Attainment counties, and 27 of Appalachia's 34 counties in large metropolitan areas of 1 million or more people all had more residents age 5 and older move into them than move out.

Likewise, counties that lost population through internal migration tended to be in areas of slow growth or population loss. For example, 93 of northern Appalachia's 144 counties lost residents to other counties during the late 1990s, as did 12 of New York State's 14 Appalachian counties, 41 of the 52 counties in Appalachian Pennsylvania, and 30 of West Virginia's 55 counties. Also, 63 of Appalachia's 121 economically distressed counties also lost residents through net migration, as did 58 of the region's 108 nonmetropolitan counties that did not border a metropolitan area.

There were some conflicting findings, however. For example, Appalachia's 259 Transitional counties collectively gained 173,000 people in the late 1990s through net internal migration; yet nearly two-fifths of these counties (104 in all) actually had more people moving out of them than moving into them. Also, the Appalachian portions of Ohio and Virginia had modest net in-migration—despite the fact that the majority of Appalachian counties in each state lost people through net migration.

***Immigration.*** Immigration has had a much smaller effect on population change in the Appalachian region. Slightly more than 1 percent of all Appalachian residents (about 316,000 people) arrived from outside the United States between 1990 and 2000—well below the 5 percent of non-Appalachian residents who immigrated during the decade.



Within the region in the 1990s, newcomers from outside the country represented less than 2 percent of the population in most areas, and less than 1 percent in some of them. (In 325 of Appalachia's 410 counties, for example, less than 1 percent of the population had come from overseas since 1990.)

There were some exceptions. Slightly more than 2 percent of residents in southern Appalachia and in large metropolitan areas (of at least 1 million population) arrived from outside the United States during the 1990s, as did nearly 3 percent of the residents of the region's 21 Competitive counties and close to 4 percent of people in the Appalachia's nine Attainment counties. Most noteworthy, however, was northern Georgia, where 5 percent of the residents had immigrated in the 1990s, matching the percentage for the non-Appalachian United States. Indeed, more than one-third of the decade's 316,000 immigrants to Appalachia settled in the Peach State. In three of the state's counties (Hall, Whitfield, and Gwinnett), at least one in 10 residents were recent immigrants.

Despite the tiny share of recent immigrants—indeed, of all immigrants<sup>35</sup>—in Appalachia's population, there is something that suggests the region is becoming a more attractive destination for new arrivals than it had been in previous decades. The 316,000 people who arrived in Appalachia from abroad during the 1990s were more than one-half (52 percent) of the region's 611,000 foreign-born residents. By comparison, two-fifths (42 percent) of the foreign-born population in the rest of the United States came to the country during the last decade. In most parts of Appalachia, the majority of foreign-born people arrived after 1990; the share approached or exceeded three-fifths in southern Appalachia; small metropolitan areas of fewer than 250,000 people; the Appalachian sections of Georgia, North Carolina, and Mississippi; and about one-fifth of the region's

410 counties. By contrast, less than two-fifths of the foreign-born population of West Virginia, western Maryland, and Pennsylvania's Appalachian section arrived during the 1990s.

### **Beyond 2000: What Does Appalachia's Growth Mean?**

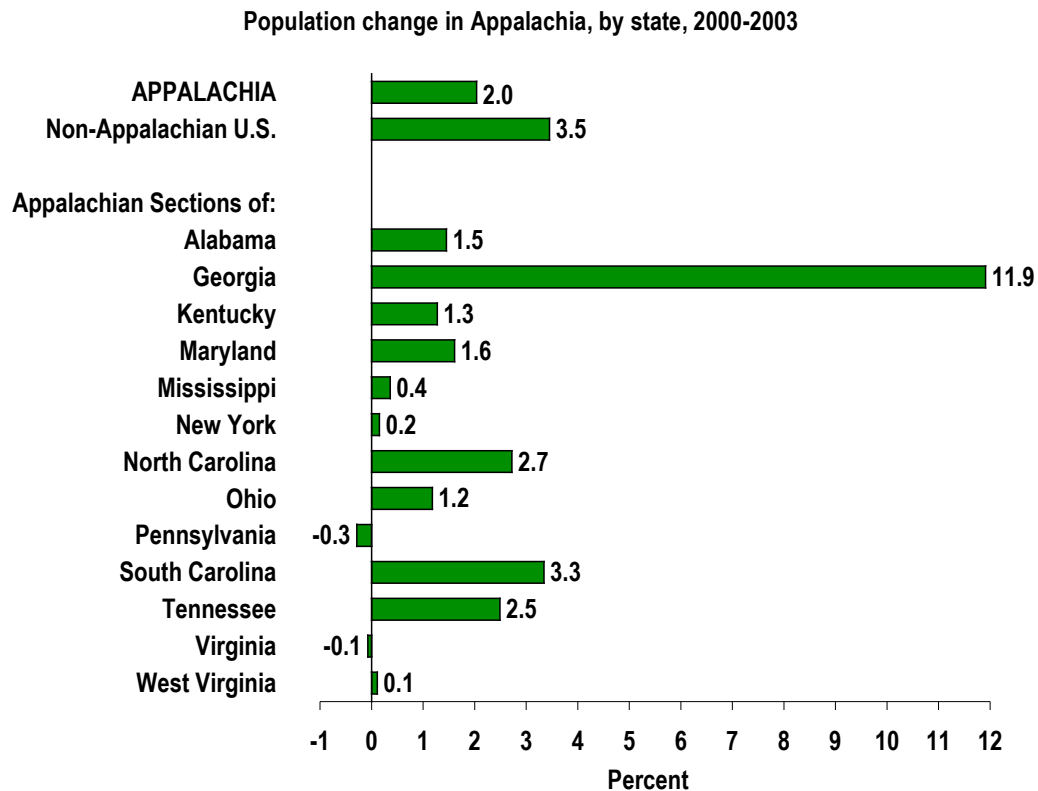
Census Bureau estimates for July 2003 suggest that many of Appalachia's growth patterns in the 1990s have held constant.<sup>36</sup> Since the 2000 census, the Appalachian region has gained an additional 466,000 people, increasing its population to nearly 23.4 million. While that translates into a 2 percent growth rate for the 39-month period, Appalachia still lags behind the rest of the country, which increased 3.5 percent over that same time.

Fueled by northern Georgia, southern Appalachia continued its rapid growth, increasing its population 4 percent between 2000 and 2003—above the average for the non-Appalachian United States. At 11.1 million residents, Appalachia's southern counties now claim 47 percent of the region's population—well above its 31 percent share in 1910. Georgia's Appalachian section alone has grown nearly 12 percent since 2000—nearly three times the solid 4 percent rate for the rest of the Peach State (see Figure 10, page 49). The Appalachian sections of the Carolinas and East Tennessee also enjoyed growth above the regional average, adding at least 2.5 percent to their population totals in the first years of the new century.

Central Appalachia also has continued its 1990s pattern of slow growth after 2000. The subregion added almost 19,000 people to its population between 2000 and 2003; its 0.9 percent rate of growth was less than half the regional average. There were pockets of rapid growth in central Appalachia—27 of the subregion's 87 counties grew

**Figure 10**

**Most of Appalachia's population patterns in the 1990s have continued in the first years of the 21st century.**



Source: U.S. Census Bureau, 2000 census and 2003 county characteristics population estimates file.

faster than the regional average, while 13 counties grew faster than the national average. A number of these counties—indeed, seven of the 13 that grew faster than the nation as a whole—were in micropolitan areas. (The other six were outside core-based areas.)

While growth in central Appalachia has remained slow in the new century, it has continued to outpace growth in the region's northern counties. Northern Appalachia had just 13,000 more people in 2003 than it had in 2000, which translates into a growth rate of just 0.1 percent. Pennsylvania's Appalachian region, in fact, has shown signs of reverting to its 1980s pattern of decline, when it lost nearly 4 percent of its residents. Census Bureau estimates show that the Keystone State's Appalachian section has lost

nearly 17,000 people (0.3 percent) between 2000 and 2003. Meanwhile, the Appalachian portion of New York State has shown signs of a positive turnaround—gaining back nearly 2,000 of the 16,000 people it had lost in the 1990s. The areas with the fastest growth in northern Appalachia were in western Maryland and southeastern Ohio, which both grew at rates exceeding 1 percent—rates still below the average for the Appalachian region.

Not surprisingly, Appalachia's more economically developed counties have continued to grow faster than the nation as a whole. Between 2000 and 2003, the region's Competitive counties increased their population 6 percent, while the Attainment counties added more than 4 percent to their collective population. The Transitional counties have grown more slowly; their rate of 1.4 percent was less than the regional (not to mention the national) average. As for population in the Distressed counties, totals have barely budged in the last three years, with fewer than 1,000 more residents in 2003 than in 2000. Depending on the economic conditions in the next few years, Appalachia's economically distressed counties could revert to the pattern of population decline that has plagued them for much of the last 50 years.

As in the previous two decades, Appalachia had faster growth between 2000 and 2003 within metropolitan areas than outside them. During this period, the region's metropolitan counties collectively grew nearly 3 percent; those counties in large metros (at least 1 million population in 2000) grew 4 percent. By contrast, Appalachia's counties outside metropolitan areas grew just 1 percent—half the regional average. As was the case during the 1990s, counties bordering metropolitan areas grew faster than those that were more isolated.

What about the counties of persistent growth and decline? By and large, their population trends of recent decades have also continued into the new millennium. Since 2000, 28 of Appalachia's 34 persistent-growth counties grew faster than the national rate of 3.3 percent; 14 of these counties (11 of which are in Georgia, including eight in greater Atlanta) have grown at least 10 percent. Of the six persistent-growth counties with the slowest post-2000 growth, only one (Watauga County, N.C.) grew less than 1 percent. At the other end of the spectrum, 45 of the 56 persistent-decline counties in the region have continued losing people—and seven of the other 11 registered increases below 1 percent. However, two of the persistent decline counties (Hale County, Ala.; and Summers County, W.Va.) have grown at least 6 percent since 2000.<sup>37</sup>

So what does all this mean? Both the 2000 census and the 2003 population estimates show the dynamic demographic patterns in the Appalachian region. As has been the case throughout the 20th century, Appalachia has grown more slowly since 1990 than the rest of the United States—although the lag is not nearly as great as it has been in several other decades (for example, the 1950s, 1960s, and 1980s). Indeed, 327 of the 410 Appalachian counties increased their population during the 1990s—up from 214 a decade earlier. And 72 of the 83 counties that did lose people in the 1990s did so more slowly than they had in the 1980s.

Observers analyzing population growth in the region, in fact, can say that the past decade (indeed, the past 30-plus years) has revealed three Appalachias. There first is the “booming” Appalachia, mostly but not exclusively in the South. This Appalachia has grown faster than the national average in recent years—and over the past half-century in some areas. The second Appalachia is the one whose demographic fortunes have been

more typical of the region as a whole—modest yet noticeable population growth. Not surprisingly, these areas can be found throughout the region. Finally, there is the Appalachia that continued to lose population, even at a time when the overall American economy was on solid footing. Some of these areas, mostly in northern and central Appalachia, have lost population over the past several decades. The trends suggest that these areas of persistent population decline could benefit from targeted attention from decision-makers in both the public and private sectors. The experiences of the parts of Appalachia that have grown at or above the national average since 1990 might provide guidance for such efforts.

But an even better guide might be found in those Appalachian counties that reversed their demographic fortunes after 1990. Of 196 counties that had lost population during the 1980s, 117 grew during the 1990s. And while the number of Appalachian counties gaining population since 2000 had declined to 264, 17 of these gainers had actually lost people during the 1990s. Some of the strategies that enabled these turnarounds might be applicable to the experiences of those areas of persistent decline.

## REFERENCES

<sup>1</sup> Donald J. Bogue and Calvin L. Beale, *Economic Areas of the United States* (New York: The Free Press of Glencoe, Inc, 1961): 214-215; Calvin L. Beale, "A Characterization of Types of Metropolitan Areas," in *A Taste of the Country: A Collection of Calvin Beale's Writings*, ed. Peter A. Morrison (University Park, Pa., and London: The Pennsylvania State University Press, 1990): 59-75; and Faqir S. Bagi, Richard J. Reeder, and Samuel D. Calhoun, "Federal Funding's Unique Role in Appalachia," *Rural Development Perspectives* 14, no. 1 (May 1999): 14-21.

<sup>2</sup> 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.

<sup>3</sup> More information on Appalachia's physiographic regions is available from Keith Witt of the Appalachian Regional Commission. Mr. Witt may be contacted at kwitt@arc.gov.

<sup>4</sup> Appalachian Regional Commission, unpublished data not available on its website. 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 Appalachian Regional Commission, "The New Appalachian Subregions and their Development Strategies," *Appalachia, A Journal of the Appalachian Regional Commission* 8, no. 1 (September 1974): 11-27. An earlier classification of Appalachia into four subregions is available in Appalachian Regional Commission, "Experiment in Appalachia," *Appalachia, A Journal of the Appalachian Regional Commission* 1, no. 1 (September 1967): 3-5.

<sup>5</sup> This report uses the ARC's economic status classifications as of FY 2003.

<sup>6</sup> Michael Bradshaw, *The Appalachian Regional Commission: Twenty-Five Years of Government Policy* (Lexington, Ky.: The University Press of Kentucky, 1992): 17-19; John Alexander Williams, *Appalachia: A History* (Chapel Hill, N.C.: The University of North Carolina Press, 2002): 229, 234-240, 253-254.

<sup>7</sup> Williams, *Appalachia: A History*: 273-274.

<sup>8</sup> Williams, *Appalachia: A History*: 274.

<sup>9</sup> Williams, *Appalachia: A History*: 253, 307.

<sup>10</sup> Williams, *Appalachia: A History*: 289-301; and Bradshaw, *The Appalachian Regional Commission*: 18-19.

<sup>11</sup> All pre-1960 figures for the non-Appalachian United States include Alaska and Hawaii.

<sup>12</sup> Bradshaw, *The Appalachian Regional Commission*: 19; and Williams, *Appalachia: A History*: 345.

<sup>13</sup> Two notable exceptions were the areas around Oak Ridge, Tenn. (which started as a nuclear research facility during World War II); and Huntsville, Ala. (which housed one of the space program's key centers for engineering research and development). See Williams, *Appalachia: A History*: 366-367.

<sup>14</sup> Williams, *Appalachia: A History*: 317-318.

<sup>15</sup> For more information about metropolitan and micropolitan areas, see U.S. Office of Management and Budget, "Standards for Defining Metropolitan and Micropolitan Statistical Areas," *Federal Register* 65, no. 249 (Dec. 27, 2000): 82227-82238.

<sup>16</sup> Niles M. Hansen, *The Future of Nonmetropolitan America: Studies in the Reversal of Rural and Small Town Population Decline* (Lexington, Mass: Lexington Books, 1973): 10-11.

<sup>17</sup> Niles M. Hansen, *Intermediate-Size Cities as Growth Centers: Applications for Kentucky, the Piedmont Crescent, the Ozarks, and Texas* (New York: Praeger Publishers, 1971): 5-7.

<sup>18</sup> Williams, *Appalachia: A History*: 353-358.

<sup>19</sup> Carol J. De Vita, "The United States at Mid-Decade," *Population Bulletin* 50, no. 4 (1996): 14-15.

<sup>20</sup> Kelvin M. Pollard, "Appalachia at the Millennium: An Overview of Results from Census 2000," *Demographic and Socioeconomic Change in Appalachia* (June 2003), accessed at [www.arc.gov/images/reports/census2000/overview/appalachia\\_census2000.pdf](http://www.arc.gov/images/reports/census2000/overview/appalachia_census2000.pdf), on June 9, 2004, and accessed at [www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=8826](http://www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=8826), on June 9, 2004: 23, 26.

<sup>21</sup> These "outer suburban counties" include Pike County, Pa. (in metropolitan New York City); Jefferson County, W.Va. (Washington, D.C.); and Brown County, Ohio (Cincinnati).

<sup>22</sup> Six of these counties were in metropolitan Atlanta.

<sup>23</sup> The ARC reclassified two of these counties (Cherokee County, N.C., and Meigs County, Tenn.) as Transitional counties for Fiscal Year 2004 (FY2004).

<sup>24</sup> Four of these counties (Pike County, Ky.; Benton County, Miss.; Monroe County, Ohio; and Lee County, Va.) were reclassified as Transitional counties in FY2004.

<sup>25</sup> Some of the fast-growing Tennessee counties (Cumberland, Macon, and Putnam, for example) actually are in central Appalachia.

<sup>26</sup> All discussion of population change and distribution in metropolitan and nonmetropolitan areas, and of their various types, will be based on their 2003 classification status.

<sup>27</sup> As defined by the U.S. Office of Management and Budget, micropolitan areas contain urban clusters of between 10,000 and 49,999 population, the county where the cluster is located, and any other county with strong economic ties to the main county, as measured by commuting patterns. This report uses the micropolitan area designations as of June 2003.

<sup>28</sup> The term "core-based statistical areas" (CBSAs) is the term the U.S. Office of Management and Budget uses to define areas consisting of an urban core and the surrounding areas with strong economic ties to that core area. CBSAs include both metropolitan and micropolitan areas.

<sup>29</sup> The rural-urban continuum codes (or "Beale codes")—established by the Economic Research Service, U.S. Department of Agriculture to measure different types of rural areas—classified counties in micropolitan areas and counties outside CBSAs as nonmetropolitan.

<sup>30</sup> According to the Census Bureau, the term "urban" refers to the presence of a settlement of at least 2,500 people. The terms "metropolitan" and "nonmetropolitan," by contrast, concerns the commuting ties between two counties. Therefore, a county can have an urban population and still be considered nonmetropolitan.

<sup>31</sup> Interestingly, the only persistent-growth county that did not border a metropolitan area was Lee County, Miss., whose county seat, Tupelo, is best known as Elvis Presley's birthplace.



<sup>32</sup> Examples include Johnstown, Pa.; Weirton, W.Va.-Steubenville, Ohio; and Anniston-Oxford, Ala.

<sup>33</sup> Allegheny and Armstrong counties.

<sup>34</sup> U.S. Census Bureau, “Demographic Components of Population Change: April 1, 1990 to July 1, 1999,” accessed at [eire.census.gov/popest/archives/county/co\\_99\\_4.php](http://eire.census.gov/popest/archives/county/co_99_4.php), on Sept. 5, 2003. Data on county-level components of change between 1990 and 2000 were not available. As a result, we must rely on Census Bureau estimates on components of change between April 1, 1990 and July 1, 1999, which were done prior to the results of the 2000 census. Despite the fact that the 2000 census totals consistently exceeded the estimates of the 2000 population made during the 1990s, the information on births and deaths between 1990 to 1999 provides good information on the level of natural increase during the 1990s.

<sup>35</sup> In 2000, all foreign-born people—regardless of the date of their arrival—made up just 3 percent of Appalachia’s population, compared to 12 percent for the rest of the country.

<sup>36</sup> U.S. Census Bureau, July 1, 2003 County Population Estimates File for Internet Display, accessed at [eire.census.gov/popest/data/counties/files/co-est2003-alldata.csv](http://eire.census.gov/popest/data/counties/files/co-est2003-alldata.csv), on April 9, 2004.

<sup>37</sup> Hale County grew nearly 11 percent during the 1990s—after losing population during each decade since the 1930s.