

Demographic and Socioeconomic Change in Appalachia

THE AGING OF APPALACHIA

by

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THE AGING OF APPALACHIA

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A few years ago, Peter G. Peterson, former secretary of commerce and deputy director of the Federal Reserve Bank, argued that the “graying of the developed world’s population . . . may actually do more to reshape our collective future” than any of a list of more publicized threats, in which he included high-tech terrorism, the proliferation of weapons of mass destruction, globalization, and ethnic hatreds (Peterson, 1999: 42). Since Sept. 11, 2001, of course, most Americans, perhaps Peterson himself, would rank long-term changes in the age structure of the population somewhat lower on the list of global threats. But Peterson’s concern was not his alone, nor have the problems of population aging that he described for the Western nations been solved in the years since. The U.S. population is aging, although less rapidly than that of other rich countries because of higher immigration and fertility rates. But the proportion of the population in the Appalachian region over age 65 is already equivalent to that of Denmark and some other smaller Western European countries, higher than that of the United States as whole. Discussions of the implications of population aging usually concern the international economy or vast federal programs like Social Security and Medicare. Does it matter much for a region, like Appalachia, to be ahead of the curve, to be older than the nation as a whole?

In this report, we use data from Census 2000 to show how and why the age structure of the Appalachian population differs from the national average and varies within the region. We discuss implications for the region and argue that they are not all negative. The changing age structure will be an important fact of life for decisionmakers in both the public and private sectors in Appalachia in coming years—but not a dire threat to standards of living.

Age Structure of Appalachia

In 2000, 14.3 percent of Appalachian residents were ages 65 and over, compared with 12.4 percent of all U.S. residents. Northern Appalachia had the oldest population

among the subregions, with 16.0 percent ages 65 and over. Pennsylvania and West Virginia ranked second and third among states in 2000 in the percentage of their population ages 65 and over; only Florida ranked higher.

In the United States as a whole, the 65-and-over population grew during the 1990s by 13.0 percent—slightly below the growth rate of the population as a whole, so the proportion of the U.S. population ages 65 and older changed very little. But the median age of the population increased from 32.9 to 35.3 during the decade. Figure 1, which shows population pyramids for the United States in 1990 and 2000, gives a clue to this apparent paradox. It shows that the largest two cohorts were born between 1956 and 1965 and were ages 25 to 34 in 1990 and 35 to 44 in 2000. (These two cohorts are often designated the “late baby boomers,” with the “early baby boomers” those born between 1946 and 1955.) The cohorts born during the 1970s (ages 20 to 29 at the time of the 2000 Census) are considerably smaller, because birth rates in the United States during that decade were well below the replacement level.

Immigration has helped fill in some of the peaks and troughs in the age-sex pyramid, but one can still read there the history of boom and bust in fertility rates during the 20th century. Especially at the older ages, the pyramids change shape because of declining mortality rates. Each year Americans are more likely to survive into the top age brackets: With fertility at replacement levels and little premature mortality, the diagrams look more and more like cylinders, and the name “pyramid” becomes less appropriate. Those who reached age 65 during the 1990s belonged to the small cohorts born during the Depression years of the 1930s. They did not add much to the 65-and-over population during the 1990s. But the large baby-boomer cohorts advancing steadily in age nonetheless raised the “center of gravity” of the age-sex pyramid, the median age of the whole population. It is clear from these diagrams that the aging of the U.S. population will accelerate soon, as the baby boomers replace the Depression-era cohorts in the 65-plus age bracket. The first baby boomers will turn 65 in 2011, which will begin a period of several decades of rapid increase in the proportion of the population ages 65 and over.

Figure 1a
Population by Age and Sex, United States, 1990

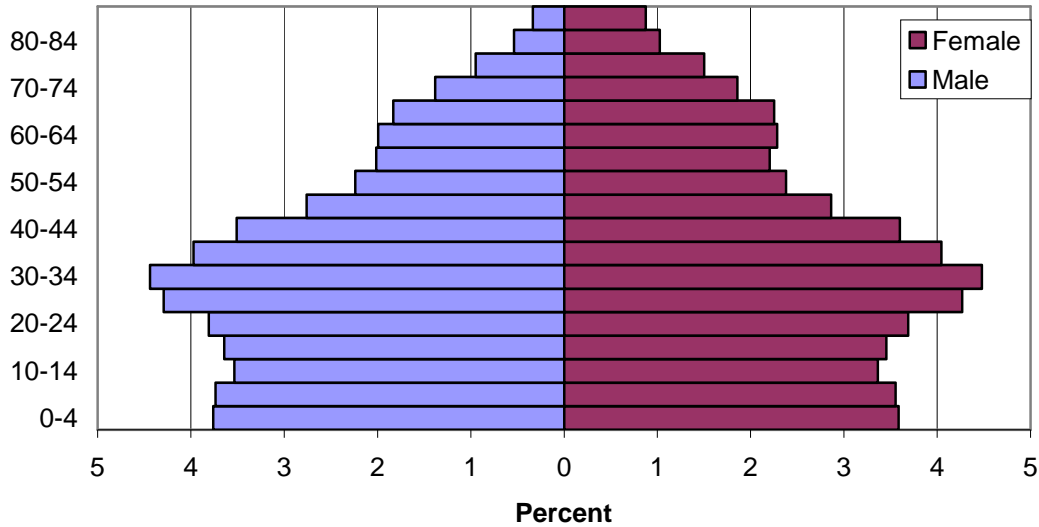
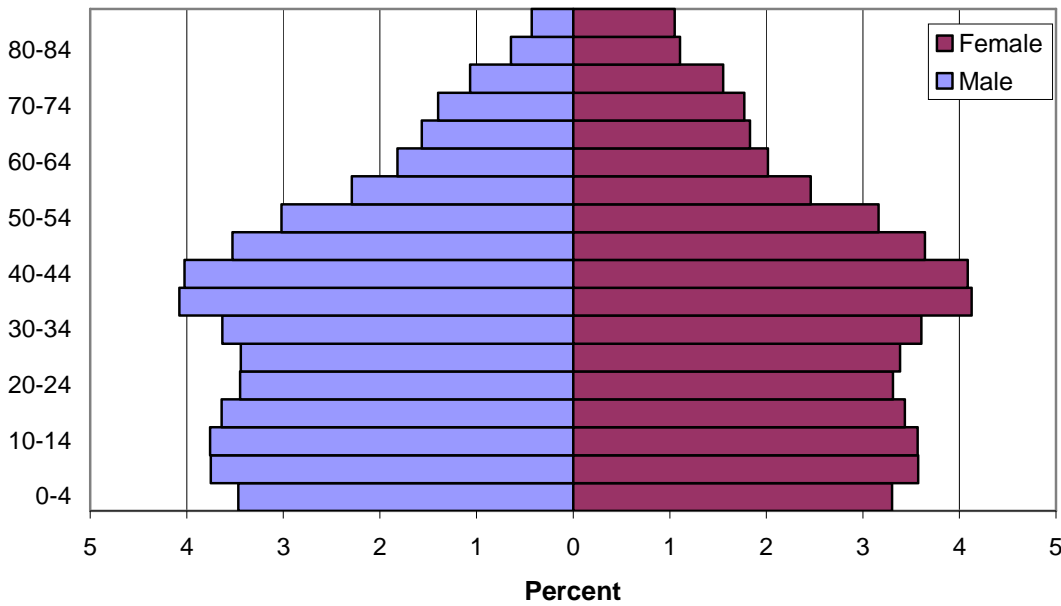


Figure 1b
Population by Age and Sex, United States, 2000



Source: PRB tabulation of data from 2000 census, SF3 release.

These same processes affecting the U.S. population as a whole can be traced in the changing shape of an age-sex pyramid for Appalachia. The same bulge of the baby-

boom cohorts, advancing steadily upward through the age brackets, can be seen for Appalachia in Figure 2.

Figure 2a
Population by Age and Sex, Appalachia, 1990

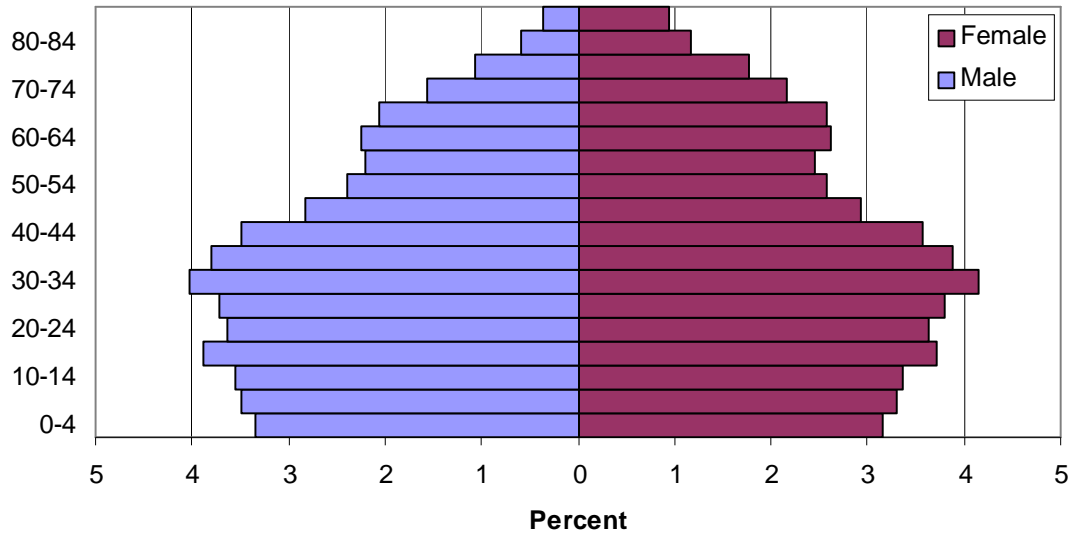
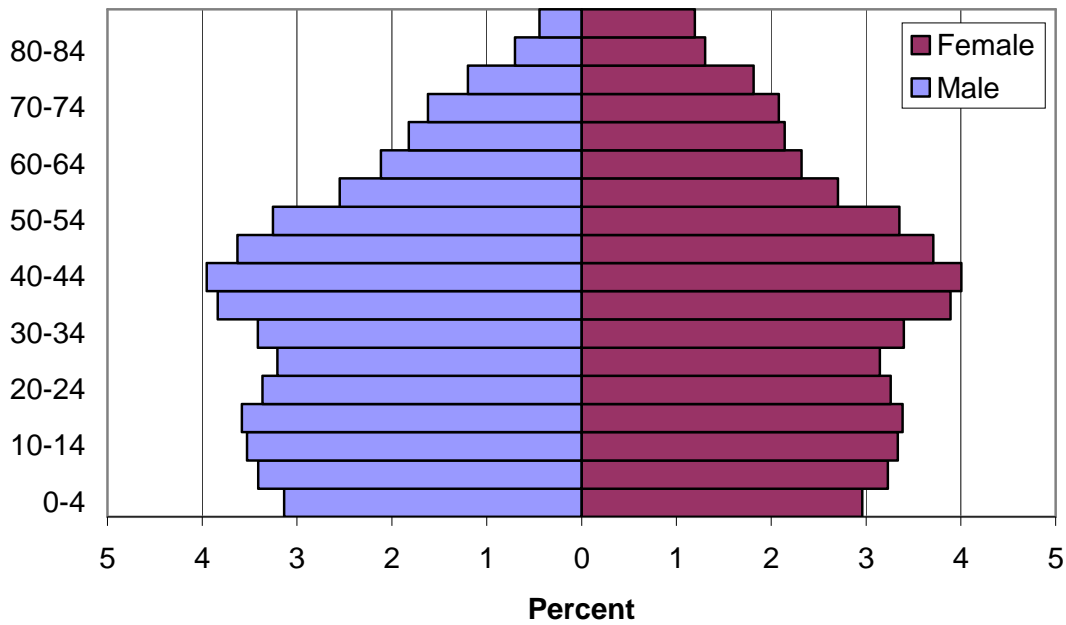


Figure 2b
Population by Age and Sex, Appalachia, 2000



Source: PRB tabulation of data from 2000 census, SF3 release.

Table 1 provides a snapshot of the age structure of the population in 2000, for the United States and Appalachia, for subregions, and for Appalachian counties classified by their economic performance. Three age groups are shown, roughly corresponding to the school-age population (ages 5 through 19), the working-age population (ages 20 through 64), and the retirement-age population (ages 65 and over). These classifications clearly do not correspond exactly to economic roles: People may be working or studying at any age. The “youth deficit” in the Appalachian region is fairly evenly divided between the school-age and working-age populations, both of which are slightly lower than the corresponding national percentages. There is little difference in age structure among the economic performance categories, with a slight tendency for the less prosperous counties to have higher proportions of older people. The major difference is the regional one, a significantly older population in Northern Appalachia.

Table 1
Age Structure of Appalachia, by Region and Economic Status, 2000

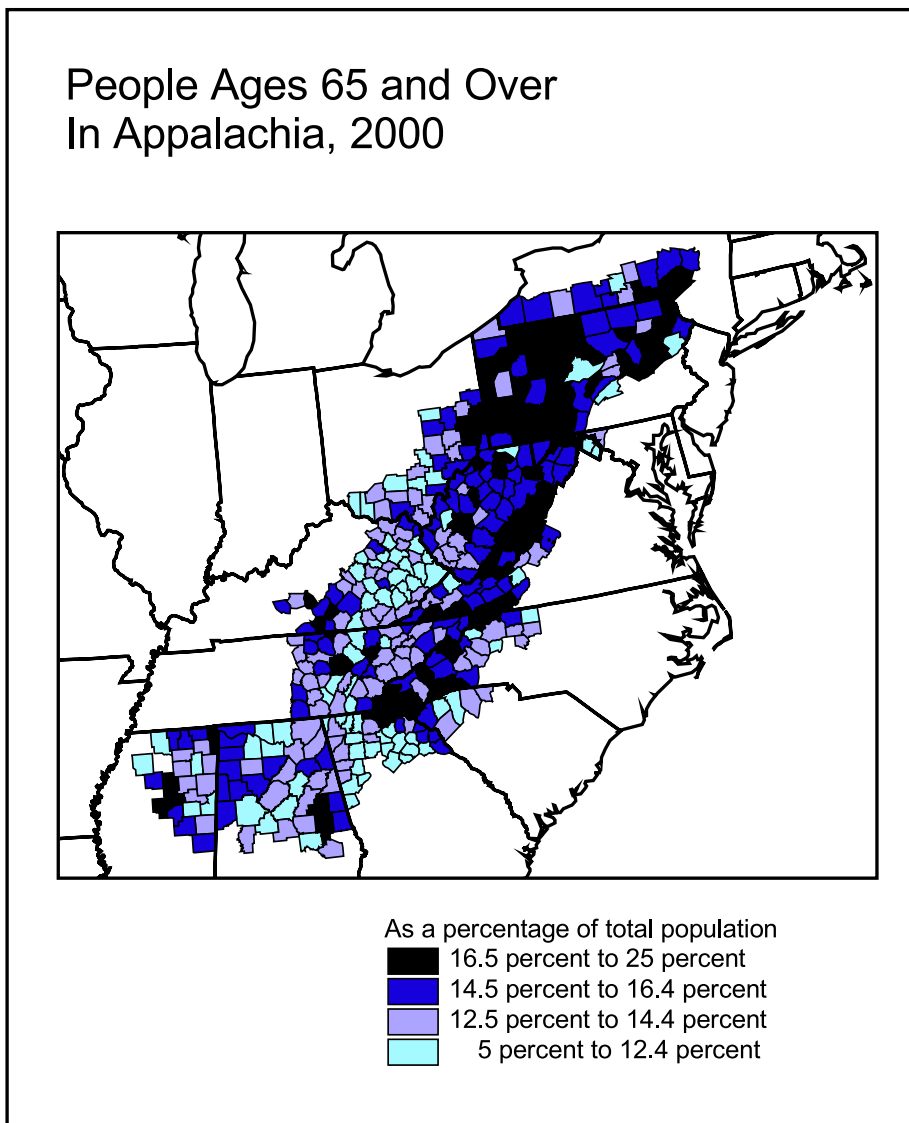
	School ages (5-19)	Working ages (20-64)	Retirement ages (65+)
United States	21.7%	59.1%	12.4%
Appalachia	20.5	59.1	14.3
Northern	20.4	57.8	16.1
Central	20.3	59.9	13.8
Southern	20.6	60.1	12.8
Attainment	20.2	60.2	13.1
Competitive	20.9	60.0	12.4
Transitional	20.4	58.7	14.9
Distressed	20.9	59.2	14.0

Source: PRB analysis of data from Census 2000, SF3 release.

A more complicated picture emerges at the county level. As the map in Figure 3 shows, the highest percentages of residents age 65 or older are generally found throughout the Appalachian portions of Pennsylvania, in eastern Ohio and northern and eastern West Virginia, and in southwest Virginia and western North Carolina. The

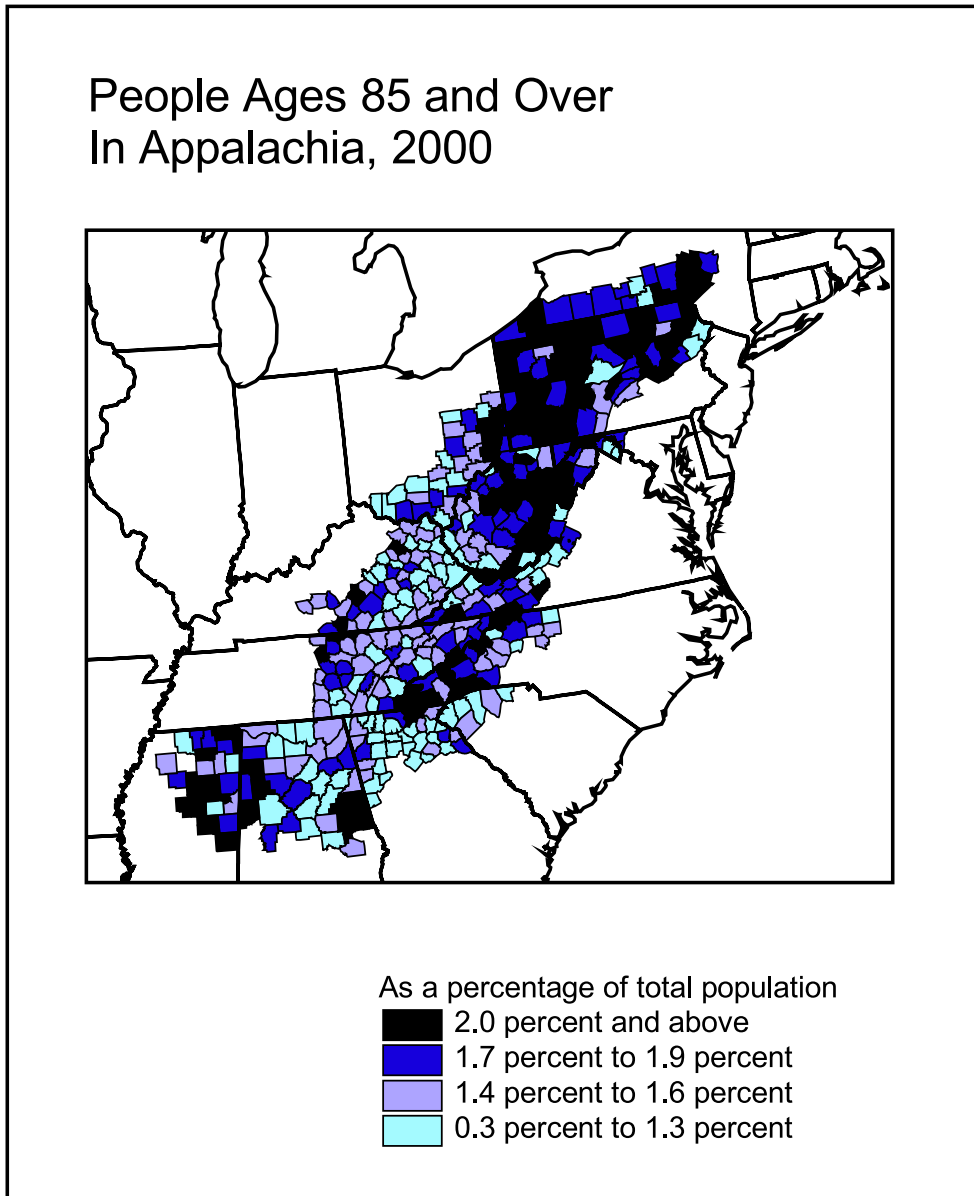
southernmost parts of the region, in northern Alabama and northeast Mississippi, also have several counties with particularly old populations. Few Appalachian counties have a smaller proportion of elderly residents than the national average; almost all of them are in the greater Atlanta area. A similar pattern is seen in Figure 4, a map showing county-level proportions of the “oldest-old,” those ages 85 and over.

Figure 3



Source: U.S. Census Bureau, 2000 Census

Figure 4



Source: U.S. Census Bureau, 2000 Census

Demographic projections prepared by Regional Economic Models, Inc., show that, with current trends, the Appalachian region will be home to over 5 million people ages 65 and over in 2025, just under 20 percent of the total population (Table 2). One of every 40 Appalachian residents will be among the oldest old, those ages 85 and over, in 2025. As is currently the case, Northern Appalachia is expected in 2025 to have a

significantly older population than the rest of the region and the nation as a whole, with 23.5 percent of its population ages 65 and over.

Table 2

Projection of Elderly Population, U.S. and Appalachia, 2000-2025

		U.S. Total	Appalachia
Population ages 65+ (millions)	2000	35.1	3.3
	2025	63.5	5.1
As percentage of total population	2000	12.4	14.3
	2025	18.2	19.8
Population ages 85+ (millions)	2000	4.3	0.4
	2025	8	0.6
As percentage of total population	2000	1.5	1.7
	2025	2.3	2.5

Sources: U.S. Census Bureau, International Program Data Base (July 2003 version); Regional Economic Models, Inc.

Reasons for Population Aging

At the national level, the process of population aging is due primarily to long-term declines in the fertility rate and to improvements in survival at all ages, especially at older ages in recent decades. Of the three components of population change, fertility, mortality, and migration, fertility and mortality are the ones that account for the changing age distribution of the U.S. population during the last century, but migration that accounts for the geographic variation within the United States seen in Census 2000.

The higher proportion of older residents is not a sign that people in Appalachia live longer than others. On the contrary, the Appalachian region has generally high mortality rates, adjusted for the age, sex, and race distribution of the popula-

tion.¹ Likewise, the geographic variation in age distribution is not due to significant geographic variation in fertility rates. The South used to have measurably higher fertility than other parts of the country, but geographic variation in fertility rates has greatly diminished in the last half-century in the United States.

The major reason for the difference in age structure between the Appalachian population and that of the United States as a whole is the net out-migration of young adults from Appalachia to other parts of the country, and Appalachia's relatively low share of immigrants from other countries. Table 3 shows the net percentage changes during the 1990s in the size of selected cohorts (groups of people who were born in the specified five-year periods) in the United States as a whole, Appalachia, and northern Appalachia (the oldest of the subregions). Within a cohort, the gains for the United States as a whole are the result of net immigration of people born during those years (minus those who died during the decade). For Appalachia, the gains or losses also reflect net migration of people in each cohort into the region from other parts of the United States, as well as from other countries. The four cohorts shown were born between 1961 and 1980, and thus were ages 10 to 29 in the 1990 census and ages 20 to 39 in the 2000 census; these ages bracket the peak migration ages both within the country and from abroad. It can be seen that Appalachia as a whole lost members of the 1971-1975 cohort (who were in their 20s during the 1990s). Northern Appalachia lost one-fifth of the members of that cohort.

¹ *The Atlas of United States Mortality*, published by the Centers for Disease Control and Prevention (Pickle, et al., 1996) provides a very striking visual display of regional variation in mortality rates, using "health service areas" (groups of counties) as a unit of analysis. The "all-cause" standardized mortality rates consistently show central Appalachian regions among the worst in the country for white males and white females, and very few Appalachian areas better than national averages for whites or blacks, males or females. The only Appalachian area with lower-than-average mortality rates appears to be western North Carolina, for both white males and white females (see pages 168, 172).

*Table 3***Changes in Population of Birth Cohorts, 1990-2000**

Birth years	U.S.	Appalachia (% change in population)	Northern Appalachia
1976-1980	10.8%	4.5%	-1.9%
1971-1975	9.2	-8.9	-20.9
1966-1970	7.8	2.0	-8.5
1961-1965	6.5	12.1	6.4

Source: PRB tabulation of data from 1990 and 2000 censuses.

Americans are mobile, and many parts of the South and West, in particular, attract retirees from other parts of the country. Serow's 2001 analysis showed that some Appalachian counties, in western North Carolina, eastern Tennessee, and northeastern Georgia, have gained elderly population through retirement migration. Such "retirement magnets" tended to be counties that were already relatively prosperous for the region, with recreational amenities and locations convenient to metropolitan areas. But most Americans "age in place." An analysis of detailed migration data from the 1990 census showed relatively little net migration of older people (ages 65 and older) into or out of the Appalachian regions (Obermiller and Howe, 2000: table 6). Appalachia as a whole gained just over 12,000 older residents through migration from 1985 to 1990 (202,000 in-migrants minus 190,000 out-migrants). Northern and central Appalachia lost elderly migrants, on balance, while southern Appalachia offset their losses with a net gain of nearly 24,000 elderly residents through migration in those years.

Poverty and Disability in the Older Population

We have selected four groupings of counties, to illustrate the range of economic and health conditions for older people and households within the Appalachian region.² These groupings of counties include:

² The Public Use Microdata Sample 1 percent files do not allow users to identify geographic areas smaller than the "Super-Public Use Microdata Areas" (Super PUMAs), groups of counties defined by the Census Bureau, each with a population large enough to protect confidentiality (at least 400,000 persons).

- Two counties in southwestern Pennsylvania, Westmoreland and Fayette. One is economically “distressed,” the other transitional; one lost population in the 1990s, and the other gained slightly. They are adjacent to the Pittsburgh metropolitan area. Both have very high percentages of older residents.
- Sixteen counties in southwestern West Virginia, including the Charleston and Huntington metropolitan areas. Most lost population during the 1990s, but Putnam County gained more than 20 percent. All are older than the national average. Ten are distressed counties, six transitional.
- Twenty-six counties in eastern Kentucky, stretching from Greenup in the north to Whitley along the Tennessee border. Two form part of metropolitan Huntington, four are “micropolitan” in the new classification, and the rest are outside micro- or metropolitan areas.³ All are distressed counties; all grew moderately in population during the 1990s.
- Nineteen counties of western North Carolina, including all those on the border with Tennessee, and Henderson, Buncombe, Surry, and Wilkes counties to the east. These include several fast-growing counties along the Georgia border, the growing cities of Asheville and Boone, and several “retirement magnet” and recreational counties. They have relatively high proportions of older residents. Three are distressed counties, 14 transitional, and two “competitive.”

None of these four areas is a microcosm of Appalachia. But they do represent the variation found within the region in economic prosperity, migration and population growth, and distance from metropolitan areas. They are likely as well to reflect the variation in economic and health conditions for older people.

Poverty. Thanks in large part to the spread of the Old Age and Survivors Insurance program under Social Security, and to a lesser extent the spread of private pensions, poverty rates decreased in the last half of the 20th century, faster for older

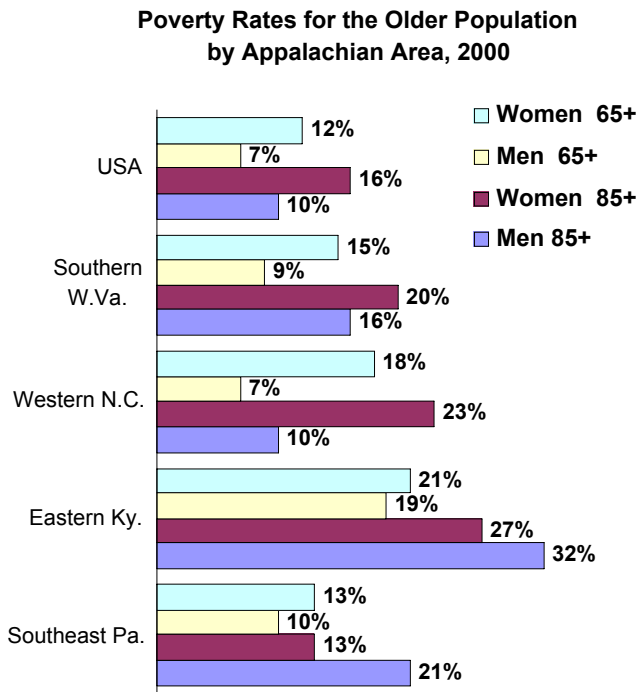
Unfortunately, the Super PUMA boundaries straddle the boundaries of the Appalachian region as defined by the ARC, preventing us from showing Appalachian totals in Table 3. The Super PUMAs analyzed here are 42080 (Pa.), 21300 (Ky.), 37010 (N.C.) 54300 (W.Va.). Boundaries for all Super-PUMAs can be found on the Census Bureau website at www.census.gov/geo/www/maps/sup_puma.htm.

³ In June 2003, the Office of Management and Budget issued new definitions of metropolitan areas for the United States, based on results of the 2000 Census. Micropolitan statistical areas include counties outside metropolitan areas that have an urban cluster of between 10,000 and 50,000 people. The designation includes the county where the urban cluster is, plus adjacent counties linked by commuting ties. Metropolitan statistical areas have an urban core of at least 50,000 people, and include the county in which the core is located as well as adjacent counties linked by commuting.

people than for other age groups. Just under 10 percent of older people nationwide reported family incomes below the poverty level in Census 2000. Poverty rates are typically higher for older women than for older men: Nationwide, 12 percent of older women had family incomes below the poverty line, compared with 7 percent of older men.

As Figure 5 shows, the subregions of Appalachia vary widely in poverty rates among older people. Poverty rates for the over-65 population were fairly close to the national average in southeastern Pennsylvania, southern West Virginia, and western North Carolina, but poverty rates were higher for the over-65 population as a whole and for all subgroups in eastern Kentucky. The oldest-old, those ages 85 and over, were more likely to be poor than the entire over-65 population.

Figure 5

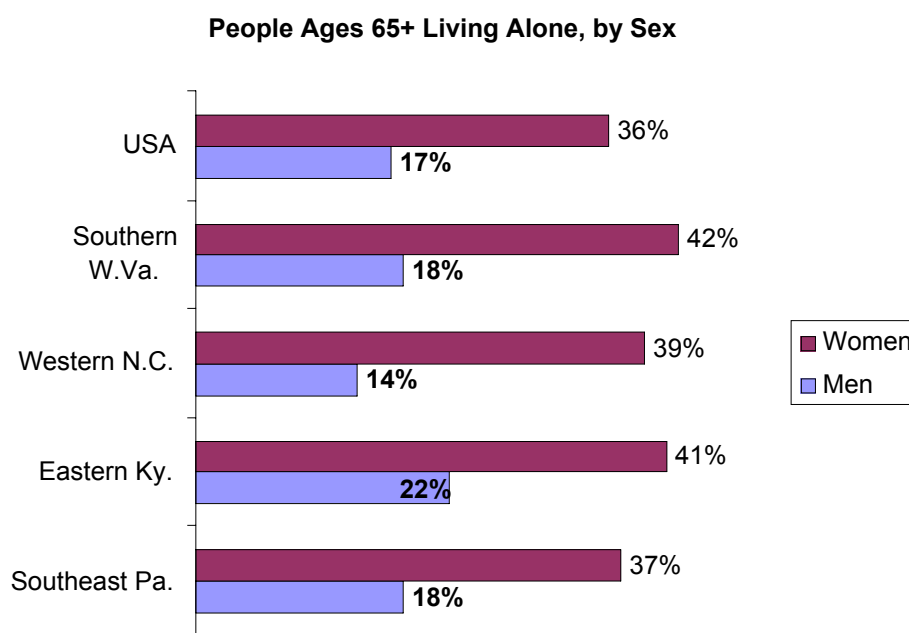


Source: PRB tabulation of 1 percent Public Use Microdata Sample, Census 2000. Geographic areas are Super PUMAs (see note 2).

One of the notable trends in the 2000 Census was the increase in the number and proportion of single-person households. This trend was due both to a rise in the age at marriage (which was only partially offset by an increase in the number of cohabiting

couples) and the increase in the proportion of older people living alone, many of them divorced or widowed. Because women's life expectancy at age 65 is almost three years longer than for men, the widowed and those living alone are disproportionately women. In the nation as a whole, 36 percent of women ages 65 and over live alone; the proportion is somewhat higher in each of the Appalachian regions shown in Figure 6. Older people living alone were more likely to be in poverty than those living with a spouse, children, or others.

Figure 6

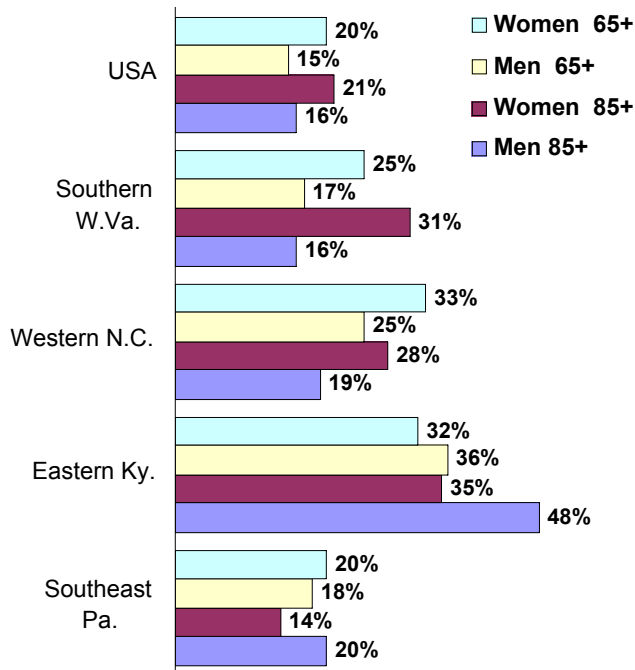


Source: PRB tabulation of 1 percent Public Use Microdata Sample, Census 2000. Geographic areas are Super PUMAs (see note 2).

One in five elderly women living alone were poor in the nation as a whole. The poverty rate for elderly women living alone was not significantly higher than the national rate in southeast Pennsylvania and southern West Virginia. But in eastern Kentucky and western North Carolina, one in three elderly women living alone were in poverty (Figure 7).

Figure 7

**Poverty Rates for the Older Population Living Alone,
by Appalachian Area, 2000**



Source: PRB tabulation of 1 percent Public Use Microdata Sample, Census 2000. Geographic areas are Super PUMAs (see note 2).

Disability. Disability rates have been declining for older people in the United States during recent decades. This has been found for several dimensions of disability, using several different data sources.⁴

Census 2000 included several questions designed to measure disability among the household population. For adults, these included questions about sensory limitations (blindness, deafness, or severe vision or hearing impairments); physical functioning (limited ability to walk, climb stairs, lift or carry objects, etc.); mental functioning (difficulty in learning, remembering, or concentrating); self-care (difficulty dressing, bathing, or getting around in the home); mobility (difficulty going out alone to visit a doctor or to shop); and employment disability. For most of these categories, the definition of disability was restricted to those caused by long-lasting conditions, not transitory

⁴ The percentages of older people reported to have any disability have been declining, by about one percentage point per year (Freedman et al., 2002). There is little agreement across data sources in the relative decline among different groups of the elderly, and thus what is happening to differentials among races or across regions of the country. But the overall conclusion is that longer lives for the elderly mean longer healthy lives, on average, not just more years spent with disabilities.

ailments. Surveys of health and disability typically include long lists of conditions and follow-up questions to distinguish the severity and nature of disabilities. Census 2000 was limited to these broad questions both to keep the questionnaire a reasonable size and because it was self-administered for most people. Sources of disability data vary considerably in the conceptual basis for defining disability. Accordingly, the census results shown here are not exactly comparable to those obtained from more specialized studies of disability. But they have proved to be fairly reliable and useful in several methodological studies (Andresen et al., 2000; Calsyn et al., 2001). The census data have the great advantage of being available for geographic regions of interest, rather than only for the nation as a whole or only for individual states.

Forty-four percent of all Americans ages 65 and over were reported to have one or more of the disabilities measured by Census 2000. For 23 percent of the elderly, these included mobility restrictions and, for 12 percent, a limited ability to take care of themselves (bathing, dressing, etc.). Such self-care questions typically are good predictors of home care use and moves to nursing homes. For the oldest old, those ages 85 and over, more than three-quarters reported some disability. Reported disability was typically somewhat higher for women than for men. Older people living alone reported disability rates somewhat higher, for the nation as a whole and in most Appalachian regions, than those living with others.

Figure 8

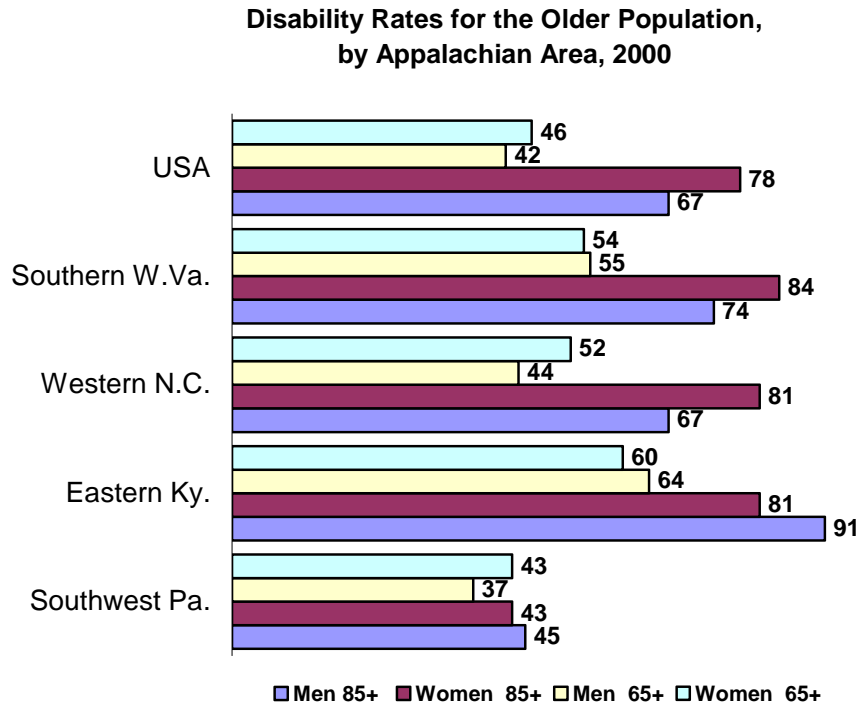
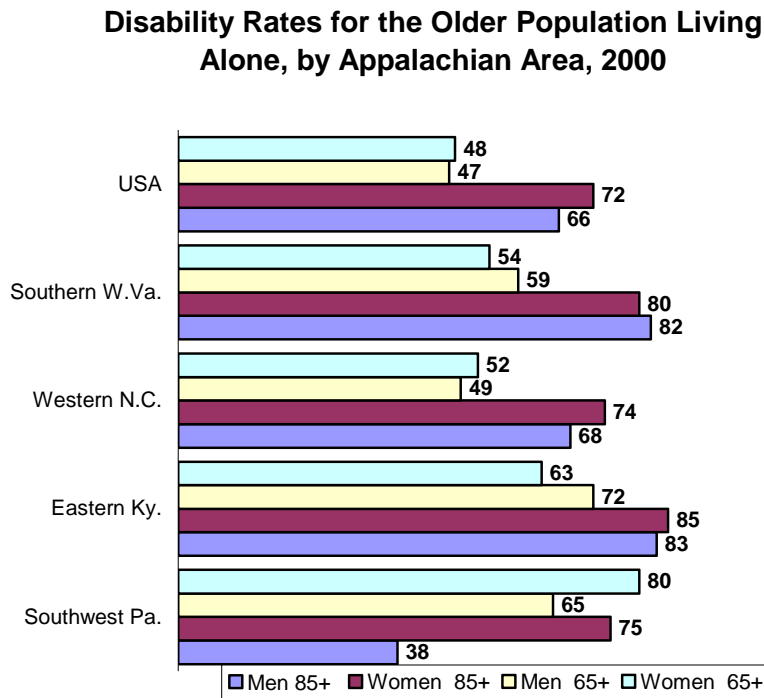


Figure 9



Source (Figures 8 and 9): PRB tabulation of 1 percent Public Use Microdata Sample, Census 2000. Geographic areas are Super PUMAs (see note 2).

Three of the four Appalachian subregions analyzed here had disability rates—overall, mobility, and self-care—generally somewhat higher than those for elderly people in the nation as a whole (Figure 8). Eastern Kentucky was again the exception, with disability rates well above the national average.

Disability rates increase with advancing age, as one might expect. It is worth noting that the rates are just as high for older people living alone as for those living with spouse, children, or others (Figure 9). The Appalachian areas all have higher percentages of older people living alone than the national average, possibly because of the high rates of out-migration of younger people from the region.

Decline of the Child Population

The bulge of baby boomers approaching retirement ages is the feature of the age distribution that receives the most attention. But the long-term decline of the child population as a proportion of the total deserves some notice as well. Both for the United States as a whole and for the Appalachian region, the cohort of under-5-year-olds in Census 2000 is smaller than the three cohorts above it, the currently school-age population of 5-to-19-year-olds. The small cohorts born during the “Baby Bust” years of the 1970s aged out of the school-age population by 2000. The current school-age population consists of somewhat larger cohorts, the children for the most part of the very large baby-boom generation. These large cohorts of teenagers are sometimes referred to as the baby-boom echo; we might call the small cohorts of current preschoolers the baby-bust echo.

This picture can be complicated for the country as a whole by changes in migration, and for particular regions both by immigration from other countries and by migration to or from other parts of the country. As another report in this series discusses more fully, the Appalachian region has not in recent years attracted a large share of migrants, and internal migration is relatively low during childhood, so the current preschool population in Appalachia should be the school-entry population in years ahead. As Table 3 shows, the under-5 population as a proportion of the total has fallen for the

nation as a whole, and for Appalachia from 1990 to 2000. This proportion is lower for Appalachia, and for northern Appalachia in particular.

Table 3

Children Under 5, as a Percent of Total Population		
	<u>1990</u>	<u>2000</u>
United States	7.3%	6.8%
Appalachia	6.5	6.1
Northern	6.6	5.7
Central	6.2	6.0
Southern	6.7	6.5

Source: PRB tabulation of data from 1990 and 2000 censuses.

Implications of Population Aging

Discussions of economic impact of population aging typically focus on the national-level fiscal effects, especially on the two large federal programs, Social Security and Medicare. This perspective overlooks the state and local effects and contributes to the general perception of older residents as an economic problem to be solved. But even in a narrow economic focus, the older population has to be seen as a resource, not just consumers of public services. The “young old” (those ages 60 to 75) especially tend to be viewed as a fiscal boon for communities. Most have some retirement income from private and public sources (the earliest age for drawing Social Security retirement benefits is 62, which is also the most common age for new claims.) Few have school-age children, and most thus place limited demands on local public services. In the 1980s, there was a reversal of a long-term decline in the proportion of men in these ages still in the labor force. Increasingly, both men and women ease into retirement with “bridge jobs,” which may be temporary or part-time, thus providing an attractive source of experienced workers who may not require employer-provided health insurance (Quinn, 2000).

An analysis of data from a national sample of men and women in their 60s, both workers and young retirees, showed that a steadily increasing proportion report they are able to work. The improvements are fairly dramatic—the proportion of 67-year-olds who

reported in 1993 that they were unable to work for health reasons was the same as the proportion for 65-year-olds a decade earlier (Crimmins et al., 1999).

Crimmins and her colleagues found that most of the improvement over time is associated with the increasing educational attainment of older workers.

Press reports provide anecdotal evidence of local communities striving to achieve through policy just the kind of demographic trend that much of Appalachia has experienced by default. Economic development offices encourage retirement migration by the “young old” and try to discourage retirees from moving away. For example, Blacksburg, Va., adopted a comprehensive economic development plan in 1996 that targeted retirees, proposing to issue new zoning codes to facilitate private development of retirement communities (Lemov, 1996). Clearly, the growth of the 65-and-over population is not regarded by state and local decisionmakers simply as a fiscal problem (the impression one would get from most discussions of the *federal* budget).

Nationwide, some 75 percent of households headed by people ages 65 and over get half or more of their income from Social Security (Federal Interagency Forum, 2000). Because of their higher proportions of elderly residents, most of the Appalachian states have high numbers of residents receiving Social Security benefits. West Virginia ranks number one among states, with 22.3 percent of state residents receiving benefits (Social Security Administration, 2003; table 1). In the Appalachian states with percentages of beneficiaries below the national rate of 15.7 percent (New York, Maryland, and Virginia), the Appalachian counties all have rates above the national rate.

The Social Security system is redistributive—that is, payments are related to beneficiaries’ incomes during their working years, but payments to low-wage retirees are a considerably higher proportion of preretirement income than are the payments to those who earned high wages while they were working (see Lee and Haaga, 2002, for discussion and examples). But as we have seen, Social Security, supplemented by private pensions, does not overcome very high regional disparities in older people’s incomes, even within the Appalachian region. Many low-wage workers (including farm laborers and domestic workers) were not covered by Social Security; the expansions of coverage in recent decades will affect future generations of retirees but not those currently in the very oldest ages.

High poverty rates among elderly people living alone are a particular problem for the Appalachian region, where higher proportions of older people live alone than the national average. The census does not collect information on how distant older people are from their relatives, nor on financial support and other types of caregiving between the generations. Some of those who show up in census data as living alone and in poverty may in fact have relatives and friends living nearby with whom they can share expenses or from whom they receive financial support. But research using sample survey data with more detailed measures of functional status than are available in the census confirms that adults living alone show significantly lower levels of functioning than married adults, across a range of indicators of mobility, emotional, and physical health (Waite and Hughes, 1999). The high rates of poverty for older people living alone have to be seen as a real indicator of social problems among the elderly left behind in Appalachia.

The disability rates among older people provide an indicator of needs for many types of services, ranging from expensive institutional long-term care to home health care services or meals on wheels. Long-term care has proved to be an especially difficult problem nationally for health care financing. Despite attempts to encourage the development of private insurance markets, the proportion of older people with any private coverage is still minuscule.

Medicaid (a joint federal/state program) has ended up by default as the largest payer for long-term care. Long-term care and prescription drugs are major reasons for the rapid rise in Medicaid expenditures. Medicaid was one of the fastest-growing lines in state budgets during the period of expansion in the late 1990s, and Medicaid expenditures were generally protected when states cut back on expenditures in 2001-2003—in part because cutting back on state Medicaid spending would reduce the flow of federal matching funds (Holahan, Wiener, and Lutzky, 2002). Older Medicaid recipients are much more “expensive” than younger women and their children, who are the majority of beneficiaries.

Long-term care, especially institutional care, is very expensive (a year in a nursing home cost on average \$49,000 nationwide in 2000), and states are required by Medicaid to keep their reimbursement rates high enough to cover the costs of an efficient and safe nursing home that meets quality standards. In 1999, the Supreme Court ruled in

Olmstead v. L.C. that institutionalization of the frail elderly when home services would enable them to live independently constitutes discrimination under the Americans with Disabilities Act. This decision has prompted renewed expansion of home- and community-based services for the elderly in many states. The growth of the elderly disabled population will clearly put continued pressure on state budgets, in the absence of national-level reforms in financing for health and long-term care (Milne et al., 2004).

The growth of the elderly disabled population also puts a strain on local government finance. The degree to which counties finance part of the cost of long-term care varies among states; in New York, where the local share of Medicaid funding is highest, county governments pay 10 percent of the cost of institutional long-term care and 25 percent of other Medicaid services (Polgreen, 2003). Counties also provide services such as transportation for the disabled and senior centers, demand for which will grow with an aging population.

The growth of long-term care services, both in the community and in nursing homes, has created a nationwide shortage of workers, complaints about which barely slowed down during the recent recession (Salsberg, 2003). The Bureau of Labor Statistics projects 50 percent growth in employment of home health aides during the current decade, for example (Hecker, 2001). Though many jobs in health care and long-term care are poorly paid, there are opportunities for skilled and managerial employment, and a labor shortage should create pressure for higher wages. Community colleges often provide training for the skills required, and the Appalachian region has succeeded in recent years in providing community college education for more residents. The growth of the elderly disabled population can also be seen as a spur to demand for local labor—one that, unlike call centers and other growth sectors of the 1990s, cannot easily be moved offshore.

In the next decade, service needs of all sorts for the geriatric population are likely to drive budgets for state and local government, as well as for private philanthropy, simply because of easily anticipated demographic changes in the region. As William Frey (1999) pointed out, “Those who retired in the late 1980s and 1990s did not face sharp competition among themselves for good housing, benefits, access to medical services, and the like because this group represented the relatively small ‘Depression cohorts’ that

could easily assimilate into the national economy as well as to the local community.” In many ways, the 1990s and the 2000s have been the calm before the storm for all institutions working with the elderly.

But for institutions serving children, the opposite could be true. The post-baby-boom-echo decline in the child population as a proportion of the total can be seen as a demographic window of opportunity for the education system, for child health, and other public and private services for children—the obverse of the challenge for services to older people. Their “customer” population should be shrinking. The National Center for Education Statistics projects that elementary and secondary enrollments will be lower in 2012 than in 2000 for every Appalachian state except Georgia, Virginia, and Tennessee. West Virginia’s school population in 2012 is projected to be 8 percent smaller than in 2000, the biggest decrease in the nation (Gerald and Hussar, 2002, table 4). The majority of baby boomers, meanwhile, will still be in the work force, many of them in peak earning (and tax-paying) ages for a few more years. During the enrollment declines of the baby bust years of the 1970s and early 1980s, per pupil expenditures rose nationwide, and class sizes fell—though in fact, class sizes had also fallen and per pupil expenditures rose even during the baby boom years (Guthrie, 1997).

The need for services and the difficulty of delivering them depend on much more than just the sheer numbers in the relevant age groups, of course. Trends in family demography may also promise some good news for child advocates and service providers. Some long-standing trends with harmful consequences for children, such as the increase in the proportion of births to unmarried parents and the increasing divorce rates, have slowed and even reversed during the last decade (Casper and Bianchi, 2001). Both basic population dynamics and family structure may be giving us a five- or 10-year spell during which systems serving children can be strengthened.

This same period is the last chance to prepare at every level of government for the revenue and expenditure effects that the baby-boom retirement will bring. The Appalachian region will hardly be alone in dealing with the challenges. But the stresses will be most visible in Appalachia, with its markedly older population.

REFERENCES

- Andresen, E.M., C.A. Fitch, and A.R. Meyers. 2000. "Reliability and Validity of Disability Questions for US Census 2000." *American Journal of Public Health* 90:8:1297-99.
- Calsyn, Robert J., Joel P. Winter, and Robert D. Yonker. 2001. "Should Disability Items in the Census Be Used for Planning Services for Elders?" *The Gerontologist* 41: 583-88.
- Casper, Lynne M., and Suzanne M. Bianchi. 2001. *Continuity and Change in the American Family*. Thousand Oaks, CA: Sage Publications.
- Crimmins, Eileen M., Sandra L. Reynolds, and Yosuhiko Saito. 1999. "Trends in Health and Ability to Work among the Older Working-Age Population." *Journals of Gerontology: Social Sciences* 54B: S31-S40.
- Federal Interagency Forum on Aging-Related Statistics. 2000. *Older Americans 2000: Key Indicators of Well-Being*. Washington, DC: U.S. Government Printing Office.
- Freedman, Vicki A., Linda G. Martin, and Robert F. Schoeni. 2002. "Recent Trends in Disability and Functioning Among Older Adults in the United States: A Systematic Review." *Journal of the American Medical Association* 288: 3137-46.
- Frey, William H. 1999. "Beyond Social Security: The Local Aspects of an Aging America." Working Paper. Washington, DC: Center on Urban and Metropolitan Policy, The Brookings Institution.
- Gerald, Debra E., and William J. Hussar. 2002. *Projections of Education Statistics to 2012*. Washington, DC: National Center for Education Statistics.
- Guthrie, James W. 1997. "School Finance: Fifty Years of Expansion." *Financing Schools*, 7: 3 (Winter): 24-38. Accessed at www.futureofchildren.org/usr_doc/vol7no3ART2.pdf, on Feb. 13, 2004.
- Hecker, Daniel E. 2001. "Occupational Employment Projections to 2010." *Monthly Labor Review* 124:11: 57-84.
- Holahan, John, Joshua M. Wiener, and Amy W. Lutzky. 2002. Health Policy for Low-Income People: States' Responses to New Challenges. *Health Affairs, Web Exclusive*, 22 May. Accessed at <http://content.healthaffairs.org/cgi/reprint/hlthaff.w2.187v1.pdf>, on Feb. 13, 2004.
- Lee, Ronald D., and John G. Haaga. 2002. "Government Spending in an Older America." *PRB Reports on America*. Washington, DC: Population Reference Bureau.
- Lemov, Penelope. 1996. "Welcome to Eldertown: Governing the Gray." *Governing* (October): 19-25.

Milne, Dann, Debbie Chang, and Robert Mollica. 2004. *State Perspectives on Medicaid Long-term Care: Report from a July 2003 State Forum*. : Washington, DC: Kaiser Commission on Medicaid and the Uninsured. Accessed at www.kff.org/medicaid/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=31043, on Feb. 13, 2004.

Newman, Sandra. 2003. "The Living Conditions of Elderly Americans." *The Gerontologist* 43: 99-109.

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

Peterson, Peter G. 1999. "Gray Dawn: The Global Aging Crisis." *Foreign Affairs* 78:1 (Jan/Feb): 42-55.

Pickle, Linda Williams, Michael Mungiole, Gretchen K. Jones, and Andrew A. White. 1996. *Atlas of United States Mortality*. DHHS Publication No. (PHS) 97-1015. Hyattsville, MD: U.S. Department of Health and Human Services.

Polgreen, Lydia. 2003. "As Population Grows Older, Upstate Towns Face Crisis." *New York Times*, November 4.

Quinn, Joseph F. 2000. "New Paths to Retirement." In Olivia S. Mitchell, P. Brett Hammond, and Anna M. Rappaport, eds. *Forecasting Retirement Needs and Retirement Wealth*. Philadelphia: University of Pennsylvania Press: 13-32.

Salsberg, Edward. 2003. *Making Sense of the System: How States Can Use Health Workforce Policies to Increase Access and Improve Quality of Care*. New York: Milbank Memorial Fund and the Reforming States Group.

Serow, William J. 2001. "Retirement Migration Counties in the Southeastern United States: Geographic, Demographic, and Economic Correlates." *The Gerontologist* 41: 220-27.

Social Security Administration. 2003. *OASDI Beneficiaries by State and County, 2002*. Accessed at www.ssa.gov/policy/docs/statcomps/oasdi_sc/2002/index.html, on Feb. 13, 2004.

Waite, Linda, and Mary Elizabeth Hughes. 1999. "At Risk on the Cusp of Old Age: Living Arrangements and Functional Status Among Black, White, and Hispanic Adults." *Journals of Gerontology: Social Sciences* 54B: S136-S144.